City of Franklin

109 3rd Ave S
Franklin, TN 37064
(615) 791-3217

Meeting Agenda

Franklin Municipal Planning Commission

Thursday, September 22, 2022	7:00 PM	Board Room

Notice is hereby given that a meeting of the Franklin Municipal Planning Commission will be held on the date, time and at the location listed above. Additional information can be found at www.franklintn.gov/planning.

The typical process for discussing an item is as follows:

1. *Staff Presentation*
2. *Public comments*
3. *Applicant presentation, and*
4. *Motion / discussion / vote*

Applicants are encouraged to attend the meeting, even if they agree with the staff recommendation. The Planning Commission may defer or disapprove an application/request unless someone is present to represent it.

For accommodations due to disabilities or other special arrangements, please contact the Human Resources Department at (615) 791-3216, at least 24 hours prior to the meeting.

Accommodations have been made to ensure that the public is able to participate in the meeting. The public may participate in the following ways: • Watch the meeting on FranklinTV or the City of Franklin website. • Watch the live stream through the City of Franklin Facebook and YouTube accounts. • Email comments to planningintake@franklintn.gov to be provided in full to the Commission and included in the minutes, but not read aloud in their entirety during the meeting. Emailed comments are accepted until 12:00 PM (noon) on the day before the meeting. • Comment in-person in the Boardroom. Speakers will be asked to fill out a speaker card prior to the meeting starting. Speakers may sit in the Boardroom, or wait in the lobby.

CALL TO ORDER

APPROVAL OF MINUTES

1. Consideration Of Approval Of The August 25, 2022 FMPC Minutes.

CITIZEN COMMENTS ON ITEMS NOT ON THE AGENDA

Open for Franklin citizens to be heard on items not included on this Agenda. As provided by law, the Planning Commission shall make no decisions or consideration of action of citizen comments, except to refer the matter to the Planning Director for administrative consideration, or to schedule the matter for Planning Commission consideration at a later date. Those citizens addressing the Planning Commission are required to complete a Public Comment Card in order for their name and address to be included with the official record.

ANNOUNCEMENTS

VOTE TO PLACE NON-AGENDA ITEMS ON THE AGENDA

The non-agenda process, by design, is reserved for rare instances, and only minor requests shall be considered. Non-agenda items shall be considered only upon the unanimous approval of all of the Planning Commission members.

CONSENT AGENDA

The items under the consent agenda are deemed by the Planning Commission to be non-controversial and routine in nature and will be approved by one motion. The items on the consent agenda will not be individually discussed. Any member of the Planning Commission, City Staff, or the public desiring to discuss an item on the consent agenda may request that it be removed and placed on the regular agenda. It will then be considered in its printed order.

2. Consideration Of Approval Of Items 3-18 And 22-26 On The Consent Agenda.

SITE PLAN SURETIES

3. 7007 Moores Lane PUD Subdivision, Final Plat; Extend The Performance Agreement For Drainage, Drainage Offsite And Green Infrastructure Offsite Improvements To September 28, 2023; Accept The Sidewalks Offsite And Green Infrastructure Improvements, Release The Performance Agreement And Establish A One-Year Maintenance Agreement. (CONSENT AGENDA)

   Sponsors: Melodie Brady

4. 7007 Moores Lane PUD Subdivision, Site Plan, Lot 2; Accept The Landscaping Phase 2 (Villas) Improvement, Release The Performance Agreement And Establish A One-Year Maintenance Agreement. (CONSENT AGENDA)

   Sponsors: Melodie Brady

5. Amelia Park PUD Subdivision, Final Plat, Section 3; Extend The Performance Agreement For Drainage And Green Infrastructure Improvements To September 28, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

6. Berry Farms Town Center PUD Subdivision, Site Plan, Section 9; Extend The Performance Agreement For Streets Improvement To September 28, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

7. Creekstone Commons PUD Subdivision, Final Plat, Section 1, Revision 2; Extend The Performance Agreement For Drainage Improvement To September 28, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

8. Lockwood Glen PUD Subdivision, Final Plat, Section 5; Extend The Performance Agreement For Drainage Improvement To September 28, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

9. Ovation Subdivision, Final Plat; Extend The Performance Agreement For Sidewalks And Streets Improvements To September 28, 2023. (CONSENT AGENDA)

Sponsors: Melodie Brady

10. Preserve At Echo Estates PUD Subdivision, Final Plat, Section 1; Accept The Sidewalk Improvements, Release The Performance Agreement And Establish A One-Year Maintenance Agreement. (CONSENT AGENDA)

    Sponsors: Melodie Brady

11. Preserve At Echo Estates PUD Subdivision, Final Plat, Section 2; Extend The Performance Agreement For Sidewalks And Green Infrastructure Improvements To September 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

12. Ralston Row PUD Subdivision, Site Plan; Extend The Performance Agreement For Drainage Improvement To September 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

13. Riverbluff PUD Subdivision, Final Plat, Section 1; Extend The Performance Agreement For Drainage Improvement To March 23, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

14. Riverbluff PUD Subdivision, Final Plat, Section 2; Extend The Performance Agreement For Drainage Improvement To March 23, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

15. Simmons Ridge PUD Subdivision, Final Plat, Section 1; Extend The Performance Agreement For Drainage Improvement To September, 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

16. Simmons Ridge PUD Subdivision, Final Plat, Section 2; Extend The Performance Agreement For Green Infrastructure Improvement To September 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

17. Synergy Bank Addition Subdivision, Site Plan, Revision 3 (Phases 3 And 4); Extend The Performance Agreement For Drainage Improvement To September 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

18. Westhaven PUD Subdivision, Final Plat, Section 40; Extend The Performance Agreement For Drainage Improvement To September 28, 2023. (CONSENT AGENDA)

    Sponsors: Melodie Brady

REZONINGS/DEVELOPMENT PLANS

19. Consideration Of Ordinance 2022-21, An Ordinance To Rezone 34.30 Acres From Regional Commerce 6 (RC-6) District To Planned (PD 10.15/203,968/130) District For The Property Located North Of Cool Springs Boulevard And East Of Mack Hatcher Memorial Parkway, At 211 Cool Springs Boulevard (The Optima Franklin PUD Subdivision).

    Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

20. Consideration Of Resolution 2022-46, A Resolution Approving A Development Plan For The Optima Franklin PUD Subdivision, For The Property North Of Cool Springs Boulevard And East Of Mack Hatcher Memorial Parkway, At 211 Cool Springs Boulevard.

    Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

21. Consideration Of Ordinance 2022-19, An Ordinance To Rezone 7.9 Acres From Civic Institutional (CI) District To Residential 4 (R4) District For The Property Located South Of Battle Avenue And West Of Cannon Street, At 1406 Cannon Street, And 319, 401, 403, And 405 Battle Avenue.
    FMPC 6/23/22, 5-2 to deny
    FMPC 8/25/22, 8-0 to defer to 9/22/22, FMPC

    Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

SITE PLANS, PRELIMINARY PLATS, AND FINAL PLATS

22. Simmons Ridge PUD Subdivision, Final Plat, Section 6, Creating 22 Single-Family Residential Lots, 22 Attached Residential Lots, And 2 Open Spaces, On 7.53 Acres, Located East Of South Carothers Road And North Of Honey Bush Circle. (CONSENT AGENDA)

    Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

23. Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10, And 11, Identifying Townhome Unit Locations Within Lots And Revising Easements, On 12.78 Acres, Located North Of Murfreesboro Road And West Of Royal Oaks Boulevard. (CONSENT AGENDA)
    8/25/2022 FMPC - Deferred

    Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

24. Robinson Lake, Site Plan (Dam Rehabilitation), Rehabilitating The Existing Dam, Providing Riparian Buffer Enhancements, Providing A Trail, And Adding A Parking Lot, On 75.5 Acres, Located East Of Interstate 65 And West Of Carothers Parkway, At 3439 Carothers Parkway. (CONSENT AGENDA)

    Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

25. The Factory At Franklin PUD Subdivision, Site Plan, Revision 1, Reconfiguring Parking Layout And Adding Open Space Lots, On 20.06 Acres, Located At 230 Franklin Road. (CONSENT AGENDA)

    Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

26. Shawnee PUD Subdivision, Site Plan, Developing 26 Attached Residential Units And 1 Open Space Lot, On 2.24 Acres, Located At 1101 Shawnee Drive. (CONSENT AGENDA)

    Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

ZONING ORDINANCE TEXT AMENDMENTS

27. Consideration Of Ordinance 2022-26, An Ordinance To Amend The Franklin Zoning Ordinance And Zoning Map As Part Of An Annual Update.
    BOMA/FMPC JCW 7/28/22
    BOMA WS 8/23/22
    BOMA WS 9/13/22

    Sponsors: Emily Wright, Kelly Dannenfelser

NON-AGENDA ITEMS

ANY OTHER BUSINESS

ADJOURN

City of Franklin

109 3rd Ave S
Franklin, TN 37064
(615) 791-3217

Meeting Minutes

Franklin Municipal Planning Commission

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CALL TO ORDER

Chair Lindsey called the meeting to order at 07:01 pm.

Board Members Present: Jimmy Franks, Nick Mann, Alma McLemore, Michael Orr, Roger Lindsey, Ann Petersen, Marcia Allen, Scott Harrison

Board Members Absent: Jenny Williamson

APPROVAL OF MINUTES

1. Consideration Of Approval Of The July 28, 2022 FMPC Minutes.

Sponsors:

Attachments: 1. DRAFT Minutes of July 28, 2022

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Ann Petersen to Approve the Minutes from the July 28, 2022, meeting. The motion carried 8-0

CITIZEN COMMENTS ON ITEMS NOT ON THE AGENDA

Chair Roger Lindsey asked for citizen comments. There were none.

ANNOUNCEMENTS

Chair Roger Lindsey asked if Staff had any announcements.

Emily Wright asked the Planning Commission to let staff know if you are not receiving the monthly emails from Cheryl. We would ask each Planning Commissioner to fill out an updated contact form that has been placed at your seat and return it to a Planning staff member. Please let me know if you have any questions or concerns regarding any communications.

Ms. Wright also stated the applicant for item 20 has requested deferral until the September 22 FMPC meeting after a discussion with staff regarding unresolved comments on the final plat. Staff agrees that deferral would be beneficial. This item is on consent, so staff recommends that the motion for consent include this deferral if FMPC agrees to defer.

The Annexation, Plan of Services, and Zoning requests for 4321 Long Lane and the Rezoning and Development Plan requests for The Optima Franklin PUD Subdivision at 211 Cool Springs Boulevard have been deferred. These decisions were made after public notifications had been mailed. New public notices will be mailed when the items are placed on an FMPC agenda, no later than 15 days prior to the agenda date.

VOTE TO PLACE NON-AGENDA ITEMS ON THE AGENDA

Chair Roger Lindsey asked if there were any non-agenda items to be presented. There were none.

CONSENT AGENDA

2. Consideration Of Approval Of Items 3-6, 15-17, and 19-20 On The Consent Agenda.

   Sponsors:

   Attachments: None

   A motion was made by Commissioner Michael Orr, seconded by Commissioner Marcia Allen to approve items 3-6, 15-17, and 19, and to defer item 20 as presented on the Consent Agenda. The motion carried 8-0.

SITE PLAN SURETIES

3. Echelon PUD Subdivision, Final Plat, Section 1, Extend The Performance Agreement For Green Infrastructure Improvement To August 24, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

   Attachments: None

   The item was Approved on Consent Agenda.

4. Lockwood Glen PUD Subdivision, Final Plat, Section 4, Extend The Performance Agreement For Sidewalks Improvement To August 24, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

   Attachments: None

   The item was Approved on Consent Agenda.

5. Westhaven PUD Subdivision, Site Plan, Section 20 (Tennis Courts), Extend The Performance Agreement For Green Infrastructure Improvement To August 24, 2023. (CONSENT AGENDA)

   Sponsors: Melodie Brady

Attachments: None

The item was Approved on Consent Agenda.

6. Westhaven PUD Subdivision, Site Plan, Section 25, Extend The Performance Agreement For Drainage Improvement To August 24, 2023. (CONSENT AGENDA)

Sponsors: Melodie Brady

Attachments: None

The item was Approved on Consent Agenda.

PLAN OF SERVICES/ANNEXATIONS/ZONINGS

7. Consideration Of Resolution 2022-57, A Resolution Adopting A Plan Of Services For The Annexation Of 517 Franklin Road, By The City Of Franklin, Tennessee.

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 517 Franklin Rd Annex Combo
2. RES 2022-57 POS Annexation 517 Franklin Rd_Combined_Law approved
3. 22-002 517 Franklin Rd BoundaryTopo Survey
4. 2022-07-07 Formal Annexation and Plan of Services Exhibit-24x36

Staff Presentation: Joey Bryan. Mr. Bryan stated that a Plan of Services would need to be outlined to provide the required infrastructure needed to serve the property. The property is part of the Mallory Valley Utility district and a 1-mile extension, for reclaimed water, may be required. Because of the distance, the extension will not be required for reclaimed water. The Spencer Creek Basin, where the property is located, was identified in the 2018 Growth Study as a long-term growth area with limited developable land with the existing large lot development pattern. The study also noted several other properties in the basin may be annexed based on the availability of water. The property owner shall be required to extend sanitary sewer mains and the necessary interceptors to service the property. Mr. Bryan stated that no additional manpower or equipment would be necessary to service the property, along with no additional Fire or Police protection or sanitation services. Staff recommends approval of Resolution 2022-57.

Chair Lindsey asked for public comment on the item. There was none.

Applicant Presentation: Adam Crunk of Crunk Engineering stated he would be happy to answer any questions.

A motion was made by Commissioner Alma McLemore, seconded by Commissioner Jimmy Franks to Approve Item 7.

Chair Lindsey asked for discussion on the item. There was none.

The motion carried 8-0.

8. Consideration Of Resolution 2022-58, A Resolution To Annex 517 Franklin Road, Consisting Of 2.07 Acres, Property Located West Of Franklin Road And South Of Century Oaks Drive And Adjoining The City Limits Within The Northern Part Of The Franklin Urban Growth Boundary (UGB).

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 517 Franklin Rd Annex Combo
2. RES 2022-58 A Resolution to Annex 517 Franklin Road_Combined_Law approved
3. 22-002 517 Franklin Rd BoundaryTopo Survey
4. 2022-07-07 Formal Annexation and Plan of Services Exhibit-24x36

Staff Presentation: Joey Bryan. Mr. Bryan stated that the subject property is within the Large Lot Residential Design Concept as defined by Envision Franklin Land Use guidelines. The applicant does not have plans to further develop the property other than to subdivide the property into two single family lots. Staff recommends approval of Resolution 2022-58.

Chair Lindsey asked for public comment on the item. There was none.

Applicant Presentation: Mr. Crunk stated he did not have anything further to add.

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Michael Orr to Approve Item 8.

Chair Linsdey asked for discussion. There was none.

The motion carried 8-0.

9. Consideration Of Ordinance 2022-31, An Ordinance To Zone 2.07 Acres Residential 1 (R1) District, Scenic Corridor Overlay (SCO) District, For The Property Located West Of Franklin Road And South Of Century Oaks Drive, At 517 Franklin Road.

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 517 Franklin Rd Annex Combo
2. ORD 2022-31 An Ordinance to Zone 2.07 Acres Residential_Combined_Law approved
3. 22-002 517 Franklin Rd BoundaryTopo Survey
4. 2022-07-07 Formal Annexation and Plan of Services Exhibit-24x36

Staff Presentation: Joey Bryan. Mr. Bryan stated that the subject property meets the guidelines set by Envision Franklin that require properties zoned for Large Lot Residential Design concept to be a minimum of one acre or larger. The subject property is appropriate for the R1 designation. The property meets the recommendations of Envision Franklin. Mr. Bryan noted that there is no site-plan at this time. Mr. Bryan also noted that as part of the Scenic Corridor Overlay district, new development must be set back according to the SCO recommendations. Staff recommends approval of Ordinance 2022-31.

Chair Lindsey asked for public comment on the item. There was none.

Applicant Presentation: Mr. Crunk stated he did not have anything further to add.

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Marcia Allen to Approve Item 9.

Chair Lindsey asked for discussion.

Commissioner Petersen noted the steep slope of the property. Mr. Crunk explained that the slope would affect the new lot but there should be plenty of space for a home.

There being no further discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

REZONINGS/DEVELOPMENT PLANS

10. Consideration Of Ordinance 2022-19, An Ordinance To Rezone 7.9 Acres From Civic Institutional (CI) District To Residential 4 (R4) District For The Property Located South Of Battle Avenue And West Of Cannon Street, At 1501 Figuers Drive.

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. 2022-19 ORD REZONE TO RESIDENTIAL_1501 FIGUERS DRIVE_Combined_Law approved
2. MAP Franklin Elem Rez
3. COF 7860 227418 FSSD Elementary ReZoning

Staff Presentation: Joey Bryan. Mr. Bryan stated that the item had been previously heard at the June 2022 FMPC meeting. The applicant did not notice property owners located within 500 feet of the subject property, therefore was required to appear again after proper noticing. The applicant requests rezoning of the property from Civil Institutional to R4. The property is currently an administrative building for the Franklin Special School District. According to Envision

Franklin, the property is in the Historic Residential Design Concept. The HRD designation recommends infill development maintain established traditional residential character and the scale of the surrounding neighborhood. Attention should be given to building form, lot width and setbacks to provide context sensitivity. The R4 designation is compatible with Envision Franklin and follows the character and pattern of the neighborhood. Mr. Bryan noted that R4 is the designation given to the most established traditional core of Franklin. Any new lot should be compatible with the surrounding area regarding building form, lot width and setbacks.

Staff recommends approval of Ordinance 2022-19.

Chair Lindsey asked for public comment on the item.

The following citizens spoke concerning Ordinance 2022-19.

Forrest Latta, 504 Figuers Drive. Mr. Latta spoke against the request for rezoning of the subject property to R4. Mr. Latta stated that without an associated development plan for the property, it is speculative as to what may be developed on the property. Mr. Latta pointed out that without a development plan the opportunity for public input is eliminated. Mr. Latta further noted that the property is zoned correctly for the existing use of the building and no further rezoning is needed. Mr. Latta concluded by stating that if a development plan is submitted during the meeting, he requests a deferral to the next FMPC meeting to properly review the plan.

Curtis Sullivan, 108 Battle Ave. Mr. Sullivan spoke in opposition to the rezoning from Civic Institutional to R4. Mr. Sullivan stated that once the civic districts are lost, they will not be recovered.

Elissa Corning, 114 Gist St. Ms. Corning spoke in opposition to the rezoning request. Ms. Corning expressed concerns of the parents in the FSSD and how the schools may be affected if the rezoning of the property is approved. Ms. Corning stated that she is concerned about the water lines and with the unknown aspects of the property.

James Turner, 311 Battle Avenue. Mr. Turner spoke in opposition to the rezoning request from CI to R4. Mr. Turner requested that the item be deferred until a development plan is submitted. Mr. Turner stated concerns about what the R4 designation means. The R4 lot sizes are unclear. Mr. Turner finished by stating that he believes there are other uses for the building as it is currently zoned.

Jared Sullivan, 419 Figuers Drive. Mr. Sullivan spoke in opposition to the requested rezoning. He stated that the rezoning would change the character of the neighborhood. Mr. Sullivan believes the FSSD did not send out the notice because they are not interested in public input. The property has been a civic space since 1862 and should continue to be. Mr. Sullivan stated that he received an email from someone associated with FSSD stating that 40 homes are hoped to be developed on the property.

Nick Basquill-White, 414 Figuers Drive. Mr. Basquill-White spoke in opposition to the requested rezoning. Mr. Basquill-White pointed out that the rezoning of the property to R4 does not follow the recommendations of Envision Franklin. The lack of a development plan eliminates the opportunity for feedback from the community. Mr. Basquill-White questions the way FSSD has approached the process of rezoning the property. The lack of proper noticing to the public and the small signs all point out that FSSD may not have made the best effort to let citizens know the future of the property.

Joshua James, 317 Battle Ave. Mr. James spoke in opposition to the requested rezoning of the FSSD Administrative property. He noted the small signage placed in one area of the subject property and not on the other areas of the property/building. Mr. James stated that a few neighborhood residents thought a single lot was under consideration for rezoning, not the entire FSSD property. Mr. James explained how many of the neighbors use the playground and empty lot daily. He stated that he is not against development, but he is against development that would change the character of the neighborhood. Mr. James finished by stating that he would like to see a development plan for the area.

Andy Clark, 601 Janice Court. Mr. Clark stated that he is part of a small private school in downtown Franklin, and he wanted to make the Commission aware that he has made an offer on the Administrative Building. The offer was rejected because of the 30-day marketing period that won't begin until the final vote. Mr. Clark requested that FSSD provide the marketing materials, before the final vote has been taken, so that an appropriate offer can be made and officially

reviewed. The intent is to buy the building as is and as zoned for a small school. Mr. Clark finished by saying that if the building/property is approved to be rezoned, FSSD plans to demolish the building. At that time, the building would be of no use to the school.

Applicant Presentation: David Esslinger, Associate Director of FSSD Schools for Finance and Administration. Mr. Esslinger stated that FSSD did not properly notice the request for rezoning and was not aware of the need to do so. Now, the rezoning request has been properly noticed and FSSD would like to request approval for the rezoning of the FSSD property from CI to R4.

Applicant Presentation: Greg Gamble. Mr. Gamble stated that there may be confusion from the last planning meeting as to what is being requested and what the R4 district means. Prior to 2020, the zoning ordinances defined areas as R1, R2, R3 and so forth zoned districts based on density. This request is not a density-based zone. The request is for R4 designation as recommended by Envision Franklin. According to the Franklin Zoning Ordinance adopted January 1, 2022, "The R4 zoning district is intended to preserve the established historic neighborhoods throughout central Franklin and ensure contextual compatibility of infill development." Specifics such as lot width, frontage types and dimensional standards among others are detailed in the Franklin Zoning Ordinance (3.7.1). Development of this area will require a preliminary plat plan which must be reviewed and approved by FMPC prior to any work commencing. Mr. Gamble used an illustration to compare existing neighborhood blocks/acreage with the subject property to show consistency with the neighborhood in form and context. Mr. Gamble addressed the concerns about the removal of open space by pointing out that there are 8 acres of open space within walking distance at Franklin Elementary School. The playground and open spaces are available for use by the public anytime school is not in session. Mr. Gamble concluded by stating that the R4 Residential District was designed specifically for the central part of Franklin and aligns with Envision Franklin.

Mr. Esslinger read his letter to the Board dated August 25, 2022. "The FSSD began conversations about the re-purposing of the Central Office Annex (COA) property approximately 4 years ago. It was quickly determined the COA building did not meet the Board's current needs and would require (at the time) an estimated $13 million to bring the building up to FSSD standards and current codes. We first discussed demolishing the COA building and constructing a new central office complex inclusive of a fenced in transportation and maintenance facility with security lighting, as well as a new central office administration building on the site. This type of construction would have been acceptable under the current CI zoning. However, through several public work sessions, the FSSD Board chose not to go this route due to the effect the fencing, security lighting and 35 buses would have on the quiet, residential neighborhood, as well as the additional daily traffic from all FSSD administration working on site. Therefore, the FSSD Board decided to purchase 5 acres on Eddy Lane already zoned as light industrial where such a development would have little to no impact. Phase one of construction of the new FSSD Central Office Complex has already begun. On May 9th, 2022, the FSSD Board declared this property surplus with the intent to sell the property. The proceeds from this sale will reduce the amount of bond funds needed for current and future projects and, the additional tax revenue generated will benefit all current FSSD tax payers for years to come. The FSSD leadership met with the staff of the Franklin Planning Department to seek their advice and counsel on the most appropriate zoning for the property before listing it for sale. We wanted to make sure the future use of the property would protect the long-range goals of Envision Franklin as well as ensure the use is contextual to the current neighborhood. The Planning Department staff encouraged our petition to rezone the property from CI to R4 and agreed that the R4 zoning was the most responsible way to protect the neighborhood. The FSSD remains a vital part of the neighborhood and is greatly interested in the future use of the property since Franklin Elementary School will continue to operate next door. We understand the community's interest in green space and will continue to provide after-school access to Franklin Elementary's multiple playgrounds, basketball court, full-size soccer field and paved track as we've done for many years. We believe rezoning the property to R4 prior to its sale is in the best interest of the immediate neighborhood and the larger Franklin community, assuring something contextual goes in the space after the sale. Therefore, we respectfully ask the Commission to accept the recommendation of the professionals of the Franklin Planning Department and the elected members of the FSSD Board of Education and approve this property to be rezoned from CI to R4."

Commissioner Petersen requested clarification of the map illustration in the staff documents. It currently states the existing zone is PD 8 and the proposed number of dwelling units is 4.

Mr. Bryan stated that this was an error, as a previous map was used to create the new map. It was confirmed that the current zoning is CI and the proposed zoning is R4. The R4 ordinance does not stipulate 4 units per acre.

Commissioner Peterson asked staff how it will be determined how many units per acre.

Mr. Bryan explained there are several factors required by the R4 ordinance including lot width, height of the building, fronting of a roadway and sidewalks, among others. All of which are contextual regarding the existing neighborhood. New development would be required to meet these regulations. As the property exists now, there are only 2 lots with frontages to Battle Avenue and Cannon Drive. Mr. Bryan finished by stating there are too many limiting factors of the subject property to accurately estimate how many homes would exist.

Ms. Wright added that a Preliminary Plat and plan would be required to be presented to the Board for review and approval. The Board would decide if the proposal meets the ordinance and neighborhood requirements. Consideration of access points, storm water requirements and open spaces will determine the number of lots, but without a Preliminary Plat these are unknowns.

Commissioner Petersen asked what the lot size would be for this area of Franklin.

Mr. Bryan stated that there is a minimum lot size of 6500 square feet for R4.

Alderman Petersen asked how many lots per acre?

Ms. Diaz-Barriga added that while 6500 square feet is the minimum, the new development lot size depends on the surrounding lots and is contextual to the neighborhood. It isn't possible to predict or design on the fly how many lots could or couldn't be on the property site.

Mr. Bryan stated that 6500 square feet is the minimum lot size, but the actual lot size would be the average of adjacent properties.

Alderman Petersen asked if staff has compared the adjacent lots to determine what the lot sizes could be.

Ms. Wright added that because the request is for rezoning, staff has not analyzed neighboring/adjacent properties. Ms. Wright added that if Chair Lindsey wanted to recognize the applicant, the information might be available.

Mr. Gamble confirmed that the surrounding lot sizes are around 10,000 square feet.

Commissioner Franks asked Mr. Gamble how many lots could be proposed?

Mr. Gamble stated that he has not completed a development plan or met with staff to review and discuss. The presentation tonight was prepared to explain and address the issues of public concern.

Commissioner Orr reminded the Board that easements, open space, and access points would need to be considered for predicting lot sizes.

Ms. Wright stated that the applicant has provided exact copies of the R4 zoning ordinance. Without a designer, with a plan, we can't speculate on the number of homes that could potentially be developed on the property. FSSD would like to rezone the property to R4 and sell the land. FSSD does not have a plan for the property. The question for the Commission is to decide is if R4 is the appropriate rezoning designation for the Annex property.

Commissioner Franks asked why the property would need to be rezoned R4, why not sell the property as it is zoned? Once the property is purchased, the new owner could choose to request rezoning of the property.

Commissioner Allen stated that in the letter from Mr. Esslinger, staff recommended R4. Why did staff not recommend CI?

Ms. Diaz-Barriga stated that staff was asked, by FSSD, what the recommended rezoning designation would be. Staff recommended R4 or PD.

Ms. Wright further added that Envision Franklin is what places this area of Franklin in the Historic Residential Design

concept. Although CI is supported in the Historic Residential Design concept, R4 is the most similar district in the ordinance to the Historic Design Concept supported by Envision Franklin.

Commissioner Allen stated that her question was answered.

Commissioner McLemore asked if the playground would still be available for use by the neighborhood families.

Mr. Esslinger stated that nothing would change at Franklin Elementary school regarding access to the playground and the open fields. There is a mistake in the application address that may have added to the confusion as to what would or would not be available to the public. The Annex address is 1406 Cannon Street and the FES address is 1501 Figures.

Commissioner McLemore asked staff what types of businesses could occupy the property if the property remained zoned as CI.

Ms. Diaz-Barriga stated that a hospital, rehabilitation facilities, school, a funeral home, among others. Ms. Diaz-Barriga read the list of Civic Institutional businesses that could occupy the building; "active recreation, a cemetery, charitable organizations, clinics, continuum of care facilities, entrepreneurs, educational facilities, daycare centers, innovation centers, public assembly centers, telecommunication towers with additional regulations."

Commissioner Orr asked the applicant to explain what the stated 13 million dollars in updating costs included to bring the Annex building up to codes/standards. Does this include the removal of asbestos and lead paint?

Mr. Esslinger stated that the 13 million dollars was an estimate received 4 years ago. Updating would include asbestos remediation and removal. The building was built in the 1950's, which probably meant lead paint was used. The asbestos is encapsulated and is currently safe, but once remodeling or disturbance of the material occurs, it becomes hazardous.

Chair Lindsey asked Mr. Esslinger what the Annex building was used for.

Mr. Esslinger stated that the Annex housed the MAC program, technology offices, and leadership offices.

Commissioner Allen asked staff if a PD designation would be recommended for this site.

Ms. Diaz-Barriga stated that, yes, it could be recommended but would need to be considered within the context of a development plan.

Commissioner Allen asked the applicant if PD has been considered as a designation for the property? Ms. Allen explained that the Board is feeling unsure about the proposal without more specifics.

Mr. Esslinger answered by stating that he is an educator and not a developer. FSSD would like to rezone the property to sell.

Mr. Gamble stated that PD would be an appropriate residential plan, but the applicant would like the plan to be determined by the purchaser of the property. The applicant would like to simply rezone the FSSD site to the R4 base district, which is consistent with every lot surrounding the property except for Franklin Elementary School.

Commissioner Franks stated/asked why not sell the property as it is zoned to the highest bidder and let the developer worry about the rezoning and the input of the neighborhood. Like Mr. Esslinger stated earlier, he isn't a developer. A simpler approach to selling the property would be to make the property available to sell and accept sealed bids. If the bids don't match the appraisal of the property value, choose not to accept the bid. Mr. Franks remarked that "otherwise, find a developer to create a plan and work with the neighbors and staff to request approval."

Mr. Gamble explained that the reasoning behind the request for the R4 base district was to ensure the long-term income benefits to FSSD. These concerns are significant for the future of FSSD.

Commissioner McLemore asked for confirmation from staff, if the property is rezoned to R4, that a Preliminary Plat or Development Plan will be reviewed by the Board for review and approval. If the board determined the plan did not

provide enough open space or met some of the other requirements, the Board would have an opportunity to approve or disapprove.

Ms. Diaz-Barriga explained that the Board would review the proposal based on the zoned ordinance and the subdivision regulations.

Chair Lindsey asked for a motion from the Board.

Ms. Wright stated that, until the meeting, staff was unaware that an incorrect address was printed on the agenda. Although the notice to the property owners living within 500 feet was correct, the general notice to the public was incorrect. Ms. Wright expressed her apologies for the staff mistake and requested a deferral to the next meeting, so that staff could correct the address.

Chair Lindsey asked for a motion in light of staff's recommendation.

Commissioner Allen moved to defer consideration of Ordinance 2022-19 to the September 22, 2022 meeting, seconded by Commissioner Harrison.

Commissioner Franks asked if the applicant would be agreeable to the deferral.

Mr. Squires stated that the issue with the incorrect address on the agenda applies to the general public and not so much to the applicant. The general public must be able to make a determination if his or her attendance is necessary. If the address on the agenda is incorrect, it is misleading to the public and does not qualify as a proper notice.

Commissioner Franks stated that at the next meeting the whole process will be repeated, again.

Commissioner Mann stated that by law, the proper procedures must be followed.

Commissioner Franks stated that he understood this, but his concern is about the additional cost to the applicant to repeat this process in a month. Commissioner Franks asked Mr. Squires to confirm the necessity of a deferral to the next meeting.

Mr. Squires stated that the Board would be in a better position to have accurate information on all documents.

Commissioner Harrison stated that no one showed up at the meeting protesting the demolition of Franklin Elementary School.

Commissioner Mann stated that it is the best interest of the City of Franklin to defer any decisions to the next meeting given the incorrect property address being listed on the agenda.

Chair Lindsey added that with all the questions and theories about what type of development could be considered for the parcel, the best plan of action is to defer any decisions to September 22, 2022. It may be determined that R4 is the best rezoning option. The question about the Annex building being purchased for a private school is another option to be considered if the price is right. In that case, no rezoning is necessary.

Mr. Esslinger stated that an offer cannot be accepted until the property can be publicly marketed.

Chair Lindsey stated that we have a proper motion on the floor to defer the consideration of Ordinance 2022-19 to the September 22, 2022, meeting.

By roll call vote, the item passed unanimously. (8-0)

11. Consideration Of Ordinance 2022-22, An Ordinance To Rezone 32.83 Acres From Civic Institutional (CI) District To Planned (PD 3.66/142,500) District For The Property Located West Of Franklin Road And South Of Gateway Court, Located At 553 And 557 Franklin Road (555 Franklin Road PUD Subdivision).

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 555 Franklin Rd PUD
2. 2022-22 ORD 555 Franklin Rd PUD Rezone_Combined_Law approved (4)
3. 555 Franklin Road PUD Subdivision, Rezoning - submittal 002

Staff Presentation: Joey Bryant. The applicant is requesting rezoning of the property from Civic Institutional (CI) to Planned District (PD). Mr. Bryant stated that the applicant proposes 120 multi-family units with 142,500 square feet of continuum of care space. Envision Franklin places the subject property in the Neighborhood Mixed Use concept, which provides a diverse mix of high activity uses with a connected and walkable block layout. These centers and corridors should have coordinated development patterns on a pedestrian scale, with high-quality architecture, plazas, sidewalks, and pedestrian and bicycle amenities to activate the street and connect these gathering places to the residential neighborhoods they support. Multi-family units, assisted living, and continuum of care facilities are appropriate types of primary and secondary uses in the Neighborhood Mixed-Use concept.

Staff recommends approval of Ordinance 2022-22.

Chair Lindsey asked for public comment on the item. There were none.

Applicant Presentation: Greg Gamble, representing Ryan Companies. Mr. Gamble stated that a master plan for a continuum of care facility was presented during the Joint Conceptual Workshop. The plan includes a request for 50% assisted living and 50% independent living. This request includes a 20% increase in independent living than the Continuum of Care CI base zone allows for. The BZA approved parking along the side of the building because of the slope and ADA requirements. Mr. Gamble finished by stating he would be glad to discuss the two Modification of Standards requests, if necessary.

Chair Lindsey asked for a motion from the Board.

A motion was made by Commissioner Jimmy Franks, seconded by Commissioner Alma McLemore to approve a recommendation to BOMA for Item 11.

Commissioner Orr stated that he is a member of Clearview Baptist Church and would not benefit financially by any decisions made by the board.

There being no further discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

12. Consideration Of Resolution 2022-47, A Resolution Approving A Development Plan For 555 Franklin Road PUD Subdivision With 1 Modification Of Development Standards Request (Foundation Height), For The Property Located West Of Franklin Road And South Of Gateway Court, Located At 553 And 557 Franklin Road.

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 555 Franklin Rd PUD
2. RES 2022-47 555 Franklin Rd PUD_Combined_Law approved (4)
3. 7894 555 Franklin Rd PUD DP_Conditions of Approval_01
4. 2022-08-04_555 Franklin Rd PUD Development Plan

Staff Presentation: Joey Bryan. The applicant requests consideration of a development plan and one modification of standards request for Resolution 2022-47. Mr. Bryant stated that the applicant proposes 120 multi-family units with 142,500 square feet of continuum of care space. Envision Franklin places the subject property in the Neighborhood Mixed Use concept, which provides a diverse mix of high activity uses with a connected and walkable block layout. These centers and corridors should have coordinated development patterns on a pedestrian scale, with high-quality architecture, plazas, sidewalks, and pedestrian and bicycle amenities to activate the street and connect these gathering places to the residential neighborhoods they support. The Neighborhood Mixed Use design concept recommends 3 stories, but larger scale master plan developments may be approved for additional height with appropriate transitioning. The development plan calls for a 3-story building with a 4th story that is recessed or tapered to the 3rd

floor along the rear drive isle. The site uses the rising topography to minimize the appearance of the 4th story. The applicant has incorporated site grading and architectural forms and details including a gable that reduces the height appearance of the building from the Franklin Road viewshed. The urban frontage concept, according to the zoning ordinance, requires that all parking be at the back of the building. The applicant was granted a variance in August by the Board of Zoning Appeals to allow for parking on the side of the building. A modification of standards was initially requested for the building entry. Staff determined that a modification of standards is no longer needed because there will not be any dwelling units on the first floor. The applicant requests a MOS to reduce the entry foundation height from 18 inches to "at grade" for the building entrance. The ground floor will be used for the continuum of care services and the physical condition of those who would likely use the front entrances would benefit from fewer steps to climb. Staff supports the MOS for the foundation height to be at grade level. Additionally, the Board of Mayor and Alderman have supported similar requests for foundation reduction to better align with ADA recommendations. Therefore, staff recommends approval of the MOS to reduce the foundation height to grade-level. Also, staff recommends approval of Resolution 2022-47 with conditions.

Chair Lindsey asked for public comment on the item. There were none.

Applicant Presentation: Greg Gamble. Mr. Gamble stated that he did not have much more to add but he would be happy to answer any questions. Mr. Gamble mentioned that the applicant is planning to provide additional landscaping and a berm to bridge the area more seamlessly between the subject property and the Gateway neighborhood.

Chair Lindsey asked for a main motion on Resolution 2022-47.

Commissioner McLemore moved to approve Resolution 2022-47, with conditions, seconded by Commissioner Mann.

Chair Lindsey asked for discussion on the main motion.

Commissioner Orr asked the applicant for more information about the connectivity between parcels.

Mr. Gamble stated that there are requirements for connectivity between north, south, east and west of the property. To the west, there is hillside hilltop protection, so there is no connectivity in that direction. To the north is Gateway Village with a right of away connection provided to the property line. The curb cuts are in place, but the asphalt is not extended to the property. To the south, the subject parcel will connect to the church parking lot with the parking lot internal drive isle.

Commissioner Orr asked Mr. Gamble if there were concerns about traffic flow through the church parking lot at inopportune times.

Mr. Gamble stated that there is a traffic light at the entrance to Gateway Village. Once the traffic light is in use, most of the traffic will migrate to the traffic light instead of the church parking lot.

Commissioner Petersen asked about the hilltop/hillslope.

Mr. Gamble noted that the area will be protected as an open space lot. The HHO implies conservation of the area.

Ms. Diaz-Barriga confirmed that all open space lots are non-buildable.

Chair Lindsey asked for discussion about the MOS to reduce the foundation height to grade level.

Commissioner Harrison moved to approve the MOS (reduce the foundation height requirement from 18" to grade level) for Resolution 2022-47, seconded by Commissioner Orr.

There being no further discussion, Chair Lindsey asked for a roll call vote.

The motion to approve the MOS passed unanimously. (8-0)

Chair Lindsey asked if there was anymore discussion on the main motion.

There being no further discussion, Chair Lindsey asked for a roll call vote.

The motion to approve Resolution 2022-47 with conditions, passed unanimously. (8-0)

13. Consideration Of Ordinance 2022-32, An Ordinance To Rezone 20.15 Acres From Planned (PD) District To Planned (PD 0.2/263,100) District For The Property Located East Of Franklin Road And North Of Liberty Pike, Located At 230 Franklin Road (The Factory At Franklin PUD Subdivision)

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP The Factory PUD DR Rev 2
2. ORD 2022-32 An Ordinance to Rezone 20.15 Acres_Combined_Law approved
3. Factory - Development Plan, Rev 2 REZONING SHEETS

Staff Presentation: Joey Bryan. The applicant proposes rezoning of the property located east of Franklin Road and north of Liberty (20.15 acres) from Planned District to Planned (PD 0.2/263,100) District to accompany a revised development plan. The revised development plan is to be considered next on the agenda. Envision Franklin places the property in the Neighborhood Commercial design concept. The areas should contain a mix of active uses at key intersections that serve surrounding residential concentrations. The centers should be compatible with and contribute to neighborhood character and livability. The centers should be defined by building frontages and activated streets and not by a parking lot. The rezoning with proposed entitlements is in accordance with Envision Franklin and is supported by staff. Staff recommends approval of Ordinance 2022-32.

Chair Lindsey asked for public comment on the item. There was none.

Applicant Presentation: Greg Gamble, representing Holladay Properties. Mr. Gamble explained key components of the proposal for the next chapter of The Factory. A MOS is requested for signage and dumpster location. A request for additional square footage to house a carousel is proposed. Mr. Gamble stated that the applicant would like to add Commercial Recreation as an approved use at the Factory.

Chair Lindsey asked for a motion for item #13, Consideration of Ordinance 2022-32.

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Michael Orr to Approve Item 13.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

14. Consideration Of Resolution 2022-59, A Resolution Approving A Revised Development Plan For The Factory At Franklin PUD Subdivision With 11 Modifications Of Development Standards (Refuse Requirements, Connectivity, Signage), For The Property Located North Of Liberty Pike And East Of Franklin Road, Located At 230 Franklin Road.

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP The Factory PUD DR Rev 2
2. Factory at Franklin PUD DP Rev 2_Conditions of Approval_01
3. RES 2022-59 Approving a Revised Development Plan_Combined_Law approved (2)
4. Factory PUD - Development Plan, Rev 2
5. 2022-06-24 HZC Comprehensive Signage Package

Staff Presentation: Joey Bryant. Mr. Bryant stated that the applicant has submitted a revision of the development plan for the Factory that includes a modification of standards for refuse locations/screening, additional square footage to house a carousel, modification of parking layout along with 11 Modification of Standards (Resolution 2022-59). A concept plan was approved for the Factory in June of 1997, Ordinance 97-32. The former industrial campus was repurposed in the late 1990's and the applicant proposes the MOS to respond to retail and customer preferences.

1) A request for a MOS for the location of the refuse areas on the Factory Campus.

The applicant proposes to locate refuse areas in the frontage area along Liberty Pike. According to Ordinance 13.3.4, refuse areas should be located away from building frontage and should be located along the side and rear of the building. Envision Franklin recommends that Neighborhood Commercial should engage the street edge with landscaping and walkways to facilitate pedestrian movement and safety. The Factory Campus has many locations along the side and rear of the campus to house the refuse areas that meet the standards of Envision Franklin. Mr. Bryan noted that the Historic Zoning Commission could not arrive at a consensus for a preliminary recommendation for the refuse locations. Mr. Bryan also stated that the HZC is not bound by the MOS, if approved. If the applicant applies for a Certificate of Appropriateness, the HZC has the final determination for the refuse locations. Mr. Bryan stated staff recommends disapproval of this MOS.

2) A request for a MOS for the location of a screen/wall to be within the 15 feet setback from the side lot line and to increase the height of the screen/wall to 8 feet.
Mr. Bryan stated that Ordinance 13.1.2C states that for a driveway located on a side street the wall/screen should be setback at least 15 feet from the side street lot line and the wall height should not be higher than 3 feet. The reason for MOS request #2 is to accommodate the refuse locations proposed in MOS #1. Mr. Bryan stated that the site offers many areas to locate the dumpsters/refuse to meet the recommendations of Envision Franklin and the requirements of the zoning ordinance including the requested screen/wall height for the dumpster areas. The HZC, similarly to MOS #1, could not arrive at a consensus for a preliminary recommendation for the proposed screen/wall height. If MOS #2 is approved, the applicant would be required to apply for a COA for the dumpster/refuse area to be built at the proposed locations. Staff recommends disapproval of MOS #2 for the screen/wall location and height.

3) A request for a MOS to reduce the number of northern cross access points to the adjacent property to 3 rather than 1 for each adjacent property.
Mr. Bryan stated that zoning ordinance 9.3 requires that internal vehicular circulation have cross access points. Staff cannot support this request. Currently, there is an alley on the Factory parcel that would ultimately allow connectivity to all parcels on Harpeth Industrial Court. If any of these parcels are cutoff from the cross-access points, the parcels will not have access to a signalized intersection. All lots along Harpeth Industrial Court must have connectivity to the Factory individually to allow for flexibility and future development. Staff recommends disapproval of MOS #3. Should the FMPC or BOMA approve this MOS, the following conditions will apply. A public access easement would be required along the northern property line of the Factory to allow staff to appropriately plan for future connections to the north.

Mr. Bryan explained that MOS requests #4-#11 relate to signage. The Factory is an adaptive reuse project and was originally an industrial campus and, as such, the building was not constructed or conducive for retail, commercial and non-residential use. The use of additional signage will assist in protecting and revitalizing this local, historical, and cultural asset. The HZC provided a favorable recommendation for the proposed signage with conditions except for MOS #8. The HZC did not approve MOS #8/vertical blade signs. Staff recommendations for the proposed signage follow suit with the HZC approval. Mr. Bryan noted that because the Factory is in the historic preservation overlay (HPO), each individual sign will require a Certificate of Appropriateness.

4) A request for a MOS for irregularly shaped signs.
Mr. Bryan explained that ordinance 15.1.3 requires that signs not be irregularly shaped. Based on the favorable recommendation from the HZC, staff recommends approval of MOS #4 with the following condition that the irregularly shaped sign be limited to small projecting or hanging signs.

5) A request for a MOS to increase the number of band signs per façade to 1 per tenant.
Mr. Bryan stated that ordinance 15.4 requires that a max of 1 band sign per main entrance on the ground floor be utilized. Staff recommends approval following the HZC favorable recommendation with the conditions that signs #5 and #6 be removed as they are proposed to be in front of mechanical screening and that signs #10 and #11 be modified to hang from the eaves and not obscure windows. Staff recommends approval of MOS #5 with conditions.

6) A request for a MOS to allow canopy signs to be located above the canopy and/or above the roofline.
Ordinance 15.5 states that a canopy sign should not project above the canopy or roofline. Following the favorable recommendation of the HZC, staff recommends approval with conditions that signs #50 and #62 be reclassified as wall signs.

7) A request for a MOS to allow one small projecting sign per tenant along the same façade and to allow a maximum size

of 6.5 square feet.
Ordinance section 15.12 for small projecting signs requires that there be 1 sign per main building entrance and the sign be a maximum size of 4.5 square feet. Based on the favorable recommendation of the HZC, staff recommends approval of MOS #7 with the condition that the signage in the MOS follows the number and location presented in the signage plan.

8) A request for a MOS to allow 1 vertical blade sign along the façade of a building less than 2 stories.
Ordinance section 15.14 requires that vertical blade signs be permitted on buildings of 2 or more stories and front a street intersection. The HZC recommended disapproval of MOS #8 because vertical blade signs are not permitted on buildings of less than 2 stories. Staff recommends disapproval of MOS #8 for the same reasons.

9) A request for a MOS to allow 1 wall sign per tenant along the same façade.
Ordinance section 15.15 states that a maximum of 1 wall sign per façade if no band sign exists is mandatory. Because of the adaptive reuse of the Factory Campus, staff can support the request. Additionally, the HZC recommended this MOS favorably with the condition that no additional wall signs other than signs #50 and #62 should extend above the roofline or sit on the roof line. Staff recommends approval of MOS #9 with the same conditions for sign #50 and #62.

10) A request for a MOS to allow wall signs measuring 350 square feet on the historic water tower.
Ordinance section 15.15 states that a wall sign measures 1 square foot per linear foot of the building façade. Additionally, the HZC recommended this MOS favorably with the condition that the sign referenced in the MOS follows the number, sizing, and location presented in the sign plan. Staff recommends approval of MOS #10 with the stated conditions.

11) A request for a MOS to allow additional site entrance signs.
Ordinance section 15.7 states that a maximum of 2 development entrance signs are permitted. Additionally, the HZC recommended this MOS favorably with the condition that the sign referenced in the MOS follows the number, sizing, and location presented in the sign plan. Due to the adaptive reuse of the Factory Campus along with the stated conditions, staff recommends approval of MOS #11.

Mr. Bryan summarized the Consideration of Resolution 2022-59, a revised development plan with 11 MOS.
Modification of Standards 1-3 were recommended for disapproval.
Modification of Standards 4-7 were recommended for approval, with conditions.
Modification of Standards 8 was recommended for disapproval.
Modification of Standards 9-11 were recommended for approval with conditions.

Chair Lindsey asked for public comment on the item. There was none.

Applicant Presentation: Greg Gamble.
Mr. Gamble stated the following plans for the Factory Campus:
- **Pedestrian connections to the Factory Campus from Franklin Road.**
- **Removal of perpendicular parking spaces along the side of Maffiozo's**
- **New sidewalks**
- **Landscaping**
- **Entrance along Liberty Pike closest to Franklin Road will be a "right in", "right out" (only)**
- **New entrance (future plan) directly across from Daniels Drive**

Mr. Gamble explained/discussed the reasoning behind the MOS requests 1-3 & 7. Mr. Gamble stated that the identified areas for the four refuse locations (2 areas along Liberty Pike and 2 areas along the north side of the campus) were chosen out of necessity as restaurants are expected to be positioned throughout the Factory buildings. Up until 2019, the dumpsters were out in the open without any screening or landscaping. As part of the commitment to the tenants, Holladay Properties will manage the trash pickup and clean up. Mr. Gamble stated that the proposed wall/screen height is proposed to be 9 feet surrounding the refuse locations. The wall/screen along with the landscaping proposed will conceal the dumpster/recycle containers. The MOS requests 1 & 2 are essential in accommodating the needs of such a large site, as well as, accommodating the needs of the tenants.
The MOS request #3 provides more cross access specificity and provides a framework for future development without limiting cross access traffic. Mr. Gamble stated that regarding MOS #7, there is a missing sentence/condition that pertains to the size of the projecting signs in the alley area. The alley area would be the only area where 6.5 projecting

signs would be permitted.

Chair Lindsey asked for a main motion.

Commissioner Harrison moved to approve a recommendation of Resolution 2022-59 to BOMA, seconded by Commissioner Orr.

Commissioner Harrison moved to approve MOS #1, seconded by Commissioner Mann.

Commissioner Harrison stated that the property is unique and will require compromise.

Commissioner Orr has concerns about dumping trash and recycling near the roadway and the sidewalk.

Commissioner Allen agreed and stated that there should be a way to house the refuse areas away from the public.

Chair Lindsey asked about disposal of frying oil waste.

Mr. Smothers stated that there is an area behind Jameson Hall to dispose of cooking waste. Mr. Smothers also noted that the first question potential tenants ask is "how far the trash and recycling dumpsters are."

Commissioner Mann stated that he can support MOS #1 & #2 for practical reasons and understands the constraints of providing reasonable access to trash receptacles.

Commissioner Allen stated her concerns about the smell and does not support the request for MOS #1 & #2.

Chair Lindsey pointed out that if the refuse areas are not located throughout the Factory Campus, you are faced with a row of 12 large dumpsters located at the back of the site. The smell and clean-up required for these types of large containers is also an issue to consider.

There being no further discussion, Chair Lindsey asked for a roll call vote.

ACTION:	**Motion to Approve MOS 1 by Commissioner Scott Harrison seconded by Commissioner Nick Mann;** **Motion Passed 6-2**
AYES:	**Jimmy Franks, Scott Harrison, Alma McLemore, Nick Mann, Ann Petersen, Roger Lindsey**
NOES:	**Marcia Allen, Michael Orr**
ABSTAIN:	**None**

Commissioner Harrison moved to approve MOS #2, seconded by Commissioner Mann.

There being no discussion, Chair Lindsey asked for a roll call vote.

ACTION:	**Motion to Approve MOS #2 by Commissioner Scott Harrison seconded by Commissioner Nick Mann;** **Motion Passed 7-1**
AYES:	**Jimmy Franks, Scott Harrison, Alma McLemore, Nick Mann, Michael Orr, Ann Petersen, Roger Lindsey**
NOES:	**Marcia Allen**
ABSTAIN:	**None**

Commissioner Harrison moved to approve MOS #3, seconded by Commissioner McLemore.

Commissioner Harrison stated the property is being purchased by a couple of different groups, making it unnecessary to have 11 cross access points.

Commissioner Allen explained that 11 cross access points may be too many, but 3 is not enough. It is a mistake to approve only 3 access points.

Commissioner Petersen pointed out that the area under discussion is mostly industrial.

Commissioner Mann stated that based on the location of the 3 cross access points, 3 should be suitable for the needs of this area.

Mr. Bryan asked if MOS #3 included the condition that, if approved, a public access easement would be required along the northern property line.

Commissioners Harrison and Mann stated that they would not support the motion if the condition was included.

Mr. Wiseman clarified that the easement along the north property line would allow staff a better opportunity to plan for future development. Connectivity could be evaluated on a lot-by-lot process and would allow staff the freedom to choose where the connection would be. Currently, the alley functions as an alley for deliveries and other services. Although there are 11 areas where connections could occur, that doesn't mean all 11 locations will have connections. Staff has more options for connectivity if the access points are not limited to 3. The goal is to create the flow of traffic to a signal. An easement on the north property line gives flexibility in planning the connections depending on future development.

Mr. Gamble explained the parking improvements around the carousel building. If an easement is created, revision of the development plan, regarding the Carousel building, would be required.

Mr. Smothers stated that the "alley" is a private parking lot. The plan is to reduce through traffic to create safer pedestrian areas.

Chair Lindsey stated that if an apartment building is built along Harpeth Industrial Court, traffic will move through the Factory parking lots to access the traffic signal. It appears that financial risk is being assumed by the redevelopers of the Factory because development progress is stalled for one reason or the other.

Commissioner Harrison stated that his motion for approval of MOS #3 should not include the "with conditions" portion.

Commissioner Mann stated that he agrees and will support the motion.

There being no discussion, Chair Lindsey asked for a roll call vote.

ACTION:	**Motion to Approve MOS #3, without conditions by Commissioner Scott Harrison seconded by Commissioner Alma McLemore;**
	Motion Passed 7-1
AYES:	**Jimmy Franks, Scott Harrison, Roger Lindsey, Nick Mann, Alma McLemore, Michael Orr, Ann Petersen**
NOES:	**Marcia Allen**
ABSTAIN:	**None**

A motion was made by Commissioner Ann Petersen, seconded by Commissioner Scott Harrison, to approve MOS #4, with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

A motion was made by Commissioner Michael Orr, seconded by Commissioner Scott Harrison, to approve MOS #5, with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

A motion was made by Commissioner Nick Mann, seconded by Commissioner Scott Harrison, to approve MOS #6, with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

A motion was made by Commissioner Nick Mann, seconded by Commissioner Scott Harrison, to approve MOS #7, with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

ACTION:	**Motion to Disapprove MOS #8 by Commissioner Marcia Allen seconded by Commissioner Ann Petersen;**
	Motion Passed 7-1
AYES:	**Marcia Allen, Scott Harrison, Roger Lindsey, Nick Mann, Alma McLemore, Michael Orr, Ann Petersen**
NOES:	**Jimmy Franks**
ABSTAIN:	**None**

A motion was made by Commissioner Marcia Allen, seconded by Commissioner Michael Orr to Approve MOS #9, with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Jimmy Franks to approve MOS #10 with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote.

The motion carried 8-0.

A motion was made by Commissioner Scott Harrison, seconded by Commissioner Marcia Allen to approve MOS #11 with conditions.

There being no discussion, Chair Lindsey asked for a roll call vote on the main motion.

The motion carried 8-0.

SITE PLANS, PRELIMINARY PLATS, AND FINAL PLATS

15. 1624 West Main PUD Subdivision, Final Plat (Formerly Bob Rucker Subdivision, Lots 1 And 2), Consolidating 2 Commercial Lots Into 1 Commercial Lot And Establishing Easements, On 0.77 Acres, Located At 1624 And 1628 West Main Street. (CONSENT AGENDA)

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP 1624 W Main PUD FP
2. 7910 1624 W Main PUD FP_Conditions of Approval_01
3. 21122_1624 W Main PUD Sub(Formerly Bob Ruker Sub Lots 1 & 2_Plat_8-3-2022 R1

The item was Approved on Consent Agenda.

16. Cool Springs East Subdivision, Site Plan, Section 28, Revision 2, Lots 675, 676, And 692 (Unified Site Plan Open Space Revisions), Redeveloping The Provided Open Space On 32.34 Acres, Located South Of Cool Springs Boulevard And East Of Carothers Parkway, At 701 Cool Springs Boulevard, 725 Cool Springs Boulevard And 6840 Carothers Parkway. (CONSENT AGENDA)

Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

Attachments:
1. MAP 7882 Cool Spring East Subdivision, Site Plan, Section 28
2. CONDITIONS OF APPROVAL 7882 Cool Springs East Subdiv., SP, Sec. 28, Rev, 2, Lots 675, 676, and 692
3. SITE LAYOUT 7882 Cool Spring East Subdivision, Site Plan, Section 28, Revision 2, Lots 675, 676, & 692
4. ELEVATIONS 7882 Cool Spring East Subdivision, Site Plan, Section 28, Revision 2, Lots 675, 676, & 692
5. ENTIRE PLAN SET 7882 Cool Spring East Subdivision, Site Plan, Section 28, Revision 2, Lots 675, 676, & 692

The item was Approved on Consent Agenda.

17. Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684 (Comtide Unified Development), Constructing 71,298 Square Foot Commercial Building, On 4.023 Acres, Located South Of Bakers Bridge Avenue And West Of Market Exchange Court, At 225 Comtide Court. (CONSENT AGENDA)

Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

Attachments:
1. MAP 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
2. CONDITIONS OF APPROVAL 7881 Cool Springs East Subdivision, Site Plan, Sec. 33, Rev. 2, Lot 684
3. SITE LAYOUT 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
4. ELEVATIONS 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
5. Pages from 1 to 8 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
6. Pages from 9 to 16 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
7. Pages from 17 to 24 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
8. Pages from 25 to 32 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
9. Pages from 33 to 41 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684
10. Pages from 41 to 47 7881 Cool Springs East Subdivision, Site Plan, Section 33, Revision 2, Lot 684

The item was Approved on Consent Agenda.

18. Jordan Reserve Subdivision, Preliminary Plat, Creating 12 Single Family Residential Lots, 3 Open Space Lots, And Dedicating Right-Of-Way On 28.26 Acres, Located South Of Cool Springs Boulevard And East Of Mack Hatcher Memorial Parkway, At 565 Jordan Road.

Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

Attachments:
1. MAP 7919 Jordan Reserve Subdivision, Preliminary Plat
2. 7919 Jordan Reserve Subdivision, Preliminary Plat Conditions of Approval_02
3. PLAT 7919 Jordan Reserve Subdivision, Preliminary Plat

Staff Presentation: Chelsea Randolph. Ms. Randolph stated that the purpose of the Preliminary Plat is to subdivide the existing single family residential into 12 single lots, 3 open spaces and to dedicate right of way. The property is zoned R2 and is within 500 feet of the HHO boundary. The Preliminary Plat meets the requirements for the R2 zoning district and chapter 17 for properties within 500 feet of the HHO boundary. Each lot will consist of 2 acres and a minimum width of 150 feet. Jordan Road will continue to be blocked off to through traffic to the south. The Preliminary Plat, with conditions, meets the zoning ordinance requirements and the subdivision regulations. Ms. Randolph stated that staff recommends approval of the Jordan Reserve Preliminary Plat with conditions.

Chair Lindsey asked for public comment on the item.

Jimmie Tullis, 604 Jordan Road. Mr. Tullis is speaking in support of the Preliminary Plat. Mr. Tullis has concerns about the sidewalk and roadway.

James Flowers, 638 Gleneagle Lane. Mr. Flowers stated that he is on the Board of the Eagles Glen HOA and is speaking against the Preliminary Plat. The preference is that the area continue to be undeveloped. In the event that the Preliminary Plat is approved, the HOA would have a few reasonable requests such as the widening of Jordan Road, addition of sidewalks, and the addition of gutters.

Ann Gilliam, 633 Gleneagle Lane. Ms. Gilliam is speaking against the Preliminary Plat proposal. Ms. Gilliam asked if there had been a safety study conducted. Ms. Gilliam requests Jordan Road be closed from Glen Eagle Lane to Wynthrop subdivision.

Nancy Cross, 113 Wynthrop Way. Ms. Cross stated that she prefers the quaint undeveloped area of her neighborhood.

Catherine Rouze, 127 Wynthrop Way. Ms. Rouze stated that Jordan Road is a small and dangerous roadway. Ms. Rouze is also concerned about the animals that live in the area.

Applicant Presentation: Keith Brotherton. Mr. Brotherton stated that the dimensions of Jordan Road was discussed with staff. From lot 1 to Liberty Pike intersection, Jordan Road would be 22 ft wide with gutters and a sidewalk (west side).

A motion was made by Commissioner Jimmy Franks, seconded by Commissioner Michael Orr to Approve Item 18. The motion carried 8-0.

19. Stream Valley PUD Subdivision, Final Plat, Section 18, Creating 17 Single-Family Residential Lots, 9 Attached Residential Lots, And 3 Open Spaces, On 13.13 Acres, Located South Of Oglethorpe Drive And West Of Interstate 65. (CONSENT AGENDA)

Sponsors: Emily Wright, Amy Diaz-Barriga, Joseph Bryan

Attachments:
1. MAP Stream Valley PUD FP Sec 18
2. 7918 Strem Valley PUD FP Sec 18_Conditions of Approval_01
3. Stream_Valley_Section_18_Final_Plat_Rev1_Signed_Sealed

The item was Approved on Consent Agenda.

20. Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10, And 11, Creating 35 Townhome Lots, Two Open Spaces, And Easements, On 10.39 Acres, Located North Of Murfreesboro Road And West Of Royal Oaks Boulevard. (CONSENT AGENDA)

Sponsors: Emily Wright, Amy Diaz-Barriga, Chelsea Randolph

Attachments:
1. DEFERRAL REQUEST 7924 Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10 & 11
2. MAP 7924 Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10 & 11
3. 7924 Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10 and 11 Cond. of Approval_01
4. PLAT 7924 Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10 & 11

The item was Deferred on Consent Agenda to the September 22, 2022 FMPC meeting.

NON-AGENDA ITEMS

Chair Roger Lindsey asked if there were any non-agenda items to be presented. There were none.

ANY OTHER BUSINESS

Chair Roger Lindsey asked if there was any further business. There was none.

ADJOURN

There being no further business, the meeting adjourned at 09:45 p.m.

_____ _____

Chair Date

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03334

DATE: August 15, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Joseph Bryan, Principal Planner

SUBJECT:

Consideration Of Ordinance 2022-21, An Ordinance To Rezone 34.30 Acres From Regional Commerce 6 (RC-6) District To Planned (PD 10.15/203,968/130) District For The Property Located North Of Cool Springs Boulevard And East Of Mack Hatcher Memorial Parkway, At 211 Cool Springs Boulevard (The Optima Franklin PUD Subdivision).

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7895
Applicant: Scotty Bernick, Ragan-Smith Associates, Inc.
Owner: NHC HEALTHCARE COOL SPRINGS, LLC., Andy Clark, Rep.

BACKGROUND/STAFF COMMENTS:
The applicant is requesting to rezone the property at 211 Cool Springs Boulevard from RC-6 to Planned (PD) District to accommodate The Optima Franklin PUD Subdivision. The proposed entitlements include 10.15 DUA (dwelling units per acre), 203,968 square feet of nonresidential space, and 130 hotel keys. The 203,968 square feet of nonresidential space includes 137,908 square feet of commercial space at the existing NHC facility. Envision Franklin places the property in the Regional Commerce Design Concept. Envision Franklin states that, "The Regional Commerce design concept contains high-intensity activity centers that attract large numbers of people and employers from both within and outside the City. These areas include major employment and revenue generators that are valuable community resources." The proposed zoning and entitlements are consistent with the recommendations of Envision Franklin and are compatible with the established uses in the surrounding area.

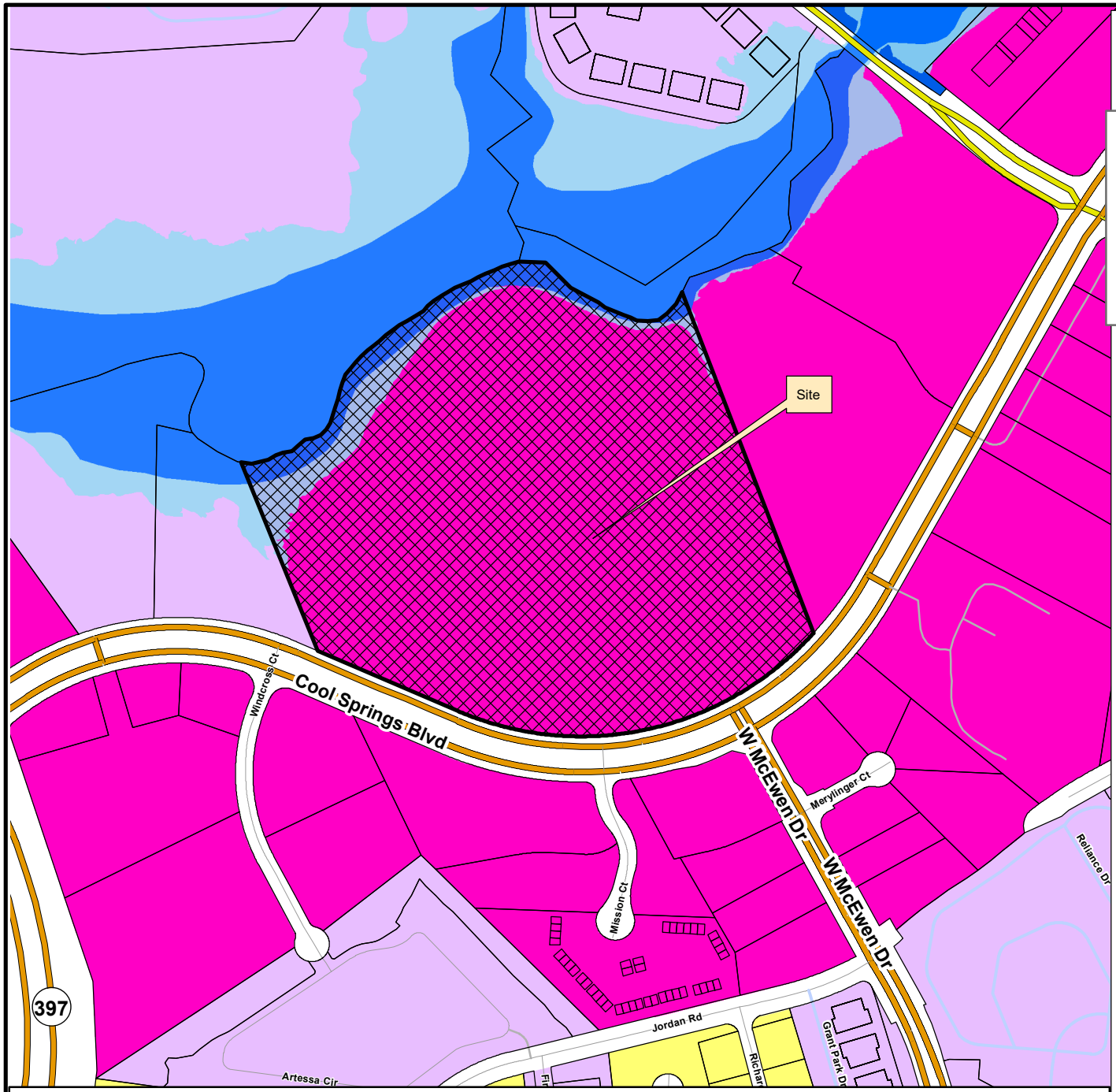
PROCEDURAL REQUIREMENTS:
1. The City's project identification number shall be included on all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend to the Board of Mayor and Aldermen to approve Ordinance 2022-21.



THE OPTIMA FRANKLIN PUD SUBDIVISION
ORDINANCE 2022-21
RESOLUTION 2022-46

Project Information
Existing Zoning: RC-6
Proposed Zoning: PD 10.15/232,168/130
Overlay Districts: FFO, FWO
Site Acreage: 34.30 acres
Proposed Number of Dwelling Units:348
Proposed Nonresidential Square Footage: 232,168
Proposed Hotel Keys: 130

Zoning Districts

- The Optima Franklin PUD

Overlays

- Floodway Fringe Overlay

Overlays

- Floodway Overlay
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
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HISTORIC FRANKLIN TENNESSEE

ORDINANCE 2022-21

AN ORDINANCE TO REZONE 34.30 ACRES FROM REGIONAL COMMERCE 6 (RC-6) DISTRICT TO PLANNED (PD 10.15/203,968/130) DISTRICT FOR THE PROPERTY LOCATED NORTH OF COOL SPRINGS BOULEVARD AND EAST OF MACK HATCHER MEMORIAL PARKWAY, AT 211 COOL SPRINGS BOULEVARD (THE OPTIMA FRANKLIN PUD SUBDIVISION).

WHEREAS, the City of Franklin, Tennessee, encourages responsible growth and the sensible transition of land uses and densities; and

WHEREAS, the Planned (PD) district provides zoning for land uses compatible with both the Franklin Land Use Plan and surrounding development; and

WHEREAS, the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee, adopted Resolution 2022-46, approving a Planned Unit Development (PUD) Development Plan as required by the Franklin Zoning Ordinance; and

WHEREAS, the zoning has been reviewed and approved by BOMA after a public hearing and a recommendation by the Franklin Municipal Planning Commission.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the following described property shall be, and is hereby, rezoned from its present zoning classification of **Regional Commerce 6 (RC-6)** District to **Planned (PD 10.15/203,968/130)** District:

PREMISES CONSIDERED

Map-Parcel	Acres
62-45.02	34.30
Total	34.30

SECTION II. That the attached Location Map and Survey shall serve the purpose of further delimiting the geographical boundaries as described by this Ordinance.

SECTION III. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect from and after its passage on third and final reading, the health, safety, and welfare of the citizens requiring it.

IT IS SO RESOLVED AND DONE on this ____ day of _____, 2022.

ATTEST:

By: _____
Eric Stuckey
City Administrator/Recorder
Approved as to form by:

_____
Shauna R. Billingsley
City Attorney

CITY OF FRANKLIN, TENNESSEE:

By: _____
Dr. Ken Moore
Mayor

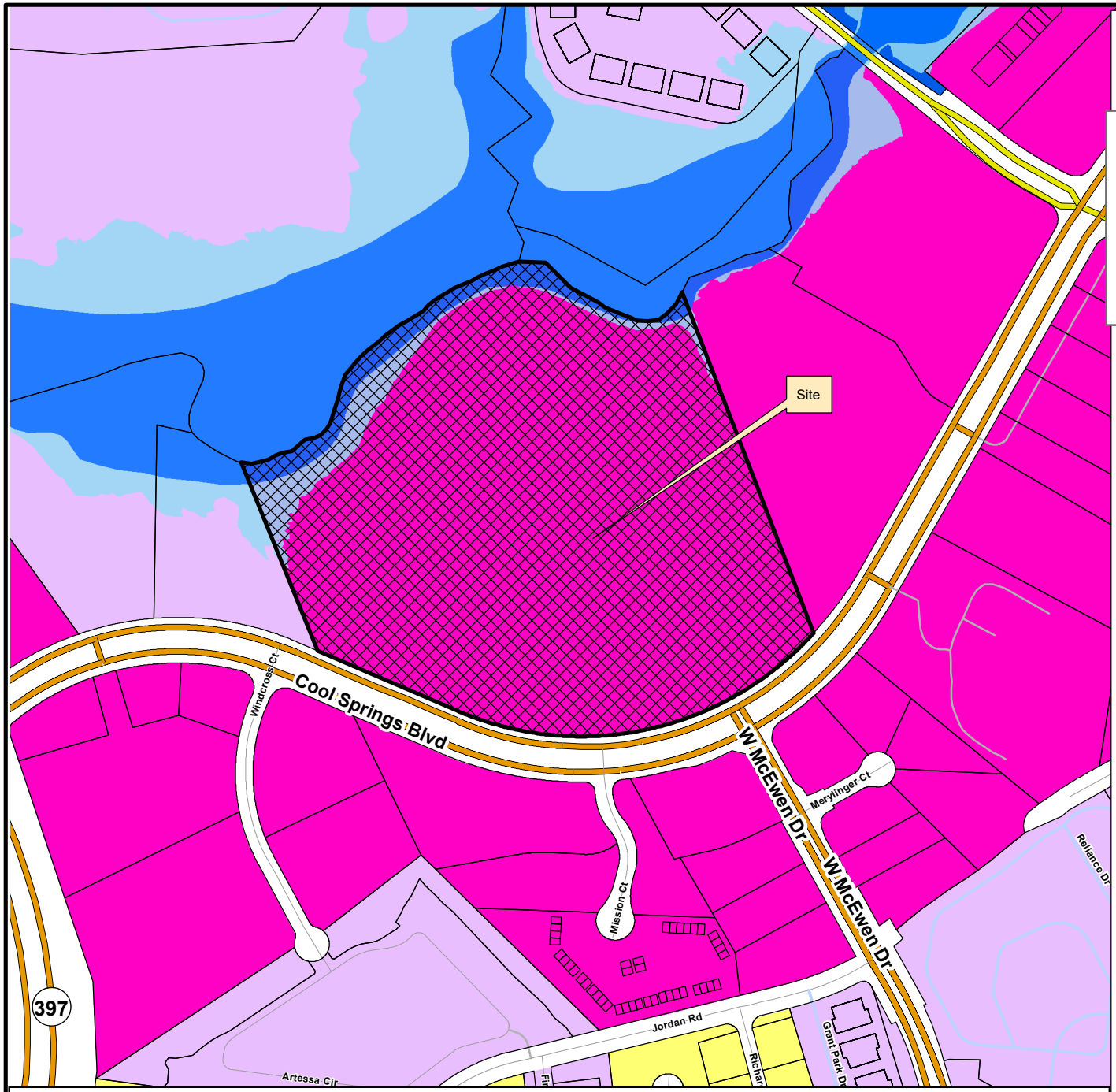
PLANNING COMMISSION RECOMMENDED: _____

PASSED FIRST READING: _____

PUBLIC HEARING HELD: _____

PASSED SECOND READING: _____

PASSED THIRD READING: _____



THE OPTIMA FRANKLIN PUD SUBDIVISION
ORDINANCE 2022-21
RESOLUTION 2022-46

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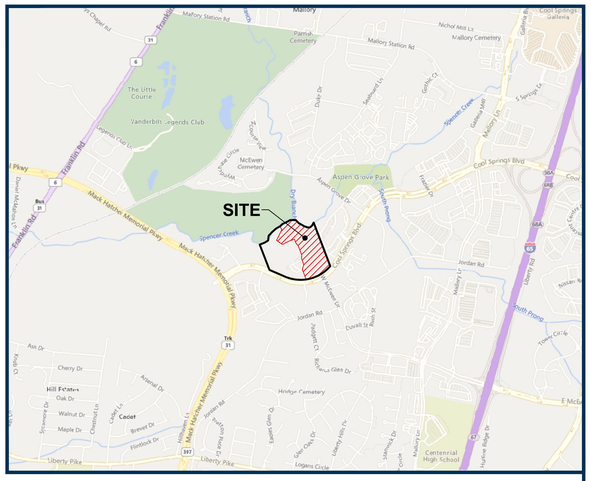
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HISTORIC FRANKLIN TENNESSEE

(COF # 7895)

REZONING PLAN
FOR
THE OPTIMA FRANKLIN
FLOURNOY DEVELOPMENT GROUP



LOCATION MAP
NOT TO SCALE



CONCEPTUAL RENDERING

CONTACTS

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ylo@dynamikdesign.com

INDEX OF SHEETS

SHEET	DESCRIPTION
C0.0	COVER SHEET
C1.0	REZONING PLAN

IN-LIEU FEE & ROADWAY IMPACT FEE OFFSET REQUESTS

ROADWAY IMPACT FEES WILL BE CONSIDERED FOR TRAFFIC IMPROVEMENT REQUIREMENTS AS OUTLINED IN THE TRAFFIC IMPACT ANALYSIS EXECUTIVE SUMMARY PREPARED BY RAGAN-SMITH & ASSOCIATES. SEE CITY OF FRANKLIN CONTRACT #XXXX-XXXX FOR ROADWAY IMPACT FEE AGREEMENT AND AMOUNT. ***SHEET C6.0 ROADWAY IMPACT FEE SCHEDULE TO BE UPDATED WITH INITIAL SUBMITTAL****

PARKLAND DEDICATION IS BEING PROPOSED WITH THIS PROJECT. PARKLAND DEDICATION CALCULATIONS ARE PROVIDED ON C7.0. ***SHEET C7.0 PARKLAND IMPACT FEE SCHEDULE TO BE UPDATED WITH INITIAL SUBMITTAL****

ADVISORY NOTE:

COMPREHENSIVE REVIEW OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS BY THE CITY OF FRANKLIN STAFF WILL OCCUR AT THE SITE PLAN STAGE. PROJECT ENTITLEMENTS APPROVED WITH THIS DEVELOPMENT PLAN DO NOT CONSTITUTE APPROVAL OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS SHOWN ON THE DEVELOPMENT PLAN. IF, UPON APPLICATION OF CITY OF FRANKLIN STREET, STORMWATER, AND UTILITY STANDARDS AT THE SITE PLAN STAGE, THE APPLICANT CANNOT ACHIEVE THE MAXIMUM APPROVED ENTITLEMENTS, THE APPLICANT SHALL BE CONFINED TO THE ENTITLEMENTS ACHIEVABLE FROM THE APPLICATION OF SAID STANDARDS.

LOT 92, REVISION ONE,
SECTION "O" & SECTION "N" ASPEN GROVE SUBDIVISION
TAX MAP 62, PARCEL 45.02
CITY OF FRANKLIN
WILLIAMSON COUNTY
TENNESSEE

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BERNICK REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 329 LANDSCAPE ARCHITECTURE APRIL 25, 2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: NTS
Date: APRIL 25, 2022
Approved By: S. BERNICK

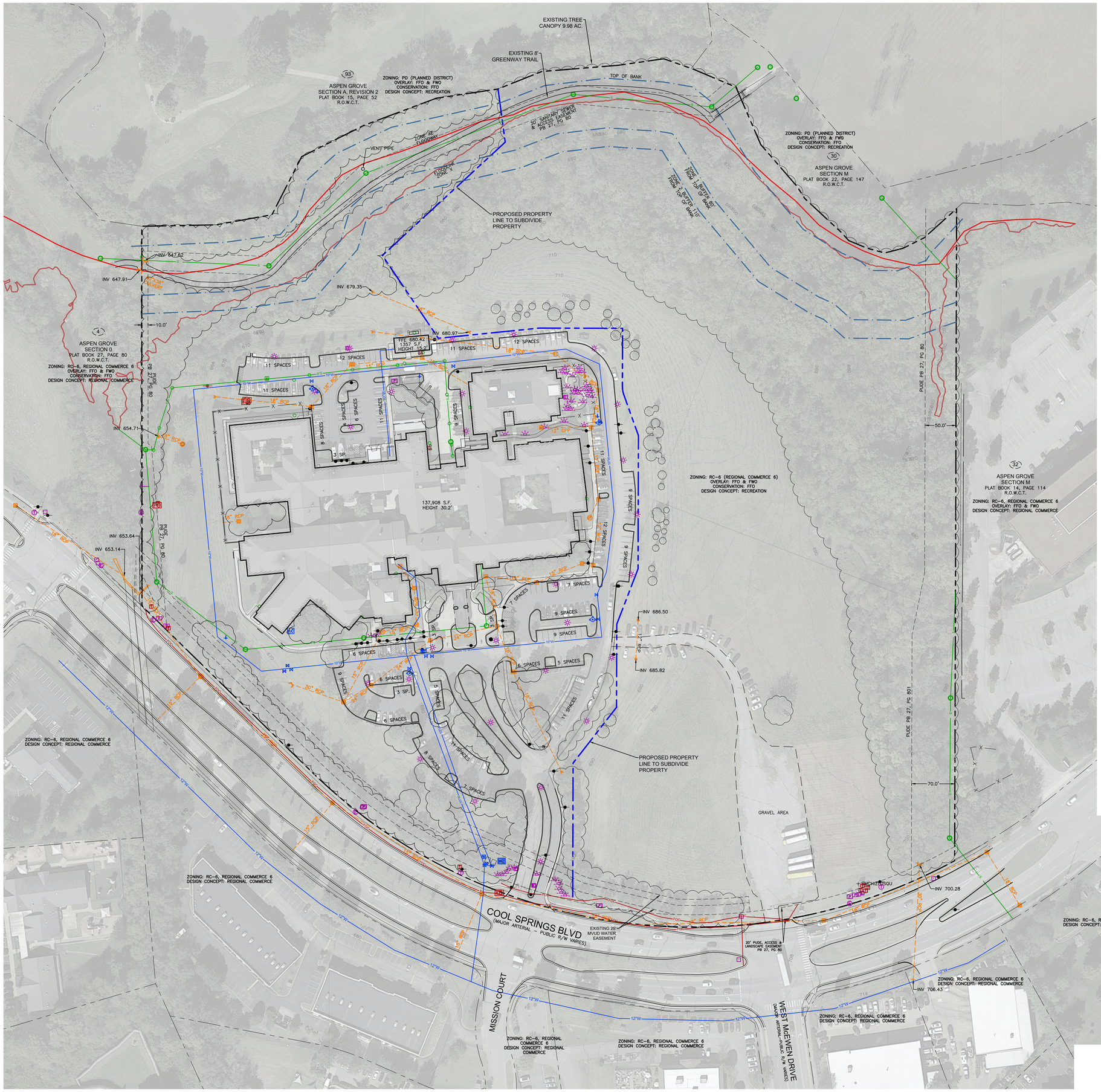
Revisions:
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1 07/07/2022 PER CITY COMMENTS

Drawing Title:
COVER SHEET

Drawing No.
C0.0

Project No.
21-0233

Law Dept approved (2) 07.20.22



SITE DATA	
SITE INFORMATION	
Project Name	The Optima Franklin
Project #:	7895
Subdivision:	Aspen Grove Section N
Lot:	92
Civil District:	Eighth
Address:	211 Cool Springs Blvd
	Franklin, Williamson County
Map / Parcel:	062 / 45.02
Total Acreage / S.F. of Site:	34.30± Ac. / 1,494,209± S.F.
Acreage of Assisted Living Lot:	16.16± Ac. / 703,980± S.F.
Acreage of Mixed Use Lot:	18.14± Ac. / 790,319± S.F.
EXISTING TREE CANOPY	
Existing Tree Canopy S.F.:	614,208 S.F.
Existing Tree Canopy Ac.:	14.10 Ac.
Existing Tree Canopy %:	41%
ZONING INFORMATION	
Existing Zoning:	RC-6 (Regional Commerce 6)
Proposed Zoning:	PD DUA/Nonres. 232,168 S.F./130 KEYS
Overlay Zoning:	FFO & FWO
Conservation:	FFO
Design Concept:	Regional Commerce

SURVEY INFORMATION

Boundary and topographic information taken from a survey prepared by Ragan-Smith Associates dated 06/19/2019.

FLOOD INFORMATION

By scaled map location and graphic plotting only, this property lies within flood zones "ae" and "x", as designated on current Federal Emergency Management Agency Map No. 47187c0204f, with an effective date of September 29, 2006, which makes up a part of the National Flood Insurance Administration Report; Community No. 470206, Panel No. 0204, Suffix F, which is the current flood insurance rate map for the community in which said premises is situated. said map defines Zone "AE" under "Special Flood Hazard Areas subject to inundation by the 1% annual chance flood" as base flood elevations determined. said map defines Zone "X" under "Other Areas" as areas determined to be outside the 0.2% annual chance floodplain

MINERAL RIGHTS INFORMATION

At the present time, property title reference does not reflect any mineral rights on the subject property.

STATEMENT OF IMPACTS

Currently the existing site stormwater flows overland in 3 directions. A portion of the western site drainage area flows west towards the Existing NHC Site and the existing stormwater facilities located for the NHC Development. The majority of the Site Drainage Basin flows northerly to the existing stream located along the northern portion of the property. A small area along the southern portion of the site.

Currently no existing stormwater quality or quantity features exist on the main Proposed Development Plan Area. The Existing NHC Development contains an existing stormwater detention pond.

The Proposed Site Development will comply with the COF Stormwater Ordinance for water quality and quantity standards. Stormwater pipe conveyance calculations will comply with COF Standards.

For the Proposed Mixed Use Development, initial proposed stormwater strategies are displayed on this sheet. The Site Strategy is to utilize stormwater lid measures (bioretention, pervious pavers) for water quality, and detention facilities for water quantity and peak flow attenuation.

To address the stormwater requirements for the proposed future outparcels (3 proposed parcels displayed along cool springs blvd), the Overall Development Plan Strategy will be to utilize existing land and facilities located on the NHC Site, that will ultimately be subdivided as part of the Development Process. It is intended to place a stormwater quality bioretention area and amend the Existing Detention Facility to meet the Proposed Outparcel Stormwater Regulation Requirements. Current placement and strategy can be seen on this sheet.

LEGEND

	FIRE HYDRANT		GAS VALVE
	WATER VALVE		GAS METER
	WATER METER		TELEPHONE RISER
	POST INDICATOR VALVE		CABLE TV BOX
	IRRIGATION CONTROL VALVE	SA	SANITARY SEWER LINE
	CATCH BASIN	G	GAS LINE
	AREA DRAIN	W	WATER LINE
	STORM MANHOLE	UGT	UNDERGROUND TELEPHONE LINE
	SANITARY SEWER MANHOLE	UGE	UNDERGROUND ELECTRIC LINE
	SEWER CLEAN-OUT	X	FENCE
	SEWER VALVE	TC	TOP OF CASTING
	LIGHT STANDARD	INV	INVERT
	YARD LIGHT	ELEV	ELEVATION
E	ELECTRIC BOX	RCP	REINFORCED CONCRETE PIPE
P	TRANSFORMER PAD	CPP	CORRUGATED PLASTIC PIPE
	HANDICAP PARKING		STREAM BUFFER
	SIGN		FLOODWAY
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE		

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com
SCOTT MICHAEL BERNICK
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE NO. 370
LANDSCAPE ARCHITECTS

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: S. BERNICK

Revisions:

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1 07/07/2022 PER CITY COMMENTS

Drawing Title:

REZONING PLAN

Drawing No.

C1.0

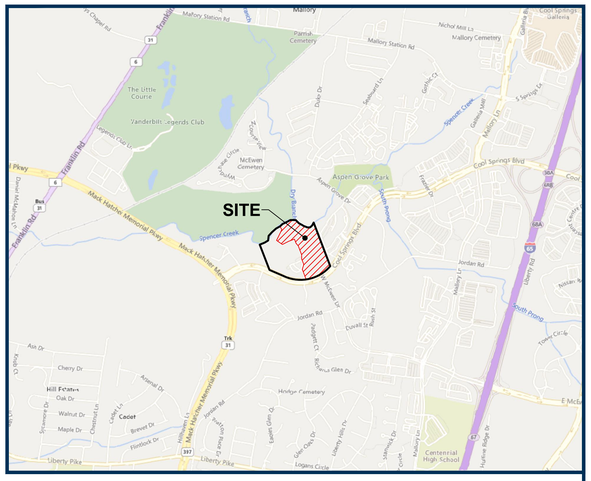
Project No.

21-0233

G:\2021\21-0233_ENGINEERING\3-DRAWINGS\1-PLANS\1-USE\1-REZONING\1-PLAN\21-0233 REZONING PLAN.DWG
Plotted: 07/07/2022 @ 10:19 AM by Jason Hoffman
Law Dept approved (2) 07.20.22

(COF # 7895)

REZONING PLAN
FOR
THE OPTIMA FRANKLIN
FLOURNOY DEVELOPMENT GROUP



LOCATION MAP
NOT TO SCALE

CONTACTS

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ADVISORY NOTE:

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Nashville - Murfreesboro - Chattanooga
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LANDSCAPE ARCHITECT
TENNESSEE NO. 329
LANDSCAPE ARCHITECTURE
APRIL 25, 2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

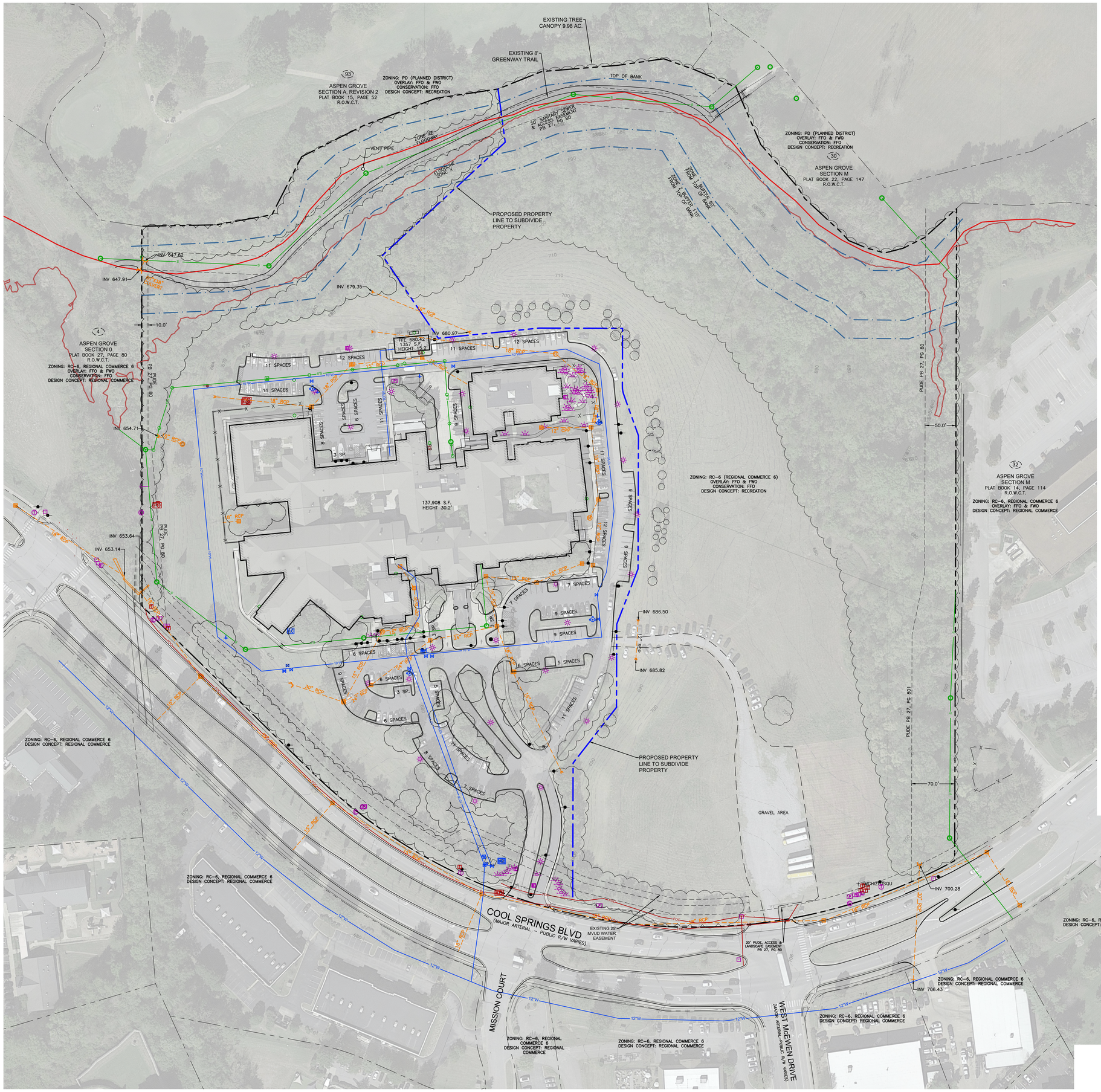
Scale: NTS
Date: APRIL 25, 2022
Approved By: S. BERNICK
Revisions:
- – –
- – –
- – –
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- – –
1 07/07/2022 PER CITY COMMENTS

Drawing Title:
COVER SHEET

Drawing No.
C0.0

Project No.
21-0233

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Plotted: 07/07/2022 2:13 PM By: JDUCHOUX



SITE DATA	
SITE INFORMATION	
Project Name	The Optima Franklin
Project #:	7895
Subdivision:	Aspen Grove Section N
Lot:	92
Civil District:	Eighth
Address:	211 Cool Springs Blvd
	Franklin, Williamson County
Map / Parcel:	062 / 45.02
Total Acreage / S.F. of Site:	34.30± Ac. / 1,494,209± S.F.
Acreage of Assisted Living Lot:	16.16± Ac. / 703,980± S.F.
Acreage of Mixed Use Lot:	18.14± Ac. / 790,319± S.F.
EXISTING TREE CANOPY	
Existing Tree Canopy S.F.:	614,208 S.F.
Existing Tree Canopy Ac.:	14.10 Ac.
Existing Tree Canopy %:	41%
ZONING INFORMATION	
Existing Zoning:	RC-6 (Regional Commerce 6)
Proposed Zoning:	PD DUA/Nonres. 232,168 S.F./130 KEYS
Overlay Zoning:	FFO & FWO
Conservation:	FFO
Design Concept:	Regional Commerce

SURVEY INFORMATION

Boundary and topographic information taken from a survey prepared by Ragan-Smith Associates dated 06/19/2019.

FLOOD INFORMATION

By scaled map location and graphic plotting only, this property lies within flood zones "ae" and "x", as designated on current Federal Emergency Management Agency Map No. 47187c0204f, with an effective date of September 29, 2006, which makes up a part of the National Flood Insurance Administration Report; Community No. 470206, Panel No. 0204, Suffix F, which is the current flood insurance rate map for the community in which said premises is situated. said map defines Zone "AE" under "Special Flood Hazard Areas subject to inundation by the 1% annual chance flood" as base flood elevations determined. said map defines Zone "X" under "Other Areas" as areas determined to be outside the 0.2% annual chance floodplain

MINERAL RIGHTS INFORMATION

At the present time, property title reference does not reflect any mineral rights on the subject property.

STATEMENT OF IMPACTS

Currently the existing site stormwater flows overland in 3 directions. A portion of the western site drainage area flows west towards the Existing NHC Site and the existing stormwater facilities located for the NHC Development. The majority of the Site Drainage Basin flows northerly to the existing stream located along the northern portion of the property. A small area along the southern portion of the site.

Currently no existing stormwater quality or quantity features exist on the main Proposed Development Plan Area. The Existing NHC Development contains an existing stormwater detention pond.

The Proposed Site Development will comply with the COF Stormwater Ordinance for water quality and quantity standards. Stormwater pipe conveyance calculations will comply with COF Standards.

For the Proposed Mixed Use Development, initial proposed stormwater strategies are displayed on this sheet. The Site Strategy is to utilize stormwater lid measures (bioretention, pervious pavers) for water quality, and detention facilities for water quantity and peak flow attenuation.

To address the stormwater requirements for the proposed future outparcels (3 proposed parcels displayed along cool springs blvd), the Overall Development Plan Strategy will be to utilize existing land and facilities located on the NHC Site, that will ultimately be subdivided as part of the Development Process. It is intended to place a stormwater quality bioretention area and amend the Existing Detention Facility to meet the Proposed Outparcel Stormwater Regulation Requirements. Current placement and strategy can be seen on this sheet.

LEGEND

	FIRE HYDRANT		GAS VALVE
	WATER VALVE		GAS METER
	WATER METER		TELEPHONE RISER
	POST INDICATOR VALVE		CABLE TV BOX
	IRRIGATION CONTROL VALVE	SA	SANITARY SEWER LINE
	CATCH BASIN	G	GAS LINE
	AREA DRAIN	W	WATER LINE
	STORM MANHOLE	UGT	UNDERGROUND TELEPHONE LINE
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	SEWER CLEAN-OUT	X	FENCE
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	LIGHT STANDARD	INV	INVERT
	YARD LIGHT	ELEV	ELEVATION
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P	TRANSFORMER PAD	CPP	CORRUGATED PLASTIC PIPE
	HANDICAP PARKING		STREAM BUFFER
	SIGN		FLOODWAY
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE		

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com
SCOTT MICHAEL BERNICK REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 329 LANDSCAPE ARCHITECTURE

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: S. BERNICK

Revisions:

- – –
- – –
- – –
- – –
- – –

1 07/07/2022 PER CITY COMMENTS

Drawing Title:

REZONING PLAN

Drawing No.

C1.0

Project No.

21-0233

G:\2021\21-0233_FRANKLIN\DRAWINGS\ARCHIVES\21-0233_ZONING EXHIBIT.DWG
Plotted: 07/07/2022 @ 10:17:11 AM by Jacob Hollingsworth

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03336

DATE: August 15, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Joseph Bryan, Principal Planner

SUBJECT:

Consideration Of Resolution 2022-46, A Resolution Approving A Development Plan For The Optima Franklin PUD Subdivision, For The Property North Of Cool Springs Boulevard And East Of Mack Hatcher Memorial Parkway, At 211 Cool Springs Boulevard.

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7896
Applicant: Scotty Bernick, Ragan-Smith Associates, Inc.
Owner: NHC HEALTHCARE COOL SPRINGS, LLC., Andy Clark, Rep.

BACKGROUND/STAFF COMMENTS:
The applicant has submitted a development plan for The Optima Franklin PUD Subdivision. This development plan proposes 348 attached residential dwelling units, 203,968 square feet of nonresidential space, and 130 hotel keys on 34.30 acres. The 203,968 square feet includes 137,908 square feet of commercial space at the existing NHC facility located at 211 Cool Springs Boulevard. Envision Franklin places this property in the Regional Commerce Design Concept which states that the area, "contains high-intensity activity centers that attract large numbers of people and employers from both within and outside the City. These areas include major employment and revenue generators that are valuable community resources."

Envision Franklin further states that, "New developments should have integrated designs with coordinated access, amenities, and cohesive architecture that fits within the context of the corridor," and that, "Buildings should be arranged on sites so that they help to frame and define the streets, giving deliberate form to streets and sidewalk areas. Building setbacks should be minimal to create an active street environment that encourages pedestrian activity. Where internal drives are used to organize buildings and pedestrian movement, setbacks to internal drives should be minimized wherever possible."

The proposed development meets the recommendations of Envision Franklin by providing a mix of uses including commercial, retail, housing, and hotel rooms in a cohesive and walkable design. A trail system at the rear of the property connects to the existing City Parks trail system for access to the

nearby Aspen Grove Park. The site layout provides an urban feel with building-lined streets creating a walkable development and provides architecture that fits in with the style of the corridor.

PROCEDURAL REQUIREMENTS:

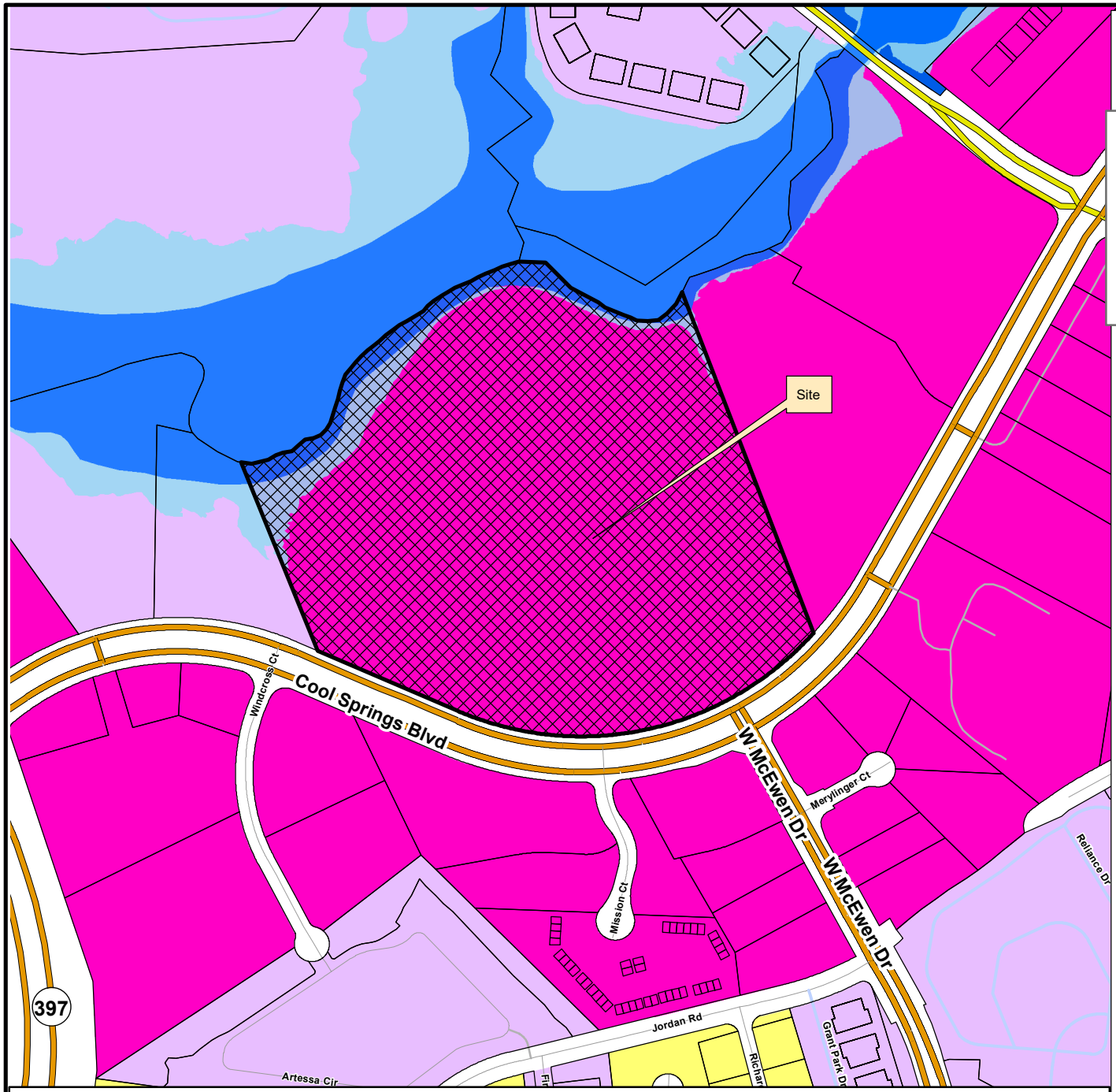
1. If the plan receives BOMA approval, the applicant shall upload the corrected plan to the online plan review website (https://franklin.contractorsplanroom.com/secure/). All revisions to the approved plans shall be "clouded." With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.
2. The City's project identification number shall be included in all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend to the Board of Mayor and Aldermen to approve Resolution 2022-46 with conditions.



THE OPTIMA FRANKLIN PUD SUBDIVISION
ORDINANCE 2022-21
RESOLUTION 2022-46

Project Information
Existing Zoning: RC-6
Proposed Zoning: PD 10.15/232,168/130
Overlay Districts: FFO, FWO
Site Acreage: 34.30 acres
Proposed Number of Dwelling Units:348
Proposed Nonresidential Square Footage: 232,168
Proposed Hotel Keys: 130

Zoning Districts

- The Optima Franklin PUD

Overlays

- Floodway Fringe Overlay

Overlays

- Floodway Overlay
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
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Feet

HISTORIC FRANKLIN TENNESSEE

RESOLUTION 2022-46

A RESOLUTION APPROVING A DEVELOPMENT PLAN FOR THE OPTIMA FRANKLIN PUD SUBDIVISION, FOR THE PROPERTY NORTH OF COOL SPRINGS BOULEVARD AND EAST OF MACK HATCHER MEMORIAL PARKWAY, AT 211 COOL SPRINGS BOULEVARD.

WHEREAS, the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee, has, or will, approve the zoning for the property as part of Ordinance 2022-21; and

WHEREAS, the Planned Unit Development (PUD) process is a review procedure that is intended to encourage innovative land planning and design and avoid the monotony sometimes associated with large developments by:

a) Reducing or eliminating the inflexibility that sometimes results from strict application of zoning standards that were designed primarily for individual lots;
b) Allowing greater freedom in selecting the means to provide access, light, open space, and design amenities;
c) Encouraging a sensitive design that respects the surrounding established land use character and natural or man-made features of the site including, but not limited to, trees, historic features, streams, hillsides, and floodplains;
d) Promoting quality design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations, and land uses; and
e) Allowing deviations from certain zoning standards that would otherwise apply if not contrary to the general spirit and intent of this ordinance; and

WHEREAS, the PUD process requires the approval of a Development Plan that is reviewed and approved by BOMA after a public hearing and a recommendation by the Franklin Municipal Planning Commission; and

WHEREAS, in accordance with the provisions of the City of Franklin, Tennessee, Zoning Ordinance, and as required by Tennessee Code Annotated § 13-4-310, as amended, the approval of the Development Plan by the BOMA will initiate a vesting period during which the development standards adopted by the City and in effect on the date of approval shall remain the standards applicable to the approved Development Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the legal description of the property included in the Development Plan is as follows:

PREMISES CONSIDERED

Map-Parcel	Acres
62-45.02	34.30
Total	34.30

SECTION II. That the attached Location Map and Survey shall serve the purpose of further delineating the geographical boundaries as described by this Resolution.

SECTION III. That the overall entitlements for The Optima Franklin PUD are as follows:

Entitlements	The Optima Franklin PUD
Base Zone District	PD 10.15/203,968/130
Other Zoning Overlays	FFO, FWO
Number of Dwelling Units	348
Number of Nonresidential Square Footage	203,968
Number of Hotel Rooms	130
Open Space Requirements	15%
Number of Phases in Development	3

SECTION IV. That the Development Plan, the exhibits accompanying the Development Plan, and all conditions and restrictions placed upon the Development Plan by the Franklin Municipal Planning Commission and this Board shall be made a part of this Resolution as though copied verbatim herein, and that a permanent record of the Development Plan, the exhibits accompanying the Development Plan, and all such conditions and restrictions shall be kept in the Franklin Planning and Sustainability Department.

SECTION V. That this Resolution shall take effect from and after the passage of Ordinance 2022-21, on third and final reading, the health, safety, and welfare of the citizens requiring it.

IT IS SO RESOLVED AND DONE on this ____ day of _____, 2022.

_____ _____

Eric S. Stuckey
City Administrator

Dr. Ken Moore
Mayor

Approved as to form by:

_____
Shauna R. Billingsley
City Attorney

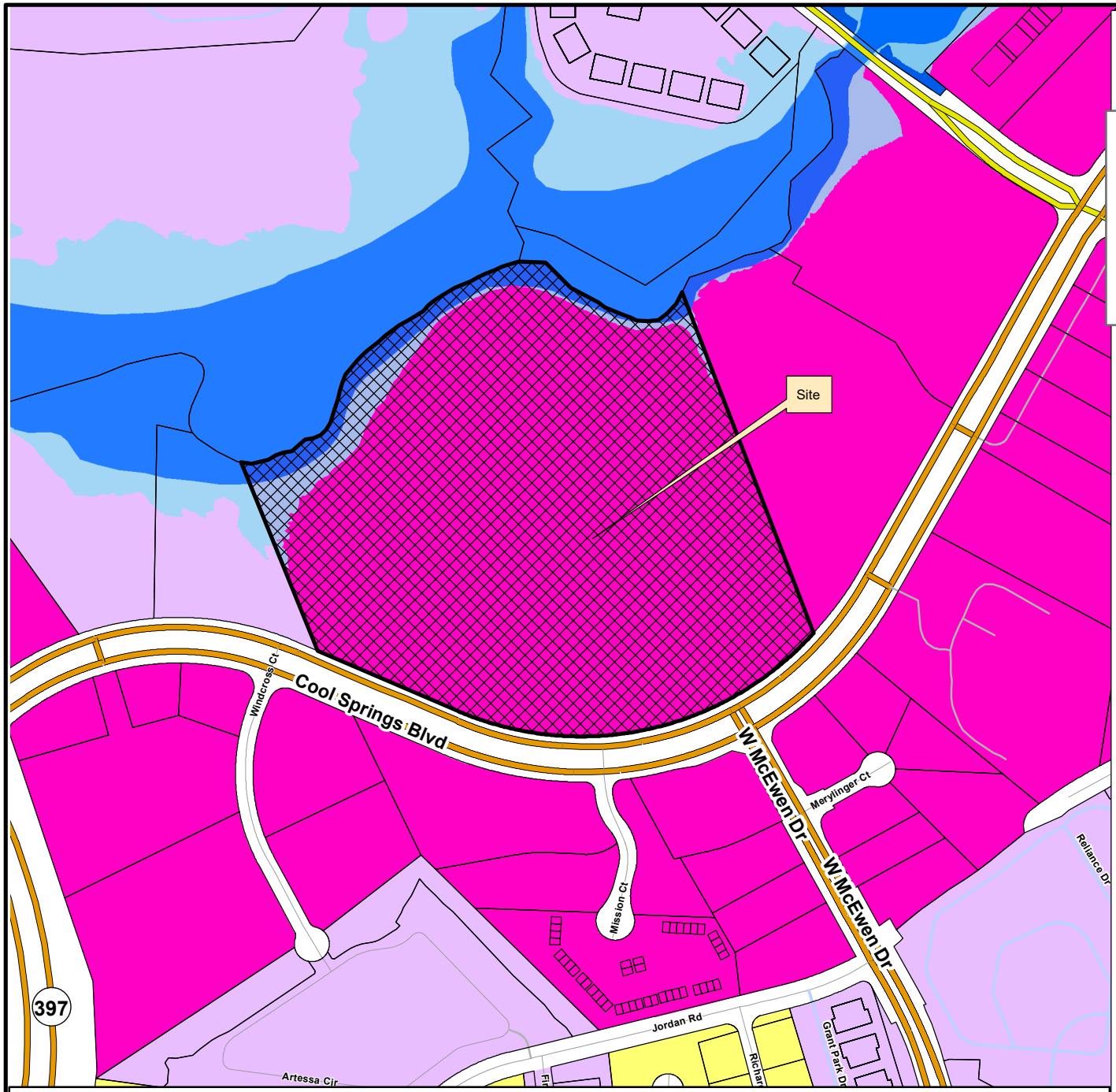
PREAPPLICATION CONFERENCE: _____6/7/22_____

BOMA/FMPC JOINT CONCEPTUAL WORKSHOP: _____6/23/22_____

NEIGHBORHOOD MEETING: _____6/7/22_____

PLANNING COMMISSION RECOMMENDED APPROVAL: _____

PUBLIC HEARING AND BOMA APPROVAL: _____



THE OPTIMA FRANKLIN PUD SUBDIVISION
ORDINANCE 2022-21
RESOLUTION 2022-46

Project Information
Existing Zoning: RC-6
Proposed Zoning: PD 10.15/232,168/130
Overlay Districts: FFO, FWO
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Feet

HISTORIC FRANKLIN TENNESSEE

(COF # 7896)

DEVELOPMENT PLAN
FOR
THE OPTIMA FRANKLIN
FLOURNOY DEVELOPMENT GROUP



LOCATION MAP
NOT TO SCALE

CONTACTS

OWNER
ANDY CLARK
NHC HEALTHCARE COOL SPRINGS LLC.
100 EAST VINE STREET
MURFREESBORO, TN 37130
(615) 890-2020
aclark@nhccare.com

DEVELOPER
CAMERON BEAN
FLOURNOY DEVELOPMENT GROUP
PO BOX 6566
COLUMBUS, GA 31917-6566
(404) 805-6785
cameron.bean@flournoydev.com

CIVIL
MICKY DOBSON, PE
RAGAN SMITH
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
mdobson@ragansmith.com

LANDSCAPE ARCHITECTURE
SCOTTY BERNICK, RLA
RAGAN SMITH
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
sbernick@ragansmith.com

ARCHITECTURE
YI LO, AIA, LEED AP
PRINCIPAL
5901 PEACHTREE DUNWOODY RD,
BUILDING C, SUITE 250
ATLANTA, GA, 30328
(678) 506-8830
ylo@dynamikdesign.com



CONCEPTUAL RENDERING

INDEX OF SHEETS

SHEET	DESCRIPTION
C0.0	COVER SHEET
CIVIL PLANS	
C1.0	EXISTING CONDITIONS
C2.0	OVERALL DEVELOPMENT PLAN
C3.0	SITE GRADING AND DRAINAGE PLAN
C4.0	R.O.W. & ACCESS PLAN
C5.0	SITE UTILITY PLAN
C6.0	OFFSITE ROADWAY IMPROVEMENTS
C7.0	PARKLAND DEDICATION
C8.0	CONCEPTUAL PHASING PLAN
L1.0	TREE PRESERVATION PLAN
ARCHITECTURAL PLANS	
1	CONCEPTUAL VIEWS
2	CONCEPTUAL ELEVATIONS
3	CONCEPTUAL ELEVATIONS
4	CONCEPTUAL ELEVATIONS
5	CONCEPTUAL ELEVATIONS
6	CONCEPTUAL MASSING EXHIBIT 1
7	CONCEPTUAL MASSING EXHIBIT 2
8	CONCEPTUAL MASSING EXHIBIT 3

IN-LIEU FEE & ROADWAY IMPACT FEE OFFSET REQUESTS

ROADWAY IMPACT FEES WILL BE CONSIDERED FOR TRAFFIC IMPROVEMENT REQUIREMENTS AS OUTLINED IN THE TRAFFIC IMPACT ANALYSIS EXECUTIVE SUMMARY PREPARED BY RAGAN-SMITH & ASSOCIATES. SEE CITY OF FRANKLIN CONTRACT #XXXX-XXXX FOR ROADWAY IMPACT FEE AGREEMENT AND AMOUNT.

PARKLAND DEDICATION IS BEING PROPOSED WITH THIS PROJECT. PARKLAND DEDICATION CALCULATIONS ARE PROVIDED ON C7.0.

ADVISORY NOTE:

COMPREHENSIVE REVIEW OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS BY THE CITY OF FRANKLIN STAFF WILL OCCUR AT THE SITE PLAN STAGE. PROJECT ENTITLEMENTS APPROVED WITH THIS DEVELOPMENT PLAN DO NOT CONSTITUTE APPROVAL OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS SHOWN ON THE DEVELOPMENT PLAN. IF, UPON APPLICATION OF CITY OF FRANKLIN STREET, STORMWATER, AND UTILITY STANDARDS AT THE SITE PLAN STAGE, THE APPLICANT CANNOT ACHIEVE THE MAXIMUM APPROVED ENTITLEMENTS, THE APPLICANT SHALL BE CONFINED TO THE ENTITLEMENTS ACHIEVABLE FROM THE APPLICATION OF SAID STANDARDS.

VESTING DEVELOPMENT STANDARDS
PRE-APPLICATION SUBMITTAL DATE MAY 30, 2022
(BASED ON THE DATE OF PRE-APPLICATION SUBMITTAL UNLESS OTHERWISE NOTED)

DEVELOPMENT STANDARD	VERSION/ DATE
ZONING ORDINANCE	JANUARY 01, 2022
SUBDIVISON REGULATIONS	JANUARY 01, 2022
TRANSPORTATION & STREET TECHNICAL STANDARDS	JULY 01, 2022
STORMWATER BMP MANUAL	JULY 01, 2022
TECHNICAL SPECIFICATIONS FOR UTILITY INSTALLATION	OCTOBER 13, 2022
MUNICIPAL CODE	MARCH 29, 2022

LOT 92, REVISION ONE,
SECTION "O" & SECTION "N" ASPEN GROVE SUBDIVISION
TAX MAP 62, PARCEL 45.02
CITY OF FRANKLIN
WILLIAMSON COUNTY
TENNESSEE

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

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G:\21\21-0233\CIVIL\REVIEW\C0.0 - COVER SHEET.DWG, 7/7/2022 7:51 AM, JOHNHOUZE

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BERNICK
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE NO. 1011
LANDSCAPE ARCHITECTURE

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: -
Date: APRIL 25, 2022
Approved By: M. DOBSON

Revisions:
- – –
- – –
- – –
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:
COVER SHEET

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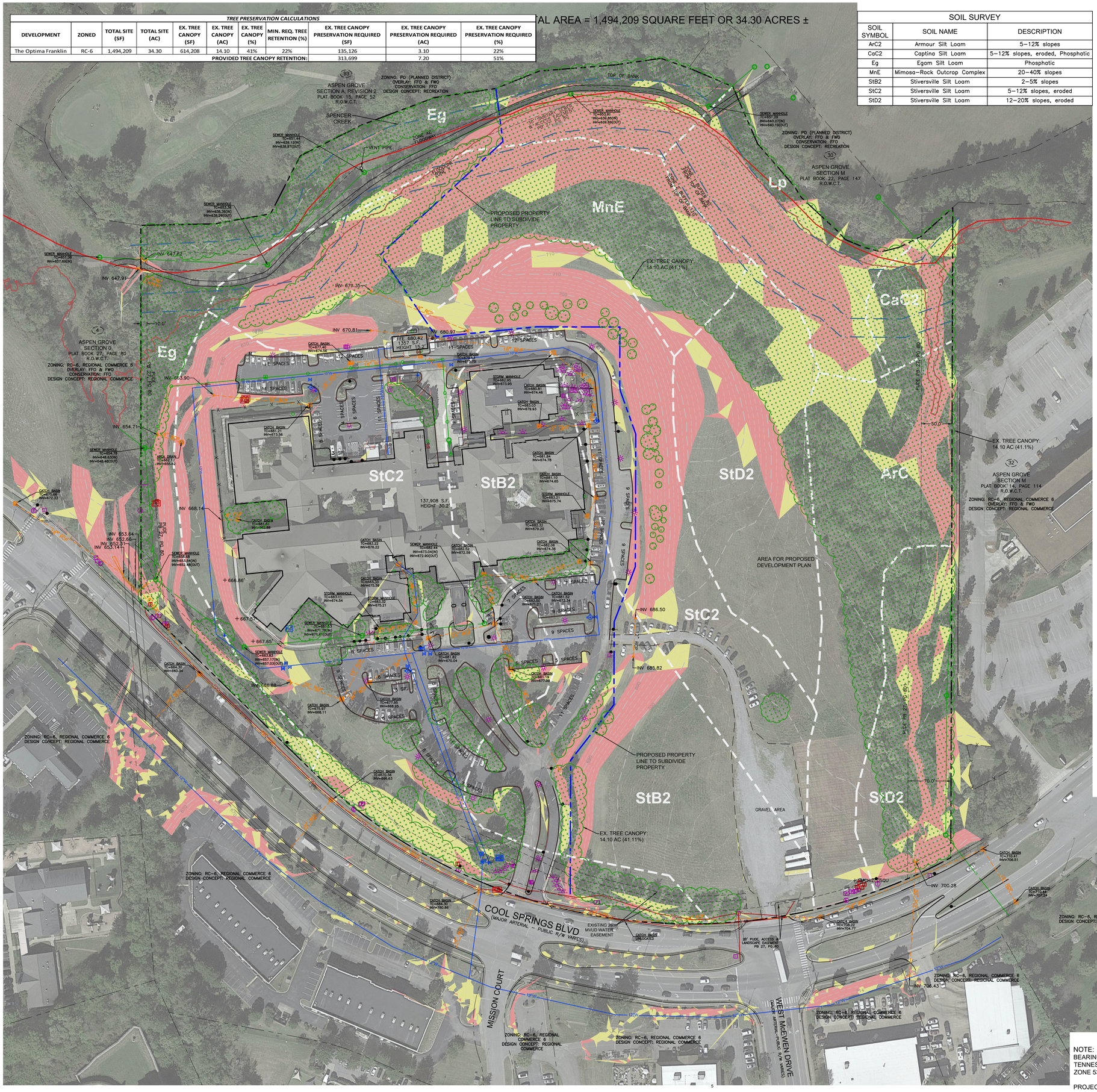
Law Dept approved (2) 07.20.22

TREE PRESERVATION CALCULATIONS

DEVELOPMENT	ZONED	TOTAL SITE (SF)	TOTAL SITE (AC)	EX. TREE CANOPY (SF)	EX. TREE CANOPY (AC)	EX. TREE CANOPY (%)	MIN. REQ. TREE RETENTION (%)	EX. TREE CANOPY PRESERVATION REQUIRED (SF)	EX. TREE CANOPY PRESERVATION REQUIRED (AC)	EX. TREE CANOPY PRESERVATION REQUIRED (%)
The Optima Franklin	RC-6	1,494,209	34.30	614,208	14.10	41%	22%	135,126	3.10	22%
					PROVIDED TREE CANOPY RETENTION:			313,699	7.20	51%

AL AREA = 1,494,209 SQUARE FEET OR 34.30 ACRES ±

SOIL SURVEY		
SOIL SYMBOL	SOIL NAME	DESCRIPTION
ArC2	Armour Silt Loam	5–12% slopes
CaC2	Captina Silt Loam	5–12% slopes, eroded, Phosphatic
Eg	Egam Silt Loam	Phosphatic
MnE	Mimosa–Rock Outcrop Complex	20–40% slopes
StB2	Stiversville Silt Loam	2–5% slopes
StC2	Stiversville Silt Loam	5–12% slopes, eroded
StD2	Stiversville Silt Loam	12–20% slopes, eroded



SITE DATA	
SITE INFORMATION	
Project Name	The Optima Franklin
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Subdivision:	Aspen Grove Section N
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Address:	211 Cool Springs Blvd
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Slopes Table			
Number	Minimum Slope	Maximum Slope	Color
1	14.00%	19.99%	
2	20.00%	100.00%	

LEGEND

	FIRE HYDRANT		GAS VALVE
	WATER VALVE		GAS METER
	WATER METER		TELEPHONE RISER
	POST INDICATOR VALVE		CABLE TV BOX
	IRRIGATION CONTROL VALVE	SA	SANITARY SEWER LINE
	CATCH BASIN	G	GAS LINE
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	SEWER CLEAN–OUT	X–X	FENCE
	SEWER VALVE	TC	TOP OF CASTING
	LIGHT STANDARD	INV	INVERT
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E	ELECTRIC BOX		
P	TRANSFORMER PAD	RCP	REINFORCED CONCRETE PIPE
	HANDICAP PARKING	CPP	CORRUGATED PLASTIC PIPE
	SIGN		STREAM BUFFER
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE		FLOODWAY
			FLOODPLAIN

GRADING & DRAINAGE DATA CHART:

DRAINAGE:
TOTAL SITE AREA: 34.30 AC
EXISTING IMPERVIOUS AREA: 7.08 AC
PROPOSED IMPERVIOUS AREA: 16.385 AC
Proposed Rv VALUE: TBD
PEAK FLOW RUNOFF:
SITE PEAK FLOWS ARE TBD. PEAK FLOW ATTENUATION WILL OCCUR ON SITE AND DISCHARGES FROM THE SITE WILL NOT BE INCREASE.

GRADING
LIMITS OF DISTURBANCE: 15.99 AC (46.6% OF PUD SITE AREA)

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BRINCK REGISTERED AGRICULTURE LANDSCAPE ARCHITECT TENNESSEE NO. 391 10/7/2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

- – – –
- – – –
- – – –
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE–APPLICATION SUBMITTAL

Drawing Title:

EXISTING CONDITIONS

Drawing No.

C1.0

Project No.

21-0233

Law Dept approved (2) 07.20.22

G:\21-0233 CIVIL ENGINEERING\PLAN SHEETS\2 - DESIGN PHASE\DWG
EXISTING CONDITIONS.DWG, 10/3/2022 2:51 PM, M.DOBSON, LAYOUT: EXISTING CONDITIONS

OPEN SPACE REQUIREMENT

SITE INFORMATION

Acreage / Square Footage of Site:	34.30 Ac. / 1,494,209± S.F.
Minimum Open Space Acreage Required:	74,710± S.F. (5% or 1.72 Ac.)
If Residential, Natural Area Required:	N/A

OPEN SPACE PROVIDED

Key	Open Space Type	Area of Open Space	Hardscape Area (S.F.)	Hardscape Area (%)	Stormwater Feature Included? (Y/N)
1	Plaza	3,242± S.F.	--	--	N
2	Plaza	5,750± S.F.	--	--	N
3	Plaza	5,730± S.F.	--	--	N
4	Plaza	6,108± S.F.	--	--	N
5	Natural Area	53,880± S.F.	--	--	N
Total Provided:		74,710± S.F.			

OPEN SPACE FEATURES

Open Space Type	Features
Plaza	Seating Elements
	Specialized Hardscape
	Pedestrian Scale Lighting
	Site Furnishings
Natural Area	Nature Trails

SHARED PARKING ANALYSIS

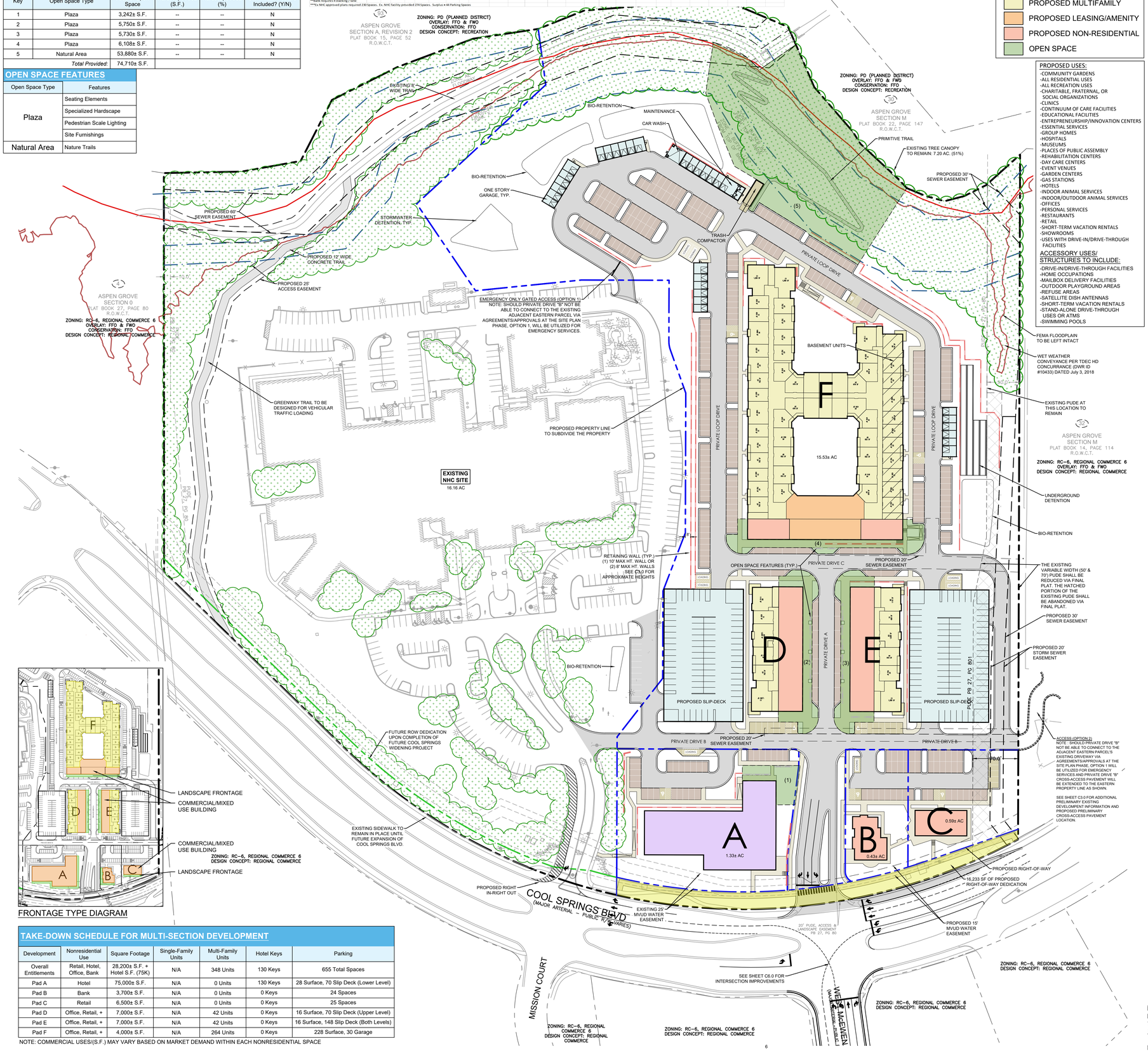
USE	Density / Keys	# 1-BED	% 1-BED	# 2-BED	% 2-BED	# 3-BED	% 3-BED	Hotel Assembly Area Occu.	Outdoor Seats	Staff	COF Parking Ratio (PER 1000 SF Keys or BR)	COF Parking Req. per Ratio	COF Parking Ratio (.67/Seat)	COF Parking Ratio (1/Employee)	COF Parking Ratio (.25/Occu.)	COF Overall Parking Req. by Use	PARKING PROVIDED (SURFACE)	PARKING PROVIDED (PAVILLION)	PARKING PROVIDED (GARAGE)	PARKING PROVIDED (SLIP DECK)	PS NHC SURPLUS (OFF SITE) ***	UU Unadjusted Parking Demand (Weekday)	UU Shared Parking Reduction (Weekday)	UU Recommended Parking (Weekday)	UU Unadjusted Parking Demand (Weekend)	UU Shared Parking Reduction (Weekend)	UU Recommended Parking (Weekend)
Ex. NHC Facility***	260									50	0.25	68				68											
Retail**	6,000										3.33	20				20											
Restaurant**	0								0	0		0		0	0	0											
Office (Gen/Medical)	14,000										4	56				56											
Bank**	3,700										4	15				15											
Hotel (Keys)*	130							0	32	11		130	8	11	0	149											
Multi-Family*	348	258	74.14%	78	21.26%	16	4.60%				1.5/2.5/3	620				620											
Total Provided: (MF Bedrooms)	*454*	*258*		*196*		*48*																					
TOTAL																860	311	26	30	288	44	833	21.78%	652	765	14.77%	652
																COF SHARED (25% Max)	18.70%										

*Bedroom Count/% shown is approximate and may vary during the Construction Document Phase. Shared Parking ratio approved during entitlements shall be utilized with Site Plans.
**Bank requires 4 stacking / lane
***Ex. NHC approved plans required 230 Spaces. Ex. NHC facility provided 274 Spaces. Surplus = 44 Parking Spaces

Per Parking Analysis, 348 Multifamily Units Assumed as Shared Parking Activity

HATCH LEGEND:

- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL
- OPEN SPACE



FRONTAGE TYPE DIAGRAM

TAKE-DOWN SCHEDULE FOR MULTI-SECTION DEVELOPMENT

Development	Nonresidential Use	Square Footage	Single-Family Units	Multi-Family Units	Hotel Keys	Parking
Overall Entitlements	Retail, Hotel, Office, Bank	28,200± S.F. + Hotel S.F. (75K)	N/A	348 Units	130 Keys	655 Total Spaces
Pad A	Hotel	75,000± S.F.	N/A	0 Units	130 Keys	28 Surface, 70 Slip Deck (Lower Level)
Pad B	Bank	3,700± S.F.	N/A	0 Units	0 Keys	24 Spaces
Pad C	Retail	6,500± S.F.	N/A	0 Units	0 Keys	25 Spaces
Pad D	Office, Retail, +	7,000± S.F.	N/A	42 Units	0 Keys	16 Surface, 70 Slip Deck (Upper Level)
Pad E	Office, Retail, +	7,000± S.F.	N/A	42 Units	0 Keys	16 Surface, 148 Slip Deck (Both Levels)
Pad F	Office, Retail, +	4,000± S.F.	N/A	264 Units	0 Keys	228 Surface, 30 Garage

NOTE: COMMERCIAL USES/(S.F.) MAY VARY BASED ON MARKET DEMAND WITHIN EACH NONRESIDENTIAL SPACE

SITE DATA

SITE INFORMATION

Project Name:	The Optima Franklin
Project #:	7896
Address:	211-13 Cool Springs Blvd. Franklin, Williamson County
Map / Parcel:	62 / 45.02
Total Acreage / Square Footage of Site:	34.30 Ac. / 1,494,209± S.F.
Acreage of Existing Assisted Living Lot:	16.16 Ac. / 703,809± S.F.
Acreage of Proposed Mixed Use Lot:	17.77 Ac. / 774,085± S.F.
Acreage of Proposed ROW Dedication:	0.37 Ac. / 16,233± S.F.
Vesting Date:	See Cover Page

REGULATIONS

Base Zoning:	RC6 (Regional Commerce 6)
Proposed Zoning:	PD DUA/Nonres. 232,168 S.F./130 KEYS
Overlay Zoning:	FFO & FWO
Proposed Principle Use:	See Proposed Uses Chart, This Sheet
Proposed Accessory Use:	All accessory uses permitted or permitted with additional use regulations for Planned Districts under Section 5.2 of the Zoning Ordinance
Building Types Applied:	Commercial / Mixed-Use Building,
Frontage Types Applied:	Landscape Frontage (See Legend)
Lot Width (Residential):	N/A
Lot Size (Residential):	N/A
Setbacks	
Front Yard (Cool Springs Blvd):	10' Min. to 60' Max.
Bldg. A&B Front Yard (Private Drive A):	0' Min. to 40' Max. (From Internal BNDY)
Bldg. D,E,F Front Yard (Private Drive A & C):	10' Min. to 40' Max. (From Face of Curb)
Eastern Side Yard (External):	5' Min.
Side Yard (Internal):	0' Min.
Western Side Yard (Internal, Adj. to NHC):	0' Min.
Northern Rear Yard (External):	25' Min.
Rear Yard (Internal):	0' Min.
Dwelling Unit Count, By Type:	
Multi-Family:	348 Units
Commercial S.F., By Use (Total):	28,200 S.F. (Ratios/Uses subject to change at Site Plan)
Offices:	14,000 S.F.
Bank:	3,700 S.F.
Retail:	10,500 S.F. (6,000 S.F. SHOWN)
Existing NHC (Facility):	175,768 ± S.F. - See Approved Site Plan for details
Hotel (Keys / SF±):	130 Keys (75,000± S.F. TBD at Site Plan phase)
Building Height:	
Commercial/Mixed Use Building A:	5-6 Stories; Type: IIIA
Commercial/Mixed Use Building B & C:	1-2 Stories; Type: IIB
Multi-Family & Commercial/Mixed Use Building D & E:	4 Stories; Type: VA
Multi-Family & Commercial/Mixed Use Building F:	4 Stories + Basement; Type: VA
Min. Landscape Surface Area:	20% (34% Conceptually Provided)
Open Space S.F. Required:	74,710± S.F. (5% or 1.72 Ac.)
Natural Area S.F. Required:	N/A- Mixed Use
Tree Canopy Retention Ac. Required:	2.20± Ac. (22% of Existing Canopy Cover)
Tree Canopy Retention Ac. Provided:	7.20± Ac. (51% of Existing Canopy Retention)
Parking Required, By Use:	See Shared Parking Analysis Chart, This Sheet
Historic Resource Treatment (Y/N):	No

PRELIMINARY ENGINEERING ASSESSMENT NOTE

This Preliminary Engineering Assessment plan set is schematic in nature. Further study and development of the site design (including site layout, site utilities, site grading and drainage, stormwater quality measures) shall be necessary. Various preliminary level design assumptions have been made that shall be further vetted and investigated. As the civil design progresses from preliminary to further detailed design, feedback and coordination with the project design team and any governing / jurisdictional agencies shall occur. It shall be anticipated that the preliminary design contained within this set may be influenced by these review and coordination efforts.

BUILDING TYPES NOTE

Buildings A, B, C, D, E, F are the Commercial / Mixed Use Building Type, as designated by the developer in the applicable Site Plan. Building Construction Type designations are for information only. Appropriate Building Construction Types will be determined at Site Plan and will meet all applicable requirements at such time.

STATEMENT OF IMPACTS

Currently the existing site stormwater flows overland in 3 directions. A portion of the western site drainage area flows west towards the Existing NHC Site and the existing stormwater facilities located for the NHC Development. The majority of the Site Drainage Basin flows generally north to the existing stream located along the northern portion of the property. A small area along the southern portion of the site currently overland flows into Cool Springs Blvd.

Currently no existing stormwater quality or quantity features exist on the main Proposed Development Plan Area. The Existing NHC Development contains an existing stormwater detention pond.

The Proposed Site Development will comply with the COF Stormwater Ordinance for water quality and quantity standards. Stormwater pipe conveyance calculations will comply with COF Standards.

For the Proposed Mixed Use Development, initial proposed stormwater strategies are displayed on this sheet. The Site Strategy is to utilize stormwater lid measures (bioretention, pervious pavers) for water quality, and detention facilities for water quantity and peak flow attenuation.

To address the stormwater requirements for the proposed future outparcels (3 proposed parcels displayed along cool springs blvd), the Overall Development Plan Strategy will be to utilize existing land and facilities located on the Mixed-Use ("The Optima") Site, that will ultimately be subdivided as part of the Development Process. A small drainage area will route to the existing NHC site and a small proposed bioretention area will exist on this site. Current placement and strategy can be seen on the Site Grading & Drainage Plan sheet.

COMPLIANCE WITH ENVISION FRANKLIN

The Optima Franklin proposed mixed-use development is consistent with the Major Objectives & Guiding Principles of Envision Franklin. This higher-intensity development utilizes a mix of uses within strategically placed building forms to activate the streetscapes and embrace a walkable neighborhood. The development responsibly proposes quality infill along existing infrastructure and will further support the commercial businesses already in place. Contextually, the development is at the intersection of two major arterial roads with a vast existing sidewalk network while the internal layout has a compact land-use pattern that supports an efficient use of resources and walkability. The live-work commercial space proposed along the development's internal spine will foster small business owners and startups a viable space within the community at an economical scale. A proposed Greenway connection will allow existing residents, community members, and proposed tenants access from Cool Springs Blvd. to an existing greenway that runs along the Little Harpeth River. This greenway falls within a wooded section of the site and embraces the natural beauty of Franklin, TN while connecting the community fabric.

The site sits within the Regional Commerce Design Concept (a high-intensity activity center). The development is consistent with the design concept's approach of framed streets where parking is secondary to the architectural design. Building character is strengthened by first floor commercial space with multi-family living above facing the internal streets. The new development provides a compatible relationship with the existing NHC facility by offering close walkable retail and opportunities for transitional housing options.

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com
SCOTT MICHAEL BYNUM REGISTERED AGRICULTURE 10/7/2022 LANDSCAPE ARCHITECT

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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3	07/07/2022	PER CITY COMMENTS
2	06/13/2022	INITIAL SUBMITTAL
1	05/30/2022	PRE-APPLICATION SUBMITTAL

Drawing Title:

OVERALL DEVELOPMENT PLAN

Drawing No.

C2.0

Project No.

21-0233

Law Dept approved (2) 07.20.22

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10/7/2022 8:34:08 PM CDT, MDOBSON, APEX - RAGAN SMITH ASSOCIATES, INC.



FLOURNOY
Development Group

THE OPTIMA FRANKLIN

FRANKLIN, TN

CONCEPTUAL VIEWS • 07-07-2022

FDC2021-02

DYNAMIK
DESIGN

CITY OF FRANKLIN PROJECT NUMBER: 7896

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Law Dept approved (2) 07.20.22



BLDG 2000 - REAR ELEVATION



BLDG 2000 - FRONT ELEVATION

FLOURNOY
Development Group

THE OPTIMA FRANKLIN

FRANKLIN, TN

CONCEPTUAL ELEVATIONS • 07-07-2022

FDC2021-02

DYNAMIK
DESIGN

CITY OF FRANKLIN PROJECT NUMBER: 7896

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"CONCEPTUAL MASSING PERSPECTIVES ARE TO ILLUSTRATE POTENTIAL SCALE, MASSING, AND FORMS FOR THE PROPOSED DEVELOPMENT. ILLUSTRATIONS ARE NOT INTENDED TO CONVEY SPECIFIC ARCHITECTURAL REQUIREMENTS, FAÇADE DESIGN, MATERIALS, DETAILING AS WILL BE REQUIRED OF THE ZONING ORDINANCE. SPECIFIC ARCHITECTURAL DETAILS WILL COMPLY WITH THE REGULATIONS OF THE APPROVED ZONING ORDINANCE AND WILL BE SUBMITTED FOR REVIEW/APPROVAL AT THE SITE PLAN / BUILDING PERMIT PHASES."

FLOURNOY
Development Group

THE OPTIMA FRANKLIN

FRANKLIN, TN

CONCEPTUAL MASSING EXHIBIT 1 • 05-27-2022

FDC2021-02

DYNAMIK
DESIGN

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Law Dept approved (2) 07.20.22

COF no: 7896

CONDITIONS OF APPROVAL:

Open Issues: 18 These issues are currently being filtered

Addressing

General Issues

12. Subdivision and Street Name Approval

lori.jarosz@franklintn.gov Addressing will be done at initial submittal of the site plan.

Engineering - Checklist

General Issues

13. Streets

jimmy.wiseman@franklintn.gov **Per the latest TIA, the following offsite improvements shall be implemented at the site plan stage:**

Cool Springs Boulevard at Mission Court/NHC Driveway

- To eliminate the minor street left turn movements that operate poorly during peak hours, the existing median opening on Cool Springs Boulevard should be modified as part of The Optima Frankin to only allow lefts turns off Cool Springs Boulevard into Mission Court or the NHC Driveway.

Cool Springs Boulevard at W McEwen Drive/Project Access

- The proposed southbound approach of McEwen Drive exiting The Optima Franklin should include one lane for traffic entering the development and three (3) lanes for traffic exiting the development. The exiting lanes should consist of a left turn lane, a through lane, and a right turn lane with 150 feet of storage in each lane.

- An eastbound left-turn lane should be installed on Cool Springs Boulevard for traffic entering The Optima Franklin. The left-turn lane should have a storage length of 175 feet.

- A westbound right-turn lane should be installed on Cool Springs Boulevard for traffic entering The Optima Franklin. The right-turn lane should have a storage length of 125 feet.

- The northbound approach of McEwen Drive should be modified to provide two lanes for traffic exiting the intersection, two left turn lanes, one new through lane for traffic entering The Optima Franklin, and one right turn lane. The storage lengths of the existing turn lanes will not be modified by the addition of a northbound through lane on this approach. The existing sidewalks, grass strips, and lane widths will need to be modified in order to provide a new through lane on the northbound approach of McEwen Drive.

Cool Springs Boulevard at Mallory Lane

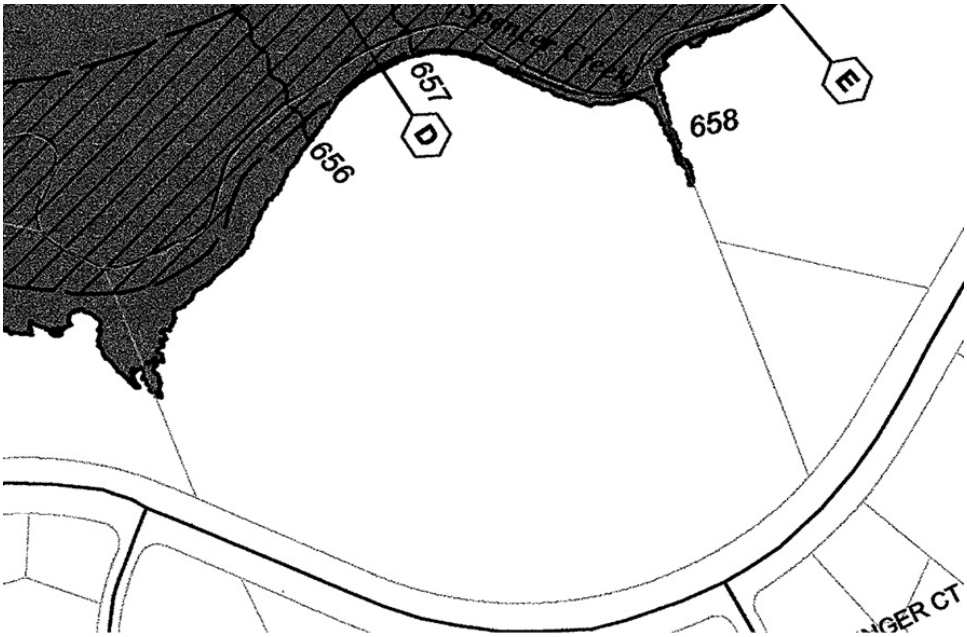
- Widen the Mallory Lane southbound approach to provide an additional left turn travel lane. The southbound approach shall include a total of 6 travel lanes. New signage will be required since the proposed left turn lane enters the interstate ramp. Realignment of the southbound through lanes is anticipated to accommodate for the additional turn lane. The existing pavement should be restriped to account for this revised alignment. Additionally, the intersection of Mallory Lane and Frazier Drive should be modified to accompany these improvements. As part of this modification, Mallory Lane should be widened to include an additional southbound through lane between Galleria Mall and Frazier Drive. The existing storage length for the southbound right turn lane on Mallory Lane at Frazier Drive should be maintained. Right-of-way acquisition is anticipated. Major grading, major utility relocation, pedestrian island modification, and new sidewalk is anticipated.
- Widen the I-65 Southbound On-Ramp to provide a second travel lane. The middle eastbound travel lane on Cool Springs Boulevard should be restriped to a shared through/right-turn lane. Major grading, major utility relocation, and realignment of both I-65 southbound on ramps are anticipated.
- Restripe the existing 10' longitudinal crosswalk pavement markings for the southbound leg of Mallory Lane. The stop line shall be restriped at a minimum of 4' from the crosswalk. Adjustment of vehicle detection is anticipated.
- Restripe the existing 10' longitudinal crosswalk pavement markings for the northbound leg of Mallory Lane. The stop line shall be restriped at a minimum of 4' from the crosswalk.
- Widen the I-65 Southbound On-Ramp to provide a second travel lane. The middle eastbound travel lane on Cool Springs Boulevard should be restriped to a shared through/right-turn lane. Major grading, major utility relocation, and realignment of both I-65 southbound on Ramps are anticipated.

Engineering - Development Plan Checklist

General Issues

37. F. Development Plan

lance.fittro@franklintn.gov The previous comment, "*The location of the floodplain boundary across the subject property shown on the FEMA FIRM map (below) does not coincide with that shown on the submitted Development Plan*" has not been fully-addressed.



Disagreement or errors identified for the location of the mapped floodplain with respect to the parcel boundaries, including disputed locations of parcel boundaries as depicted on FEMA FIRM maps, shall be resolved through approval of a Letter of Map Amendment by FEMA and corresponding application to the Board of Zoning Appeals for relocation of the Floodway Fringe Overlay which coincides with the 100-year floodplain boundary as mapped by FEMA. The approved LOMA and BZA determinations shall be then referenced on the final plat for the property.

Any proposed development within the 100-year floodplain, as mapped by FEMA, shall be in accordance with all floodplain development standards and restrictions. Any future subdivision or revised plat for the subject property shall require the portions which lie within the 100-year floodplain, as mapped by FEMA, to be platted as a non-buildable open space lot and separated from the buildable lot(s) proposed for development.

[Edited By Lance Fittro]

58. Offset Agreement

jimmy.wiseman@franklintn.gov	An offset agreement shall be approved by the BOMA concurrently with this development plan revision for the purchase of the right-of-way dedication. A draft has been uploaded on IDT. Please fill out the appropriate information and send to Jimmy Wiseman for approval.

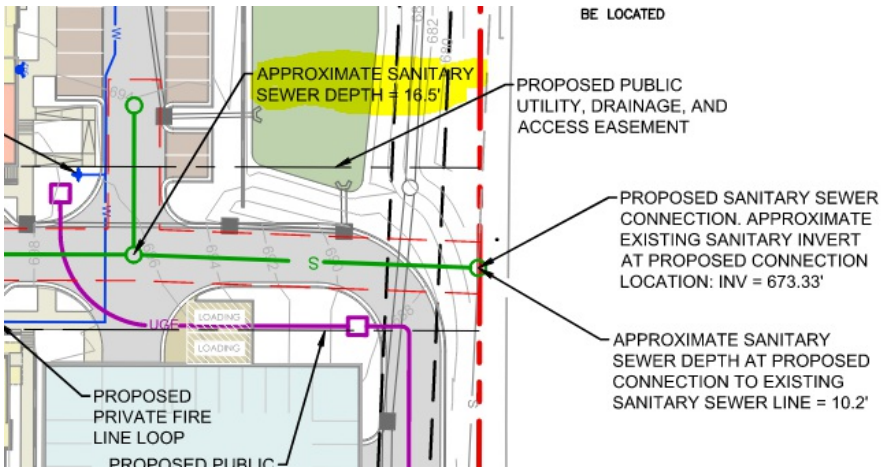
62. Lane Width

joe.marlo@franklintn.gov	*The following shall remain open as a Condition of Approval of the Development Plan.* All improvements to Collector and Arterial streets, including but not limited to Cool Springs Boulevard and West McEwen Drive, shall generally provide a minimum 12-foot pavement width for all lanes, exclusive of gutter width. Final determination of lane width requirements shall be per the City Engineer's discretion at the Site Plan stage.

66. F. Development Plan

jimmy.wiseman@franklintn.gov	***This is an advisory comment and does not hinder the approval of this development plan.*** At the site plan stage, all roadway improvements shall be designed in accordance with the appropriate common standards as established by (A) the City of Franklin Transportation and Street Technical Standards, (B) the AASHTO Policy on Geometric Design of Highways and Streets, and (C) the Tennessee Department of Transportation Design Guidelines and Standard Details. Features such as taper lengths, horizontal and vertical geometry, clear zones, guardrail requirements, etc., shall be evaluated In greater detail at the site plan stage and will be required to conform to the accepted standard in order to ensure public safety and well-being, as well as the continued functionality of the existing and proposed street networks.

69. I. Utility Plan

lance.fittro@franklintn.gov	This is a new comment due to utility depth information that was removed from the plan with the current submittal: Applicant shall provide approximate proposed sanitary sewer depth on the utility plan at the location highlighted below, as it was shown on the previous submittal: 

FIRE--Planning--DRT

General Issues

8. Question

curt.edelmann@franklintn.gov Development plans are required to show the type, size, and location of existing and proposed public utility infrastructure and appurtenances (valves, hydrants, etc), including for City utilities (water, sewer, reclaimed water, communications and non-City utilities (non-City water, electric, telephone, gas, cable TV communications. Checklist Item 80.
1. The location of the fire meter by Building D does not appear to serve the private hydrants plan-south from buildings D and E unless two mains are installed between buildings D and E.
2. Additional hydrant is required to serve Building C.

Parks

General Issues

20. Parkland information

kevinl@franklintn.gov This was moved to the 10-11-22 work session and on to 10-25-22 BOMA if all goes well with this submittal.

Planning

General Issues

63. transit stop

joseph.bryan@franklintn.gov Comment to remain open: The applicant shall submit a site plan for a transit stop with transit infrastructure for review and approval by the DRT if and when this development site is located along an existing or planned public transit route. Franklin Transit Authority shall also review and approve the site plan for the transit stop.

Stormwater

General Issues

55. Riparian Buffer

jeff.willoughby@franklintn.gov Offset for the path is still incorrectly shown. For example: If there is 1,000sqft of impact associated with a trail, then 1,000sqft of additional buffer shall be shown as increased widths in this area of the trail.

Additionally further information is needed regarding the primitive path. Is it going to be constructed? Or is it going to be a "natural" trail? I'm asking cause a natural footpath is allowed and may not required mitigation, but more detail is needed.

[Edited By Jeff Willoughby]

56. Riparian Buffer

jeff.willoughby@franklintn.gov If the sewer easement is being widened then the sqft of the additional easement shall be mitigated onsite, as that easement will now be required to be maintained.

61. Drainage

ellen.moore@franklintn.gov *This is an advisory comment and does not affect development plan approval.*

The current proposed location of the multi-use trail along the existing dry detention pond appears to encroach on the pond limits and possibly into the riparian buffer for Hodge Branch. Another layout may be required at site plan to prevent encroachment of the existing pond.

67. Riparian Buffer

jeff.willoughby@franklintn.gov	Incorrectly shown. Additional buffer width for the steps slopes shall be shown and labeled as Zone 1 buffer. See original comment. [Edited By Jeff Willoughby]

68. Riparian Buffer

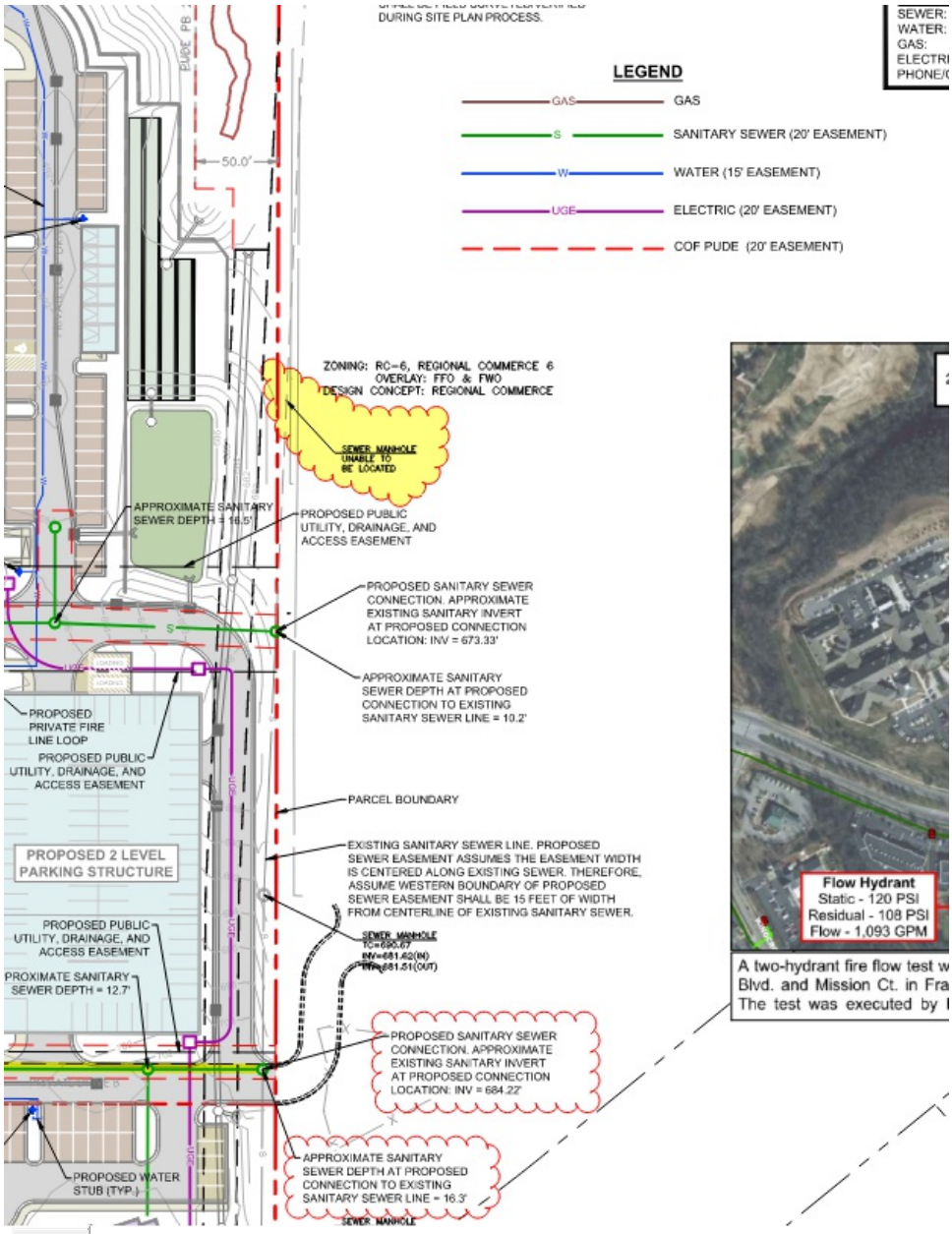
jeff.willoughby@franklintn.gov	This could not be found

Water/Sewer

General Issues

42. Existing sanitary sewer

ben.mcneil@franklintn.gov	Applicant shall understand the sanitary sewer layout shown in the development plan **is not** approved. At site plan, applicant will be required to layout the sanitary sewer in accordance with WMD guidelines and specifications and to ensure the infrastructure is designed to allow for cost-effective and safe future maintenance. This could result in having to alter the design of the site to avoid conflicts with other utilities, structures, etc. ***This is a condition of approval.*** At site plan stage, the existing sanitary sewer main along the east side of the property shall be evaluated to determine the proposed depth. The applicant shall meet all requirements for depth, pipe material and easement widths.



Reply

44. Access

ben.mcneil@franklintn.gov Applicant shall understand the sanitary sewer layout shown in the development plan **is not** approved. At site plan, applicant will be required to layout the sanitary sewer in accordance with WMD guidelines and specifications and to ensure the infrastructure is designed to allow for cost-effective and safe future maintenance. This could result in having to alter the design of the site to avoid conflicts with other utilities, structures, etc.

This is a condition of approval.

The applicant shall provide access to the existing sanitary sewer infrastructure to the north of the site. Vehicle access must be maintained for operations and maintenance.

Zoning

General Issues

19. FFO

shanna.mccoy@franklintn.gov	Comment to remain open as a reminder. The applicant shall obtain a floodplain development permit prior to any disturbance of the FFO. The walking trail encroaches into FFO & FWO.

(COF # 7896)

DEVELOPMENT PLAN
FOR
THE OPTIMA FRANKLIN
FLOURNOY DEVELOPMENT GROUP



LOCATION MAP
NOT TO SCALE

CONTACTS

OWNER
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DEVELOPER
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CIVIL
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SCOTTY BERNICK, RLA
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NASHVILLE, TN 37206
(615) 244-8591
sbernick@ragansmith.com

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CONCEPTUAL RENDERING

INDEX OF SHEETS

SHEET	DESCRIPTION
C0.0	COVER SHEET
CIVIL PLANS	
C1.0	EXISTING CONDITIONS
C2.0	OVERALL DEVELOPMENT PLAN
C3.0	SITE GRADING AND DRAINAGE PLAN
C4.0	R.O.W. & ACCESS PLAN
C5.0	SITE UTILITY PLAN
C6.0	OFFSITE ROADWAY IMPROVEMENTS
C6.1	FUTURE ROADWAY LAYOUT
C7.0	PARKLAND DEDICATION
C8.0	CONCEPTUAL PHASING PLAN
C9.0	BUFFER MANAGEMENT PLAN
L1.0	TREE PRESERVATION PLAN
ARCHITECTURAL PLANS	
1	CONTEXTUAL PERSPECTIVE
2-5	CONTEXTUAL ELEVATIONS
6-11	CONCEPTUAL ROPERS KNOB VIEWS
12	CONCEPTUAL MASSING EXHIBIT

IN-LIEU FEE & ROADWAY IMPACT FEE OFFSET REQUESTS

ROADWAY IMPACT FEES WILL BE CONSIDERED FOR TRAFFIC IMPROVEMENT REQUIREMENTS AS OUTLINED IN THE TRAFFIC IMPACT ANALYSIS EXECUTIVE SUMMARY PREPARED BY RAGAN-SMITH & ASSOCIATES. SEE CITY OF FRANKLIN CONTRACT #7896 FOR ROADWAY IMPACT FEE AGREEMENT AND AMOUNT.

PARKLAND DEDICATION IS BEING PROPOSED WITH THIS PROJECT. PARKLAND DEDICATION CALCULATIONS ARE PROVIDED ON C7.0.

ADVISORY NOTE:

COMPREHENSIVE REVIEW OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS BY THE CITY OF FRANKLIN STAFF WILL OCCUR AT THE SITE PLAN STAGE. PROJECT ENTITLEMENTS APPROVED WITH THIS DEVELOPMENT PLAN DO NOT CONSTITUTE APPROVAL OF THE ROADWAY, STORMWATER, AND UTILITY ELEMENTS SHOWN ON THE DEVELOPMENT PLAN. IF, UPON APPLICATION OF CITY OF FRANKLIN STREET, STORMWATER, AND UTILITY STANDARDS AT THE SITE PLAN STAGE, THE APPLICANT CANNOT ACHIEVE THE MAXIMUM APPROVED ENTITLEMENTS, THE APPLICANT SHALL BE CONFINED TO THE ENTITLEMENTS ACHIEVABLE FROM THE APPLICATION OF SAID STANDARDS.

VESTING DEVELOPMENT STANDARDS
PRE-APPLICATION SUBMITTAL DATE MAY 30, 2022
(BASED ON THE DATE OF PRE-APPLICATION SUBMITTAL UNLESS OTHERWISE NOTED)

DEVELOPMENT STANDARD	VERSION/ DATE
ZONING ORDINANCE	JANUARY 01, 2022
SUBDIVISON REGULATIONS	JANUARY 01, 2022
TRANSPORTATION & STREET TECHNICAL STANDARDS	JULY 01, 2022
STORMWATER BMP MANUAL	JULY 01, 2022
TECHNICAL SPECIFICATIONS FOR UTILITY INSTALLATION	OCTOBER 13, 2022
MUNICIPAL CODE	MARCH 29, 2022

LOT 92, REVISION ONE,
SECTION "O" & SECTION "N" ASPEN GROVE SUBDIVISION
TAX MAP 62, PARCEL 45.02
CITY OF FRANKLIN
WILLIAMSON COUNTY
TENNESSEE

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

RaganSmith
Nashville - Murfreesboro - Chattanooga
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SCOTT MICHAEL BERNICK
REGISTERED
LANDSCAPE ARCHITECT
STATE OF TENNESSEE NO. 391
LANDSCAPE ARCHITECTURE
05/31/2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: -
Date: APRIL 25, 2022
Approved By: M. DOBSON

Revisions:
- – –
5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:
COVER SHEET

Drawing No.
C0.0

Project No.
21-0233

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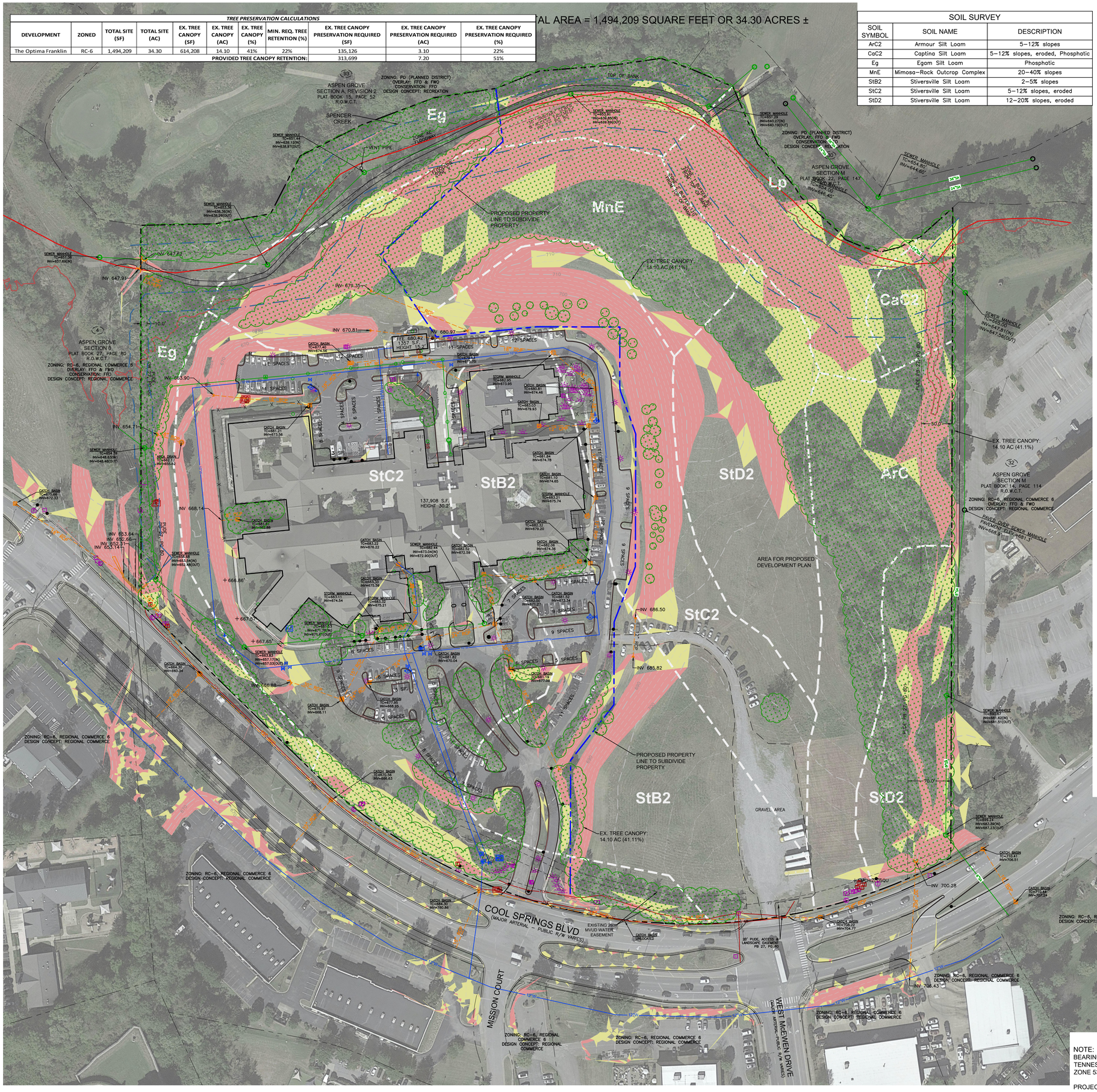
TREE PRESERVATION CALCULATIONS

DEVELOPMENT	ZONED	TOTAL SITE (SF)	TOTAL SITE (AC)	EX. TREE CANOPY (SF)	EX. TREE CANOPY (AC)	EX. TREE CANOPY (%)	MIN. REQ. TREE RETENTION (%)	EX. TREE CANOPY PRESERVATION REQUIRED (SF)	EX. TREE CANOPY PRESERVATION REQUIRED (AC)	EX. TREE CANOPY PRESERVATION REQUIRED (%)
The Optima Franklin	RC-6	1,494,209	34.30	614,208	14.10	41%	22%	135,126	3.10	22%
					PROVIDED TREE CANOPY RETENTION:			313,699	7.20	51%

AL AREA = 1,494,209 SQUARE FEET OR 34.30 ACRES ±

SOIL SURVEY

SOIL SYMBOL	SOIL NAME	DESCRIPTION
ArC2	Armour Silt Loam	5–12% slopes
CaC2	Captina Silt Loam	5–12% slopes, eroded, Phosphatic
Eg	Egam Silt Loam	Phosphatic
MnE	Mimosa–Rock Outcrop Complex	20–40% slopes
StB2	Stiversville Silt Loam	2–5% slopes
StC2	Stiversville Silt Loam	5–12% slopes, eroded
StD2	Stiversville Silt Loam	12–20% slopes, eroded


ASPEN GROVE SECTION A REVISION 2 PLAT BOOK 15, PAGE 52 R.O.W.C.T.
ZONING: PD (PLANNED DISTRICT) OVERLAY: FFO & FWO CONSERVATION: FFO DESIGN CONCEPT: RECREATION
SPENCER CREEK
ZONE AE FLOODWAY
FLOODPLAIN
FLOODWAY
VENT PIPE
TOP OF BANK
30' SANITARY SEWER & ACCESS EASEMENT PB 27, PG 97
PROPOSED PROPERTY LINE TO SUBDIVIDE PROPERTY
ASPEN GROVE SECTION M PLAT BOOK 27, PAGE 147 R.O.W.C.T.
ASPEN GROVE SECTION 6 PLAT BOOK 27, PAGE 80 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6 OVERLAY: FFO & FWO CONSERVATION: FFO DESIGN CONCEPT: REGIONAL COMMERCE
EX. TREE CANOPY 14.10 AC (41.1%)
FFE 680.42 1,357 S.F. HEIGHT 15.2'
137,908 S.F. HEIGHT 30.2'
AREA FOR PROPOSED DEVELOPMENT PLAN
PROPOSED PROPERTY LINE TO SUBDIVIDE PROPERTY
GRAVEL AREA
EXISTING 25' MVUD WATER EASEMENT
30' PUDE, ACCESS & LANDSCAPE EASEMENT PB 27, PG 80
COOL SPRINGS BLVD (MAJOR ARTERIAL – PUBLIC R/W VARIES)
MISSION COURT
WEST McEWEN DRIVE (MAJOR ARTERIAL – PUBLIC R/W VARIES)
Eg
MnE
Lp
CaC2
StC2
StB2
StD2
ArC
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE
ASPEN GROVE SECTION N PLAT BOOK 14, PAGE 114 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6 OVERLAY: FFO & FWO DESIGN CONCEPT: REGIONAL COMMERCE
PAVED OVER SEWER MANHOLE RIM ELEV.=681.3' INV=668.8'
EX. TREE CANOPY: 14.10 AC (41.1%)
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE

OPEN SPACE REQUIREMENT

SITE INFORMATION

Acreage / Square Footage of Site:	34.30 Ac. / 1,494,209± S.F.
Minimum Open Space Acreage Required:	74,710± S.F. (5% or 1.72 Ac.)
If Residential, Natural Area Required:	N/A

OPEN SPACE PROVIDED

Key	Open Space Type	Area of Open Space	Hardscape Area (S.F.)	Hardscape Area (%)	Stormwater Feature Included? (Y/N)
1	Plaza	3,242± S.F.	--	--	N
2	Plaza	5,750± S.F.	--	--	N
3	Plaza	5,730± S.F.	--	--	N
4	Plaza	6,108± S.F.	--	--	N
5	Natural Area	53,880± S.F.	--	--	N
Total Provided:		74,710± S.F.			

OPEN SPACE FEATURES

Open Space Type	Features
Plaza	Seating Elements
	Specialized Hardscape
	Pedestrian Scale Lighting
	Site Furnishings
Natural Area	Nature Trails

SHARED PARKING ANALYSIS

Use	Density / Keys	# 1-BED	% 1-BED	# 2-BED	% 2-BED	# 3-BED	% 3-BED	Hotel Assembly Area (Sea.	Outdoor Seats	COF Parking Ratio (PER 1000 SF or Key or BR)	COF Parking Req. per Ratio	COF Parking Ratio (LOT/Seat)	COF Parking Ratio (1/Employee)	COF Parking Ratio (25/Dwel.)	COF Overall Parking Req. by Use	PARKING PROVIDED (SURFACE)	PARKING PROVIDED (PARK LEV.)	PARKING PROVIDED (GARAGE)	PARKING PROVIDED (SLIP DECK)	VA MIN. PARKING (OFF SITE) ***	UU Unadjusted Parking Demand (Weekday)	UU Shared Parking Reduction (Weekday)	UU Recommended Parking (Weekday)	UU Unadjusted Parking Demand (Weekend)	UU Shared Parking Reduction (Weekend)	UU Recommended Parking (Weekend)
Ex. NHC Facility***	40									3.33	133	3.33			133											
Retail**	30,500									3.33	35				35											
Restaurant**	0								0	10	0	0	0		0											
Office (Gen/Medical)	16,000									4	56				56											
Bank**	3,700									4	15				15											
Hotel (Limited)	130							0	32	11	1	130	8	11	0	149										
Multi-Family*	348	208	74.14%	74	21.36%	10	4.60%				1.5/1.5/1	620				620										
(WF Bedrooms)	454	258		248		48																				
TOTAL																975					952	26	30	288	44	369	22.73%	836	783	16.09%	857
															COF SHARED (70% Max):						70.00%					

*Bedroom Count/% shown is approximate and may vary during the Construction Document Phase. Shared Parking ratio approved during entitlements shall be utilized with Site Plans.
**Bank requires 4 stacking / lane
***Ex NHC approved plans required 230 Spaces. Ex. NHC Facility provided 274 Spaces. Surplus = 44 Parking Spaces

HATCH LEGEND:

- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL
- OPEN SPACE

PROPOSED USES:
-COMMUNITY GARDENS
-ALL RESIDENTIAL USES
-ALL RECREATION USES
-CHARITABLE, FRATERNAL, OR SOCIAL ORGANIZATIONS
-CLINICS
-CONTINUUM OF CARE FACILITIES
-EDUCATIONAL FACILITIES
-ENTREPRENEURSHIP/INNOVATION CENTERS
-ESSENTIAL SERVICES
-GROUP HOMES
-HOSPITALS
-MUSEUMS
-PLACES OF PUBLIC ASSEMBLY
-REHABILITATION CENTERS
-DAY CARE CENTERS
-EVENT VENUES
-GARDEN CENTERS
-GAS STATIONS
-HOTELS
-INDOOR ANIMAL SERVICES
-INDOOR/OUTDOOR ANIMAL SERVICES
-OFFICES
-PERSONAL SERVICES
-RESTAURANTS
-RETAIL
-SHORT-TERM VACATION RENTALS
-SHOWROOMS
-USES WITH DRIVE-IN/DRIVE-THROUGH FACILITIES

ACCESSORY USES/ STRUCTURES TO INCLUDE:
-DRIVE-IN/DRIVE-THROUGH FACILITIES
-HOME OCCUPATIONS
-MAILBOX DELIVERY FACILITIES
-OUTDOOR PLAYGROUND AREAS
-REFUSE AREAS
-SATELLITE DISH ANTENNAS
-SHORT-TERM VACATION RENTALS
-STAND-ALONE DRIVE-THROUGH USES OR ATMS
-SWIMMING POOLS

ZONING: PD (PLANNED DISTRICT)
OVERLAY: FFO & FWO
CONSERVATION: FFO
DESIGN CONCEPT: RECREATION

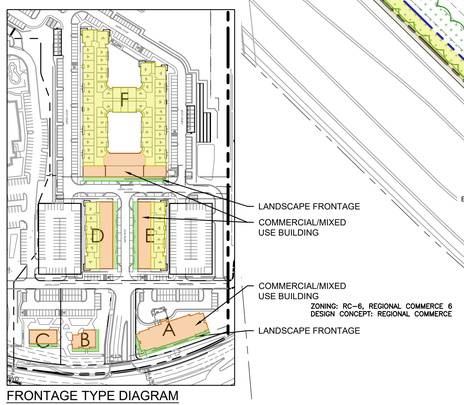
ASPEN GROVE SECTION A, REVISION 2 PLAT BOOK 15, PAGE 52 R.O.W.C.T.

ASPEN GROVE SECTION M PLAT BOOK 22, PAGE 147 R.O.W.C.T.

ASPEN GROVE SECTION B PLAT BOOK 27, PAGE 80 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6
OVERLAY: FFO & FWO
CONSERVATION: FFO
DESIGN CONCEPT: REGIONAL COMMERCE

ASPEN GROVE SECTION M PLAT BOOK 14, PAGE 114 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6
OVERLAY: FFO & FWO
DESIGN CONCEPT: REGIONAL COMMERCE

SPENCER CREEK (CENTERLINE OF CREEK OFF SITE & NOT SURVEYED)
SPENCER CREEK TOP OF BANK
EXISTING 8' WIDE TRAIL
PRIMITIVE TRAIL
EXISTING TREE CANOPY TO REMAIN: 7.20 AC. (51%)
BIO-RETENTION
CAR WASH
MAINTENANCE
80' RIPARIAN BUFFER ZONE 2
110' RIPARIAN BUFFER ZONE 2 BIO-RETENTION
ONE STORY GARAGE, TYP.
PROPOSED 30' SEWER EASEMENT
PROPOSED 60' SEWER EASEMENT
STORMWATER DETENTION, TYP.
TRASH COMPACTOR
PROPOSED 12' WIDE CONCRETE TRAIL
PROPOSED 25' ACCESS EASEMENT
EMERGENCY ONLY GATED ACCESS (OPTION 1)
NOTE: SHOULD PRIVATE DRIVE "B" NOT BE ABLE TO CONNECT TO THE EXISTING ADJACENT EASTERN PARCEL VIA AGREEMENTS/APPROVALS AT THE SITE PLAN PHASE, OPTION 1, WILL BE UTILIZED FOR EMERGENCY SERVICES.
ASPEN LOOP
BASEMENT UNITS
FEMA FLOODPLAIN TO BE LEFT INTACT
WET WEATHER CONVEYANCE PER TDEC HD CONCURRANCE (DWR ID #10433) DATED July 3, 2018
EXISTING PUDE AT THIS LOCATION TO REMAIN
UNDERGROUND DETENTION
BIO-RETENTION
GREENWAY TRAIL TO BE DESIGNED FOR VEHICULAR TRAFFIC LOADING
CENTERLINE OF HODGE BRANCH (STREAM CHANNEL)
TOP OF BANK OF HODGE BRANCH (STREAM CHANNEL)
30' RIPARIAN BUFFER ZONE 1
60' RIPARIAN BUFFER ZONE 2
PROPOSED PROPERTY LINE TO SUBDIVIDE THE PROPERTY
EXISTING NHC SITE
16.16 AC
15.53± AC
RETAINING WALL (TYP.)
(1) 10' MAX HT. WALL OR
(2) 8' MAX HT. WALLS
SEE C6.0 FOR APPROXIMATE HEIGHTS
OPEN SPACE FEATURES (TYP.)
PROPOSED 20' SEWER EASEMENT
THE EXISTING VARIABLE WIDTH (50' & 70') PUDE SHALL BE REDUCED VIA FINAL PLAT. THE HATCHED PORTION OF THE EXISTING PUDE SHALL BE ABANDONED VIA FINAL PLAT.
PROPOSED 30' SEWER EASEMENT
PROPOSED 20' STORM SEWER EASEMENT
ASPEN WAY
D.B. 27, PG. 80
PROPOSED SLIP-DECK
BIO-RETENTION
29,752 SF OF PROPOSED RIGHT-OF-WAY DEDICATION
ACCESS (OPTION 2)
NOTE: SHOULD PRIVATE DRIVE "B" NOT BE ABLE TO CONNECT TO THE ADJACENT EASTERN PARCEL'S EXISTING DRIVEWAY VIA AGREEMENTS/APPROVALS AT THE SITE PLAN PHASE, OPTION 1 WILL BE UTILIZED FOR EMERGENCY SERVICES AND PRIVATE DRIVE "B" CROSS-ACCESS PAVEMENT WILL BE EXTENDED TO THE EASTERN PROPERTY LINE AS SHOWN.
SEE SHEET C3.0 FOR ADDITIONAL PRELIMINARY EXISTING DEVELOPMENT INFORMATION AND PROPOSED PRELIMINARY CROSS-ACCESS PAVEMENT LOCATION.
0.65± AC
0.68± AC
1.02± AC
EXISTING GRASS STRIP TO REMAIN (PER CONVERSATION WITH CITY)
EXISTING SIDEWALK TO BE REMOVED & REPLACED W/ 8'-0" WIDE SIDEWALK (PER CONVERSATIONS W/ CITY)
PROPOSED RIGHT-OF-WAY
29,752 SF OF PROPOSED RIGHT-OF-WAY DEDICATION
PROPOSED RIGHT IN-RIGHT OUT
COOL SPRINGS BLVD (MAJOR ARTERIAL - PUBLIC R/W VARIES)
EXISTING 25' MVUD WATER EASEMENT
PROPOSED 15' MVUD WATER EASEMENT
20' PUDE, ACCESS & LANDSCAPE EASEMENT PB 27, PG 80
SEE SHEET C6.0 FOR INTERSECTION IMPROVEMENTS
INTERNAL RIDE PICKUP (TBD). TRANSIT TO BE COORDINATED WITH DRT & FTA AT SITE PLAN PHASE WHEN/IF TRANSIT ROUTE IS PLANNED IN THE FUTURE.
MISSION COURT
WEST MCEWEN DRIVE (VARIABLE PUBLIC R/W)
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE



FRONTAGE TYPE DIAGRAM

TAKE-DOWN SCHEDULE FOR MULTI-SECTION DEVELOPMENT

Development	Nonresidential Use	Square Footage	Single-Family Units	Multi-Family Units	Hotel Keys	Parking
Overall Entitlements	Retail, Hotel, Office, Bank	28,200± S.F. + Hotel S.F. (75K)	N/A	348 Units	130 Keys	656 Total Spaces
Pad A	Hotel	75,000± S.F.	N/A	0 Units	130 Keys	29 Surface, 70 Slip Deck (Lower Level)
Pad B	Bank	3,700± S.F.	N/A	0 Units	0 Keys	27 Spaces
Pad C	Retail	6,500± S.F.	N/A	0 Units	0 Keys	22 Spaces
Pad D	Office, Retail, +	7,000± S.F.	N/A	42 Units	0 Keys	16 Surface, 70 Slip Deck (Upper Level)
Pad E	Office, Retail, +	7,000± S.F.	N/A	42 Units	0 Keys	16 Surface, 148 Slip Deck (Both Levels)
Pad F	Office, Retail, +	4,000± S.F.	N/A	264 Units	0 Keys	228 Surface, 30 Garage

NOTE: COMMERCIAL USES/(S.F.) MAY VARY BASED ON MARKET DEMAND WITHIN EACH NONRESIDENTIAL SPACE
LEASING/AMENITY SPACE WITHIN MULTI-FAMILY BLDG F NOT COUNTED TOWARDS COMMERCIAL SF.

SITE DATA

SITE INFORMATION

Project Name:	The Optima Franklin
Project #:	7896
Address:	211-13 Cool Springs Blvd. Franklin, Williamson County
Map / Parcel:	62 / 45.02
Total Acreage / Square Footage of Site:	34.30 Ac. / 1,494,209± S.F.
Acreage of Existing Assisted Living Lot:	15.85 Ac. / 690,294± S.F.
Acreage of Proposed Mixed Use Lot:	17.77 Ac. / 774,085± S.F.
Acreage of Proposed ROW Dedication:	0.68 Ac. / 29,752± S.F.
Vesting Date:	See Cover Page

REGULATIONS

Base Zoning:	RC6 (Regional Commerce 6)
Proposed Zoning:	PD (10.15/232,168/130)
Overlay Zoning:	FFO & FWO
Proposed Principle Use:	See Proposed Uses Chart, This Sheet
Proposed Accessory Use:	All accessory uses permitted or permitted with additional use regulations for Planned Districts under Section 5.2 of the Zoning Ordinance
Building Types Applied:	Commercial / Mixed-Use Building,
Frontage Types Applied:	Landscape Frontage (See Legend)
Lot Width (Residential):	N/A
Lot Size (Residential):	N/A
Setbacks	
Front Yard (Cool Springs Blvd):	10' Min. to 80' Max.
Bldg. A&B Front Yard (Private Drive A):	0' Min. to 40' Max. (From Internal BNDY)
Bldg. D,E,F Front Yard (Private Drive A & C):	8' Min. to 40' Max. (From Face of Curb)
Eastern Side Yard (External):	5' Min.
Side Yard (Internal):	0' Min.
Western Side Yard (Internal, Adj. to NHC):	0' Min.
Northern Rear Yard (External):	25' Min.
Rear Yard (Internal):	0' Min.
Dwelling Unit Count, By Type:	
Multi-Family:	348 Units
Commercial S.F., By Use (Total):	28,200 S.F. (Ratios/Uses subject to change at Site Plan)
Offices:	14,000 S.F.
Bank:	3,700 S.F.
Retail:	10,500 S.F.
Existing NHC (Facility):	175,768 ± S.F. - See Approved Site Plan for details
Hotel (Keys / SF±):	130 Keys (75,000± S.F. TBD at Site Plan phase)
Building Height:	
Commercial/Mixed Use Building A:	5-6 Stories; Type: IIIA
Commercial/Mixed Use Building B & C:	1-2 Stories; Type: IIB
Multi-Family & Commercial/Mixed Use Building D & E:	4 Stories; Type: VA
Multi-Family & Commercial/Mixed Use Building F:	4 Stories + Basement; Type: VA
Min. Landscape Surface Area:	20% (34% Conceptually Provided)
Open Space S.F. Required:	74,710± S.F. (5% or 1.72 Ac.)
Natural Area S.F. Required:	N/A- Mixed Use
Tree Canopy Retention Ac. Required:	2.20± Ac. (22% of Existing Canopy Cover)
Tree Canopy Retention Ac. Provided:	7.20± Ac. (51% of Existing Canopy Retention)
Parking Required, By Use:	See Shared Parking Analysis Chart, This Sheet
Historic Resource Treatment (Y/N):	No

PRELIMINARY ENGINEERING ASSESSMENT NOTE

This Preliminary Engineering Assessment plan set is schematic in nature. Further study and development of the site design (including site layout, site utilities, site grading and drainage, stormwater quality measures) shall be necessary. Various preliminary level design assumptions have been made that shall be further vetted and investigated. As the civil design progresses from preliminary to further detailed design, feedback and coordination with the project design team and any governing / jurisdictional agencies shall occur. It shall be anticipated that the preliminary design contained within this set may be influenced by these review and coordination efforts.

BUILDING TYPES NOTE

Buildings A, B, C, D, E, F are the Commercial / Mixed Use Building Type, as designated by the developer in the applicable Site Plan. Building Construction Type designations are for information only. Appropriate Building Construction Types will be determined at Site Plan and will meet all applicable requirements at such time.

STATEMENT OF IMPACTS

Currently the existing site stormwater flows overland in 3 directions. A portion of the western site drainage area flows west towards the Existing NHC Site and the existing stormwater facilities located for the NHC Development. The majority of the Site Drainage Basin flows generally north to the existing stream located along the northern portion of the property. A small area along the southern portion of the site currently overland flows into Cool Springs Blvd.

Currently no existing stormwater quality or quantity features exist on the main Proposed Development Plan Area. The Existing NHC Development contains an existing stormwater detention pond.

The Proposed Site Development will comply with the COF Stormwater Ordinance for water quality and quantity standards. Stormwater pipe conveyance calculations will comply with COF Standards.

For the Proposed Mixed Use Development, initial proposed stormwater strategies are displayed on this sheet. The Site Strategy is to utilize stormwater lid measures (bioretention, pervious pavers) for water quality, and detention facilities for water quantity and peak flow attenuation.

To address the stormwater requirements for the proposed future outparcels (3 proposed parcels displayed along cool springs blvd), the Overall Development Plan Strategy will be to utilize existing land and facilities located on the Mixed-Use ("The Optima") Site, that will ultimately be subdivided as part of the Development Process. A small drainage area will route to the existing NHC site and a small proposed bioretention area will exist on this site. Current placement and strategy can be seen on the Site Grading & Drainage Plan sheet.

COMPLIANCE WITH ENVISION FRANKLIN

The Optima Franklin proposed mixed-use development is consistent with the Major Objectives & Guiding Principles of Envision Franklin. This higher-intensity development utilizes a mix of uses within strategically placed building forms to activate the streetscapes and embrace a walkable neighborhood. The development responsibly proposes quality infill along existing infrastructure and will further support the commercial businesses already in place. Contextually, the development is at the intersection of two major arterial roads with a vast existing sidewalk network while the internal layout has a compact land-use pattern that supports an efficient use of resources and walkability. The live-work commercial space proposed along the development's internal spine will foster small business owners and startups a viable space within the community at an economical scale. A proposed Greenway connection will allow existing residents, community members, and proposed tenants access from Cool Springs Blvd. to an existing greenway that runs along the Little Harpeth River. This greenway falls within a wooded section of the site and embraces the natural beauty of Franklin, TN while connecting the community fabric.

The site sits within the Regional Commerce Design Concept (a high-intensity activity center). The development is consistent with the design concept's approach of framed streets where parking is secondary to the architectural design. Building character is strengthened by first floor commercial space with multi-family living above facing the internal streets. The new development provides a compatible relationship with the existing NHC facility by offering close walkable retail and opportunities for transitional housing options.

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BRINCK REGISTERED LANDSCAPE ARCHITECT STATE OF TENNESSEE NO. 1011 LANDSCAPE ARCHITECTURE 04/01/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

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Drawing Title:

OVERALL DEVELOPMENT PLAN

Drawing No.

C2.0

Project No.

21-0233

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STATEMENT OF IMPACTS:

CURRENTLY THE EXISTING SITE STORMWATER FLOWS OVERLAND IN 3 DIRECTIONS. A PORTION OF THE WESTERN SITE DRAINAGE AREA FLOWS WEST TOWARDS THE EXISTING NHC SITE AND THE EXISTING STORMWATER FACILITIES LOCATED FOR THE NHC DEVELOPMENT. THE MAJORITY OF THE SITE DRAINAGE BASIN FLOWS GENERALLY NORTH TO THE EXISTING STREAM LOCATED ALONG THE NORTHERN PORTION OF THE PROPERTY. A SMALL AREA ALONG THE SOUTHERN PORTION OF THE SITE CURRENTLY OVERLAND FLOWS INTO COOL SPRINGS BLVD.

CURRENTLY NO EXISTING STORMWATER QUALITY OR QUANTITY FEATURES EXIST ON THE MAIN PROPOSED DEVELOPMENT PLAN AREA. THE EXISTING NHC DEVELOPMENT CONTAINS AN EXISTING STORMWATER DETENTION POND.

THE PROPOSED SITE DEVELOPMENT WILL COMPLY WITH THE COF STORMWATER ORDINANCE FOR WATER QUALITY AND QUANTITY STANDARDS. STORMWATER PIPE CONVEYANCE CALCULATIONS WILL COMPLY WITH COF STANDARDS.

FOR THE PROPOSED MIXED USE DEVELOPMENT, INITIAL PROPOSED STORMWATER STRATEGIES ARE DISPLAYED ON THIS SHEET. THE SITE STRATEGY IS TO UTILIZE STORMWATER LID MEASURES (BIORETENTION, PERVIOUS PAVERS) FOR WATER QUALITY, AND DETENTION FACILITIES FOR WATER QUANTITY AND PEAK FLOW ATTENUATION.

TO ADDRESS THE STORMWATER REQUIREMENTS FOR THE PROPOSED FUTURE OUTPARCELS (3 PROPOSED PARCELS DISPLAYED ALONG COOL SPRINGS BLVD), THE OVERALL DEVELOPMENT PLAN STRATEGY WILL BE TO UTILIZE EXISTING LAND AND FACILITIES LOCATED ON THE MIXED-USE ("THE OPTIMA") SITE, THAT WILL ULTIMATELY BE SUBDIVIDED AS PART OF THE DEVELOPMENT PROCESS. A SMALL DRAINAGE AREA WILL ROUTE TO THE EXISTING NHC SITE AND A SMALL PROPOSED BIORETENTION AREA WILL EXIST ON THIS SITE. CURRENT PLACEMENT AND STRATEGY CAN BE SEEN ON SITE GRADING AND DRAINAGE PLAN SHEET.

STORMWATER NARRATIVE

FUTURE DEVELOPMENT STORMWATER QUANTITY AND QUALITY ARE CURRENTLY BEING REVIEWED WITH THE CITY OF FRANKLIN. GREEN INFRASTRUCTURE PRACTICES ARE SHOWN FOR DESIGN INTENT ONLY AND ARE NOT INTENDED TO REPRESENT THE FINAL DESIGN. IT IS ANTICIPATED THAT A WIDE VARIETY OF PRACTICES WILL BE USED FOR THIS DEVELOPMENT INCLUDING ALL GREEN INFRASTRUCTURE PRACTICES LISTED IN TABLE 5 OF SECTION 1, 3.1 OF THE CITY OF FRANKLIN BEST MANAGEMENT PRACTICES STORMWATER MANAGEMENT MANUAL AS WELL AS ALTERNATE BMPS SUPPORTED BY CITY STAFF INCLUDING RAINWATER CISTERNS, WATER REUSE, AND PROPRIETARY TREATMENT DEVICES. ADDITIONAL METHODS MAY BE PROPOSED AT SITE PLAN SUBMITTALS, AND ARE UNDERSTOOD TO NEED STAFF APPROVAL PRIOR TO IMPLEMENTATION.

GRADING & DRAINAGE GENERAL NOTES

1. GRADING PERMIT IS REQUIRED FOR ANY PROJECT DISTURBING MORE THAN 10,000 SF, ADDING MORE THAN 5,000 SF OF IMPERVIOUS SURFACE OR FOR ANY SITE GRADING REQUIRING STOCKPILING OF MATERIAL.
2. THE DEVELOPER SHALL PROVIDE THE NECESSARY LABOR AND SUPERVISION REQUIRED TO SUPPORT FIELD TESTING BY THE INDEPENDENT TESTING FIRM AND INSPECTIONS BY CITY OFFICIALS AT NO COST TO THE CITY. TEST REPORTS OF FIELD TESTING IF APPLICABLE SHALL BE SUBMITTED DIRECTLY TO THE STREET DEPARTMENT. DEFECTS DISCLOSED BY TESTS SHALL BE RECTIFIED
3. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
4. DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, CULVERTS, DETENTION BASINS AND DITCHES, AS WELL AS THE ROADWAY SUB-GRADE, BASE STONE AND BINDER & SURFACE COARSE SHALL BE INSPECTED, TESTED AND GIVEN APPROVAL AT EACH STAGE OF INSTALLATION PRIOR TO PROCEEDING TO THE NEXT STAGE OF CONSTRUCTION. FINAL CONSTRUCTION INSPECTION FOR APPROVAL AND ACCEPTANCE OF STREETS AND DRAINAGE SYSTEMS WILL NOT BE GRANTED UNTIL ALL WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. ENVIRONMENTAL PERMITTING PER JURISDICTIONAL DETERMINATION FROM TDEC/USACOE SHALL BE DONE WITH SITE PLANS.
7. OFFSITE STORMWATER FLOWS FROM COOL SPRINGS BLVD WILL BE BYPASSED THROUGH THE SITE BY EXTENDING THE STORMWATER CULVERT IN THE SOUTHEAST CORNER OF THE SITE. THE EXISTING DRAINAGE PATERN WILL BE MAINTAINED.
8. THE FIRST DOWNSTREAM STRUCTURE FROM THE SITE IS THE ROADWAY BRIDGE ON MACK HATCHER PARKWAY OVER SPENCER CREEK.

ACCESSIBLE PATH NOTE:
ONGOING ASSESSMENT TO STUDY THE IDEAL PEDESTRIAN ACCESSIBLE PATHS TO BE DISPLAYED AND THE PROPOSED FINE GRADING FOR THESE BUILDINGS AND SURROUNDING AREAS SHALL OCCUR AS THE DESIGN PROGRESSES FROM PRELIMINARY INTO FURTHER DETAILED DESIGN

GRADING & DRAINAGE DATA CHART:

DRAINAGE:
TOTAL SITE AREA: 34.30 AC
EXISTING IMPERVIOUS AREA: 7.08 AC
PROPOSED IMPERVIOUS AREA: 16.385 AC
Proposed Rv VALUE: TBD
PEAK FLOW RUNOFF:
SITE PEAK FLOWS ARE TBD. PEAK FLOW ATTENUATION WILL OCCUR ON SITE AND DISCHARGES FROM THE SITE WILL NOT BE INCREASE.

GRADING
LIMITS OF DISTURBANCE: 15.91 AC
(46.4% OF PUD SITE AREA)

HATCH LEGEND:
- PERVIOUS PAVERS (WITH EXCLUSIVE GREEN INFRASTRUCTURE EASEMENT)
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL

RETAINING WALL (TYP.)
(DESIGN BY OTHERS)
(1) 10' MAX HT. WALL OR
(2) 8' MAX HT. WALLS WITH 6' SEPARATION

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

RaganSmith
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SCOTT MICHAEL BRINCK
REGISTERED
AGRICULTURE
TENNESSEE NO. 3107
LANDSCAPE ARCHITECT
07/01/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

- – – –

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:

SITE GRADING AND DRAINAGE PLAN

Drawing No.

C3.0

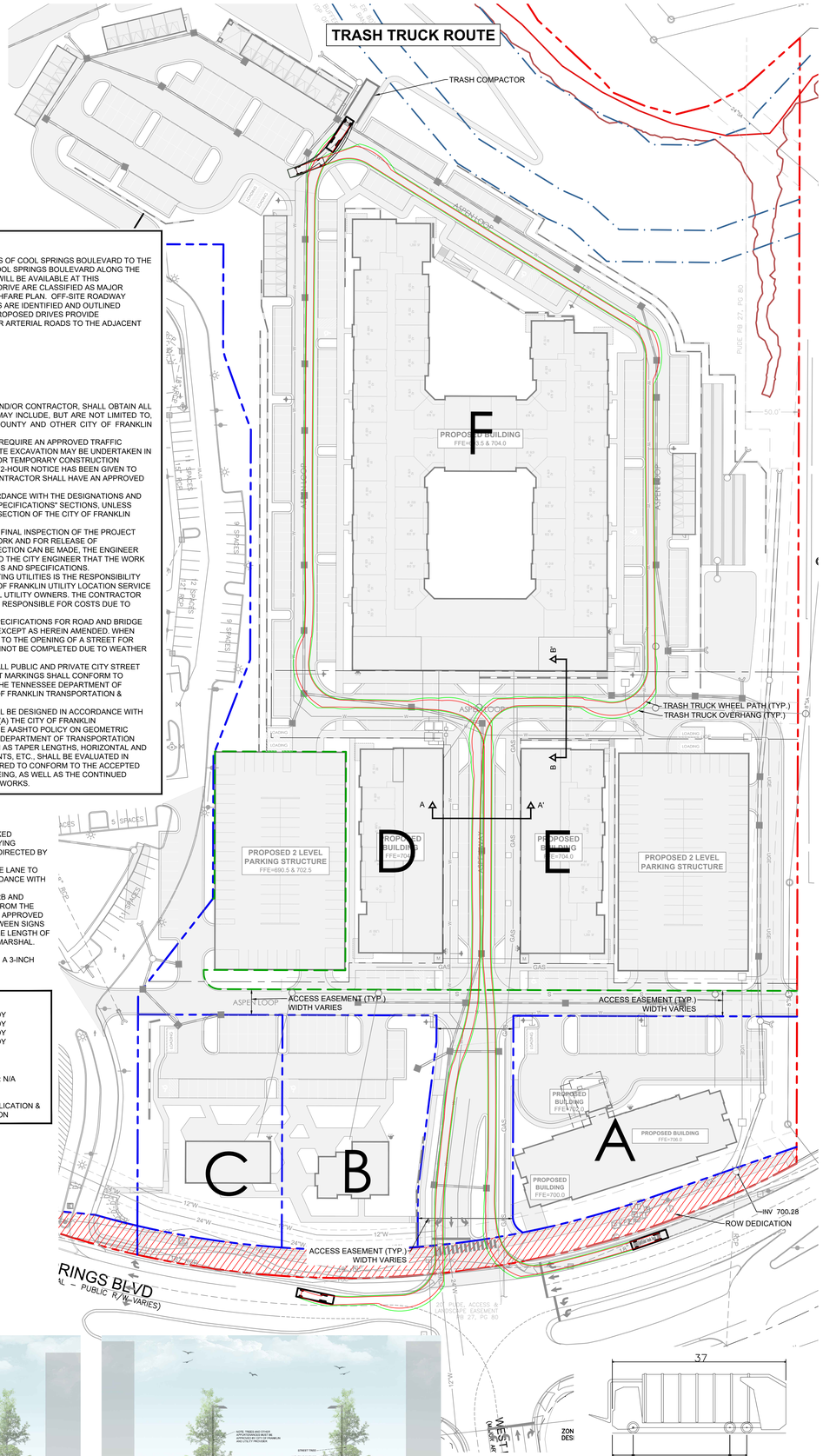
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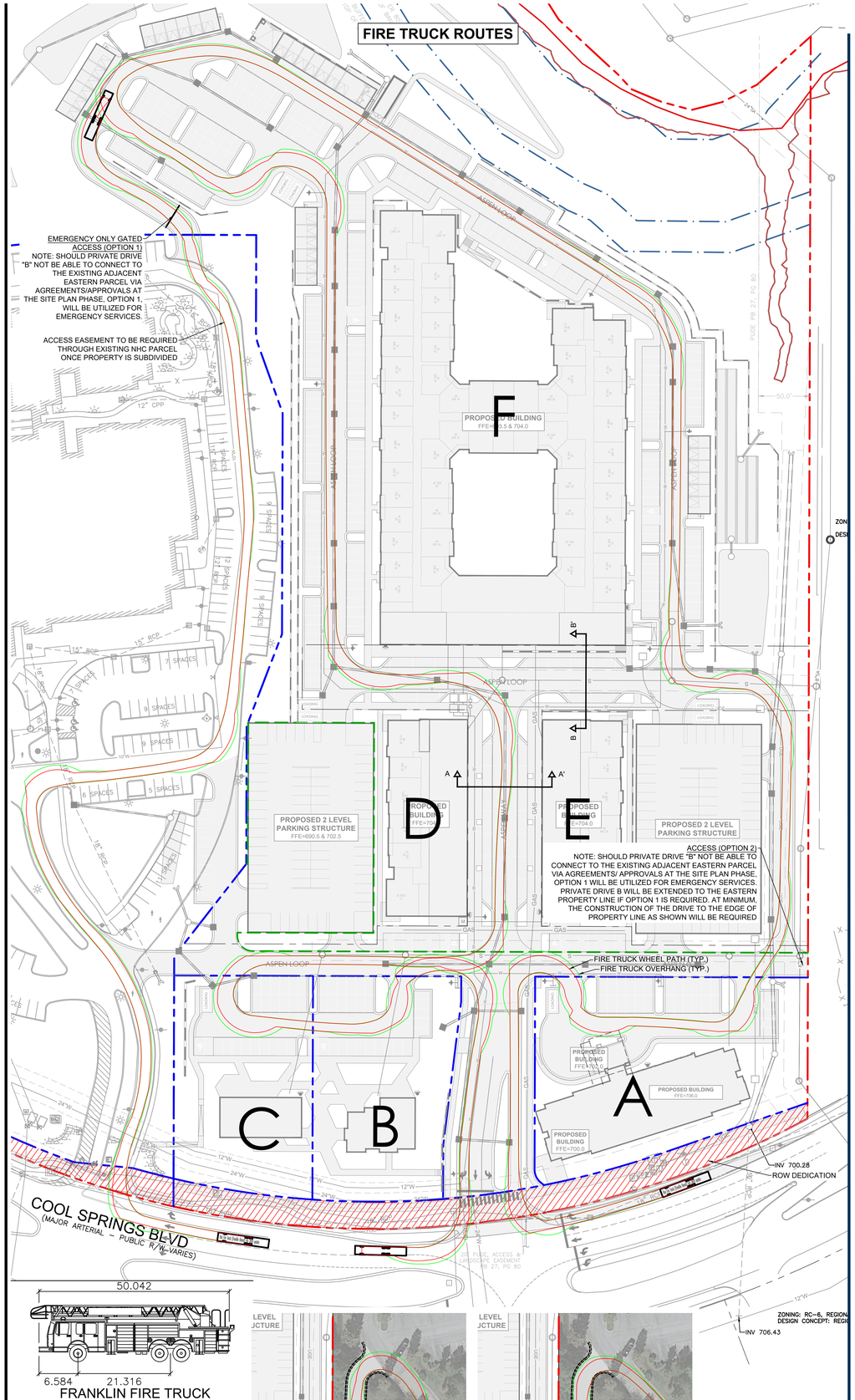
HATCH LEGEND:

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- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL

TRASH TRUCK ROUTE



FIRE TRUCK ROUTES



STATEMENT OF IMPACTS:

THE STREET NETWORK SURROUNDING THE PROJECT CONSISTS OF COOL SPRINGS BOULEVARD TO THE SOUTH OF THE PROPERTY. W. MCEWEN DRIVE INTERSECTS COOL SPRINGS BOULEVARD ALONG THE PROJECT FRONTAGE AND PRIMARY ACCESS TO THE PROJECT WILL BE AVAILABLE AT THIS INTERSECTION. COOL SPRINGS BOULEVARD AND W. MCEWEN DRIVE ARE CLASSIFIED AS MAJOR ARTERIAL ROADS ON THE CITY OF FRANKLIN MAJOR THOROUGHFARE PLAN. OFF-SITE ROADWAY IMPROVEMENTS CONSISTENT WITH CITY OF FRANKLIN POLICIES ARE IDENTIFIED AND OUTLINED THROUGH THE TRAFFIC IMPACT STUDY PROCESS. INTERNAL PROPOSED DRIVES PROVIDE CONNECTIVITY THROUGH THE DEVELOPMENT FROM THE MAJOR ARTERIAL ROADS TO THE ADJACENT PARCELS.

ROADWAY NETWORK NARRATIVE

1. SEE TRAFFIC IMPACT STUDY

ROW & ACCESS GENERAL NOTES

1. PRIOR TO BEGINNING ANY CONSTRUCTION, THE DEVELOPER AND/OR CONTRACTOR, SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY LAW. SUCH PERMITS MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE REQUIRED BY STATE OF TENNESSEE, WILLIAMSON COUNTY AND OTHER CITY OF FRANKLIN AGENCIES.
2. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
3. CONSTRUCTION MATERIALS SHALL BE FULLY TESTED IN ACCORDANCE WITH THE DESIGNATIONS AND REQUIREMENTS WITHIN THE REFERENCED "TDOT STANDARD SPECIFICATIONS" SECTIONS, UNLESS OTHERWISE NOTED WITHIN THE "STANDARD SPECIFICATIONS" SECTION OF THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.
4. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. ALL TEMPORARY STRIPING SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," PUBLISHED BY TDOT, THE LATEST REVISION EXCEPT AS HEREIN AMENDED. WHEN APPROVED, TEMPORARY STRIPING SHALL BE REQUIRED PRIOR TO THE OPENING OF A STREET FOR TRAVEL WHERE PAVEMENT AND/OR PERMANENT STRIPING CANNOT BE COMPLETED DUE TO WEATHER AND/OR TIME CONSTRAINTS.
7. THERMOPLASTIC PAVEMENT MARKINGS SHOULD BE USED ON ALL PUBLIC AND PRIVATE CITY STREET PROJECTS. THERMOPLASTIC TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO SECTION 716.03 "THERMOPLASTIC PAVEMENT MARKINGS", OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS (TDOT), AND TO THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.
8. AT THE SITE PLAN STAGE, ALL ROADWAY IMPROVEMENTS SHALL BE DESIGNED IN ACCORDANCE WITH THE APPROPRIATE COMMON STANDARDS AS ESTABLISHED BY (A) THE CITY OF FRANKLIN TRANSPORTATION AND STREET TECHNICAL STANDARDS, (B) THE AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AND (C) THE TENNESSEE DEPARTMENT OF TRANSPORTATION DESIGN GUIDELINES AND STANDARD DETAILS. FEATURES SUCH AS TAPER LENGTHS, HORIZONTAL AND VERTICAL GEOMETRY, CLEAR ZONES, GUARDRAIL REQUIREMENTS, ETC., SHALL BE EVALUATED IN GREATER DETAIL AT THE SITE PLAN STAGE AND WILL BE REQUIRED TO CONFORM TO THE ACCEPTED STANDARD IN ORDER TO ENSURE PUBLIC SAFETY AND WELL-BEING, AS WELL AS THE CONTINUED FUNCTIONALITY OF THE EXISTING AND PROPOSED STREET NETWORKS.

FIRE LANE NOTES:

PUBLIC PROPERTY: WHERE FIRE LANES MAY BE BLOCKED BY PARKED VEHICLES, APPROVED SIGNS OR OTHER APPROVED MARKINGS SAYING **NO PARKING FIRE LANE** MUST BE INSTALLED AND MAINTAINED AS DIRECTED BY THE FIRE CODE OFFICIAL. (IFC 503.3)
PRIVATE PROPERTY: WHERE PARKED CARS MAY NARROW THE FIRE LANE TO LESS THAN 20-FEET, THE FIRE LANES SHALL BE MARKED IN ACCORDANCE WITH MUNICIPAL ORDINANCE, 7-225.
FIRE LANES SHALL BE MARKED WITH SIGNS ADJACENT TO THE CURB AND PAVEMENT MARKINGS READING **FIRE LANE-NO PARKING** VISIBLE FROM THE NORMAL LANE OF TRAFFIC AND PAINTED YELLOW OR WHITE OR AS APPROVED BY THE FIRE MARSHAL. A MAXIMUM OF 50-FEET ALTERNATING BETWEEN SIGNS AND PAVEMENT MARKINGS SHALL BE REQUIRED ALONG THE ENTIRE LENGTH OF THE FIRE LANE. PLACEMENT SUBJECT TO APPROVAL BY THE FIRE MARSHAL.

SIZE OF LETTERING ON PAVEMENT SHALL BE 18-INCHES HIGH WITH A 3-INCH BRUSH STROKE.

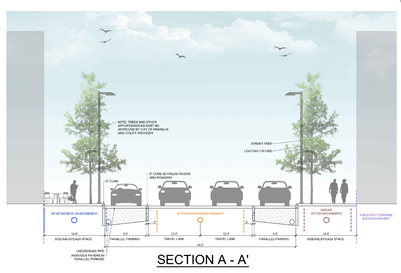
ROW & ACCESS DATA CHART

DAILY TRIP GENERATION:	SEE TRAFFIC IMPACT STUDY
PEAK HOUR TRIP GENERATION:	SEE TRAFFIC IMPACT STUDY
TRAFFIC IMPACT STUDY REQUIRED:	SEE TRAFFIC IMPACT STUDY
CIRCULATION PLAN REQUIRED:	SEE TRAFFIC IMPACT STUDY

ACCESS MANAGEMENT

MIN. DISTANCE BETWEEN INTERSECTION: 150'± (SEE PLAN)
MIN. DISTANCE BETWEEN HIGH VOLUME/ALLEYS & INTERSECTIONS: N/A
MIN. DISTANCE BETWEEN DRIVEWAY AND INTERSECTIONS: 75'±

DRIVEWAY WIDTH: SEE REZONING & PUD DEVELOPMENT PLAN APPLICATION & PUD PATTERN BOOK DRIVEWAY APPROACH STREET CONFIGURATION



SECTION A - A'

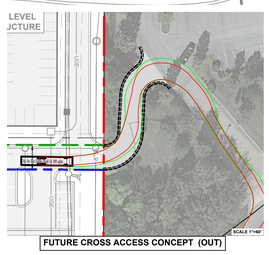
SECTION B - B'

Front Load Trash Truck

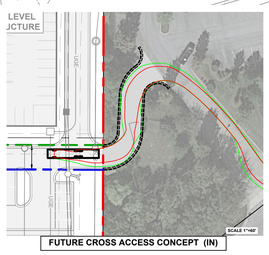
Overall Length	37.000ft
Overall Width	8.0833ft
Overall Body Height	12.500ft
Min Body Ground Clearance	0.698ft
Track Width	6.500ft
Curb to Curb Turning Radius	46.000ft

FRANKLIN FIRE TRUCK

NUMBER OF FRONT AXLES:	1
TRACK WIDTH:	8'
WHEELS ON FRONT AXLE:	2
NUMBER OF REAR AXLES:	2
TRACK WIDTH:	8'
WHEEL BASE:	21.316'
REAR AXLE SPACING:	4.417'
BODY LENGTH:	30.0417'
WIDTH:	8.333'
REAR OVERHANG:	22.1424'
TURNING RADIUS WALL TO WALL:	42'
MINIMUM DESIGN SPEED:	5 MPH



FUTURE CROSS ACCESS CONCEPT (OUT)



FUTURE CROSS ACCESS CONCEPT (IN)

NOTE: SEE FRONT YARD (INTERNAL PRIVATE DRIVE) MIN. & MAX. SETBACKS DIMENSIONS SHOWN IN SECTIONS ARE FOR DESIGN INTENT ONLY.

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PLOTTED BY: JOHN CROSSWHITE ON: 8/5/2022 3:48 PM - XREF DEPENDENT IP:\PLAN\PACK Z\ ON: 8/2/2022 3:08 PM

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BRINCK — REGISTERED — 2101 — LANDSCAPE ARCHITECT — TENNESSEE NO. 101 — 07/01/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

- - -

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:

R.O.W. & ACCESS PLAN

Drawing No.

C4.0

Project No.

21-0233

PROJECT # 7896

0 50 100

STATEMENT OF IMPACTS:

1. WATER FACILITIES: MALLORY VALLEY UTILITIES DISTRICT (MVUD) IS THE WATER PROVIDER FOR THE PARCEL. IT IS ANTICIPATED THAT A NEW PROPOSED WATER MAIN WILL ROUTE THROUGHT THE DEVELOPMENT AS DISPLAYED ON THIS EXHIBIT. MVUD AND THEIR ENGINEERS WILL PROVIDE THE DESIGNS FOR ANY NEW CONNECTIONS TO THE EXISTING WATER MAIN LINE LOCATED WITHIN COOL SPRINGS BLVD. A REQUEST FOR WATER AVAILABILITY AND FLOW TEST HAS BEEN MADE. RESULTS ARE CURRENTLY PENDING ASSESSMENT BY MVUD.
2. SEWER FACILITIES: THE CITY OF FRANKLIN IS THE SANITARY SEWER SERVICE PROVIDER FOR THE DEVELOPMENT. IT IS ANTICIPATED THAT A PROPOSED SEWER MAIN WILL BE ROUTED THROUGH THE DEVELOPMENT AS DISPLAYED ON THIS EXHIBIT. A SEWER AVAILABILITY REQUEST HAS BEEN MADE WITH THE COF AND CURRENTLY PENDING ASSESSMENT.
3. REPURIFIED (REUSE) WATER FACILITIES: CURRENTLY NO REPURIFIED (REUSE) WATER FACILITIES ARE PLANNED AS PART OF THIS PROJECT.

UTILITY NARRATIVE:

THE DEVELOPMENT IS INTENDED TO BE SERVED BY PUBLIC SEWER, PUBLIC WATER, UNDERGROUND ELECTRIC, AND GAS THROUGHOUT. CURRENTLY, AUTHORITIES THAT WILL BE ASSISTING IN THE DETAILS OF THESE SERVICES ARE MALLORY VALLEY UTILITY DISTRICT, CITY OF FRANKLIN SEWER, MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, ATMOS ENERGY.

WATER & SEWER NOTES

1. ALL PERSONS WHO UNDERTAKE THE CONSTRUCTION OF WATER, SEWER AND/OR RECLAIMED WATER LINES LOCATED IN, OR AFFECTING SERVICES PROVIDED BY THE CITY OF FRANKLIN SHALL COMPLY WITH THE REQUIREMENTS AND REGULATIONS SET FORTH IN THE "GENERAL REQUIREMENTS & TECHNICAL SPECIFICATIONS, WATER MANAGEMENT DEPARTMENT, CITY OF FRANKLIN, TENNESSEE" LATEST EDITION, ALONG WITH ANY AMENDMENTS, ADDITIONS, OR ALTERATION THAT MAY THEREAFTER BE ADOPTED BY THE BOARD OF MAYOR AND ALDERMEN BY RESOLUTION.
2. CONTRACTOR SHALL OBTAIN WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT PRIOR TO SCHEDULING REQUIRED PRE-CONSTRUCTION SITE MEETING. CONTRACTOR SHALL COMPLETE THE PRECONSTRUCTION SITE MEETING PRIOR TO COMMENCING WITH CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN AND KEEP ALL OF THE FOLLOWING ITEMS ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION:
   A. APPROVED, STAMPED AND SIGNED WATER AND/OR SEWER PLANS
   B. WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT, WITH ALL STEPS COMPLETED AND SIGNED BY APPROPRIATE CITY EMPLOYEES.
   C. COPY OF APPROVED AVAILABILITY REQUEST RESPONSE LETTER.
   D. A COPY OF ALL APPROVED CUT SHEETS.
4. ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE SHALL BECOME THE RESPONSIBILITY OF THE CITY OF FRANKLIN, TN FOLLOWING APPROVAL FROM THE CITY OF FRANKLIN INSPECTORS AND ACCEPTANCE BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION. THE ACCEPTANCE DATE SHALL BE BASED ON THE DAY MAINTENANCE SURETIES ARE ESTABLISHED BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION.
5. PRIOR TO THE ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AS-BUILT DRAWINGS TO THE PLANNING AND SUSTAINABILITY DEPARTMENT.
6. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
7. ANY DAMAGES CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL, AT HIS OWN EXPENSE, BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY, BY THE CONTRACTOR.

LIGHTING NOTE:
ALL STREET LIGHTS SHALL HAVE A LED LIGHT SOURCE.

UTILITY NOTE:
UTILITY PHASING & LOCATIONS SHOWN ARE CONCEPTUAL, SPECIFIC ALIGNMENT & PHASING TO BE COORDINATED AND APPROVED WITH THE UTILITY PROVIDERS.

WATER & SEWER DATA CHART

FACILITY TYPE:	MIXED USE
SEWER FLOW IN GPD:	116,710 GPD
WATER FLOW IN GPD:	116,710 GPD
NUMBER OF UNITS:	334 SFU

UTILITY PROVIDERS

SEWER:	FRANKLIN, TN WATER MANAGEMENT DEPARTMENT: 615-794-4554
WATER:	MALLORY VALLEY UTILITY DISTRICT: 615-628-0237
GAS:	ATMOS ENERGY: 615-566-3073
ELECTRIC:	MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION: 615-595-4683
PHONE/CABLE:	AT&T: 615-595-7816

ANTICIPATED UTILITY DEPTHS

SEWER:	4' MIN - 12' MAX UNLESS OTHERWISE SHOWN
WATER:	30" - 60" OR PER MVUD REQUIREMENTS
GAS:	TBD PER ATMOS ENERGY REQUIREMENTS
ELECTRIC:	36" - 42" OR PER MTEMC REQUIREMENTS
PHONE/CABLE:	TBD

LEGEND

- GAS — GAS
- S — SANITARY SEWER (20' EASEMENT)
- W — WATER (15' EASEMENT)
- UGE — ELECTRIC (20' EASEMENT)
- COF PUDE (20' EASEMENT)



A two-hydrant fire flow test was performed on June 9, 2022 near the intersection of Cool Springs Blvd. and Mission Ct. in Franklin, TN. The flow test started at approximately 9:30 P.M., CST. The test was executed by Hunter Patton (H&D) and Justin Maxwell (MVUD).

HATCH LEGEND:

- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

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RaganSmith

Nashville - Murfreesboro - Chattanooga
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SCOTT MICHAEL BRINCK — REGISTERED — AGRICULTURE — TENNESSEE NO. 3017 — LANDSCAPE ARCHITECT — 10/10/2022

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CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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Drawing Title:

SITE UTILITY PLAN

Drawing No.

C5.0

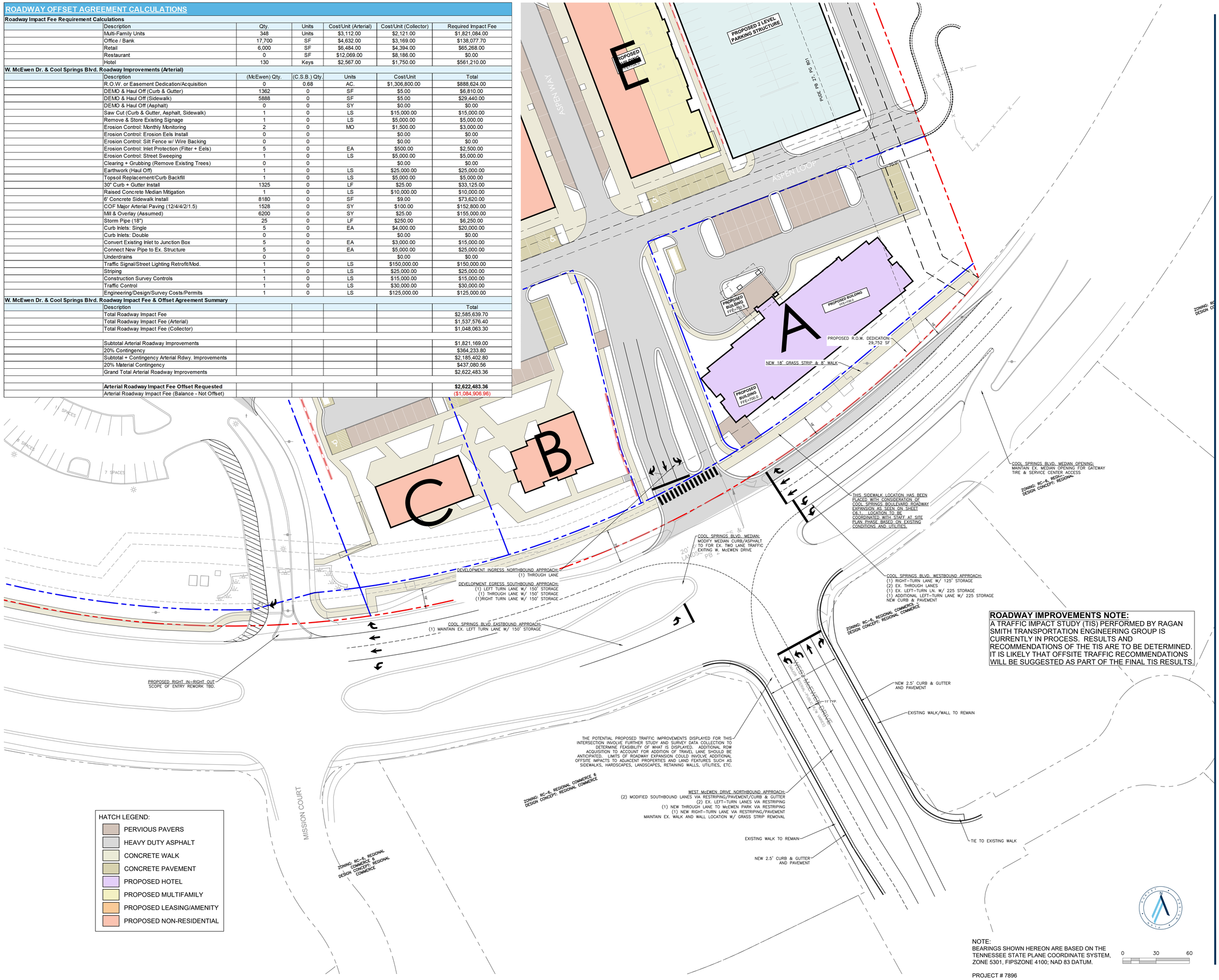
Project No.

21-0233

ROADWAY OFFSET AGREEMENT CALCULATIONS

Roadway Impact Fee Requirement Calculations

	Description	Qty.	Units	Cost/Unit (Arterial)	Cost/Unit (Collector)	Required Impact Fee
	Multi-Family Units	348	Units	$3,112.00	$2,121.00	$1,821,084.00
	Office / Bank	17,700	SF	$4,632.00	$3,169.00	$138,077.70
	Retail	6,000	SF	$6,484.00	$4,394.00	$65,268.00
	Restaurant	0	SF	$12,069.00	$8,186.00	$0.00
	Hotel	130	Keys	$2,567.00	$1,750.00	$561,210.00
W. McEwen Dr. & Cool Springs Blvd. Roadway Improvements (Arterial)						
	Description	(McEwen) Qty.	(C.S.B.) Qty.	Units	Cost/Unit	Total
	R.O.W. or Easement Dedication/Acquisition	0	0.68	AC.	$1,306,800.00	$888,624.00
	DEMO & Haul Off (Curb & Gutter)	1362	0	SF	$5.00	$6,810.00
	DEMO & Haul Off (Sidewalk)	5888	0	SF	$5.00	$29,440.00
	DEMO & Haul Off (Asphalt)	0	0	SY	$0.00	$0.00
	Saw Cut (Curb & Gutter, Asphalt, Sidewalk)	1	0	LS	$15,000.00	$15,000.00
	Remove & Store Existing Signage	1	0	LS	$5,000.00	$5,000.00
	Erosion Control: Monthly Monitoring	2	0	MO	$1,500.00	$3,000.00
	Erosion Control: Erosion Eels Install	0	0		$0.00	$0.00
	Erosion Control: Silt Fence w/ Wire Backing	0	0		$0.00	$0.00
	Erosion Control: Inlet Protection (Filter + Eels)	5	0	EA	$500.00	$2,500.00
	Erosion Control: Street Sweeping	1	0	LS	$5,000.00	$5,000.00
	Clearing + Grubbing (Remove Existing Trees)	0	0		$0.00	$0.00
	Earthwork (Haul Off)	1	0	LS	$25,000.00	$25,000.00
	Topsoil Replacement/Curb Backfill	1	0	LS	$5,000.00	$5,000.00
	30" Curb + Gutter Install	1325	0	LF	$25.00	$33,125.00
	Raised Concrete Median Mitigation	1	0	LS	$10,000.00	$10,000.00
	6' Concrete Sidewalk Install	8180	0	SF	$9.00	$73,620.00
	COF Major Arterial Paving (12/4/4/2/1.5)	1528	0	SY	$100.00	$152,800.00
	Mill & Overlay (Assumed)	6200	0	SY	$25.00	$155,000.00
	Storm Pipe (18")	25	0	LF	$250.00	$6,250.00
	Curb Inlets: Single	5	0	EA	$4,000.00	$20,000.00
	Curb Inlets: Double	0	0		$0.00	$0.00
	Convert Existing Inlet to Junction Box	5	0	EA	$3,000.00	$15,000.00
	Connect New Pipe to Ex. Structure	5	0	EA	$5,000.00	$25,000.00
	Underdrains	0	0		$0.00	$0.00
	Traffic Signal/Street Lighting Retrofit/Mod.	1	0	LS	$150,000.00	$150,000.00
	Striping	1	0	LS	$25,000.00	$25,000.00
	Construction Survey Controls	1	0	LS	$15,000.00	$15,000.00
	Traffic Control	1	0	LS	$30,000.00	$30,000.00
	Engineering/Design/Survey Costs/Permits	1	0	LS	$125,000.00	$125,000.00
W. McEwen Dr. & Cool Springs Blvd. Roadway Impact Fee & Offset Agreement Summary						
	Description					Total
	Total Roadway Impact Fee					$2,585,639.70
	Total Roadway Impact Fee (Arterial)					$1,537,576.40
	Total Roadway Impact Fee (Collector)					$1,048,063.30
	Subtotal Arterial Roadway Improvements					$1,821,169.00
	20% Contingency					$364,233.80
	Subtotal + Contingency Arterial Rdwy. Improvements					$2,185,402.80
	20% Material Contingency					$437,080.56
	Grand Total Arterial Roadway Improvements					$2,622,483.36
	Arterial Roadway Impact Fee Offset Requested					**$2,622,483.36**
	Arterial Roadway Impact Fee (Balance - Not Offset)					($1,084,906.96)



ROADWAY IMPROVEMENTS NOTE:
A TRAFFIC IMPACT STUDY (TIS) PERFORMED BY RAGAN SMITH TRANSPORTATION ENGINEERING GROUP IS CURRENTLY IN PROCESS. RESULTS AND RECOMMENDATIONS OF THE TIS ARE TO BE DETERMINED. IT IS LIKELY THAT OFFSITE TRAFFIC RECOMMENDATIONS WILL BE SUGGESTED AS PART OF THE FINAL TIS RESULTS.

HATCH LEGEND:
- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED NON-RESIDENTIAL

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

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Nashville - Murfreesboro - Chattanooga
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SCOTT MICHAEL BRINCK REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 331 04/01/2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=30'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:

OFFSITE ROADWAY IMPROVEMENTS

Drawing No.

C6.0

Project No.

21-0233

S:\21-0233\CIVIL ENGINEERING\PLANS\SHEETS\21-0233 OFFSITE ROADWAY.DWG
XLOGS IN: JAMES CROWELL ON: 4/25/2022 4:47 PM - LAST MODIFIED BY: JAMES CROWELL ON: 8/4/2022 3:07 PM

HATCH LEGEND:

- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED BUILDING
- BIORETENTION
- DETENTION POND

ROADWAY PHASING IMPROVEMENTS NOTE:
ALL WORK SHOWN ON THIS SHEET IS INTENDED FOR FUTURE DEVELOPMENT VISUALIZATION UPON THE IMPLEMENTATION OF THE COOL SPRINGS BLVD WIDENING PLAN. FOR THE CURRENT PROPOSED ROADWAY/SIDEWALK IMPROVEMENT SCOPE FOR THE OPTIMA MIXED USE DEVELOPMENT, REFER TO DEVELOPMENT PLAN SHEET C2.0.

FUTURE 8' SIDEWALK (TYP.)
FUTURE 6' GRASS STRIP (TYP.)
FUTURE 2.5 CURB & GUTTER (TYP.)
NHC RIGHT-OF-WAY DEDICATION 13,520 SF (CROSS HATCHED AREA)
FUTURE PROPOSED 12' THROUGH LANE (TYP.)
FUTURE PROPOSED RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT IN-RIGHT OUT
FUTURE CONVERSION OF TURN LANE TO THROUGH LANE
ASSESS EXISTING ENTRANCE SIGNAGE AND IF ALTERATION IS NEEDED
FUTURE TURN LANE ADDITION
EXISTING 25' MVUD WATER EASEMENT
20' PUDE, ACCESS & LANDSCAPE EASEMENT PB 27, PG 80
FUTURE TURN LANE ADDITION
FUTURE CONVERSION OF TURN LANE TO THROUGH LANE
EXISTING SIDEWALK
EXISTING CURB
PROPOSED 15' MVUD WATER EASEMENT
COOL SPRINGS BLVD (MAJOR ARTERIAL – PUBLIC R/W VARIES)
MISSION COURT
WEST McEWEN DRIVE (MAJOR ARTERIAL – PUBLIC R/W VARIES)

NOTE:
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PROJECT # 7896

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SCOTT MICHAEL BRINCK
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE NO. 391
04/07/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=40'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

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- – –

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS

Drawing Title:

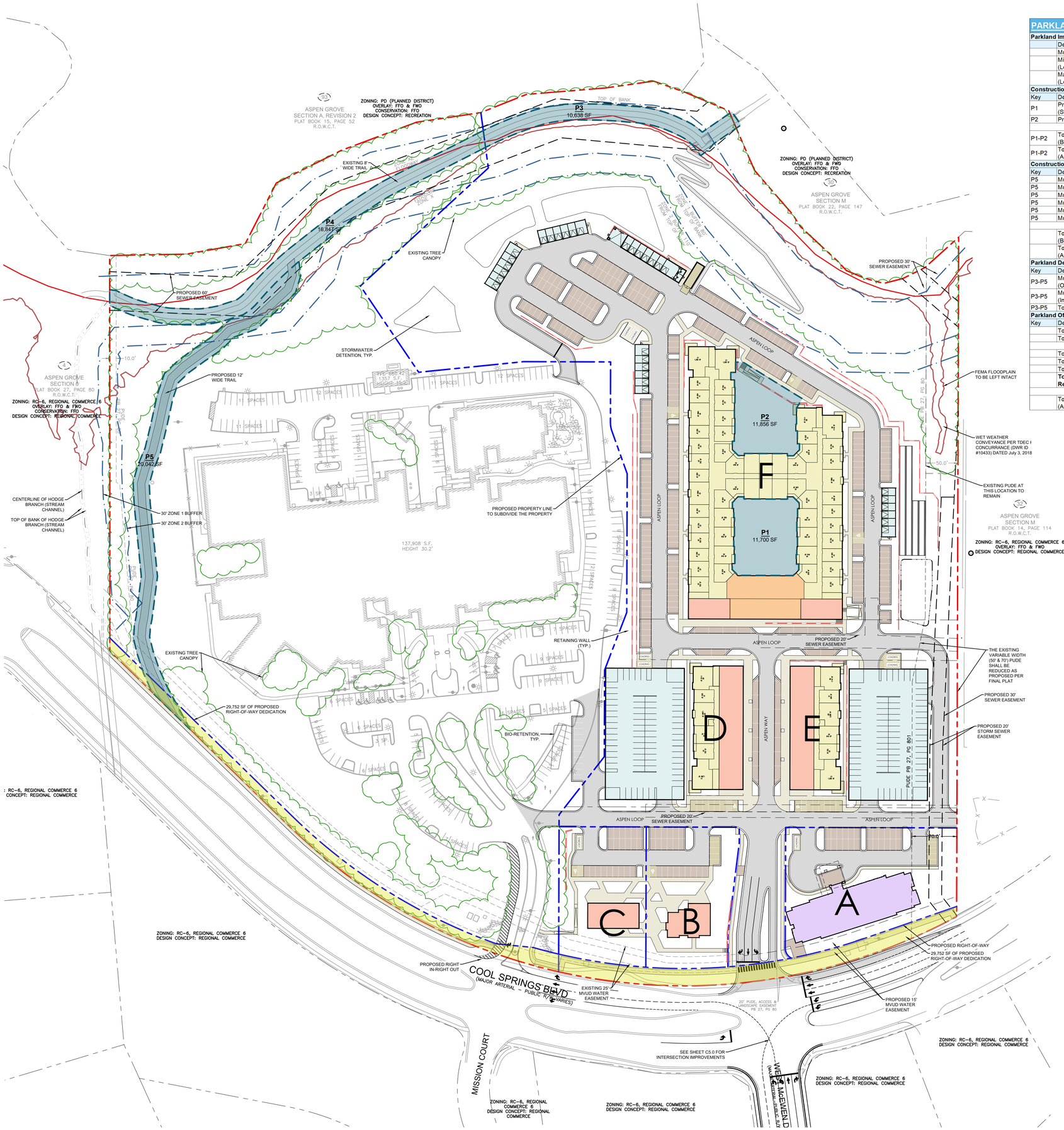
FUTURE ROADWAY LAYOUT PLAN

Drawing No.

C6.1

Project No.

21-0233



PARKLAND DEDICATION CALCULATIONS

Parkland Impact Fee Requirement Calculations

	Description	% of Offset Allowed	Qty.	Units	Cost/Unit	Required Impact Fee
	Multi-Family Units		348	Units	$4,304.00	$1,497,792.00
	Minimum Parkland Impact Fee Payment (Less than 5 Acres)	25%	--	--	--	$374,448.00
	Maximum Parkland Off-set Eligible to Receive (Less than 5 Acres)	75%	--	--	$ 3,228.00	$1,123,344.00

Construction of Private Park and Recreation Amenities Improvements in Lieu of Parkland Impact Fee Off-sets (Not Open to Public)

Key	Description	% of Offset Allowed	Qty.	Units	Cost/Unit	Total
P1	Private Recreation Amenities (Swimming Pool/Deck/Courtyard)	--	1	LS	--	$775,000.00
P2	Private Recreation Amenities (Recreation)	--	1	LS	--	$407,000.00
P1-P2	Total Private Park (Private Use) Construction Cost (Before % Offset Applied)	--	--	--	--	$1,182,000.00
P1-P2	Total Private Park (Private Use) Construction Cost (After % Offset Applied)	25%	--	--	--	$295,500.00

Construction of Public Park and Recreation Amenities Improvements in Lieu of Parkland Impact Fee Off-sets

Key	Description	% of Offset Allowed	Qty.	Units	Cost/Unit	Total
P5	Multi-Use Trail (12' Concrete Trail)	--	--	LS	--	$112,500.00
P5	Multi-Use Trail (Earthwork)	--	--	LS	--	$110,000.00
P5	Multi-Use Trail (Furniture)	--	--	LS	--	$15,000.00
P5	Multi-Use Trail (Landscaping Material)	--	--	LS	--	$20,000.00
P5	Multi-Use Trail (Trail Head Signage)	--	--	LS	--	$25,000.00
P5	Multi-Use Trail (Assorted)	--	--	LS	--	$15,000.00
	Total Public Use Construction Cost (Before % Offset Applied)	100%	--	--	--	$297,500.00
	Total Public Use Construction Cost (After % Offset Applied)	100%	--	--	--	$297,500.00

Parkland Dedication in Lieu of Parkland Impact Fee Off-sets (Public)

Key	Description	% of Offset Allowed	Qty.	Units	Cost/Unit	Total
P3-P5	Multi-Use Trail Land Dedication (Outside of Floodplain)	100%	0.39	AC	$62,121.00	$24,227.19
P3-P5	Multi-Use Trail Land Dedication (Inside of Floodplain)	100%	0.7	AC	$45,757.00	$32,029.90
P3-P5	Total Multi-Use Trail Land Dedication	100%	1.09	AC	--	$56,257.09

Parkland Offset Summary

Key	Description					Total
	Total Parkland Impact Fee					$1,497,792.00
	Total Parkland Impact Eligible Offset					$1,123,344.00
	Total Private Park Construction Offset Cost					$295,500.00
	Total Public Park Construction Offset Cost					$297,500.00
	Total Public Parkland Set-aside Offset Value					$56,257.09
	Total Parkland Offset in Lieu of Payment Requested					**$649,257.09**
	Total Parkland Impact Fee Balance Paid by Developer (After Offset Reimbursement)					$848,534.91

HATCH LEGEND:

- PERVIOUS PAVERS
- HEAVY DUTY ASPHALT
- CONCRETE WALK
- CONCRETE PAVEMENT
- PROPOSED HOTEL
- PROPOSED MULTIFAMILY
- PROPOSED LEASING/AMENITY
- PROPOSED RETAIL
- PARKLAND AREA

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

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SCOTT MICHAEL BRINCK
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE NO. 391
05/01/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

- - - -

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
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Drawing Title:

PARKLAND DEDICATION

Drawing No.

C7.0

Project No.

21-0233

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PHASING TABLE

Area	Phase	Commence (Approx.)	Deliver (Approx.)	Approximate Land Area (Ac.)
Existing NHC Site	--	--	--	16.16
D, E, F	1	Middle 2023	Middle 2025	15.42
B, C	2	TBD	TBD	1.33
A	3	TBD	TBD	1.02
			Total:	33.93*

* APPROXIMATE LAND AREAS EXCLUDE PROPOSED R.O.W.; PROPOSED DRIVES MAKE UP PART OF EACH AREA AND WILL VARY PENDING THE SEQUENCING OF DRIVE CONSTRUCTION.

HATCH LEGEND:
- PHASE 1
- PHASE 2
- PHASE 3

ASPEN GROVE SECTION A, REVISION 2 PLAT BOOK 15, PAGE 52 R.O.W.C.T.
ZONING: PD (PLANNED DISTRICT) OVERLAY: FFO & FWO CONSERVATION: FFO DESIGN CONCEPT: RECREATION
ASPEN GROVE SECTION M PLAT BOOK 22, PAGE 147 R.O.W.C.T.
ASPEN GROVE SECTION 8 PLAT BOOK 27, PAGE 80 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6 OVERLAY: FFO & FWO CONSERVATION: FFO DESIGN CONCEPT: REGIONAL COMMERCE
ASPEN GROVE SECTION M PLAT BOOK 14, PAGE 114 R.O.W.C.T.
ZONING: RC-6, REGIONAL COMMERCE 6 OVERLAY: FFO & FWO DESIGN CONCEPT: REGIONAL COMMERCE
ZONE AE FLOODWAY
ZONE AE FLOODWAY FRINGE
TOP OF BANK
PHASE 1
15.42± AC
PHASE 2
1.33± AC
PHASE 3
1.02± AC
F
D
E
C
B
A
137,908 S.F. HEIGHT 30.2'
1357 S.F. HEIGHT 16.2'
16,233 SF OF RIGHT-OF-WAY DEDICATION
20' PUDE, ACCESS & LANDSCAPE EASEMENT PB 27, PG 80
50.0'
PAGE PB 27, PG 80
ZONING: RC-6, REGIONAL COMMERCE 6 DESIGN CONCEPT: REGIONAL COMMERCE
COOL SPRINGS BLVD (MAJOR ARTERIAL – PUBLIC R/W VARIES)
MISSION COURT
WEST MCEWEN DR (MAJOR ARTERIAL – PUBLIC R/W VARIES)

NOTE:
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PROJECT # 7896

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SCOTT MICHAEL BRINCK REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 001 10/01/2022

THE OPTIMA FRANKLIN
FOR
FLOURNOY DEVELOPMENT GROUP
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

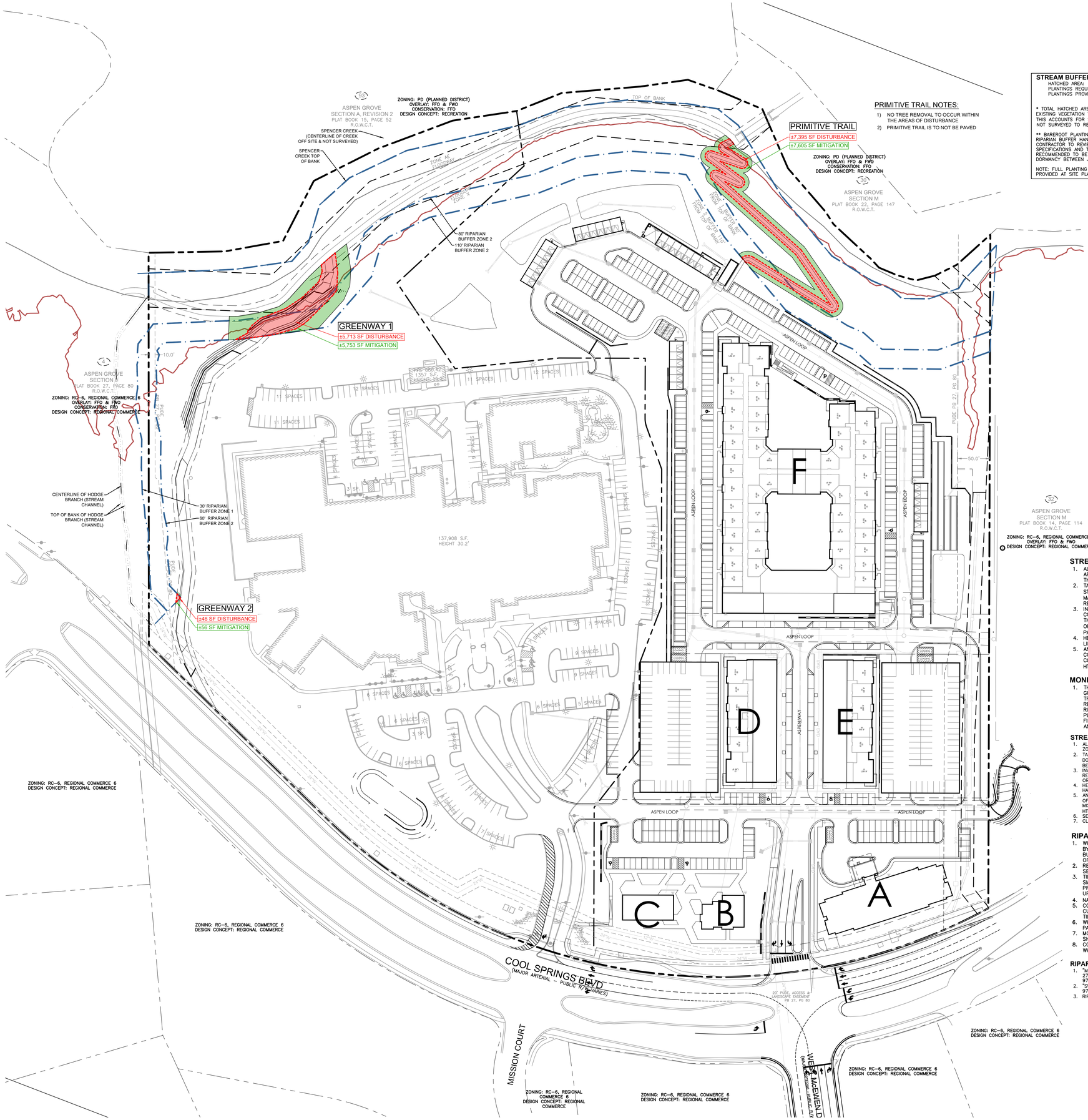
Scale: 1"=60'
Date: APRIL 25, 2022
Approved By: M. DOBSON
Revisions:
- – – –
5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITIAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:
CONCEPTUAL PHASING PLAN

Drawing No.
C8.0

Project No.
21-0233

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Xref: 21-0233 CAD PROPOSED ALTA 10-2021 - 4.DWG, 21-0233 CAD PROPOSED ALTA 10-2021 - 5.DWG
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PRIMITIVE TRAIL NOTES:

1) NO TREE REMOVAL TO OCCUR WITHIN THE AREAS OF DISTURBANCE
2) PRIMITIVE TRAIL IS TO NOT BE PAVED

STREAM BUFFER TREE/SHRUB CALCS:

HATCHED AREA:	6,577 S.F.*
PLANTINGS REQUIRED:	183 (6,577/36 SF)
PLANTINGS PROVIDED:	183

* TOTAL HATCHED AREA = 13,154 SF. ASSUMED EXISTING VEGETATION TO REMAIN = 50% (6,577 SF) THIS ACCOUNTS FOR SHRUBS AND TREES UNDER 10" NOT SURVEYED TO REMAIN.

** BAREROOT PLANTINGS PROPOSED PER TN URBAN RIPARIAN BUFFER HANDBOOK RECOMMENDATIONS. CONTRACTOR TO REVIEW THIS GUIDE FOR PLANTING SPECIFICATIONS AND TIMING. PLANTINGS ARE RECOMMENDED TO BE INSTALLED DURING PLANT DORMANCY BETWEEN JANUARY AND MARCH .

NOTE: FULL PLANTING PLAN AND SCHEDULE TO BE PROVIDED AT SITE PLAN.

STREAM BUFFER ENHANCEMENT NOTES:

1. ALL INVASIVE SPECIES (I.E. JAPANESE HONEYSUCKLE, PRIVET, ETC.) WITHIN THE STREAM BUFFER MITIGATION AREA SHOWN IN GREEN SHALL BE REMOVED FROM THE STREAM BUFFER ZONES AND HAULED OFF FROM THE SITE.
2. TAKE SPECIAL CARE TO MINIMIZE DISTURBANCE TO EXISTING CANOPY TREE ROOT SYSTEMS WITHIN THE STREAM BUFFER MITIGATION AREA SHOWN IN GREEN IN THE TOP 12" OF TOPSOIL. DO NOT CUT THE TREE'S MAJOR ROOT SYSTEM. NO ROOTS OVER 2" IN DIAMETER ARE TO BE CUT. ALL ROOTS CUT BELOW THE 2" REQUIREMENT ARE TO BE APPROPRIATELY PRUNED WITH A CLEAN CUT.
3. INVASIVE SPECIES REMOVAL SHALL BE DONE BY HAND. THE INVASIVE SPECIES ROOT SYSTEM SHALL BE COMPLETELY REMOVED AND NOT CUT OFF AT GROUND LEVEL. NO HEAVY EQUIPMENT IS ALLOWED WITHIN THE STEAM BUFFER ZONES OR TREE PROTECTION AREA FOR MITIGATION PURPOSES AS REQUIRED BY CITY OF FRANKLIN ORDINANCE (EXCEPT FOR GREENWAY PAVEMENT INSTALLATION IN ACCORDANCE WITH THE PARKS MASTER PLAN).
4. HERBICIDE TREATMENT MAY BE APPLIED TO THE INVASIVE PLANT MATERIAL ONLY BY A LICENSED SPRAYER IN LIEU OF HAND REMOVAL.
5. ANY DISTURBED AREA NOT OTHERWISE PLANTED PER THE PROPOSED LANDSCAPE PLAN SHALL RECEIVE COMBINATION OF RIPARIAN SEED MIX 168 WITH SWAMP MILKWEED SEED. CONTRACTOR TO PROVIDE NATIVE SEED MIX SPECIFICATIONS THAT MEET THE URBAN RIPARIAN HANDBOOK AT: HTTP://WWW.FRANKLINTN.GOV/GOVERMENT/ENGINEERING/STORMWATER/CONSTRUCTION-DEVELOPMENT.

MONITOR & REPORT NOTES:

1. THE OWNER SHALL SUBMIT A YEARLY MONITORING REPORT TO THE CITY. SEEDLING/TREES MUST BE GUARANTEED AT A 75% SURVIVORSHIP FOR THE DURATION OF THE REQUIRED MONITORING PERIOD. ANY TREES THAT DO NOT SURVIVE DURING THIS PERIOD SHALL BE REPLACED BY THE OWNER. THE MONITORING REPORT MUST INCLUDE A NARRATIVE DESCRIPTION AND PHOTOS ACCURATELY DEPICTING THE STREAM AND RIPARIAN HABITAT, AND A COPY OF THE RIPARIAN VEGETATION SURVEY DOCUMENTING THE SURVIVORSHIP OF PLANTED RIPARIAN SPECIES. THE MONITORING REPORT SHOULD BE SUBMITTED AT THE BEGINNING OF THE FIRST GROWING SEASON AFTER COMPLETION OF THE RESTORATION PROJECT, AND SHALL BE SUBMITTED ANNUALLY FOR A PERIOD OF 3 YEARS.

STREAM BUFFER ENHANCEMENT NOTES:

1. ALL INVASIVE SPECIES (I.E. JAPANESE HONEYSUCKLE, PRIVET, ETC.) SHALL BE REMOVED FROM THE STREAM BUFFER ZONES AND HAULED OFF FROM THE SITE.
2. TAKE SPECIAL CARE TO MINIMIZE DISTURBANCE TO EXISTING CANOPY TREE ROOT SYSTEMS IN THE TOP 12" OF TOPSOIL. DO NOT CUT THE TREE'S MAJOR ROOT SYSTEM. NO ROOTS OVER 2" IN DIAMETER ARE TO BE CUT. ALL ROOTS CUT BELOW THE 2" REQUIREMENT ARE TO BE APPROPRIATELY PRUNED WITH A CLEAN CUT.
3. INVASIVE SPECIES REMOVAL SHALL BE DONE BY HAND. THE INVASIVE SPECIES ROOT SYSTEM SHALL BE COMPLETELY REMOVED AND NOT CUT OFF AT GROUND LEVEL. NO HEAVY EQUIPMENT IS ALLOWED WITHIN THE STEAM BUFFER ZONES OR TREE PROTECTION AREA AS REQUIRED BY CITY OF FRANKLIN ORDINANCE.
4. HERBICIDE TREATMENT MAY BE APPLIED TO THE INVASIVE PLANT MATERIAL ONLY BY A LICENSED SPRAYER IN LIEU OF HAND REMOVAL.
5. ANY DISTURBED AREA NOT OTHERWISE PLANTED PER THE PROPOSED LANDSCAPE PLAN SHALL RECEIVE A NATIVE SEED MIX OF FORBES/GRASSES/SEDGES/RUSHES SUITABLE FOR MOIST SHADED CONDITIONS. CONTRACTOR TO PROVIDE NATIVE SEED MIX SPECIFICATIONS THAT MEET THE URBAN RIPARIAN HANDBOOK AT: HTTP://WWW.FRANKLINTN.GOV/GOVERMENT/ENGINEERING/STORMWATER/CONSTRUCTION-DEVELOPMENT.
6. SEE URBAN RIPARIAN HANDBOOK FOR IRRIGATION AND PLANTING RECOMMENDATIONS OF BARE ROOT PLANTS.
7. CLEARLY MARK THE OUTLINE OF THE PROPOSED BUFFER AREA WITH WHITE FLAGS OR STAKES.

RIPARIAN BUFFER PLANTING MIX NOTES:

1. WHEN PLANTING DURING DORMANT SEASON (NOVEMBER-FEBRUARY), SEEDING RATE SHOULD BE INCREASED BY APPROXIMATELY 25% TO ACCOMMODATE FOR SEED LOSS DUE TO ROT, PREDATION, EROSION, OR BEING BURIED TOO DEEP BY FREEZING AND THAWING. WHEN PLANTING DURING SPRING, SEED DURING THE MONTHS OF APRIL-JUNE.
2. REMOVE EXISTING VEGETATION PRIOR TO SEEDING. FOR ERODIBLE SITES, REMOVE VEGETATION JUST PRIOR TO SEEDING TO HOLD THE SOIL.
3. TILL SOIL BY DISKING, DRAGGING, OR RAKING TO PREVENT SEED FROM BEING BURIED TOO DEEP. AFTER SMOOTHING, CONDITION BY USING A CULTIPACKER, ROLLER, OR OTHER EQUIPMENT TO COMPACT THE SOIL PRIOR TO SEEDING. TILLAGE SHOULD BE AVOIDED IF POSSIBLE IN CROP FIELD SITES TO PREVENT BRINGING UP WEED SEED FROM THE SOIL BANK.
4. NATIVE SEED SHOULD BE PLANTED NO MORE THAN ¼" DEEP, DEPENDING ON SOIL MOISTURE.
5. CONVENTIONALLY TILLED AREAS SHALL BE MECHANICALLY OR MANUALLY BROADCAST SEEDED. SOIL SHALL BE CULTIPACKED OR ROLLED AFTER SEEDING TO PRESS THE SEED INTO THE SOIL. FOR NON-CONVENTIONALLY TILLED AREAS, SPECIALTY WARM SEASON GRASS DRILLS ARE NEEDED TO SEED.
6. WHEN BROADCAST SEEDING, BROADCAST AT HALF RATE AND SEED OVER THE AREA TWICE WITH THE SECOND PASS AT A RIGHT ABLE TO THE FIRST PASS FOR EQUAL COVERAGE.
7. MOW AS OFTEN AS NECESSARY JUST ABOVE THE HEIGHT OF NATIVES AS SOON AS COMPETITION BEGINS TO SHADE EMERGING NATIVES.
8. CONTACT ROUNDSTONE NATIVE SEED, LLC FOR SEED MIX SPECIFICATIONS AND PLANTING GUIDELINES: WWW.ROUNDSTONESEED.COM (888) 531-2353

RIPARIAN SEED MIX NOTES:

1. "MIX 168 – SOUTHERN RIPARIAN BUFFER MIX" SEEDS CAN BE PURCHASED FROM ROUNDSTONE NATIVE SEED LLC. PHONE: 270-531-3036 9764 RAIDER HOLLOW ROAD, UPTON, KY 42784. CONTACT SUPPLIER FOR PLANTING SPECIFICATIONS AND TIMING.
2. "SWAMP MILKWEED" SEEDS CAN BE PURCHASED FROM ROUNDSTONE NATIVE SEED LLC. PHONE: 270-531-3036 9764 RAIDER HOLLOW ROAD, UPTON, KY 42784. CONTACT SUPPLIER FOR PLANTING SPECIFICATIONS AND TIMING.
3. RIPARIAN SEED MIX TO BE BROADCAST AT 100% FOR TOTAL HATCHED AREA (9,654 S.F.)

HATCH LEGEND:

- AREAS TO BE DISTURBED
- AREAS TO BE MITIGATED

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

G:\21-0233\CIVIL ENGINEERING\PLAN SHEETS\21-0233 BUFFER MANAGEMENT PLAN.DWG
PLOTTED BY: JOSEPH CHRISTIAN WILLIAMS ON APR 25, 2022 - 10:19:02 AM

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

SCOTT MICHAEL BRINCK REGISTERED AGRICULTURE No. 357 STATE OF TENNESSEE LANDSCAPE ARCHITECT 5/9/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: S. BERNICK

Revisions:

- – –
- – –
- – –
- – –
- – –

5 09/01/2022 PER JCW COMMENTS

Drawing Title:

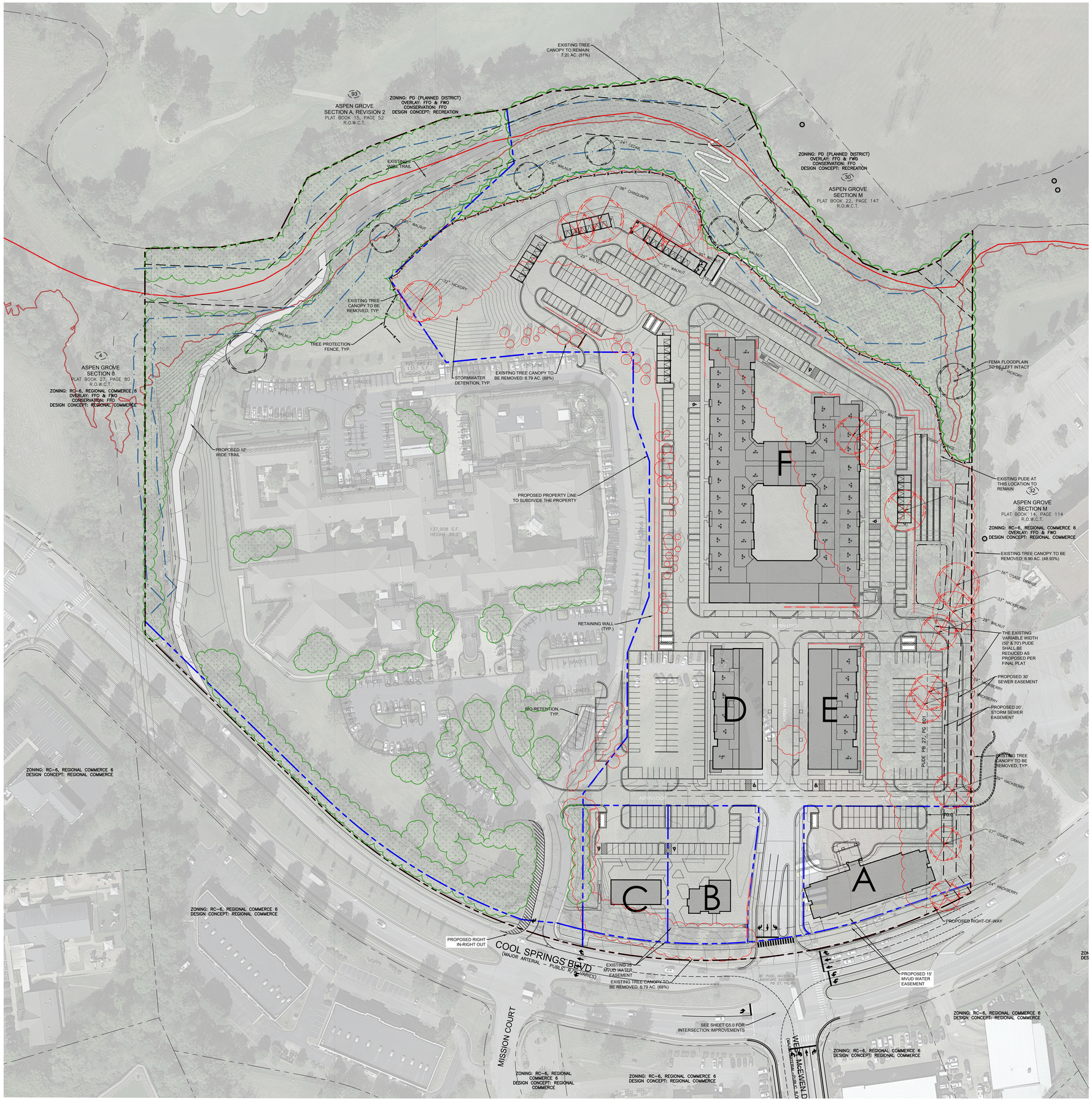
BUFFER MANAGEMENT PLAN

Drawing No.

C9.0

Project No.

21-0233



LANDSCAPE DATA

SITE INFORMATION	
Acreage / Square Footage of Site:	34.30 Ac. / 1,494,209± S.F.
Site Zoning District and Applicable Overlays:	PD (PLANNED DISTRICT); FFO & FWO
LANDSCAPE SURFACE AREA	
Minimum Required Landscape Surface Area (Ratio and Acreage):	6.86 Ac. (20%)
Provided Landscape Surface Area (Ratio and Acreage):	7.20 Ac. (21%)
TREE CANOPY	
Percent and Acreage of Original Canopy Cover:	14.10 Ac. (41% of Total Site Acreage)
Percent and Acreage Tree Canopy Required:	3.1 Ac. (22% of existing canopy cover)
Percent and Acreage of Preserved Canopy Cover Provided:	7.20 Ac. (51%)
Number and DBH of Specimen Trees Removed:	488 DBH / 16 Specimen Trees Removed

EXISTING SPECIMEN TREE LIST

Caliper Inches	Specimen Name	Caliper Inches	Specimen Name
32	Walnut	30	Walnut
32	Hickory	33	Osage Orange
25	Walnut	32	Hickory
25	Walnut	36	Osage Orange
29	Walnut	33	Hackberry
24	Cedar	28	Walnut
38	Chinquapin	30	Hackberry
30	Walnut	29	Hickory
35	Walnut	27	Osage Orange
25	Walnut	24	Hackberry
29	Hackberry	30	Buckeye
28	Hickory	31	Buckeye

Specimen tree calipers to be removed:	488
Specimen tree DBH required (2:1 Replacement):	976

NOTE:
BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIPSZONE 4100; NAD 83 DATUM.

PROJECT # 7896

0 60 120

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com
SCOTT MICHAEL BRINCK
REGISTERED
LANDSCAPE ARCHITECT
STATE OF TENNESSEE NO. 329
04/01/2022

THE OPTIMA FRANKLIN

FOR

FLOURNOY DEVELOPMENT GROUP

CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: APRIL 25, 2022

Approved By: M. DOBSON

Revisions:

- – – –

5 09/01/2022 PER JCW COMMENTS
4 08/04/2022 PER JCW COMMENTS
3 07/07/2022 PER CITY COMMENTS
2 06/13/2022 INITAL SUBMITTAL
1 05/30/2022 PRE-APPLICATION SUBMITTAL

Drawing Title:

TREE PRESERVATION PLAN

Drawing No.

L1.0

Project No.

21-0233

G:\21-0233\CIVIL ENGINEERING\CAD\L1.0 TREE PRESERVATION PLAN.DWG
6/21/2022 9:45 AM, MICHAEL DOBSON, 1:60 SCALE, 1:60 PLOT SCALE, TREE PRESERVATION PLAN, 1920X1080, 1:60 PM



FLOURNOY
Development Group

COF Number 7896

THE OPTIMA FRANKLIN

FRANKLIN, TN

CONCEPTUAL VIEWS • 07-07-2022

FDC2021-02

DYNAMIK
DESIGN

CITY OF FRANKLIN PROJECT NUMBER: 7896

© COPYRIGHT 2022 DYNAMIK DESIGN



BLDG 1000 - FRONT ELEVATION



BLDG 1000 - SIDE ELEVATION

FLOURNOY
Development Group

COF Number 7896

THE OPTIMA FRANKLIN

FRANKLIN, TN

CONCEPTUAL ELEVATIONS • 07-07-2022

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DYNAMIK
DESIGN

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BLDG 1000 - REAR ELEVATION



BLDG 1000 - SIDE ELEVATION

FLOURNOY
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CONCEPTUAL ELEVATIONS • 07-07-2022

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BLDG 2000 - SIDE ELEVATION

FLOURNOY
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FRANKLIN, TN

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FDC2021-02

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FLOURNOY Development Group

COF Number 7896

906 STUDIO ARCHITECTS + INTERIORS

Mike Hathaway | Consultant

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FRANKLIN, TN

CONTEXTUAL VIEWS • 08-03-2022

FDC2021-02

DYNAMIK DESIGN

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FRANKLIN, TN

CONTEXTUAL VIEWS • 08-03-2022

FDC2021-02

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AERIAL VIEW FROM COOL SPRINGS AND MALLORY LN

FLOURNOY
Development Group

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+INTERIORS

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FRANKLIN, TN

CONTEXTUAL VIEWS • 08-04-2022

FDC2021-02

DYNAMIK
DESIGN

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City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03260

DATE: August 30, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Joseph Bryan, Principal Planner

SUBJECT:

Consideration Of Ordinance 2022-19, An Ordinance To Rezone 7.9 Acres From Civic Institutional (CI) District To Residential 4 (R4) District For The Property Located South Of Battle Avenue And West Of Cannon Street, At 1406 Cannon Street, And 319, 401, 403, And 405 Battle Avenue.
FMPC 6/23/22, 5-2 to deny
FMPC 8/25/22, 8-0 to defer to 9/22/22, FMPC

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7860
Applicant: Jim Gilliam, HFR Design
Owner: FSSD, David Snowden, Rep.

BACKGROUND/STAFF COMMENTS:
UPDATE:
This request is back before the Planning Commission because it was discovered during the August FMPC meeting that the wrong address was listed on the published agenda and the rezoning submittal. This issue has been corrected in the agenda and submittal, but the public notification mailings this month did not meet the requirements of being postmarked at least 15 days prior to the FMPC meeting (Section 20.2.9 of the Zoning Ordinance). The applicant provided a Public Notice Affidavit to the City believing they had met the requirement, as they had dropped off the mailers at the post office at least 15 days prior to the FMPC meeting. However, a citizen provided their mailer to staff after the agenda had been published in the paper, showing that the post office did not postmark them until the following day (being only 14 days prior to the meeting). As such, staff's recommendation is for the request to be deferred to the October 27, 2022 FMPC meeting in order to meet public notification requirements.

PREVIOUS STAFF REPORT:
The applicant is requesting to rezone the property from Civic Institutional (CI) to Residential 4 (R4) District. The property consists of 7.9 acres and is the site of an administrative complex for the Franklin Special School District. The property is located within the Historic Residential Design Concept as defined by Envision Franklin. Envision Franklin states that, "Infill developments should

maintain the established, traditional residential character and reflect the scale of the surrounding neighborhood. Context sensitivity is a key component, including compatible building form, lot widths, and setbacks. A gridded street network, sidewalks, and street trees should be used to support connectivity and the pedestrian-scale environment." The R4 zoning district is compatible with the recommendations of Envision Franklin as well as the character and pattern of the surrounding established neighborhoods.

Project Consideration:
Should the property be rezoned, the existing buildings and current office and administrative uses would be nonconforming and any future re-development or major site improvements would cause the property to lose its nonconforming status.
The property does not have any other development applications with the City. Any proposed development, other than one single-family residence, would have to file a development application in the form of a preliminary plat or development plan with an associated PD rezoning request.

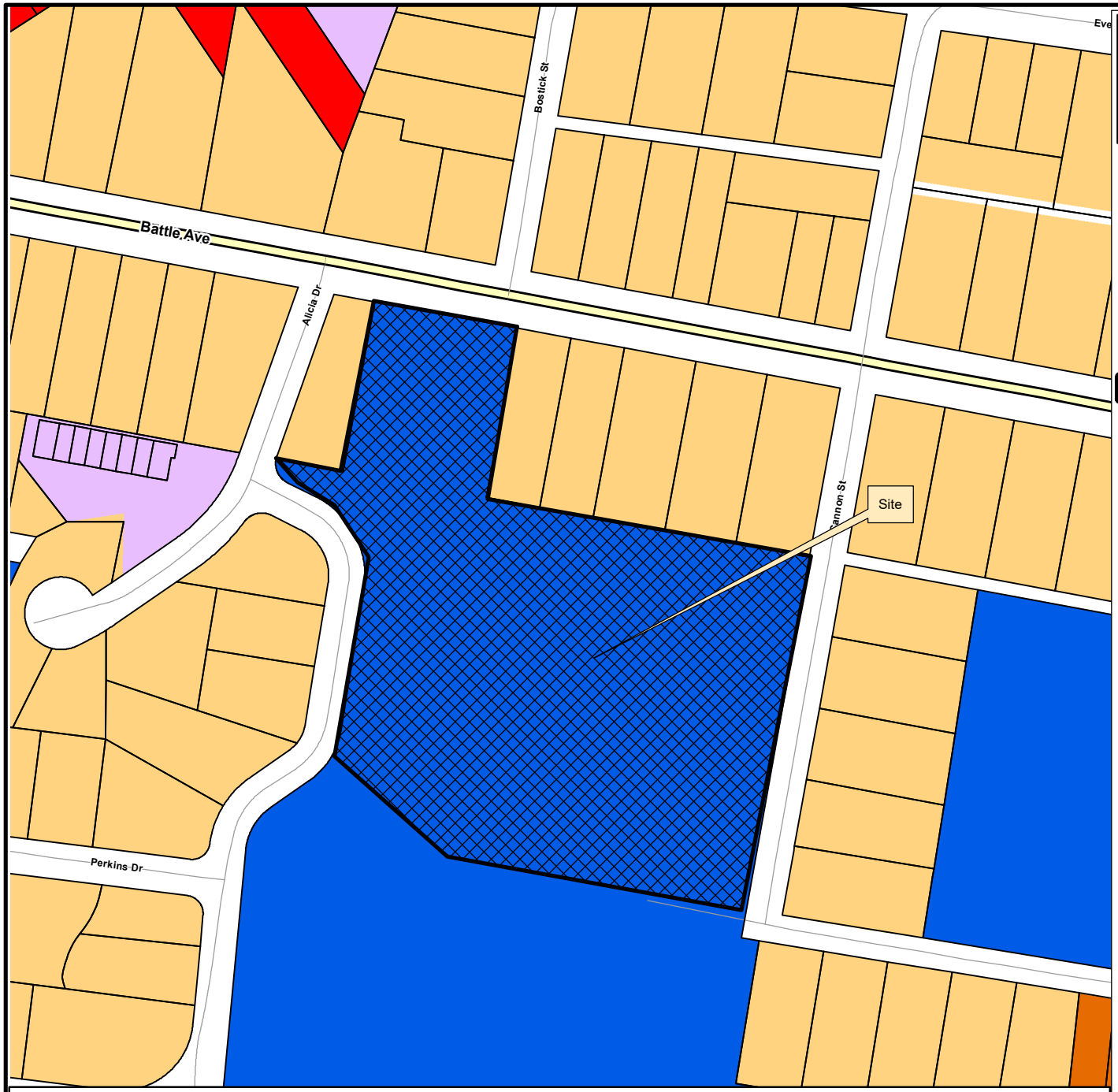
PROCEDURAL REQUIREMENTS:
1. The City's project identification number shall be included on all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

At the June meeting, the Franklin Municipal Planning Commission voted 5-2 to deny the rezoning request.
Staff recommends that the Planning Commission recommend to the Board of Mayor and Aldermen to defer Ordinance 2022-19 to the October 27, 2022 FMPC meeting.



FRANKLIN ELEMENTARY SCHOOL SUBDIVISION, LOT 2
SUNSET MANOR SUBDIVISION, LOTS 10-13
REZONING

Project Information
Existing Zoning: CI
Proposed Zoning: R4
Overlay Districts: CFO
Site Acreage: 7.9 acres
Proposed Number of Dwelling Units: 0
Proposed Nonresidential Square Footage: 0

Zoning Districts

Subject Property

Overlays

- Hillside/Hillcrest Overlay
- 500 Ft Buffer of Hillside
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

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It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
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N

0 250 500 1,000
Feet

HISTORIC FRANKLIN TENNESSEE

ORDINANCE 2022-19

AN ORDINANCE TO REZONE 7.9 ACRES FROM CIVIC INSTITUTIONAL (CI) DISTRICT TO RESIDENTIAL 4 (R4) DISTRICT FOR THE PROPERTY LOCATED SOUTH OF BATTLE AVENUE AND WEST OF CANNON STREET, AT 1406 CANNON STREET AND 319, 401, 403 AND 405 BATTLE AVENUE

WHEREAS, the City of Franklin, Tennessee, encourages responsible growth and the sensible transition of land uses and densities; and

WHEREAS, the R4 district provides zoning for land uses compatible with both the Franklin Land Use Plan and surrounding development; and

WHEREAS, the zoning has been reviewed and approved by BOMA after a public hearing and a recommendation by the Franklin Municipal Planning Commission.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the following described property shall be, and is hereby, rezoned from its present zoning classification of **Civic Institutional (CI)** District to **Residential 4 (R4)** District:

PREMISES CONSIDERED

Map-Parcel	Acres
78 O-1.06	6.75
78 O-1.05	0.31
78 O-1.04	0.28
78 O-1.03	0.28
78 O-1.02	0.28
Total	7.9

SECTION II. That the attached Location Map and Survey shall serve the purpose of further delimiting the geographical boundaries as described by this Ordinance.

SECTION III. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect from and after its passage on third and final reading, the health, safety, and welfare of the citizens requiring it.

IT IS SO RESOLVED AND DONE on this ____ day of _____, 2022.

ATTEST:

By: _____
Eric Stuckey
City Administrator/Recorder

CITY OF FRANKLIN, TENNESSEE:

By: _____
Dr. Ken Moore
Mayor

Approved as to form by:

_____
Shauna R. Billingsley
City Attorney

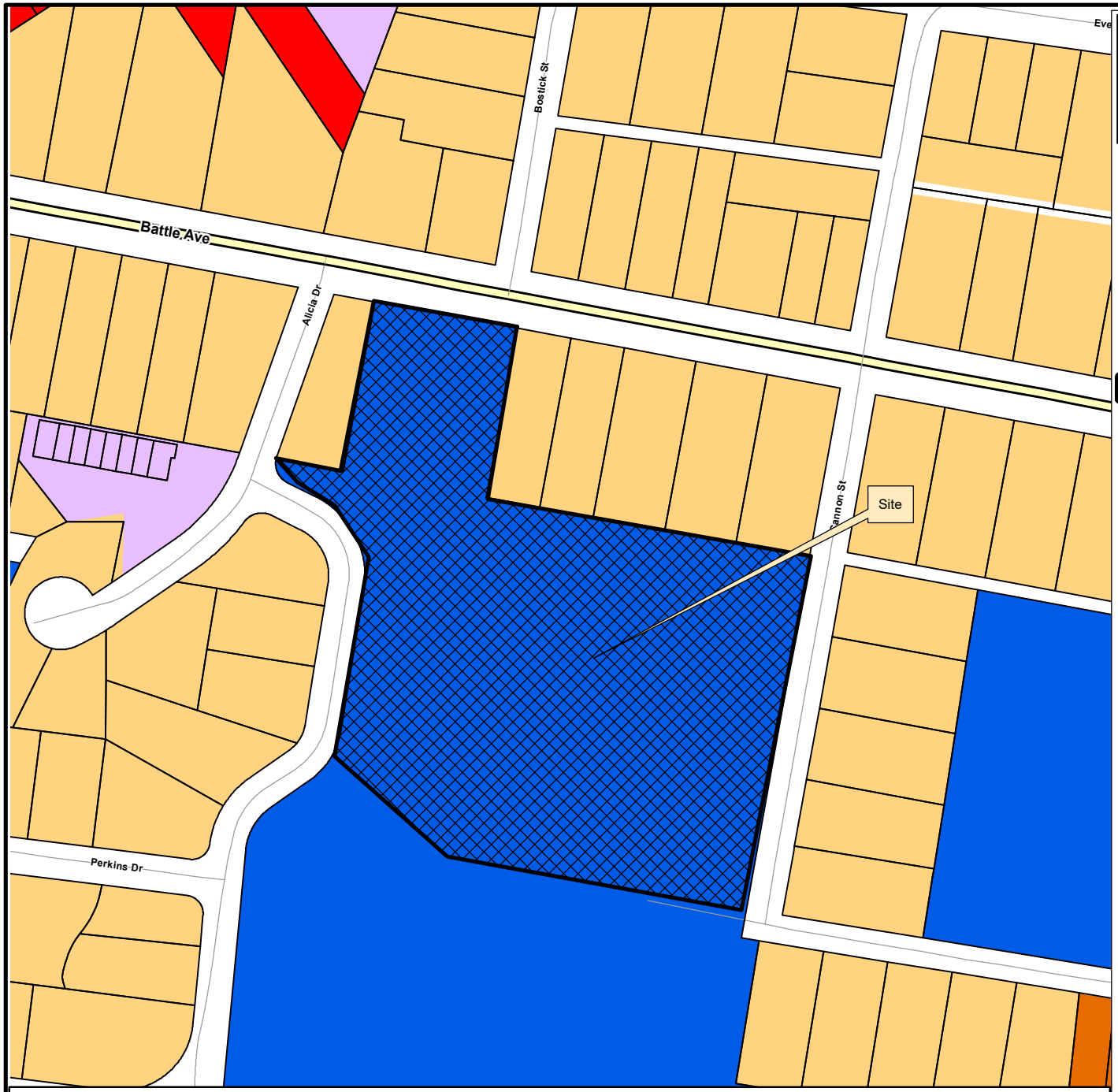
PLANNING COMMISSION RECOMMENDED: _____

PASSED FIRST READING: _____

PUBLIC HEARING HELD: _____

PASSED SECOND READING: _____

PASSED THIRD READING: _____



FRANKLIN ELEMENTARY SCHOOL SUBDIVISION, LOT 2
SUNSET MANOR SUBDIVISION, LOTS 10-13
REZONING

Project Information
Existing Zoning: CI
Proposed Zoning: R4
Overlay Districts: CFO
Site Acreage: 7.9 acres
Proposed Number of Dwelling Units: 0
Proposed Nonresidential Square Footage: 0

Zoning Districts

Subject Property

Overlays

- Hillside/Hillcrest Overlay
- 500 Ft Buffer of Hillside

- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
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- DD Downtown District
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- 5TH Avenue District
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- RC12 Regional Commerce 12 District
- GO General Office District
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- HI Heavy Industrial District

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0 250 500 1,000
Feet

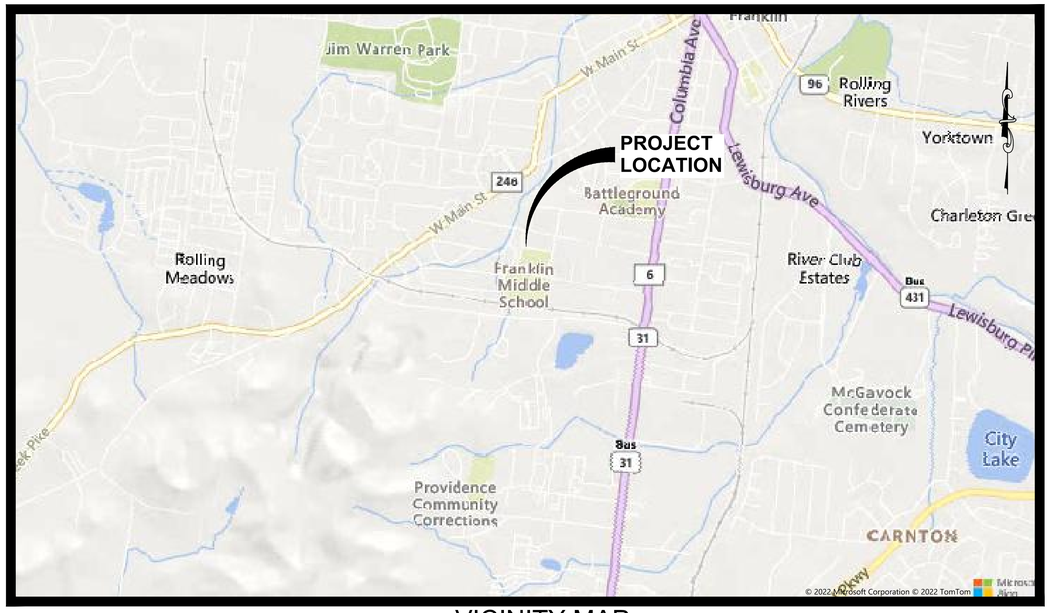
HISTORIC FRANKLIN TENNESSEE

FUTURE LOT 2 AND THE NORTHERLY PORTION OF PARCEL 1
BEING 7.885 ACRES

PARCEL 1.02 / 319 BATTLE AVE.
PARCEL 1.03 / 401 BATTLE AVE.
PARCEL 1.04 / 403 BATTLE AVE.
PARCEL 1.05 / 405 BATTLE AVE.
PARCEL 1.06 / 1406 CANNON ST

CITY OF FRANKLIN PROJECT NUMBER : 7860

Dated: 05/09/2022
Resubmittal: 09/01/2022



VICINITY MAP
N.T.S.

Wold - HFR Design, Inc.
214 Centerview Drive
Suite 300
Brentwood, TN 37027

615.370.8500
615.370.8530
www.HFRdesign.com

JAMES H. GILLIAM III
REGISTERED PROFESSIONAL ENGINEER
CIVIL
AGRICULTURE
COMMERCE
NO. 103750
STATE OF TENNESSEE
08/30/22

SITE INFORMATION

OWNER
FRANKLIN SPECIAL SCHOOLS DISTRICT
Owners Address:
750 New Highway 96 West
Franklin, TN 37064

ZONING
EXISTING ZONING: CI - CIVIL AND INSTITUTIONAL
PROPOSED ZONING: R4 - RESIDENTIAL 4

PROJECT TEAM

OWNER
FRANKLIN SPECIAL SCHOOLS DISTRICT
Owners Address:
507 New Highway 96 West
Franklin, TN 37064
CONTACT NAME: DAVID L. SNOWDEN, Ph.D.
(PHO) (615) 794-6624
email: dsnowden@fssd.org

DESIGN PROFESSIONAL
CIVIL ENGINEER: Jim Gilliam
214 Centerview Drive, Suite 300
Brentwood, TN 37027
(PHO) (615) 370-8500
email: jgilliam@hfrdesign.com

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	REZONING PLAN

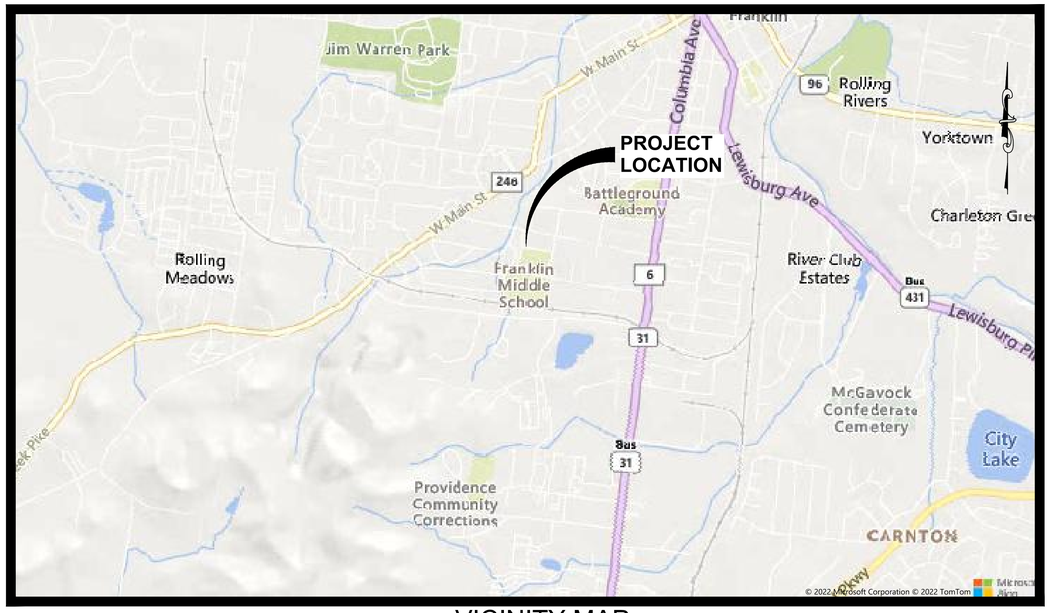

ORIGINAL RAILROAD RIGHT OF WAY SHOWN HEREON TAKEN FROM FINAL PLAT OF THE BROOKESTONE TOWNHOMES AS OF RECRD IN PB P53, PAGE 58
BOSTICK STREET
LOCAL STREET
ALICIA DRIVE
(50' R.O.W. P.B. P53, PG. 58)
LOCAL STREET
BATTLE AVENUE
(80' R.O.W. BOOK 73, PG. 452)
LOCAL STREET
SUNSET MANOR
P.B. 73, PG. 452
CANNON STREET
(50' R.O.W.)
LOCAL STREET
16' ALLEY
FIGUERS DRIVE
(R.O.W. P.B. 2, PG. 27)
FAIRGROU
IPIPE(O)
IP(N)
202.00'
S79-32-45E
51.98'
50.00'
241.97'
S09-24-55W
242.00'
N10-53-08E
96.48'
S79-32-45E
58.21'
117' PLAT
N79-52-14W
17.61'
208.21'
S79-32-45E
475.00'
S10-23-39W
476.55'
527.77'
N09-18-46E
244.27'
N50-36-03W
55.57'
179.08'
N54-52-06W
407.40'
N80-04-21W
62.22'
GRAVEL DRIVE ACROSS PROP LINE
MAP 78O , GROUP "A" PARCEL 1.05
LOT 13
0.306 AC.
405 BATTLE AVE.
MAP 78O , GROUP "A" PARCEL 1.04
LOT 12
0.278 AC.
403 BATTLE AVE.
MAP 78O , GROUP "A" PARCEL 1.03
LOT 11
0.278 AC.
401 BATTLE AVE.
MAP 78O , GROUP "A" PARCEL 1.02
LOT 10
0.278 AC.
319 BATTLE AVE.
MAP 78J, GROUP"F", PARCEL 17.00
BRANDON OGLES
BOOK 2218, PG. 978
LOT 9 & PART OF LOT 8
MAP 78J, GROUP"G", PARCEL 1.00
JOHN & KATIE HOUSTON
BOOK 7343, PG. 83
LOT 7 & PART OF LOT 8
MAP 78J, GROUP"G", PARCEL 2.00
BENJAMIN & STEPHANIE COLLINS
BOOK 7641, PG. 583
LOTS 5 & 6
MAP 78J, GROUP"G", PARCEL 3.00
JAMES K. TURNER
BOOK 6106, PG. 233
LOTS 3 & 4
MAP 78J, GROUP"G", PARCEL 4.00
SHIRLEY & WILLIAM BROWNE
BOOK 1714, PG. 994
LOTS 1 & 2
MAP 78J, GROUP"G", PARCEL 5.00
HOWARD YANCY
BOOK 6508, PG. 470
MAP 78J, GROUP"G", PARCEL 42.00
DONNA LYNCH
BOOK 3605, PG. 870
MAP 78J, GROUP"G", PARCEL 41.00
WILLIAM & ALLYSON ANDREWS
BOOK 7646, PG. 420
MAP 78J, GROUP"G", PARCEL 40.00
WAVES INC.
BOOK 1202, PG. 828
MAP 78J, GROUP"G", PARCEL 38.00
RAYMOND & GENEVA RAGSDALE
BOOK 1600, PG. 690
MAP 78J, GROUP"G", PARCEL 39.00
JONATHAN SHELL & CAYLEE FORD
BOOK 6490, PG. 139
LOT 2
MAP 78O, GROUP "A" PARCEL 1.06
6.746 ACRES
293,585.60 SF
1406 CANNON ST
NOTE:
THIS AREA TO BE RE-ZONED FROM "CI" CIVIC AND INSTITUTIONAL TO R4
ANCHOR EASEMENT SCALED FROM PLAT BOOK 2, PAGE 27
ANCHOR EASEMENT SCALED FROM PLAT BOOK 2, PAGE 27
C1
C2
C3
C4
4' CYC. FENCE
WOOD FENCE
15" RCP
30" RCP
24" RCP
18"
SSMH
SSCO
SSCO
SSCO

FUTURE LOT 2 AND THE NORTHERLY PORTION OF PARCEL 1
BEING 7.885 ACRES

PARCEL 1.02 / 319 BATTLE AVE.
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PARCEL 1.04 / 403 BATTLE AVE.
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PARCEL 1.06 / 1406 CANNON ST

CITY OF FRANKLIN PROJECT NUMBER : 7860

Dated: 05/09/2022
Resubmittal: 09/01/2022



VICINITY MAP
N.T.S.

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JAMES H. GILLIAM III
REGISTERED PROFESSIONAL ENGINEER
DEPARTMENT OF AGRICULTURE
COMMERCE
NO. 103750
STATE OF TENNESSEE
08/30/22

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Owners Address:
750 New Highway 96 West
Franklin, TN 37064

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EXISTING ZONING: CI - CIVIL AND INSTITUTIONAL
PROPOSED ZONING: R4 - RESIDENTIAL 4

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CIVIL ENGINEER: Jim Gilliam
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email: jgilliam@hfrdesign.com

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	REZONING PLAN



TN

C

LEGEND

CONCRETE MONUMENT OLD	■
IRON PIPE OLD	● IPIPE(O)
IRON PIN OLD	●
IRON PIN NEW 5/8" WITH HFR CAP	● IP(N)
WATER VALVE	⊠
FIRE HYDRANT	
WATER METER	
MANHOLE	
UTILITY POLE	
LIGHT POLE	
SIGN POST	
BOLLARD	○ B
LANDSCAPING	LS
YARD LIGHT	○ YL
ELECT. BOX	□ E
PROPERTY/R.O.W. LINE	
SEWER LINE	8" S
OVERHEAD WIRES	OH OH OH OH
AREA TO BE REZONED	

CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	CHORD	BEARING
C1	90-00-00	25.00'	25.00'	39.27'	35.36'	N53-23-46E
C2	89-05-00	80.78'	79.50'	125.60'	113.32'	S53-51-16W
C3	89-11-00	100.72'	99.29'	156.77'	141.42'	N35-16-44W
C4	86-03-09	37.60'	35.09'	56.47'	51.31'	S36-50-40E

NOTES:

1. ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
2. UTILITIES HAVE BEEN PLOTTED FROM SURFACE FEATURES FOUND AT THE TIME OF SURVEY AND AVAILABLE MAPS AND RECORDS. THERE MAY BE OTHER UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES MUST BE VERIFIED BY THE APPROPRIATE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.
3. BY SCALING, GRAPHIC INTERPOLATION AND PLOTTING THE SUBJECT PROPERTY IS LOCATED IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE SPECIAL FLOOD HAZARD AREA AS SHOWN ON F.E.M.A. "FLOOD RATE INSURANCE MAP", MAP NOS. 47187C0192G DATED: 12-22-2016.
4. THIS PROPERTY IS FOUND ON WILLIAMSON COUNTY TAX MAP 78O, GROUP"A" AND BEING PARCEL 1.00.
5. THE PROPERTY IS CURRENTLY ZONED "CI" CIVIC AND INSTITUTIONAL, THE PROPOSED ZONE IS R4
6. THE PROPERTY IS LOCATED IN ZONE "X" AREAS NOT AFFECTED BY THE 100 YEAR FLOOD PLAIN BASED ON F.E.M.A. "FLOOD RATE INSURANCE MAP", NO. 47187C0192G, DATED: DECEMBER 22, 2016.
7. CURRENT OWNER HAS NO KNOWLEDGE OF ANY ENTITY HAVING MINERAL RIGHTS TO THE SUBJECT PROPERTY.
8. ENVISION FRANKLIN DESIGN CONCEPT: HISTORIC RESIDENTIAL
9. OVERLAY: CENTRAL FRANKLIN OVERLAY

NOTE:
THE OWNER DOES NOT ASSUME RESPONSIBILITY FOR THE POSSIBILITY THAT DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED OR THAT ACTUAL LOCATIONS OF THOSE SHOWN MAYBE DIFFERENT FROM THE LOCATIONS DESIGNATED ON THE CONTRACT DRAWINGS. IN AREAS WHERE IT IS NECESSARY THAT THE EXACT LOCATION BE KNOWN OF UNDERGROUND FACILITIES, THE CONTRACTOR, AT ITS OWN EXPENSE, SHALL FURNISH ALL LABOR AND TOOLS TO EITHER VERIFY AND SUBSTANTIATE OR DEFINITIVELY ESTABLISH THE POSITIONS OF UNDERGROUND UTILITY LINES.

811 Know what's below. Call before you dig.

FUTURE LOT 2 AND THE NORTHERLY PORTION OF PARCEL 1 BEING 7.885 ACRES

CITY OF FRANKLIN
PROJECT NUMBER: 7860

WOLD | HFR DESIGN
214 Centerview Drive Suite 300
Brentwood, TN 37027

woldhfr.com | 615.370.8500

JAMES R. GUM
REGISTERED
LICENSED
LAND SURVEYOR
2691
STATE OF TENNESSEE
08/30/22

Revisions		
Description	Date	Num
CITY COMMENTS	06/02/2022	1

Proj. #: 227416
Date: 05.09.2022
Drawn: JG
Check: ALR

REZONING PLAN

C1.0

PLOT DATE: 8/1/2022 1:27:35 PM | ARCHIDES | LOCATION: C:\USERS\ARCHIDES\DOCUMENTS_LHFR DESIGN\227416 - FSSD NEW CENTRAL OFFICE-SURVEY - 227416\C-BASE 227416.DWG
© COPYRIGHT 2022 - ALL RIGHTS RESERVED. NO PORTION(S) OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT THE EXPRESSED (WRITTEN CONSENT OF WOLD | HFR DESIGN.

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03541

DATE: September 6, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Chelsea Randolph, Planner

SUBJECT:

Simmons Ridge PUD Subdivision, Final Plat, Section 6, Creating 22 Single-Family Residential Lots, 22 Attached Residential Lots, And 2 Open Spaces, On 7.53 Acres, Located East Of South Carothers Road And North Of Honey Bush Circle. (CONSENT AGENDA)

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7947
Applicant: Thomas King, Simmons Ridge Joint Venture
Owner: John Franks, Simmons Ridge Joint Venture

BACKGROUND/STAFF COMMENTS:

This final plat creates 22 single-family residential lots, 22 attached residential lots, and 2 open space lots. The creation of new lots on this final plat requires approval by the Franklin Municipal Planning Commission. The development plan was approved on March 23, 2017 by BOMA and the site plan was approved administratively in September 2021. The final plat is consistent with both the site plan and the development plan.

PROCEDURAL REQUIREMENTS:
1. In addition to uploading the corrected plat to the online plan review website (https://franklin.contractorsplanroom.com/secure/), the applicant shall submit the Mylar to the Department of Building and Neighborhood Services (Suite 110, Franklin City Hall). The mylar shall be 18 inches by 24 inches in size. The Certificates of Approval for the Subdivision Name and Street Names, Water System (if not COF Water), Survey, and Ownership shall be signed when the plat is resubmitted. The Mylar shall be submitted to BNS within five (5) business days of the corrected electronic plat being uploaded to the online plan review website (or vice versa) or the item shall be rejected as incomplete for City review. With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.
2. The City's project identification number shall be included in all correspondence with any City department relative to this project.

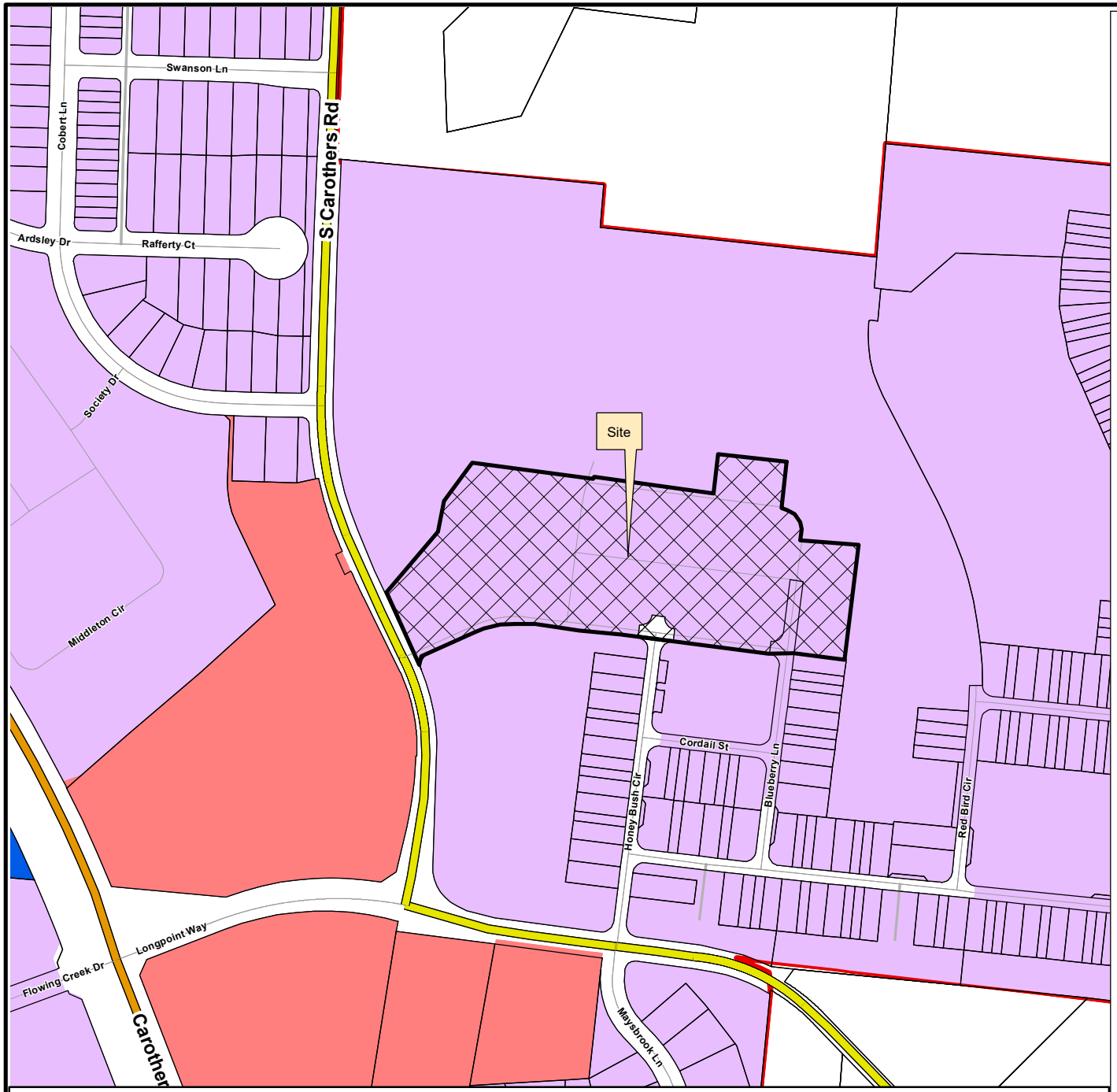
3. The applicant shall upload a .dwg copy of the final plat through the IDT system (link above) in Tennessee state plan coordinates, NAD 83, NAVD 88, zone 4100/5301 for incorporation of the plat into the Franklin GIS database.)

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends that the Franklin Municipal Planning Commission approve the final plat for Simmons Ridge PUD Subdivision, Final Plat, Section 6 with conditions.



SIMMONS RIDGE PUD SUBDIVISION, FINAL PLAT, SECTION 6

Project Information
Existing Zoning: Planned District (PD) 4.6
Site Acreage: 7.53 acres
Proposed Number of Dwelling Units: 44
Proposed Nonresidential Square Footage: 0

Legend

- Subject Property
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
All data and materials (c) copyright 2022. All rights reserved.

N

0 250 500 1,000
Feet

HISTORIC FRANKLIN TENNESSEE

COF no: 7947

CONDITIONS OF APPROVAL:

Open Issues: 5 These issues are currently being filtered

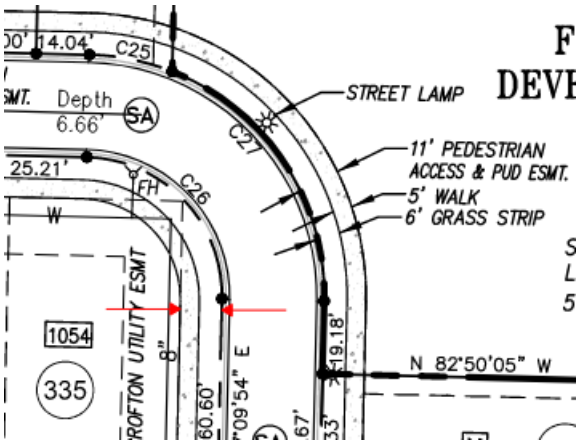
Engineering - Final Plat Checklist

General Issues

14. C. Final Plat

lance.fittro@franklintn.gov The previous comment, "*Showthe location and dimension of the 11' Pedestrian Access & PUD Easement on the east side of Bloomsbury Lane and west side of Blueberry Lane*" has been partially addressed. (thank you)

Applicant shall show the location and dimension the 11' Pedestrian Access & PUD Easement on the west side of Blueberry Lane, as it is labeled for the other block faces:



Performance Agreement and Surety

General Issues

5. Engineering Sureties

kevin.long@franklintn.gov Any unposted sureties associated with this development from site plan **COF# 7642 (Simmons Ridge PUD Subdivision, Site Plan, Section 6)** shall be transferred to this final plat as a condition of approval.

Planning

General Issues

8. Final Plat

chelsea.randolph@franklintn.gov Applicant shall ensure that the proposed final plat reflect what is approved on the site plan. The site plan shows 4 open spaces on the takedown chart why has that number been reduced to two on the final plat?

17. Purpose Statement Note

chelsea.randolph@franklintn.gov Applicant shall update purpose statement note to breakdown the type of lots that are being created. (22 single-family residential lots, 22 attached residential lots and 2 open spaces for a total of 46 lots.)

Stormwater

General Issues

7. Plats

jeff.willoughby@franklintn.gov Not completely addressed.

- Show and label stream and top of bank on sheet 2
- Add "Riparian" to riparian buffer labels Ex: 30' Riparian Buffer Zone 1, etc

GENERAL NOTES:

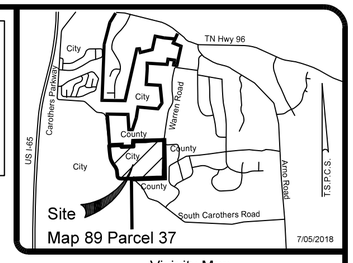
1) THE PURPOSE OF THIS PLAT IS TO CREATE 44 BUILDABLE LOTS, 2 OPEN SPACE LOTS
2) EXISTING ZONING PD (4.6)
3) MINIMUM REQUIRED SETBACK LINES:
   YARD FRONTING ANY STREET: 33 FEET (ATTACHED) 20 FEET DETACHED
   SIDE YARD: 5 FEET CORNER LOT 10 FEET
   REAR YARD: 20 FEET
4) SUBJECT PROPERTY IS CURRENTLY IDENTIFIED AS PARCEL 37 ON WILLIAMSON COUNTY TAX MAP NO. 89.
5) STREET ADDRESS ARE SHOWN ON PARCEL AREA TABLE, THIS SHEET.
6) THE DEVELOPER ACKNOWLEDGES THAT ALL LOTS HAVE ADEQUATE BUILDING ENVELOPES WITHIN THE REQUIRED SETBACK LINES.
7) OWNER/SUBDIVIDER: SIMMONS RIDGE JOINT VENTURES
   ADDRESS: 144 SOUTHEAST PARKWAY SUITE 230
   FRANKLIN, TENNESSEE 37064
   CONTACT: JOHN FRANKS
   TELEPHONE: (615) 790-2447
   EMAIL: johnfranks@live.com
8) SURVEYOR: HYDE PARK HOMES, LLC Thomas G. King III
   ADDRESS: 144 SOUTHEAST PARKWAY SUITE 230
   FRANKLIN, TENNESSEE 37064
   CONTACT: TOM KING
   TELEPHONE: (615) 238-4958
   EMAIL: tomgking3@gmail.com
9) ALL LOTS TO BE SERVED BY PUBLIC WATER AND SEWER.
10) THIS SURVEYOR HAS NOT PHYSICALLY LOCATED ALL UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH
11) UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION AS INDICATED. CONTACT TENNESSEE ONE CALL 1-800-351-1111.
12) THIS PROPERTY IS NOT WITHIN AN AREA OF FLOOD INUNDATION AS EVIDENCED ON F.E.M.A. COMMUNITY PANEL NUMBER 47187C 0214 G, WHICH BEARS AN EFFECTIVE DATE OF DECEMBER 21, 2016.
13) WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
14) STREET LIGHT LOCATIONS AND QUANTITIES ARE APPROXIMATE. FINAL POSITIONING AND QUANTITIES SHALL BE AT DIRECTION OF MTEMC.
15) ADEQUATE SPACING AND EASEMENT WIDTHS MUST BE PROVIDED FOR THE PROPOSED UTILITIES PER CITY OF FRANKLIN STANDARDS/REGULATIONS.
16) ALL SIDEWALKS, TRAILS, PATHS, ETC., LYING OUTSIDE OF PUBLIC RIGHT OF WAY ARE PUBLIC ACCESS EASEMENTS AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. SIDEWALK LOCATIONS WILL BE PROVIDED ON THE SITE PLAN FOR EACH LOT.
17) PROJECT GEODETIC REFERENCE NETWORK BASED ON: COORDINATE SYSTEM U.S. STATE PLANE 1983, ZONE 4301, FIPSZONE 4100; PROJECT DATUM NAD 1983 (CONUS); VERTICAL DATUM NAVD 88; COMBINED FACTOR = 0.99991825; COMVERGENCE ANGLE = 00°29'18.14463".
18) NO BUILDING PERMITS SHALL BE ISSUED FOR PROJECTS IN THIS SECTION UNTIL THE INDIVIDUAL SITE PLAN HAS BEEN APPROVED.
19) TREES SHALL BE PRUNED TO A MINIMUM OF EIGHT FEET ABOVE GRADE AND NO FENCES OR OTHER OBSTRUCTIONS SHALL BE TALLER THREE FEET ABOVE GRADE WITHIN SIGHT TRIANGLES FOR STREET INTERSECTIONS AND ROADWAY SIGNAGE PER THE LATEST VERSION OF AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
20) THE OWNER/SUBDIVIDER, SIMMONS RIDGE JOINT VENTURES, ATTESTS THAT NO ONE OTHER THAN THE OWNER HOLDS MINERAL RIGHTS TO THE PROPERTY. NO DOCUMENTATION HAS BEEN FOUND.
21) NO BUILDINGS EXIST IN THIS SECTION.
22) TYPICAL, OFF-STREET & ON STREET PARKING, SIDEWALKS AND STREET PLANTINGS TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.
23) NO LOTS ARE SPECIFICALLY DEDICATED FOR HANDICAP ACCESSIBILITY IN THIS SECTION.
24) THE CITY OF FRANKLIN'S SEWER SERVICE RESPONSIBILITY ENDS AT THE EDGE OF ASPHALT. THE HOMEOWNER IS RESPONSIBLE FOR THE SEWER SERVICE FROM ASPHALT TO THE DWELLING.
25) ALL OPEN SPACE SHALL BE MAINTAINED BY THE HOME OWNERS ASSOCIATION OR PROPERTY OWNER(S) AND SHALL BE PUBLIC UTILITY, ACCESS & DRAINAGE EASEMENT.
26) MAINTENANCE OF ALL STORMWATER MANAGEMENT FEATURES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) OR HOA.
27) THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT IS NOT RESPONSIBLE FOR REPAIRING THE TRAIL SYSTEM OVER THE SEWER MAIN IN THE EVENT OF MAINTENANCE OR EMERGENCY REPAIR TO THE SANITARY SEWER LINE.
28) NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENT. THE CITY OF FRANKLIN IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS.
29) THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE.
30) GREEN INFRASTRUCTURE EASEMENTS(GIE) ARE EXCLUSIVE EASEMENTS DEFINING AREAS SET ASIDE FOR THE CONSTRUCTION, MAINTENANCE, REPAIR, MONITORING, AND OTHER ACTIVITIES NECESSARY FOR THE FURTHERANCE OF WATER QUALITY FEATURES DESIGNATED AS GREEN INFRASTRUCTURE PRACTICES BY THE CITY OF FRANKLIN, AND TO PROVIDE PUBLIC ACCESS TO SUCH FEATURES. ANY AND ALL ACTIVITIES, EXCEPT AS SPECIFICALLY PERMITTED BY NOTATION ON THE CURRENT PLAT OF RECORD AND/OR WITHIN THE RECORDED LONG TERM MAINTENANCE AGREEMENT, SHALL BE STRICTLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE CITY ENGINEER OR ITS DESIGNEE.

The City of Franklin Water Management department has unrestricted access to its domestic water, sanitary sewer, reclaim water lines or system improvements located within its exclusive easements within the development. In the event landscaping, fencing, concrete or other structures are installed or placed within a City of Franklin easement, the City of Franklin shall have the right to remove such encroachments within the easement as may be necessary for the City of Franklin to repair, maintain or replace its infrastructure which is now or in the future may be located within the easement without obtaining any further permission from the property owner or HOA. The property owner or HOA shall be responsible for repairing and/or replacing any such landscaping, fencing, concrete or other structures removed or disturbed by the City of Franklin in common open space lots and in areas owned by the property owner or HOA at no expense to the City of Franklin. Individual homeowners shall be responsible for structures removed or disturbed by the City of Franklin within an easement on the homeowners' lot at the homeowners' expense.

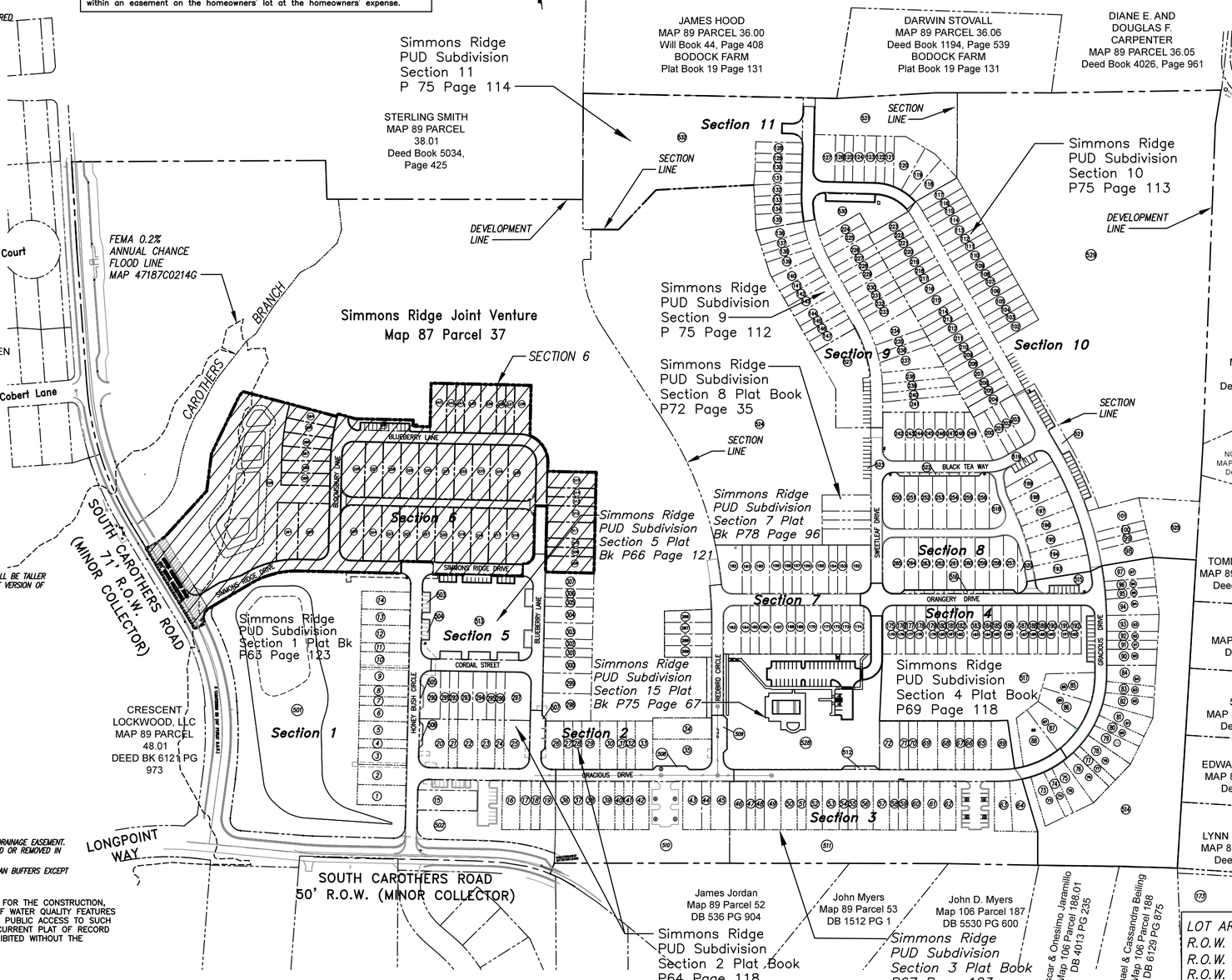
200 0 200
SCALE 1" = 200'

see note 17

All Milcrofton Utility District (MUD) easements are exclusive easements. No excavation, building, structure, or obstruction of any kind may be constructed or permitted within the easements, except pavement for a driveway that crosses an easement. Not trees or shrubbery may be planted within the easements. MUD will have unrestricted access to all of its lines, meters, valves and other water system facilities within the easements without seeking any further permission. MUD has the right to disturb or remove any impermissible items within the easements. The property owner will be responsible for repairing or replacing any such items at the property owner's expense.



Vicinity Map
Scale: 1" = 600'



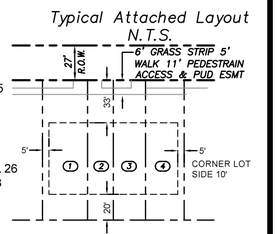
Handicap Accessible Lots	
Section	Number of Lots
1, 2, 3, 4, 5, 7, 8, 9, 10 & 11	=0

Building Type by Lot	
Detached Units	Attached Units
12	32
ON STREET PARKING SECTION 6 = 12	

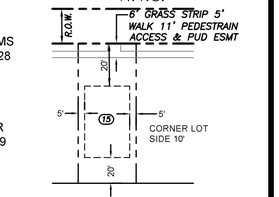
LEGEND

Iron Rod Existing -EX IR	○
Iron Rod Set -IR S	●
Monument -	⊠
Property Line -	
Utility Pole w guy wire	ø
Water Main	W
Sanitary Sewer Main	SA
Storm Sewer Pipe	18" RCP
Fire Hydrant	HYD
Street Lamp	☼
Road Sign	
Public Utility Easement	PUE
Public Drainage Easement	PDE
Public Utility, Drainage & Access Easement	PUDAE
Street Address	3001
Milcrofton Utility District Exclusive Easement	MUDEE

Typical Attached Layout N.T.S.



Typical Detached Layout N.T.S.



LOT AREA = 186,112 s.f. = 4.27 Ac.
R.O.W. Area (Sect 6)= 43,406 s.f. = 1.00 Ac.
R.O.W. Area (South Carothers)= 9,706 s.f. = 0.22 Ac.
R.O.W. Alley = 9,201 s.f. = 0.21
OPEN SPACE = 79,887 s.f. = 1.83 Ac.
LINEAR FEET OF ROAD THIS SECTION = 1,627'
(does not include alley)
TOTAL AREA SECTION 6 s.f. = 328,312 = 7.53 Ac.+/-

MTEMC Certificate of Approval for Recording

Middle Tennessee Electric Membership Corporation (MTEMC) will provide electric service to the subject property according to normal operating practices of MTEMC as defined in the rules and regulation, bylaws, policy bulletins and operational bulletins of MTEMC, and in accordance with the plat approval checklist, tree planting guidelines and other regulations contained on the MTEMC website at www.mtemc.com (collectively the "Requirements"). No electric service will be provided until MTEMC's Requirements have been met and approved in writing by an authorized representative of MTEMC. Any approval is, at all times, contingent upon continuing compliance with MTEMC's Requirements.

Middle Tennessee Electric Membership Corporation — Date

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the Williamson County Emergency Management Agency and the City of Franklin,

Williamson County Emergency Management Agency — Date

City of Franklin — Date

CERTIFICATE OF APPROVAL OF WATER SYSTEMS

I hereby certify:
(1) The water systems designated in "Simmons Ridge PUD Subdivision, Section 6" have been installed in accordance with utility specifications, or
(2) A performance bond in the amount of $_____ for the WATER system has been posted with the Milcrofton Utility District, Tennessee, to assure completion of such systems.

Milcrofton Utility District — *Date*

CERTIFICATE OF APPROVAL FOR RECORDING

Approved by the Franklin Municipal Planning Commission, Franklin, Williamson County, Tennessee, with the exception of such conditions, if any, as are noted in the planning commission minutes for the _____ day of _____, 2022, and this plat has been approved for recording in the Register's Office of Williamson County.

Secretary, Franklin Municipal Planning Commission — *Date*

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown hereon as evidenced in Book 6505, Page 620, R.O.W.C, Tennessee, and adopt the plan of subdivision of the property as shown hereon and dedicate all public ways and easements as noted. No lot(s) as shown hereon shall again be subdivided, resubdivided, altered or changed so as to produce less area than is hereby established until otherwise approved by the Franklin Municipal Planning Commission, and under no condition shall such lot(s) be made to produce less area than is prescribed by the restrictive covenants as of record in Book 6789, Page 125-196, R.O.W.C., Tennessee running with the title to the property. I (we) further certify that there are no liens on this property, except as follows: Book _____, Page _____, R.O.W.C.

John Y. Franks — *08-30-2022*

Owner(s) Simmons Ridge Joint Venture
Simmons Ridge Partners, LLC Member John Y. Franks (Book 6505, Page 620) Date

CERTIFICATE OF ACCURACY

I (we) hereby certify that the subdivision plat as shown is correct and that all of the monuments shown hereon have been placed as indicated. The subdivision plat correctly represents as survey made under my supervision on the 3rd day of June, 2015.

Thomas G King III — 08/30/2022

Thomas G. King III, Land Surveyor — Date

Tennessee R.L.S. No. 1720

CERTIFICATE OF APPROVAL OF SEWER SYSTEMS

I hereby certify:
(A) The sewer systems designated in "Simmons Ridge PUD Subdivision, Section 6 " have been installed in accordance with city specifications, or
(B) performance bond in the amount of $_____ for the water system and $_____ for the sewer system has been posted with the City of Franklin, Tennessee, to assure completion of such systems.

Director, Water Management Dept. City of Franklin, Tennessee — *Date*

CERTIFICATE OF APPROVAL of STREETS, DRAINAGE, SIDEWALKS & GREEN INFRASTRUCTURE

I hereby certify that:
(A) The streets, drainage, sidewalks, and green infrastructures designated in the Simmons Ridge PUD Subdivision, Section 6 have been installed in accordance with City specifications, or
(B) performance bond in the amount of $_____ for streets and $_____ for drainage $_____ for sidewalks, and $_____ for green infrastructure has been posted with the City of Franklin, Tennessee, to assure completion of such improvements.

Supt., Streets, Franklin, Tennessee — *Date*

THOMAS G. KING III REGISTERED LAND SURVEYOR XVI AGRICULTURE COMMERCE TENNESSEE NO. 1720

. 22-08-30 addressed city comments

SIMMONS RIDGE PUD SUBDIVISION
SECTION 6
4408 SOUTH CAROTHERS ROAD

FINAL SUBDIVISION PLAT
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Total Acres = 7.53	Total Lots = 46
Acres New Streets = 1.21	Feet New Streets = 1,627'
Civil District : 14th	Closure Error :1/10,000+
Scale : 1"=200' / Date : 07/25/22	City Project No 7947
	SHEET 1 OF 2

LOT AREA

Lot	Sq. Feet	Acres
308	3,942	0.09
309	2,170	0.05
310	2,170	0.05
311	3,942	0.09
312	3,942	0.09
313	2,170	0.05
314	2,170	0.05
315	3,942	0.09
316	7,290	0.17
317	4,884	0.11
318	4,884	0.11
319	4,884	0.11
320	4,884	0.11
321	4,884	0.11
322	4,884	0.11
323	4,884	0.11
324	4,884	0.11
325	6,041	0.14
326	6,018	0.14
327	4,884	0.11
328	4,884	0.11
329	4,884	0.11
330	4,884	0.11
331	4,884	0.11
332	4,884	0.11
333	4,884	0.11
334	4,884	0.11
335	7,115	0.16
336	3,934	0.09
337	2,170	0.05
338	2,170	0.05
339	3,888	0.09
340	3,906	0.09
341	2,170	0.05
342	2,170	0.05
343	3,888	0.09
384	3,097	0.07
385	3,097	0.07
386	3,097	0.07
387	3,128	0.07
388	2,995	0.07
389	2,995	0.07
390	8,386	0.19
391	5,963	0.14
Total	186,112	4.27

OPEN SPACE

Open Space Table		
Lot	Sq. Feet	Acres
525	3,949	0.09
526	75,938	17.74
Total	79,887	1.83

SINGLE FAMILY LOT PLANTING REQUIREMENTS: The following aggregate caliper inches of canopy trees are required for each detached residential lot:	
LOT SIZE	ACI CANOPY TREES REQUIRED:
LESS THAN 10,000SF	6

DETACHED RESIDENTIAL LOT TREE CHART:
The following 3 inch caliper canopy trees are required for each lot:

LOT #	ACI	# TREES
316-335	120	40
390-391	12	4

TOTAL CALIPER INCHES 132 TOTAL 3 INCH TREES 44

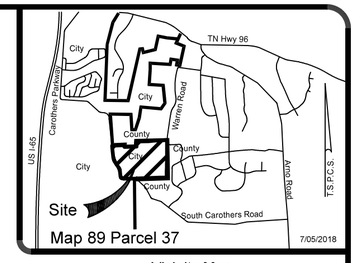
Curve Table

CURVE	DELTA ANGLE	RADIUS	ARC	CHORD	CHORD BEARING
C1	3°01'31"	400.00'	21.12'	21.12'	S 23°51'59" E
C2	89°34'08"	25.00'	39.08'	35.22'	S 70°09'48" E
C3	87°24'21"	25.00'	38.14'	34.55'	N 21°20'58" E
C4	1°24'27"	25.00'	0.61'	0.61'	N 62°10'37" E
C5	32°07'11"	227.00'	127.26'	125.60'	N 81°06'44" E
C6	11°55'55"	227.59'	47.40'	47.31'	S 89°23'36" E
C7	0°43'38"	179.31'	2.28	2.28'	N 82°55'06" W
C8	90°00'00"	23.00'	36.13'	32.53'	N 52°10'19" E
C10	3°19'28"	438.50'	25.44'	25.44'	N 09°08'13" E
C11	3°19'29"	438.50'	25.44'	25.44'	N 12°27'41" E
C12	90°00'00"	23.00'	36.13'	32.53'	N 37°49'41" E
C13	3°19'29"	438.50'	25.44'	25.44'	N 15°47'10" E
C14	14°25'18"	438.50'	110.37'	110.08'	N 14°22'58" E
C15	3°19'29"	438.50'	25.44'	25.44'	N 19°06'39" E
C16	90°00'00"	25.00'	39.27'	35.36'	N 52°10'19" E
C17	0°49'14"	438.50'	6.28'	6.28'	N 21°11'00" E
C18	3°30'22"	411.50'	25.18'	25.18'	N 08°55'30" E
C19	90°00'00"	25.00'	39.27'	35.36'	S 37°49'41" E
C20	86°29'38"	23.00'	34.72'	31.52'	N 53°55'30" E
C21	104°25'18"	23.00'	41.92'	36.35'	S 30°37'02" E
C22	90°00'29"	23.00'	36.13'	32.53'	S 52°10'09" W
C23	89°59'36"	25.00'	39.27'	35.35'	S 37°49'53" E
C24	90°00'24"	25.00'	39.27'	35.36'	S 52°10'07" W
C25	20°13'59"	63.50'	22.42'	22.31'	S 72°42'41" E
C26	89°59'36"	36.50'	57.33'	51.62'	S 37°49'53" E
C27	89°59'36"	63.50'	99.74'	89.80'	S 37°49'53" E
C28	32°07'11"	200.00'	112.12'	110.66'	S 81°06'44" W

0 50 100 150

Scale : 1"=50'

Tennessee State Plane Coordinate System, Zone 5301, Fipszone 4100; NAD 83 Datum.



Vicinity Map
Scale: 1" = 600'

LEGEND

Iron Rod Existing -EX IR	○
Iron Rod Set -IR S	●
Monument -	⊠
Fence -	
Property Line -	
Utility Pole w guy wire	⌀
Water Main	W
Sanitary Sewer Main	SA
Storm Sewer Pipe	18" RCP
Fire Hydrant	HYD
Street Lamp	☼
Road Sign	
Public Utility Easement	PUE
Public Drainage Easement	PDE
Public Utility, Drainage & Access Easement	PUDAE
Street Address	3001
Milcrofton Uitility District Exclusive Easement	MUDEE

22-08-30 addressed city comments

SIMMONS RIDGE PUD SUBDIVISION

SECTION 6
4408 SOUTH CAROTHERS ROAD

FINAL SUBDIVISION PLAT

FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Total Acres = 7.53	Total Lots = 46
Acres New Streets = 1.21	Feet New Streets = 1,627'
Civil District : 14th	Closure Error :1/10,000+
Scale : 1"=50'	Date : 07/25/22 City Project No 7947

SHEET 2 OF 2

THOMAS G. KING III REGISTERED LAND SURVEYOR XVI AGRICULTURE COMMERCE TENNESSEE NO. 1720

SR Section 6 Final Plat.dwg SH 2 of 2 8/31/2022 16:08:55 1:1

GENERAL NOTES:

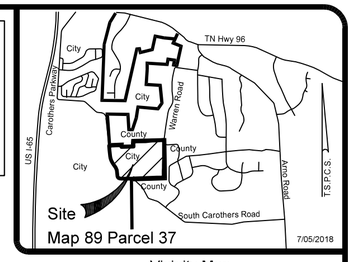
1) THE PURPOSE OF THIS PLAT IS TO CREATE 44 BUILDABLE LOTS, 2 OPEN SPACE LOTS
2) EXISTING ZONING PD (4.6)
3) MINIMUM REQUIRED SETBACK LINES:
   YARD FRONTING ANY STREET: 33 FEET (ATTACHED) 20 FEET DETACHED
   SIDE YARD: 5 FEET CORNER LOT 10 FEET
   REAR YARD: 20 FEET
4) SUBJECT PROPERTY IS CURRENTLY IDENTIFIED AS PARCEL 37 ON WILLIAMSON COUNTY TAX MAP NO. 89.
5) STREET ADDRESS ARE SHOWN ON PARCEL AREA TABLE, THIS SHEET.
6) THE DEVELOPER ACKNOWLEDGES THAT ALL LOTS HAVE ADEQUATE BUILDING ENVELOPES WITHIN THE REQUIRED SETBACK LINES.
7) OWNER/SUBDIVIDER: SIMMONS RIDGE JOINT VENTURES
   ADDRESS: 144 SOUTHEAST PARKWAY SUITE 230
   FRANKLIN, TENNESSEE 37064
   CONTACT: JOHN FRANKS
   TELEPHONE: (615) 790-2447
   EMAIL: johnfranks@live.com
8) SURVEYOR: HYDE PARK HOMES, LLC Thomas G. King III
   ADDRESS: 144 SOUTHEAST PARKWAY SUITE 230
   FRANKLIN, TENNESSEE 37064
   CONTACT: TOM KING
   TELEPHONE: (615) 238-4958
   EMAIL: tomgking3@gmail.com
9) ALL LOTS TO BE SERVED BY PUBLIC WATER AND SEWER.
10) THIS SURVEYOR HAS NOT PHYSICALLY LOCATED ALL UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH
11) UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION AS INDICATED. CONTACT TENNESSEE ONE CALL 1-800-351-1111.
12) THIS PROPERTY IS NOT WITHIN AN AREA OF FLOOD INUNDATION AS EVIDENCED ON F.E.M.A. COMMUNITY PANEL NUMBER 47187C 0214 G, WHICH BEARS AN EFFECTIVE DATE OF DECEMBER 21, 2016.
13) WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
14) STREET LIGHT LOCATIONS AND QUANTITIES ARE APPROXIMATE. FINAL POSITIONING AND QUANTITIES SHALL BE AT DIRECTION OF MTEMC.
15) ADEQUATE SPACING AND EASEMENT WIDTHS MUST BE PROVIDED FOR THE PROPOSED UTILITIES PER CITY OF FRANKLIN STANDARDS/REGULATIONS.
16) ALL SIDEWALKS, TRAILS, PATHS, ETC., LYING OUTSIDE OF PUBLIC RIGHT OF WAY ARE PUBLIC ACCESS EASEMENTS AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. SIDEWALK LOCATIONS WILL BE PROVIDED ON THE SITE PLAN FOR EACH LOT.
17) PROJECT GEODETIC REFERENCE NETWORK BASED ON: COORDINATE SYSTEM U.S. STATE PLANE 1983, ZONE 4301, FIPSZONE 4100; PROJECT DATUM NAD 1983 (CONUS); VERTICAL DATUM NAVD 88; COMBINED FACTOR = 0.99991825; COMVERGENCE ANGLE = 00°29'18.14463".
18) NO BUILDING PERMITS SHALL BE ISSUED FOR PROJECTS IN THIS SECTION UNTIL THE INDIVIDUAL SITE PLAN HAS BEEN APPROVED.
19) TREES SHALL BE PRUNED TO A MINIMUM OF EIGHT FEET ABOVE GRADE AND NO FENCES OR OTHER OBSTRUCTIONS SHALL BE TALLER THREE FEET ABOVE GRADE WITHIN SIGHT TRIANGLES FOR STREET INTERSECTIONS AND ROADWAY SIGNAGE PER THE LATEST VERSION OF AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
20) THE OWNER/SUBDIVIDER, SIMMONS RIDGE JOINT VENTURES, ATTESTS THAT NO ONE OTHER THAN THE OWNER HOLDS MINERAL RIGHTS TO THE PROPERTY. NO DOCUMENTATION HAS BEEN FOUND.
21) NO BUILDINGS EXIST IN THIS SECTION.
22) TYPICAL, OFF-STREET & ON STREET PARKING, SIDEWALKS AND STREET PLANTINGS TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.
23) NO LOTS ARE SPECIFICALLY DEDICATED FOR HANDICAP ACCESSIBILITY IN THIS SECTION.
24) THE CITY OF FRANKLIN'S SEWER SERVICE RESPONSIBILITY ENDS AT THE EDGE OF ASPHALT. THE HOMEOWNER IS RESPONSIBLE FOR THE SEWER SERVICE FROM ASPHALT TO THE DWELLING.
25) ALL OPEN SPACE SHALL BE MAINTAINED BY THE HOME OWNERS ASSOCIATION OR PROPERTY OWNER(S) AND SHALL BE PUBLIC UTILITY, ACCESS & DRAINAGE EASEMENT.
26) MAINTENANCE OF ALL STORMWATER MANAGEMENT FEATURES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) OR HOA.
27) THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT IS NOT RESPONSIBLE FOR REPAIRING THE TRAIL SYSTEM OVER THE SEWER MAIN IN THE EVENT OF MAINTENANCE OR EMERGENCY REPAIR TO THE SANITARY SEWER LINE.
28) NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENT. THE CITY OF FRANKLIN IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS.
29) THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE.
30) GREEN INFRASTRUCTURE EASEMENTS(GIE) ARE EXCLUSIVE EASEMENTS DEFINING AREAS SET ASIDE FOR THE CONSTRUCTION, MAINTENANCE, REPAIR, MONITORING, AND OTHER ACTIVITIES NECESSARY FOR THE FURTHERANCE OF WATER QUALITY FEATURES DESIGNATED AS GREEN INFRASTRUCTURE PRACTICES BY THE CITY OF FRANKLIN, AND TO PROVIDE PUBLIC ACCESS TO SUCH FEATURES. ANY AND ALL ACTIVITIES, EXCEPT AS SPECIFICALLY PERMITTED BY NOTATION ON THE CURRENT PLAT OF RECORD AND/OR WITHIN THE RECORDED LONG TERM MAINTENANCE AGREEMENT, SHALL BE STRICTLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE CITY ENGINEER OR ITS DESIGNEE.

The City of Franklin Water Management department has unrestricted access to its domestic water, sanitary sewer, reclaim water lines or system improvements located within its exclusive easements within the development. In the event landscaping, fencing, concrete or other structures are installed or placed within a City of Franklin easement, the City of Franklin shall have the right to remove such encroachments within the easement as may be necessary for the City of Franklin to repair, maintain or replace its infrastructure which is now or in the future may be located within the easement without obtaining any further permission from the property owner or HOA. The property owner or HOA shall be responsible for repairing and/or replacing any such landscaping, fencing, concrete or other structures removed or disturbed by the City of Franklin in common open space lots and in areas owned by the property owner or HOA at no expense to the City of Franklin. Individual homeowners shall be responsible for structures removed or disturbed by the City of Franklin within an easement on the homeowners' lot at the homeowners' expense.

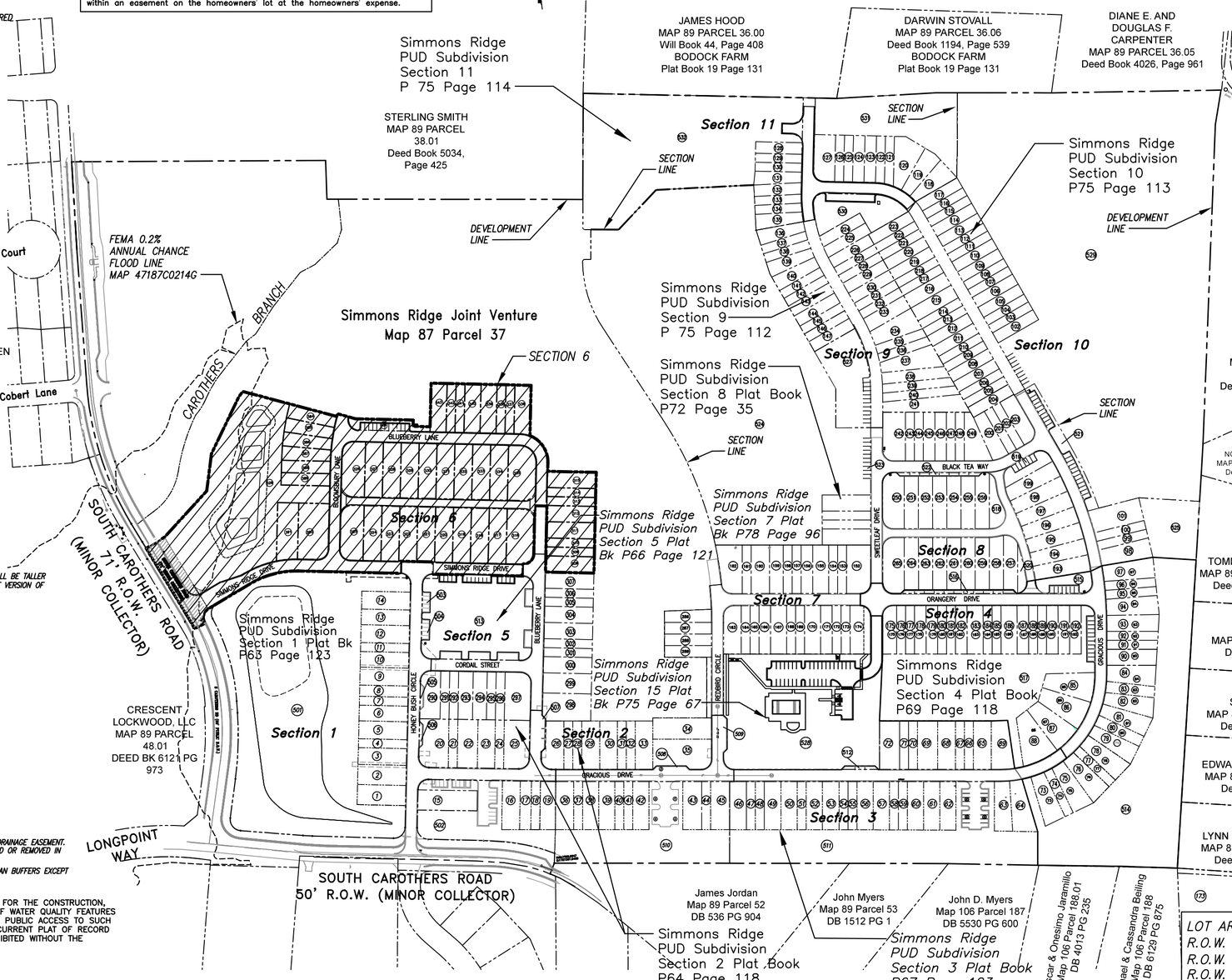
200 0 200
SCALE 1" = 200'

see note 17

All Milcrofton Utility District (MUD) easements are exclusive easements. No excavation, building, structure, or obstruction of any kind may be constructed or permitted within the easements, except pavement for a driveway that crosses an easement. Not trees or shrubbery may be planted within the easements. MUD will have unrestricted access to all of its lines, meters, valves and other water system facilities within the easements without seeking any further permission. MUD has the right to disturb or remove any impermissible items within the easements. The property owner will be responsible for repairing or replacing any such items at the property owner's expense.



Vicinity Map
Scale: 1" = 600'



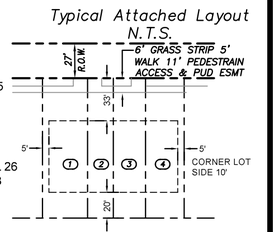
Handicap Accessible Lots	
Section	Number of Lots
1, 2, 3, 4, 5, 7, 8, 9, 10 & 11	=0

Building Type by Lot	
Detached Units	Attached Units
12	32
ON STREET PARKING SECTION 6 = 12	

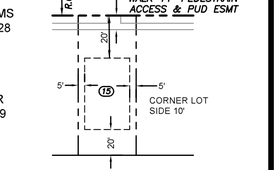
LEGEND

Iron Rod Existing -EX IR	○
Iron Rod Set -IR S	●
Monument -	⊠
Property Line -	
Utility Pole w guy wire	ø
Water Main	W
Sanitary Sewer Main	SA
Storm Sewer Pipe	18" RCP
Fire Hydrant	HYD
Street Lamp	☼
Road Sign	
Public Utility Easement	PUE
Public Drainage Easement	PDE
Public Utility, Drainage & Access Easement	PUDAE
Street Address	3001
Milcrofton Utility District Exclusive Easement	MUDEE

Typical Attached Layout N.T.S.



Typical Detached Layout N.T.S.



LOT AREA = 186,112 s.f. = 4.27 Ac.
R.O.W. Area (Sect 6)= 43,406 s.f. = 1.00 Ac.
R.O.W. Area (South Carothers)= 9,706 s.f. = 0.22 Ac.
R.O.W. Alley = 9,201 s.f. = 0.21
OPEN SPACE = 79,887 s.f. = 1.83 Ac.
LINEAR FEET OF ROAD THIS SECTION = 1,627'
(does not include alley)
TOTAL AREA SECTION 6 s.f. = 328,312 = 7.53 Ac.+/-

MTEMC Certificate of Approval for Recording

Middle Tennessee Electric Membership Corporation (MTEMC) will provide electric service to the subject property according to normal operating practices of MTEMC as defined in the rules and regulation, bylaws, policy bulletins and operational bulletins of MTEMC, and in accordance with the plat approval checklist, tree planting guidelines and other regulations contained on the MTEMC website at www.mtemc.com (collectively the "Requirements"). No electric service will be provided until MTEMC's Requirements have been met and approved in writing by an authorized representative of MTEMC. Any approval is, at all times, contingent upon continuing compliance with MTEMC's Requirements.

Middle Tennessee Electric Membership Corporation _____ Date _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the Williamson County Emergency Management Agency and the City of Franklin,

Williamson County Emergency Management Agency _____ Date _____

City of Franklin _____ Date _____

CERTIFICATE OF APPROVAL OF WATER SYSTEMS

I hereby certify:
(1) The water systems designated in "Simmons Ridge PUD Subdivision, Section 6" have been installed in accordance with utility specifications, or
(2) A performance bond in the amount of $_____ for the WATER system has been posted with the Milcrofton Utility District, Tennessee, to assure completion of such systems.

Milcrofton Utility District _____ *Date* _____

CERTIFICATE OF APPROVAL FOR RECORDING

Approved by the Franklin Municipal Planning Commission, Franklin, Williamson County, Tennessee, with the exception of such conditions, if any, as are noted in the planning commission minutes for the _____ day of _____, 2022, and this plat has been approved for recording in the Register's Office of Williamson County.

Secretary _____ *Date* _____
Franklin Municipal Planning Commission

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown hereon as evidenced in Book 6505, Page 620, R.O.W.C, Tennessee, and adopt the plan of subdivision of the property as shown hereon and dedicate all public ways and easements as noted. No lot(s) as shown hereon shall again be subdivided, resubdivided, altered or changed so as to produce less area than is hereby established until otherwise approved by the Franklin Municipal Planning Commission, and under no condition shall such lot(s) be made to produce less area than is prescribed by the restrictive covenants as of record in Book 6789, Page 125-196, R.O.W.C., Tennessee running with the title to the property. I (we) further certify that there are no liens on this property, except as follows: Book _____, Page _____, R.O.W.C.

John Y. Franks *08-30-2022*
Owner(s) Simmons Ridge Joint Venture
Simmons Ridge Partners, LLC Member John Y. Franks (Book 6505, Page 620) Date

CERTIFICATE OF ACCURACY

I (we) hereby certify that the subdivision plat as shown is correct and that all of the monuments shown hereon have been placed as indicated. The subdivision plat correctly represents as survey made under my supervision on the 3rd day of June, 2015.

Thomas G King III 08/30/2022
Thomas G. King III Date
Land Surveyor
Tennessee R.L.S. No. 1720

CERTIFICATE OF APPROVAL OF SEWER SYSTEMS

I hereby certify:
(A) The sewer systems designated in "Simmons Ridge PUD Subdivision, Section 6 " have been installed in accordance with city specifications, or
(B) performance bond in the amount of $_____ for the water system and $_____ for the sewer system has been posted with the City of Franklin, Tennessee, to assure completion of such systems.

Director, Water Management Dept. _____ *Date* _____
City of Franklin, Tennessee

CERTIFICATE OF APPROVAL of STREETS, DRAINAGE, SIDEWALKS & GREEN INFRASTRUCTURE

I hereby certify that:
(A) The streets, drainage, sidewalks, and green infrastructures designated in the Simmons Ridge PUD Subdivision, Section 6 have been installed in accordance with City specifications, or
(B) performance bond in the amount of $_____ for streets and $_____ for drainage $_____ for sidewalks, and $_____ for green infrastructure has been posted with the City of Franklin, Tennessee, to assure completion of such improvements.

Supt., Streets _____ *Date* _____
Franklin, Tennessee

THOMAS G. KING III REGISTERED LAND SURVEYOR XVI AGRICULTURE COMMERCE TENNESSEE NO. 1720

. 22-08-30 addressed city comments

SIMMONS RIDGE PUD SUBDIVISION
SECTION 6
4408 SOUTH CAROTHERS ROAD

FINAL SUBDIVISION PLAT
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

Total Acres = 7.53	Total Lots = 46
Acres New Streets = 1.21	Feet New Streets = 1,627'
Civil District : 14th	Closure Error :1/10,000+
Scale : 1"=200' / Date : 07/25/22	City Project No 7947
	SHEET 1 OF 2

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03542

DATE: September 6, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Chelsea Randolph, Planner

SUBJECT:

Williamson Square Subdivision, Final Plat, Revision 6, Lots 8, 10, And 11, Identifying Townhome Unit Locations Within Lots And Revising Easements, On 12.78 Acres, Located North Of Murfreesboro Road And West Of Royal Oaks Boulevard. (CONSENT AGENDA)
8/25/2022 FMPC - Deferred

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7924
Applicant: Steve Matthews, Dale & Associates
Owner: Ben Beasley, Cypress Home, LLC

BACKGROUND/STAFF COMMENTS:

This final plat shows 7 townhomes on lot 8, 28 townhomes on lot 11, and a revised drainage easement on Lot 10. Due to this item being deferred from last month's agenda, this final plat requires approval by the Franklin Municipal Planning Commission. The rezoning and development plan for this project were given a favorable recommendation by FMPC in December 2014 and approved by BOMA in March 2015. The site plan was approved on May 14, 2020 by FMPC. The final plat is consistent with both the site plan and development plan.

PROCEDURAL REQUIREMENTS:
1. In addition to uploading the corrected plat to the online plan review website (https://franklin.contractorsplanroom.com/secure/), the applicant shall submit the Mylar to the Department of Building and Neighborhood Services (Suite 110, Franklin City Hall). The mylar shall be 18 inches by 24 inches in size. The Certificates of Approval for the Subdivision Name and Street Names, Water System (if not COF Water), Survey, and Ownership shall be signed when the plat is resubmitted. The Mylar shall be submitted to BNS within five (5) business days of the corrected electronic plat being uploaded to the online plan review website (or vice versa) or the item shall be rejected as incomplete for City review. With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.

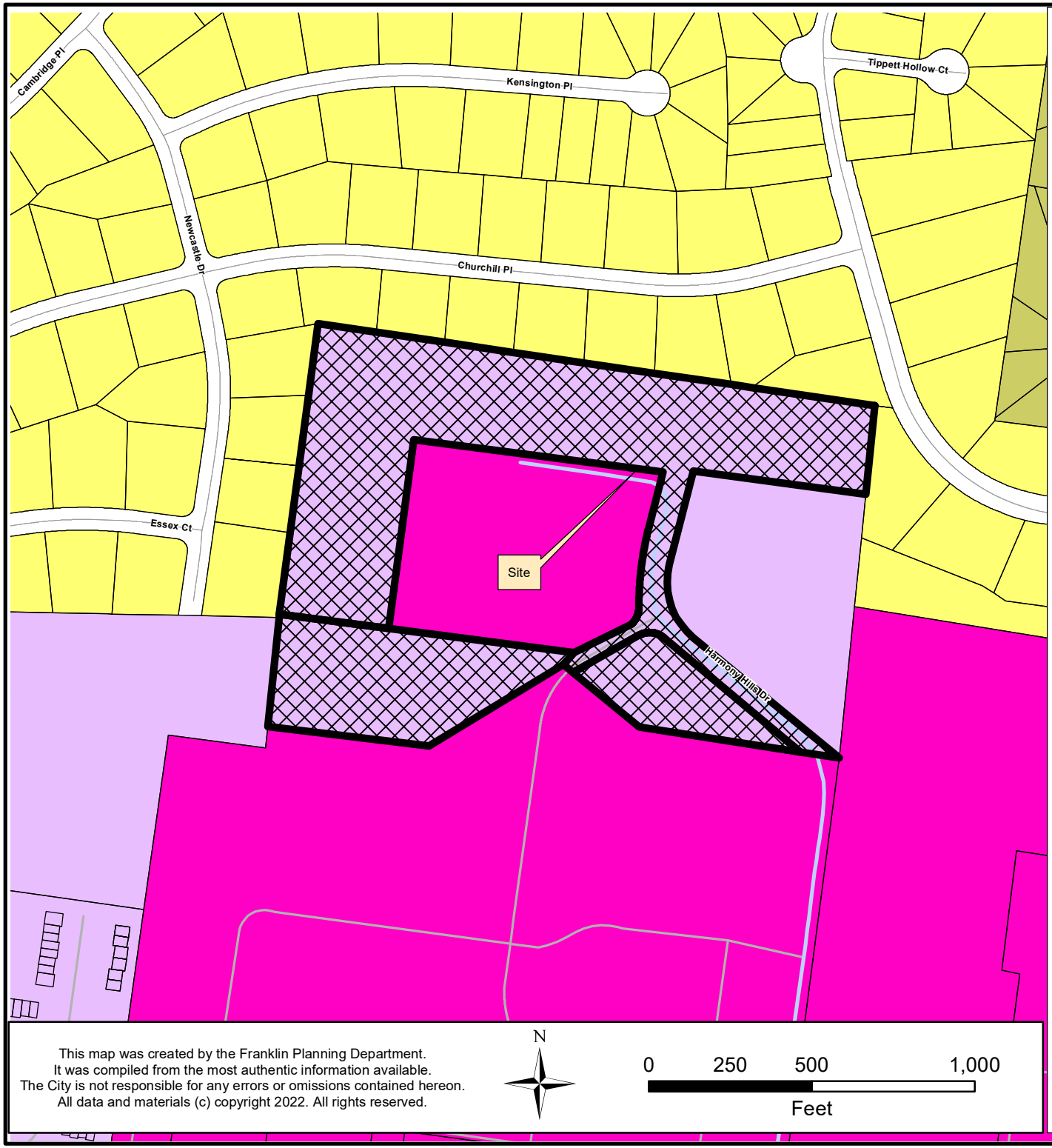
2. The City's project identification number shall be included in all correspondence with any City department relative to this project.
3. The applicant shall upload a .dwg copy of the final plat through the IDT system (link above) in Tennessee state plan coordinates, NAD 83, NAVD 88, zone 4100/5301 for incorporation of the plat into the Franklin GIS database.)

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends that the Franklin Municipal Planning Commission approve the final plat for Williamson Square Subdivision, Revision 6, Lots 8, 10, and 11 with conditions.



WILLIAMSON SQUARE SUBDIVISION,
FINAL PLAT,
REVISION 6, LOTS 8, 10 & 11

Project Information
Existing Zoning: PD, Planned District
Site Acreage: 12.78 acres
Proposed Number of Dwelling Units: 44
Proposed Nonresidential Square Footage: 0

Legend

- Subject Property
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
All data and materials (c) copyright 2022. All rights reserved.

N

0 250 500 1,000
Feet

HISTORIC FRANKLIN TENNESSEE

COF no: 7924

CONDITIONS OF APPROVAL:

Open Issues: 5 These issues are currently being filtered

Engineering - Final Plat Checklist

General Issues

19. C. Final Plat

lance.fittro@franklintn.gov **The following condition is placed on the final plat as a Condition of Approval to be satisfied prior to issuance of building permits**:

No building permits for Section 2 shall be issued until the additional detention pond volume shown on the Section 1 site plan (COF #5841) is provided per the approved plans and stormwater design for Section 2. Pond volume shall be verified with approved submittal of as-built drawings for the detention pond.

Parks

General Issues

5. Parkland information

kevinl@franklintn.gov The parkland agreement has been executed and will go to BOMA on behalf of on 9-13-22.

Fees can be paid at any time and will be due at the ONEStop. After the fees are paid the the plat can be recorded and moved from ONEStop.

The fully executed parkland agreement and invoice has been uploaded to IDT.

Please contact Alex Bearden for an appointment in Building and Neighborhood Services to make payment.
***Applicant shall bring the Parkland Invoice with the payment to BNS at City Hall**
alex.bearden@franklintn.gov 615-721-9103

Performance Agreement and Surety

General Issues

14. Engineering Sureties

kevin.long@franklintn.gov **No sureties associated with this final plat.** All sureties associated with this development from site plan **COF# 7216 (Township PUD Subdivision, Site Plan, Section 2)** were previously posted with the site plan.

(This comment serves only as a reminder to staff and does not hinder approval. No response is necessary from the applicant beyond "N/A" or "Acknowledged" to satisfy requirements of the IDT system.)

Planning

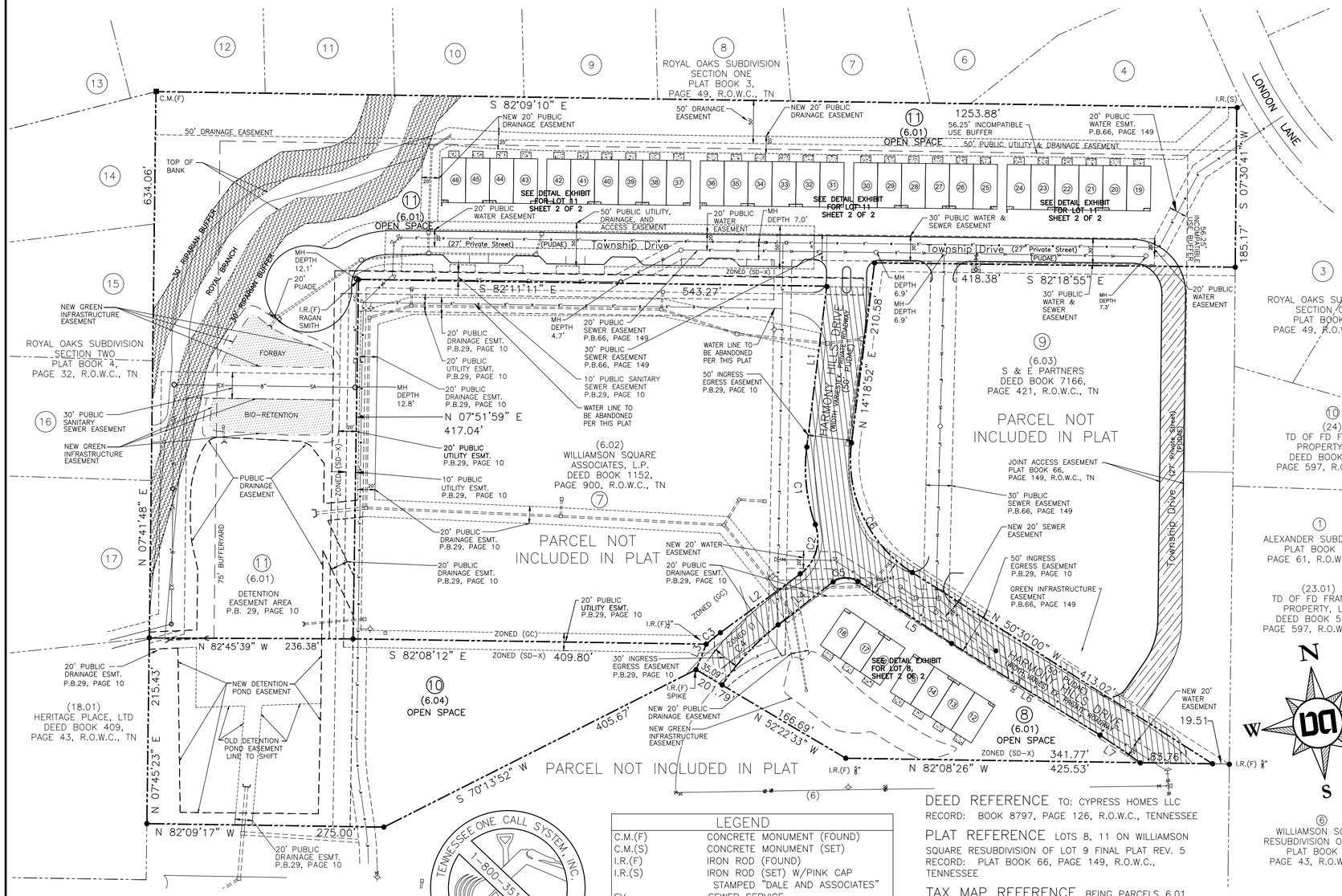
General Issues

34. Note 9

chelsea.randolph@franklintn.gov	Applicant shall update the zoning listed in comment 9 to reflect Planned District.

35. Open Space Label

chelsea.randolph@franklintn.gov	Applicant shall remove "open space" label from lots with townhomes on them, lot 8 and lot 11.



CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	91.24'	195.00'	26°48'31"	S 00°40'43" W	90.41'
C2	64.05'	50.00'	73°23'45"	S 23°58'21" W	59.76'
C3	21.17'	220.00'	5°30'48"	S 57°54'54" W	21.16'
C4	95.59'	300.00'	18°15'26"	N 49°52'19" E	95.19'
C5	30.45'	25.00'	69°46'47"	S 84°25'51" E	28.60'
C6	175.34'	155.00'	64°48'53"	N 18°05'34" W	166.14'

LINE	BEARING	DISTANCE
L1	S 14°04'59" W	188.43'
L2	S 60°40'18" W	114.96'
L3	S 28°45'37" W	31.87'
L4	N 58°59'52" E	81.00'
L5	S 49°32'17" E	130.69'
L6	S 51°19'32" E	202.21'
L7	S 48°33'26" E	56.84'

LEGEND

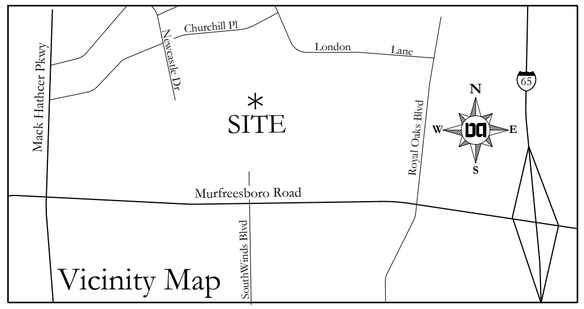
C.M.(F)	CONCRETE MONUMENT (FOUND)
C.M.(S)	CONCRETE MONUMENT (SET)
I.R.(F)	IRON ROD (FOUND)
I.R.(S)	IRON ROD (SET) W/PINK CAP STAMPED "DALE AND ASSOCIATES"
SV	SEWER SERVICE
WS	WATER SERVICE
PUDAE	PUBLIC UTILITY DRAINAGE & ACCESS EASEMENT
PROPERTY LINE	———
OVERHEAD UTILIITES	——OH——
WATER LINE	——W——
SANITARY LINE	——SA——
GAS LINE	——G——
CONCRETE	

TENNESSEE ONE CALL SYSTEM, INC. 1-800-351-1111 STOP-CALL BEFORE YOU DIG!

DEED REFERENCE TO: CYPRESS HOMES LLC
RECORD: BOOK 8797, PAGE 126, R.O.W.C., TENNESSEE

PLAT REFERENCE LOTS 8, 11 ON WILLIAMSON SQUARE RESUBDIVISION OF LOT 9 FINAL PLAT REV. 5
RECORD: PLAT BOOK 66, PAGE 149, R.O.W.C., TENNESSEE

TAX MAP REFERENCE BEING PARCELS 6.01, & 6.05 ON TAX MAP 079G



GENERAL NOTES

1. THE PURPOSE OF THIS RECORDING IS TO SHOW 7 UNITS ON LOT 8 AND 28 UNITS ON LOT 11 & REVISE DRAINAGE EASEMENT ON LOT 10.
2. THIS SURVEY MEETS THE REQUIREMENTS OF AN "URBAN LAND SURVEY" AS PER T.C.A. CHAPTER 820-03 OF STANDARDS OF PRACTICE AS ADOPTED BY THE BOARD OF EXAMINERS FOR LAND SURVEYOR'S FOR THE STATE OF TENNESSEE, DATED MARCH 17, 2011.
3. THIS SURVEY CONFORMS TO THE GUIDELINES SET FORTH IN THE STANDARDS OF PRACTICE CHAPTER 0820-3.05 FOR A CATEGORY 1 SURVEY HAVING A RATIO OF PRECISION EXCEEDING 1:10,000 AS SHOWN HEREON.
4. PARCEL NUMBER SHOWN THUS (00) PERTAIN TO PROPERTY TAX MAP 79G.
5. ALL LOTS ARE TO BE SERVED BY PUBLIC WATER AND SANITARY SEWER.
6. THE AFFECTED PROPERTY SHOWN HEREON CONTAINS 452,362.28 SQUARE FEET OR 10.39 ACRES OF LAND.
7. THE PROPERTY SHOWN HEREON IS NOT INCLUDED IN AREAS DESIGNATED AS "SPECIAL FLOOD HAZARD" ON THE LATEST FLOOD INSURANCE PROGRAM MAP PANEL NO. 47187C0212F DATED SEPTEMBER 29, 2006.
8. PROPERTY CORNERS SHOWN THUS -●- ARE MARKED BY IRON RODS.
   PROPERTY CORNERS SHOWN THUS -■- ARE MARKED BY CONCRETE MONUMENTS.
9. THE PROPERTY SHOWN HEREON IS CURRENTLY ZONED SD-X 3.39, 68,961 SF (SPECIFIC DEVELOPMENT-VARIETY). THE PLAT REVISION IS FOR A DEVELOPMENT NOW NAMED TOWNSHIP PUD SUBDIVISION. YARD FRONTING STREETS: N/A, SIDE YARD: 10 FEET, REAR YARD: 30'.
10. NUMBERS SHOWN THUS XXXX ARE PROPERTY ADDRESSES OFF HARMONY HILLS DRIVE
11. PROPERTY OWNER:
    CYPRESS HOMES LLC, P.O. BOX 682447, FRANKLIN, TN 37068
12. THE RECORDING OF THIS PLAT VOIDS, VACATES AND SUPERSEDES LOT 8 AND 11 ON THE PLAT OF WILLIAMSON SQUARE REVISION FIVE (RESUBDIVISION OF LOT 9) OF RECORD IN PLAT BOOK P66, PAGE 149, R.O.W.C., TN.
13. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES (INCLUDING CABLE TELEVISION, ELECTRICAL, NATURAL GAS, SEWER, TELEPHONE, AND WATER LINES) SHALL BE PLACED UNDERGROUND.
14. LOTS SHALL CONFORM TO THE REQUIREMENTS OF THE FRANKLIN ZONING ORDINANCE.
15. BEARINGS SHOWN ON THE SURVEY ARE RELATIVE TO THE TENNESSEE STATE PLANE COORDINATE SYSTEM, (NAD 83).
16. MAINTENANCE OF ALL STORMWATER MANAGEMENT FEATURES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNERS OR HOA.
17. MINERAL RIGHTS WERE NOT DETERMINED AND ARE UNCERTAIN RELATIVE TO THESE PARCELS.
18. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE.
19. ALL STREET LIGHT LOCATIONS AND QUANTITIES ARE APPROXIMATE. FINAL POSITIONING AND QUANTITY SHALL BE AT THE DIRECTION OF MTEMC.
20. IN ACCORDANCE WITH CITY OF FRANKLIN ZONING ORDINANCE SECTION 5.4.6, THE LANDSCAPE BERM IS A REQUIREMENT TO REDUCE THE LANDSCAPE BUFFERS TO WIDTH OF 56.25 FEET.
21. THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT HAS UNRESTRICTEDACCESS TO ITS DOMESTIC WATER, SANITARY SEWER, RECLAIM WATER LINES OR SYSTEM IMPROVEMENTS LOCATED WITHIN ITS EXCLUSIVE EASEMENTS WITHIN THE DEVELOPMENT. IN THE EVENT LANDSCAPE, FENCING, CONCRETE OR OTHER STRUCTURES ARE INSTALLED OR PLACED WITHIN A CITY OF FRANKLIN EASEMENT, THE CITY OF FRANKLIN SHALL HAVE THE RIGHT TO REMOVE SUCH ENCROACHMENTS WITHIN THE EASEMENT AS MAY BE NECESSARY FOR THE CITY OF FRANKLIN TO REPAIR, MAINTAIN OR REPLACE ITS INFRASTRUCTURE WHICH IS NOW OR IN THE FUTURE MAY BE LOCATED WITHIN THE EASEMENT WITHOUT OBTAINING ANY FURTHER PERMISSION FROM THE PROPERTY OWNER OR HOA. THE PROPERTY OWNER OR HOA SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY SUCH LANDSCAPING, FENCING, CONCRETE OR OTHER STRUCTURES REMOVED OR DISTURBED BY THE CITY OF FRANKLIN IN COMMON OPEN SPACE LOTS AND IN AREAS OWNED BY THE PROPERTY OWNER OR HOA AT NO EXPENSE TO THE CITY OF FRANKLIN. INDIVIDUAL HOMEOWNERS SHALL BE RESPONSIBLE FOR STRUCTURES REMOVED OR DISTURBED BY THE CITY OF FRANKLIN WITHIN AN EASEMENT ON THE HOMEOWNERS' LOT AT THE HOMEOWNERS' EXPENSE.
22. ALL WATER AND SEWER EASEMENTS SHOWN HEREON RELATIVE TO THE SUBJECT PLAT SHALL BE CONSIDERED EXCLUSIVE TO UTILITY USES OF WATER AND SEWER.
23. NO BUILDING PERMITS FOR SECTION 2 SHALL BE ISSUED UNTIL THE DETENTION POND WORK SHOW ON SECTION 1 SITE PLAN 9COF #5941) IS COMPLETED PER THE APPROVED PLANS.
24. ALL OPEN SPACE SHALL BE PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENTS AND SHALL BE MAINTAINED BY THE PROPERTY OWNER(S) OR THE HOA.
25. ALL PRIVATE STREETS SHALL BE PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENTS AND SHALL BE MAINTAINED BY THE PROPERTY OWNER(S) OR THE HOA.
26. NO OBSTRUCTIONS OR ENCROACHMENTS WHICH IMPEDE THE FLOW OF STORMWATER SHALL BE PERMITTED WITHIN PUBLIC DRAINAGE EASEMENTS. THE CITY OF FRANKLIN IS NOT RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY ENCROACHMENTS THAT ARE DAMAGED OR REMOVED IN THE COURSE OF MAINTENANCE ACTIVITY WITHIN EASEMENTS.
27. GREEN INFRASTRUCTURE EASEMENTS (GIE) ARE EXCLUSIVE EASEMENTS DEFINING AREAS SET ASIDE FOR THE CONSTRUCTION, MAINTENANCE, REPAIR, MONITORING, AND OTHER ACTIVITIES NECESSARY FOR THE FURTHERANCE OF WATER QUALITY FEATURES DESIGNATED AS GREEN INFRASTRUCTURE PRACTICES BY THE CITY OF FRANKLIN, AND TO PROVIDE PUBLIC ACCESS TO SUCH FEATURES. ANY AND ALL ACTIVITIES, EXCEPT AS SPECIFICALLY PERMITTED BY NOTATION ON THE CURRENT PLAT OF RECORD AND/OR WITHIN THE RECORDED LONG TERM MAINTENANCE AGREEMENT, SHALL BE STRICTLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE CITY ENGINEER OR HIS DESIGNEE.
28. SIDEWALKS AND TRAILS OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE PUBLIC ACCESS EASEMENTS AND SHALL BE MAINTAINED BY THE PROPERTY OWNER(S) OR THE HOA.
29. PARKLAND INFORMATION: 35 UNITS X $4,304=$150,640 DUE AT FINAL PLAT, MOVED TO THE THE NEWEST ORDINANCE.
30. WHERE THE PORTION OF THE SEWER SERVICES LINES FOR LOTS 40 THRU 46, FALL OUTSIDE OF THE P.U.D.A.E. OR THE RECORDED SEWER EASEMENT, THERE SHALL BE AN ADDITIONAL 10' SEWER EASEMENT, PARALLEL TO, ON EACH SIDE OF THESE LINE FOR MAINTENANCE, REPAIRS AND ETC,

CERTIFICATE OF OWNERSHIP

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book 8797, Page 126, R.O.W.C., Tennessee, and adopt the plan of subdivision of the property as shown and dedicate all public ways and easements as noted. No lot(s) as shown hereon shall again be subdivided, resubdivided, altered or changed so as to produce less area than is hereby established until otherwise approved by the Franklin Municipal Planning Commission, and under no condition shall such lot(s) be made to produce less area than is prescribed by the restrictive covenants as of record in Book ____, Page ____, R.O.W.C., TN. running with the title to the property. I(we) further certify that there are no liens on this property, except as follows:

Cypress Homes LLC — Date

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME, STREET NAMES, AND ADDRESSING

Subdivision name and street names approved by the Williamson County Emergency Management Agency.

City of Franklin — Date

Williamson County Emergency Management Agency — Date

MTEMC

Middle Tennessee Electric Membership Corporation (MTEMC) will provide electric service to the subject property according to the normal operating practices of MTEMC as defined in the rules and regulations, bylaws, policy bulletins and operational bulletins of MTEMC, and in accordance with the plat approval checklist, tree planting guidelines and other regulations contained on the MTEMC website at www.mtemc.com (collectively the "Requirements"). No electric service will be provided until MTEMT's Requirements have been met and approved in writing by an authorized representative of MTEMC. Any approval is, at all times, contingent upon continuing compliance with MTEMC's Requirements.

Middle Tennessee Electric Membership Corporation — Date

CERTIFICATE OF ACCURACY

I (we) hereby certify that the subdivision as shown hereon is correct and that all of the monuments shown hereon have been placed as indicated. This subdivision plat correctly represents a survey made under my supervision on the 24 day of June, 2022.

Registered Land Surveyor — 8/29/22 Date

STEVEN C. MATTHEWS — REGISTERED LAND SURVEYOR — XVI — AGRICULTURE — SURVEYING — COMMERCE — 8/29/22 — TENNESSEE NO. 2352

CERTIFICATE OF APPROVAL OF WATER AND SEWER SYSTEMS

I hereby certify that: (1) the water and sewer systems designated in Williamson Squre Subdivision, Lots 8 & 11 have been installed in accordance with City specifications, or (2) a performance bond in the amount of $_____ for the water system and $_____for the sewer system has been posted with the City of Franklin, Tennessee, to assure completion of such systems.

Supt. Water and Sewer Franklin, Tennessee

Date

CERTIFICATE OF APPROVAL OF STREETS AND DRAINAGE

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Director, Streets Department
City of Franklin, Tennessee

Date

CERTIFICATE OF APPROVAL FOR RECORDING

Approved by the Franklin Municipal Planning Commission, Franklin, Williamson County, Tennessee, with the exception of such conditions, if any, as are noted in the Planning Commission minutes for the ____ day of _____, 20__, and this plat has been approved for recording in the Register's Office of Williamson County, recording in the office of the County Register.

Secretary — Date
Franklin Municipal Planning Commission

Owner/Developer:
Cypress Homes LLC
P.O. Box 682447
Franklin , TN 37068

9th CIVIL DISTRICT
SCALE 1"=100'
CLOSURE>1:10,000

TOTAL ACRES OF AFFECTED PROPERTY = 12.78
TOTAL LOTS= 3
City of Franklin Project# 7924

Rev: August 4, 2022 R1
Rev: August 29, 2022 R2
Rev: September 2, 2022 R3

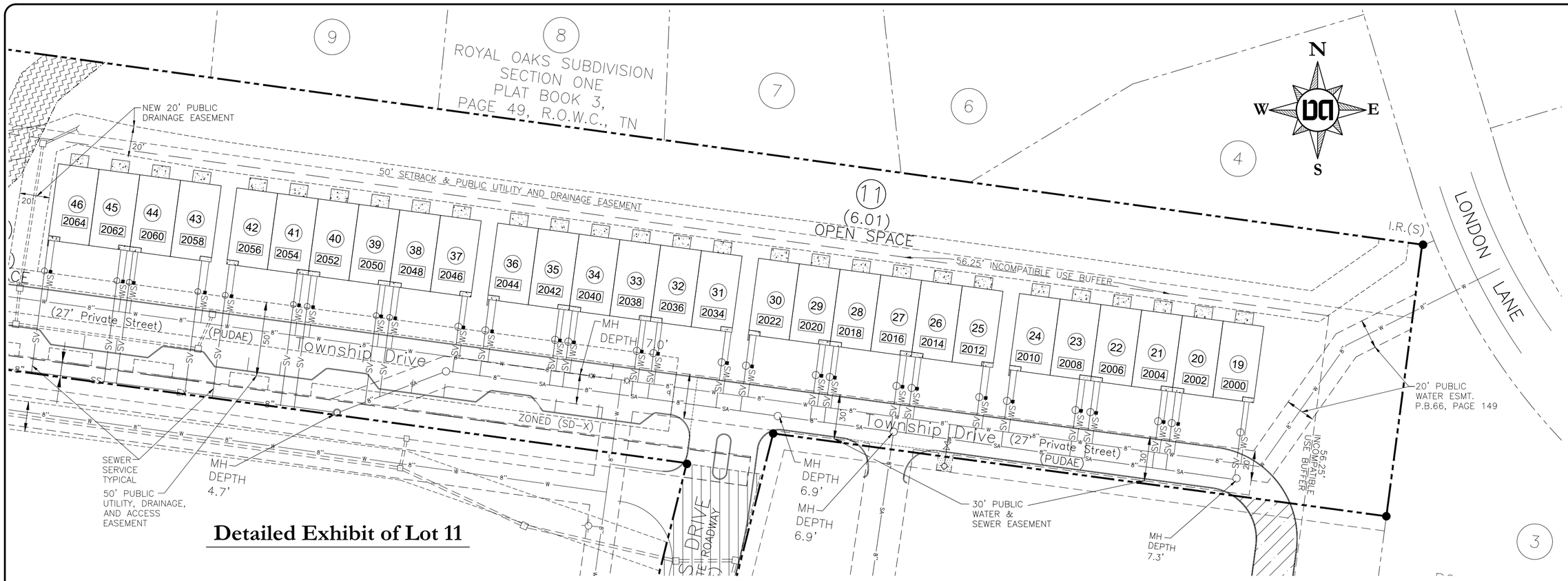
Date: June 24, 2022

FINAL PLAT
WILLIAMSON SQUARE REVISION 6 LOTS 8, 10 & 11

Dale & Associates
516 Heather Place
Nashville, Tennessee 37204
(615) 297-5166
Consulting Civil Engineering
Land Planning & Zoning
Landscape Architecture
Surveying

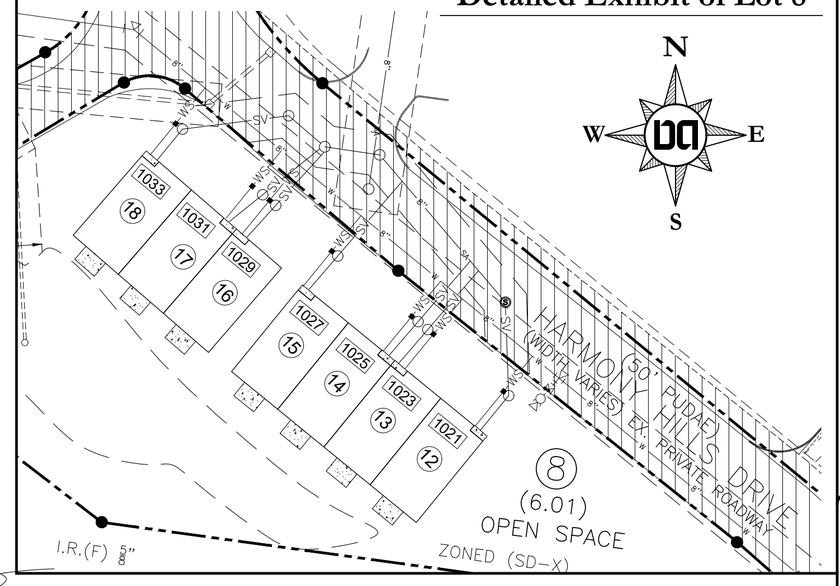
Project # 12017

Sheet 1 of 2



Detailed Exhibit of Lot 11

Detailed Exhibit of Lot 8



LEGEND	
C.M.(F)	CONCRETE MONUMENT (FOUND)
C.M.(S)	CONCRETE MONUMENT (SET)
I.R.(F)	IRON ROD (FOUND)
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PROPERTY LINE	
OVERHEAD UTILIITES	OH
WATER LINE	W
SANITARY LINE	SA
GAS LINE	G
CONCRETE	

Area Table		
Area	Acres	Sq. Feet
Lot 8	0.80	34670.76
Lot 10	2.40	104361.25
Lot 11	7.53	327981.69
Total Area	12.78	556,523.53

DEED REFERENCE TO: CYPRESS HOMES LLC
RECORD: BOOK 8797, PAGE 126, R.O.W.C., TENNESSEE

PLAT REFERENCE LOTS 8, 11 ON WILLIAMSON SQUARE RESUBDIVISION OF LOT 9 FINAL PLAT REV. 5
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TENNESSEE ONE CALL SYSTEM, INC. 1-800-351-1111 STOP-CALL BEFORE YOU DIG!

50 0 50 100 150

Scale 1" = 50'

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Secretary
Franklin Municipal Planning Commission — Date

Rev: August 4, 2022 R1
Rev: August 29, 2022 R2
Rev: September 2, 2022 R3

Date: June 24, 2022

FINAL PLAT

WILLIAMSON SQUARE REVISION 6 LOTS 8, 10 & 11

9th CIVIL DISTRICT
SCALE 1"=100'
CLOSURE>1:10,000

TOTAL ACRES OF AFFECTED PROPERTY = 12.78
TOTAL LOTS= 3

City of Franklin Project# 7924

Dale & Associates
516 Heather Place
Nashville, Tennessee 37204
(615) 297-5166
Consulting Civil Engineering
Land Planning & Zoning
Landscape Architecture
Surveying

Project # 12017

Sheet 2 of 2

File #: 21-03543

DATE: September 6, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Chelsea Randolph, Planner

SUBJECT:

Robinson Lake, Site Plan (Dam Rehabilitation), Rehabilitating The Existing Dam, Providing Riparian Buffer Enhancements, Providing A Trail, And Adding A Parking Lot, On 75.5 Acres, Located East Of Interstate 65 And West Of Carothers Parkway, At 3439 Carothers Parkway. (CONSENT AGENDA)

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7945
Applicant: David Mason, CDM Smith
Owner: City of Franklin

BACKGROUND/STAFF COMMENTS:
The purpose of this site plan is to rehabilitate the existing dam, conduct riparian buffer enhancements, add a trail, and to add a parking lot adjacent to the park. The site is a part of the City's park system.

PROCEDURAL REQUIREMENTS:
1. The applicant shall upload the corrected plan to the online plan review website (https://franklin.contractorsplanroom.com/secure/). All revisions to the approved plans shall be "clouded." With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.
2. Once the corrected site plan has been approved, one (1) full-size and one (1) half-sized copy of the final approved landscape plans shall be submitted to the Department of Building and Neighborhood Services for future landscape inspection purposes.
3. Once the project has obtained Site Plan approval, the applicant will be notified by COF Engineering Department with instructions regarding the status of their digitally stamped construction plans.
4. The applicant shall upload complete building plans, including the approved, revised site plans, to the City's IDT site for Building and Neighborhood Services Department review and approval prior to the issuance of a building permit.
5. Prior to the start of any excavation work, the developer and/or contractor shall notify AT&T

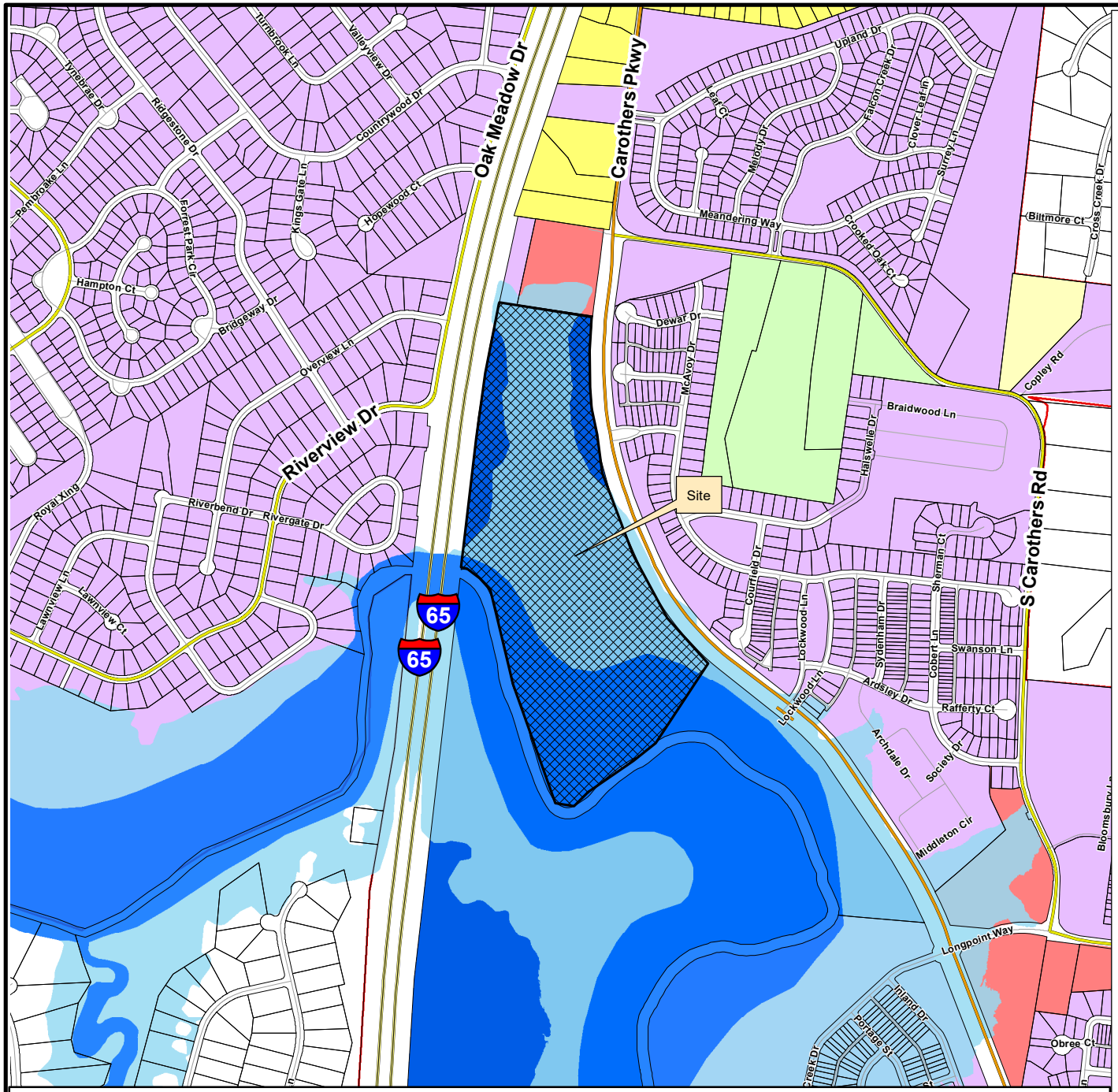
and Comcast.
6. The City's project identification number shall be included in all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends that the Franklin Municipal Planning Commission approve the site plan for Robinson Lake, Site Plan (Dam Rehabilitation), with conditions.



ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

Project Information

Existing Zoning: Civic Institutional District (CI)
Overlay Districts: FFO, FWO
Site Acreage: 75.5 acres
Proposed Number of Dwelling Units: 0
Proposed Nonresidential Square Footage: 0

Legend

- Subject Property
- Floodway Fringe Overlay
- Floodway Overlay
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
All data and materials (c) copyright 2022. All rights reserved.

N

0 250 500 1,000
Feet

HISTORIC FRANKLIN TENNESSEE

COF no: 7945

CONDITIONS OF APPROVAL:

Open Issues: 6 These issues are currently being filtered

FIRE--Planning--DRT

General Issues

1. Proposed gate

curt.edelmann@franklintn.gov Please add a note to either sheet CD-14 or C-9 to document the requirement.

Performance Agreement and Surety

General Issues

31. Engineering Sureties

kevin.long@franklintn.gov **No sureties are associated with this Site Plan.**

(This comment serves only as a reminder to staff and does not hinder approval. No response is necessary from the applicant beyond "N/A" or "Acknowledged" to satisfy requirements of the IDT system.)

35. Landscape

jason.arnold@franklintn.gov Landscape surety is not required for a city of Franklin project.

Planning

General Issues

12. Project number

chelsea.randolph@franklintn.gov Applicant shall state project number **7945** on all future correspondence.

Stormwater

General Issues

33. Long Term Maintenance Plan

jeff.willoughby@franklintn.gov Pending One Stop

Zoning

General Issues

24. FFO

shanna.mccoy@franklintn.gov Reminder:

Floodplain development permit # 158204 to be issued in conjunction with grading permit.

SITE DATA CHART

PROJECT NAME:	ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)
PROJECT #:	736426
ADDRESS:	3439 CAROTHERS PARKWAY; FRANKLIN, TN 37064
PARCEL(S)	089 04808
ACREAGE/SQUARE FOOTAGE OF SITE:	75.5
VESTING:	N/A

REGULATIONS:

BASE ZONING:	CI
OVERLAY ZONING:	FFO FWO
BUILDING TYPES APPLIED:	N/A
LOT WIDTH/SIZE (RESIDENTIAL):	N/A
SETBACKS:	N/A
FRONT YARD:	N/A
SIDE YARD:	N/A
REAR YARD:	N/A
BUILDING HEIGHT:	N/A
MINIMUM LANDSCAPE SURFACE AREA:	20% REQURIED
OPEN SPACE SF REQUIRED:	5% REQUIRED
NATURAL AREA SF REQUIRED:	–
TREE CANOPY RETENTION ACREAGE:	4.12 ACRES
PARKING REQUIRED:	–
PARKING PROVIDED:	140 SPOTS
BICYCLE PARKING REQUIRED:	7
BICYCLE PARKING PROVIDED:	8
HISTORIC RESOURCE TREATMENT NO:	–

APPLICANT / OWNERS REPRESENTATIVE	
ADDRESS:	109 3RD AVE SOUTH; FRANKLIN TN 37064
PHONE NO.:	615–550– 6708
CONTACT NAME:	SHAHAD ABDULRAHMAN
E–MAIL ADDRESS:	SHAHAD.ABDULRAHMAN@FRANKLINTN.GOV

NOTE: PARKLAND IMPACT FEE NOT REQUIRED

CITY OF FRANKLIN, TENNESSEE

HISTORIC FRANKLIN TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)



LOCATION PLAN

NOT TO SCALE

DRAWING INDEX

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G–2	SUGGESTED CONSTRUCTION SEQUENCE
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C–1B	EXISTING CONDITIONS PLAN II
C–2A	EXISTING SLOPE ANALYSIS I
C–2B	EXISTING SLOPE ANALYSIS II
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C–4	GEOTECHNICAL PROFILES II
C–5	GEOTECHNICAL PROFILES III
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C–7	DEMOLITION AND CLEARING PLAN II
C–8A	LAYOUT AND MATERIALS PLAN I
C–8B	LAYOUT AND MATERIALS PLAN II
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C–11	FOUNDATION GROUTING SECTIONS
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C–13B	DEWATERING AND STORMWATER BYPASS PLAN II
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C–14B	GRADING PLAN II
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C–16	TOE DRAIN PLAN AND PROFILE
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C–19	LAKE SEDIMENT SECTIONS I
C–20	LAKE SEDIMENT SECTIONS II
C–21	LAKE SEDIMENT SECTIONS III
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C–24	EROSION AND SEDIMENTATION CONTROL PLAN PHASE 2 – AREA 1
C–25	EROSION AND SEDIMENTATION CONTROL PLAN PHASE 2 – AREA 2
C–26	EROSION AND SEDIMENTATION CONTROL PLAN PHASE 3 – AREA 1
C–27	EROSION AND SEDIMENTATION CONTROL PLAN PHASE 3 – AREA 2
C–28	FISH HABITAT AND STRUCTURES PLAN I
C–29	FISH HABITAT AND STRUCTURES PLAN II
C–30	TREE PLANTING PLAN I
C–31	TREE PLANTING PLAN II
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ED–2	ELECTRICAL DETAILS

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PROJECT NUMBER: 736426

14915–237520

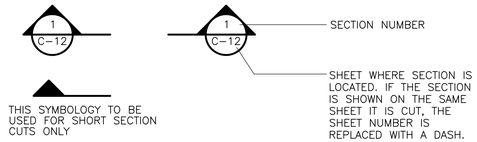
ABBREVIATIONS

#	NUMBER
&	AND
ø	DIAMETER
APPROX	APPROXIMATE
BFV	BUTTERFLY VALVE
BLDG	BUILDING
C&G	CURB AND GUTTER
CFS	CUBIC FEET PER SECOND
CONC	CONCRETE
DET	DETAIL
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DISCH	DISCHARGE
DWG	DRAWING
EA	EACH
ECM	EROSION CONTROL MATTING
ELEV	ELEVATION
ELEC	ELECTRIC
EOP	EDGE OF PAVING
EQUIP	EQUIPMENT
ESMT	EASEMENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR/EXTENDED
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH (ED)
FLG	FLANGE
FLR	FLOOR
FLEX	FLEXIBLE
FT	FOOT/FEET
FTG	FOOTING
GN	GROUND
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GR	GRADE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCH (ES)
INV	INVERT
JT	JOINT
LB(S)	POUND (S)
LG	LONG
MATL	MATERIAL
MFD	MANUFACTURED
MFG	MANUFACTURING
MFR/MFGR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
NIC	NOT IN CONTRACT
NOM	NOMINAL
NRCS	NATURAL RESOURCES CONSERVATION SERVICE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD UTILITIES
OPNG	OPENING
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PERF	PERFORATED
PL	PROPERTY LINE
PS	PUMP STATION
PVC	POLYVINYL CHLORIDE
ROW	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REINF	REINFORCING
REQ'D	REQUIRED
RW	RAW WATER
SCH	SCHEDULE
SD	STORM DRAIN
SEC	SECTION
SF	SILT FENCE
SHT	SHEET
S/W	SIDEWALK
SQ	SQUARE
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD/STND	STANDARD
TC	TOP OF CONCRETE
TDEC	TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TDOT	TENNESSEE DEPARTMENT OF TRANSPORTATION
THK	THICK
TRM	TURF REINFORCEMENT MATTING
TSP	TOP OF SHEETPILE
TW	TOP OF WALL
TYP	TYPICAL
UNK	UNKNOWN
W	WIDTH
W/	WITH
WL	WATER LEVEL
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
WTP	WATER TREATMENT PLANT

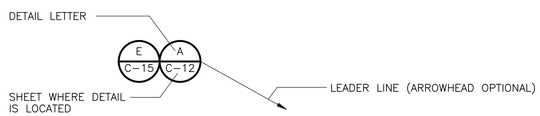
LEGEND

	EXISTING BUILDING/STRUCTURE
	EXISTING INTERMEDIATE CONTOUR
250	EXISTING INDEX CONTOUR
645.0	EXISTING SPOT ELEVATION
1.2	SEDIMENT THICKNESS IN FEET
	PROPERTY LINE
	WATERLINE
100 FP	100-YEAR FLOODPLAIN
FW FW	FLOODWAY
	WETLANDS
	EXISTING GRAVEL ROAD
	EXISTING RIPRAP
X X	EXISTING FENCE
OHP OHP	EXISTING OVERHEAD POWER
OHT OHT	EXISTING OVERHEAD TELEPHONE
18" RCP	EXISTING STORM DRAIN
LOD LOD	LIMITS OF DISTURBANCE
	PROPOSED INTERMEDIATE CONTOUR
250	PROPOSED INDEX CONTOUR
SF SF	SILT FENCE
X X	CHAINLINK FENCE
	SHEETING
	EMBANKMENT SLOPES
	TURBIDITY CURTAIN
B-101	TEST BORING 2019
W-101	GROUNDWATER OBSERVATION WELL 2019
CDM-1	TEST BORING (APPROX. LOCATION) 2017
	EXISTING CONTROL POINT
	EXISTING BENCHMARK
MON	EXISTING PROPERTY MONUMENT
	EXISTING DECIDUOUS TREE
D	EXISTING STORM DRAIN MANHOLE
PP	EXISTING POWER POLE
TP	EXISTING TELEPHONE POLE
LS	EXISTING LIGHTING
EJB	EXISTING ELECTRICAL BOX
FOB	EXISTING FIBER OPTIC BOX
	EXISTING DRAIN INLET
SN	EXISTING SIGN
	ZONE 1 BUFFER
	ZONE 2 BUFFER

SECTION CUT SYMBOLS



DETAIL CALL OUT SYMBOLS



WHERE A NOTE IS REQUIRED FOR CLARITY, A/C-12 FORMAT IS USED IN THE NOTE INSTEAD OF BUBBLE. IF MULTIPLE DETAILS REFER TO THE SAME AREA OF THE DRAWING, THE BUBBLES ARE STACKED SIDE BY SIDE.

DRAWING, SECTION AND DETAIL TITLES

SUBTITLE OR DESCRIPTION (AS REQ'D)

PLAN

1" = 20'
(VARIES)

SECTION — 1/8" = 1'-0" — 1 / S-6
SECTION NUMBER
SHEET WHERE SECTION CUT IS TAKEN *

DETAIL — 1/4" = 1'-0" — A / A-3
DETAIL LETTER
SHEET WHERE DETAIL IS TAKEN *

* IF SECTION, DETAIL OR DIAGRAM IS DRAWN ON THE SAME SHEET THAT IT IS TAKEN FROM, THE SHEET NUMBER IS REPLACED WITH A HYPHEN. IF THE SECTION IS REFERENCED ON MULTIPLE SHEETS, THE SHEET NUMBER SHOWN INDICATES THE FIRST SHEET THE SECTION IS TAKEN FROM.

GENERAL NOTES

ABBREVIATIONS ON THIS SHEET APPLY TO "G" AND "C" SHEETS.

WHERE NOTED, "RIGHT" AND "LEFT" CONVENTION SHALL BE CONSIDERED AS LOOKING DOWNSTREAM FROM THE DAM AND SPILLWAYS.

UTILITIES

UTILITIES ARE ILLUSTRATED FOR INFORMATION PURPOSES ONLY. THE ENGINEER WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF UTILITY LOCATIONS, SIZES, AND DEPTHS, OR FOR COMPLETENESS OF UTILITY INFORMATION.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS WHOSE FACILITIES WILL BE AFFECTED TO DETERMINE UTILITY LOCATIONS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS. THE CONTRACTOR SHALL HOLD THE CITY HARMLESS FOR ANY THIRD-PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS.

AT&T REGIONAL FIBER OPTIC LINE RUNS ALONG THE WESTERN PROPERTY LINE.

- FOR UTILITY LOCATIONS CALL TENNESSEE 811 @ 1-800-351-1111.
- FOR LOCATION OF UTILITIES NOT MEMBERS OF TENNESSEE 811, CONTACT UTILITY OWNER.

INSPECTIONS

ALL WORK SHALL BE SUBJECT TO AND AVAILABLE FOR OBSERVATION BY THE ENGINEER AND THE CITY OF FRANKLIN. NO WORK, WHETHER ON PUBLIC OR PRIVATE PROPERTY, SHALL BE ACCEPTED UNTIL IT IS INSPECTED AND APPROVED BY THE ENGINEER OR THE CITY OF FRANKLIN.

GRASSED SURFACE RESTORATION

ALL EXISTING GRASSED AREAS DISTURBED DURING CONSTRUCTION ARE TO BE SEEDED AND MULCHED PER THE SPECIFICATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE CITY OF FRANKLIN.

EROSION AND SEDIMENTATION CONTROL

THE CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, PREVENT EROSION, SEDIMENT TRANSPORT, AND ANY STANDING WATER DUE TO CONSTRUCTION. ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE DRAWINGS SPECIFICATIONS, THE CITY OF FRANKLIN STANDARD, AND TDEC REQUIREMENTS. ALL REPORTING, INSPECTING, AND RECORD KEEPING IS THE RESPONSIBILITY OF THE CONTRACTOR.

DEWATERING AND STORMWATER BYPASS SYSTEM

CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING A TEMPORARY STORMWATER BYPASS SYSTEM TO DIVERT STORMWATER FLOWS FROM THE LAKE BED TO AND DEWATER TO MAINTAIN WORK AREAS IN A DRAINED CONDITION. BASEFLOW INTO THE LAKE IS ASSUMED TO BE 0.5 CUBIC FEET PER SECOND. OUTLET OF BYPASS PIPE MUST BE PROTECTED FROM EROSIVE VELOCITIES (USING A SEDIMENT BAG OR OTHER MEASURES).

EXCAVATION SHALL BE PERFORMED "IN-THE-DRY". DEFINED AS A SUBGRADE WHERE THE GROUNDWATER LEVEL HAS BEEN LOWERED 2 FT BELOW THE LOWEST LEVEL OF THE EXCAVATION, IS STABLE WITH NO PONDED WATER, MUD, OR MUCK, IS ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT RUTTING OR DISTURBANCE AND IS SUITABLE FOR THE PLACEMENT AND COMPACTION OF FILL MATERIAL, PIPE OR CONCRETE FOUNDATIONS.

CONTRACTOR IS RESPONSIBLE FOR PREVENTING DOWNSTREAM SILT MIGRATION AND EROSION FROM THE TEMPORARY STORMWATER BYPASS SYSTEM AND DEWATERING MEASURES. AT A MINIMUM DEWATERING AND STORMWATER DIVERSION FLOWS SHALL BE DIRECTED TO A STONE CHECK DAM PRIOR TO DISCHARGING DOWNSTREAM OF THE DAM.

CONSTRUCTION EQUIPMENT

CONSTRUCTION EQUIPMENT SHALL BE OF A TYPE AND SIZE THAT WILL MINIMIZE DAMAGE TO SURROUNDING AREAS, PAVEMENT, TREES, UTILITIES, AND OTHER FEATURES DURING CONSTRUCTION.

TREES, SHRUBS, HEDGES, AND ROOT BALLS

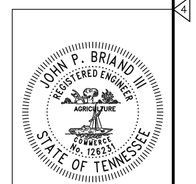
THE CONTRACTOR SHALL REMOVE ALL TREES, SHRUBS, HEDGES AND ROOT BALLS FROM THE DAM AND ABUTMENTS IN THE AREA OF REGRADING ONLY.

THE CONTRACTOR SHALL PROTECT ALL TREES, SHRUBS, AND HEDGES OUTSIDE OF CUT/FILL LINES, IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO TO SAVE ALL OTHER EXISTING TREES, SHRUBS, AND HEDGES WHERE POSSIBLE.

WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY COVER ALL ROOT CUT SURFACES, LARGER THAN TWO INCHES IN DIAMETER, WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK. STUMP AND ROOT BALL SHALL BE REMOVED BY CONTRACTOR PER SPECIFICATIONS.

PROJECT LIMITS

LIMITS OF DISTURBANCE ARE DEFINED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL LIMIT ALL DISTURBANCE TO WITHIN THE LIMITS OF DISTURBANCE.



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: B. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

GENERAL NOTES

PROJECT NO. 14915-237520
FILE NAME: G0001GNFG

SHEET NO.
G-1

ISSUED FOR BID

SUGGESTED CONSTRUCTION SEQUENCE

1. THE FOLLOWING WAS DEVELOPED TO SHOW A LOGICAL SEQUENCE OF CONSTRUCTION AND IS CONSISTENT WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PERMIT. IF ALTERNATE STORMWATER BYPASS PLANS ARE PROPOSED BY THE CONTRACTOR, THEY WILL BE RESPONSIBLE TO OBTAIN THE REQUIRED PERMIT MODIFICATIONS WITHOUT IMPACTING THE COMPLETION DATE OF THE PROJECT.
2. PRIOR TO ANY CONSTRUCTION ACTIVITY, SECURE ALL REQUIRED PERMITS.
3. PRIOR TO ANY CONSTRUCTION ACTIVITY, NOTIFY TENNESSEE 811 AND ALL UTILITY OWNERS WHOSE FACILITIES WILL BE AFFECTED TO DETERMINE UTILITY LOCATIONS.
4. PRIOR TO ANY CONSTRUCTION ACTIVITY, CONTACT CITY OF FRANKLIN TO SCHEDULE A PRE–CONSTRUCTION MEETING AND HOLD MEETING AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
5. PERFORM SITE LAYOUT AND INSTALL TREE PROTECTION FENCE AND CONSTRUCTION FENCE ALONG THE LIMITS OF DISTURBANCE.
6. COORDINATE WITH THE CITY OF FRANKLIN TO SURVEY THE EXISTING DAM, AUXILIARY SPILLWAY, UPSTREAM AREAS, DOWNSTREAM AREAS, AND THE LAKE BED. THE SURVEY SHALL EXTEND TO THE CONSTRUCTION LIMITS.
7. INSTALL EROSION AND SEDIMENTATION CONTROL DEVICES INCLUDING STABILIZED CONSTRUCTION ENTRANCE AND SILT FENCE. INSTALL TURBIDITY BARRIER AT THE CHANNEL DISCHARGE TO THE HARPETH RIVER. MAINTAIN THE FOUR EXISTING CHECK DAMS DOWNSTREAM OF THE DAM. ADD ADDITIONAL RIPRAP AS NECESSARY TO MAINTAIN THE CHECK DAMS IN WORKING ORDER.
8. CLEAR AND GRUB VEGETATION, AS SHOWN ON SHEETS C–6 AND C–7, INCLUDING TREES AND SHRUBS DOWNSTREAM OF THE DAM AND ON THE UPSTREAM AND DOWNSTREAM SLOPES OF THE DAM EMBANKMENT. STABILIZE DISTURBED AREAS WITH TEMPORARY SEED OR EROSION CONTROL MATTING, AS REQUIRED.
9. PERFORM SUBSURFACE EXPLORATION PROGRAM AND PERFORM SEDIMENT TESTING AS SPECIFIED IN SECTION 312319.
10. PERFORM PRESSURE GROUTING AS SHOWN ON C–10 AND C–11 AND AS SPECIFIED IN SECTION 314314.
11. LOWER, EXPAND, AND ADD RIPRAP TO THE BREACH CHANNEL AS SHOWN ON SHEET C–13A.
12. REMOVE SEDIMENT IN LAKE TO TOP OF OVERBURDEN SOILS OR FINAL GRADES SHOWN ON C–14A AND C–14B, WHICHEVER IS ENCOUNTERED FIRST.
13. DEWATERING AND BYPASS PUMPING SHALL BE DISCHARGED TO A TEMPORARY DEWATERING STRUCTURE WITHOUT TREATMENT UNTIL THE PUMP EFFLUENT IS OBSERVED TO BE VISIBLY TURBID, OR THE TURBIDITY IS MEASURED TO BE IN EXCESS OF 50 NEPHELOMETRIC TURBIDITY UNITS (NTU). ONCE TURBID EFFLUENT IS OBSERVED, DEWATERING SHALL CONTINUE BY DISCHARGING PUMP EFFLUENT INTO A SEDIMENT BAG. MAXIMUM PUMPING RATE SHALL NOT EXCEED THE BAG CAPACITY. BASEFLOW INTO THE LAKE IS ASSUMED TO BE 0.5 CUBIC FEET PER SECOND.
14. PROPERLY DISPOSE OF SEDIMENTS, EARTHEN MATERIALS, AND OTHER DEBRIS REMOVED FROM THE LAKE BED. THIS SHALL INCLUDE ANY DRYING OR SOIL CONDITIONING OR ADDITIONAL TESTING REQUIRED FOR TRANSPORT AND DISPOSAL. ALL MATERIAL SHALL BE HAULED TO THE CITY OF FRANKLIN'S FUTURE SE PARK AND STOCKPILED AND STABILIZED ON SITE AT A LOCATION IDENTIFIED BY CITY OF FRANKLIN STAFF.
15. CREATE WORK AREA AND STABLE FOUNDATION FOR THE PHASE 1 TEMPORARY COFFERDAM, AS SHOWN ON C–13A, REMOVE ADDITIONAL SEDIMENT AND SOIL AT THE DIRECTION OF THE ENGINEER. EXCAVATION SHALL BE PERFORMED "IN–THE–DRY". DEFINED AS A SUBGRADE WHERE THE GROUNDWATER LEVEL HAS BEEN LOWERED 2 FT BELOW THE LOWEST LEVEL OF THE EXCAVATION, IS STABLE WITH NO PONDED WATER, MUD, OR MUCK, IS ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT RUTTING OR DISTURBANCE AND IS SUITABLE FOR THE PLACEMENT AND COMPACTION OF FILL MATERIAL, PIPE, AND CONCRETE FOUNDATION. EMPLOY SURFACE DRAINAGE AND SUBSURFACE DEWATERING MEASURES TO MAINTAIN WORK AREAS IN–THE–DRY, AS SPECIFIED IN SECTION 312319.
16. COORDINATE WITH THE CITY OF FRANKLIN TO PERFORM A TOPOGRAPHIC SURVEY IN LAKE.
17. PROOFROLL COFFERDAM FOOTPRINT WITH A MINIMUM OF FOUR PASSES AS SPECIFIED IN SECTION 312000 AND REMOVE UNSUITABLE MATERIALS AT THE DIRECTION OF THE ENGINEER PRIOR TO CONSTRUCTING THE COFFERDAM.
18. CONSTRUCT PHASE 1 TEMPORARY COFFERDAM AS SHOWN ON C–13A.
19. TEMPORARY SEED EXPOSED LAKE BOTTOM WITHIN CONSTRUCTION LIMITS, AS DIRECTED BY THE CITY OF FRANKLIN.
20. EXCAVATE EAST SIDE OF EXISTING EARTHEN DAM AND SPILLWAY AREA, AS SHOWN ON C–13A.
21. CONSTRUCT NEW NRCS SPILLWAY RISER, DISCHARGE PIPE, AND IMPACT STILLING BASIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO SURVEY AND CONTROL THE WORK SUCH THAT THE NEW NRCS SPILLWAY STRUCTURE IS CONSTRUCTED TO THE LINES AND GRADES SHOWN. FOR THE NEW NRCS SPILLWAY, THE ELEVATION OF THE INTAKE WEIRS SHALL BE FIELD VERIFIED BY AN INDEPENDENT THIRD–PARTY SURVEYOR PRIOR TO CONCRETE PLACEMENT AND IMMEDIATELY FOLLOWING CONCRETE PLACEMENT.
22. BACKFILL AND CONSTRUCT EAST SIDE OF DAM INCLUDING INSTALLATION OF CHIMNEY, BLANKET, AND TOE DRAIN. INSTALL PERMANENT DOWNSTREAM CHANNEL RIPRAP PROTECTION AS SHOWN ON C–14A.
23. REMOVE PHASE 1 COFFERDAM, INSTALL TEMPORARY INLET PROTECTION AT THE LOW–LEVEL OUTLET OF THE NRCS RISER STRUCTURE, AND DIRECT BASEFLOW INTO THE LOW–LEVEL OUTLET TO BEGIN PHASE 2 DIVERSION. GATE SHALL REMAIN FULLY–OPEN DURING PHASE 2 DIVERSION.
24. CREATE WORK AREA AND STABLE FOUNDATION FOR THE PHASE 2 TEMPORARY COFFERDAM, AS SHOWN ON C–13B, REMOVE ADDITIONAL SEDIMENT AND SOIL AT THE DIRECTION OF THE ENGINEER.
25. PROOFROLL COFFERDAM FOOTPRINT WITH A MINIMUM OF FOUR PASSES AS SPECIFIED IN SECTION 312000 AND REMOVE UNSUITABLE MATERIALS AT THE DIRECTION OF THE ENGINEER PRIOR TO CONSTRUCTING THE COFFERDAM.
26. CONSTRUCT PHASE 2 TEMPORARY COFFERDAM AS SHOWN ON C–13B.
27. EXCAVATE WEST SIDE OF EXISTING EARTHEN DAM, AS SHOWN ON C–13B.
28. BACKFILL AND CONSTRUCT WEST SIDE OF DAM INCLUDING INSTALLATION OF CHIMNEY, BLANKET, AND TOE DRAIN.
29. REMOVE PHASE 2 COFFERDAM.
30. DEMOLISH AUXILIARY SPILLWAY AND REMOVE RIPPABLE ROCK. COORDINATE WITH THE CITY OF FRANKLIN TO PERFORM A TOPOGRAPHIC SURVEY OF THE TOP OF SOUND ROCK.
31. REMOVE SOUND ROCK AS REQUIRED TO INSTALL THE PROPOSED AUXILIARY SPILLWAY CHANNEL AND UNDERDRAIN, AS SPECIFIED IN SECTION 312316.
32. INSTALL AUXILIARY SPILLWAY INCLUDING UNDERDRAIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO SURVEY AND CONTROL THE WORK SUCH THAT THE NEW AUXILIARY SPILLWAY STRUCTURE IS CONSTRUCTED TO THE LINES AND GRADES SHOWN. FOR THE NEW AUXILIARY SPILLWAY, THE ELEVATION OF THE WEIR SHALL BE FIELD VERIFIED BY AN INDEPENDENT THIRD–PARTY SURVEYOR PRIOR TO CONCRETE PLACEMENT AND IMMEDIATELY FOLLOWING CONCRETE PLACEMENT.
33. INSTALL PEDESTRIAN BRIDGE AS SPECIFIED IN SECTION 323413.
34. INSTALL ARTICULATING CONCRETE BLOCK MATS, AS SHOWN ON C–14A.
35. REGRADE, RESTORE AND STABILIZE UPSTREAM AND DOWNSTREAM SLOPES AND CREST OF DAM.
36. INSTALL CONCRETE PEDESTRIAN PATHWAY ON CREST.
37. INSTALL SOD ON UPSTREAM AND DOWNSTREAM SLOPES, AS SHOWN ON C–26.
38. REMOVE ALL MATERIALS AND EQUIPMENT FROM LAKE, DAM, AND DOWNSTREAM AREA, INCLUDING TEMPORARY EROSION CONTROL MEASURES. UPON RECEIPT OF PERMIT TO IMPOUND FROM TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LOWER GATE, AS DIRECTED BY ENGINEER.

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: B. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

SUGGESTED CONSTRUCTION SEQUENCE

PROJECT NO. 14915–237520
FILE NAME: G0002GNCS

SHEET NO.
G-2

ISSUED FOR BID

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MATCH LINE SEE SHEET C-1B FOR CONTINUATION

PROPOSED ZONE 2 RIPARIAN BUFFER
EXISTING ZONE 2 BUFFER
PROPOSED ZONE 1 RIPARIAN BUFFER
EXISTING ZONE 1 BUFFER
100 YEAR FLOODPLAIN
500 YEAR FLOODPLAIN
TOP OF BANK
WATERLINE NORMAL POOL 640' (10.35 ACRES)
SEDIMENT THICKNESS IN FEET (TYP)
EXISTING DIKE
TEST BORING LOCATION (TYP)
OBSERVATION WELL LOCATION (TYP)
WETLAND TO BE PROTECTED
POWER LINE EASEMENT
REGIONAL FIBER OPTIC LINE SEE NOTE 8
FLOODWAY
BENCHMARK CP-1654
PK NAIL IN CONCRETE SPILLWAY
ELEV. 642.65
(NAVD-88)
EXPOSED ROCK SPILLWAY
METAL T-POST
TOP ELEV. = 643.34'
N: 568411.85
E: 1723414.38
PROPERTY LINE (TYP)
4' WOVEN WIRE FENCE
TVA TRANSMISSION LINE EASEMENT BOOK 4439, PAGE 813 R.O.W.C.
CHECK DAM
RIPRAP
HARPETH RIVER
BRUSH PILE
EXISTING EMBANKMENT DAM
WETLAND
WETLANDS TO BE REMOVED PER THE AQUATIC RESOURCE ALTERATION PERMIT
PROPOSED ZONE 1 RIPARIAN BUFFER
106 (186.00) CITY OF FRANKLIN BOOK 4576, PAGE 663 R.O.W.C.
INTERSTATE 65 FEDERAL AID PROJECT NO. I-65-2(23) 57 SHEETS 35-37
6' CHAIN LINK FENCE
GRAVEL ROAD
CITY OF FRANKLIN BK7268 PG403 MAP 089 PARCEL 48.08 (75.52 AC)
ROBINSON LAKE
SOIL STOCKPILE
(47.00 AC) CRESCENT LOCKWOOD, LLC BOOK 6362, PAGE 991 R.O.W.C.
GRAVEL ACCESS ROAD
SINKHOLE
MIDIGATE SINKHOLE
TDOT SINKHOLE TREATMENT 2A
24" CMP INV 643.73
CATCH BASIN RIM 657.54 INV IN 650.84 (N) INV IN 650.74 (E) INV OUT 650.64 (S)
CP-51 MAG NAIL IN ASPHALT EL: 657.41 N: 568818.03 E: 1724027.80
CARTHAGE BURNHAM (130' PUBLIC RIGHT OF WAY)
CATCH BASIN RIM 654.46 INV 648.76 (IN-N) INV 648.66 (OUT-S)
CATCH BASIN RIM 651.91 INV 646.11 (IN-N) INV 646.01 (OUT-S)
DBL CATCH BASIN RIM 651.25 INV 646.05 (OUT-S)
DBL CATCH BASIN RIM 650.75 INV 645.15 (IN-N) INV 644.95 (OUT-S)
DBL AREA DRAIN RIM 651.26 INV 643.96 (IN-E) INV 643.76 (OUT-W)
DBL AREA DRAIN RIM 651.18 INV 642.98 (IN-E) INV 642.78 (OUT-W)
DBL CATCH BASIN RIM 650.67 INV 644.57 (IN-S) INV 644.47 (IN-N) INV 644.17 (OUT-W)
CATCH BASIN RIM 650.78 INV 644.98 (IN-S) INV 644.78 (OUT-N)
8" CONC.
42" RCP INV 642.06
DETENTION BASIN
6" CONC. WALL
8" OPENING IN STRUCTURE EL 641.40
2'X2' SPILLWAY CUT EL 642.83
8" RCP INV 641.47 (OUT)
18" RCP INV 640.97
6" CONC. WALL
CATCH BASIN RIM 651.21 INV 645.81 (OUT-N)
CATCH BASIN RIM 650.97 INV 645.77 (IN-S) INV 645.67 (OUT-N)
CATCH BASIN RIM 651.57 INV 646.57 (IN-S) INV 646.37 (OUT-N)
TBM IRON ROD WITH CAP EL: 653.06 N: 568271.44 E: 1724270.35
CATCH BASIN RIM 652.23 INV 647.73 (OUT-N)
36" RCP INV 648.39
CATCH BASIN RIM 652.54 INV OUT 646.69 (S)
CATCH BASIN RIM 653.15
ACCESS GATE
TOP OF CONC. STRUCTURE C ELEV. 654.02
B-101 B-102 B-103 B-104 B-105 B-106 B-107 B-108 B-109 B-110
W-101 W-102
CDM-1 CDM-2 CDM-2A CDM-3 CDM-4
C-3 C-4 C-5 CD-12

N

1" = 50'
25 0 50

NOTES:

1. INFORMATION SHOWN HEREIN IS BASED ON TOPOGRAPHIC SURVEY PLANS PREPARED BY BWSC OF NASHVILLE, TENNESSEE, DATED SEPTEMBER 7, 2017; CIVIL INFRASTRUCTURE ASSOCIATES OF MURFREESBORO, TENNESSEE, DATED DECEMBER 9, 2019; AND CIVIL & ENVIRONMENTAL CONSULTANTS, INC. OF FRANKLIN, TENNESSEE DATED, OCTOBER 8, 2021.
2. WETLANDS WERE DELINEATED BY BWSC ON APRIL 20 AND 21, 2020.
3. HORIZONTAL DATUM IS THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83). VERTICAL DATUM IS NAVD-1988, USING GEOID 2003 FOR ORTHOMETRIC HEIGHT DETERMINATION.
4. TOPOGRAPHY GENERATED WITHIN THE DEWATERED ROBINSON LAKE WAS PRODUCED UTILIZING AN UNMANNED AERIAL SYSTEM (UAS) COLLECTED BY CIVIL & ENVIRONMENTAL CONSULTANTS (CEC) ON SEPTEMBER 24, 2021. CONTOURS DERIVED FROM A DIGITAL SURFACE MODEL CONSTRUCTED FROM UAS RECORDED ELEVATION POINTS, TOPOGRAPHIC CONTOURS MAPPED AT AN INTERVAL OF 1 FOOT.
5. SEDIMENT THICKNESS IS BASED UPON AN INVESTIGATION PERFORMED BY MER COMMERCIAL DIVING DIVISION OF MURRAY, KENTUCKY ON AUGUST 22 AND 23, 2019 BEFORE THE LAKE WAS DRAINED. TO MEASURE THE SEDIMENT THICKNESS, MER USED BODY WEIGHT TO PUSH A 1.5-INCH-DIAMETER METAL ROD AS FAR INTO THE SEDIMENT AS POSSIBLE. ACTUAL THICKNESS MAY VARY.
6. A PORTION OF THE SURVEY IS LOCATED WITHIN BOTH THE FLOODWAY AND 100-YEAR FLOODPLAIN AS SHOWN ON FEMA-FIRM MAP NO. 470206, PANEL NO. 0214 G, DATED DECEMBER 22, 2016.
7. THE AS-DRILLED BORING LOCATIONS WERE LOCATED BASED ON HAND-HELD GPS COORDINATES FOR THE CDM-1 SERIES TEST BORINGS AND SURVEY FOR THE B-101 SERIES TEST BORINGS.
8. THE REGIONAL FIBER OPTIC LINE WAS NOT LOCATED. THE CONTRACTOR IS REQUIRED TO LOCATE AND PROTECT THIS LINE FROM CONSTRUCTION ACTIVITIES, PRIOR TO CONSTRUCTION.
9. SEE SHEETS C-2A AND C-2B FOR EXISTING SLOPE ANALYSIS.

LEGEND

NATURAL WETLAND
100 FP — 100 YARD FLOODPLAIN
650 — EXISTING CONTOURS
ZONE 1 BUFFER
ZONE 2 BUFFER
EXISTING TREE
EXISTING DEAD TREE

JOHN P. BRIAND II REGISTERED ENGINEER AGRICULTURE COMMERCE No. 126231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

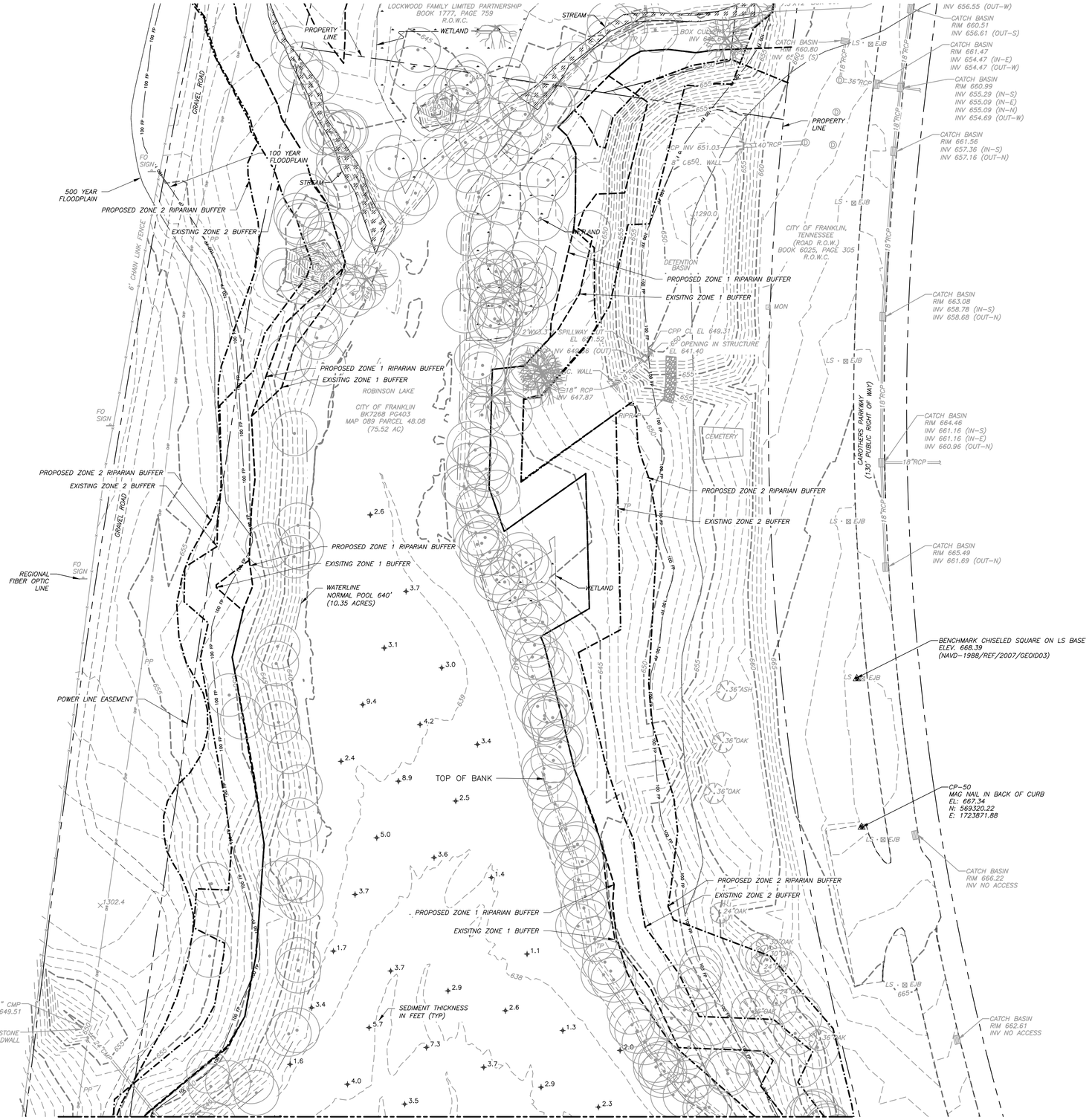
EXISTING CONDITIONS PLAN I

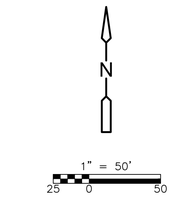
PROJECT NO. 14915-237520
FILE NAME: C001EXPL-A.DWG
SHEET NO. C-1A

ISSUED FOR BID

XREFs: [CDMS_2436, CEP000ST, CWP000ST, CWP004ST, Key Plan] Images: []
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LEGEND

- NATURAL WETLAND
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- EXISTING CONTOURS
- ZONE 1 BUFFER
- ZONE 2 BUFFER
- EXISTING TREE
- EXISTING DEAD TREE

NOTES

1. REFER TO NOTES ON C-1A.

JOHN P. BRIANO III
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AGRICULTURE
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

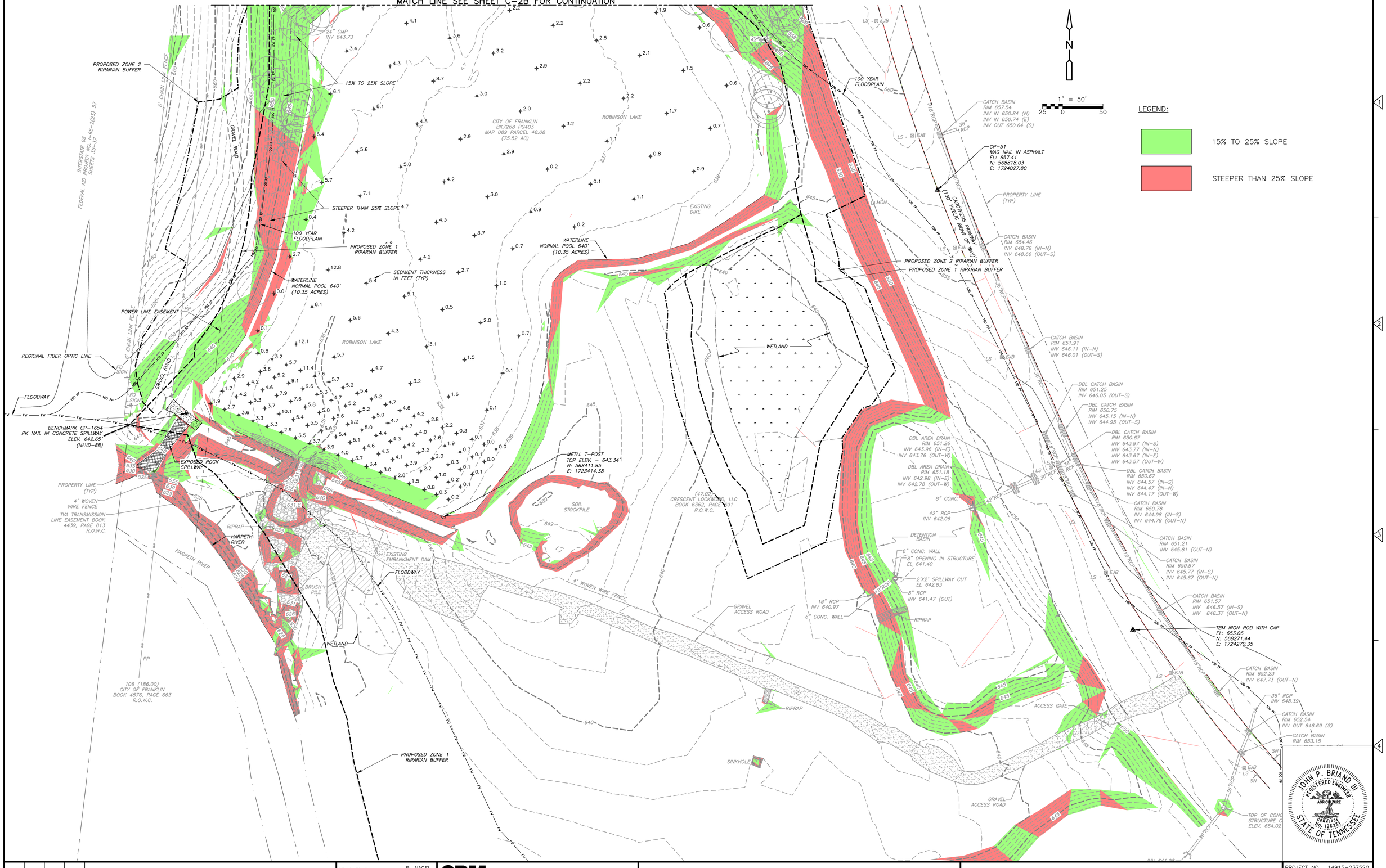
EXISTING CONDITIONS PLAN II

PROJECT NO. 14915-237520
FILE NAME: C001EXPL-B.DWG

SHEET NO.
C-1B

ISSUED FOR BID

MATCH LINE SEE SHEET C-2B FOR CONTINUATION



REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EXISTING SLOPE ANALYSIS I

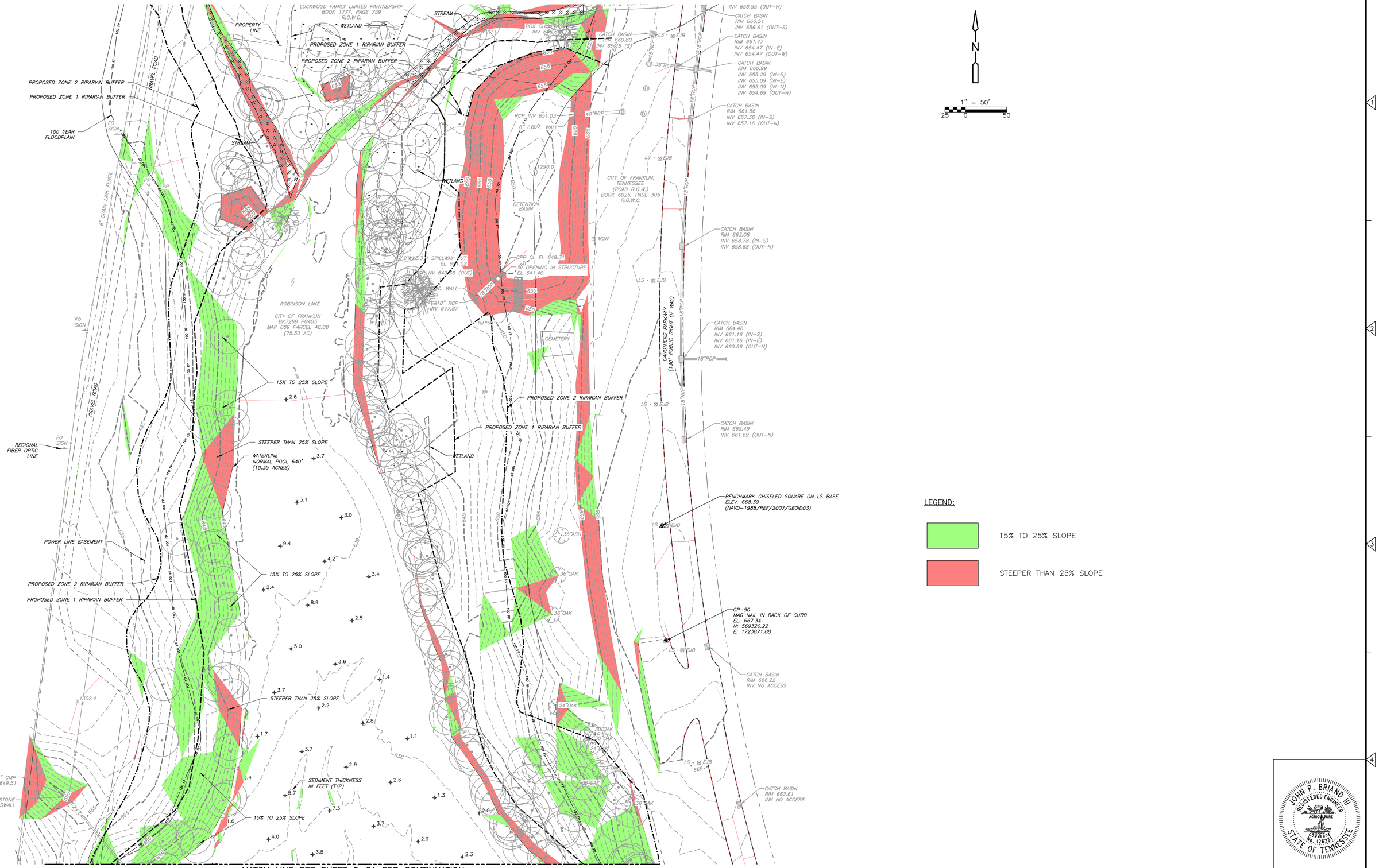
PROJECT NO. 14915-237520
FILE NAME: C002EXPL-A.DWG

SHEET NO.
C-2A

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
No. 126231
STATE OF TENNESSEE

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MATCH LINE SEE SHEET C-2A FOR CONTINUATION

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COMMERCE
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STATE OF TENNESSEE

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

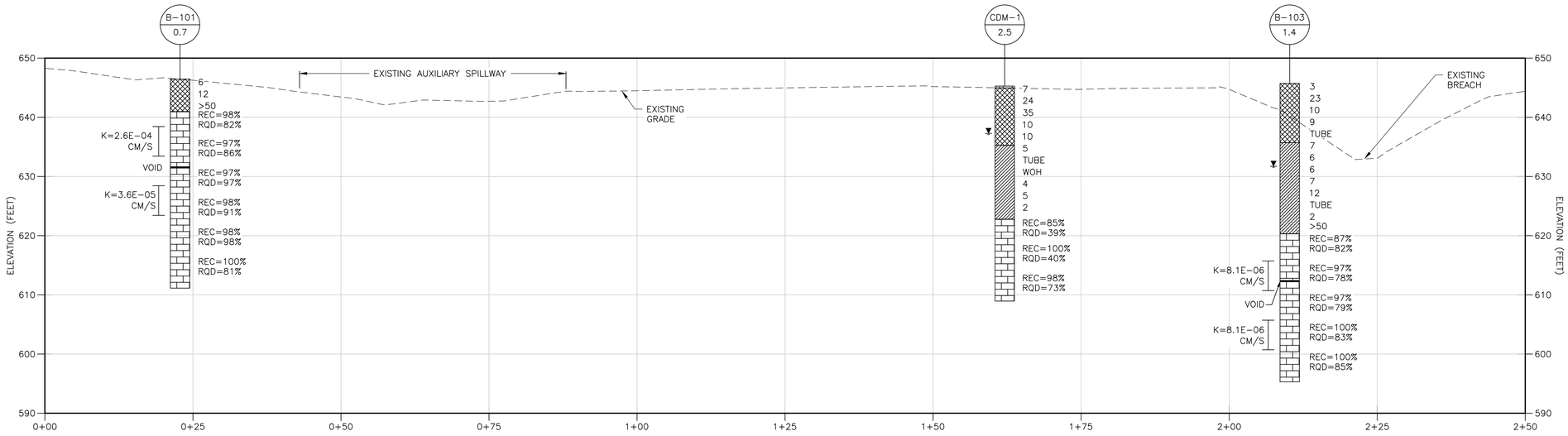
EXISTING SLOPE ANALYSIS II

PROJECT NO. 14915-237520
FILE NAME: C002EXPL-B.DWG

SHEET NO.
C-2B

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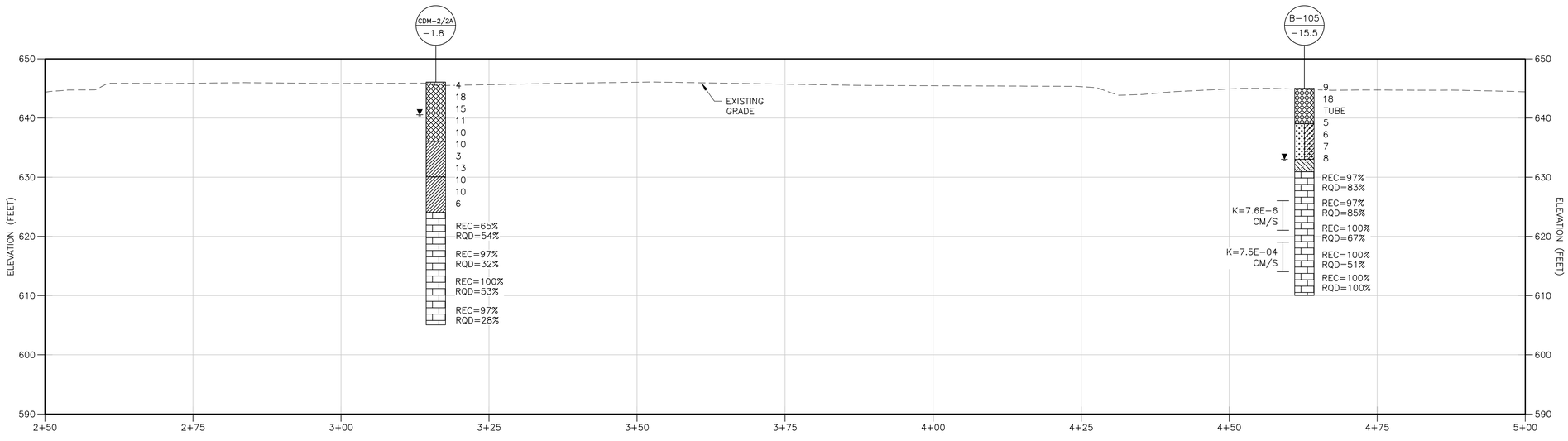


EXISTING EMBANKMENT DAM STA. 0+00 TO 2+50

SECTION 1 / C-1A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10



EXISTING EMBANKMENT DAM STA. 2+50 TO 5+00

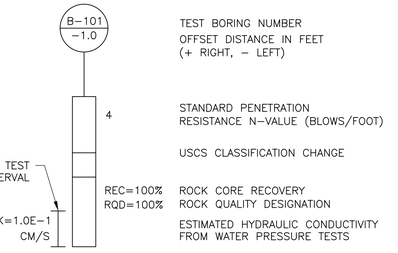
SECTION 1 / C-1A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LEGEND:

	FILL
	LIMESTONE
	VOID
	WELL-GRADED SAND WITH CLAY (SW-SC)
	CLAYEY SAND (SC)
	LOW PLASTICITY CLAY (CL)
	HIGH PLASTICITY CLAY (CH)
	CLAYEY GRAVEL (GC)
	TOPSOIL
	OBSERVED GROUNDWATER LEVEL
TUBE	SHELBY TUBE
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
>	GREATER THAN



TEST BORING NUMBER
OFFSET DISTANCE IN FEET
(+ RIGHT, - LEFT)

STANDARD PENETRATION RESISTANCE N-VALUE (BLOWS/FOOT)

USCS CLASSIFICATION CHANGE

ROCK CORE RECOVERY

ROCK QUALITY DESIGNATION

ESTIMATED HYDRAULIC CONDUCTIVITY FROM WATER PRESSURE TESTS

NOTES:

1. SUBSURFACE CONDITIONS ARE KNOWN ONLY AT THE TEST BORING LOCATIONS. CONDITIONS MAY VARY BETWEEN TEST BORING LOCATIONS.
2. GROUNDWATER LEVELS INDICATED ON TEST BORINGS WERE MEASURED AT TIME OF DRILLING AND MAY NOT REPRESENT STABILIZED LEVELS. GROUNDWATER LEVELS ARE EXPECTED TO FLUCTUATE WITH SEASON, TEMPERATURE, CLIMATE, AND OTHER FACTORS. ACTUAL GROUNDWATER CONDITIONS DURING CONSTRUCTION MAY VARY.
3. SEE C-1A FOR TEST BORING LOCATIONS.
4. DRILLING WAS PERFORMED BETWEEN SEPTEMBER 25 AND 27, 2017 FOR TEST BORINGS CDM-1 THROUGH CDM-4. DRILLING WAS PERFORMED BETWEEN JULY 23 AND AUGUST 1, 2019 FOR TEST BORINGS B-101 THROUGH B-110.
5. SOIL CLASSIFICATIONS BASED ON ASTM D2488 AND D2487.
6. REFER TO APPENDIX A (GEOTECHNICAL DATA) IN SPECIFICATIONS FOR WATER PRESSURE TESTING LOGS.

JOHN P. BRIAND
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DEPARTMENT OF AGRICULTURE
CROPSEY
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: Z. MICKEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: J. BRIAND
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

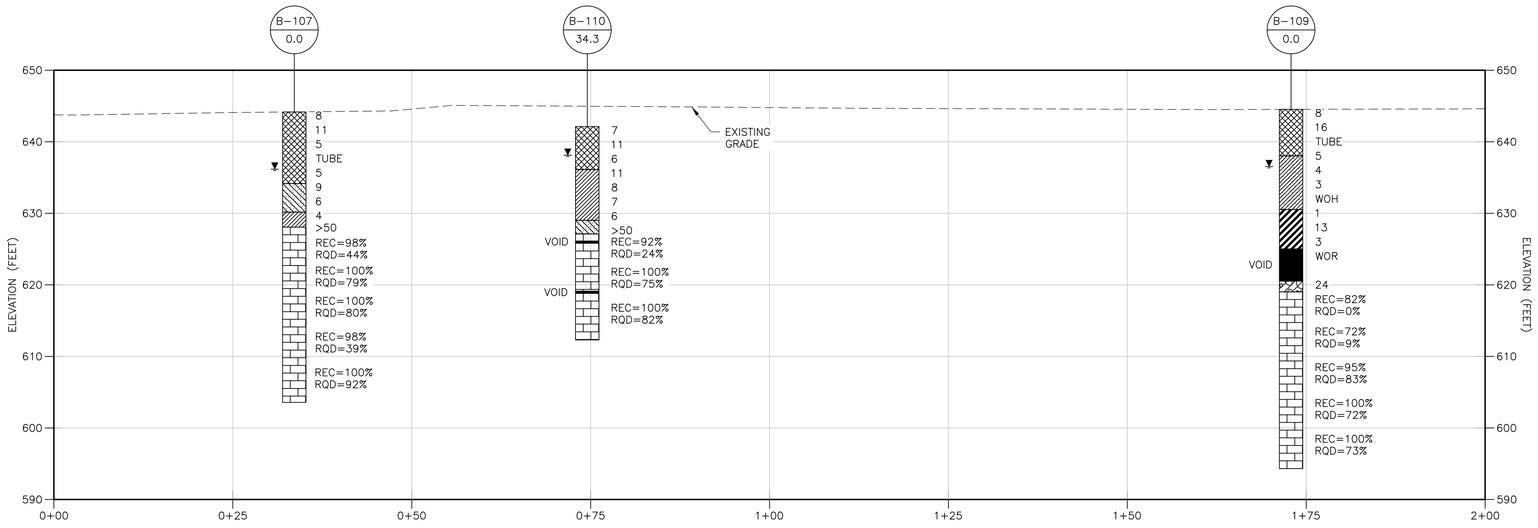
GEOTECHNICAL PROFILES I

PROJECT NO. 14915-237520
FILE NAME: C003EXSC.DWG

SHEET NO.
C-3

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EXISTING DIKE

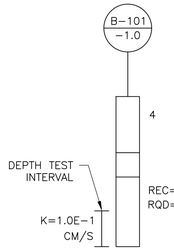
SECTION 2 C-1A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LEGEND:

- FILL
- LIMESTONE
- VOID
- WELL-GRADED SAND WITH CLAY (SW-SC)
- CLAYEY SAND (SC)
- LOW PLASTICITY CLAY (CL)
- HIGH PLASTICITY CLAY (CH)
- CLAYEY GRAVEL (GC)
- TOPSOIL
- OBSERVED GROUNDWATER LEVEL
- TUBE SHELBY TUBE
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- \> GREATER THAN



TEST BORING NUMBER
OFFSET DISTANCE IN FEET (+ RIGHT, - LEFT)

STANDARD PENETRATION RESISTANCE N-VALUE (BLOWS/FOOT)

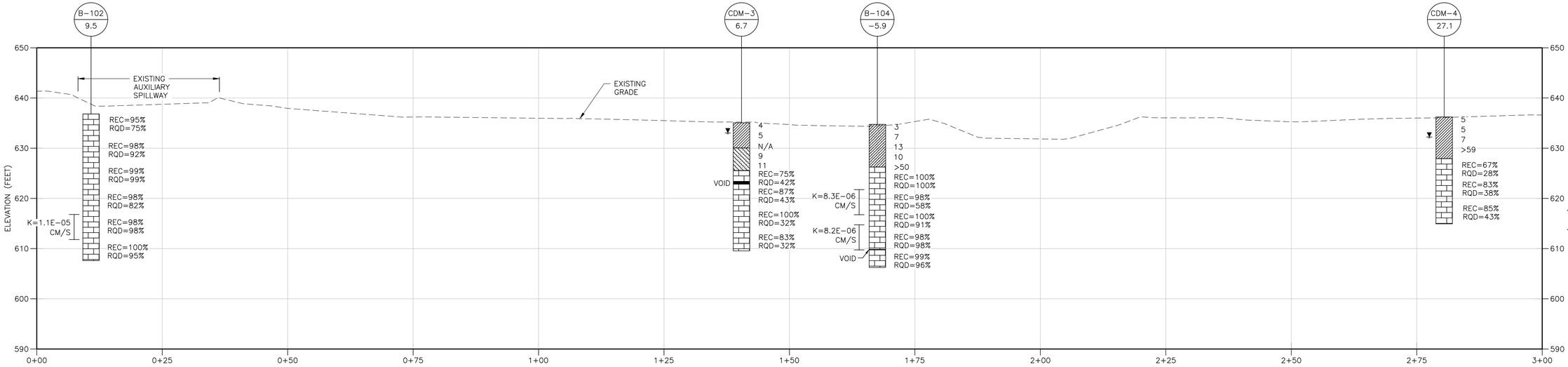
USCS CLASSIFICATION CHANGE

ROCK CORE RECOVERY
ROCK QUALITY DESIGNATION

ESTIMATED HYDRAULIC CONDUCTIVITY FROM WATER PRESSURE TESTS

NOTES:

1. REFER TO NOTES ON C-3.



EXISTING EMBANKMENT DAM DOWNSTREAM AREA

SECTION 3 C-1A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

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STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

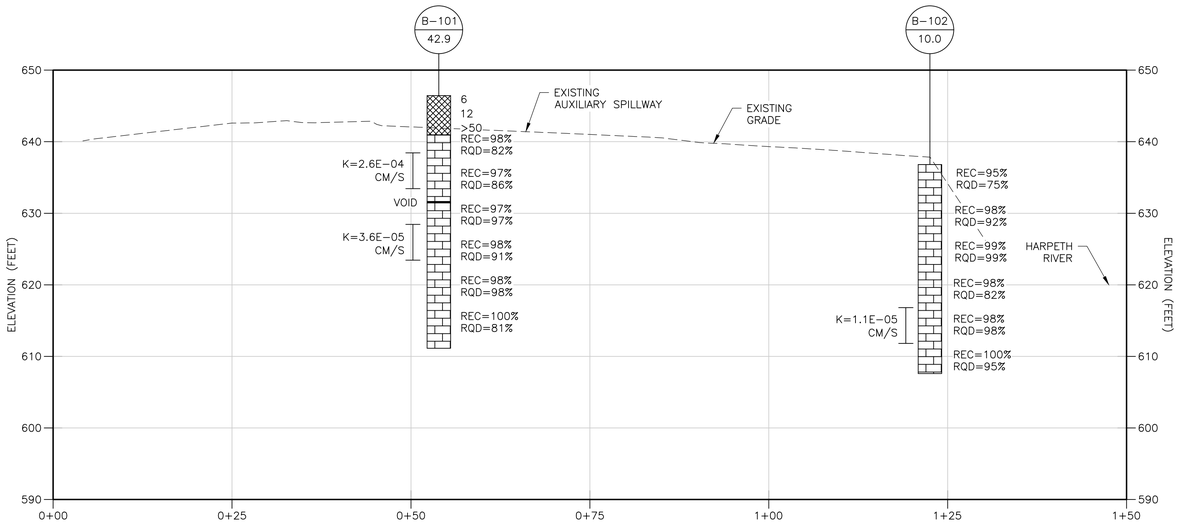
GEOTECHNICAL PROFILES II

PROJECT NO. 14915-237520
FILE NAME: C004EXSC.DWG

SHEET NO.
C-4

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EXISTING AUXILIARY SPILLWAY

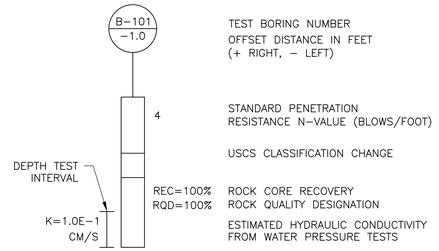
SECTION 4 / C-1A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LEGEND:

- FILL
- LIMESTONE
- VOID
- WELL-GRADED SAND WITH CLAY (SW-SC)
- CLAYEY SAND (SC)
- LOW PLASTICITY CLAY (CL)
- HIGH PLASTICITY CLAY (CH)
- CLAYEY GRAVEL (GC)
- TOPSOIL
- OBSERVED GROUNDWATER LEVEL
- TUBE SHELBY TUBE
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- > GREATER THAN



TEST BORING NUMBER
OFFSET DISTANCE IN FEET
(+ RIGHT, - LEFT)

STANDARD PENETRATION
RESISTANCE N-VALUE (BLOWS/FOOT)

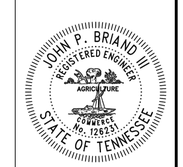
USCS CLASSIFICATION CHANGE

ROCK CORE RECOVERY
ROCK QUALITY DESIGNATION

ESTIMATED HYDRAULIC CONDUCTIVITY
FROM WATER PRESSURE TESTS

NOTES:

1. REFER TO NOTES ON C-3.
2. THE EXISTING CONTOURS AT THE EDGE OF THE HARPETH RIVER ARE APPROXIMATE DUE TO STEEP DROP-OFF TO RIVERBED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: Z. MICKEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: J. BRIAND
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

GEOTECHNICAL PROFILES III

PROJECT NO. 14915-237520
FILE NAME: C005EXSC.DWG

SHEET NO.
C-5

ISSUED FOR BID

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MATCH LINE SEE SHEET C-7 FOR CONTINUATION

REMOVE TWO DEAD RED CEDAR TREES

PROPOSED ZONE 1 RIPARIAN BUFFER

PROPOSED ZONE 2 RIPARIAN BUFFER

LIMITS OF DISTURBANCE

24" CMP INV 643.73

6' CHAIN LINK FENCE

FEDERAL AID # S 165-2(23) 57

100 YEAR FLOODPLAIN

WATERLINE NORMAL POOL 640' (10.35 ACRES)

ROBINSON LAKE

DEMOLISH AND REMOVE CONCRETE AUXILIARY SPILLWAY AND DEBRIS GUARD

APPROXIMATE LIMITS OF ROCK REMOVAL WITHIN FOOTPRINT OF AUXILIARY SPILLWAY (SEE NOTE 2)

FLOODWAY

BENCHMARK CP-1654 PK NAIL IN CONCRETE SPILLWAY ELEV. 642.65 (NAVD-88)

DEMOLISH AND REMOVE CONCRETE AND RIPRAP SLOPE PROTECTION

PROPERTY LINE (TYP)

4' WOVEN WIRE FENCE

TVA TRANSMISSION LINE EASEMENT BOOK 4439, PAGE 813 R.O.W.C.

DEMOLISH AND REMOVE POST

ABANDON EXISTING GROUNDWATER OBSERVATION WELL IN ACCORDANCE WITH TDEC STANDARDS

DEMOLISH AND REMOVE 4' WOVEN WIRE FENCE

MAINTAIN RIPRAP CHECK DAMS DURING CONSTRUCTION

HARPETH RIVER

REMOVE BRUSH PILE

106 (186.00) CITY OF FRANKLIN BOOK 4576, PAGE 663 R.O.W.C.

WETLAND TO BE REMOVED PER THE AQUATIC RESOURCE ALTERATION PERMIT

REMOVE TREES, SHRUBS, ROOTBALLS, AND STONES FROM THIS AREA

PROPOSED ZONE 1 RIPARIAN BUFFER

CITY OF FRANKLIN BK7268 PG403 MAP 089 PARCEL 48.08 (75.52 AC)

TOP OF BANK

LIMITS OF DISTURBANCE

REMOVE TREES, SHRUBS, HEDGES, ROOTBALLS, AND STONES FROM THIS AREA

WATERLINE NORMAL POOL 640' (10.35 ACRES)

ABANDON EXISTING GROUNDWATER OBSERVATION WELL IN ACCORDANCE WITH TDEC STANDARDS

WETLAND

METAL T-POST TOP ELEV. = 645.34' N: 580411.85 E: 1723914.38

CRESCENT LOOP ROAD, LLC BOOK 6382, PAGE 891 R.O.W.C.

PROPERTY LINE

ACCESS ROAD

6' CONC. WALL

MAINTAIN ACCESS ROAD DURING CONSTRUCTION REMOVE AFTER CONSTRUCTION

MAINTAIN RIPRAP OUTLET DURING CONSTRUCTION REMOVE AFTER CONSTRUCTION

SINKHOLE

C / CD-12 MIDIGATE SINKHOLE TDOT SINKHOLE TREATMENT 2A

REMOVE 3 TREES IN WAY OF PROPOSED PATH

100 YEAR FLOODPLAIN

CATCH BASIN RIM 657.54 INV IN 650.84 (N) INV IN 650.74 (E) INV OUT 650.64 (S)

18" RCP

16" RCP

CP-51 MAG NAIL IN ASPHALT EL: 657.41 N: 568818.03 E: 1724027.80

(130' PUBLIC RIGHT OF WAY)

PROPERTY LINE (TYP)

CATCH BASIN RIM 654.46 INV 648.76 (IN-N) INV 648.66 (OUT-S)

PROPOSED ZONE 1 RIPARIAN BUFFER

PROPOSED ZONE 2 RIPARIAN BUFFER

TOP OF BANK

WETLAND TO BE PROTECTED AND NOT BE DISTURBED AS REQUIRED BY AQUATIC RESOURCE ALTERATION PERMIT

CATCH BASIN RIM 651.91 INV 646.11 (IN-N) INV 646.01 (OUT-S)

DBL CATCH BASIN RIM 651.25 INV 646.05 (OUT-S)

DBL CATCH BASIN RIM 650.75 INV 645.15 (IN-N) INV 644.95 (OUT-S)

DBL CATCH BASIN RIM 650.67 INV 643.97 (IN-S) INV 643.77 (IN-N) INV 643.67 (IN-E) INV 643.57 (OUT-W)

DBL AREA DRAIN RIM 651.26 INV 643.96 (IN-E) INV 643.76 (OUT-W)

DBL AREA DRAIN RIM 651.18 INV 642.98 (IN-E) INV 642.78 (OUT-W)

DBL CATCH BASIN RIM 650.67 INV 644.57 (IN-S) INV 644.47 (IN-N) INV 644.17 (OUT-W)

8" CONC.

42" RCP INV 642.06

CATCH BASIN RIM 650.78 INV 644.98 (IN-S) INV 644.78 (OUT-N)

DETENTION BASIN

CATCH BASIN RIM 651.21 INV 645.81 (OUT-N)

6" CONC. WALL

8" OPENING IN STRUCTURE EL 641.40

CATCH BASIN RIM 650.97 INV 645.77 (IN-S) INV 645.67 (OUT-N)

2'X2' SPILLWAY CUT EL 642.83

8" RCP INV 641.47 (OUT)

PROTECT IN PLACE 18" RCP, HEADWALL, AND RIPRAP

18" RCP INV 640.00

6' CONC. WALL

RIPRAP

CATCH BASIN RIM 651.57 INV 646.57 (IN-S) INV 646.37 (OUT-N)

RELOCATE LIGHTING FOR DRIVEWAY

TBM IRON ROD WITH CAP EL: 653.06 N: 568271.44 E: 1724270.35

DEMOLISH AND REMOVE 4' WOVEN WIRE FENCE

CATCH BASIN RIM 652.23 INV 647.73 (OUT-N)

36" RCP INV 648.39

CATCH BASIN RIM 652.54 INV OUT 646.69 (S)

CATCH BASIN RIM 653.15

ACCESS GATE

GRAVEL ACCESS ROAD

TOP OF CONC. STRUCTURE EL. ELEV. 654.02

36" RCP

INV 641.98

N

1" = 50'

25 0 50

NOTES:

1. REFER TO C-3 AND APPENDIX A FOR TEST BORING DATA.
2. LIMITS OF SOUND ROCK EXCAVATION ARE APPROXIMATE AND MAY BE DIFFERENT THAN SHOWN.
3. EROSION AND SEDIMENTATION CONTROL PHASE I MEASURES SHALL BE INSTALLED PRIOR TO STARTING ANY DEMOLITION OR CONSTRUCTION. SEE C-22 AND C-23.
4. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE.

LIMITS OF DISTURBANCE		
POINT NO.	NORTHING	EASTING
1	568860.69	1723905.25
2	568805.85	1723915.24
3	568761.97	1723837.01
4	568715.57	1723741.19
5	568664.76	1723688.32
6	568564.04	1723695.66
7	568334.39	1723792.03
8	568393.19	1723917.57
9	568154.53	1724011.17
10	568238.17	1724200.64
11	568416.56	1724107.29
12	568449.77	1724174.30
13	568174.63	1724364.87

LIMITS OF DISTURBANCE		
POINT NO.	NORTHING	EASTING
14	568048.55	1724266.26
15	567985.16	1724061.02
16	567998.16	1723489.37
17	568194.42	1723383.76
18	568216.95	1723213.44
19	568319.68	1723165.57
20	568440.89	1723166.58
21	568467.00	1723104.07
22	568440.57	1723073.45
23	568464.88	1723016.34
24	568623.41	1723035.32
25	568664.79	1723076.54

LEGEND:

- AREA OF TREES, SHRUBS, HEDGES, ROOTBALLS, AND STONES TO BE REMOVED
- AREA OF PIPES AND STRUCTURES TO BE REMOVED
- APPROXIMATE LIMITS OF ROCK REMOVAL (SEE NOTES 1 AND 2)
- TREE REMOVAL

JOHN P. BRIAND REGISTERED ENGINEER AGRICULTURE CERTIFICATE No. 126231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

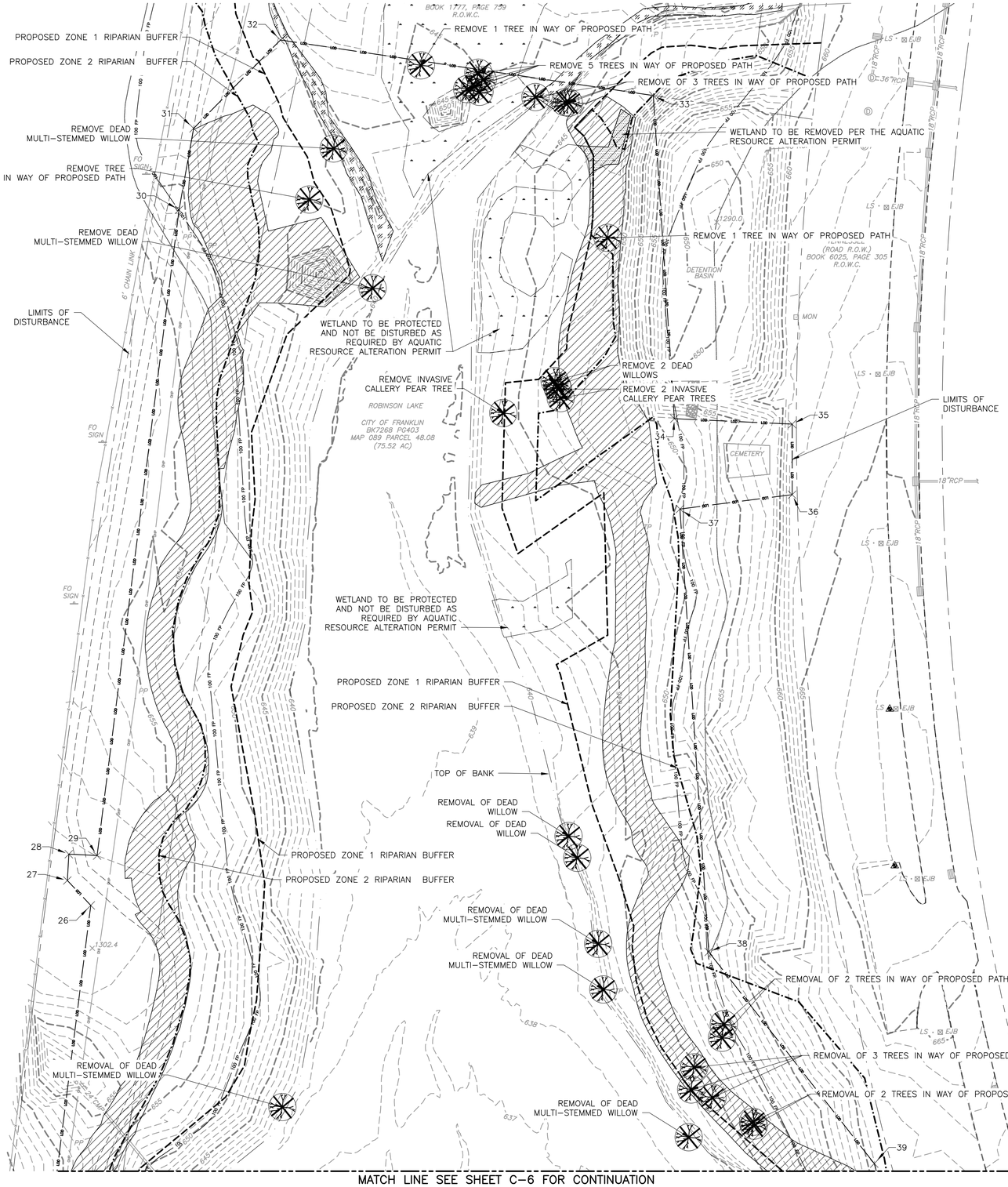
DEMOLITION AND CLEARING PLAN I

PROJECT NO. 14915-237520
FILE NAME: C006DMPL.DWG

SHEET NO.
C-6

ISSUED FOR BID

XREFs: [CDMS_2436, CEP000ST, GWP000ST, Key Plan, GWP004ST, CWP005ST, CWP009ST] Images: []
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MATCH LINE SEE SHEET C-6 FOR CONTINUATION

LEGEND:

AREA OF TREES, SHRUBS, HEDGES, ROOTBALLS, AND STONES TO BE REMOVED

AREA OF PIPES AND STRUCTURES TO BE REMOVED

TREE REMOVAL

NOTES:

1. SEE SHEET C-6 FOR NOTES.

LIMITS OF DISTURBANCE		
POINT NO.	NORTHING	EASTING
26	569284.90	1723155.22
27	569307.12	1723134.31
28	569330.58	1723135.65
29	569329.35	1723160.85
30	569905.01	1723233.90
31	569977.59	1723246.91
32	570056.38	1723324.30
33	570006.77	1723656.65
34	569718.84	1723675.44
35	569713.96	1723780.47
36	569651.05	1723780.47
37	569638.22	1723680.42
38	569243.45	1723706.07
39	569054.75	1723853.64

JOHN P. BRIANT III REGISTERED ENGINEER AGRICULTURE TENNESSEE No. 128231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

DEMOLITION AND CLEARING PLAN II

PROJECT NO. 14915-237520
FILE NAME: C007DMPL.DWG

SHEET NO.
C-7

ISSUED FOR BID

XREFs: [CDMS_2436, CEP000ST, CWP000ST, Key Plan, CWP005ST, CWP009ST] Images: []
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MATCH LINE SEE SHEET C-8B FOR CONTINUATION

PROPOSED ZONE 1 RIPARIAN BUFFER
PROPOSED ZONE 2 RIPARIAN BUFFER
LIMIT OF EXPANDED BUFFER
C CD-13 14' WIDE CONCRETE SIDEWALK (HEAVY DUTY)
INTERSTATE 65 FEDERAL AID PROJECT NO. I-65-7 SHEETS 35-37
PROPERTY LINE
F CD-8 STANDARD GROUND MOUNTED BUFFER SIGN (COF TO PROVIDE SIGN. CONTRACTOR TO PROVIDE POST/HARDWARE AND INSTALL.)
REMOVABLE BALLARD G CD-8
CONCRETE AUXILIARY SPILLWAY
NO VEHICLE ACCESS SIGN F CD-8
100 YEAR FLOODPLAIN
ARTICULATING CONCRETE BLOCK MAT FROM CREST TO EL 637 (STA 0+00 TO 5+00)
DAM CENTERLINE ALIGNMENT
48" PCCP INV 632.5
48" PCCP INV 631.5
NO VEHICLE ACCESS SIGN F CD-8
PEDESTRIAN BRIDGE
D CD-7 UNDERDRAIN OUTLET (TYP OF 3)
TOE DRAIN
G CD-8 REMOVABLE BALLARD
C CD-13 12' WIDE CONCRETE SIDEWALK (HEAVY DUTY) 22' WIDE CREST
IMPACT STILLING BASIN
E CD-7 RIPRAP-LINED DISCHARGE CHANNEL
D CD-13 6" DETACHED CONCRETE CURB
E CD-13 6" RIBBON CURB
F CD-8 STANDARD GROUND MOUNTED BUFFER SIGN (COF TO PROVIDE SIGN. CONTRACTOR TO PROVIDE POST/HARDWARE AND INSTALL.)
PROPOSED ZONE 1 RIPARIAN BUFFER
A CD-12 4" CONCRETE SIDEWALK (LIGHT DUTY)

TOP OF BANK
ROBINSON LAKE
F CD-13 12' WIDE CONCRETE SIDEWALK (LIGHT DUTY)
TRANSITION BETWEEN LIGHT DUTY AND HEAVY DUTY SIDEWALK
G CD-7 ARTICULATING CONCRETE BLOCK MAT FROM CREST TO EL 638 (STA 5+00 TO 10+40)
EXISTING WATERLINE (10.35 ACRES)
PROPOSED WATERLINE NORMAL POOL 640' (10.16 ACRES)
F CD-13 6' WIDE CONCRETE SIDEWALK (LIGHT DUTY)
NRCS RISER WEIR EL 640 (NORMAL POOL) LOW-LEVEL OUTLET EL 632.5
PADDLE DOCK BY OTHERS
F CD-14 10' WIDE CONCRETE STAIR WITH HANDRAILS
M SD-1 14' WIDE BOAT RAMP
REMOVABLE BALLARD G CD-8
LIMIT OF 6" DETACHED CONCRETE CURB
B CD-14 PARKING BLOCK
D CD-8 ACCESSIBLE PARKING AREA
A CD-14 ACCESSIBLE PARKING SIGN TYP OF 6
C CD-13 CONCRETE SIDEWALK/TRAIL (HEAVY DUTY)
LIMIT OF 6" DETACHED CONCRETE CURB
TACTILE STRIP
G CD-8 REMOVABLE BALLARD TYP. 2
LIMIT OF 6" DETACHED CONCRETE CURB
I CD-10 13' x 13' X 10" CONCRETE PAD LIGHT DUTY – WITH 4 BICYCLE RACKS
LIGHT DUTY
4" SINGLE SOLID WHITE LINE (PAINT) TYP
9' X 18' STANDARD PARKING SPACE (TYP.)
A CD-12 4" CONCRETE SIDEWALK (LIGHT DUTY)
B CD-12 PARKING LOT PAVEMENT SECTION
A CD-12 4" CONCRETE SIDEWALK (LIGHT DUTY)
F CD-8 "FLOOD ZONE" AND "PARK CLOSED FROM SUNSET TO SUNRISE" SIGNS ON ONE POST
A CD-14
DOUBLE YELLOW MEDIAN LINE PAVEMENT MARKINGS
4" DOUBLE SOLID YELLOW LINE THERMO
LIMITS OF CONCRETE SIDEWALK
LEFT AND RIGHT HAND TURN ARROW THERMO PAVEMENT MARKINGS

CP-51 MAG NAIL IN ASPHALT EL: 657.41 N: 568818.03 E: 1724027.80
12' WIDE CONCRETE SIDEWALK (HEAVY DUTY) C CD-13
EXISTING WETLAND TO BE PROTECTED
PROPOSED ZONE 2 RIPARIAN BUFFER
PROPOSED ZONE 1 RIPARIAN BUFFER
STANDARD GROUND MOUNTED BUFFER SIGN (COF TO PROVIDE SIGN. CONTRACTOR TO PROVIDE POST/HARDWARE AND INSTALL.) F CD-8
LIMITS OF DISTURBANCE SEE NOTE 1
EXISTING STORMWATER BASIN
TBM IRON IRON WITH CAP EL: 653.06 N: 568271.44 E: 1724270.35
LIMIT OF CONCRETE SIDEWALK
F CD-8 15 MPH SPEED LIMIT SIGN R2-1 24"X30"
A CD-12 4" CONCRETE SIDEWALK (LIGHT DUTY)
4" SINGLE SOLID WHITE LINE THERMO
LIMIT OF 6" DETACHED CONCRETE CURB
LIMIT OF BIT. CONC. PAVEMENT. SAWCUT AND MATCH EXISTING
STOP BAR THERMO PAVEMENT MARKING
STOP SIGN F CD-8
LIMIT OF 6" DETACHED CONCRETE CURB
LEFT AND RIGHT HAND TURN ARROW THERMO PAVEMENT MARKINGS
24" STEEL CASING FOR FUTURE 12" WATERLINE (SEE NOTE 2)
VEHICULAR ACCESS GATE AND FUTURE SIGN E CD-12

LEGEND:
- CONCRETE PAVEMENT
- BITUMINOUS CONCRETE PAVEMENT
- RIPRAP CHANNEL
- ARTICULATING CONCRETE BLOCK MAT

NOTE:
1. SEE SHEETS C-6 AND C-7 LIMITS OF DISTURBANCE CONTROL POINTS.
2. THE CASING PIPE SHALL BE NEW, WELDED OR SEAMLESS STEEL PIPE PER ASTM A139, GRADE B; ASTM A252, GRADE 2; OR ASTM A53, GRADE B. THE STEEL CASING PIPE SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI AND SHALL HAVE A MINIMUM WALL THICKNESS OF 0.312" WITH PROTECTIVE COATING OR 0.375" WITHOUT PROTECTIVE COATING.

N
1" = 50'
25 0 50

POINT TABLE		
POINT NO.	NORTHING	EASTING
1	568597.51	1723071.11
2	568580.99	1723070.97
3	568568.03	1723081.21
4	568534.01	1723125.16
5	568422.17	1723391.84
6	568417.43	1723454.99
7	568451.57	1723508.32
8	568471.49	1723524.40
9	568597.75	1723569.01
10	568602.56	1723569.01
11	568653.74	1723583.27
12	568690.19	1723621.93
13	568811.76	1723853.11
14	568645.46	1723563.01
15	568637.58	1723551.55
16	568606.39	1723547.05
17	568568.44	1723537.37
18	568534.19	1723518.38
19	568520.62	1723508.39
20	568527.14	1723499.53
21	568499.91	1723536.51
22	568514.62	1723455.41
23	568460.11	1723522.93
24	568493.59	1723358.05
25	568479.51	1723370.94
26	568471.95	1723358.37
27	568417.59	1723335.60
28	568414.23	1723343.54
29	568420.95	1723327.65
30	568393.26	1723337.93

POINT TABLE		
POINT NO.	NORTHING	EASTING
31	568397.77	1723327.21
32	568353.24	1723308.39
33	568310.48	1723280.97
34	568279.32	1723240.85
35	568259.34	1723203.41
36	568506.51	1723111.93
37	568412.95	1723324.27
38	568406.24	1723340.16
39	568382.31	1723410.73
40	568579.95	1723154.59
41	568562.98	1723113.62
42	568471.81	1723043.05
43	568398.00	1723550.62
44	568365.11	1723563.04
45	568323.48	1723576.02
46	568302.74	1723574.88
47	568288.07	1723561.25
48	568206.67	1724314.04
49	568161.17	1724250.40
50	568091.78	1724112.29
51	568067.89	1723959.59
52	568067.89	1723631.22
53	568273.10	1723530.72
54	568288.24	1723523.30
55	568307.28	1723467.73
56	568251.70	1723448.69
57	568123.66	1723511.40
58	568082.97	1723548.28
59	568067.89	1723601.09
60	568034.02	1723936.45

POINT TABLE		
POINT NO.	NORTHING	EASTING
61	568033.89	1723601.09
62	568108.67	1723480.89
63	568236.75	1723418.16
64	568337.93	1723453.00
65	568105.53	1723650.65
66	568101.89	1723656.86
67	568101.89	1723959.59
68	568176.44	1724212.42
69	568184.88	1724219.98
70	568204.06	1724233.56
71	568207.20	1724238.14
72	568210.62	1724288.62
73	568173.17	1724236.24
74	568181.32	1724309.53
75	568144.50	1724258.05
76	568825.27	1723866.16
77	568843.88	1723868.63
78	568959.78	1723846.74
79	568994.23	1723833.28
80	569039.10	1723799.15
81	568751.42	1723153.22
82	568916.59	1723151.88
83	569008.80	1723147.99
84	568694.31	1723579.76
85	568712.11	1723620.50
86	568715.54	1723651.58
135	568146.19	1724270.91
136	568186.81	1724241.76

JOHN P. BRIAND III REGISTERED ENGINEER AGRICULTURE CERTIFICATE No. 126231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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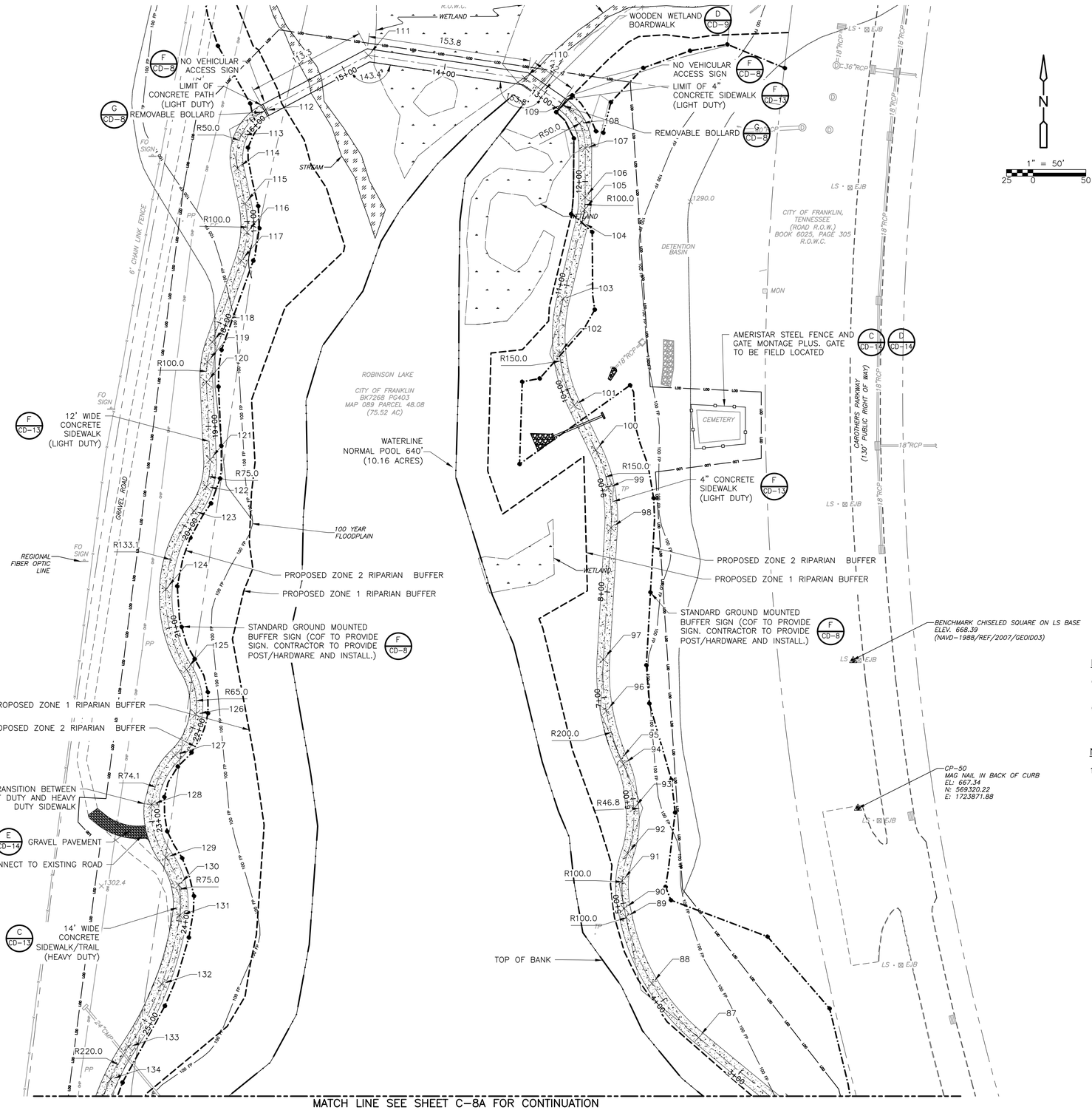
CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

LAYOUT AND MATERIALS PLAN I

PROJECT NO. 14915-237520
FILE NAME: C008LMPL-A.DWG
SHEET NO. C-8A

XREFs: [CDMS_2436, CEP000ST, CWP000ST, CWP004ST, Key Plan, CWP005ST, CWP009ST] Images: []
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POINT TABLE		
POINT NO.	NORTHING	EASTING
87	569103.44	1723721.17
88	569154.52	1723677.11
89	569217.35	1723652.55
90	569225.50	1723650.87
91	569251.66	1723648.99
92	569277.40	1723653.98
93	569320.08	1723659.92
94	569361.87	1723650.04
95	569366.76	1723647.87
96	569412.11	1723633.93
97	569461.01	1723631.15
98	569585.45	1723638.43
99	569623.14	1723635.87
100	569659.00	1723623.97
101	569701.47	1723603.63
102	569750.77	1723589.72
103	569801.89	1723593.21
104	569874.79	1723611.04
105	569886.30	1723613.15
106	569897.98	1723613.90
107	569944.48	1723614.16
108	569967.84	1723608.51
109	569985.87	1723592.62
110	570010.08	1723557.66

POINT TABLE		
POINT NO.	NORTHING	EASTING
111	570032.28	1723408.90
112	569979.92	1723310.63
113	569956.93	1723288.83
114	569925.46	1723285.22
115	569892.23	1723292.24
116	569864.95	1723294.18
117	569838.16	1723288.66
118	569761.12	1723261.36
119	569742.37	1723256.70
120	569723.08	1723255.73
121	569649.94	1723259.14
122	569624.29	1723255.87
123	569601.27	1723244.08
124	569527.47	1723217.35
125	569451.45	1723236.84
126	569409.15	1723245.90
127	569370.53	1723226.41
128	569323.84	1723203.88
129	569273.81	1723217.45
130	569247.62	1723229.43
131	569218.85	1723230.65
132	569153.99	1723213.34
133	569094.49	1723182.25
134	569063.78	1723165.01

LEGEND:

CONCRETE PAVEMENT

GRAVEL PAVEMENT

NOTE:

1. SEE SHEETS C-6 AND C-7 LIMITS OF DISTURBANCE CONTROL POINTS.

MATCH LINE SEE SHEET C-8A FOR CONTINUATION

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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210 25th Avenue North, Suite 1102
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CITY OF FRANKLIN, TENNESSEE

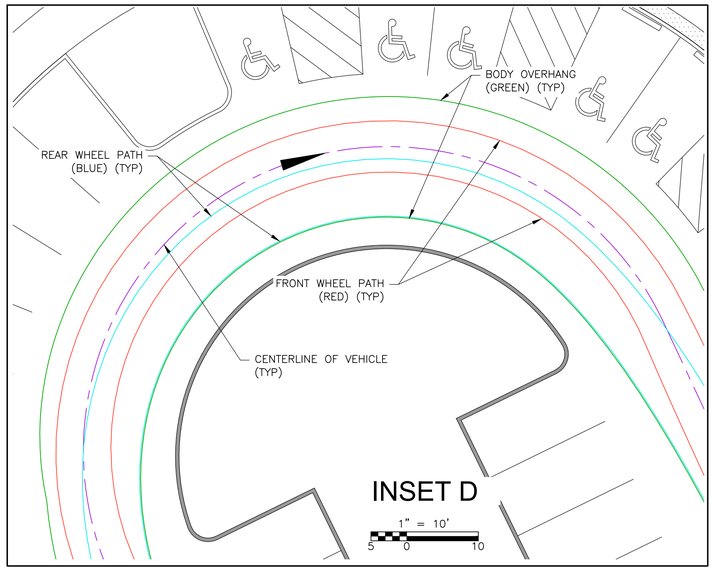
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

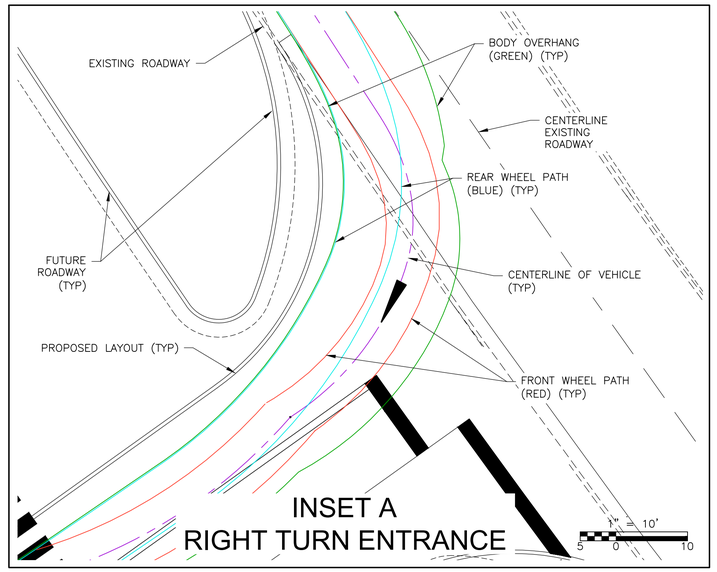
LAYOUT AND MATERIALS PLAN II

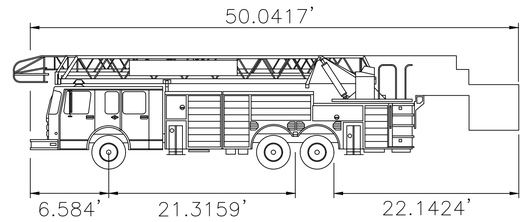
PROJECT NO. 14915-237520
FILE NAME: C008LMPL-B.DWG
SHEET NO. C-8B

ISSUED FOR BID

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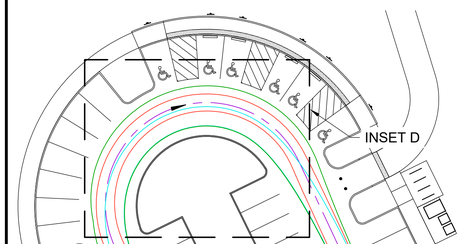


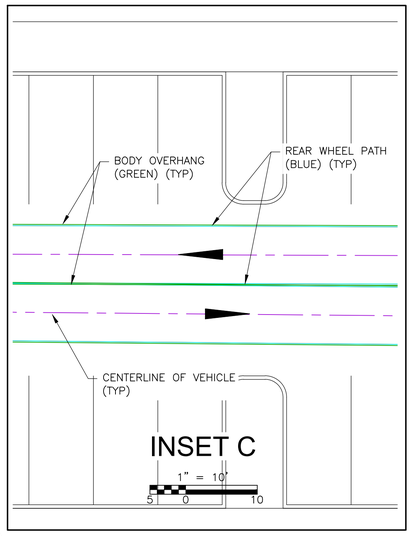


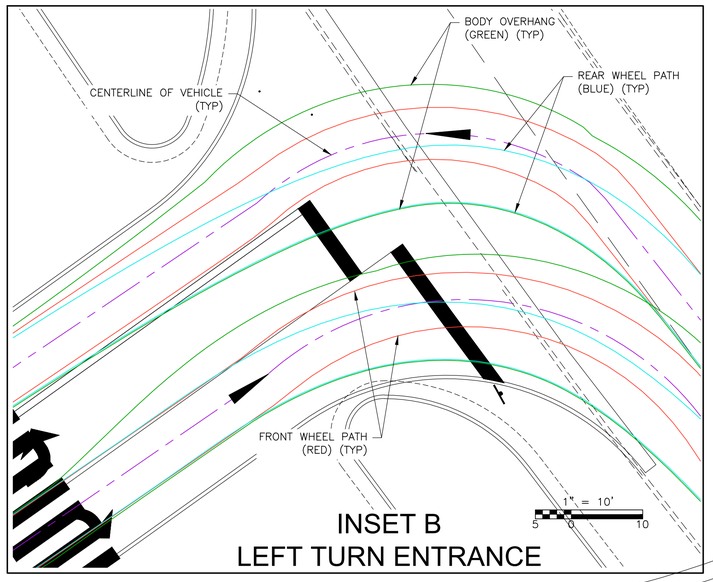


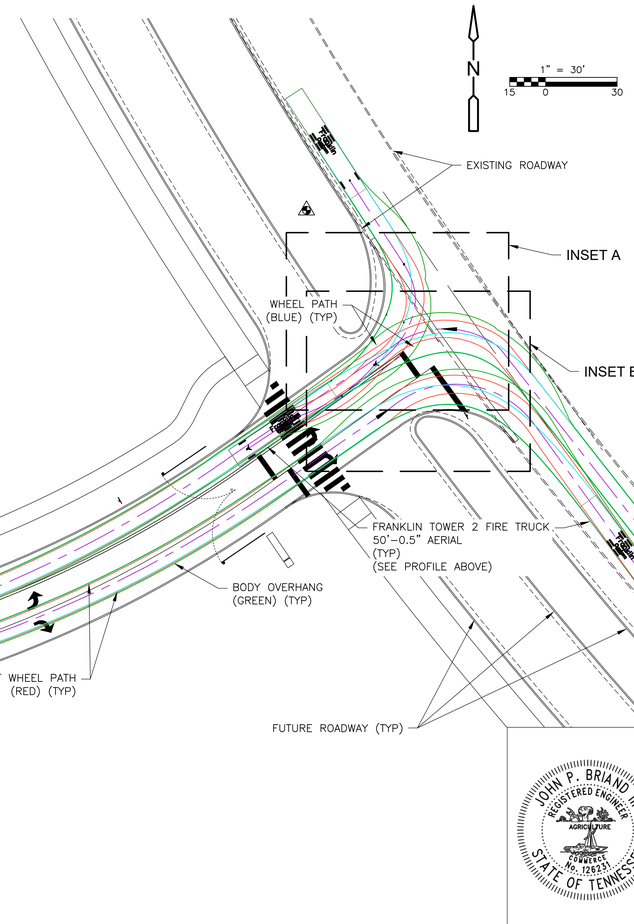
FRANKLIN FIRE TRUCK – TOWER 2 TRUCK 2015

Overall Length	: 50.042 ft
Overall Width	: 8.33 ft
Overall Body Height	: 8.33 ft
Min Body Ground Clearance	: 0.627 ft
Track Width	: 8.00 ft
Lock to Lock Time	: 6.0 Seconds
Wall to Wall Turning Radius	: 42.000 ft
Steering Angle	: 33.3 Deg
Minimum Speed	: 5 Mph









JOHN P. BRIAND III
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AGRICULTURE
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: W. BEELER
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: S. WHITESIDE
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CITY OF FRANKLIN, TENNESSEE

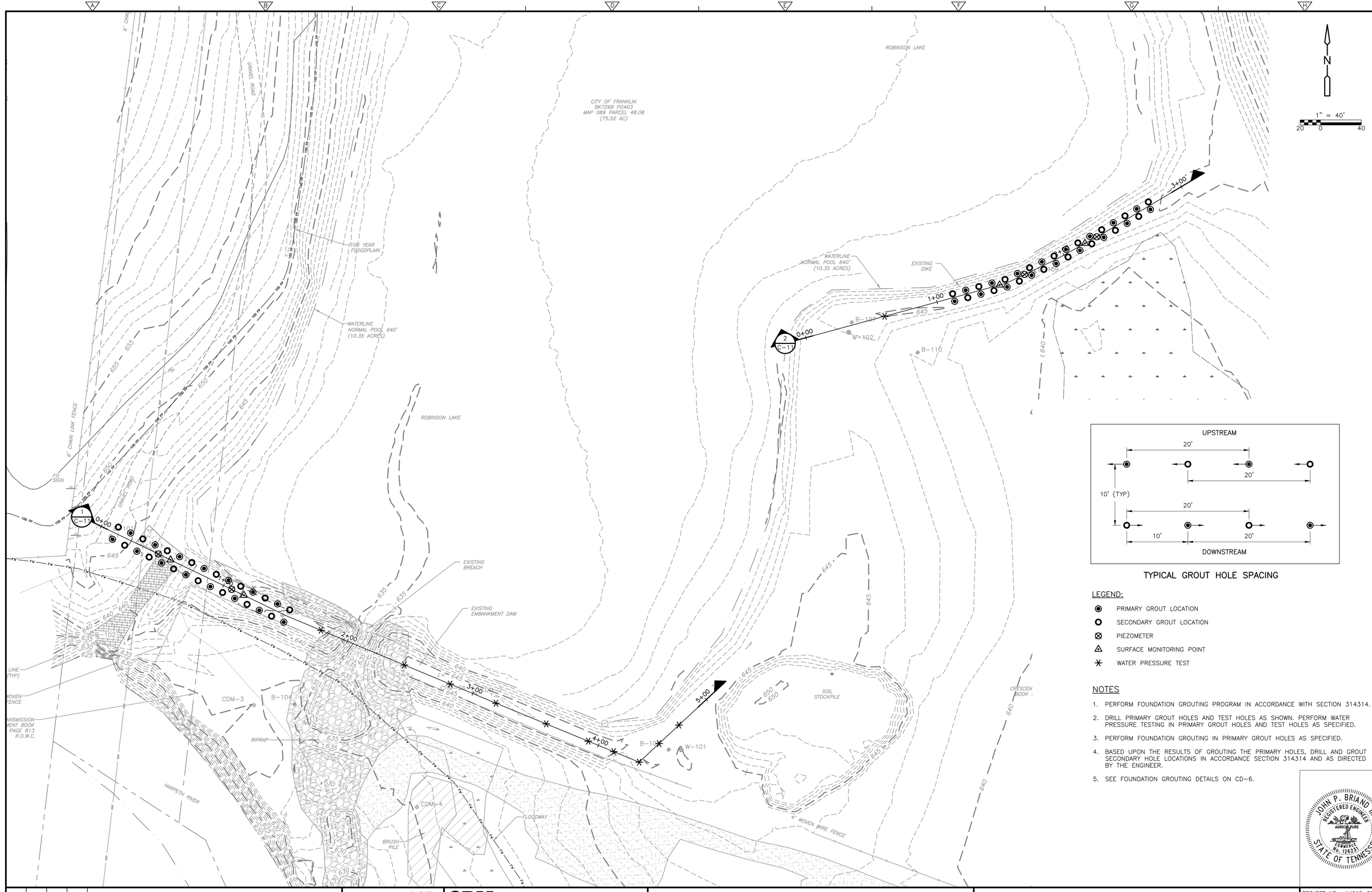
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

FIRE TRUCK TURNING PLAN

PROJECT NO. 14915-237520
FILE NAME: C009STPL.DWG

SHEET NO.
C-9

XREFs: [CDMS_2436, CEP000ST, CWP000ST, CWP004ST, CWP005ST, CWP008ST] Images: []
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TYPICAL GROUT HOLE SPACING

LEGEND:

- PRIMARY GROUT LOCATION
- SECONDARY GROUT LOCATION
- PIEZOMETER
- SURFACE MONITORING POINT
- WATER PRESSURE TEST

NOTES

1. PERFORM FOUNDATION GROUTING PROGRAM IN ACCORDANCE WITH SECTION 314314.
2. DRILL PRIMARY GROUT HOLES AND TEST HOLES AS SHOWN. PERFORM WATER PRESSURE TESTING IN PRIMARY GROUT HOLES AND TEST HOLES AS SPECIFIED.
3. PERFORM FOUNDATION GROUTING IN PRIMARY GROUT HOLES AS SPECIFIED.
4. BASED UPON THE RESULTS OF GROUTING THE PRIMARY HOLES, DRILL AND GROUT SECONDARY HOLE LOCATIONS IN ACCORDANCE SECTION 314314 AND AS DIRECTED BY THE ENGINEER.
5. SEE FOUNDATION GROUTING DETAILS ON CD-6.

JOHN P. BRIAND III
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REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

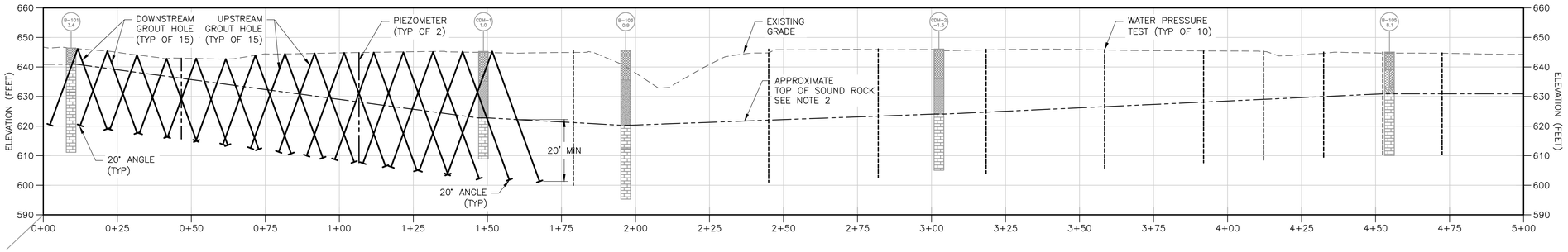
FOUNDATION GROUTING PLAN

PROJECT NO. 14915-237520
FILE NAME: C010GRPL.DWG

SHEET NO.
C-10

ISSUED FOR BID

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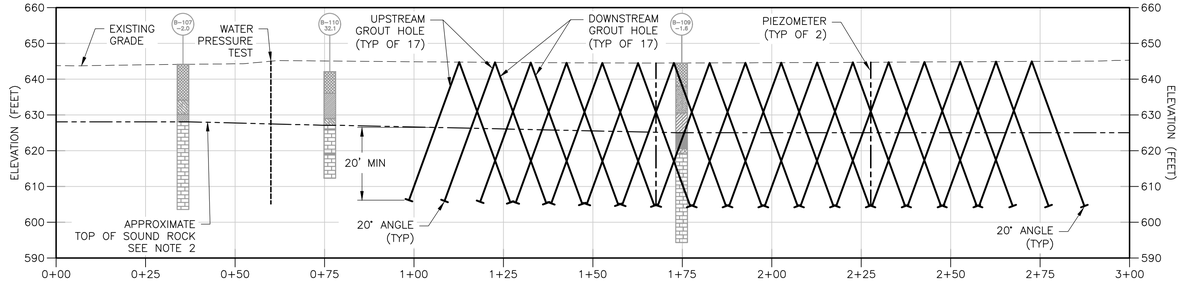


EMBANKMENT DAM GROUTING

SECTION 1 / C-10

VERTICAL SCALE: 1" = 20' 10 0 20

HORIZONTAL SCALE: 1" = 20' 10 0 20



EMBANKMENT DAM GROUTING

SECTION 2 / C-10

VERTICAL SCALE: 1" = 20' 10 0 20

HORIZONTAL SCALE: 1" = 20' 10 0 20

NOTES:

1. SEE C-3 THROUGH C-5 AND APPENDIX A (GEOTECHNICAL DATA) IN SPECIFICATIONS FOR TEST BORING AND WATER PRESSURE TEST DATA.
2. APPROXIMATE TOP OF SOUND ROCK IS KNOWN ONLY AT TEST BORING LOCATIONS AND ACTUAL TOP OF SOUND ROCK MAY BE DIFFERENT THAN SHOWN.
3. GROUT HOLES SHALL EXTEND 20' BELOW THE TOP OF SOUND ROCK.
4. SEE FOUNDATION GROUTING DETAILS ON CD-6.

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SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

FOUNDATION GROUTING SECTIONS

PROJECT NO. 14915-237520
FILE NAME: C011GRSC.DWG

SHEET NO.
C-11

ISSUED FOR BID

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PROPOSED ZONE 2 RIPARIAN BUFFER
PROPOSED ZONE 1 RIPARIAN BUFFER
INTERSTATE 65
FEDERAL AID PROJECT NO. I-65-2(23) 57
SHEETS 35-37
6' CHAIN LINK FENCE
GRAVEL ROAD
500 YEAR FLOODPLAIN
100 YEAR FLOODPLAIN
FLOODWAY
STOP SIGN
APPROXIMATE LIMITS OF PHASE 2 BYPASS COFFERDAM
APPROXIMATE LIMITS OF PHASE 1 BYPASS COFFERDAM
EXCAVATE TO BOTTOM OF SEDIMENT WITHIN FOOTPRINT OF TEMPORARY COFFERDAMS AND PROPOSED DAM EMBANKMENT
PROPERTY LINE (TYP)
TVA TRANSMISSION LINE EASEMENT BOOK 4439, PAGE 813 R.O.W.C.
KEYWAY (4' WIDE BASE, 2' DEEP, 1H:1V SLOPES)
HARPETH RIVER
106 (186.00) CITY OF FRANKLIN BOOK 4576, PAGE 663 R.O.W.C.
PROPOSED ZONE 1 RIPARIAN BUFFER
TOP OF BANK
WETLAND
PROPERTY LINE
(47.05') CRESCENT LOCKWOOD, LLC BOOK 6362, PAGE 991 R.O.W.C.
DBL AREA DRAIN RIM 651.28 INV 643.90 (IN–E) INV 643.76 (OUT–W)
DBL AREA DRAIN RIM 651.18 INV 642.98 (IN–E) INV 642.78 (OUT–W)
8" CONC.
42" RCP INV 642.06
DETENTION BASIN
6" CONC. WALL
8" OPENING IN STRUCTURE EL 641.40
2'X2' SPILLWAY CUT EL 642.83
8" RCP INV 641.47 (OUT)
18" RCP INV 640.97
6" CONC. WALL
RIPRAP
CATCH BASIN RIM 657.54 INV IN 650.84 (N) INV IN 650.74 (E) INV OUT 650.64 (S)
36" RCP
CP–51 MAG NAIL IN ASPHALT EL: 657.41 N: 568818.03 E: 1724027.80
(130' PUBLIC ROW)
CAROTHER PARKWAY
CUT OF 2011
PROPERTY LINE (TYP)
CATCH BASIN RIM 654.46 INV 648.76 (IN–N) INV 648.66 (OUT–S)
CATCH BASIN RIM 651.91 INV 646.11 (IN–N) INV 646.01 (OUT–S)
DBL CATCH BASIN RIM 651.25 INV 646.05 (OUT–S)
DBL CATCH BASIN RIM 650.75 INV 645.15 (IN–N) INV 644.95 (OUT–S)
DBL CATCH BASIN RIM 650.67 INV 643.97 (IN–S) INV 643.77 (IN–N) INV 643.67 (IN–E) INV 643.57 (OUT–W)
DBL CATCH BASIN RIM 650.67 INV 644.57 (IN–S) INV 644.47 (IN–N) INV 644.17 (OUT–W)
CATCH BASIN RIM 650.78 INV 644.98 (IN–S) INV 644.78 (OUT–N)
CATCH BASIN RIM 651.21 INV 645.81 (OUT–N)
CATCH BASIN RIM 650.97 INV 645.77 (IN–S) INV 645.67 (OUT–N)
CATCH BASIN RIM 651.57 INV 646.57 (IN–S) INV 646.37 (OUT–N)
TBM IRON ROD WITH CAP EL: 653.06 N: 568271.44 E: 1724270.35
CATCH BASIN RIM 652.23 INV 647.73 (OUT–N)
36" RCP INV 648.39
CATCH BASIN RIM 652.54 INV OUT 646.69 (S)
TOP OF CONC STRUCTURE C ELEV. 654.02
1" = 50'
25 0 50

JOHN P. BRIAND II
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No. 126231
STATE OF TENNESSEE

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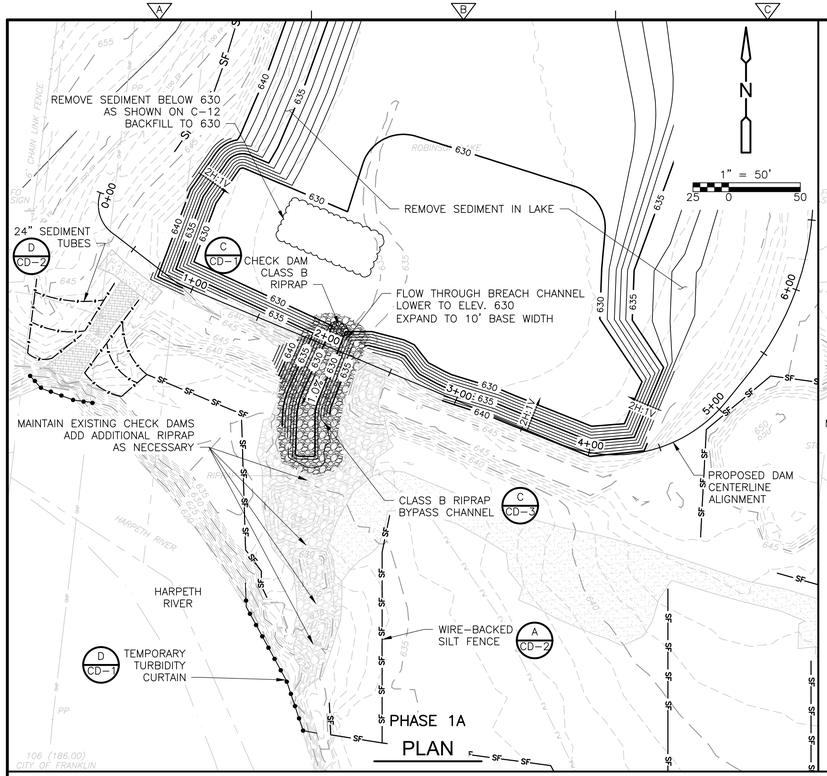
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

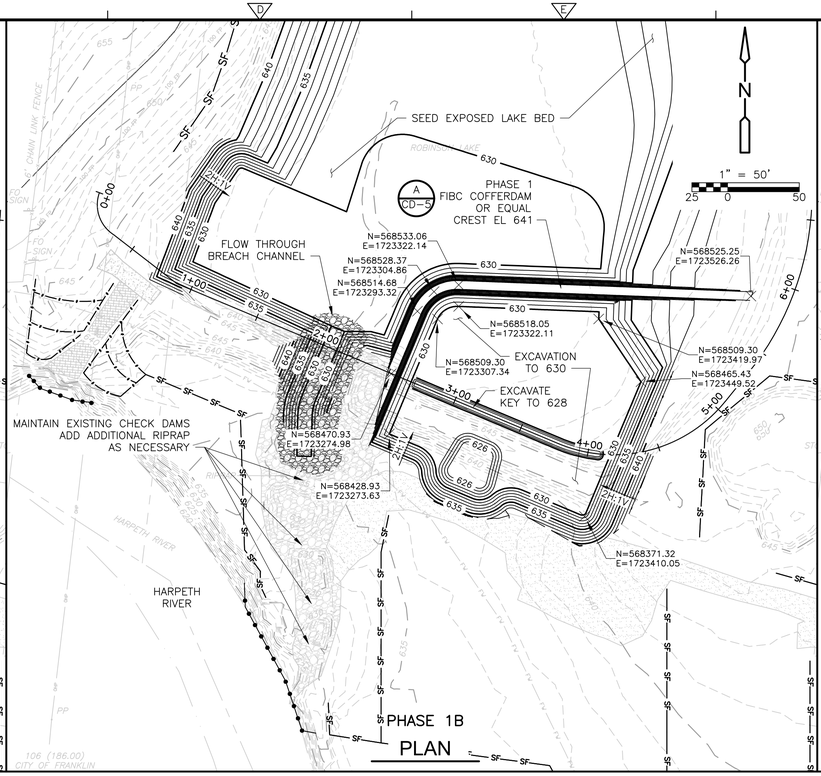
EXCAVATION PLAN

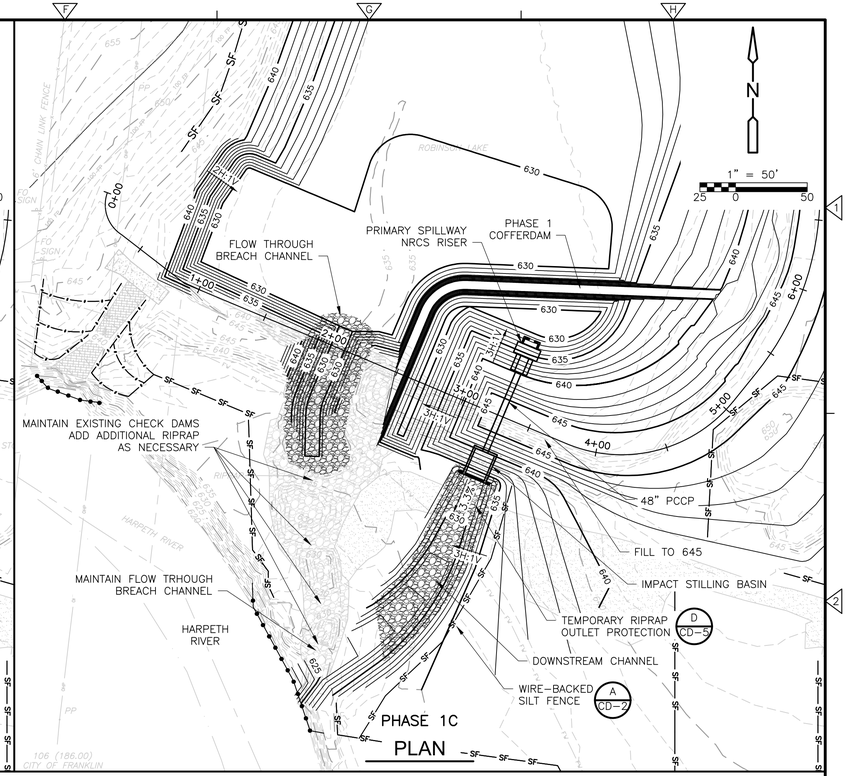
PROJECT NO. 14915–237520
FILE NAME: C012ECPL.DWG

SHEET NO.
C-12

ISSUED FOR BID







STORMWATER BYPASS SEQUENCE

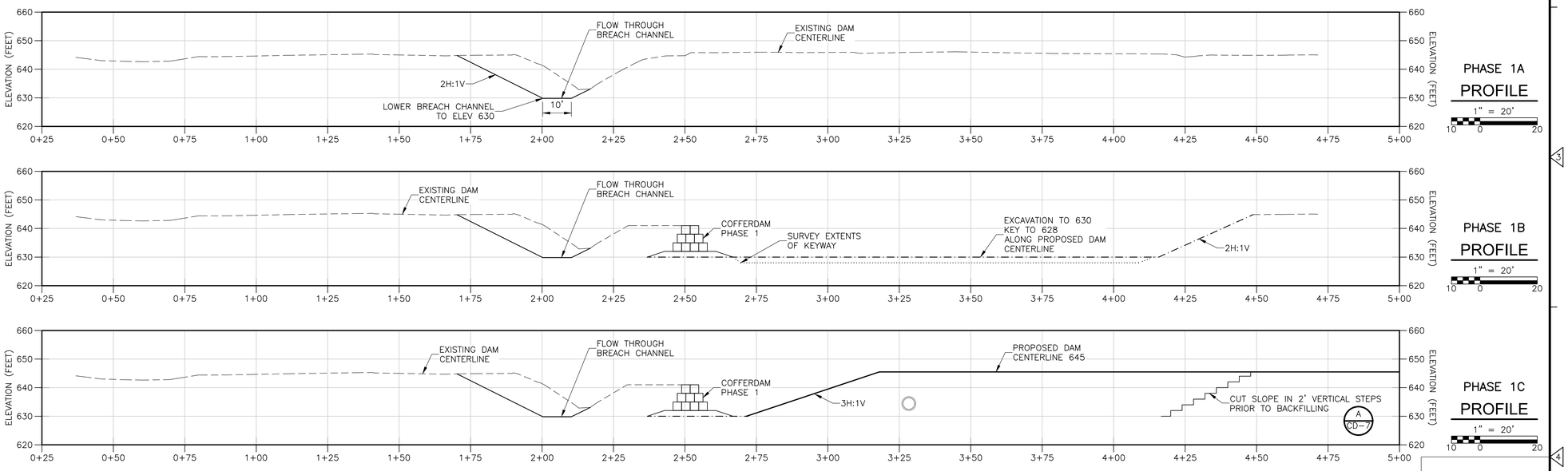
THE FOLLOWING STORMWATER BYPASS PLAN WAS DEVELOPED TO SHOW A LOGICAL SEQUENCE OF CONSTRUCTION AND IS CONSISTENT WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PERMIT. IF ALTERNATE STORMWATER BYPASS PLANS ARE PROPOSED BY THE CONTRACTOR, THEY WILL BE RESPONSIBLE TO OBTAIN THE REQUIRED PERMIT MODIFICATIONS WITHOUT IMPACTING THE COMPLETION DATE OF THE PROJECT.

THE PHASE 1 STORMWATER BYPASS WAS DESIGNED TO PASS THE 25-YEAR 6-HOUR DURATION STORM EVENT THROUGH THE BREACH CHANNEL, RESULTING IN A PEAK STAGE OF EL. 637.5 IN THE LAKE AND A PEAK DISCHARGE OF 872 CUBIC FEET PER SECOND (CFS) WHEN THE LAKE IS DRAINED TO PRIOR TO THE STORM.

BASEFLOW INTO THE LAKE IS ASSUMED TO BE 0.5 CFS. SEE G-2 FOR CONSTRUCTION SEQUENCE AND C-22 TO C-27 FOR EROSION AND SEDIMENTATION CONTROL. SEE C-6 AND C-7 FOR DEMOLITION. SEE C-12 FOR EXCAVATION.

PHASE 1A – FLOW THROUGH BREACH CHANNEL – REMOVE LAKE SEDIMENT AND CONSTRUCT PHASE 1 COFFERDAM

1. INSTALL TURBIDITY BARRIER IN THE EXISTING DISCHARGE CHANNEL. REMOVE SILT AND INSTALL ADDITIONAL RIPRAP AS NECESSARY TO MAINTAIN THE EXISTING CHECK DAMS. INSTALL ADDITIONAL EROSION AND SEDIMENTATION CONTROLS ON SHEETS NOTED ABOVE.
2. PERFORM GROUTING PROGRAM AS OUTLINED ON C-10 AND C-11.
3. LOWER THE BREACH CHANNEL TO ELEVATION 630, WIDEN THE CHANNEL BASE TO 10', AND PROVIDE A MINIMUM 1% LONGITUDINAL SLOPE. LINE THE BREACH CHANNEL WITH 30" OF CLASS B RIPRAP.
4. INSTALL CHECK DAM AT UPSTREAM END OF BYPASS CHANNEL.
5. REMOVE SEDIMENT IN THE LAKE TO FINAL GRADES SHOWN ON C-14A AND C-14B. CONTRACTOR TO STAGE SEDIMENT REMOVAL BY ZONES TO MINIMIZE SEDIMENT TRANSPORT. DIVERT FLOWS WITHIN THE LAKE AND DEWATER AS NECESSARY TO MAINTAIN CURRENT WORK AREA IN A DRAINED CONDITION.
6. DEWATERING AND BYPASS PUMPING SHALL BE DISCHARGED TO A TEMPORARY DEWATERING STRUCTURE UNTIL THE PUMP EFFLUENT IS OBSERVED TO BE VISIBLY TURBID OR THE TURBIDITY IS MEASURED TO BE IN EXCESS OF 50 NTU. ONCE TURBID EFFLUENT IS OBSERVED, DEWATERING SHALL CONTINUE BY DISCHARGING PUMP EFFLUENT INTO A SEDIMENT BAG.
7. REMOVE EARTHEN MATERIALS INCLUDING ADDITIONAL SEDIMENT IN LAKE AS REQUIRED TO CONSTRUCT TEMPORARY STORMWATER BYPASS AND COFFERDAM. LOCALIZED DEWATERING WITHIN THE LAKE BED TO MAINTAIN WATER LEVELS 2-FEET BELOW SUBGRADE WILL BE REQUIRED. SEE C-12 FOR EXCAVATION BASE OF THE COFFERDAM.
8. PROOFROLL PHASE 1 COFFERDAM FOOTPRINT AREA WITH A MINIMUM OF FOUR PASSES WITH APPROPRIATE COMPACTION EQUIPMENT AND REMOVE UNSUITABLE MATERIALS AT THE DIRECTION OF THE ENGINEER PRIOR TO CONSTRUCTING THE COFFERDAM. BACKFILL WITH SELECT FILL MAY BE REQUIRED TO OBTAIN PAD ELEVATION SHOWN.
9. CONSTRUCT PHASE 1 COFFERDAM ACROSS LAKE BOTTOM. CONTINUE TO MAINTAIN THE LAKE IN A DRAINED CONDITION DURING COFFERDAM CONSTRUCTION.



PHASE 1B – FLOW THROUGH BREACH CHANNEL – EXCAVATE EAST SIDE OF DAM

1. TEMPORARY SEED EXPOSED LAKE BOTTOM WITHIN CONSTRUCTION LIMITS AND EARTHEN COFFERDAM.
2. EXCAVATE EAST SIDE OF EXISTING EARTHEN DAM AND SPILLWAY AREA TO ELEVATIONS SHOWN ON C-12.
3. EMPLOY SURFACE DRAINAGE AND SUBSURFACE DEWATERING MEASURES TO MAINTAIN WORK AREAS IN A DRAINED CONDITION, AS SPECIFIED IN SECTION 312319.
4. SURVEY THE EXTENTS OF THE KEYWAY EXCAVATION TO ENSURE OVERLAP WITH THE PHASE 2 KEYWAY EXCAVATION.

PHASE 1C – FLOW THROUGH BREACH CHANNEL – CONSTRUCT PRIMARY SPILLWAY AND BACKFILL EAST SIDE OF DAM

1. CONSTRUCT NEW NRCS RISER, DISCHARGE PIPE AND STILLING BASIN.
2. BACKFILL AND CONSTRUCT EAST SIDE OF DAM INCLUDING INSTALLATION OF CHIMNEY, BLANKET, AND TOE DRAIN. CUT SLOPES IN 2' VERTICAL STEPS PRIOR TO BACKFILLING.
3. CONSTRUCT DOWNSTREAM CHANNEL, EXCEPT NEAR THE HARPETH RIVER TO MAINTAIN FLOW THROUGH BREACH CHANNEL UNTIL THE PHASE 2 COFFERDAM IS COMPLETE.
4. INSTALL ADDITIONAL SILT FENCE EAST OF THE NEW CHANNEL.

JOHN P. BRIANO II REGISTERED ENGINEER AGRICULTURE NO. 128231 STATE OF TENNESSEE

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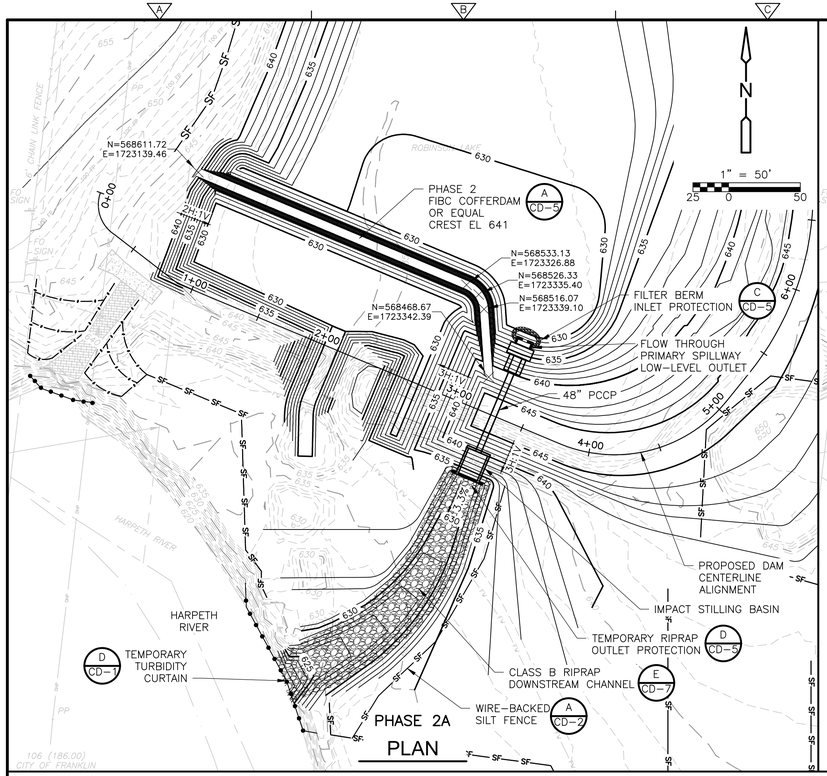
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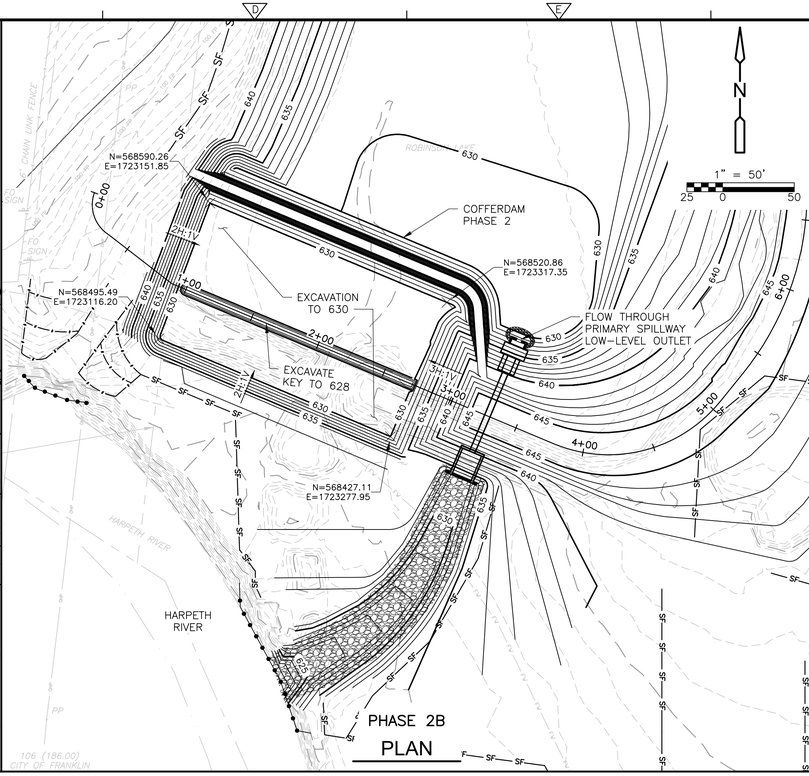
DEWATERING AND STORMWATER BYPASS PLAN I

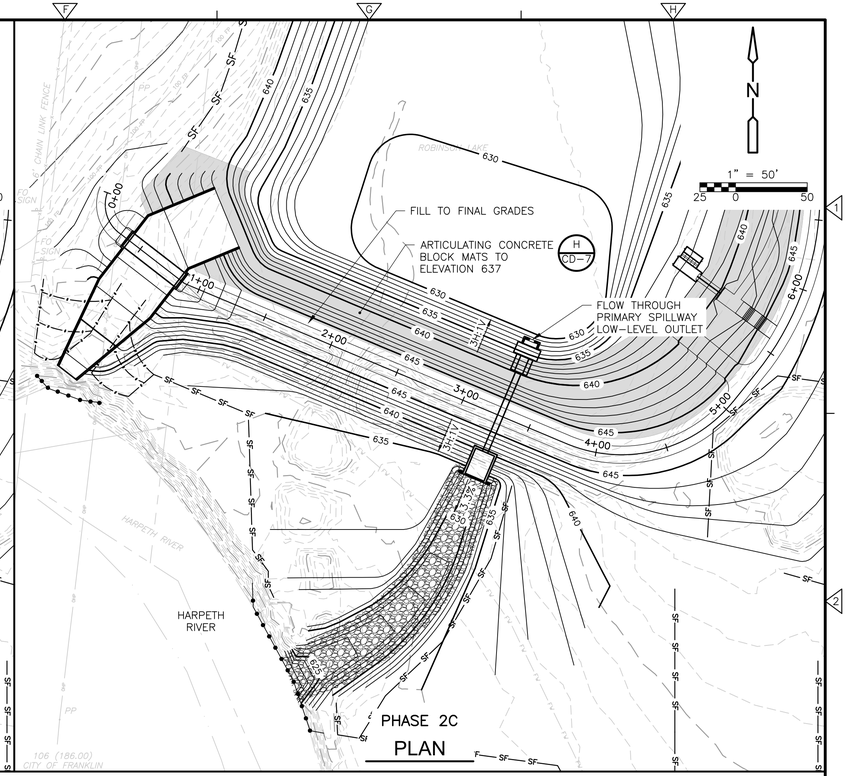
PROJECT NO. 14915-237520
FILE NAME: C013SDPL-A.DWG
SHEET NO. C-13A

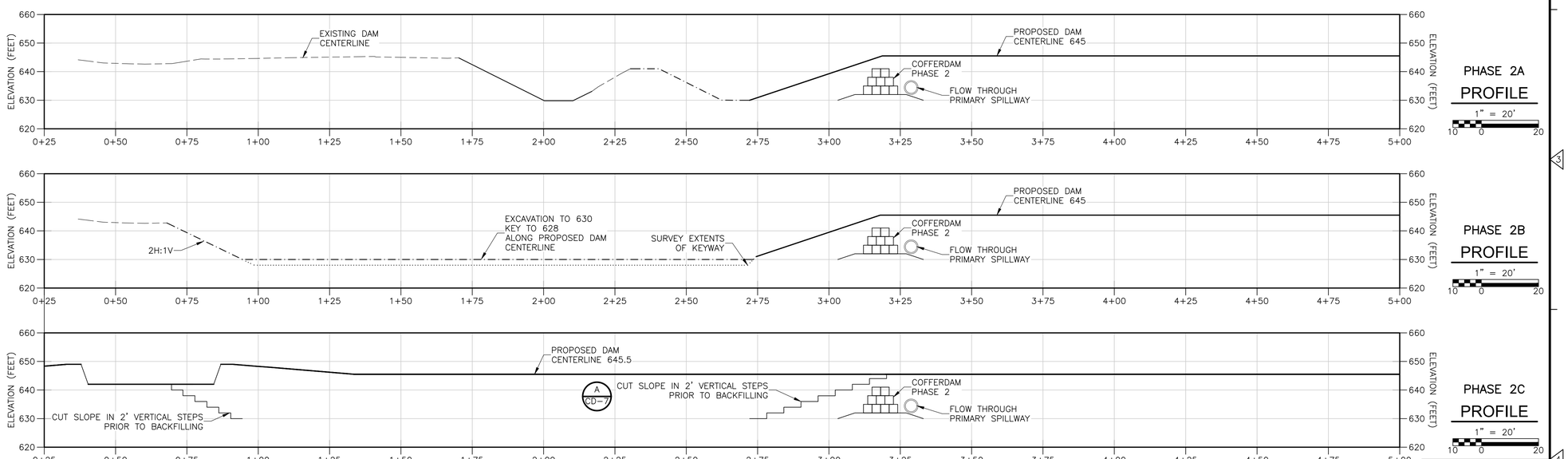
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STORMWATER BYPASS SEQUENCE CONTINUED

THE PHASE 2 STORMWATER BYPASS WAS DESIGNED TO PASS THE 10-YEAR 6-HOUR DURATION STORM EVENT THROUGH THE PRIMARY SPILLWAY LOW-LEVEL OUTLET, RESULTING IN A PEAK STAGE OF EL. 640.5 IN THE LAKE AND A PEAK DISCHARGE OF 106 CUBIC FEET PER SECOND (CFS) WHEN THE LAKE IS DRAINED TO EL. 632 PRIOR TO THE STORM.

BASEFLOW INTO THE LAKE IS ASSUMED TO BE 0.5 CFS. SEE G-2 FOR CONSTRUCTION SEQUENCE AND C-22 TO C-27 FOR EROSION AND SEDIMENTATION CONTROL. SEE C-6 AND C-7 FOR DEMOLITION. SEE C-12 FOR EXCAVATION.

PHASE 2A – FLOW THROUGH PRIMARY SPILLWAY LOW-LEVEL OUTLET – CONSTRUCT PHASE 2 COFFERDAM

2. INSTALL TEMPORARY INLET PROTECTION AT THE LOW-LEVEL OUTLET OF THE NRCS RISER STRUCTURE.
5. BLOCK BYPASS CHANNEL. FINISH DOWNSTREAM CHANNEL NEAR THE HARPETH RIVER AND INSTALL PERMANENT RIPRAP PROTECTION. REMOVE PORTION OF PHASE 1 COFFERDAM TO DIRECT BASEFLOW TO NEW LOW-LEVEL OUTLET.
6. FINISH REMOVING PHASE 1 COFFERDAM.
7. PROOFROLL PHASE 2 COFFERDAM FOOTPRINT AREA WITH A MINIMUM OF FOUR PASSES WITH APPROPRIATE COMPACTION EQUIPMENT AND REMOVE UNSUITABLE MATERIALS AT THE DIRECTION OF THE ENGINEER PRIOR TO CONSTRUCTING THE COFFERDAM. BACKFILL WITH SELECT FILL MAY BE REQUIRED TO OBTAIN PAD ELEVATION SHOWN.
8. CONSTRUCT PHASE 2 COFFERDAM ACROSS LAKE BOTTOM. CONTINUE TO MAINTAIN THE LAKE IN A DRAINED CONDITION DURING COFFERDAM CONSTRUCTION.

PHASE 2B – FLOW THROUGH PRIMARY SPILLWAY LOW-LEVEL OUTLET – EXCAVATE WEST SIDE OF DAM

1. EXCAVATE WEST SIDE OF EXISTING EARTHEN DAM TO ELEVATIONS SHOWN ON C-12.
2. EMPLOY SURFACE DRAINAGE AND SUBSURFACE DEWATERING MEASURES TO MAINTAIN WORK AREAS IN A DRAINED CONDITION, AS SPECIFIED IN SECTION 312319.
3. SURVEY THE EXTENTS OF THE KEYWAY EXCAVATION TO ENSURE OVERLAP WITH THE PHASE 1 KEYWAY EXCAVATION.

PHASE 2C – FLOW THROUGH PRIMARY SPILLWAY LOW-LEVEL OUTLET – BACKFILL WEST SIDE OF DAM

1. BACKFILL AND CONSTRUCT WEST SIDE OF DAM INCLUDING INSTALLATION OF CHIMNEY, BLANKET, AND TOE DRAIN. CUT SLOPES IN 2' VERTICAL STEPS PRIOR TO BACKFILLING.
2. REMOVE PHASE 2 COFFERDAM.
3. REGRADE AND RESTORE UPSTREAM AND DOWNSTREAM SLOPES OF DAM. INSTALL ARTICULATING CONCRETE BLOCK MATS AND SURFACE STABILIZATION.

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
No. 129231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
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210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

DEWATERING AND STORMWATER BYPASS PLAN II

PROJECT NO. 14915-237520
FILE NAME: C013SDPL-B.DWG

SHEET NO.
C-13B

ISSUED FOR BID

XREFs: [CDMS_2436, CEP000ST, CWP002ST-OLD, CWP000ST, CWP003ST, CWP005ST] Images: []
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MATCH LINE SEE SHEET C-14B FOR CONTINUATION

PROPOSED RIPARIAN BUFFER ZONE 1
PROPOSED RIPARIAN BUFFER ZONE 2
6' CHAIN LINK FENCE
INTERSTATE 65
FEDERAL AID PROJECT NO. I-65-2(23) 57
SHEETS 35-37
CITY OF FRANKLIN
BK/PG 268 PG403
MAP 080 PARCEL 48.08
(75.52 AC)
ROBINSON LAKE
TOP OF BANK
5' WIDE BENCH
2% SLOPE
ARTICULATING CONCRETE
BLOCK MAT
FROM CREST TO EL 638
(STA 5+00 TO 10+40)
WATERLINE
NORMAL POOL 640'
(10.16 ACRES)
ARTICULATING CONCRETE BLOCK
MAT SLOPE PROTECTION
FROM CREST TO EL 637
(STA 0+00 TO 5+00)
NRCS RISER
WEIR EL 640 (NORMAL POOL)
LOW-LEVEL OUTLET EL 632.5
48" PCCP
INV 632.5
IMPACT
STILLING BASIN
22' WIDE CREST
AT EL 645.5 (TYP)
12' WIDE CONCRETE
PEDESTRIAN PATH
CONCRETE AUXILIARY
SPILLWAY
PEDESTRIAN
BRIDGE
500 YEAR
FLOODPLAIN
100 YEAR
FLOODPLAIN
FO SIGN
EXISTING WETLAND
TO BE PROTECTED
CONCRETE
PEDESTRIAN PATHWAY
DAM CENTERLINE
ALIGNMENT
PROPERTY LINE
(TYP)
TVA TRANSMISSION
LINE EASEMENT BOOK
4439, PAGE 813
R.O.W.C.
HARPETH RIVER
106 (186.00)
CITY OF FRANKLIN
BOOK 4576, PAGE 663
R.O.W.C.
47.02±
CRESCENT LOCKWOOD, LLC
BOOK 6562, PAGE 991
R.O.W.C.
RIPRAP TIE-IN WITH
STILLING BASIN
RIPRAP CHANNEL
TYP SECTION
CHECK VALVE
HW1 – TDOT STRAIGHT END WALL
INV. OUT = 624.50
RIPRAP TIE-IN WITH
EXISTING DOWNSTREAM
GRADES
10' CONCRETE
ENCASEMENT
6" SCH 80 PVC UNDERDRAINS
CB1 – TDOT CIRCULAR NO. 42
RIM = 638.40
INV. IN = 626.08
INV. OUT = 626.00
6" UNDERDRAIN INV. = 634.00 (TYP. OF 2)
PROPOSED ZONE 1 RIPARIAN BUFFER
C.O. (TYP. OF 8)
CB3 – TDOT CIRCULAR NO. 42
RIM = 634.25
4" UNDERDRAIN INV. IN = 628.60
(TOTAL OF 2)
INV. OUT = 627.20
CB5 – TDOT 32"X32" NO. 42
RIM = 639.70
INV. OUT = 636.28
MH1 – TDOT STANDARD NO. 3
RIM = 637.50
INV. IN (E) = 626.95
INV. IN (S) = 626.95
INV. OUT = 626.75
6" SCH 80 PVC UNDERDRAINS AND CLEANOUTS
BIO POND 2
(LEVEL 1)
1793 SF
BIO POND 1 (LEVEL 2)
2542 SF
CB2 – TDOT 8'X4' RECTANGULAR CONCRETE NO. 43SB
RIM = 635.00
INV. OUT = 628.16
PERMEABLE GRAVEL BERM
PRE-TREATMENT CELL FORBAY
HW2 – TDOT STRAIGHT ENDWALL
INV. OUT = 634.75
CB4 – TDOT 32"X32" NO. 42
RIM = 639.70
INV. IN = 635.38
INV. OUT = 635.18
CATCH BASIN
RIM 657.54
INV IN 650.84 (N)
INV IN 650.74 (E)
INV OUT 650.64 (S)
PROPERTY LINE
(TYP)
CATCH BASIN
RIM 654.46
INV 648.76 (IN-N)
INV 648.66 (OUT-S)
PROPOSED RIPARIAN BUFFER ZONE 1
PROPOSED RIPARIAN BUFFER ZONE 2
CATCH BASIN
RIM 651.91
INV 646.11 (IN-N)
INV 646.01 (OUT-S)
DBL CATCH BASIN
RIM 651.25
INV 646.05 (OUT-S)
DBL CATCH BASIN
RIM 650.75
INV 645.15 (IN-N)
INV 644.95 (OUT-S)
DBL AREA DRAIN
RIM 651.26
INV 643.96 (IN-E)
INV 643.76 (OUT-W)
DBL CATCH BASIN
RIM 650.67
INV 643.97 (IN-S)
INV 643.77 (IN-N)
INV 643.67 (IN-E)
INV 643.57 (OUT-W)
DBL AREA DRAIN
RIM 651.18
INV 642.98 (IN-E)
INV 642.78 (OUT-W)
DBL CATCH BASIN
RIM 650.67
INV 644.57 (IN-S)
INV 644.47 (IN-N)
INV 644.17 (OUT-W)
8" CONC.
42" RCP
INV 642.06
CATCH BASIN
RIM 650.78
INV 644.98 (IN-S)
INV 644.78 (OUT-N)
DETENTION
BASIN
6" CONC. WALL
8" OPENING IN STRUCTURE
EL 641.40
2'X2' SPILLWAY CUT
EL 642.83
8" RCP
INV 641.47 (OUT)
CATCH BASIN
RIM 651.21
INV 645.81 (OUT-N)
CATCH BASIN
RIM 650.97
INV 645.77 (IN-S)
INV 645.67 (OUT-N)
18" RCP
INV 640.37
6" CONC. WALL
RIPRAP
CATCH BASIN
RIM 651.57
INV 646.57 (IN-S)
INV 646.37 (OUT-N)
CATCH BASIN
RIM 652.23
INV 647.73 (OUT-N)
36" RCP
INV 648.39
CATCH BASIN
RIM 652.54
INV OUT 646.69 (S)
CATCH BASIN
RIM 653.15
TOP OF CONC
STRUCTURE C
ELEV. 654.02
INV 641.98

N

1" = 50'
25 0 50

NOTE:

1. ALL DISTURBED AREAS WITH SLOPES EQUAL TO 4H:1V OR STEEPER SHALL HAVE EROSION CONTROL BLANKET INSTALLED.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE
3. AS PER FMC 23-107(5)(D) BUFFER BOUNDARIES SHALL BE MARKED WITH SIGNS THAT PERSIST BEFORE, DURING, AND AFTER CONSTRUCTION. SIGNAGE SHALL BE POSTED AT THE EDGE OF THE BUFFER ZONE, EACH LOT LINE, AND AT A MAXIMUM SPACING OF ONE HUNDRED FIFTY (150) FEET. THIS SPACING CAN BE REDUCED FOR LARGE SCALE DEVELOPMENT AS APPROVED BY THE CITY'S ENGINEERING DEPARTMENT. THESE SIGN SHALL BE SUPPLIED BY THE CITY OF FRANKLIN'S STORMWATER INSPECTORS AT INITIAL SITE PRECONSTRUCTION MEETINGS AND BE INSTALLED BY THE FIRST EPSC INSPECTION
4. RIPARIAN BUFFER ZONE 2 WIDTH VARIES. SEE SHEET 36B (BUFFER MANAGEMENT PLAN – PROPOSED ZONE 1 AND ZONE 2 RIPARIAN BUFFERS)

SITE ACREAGE: 75.5
DISTURBED ACRES: 30.3
IMPERVIOUS AREA: 124,865 SF

JOHN P. BRIANO II
REGISTERED ENGINEER
AGRICULTURE
No. 129831
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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210 25th Avenue North, Suite 1102
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CITY OF FRANKLIN, TENNESSEE

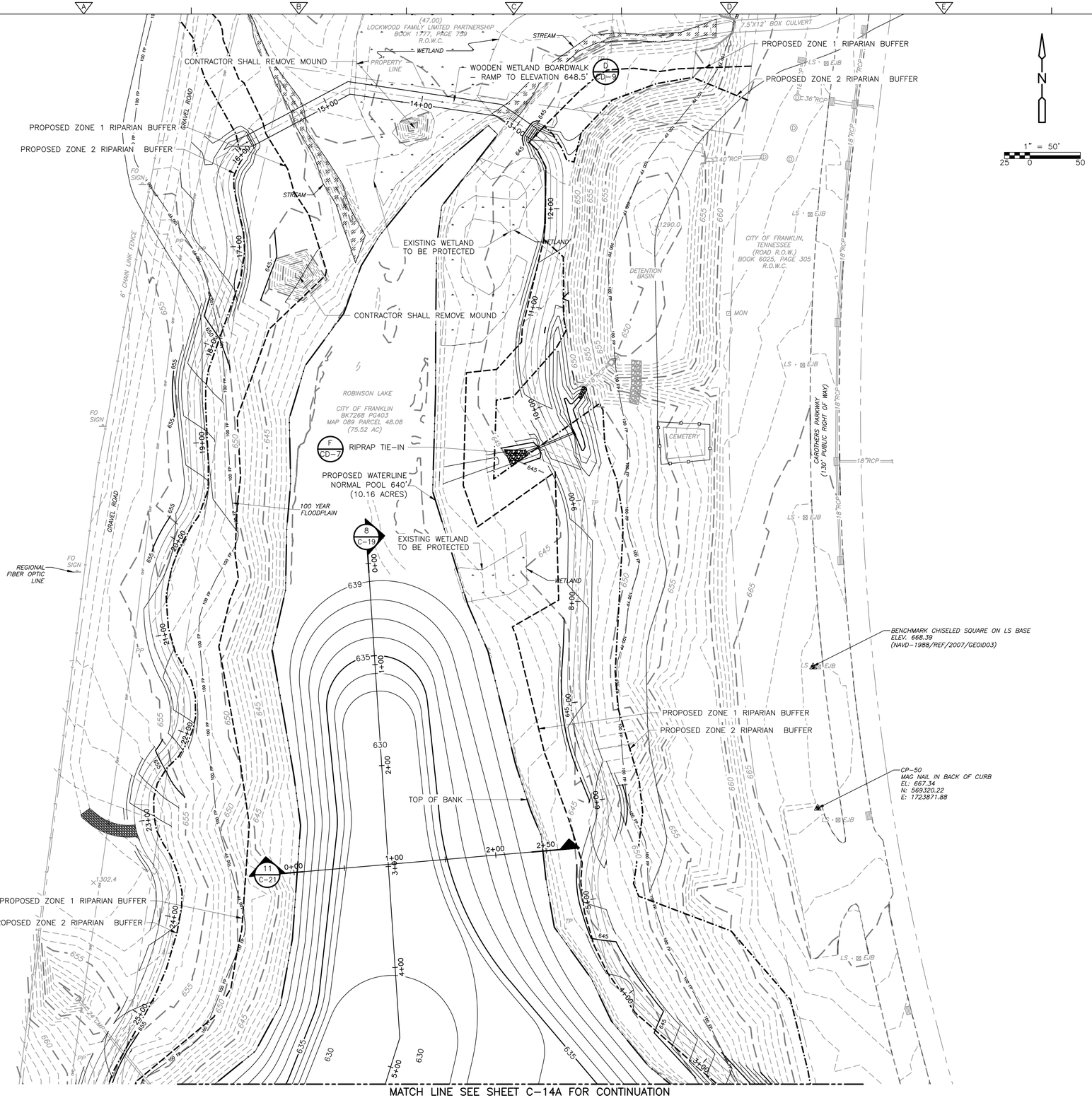
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

GRADING PLAN I

PROJECT NO. 14915-237520
FILE NAME: C014STPL-A.DWG
SHEET NO. C-14A

ISSUED FOR BID

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NOTE:

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4. RIPARIAN BUFFER ZONE 2 WIDTH VARIES. SEE SHEET 36B (BUFFER MANAGEMENT PLAN – PROPOSED ZONE 1 AND ZONE 2 RIPARIAN BUFFERS)

SITE ACREAGE: 75.5
DISTURBED ACRES: 30.3
IMPERVIOUS AREA: 124,865 SF

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 129231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

GRADING PLAN II

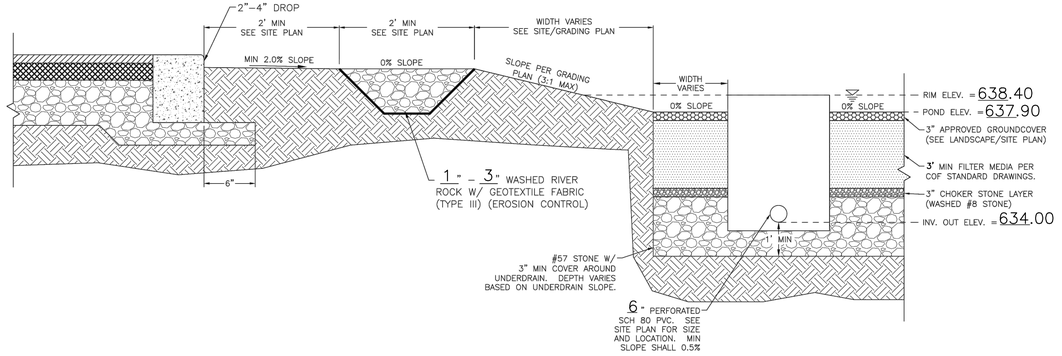
PROJECT NO. 14915-237520
FILE NAME: C014STPL-B.DWG

SHEET NO.
C-14B

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NOTE: PRIOR TO USING THIS STANDARD DRAWING, THE ENGINEER OF RECORD SHALL SPECIFY THE FOLLOWING INFORMATION:
1. RIM ELEVATION
2. POND ELEVATION,
3. UNDERDRAIN SIZE / INV ELEV.
4. GRAVEL/STONE DIAPHRAGM ROCK SIZE
5. POND #



GENERAL NOTES:
1) COORDINATE STANDARD DRAWING WITH SITE PLAN, GRADING PLAN AND LANDSCAPING PLAN.
2) COORDINATE STANDARD DRAWING WITH CITY OF FRANKLIN "PRE-TREATMENT (SHEET FLOW) GRAVEL/STONE DIAPHRAGM" AND "BIORETENTION LEVEL 1" DETAILS.

LEVEL 1 BIORETENTION WITH GRAVEL/STONE DIAPHRAGM BIOPOND # 2			
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hodge	DATE: 4/15/2021	
NOT TO SCALE			

GRIPH:
AS SHOWN ON APPROVED PLANS

CONTENTS:
85% to 88% SAND
8% to 12% SOIL FINES
3% to 5% ORGANIC MATTER

PRE-TREATMENT NOTES:

TREATMENT DEPENDENT ON TYP. FLOW

SHEET FLOW
- VEGETATED FILTER STRIP
- GRAVEL/STONE DIAPHRAGM
- VEGETATED LEVEL SPREADER

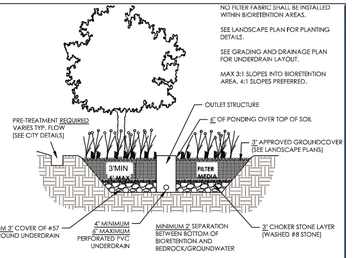
CONCENTRATED FLOW
- PRE-TREATMENT (FOREBAY) CELL
- GRAVEL/STONE FLOW SPREADER

NO FILTER FABRIC SHALL BE INSTALLED WITHIN BIORETENTION AREAS.

SEE LANDSCAPE PLAN FOR PLANTING DETAILS.

SEE GRADING AND DRAINAGE PLAN FOR UNDERDRAIN LAYOUT.

MAX 3:1 SLOPES INTO BIORETENTION AREA. 4:1 SLOPES PREFERRED.



1. EXCAVATORS SHALL WORK FROM THE OUTSIDE THE GREEN INFRASTRUCTURE PRACTICE (GIP) FOOTPRINT. EXCAVATED AREAS SHALL NOT BE COMPACTED OR LOADED IN ANY WAY AS TO CAUSE SOIL COMPACTION.
2. DURING EXCAVATION, MOIST CONDITIONS MAY CAUSE FINES TO CLOG THE NATIVE SOIL SURFACE OF THE FACILITY. IF THE NATIVE SOIL HAS BEEN EXPOSED TO RAINFALL OR IF SMEARING OCCURS, SCARIFY THE SURFACE TO A DEPTH OF 1" TO RESTORE INFILTRATION CAPACITY.
3. DURING CONSTRUCTION PHASE, CONTRACTOR SHALL DIVERT RUNOFF FLOW AROUND THE GIP AREAS TO ENSURE SEDIMENT DOES NOT ENTER.
4. RECYCLED MATERIAL IS NOT APPROVED FOR USE IN GIP FACILITIES.
5. UTILITIES AND IRRIGATION ARE PROHIBITED WITHIN THE GIP FOOTPRINT.
6. WATER QUALITY SIGNS SHALL BE INSTALLED IN ALL WATER QUALITY AREAS.

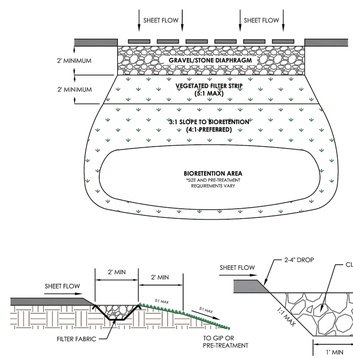
NOTE:
TREE PLANTING PITS TO BE BACKFILLED WITH A SOIL MIXTURE CONSISTING OF OF 50% SAND, 30% TOP SOIL AND 20% ACCEPTABLE LEAF COMPOST

CONSTRUCTION SEQUENCING:
1. CONSTRUCT STORMWATER RUNOFF DIVERSIONS.
2. EXCAVATE GIP AREAS.
3. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
4. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
5. INSTALL STONE SUBBASE AND UNDERDRAINS. CONNECT UNDERDRAIN TO OUTLET STRUCTURE.
6. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
7. INSTALL ADDITIONAL STONE ON AND FLAG THE UNDERDRAIN (3' EACH SIDE).
8. A SMALL SKID STEER LOADER MAY TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AVOIDING THE UNDERDRAIN PIPE INSTALLATIONS.
9. DELIVER AND STORE SOIL MEDIA ON PLASTIC SHEETING WITH APPROPRIATE EROSION CONTROL MEASURES.
10. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
11. INSTALL SOIL MEDIA IN LIFTS. DO NOT COMPACT WITH EQUIPMENT.
12. ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS.
13. INSTALL VEGETATION, AND WATER ACCORDINGLY. PERMANENT IRRIGATION IS PROHIBITED IN GIP.
14. INSTALL SPECIFIED GROUNDCOVER.
15. FLAG LIMITS OF GIP FOR SURVEY LOCATE AND SHOW ON AS-BUILT PLANS.

N.T.S.

BIORETENTION LEVEL 1 (TITLE)	CITY OF FRANKLIN ENGINEERING 109 THIRD AVE SOUTH FRANKLIN, TN 37064	
GIP-01 (01) (DWG.NO.)	DIRECTOR OF ENGINEERING Ralph Hodge	7/22/19 (DATE)
07/22/2019 (EFFECTIVE DATE)	STORMWATER COORDINATOR	7/22/19 (DATE)

BOIRETENTION LEVEL 1
DETAIL A
NTS



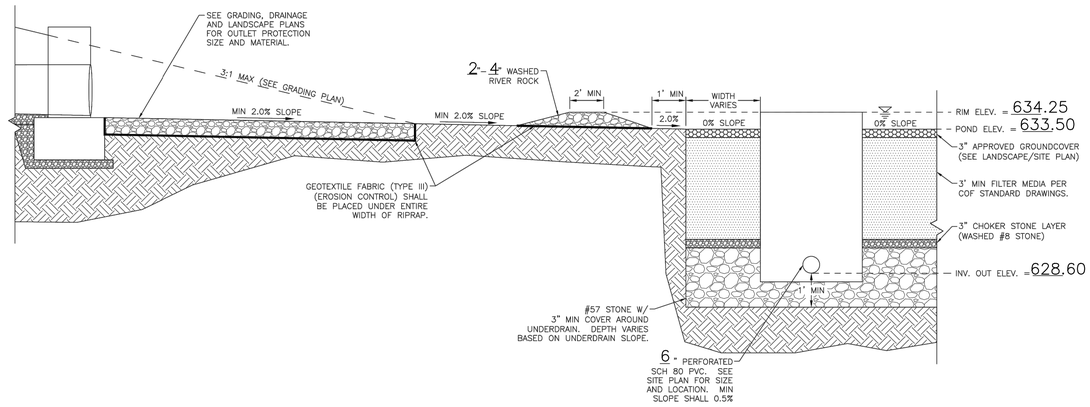
A GRAVEL DIAPHRAGM LOCATED AT THE EDGE OF THE PAVEMENT SHOULD BE ORIENTED PERPENDICULAR TO THE FLOW PATH TO PRE-TREAT LATERAL RUNOFF, AND SHALL RUN ALONG THE SAME CONTOUR AT THE TOP OF THE FILTER STRIP. A LAYER OF FILTER FABRIC SHOULD BE PLACED BETWEEN THE GRAVEL AND THE UNDERLYING SOIL TRENCH. IF THE CONTRIBUTING DRAINAGE AREA IS STEEP (6% OR GREATER), LARGER STONE SHOULD BE USED.

GRAVEL/STONE DIAPHRAGM NOTES:
1. A LAYER OF FILTER FABRIC SHALL BE PLACED BETWEEN THE GRAVEL AND THE UNDERLYING SOIL TRENCH
2. STONE SHALL BE SIZED ACCORDING TO THE EXPECTED RATE OF DISCHARGE

N.T.S.

Pre-Treatment (sheet flow) GRAVEL/STONE DIAPHRAGM (TITLE)	CITY OF FRANKLIN ENGINEERING 109 THIRD AVE SOUTH FRANKLIN, TN 37064	
(DWG.NO.)	DIRECTOR OF ENGINEERING	12/7/2017 (DATE)
02/20/2017 (EFFECTIVE DATE)	STORMWATER COORDINATOR	12/7/2017 (DATE)

NOTE: PRIOR TO USING THIS STANDARD DRAWING, THE ENGINEER OF RECORD SHALL SPECIFY THE FOLLOWING INFORMATION:
1. RIM ELEVATION
2. POND ELEVATION,
3. UNDERDRAIN SIZE / INV ELEV.
4. GRAVEL/STONE DIAPHRAGM ROCK SIZE
5. POND #



GENERAL NOTES:
1) COORDINATE STANDARD DRAWING WITH SITE PLAN, GRADING PLAN AND LANDSCAPING PLAN.
2) COORDINATE STANDARD DRAWING WITH CITY OF FRANKLIN "PRE-TREATMENT CELL/FOREBAY" AND "BIORETENTION LEVEL 2" DETAILS.

LEVEL 2 BIORETENTION WITH ROCK CHECK DAM BIOPOND # 1			
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hodge	DATE: 4/15/2021	
NOT TO SCALE			

AS SHOWN ON APPROVED PLANS

SHEET FLOW
- VEGETATED FILTER STRIP
- GRAVEL/STONE DIAPHRAGM
- VEGETATED LEVEL SPREADER

CONCENTRATED FLOW
- PRE-TREATMENT (FOREBAY) CELL
- GRAVEL/STONE FLOW SPREADER

CONTENTS:
80% to 88% SAND
8% to 12% SOIL FINES
3% to 8% ORGANIC MATTER

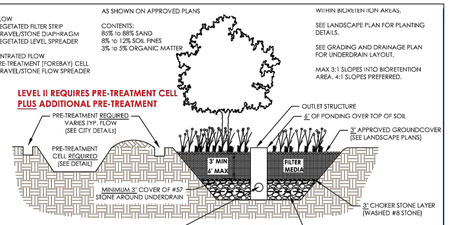
WITHIN BIORETENTION AREAS.

SEE LANDSCAPE PLAN FOR PLANTING DETAILS.

SEE GRADING AND DRAINAGE PLAN FOR UNDERDRAIN LAYOUT.

MAX 3:1 SLOPES INTO BIORETENTION AREA. 4:1 SLOPES PREFERRED.

LEVEL II REQUIRES PRE-TREATMENT CELL PLUS ADDITIONAL PRE-TREATMENT



1. EXCAVATORS SHALL WORK FROM THE OUTSIDE THE GREEN INFRASTRUCTURE PRACTICE (GIP) FOOTPRINT. EXCAVATED AREAS SHALL NOT BE COMPACTED OR LOADED IN ANY WAY AS TO CAUSE SOIL COMPACTION.
2. DURING EXCAVATION, MOIST CONDITIONS MAY CAUSE FINES TO CLOG THE NATIVE SOIL SURFACE OF THE FACILITY. IF THE NATIVE SOIL HAS BEEN EXPOSED TO RAINFALL OR IF SMEARING OCCURS, HAND RAKE OR SCARIFY THE SURFACE TO A DEPTH OF 12" TO RESTORE INFILTRATION CAPACITY.
3. DURING CONSTRUCTION PHASE, CONTRACTOR SHALL DIVERT RUNOFF FLOW AROUND THE GIP AREAS TO ENSURE SEDIMENT DOES NOT ENTER.
4. RECYCLED MATERIAL IS NOT APPROVED FOR USE IN GIP FACILITIES.
5. UTILITIES AND IRRIGATION ARE PROHIBITED WITHIN THE GIP FOOTPRINT.
6. WATER QUALITY SIGNS SHALL BE INSTALLED IN ALL WATER QUALITY AREAS.

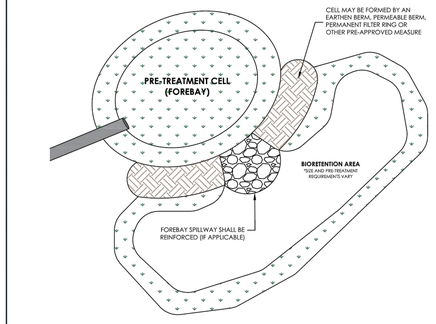
NOTE:
TREE PLANTING PITS TO BE BACKFILLED WITH A SOIL MIXTURE CONSISTING OF OF 50% SAND, 30% TOP SOIL AND 20% ACCEPTABLE LEAF COMPOST

CONSTRUCTION SEQUENCING:
1. CONSTRUCT STORMWATER RUNOFF DIVERSIONS.
2. EXCAVATE GIP AREAS.
3. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
4. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
5. INSTALL STONE SUBBASE AND UNDERDRAINS. CONNECT UNDERDRAIN TO OUTLET STRUCTURE.
6. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
7. INSTALL ADDITIONAL STONE ON AND FLAG THE UNDERDRAIN (3' EACH SIDE).
8. A SMALL SKID STEER LOADER MAY TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AVOIDING THE UNDERDRAIN PIPE INSTALLATIONS.
9. DELIVER AND STORE SOIL MEDIA ON PLASTIC SHEETING WITH APPROPRIATE EROSION CONTROL MEASURES.
10. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT **(615) 791-3218.**
11. ALLOW 48 HOURS SETTLEMENT. DO NOT COMPACT WITH EQUIPMENT.
12. ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS.
13. INSTALL VEGETATION, AND WATER ACCORDINGLY. PERMANENT IRRIGATION IS PROHIBITED IN GIP.
14. INSTALL SPECIFIED GROUNDCOVER.
15. FLAG LIMITS OF GIP FOR SURVEY LOCATE AND SHOW ON AS-BUILT PLANS.

N.T.S.

BIORETENTION LEVEL 2 (TITLE)	CITY OF FRANKLIN ENGINEERING 109 THIRD AVE SOUTH FRANKLIN, TN 37064	
GIP-01 (02) (DWG.NO.)	DIRECTOR OF ENGINEERING Ralph Hodge	7/22/19 (DATE)
07/22/2019 (EFFECTIVE DATE)	STORMWATER COORDINATOR	7/22/19 (DATE)

BIORETENTION LEVEL 2
DETAIL B
NTS



PRE-TREATMENT CELL NOTES:
1. LEVEL II REQUIRES PRE-TREATMENT CELL PLUS ADDITIONAL TREATMENT
2. STORAGE VOLUME = 15% OF TREATMENT VOLUME (Tv)
3. 2:1 LENGTH:WIDTH DESIGN
4. DISSIPATION REQUIRED FOR EXPECTED RATES OF DISCHARGE
5. PRE-TREATMENT CELL MUST NOT INTERFERE WITH REQUIRED PONDING IN BIORETENTION AREAS
6. PRE-TREATMENT CELLS DO NOT REQUIRE UNDERLYING FILTER MEDIA

N.T.S.

Pre-Treatment (concentrated flow) PRE-TREATMENT CELL/FOREBAY (TITLE)	CITY OF FRANKLIN ENGINEERING 109 THIRD AVE SOUTH FRANKLIN, TN 37064	
(DWG.NO.)	DIRECTOR OF ENGINEERING	12/7/2017 (DATE)
02/20/2017 (EFFECTIVE DATE)	STORMWATER COORDINATOR	12/7/2017 (DATE)

JOHN P. BRIAND II — REGISTERED ENGINEER — AGRICULTURE — No. 126231 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

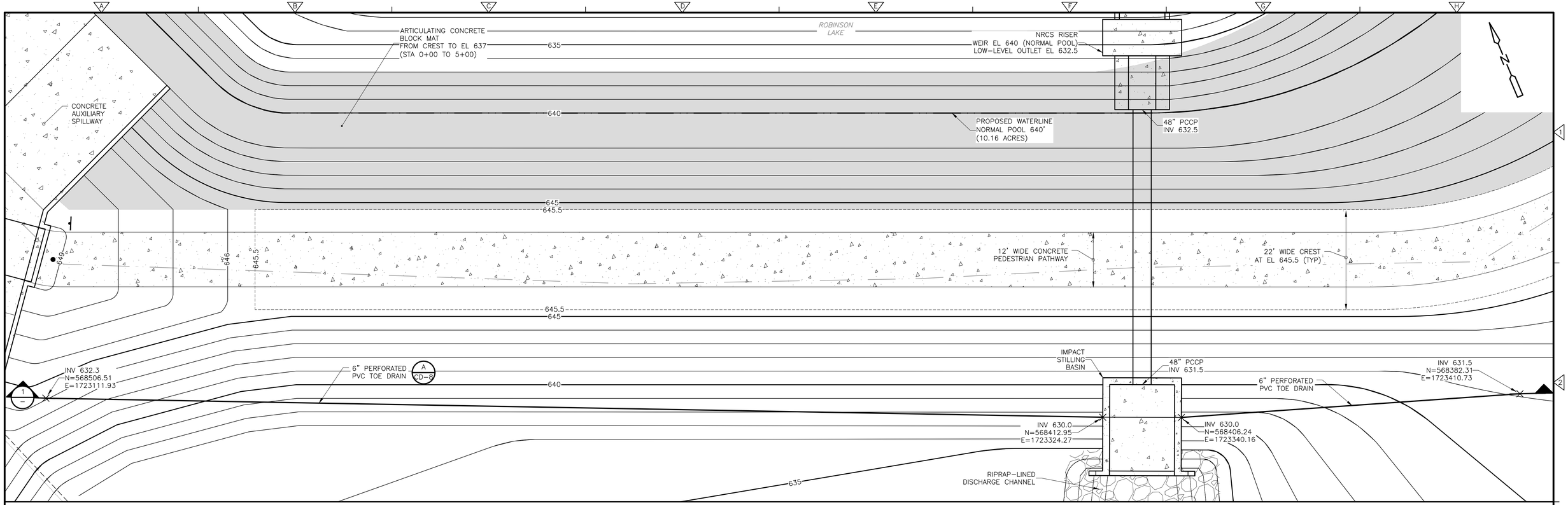
WATER QUALITY STANDARD DRAWINGS

PROJECT NO. 14915-237520
FILE NAME: C015STDT.DWG

SHEET NO.
C-15

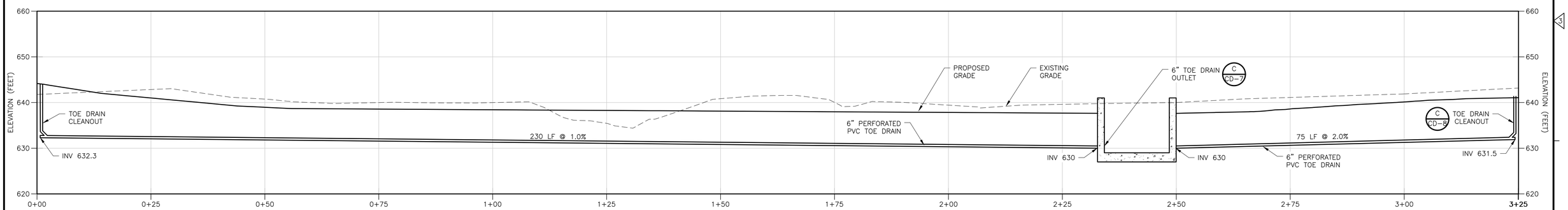
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TOE DRAIN
PLAN

1" = 10'
5 0 10



TOE DRAIN
SECTION 1

VERTICAL SCALE: 1" = 10' 5 0 10
HORIZONTAL SCALE: 1" = 10' 5 0 10

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

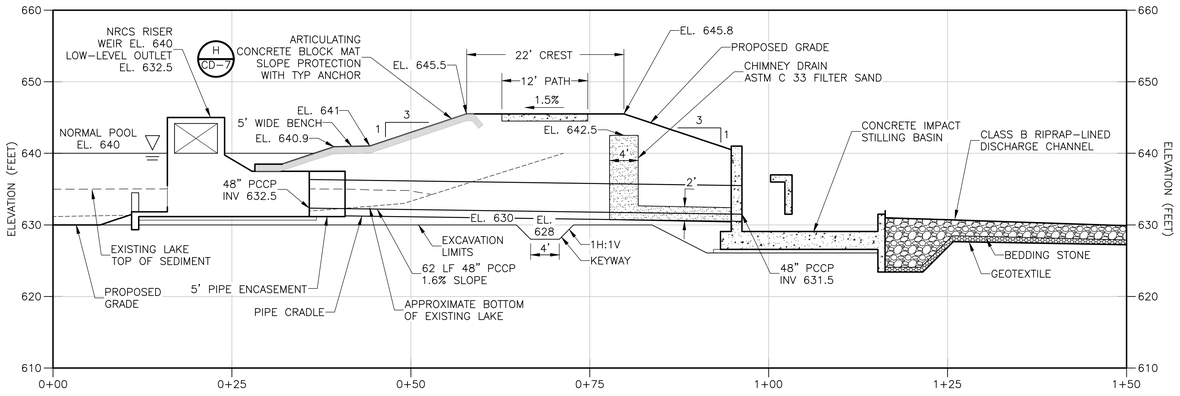
TOE DRAIN PLAN AND PROFILE

PROJECT NO. 14915-237520
FILE NAME: C016TDPP.DWG

SHEET NO.
C-16

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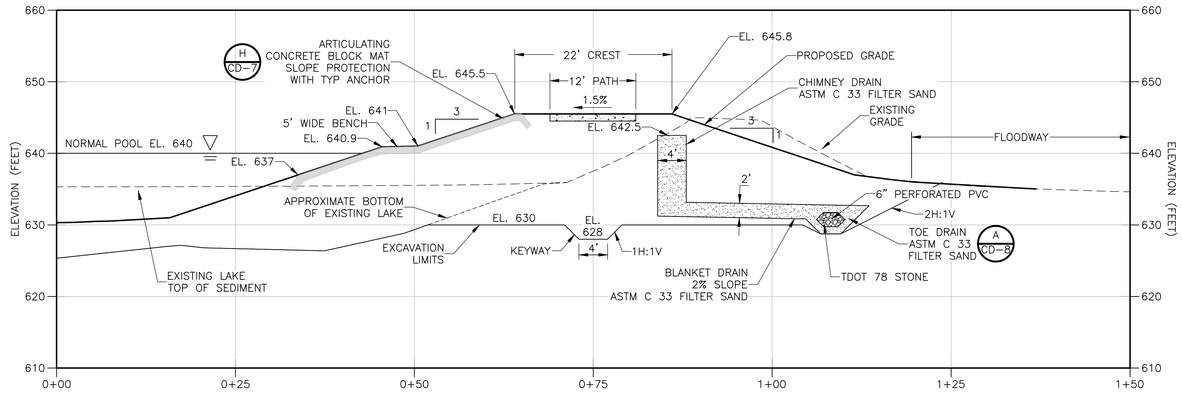


EMBANKMENT DAM PRIMARY SPILLWAY

SECTION 1 C-14A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

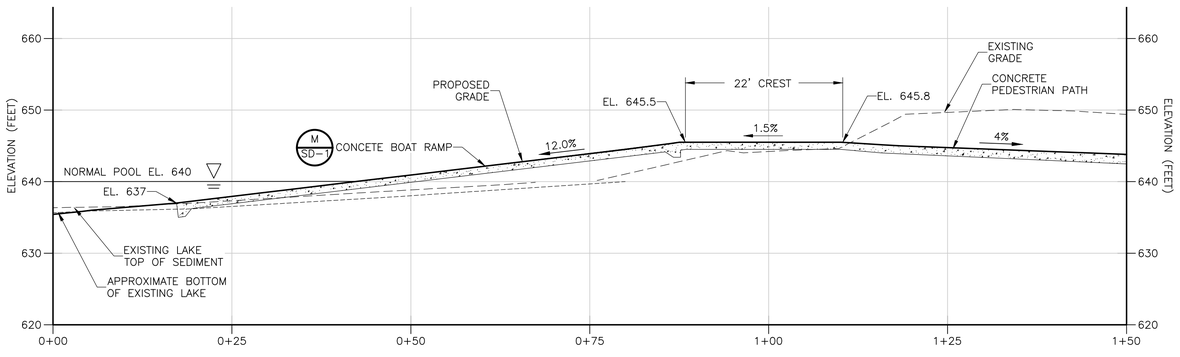


EMBANKMENT DAM – RIGHT OF PRIMARY SPILLWAY

SECTION 2 C-14A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

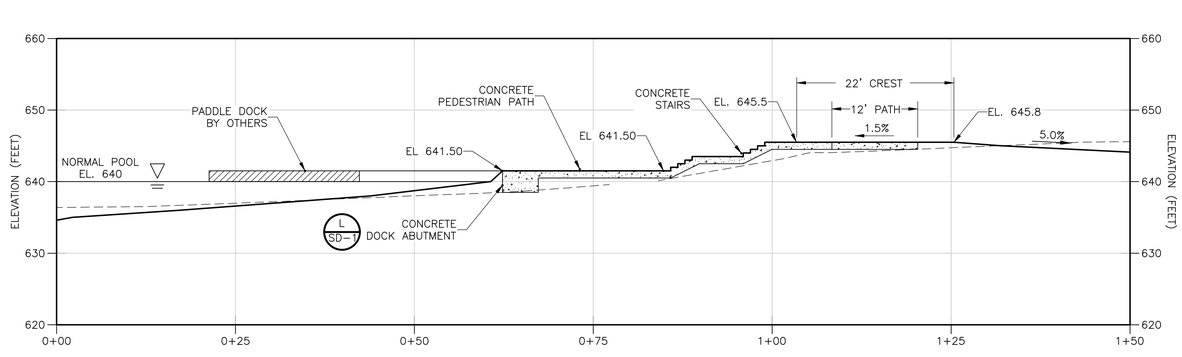


EMBANKMENT DAM – BETWEEN EXISTING EMBANKMENT DAM AND EXISTING DIKE

SECTION 3 C-14A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10



EMBANKMENT DAM – BETWEEN EXISTING EMBANKMENT DAM AND EXISTING DIKE

SECTION 4 C-14A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
TENNESSEE
No. 128231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

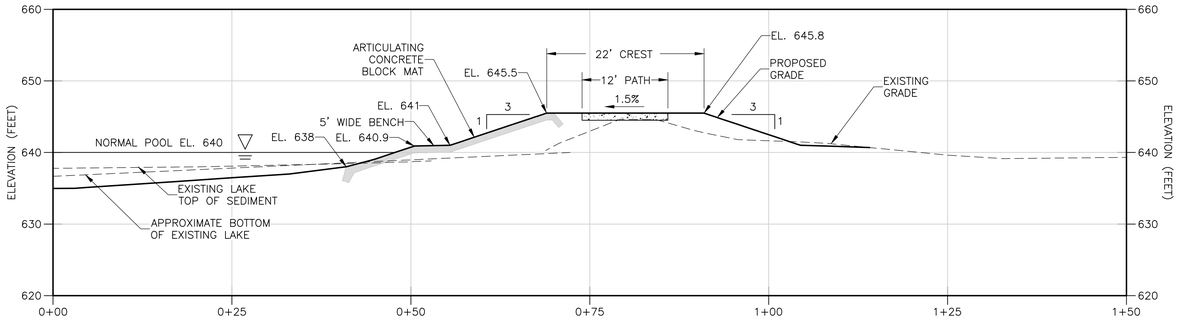
DAM SECTIONS I

PROJECT NO. 14915-237520
FILE NAME: C017PRSC.DWG

SHEET NO.
C-17

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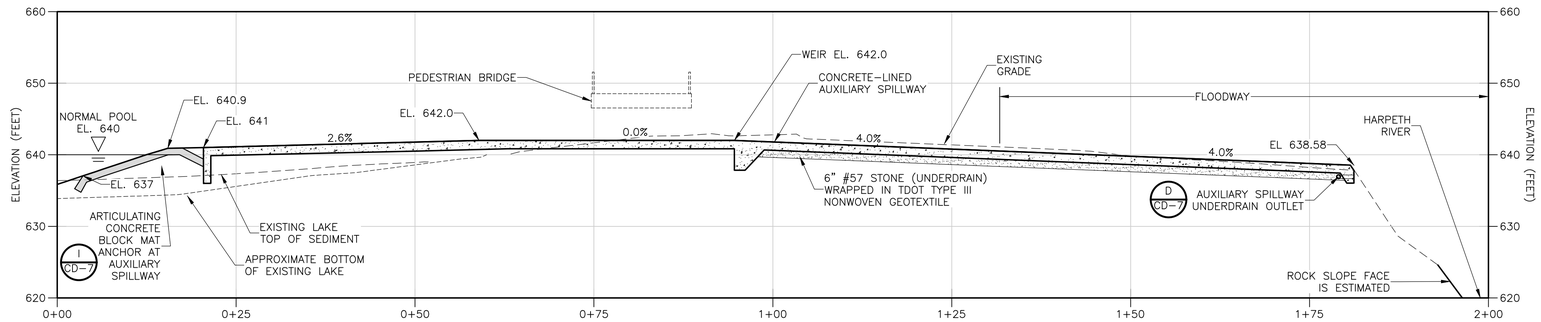


EMBANKMENT DAM – EXISTING DIKE

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

SECTION 5 C-14A



EMBANKMENT DAM AUXILIARY SPILLWAY

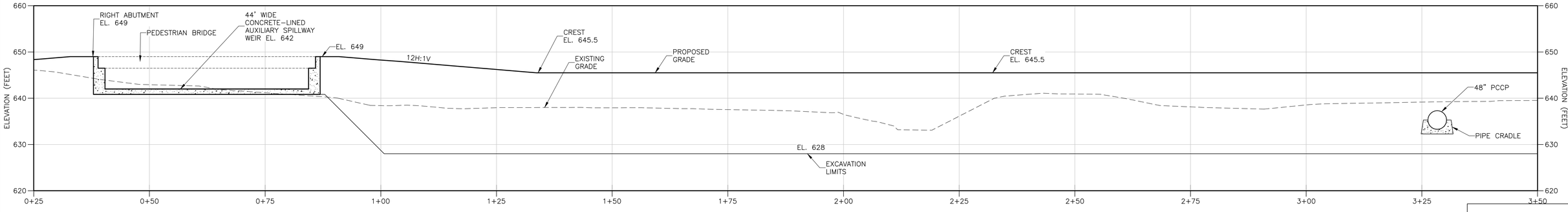
VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

SECTION 6 C-14A

NOTE:

1. THE EXISTING CONTOURS AT THE EDGE OF THE HARPETH RIVER ARE APPROXIMATE DUE TO STEEP DROP-OFF TO RIVER WATER LEVEL.



EMBANKMENT DAM – ALONG CREST NEAR PRIMARY AND AUXILARY SPILLWAYS

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

SECTION 7 C-14A

JOHN P. BRIAND II REGISTERED ENGINEER AGRICULTURE TENNESSEE No. 128231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

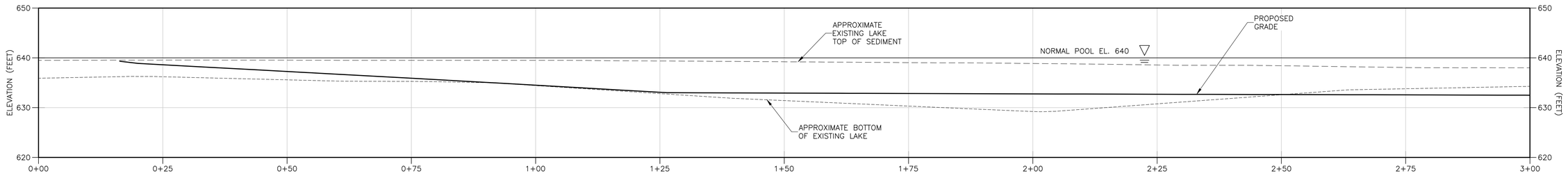
DAM SECTIONS II

PROJECT NO. 14915-237520
FILE NAME: C018PRSC.DWG

SHEET NO. C-18

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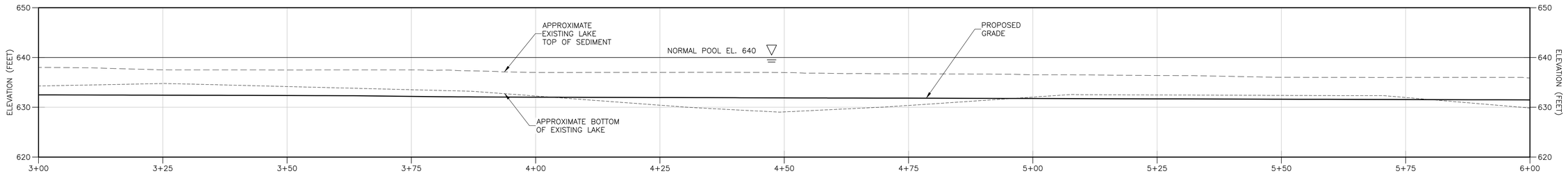
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VERTICAL SCALE: 1" = 10' 5 0 10
HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 0+00 TO 3+00

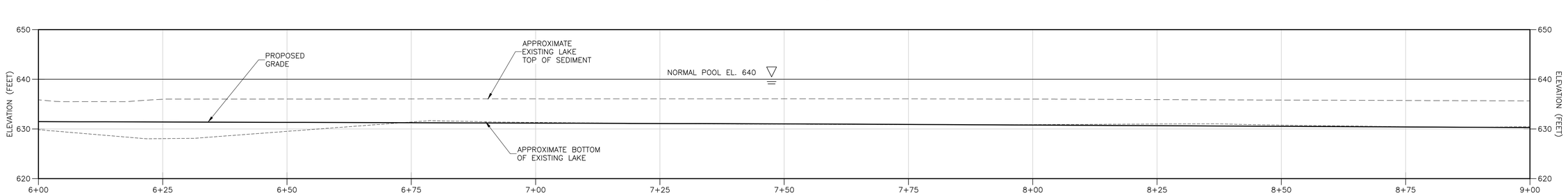
SECTION 8 / C-14B



VERTICAL SCALE: 1" = 10' 5 0 10
HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 3+00 TO 6+00

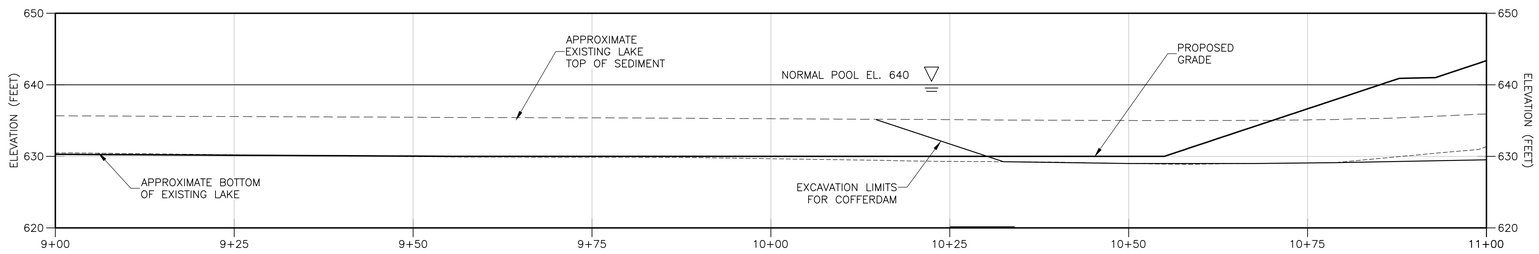
SECTION 8 / C-14B



VERTICAL SCALE: 1" = 10' 5 0 10
HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 6+00 TO 9+00

SECTION 8 / C-14A



VERTICAL SCALE: 1" = 10' 5 0 10
HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 9+00 TO 11+00

SECTION 8 / C-14A

NOTE:

1. TOP OF SEDIMENT WAS GENERATED FROM AN UNMANNED AERIAL SYSTEM (UAS) SURVEY BY CIVIL & ENVIRONMENTAL CONSULTANTS (CEC) ON SEPTEMPBER 23, 2021.

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHTESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

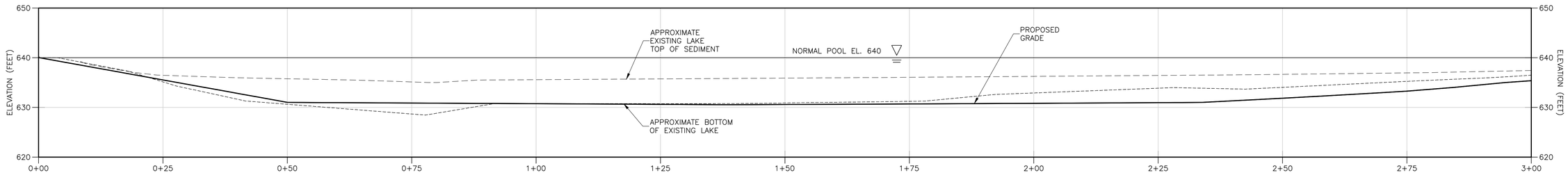
LAKE SEDIMENT SECTIONS I

PROJECT NO. 14915-237520
FILE NAME: C019PRSC.DWG

SHEET NO.
C-19

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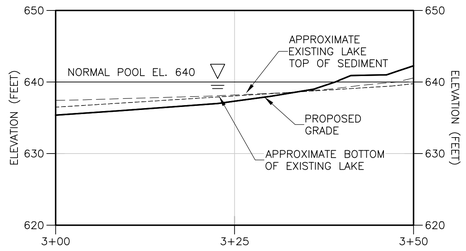


VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 0+00 TO 3+00

SECTION 9 C-14A



VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 3+00 TO 3+50

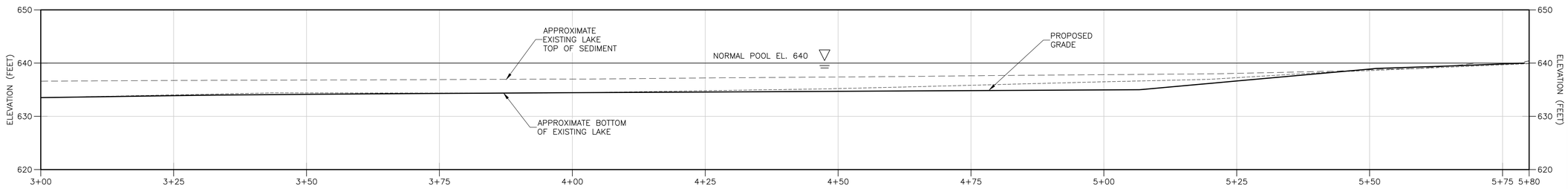
SECTION 9 C-14A

VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 0+00 TO 3+00

SECTION 10 C-14A



VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 3+00 TO 5+80

SECTION 10 C-14A

NOTE:

1. TOP OF SEDIMENT WAS GENERATED FROM AN UNMANNED AERIAL SYSTEM (UAS) SURVEY BY CIVIL & ENVIRONMENTAL CONSULTANTS (CEC) ON SEPTEMPBER 23, 2021.

JOHN P. BRIAND II
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: D. DORAN
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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

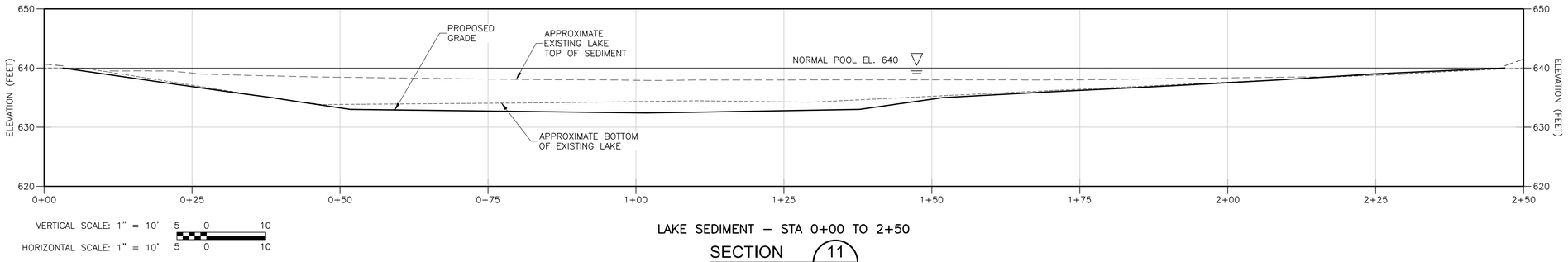
LAKE SEDIMENT SECTIONS II

PROJECT NO. 14915-237520
FILE NAME: C020PRSC.DWG

SHEET NO.
C-20

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VERTICAL SCALE: 1" = 10' 5 0 10

HORIZONTAL SCALE: 1" = 10' 5 0 10

LAKE SEDIMENT – STA 0+00 TO 2+50

SECTION 11 / C-14B

NOTE:

1. TOP OF SEDIMENT WAS GENERATED FROM AN UNMANNED AERIAL SYSTEM (UAS) SURVEY BY CIVIL & ENVIRONMENTAL CONSULTANS (CEC) ON SEPTEMPBER 23, 2021.

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
CONVERSE
No. 128231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

LAKE SEDIMENT SECTIONS III

PROJECT NO. 14915-237520
FILE NAME: C021PRSC.DWG

SHEET NO.
C-21

ISSUED FOR BID

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MATCH LINE SEE SHEET C-23 FOR CONTINUATION

NOTE:

1. ALL DISTURBED AREAS WITH SLOPES EQUAL TO 4H:1V OR STEEPER SHALL HAVE EROSION CONTROL BLANKET INSTALLED.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE
3. AS PER FMC 23-107(5)(D) BUFFER BOUNDARIES SHALL BE MARKED WITH SIGNS THAT PERSIST BEFORE, DURING, AND AFTER CONSTRUCTION. SIGNAGE SHALL BE POSTED AT THE EDGE OF THE BUFFER ZONE, EACH LOT LINE, AND AT A MAXIMUM SPACING OF ONE HUNDRED FIFTY (150) FEET. THIS SPACING CAN BE REDUCED FOR LARGE SCALE DEVELOPMENT AS APPROVED BY THE CITY'S ENGINEERING DEPARTMENT. THESE SIGN SHALL BE SUPPLIED BY THE CITY OF FRANKLIN'S STORMWATER INSPECTORS AT INITIAL SITE PRECONSTRUCTION MEETINGS AND BE INSTALLED BY THE FIRST EPSC INSPECTION
4. RIPARIAN BUFFER ZONE 2 WIDTH VARIES. SEE SHEET 36B (BUFFER MANAGEMENT PLAN – PROPOSED ZONE 1 AND ZONE 2 RIPARIAN BUFFERS)

N

1" = 50'
25 0 50

LAYDOWN AREA (95,000 SF)

STORAGE/LAYDOWN AREA (18,000 SF)

STORAGE/LAYDOWN AREA (40,000 SF)

STORAGE/LAYDOWN AREA (20,000 SF)

WETLAND TO BE PROTECTED

LIMITS OF DISTURBANCE

PROPOSED ZONE 1 RIPARIAN BUFFER

PROPOSED ZONE 2 RIPARIAN BUFFER

WIRE-BACKED SILT FENCE (A/CD-2)

CONSTRUCTION ROAD STABILIZATION (B/CD-1)

24" SEDIMENT TUBE (D/CD-2)

IF REQUIRED FOR FOUNDATION GROUTING PROGRAM, GRADE AND CONSTRUCT TEMPORARY HAUL ROAD (B/CD-1)

70' TEMPORARY TURBIDITY CURTAIN (D/CD-1)

130' TEMPORARY TURBIDITY CURTAIN (D/CD-1)

MAINTAIN EXISTING CHECK DAMS ADD ADDITIONAL RIPRAP AS NECESSARY (C/CD-1)

24" CORRUGATED HDPE TEMPORARY DIVERSION PIPE

RIPRAP OUTLET PROTECTION (D/CD-5)

MAINTAIN EXISTING ACCESS ROAD ADD ADDITIONAL STONE AS NECESSARY (B/CD-1)

CONCRETE WASHOUT (A/CD-3)

TEMPORARY CONSTRUCTION ENTRANCE (A/CD-1)

MAINTAIN TEMPORARY ACCESS GATE

WETLAND TO BE REMOVED PER AQUATIC RESOURCE ALTERATION PERMIT

PROPOSED ZONE 1 RIPARIAN BUFFER

CATCH BASIN RIM 657.54 INV IN 650.84 (N) INV IN 650.74 (E) INV OUT 650.64 (S)

CP-51 MAG NAIL IN ASPHALT EL: 657.41 N: 568818.03 E: 1724027.80

CATCH BASIN RIM 654.46 INV 648.76 (IN-N) INV 648.66 (OUT-S)

CATCH BASIN RIM 651.91 INV 646.11 (IN-N) INV 646.01 (OUT-S)

DBL CATCH BASIN RIM 651.25 INV 646.05 (OUT-S)

DBL CATCH BASIN RIM 650.75 INV 643.15 (IN-N) INV 644.95 (OUT-S)

DBL CATCH BASIN RIM 650.67 INV 643.97 (IN-S) INV 643.77 (IN-N) INV 643.67 (IN-E) INV 643.57 (OUT-W)

DBL AREA DRAIN RIM 651.26 INV 643.96 (IN-E) INV 643.76 (OUT-W)

DBL AREA DRAIN RIM 651.18 INV 642.98 (IN-E) INV 642.78 (OUT-W)

DBL CATCH BASIN RIM 650.67 INV 644.57 (IN-S) INV 644.47 (IN-N) INV 644.17 (OUT-W)

CATCH BASIN RIM 650.78 INV 644.98 (IN-S) INV 644.78 (OUT-N)

CATCH BASIN RIM 651.21 INV 645.81 (OUT-N)

CATCH BASIN RIM 650.97 INV 645.77 (IN-S) INV 645.67 (OUT-N)

CATCH BASIN RIM 651.57 INV 646.57 (IN-S) INV 646.37 (OUT-N)

CATCH BASIN RIM 647.73 (OUT-N)

CATCH BASIN RIM 652.54 INV OUT 646.69 (S)

CATCH BASIN RIM 653.15

TBM IRON ROD WITH CAP EL: 653.06 N: 568271.44 E: 1724227.80

TOP OF CONC STRUCTURE C ELEV. 654.02

INV 641.98

42" RCP INV 642.06

8" CONC.

DETENTION BASIN

6" CONC. WALL

8" OPENING IN STRUCTURE EL 641.40

2'X2' SPILLWAY CUT EL 642.83

8" RCP INV 641.47 (OUT)

18" RCP INV 640.97

6" CONC. WALL

36" RCP (130' PUBLIC RIGHT OF WAY)

PROPERTY LINE (TYP)

EXISTING DIKE

EXISTING EMBANKMENT DAM

100 YEAR FLOODPLAIN

WATERLINE NORMAL POOL 640' (10.35 ACRES)

TOP OF BANK

ROBINSON LAKE

HARPETH RIVER

FLOODWAY

RIPRAP

WETLAND

SINKHOLE

60' RIPARIAN BUFFER

GRAVEL ACCESS ROAD

ACCESS GATE

BRUSH PILE

SOIL STOCKPILE

INTERSTATE 65 FEDERAL AID PROJECT NO. I-65-2(23) 57 SHEETS 35-37

6' CHAIN LINK FENCE

4' WOVEN WIRE FENCE

TVA TRANSMISSION LINE EASEMENT BOOK 4439, PAGE 813 R.O.W.C.

FO SIGN

GRAVEL ROAD

PP

FV

SF

LOD

SN

EJB

LS

MON

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
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APPROVED BY: J. BRIANT
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Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATION CONTROL PLAN
PHASE 1 - AREA 1

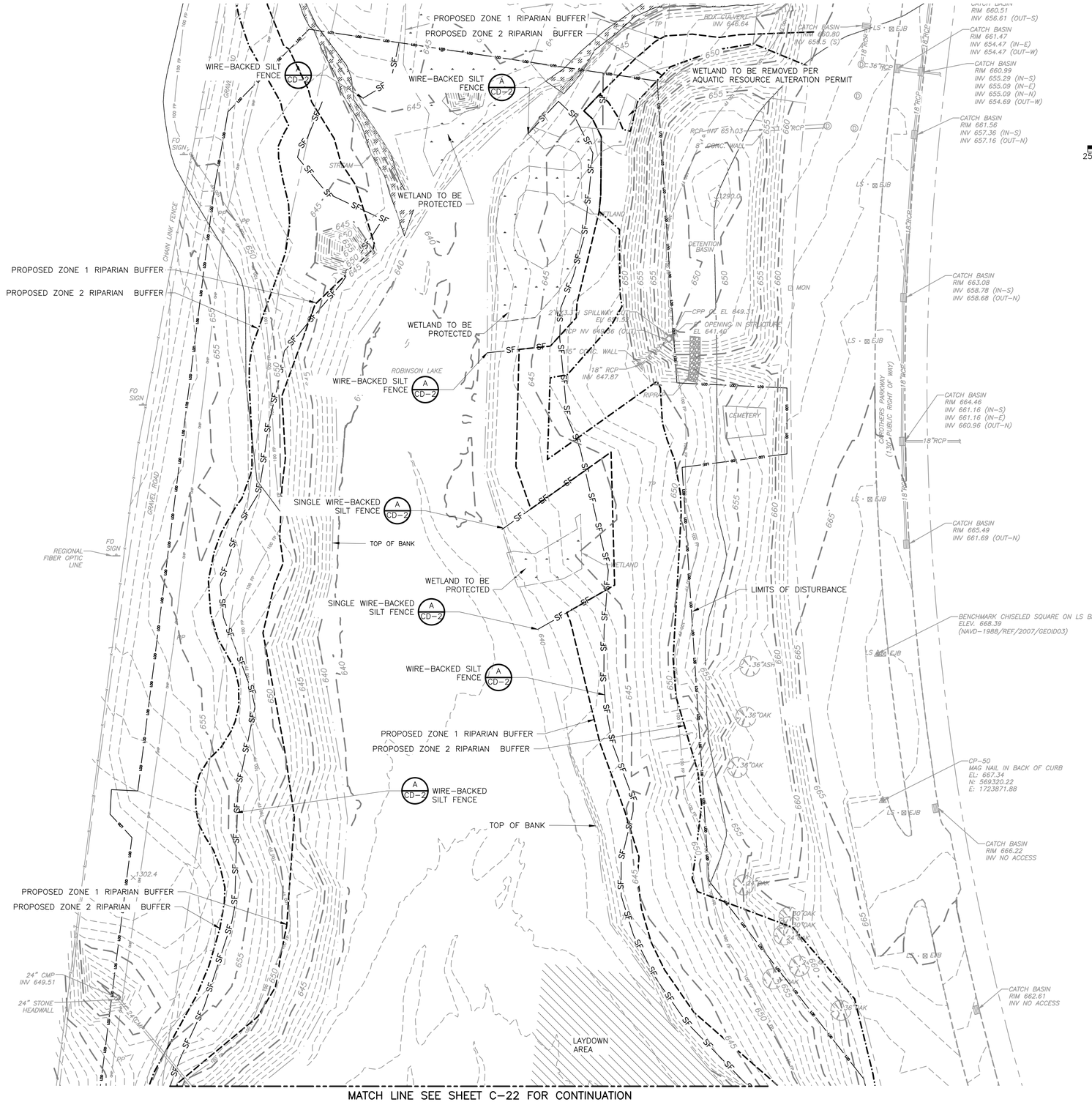
PROJECT NO. 14915-237520
FILE NAME: C022ESPL.DWG

SHEET NO.
C-22

JOHN P. BRIANT II
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 128231
STATE OF TENNESSEE

ISSUED FOR BID

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MATCH LINE SEE SHEET C-22 FOR CONTINUATION

NOTE:

1. ALL DISTURBED AREAS WITH SLOPES EQUAL TO 4H:1V OR STEEPER SHALL HAVE EROSION CONTROL BLANKET INSTALLED.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE
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4. RIPARIAN BUFFER ZONE 2 WIDTH VARIES. SEE SHEET 36B (BUFFER MANAGEMENT PLAN – PROPOSED ZONE 1 AND ZONE 2 RIPARIAN BUFFERS)

JOHN P. BRIAND III REGISTERED ENGINEER AGRICULTURE COMMISSION No. 126231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

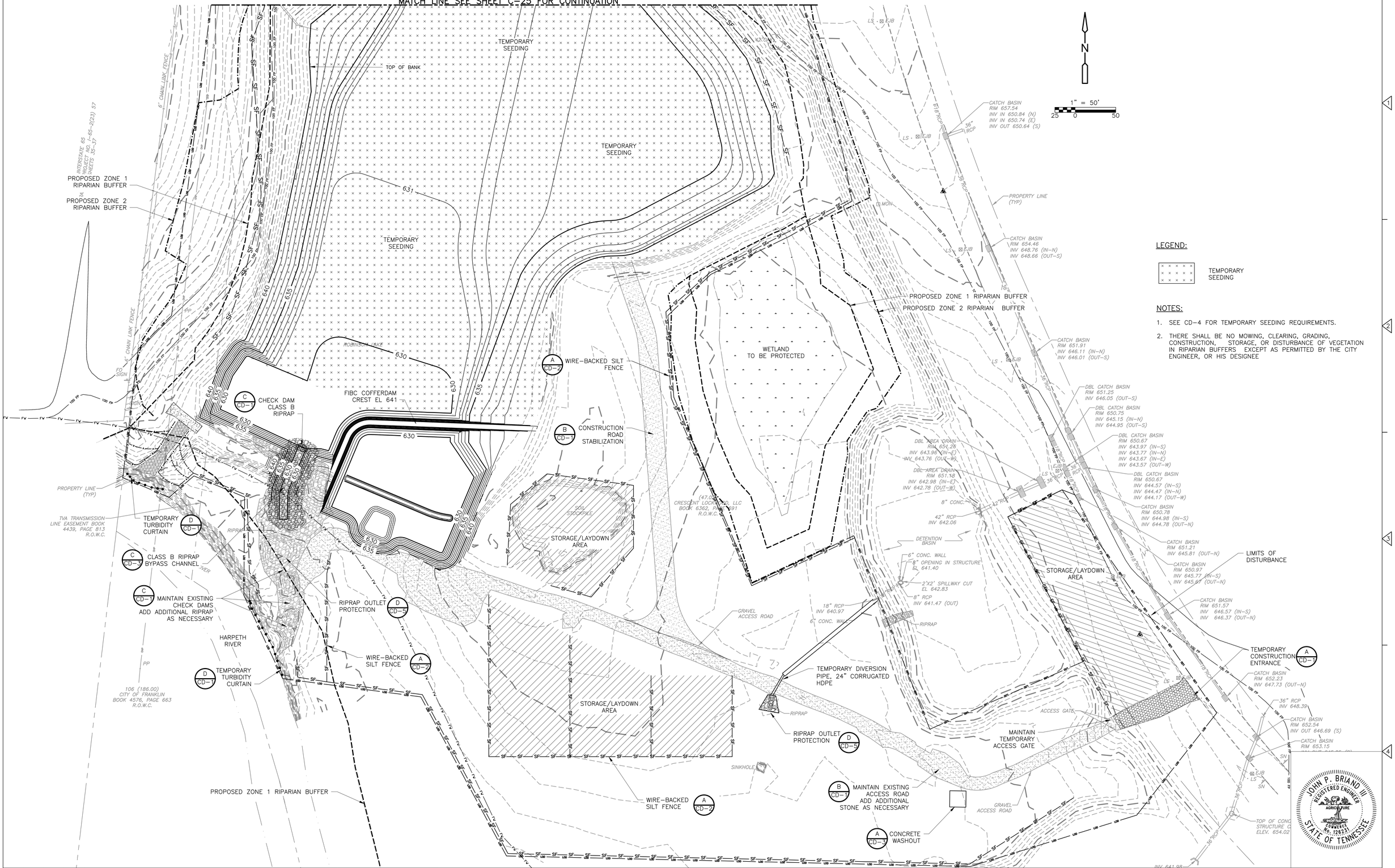
EROSION AND SEDIMENTATION CONTROL PLAN
PHASE 1 - AREA 2

PROJECT NO. 14915-237520
FILE NAME: C023ESPL.DWG
SHEET NO. C-23

ISSUED FOR BID

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MATCH LINE SEE SHEET C-25 FOR CONTINUATION



LEGEND:

TEMPORARY SEEDING

NOTES:

1. SEE CD-4 FOR TEMPORARY SEEDING REQUIREMENTS.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE

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CITY OF FRANKLIN, TENNESSEE

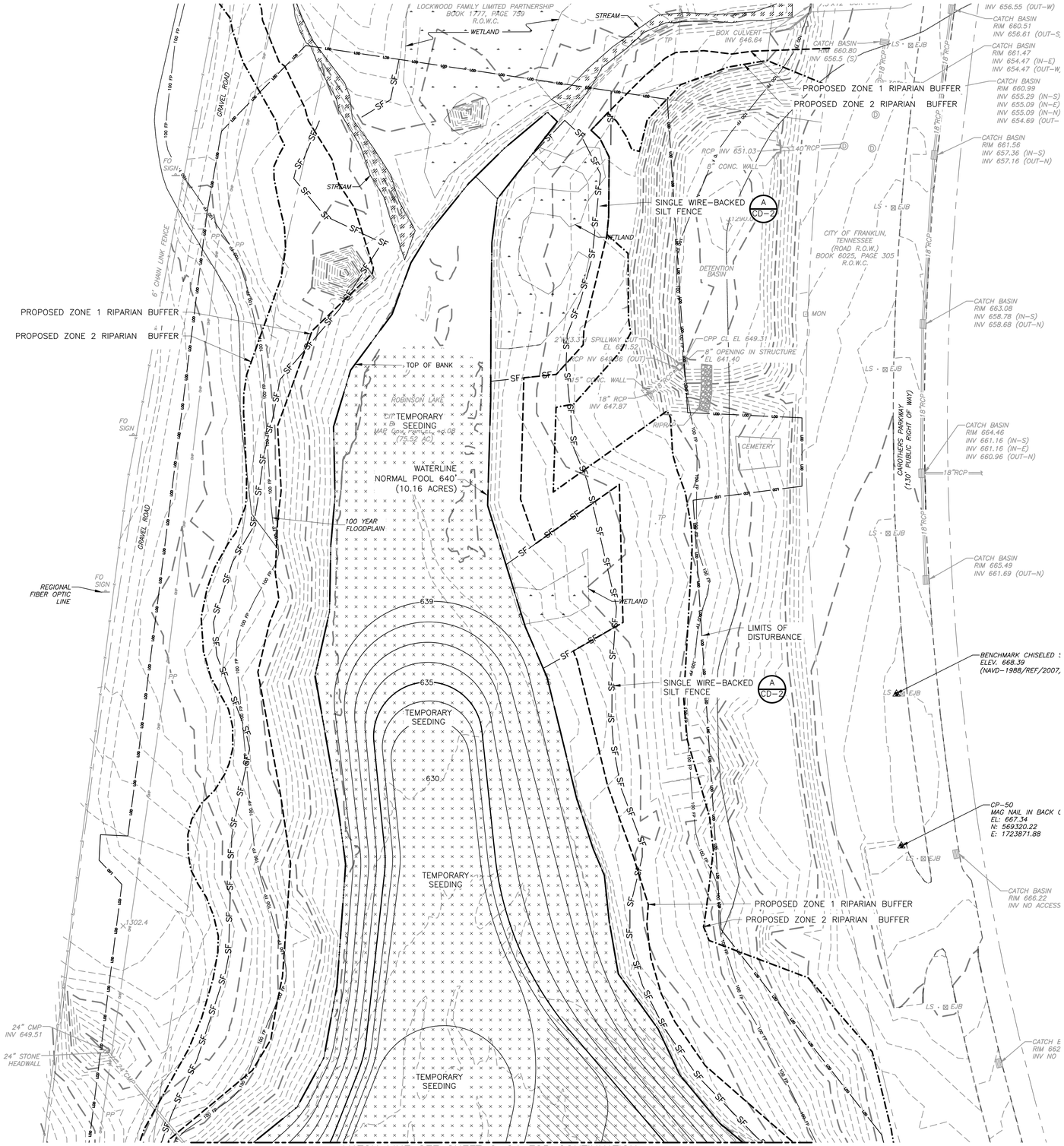
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATION CONTROL PLAN
PHASE 2 - AREA 1

PROJECT NO. 14915-237520
FILE NAME: C024ESPL.DWG
SHEET NO.
C-24

ISSUED FOR BID

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MATCH LINE SEE SHEET C-24 FOR CONTINUATION

LEGEND:

TEMPORARY SEEDING

NOTES:

1. SEE CD-4 FOR TEMPORARY SEEDING REQUIREMENTS.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE

JOHN P. BRIAND III
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STATE OF TENNESSEE

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DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATON CONTROL PLAN
PHASE 2 - AREA 2

PROJECT NO. 14915-237520
FILE NAME: C025ESPL.DWG

SHEET NO.
C-25

ISSUED FOR BID

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MATCH LINE SEE SHEET C-27 FOR CONTINUATION

PROPOSED ZONE 1 RIPARIAN BUFFER
PROPOSED ZONE 2 RIPARIAN BUFFER
6' CHAIN LINK FENCE
CONCRETE PEDESTRIAN PATHWAY ON CREST
ROBINSON LAKE
SOD ON TOP OF ARTICULATING CONCRETE BLOCK MAT
SOD UPSTREAM AND DOWNSTREAM SLOPES
100 YEAR FLOODPLAIN
12' WIDE CONCRETE PEDESTRIAN PATH
WETLAND TO BE PROTECTED
PROPOSED ZONE 1 RIPARIAN BUFFER
PROPOSED ZONE 2 RIPARIAN BUFFER
SOD UPSTREAM AND DOWNSTREAM SLOPES
DETENTION BASIN
E / CD-7 RIPRAP-LINED DISCHARGE CHANNEL
A / CD-11 EROSION CONTROL MAT ON CHANNEL SIDESLOPES ABOVE RIPRAP
PROPOSED ZONE 1 RIPARIAN BUFFER

N

1" = 50'
25 0 50

SEED MIX LEGEND

NOTE: SEE SHEET C-33 FOR SEED MIXES AND APPROVED SHRUB SPECIES

- NATIVE SCRUB-SHRUB WETLAND SEED MIX
- NATIVE FORESTED WETLAND SEED MIX
- NATIVE UPLAND MEADOW SEED MIX
- NATIVE UPLAND FOREST SEED MIX
- TURF SEED MIX
- SOD

NOTES:

1. SEE SHEET CD-4 FOR PERMANENT SEEDING, SOD AND MULCH REQUIREMENTS.
2. SEE SHEETS C-34 AND C-35 FOR PERMANENT SEEDING PLANS.
3. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE

JOHN P. BRIAND II
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CONVERSE
No. 129231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

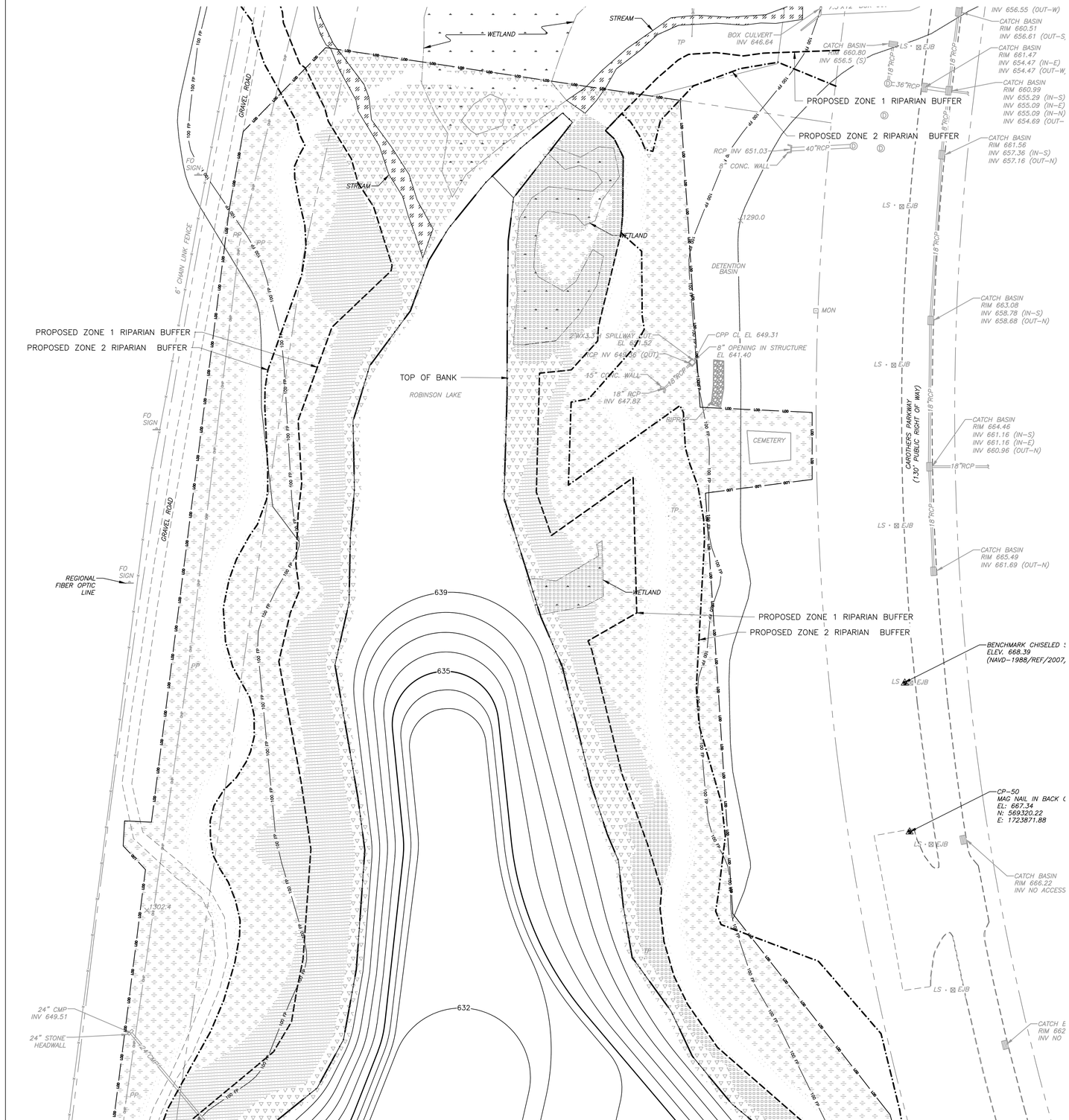
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATON CONTROL PLAN
PHASE 3 - AREA 1

PROJECT NO. 14915-237520
FILE NAME: C026ESPL.DWG
SHEET NO. C-26

ISSUED FOR BID

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MATCH LINE SEE SHEET C-26 FOR CONTINUATION

SEED MIX LEGEND

NOTE: SEE SHEET C-33 FOR SEED MIXES AND APPROVED SHRUB SPECIES

- NATIVE SCRUB-SHRUB WETLAND SEED MIX
- NATIVE FORESTED WETLAND SEED MIX
- NATIVE UPLAND MEADOW SEED MIX
- NATIVE UPLAND FOREST SEED MIX
- TURF SEED MIX

NOTES:

1. SEE SHEET CD-4 FOR PERMANENT SEEDING, SOD AND MULCH REQUIREMENTS.
2. SEE SHEETS C-34 AND C-35 FOR PERMANENT SEEDING PLANS.
3. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE

JOHN P. BRIAND II REGISTERED ENGINEER AGRICULTURE No. 126231 STATE OF TENNESSEE

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATON CONTROL PLAN
PHASE 3 - AREA 2

PROJECT NO. 14915-237520
FILE NAME: C027ESPL.DWG

SHEET NO.
C-27

ISSUED FOR BID

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MATCH LINE SEE SHEET C-29 FOR CONTINUATION

PROPOSED ZONE 2 RIPARIAN BUFFER
PROPOSED ZONE 1 RIPARIAN BUFFER
TOP OF BANK
100 YEAR FLOODPLAIN
WATERLINE NORMAL POOL 640' (110.35 ACRES)
APPROXIMATE HABITAT EXCLUSION ZONE
FLOODWAY
GRAVEL ROAD
WETLAND
CP-51
MAG NAIL IN ASPHALT
EL: 657.41
N: 568818.03
E: 1724027.80
(130' PUBLIC RIGHT OF WAY)
TBM IRON ROD WITH CAP
EL: 653.06
N: 568271.44
E: 1724270.35
ROBINSON LAKE
DETENTION BASIN
3003
3002
3001

N

1" = 50'
25 0 50

LEGEND

- CATFISH NEST BOX SEE DETAIL A, SHEET CD-9
- ROCK PILE SEE DETAIL B, SHEET CD-9
- ARTIFICIAL TREE/SHRUB COMPLEX SEE DETAIL E, SHEET CD-9
- ANCHORED NATURAL LOG SEE DETAIL C, SHEET CD-9
- GRAVEL SPAWNING BED - SMALL DIAMETER
- GRAVEL SPAWNING BED - LARGE DIAMETER

HABITAT STRUCTURES:

CATFISH NEST BOXES - 8
ROCK PILES - 6
ANCHORED NATURAL LOGS - 4
ARTIFICIAL BUSH/TREE - 3

TOTALS:

CATFISH NEST BOXES - 25
ROCK PILES - 15
ANCHORED NATURAL LOGS - 16
ARTIFICIAL BUSH/TREE - 7

JOHN P. BRIAND III
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No. 124231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

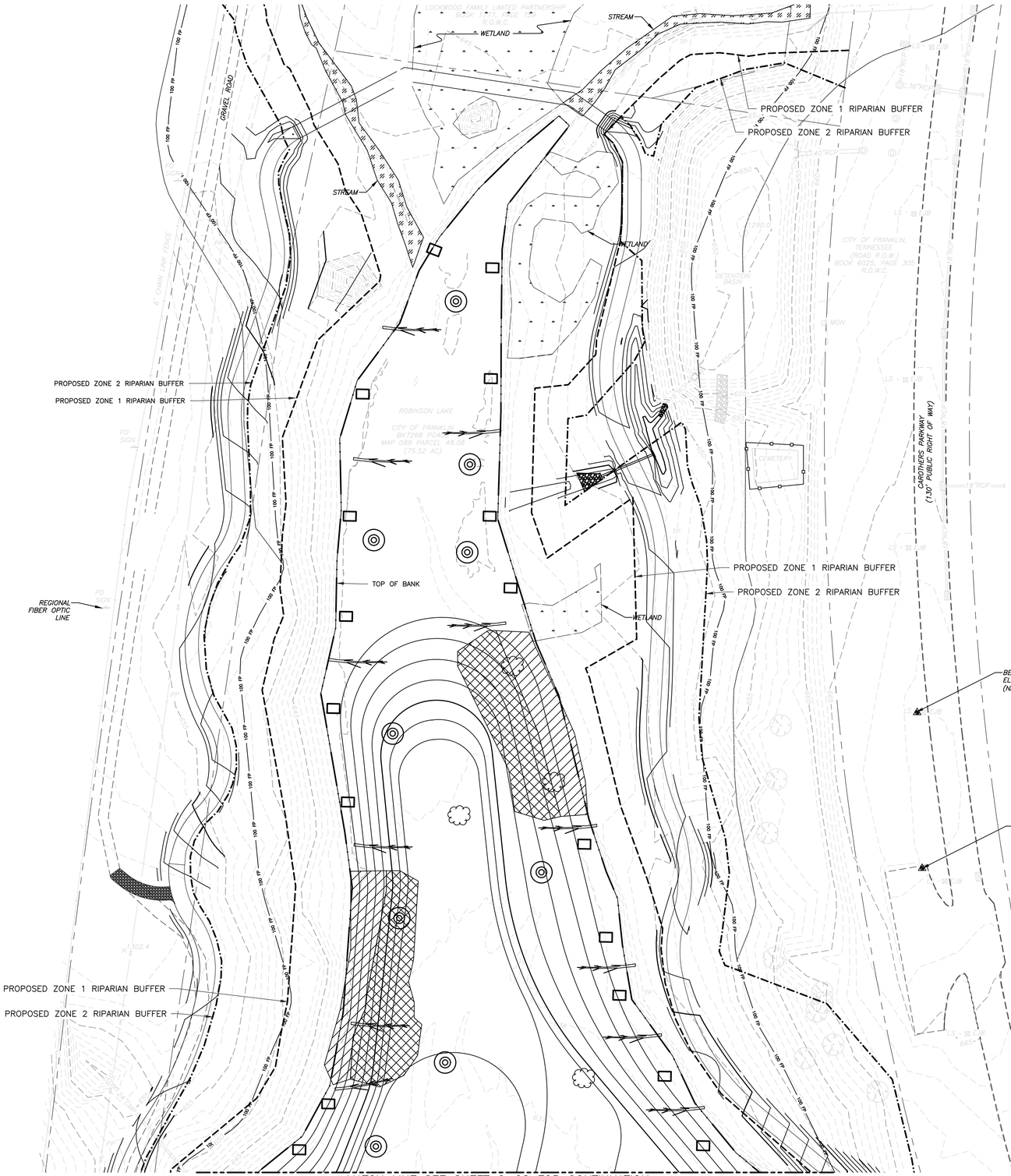
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

FISH HABITAT STRUCTURES PLAN I

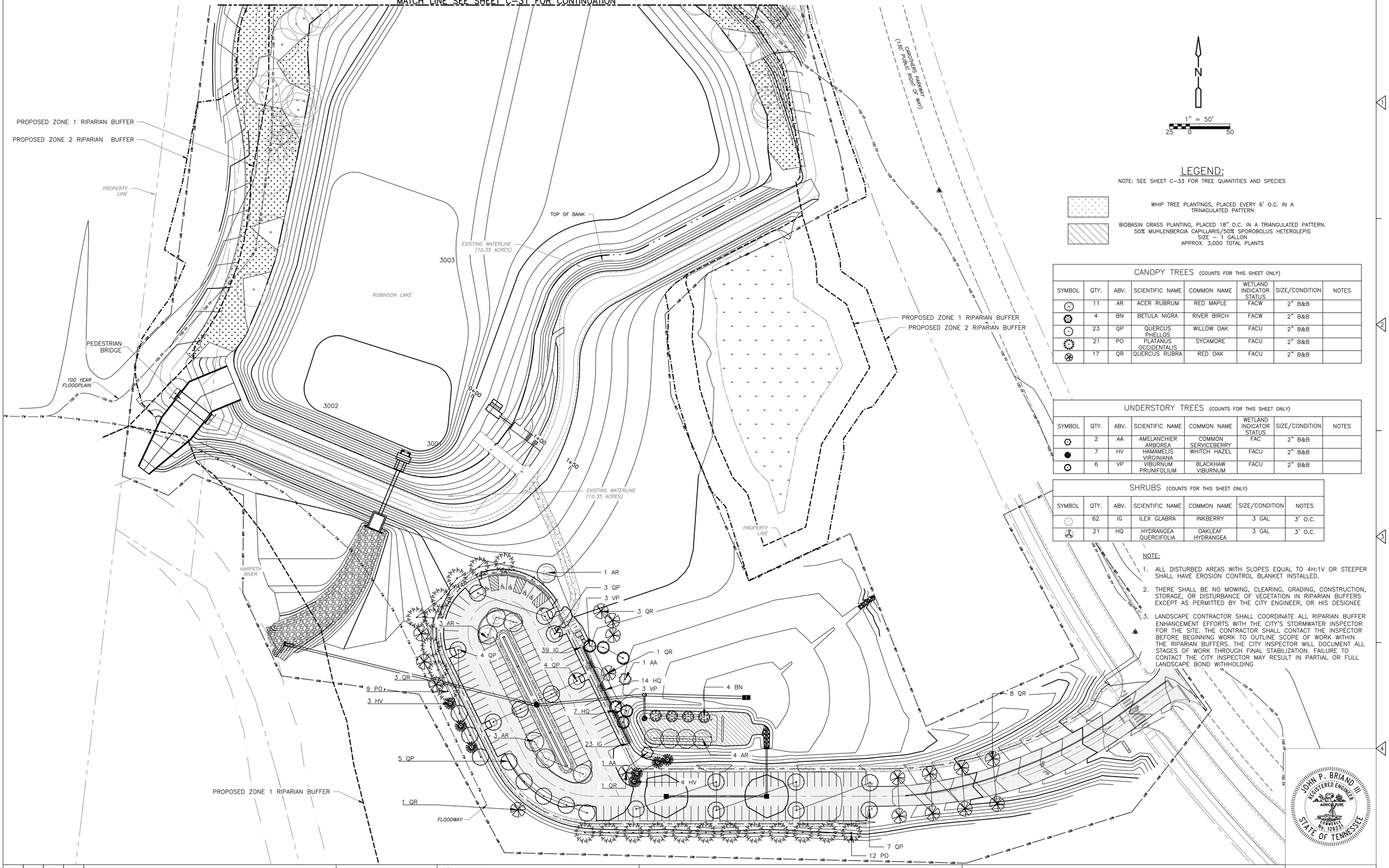
PROJECT NO. 14915-237520
FILE NAME: C028FHSP.DWG

SHEET NO.
C-28

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STREAM
WETLAND
LOCKWOOD FAMILY LIMITED PARTNERSHIP
BK 1177, PG 116
R.O.W.C.
GRAVEL ROAD
PROPOSED ZONE 1 RIPARIAN BUFFER
PROPOSED ZONE 2 RIPARIAN BUFFER
STREAM
WETLAND
CITY OF FRANKLIN, TENNESSEE
(ROAD R.O.W.)
BOOK 6025, PAGE 305
R.O.W.C.
DETENTION BASIN
CEMETERY
CARDINAL
CARDINAL
CARDINAL

MATCH LINE SEE SHEET C-31 FOR CONTINUATION



LEGEND:

NOTE: SEE SHEET C-33 FOR TREE QUANTITIES AND SPECIES

WHIP TREE PLANTINGS, PLACED EVERY 6' O.C. IN A TRINAGULATED PATTERN

BIOBASIN GRASS PLANTING, PLACED 18" O.C. IN A TRIANGULATED PATTERN.
50% MUHLENBERGIA CAPILLARIS/50% SPOROBOLUS HETEROLEPIS
SIZE – 1 GALLON
APPROX. 3,000 TOTAL PLANTS

CANOPY TREES (COUNTS FOR THIS SHEET ONLY)

SYMBOL	QTY.	ABV.	SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS	SIZE/CONDITION	NOTES
	11	AR	ACER RUBRUM	RED MAPLE	FACW	2" B&B	
	4	BN	BETULA NIGRA	RIVER BIRCH	FACW	2" B&B	
	23	QP	QUERCUS PHELLOS	WILLOW OAK	FACU	2" B&B	
	21	PO	PLATANUS OCCIDENTALIS	SYCAMORE	FACU	2" B&B	
	17	QR	QUERCUS RUBRA	RED OAK	FACU	2" B&B	

UNDERSTORY TREES (COUNTS FOR THIS SHEET ONLY)

SYMBOL	QTY.	ABV.	SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS	SIZE/CONDITION	NOTES
	2	AA	AMELANCHIER ARBOREA	COMMON SERVICEBERRY	FAC	2" B&B	
	7	HV	HAMAMELIS VIRGINIANA	WHITCH HAZEL	FACU	2" B&B	
	6	VP	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	FACU	2" B&B	

SHRUBS (COUNTS FOR THIS SHEET ONLY)

SYMBOL	QTY.	ABV.	SCIENTIFIC NAME	COMMON NAME	SIZE/CONDITION	NOTES
	62	IG	ILEX GLABRA	INKBERRY	3 GAL	3' O.C.
	21	HQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	3 GAL	3' O.C.

NOTE:

1. ALL DISTURBED AREAS WITH SLOPES EQUAL TO 4H:1V OR STEEPER SHALL HAVE EROSION CONTROL BLANKET INSTALLED.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE
3. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL RIPARIAN BUFFER ENHANCEMENT EFFORTS WITH THE CITY'S STORMWATER INSPECTOR FOR THE SITE. THE CONTRACTOR SHALL CONTACT THE INSPECTOR BEFORE BEGINNING WORK TO OUTLINE SCOPE OF WORK WITHIN THE RIPARIAN BUFFERS. THE CITY INSPECTOR WILL DOCUMENT ALL STAGES OF WORK THROUGH FINAL STABILIZATION. FAILURE TO CONTACT THE CITY INSPECTOR MAY RESULT IN PARTIAL OR FULL LANDSCAPE BOND WITHHOLDING

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 129231
STATE OF TENNESSEE

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

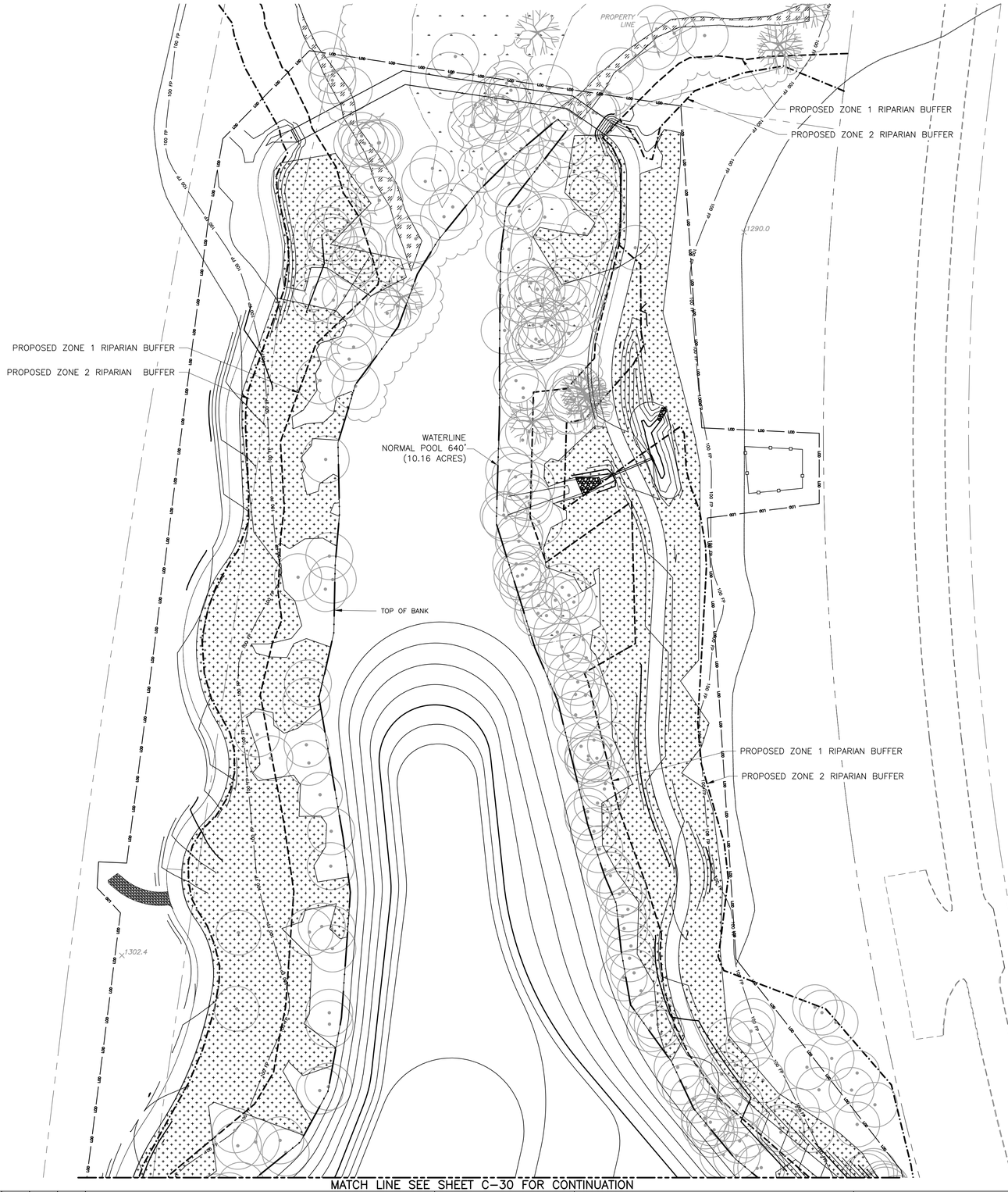
CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

TREE PLANTING PLAN AND BUFFER MANAGEMENT PLAN I

PROJECT NO. 14915-237520
FILE NAME: C030PLPL.DWG

SHEET NO.
C-30



MATCH LINE SEE SHEET C-30 FOR CONTINUATION

NOTE:

1. ALL DISTURBED AREAS WITH SLOPES EQUAL TO 4H:1V OR STEEPER SHALL HAVE EROSION CONTROL BLANKET INSTALLED.
2. THERE SHALL BE NO MOWING, CLEARING, GRADING, CONSTRUCTION, STORAGE, OR DISTURBANCE OF VEGETATION IN RIPARIAN BUFFERS EXCEPT AS PERMITTED BY THE CITY ENGINEER, OR HIS DESIGNEE
3. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL RIPARIAN BUFFER ENHANCEMENT EFFORTS WITH THE CITY'S STORMWATER INSPECTOR FOR THE SITE. THE CONTRACTOR SHALL CONTACT THE INSPECTOR BEFORE BEGINNING WORK TO OUTLINE SCOPE OF WORK WITHIN THE RIPARIAN BUFFERS. THE CITY INSPECTOR WILL DOCUMENT ALL STAGES OF WORK THROUGH FINAL STABILIZATION. FAILURE TO CONTACT THE CITY INSPECTOR MAY RESULT IN PARTIAL OR FULL LANDSCAPE BOND WITHHOLDING

N

1" = 50'
25 0 50

LEGEND:

NOTE: SEE SHEET C-34 FOR TREE QUANTITIES AND SPECIES

WHIP TREE PLANTINGS, PLACED EVERY 6' O.C. IN A TRINAGULATED PATTERN

JOHN P. BRIAND II
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No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

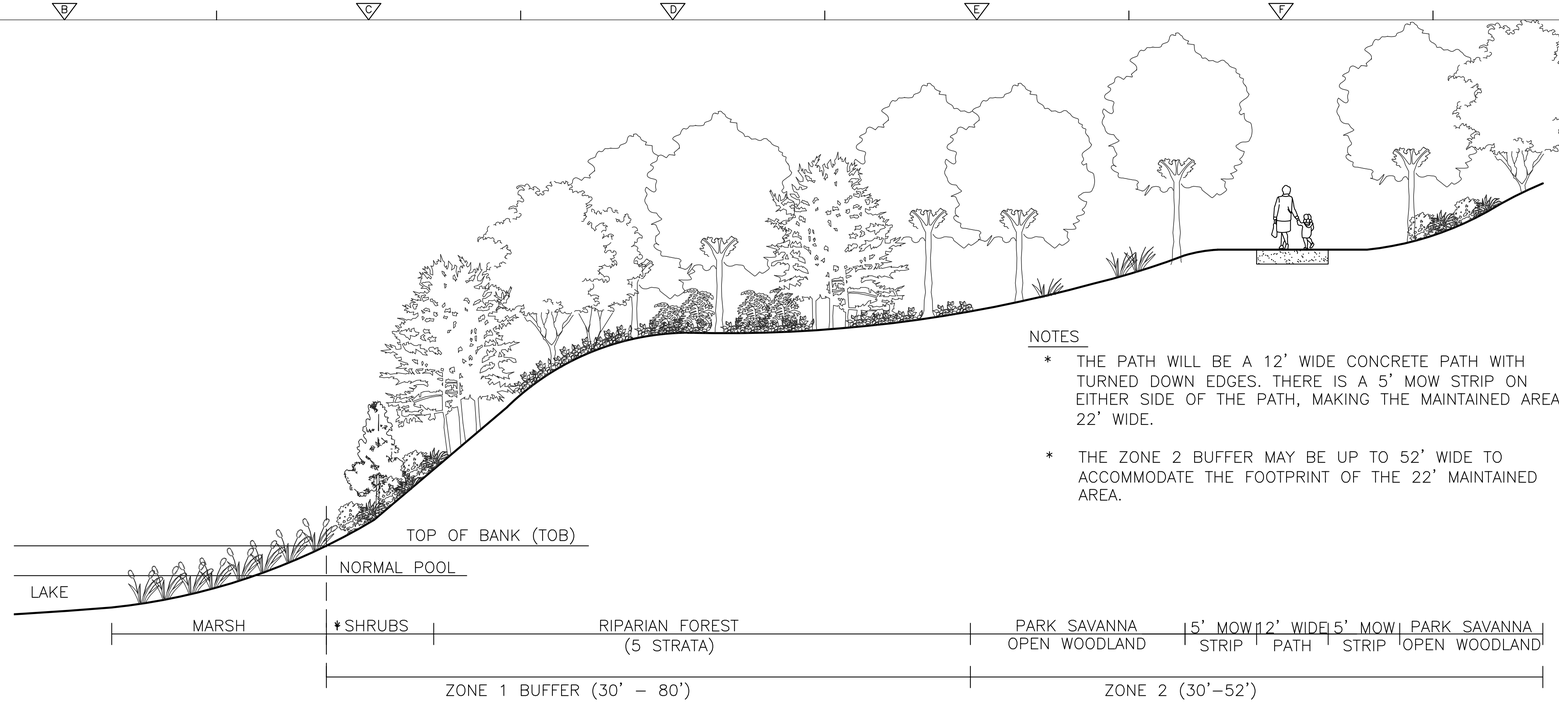
TREE PLANTING PLAN AND BUFFER MANAGEMENT PLAN II

PROJECT NO. 14915-237520
FILE NAME: C031PLPL.DWG

SHEET NO.
C-31

ISSUED FOR BID

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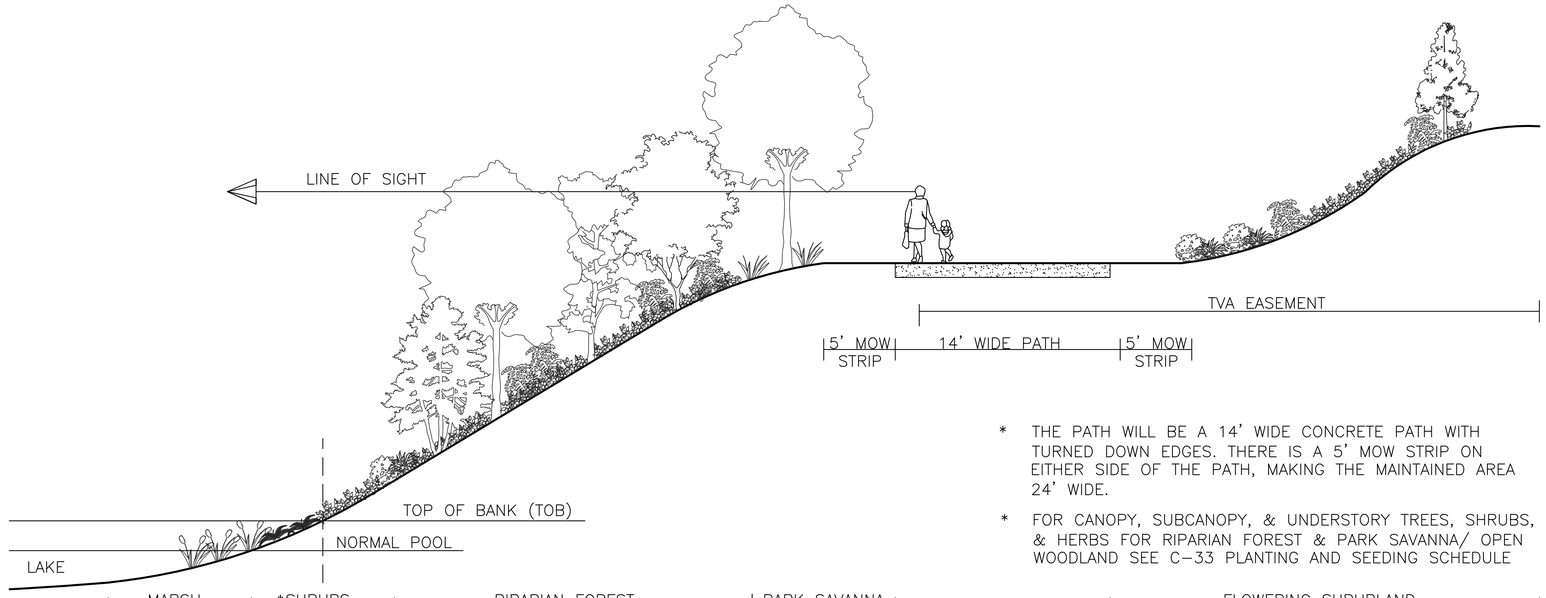


NOTES

* THE PATH WILL BE A 12' WIDE CONCRETE PATH WITH TURNED DOWN EDGES. THERE IS A 5' MOW STRIP ON EITHER SIDE OF THE PATH, MAKING THE MAINTAINED AREA 22' WIDE.
* THE ZONE 2 BUFFER MAY BE UP TO 52' WIDE TO ACCOMMODATE THE FOOTPRINT OF THE 22' MAINTAINED AREA.

LAKE BUFFER SECTION

SECTION 1 – NOT TO SCALE



* THE PATH WILL BE A 14' WIDE CONCRETE PATH WITH TURNED DOWN EDGES. THERE IS A 5' MOW STRIP ON EITHER SIDE OF THE PATH, MAKING THE MAINTAINED AREA 24' WIDE.
* FOR CANOPY, SUBCANOPY, & UNDERSTORY TREES, SHRUBS, & HERBS FOR RIPARIAN FOREST & PARK SAVANNA/ OPEN WOODLAND SEE C–33 PLANTING AND SEEDING SCHEDULE

TYPICAL TVA EASEMENT BUFFER

SECTION 2 – NOT TO SCALE

JOHN P. BRIAND III
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AGRICULTURE
COMMERCE
No. 129231
STATE OF TENNESSEE

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

SHORELINE BUFFER LANDSCAPING SECTIONS AND ENLARGEMENT PLAN

PROJECT NO. 14915–237520
FILE NAME: C032LDSC.DWG
SHEET NO. C-32

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SEEDING SCHEDULE

NATIVE SCRUB–SHRUB WETLAND SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
20.00%	FOX SEDGE	CAREX VULPINOIDEA
20.00%	VIRGINIA WILDRYE	ELYMUS VIRGINICUS
18.00%	BLUNT BROOM SEDGE	CAREX SCOPARIA
15.50%	LURID SEDGE	CAREX LURIDA
15.00%	DEERTONGUE	PANICUM CLANDESTINUM
5.00%	HOP SEDGE	CAREX LUPULINA
3.00%	SOFT RUSH	JUNCUS EFFUSUS
2.00%	RICE CUTGRASS	LEERSIA ORYZOIDES
1.00%	FRINGED SEDGE	CAREX CRINITA
0.50%	WOOLGRASS	SCIRPUS CYPERINUS

NATIVE UPLAND MEADOW SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
34.90%	BIG BLUESTEM	ANDROPOGON GERARDII
27.00%	SWITCHGRASS	PANICUM VIRGATUM
21.00%	VIRGINIA WILDRYE	ELYMUS VIRGINICUS
9.00%	INDIANGRASS	SORGHASTRUM NUTANS
3.00%	BLACKEYED SUSAN	RUDBECKIA HIRTA
2.00%	PARTRIDGE PEA	CHAMAECRISTA FASCICULATA
1.50%	OXEYE SUNFLOWER	HELIOPSIS HELIANTHOIDES
1.00%	PLAINS COREOPSIS	COREOPSIS TINCTORIA
0.40%	SHOWY TICKTREFOIL	DESMODIUM CANADENSE
0.10%	COMMON MILKWEED	ASCLEPIAS SYRIACA
0.10%	WILD BERGAMONT	MONARDA FISTULOSA

NATIVE FORESTED WETLAND SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
32.50%	FOX SEDGE	CAREX VULPINOIDEA
20.00%	VIRGINIA WILDRYE	ELYMUS VIRGINICUS
15.00%	BLUNT BROOM SEDGE	CAREX SCOPARIA
12.40%	LURID SEDGE	CAREX LURIDA
7.00%	WOOD REEDGRASS	CINNA ARUNDINACEA
4.00%	BLUE VERVAIN	VERBENA HASTATA
3.00%	SOFT RUSH	JUNCUS EFFUSUS
2.00%	OXEYE SUNFLOWER	HELIOPSIS HELIANTHOIDES
1.00%	STAR SEDGE	CAREX INTUMESCENS
1.00%	EASTERN BUR REED	SPARGANIUM AMERICANUM
0.50%	BONESET	EUPATORIUM PERFOLIATUM
0.50%	WOOLGRASS	SCRIPUS CYPERINUS
0.50%	NEW YORK IRONWEED	VERNONIA NOVEBORACENSIS
0.30%	GREAT BLUE LOBELIA	LOBELIA SIPHILITICA
0.30%	DITCH STONECROP	PENTHORUM SEDOIDES

NATIVE UPLAND FOREST SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
29.00%	DEERTONGUE	PANICUM CLANDESTINUM
20.00%	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM
15.00%	VIRGINIA WILDRYE	ELYMUS VIRGINICUS
15.00%	SWITCHGRASS	PANICUM VIRGATUM
10.00%	CREEPING RED FESCUE	FESTUCA RUBRA
5.00%	AUTUMN BENTGRASS	AGROSTIS PERENNANS
3.00%	FOX SEDGE	CAREX VULPINOIDEA
3.00%	PARTRIDGE PEA	CHAMAERCRISTA

BIOBASIN SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
10.00%	PURPLE CONEFLOWER	ECHINACEA PURPUREA
10.00%	MARSH MILKWEED	ASCLEPIAS INCARNATA
10.00%	BUTTERFLY MILKWEED	ASCLEPIAS TUBEROSA
10.00%	GREEN MILKWEED	ASCLEPIAS VERDIS
10.00%	SWEET JOE–PYE WEED	EUPATORIUM
10.00%	BEARDTONGUE	PENSTEMON SMALLII
10.00%	NEW ENGLAND ASTER	ASTER NOVAETANGLIAE
10.00%	ALUMROOT	HEUCHERA AMERICANA
10.00%	BLACK EYED SUSAN	RUDBECKIA HIRTA
10.00%	CARDINAL FLOWER	LOBELIA CARDINALIS

TURF MOW STRIP SEED MIX

PERCENT	COMMON NAME	SCIENTIFIC NAME
30.00%	TALL FESCUE	FESTUCA ARUNDINACEA, 'FAWN'
30.00%	PERENNIAL RYEGRASS	LOLIUM PERENNE, 'AMAZING A+'
30.00%	KENTUCKY BLUEGRASS	POA PRATENSIS
10.00%	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM

MEANS AND METHODS FOR GROUND PREPARATION AND SEED IMPLEMENTATION SHALL BE APPROVED BY THE CITY OF FRANKLIN AND SHALL MEET THE MANUFACTURES RECOMMENDATION.

PLANTING SCHEDULE

CANOPY TREES						
PERCENT	QTY.	ABV.	SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS	NOTES
6%	138	AR	ACER RUBRUM	RED MAPLE	FACW	
6.5%	146	AS	ACER SACCHARUM	SUGAR MAPLE	FACU	
4.5%	100	CO	CARYA OVATA	SHAGBARK HICKORY	FACU	
9%	202	FG	FAGUS GRANDIFOLIA	AMERICAN BEECH	FACU	
3%	70	IO	ILEX OPACA	AMERICAN HOLLY	FACU	50% MALE 50% FEMALE
4.5%	100	PT	PINUS TAEDA	LOBLOLLY PINE	FAC	
3%	70	PV	PINUS VIRGINIANA	VIRGINIA PINE	NI	
14%	315	PO	PLATANUS OCCIDENTALIS	SYCAMORE	FACU	
10.5%	235	PD	POPULUS DELTOIDES	EASTERN COTTONWOOD	FAC	
10%	225	QA	QUERCUS ALBA	WHITE OAK	FACU	
9%	202	QR	QUERCUS RUBRA	RED OAK	FACU	

UNDERSTORY TREES						
SYMBOL	QTY.	ABV.	SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS	NOTES
6%	135	AA	AMELANCHIER ARBOREA	COMMON SERVICEBERRY	FAC	
4.5%	102	CC	CERCIS CANADENSIS	EASTERN REDBUD	FACU	
3%	70	HV	HAMAMELIS VIRGINIANA	WHITCH HAZEL	FACU	
3%	70	RM	RHODODENDRON MAXIMUM	ROSEBAY/GREAT LAUREL RHODODENDRON	FAC	
3%	70	VP	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	FACU	

TREE WHIPS SHALL BE PLANTED AT A RATIO OF 600 WHIPS PER ACRE. THE TOTAL TREE PLANTING AREA IS EQUAL TO 3.75 ACRES. 2,250 TREE WHIPS SHALL BE PLANTED WITHIN THE DESIGNATED AREA,TRIANGULATED PLANTED PATTERN 6' O.C.

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

PLANTING AND SEEDING SCHEDULE

PROJECT NO. 14915–237520
FILE NAME: C033PLSC.DWG

SHEET NO.
C-33

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MATCH LINE SEE SHEET C-35 FOR CONTINUATION

PROPOSED ZONE 1 RIPARIAN BUFFER

PROPOSED ZONE 2 RIPARIAN BUFFER

TOP OF BANK

ROBINSON LAKE

PEDESTRIAN BRIDGE

HARPETH RIVER

6.35

6.30

CAROTHERS PARKWAY (150' PUBLIC RIGHT OF WAY)

ALL RIPARIAN BUFFERS SHALL BE ENHANCED

PROPOSED ZONE 1 RIPARIAN BUFFER

PROPOSED ZONE 2 RIPARIAN BUFFER

PROPOSED ZONE 1 RIPARIAN BUFFER

N

1" = 50'

25 0 50

SEED MIX LEGEND

NOTE: SEE SHEET C-33 FOR SEED MIXES AND APPROVED SHRUB SPECIES

- NATIVE SCRUB-SHRUB WETLAND SEED MIX
- NATIVE FORESTED WETLAND SEED MIX
- NATIVE UPLAND MEADOW SEED MIX
- NATIVE UPLAND FOREST SEED MIX
- TURF SEED MIX
- SOD
- BIOBASIN MIX WITH RIVERSTONE GROUND COVER

JOHN P. BRIAND III
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AGRICULTURE
CDMWRec1
No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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CITY OF FRANKLIN, TENNESSEE

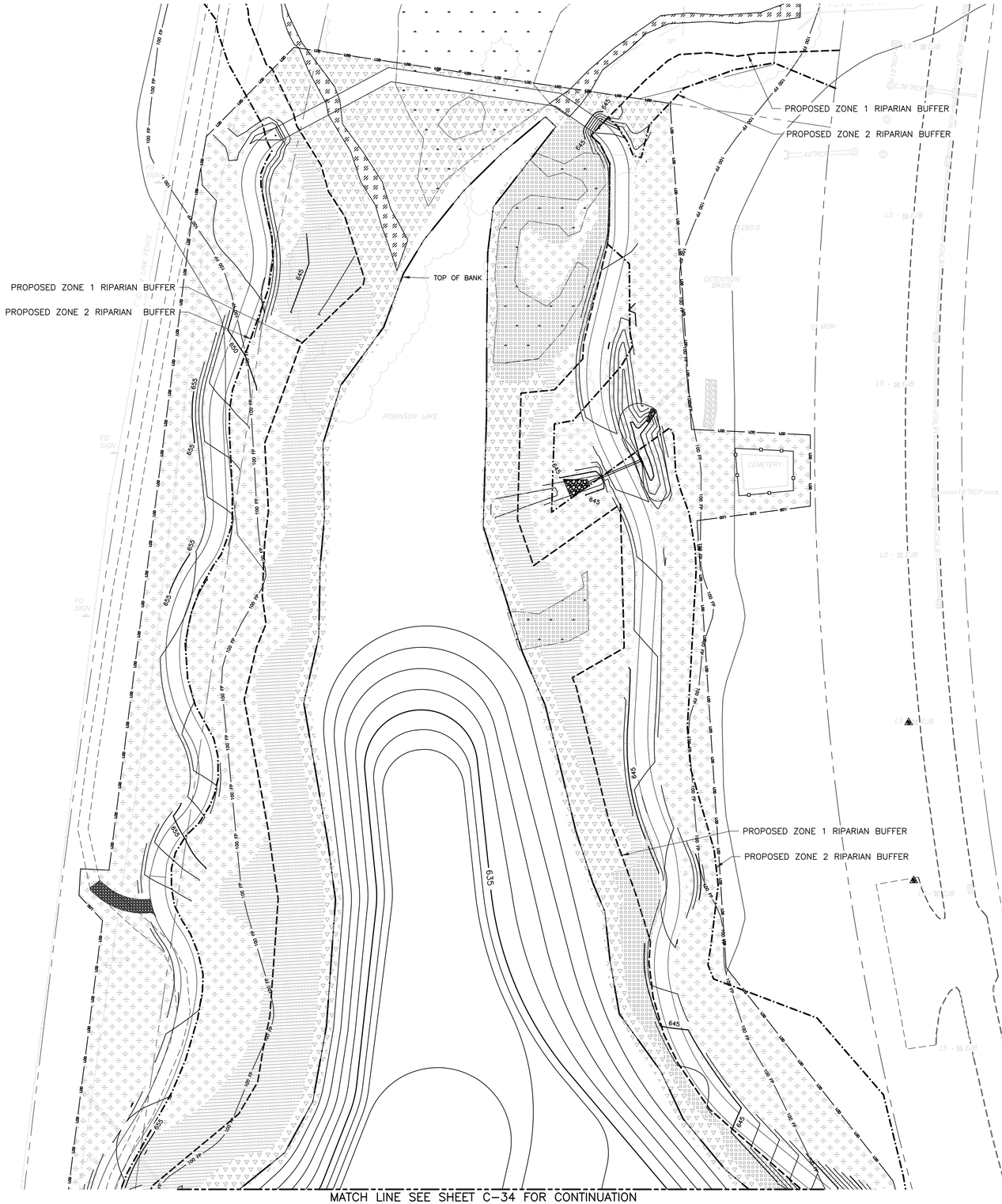
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

SHRUB & SEEDING PLAN I

PROJECT NO. 14915-237520
FILE NAME: C034PLPL.DWG

SHEET NO.
C-34

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N

1" = 50'

25 0 50

SEED MIX LEGEND

NOTE: SEE SHEET C-33 FOR SEED MIXES AND APPROVED SHRUB SPECIES

- NATIVE SCRUB-SHRUB WETLAND SEED MIX
- NATIVE FORESTED WETLAND SEED MIX
- NATIVE UPLAND MEADOW SEED MIX
- NATIVE UPLAND FOREST SEED MIX
- TURF SEED MIX

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

SHRUB & SEEDING PLAN II

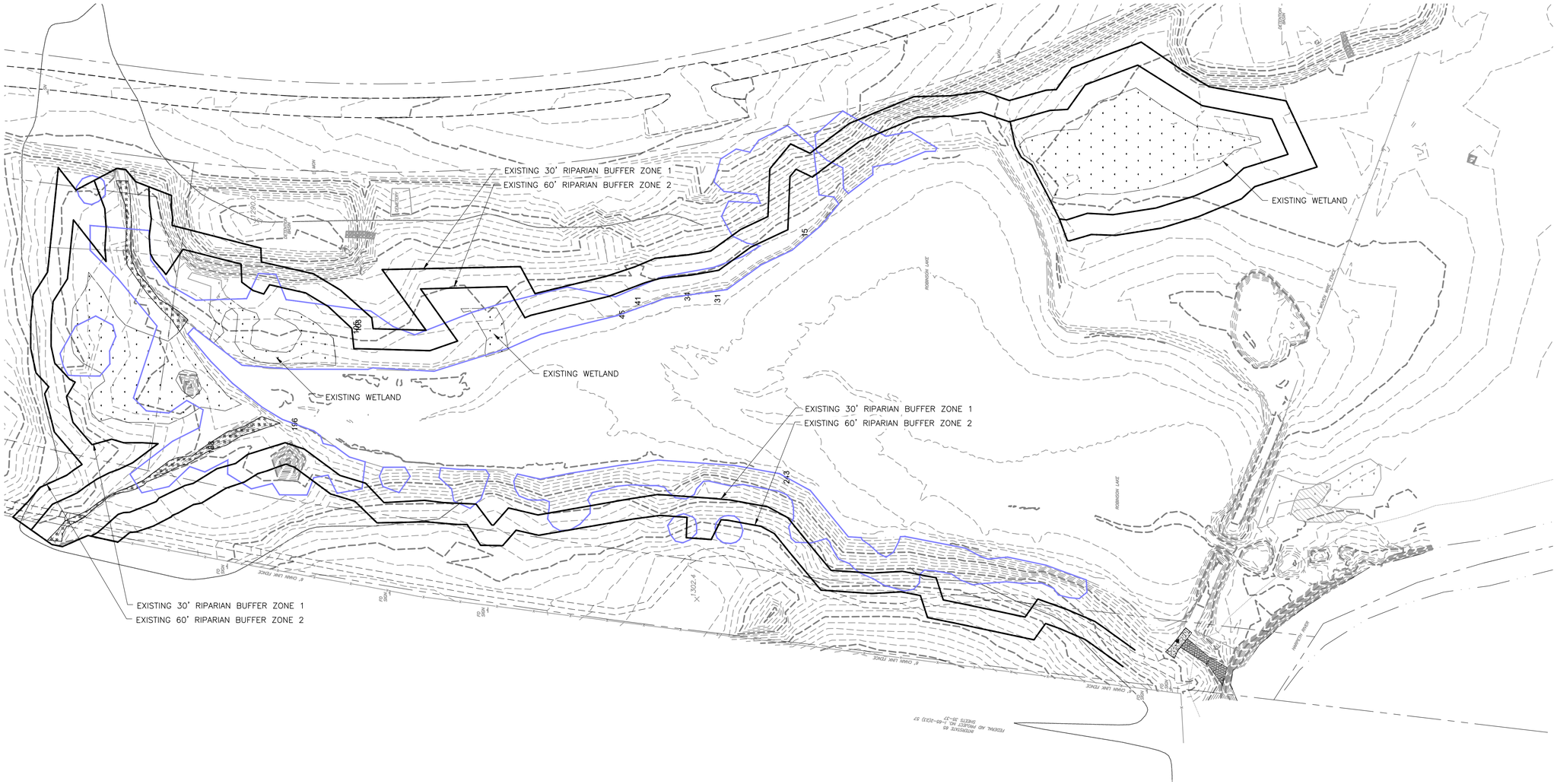
PROJECT NO. 14915-237520
FILE NAME: C035PLPL.DWG

SHEET NO.
C-35

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NOTE:

1. AS PER FMC 23-107(5)(D) BUFFER BOUNDARIES SHALL BE MARKED WITH SIGNS THAT PERSIST BEFORE, DURING, AND AFTER CONSTRUCTION. SIGNAGE SHALL BE POSTED AT THE EDGE OF THE BUFFER ZONE, EACH LOT LINE, AND AT A MAXIMUM SPACING OF ONE HUNDRED FIFTY (150) FEET. THIS SPACING CAN BE REDUCED FOR LARGE SCALE DEVELOPMENT AS APPROVED BY THE CITY'S ENGINEERING DEPARTMENT. THESE SIGN SHALL BE SUPPLIED BY THE CITY OF FRANKLIN'S STORMWATER INSPECTORS AT INITIAL SITE PRECONSTRUCTION MEETINGS AND BE INSTALLED BY THE FIRST EPSC INSPECTION



LEGEND:

PRESERVED TREE CANOPY

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
TENNESSEE
No. 128231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

BUFFER MANAGEMENT PLAN
EXISTING ZONE 1 AND ZONE 2 RIPARIAN BUFFERS

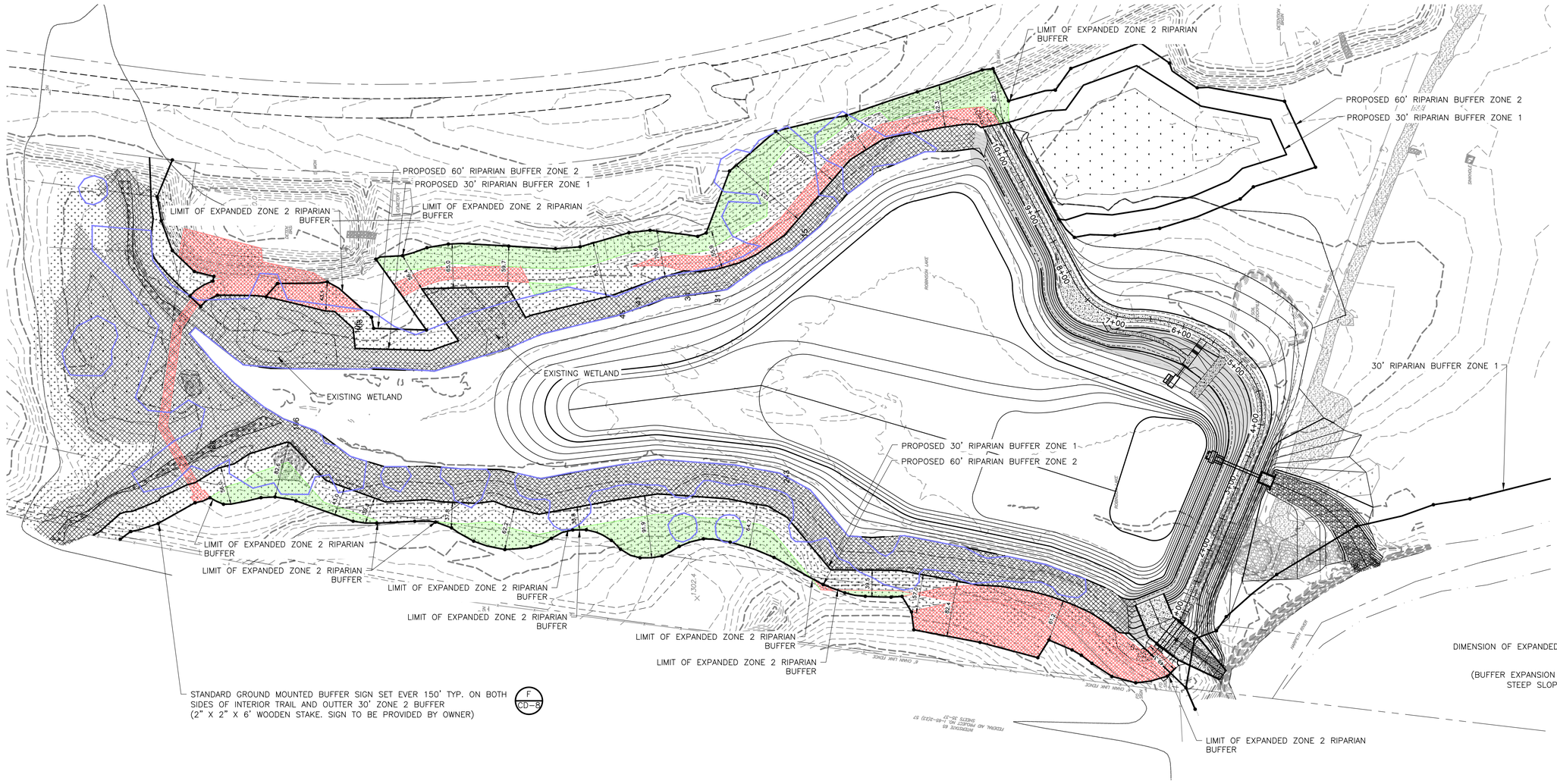
PROJECT NO. 14915-237520
FILE NAME: C036BMPL.DWG

SHEET NO.
C-36A

XREFs: [CDMS_2436, CEP000ST, CWP000ST, CWP004ST] Images: []
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NOTE:

1. AS PER FMC 23-107. WALKING TRAILS ARE NOT AN ALLOWED USE IN A ZONE 1 RIPARIAN BUFFERS.
2. WALKING TRAILS IN THE ZONE 2 BUFFER SHALL BE INCREASED BY THE WIDTH OF IMPACT ASSOCIATED WITH THE PATH, GREENWAY OR TRAIL. THIS SHALL INCLUDE ANY DISTURBANCE ASSOCIATED WITH MAINTENANCE OR MOWING OF THE SIDES OF THE PATH.
3. ENHANCEMENT SHALL INCLUDE REMOVAL AND TREATMENT OF INVASIVE SPECIES
4. AS PER FMC 23-107(5)(D) BUFFER BOUNDARIES SHALL BE MARKED WITH SIGNS THAT PERSIST BEFORE, DURING, AND AFTER CONSTRUCTION. SIGNAGE SHALL BE POSTED AT THE EDGE OF THE BUFFER ZONE, EACH LOT LINE, AND AT A MAXIMUM SPACING OF ONE HUNDRED FIFTY (150) FEET. THIS SPACING CAN BE REDUCED FOR LARGE SCALE DEVELOPMENT AS APPROVED BY THE CITY'S ENGINEERING DEPARTMENT. THESE SIGN SHALL BE SUPPLIED BY THE CITY OF FRANKLIN'S STORMWATER INSPECTORS AT INITIAL SITE PRECONSTRUCTION MEETINGS AND BE INSTALLED BY THE FIRST EPSC INSPECTION



JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
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No. 129231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

BUFFER MANAGEMENT PLAN
PROPOSED ZONE 1 AND ZONE 2 RIPARIAN BUFFERS

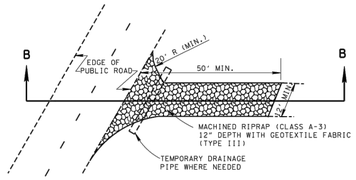
PROJECT NO. 14915-237520
FILE NAME: C036BMPL.DWG

SHEET NO.
C-36B

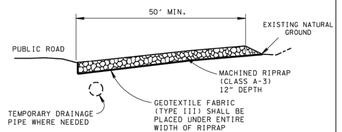
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XREFs: [CDMS_2436] Images: [TDEC logo_new high res]
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TEMPORARY CONSTRUCTION EXIT



PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD



SECTION B-B

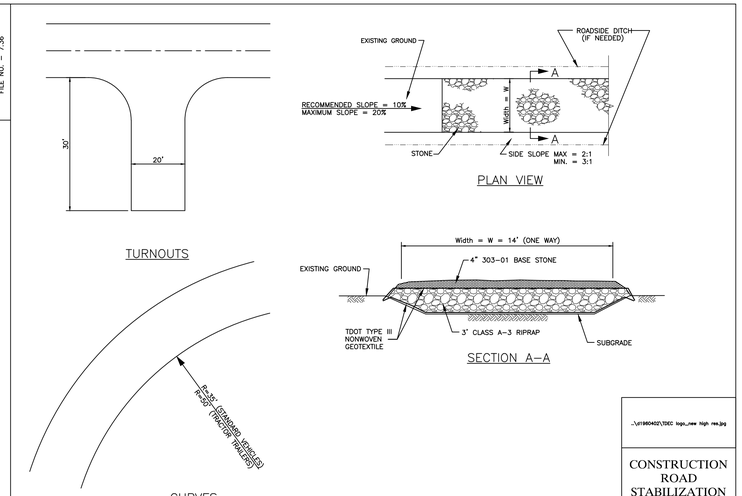
NOTES:

1. TEMPORARY CONSTRUCTION EXITS SHALL BE BUILT TO REDUCE SEDIMENT LEAVING THE CONSTRUCTION SITE VIA CONSTRUCTION VEHICLES AND TO REDUCE SEDIMENT TRACKING ON TO PUBLIC ROADS AND OTHER PAVED AREAS.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
3. ADDITIONAL STONE MAY BE REQUIRED TO TOP-DRESS THE STONE PAD IF IT BECOMES CLOGGED WITH SEDIMENT TO ENSURE THE TEMPORARY CONSTRUCTION EXIT REMAINS EFFECTIVE. WASH OR REPLACE STONE WHENEVER ENTRANCE FAILS TO PREVENT MUD FROM BEING CARRIED OFFSITE BY VEHICLES.
4. ON SITES WHERE THE GRADE TOWARD THE PUBLIC ROAD IS GREATER THAN 2% A MOUNTABLE BERM AT LEAST 6 INCHES HIGH WITH 3:1 SIDE SLOPES SHOULD BE PROVIDED AT THE END OF THE PAD TO PREVENT RUNOFF FROM LEAVING THE SITE.

CONSTRUCTION EXIT TDOT EC-STR-25

DETAIL A
NTS

TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION — FILE NO. – 7.36



NOT TO SCALE

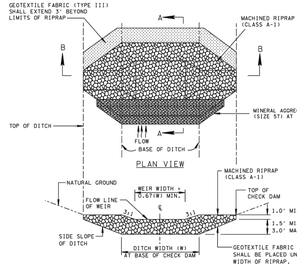
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CONSTRUCTION ROAD STABILIZATION
7.36

CONSTRUCTION ROAD STABILIZATION

DETAIL B
NTS

DETAIL FOR TRAPEZOIDAL DITCH

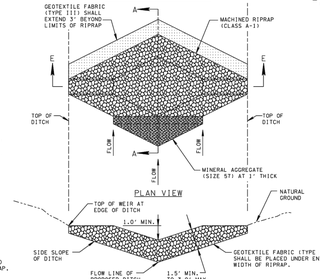


ENHANCED ROCK CHECK DAM ESTIMATED QUANTITIES

DEPTH	V-DITCH[1] MINERAL AGGREGATE (SIZE 57) (TON)	V-DITCH[1] MACHINED RIPRAP (CLASS A-1) (TON)	V-DITCH[1] GEOTEXTILE FABRIC (TYPE III) (S.Y.)	TRAPEZOIDAL DITCH[2] MINERAL AGGREGATE (SIZE 57) (TON)	TRAPEZOIDAL DITCH[2] MACHINED RIPRAP (CLASS A-1) (TON)	TRAPEZOIDAL DITCH[2] GEOTEXTILE FABRIC (TYPE III) (S.Y.)
1.5	9.21	12.2	31.7	0.29	17.2	40.1
2.0	0.33	20.2	44.0	0.44	27.6	54.7
2.5	0.48	33.1	58.3	0.62	41.2	71.0
3.0	0.66	45.1	74.7	0.83	58.3	89.3

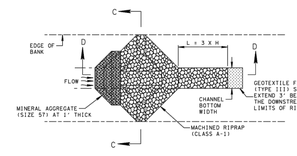
1. ESTIMATED QUANTITIES BASED ON 4:1 SIDE SLOPES, QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.
2. ESTIMATED QUANTITIES BASED ON 4FT BOTTOM WIDTH, 4 FT DEPTH, AND 4:1 SIDE SLOPES. QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.

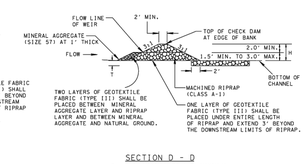
DETAIL FOR V-DITCH

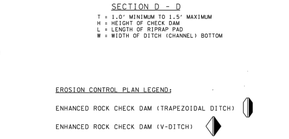


- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.
- REV. 5-6-16: REVISED GENERAL NOTE 6.

DETAIL FOR CHANNELS







EROSION CONTROL PLAN LEGEND:

ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)

ENHANCED ROCK CHECK DAM (V-DITCH)

ENHANCED ROCK CHECK DAM (CHANNEL)

ENHANCED ROCK CHECK DAM GENERAL NOTES

(A) ENHANCED ROCK CHECK DAMS MAY BE USED TO REDUCE FLOW VELOCITIES TO ALLOW SEDIMENTS TO DROP OUT. THEY MAY BE EMPLOYED WHERE THE DRAINAGE AREA EXCEEDS THE MAXIMUM FOR ROCK CHECK DAMS OR WHERE A FILTRATION FUNCTION IS DESIRED. ROCK CHECK DAMS SHALL NOT BE USED IN FLOWING STREAMS OR WETLANDS UNLESS PROVIDED FOR IN THE PERMITS.

(B) AT WEST SITES, THE MAXIMUM ALLOWABLE DRAINAGE AREA SHALL BE 30 ACRES. AT SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM ALLOWABLE DRAINAGE AREA SHALL BE 20 ACRES.

(C) ENHANCED CHECK DAM MAY REMAIN IN PLACE AS PERMANENT CHECK DAM, IF SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

(D) THE CENTER OF THE ENHANCED ROCK CHECK DAM USED IN DITCHES MUST BE AT LEAST ONE (1) FOOT LOWER THAN THE OUTER EDGES, THE CENTER OF ENHANCED ROCK CHECK DAMS USED IN CHANNELS MUST BE AT LEAST TWO (2) FEET LOWER THAN THE OUTER EDGES.

(E) THE DEPTH OF FLOW ON THE CENTER OF THE STRUCTURE SHALL BE COMPUTED FOR THE PEAK FLOW RATE GENERATED BY THE 2-YEAR, 24-HOUR STORM IN ORDER TO ENSURE THAT THE TOP OF THE STRUCTURE WILL NOT BE OVERTOPPED. FOR SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT IMPAIRED STREAMS, THE DEPTH SHOULD BE DETERMINED FOR THE 10-YEAR, 24-HOUR PEAK FLOW RATE. THIS WILL ELIMINATE THE ROCK - SOIL FAILURE POINT WHERE THE ENHANCED ROCK CHECK DAM AND NATURAL GROUND MERGE.

(F) THE MAXIMUM SPACE BETWEEN ENHANCED ROCK CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM IS AT THE SAME ELEVATION AS THE FLOW LINE OF THE WEIR OF THE DOWNSTREAM DAM. (SEE ROCK CHECK DAM SPACING GRAPH ON EC-STR-6)

(G) ONLY GEOTEXTILE FABRIC (TYPE III) LISTED ON THE QUALIFIED PRODUCTS LIST SHALL BE USED.

(H) PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST FOR FILTER SOCK DITCH APPLICATION MAY BE USED AND SHALL BE PAID UNDER FOLLOWING ITEM NUMBER:

209-08.09 FILTER SOCK CHECK DAM PER EACH

(I) ENHANCED ROCK CHECK DAMS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-08.08 ENHANCED ROCK CHECK DAM PER EACH

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF ENHANCED ROCK CHECK DAMS.

(J) SEDIMENT SHALL BE REMOVED FROM BEHIND THE ENHANCED ROCK CHECK DAM WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

- MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

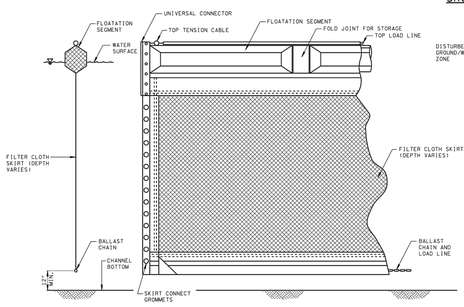
ENHANCED ROCK CHECK DAM

4-1-08 EC-STR-6A

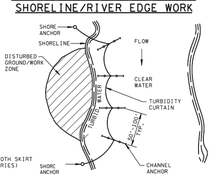
ENHANCED CHECK DAM

DETAIL C
NTS

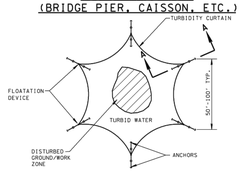
FLOATING TURBIDITY CURTAIN



TYPICAL ANCHORING PLAN FOR SHORELINE/RIVER EDGE WORK



TYPICAL ANCHORING PLAN FOR MID CHANNEL WORK (BRIDGE PIER, CAISSON, ETC.)

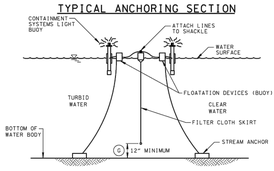


- REV. 4-15-06: REFORMATTED SHEET, REVISED NOTES, MISC. EDITS TO DRAWING.
- REV. 4-1-08: REVISED GENERAL NOTES.
- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.

PHYSICAL PROPERTIES OF TURBIDITY CURTAIN FABRIC

PHYSICAL PROPERTY	MINIMUM REQUIREMENT
THICKNESS, MILS	45
WEIGHT, OZ. / SQ. YD.	18
GRAB TENSILE STRENGTH, LBS.	300
UV INHIBITOR	MUST BE INCLUDED
APPARENT OPENING SIZE (AOS)	FINER THAN OR EQUAL TO #70 U.S. STANDARD SIEVE

TYPICAL ANCHORING SECTION



AUTOMATIC FLASHING LIGHT BUOY (ON AT DUSK-OFF AT DAWN) 100' ON CENTER SHALL BE USED IN NAVIGABLE CHANNELS ONLY

EROSION CONTROL PLAN LEGEND: FLOATING TURBIDITY CURTAIN

FLOATING TURBIDITY CURTAIN GENERAL NOTES

(A) FLOATING TURBIDITY CURTAINS (ALSO KNOWN AS TURBIDITY BARRIERS OR SILT CURTAINS) CREATE A BARRIER TO PREVENT TURBID WATER FROM ENTERING CLEAN WATER. FLOATING TURBIDITY CURTAINS SHOULD BE USED TO ISOLATE ACTIVE CONSTRUCTION AREAS WITHIN OR ADJACENT TO A BODY OF WATER TO MINIMIZE THE MIGRATION OF SILT LADEN WATER OUT OF THE CONSTRUCTION ZONE.

(B) TURBIDITY CURTAINS SHALL NOT BE INSTALLED PERPENDICULAR ACROSS THE MAIN FLOW OF A SIGNIFICANT BODY OF MOVING WATER.

(C) FLOATING TURBIDITY CURTAINS SHALL NOT BE USED WHERE THE ANTICIPATED FLOW VELOCITIES WILL EXCEED 5 FT/SEC.

(D) TURBIDITY CURTAINS SHALL BE ANCHORED TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. ANCHORAGE SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE. CURTAINS SHALL BE INSTALLED AS CLOSE TO PROJECT SITE AS POSSIBLE. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR "INTERNATIONAL" ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.

(E) SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE TO STABILIZE THE BARRIER WITH NUMBER AND SPACING DEPENDENT ON WATERWAY VELOCITIES AND MANUFACTURER'S RECOMMENDATIONS.

(F) IN SHALLOW WATER (2 FEET OF DEPTH OR LESS) A TURBIDITY CURTAIN MAY BE INSTALLED ON STAKES DRIVEN INTO THE BED OF THE WATER BODY.

(G) FABRIC SECTIONS SHALL BE CONNECTED END TO END WITH A MINIMUM ⅝ INCH DIAMETER POLYPROPYLENE ROPE. FABRIC SHALL BE SEAMED TOGETHER IN A MANNER THAT RETAINS THE OVERALL TENSILE STRENGTH.

(H) DESIGN OF CURTAIN AND ANCHORAGE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FILTER CLOTH SKIRT SHOULD BE ABLE TO WITHSTAND THE FORCES IMPARTED ON IT DUE TO THE EXPECTED WIND VELOCITY OR STREAM VELOCITY. FABRIC SHALL BE MADE OF A NON-DETERIORATING MATERIAL, SUCH AS PLASTIC OR NYLON, WHICH WILL ALLOW WATER TO PASS THROUGH WHILE STILL RETAINING SEDIMENT.

(I) THE TURBIDITY CURTAIN AND ADJACENT WORK AREAS SHALL NOT BE DISTURBED 12 HOURS PRIOR TO REMOVAL FROM WATER BODY. MAINTENANCE SHALL BE PERFORMED AS NEEDED. CONTRACTOR SHALL REMOVE THE CURTAIN AT COMPLETION OF WORK IN A MANNER THAT WILL PREVENT SILTATION OF THE WATERWAY. DURING REMOVAL, EXTREME CARE SHOULD BE TAKEN NOT TO DISTURB ANY SEDIMENT DEPOSITS.

(J) MAINTAIN 12" MINIMUM GAP BETWEEN SKIRT BOTTOM AND CHANNEL BOTTOM TO PREVENT ACCUMULATED SEDIMENT FROM PULLING TOP OF CURTAIN BELOW WATER SURFACE.

(K) IN WIND OR WAVE ACTION SITUATIONS, THE MAXIMUM DEPTH OF THE CURTAIN SHALL BE 12 FEET.

(L) CONCENTRATED FLOWS SHALL NOT DISCHARGE BEYOND FLOATING TURBIDITY CURTAIN. CURTAINS ARE NOT TO BE INSTALLED ACROSS FLOWING BODY OF WATER.

(M) WHEN INSTALLED IN A NAVIGABLE WATERWAY, BUOYS SHOULD BE LIT ACCORDING TO REGULATORY AGENCY STANDARDS.

(N) WHEN ESTIMATING THE LENGTH OF TURBIDITY CURTAIN, ALLOW 10 TO 20 PERCENT VARIANCE IN STRAIGHT LINE MEASUREMENT.

(O) FLOATING TURBIDITY CURTAIN SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

209-13.04 TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.05 TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.06 TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.07 TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT
209-13.08 TURBIDITY CURTAIN (DESCRIPTION) PER LINEAR FOOT

PAYMENT SHALL INCLUDE ALL MATERIAL AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TURBIDITY CURTAINS

(P) ONLY FLOATING TURBIDITY CURTAINS LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED. ANY PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE IS ALSO ACCEPTABLE.

- MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

FLOATING TURBIDITY CURTAIN

1-20-06 EC-STR-38

TURBIDITY CURTAIN

DETAIL D
NTS

JOHN P. BRIAND II — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 128231 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
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APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

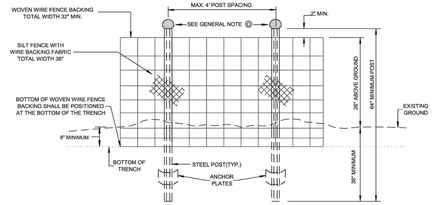
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATION CONTROL DETAILS I

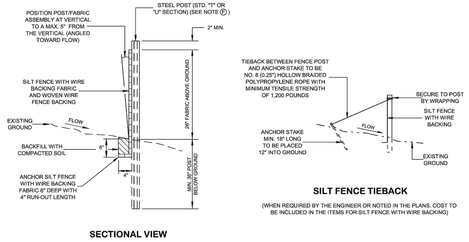
PROJECT NO. 14915-237520
FILE NAME: CD01STDT.DWG

SHEET NO.
CD-1

ISSUED FOR BID



ELEVATION VIEW



SECTIONAL VIEW

SILT FENCE TIEBACK

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS. COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE WITH WIRE BACKING)

EROSION CONTROL PLAN LEGEND: * SFB * SFB * SFB * SILT FENCE WITH WIRE BACKING

NOT TO SCALE

SILT FENCE WITH WIRE BACKING FABRIC SPECIFICATIONS	
FABRIC PROPERTY AND TEST METHODS	**REQUIRED PHYSICAL PROPERTIES (MARV VALUES OF TEST DATA)**
GEOTEXTILE FABRIC TYPE	WOVEN MONOFILAMENT
APPARENT OPENING SIZE (ASTM D4751)	# 70 TO # 100 STANDARD SIEVE
WATER FLUX (ASTM D4491)	≥ 18 GPM/FT ^{2}
TENSILE STRENGTH (ASTM D4632)	≥ 310 LB. (WARP DIRECTION) X 200 LB. (FILL DIRECTION)
ULTRAVIOLET STABILITY (AFTER 500 HRS PER ASTM D4355)	≥ 90%
BURST STRENGTH (ASTM D3786)	≥ 400 PSI
PUNCTURE STRENGTH (ASTM D4833)	≥ 105 LB.
TRAPEZOIDAL TEAR (ASTM D4533)	≥ 100 LB. (WARP DIRECTION) X 60 LB. (FILL DIRECTION)

GENERAL NOTES

A. SILT FENCE WITH WIRE BACKING IS USED TO INTERCEPT SMALL AMOUNTS OF SEDIMENT AND REDUCE VELOCITY FROM SHEET FLOW ONLY. USE SILT FENCE WITH WIRE BACKING UP-GRADIENT TO, AND ALONG THE PERIMETER OF STREAMS, WETLANDS, PONDS, SPRINGS, OR OTHER NATURAL WATER RESOURCES LOCATED WITHIN OR ADJACENT TO THE PROJECT RIGHT-OF-WAY AND AT LARGE FILL SLOPES.

B. THE MAXIMUM DRAINAGE AREA SIZE FOR CONTINUOUS SILT FENCE WITH BACKING SHALL BE 1 ACRE PER 150 LINEAR FEET OF FENCE LENGTH. MAXIMUM SLOPE LENGTH BEHIND FENCE ON UP SLOPE SIDE SHALL BE 290 FEET (AS MEASURED ALONG THE GROUND SURFACE).

C. WHEN INSTALLED AT THE TOE OF A SLOPE SILT FENCE WITH WIRE BACKING SHOULD BE PLACED 5 FEET TO 10 FEET AWAY FROM THE TOE TO ALLOW SPACE FOR PONDING OF WATER, COLLECTION OF SEDIMENT, AND EASE OF MAINTENANCE AND REMOVAL.

D. WHEN TWO SECTIONS OF SILT FENCE WITH WIRE BACKING FABRIC ADJOIN EACH OTHER, THEY SHALL BE JOINED ACCORDING TO THE DETAILS ON STANDARD DRAWING EC-STR-3E.

E. MAINTENANCE SHALL BE PREFORMED AS NEEDED; CAPTURED SOIL MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND/OR WHEN EVIDENCE OF FILTER CLOGGING IS OBSERVED.

F. STEEL POSTS SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB/FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH GRADE WEATHER RESISTANT STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED TO AID IN THE ATTACHMENT OF THE WIRE BACKING. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.

G. STEEL POSTS SHALL HAVE A PROJECTION FOR FASTENING WIRE TO THEM. WOVEN WIRE FENCE BACKING TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST SIX PER POST.

H. FABRIC SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE BACKING WITH THE TIES SPACED EVERY 24 INCHES ALONG TOP AND MIDSECTION.

I. WOVEN WIRE FENCE BACKING SHALL MEET THE REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FARM, DESIGN NO. 832-6-11, CLASS 3 COATING.

J. SILT FENCE WITH BACKING SHOULD BE PLACED ALONG OR NEAR THE GROUND CONTOURS. THE BOTTOM OF THE FENCE AT GROUND LINE SHOULD BE ON A ZERO PERCENT (0%) GRADE, PLUS OR MINUS ONE HALF PERCENT (± 0.5%). THE END OF A ROW OF SILT FENCE WITH WIRE BACKING SHOULD BE TURNED UP SLOPE FORMING A J-HOOK TO FILTER ANY CONCENTRATED FLOW BEHIND FENCE.

K. FOR TRENCH-BASED INSTALLATIONS, SILT FENCING WITH WIRE BACKING SHALL BE INSTALLED PER THE FOLLOWING STEPS AND IN THE FOLLOWING ORDER:

1. EXCAVATE TRENCH A MAXIMUM OF 4 INCHES WIDE AND 8 INCHES DEEP. THE TRENCH SHALL BE HAND-CLEANED FOLLOWING EXCAVATION TO REMOVE BULKY DEBRIS SUCH AS ROCKS, STICKS, AND SOIL CLODS FROM THE TRENCH.
2. DRIVE AND SET SUPPORT POSTS PER SPACING REQUIREMENTS GIVEN ON THE APPLICABLE FENCE DETAIL.
3. ATTACH WOVEN WIRE FENCE BACKING TO POSTS AND FABRIC TO THE WIRE BACKING USING WIRE TIES. SPACING AND DENSITY OF TIES SHALL BE INSTALLED ACCORDING TO NOTES G AND H.
4. INSTALL FABRIC IN TRENCH.
5. BACKFILL TRENCH (OVER-FILL) WITH SOIL PLACED AROUND FABRIC.
6. COMPACT SOIL. BACKFILL WITH MECHANICAL EQUIPMENT. DO NOT DAMAGE THE FABRIC DURING COMPACTION (DAMAGED FABRIC SHALL BE REPLACED).

L. ONLY SILT FENCE WITH WIRE BACKING FABRIC LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED. ANY PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE MAY ALSO BE USED.

M. SILT FENCE WITH WIRE BACKING SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-08.02 TEMPORARY SILT FENCE (WITH BACKING), L.F.

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE SILT FENCE WITH WIRE BACKING.

N. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WITH WIRE BACKING WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER C.Y.

O. ORANGE SAFETY CAPS FOR METAL POSTS SHALL BE REQUIRED TO MEET OSHA REGULATION 1926.701. ALL COST OF THE CAPS TO BE INCLUDED IN THE COST OF THE FENCE.

REV. 12-18-03: MODIFIED TABLE 2 AND GENERAL NOTE O.

- REV. 7-29-04: CHANGED VALUES IN TABLE 2 FROM MEAN TO MARV VALUES.
- REV. 4-15-06: MODIFIED FABRIC HEIGHT, ADDED NOTES Q AND R. REVISED TABLE TITLE. REORDERED GENERAL NOTES. REFORMATTED SHEET. REVISED NOTES, MISC. EDITS TO DRAWING.
- REV. 4-1-08: REMOVED TEMPORARY REFERENCE, REVISED NOTES, AND MISC. EDITS TO DRAWING.
- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.
- REV. 08-28-2019: ADDED NOTE R. REDREW SHEET.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

NOT TO SCALE

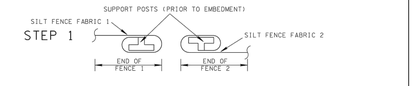
STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

SILT FENCE WITH WIRE BACKING

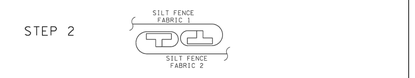
12-18-2002 EC-STR-3C

WIRE BACKED SILT FENCE
DETAIL A
NTS

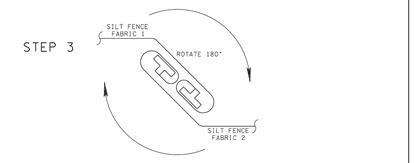
NOT USED
DETAIL B
NTS



1. WRAP FABRIC AROUND END SUPPORTS AS SHOWN AND ANCHOR FABRIC TO POSTS.
2. POSITION POSTS/FABRIC AS SHOWN ABOVE.



1. POSITION THE SILT FENCE FABRIC 2 POST INSIDE OF THE SILT FENCE FABRIC 1 POST AS SHOWN ABOVE.



1. ROTATE BOTH POSTS WITH FABRIC CLOCKWISE AT LEAST 180°.
2. EMBED BOTH POSTS INTO GROUND PER APPLICABLE SILT FENCE STANDARD DRAWING, (EC-STR-3B, EC-STR-3C, OR EC-STR-3D)

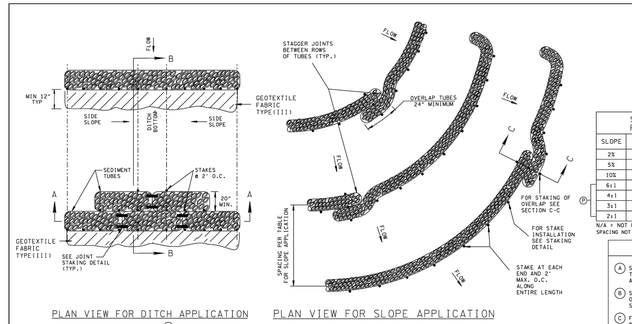
PLAN VIEW
JOINING SILT FENCE FABRIC SECTIONS (STEEL POSTS)

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SILT FENCE FABRIC JOINING DETAILS

12-18-02 EC-STR-3E

SILT FENCE JOINING
DETAIL C
NTS



PLAN VIEW FOR DITCH APPLICATION

PLAN VIEW FOR SLOPE APPLICATION

SEE NOTE E

SEDIMENT TUBE SPACING FOR SLOPE APPLICATION					
SLOPE	8"	12"	18"	20"	24"
2%	70'	80'	N/A	N/A	N/A
5%	30'	60'	80'	N/A	N/A
10%	20'	30'	70'	80'	80'
6:1	N/A	20'	40'	50'	55'
4:1	N/A	20'	30'	30'	30'
3:1	N/A	N/A	20'	20'	25'
2:1	N/A	N/A	20'	20'	20'

N/A = NOT RECOMMENDED
SPACING NOT TO EXCEED 80'

SEDIMENT TUBE SPACING TABLE FOR DITCH APPLICATION	
SLOPE	MAXIMUM SEDIMENT TUBE SPACING
LESS THAN 2%	80'
2%	80'
3%	50'
4%	40'
5%	30'
6%	20'
GREATER THAN 6%	20'

BASED ON A 20" SEDIMENT TUBE
SEE TABLE ON EC-STR-4 FOR OTHER HEIGHTS.

SEDIMENT TUBE GENERAL NOTES

A. SEDIMENT TUBES CAN BE PLACED AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES TO INTERCEPT RUNOFF, REDUCE FLOW VELOCITY, RELEASE THE RUNOFF AS SHEET FLOW AND PROVIDE REMOVAL OF SEDIMENT FROM THE RUNOFF.

B. SEDIMENT TUBES SHALL BE INSTALLED ALONG OR ON THE GROUND CONTOUR, AT THE TOE OF SLOPES, OR IN A DITCH TO HELP REDUCE THE EFFECTS OF SOIL EROSION AND RETAIN SEDIMENT. SEDIMENT TUBES SHOULD NOT BE USED IN DITCHES OR STREAMS.

C. FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 0.5 ACRES. AT SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM DRAINAGE AREA SHALL BE 0.25 ACRES. FOR SLOPE APPLICATIONS, THE MAXIMUM DRAINAGE AREAS SHALL BE ¼ ACRE PER 100 LF OF TUBE.

D. SEDIMENT TUBES SHALL NOT BE USED ON PAVEMENT, ROCKY SOILS, OR AT ANY OTHER LOCATIONS WHERE THE STAKES CANNOT BE DRIVEN TO THE REQUIRED DEPTH.

E. SEDIMENT TUBES SHALL BE MANUFACTURED FROM WOOD EXCELSIOR, RICE OR WHEAT STRAW, COCONUT FIBERS, OR HARDWOOD MULCH THAT IS ENCASED BY A TUBULAR BIODEGRADABLE NETTING MATERIAL. ALL MATERIALS INCLUDING THE NETTING SHALL BE BIODEGRADABLE.

F. PINE NEEDLE AND LEAF MULCH FILLED SEDIMENT TUBES AND STRAW BALES ARE NOT ACCEPTABLE MATERIALS.

G. THE DIAMETER OF A SEDIMENT TUBE SHALL BE A MINIMUM OF 8 INCHES AND A MAXIMUM OF 24 INCHES. DIAMETER TOLERANCE IS 2 INCHES. FOR DITCH APPLICATIONS, SEDIMENT TUBES SHALL BE A MINIMUM OF 20 INCHES.

H. SEDIMENT TUBES SHALL BE INSTALLED WITH WOODEN STAKES (MIN. 1.5" x 1.5" ACTUAL). THE STAKE SHALL BE EMBEDDED A MINIMUM OF 3 FEET.

I. SEDIMENT TUBES SHALL BE TRENCHED IN A MINIMUM OF 2 INCHES.

J. IF MORE THAN ONE SEDIMENT TUBE IS PLACED IN A ROW IN SLOPE APPLICATION, THE TUBES SHALL BE OVERLAPPED A MINIMUM OF 24 INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT, WHEN USED IN DITCHES, TWO ROWS OF TUBE SHALL BE PLACED ON THE CHANNEL BOTTOM WITH STAGGERED JOINTS AS SHOWN.

K. FOR DITCH APPLICATIONS, SEDIMENT TUBES SHALL BE A MINIMUM OF 20 INCH DIAMETER AND SHALL BE PLACED PERPENDICULAR TO THE FLOW OF WATER. SEDIMENT TUBES SHALL CONTINUE UP THE SIDE SLOPES A MINIMUM OF 3 FEET PLUS THE DIAMETER OF THE TUBE, OR TO THE TOP OF THE DITCH, WHICHEVER IS LESS.

L. SEDIMENT TUBES USED IN SLOPE APPLICATIONS MAY REMAIN IN PLACE TO BIODEGRADE. FOR DITCH APPLICATIONS SEDIMENT TUBES SHALL BE COMPLETELY REMOVED AFTER FULLY ESTABLISHED VEGETATION HAS COMPLETELY DEVELOPED.

M. SEDIMENT TUBES SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS NUMBERS:

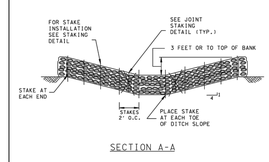
740-11.01 TEMPORARY SEDIMENT TUBE (8 INCH) PER LINEAR FOOT
740-11.02 TEMPORARY SEDIMENT TUBE (12 INCH) PER LINEAR FOOT
740-11.03 TEMPORARY SEDIMENT TUBE (18 INCH) PER LINEAR FOOT
740-11.04 TEMPORARY SEDIMENT TUBE (20 INCH) PER LINEAR FOOT
740-11.05 TEMPORARY SEDIMENT TUBE (24 INCH) PER LINEAR FOOT

PAYMENT SHALL INCLUDE ALL MATERIALS (INCLUDING GEOTEXTILE FABRIC IF USED) AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF SEDIMENT TUBE.

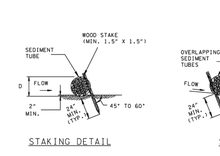
N. ONLY SEDIMENT TUBES LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED.

O. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SEDIMENT TUBE WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

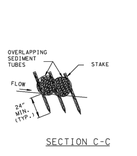
P. GEOTEXTILE FABRIC REQUIRED FOR SLOPE APPLICATION STEEPER THAN 6:1.



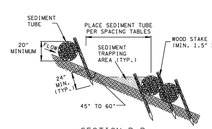
SECTION A-A



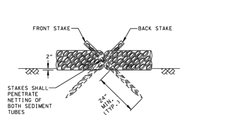
STAKING DETAIL



SECTION C-C



SECTION B-B



JOINT STAKING DETAIL
(DITCH APPLICATION ONLY)

EROSION CONTROL PLAN LEGEND: TUBE••TUBE••TUBE SEDIMENT TUBE

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

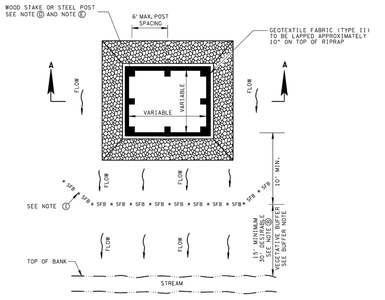
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SEDIMENT TUBE

1-20-06 EC-STR-37

SEDIMENT TUBE
DETAIL D
NTS

- REV. 4-15-06: REFORMATTED SHEET, REVISED NOTES, MISC. EDITS TO DRAWING.
- REV. 4-1-08: REMOVED TEMPORARY REFERENCE, REVISED NOTES, AND OTHER MINOR MISC. EDITS, REVISED GENERAL NOTES.
- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.
- REV. 6-10-14: MODIFIED SPACING TABLES. ADDED GEOTEXTILES ADDED NOTE P.

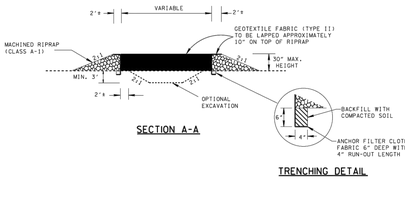


PLAN VIEW

BUFFER NOTE:
REPORTS SHOULD BE MADE TO PROVIDE THE DESIRABLE WIDTH AT ALL SITES. THE AVERAGE WIDTH OF THE BUFFER STRIP MAY BE USED WHEN CALCULATING THE DESIRABLE WIDTH.

DEWATERING STRUCTURE VOLUMES AND DIMENSIONS				
PUMP DIAMETER (INCHES)	PUMP RATE (GALLONS PER MINUTE)	STORAGE VOLUME REQ'D (CUBIC YARDS)	INTERIOR DIMENSIONS	EXTERIOR DIMENSIONS
2	140	84	30' X 30'	44' X 44'
3	260	155	41' X 41'	55' X 55'
4	500	298	57' X 57'	71' X 71'
6	1,100	654	85' X 85'	99' X 99'

1. DIMENSIONS BASED ON THE MAXIMUM STRUCTURE HEIGHT OF 30" AND THE LENGTH BEING EQUAL TO THE WIDTH. OPTIONAL EXCAVATION IS NOT INCLUDED.
2. ADJUSTMENTS SHOULD BE MADE TO THE DIMESIONS TO OBTAIN THE BEST CONFIGURATION FOR THE PROJECT SITE. DIMENSIONS ARE BASED ON THE DEWATERING STRUCTURE BEING HORIZONTAL.



SECTION A-A

TRENCHING DETAIL

DEWATERING STRUCTURE GENERAL NOTES

A. DEWATERING STRUCTURES MAY BE USED WHENEVER SEDIMENT LADEN WATER IS REMOVED BY MEANS OF PUMPING. THEY SHOULD BE USED IN CONJUNCTION WITH THE DEWATERING OF COFFERDAMS, TRENCHES, ENCLOSED DITCHES, AND OTHER CONSTRUCTION ACTIVITIES WHICH REQUIRE THE REMOVAL OF SEDIMENT LADEN WATER.

B. DEWATERING STRUCTURES SHOULD NOT BE PLACED WITHIN A JURISDICTIONAL WETLAND OR WITHIN 15 FEET (30 FEET DESIRABLE) OF A STABILIZED OUTLET, STREAM, OR OTHER NATURAL WATER RESOURCE. WHEN DISCHARGING TO SEDIMENT-IMPAIRED STREAMS OR EXCEPTIONAL TENNESSEE WATERS, THE BUFFER SHALL BE A MINIMUM OF 30 FEET WITH A DESIRABLE WIDTH OF 60 FEET. BUFFER REQUIREMENT DOES NOT APPLY TO ANY LOCATION ON SITE WITH A VALID AWAM OR EQUIVALENT PERMIT BY FEDERAL AGENCIES.

C. THE MINIMUM STORAGE VOLUME REQUIRED FOR A DEWATERING STRUCTURE SHOULD BE BASED ON 2 HOURS OF PUMPING AT THE RATE SHOWN IN THE "DEWATERING STRUCTURE VOLUMES AND DIMENSIONS" TABLE. THE MINIMUM STORAGE VOLUME REQUIRED IN CUBIC FEET IS OBTAINED BY MULTIPLYING THE PUMPING RATE IN GALLONS PER MINUTE BY 16.

D. POST SHALL BE PLACED ALONG THE INTERIOR PERIMETER OF THE DEWATERING STRUCTURE. ONE POST SHOULD BE PLACED IN EACH CORNER AND POSTS SHOULD BE PLACED ALONG THE SIDES AT A MAXIMUM SPACING OF 6 FEET. POST SHOULD BE EMBEDDED A MINIMUM OF 30 INCHES INTO THE EXISTING GROUND AND SHOULD EXTEND AT A MINIMUM THE HEIGHT OF THE DEWATERING STRUCTURE.

E. THE POST SHOULD BE A MINIMUM 2.25" (NOMINAL) X 2.25" (NOMINAL) HARDWOOD POST (OAK OR HICKORY) OR MINIMUM 1.25 LB./FT. STEEL POST (STD. "T" OR "U" SECTION).

F. DIVERT ANY STORMWATER RUNOFF AWAY FROM THE DEWATERING STRUCTURE.

G. SEDIMENT FILTER BAGS MAY BE USED TO COLLECT SEDIMENT WHEN PUMPING FROM A DEWATERING STRUCTURE INTO AN ADJACENT STREAM WHEN APPROVED BY THE ENGINEER. SEE STANDARD DRAWING EC-STR-2.

H. ONLY GEOTEXTILE FABRIC (TYPE II) LISTED ON THE QUALIFIED PRODUCTS LIST SHALL BE USED.

I. INSTALL SILT FENCE WITH WIRE BACKING BETWEEN STREAM AND/OR DRAINAGE DITCH AND THE DEWATERING STRUCTURE. SEE STANDARD DRAWINGS EC-STR-3C AND EC-STR-3E FOR INSTALLATION DETAILS.

J. THE EXISTING VEGETATIVE BUFFER SHOULD REMAIN BETWEEN SILT FENCE WITH WIRE BACKING AND STABILIZED OUTLET, STREAM OR OTHER NATURAL RESOURCE. BUFFER ZONE EXEMPTIONS ARE DEFINED BASED ON EXISTING LAND USES.

K. THE VOLUME OF DEWATERING STRUCTURE SHOWN IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS IS TO BE BASED ON USE OF THE 4 INCH PUMP SHOWN IN THE "DEWATERING STRUCTURE VOLUMES AND DIMENSIONS" TABLE.

L. DEWATERING STRUCTURES SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

203-01 ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) PER CUBIC YARD
209-10.01 TEMPORARY DEWATERING STRUCTURE PER CUBIC YARD

SILT FENCE WITH WIRE BACKING SHALL BE PAID FOR ACCORDING TO ITS RESPECTIVE STANDARD DRAWING.

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE DEWATERING STRUCTURE.

M. THE ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE STRUCTURE IS HALF FULL AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

REV. 12-18-95: CHANGED DRAWING NO. FROM ESC-STR-1 TO EC-STR-1.

- REV. 10-26-00: IN TEMPORARY EROSION AND SEDIMENT CONTROL PAY ITEMS BLOCK CHANGED PAY ITEM NUMBERS AND DESCRIPTIONS TO CONCUR WITH CHANGES MADE BY CONSTRUCTION DIVISION.
- REV. 5-27-01: REVISED PAY ITEMS AND GENERAL NOTES TO COMPLY WITH NEW PAY ITEM SYSTEM GOING IN EFFECT OCTOBER 24, 2001.
- REV. 12-18-02: ADDED PAY ITEM NOS. 209-08.02 AND 209-08.04. CHANGED SHEET NAME.
- REV. 2-22-03: CHANGED GENERAL NOTE O.
- REV. 4-1-08: REMOVED TEMPORARY REFERENCE, REMOVED PAY ITEMS TABLE, REPLACED GENERAL NOTES AND DEWATERING STRUCTURE VOLUMES TABLE, AND OTHER MINOR DRAFTING EDITS.
- REV. 8-1-12: MODIFIED BUFFER DIMENSIONS, ADDED BUFFER NOTES, MINOR EDITS TO GENERAL NOTES.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

DEWATERING STRUCTURE

10-26-92 EC-STR-1

DEWATERING STRUCTURE
DETAIL E
NTS

EROSION CONTROL PLAN LEGEND: DEWATERING STRUCTURE

JOHN P. BRIAND
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE No. 126241
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
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210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATION CONTROL DETAILS II

PROJECT NO. 14915-237520
FILE NAME: CD02STDT.DWG

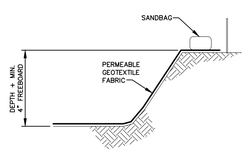
SHEET NO.
CD-2

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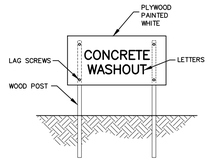
XREFs: [CDMS_2436] Images: [TDEC logo_new high res]
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TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION

FILE NO. – 7.16



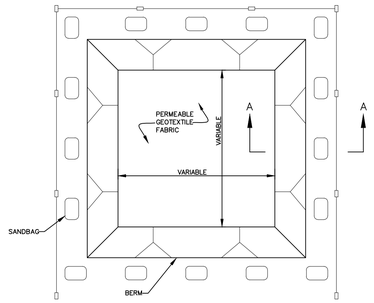
SECTION A–A
NOT TO SCALE



CONCRETE WASHOUT
SIGN (OR EQUIVALENT)



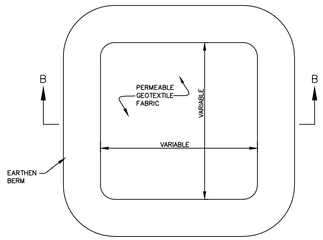
SECTION B–B
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

TYPE "BELOW GRADE"

NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.



PLAN VIEW
NOT TO SCALE

TYPE "ABOVE GRADE"
WITH EARTHERN BERMS

.\x\1960401\TDEC logo_new high res.jpg

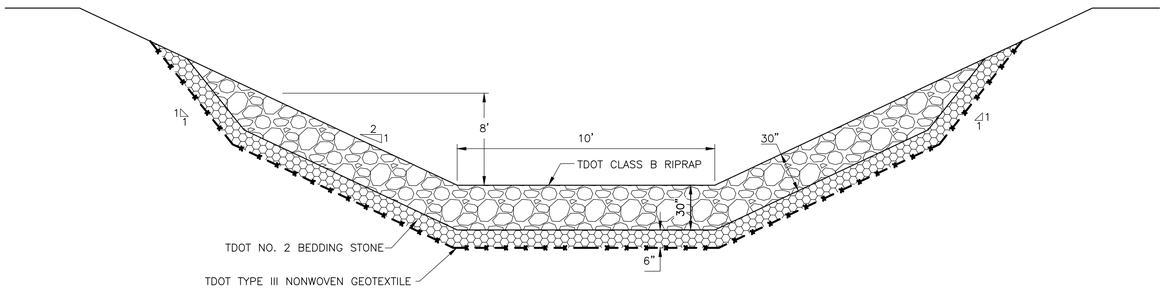
CONCRETE WASHOUT

7.16

NOT TO SCALE

CONCRETE WASHOUT
DETAIL A
NTS

NOT USED
DETAIL B
NTS



TEMPORARY BYPASS CHANNEL
DETAIL C
NTS

NOT USED
DETAIL D
NTS

JOHN P. BRIAND III
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TENNESSEE
No. 128231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

EROSION AND SEDIMENTATION CONTROL DETAILS III

PROJECT NO. 14915–237520
FILE NAME: CDD3STDT.DWG

SHEET NO.
CD-3

ISSUED FOR BID

XREFs: [CDMS_2436] Images: [TDEC logo_new high res]
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TEMPORARY SEEDING AND VEGETATION

DEFINITION

THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SPECIES FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

PURPOSE

TO TEMPORARILY STABILIZE DENUDED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 14 DAYS.

TEMPORARY SEEDING CONTROLS RUNOFF AND EROSION UNTIL PERMANENT VEGETATION OR OTHER EROSION CONTROL MEASURES CAN BE ESTABLISHED. SEEDING WITH A TEMPORARY GROUNDCOVER PROVIDES TEMPORARY STABILIZATION UNTIL PERMANENT STABILIZATION CAN BE ACHIEVED. IN ADDITION, IT PROVIDES RESIDUE FOR SOIL PROTECTION AND SEEDBED PREPARATION, AND REDUCES PROBLEMS OF MUD AND DUST PRODUCTION FROM BARE SOIL SURFACES DURING CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES

ON ANY CLEARED, UNVEGETATED, OR SPARSELY VEGETATED SOIL SURFACE WHERE VEGETATIVE COVER IS NEEDED FOR LESS THAN 1 YEAR.

PLANNING CONSIDERATIONS

ANNUAL PLANTS THAT SPROUT AND GROW RAPIDLY AND SURVIVE FOR ONLY ONE SEASON ARE SUITABLE FOR ESTABLISHING INITIAL OR TEMPORARY VEGETATIVE COVER. TEMPORARY SEEDING PRESERVES THE INTEGRITY OF EARTHEN SEDIMENT CONTROL STRUCTURES SUCH AS DIKES, DIVERSIONS, AND THE BANKS OF DAMS AND SEDIMENT BASINS. IT CAN ALSO REDUCE THE AMOUNT OF MAINTENANCE ASSOCIATED WITH THESE DEVICES. FOR EXAMPLE, THE FREQUENCY OF SEDIMENT BASIN CLEANOUTS WILL BE REDUCED IF THE WATERSHED AREAS OUTSIDE THE ACTIVE CONSTRUCTION ZONE ARE STABILIZED.

PROPER SEEDBED PREPARATION, SELECTION OF APPROPRIATE SPECIES, AND THE USE OF QUALITY SEED ARE IMPORTANT. FAILURE TO FOLLOW ESTABLISHED GUIDELINES AND RECOMMENDATIONS CAREFULLY MAY RESULT IN AN INADEQUATE OR SHORT-LIVED STAND OF VEGETATION THAT WILL NOT CONTROL EROSION. TEMPORARY SEEDING PROVIDES PROTECTION FOR NO MORE THAN 1 YEAR, DURING WHICH TIME PERMANENT STABILIZATION SHOULD BE INITIATED.

DESIGN CRITERIA

COMPLETE GRADING BEFORE PREPARING SEEDBEDS, AND INSTALL ALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS. MINIMIZE STEEP SLOPES BECAUSE THEY MAKE SEEDBED PREPARATION DIFFICULT AND INCREASE THE EROSION HAZARD. IF SOILS BECOME COMPACTED DURING GRADING, LOOSEN THEM TO A DEPTH OF 6–8 INCHES USING A RIPPER, HARROW, OR CHISEL PLOW.

CONSTRUCTION SPECIFICATIONS

GRADING AND SHAPING: EXCESSIVE WATER RUNOFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS DITCHES, DIKES, DIVERSIONS, AND SEDIMENT BASINS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION: GOOD SEEDBED PREPARATION IS ESSENTIAL TO SUCCESSFUL PLANT ESTABLISHMENT. A GOOD SEEDBED IS WELL PULVERIZED, LOOSE AND UNIFORM. WHERE HYDROSEEDING METHODS ARE USED, THE SURFACE MAY BE LEFT WITH A MORE IRREGULAR SURFACE OF LARGE CLODS AND STONES.

LIMING: APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. IF THE PH (ACIDITY) OF THE SOIL IS NOT KNOWN, AN APPLICATION OF GROUND AGRICULTURAL LIMESTONE AT THE RATE TO 1 TO 1½ TONS/ACRE ON COARSE TEXTURED SOILS AND 2–3 TONS/ACRE ON FINE TEXTURED SOILS IS USUALLY SUFFICIENT. APPLY LIMESTONE UNIFORMLY AND INCORPORATE INTO THE TOP 4–6 INCHES OF SOIL. SOILS WITH A PH OF 6 OR HIGHER DO NOT NEED TO BE LIMED.

FERTILIZER: BASE APPLICATION RATES ON SOIL TESTS. WHEN SOIL TESTS ARE NOT POSSIBLE, APPLY A 10-10-10 GRADE FERTILIZER AT 700-1000LB/ACRE. BOTH FERTILIZER AND LIME SHOULD BE INCORPORATED INTO THE TOP 4–6 INCHES OF SOIL. IF A HYDRAULIC SEEDER IS USED, DO NOT MIX SEED AND FERTILIZER MORE THAN 30 MINUTES BEFORE THE APPLICATION.

SURFACE ROUGHENING: IF RECENT TILLAGE OPERATIONS HAVE RESULTED IN A LOOSE SURFACE, ADDITIONAL ROUGHENING MAY NOT BE NECESSARY, EXCEPT TO BREAK UP LARGE CLODS. IF RAINFALL CAUSED THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. GROOVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR BEFORE SEEDING.

SEEDING: SELECT A NON-INVASIVE GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. ALTHOUGH NATIVE PLANTS ARE PREFERRED, THERE ARE CURRENTLY NO AVAILABLE NATIVE SPECIES THAT ARE NOT COST PROHIBITIVE, NON-INVASIVE ANNUAL PLANTS ARE PREFERRED. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER. DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ¼ TO ½ INCHES DEEP. APPROPRIATE DEPTH OF PLANTING IS 10 TIMES THE SEED DIAMETER. SOIL SHOULD BE RAKED LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.

MULCHING: THE USE OF MULCH WILL HELP ENSURE ESTABLISHMENT UNDER NORMAL CONDITIONS, AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH SITE CONDITIONS. HARSH SITE CONDITIONS INCLUDE:

- > SEEDING IN FALL FOR WINTER COVER
- > SLOPES STEEPER THAN 3:1
- > EXCESSIVELY HOT OR DRY WEATHER
- > ADVERSE SOILS (SHALLOW, ROCKY, OR HIGH IN CLAY OR SAND), AND
- > AREAS RECEIVING CONCENTRATED FLOW.

IRRIGATION: DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL ENSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE AS NEEDED. NEWLY SEEDED AREAS REQUIRE MORE WATER THAN MORE MATURE PLANTS.

MAINTENANCE AND INSPECTION POINTS

RESEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW.

SOD

DEFINITION

PERMANENTLY STABILIZING AREAS BY LAYING A CONTINUOUS COVER OF GRASS SOD.

PLANNING CONSIDERATIONS

SOD CAN BE LAID DURING TIMES OF THE YEAR WHEN SEEDED GRASSES MAY FAIL, PROVIDED THERE IS ADEQUATE WATER AVAILABLE FOR IRRIGATION IN THE EARLY WEEKS. IRRIGATION IS ESSENTIAL, AT ALL TIMES OF THE YEAR, TO INSTALL SOD. IT IS INITIALLY MORE COSTLY TO INSTALL SOD THAN TO PLANT SEED.

BECAUSE SOD IS COMPOSED OF LIVING PLANTS THAT MUST RECEIVE ADEQUATE CARE, FINAL GRADING AND SOIL PREPARATION SHOULD BE COMPLETED BEFORE SOD IS DELIVERED. IF LEFT ROLLED OR STACKED, HEAT CAN BUILD UP INSIDE THE SOD, CAUSING SEVERE DAMAGE AND LOSS OF COSTLY PLANT MATERIAL.

DESIGN CRITERIA

CHOOSING APPROPRIATE TYPES OF SOD: THE TYPE OF SOD SELECTED SHOULD BE COMPOSED OF PLANTS ADAPTED TO BOTH THE SITE AND THE INTENDED PURPOSE. A COMPLETE AND CURRENT LISTING OF SOD RECOMMENDATIONS CAN BE OBTAINED FROM SUPPLIERS OR THE STATE AGRICULTURAL EXTENSION OFFICE. SOD COMPOSED OF A MIXTURE OF VARIETIES MAY BE PREFERRED BECAUSE OF ITS BROADER RANGE OF ADAPTABILITY. SOD THAT CONSISTS OF NATIVE SPECIES IS PREFERRED IF AVAILABLE.

IN GENERAL, WARM SEASON GRASSES SUCH AS BERMUDAGRASS SOD SHOULD BE USED IN WEST TN AND COOL SEASON GRASSES SUCH AS FESCUE SOD SHOULD BE USED IN EAST TN. BOTH CAN BE USED IN MIDDLE TN, WITH WARMER SEASON GRASSES IN SOUTHERN MIDDLE TN AND COOLER SEASON GRASSES IN NORTHERN MIDDLE TN.

CONSTRUCTION SPECIFICATIONS

QUALITY OF SOD: USE ONLY HIGH-QUALITY SOD OF KNOWN GENETIC ORIGIN, FREE OF NOXIOUS WEEDS, DISEASE, AND INSECT PROBLEMS. IT SHOULD APPEAR HEALTHY AND VIGOROUS, AND CONFORM TO THE FOLLOWING SPECIFICATIONS:

- > SOD SHOULD BE MACHINE CUT AND CONTAIN ¾" OF SOIL, NOT INCLUDING SHOOTS OR THATCH.
- > SOD SHOULD NOT HAVE BEEN CUT IN EXCESSIVELY WET OR DRY WEATHER.
- > SOD SHOULD BE CUT TO THE DESIRED SIZE. TORN OR UNEVEN PADS SHOULD BE REJECTED.
- > HARVEST, DELIVERY, AND INSTALLATION OF SOD SHOULD TAKE PLACE WITHIN A PERIOD 36 HOURS.
- > SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN LIFTED BY ONE END.
- > AVOID PLANTING WHEN SUBJECT TO FROST HEAVE OR HOT WEATHER IF IRRIGATION IS NOT AVAILABLE.

SOIL PREPARATION: BRING THE SOIL SURFACE TO FINAL GRADE. CLEAR SURFACE OF TRASH, WOODY DEBRIS, STONES AND CLODS LARGER THAN 1". FILL OR LEVEL LOW SPOTS IN ORDER TO AVOID STANDING WATER. MIX FERTILIZER AND/OR LIME INTO SOIL SURFACE WHERE NECESSARY. SEE PERMANENT SEEDING SECTION FOR MORE INFORMATION ON SOIL AMENDMENTS.

INSTALLATION:

- > MOISTENING THE SOD AFTER IT IS UNROLLED HELPS MAINTAIN ITS VIABILITY. STORE IT IN THE SHADE DURING INSTALLATION.
- > RAKE THE SOIL SURFACE TO BREAK THE CRUST JUST BEFORE LAYING SOD. DURING THE SUMMER, LIGHTLY IRRIGATE THE SOIL, IMMEDIATELY TO COOL THE SOIL, REDUCE ROOT BURNING, AND DIEBACK.
- > ENSURE THAT THE SOD IS IN GOOD CONTACT WITH THE PREPARED SOIL SURFACE.
- > DO NOT STRETCH THE SOD STRIPS. INSTEAD, MAINTAIN THE SHAPE OF THE SOD AND CUT PIECES TO FIT RATHER THAN STRETCHING SECTIONS.
- > DO NOT INSTALL SOD ON GRAVEL, FROZEN SOILS, OR SOILS THAT HAVE BEEN TREATED RECENTLY WITH STERILANTS OR HERBICIDES.
- > LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. STAGGER STRIPS IN A BRICK-LIKE PATTERN (SEE FIGURE 7-7.10-1). BE SURE THAT THE SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHTLY TO PREVENT VOIDS.
- > INSTALL STRIPS OF SOD WITH THEIR LONGEST DIMENSION PERPENDICULAR TO THE SLOPE. ON SLOPES 3:1 OR STEEPER, OR WHEREVER EROSION MAY BE A PROBLEM, SECURE WITH PEGS OR STAPLES.
- > AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETE, ROLL SOD TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.
- > AFTER ROLLING IRRIGATE UNTIL THE SOIL IS WET 4" BELOW THE SOD.
- > KEEP SODDED AREA MOIST TO A DEPTH OF 4" UNTIL THE GRASS TAKES ROOT. THIS CAN BE DETERMINED BY GENTLY TUGGING ON THE SOD.
- > MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2–3 WEEKS.

MAINTENANCE AND INSPECTION POINTS

AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT THE SOD FROM GOING DORMANT. GRASS HEIGHT SHOULD NOT BE CUT TO LESS THAN 2" TO 3". RE-SOD AREAS WHERE AN ADEQUATE STAND OF SOD IS NOT OBTAINED.

JOHN P. BRIAND III
REGISTERED ENGINEER
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TENNESSEE
No. 128231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

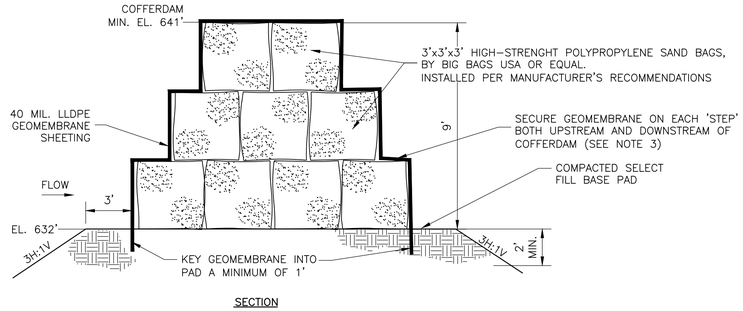
STABILIZATION NOTES

PROJECT NO. 14915-237520
FILE NAME: CD04STDT.DWG

SHEET NO.
CD-4

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XREFs: [CDMS_2436] Images: []
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SECTION

NOTES:

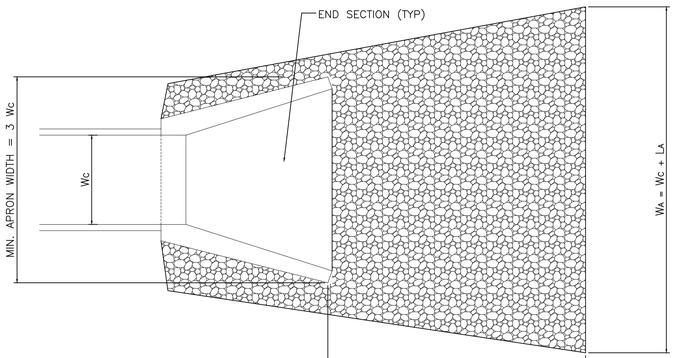
1. LARGE-SANDBAGS SHALL BE PLACED AND FILLED PER MANUFACTURER'S RECOMMENDATIONS. BASE PAD SHALL BE FILLED AND COMPACTED PER SPECIFICATIONS.
2. GEOMEMBRANE SHEETING SHALL EXTEND THE ENTIRE LENGTH OF THE COFFERDAM.
3. SMALL-SANDBAGS OR OTHER WEIGHTING DEVICES SHALL BE USED ALONG THE ENTIRE LENGTH OF COFFERDAM TO SECURE THE GEOMEMBRANE IN PLACE.
4. COFFERDAMS SHALL BE TIED INTO ABUTMENTS TO PREVENT FLOW AROUND THE ENDS OF EACH COFFERDAM.

FIBC (FLEXIBLE INTERMEDITATE BULK CONTAINER) COFFERDAM

DETAIL A
NTS –

NOT USED

DETAIL B
NTS –



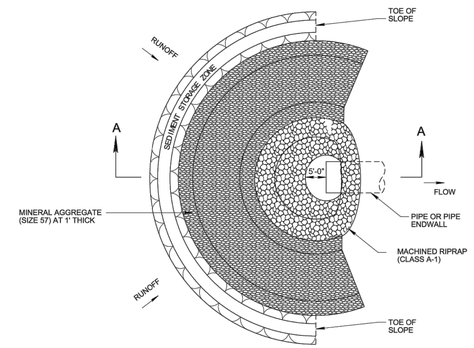
Hc = HEIGHT OF CULVERT
Wc = WIDTH OF CULVERT
LA = LENGTH OF RIP-RAP APRON
WA = WIDTH OF RIP-RAP APRON AT END
D50 = MEDIAN RIP-RAP SIZE
DMAX = MAXIMUM SIZE OF RIP-RAP = 1.5 D50
DA = DEPTH OF RIP-RAP APRON = 1.5 DMAX
SEPARATOR = 6" TDOT NO. 2 BEDDING STONE

APRON FOR	SHEET NO.	GRID LOCATION	RIPRAP D50 (IN)	TDOT RIPRAP CLASS	LENGTH LA – (FT)	DEPTH – DA (IN)	UPSTREAM APRON WIDTH (FT)	DOWNSTREAM WIDTH – WA (FT)
CONCRETE STILLING BASIN	C-14A	B-3	12	CLASS B	30	30	18	48
30" RCP OUTLET	C-14A	B-3	12	CLASS B	24	30	3	21
18" RCP OUTLET (TYP OF 2)	C-14A C-14B	E-4 C-2	7	CLASS A-1	20	18	3	21
EX. POND OUTLET (TYP OF 2)	C-14A C-14B	E-4 C-2	7	CLASS A-1	20	18	3	21
TEMPORARY 24" CORR. HDPE	C-22	E-4	7	CLASS A-1	20	18	3	21

RIPRAP OUTLET PROTECTION

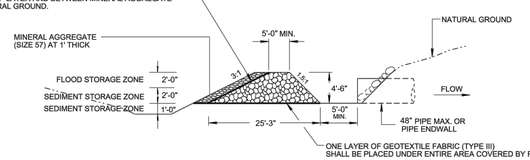
DETAIL D
NTS –

DETAIL MODIFIED FOR 48" PIPE SIZE



PLAN VIEW

TWO LAYERS OF GEOTEXTILE FABRIC (TYPE III) SHALL BE PLACED BETWEEN MINERAL AGGREGATE LAYER AND RIPRAP LAYER AND BETWEEN MINERAL AGGREGATE AND NATURAL GROUND.



SECTION A - A

NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

CULVERT PROTECTION TYPE 1

10-26-92 EC-STR-11

CULVERT PROTECTION TYPE 1 GENERAL NOTES

(A) CULVERT PROTECTION (TYPE 1) MAY BE USED AROUND A CULVERT INLET TO REDUCE FLOW VELOCITIES TO ALLOW SEDIMENTS TO DROP OUT. IT IS NORMALLY USED WHERE ALL OF THE INFLOW TO THE CULVERT IS ON-SITE RUNOFF. IT MAY ALSO BE USED WHERE A FILTRATION FUNCTION FOR VERY LOW FLOWS IS DESIRED.

(B) CULVERT PROTECTION (TYPE I) SHALL NOT BE USED IN STREAMS OR OTHER NATURAL WATER RESOURCES, UNLESS PROVIDED FOR IN THE PERMITS.

(C) CULVERT PROTECTION (TYPE I) SHOULD NOT BE USED IN DITCHES, SWALES, OR OTHER DEPRESSIONS WITH A DEPTH GREATER THAN 1 FOOT.

(D) CULVERT PROTECTION (TYPE1) SHOULD NOT BE USED AT THE CULVERT OUTLET.

(E) WHERE CONDITIONS OF HIGH SEDIMENT FLOW EXIST, MACHINED RIPRAP (CLASS A-3) MAY BE USED IN LIEU OF MACHINED RIPRAP (CLASS A-1) FOR PIPES UP TO 24 INCHES IN DIAMETER WITH A DRAINAGE AREA LESS THAN 3 ACRES. IT MAY ALSO BE USED FOR PIPE FROM 24 INCHES IN DIAMETER WITH A DRAINAGE AREA LESS THAN 6 ACRES.

(F) AT MOST SITES, THE MAXIMUM ALLOWABLE DRAINAGE AREA SHALL BE 30 ACRES. AT SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM ALLOWABLE DRAINAGE AREA SHALL BE 20 ACRES.

(G) ONLY GEOTEXTILE FABRIC (TYPE III) LISTED ON THE QUALIFIED PRODUCTS LIST SHALL BE USED.

(H) CULVERT PROTECTION (TYPE 1) SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) PER CUBIC YARD
303-10.01	MINERAL AGGREGATE (SIZE 57) PER TON
709-05.05	MACHINED RIPRAP (CLASS A-3) PER TON
709-05.06	MACHINED RIPRAP (CLASS A-1) PER TON
740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL) PER SQUARE YARD

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF CULVERT PROTECTION (TYPE 1).

(I) SEDIMENT SHALL BE REMOVED FROM BEHIND THE CULVERT PROTECTION (TYPE 1) WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

FILTER BERM INLET PROTECTION

DETAIL C
NTS –

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12/8/21
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REV. NO.	DATE	DRWN	CHKD	REMARKS

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CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

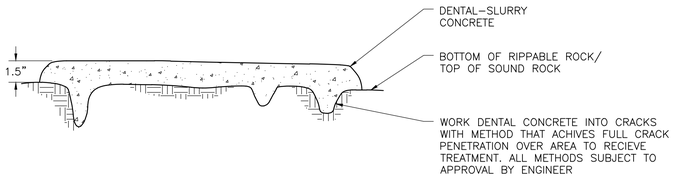
STORMWATER BYPASS DETAILS

PROJECT NO. 14915-237520
FILE NAME: CD05STDT.DWG

SHEET NO.
CD-5

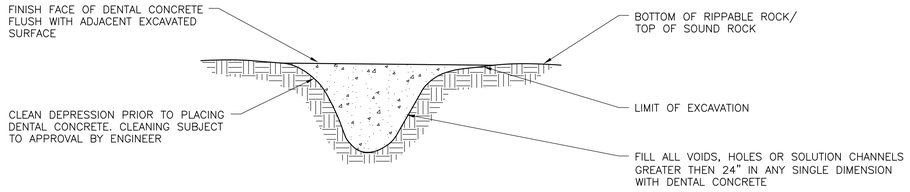
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XREFs: [CDMS_2436] Images: [TDEC logo_new high res]
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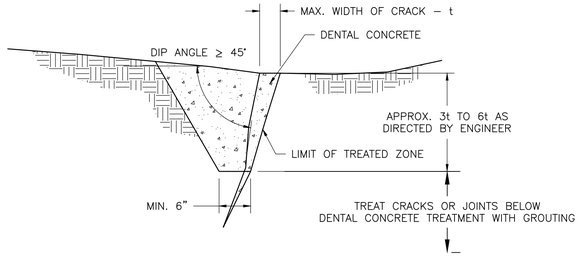
THIN SURFACE CRACKS

DETAIL A — NTS — C–10



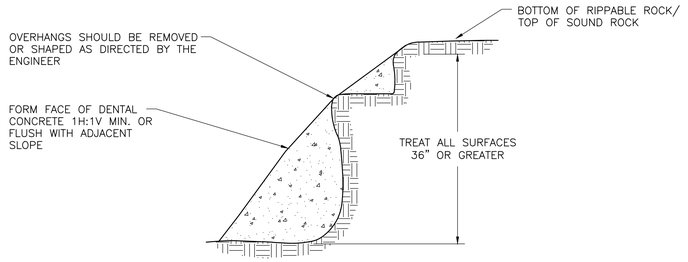
VOIDS, DEPRESSIONS, HOLES, OR SOLUTION CHANNELS WITHIN SPILLWAY FOOTPRINT

DETAIL B — NTS — C–10



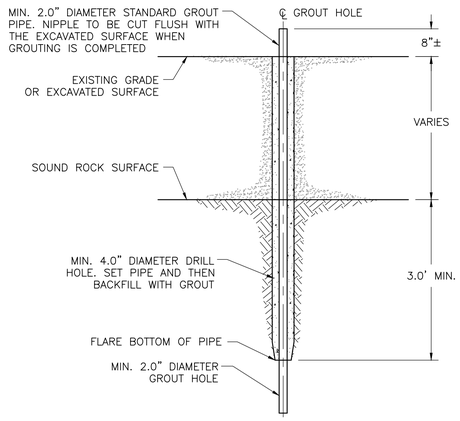
OPEN CRACK, JOINT, FRACTURE OF DEFECT IN SURFACE

DETAIL C — NTS — C–10



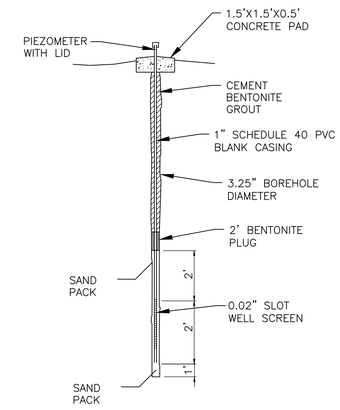
OVERHANGS AND IRREGULAR SURFACES

DETAIL D — NTS — C–10



GROUT PIPE DETAIL

DETAIL E — NTS — C–10



STANDPIPE PIEZOMETER

DETAIL F — NTS — C–10

NOTES:

1. REFER TO SECTION 312316 FOR ROCK REMOVAL AND SECTIONS 314313 AND 314314 FOR GROUTING SPECIFICATIONS.

JOHN P. BRIAND III — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 126231 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: O. TASTAN
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith

Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

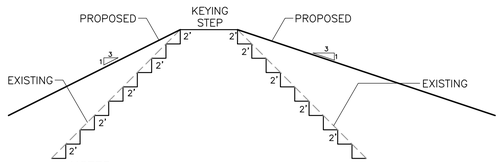
SPILLWAY FOUNDATION PREPARATION AND GROUTING DETAILS

PROJECT NO. 14915–237520
FILE NAME: CD06GRDT.DWG

SHEET NO.
CD-6

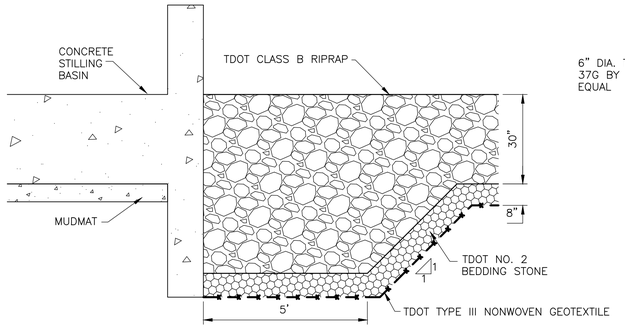
ISSUED FOR BID

XREFs: [CDMS_2436] Images: []
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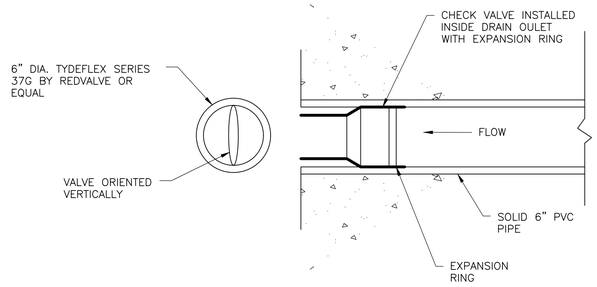


NOTES:
1. REMOVE TOPSOIL AND VEGETATION FROM SLOPES.
2. CUT EXISTING SLOPE WITH 2' VERTICAL STEPS.
3. BACKFILL TO PROPOSED SLOPE USING 8" THICK (LOOSE THICKNESS) VERTICAL LIFTS.
4. OVERFILL NEW SLOPES AND CUT GRADES BACK TO FINAL GRADE TO ENSURE PROPER COMPACTION AT FACE OF SLOPE.

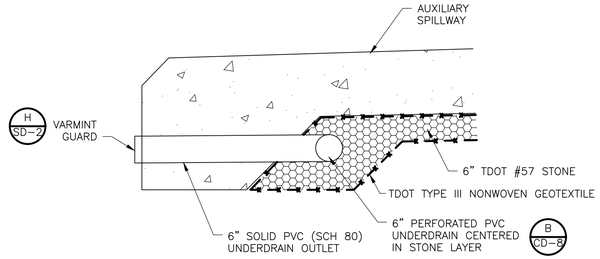
PROPOSED FILL SLOPE
DETAIL A
NTS



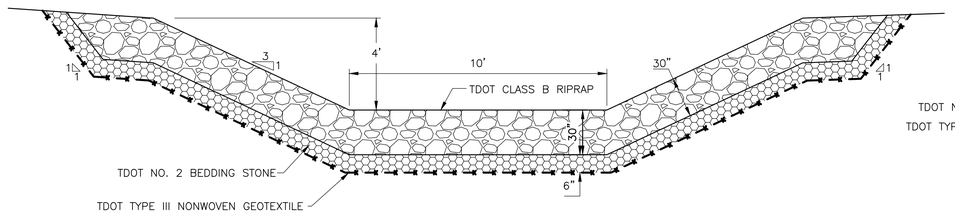
RIPRAP TIE-IN WITH STILLING BASIN
DETAIL B
NTS



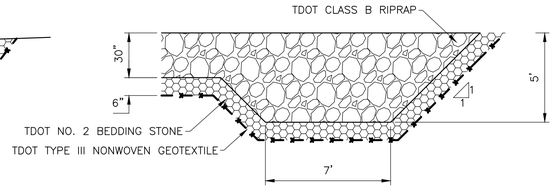
TOE DRAIN OUTLET
DETAIL C
SCALE 1"=10'



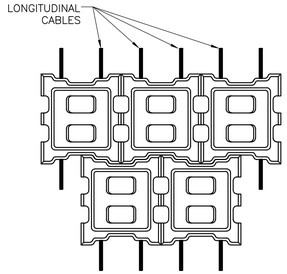
AUXILIARY SPILLWAY UNDERDRAIN OUTLET
DETAIL D
NTS



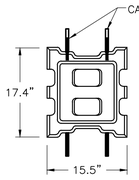
RIPRAP CHANNEL TYPICAL SECTION
DETAIL E
NTS



RIPRAP TIE-IN WITH EXISTING DOWNSTREAM GRADES
DETAIL F
NTS



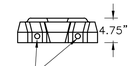
PLAN



TOP VIEW

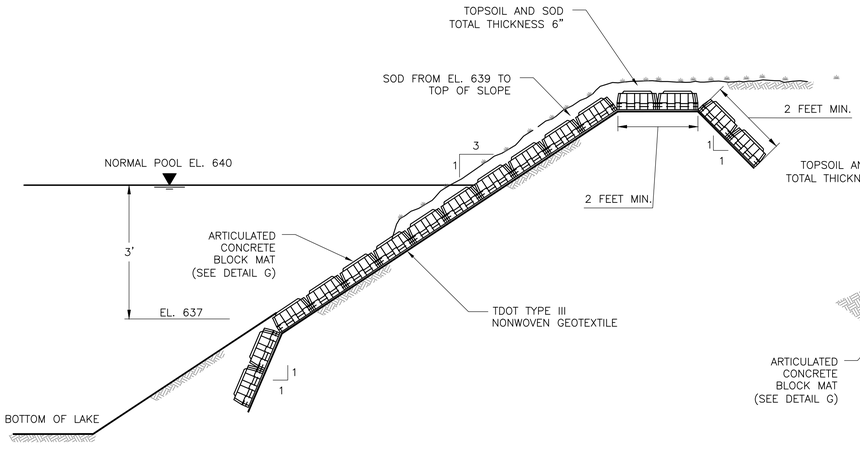


SIDE VIEW

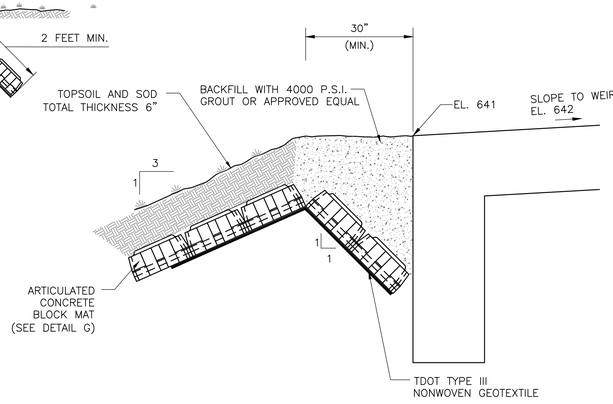


END VIEW

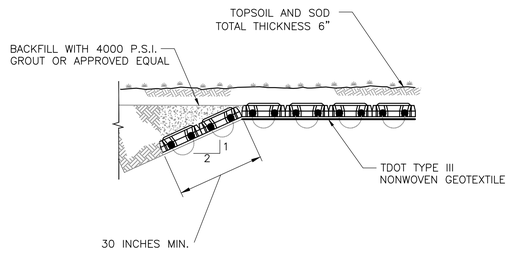
ARTICULATING CONCRETE BLOCK MAT
DETAIL G
NTS



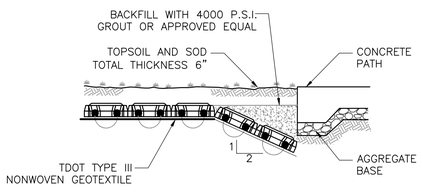
ARTICULATING CONCRETE BLOCK MAT
SLOPE PROTECTION WITH TYPICAL ANCHOR
DETAIL H
NTS



ARTICULATING CONCRETE BLOCK MAT
ANCHOR AT AUXILIARY SPILLWAY
DETAIL I
NTS



ARTICULATING CONCRETE BLOCK MAT FLANK DETAIL
DETAIL J
NTS



ARTICULATING CONCRETE BLOCK MAT
TIE IN WITH CONCRETE PATH
DETAIL K
NTS

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
CERTIFICATE No. 126231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

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210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

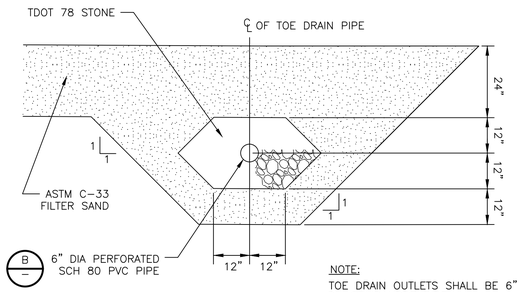
CIVIL DETAILS I

PROJECT NO. 14915-237520
FILE NAME: CD07STDT.DWG

SHEET NO.
CD-7

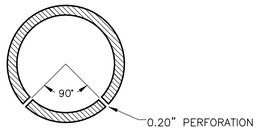
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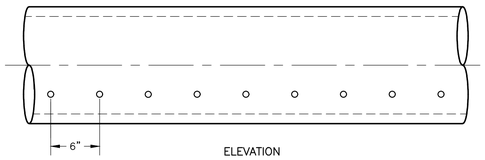
NOTE:
TOE DRAIN OUTLETS SHALL BE 6" DIA SOLID HDPE PIPE.

TOE DRAIN
DETAIL A
NTS



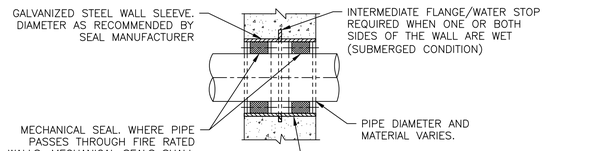
SECTION

PIPE TYPE	SIZE
TOE DRAIN	6"

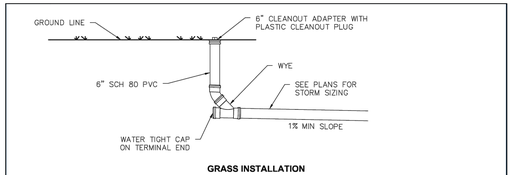


ELEVATION

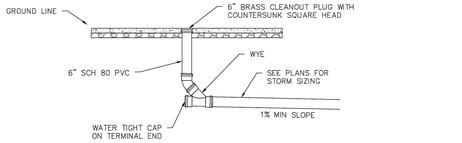
PERFORATED SCH 80 PVC DRAIN PIPE
DETAIL B
NTS



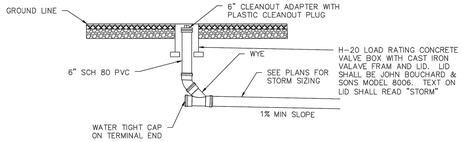
WALL SLEEVE WITH MECHANICAL SEAL
DETAIL D
NTS



GRASS INSTALLATION



SIDEWALK / TRAIL INSTALLATION



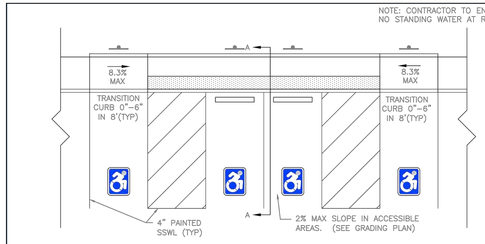
PARKING LOT INSTALLATION

GENERAL NOTES
1. FLEXIBLE CONNECTIONS SHALL BE PRHIBITED
2. ALL CONNECTIONS SHALL WATER TIGHT
3. BACKFILL PER TDOT STANDARD DRAWING FOR FLEXIBLE PIPE INSTALLATION.

N.T.S

STORM CLEANOUT (SCH 80 PVC)			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hoge	DATE: 4/15/2021	CS13
NOT TO SCALE			

STORM CLEANOUT (SCH 80 PVC)
DETAIL C
NTS



SECTION A-A

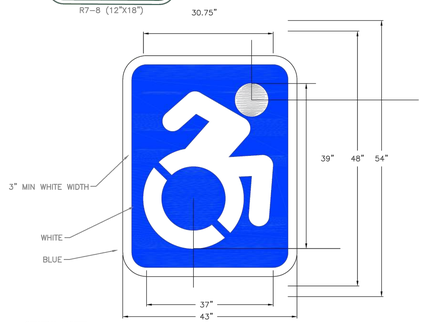
GENERAL NOTES
1. SEE SITE / GRADING PLAN FOR EXACT LAYOUT, NUMBER OF SPACES, ELEVATION, SIGN LOCATIONS, ECT. A VARIATION OF THIS RAMP MAY BE USED BUT MUST COMPLY WITH ACCESSIBILITY GUIDELINES.
2. 1.5% IS THE DESIRABLE SLOPE TO BE USED UNLESS OTHERWISE DIRECTED BY THE CITY OF FRANKLIN.
3. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACES. SURFACE SLOPE THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
4. DETECTABLE WARNING SURFACES SHALL BE CAST-IN-PLACE SURFACES BY ADA SOLUTIONS, INC. OR APPROVED EQUAL. SURFACE COLOR SHALL BE YELLOW. SURFACES SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARED SIDES), AND SHALL EXTEND ONLY 2 FEET IN THE DIRECTION OF TRAVEL.

ACCESSIBLE PARKING LAYOUT AND RAMP DETAIL W/ PAINTED PAVEMENT MARKINGS			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hoge	DATE: 6/1/2021	CS21B
NOT TO SCALE			

ACCESSIBLE PARKING LAYOUT AND RAMP DETAIL
DETAIL D
NTS



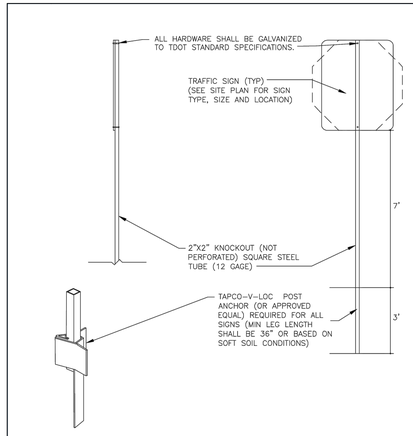
NOTE: FOR EVERY SIX OR FRACTION OF SIX PARKING SPACES REQUIRED, AT LEAST ONE SHALL BE A VAN PARKING SPACE WITH THE R7-8P SUPPLEMENTARY SIGN.



GENERAL NOTES
1. ALL PAVEMENT MARKINGS SHALL BE PAINT PER TDOT SPEC.
2. COORDINATE INSTALLATION WITH STANDARD GROUND MOUNTED SIGN DETAIL DRAWING.
3. SEE SITE PLAN FOR LOCATION. SIGNS MAY BE MOUNTED ON THE SAME POST AS SHOWN ON THE SITE PLAN.
4. ALL SIGNS MUST BE FABRICATED WITH REFLECTIVE MATERIALS. ALL REFLECTIVE MATERIALS MUST QUALIFY AS HIGH INTENSITY PRISMATIC GRADE. ALL SIGNS MUST HAVE A MINIMUM 7-YEAR MATERIALS WARRANTY.
5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY OF FRANKLIN FOR REVIEW AND APPROVAL PRIOR TO ORDERING/INSTALLATION.

PAINTED PAVEMENT MARKING (ACTIVE HANDICAP SYMBOL) AND RESERVED PARKING FOR ACCESSIBILITY SIGNS			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hoge	DATE: 6/1/2021	CS20B
NOT TO SCALE			

ACESSIBLE PARKING SPACE PAVEMENT MARKING
DETAIL E
NTS

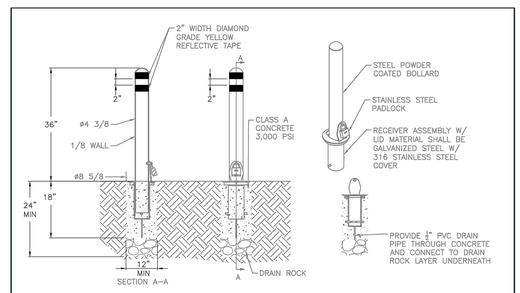


GENERAL NOTES
1. ALL SIGNS MUST BE FABRICATED WITH REFLECTIVE MATERIALS. ALL REFLECTIVE MATERIALS MUST QUALIFY AS HIGH INTENSITY PRISMATIC GRADE. ALL SIGNS MUST HAVE A MINIMUM 7-YEAR MATERIALS WARRANTY.
2. ALL SIGNS SHALL BE MUTCD COMPLIANT.
3. SHOP DRAWINGS SHALL BE SUBMITTED TO STREET DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING/INSTALLATION.
4. THE MINIMUM HEIGHT, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB IN BUSINESS, COMMERCIAL OR RESIDENTIAL AREAS WHERE PARKING OR PEDESTRIAN MOVEMENTS ARE LIKELY TO OCCUR SHALL BE 7 FEET. THE HEIGHT TO THE BOTTOM OF A SECONDARY SIGN MOUNTED BELOW ANOTHER SIGN MAY BE 1 FOOT LESS. SEE FIGURE 2A-2 AND SECTION 2A.18 OF THE MUTCD FOR ADDITIONAL INFORMATION.

N.T.S

STANDARD GROUND MOUNTED SIGN			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hoge	DATE: 4/15/2021	CS5
NOT TO SCALE			

STANDARD GROUND MOUNTED SIGN
DETAIL F
NTS



GENERAL NOTES
1. BOLLARD POST SHALL BE MODEL R-7902 MANUFACTURED BY RELIANCE FOUNDRY OR APPROVED EQUAL
2. BLACK POLYESTER POWDER COATING REQUIRED

REMOVABLE BOLLARD			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Ralph Hoge	DATE: 6/1/2021	CS22
NOT TO SCALE			

REMOVABLE BOLLARD
DETAIL G
NTS

NOT USED
DETAIL H
NTS

JOHN P. BRIAND III
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 129231
STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. NAGEL
DRAWN BY: D. DORAN
SHEET CHK'D BY: Z. MICKEL
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

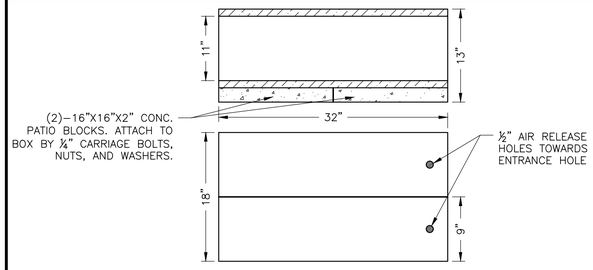
CIVIL DETAILS II

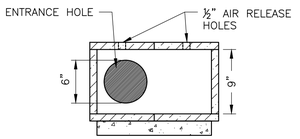
PROJECT NO. 14915-237520
FILE NAME: CD08STDT.DWG

SHEET NO.
CD-8

ISSUED FOR BID

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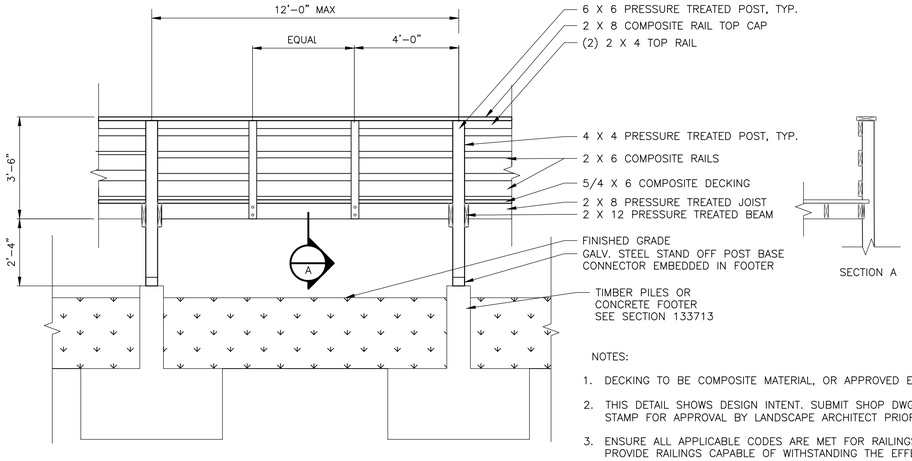


NOTES:

1. A TOTAL OF (25) CATFISH BOXES SHALL BE INSTALLED IN LOCATIONS INDICATED ON SHEET C-28 AND C-29.
2. NEST BOX SHALL BE PLACED ON LEVEL GROUND WITH THE BACK OF THE BOX AT THE TOE OF SLOPE OF THE LAKE SHORELINE. THE BACK OF THE BOX SHALL REST AGAINST THE SLOPED BANK OR SHALL BE EMBEDDED INTO THE BANK TO A DEPTH OF NO MORE THAN 18". THE BOX SHOULD BE PLACED BELOW NORMAL POOL ELEVATION SO THAT THE BOX IS SUBMERGED AT ALL TIMES, PREFERABLY AT LEAST 6" BELOW NORMAL POOL ELEVATION.
3. ENTRANCE HOLE SHALL FACE OPEN WATER, AWAY FROM THE LAKE SHORELINE.
4. BOX SHALL BE INSTALLED IN THE DRY PRIOR TO LAKE FILLING OR MAY BE INSTALLED BY BOAT.
5. IF INSTALLED IN THE DRY, PATIO BLOCK SHALL BE PLACED IN A SHALLOW HOLE SO THAT THE BOTTOM OF THE NEST BOX SITS FLUSH WITH THE LAKE BED.

CATFISH NEST BOX

DETAIL A / – SCALE: NTS

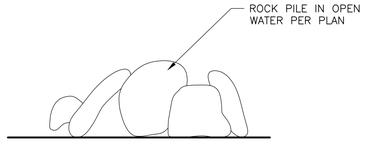


NOTES:

1. DECKING TO BE COMPOSITE MATERIAL, OR APPROVED EQUAL.
2. THIS DETAIL SHOWS DESIGN INTENT. SUBMIT SHOP DWGS WITH TN ENGINEER'S STAMP FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION.
3. ENSURE ALL APPLICABLE CODES ARE MET FOR RAILINGS AND HANDRAILS. PROVIDE RAILINGS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY AND THE FOLLOW LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED: UNIFORM LOAD OF 50 LBF/FT. APPLIED IN ANY DIRECTION AND CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

WOODEN WETLAND BOARDWALK

DETAIL D / – SCALE: NTS



NOTES:

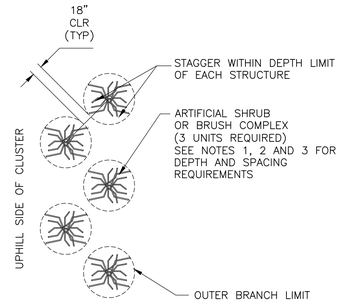
1. ROCK PILES SHOULD BE STACKED RANDOMLY AND ARRANGED TO CREATE INTERSTITIAL SPACES.
2. BOULDERS SHOULD BE AT LEAST 3 FEET LONG AND 1 FOOT THICK.
3. ROCK PILES SHALL BE STACKED SO THAT, COLLECTIVELY, THE STRUCTURE STANDS VERTICALLY IN THE WATER COLUMN CREATING A REEF-LIKE STRUCTURE.
4. A TOTAL OF (15) ROCK PILES CONSISTING OF AT LEAST (5) INDIVIDUAL BOULDERS/RUBBLE SHALL BE INSTALLED IN LOCATIONS INDICATED ON SHEET C-28 AND C-29.
5. RUBBLE OR ROCK SOURCED FROM ON-SITE SHALL BE CLEANED THOROUGHLY WITH A POWER WASHER AND STORED IN CLEAN SITE AREAS PRIOR TO USE AS FISH HABITAT. NO TRASH, SOIL, DEBRIS, VEGETATION, OR OTHER ACCRETIONS OR ABNORMALITIES SHALL BE PRESENT ON ROCK SURFACES.
6. ROCK PILES SHALL BE INSTALLED AND ARRANGED IN THE DRY FOLLOWING FINAL GRADING AND BEFORE WATER FILLS THE LAKE.

BOULDER PILE

DETAIL B / – SCALE: NTS

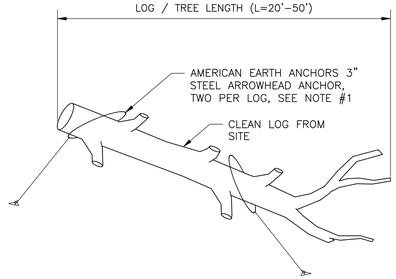
NOTES:

1. INSTALL ARTIFICIAL SHRUB IN CLUSTERS AT A DEPTH OF 3' TO 6'. PLACE STRUCTURES IN A TRIANGULAR PATTERN WITH 18" SEPARATION BETWEEN OUTER BRANCH LIMIT. SEE DIAGRAMMATIC PLAN, THIS SHEET.
2. INSTALL SMALL BRUSH COMPLEX IN CLUSTERS AT A DEPTH OF 2' TO 5'. PLACE STRUCTURES IN A TRIANGULAR PATTERN WITH 18" SEPARATION BETWEEN OUTER BRANCH LIMIT. SEE DIAGRAMMATIC PLAN, THIS SHEET.
3. WHERE ONE COORDINATE IS SHOWN ON THE PLANS FOR MULTIPLE BRUSH COMPLEX CLUSTERS, INSTALL CLUSTERS DIRECTLY ADJACENT TO EACH OTHER PER PLAN, THIS SHEET.



ARTIFICIAL SHRUB AND BRUSH COMPLEX

DETAIL E / – SCALE: NTS



NOTES:

1. ARROWHEAD ANCHORS SUPPLIED BY AMERICAN EARTH ANCHORS, OR EQUIVALENT" ARROWHEAD ANCHOR TO BE DRIVEN TO A MIN. DEPTH OF 3'. SEE AMERICAN EARTH ANCHORS FOR DETAILS AND SPECS. ALTERNATIVE ANCHORING SYSTEMS MAY BE USED UPON APPROVAL OF THE ENGINEER OF RECORD.
2. EXCEPT FOR A MAXIMUM OF (3) LARGE LIMBS ON THE CROWN OF THE TREE, ALL BRANCHES AND LEAF LITTER SHALL BE REMOVED FROM THE LARGE LOG.
3. A TOTAL OF (16) LARGE LOGS CONSISTING OF 20-50 FOOT INDIVIDUAL TREES SHALL BE INSTALLED IN LOCATIONS INDICATED ON SHEET C-32 AND C-33.
4. WHERE POSSIBLE, LARGE LOGS SHOULD BE SOURCED FROM TREES REMOVED ON SITE.
5. LARGE LOGS SOURCED FROM ON-SITE SHALL BE CLEANED THOROUGHLY WITH A POWER WASHER AND STORED IN CLEAN SITE AREAS PRIOR TO USE AS FISH HABITAT. NO TRASH, SOIL, DEBRIS, VEGETATION, OR OTHER ACCRETIONS OR ABNORMALITIES SHALL BE PRESENT ON LOG SURFACES.
6. LARGE LOGS SHALL BE INSTALLED AND ARRANGED IN THE DRY FOLLOWING FINAL GRADING AND BEFORE WATER FILLS THE LAKE. UP TO ¼ OF THE DIAMETER OF THE LOG MAY BE BURIED OR EMBEDDED INTO THE LAKE SUBSTRATE TO SECURE THE LOG IN PLACE.
7. AS WATER FILLS THE LAKE, LARGE LOGS SHOULD BE MONITORED TO ENSURE THEY DO NOT BECOME BUOYANT. ADDITIONAL ANCHORS AND/OR ALTERNATIVE ANCHORING SYSTEMS MAY BE REQUIRED TO SECURE LARGER LOGS TO THE LAKE BED.
8. LARGE LOGS SHALL NOT BE INSTALLED IN THE HABITAT EXCLUSION ZONE (SEE SHEET C-28) NEAR THE DAM TO REDUCE THE POTENTIAL OF A LOG DISLODGING AND DAMAGING THE DAM.

ANCHORED LARGE LOG

DETAIL C / – SCALE: NTS

JOHN P. BRIAND II REGISTERED ENGINEER AGRICULTURE COURAGE No. 126231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

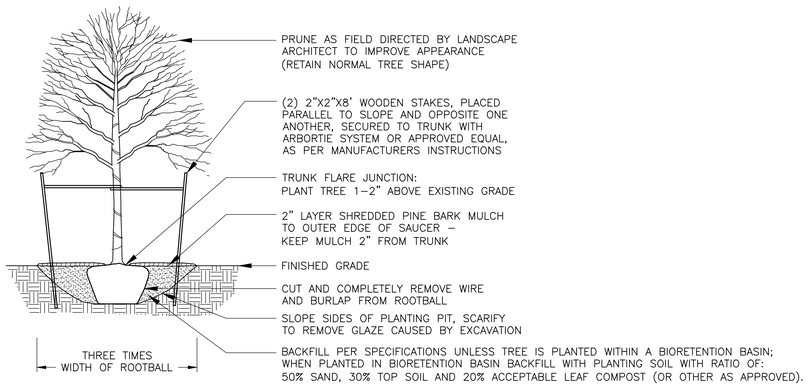
CIVIL DETAILS III

PROJECT NO. 14915-237520
FILE NAME: CD09STDT.DWG

SHEET NO.
CD-9

ISSUED FOR BID

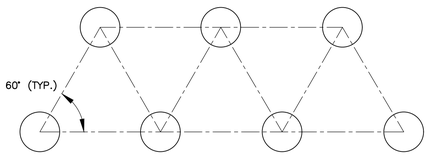
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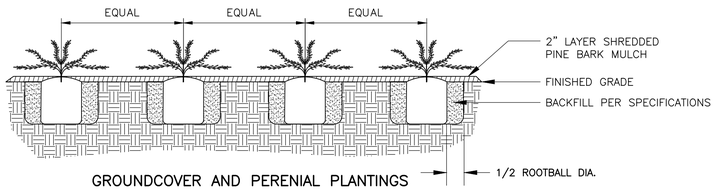
DECIDUOUS TREE PLANTING

DETAIL A – NTS

NOTE:
1. FOR ALL CONTAINERIZED PLANTING, IMMEDIATELY PRIOR TO PLANTING, MAKE 3 VERTICAL CUTS EQUIDISTANT AND ½" DEEP INTO ROOT MASS.

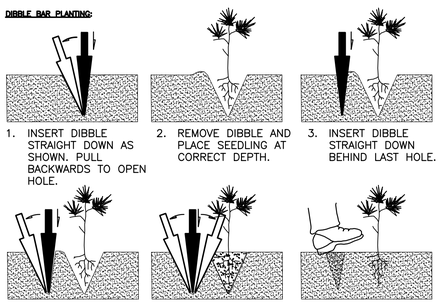


NOTE:
ON CENTER SPACING VARIES – SEE PLANT LIST



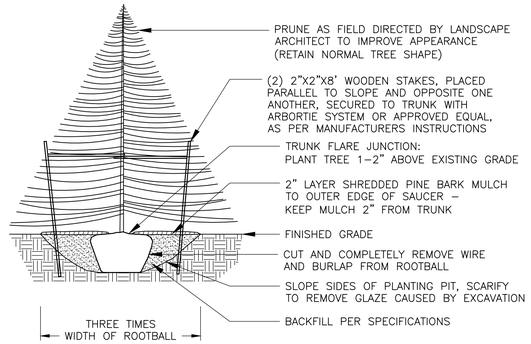
GROUNDCOVER AND PERENIAL PLANTINGS

DETAIL D – NTS



DIBBLE BAR PLANTING INSTALLATION DETAIL

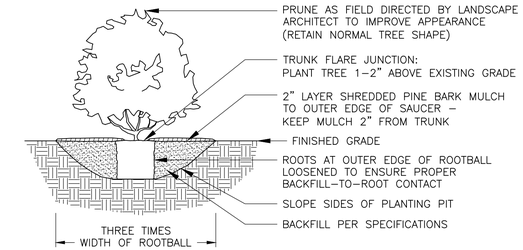
DETAIL G – NOT TO SCALE



EVERGREEN TREE PLANTING

DETAIL B – NTS

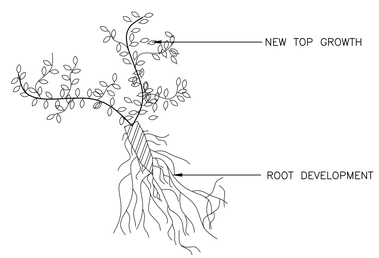
NOTE:
1. FOR ALL CONTAINERIZED PLANTING, IMMEDIATELY PRIOR TO PLANTING, MAKE 3 VERTICAL CUTS EQUIDISTANT AND ½" DEEP INTO ROOT MASS.



SHRUB PLANTING

DETAIL E – NTS

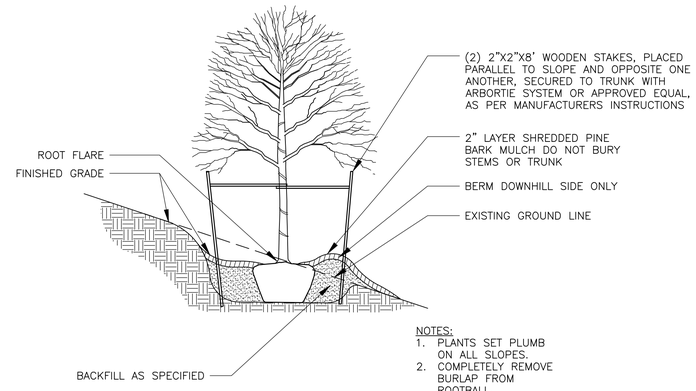
NOTE:
1. FOR ALL CONTAINERIZED PLANTING, IMMEDIATELY PRIOR TO PLANTING, MAKE 3 VERTICAL CUTS EQUIDISTANT AND ½" DEEP INTO ROOT MASS.



NOTES:
1. ORIENT BUDS UP
2. INSERT INTO PILOT HOLE AND INTO GROUND AT RIGHT ANGLES TO THE SLOPE
3. APPLY WATER AND FIRMLY PACK LOAM AROUND THE PLANT MATERIAL.
4. DO NOT SPLIT OR BREAK OR BEND ROOTS AND ROOTBALL DURING INSTALLATION.

TREE TUBELING/ HERBACEOUS PLUG

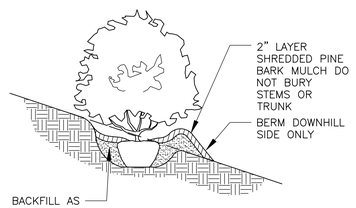
DETAIL H – NTS



NOTES:
1. PLANTS SET PLUMB ON ALL SLOPES.
2. COMPLETELY REMOVE BURLAP FROM ROOTBALL.

TREE ON SLOPE PLANTING

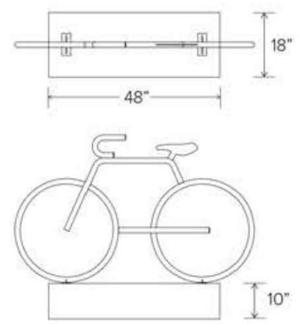
DETAIL C – NTS



SHRUB ON SLOPE PLANTING

DETAIL F – NTS

SURFACE MOUNT



NOTES:

SURFACE MOUNTED BIKE RACK BASIS OF DESIGN; "BIKE BIKE RACK" AS MANUFACTURED BY: THE PARK AND FACILITIES 220 CONGRESS PARK DRIVE SUITE 215 DELRAY BEACH FL, 334455 OR APPROVED EQUAL

BIKE RACK

DETAIL I – NTS

JOHN P. BRIAND III REGISTERED ENGINEER AGRICULTURE COMMERCE No. 124231 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

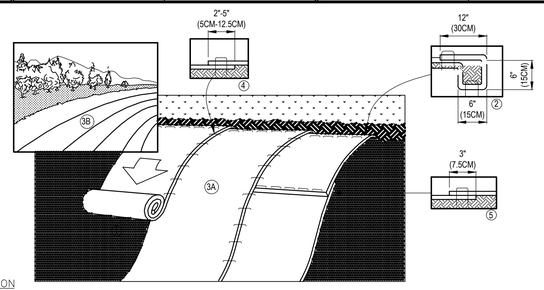
CIVIL DETAILS IV

PROJECT NO. 14915–237520
FILE NAME: CD10STDT.DWG

SHEET NO.
CD-10

ISSUED FOR BID

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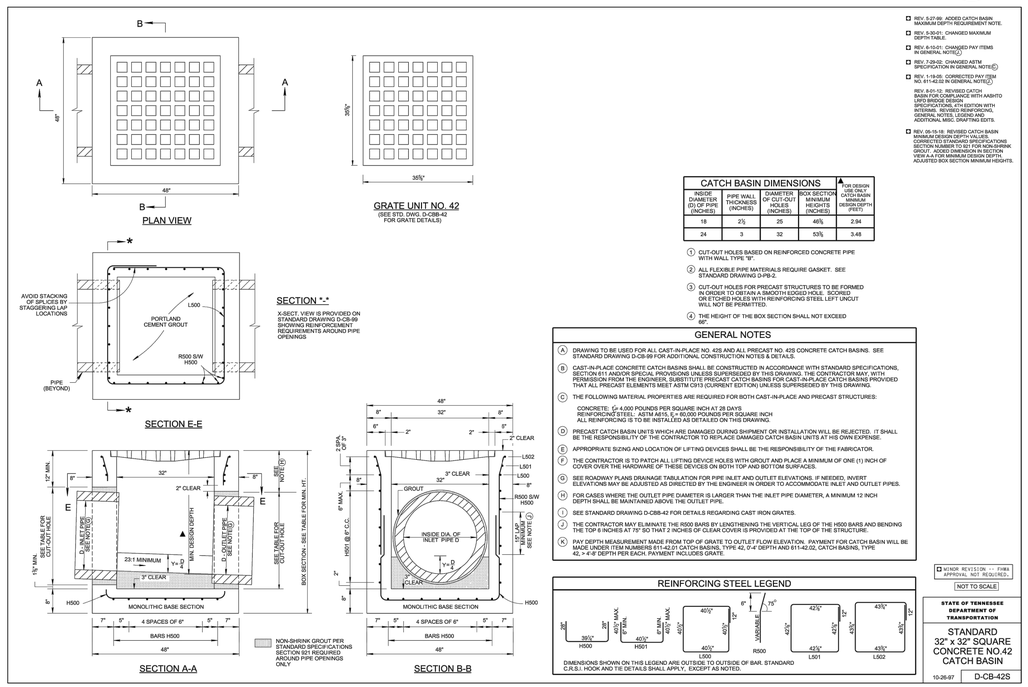


SLOPE INSTALLATION

1. EROSION CONTROL BLANKETS TO BE INSTALLED AS SHOWN ON PLANS AND ON ALL SLOPES 3:1 OR STEEPER.
2. EROSION CONTROL BLANKET PRODUCTS SHALL BE AS INDICATED IN SPECIFICATIONS AND AS INDICATED ON THE DRAWINGS.
3. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF SOIL AMENDMENTS (INCLUDING PH ADJUSTMENT, COMPOST AND FERTILIZER) AND SEED AS INDICATED IN THE SPECIFICATIONS AND DRAWINGS.
4. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15CM) DEEP X 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF BIODEGRADABLE STAKES OR PINS APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAKES/PINS SPACED APPROXIMATELY 12" (30CM) APART ACROSS THE WIDTH OF THE BLANKET.
5. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES/PINS IN AN APPROPRIATE PATTERN AND SPACING AS RECOMMENDED BY THE EROSION CONTROL BLANKET MANUFACTURER.
6. THE EDGES OF PARALLEL BLANKETS MUST BE STAKED WITH APPROXIMATELY 2"-5" (5CM-12.5CM) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
7. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30CM) APART ACROSS ENTIRE BLANKET WIDTH.
8. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
9. IN LOOSE SOIL CONDITIONS STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET
DETAIL A — NOT TO SCALE

NOT USED
DETAIL B — NTS



STANDARD 32"x32" SQUARE CONCRETE NO. 42 CATCH BASIN
DETAIL D — NTS

- REV. 5-27-99: ADDED CATCH BASIN MAXIMUM DEPTH REQUIREMENT NOTE.
- REV. 5-30-01: CHANGED MAXIMUM DEPTH TABLE.
- REV. 8-10-01: CHANGED PAY ITEMS IN GENERAL NOTE (J)
- REV. 2-28-02: CHANGED ASTM SPECIFICATION IN GENERAL NOTE (E)
- REV. 1-19-05: CORRECTED PAY ITEM NO. 611-42.02 IN GENERAL NOTE (J)
- REV. 8-01-12: REVISED CATCH BASIN FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION WITH INTERIMS. REVISED REINFORCING, GENERAL NOTES, LEGEND AND ADDITIONAL MISC. DRAFTING EDITS.
- REV. 05-15-18: REVISED CATCH BASIN MINIMUM DESIGN DEPTH VALUES, CORRECTED STANDARD SPECIFICATIONS SECTION NUMBER TO 921 FOR NON-SHRINK GROUT. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM DESIGN DEPTH. ADJUSTED BOX SECTION MINIMUM HEIGHTS.

CATCH BASIN DIMENSIONS				▲ FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	BOX SECTION MINIMUM HEIGHTS (INCHES)	
18	2½	25	46½	2.94
24	3	32	53½	3.48

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.
(4) THE HEIGHT OF THE BOX SECTION SHALL NOT EXCEED 60".

GENERAL NOTES
(A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 42S AND ALL PRECAST NO. 42S CONCRETE CATCH BASINS. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.
(B) CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS UNLESS SUPERSEDED BY THIS DRAWING. THE CONTRACTOR MAY, WITH PERMISSION FROM THE ENGINEER SUBSTITUTE PRECAST CATCH BASINS FOR CAST-IN-PLACE CATCH BASINS PROVIDED THAT ALL PRECAST ELEMENTS MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
(C) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST STRUCTURES: CONCRETE: f'c= 4,000 POUNDS PER SQUARE INCH AT 28 DAYS REINFORCING STEEL: ASTM A615, Fy = 60,000 POUNDS PER SQUARE INCH ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
(D) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.
(E) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
(F) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
(G) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
(H) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 12 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
(I) SEE STANDARD DRAWING D-CBB-42 FOR DETAILS REGARDING CAST IRON GRATES.
(J) THE CONTRACTOR MAY ELIMINATE THE H500 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500 BARS AND BENDING THE TOP 6 INCHES AT 75° SO THAT 2 INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.
(K) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-42.01 CATCH BASINS, TYPE 42, 0'-4' DEPTH AND 611-42.02, CATCH BASINS, TYPE 42, > 4'-0" DEPTH PER EACH. PAYMENT INCLUDES GRATE.

REINFORCING STEEL LEGEND

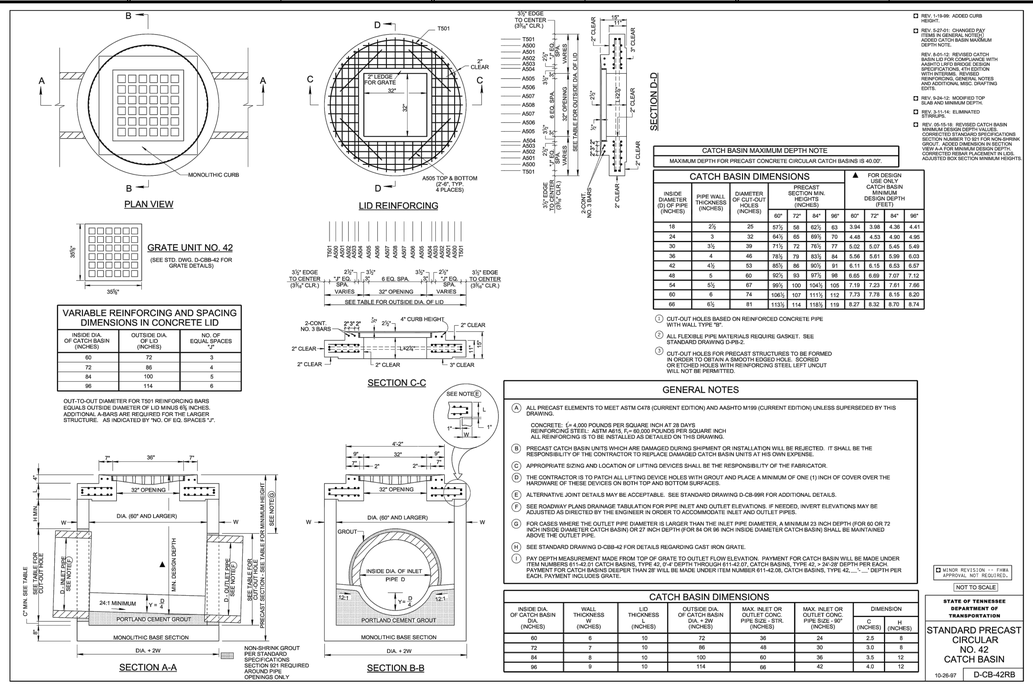
DIMENSIONS SHOWN ON THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.
NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD 32" x 32" SQUARE CONCRETE NO.42 CATCH BASIN

10-26-97 | D-CB-42S



CATCH BASIN DIMENSIONS										▲ FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	PRECAST SECTION MIN. HEIGHTS (INCHES)							
			60"	72"	84"	96"	60"	72"	84"	96"
18	2½	25	57½	58	62½	63	3.94	3.98	4.36	4.41
24	3	32	64½	65	69½	70	4.48	4.53	4.90	4.95
30	3½	39	71½	72	76½	77	5.02	5.07	5.45	5.49
36	4	46	78½	79	83½	84	5.56	5.61	5.99	6.03
42	4½	53	85½	86	90½	91	6.11	6.15	6.53	6.57
48	5	60	92½	93	97½	98	6.65	6.69	7.07	7.12
54	5½	67	99½	100	104½	105	7.19	7.23	7.61	7.66
60	6	74	106½	107	111½	112	7.73	7.78	8.15	8.20
66	6½	81	113½	114	118½	119	8.27	8.32	8.70	8.74

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

GENERAL NOTES
(A) ALL PRECAST ELEMENTS TO MEET ASTM C478 (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING. CONCRETE: f'c = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS REINFORCING STEEL: ASTM A615, Fy = 60,000 POUNDS PER SQUARE INCH ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
(B) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.
(C) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
(D) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
(E) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99R FOR ADDITIONAL DETAILS.
(F) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
(G) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 23 INCH DEPTH (FOR 60 OR 72 INCH INSIDE DIAMETER CATCH BASIN) OR 27 INCH DEPTH (FOR 84 OR 96 INCH INSIDE DIAMETER CATCH BASIN) SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
(H) SEE STANDARD DRAWING D-CBB-42 FOR DETAILS REGARDING CAST IRON GRATE.
(I) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-42.01 CATCH BASINS, TYPE 42, 0'-4' DEPTH THROUGH 611-42.07, CATCH BASINS, TYPE 42, > 24'-0" DEPTH PER EACH. PAYMENT FOR CATCH BASINS DEEPER THAN 28' WILL BE MADE UNDER ITEM NUMBER 611-42.08, CATCH BASINS, TYPE 42, _'-_" DEPTH PER EACH. PAYMENT INCLUDES GRATE.

CATCH BASIN DIMENSIONS							
INSIDE DIA. OF CATCH BASIN DIA. (INCHES)	WALL THICKNESS W (INCHES)	LID THICKNESS L (INCHES)	OUTSIDE DIA. OF CATCH BASIN DIA. + 2W (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (INCHES)	DIMENSION	
						C (INCHES)	H (INCHES)
60	6	10	72	36	24	2.5	8
72	7	10	86	48	30	3.0	8
84	8	10	100	60	36	3.5	12
96	9	10	114	66	42	4.0	12

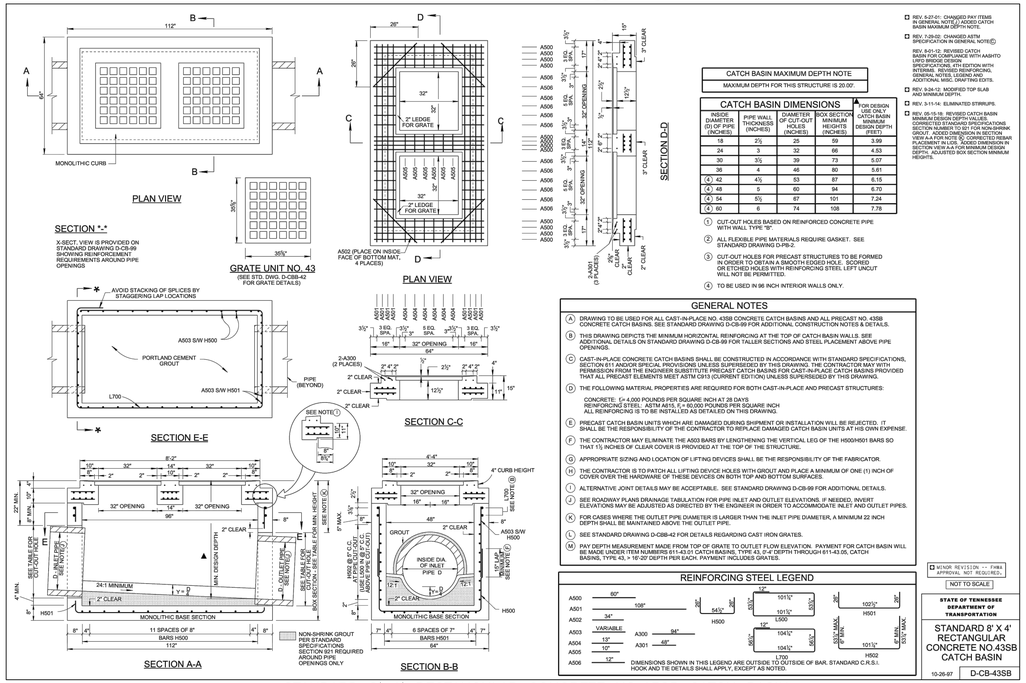
MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.
NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN

10-26-97 | D-CB-42RB

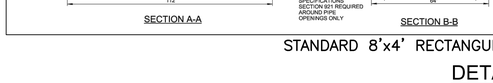
STANDARD PRECAST CIRCULAR NO.42 CATCH BASIN
DETAIL C — NTS



CATCH BASIN DIMENSIONS				▲ FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	BOX SECTION MINIMUM HEIGHTS (INCHES)	
18	2½	25	59	3.99
24	3	32	66	4.53
30	3½	39	73	5.07
36	4	46	80	5.61
(4) 42	4½	53	87	6.15
(4) 48	5	60	94	6.70
(4) 54	5½	67	101	7.24
(4) 60	6	74	108	7.78

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.
(4) TO BE USED IN 66 INCH INTERIOR WALLS ONLY.

GENERAL NOTES
(A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 43SB CONCRETE CATCH BASINS AND ALL PRECAST NO. 43SB CONCRETE CATCH BASINS. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.
(B) THIS DRAWING DEPICTS THE MINIMUM HORIZONTAL REINFORCING AT THE TOP OF CATCH BASIN WALLS. SEE ADDITIONAL DETAILS ON STANDARD DRAWING D-CB-99 FOR TALLER SECTIONS AND STEEL PLACEMENT ABOVE PIPE OPENINGS.
(C) CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS UNLESS SUPERSEDED BY THIS DRAWING. THE CONTRACTOR MAY WITH PERMISSION FROM THE ENGINEER SUBSTITUTE PRECAST CATCH BASINS FOR CAST-IN-PLACE CATCH BASINS PROVIDED THAT ALL PRECAST ELEMENTS MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
(D) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST STRUCTURES: CONCRETE: f'c= 4,000 POUNDS PER SQUARE INCH AT 28 DAYS REINFORCING STEEL: ASTM A615, Fy = 60,000 POUNDS PER SQUARE INCH ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
(E) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.
(F) THE CONTRACTOR MAY ELIMINATE THE A503 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500/H501 BARS SO THAT 1½ INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.
(G) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
(H) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
(I) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL DETAILS.
(J) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
(K) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 22 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
(L) SEE STANDARD DRAWING D-CBB-42 FOR DETAILS REGARDING CAST IRON GRATES.
(M) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-43.01 CATCH BASINS, TYPE 43, 0'-4' DEPTH THROUGH 611-43.05, CATCH BASINS, TYPE 43, > 16'-20' DEPTH PER EACH. PAYMENT INCLUDES GRATES.

REINFORCING STEEL LEGEND

DIMENSIONS SHOWN IN THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.
NOT TO SCALE

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD 8' X 4' RECTANGULAR CONCRETE NO.43SB CATCH BASIN

10-26-97 | D-CB-43SB

STANDARD 8'x4' RECTANGULAR CONCRETE NO.43SB CATCH BASIN
DETAIL E — NOT TO SCALE

JOHN P. BRIANT III — REGISTERED ENGINEER — AGRICULTURE — CERTIFICATE No. 126231 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

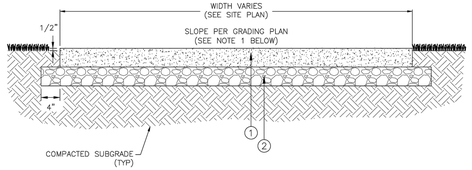
CIVIL DETAILS V

PROJECT NO. 14915-237520
FILE NAME: CD11STDT.DWG

SHEET NO.
CD-11

ISSUED FOR BID
Page 165 of 334

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pw:\\cdmsmith-az02-pw.bentley.com:PW_PL1\14915\237520\04 Design Services NM_305\02 Civil\10 CADD\CD11STDT.dwg
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PAVEMENT SCHEDULE

1. 4" CLASS "A" COCNRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI WITH SYNTHETIC FIBER REINFORCEMENT.
2. 4" MINERAL AGGREGATE BASE 303-01 MINERAL
   303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING"D"

GENERAL NOTES

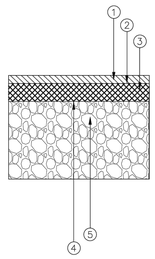
1. DESIRABLE SIDEWALK CROSS SLOPE IS 1.5%, ABSOLUTE MAXIMUM IS 2.0%.
2. SEE EXPANSION JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. 5' TRANSVERSE/CONSTRUCTION JOINT REQUIRED. WHEN THE WITH OF THE TRAIL EXCEEDS 8', A LONGITUDINAL CONSTRUCTION JOINT SHALL BE REQUIRED.
3. 4" MIN BASE STONE (303-01) MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" REQUIRED UNDER ALL SIDEWALKS.

N.T.S

	4" CONCRETE SIDEWALK/TRAIL (LIGHT DUTY)	DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Paul P Holz	DATE: 4/15/2021
NOT TO SCALE		CS24

4" CONCRETE SIDEWALK (LIGHT DUTY)

DETAIL A / NTS



PAVEMENT SCHEDULE

1. 1.5" – BITUMINOUS SURFACE COURSE
   411-01.11 ACS MIX(PG64-22) GRADING E RDWY
2. TACK COAT
   403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) @0.07 GAL/SY
   (@0.10 GAL/SY MILLED SURFACES)
3. 3" – BITUMINOUS AGGREGATE BASE
   307-01.08 ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING B-M2
4. PRIME COAT
   402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @0.30-0.35 GAL/SY
   402-02 AGGREGATE FOR COVER MATERIAL (PC) @8-12LBS/SY
5. 8" MINERAL AGGREGATE BASE 303-01 MINERAL
   303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING"D"

GENERAL NOTES

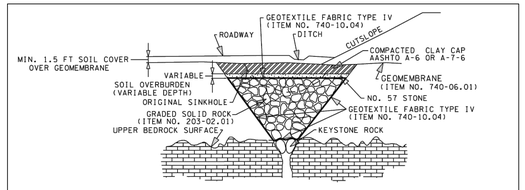
1. MAXIMUM SIDESLOPE WHETHER IN CUT OR FILL IS TO BE 3:1.
2. ASPHALT THICKNESSES ARE MINIMUMS. THICKNESSES TO BE DETERMINED BY GEOTECHNICAL DESIGN.
3. REFERENCE TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

N.T.S

	PARKING LOT PAVEMENT SECTION	DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Paul P Holz	DATE: 4/15/2021
NOT TO SCALE		CS1

PARKING LOT PAVEMENT SECTION

DETAIL B / NTS



SINKHOLE TREATMENT 2A

SEQUENCE OF CONSTRUCTION:

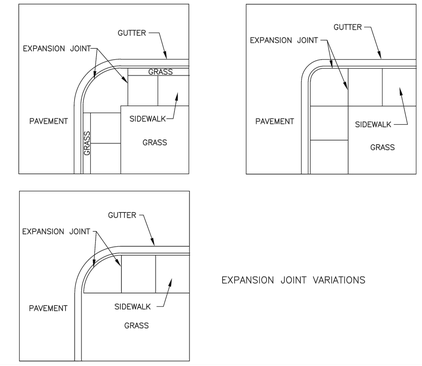
1. EXCAVATE SINKHOLE TO DEFINE OPENING IN BEDROCK MAKING SURE TO REMOVE ALL SOIL AND DEBRIS.
2. FIT THE OPENING WITH KEYSTONE ROCK, WHICH SHALL BE OF SUFFICIENT SIZE TO LOCK IN PLACE WITHOUT CREATING AN AIRBLOCK TO SUBSURFACE DRAINAGE.
3. PLACE THE GEOTEXTILE FABRIC TYPE IV ON EXCAVATED SLOPES AND BASE OF SINKHOLE.
4. BACKFILL WITH GRADED SOLID ROCK (CLASSIFICATION 203-02.01 BORROW EXCAVATION) UP TO SPECIFIED GRADE.
5. PLACE GEOTEXTILE FABRIC TYPE IV ON TOP OF GRADED SOLID ROCK. PLACE NO. 57 STONE ON TOP OF GETEXTILE FABRIC.
6. CONSTRUCT COMPACTED CLAY CAP. SOIL SHOULD BE OF TYPE AASHTO A-6 OR A-7-6.

FOR 2A INACTIVE ONLY

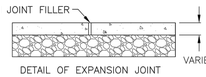
7. PLACE GEOMEMBRANE ON TOP OF SOIL CAP BEFORE CONSTRUCTION OF ANY OVERLYING STRUCTURES OR EMBANKMENTS. THERE SHOULD BE A MINIMUM OF 1.5 FT. OF SOIL PLACED OVER THE MEMBRANE.
8. DITCH SHOULD BE PAVED OR LINED WITH A GEOMEMBRANE.

TDOT SINKHOLE TREATMENT 2A

DETAIL C / NTS



EXPANSION JOINT VARIATIONS



DETAIL OF EXPANSION JOINT

GENERAL NOTES

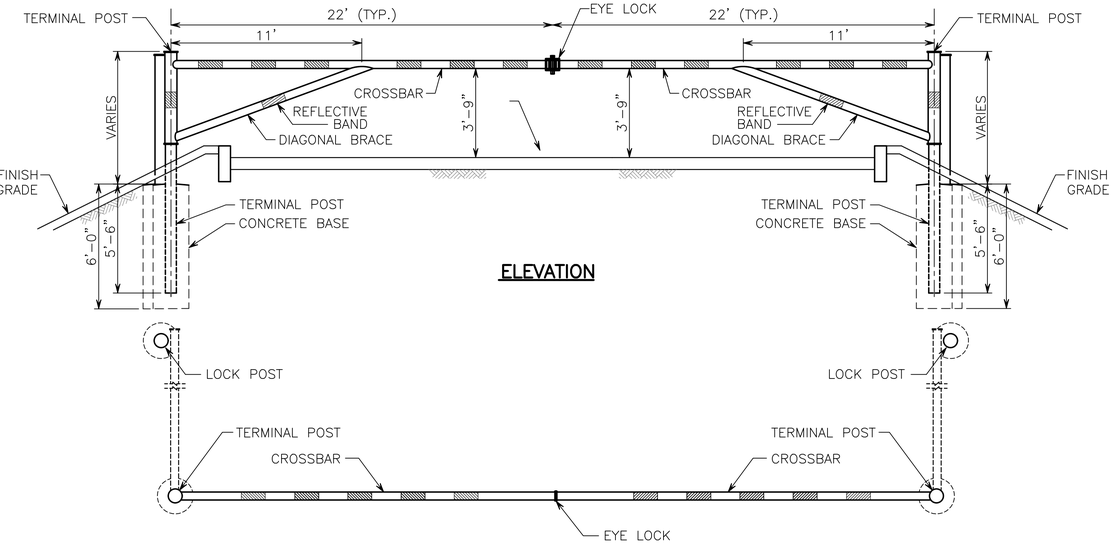
1. ALSO SEE SIDEWALK DETAILS
2. 1" JOINTS TO BE PLACED WHERE THE SIDEWALK IS IN CONTACT WITH CIRCULAR CURB, BUILDINGS AND RETAINING WALLS. 1/2" JOINTS TO BE USED AT OTHER LOCATIONS.
3. ONE LONGITUDINAL JOINT MARKING REQUIRED ON SIDEWALK OVER 5' IN WIDTH TO LESS THAN 10'. TWO LONGITUDINAL JOINTS FOR TRAIL 10' TO 12'.

N.T.S

CITY OF FRANKLIN		
TYPICAL SIDEWALK/TRAIL EXPANSION JOINT		Paul P Holz 7/1/2017 CITY ENGINEER DATE
DWG. NO. RP-10	EFFECTIVE DATE: 7/1/2017	Jacob Martin 7/1/2017 ASST. DIRECTOR OF ENG. DATE

TYPICAL SIDEWALK/TRAIL EXPANSION JOINT

DETAIL D / NTS

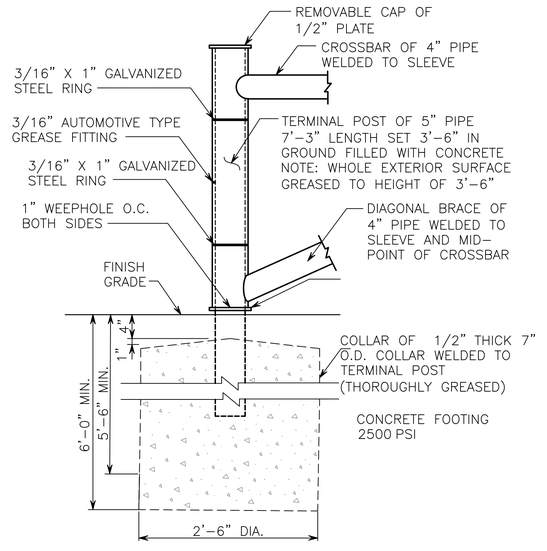


ELEVATION

PLAN

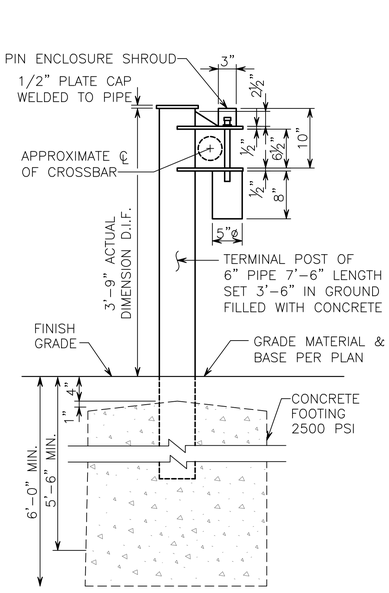
NOTES:
1. REFLECTIVE BAND SHALL BE 6" DIAMOND GRADE YELLOW REFLECTIVE TAPE PLACED EVERY 5' MINIMUM.

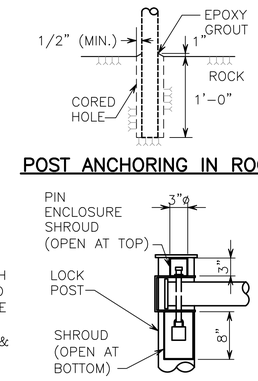
SINGLE LEAF SWING GATE
N.T.S.



VEHICULAR PIPE GATE

DETAIL E / NTS





POST ANCHORING IN ROCK

SCALE: 1" = 1'-0"



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

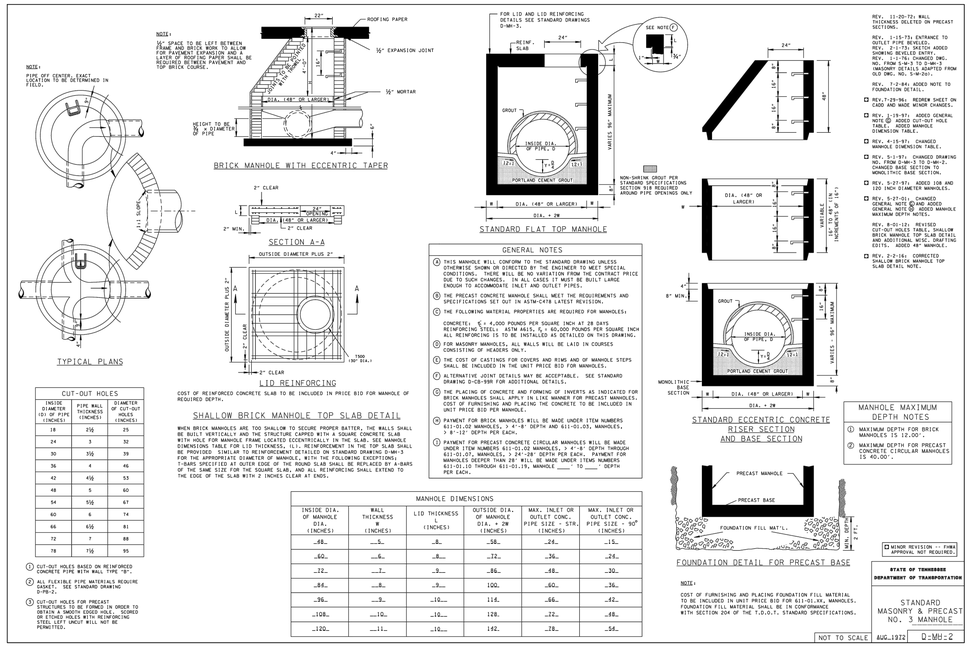
CIVIL DETAILS VI

PROJECT NO. 14915-237520
FILE NAME: CD12STDT.DWG

SHEET NO.
CD-12

ISSUED FOR BID

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GENERAL NOTES

(A) THIS MANHOLE WILL BE CONFORM TO THE STANDARD DRAWING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER TO MEET SPECIAL CONDITIONS. THERE WILL BE NO VARIATION FROM THE CONTRACT PRICE DUE TO SUCH CHANGES. IN ALL CASES IT MUST BE BUILT LARGE ENOUGH TO ACCOMODATE INLET AND OUTLET PIPES.

(B) THE PRECAST CONCRETE MANHOLE SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS SET OUT IN ASTM-C478 LATEST REVISION.

(C) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR MANHOLES;

CONCRETE; f'c = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL; ASTM A615, fy = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(D) FOR MASONRY MANHOLES, ALL WALLS WILL BE LAID IN COURSES CONSISTING OF HEADERS ONLY.

(E) THE COST OF CASTINGS FOR COVERS AND RIMS AND OF MANHOLE STEPS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES.

(F) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-S99 FOR ADDITIONAL DETAILS.

(G) THE PLACING OF CONCRETE AND FORMING OF INVERTS AS INDICATED FOR BRICK MANHOLES SHALL APPLY IN LIKE MANNER FOR PRECAST MANHOLES. COST OF FURNISHING AND PLACING THE CONCRETE TO BE INCLUDED IN UNIT PRICE BID PER MANHOLE.

(H) PAYMENT FOR BRICK MANHOLES WILL BE MADE UNDER ITEM NUMBERS 611-01.02 MANHOLES, 3' 4"-8" DEPTH AND 611-01.03, MANHOLES, > 8'-12" DEPTH PER EACH.

(I) PAYMENT FOR PRECAST CONCRETE CIRCULAR MANHOLES WILL BE MADE UNDER ITEM NUMBERS 611-01.02 MANHOLES, 3' 4"-8' DEPTH THROUGH 611-01.07, MANHOLES, > 24'-28" DEPTH PER EACH. PAYMENT FOR MANHOLES DEEPER THAN 28' WILL BE MADE UNDER ITEMS NUMBERS 611-01.10 THROUGH 611-01.19, MANHOLE _____' TO _____' DEPTH PER EACH.

MANHOLE MAXIMUM DEPTH NOTES

(1) MAXIMUM DEPTH FOR BRICK MANHOLES IS 12.00'.

(2) MAXIMUM DEPTH FOR PRECAST CONCRETE CIRCULAR MANHOLES IS 40.00'.

CUT-OUT HOLES

INSIDE DIA. OF MANHOLE (D) OR PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLE (INCHES)
18	2½	25
24	3	32
30	3½	39
36	4	46
42	4½	53
48	5	60
54	5½	67
60	6	74
66	6½	81
72	7	88
78	7½	95

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET, SEE STANDARD DRAWING D-PB-2.

(3) CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED CONCRETE OR CUTTING OF REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

MANHOLE DIMENSIONS

INSIDE DIA. OF MANHOLE DIA. (INCHES)	WALL THICKNESS W (INCHES)	LID THICKNESS L (INCHES)	OUTSIDE DIA. OF MANHOLE DIA. + 2W (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (INCHES)
48	5	8	58	24	15
60	6	8	72	36	24
72	7	9	86	48	30
84	8	9	100	60	36
96	9	10	114	66	42
108	10	10	128	72	48
120	11	10	142	78	54

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

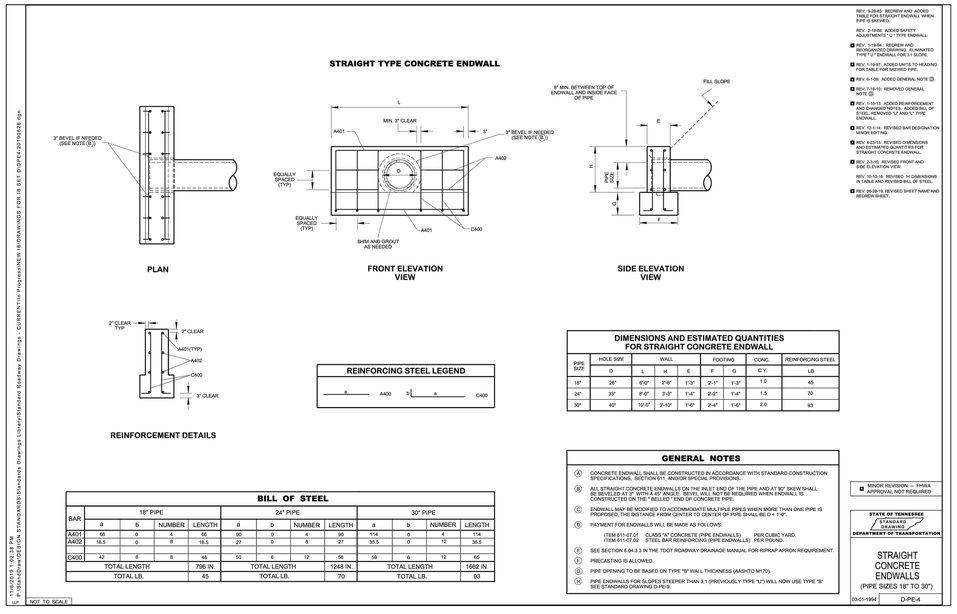
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD MASONRY & PRECAST NO. 3 MANHOLE

NOT TO SCALE | AUG.1972 | D-MH-2

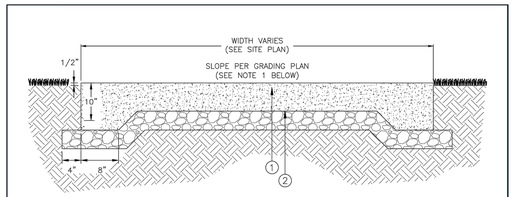
STANDARD MASONRY & PRECAST NO.3 MANHOLE

DETAIL A — NTS



STRAIGHT CONCRETE ENDWALLS (PIPE SIZES 18" TO 30")

DETAIL B — NTS



PAVEMENT SCHEDULE

1. 6" CLASS "A" COCNRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI WITH SYNTHETIC FIBER REINFORCEMENT.
2. 4" MINERAL AGGREGATE BASE 303-01 MINERAL 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING"D"

GENERAL NOTES

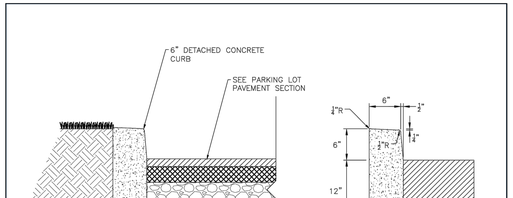
1. DESIRABLE SIDEWALK CROSS SLOPE IS 1.5%, ABSOLUTE MAXIMUM IS 2.0%.
2. SEE EXPANSION JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. 5' TRANSVERSE/CONSTRUCTION JOINT REQUIRED. WHEN THE WITH OF THE TRAIL EXCEEDS 8', A LONGITUDINAL CONSTRUCTION JOINT SHALL BE REQUIRED.
3. 4" MIN BASE STONE (303-01) MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" REQUIRED UNDER ALL SIDEWALKS.

N.T.S

6" TURNDOWN CONCRETE SIDEWALK/TRAIL (HEAVY DUTY)			DWG. NO. CS23
CITY OF FRANKLIN	CITY ENGINEER:	DATE: 4/15/2021	
NOT TO SCALE			

6" TURNDOWN CONCRETE SIDEWALK (HEAVY DUTY)

DETAIL C — NTS



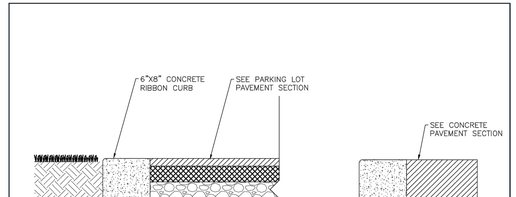
1. CONCRETE EXPANSION JOINT MATERIAL IS TO BE ½" THICKNESS AT ALL LOCATIONS. ALL MATERIAL IS TO BE PRE-MOLDED FIBER.
2. EXPANSION JOINTS ARE TO BE PLACED AS FOLLOWS:
   A) AT TANGENT POINTS OF CIRCULAR CURBS.
   B) BETWEEN CURBS AND ABUTTING RIGID OBJECTS.
   C) AT OTHER PLACES WHERE STRESSES MAY DEVELOP.
   D) TO LINE UP WITH PAVEMENT JOINTS WHERE THE ADJACENT PAVEMENT IS CONCRETE.
   E) THE MAXIMUM SPACING IS TO BE 100 FEET.
   F) BETWEEN CONCRETE CURBS OR CURB AND GUTTERS AND CONCRETE PAVEMENT. IT IS NOT REQUIRED WHEN CURBS OR CURB AND GUTTERS ARE ADJACENT TO ASPHALT.
3. CONTRACTION JOINTS ARE TO BE SPACED AT 10 FEET. THE SPACING OF 10 FEET MAY BE REDUCED FOR CLOSURES, BUT NOT LESS THAN 6 FEET.
4. EDGES OF JOINTS SHALL BE FINISHED ON ½" RADII.

N.T.S

6" DETACHED CONCRETE CURB			DWG. NO. CS17
CITY OF FRANKLIN	CITY ENGINEER:	DATE: 4/15/2021	
NOT TO SCALE			

6" DETACHED CONCRETE CURB

DETAIL D — NTS



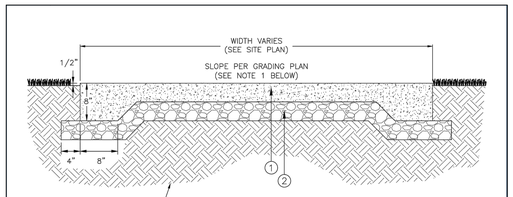
1. CONCRETE EXPANSION JOINT MATERIAL IS TO BE ½" THICKNESS AT ALL LOCATIONS. ALL MATERIAL IS TO BE PRE-MOLDED FIBER.
2. EXPANSION JOINTS ARE TO BE PLACED AS FOLLOWS:
   A) AT TANGENT POINTS OF CIRCULAR CURBS.
   B) BETWEEN CURBS AND ABUTTING RIGID OBJECTS.
   C) AT OTHER PLACES WHERE STRESSES MAY DEVELOP.
   D) TO LINE UP WITH PAVEMENT JOINTS WHERE THE ADJACENT PAVEMENT IS CONCRETE.
   E) THE MAXIMUM SPACING IS TO BE 100 FEET.
   F) BETWEEN CONCRETE CURBS OR CURB AND GUTTERS AND CONCRETE PAVEMENT. IT IS NOT REQUIRED WHEN CURBS OR CURB AND GUTTERS ARE ADJACENT TO ASPHALT.
3. CONTRACTION JOINTS ARE TO BE SPACED AT 10 FEET. THE SPACING OF 10 FEET MAY BE REDUCED FOR CLOSURES, BUT NOT LESS THAN 6 FEET.
4. EDGES OF JOINTS SHALL BE FINISHED ON ½" RADII.

N.T.S

6" RIBBON CURB			DWG. NO. CS19
CITY OF FRANKLIN	CITY ENGINEER:	DATE: 4/15/2021	
NOT TO SCALE			

6" RIBBON CURB

DETAIL E — NTS



PAVEMENT SCHEDULE

1. 4" CLASS "A" COCNRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI WITH SYNTHETIC FIBER REINFORCEMENT.
2. 4" MINERAL AGGREGATE BASE 303-01 MINERAL 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING"D"

GENERAL NOTES

1. DESIRABLE SIDEWALK CROSS SLOPE IS 1.5%, ABSOLUTE MAXIMUM IS 2.0%.
2. SEE EXPANSION JOINT DETAIL. EXPANSION JOINTS SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. 5' TRANSVERSE/CONSTRUCTION JOINT REQUIRED. WHEN THE WITH OF THE TRAIL EXCEEDS 8', A LONGITUDINAL CONSTRUCTION JOINT SHALL BE REQUIRED.
3. 4" MIN BASE STONE (303-01) MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" REQUIRED UNDER ALL SIDEWALKS.

N.T.S

4" TURNDOWN CONCRETE SIDEWALK/TRAIL (LIGHT DUTY)			DWG. NO. CS22
CITY OF FRANKLIN	CITY ENGINEER:	DATE: 4/15/2021	
NOT TO SCALE			

4" TURNDOWN CONCRETE SIDEWALK (LIGHT DUTY)

DETAIL F — NTS

JOHN P. BRIAND III — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 129231 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: S. WHITESIDE
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

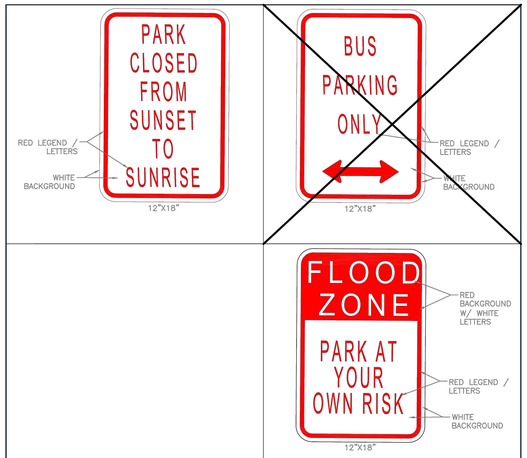
CIVIL DETAILS VII

PROJECT NO. 14915-237520
FILE NAME: CD13STDT.DWG

SHEET NO. CD-13

ISSUED FOR BID

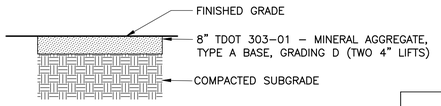
XREFs: [CDMS_2436] Images: []
Last saved by: FOGARTYPM Time: 3/14/2022 8:48:41 AM
pw:\\cdmsmith-az02-pw.bentley.com:PW_Pl_1\14915\237520\04 Design Services NM_30#\02 Civil\10 CADD\CD13STDT.dwg
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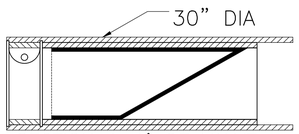
GENERAL NOTES
1. COORDINATE INSTALLATION WITH STANDARD GROUND MOUNTED SIGN DETAIL DRAWING.
2. SEE SITE PLAN FOR LOCATION. SIGNS MAY BE MOUNTED ON THE SAME POST AS SHOWN ON THE SITE PLAN.
3. ALL SIGNS MUST BE FABRICATED WITH REFLECTIVE MATERIALS. ALL REFLECTIVE MATERIALS MUST QUALIFY AS HIGH INTENSITY PRISMATIC GRADE. ALL SIGNS MUST HAVE A MINIMUM 7-YEAR MATERIALS WARRANTY.
4. SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY OF FRANKLIN FOR REVIEW AND APPROVAL PRIOR TO ORDERING/INSTALLATION.

TYPICAL PARK SIGNS		DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Paul Holzen	CS18A
NOT TO SCALE	DATE: 6/1/2021	

TYPICAL PARKING SIGNS
DETAIL A
NTS



GRAVEL PAVEMENT
DETAIL E
NOT TO SCALE



SECTION A–A' OF VALVE

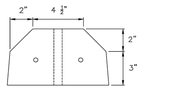


SECTION B–B' OF VALVE

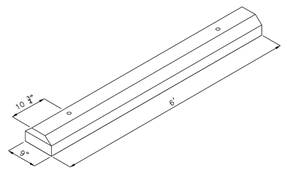
TIDEFLEX CHECKMATE CHECK VALVE AS MANUFACTURED BY TIDEFLEX TECHNOLOGIES 600 N. BELL AVE., CARNEGIE, PA 15106 412-279-0044 OR APPROVED EQUAL

INLINE CHECK VALVE
30" DIA NOMINAL PIPE
INSTALLED PER MANUFACTURING SPECIFICATIONS

CHECK VALVE
DETAIL G
NTS



SECTION VIEW



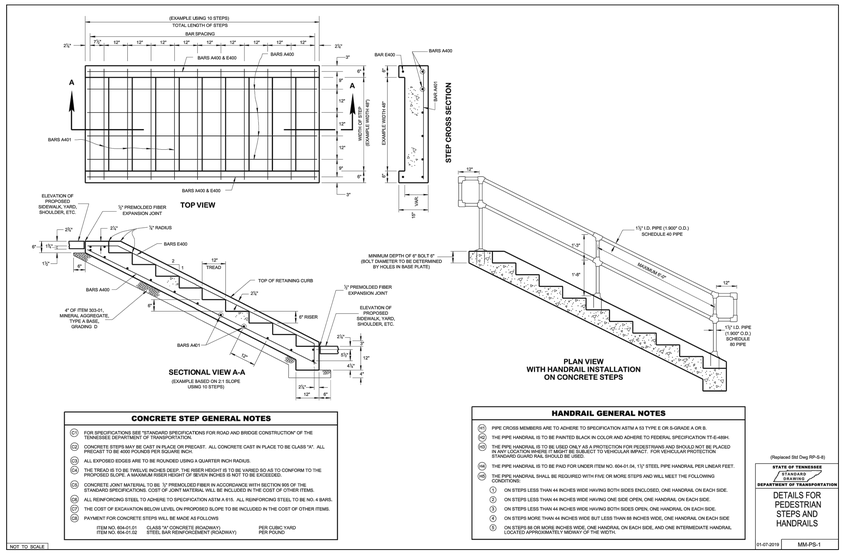
ISOMETRIC VIEW

GENERAL NOTES
1. REBAR AMERICAN GRADE 60 SIZE #3
2. 4000 PSI CONCRETE 28 DAY
3. WEIGHT 200 POUNDS.

N.T.S

PARKING BLOCK		DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER: Paul Holzen	CS4
NOT TO SCALE	DATE: 4/15/2021	

PARKING BLOCK
DETAIL B
NTS



CONCRETE STEP GENERAL NOTES

(G1) FOR SPECIFICATIONS SEE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
(G2) CONCRETE STEPS MAY BE CAST IN PLACE OR PRECAST. ALL CONCRETE CAST IN PLACE TO BE CLASS "A". ALL PRECAST TO BE 4000 POUNDS PER SQUARE INCH.
(G3) ALL EXPOSED EDGES ARE TO BE ROUNDED USING A QUARTER INCH RADIUS.
(G4) THE TREAD IS TO BE TWELVE INCHES DEEP. THE RISER HEIGHT IS TO BE VARIED SO AS TO CONFORM TO THE PROPOSED SLOPE. A MAXIMUM RISER HEIGHT OF SEVEN INCHES IS NOT TO BE EXCEEDED.
(G5) CONCRETE JOINT MATERIAL TO BE ½" PREMOLDED FIBER IN ACCORDANCE WITH SECTION 905 OF THE STANDARD SPECIFICATIONS. COST OF JOINT MATERIAL WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
(G6) ALL REINFORCING STEEL TO ADHERE TO SPECIFICATION ASTM A 615. ALL REINFORCING STEEL TO BE NO. 4 BARS.
(G7) THE COST OF EXCAVATION BELOW LEVEL ON PROPOSED SLOPE TO BE INCLUDED IN THE COST OF OTHER ITEMS.
(G8) PAYMENT FOR CONCRETE STEPS WILL BE MADE AS FOLLOWS

ITEM NO. 604-01.01	CLASS "A" CONCRETE (ROADWAY)	PER CUBIC YARD
ITEM NO. 604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	PER POUND

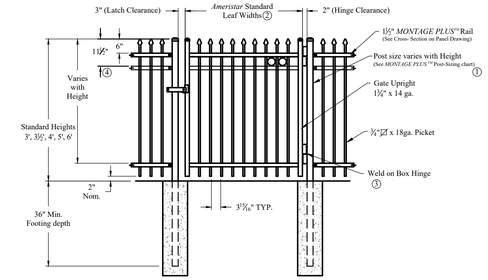
HANDRAIL GENERAL NOTES

(HR) PIPE CROSS MEMBERS ARE TO ADHERE TO SPECIFICATION ASTM A 53 TYPE E OR S-GRADE A OR B.
(HR) THE PIPE HANDRAIL IS TO BE PAINTED BLACK IN COLOR AND ADHERE TO FEDERAL SPECIFICATION TT-E-489H.
(HR) THE PIPE HANDRAIL IS TO BE USED ONLY AS A PROTECTION FOR PEDESTRIANS AND SHOULD NOT BE PLACED IN ANY LOCATION WHERE IT MIGHT BE SUBJECT TO VEHICULAR IMPACT. FOR VEHICULAR PROTECTION STANDARD GUARD RAIL SHOULD BE USED.
(HR) THE PIPE HANDRAIL IS TO BE PAD FOR UNDER ITEM NO. 604-01.04, 1½" STEEL PIPE HANDRAIL PER LINEAR FEET.
(HR) THE PIPE HANDRAIL SHALL BE REQUIRED WITH FIVE OR MORE STEPS AND WILL MEET THE FOLLOWING CONDITIONS:
1. ON STEPS LESS THAN 44 INCHES WIDE HAVING BOTH SIDES ENCLOSED, ONE HANDRAIL ON EACH SIDE.
2. ON STEPS LESS THAN 44 INCHES WIDE HAVING ONE SIDE OPEN, ONE HANDRAIL ON EACH SIDE.
3. ON STEPS LESS THAN 44 INCHES WIDE HAVING BOTH SIDES OPEN, ONE HANDRAIL ON EACH SIDE.
4. ON STEPS MORE THAN 44 INCHES WIDE BUT LESS THAN 88 INCHES WIDE, ONE HANDRAIL ON EACH SIDE
5. ON STEPS 88 OR MORE INCHES WIDE, ONE HANDRAIL ON EACH SIDE, AND ONE INTERMEDIATE HANDRAIL LOCATED APPROXIMATELY MIDWAY OF THE WIDTH.

NOT TO SCALE

(Replaced Std Dwg RP-S-6)
STATE OF TENNESSEE STANDARD DEPARTMENT OF TRANSPORTATION
DETAILS FOR PEDESTRIAN STEPS AND HANDRAILS
01-07-2019 | MM-PS-1

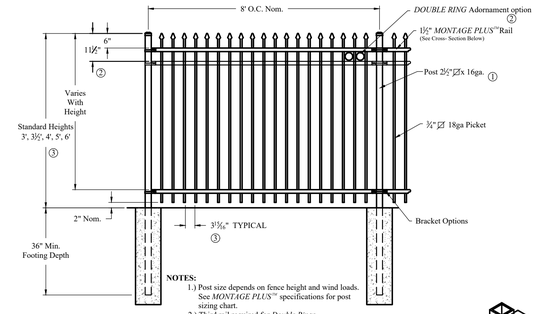
CONCRETE STAIRS WITH HANDRAILS
DETAIL F
NOT TO SCALE



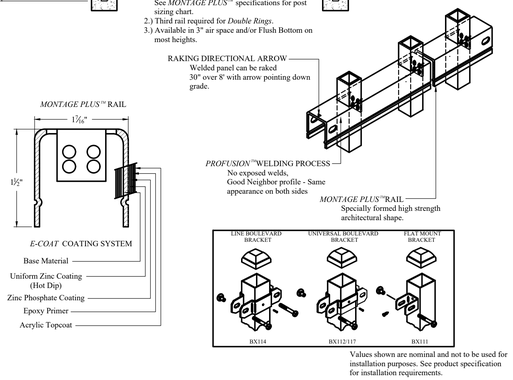
Single gate Arrangement

NOTES:
1.) Post size depends on fence height, weight and wind loads. See *MONTAGE PLUS* specifications for post sizing chart.
2.) See *Ameristar* gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
3.) Additional styles of gate hardware are available on request. This could change the Latch & Hinge Clearance.
4.) Third rail required for *Double Rings*.

AMERISTAR STEEL FENCE GATE – MONTAGE PLUS
DETAIL C
NTS



NOTES:
1.) Post size depends on fence height and wind loads. See *MONTAGE PLUS™* specifications for post sizing chart.
2.) Third rail required for *Double Rings*.
3.) Available in 3" air space and/or Flush Bottom on most heights.

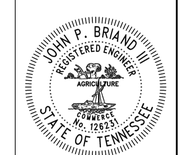


Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

AMERISTAR STEEL FENCE – MONTAGE PLUS
DETAIL D
NTS

NOT USED
DETAIL H
NOT TO SCALE

NOT USED
DETAIL I
NOT TO SCALE



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. FUSCO
DRAWN BY: J. BRONENKANT
SHEET CHK'D BY: M. PETTY
CROSS CHK'D BY: D. MASON
APPROVED BY: J. BRIAND
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennesee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

CIVIL DETAILS VIII

PROJECT NO. 14915-237520
FILE NAME: CD14STDT.DWG
SHEET NO. CD-14

ISSUED FOR BID

XREFs: [CDMS_2436] Images: []
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GENERAL NOTES

DESIGN CRITERIA:

CODES:

- INTERNATIONAL BUILDING CODE, 2018 EDITION
- ENVIRONMENTAL STRUCTURES: ACI 350 "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES"
- OTHER STRUCTURES: ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
- AISC MANUAL OF STEEL CONSTRUCTION, FOURTEENTH EDITION

DESIGN LOADS:

LIVE LOADS:

– PEDESTRIAN BRIDGE	AASHTO H10
– ELEVATED SLABS (INCLUDING HATCHES AND GRATING)	100 PSF

ROOF SNOW LOAD:

– GROUND SNOW LOAD, P_g	15 PSF
– SNOW EXPOSURE FACTOR, C_e	1.0
– SNOW LOAD IMPORTANCE FACTOR, I_s	1.1
– THERMAL FACTOR, C_t	1.0

SUPERIMPOSED DEAD LOADS:

– ROOFS	AS NOTED
– FLOORS	AS NOTED

WINDLOADS:

– RISK CATEGORY	II
– ULTIMATE DESIGN WIND SPEED	105 MPH
– NORMAL DESIGN WIND SPEED	82 MPH
– EXPOSURE CATEGORY	C
– INTERNAL PRESSURE COEFFICIENT	N/A
– COMPONENTS AND CLADDING	N/A

EARTHQUAKE:

– SEISMIC DESIGN CATEGORY	D
– SEISMIC IMPORTANCE FACTOR, I	1.25
– MAPPED SPECTRAL RESPONSE ACC, S_S	0.283
– MAPPED SPECTRAL RESPONSE ACC, S_1	0.140
– SPECTRAL RESPONSE COEFFICIENT, S_{DS}	0.297
– SPECTRAL RESPONSE COEFFICIENT, S_{D1}	0.216
– BASIC SEISMIC–FORCE– RESISTING SYSTEM	–
– DESIGN BASE SHEAR	–
– SEISMIC RESPONSE COEFFICIENT, CS	–
– RESPONSE MODIFICATION FACTOR, R	–
– ANALYSIS PROCEDURE USED	–

FLOOD DESIGN DATA: ZONE AE NAVD 88

– 1% ANNUAL CHANCE BASE FLOOD ELEVATION	EL 640.00'
– 0.2% ANNUAL CHANCE BASE FLOOD ELEVATION	EL 645.50'

CONCRETE 28–DAY STRENGTH:

– STRUCTURAL CONCRETE	4000	PSI
– CONCRETE FILL	2500	PSI

FOUNDATIONS:

- ALLOWABLE BEARING PRESSURE FOR SPREAD FOOTINGS OVER SUBSURFACE PREPARED AS PER SPECIFICATIONS: 1500 PSF

GENERAL CONDITIONS:

ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE CIVIL, ELECTRICAL AND SHOP DRAWINGS AND SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW AND VERIFY DIMENSIONS SHOWN IN ALL PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FACILITY, SHOULD DISCREPANCIES APPEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING TO OBTAIN ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH THE WORK.

FOR ALL ITEMS EMBEDDED IN OR PASSED THROUGH CONCRETE, THE CONTRACTOR SHALL INITIALLY REFER TO MECHANICAL, HEATING AND VENTILATION DRAWINGS FOR TYPE, SIZE, LOCATION AND SPECIAL INSTALLATION REQUIREMENTS FOR THESE ITEMS.

THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY MEASURES TO PROTECT EXISTING STRUCTURES FROM DAMAGE WHEN WORKING IN AND AROUND EXISTING STRUCTURES PERFORMING WORK SUCH AS DEMOLITION, FOUNDATION EXCAVATION AND OTHERS.

SIZE AND LOCATION OF EQUIPMENT PADS AND ANCHOR BOLTS SHALL BE PER EQUIPMENT MANUFACTURER'S REQUIREMENTS.

ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSE–WHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

STANDARD DETAILS APPLY TO ALL SIMILAR SITUATIONS ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.

UNLESS OTHERWISE NOTED, ALL PIPES UNDER SOIL SUPPORTED STRUCTURAL SLABS AND FOOTINGS SHALL BE ENCASED IN REINFORCED CONCRETE AS SHOWN ON THE STRUCTURAL DRAWINGS. PIPES SHALL BE PRESSURE TESTED BEFORE ENCASING. NOT ALL PIPING SHOWN ON STRUCTURAL DRAWINGS. REFER TO CIVIL, PROCESS MECHANICAL, HVAC AND PLUMBING DRAWINGS FOR PIPING SIZE AND LOCATIONS.

CONCRETE:

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318 REQUIREMENTS.

WATER REDUCING AGENT SHALL BE IN ACCORDANCE WITH ASTM C494.

ALL CONCRETE SURFACES EXPOSED TO AIR, UNLESS OTHERWISE NOTED IN SPECIFICATIONS, SHALL BE TREATED WITH AN APPROPRIATE CURING COMPOUND AS SOON AS CEMENT FINISHING IS COMPLETED OR FORMS ARE REMOVED.

ALL EXPOSED CORNERS OF CONCRETE SHALL HAVE A MINIMUM CHAMFER OF ¾" UNLESS OTHERWISE NOTED.

THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL FOR THE LOCATION OF CONSTRUCTION JOINTS THAT ARE NOT SHOWN ON THE DRAWING.

REINFORCING STEEL:

REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 REQUIREMENTS.

ALL ACCESSORIES SHALL BE IN CONFORMANCE WITH ACI 315 REQUIREMENTS. REINFORCING STEEL SHALL HAVE THE FOLLOWING CLEAR COVER UNLESS OTHER–WISE NOTED:

– CONCRETE CAST AGAINST EARTH	3"
– FORMED SURFACES IN CONTACT WITH SOIL, SEWAGE, WATER OR EXPOSED TO WEATHER	2"
– FORMED SURFACES NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL:	
– SLABS, WALLS AND JOISTS	1"
– BEAMS AND COLUMNS	1½"

LAP SPLICES SHALL BE AS SHOWN ON THE DRAWINGS. FOR LAP SPLICES NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL.

THE CONTRACTOR SHALL PREPARE PLACING DRAWINGS AND SCHEDULES IN CONFORMANCE WITH ACI 315 REQUIREMENTS.

FLOATATION CONSIDERATION:

STRUCTURES WERE DESIGNED TO BE NON–BUOYANT AFTER THE STRUCTURE IS PLACED INTO SERVICE. THEREFORE, THE STRUCTURE MAY BE BUOYANT DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL PROTECT ALL STRUCTURES (NEW AND EXISTING) FROM FLOATATION DURING CONSTRUCTION, REGARDLESS OF GROUNDWATER LEVELS, UNTIL STRUCTURES ARE PLACED IN OPERATION.

STRUCTURAL STEEL:

DESIGN, FABRICATION, ERECTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS AND DESIGN DRAWINGS.

ALL STRUCTURAL STEEL:

W SHAPES –	ASTM A992
M, S AND HP SHAPES –	ASTM A36
CHANNELS AND ANGLES –	ASTM A36
HSS (SQUARE, RECTANGULAR AND ROUND) –	ASTM A500
PLATES –	ASTM A36
HIGH–STRENGTH BOLTS –	ASTM A325
TENSION CONTROL BOLTS –	ASTM F1852
NUTS –	ASTM A563
HARDENED STEEL WASHER –	ASTM F436
ANCHOR RODS –	ASTM F1554
THREADED RODS –	ASTM A36

ALL PIPE: ASTM A53, GRADE B.

THE FABRICATOR SHALL DESIGN AND DETAIL ALL PARTS OF CONNECTIONS NOT FULLY DETAILED ON THE DESIGN DRAWINGS. THE NUMBER OF BOLTS AND OTHER SIMILAR ELEMENTS SHOWN ON THE DRAWING ARE PICTORIAL ONLY.

SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST AWS STRUCTURAL WELDING CODE REQUIREMENTS. ELECTRODES SHALL BE E–70XX.

STRUCTURAL ALUMINUM:

DESIGN, FABRICATION, ERECTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST "ALUMINUM DESIGN MANUAL" (ADM) SPECIFICATIONS AND DESIGN DRAWINGS.

ALL STRUCTURAL ALUMINUM:

ALUMINUM EXTRUDED PIPE –	ASTM B429, ALLOY 6063–T6
ALUMINUM EXTRUDED SHAPE –	ASTM B221, ALLOY 6061–T6
ALUMINUM SHEET AND PLATE –	ASTM B209, ALLOY 6061–T6
ALUMINUM ALLOY ROLLED THREAD PLATE –	ASTM B209, ALLOY 6061–T6
ALUMINUM CASTING –	ASTM B26/B36M, ALLOY 443.0–F

SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST AWS D1.2/D1.2M "STRUCTURAL WELDING CODE – ALUMINUM".

WHERE ALUMINUM CONTACTS A DISSIMILAR METAL, APPLY TO THE DISSIMILAR METAL A HEAVY BRUSH COAT OF ZINC–CHROMATE PRIMER FOLLOWED BY TWO COATS OF ALUMINUM METAL PAINT.

WHERE ALUMINUM CONTACTS MASONRY OR CONCRETE, APPLY A HEAVY COAT OF BITUMASTIC OR EPOXY PAINT.

LEGEND & SYMBOLS

GRATING SPAN DIRECTION

WATERSTOP (SEE SPECS FOR TYPE AND MATERIALS)

EARTH FILL

UNDISTURBED EARTH

CONCRETE

CONCRETE MASONRY

STEEL

STRUCTURAL FILL

ALUMINUM

GRATING

CHECKERED PLATE

GRANULAR FILL

SAND

GROUT

DEMOLITION

UNDISTURBED EARTH

ABBREVIATIONS:

AL	ALUMINUM	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BOT	BOTTOM	NF	NEAR FACE
CC	CENTER TO CENTER	NTS	NOT TO SCALE
CJ	CONTROL JOINT	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT	PCJ	PARTIAL CONTRACTION JOINT
CONC	CONCRETE	PL	PLATE
CONST JT	CONSTRUCTION JOINT	PLF	POUNDS PER LINEAR FOOT
CONT	CONTINUOUS	PROJ	PROJECTION
DIA	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
EF	EACH FACE	REINF	REINFORCEMENT
EJ	EXPANSION JOINT	SPECS	SPECIFICATIONS
EL	ELEVATION	SS	STAINLESS STEEL
EW	EACH WAY	STD	STANDARD
FF	FAR FACE	T&B	TOP AND BOTTOM
FTG	FOOTING	T/STRUCTURE	TOP OF STRUCTURE
HORIZ	HORIZONTAL	TYP	TYPICAL
HP	HIGH POINT	UON	UNLESS OTHERWISE NOTED
ID	INSIDE DIAMETER	VERT	VERTICAL
LP	LOW POINT	WSTP	WATERSTOP
MAT'L	MATERIAL	WWF	WELDED WIRE FABRIC
MAX	MAXIMUM		

NOTE:
THESE ABBREVIATIONS ARE FOR USE ON STRUCTURAL DRAWINGS ONLY.

NOTE:
ABBREVIATIONS SHOWN ON THIS SHEET APPLY ONLY TO THE S–SHEETS

NOTE:
REFER TO CIVIL, MECHANICAL AND ELECTRICAL SHEETS FOR MISCELLANEOUS SITE CONCRETE AND EQUIPMENT FOUNDATIONS.

JUSTIN S. BOGGS
REGISTERED ENGINEER
AGRICULTURE
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NO. 119060
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. ROSENTHAL
DRAWN BY: P. SCHIAVO
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BOGGS
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
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Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

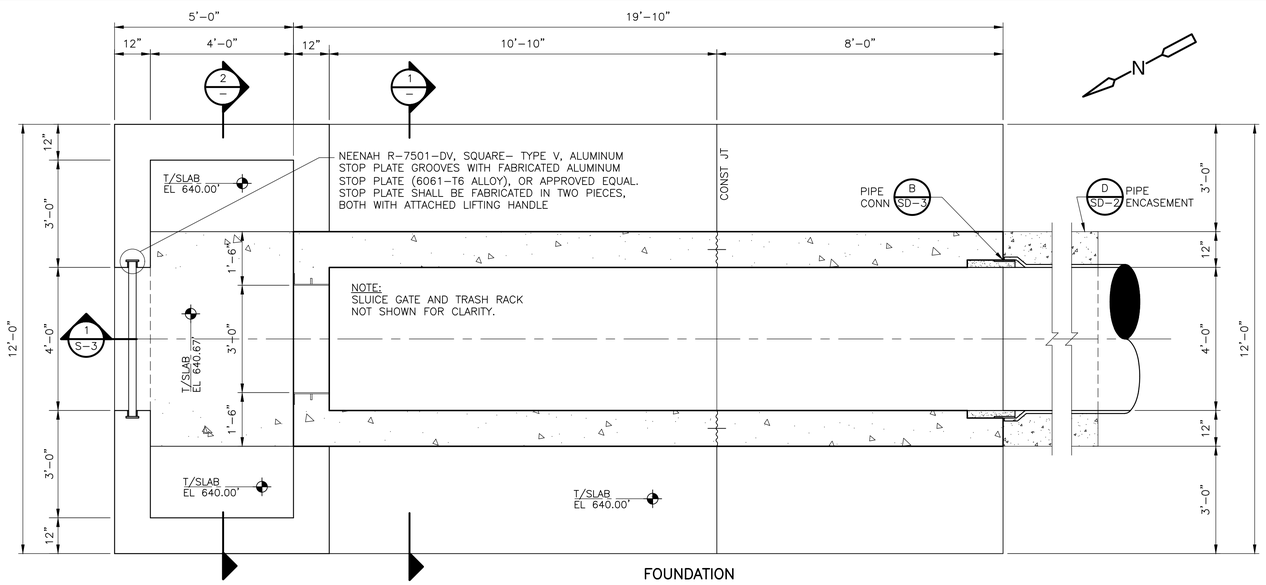
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

STRUCTURAL NOTES

PROJECT NO. 14915–237520
FILE NAME: S001STNT.DWG

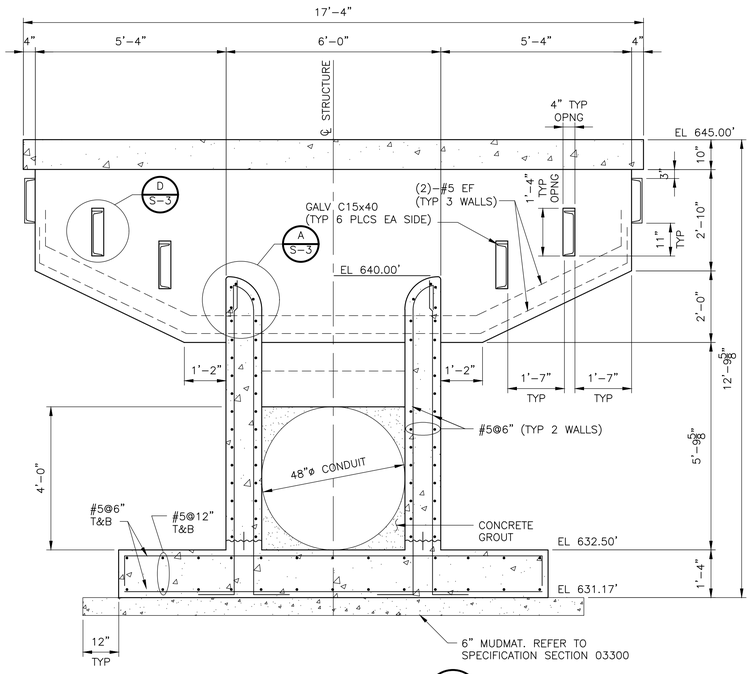
SHEET NO.
S-1

ISSUED FOR BID



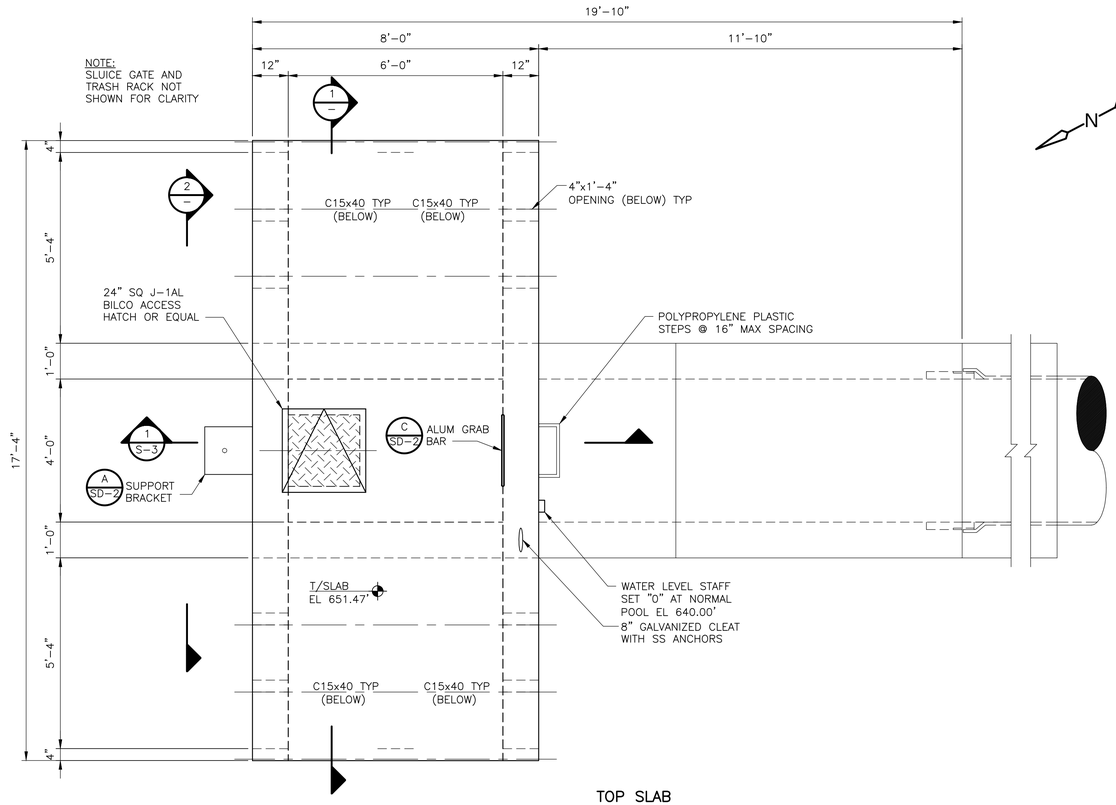
FOUNDATION PLAN

1/2" = 1'-0"



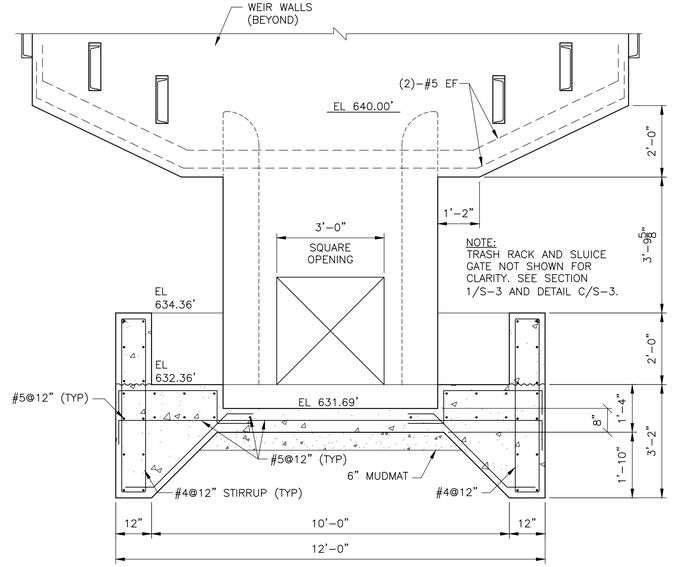
SECTION 1

1/2" = 1'-0"



TOP SLAB PLAN

3/8" = 1'-0"



SECTION 2

1/2" = 1'-0"

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JUSTIN S. BOGGS REGISTERED ENGINEER AGRICULTURE COMMERCE No. 119080 STATE OF TENNESSEE

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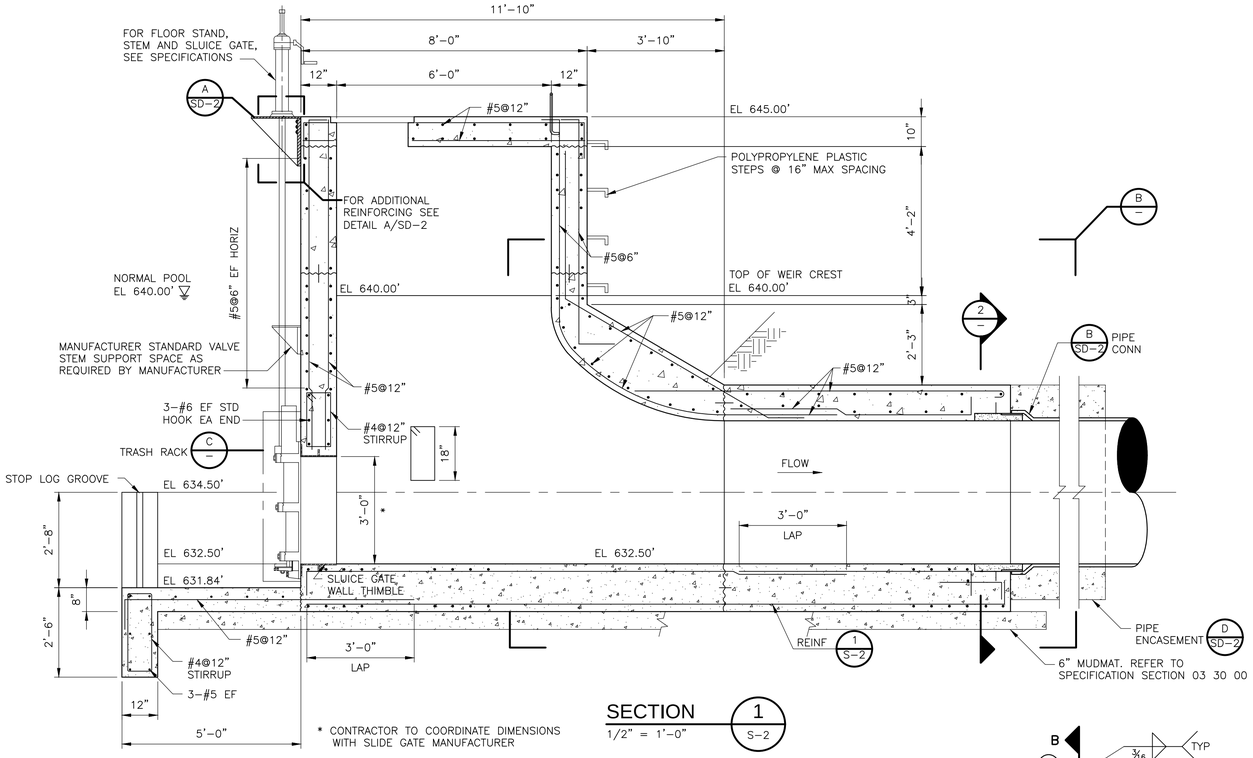
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

NRCS RISER
PLANS AND SECTIONS

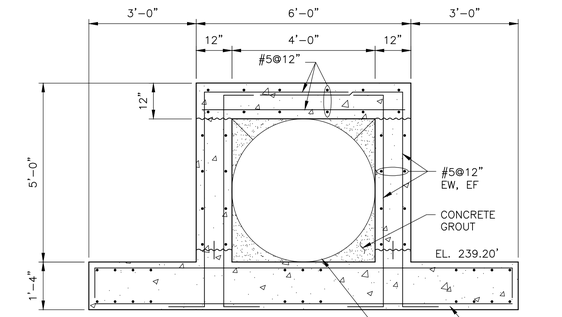
PROJECT NO. 14915-237520
FILE NAME: S002WCST.DWG

SHEET NO.
S-2

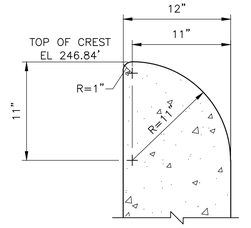
ISSUED FOR BID



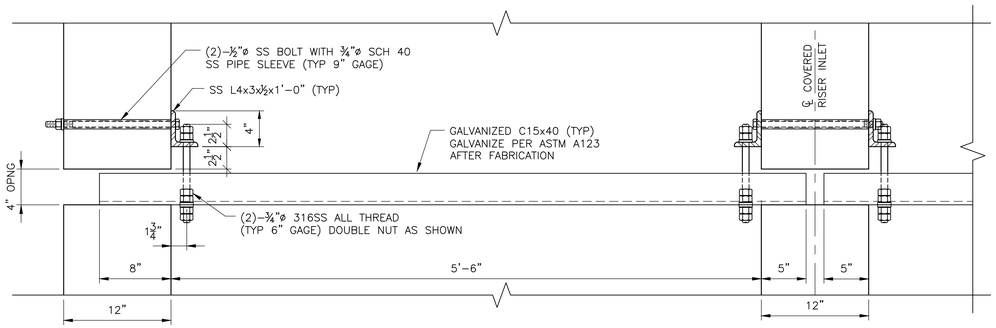
SECTION 1 / 1/2" = 1'-0" (S-2)



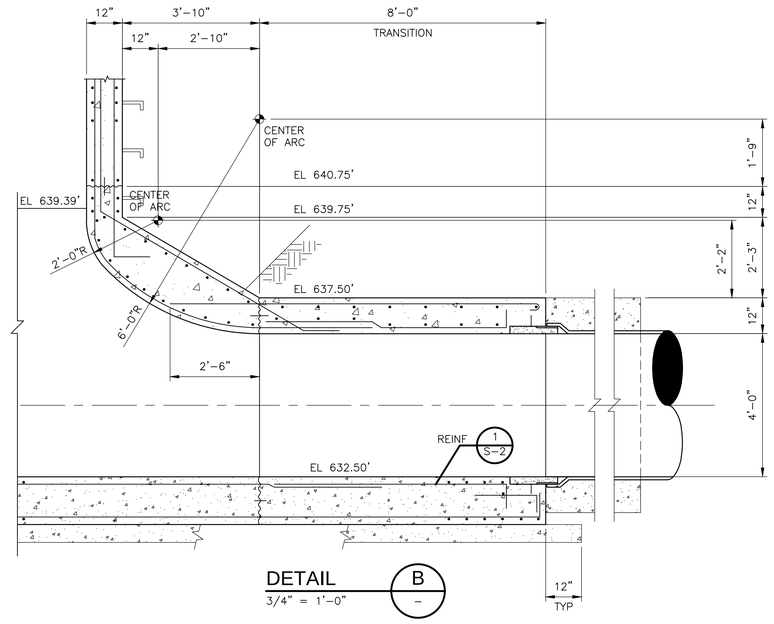
SECTION 2 / 1/2" = 1'-0" (–)



WEIR CREST DETAIL A / 1 1/2" = 1'-0" (S-2)

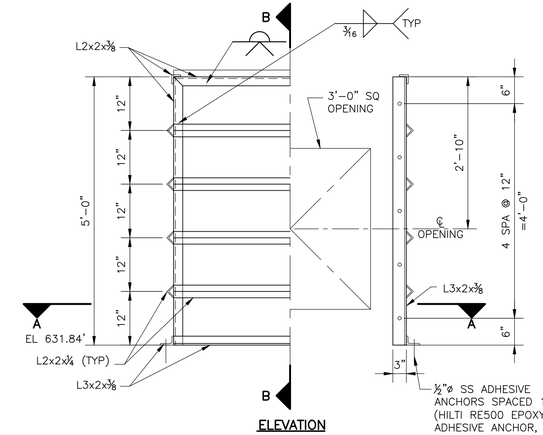


CHANNEL CONNECTION TO WALL POCKET DETAIL D / 1 1/2" = 1'-0" (–)

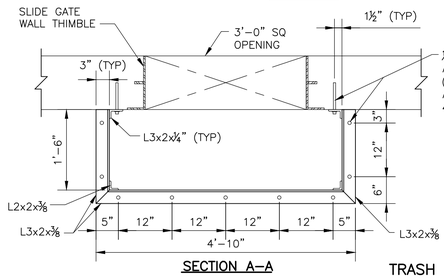


DETAIL B / 3/4" = 1'-0" (–)

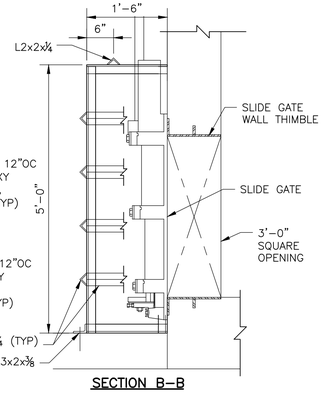
6" MUDMAT. REFER TO SPECIFICATION SECTION 03300



ELEVATION



SECTION A-A



SECTION B-B

TRASH RACK DETAIL C / 3/4" = 1'-0" (–)

SLUICE GATE NOTES:

1. SLUICE GATE AND ALL APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS SHOWN ON THE DRAWINGS AND IN THE SPECIFICATIONS.
2. WALL THIMBLE SHALL BE TYPE "F" WITH A MINIMUM DEPTH AS SHOWN ON THE DETAILS.
3. STEM SHALL BE STAINLESS STEEL, CONFORM TO THE SPECIFICATIONS, AND HAVE A DIAMETER AS REQUIRED BY THE GATE MANUFACTURER.
4. STEM GUIDES SHALL BE FULLY ADJUSTABLE WITH A TWO-PIECE COLLAR THAT CAN BE INSTALLED AFTER THE STEM IS IN PLACE. THE REACH FOR THE GUIDES WILL VARY ACCORDING TO THE TOTAL WALL OFFSET AT THE GUIDE.
5. STEM SHALL BE PROTECTED WITH A SCHEDULE 80 PIPE SLEEVE. PIPE SLEEVE SHALL HAVE A DIAMETER AT LEAST 1/2" LARGER THAN THE STEM DIAMETER.
6. AN APPROPRIATELY SIZED LIFT WITH A CRANK SHALL BE PROVIDED FOR THE MANUAL OPERATION OF GATE. THE HEIGHT OF EACH FLOOR STAND SHALL BE SET SO THAT THE CENTERLINE OF THE CRANK IS APPROXIMATELY 36" ABOVE THE OPERATING FLOOR.

TRASH RACK NOTES:

1. ALL STRUCTURAL ANGLE, BAR AND PLATE SHALL BE ASTM A36.
2. ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.

JUSTIN S. BOGGS — REGISTERED ENGINEER — AGRICULTURE — COMMERCE NO. 118060 — STATE OF TENNESSEE

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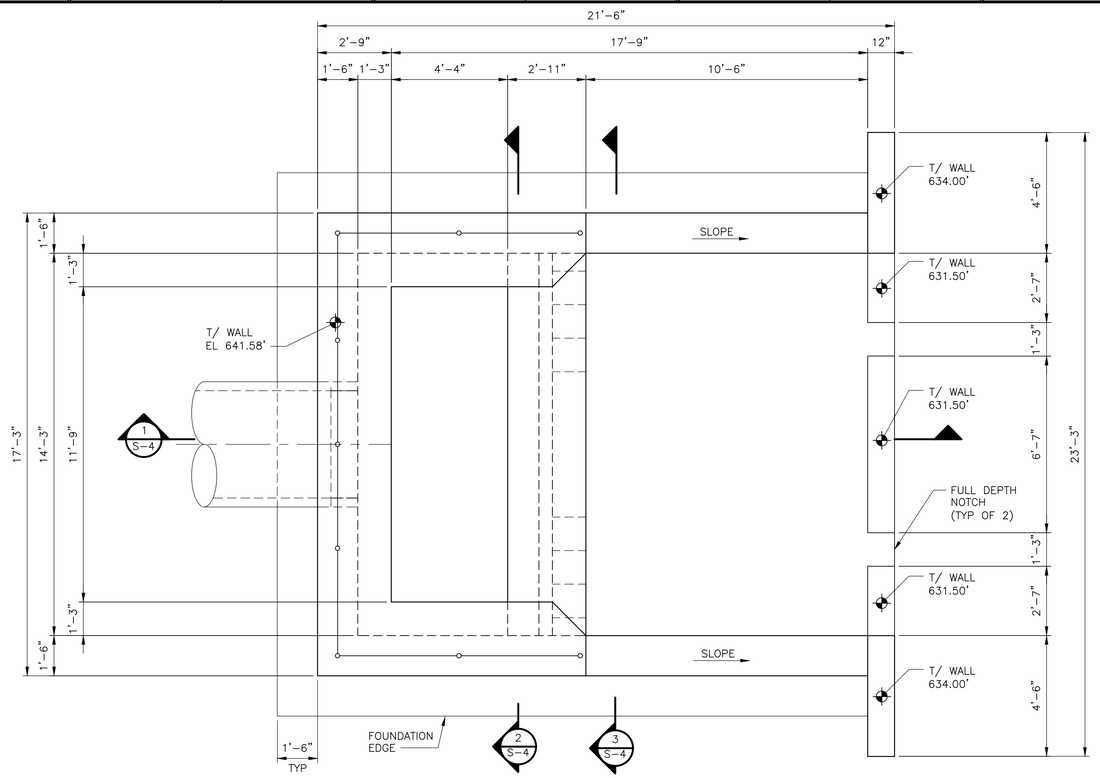
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

NRCS RISER
SECTIONS AND DETAILS

PROJECT NO. 14915-237520
FILE NAME: S003WCST.DWG

SHEET NO.
S-3

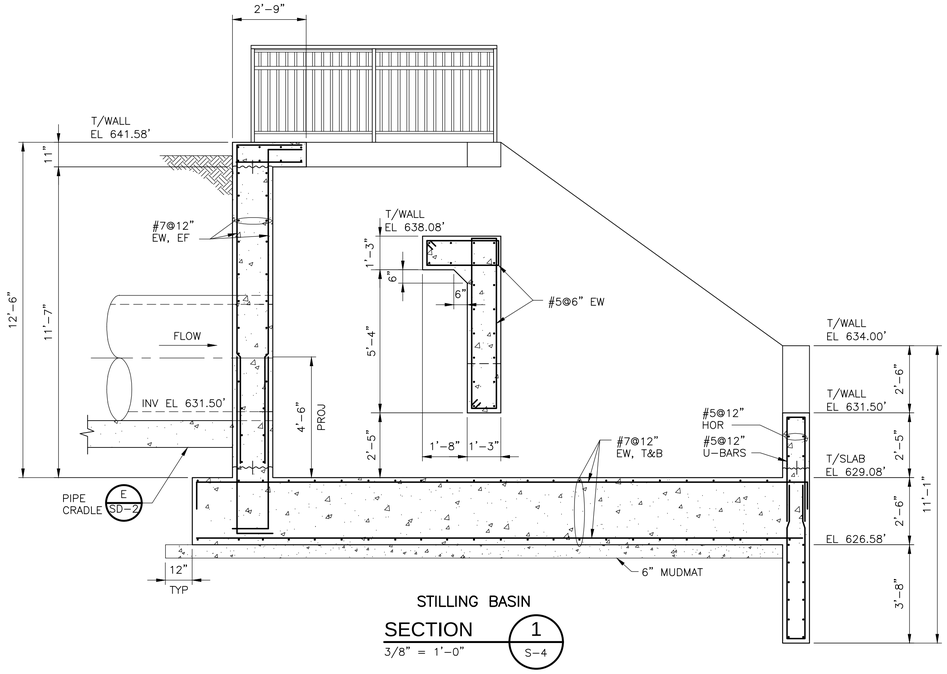
ISSUED FOR BID



STILLING BASIN TOP PLAN

PLAN

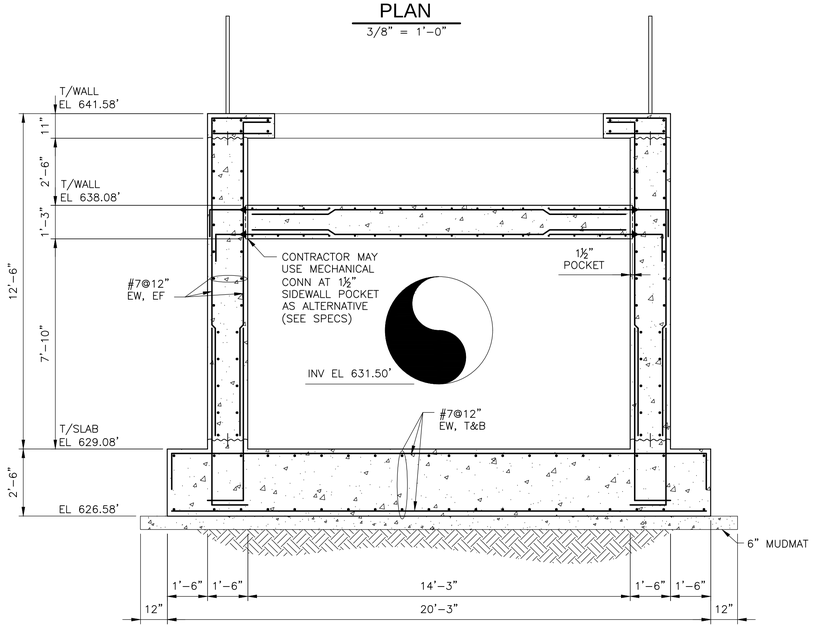
3/8" = 1'-0"



STILLING BASIN

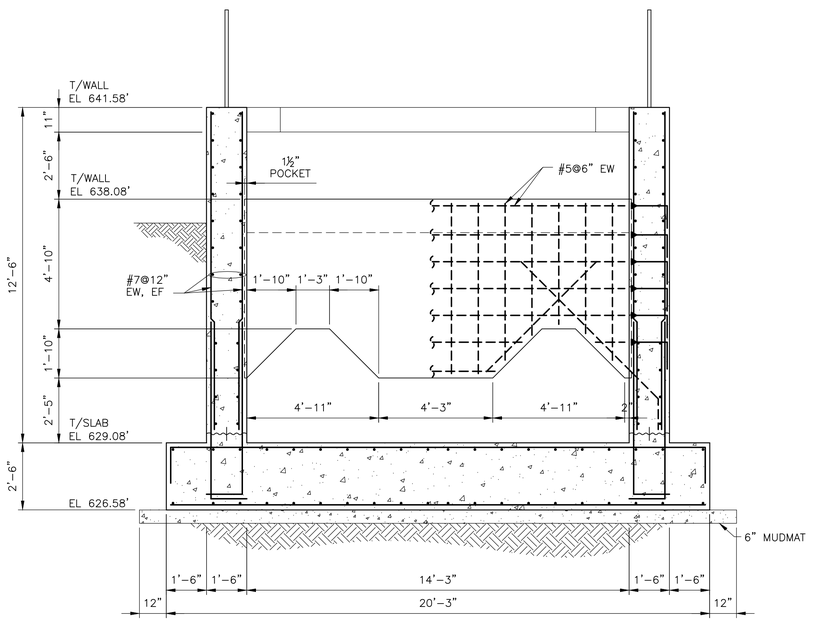
SECTION 1 / S-4

3/8" = 1'-0"



SECTION 2 / S-4

3/8" = 1'-0"



SECTION 3 / S-4

3/8" = 1'-0"

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COMMERCE
NO. 119060
STATE OF TENNESSEE

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ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

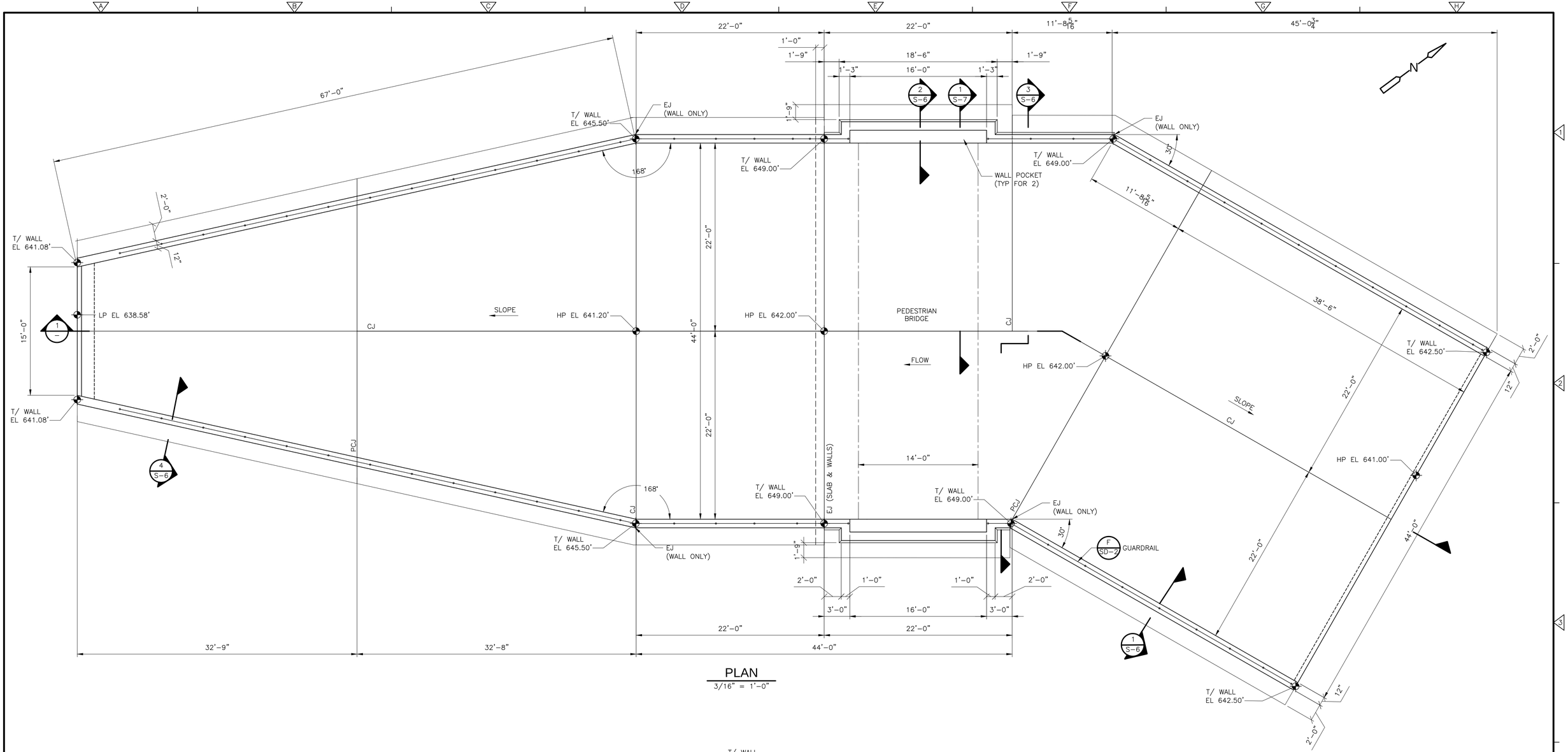
STILLING BASIN
PLAN AND SECTION

PROJECT NO. 14915-237520
FILE NAME: S004EDST.DWG
SHEET NO. S-4

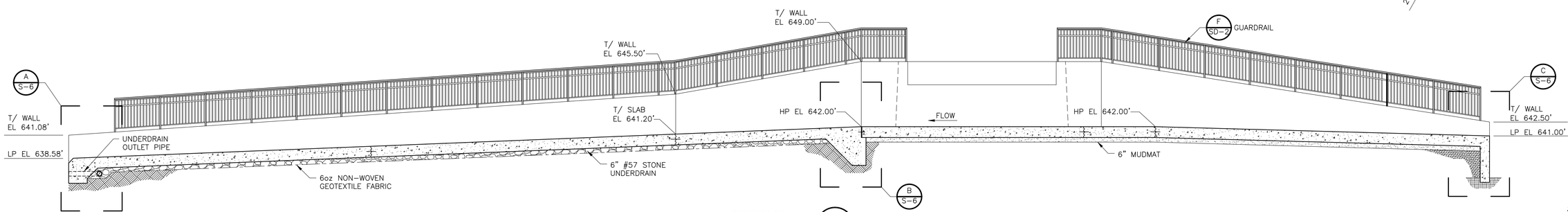
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PLAN
3/16" = 1'-0"



NOTE: REINFORCEMENT NOT SHOWN. SEE SECTIONS AND DETAILS ON S-7.

SECTION 1
3/16" = 1'-0"

JUSTIN S. BOGGS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 119080
STATE OF TENNESSEE

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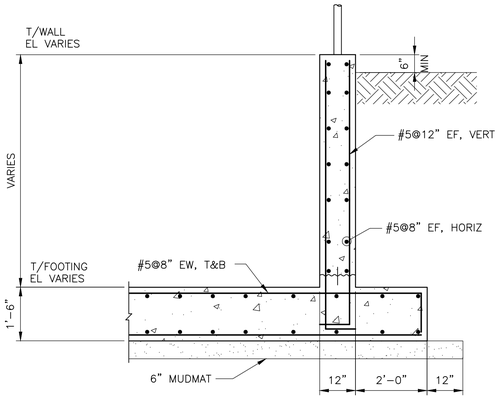
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

AUXILIARY SPILLWAY
FOUNDATION PLAN AND SECTIONS

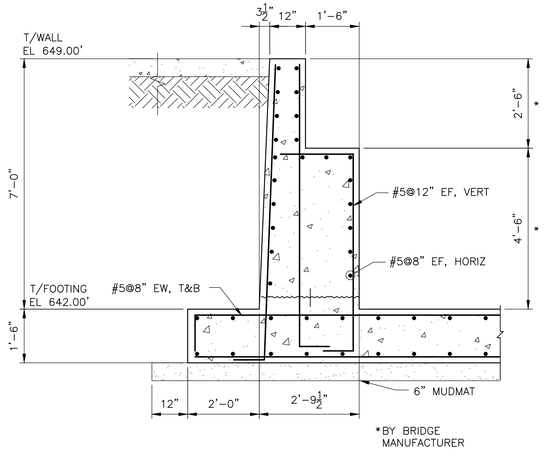
PROJECT NO. 14915-237520
FILE NAME: S005WCPL.DWG

SHEET NO.
S-5

ISSUED FOR BID

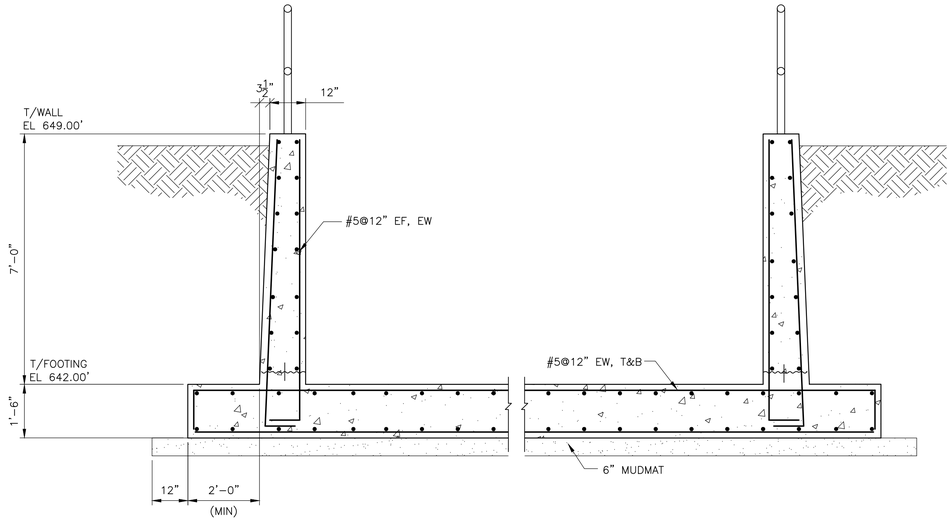


SECTION 1
1/2" = 1'-0"
S-5

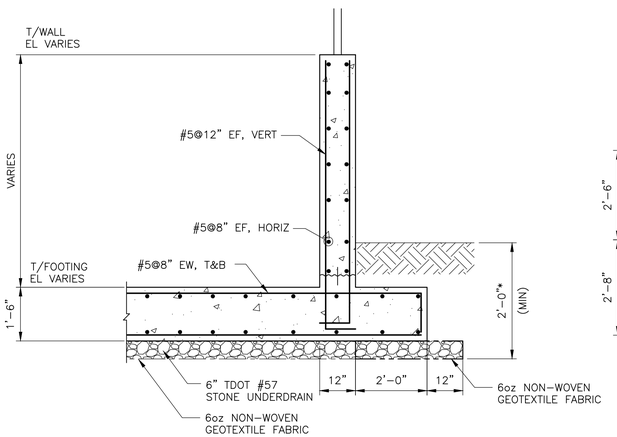


*BY BRIDGE MANUFACTURER

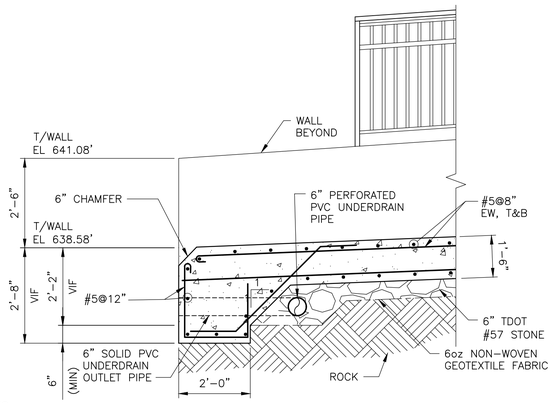
SECTION 2
1/2" = 1'-0"
S-5



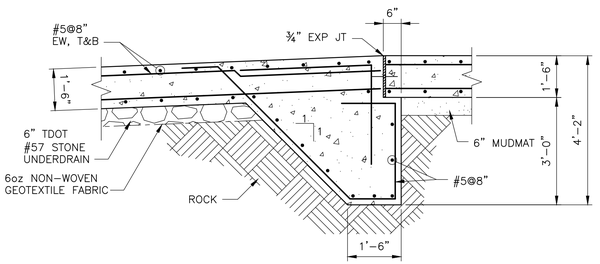
SECTION 3
1/2" = 1'-0"
S-5



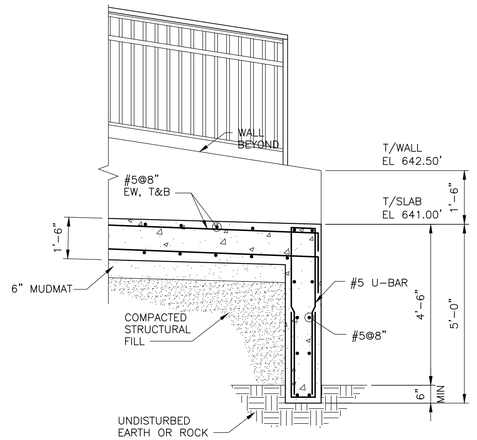
SECTION 4
1/2" = 1'-0"
S-5



DETAIL A
1/2" = 1'-0"
S-5



DETAIL B
1/2" = 1'-0"
S-5



DETAIL C
1/2" = 1'-0"
S-5

NOTES:
1. UNDERDRAIN SHALL BE 6" TDOT #57 STONE.
2. * INDICATES BOTTOM OF UNDERDRAIN STONE SHALL BE 2'-0" MINIMUM BELOW FINISHED GRADE

JUSTIN S. BOGGS
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STATE OF TENNESSEE

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

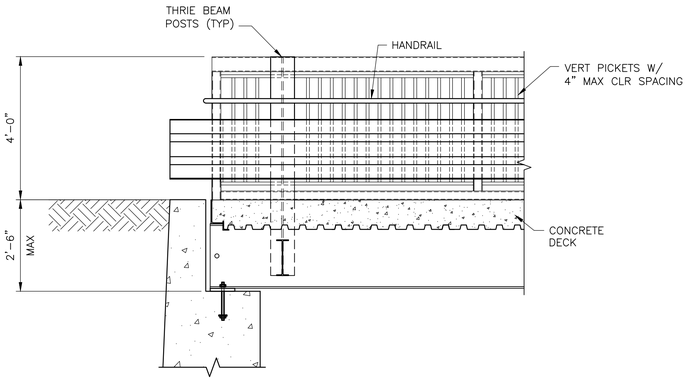
AUXILIARY SPILLWAY PLAN

PROJECT NO. 14915-237520
FILE NAME: S006WCST.DWG

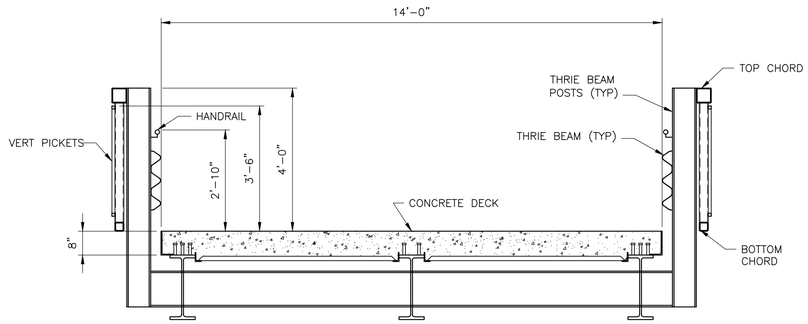
SHEET NO.
S-6

ISSUED FOR BID

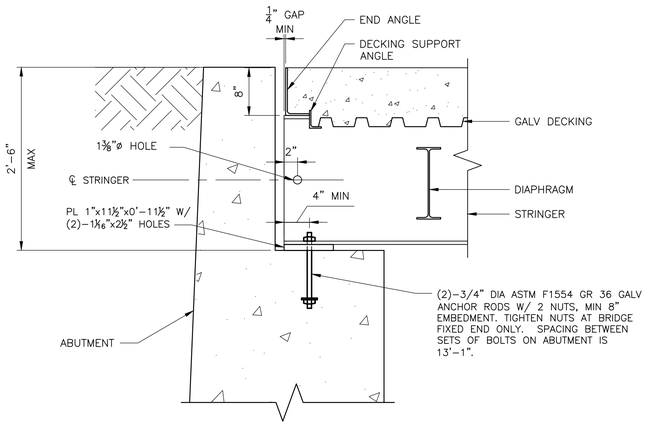
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SECTION 1
1/2" = 1'-0"
S-5



SECTION 2
1/2" = 1'-0"
S-5



PEDESTRIAN BRIDGE CONNECTION TO ABUTMENT
DETAIL A
1"=1'-0"
–

NOTES:

1. BRIDGE DRAWINGS ARE CONCEPTUAL AND ARE SHOWN TO CONVEY THE INTENT FOR A PEDESTRIAN BRIDGE.
2. THE PEDESTRIAN BRIDGE SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TENNESSEE, FURNISHED AND INSTALLED BY THE CONTRACTOR AS SPECIFIED IN SECTION 323413.
3. SIZE AND LOCATION OF ANCHORS IS PRELIMINARY AND SUBJECT TO REVISIONS BY THE ENGINEER. ANCHORS SHALL BE COORDINATED WITH FINAL BRIDGE DESIGN AND SUBMITTED TO THE ENGINEER FOR APPROVAL.

JUSTIN S. BOGGS REGISTERED ENGINEER AGRICULTURE COMMERCE No. 118089 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. ROSENTHAL
DRAWN BY: P. DOUGLAS
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BOGGS
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

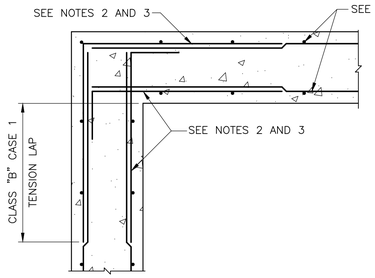
ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

AUXILIARY SPILLWAY PEDESTRIAN BRIDGE SECTIONS AND DETAILS

PROJECT NO. 14915-237520
FILE NAME: S007WCST.DWG
SHEET NO. S-7

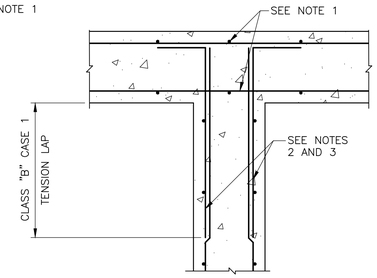
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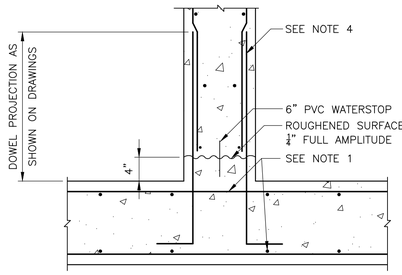
WALL CORNER REINFORCING

DETAIL A — NTS



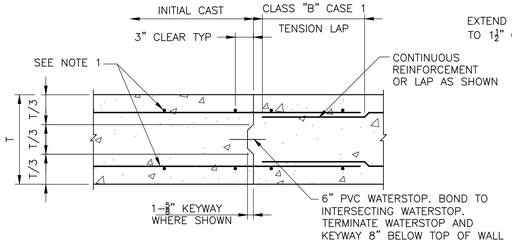
WALL INTERSECTION REINFORCING

DETAIL B — NTS



WALL BASE CONSTRUCTION JOINT

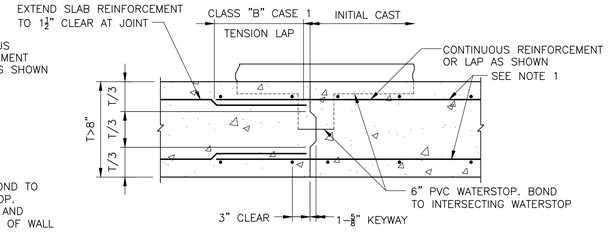
DETAIL C — NTS



NOTE: 2ND POUR SHALL BE 24 HOURS MINIMUM AFTER INITIAL POUR

WALL CONSTRUCTION JOINT (CJ)

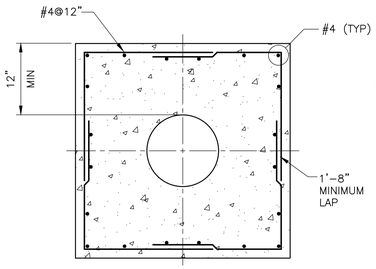
DETAIL D — NTS



NOTE: 2ND POUR SHALL BE 24 HOURS AFTER INITIAL POUR.

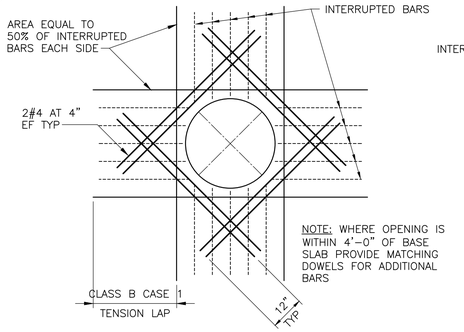
BASE/ELEVATED SLAB CONSTRUCTION JOINT (CJ)

DETAIL E — NTS



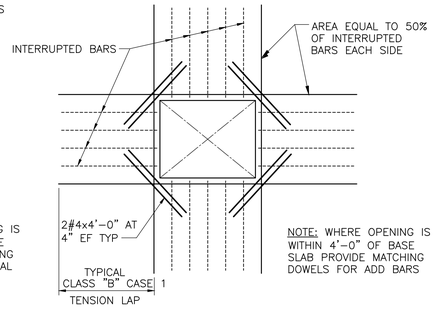
PIPE ENCASEMENT

DETAIL F — NTS



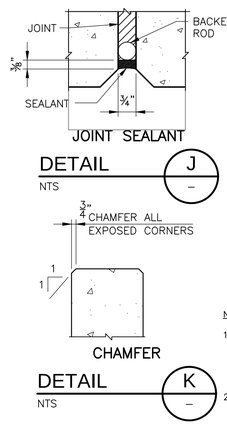
REINFORCEMENT AT
CIRCULAR OPENINGS GREATER THAN 12"

DETAIL G — NTS



REINFORCEMENT AT
RECTANGULAR OPENINGS GREATER THAN 12"

DETAIL H — NTS

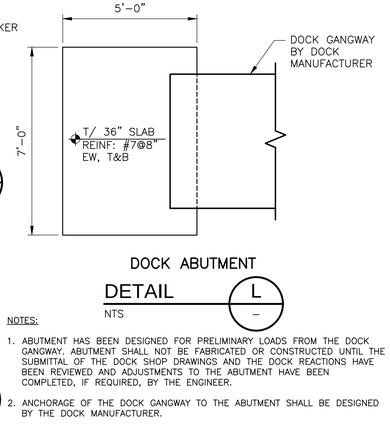


JOINT SEALANT

DETAIL J — NTS

CHAMFER

DETAIL K — NTS

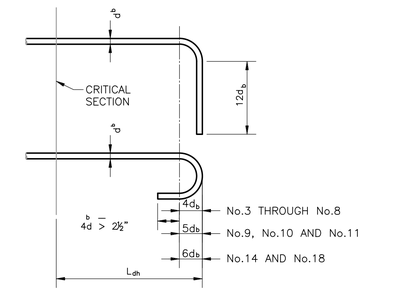


DOCK ABUTMENT

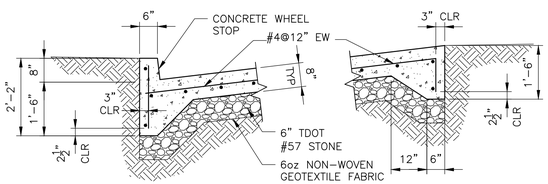
DETAIL L — NTS

NOTES:

1. ABUTMENT HAS BEEN DESIGNED FOR PRELIMINARY LOADS FROM THE DOCK GANGWAY. ABUTMENT SHALL NOT BE FABRICATED OR CONSTRUCTED UNTIL THE SUBMITTAL OF THE DOCK SHOP DRAWINGS AND THE DOCK REACTIONS HAVE BEEN REVIEWED AND ADJUSTMENTS TO THE ABUTMENT HAVE BEEN COMPLETED, IF REQUIRED, BY THE ENGINEER.
2. ANCHORAGE OF THE DOCK GANGWAY TO THE ABUTMENT SHALL BE DESIGNED BY THE DOCK MANUFACTURER.



HOOKED BAR DETAILS FOR
DEVELOPMENT OF STANDARD HOOKS

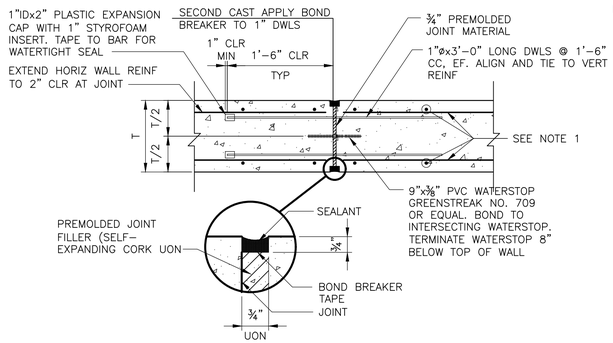


BOAT RAMP

DETAIL M — NTS

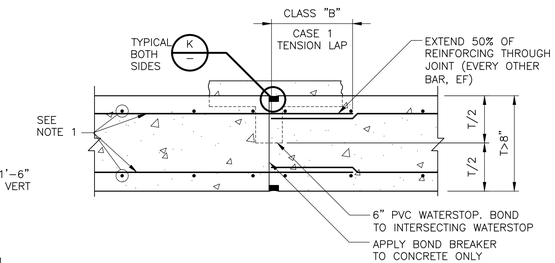
NOTES:

1. ALL REINFORCEMENT SHALL BE EPOXY COATED.
2. PARTIAL CONTRACTION JOINTS (PCJ) SHALL BE SPACED 20' MAXIMUM ON CENTER.
3. RAMP FINISH SHALL BE V–GROOVED WITH GROOVES ¾"x ¾".



BASE SLAB/WALL EXPANSION JOINT

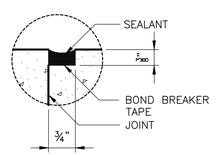
DETAIL F — NTS



NOTE: 2ND POUR SHALL BE 24 HOURS
AFTER INITIAL POUR.

BASE/ELEVATED SLAB PARTIAL CONTRACTION JOINT

DETAIL F — NTS



PARTIAL CONTRACTION JOINT SEALANT (PCJ)

DETAIL G — NTS

CLASS B TENSION LAP SPLICE LENGTHS IN WALLS AND SLABS (INCHES)

BAR SIZE	BLACK STEEL f'c=4000 psi	
	TOP BARS	OTHER BARS
3	15	12
4	20	15
5	29	23
6	40	31
7	65	50
8	81	62
8*	49	37
9*	60	46
10*	74	57

TENSION DEVELOPMENT LENGTHS IN WALLS AND SLABS (INCHES)

BAR SIZE	BLACK STEEL f'c=4000 psi		
	TOP BARS	OTHER BARS	Ldh
3	12	12	6
4	15	12	7
5	22	17	9
6	31	24	10
7	50	38	13
8	62	48	14
8*	37	29	14
9*	46	36	15
10*	57	44	17

NOTES:

1. MINIMUM BAR SPACING = 6" INCHES ON CENTER.
2. MINIMUM CONCRETE COVER = 1", EXCEPT AS NOTED BY * .
   * INDICATES MINIMUM CONCRETE COVER= 2".
3. A TOP BAR IS A HORIZONTAL BAR WHERE MORE THAN 12" OF FRESH CONCRETE IS CAST DIRECTLY BELOW THE BAR. WHERE HORIZONTAL WALL REINFORCEMENT IS UNIFORMLY SPACED IN A VERTICAL PLANE AT 12" MAXIMUM SPACING, LENGTHS MAY BE AS FOR "OTHER BARS".
4. LENGTHS FOR BEAMS AND COLUMNS SHALL BE AS SHOWN ON THE DRAWINGS.

LAP SPLICE AND DEVELOPMENT LENGTHS BLACK REINFORCING STEEL

JUSTIN S. BOGGS — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 119060 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. ROSENTHAL
DRAWN BY: P. SCHIAVO
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BOGGS
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

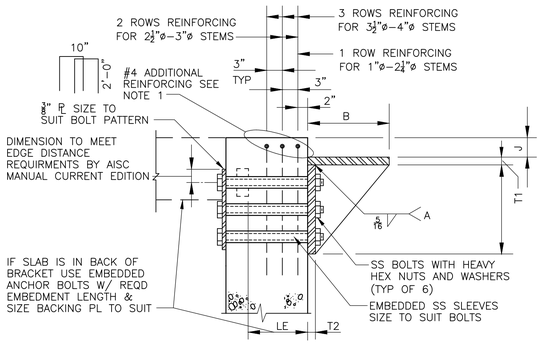
STANDARD DETAILS

PROJECT NO. 14915–237520
FILE NAME: SD01STDT.DWG

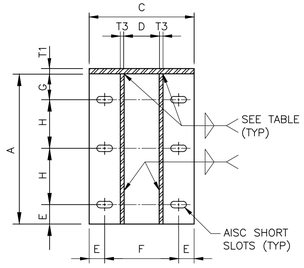
SHEET NO.
SD-1

ISSUED FOR BID

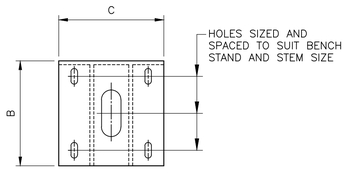
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SECTION



ELEVATION



PLAN

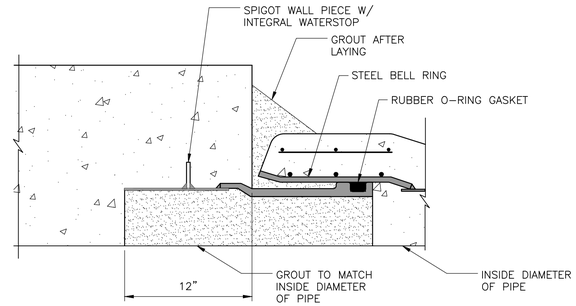
DIMENSIONS IN INCHES															
SLUICE GATE STEM DIA	**BOLT DIA**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**LE**	**T1**	**T2**	**T3**	**WELD SIZE**
1	¾	16	16	15	2¼	2 1³⁄₁₆	9⅜	3³⁄₁₆	5	0	6	½	1⅛	¾	⁵⁄₁₆
1½	1⅛	17	16	16	2¾	2⅞	10¼	3⅝	5¼	1	8	⅝	1⅜	⅞	⁵⁄₁₆
2	1½	18	16	17	3½	2⅞	11¼	4⅛	5½	2	10	⅞	1½	1	⅜
2½	1¾	21	18	18	4	2 1⁵⁄₁₆	12⅛	4⅜	6¾	3	12	1	1½	1⅛	⅜
3	2	25	18	19	4¾	2 1⁵⁄₁₆	13⅜	5⁵⁄₁₆	8½	4	14	1⅛	1½	1¼	½
3½	2¼	29	18	20½	5¼	3⅛	14¼	5⅜	10¼	5	16	1¼	1½	1⅜	½
4	2½	33	18	22	5¾	3³⁄₁₆	15⅝	5 1³⁄₁₆	12	6	18	1⅜	1½	1½	½

SLIDE GATE OPERATOR SUPPORT BRACKET

DETAIL A
NTS

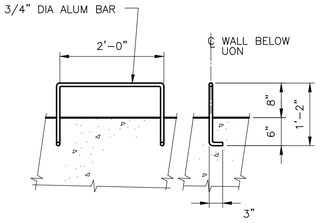
NOTES:

1. SEE STRUCTURAL DRAWINGS AT SPECIFIC GATE FOR REINFORCING IN SUPPORTING BEAM; SPECIAL ADDITIONAL SHEAR FRICTION REINFORCEMENT SHOWN ON THIS DRAWING ONLY.
2. ALL PLATES SHALL BE STAINLESS STEEL.



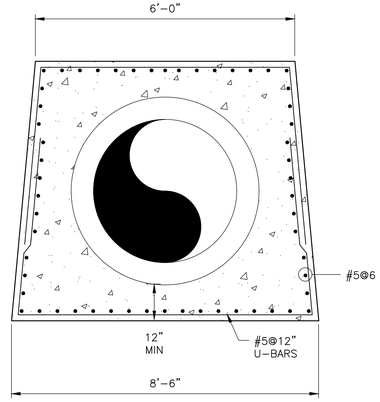
SPIGOT WALL PIECE

DETAIL B
NTS



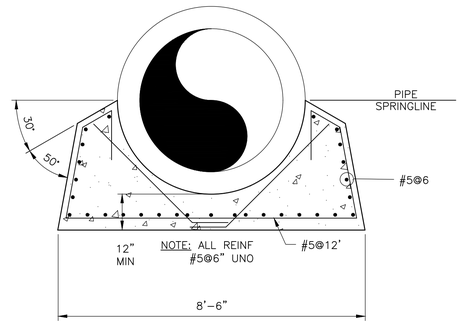
GRAB BAR

DETAIL C
NTS



PIPE ENCASEMENT

DETAIL D
NTS



PIPE CRADLE

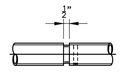
DETAIL E
NTS

NOTES:

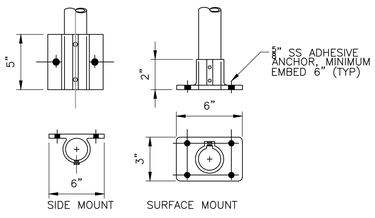
1. BASIC SLAB/WALL/BEAM REINFORCING AS SHOWN ON DESIGN DRAWINGS
2. SIZE AND SPACING OF BAR TO MATCH WALL/BEAM REINFORCEMENT AS SHOWN ON DESIGN DRAWINGS
3. FOR ADDITIONAL BARS AT CORNERS AND INTERSECTIONS SEE DESIGN DRAWINGS
4. FOR DOWEL SIZE AND SPACING SEE DESIGN DRAWINGS

STEEL GUARDRAIL NOTES:

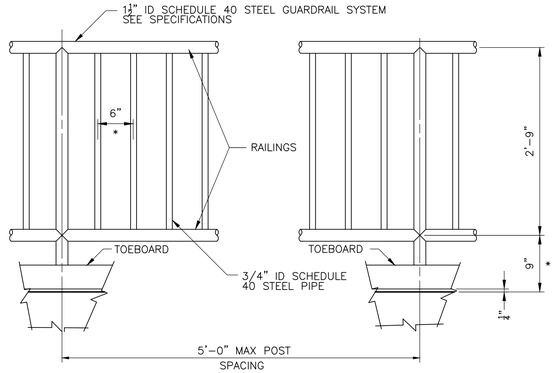
1. GUARDRAILS SHALL BE TWO RAIL, 1.5" NOMINAL DIAMETER SYSTEM WITH 34" NOMINAL DIAMETER BALUSTERS.
2. GUARDRAILS AT HORIZONTAL SURFACES (LANDINGS, MEZZANINES, ETC.) SHALL BE 42" HIGH AND SHALL BE PROVIDED WITH A 4" KICKPLATE, EXCEPT AS NOTED. BALUSTERS AND INTERMEDIATE RAILS SHALL BE PROVIDED SUCH THAT A 4 INCH DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING UP TO A HEIGHT OF 42 INCHES.
3. STEEL SURFACES IN CONTACT WITH EXPOSED CONCRETE MUST BE COATED WITH A HEAVY BITUMASTIC OR SEPARATED BY A ³⁄₃₂" NEOPRENE GASKET. IN ANY CASE WHERE TWO DIFFERENT METALS ARE TO BE IN CONTACT, A NEOPRENE GASKET MUST BE PROVIDED.
4. HANDRAILS, GUARDRAILS, POSTS, BRACKETS AND MOUNTINGS SHALL MEET THE INTERNATIONAL BUILDING CODE AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LOADING REQUIREMENTS.
5. STEEL GUARDRAIL SYSTEM SHALL BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.



EXPANSION JOINT



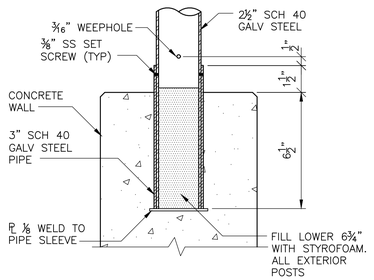
CONNECTIONS



*COORDINATE DIMENSION WITH GUARDRAIL NOTE 2.

GUARDRAIL

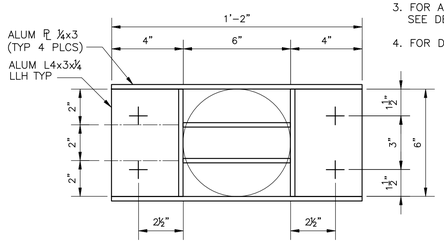
DETAIL F
1" = 1'–0"



NOTE: PIPE SLEEVE ASSEMBLY SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.

REMOVABLE GUARDRAIL

DETAIL G
NTS



NOTE: ATTACH GUARD TO STRUCTURE WITH (4)–½"ø SS HILTI HY–150 ADHESIVE ANCHORS OR EQUAL (MIN EMBED 4½")

VARMINT GUARD

DETAIL H
NTS

JUSTIN S. BOGGS — REGISTERED ENGINEER — 120747 — AGRICULTURE — COMMERCE NO. 1180651 — STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: J. ROSENTHAL
DRAWN BY: P. SCHIAVO
SHEET CHK'D BY: M. CALVINO
CROSS CHK'D BY: S. WHITESIDE
APPROVED BY: J. BOGGS
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

STANDARD DETAILS

PROJECT NO. 14915–237520
FILE NAME: SD02STDT.DWG

SHEET NO.
SD-2

ISSUED FOR BID

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GENERAL NOTES:

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS.
2. COORDINATE WORK WITH OTHER TRADES AND OWNER. MAINTAIN EXISTING OPERATIONS.
3. FIELD VERIFY ALL EXISTING UNDERGROUND ELECTRICAL CONDUIT, CONCRETE DUCT BANKS, MANHOLES, PULL BOXES, ETC. AND MECHANICAL PIPING. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH RELOCATION OR REMOVAL OF UNDERGROUND EQUIPMENT AS REQUIRED FOR THIS CONSTRUCTION. USE DUE CARE IN CONGESTED AREAS TO AVOID DAMAGE TO EXISTING UNDERGROUND UTILITIES.
4. CONTRACTOR'S WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AND MAKING ANY MINOR CORRECTIONS CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY; SUBSTANDARD WORK WILL BE REJECTED.
5. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES, INC., AND SHALL BEAR THE APPROPRIATE UL LISTING MARK OR CLASSIFICATION MARKING. EQUIPMENT, MATERIALS, ETC. UTILIZED NOT BEARING A UL CERTIFICATION SHALL BE FIELD OR FACTORY UL CERTIFIED PRIOR TO EQUIPMENT ACCEPTANCE AND USE.
6. DO NOT SCALE THE ELECTRICAL DRAWINGS REFER TO THE CIVIL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.
7. ALL WORK SHALL COMPLY WITH NEC, CITY OF FRANKLIN AND LOCAL CODES.
8. THE PLANS DO NOT SHOW ALL RACEWAYS AND CONDUCTORS BETWEEN LIGHTING FIXTURES. HOWEVER, THE CONTRACTOR SHALL FURNISH AND INSTALL THESE CONNECTIONS IN ACCORDANCE WITH THE ASSIGNED FIXTURE CIRCUIT NUMBER. CONDUCTORS SHOWN CONCEALED SHALL BE INDICATIVE OF ENTIRE CIRCUIT INSTALLATION. THE SAME SHALL APPLY FOR CONDUCTORS SHOWN EXPOSED.
9. THE QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
10. INSTALL ALL PULL BOXES AS REQUIRED BY OWNER FOR THE DISTRIBUTION AND LIGHTING CIRCUITS. THE DRAWINGS SHOW PROPOSED LOCATIONS AND ADDITIONAL BOXES MAY BE REQUIRED BY OWNER. SMALL AND LARGE PULL BOXES SHALL HAVE "COF STREET LIGHTING" CAST INTO THE TOP AND SHALL MEET ALL REQUIREMENTS SHOWN IN CITY OF FRANKLIN STANDARD DRAWINGS.
11. NOTE IT IS RECOMMENDED THAT CONTRACTOR HAND DIG WHERE SITE IS VERY CONGESTED.
12. SUBMIT TO THE ENGINEER THE FOLLOWING FOR APPROVAL IN ACCORDANCE WITH CONTRACT DOCUMENTS: RACEWAYS, BOXES, FITTINGS AND HANGERS; WIRES AND CABLES; HANDHOLES; PULL BOXES; LIGHT FIXTURES; LIGHT POLES; GROUNDING HARDWARE; AND ALL ELECTRICAL APPURTENANCES USED IN THE CONSTRUCTION OF THIS PROJECT.

RACEWAYS, BOXES, FITTINGS AND SUPPORTS:

1A. RIGID GALVANIZED STEEL (GRS) CONDUIT SHALL BE USED IN ALL LOCATIONS WHERE CONDUIT IS EXPOSED. RIGID STEEL CONDUIT INTERIOR AND EXTERIOR SHALL BE HOT–DIPPED GALVANIZED AND BE AS MANUFACTURED BY ALLIED TUBE AND CONDUIT CORP., WHEATLAND TUBE CO., OR EQUAL. RIGID STEEL CONDUIT SHALL BE FOR USE UNDER THE PROVISIONS OF NEC ARTICLE 344.

1B. RIGID NONMETALLIC CONDUIT SHALL BE USED IN ALL UNDERGROUND DIRECT BURIED APPLICATIONS. RIGID NONMETALLIC CONDUIT SHALL BE PVC SCHEDULE 40 AS MANUFACTURED BY CARLON; AN INDIAN HEAD CO.; CANTEX; QUEEN CITY PLASTICS OR EQUAL. PVC CONDUIT SHALL BE FOR USE UNDER THE PROVISIONS OF NEC ARTICLE 352.

1C. LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC) SHALL BE USED FOR ALL EQUIPMENT WHERE VIBRATION IS PRESENT. LFMC SHALL BE AS MANUFACTURED BY THE ANACONDA METAL HOSE DIV.; ANACONDA AMERICAN BRASS CO.; AMERICAN FLEXIBLE CONDUIT CO.; UNIVERSAL METAL HOSE CO. OR EQUAL. LFMC SHALL BE FOR USE UNDER THE PROVISIONS OF NEC ARTICLE 350. FITTINGS USED WITH LFMC SHALL BE OF THE 3–PIECE SCREW–IN TYPE MALLEABLE IRON AS MANUFACTURED BY THE O.Z. GEDNEY CO. OR EQUAL.

2. MINIMUM SIZE CONDUIT SHALL BE 2 INCH ELECTRICAL TRADE SIZE.
3. CONDUITS TERMINATING IN PRESSED STEEL BOXES SHALL HAVE DOUBLE LOCKNUTS (MALLEABLE IRON FOR GRS AND ALUMINUM FOR RAC) AND INSULATED GROUNDING BUSHINGS. CONDUITS TERMINATING IN GASKETED ENCLOSURES SHALL BE TERMINATED WITH GROUNDING TYPE CONDUIT HUBS.
4. CONDUITS CONTAINING EQUIPMENT GROUNDING CONDUCTORS AND TERMINATING IN SHEET STEEL BOXES SHALL HAVE INSULATED THROAT GROUNDING BUSHINGS WITH LAY–IN TYPE LUGS.
5. CONDUITS SHALL BE INSTALLED USING THREADED FITTINGS U.O.N. PVC CONDUIT TO NON–METALLIC AND METALLIC BOX CONNECTIONS SHALL BE MADE WITH SEALING RINGS, WITH A STAINLESS STEEL RETAINER AS MANUFACTURED BY THOMAS & BETTS CO.

6A. ALL FIELD CUTS THREADS ON GALVANIZED STEEL CONDUIT SHALL BE CLEANED AND PAINTED WITH COLD GALVANIZING COMPOUND (95% ZINC CONTENT MINIMUM) BEFORE INSTALLATION.

6B. ALL THREADS ON RAC AND FITTINGS SHALL BE CLEANED AND COATED WITH "NO–OXIDE" COMPOUND BEFORE INSTALLATION.

7. ALL METAL CONDUIT RISERS FROM UNDERGROUND, CONCRETE PADS, ETC. SHALL BE PROVIDED WITH HEAT SHRINK TUBING (RAYCHEM CO. OR EQUAL) FROM A POINT 12–INCHES BELOW BOTTOM OF SLAB OR GRADE TO A POINT NOT LESS THAN 6–INCHES ABOVE GRADE OR SURFACE OF SLAB.

8 ALL JUNCTION BOXES AND PULL BOXES SHALL BE TYPE 316 STAINLESS STEEL. BOXES SHALL BE SIZED IN ACCORDANCE WITH THE REQUIREMENTS OF NEC ARTICLE 314.

9. ALL UNDERGROUND CONTROL AND INSTRUMENTATION CONDUITS SHALL BE SEPARATED FROM POWER CONDUITS BY A MINIMUM OF 12–INCHES.
10. ALL CONDUIT MOUNTING EQUIPMENT AND HARDWARE SUCH AS CHANNELS, HANGERS, RODS, BACKPLATES, BEAM CLAMPS, FASTENERS, ANCHORS, NUTS, WASHERS, ETC. SHALL BE TYPE 316 STAINLESS STEEL.
11. THE MINIMUM COVER FOR DIRECT BURIED CONDUITS SHALL BE 30 INCHES UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
12. NEMA 4X STAINLESS STEEL, JUNCTION BOXES SHALL BE 316 STAINLESS STEEL WITH 316 STAINLESS STEEL HARDWARE AND GASKETED COVERS. BOXES SHALL HAVE CONTINUOUSLY WELDED SEAMS AND WELDS SHALL BE GROUND SMOOTH. BOX BODIES SHALL BE FLANGED AND SHALL NOT HAVE HOLES OR KNOCKOUTS. BOX BODIES SHALL NOT BE LESS THAN 14 GAUGE METAL AND COVERS SHALL NOT BE LESS THAN 12 GAUGE METAL. COVERS SHALL BE GASKETED AND FASTENED WITH STAINLESS STEEL SCREWS.
13. PULL BOXES SHALL BE CONSTRUCTED OF POLYMER CONCRETE AND REINFORCED WITH HEAVY WEAVE FIBERGLASS, GREEN FINISH, OPEN BOTTOM AND MINIMAL DIMENSIONS OF 12–IN LONG BY 18–IN WIDE BY 18–IN DEEP. LIGHTING PULL BOX COVER SHALL BE HEAVY DUTY TYPE, GREEN FINISH WITH STAINLESS STEEL PENTA HEAD BOLTS. COVERS SHALL BE MARKED "ELECTRIC". COVERS SHALL HAVE A SERVICE LOAD OF 15,000 POUNDS OVER A 10–IN SQUARE. LIGHTING HANDHOLES AND COVERS SHALL BE AS MANUFACTURED BY QUAZITE; OLDCASTLE; EASTON PRE–CAST OR EQUAL. PLACE BASES ON 12–IN BED SCREENED GRAVEL OR CRUSHED STONE AS SHOWN ON THE DRAWINGS.
14. CAST ALUMINUM BOXES AND FITTINGS SHALL BE COPPER–FREE ALUMINUM WITH CAST ALUMINUM COVERS AND STAINLESS STEEL SCREWS AS MANUFACTURED BY THE KILLARK ELECTRIC CO.; CROUSE–HINDS CO.; APPLETON ELECTRIC CO,; OR EQUAL.
15. CAST ALUMINUM DEVICE BOXES SHALL BE TYPE FD. ALL CAST ALUMINUM BOXES AND FITTINGS SHALL BE COPPER–FREE ALUMINUM WITH CAST ALUMINUM COVERS AND STAINLESS STEEL SCREWS AS MANUFACTURED BY THE KILLARK ELECTRIC CO.; CROUSE–HINDS CO.; L.E. MASON CO. OR EQUAL.

WIRES & CABLES:

1. WIRES AND CABLES SHALL BE ANNEALED, 98 PERCENT CONDUCTIVITY, STRANDED, SOFT DRAWN COPPER.
2. ALL WIRE OF A GIVEN TYPE SHALL BE BY THE SAME MANUFACTURER.
3. MINIMUM WIRE SIZE FOR POWER CIRCUITS SHALL BE NO. 12 AWG. MINIMUM WIRE SIZE FOR CONTROL CIRCUITS SHALL BE NO. 14 AWG.
4. WIRE FOR POWER AND CONTROL CIRCUITS SHALL BE NEC TYPE XHHW AND BE AS MANUFACTURED BY SOUTHWIRE CO.; ROME CABLE CO.; PIRELLI CABLE CORP.; OKONITE CO.; OR EQUAL.
5. UNLESS OTHERWISE INDICATED ON THE PLANS, NO SPLICES MAY BE MADE IN THE CABLES WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. WHERE SPLICING IS APPROVED, THEN SPLICING MATERIAL SHALL BE APPROVED BY THE ENGINEER AND CABLE MANUFACTURER. SPLICING MATERIALS FOR ALL 600 VOLT SPLICES SHALL BE MADE WITH LONG BARREL TIN PLATED COPPER COMPRESSION (HYDRAULICALLY PRESSED) CONNECTORS AND INSULATED WITH HEAVY WALL HEAT SHRINKABLE TUBING. SPLICING MATERIALS AND INSTALLATION FOR CONTROL CONDUCTORS SHALL BE AS REQUIRED BY THE ENGINEER. THE CONDUCTIVITY OF ALL COMPLETED CONNECTIONS SHALL BE NOT LESS THAN THAT OF THE UNCUT CONDUCTOR.
6. THE INSULATION RESISTANCE OF ALL COMPLETED CONNECTIONS OF INSULATED CONDUCTORS SHALL BE NOT LESS THAN THAT OF THE UNCUT CONDUCTOR. 600 VOLT WIRE LUGS SHALL BE TIN PLATED COPPER, LONG BARREL COMPRESSION TYPE (HYDRAULICALLY PRESSED) FOR WIRE SIZES NO. 8 AWG AND LARGER. LUGS FOR NO.10 AWG AND SMALLER WIRE SHALL BE LOCKING SPADE TYPE WITH INSULATED SLEEVE. LUGS SHALL BE AS MANUFACTURED BY THE THOMAS & BETTS CO., OR EQUAL. TERMINATION CONNECTORS, FOR CONTROL CONDUCTORS, SHALL BE OF THE EXPANDED VINYL INSULATED LOCKING FORK–END (UPTURNED LEG ENDS) TYPE AS MANUFACTURED BY IDEAL INDUSTRIES; 3M CO.; PANDUIT CORP. OR EQUAL.
7. FOR WIRE SIZES #10 AWG AND LARGER, INSULATED 'POLARIS' CONNECTORS AS MANUFACTURED BY NSI INDUSTRIES, INC. SHALL BE UTILIZED FOR THE BRANCH CIRCUIT WIRES. CONNECTORS SHALL BE SUITABLY SIZED FOR ALL FIELD WIRING.
8. WIRE AND CABLE MARKERS SHALL BE TYPE WRITTEN, HEAT SHRINKABLE TYPE, SHRUNK IN PLACE AS MANUFACTURED BY THE W.H. BRADY CO., THOMAS & BETTS CO., OR EQUAL.
9. USE LUBRICATIONS TO FACILITATE WIRE PULLING. PULLING COMPOUND SHALL BE NONTOXIC, NONFLAMMABLE, NONCOMBUSTIBLE AND NONCORROSIVE. THE MATERIAL SHALL BE UL LISTED AND COMPATIBLE WITH THE CABLE INSULATION AND JACKET.
10. IF CABLE CANNOT BE TERMINATED IMMEDIATELY AFTER INSTALLATION INSTALL HEAT SHRINKABLE END CAPS.
11. TEST ALL 600 VOLT WIRE INSULATION WITH A MEGOHM METER AFTER INSTALLATION AND PRIOR TO TERMINATION. MAKE TESTS AT NO LESS THAN 1000 VOLTS DC. SUBMIT A WRITTEN TEST REPORT OF THE RESULTS TO THE ENGINEER. NOTIFY ENGINEER AND CONSTRUCTION MANAGER IN WRITING 48 HOURS PRIOR TO TESTING. FIELD TESTING AND COMMISSIONING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE "ACCEPTANCE TESTING SPECIFICATIONS FOR ELECTRICAL POWER DISTRIBUTION EQUIPMENT AND SYSTEMS" PUBLISHED BY THE INTERNATIONAL ELECTRICAL TESTING ASSOCIATION. MINIMUM WIRE INSULATION RESISTANCE SHALL NOT BE LESS THAN 250 MEGOHMS.
12. WIRE COLOR CODE IDENTIFICATION SHALL BE: BROWN, ORANGE, YELLOW, GRAY (A,B,C,N) FOR 480Y/277V; BLACK, RED, BLUE, WHITE (A,B,C,N) FOR 208Y/120V, BLACK, RED, WHITE (L1,L2,N) FOR 240/120V; RED FOR AC CONTROL, BLUE FOR DC CONTROL AND GREEN FOR GROUND.

GROUNDING AND BONDING:

1. ALL POWER AND CONTROL CONDUITS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR. EQUIPMENT GROUNDING CONDUCTORS SHALL BE NEC TYPE XHHW AND UNLESS OTHERWISE SHOWN SHALL BE SIZED PER NEC TABLE 250.122.
2. GROUND RODS SHALL BE 3/4–INCH DIAMETER BY 10–FEET COPPER CLAD STEEL.
3. ALL BURIED GROUNDING CONNECTIONS OR CONNECTIONS TO BUILDING STEEL SHALL BE BY EXOTHERMIC WELDING PROCESS.

LIGHTING FIXTURES AND POLES:

1. LUMINAIRES SHALL BE AS SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE. LUMINAIRES, MATERIALS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH NEC, UL, ANSI, AND AS SHOWN ON THE DRAWINGS AND AS SPECIFIED OR APPROVED EQUAL.
2. POLES SHALL BE AS SHOWN ON THE DRAWINGS, AND AS SPECIFIED. FINISH SHALL BE AS SPECIFIED ON THE DRAWINGS.
3. THE POLE AND LUMINAIRE SHALL BE DESIGNED FOR WIND LOADING AS REQUIRED BY WIND LOADING CONDITIONS AT PROJECT SITE. THE EFFECTIVE PROJECTED AREA OF THE POLE SHALL BE APPLIED AT THE HEIGHT OF THE POLE BASE, AS SHOWN ON THE DRAWINGS.
4. FURNISH AND INSTALL A FUSE HOLDER AND FUSE IN EACH UNGROUNDED LEG OF THE ELECTRICAL CIRCUIT SUPPLYING THE OUTDOOR LUMINAIRE. THE FUSE HOLDER SHALL BE A 2–POLE FUSE HOLDER WHICH SIMULTANEOUSLY DISCONNECTS BOTH UNGROUNDED CONDUCTORS. EVERY LUMINAIRE SHALL BE SEPARATELY FUSED WITH A WATER–RESISTANT FUSE HOLDER. SIZE THE FUSE FOR THE AMPERAGE OF THE LUMINAIRE. TAP THE CIRCUIT CONDUCTORS WITH A MINIMUM #10 AWG CONDUCTOR TO SERVE THE LUMINAIRE. THE FUSE AND HOLDER SHALL BE ACCESSIBLE THROUGH THE HANDHOLE. PROVIDE SUFFICIENT WIRE TO BRING FUSE HOLDER OUTSIDE OF HANDHOLE.
5. PROVIDE SOLDERLESS TWIST–ON SPRING CONNECTORS (WIRE–NUTS) WITH INSULATING COVERS FOR COPPER WIRE SPLICES AND TAPS. ALL WIRE CONNECTORS USED IN SITE LIGHTING APPLICATIONS SHALL BE SILICONE GEL–FILLED TWIST CONNECTORS OR CONNECTORS DESIGNED FOR DAMP AND WET LOCATIONS. GEL–FILLED TWIST–ON CONNECTORS MAY BE USED FOR COPPER CONDUCTOR SIZES 6 AWG AND SMALLER FOR SITE LIGHTING APPLICATIONS. THE MANUFACTURER'S WIRE FILL CAPACITY MUST BE FOLLOWED.
6. FOUNDATIONS SHALL SUPPORT THE EFFECTIVE PROJECTED AREA OF THE SPECIFIED POLE, LUMINAIRE(S), UNDER WIND CONDITIONS PREVIOUSLY SPECIFIED.
7. FOR POLE FOUNDATIONS EXCAVATE ONLY AS NECESSARY TO PROVIDE SUFFICIENT WORKING CLEARANCE FOR INSTALLATION OF FORMS AND PROPER USE OF TAMPER TO THE FULL DEPTH OF THE EXCAVATION. PREVENT SURFACE WATER FROM FLOWING INTO THE EXCAVATION. THOROUGHLY COMPACT BACKFILL WITH COMPACTING ARRANGED TO PREVENT PRESSURE BETWEEN CONDUCTOR, JACKET, OR SHEATH, AND THE END OF CONDUIT.
8. SET ANCHOR BOLTS ACCORDING TO ANCHOR–BOLT TEMPLATES FURNISHED BY THE POLE MANUFACTURER.
9. INSTALL POLES AS NECESSARY TO PROVIDE A PERMANENT VERTICAL POSITION FOR LUMINAIRE LOCATION.
10. AFTER THE POLES HAVE BEEN INSTALLED, SHIMMED, AND PLUMBED, GROUT THE SPACES BETWEEN THE POLE BASES AND THE CONCRETE BASE WITH NON–SHRINK CONCRETE GROUT MATERIAL. PROVIDE A PLASTIC OR COPPER TUBE, OF NOT LESS THAN 0.375–INCH INSIDE DIAMETER THROUGH THE GROUT, TIGHT TO THE TOP OF THE CONCRETE BASE TO PREVENT MOISTURE WEEPING FROM THE INTERIOR OF THE POLE.
11. GROUND NONCURRENT–CARRYING PARTS OF EQUIPMENT, INCLUDING METAL POLES, LUMINAIRES, MOUNTING ARMS, BRACKETS, AND METALLIC ENCLOSURES, AS SPECIFIED. WHERE COPPER GROUNDING CONDUCTOR IS CONNECTED TO A METAL OTHER THAN COPPER, PROVIDE SPECIALLY–TREATED OR LINED CONNECTORS SUITABLE AND LISTED FOR THIS PURPOSE.
12. BOND THE EQUIPMENT GROUNDING CONDUCTOR TO EACH PULL BOX, JUNCTION BOX, OUTLET BOX, DEVICE BOX, CABINETS, AND OTHER ENCLOSURES THROUGH WHICH THE CONDUCTOR PASSES. PROVIDE LUGS IN EACH BOX AND ENCLOSURE FOR EQUIPMENT GROUNDING CONDUCTOR TERMINATION.
13. WHEN MAKING GROUNDING AND BONDING CONNECTIONS, APPLY A CORROSION INHIBITOR TO ALL CONTACT SURFACES. USE CORROSION INHIBITOR APPROPRIATE FOR PROTECTING A CONNECTION BETWEEN THE METALS USED.
14. FURNISH AND INSTALL A COMPLETE UNDERGROUND SYSTEM OF RACEWAYS, HANDHOLES, ETC. AS SHOWN ON THE DRAWINGS. DIRECT BURIED RACEWAYS FOR SITE LIGHTING SHALL BE POLYVINYL CHLORIDE CONDUIT (PVC) SCHEDULE 80.
15. UNDERGROUND DEPTH OF CONDUIT SHALL BE 30 INCHES MINIMUM TO TOP OF CONDUIT. WHERE INTERFERENCE WITH OTHER UNDERGROUND WORK OCCURS, CONDUITS SHALL PASS BELOW THE OTHER WORK. GRADE CONDUITS UNIFORMLY TO DRAIN TO PULL BOXES. THE MINIMUM CONDUIT SIZE SHALL BE 2 INCH TRADE SIZE FOR UNDERGROUND INSTALLATIONS.
16. SPLICES AT JUNCTION BOXES SHALL BE MADE WITH AN APPROVED, INSULATED, LIVE SPRING TYPE CONNECTOR SUCH AS THOSE MANUFACTURED BY SCOTCHLOCK, 3M OR IDEAL.. USE ERICO PRODUCTS CADWELD CONNECTORS FOR UNDERGROUND SPLICES, TAPS, T AND X CONNECTIONS OF BARE GROUNDING CONDUCTORS, FOR CONNECTIONS TO BUILDING STEEL MEMBERS, WHERE SUCH CONNECTIONS WILL BE INACCESSIBLE, AND WHERE SUCH CONNECTIONS ARE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.

SPENCER J. PERRY, JR. REGISTERED ENGINEER 25 AGRICULTURE COMMERCE NO. 115330 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

ELECTRICAL NOTES AND GENERAL REQUIRMENTS

PROJECT NO. 14915–237520
FILE NAME: E001NFNT.DWG

SHEET NO.
E-1

ISSUED FOR BID

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GENERAL NOTES:

A. DO NOT SCALE THE ELECTRICAL DRAWINGS REFER TO THE CIVIL, DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.

B. ALL WORK SHALL COMPLY WITH NEC AND LOCAL CODES.

C. CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED.

D. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250.122 OF THE NEC (UNLESS OTHERWISE NOTED).

NOTES:

1. FIELD VERIFY INFORMATION SHOWN FOR EXISTING CONDITIONS. INFORMATION WAS PRIMARILY GAINED FROM "SURVEY" DRAWINGS AND/OR LIMITED FIELD INVESTIGATION. BEFORE BID, VISIT THE SITE TO VERIFY EXISTING UNDERGROUND UTILITIES, PIPING, ETC. AND MAKE ALLOWANCES FOR VARIATIONS FROM THAT SHOWN. REROUTE NEW CONDUITS, PULLBOXES, ETC., AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER. ALL WORK SHALL COMPLY WITH NEC AND LOCAL CODES.
2. ALL EXCAVATIONS FOR CONDUITS, HANDHOLES, PULL BOXES, ETC. NEAR EXISTING TREES, PIPING, CONDUIT, EQUIPMENT SHALL BE HAND EXCAVATED AND COORDINATED WITH THE ENGINEER AND OR OWNER. CIRCUIT LAYOUT SHOWN IS A SUGGESTED ROUTE AND IS NOT INTENDED TO SHOW THE NUMBER OF FITTINGS, OR OTHER INSTALLATION DETAILS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL ROUTE OF THE REQUIRED CIRCUIT. FURNISH ALL LABOR AND MATERIALS NECESSARY TO INSTALL AND PLACE IN SATISFACTORY OPERATION ALL POWER, LIGHTING AND OTHER ELECTRICAL SYSTEMS SHOWN.
3. NOT ALL ELECTRICAL PULL BOXES ARE SHOWN. INSTALL ELECTRICAL PULL BOXES AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, ETC. IN COMPLIANCE WITH NEC AND REGULATORY REQUIREMENTS.

N

1" = 30'

15 0 30

FUTURE SOUTHBOUND COROTHERS PARKWAY

FUTURE 12' TRAIL

EQUIPMENT MOUNTING RACK (A ED-2)

EVENT / FOOD TRUCK PANEL (SEE POWER RISER DIAGRAM, SHEET E-3)

L2 E-4 TYPE 'B' LIGHT FIXTURE (TYP)

L2 E-4 TYPE 'A' LIGHT FIXTURE (TYP)

SIDEWALK

CONDUIT STUB MONUMENT (2)-2"C., EMPTY (SEE POWER RISER DIAGRAM, SHEET E-3) (D ED-2)

NEW MILLBANK SWITCHED LOAD CENTER (SEE POWER RISER DIAGRAM, SHEET E-3)

TO NEW POWER COMPANY POLE MOUNTED TRANSFORMER (COORDINATE WITH POWER COMPANY AND OWNER FOR LOCATION)

GROUNDING TRIANGLE (B ED-2)

SEE CITY OF FRANKLIN DRAWING ITS-2 CONDUIT TRENCH BACKFILL (TYP, SHEET ED-1)

SEE CITY OF FRANKLIN DRAWING L-10 STREET LIGHT SMALL PULL BOX INSTALLATION DETAIL (TYP, SHEET ED-1)

SEE CITY OF FRANKLIN DRAWING L-9 STREET LIGHT LARGE PULL BOX INSTALLATION DETAIL (TYP, SHEET ED-1)

PLAN

SPENCER J. PERRY JR. REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 115330 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

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CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

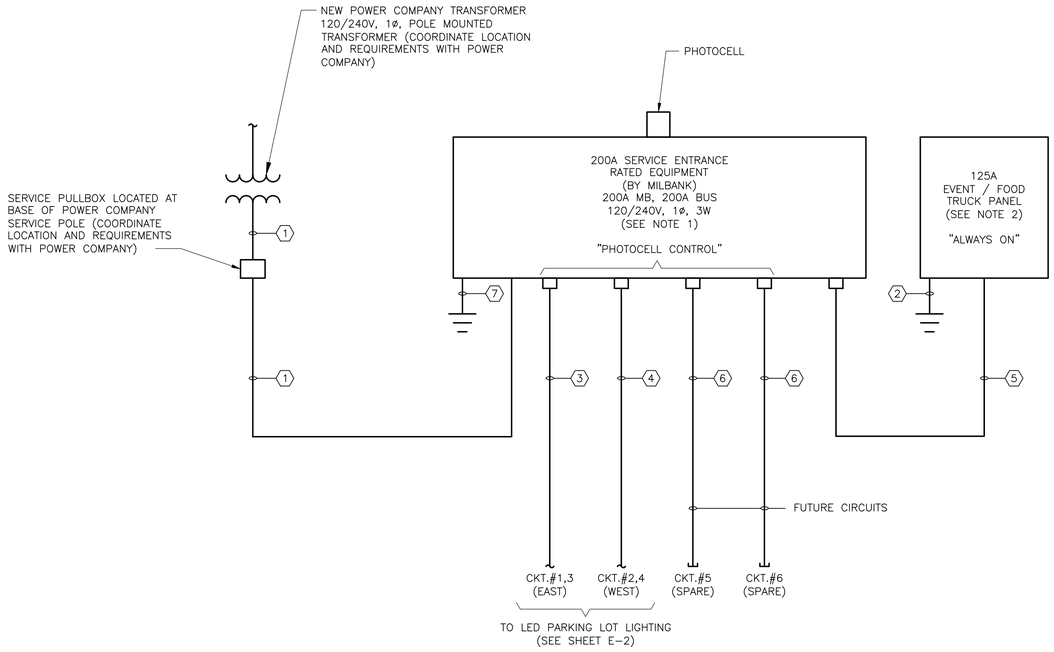
ELECTRICAL SITE PLAN

PROJECT NO. 14915-237520
FILE NAME: E002STPL.DWG

SHEET NO. E-2

ISSUED FOR BID

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OVERALL

POWER RISER DIAGRAM

NTS

200 AMP MAIN BREAKER — **MILBANK PANEL "PHOTOCELL CONTROl** — LOCATION: **MILBANK PEDESTAL**
200 AMP BUS RATING **16** POLES **22** KA SHORT CIRCUIT RATING ENCLOSURE RATING: **NEMA 4X**
120/240 VOLTS **1** PHASE **3** WIRE **60 Hz.** ELECTRONIC GRADE: **NO** MOUNTING: **SURFACE**

CIRCUIT NO.	DESCRIPTION	LOAD KVA LINE 1	LOAD KVA LINE 2	BREAKER AMPS/ POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA LINE 1	LOAD KVA LINE 2	BREAKER AMPS/ POLES	NOTES
1	PARKING LOT LIGHTING	0.53		30 /2	2	2	PARKING LOT LIGHTING	0.53		30 /2	2
3	(WEST)		0.53		5	4	(EAST)		0.53		6
5	SPARE	0		20 /1		6	SPARE	0		20 /1	
7	SPARE		0	20 /1		8	SPARE		0	20 /1	
9	SPARE	0		20 /1		10	SPACE	0		20 /1	
11	SPACE		0	20 /1		12	SPACE		0	20 /1	
13	SPACE			20 /1		14	SPACE			20 /1	
15	SPACE			20 /1		16	SPACE			20 /1	
	TOTAL LINE KVA THIS SIDE	0.53	0.53				TOTAL LINE KVA THIS SIDE	0.53	0.53		
							TOTAL KVA PER LINE	1.06	1.06		
							TOTAL KVA	2.12			

NOTES:	NOTES CONT.:
1. PROVIDE LOCKING HARDWARE	2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)	4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
5. BRANCH CIRCUIT WIRING: 2"C, 2#8 & 1#8G	6. BRANCH CIRCUIT WIRING: 2"C, 2#10 & 1#10G

200 AMP MAIN BREAKER — **MILBANK PANEL "ALWAYS ON"** — LOCATION: **MILBANK PEDESTAL**
200 AMP BUS RATING **10** POLES **22** KA SHORT CIRCUIT RATING ENCLOSURE RATING: **NEMA 4X**
120/240 VOLTS **1** PHASE **3** WIRE **60 Hz.** ELECTRONIC GRADE: **NO** MOUNTING: **SURFACE**

CIRCUIT NO.	DESCRIPTION	LOAD KVA LINE 1	LOAD KVA LINE 2	BREAKER AMPS/ POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA LINE 1	LOAD KVA LINE 2	BREAKER AMPS/ POLES	NOTES
1	EVENT / FOOD TRUCK PANEL	7.8		125 /2	2,5	2	SPACE	0		20 /1	
3			7.8			4	SPACE		0	20 /1	
5	SPARE	0		20 /1		6	SPACE	0		20 /1	
7	SPARE		0	20 /1		8	SPACE		0	20 /1	
9	SPARE	0		20 /1		10	SPACE	0		20 /1	
	TOTAL LINE KVA THIS SIDE	7.8	7.8				TOTAL LINE KVA THIS SIDE	0	0		
							TOTAL KVA PER LINE	7.8	7.8		
							TOTAL KVA	15.6			

NOTES:	NOTES CONT.:
1. PROVIDE LOCKING HARDWARE	2. 5 ma GROUND FAULT INTERRUPTER (GFI) CIRCUIT BREAKER
3. 30 ma GFI CIRCUIT BREAKER FOR EQUIPMENT PROTECTION ONLY (HEAT TRACE)	4. PROVIDE LOCKING HARDWARE & PAINT BREAKER HANDLE RED (FACP)
5. BRANCH CIRCUIT WIRING: 3"C, 3-350kcmil & 1#2G	6.

NOTES:

1. MILLBANK SWITCHED LOAD CENTER COMMERCIAL PEDESTAL.
   - 120/240V, 1 PHASE, 3 WIRE
   - 200A METER SOCKET
   - 200A MAIN BREAKER
   - 22K AIC
   - EMBEDDED IN CONCRETE MOUNTING BASE
   - SEPERATE SEALABLE AND LOCKABLE UTILITY TERMINATION SECTION
   - SEPERATE SEALABLE AND LOCKABLE METERING SECTION
   - SEPERATE SEALABLE AND LOCKABLE CUSTOMER SECTION WITH CONTROL CIRCUITING INCLUDING PHOTOCELL, LEXAN WINDOW, GLARE SHIELD, HAND-OFF-AUTO (HOA) SWITCH, CONTACTOR CONTROLLING 16 CIRCUIT LOAD CENTER,
   - (2) 30A,2P BREAKERS FOR PARKING LOT LIGHTING (4) 20A,1P SPARE CIRCUIT BREAKERS
   - LOAD CENTER FOR "ALWAYS ON" LOADS WITH A 125A,2P BREAKER FOR THE EVENT / FOOD TRUCK PANEL
2. EVENT / FOOD TRUCK PANEL. PROVIDE MILBANK #U5000-XL-75 SURFACE MOUNT POWER OUTLET. UNIT IS RATED 125A WITH THREE INTERNAL BREAKERS AND OUTLETS. BREAKERS ARE 50A,2P, 30A,1P & 20A,1P. OUTLETS ARE 14-50R, TT30R & 5-20R-GFI. UNIT MOUNTS TO A PANEL/EQUIPMENT MOUNTING RACK (SEE DETAIL ON SHEET ED-2).
3. PANELS AND PANEL MOUNTING STRUCTURES SHALL BE PAINTED W/ COLOR SELECTION PER OWNER. COORDINATE WITH OWNER FOR EXACT COLOR SELECTION.

CONDUIT AND WIRE LEGEND
(NUMBERS REFERENCE THIS SHEET ONLY)

NO.	DESCRIPTION
1	PROVIDED BY POWER COMPANY
2	#2/0 GND TO 3/4" DIA X 10' COPPERWELD GROUND RODS
3	2"C., 2#10, 1#10G
4	2"C, 2#8, 1#8G
5	3"C, 3-350kcmil, 1#2G
6	2"C, EMPTY
7	#4/0 GND TO GROUNDING TRIANGLE

SPENCER J. PERRY JR. REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 115338 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

ELECTRICAL RISER DIAGRAM AND PANELBOARD SCHEDULE

PROJECT NO. 14915-237520
FILE NAME: E003NFOL.DWG

SHEET NO.
E-3

ISSUED FOR BID

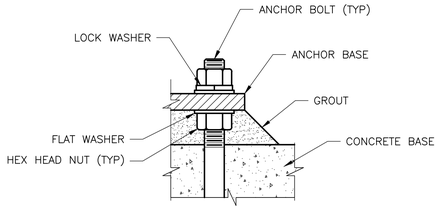
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LIGHTING FIXTURE SCHEDULE

TYPE	WATT	DESCRIPTION	MFR (NO SUBSTITUTIONS)
A	105	MONGOOSE MEDIUM LED OFFSET ROADWAY AND AREA LUMINAIRE; 1,560LUMENS; 4000K, 70 CRI; DIECAST ALUMINUM (<1% COPPER) HOUSING; TOOL-LESS ACCESS WITH STAINLESS STEEL LATCHES; TERMINAL BLOCK IN ARM; REMOVABLE POWER TRAY; STAINLESS-STEEL LATCHES; MOUNTING TO ROUND AND SQUARE POLES (UN); 3G VIBRATION RATED PER ANSI C136.31; ADJUSTABLE FIXTURE TILT FROM 0-45 DEGREES; STANDARD SURGE PROTECTION IS 20KV/10KA; LED LIGHT ENGINES ARE RATED > 100,000 AT 25°C, L70; ELECTRONIC DRIVER HAS AN EXPECTED LIFE OF > 100,000 HOURS AT 25°C; RATED; FOR -40°C / (-40°F) MINIMUM AMBIENT; PROGRAMMABLE ELECTRONIC DRIVER WITH 0-10V CONTROL LEADS; DRIVER VOLTAGE OPTIONS: 120-277V; IP66 RATED BOROSILICATE GLASS OPTICS; IP66 RATED OPTICS; BOROSILICATE GLASS REFRACTOR OPTICS; AREA (AG); UPLIGHT SKIRT (US) WHEN USED WITH REFRACTOR ENSURES ZERO UPLIGHT ABOVE 90°; FIELD ADJUSTABLE OUTPUT; VITRACOAT BLACK FINISH; CSA CERTIFIED TO US AND CANADIAN STANDARDS; SUITABLE FOR OPERATION IN AN AMBIENT TEMPERATURE UP TO 40°C/104°F FOR STANDARD PRODUCT; 5-YEAR LIMITED WARRANTY.	HOLOPHANE LIGHTING: MGLEDM MONGOOSE MEDIUM LED PART NO. MGLEDM-P1-40K-MVOLT-AG-UN-BKSD-AO-NL-US ACCESSORIE: MGLEDM US-BKSD (SEE NOTES 1 & 2)
B	105	MONGOOSE MEDIUM LED OFFSET ROADWAY AND AREA LUMINAIRE; 1,560LUMENS; 4000K, 70 CRI; DIECAST ALUMINUM (<1% COPPER) HOUSING; TOOL-LESS ACCESS WITH STAINLESS STEEL LATCHES; TERMINAL BLOCK IN ARM; REMOVABLE POWER TRAY; STAINLESS-STEEL LATCHES; MOUNTING TO ROUND AND SQUARE POLES (UN); 3G VIBRATION RATED PER ANSI C136.31; ADJUSTABLE FIXTURE TILT FROM 0-45 DEGREES; STANDARD SURGE PROTECTION IS 20KV/10KA; LED LIGHT ENGINES ARE RATED > 100,000 AT 25°C, L70; ELECTRONIC DRIVER HAS AN EXPECTED LIFE OF > 100,000 HOURS AT 25°C; RATED; FOR -40°C / (-40°F) MINIMUM AMBIENT; PROGRAMMABLE ELECTRONIC DRIVER WITH 0-10V CONTROL LEADS; DRIVER VOLTAGE OPTIONS: 120-277V; IP66 RATED BOROSILICATE GLASS OPTICS; IP66 RATED OPTICS; BOROSILICATE GLASS REFRACTOR OPTICS; WIDE ROADWAY (WG); UPLIGHT SKIRT (US) WHEN USED WITH REFRACTOR ENSURES ZERO UPLIGHT ABOVE 90°; FIELD ADJUSTABLE OUTPUT; VITRACOAT BLACK FINISH; CSA CERTIFIED TO US AND CANADIAN STANDARDS; SUITABLE FOR OPERATION IN AN AMBIENT TEMPERATURE UP TO 40°C/104°F FOR STANDARD PRODUCT; 5-YEAR LIMITED WARRANTY.	HOLOPHANE LIGHTING: MGLEDM MONGOOSE MEDIUM LED PART NO. MGLEDM-P1-40K-MVOLT-WG-UN-BKSD-AO-NL-US ACCESSORIE: MGLEDM US-BKSD (SEE NOTES 1 & 2)

NOTES:

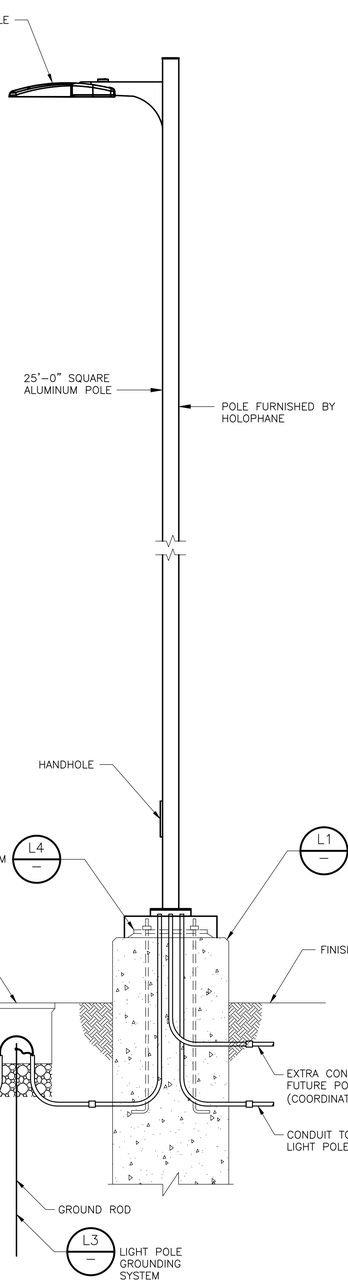
1. FIELD ADJUSTABLE MODULE. THE FIELD ADJUSTABLE OUTPUT (FAO) MODULE IS AN ONBOARD DEVICE THAT ADJUSTS THE LIGHT OUTPUT AND INPUT WATTAGE TO MEET SITE SPECIFIC REQUIREMENTS, ALLOWING A SINGLE FIXTURE CONFIGURATION TO BE FLEXIBLY APPLIED.
2. PROVIDE A 25'-0" HIGH, SQUARE ALUMINUM POLE. POLE SHALL HAVE A POWDER COAT TEXTURED BLACK FINISH AND MEET WIND LOADS AND GUST FACTOR FOR RELATED PROJECT LOCATION. POLE SHALL BE MOUNTED TO A STANDARD LIGHTING BASE PER DETAIL L1. SUITABLE ANCHOR BOLTS, BASE COVER, GROUND LUG, AND VIBRATION PAD FURNISHED WITH POLE. POLE SHALL BE MANUFACTURED BY HOLOPHANE.

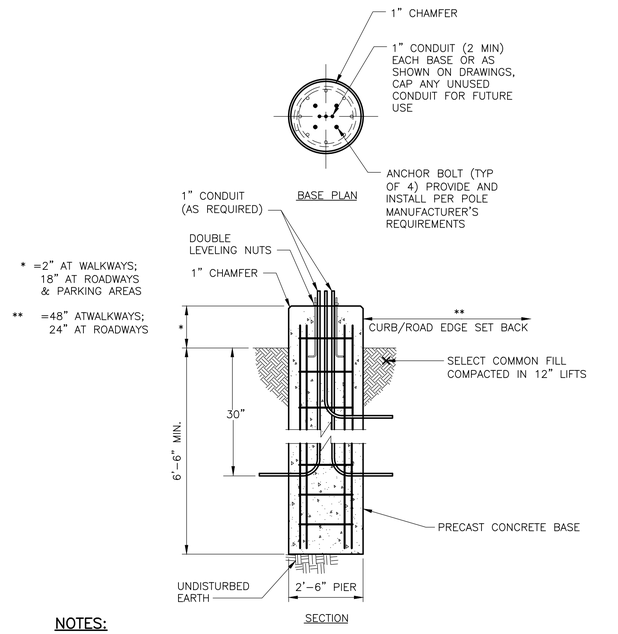


LIGHT POLE LEVELING SYSTEM

DETAIL L4 / –

NTS





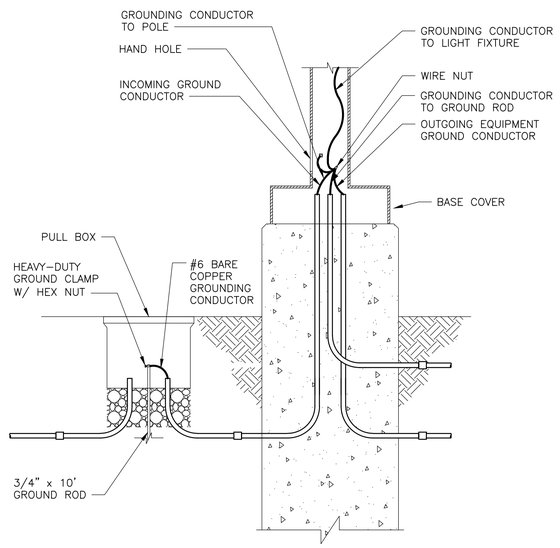
NOTES:

1. LIGHT POLE FOUNDATION SHALL BE A PRECAST CONCRETE FOUNDATION DESIGNED BY A TENNESSEE REGISTERED PROFESSIONAL ENGINEER ENGAGED AT THE EXPENSE OF THE CONTRACTOR. DESIGN SPEED SHALL BE IN ACCORDANCE WITH ASCE 7-10 FOR THE PROJECT SPECIFIC SITE. CONTRACTOR SHALL CONFIRM SOIL CONDITIONS WITH A TENNESSEE REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER. DESIGN SHALL BE SIGNED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF TENNESSEE.
2. EMBEDMENT DEPTH AS REQUIRED PER DELEGATE ENGINEER. MIN. EMBEDMENT IN CLAYEY SOILS 6'-6".
3. REFER TO SHEET E-1 FOR MATERIALS AND ADDITIONAL REQUIREMENTS.

STANDARD LIGHTING BASE

DETAIL L1 / –

NTS



LIGHT POLE GROUNDING SYSTEM

DETAIL L3 / –

NTS

POLE MOUNTED LUMINAIRE

DETAIL L2 / –

NTS

SPENCER J. PERRY, JR. REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 115139 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

CDM Smith
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Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

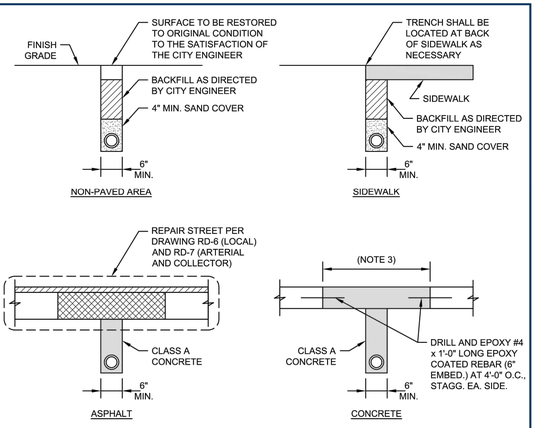
LIGHTING FIXTURE SCHEDULE AND DETAILS

PROJECT NO. 14915-237520
FILE NAME: E004NFLF.DWG

SHEET NO.
E-4

ISSUED FOR BID

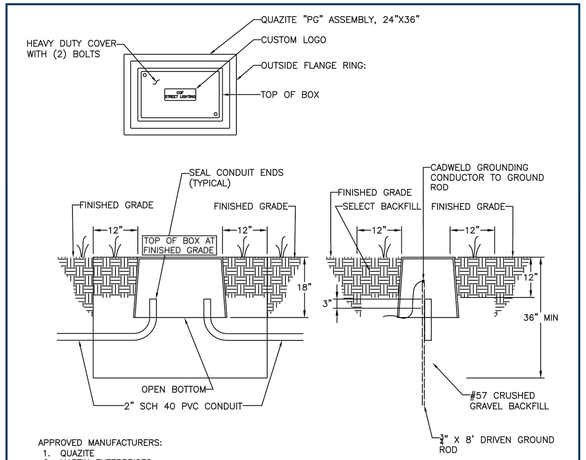
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NOTES

1. CONTRACTOR SHALL COORD. TRENCH, BACKFILL, AND PAVEMENT INSPECTIONS WITH THE COF STREET DEPARTMENT.
2. ALL CUTS IN PUBLIC STREETS REQUIRE A STREET CROSSING PERMIT AND APPROVED TRAFFIC CONTROL PLAN.
3. SAWCUT EXISTING PAVEMENTS, BASES, CURB AND GUTTER, AND SIDEWALKS (CUT JOINT TO JOINT) IN NEAT LINES.
4. TRENCH DEPTH SHALL BE 2'-0" MIN. SHOULD THE COF STREET DEPARTMENT ALLOW A LESSER DEPTH DUE TO FIELD CONDITIONS, THE CONDUIT SHALL BE CONCRETE-ENCASED IN ALL APPLICATIONS.
5. CONDUIT, PULL BOXES, AND POLES ARE TO BE INSTALLED AND LEVEL TO FINAL GRADE PRIOR TO POURING SIDEWALKS.
6. WARNING TAPE: TYPE 2 TAPE INSTALLED AT 12" BELOW FINISH GRADE (ALL TRENCHES)
7. TRACER WIRE: COPPER CLAD, 12 GA. MIN. WITH COLOR-CODED 30 MIL. HDPE INSULATED JACKET (ALL TRENCHES)
8. CONCRETE: CLASS A (3,000 PSI, 6% AIR)
9. CONDUIT:
   - A. SEE PLANS FOR NUMBER AND SIZE.
   - B. ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
   - C. ALL CONDUIT SHALL USE LONG SWEEP RADII (MINIMUM 6" RADIUS).
   - D. PROVIDE JET LINE OR EQUAL PULL STRING.

HISTORIC FRANKLIN TENNESSEE	**CONDUIT TRENCH BACKFILL**		DWG. NO. **ITS-2**
CITY OF FRANKLIN NOT TO SCALE	CITY ENGINEER: Paul P Holzen	DATE: 7/1/2020	

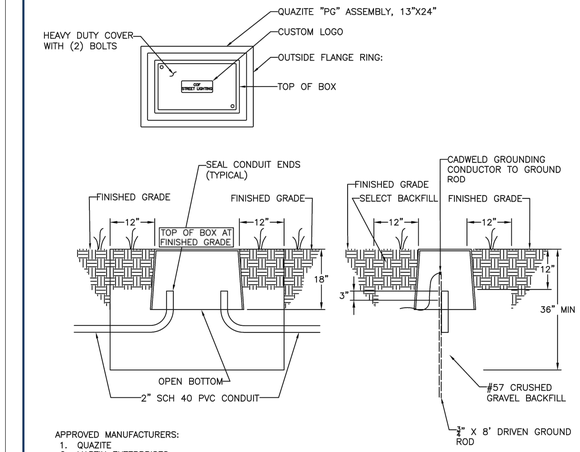


APPROVED MANUFACTURERS:
1. QUAZITE
2. MARTIN ENTERPRISES
3. ARMORCAST

NOTES:
1) EXCAVATE AND BACKFILL WITH MINIMUM EIGHTEEN INCH (18") THICK LAYER OF #57 CRUSHED GRAVEL.
2) INSTALL BOX AND BACKFILL TO WITHIN TWELVE INCHES (12") OF FINISHED GRADE WITH #57 CRUSHED GRAVEL.
3) BACKFILL INSIDE BOX WITHIN THREE INCHES (3") OF THE TOP OF THE CONDUIT WITH #57 CRUSHED GRAVEL.
4) THE TOP OF THE PULL-BOX MUST BE FLUSH WITH FINISHED GRADE.
5) PULL-BOX TO BE FURNISHED AND INSTALLED BY CUSTOMER.
6) SCHEDULE INSPECTION OF PULL-BOX INSTALLATION WITH CITY OF FRANKLIN STREET DEPARTMENT A MINIMUM OF THREE BUSINESS DAYS PRIOR TO INSPECTION.
7) CITY OF FRANKLIN RESERVES THE RIGHT TO REQUIRE A LARGER PULL-BOX. IF LARGER PULL-BOX IS REQUIRED, THE CITY WILL ISSUE SPECIFICATIONS AND INSTALLATION REQUIREMENTS FOR THE LARGER PULL-BOX.
8) PULL-BOXES ARE REQUIRED TO BE INSTALLED AT THE MIDPOINT OF ANY CIRCUIT RUN THAT EXCEED 300 FEET
9) PULL-BOXES ARE NOT TO BE INSTALLED IN THE PATH OF VEHICLAR TRAVEL.
10) PULL-BOXES SHALL BE UL LISTED.

N.T.S

HISTORIC FRANKLIN TENNESSEE	**STREET LIGHT LARGE PULL BOX INSTALLATION DETAIL**		DWG. NO. **L-9**
CITY OF FRANKLIN NOT TO SCALE	CITY ENGINEER: Paul P Holzen	DATE: 1/1/2020	



APPROVED MANUFACTURERS:
1. QUAZITE
2. MARTIN ENTERPRISES
3. ARMORCAST

NOTES:
1) EXCAVATE AND BACKFILL WITH MINIMUM EIGHTEEN INCH (18") THICK LAYER OF #57 CRUSHED GRAVEL.
2) INSTALL BOX AND BACKFILL TO WITHIN TWELVE INCHES (12") OF FINISHED GRADE WITH #57 CRUSHED GRAVEL.
3) BACKFILL INSIDE BOX WITHIN THREE INCHES (3") OF THE TOP OF THE CONDUIT WITH #57 CRUSHED GRAVEL.
4) THE TOP OF THE PULL-BOX MUST BE FLUSH WITH FINISHED GRADE.
5) PULL-BOX TO BE FURNISHED AND INSTALLED BY CUSTOMER.
6) SCHEDULE INSPECTION OF PULL-BOX INSTALLATION WITH CITY OF FRANKLIN STREET DEPARTMENT A MINIMUM OF THREE BUSINESS DAYS PRIOR TO INSPECTION.
7) CITY OF FRANKLIN RESERVES THE RIGHT TO REQUIRE A LARGER PULL-BOX. IF LARGER PULL-BOX IS REQUIRED, THE CITY WILL ISSUE SPECIFICATIONS AND INSTALLATION REQUIREMENTS FOR THE LARGER PULL-BOX.
8) PULL-BOXES ARE REQUIRED TO BE INSTALLED AT THE MIDPOINT OF ANY CIRCUIT RUN THAT EXCEED 300 FEET
9) PULL-BOXES ARE NOT TO BE INSTALLED IN THE PATH OF VEHICLAR TRAVEL
10) PULL-BOXES SHALL BE UL LISTED.

N.T.S

HISTORIC FRANKLIN TENNESSEE	**STREET LIGHT SMALL PULL BOX INSTALLATION DETAIL**		DWG. NO. **L-10**
CITY OF FRANKLIN NOT TO SCALE	CITY ENGINEER: Paul P Holzen	DATE: 1/1/2020	

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

CDM Smith
Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

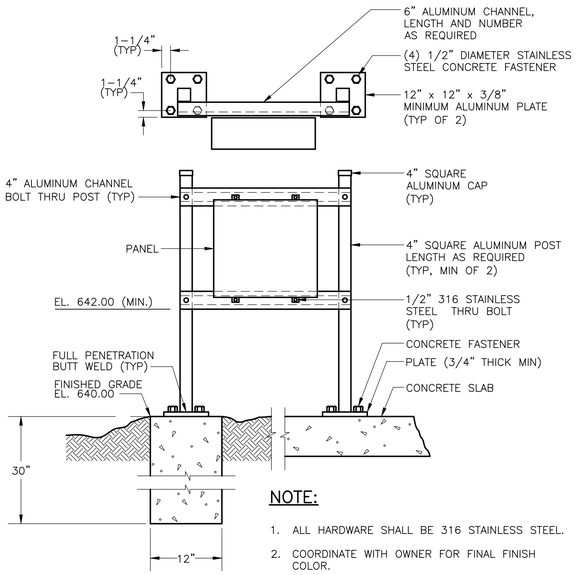
CITY OF FRANKLIN (COF)
STANDARD DETAILS

PROJECT NO. 14915-237520
FILE NAME: ED01NFDT.DWG

SHEET NO.
ED-1

ISSUED FOR BID

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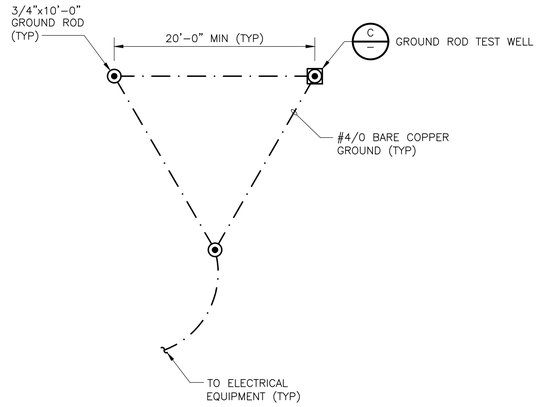


NOTE:

1. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
2. COORDINATE WITH OWNER FOR FINAL FINISH COLOR.

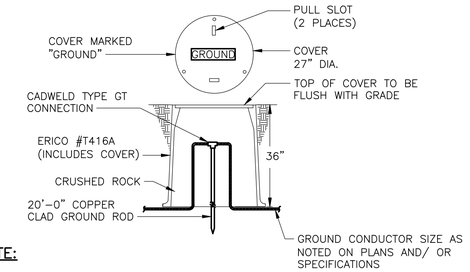
EQUIPMENT MOUNTING RACK

DETAIL A – NTS



GROUNDING TRIANGLE

DETAIL B – NTS

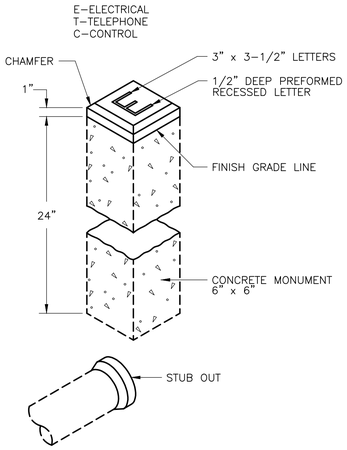


NOTE:

1. TO IMPROVE SYSTEM RESISTANCE, ERICO GEM MAY BE USED AS A BACKFILL MATERIAL IN AN AUGERED HOLE.

GROUND ROD TEST WELL

DETAIL C – NTS



CONDUIT STUB MONUMENT

DETAIL D – NTS

SPENCER J. PERRY JR. REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 115350 STATE OF TENNESSEE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: R. CARTER
DRAWN BY: R. CARTER
SHEET CHK'D BY: S. PERRY
CROSS CHK'D BY: P. LEFAVE
APPROVED BY: S. PERRY
DATE: APRIL 2022

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Camp Dresser McKee & Smith
210 25th Avenue North, Suite 1102
Nashville, Tennessee 37203
Tel: (615) 320-3161

CITY OF FRANKLIN, TENNESSEE

ROBINSON LAKE, SITE PLAN (DAM REHABILITATION)

ELECTRICAL DETAILS

PROJECT NO. 14915-237520
FILE NAME: ED02NFDT.DWG

SHEET NO.
ED-2

ISSUED FOR BID

XREFs: [CDMS_2436] Images: []
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City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03588

DATE: September 9, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Joseph Bryan, Principal Planner

SUBJECT:

The Factory At Franklin PUD Subdivision, Site Plan, Revision 1, Reconfiguring Parking Layout And Adding Open Space Lots, On 20.06 Acres, Located At 230 Franklin Road. (CONSENT AGENDA)

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7941
Applicant: Mary McGowan, Kimley-Horn
Owner: Factory Partners, LLC, Benton Smothers, Rep.

BACKGROUND/STAFF COMMENTS:
The purpose of this site plan is to reconfigure the parking layout and add open space lots for outdoor eating areas for the Factory at Franklin PUD Subdivision. The subject property consists of 20.06 acres, and is located at 230 Franklin Road. The original concept plan for The Factory was approved in June 1997 with Ordinance 97-32 and the most recent revision to the development plan was approved in May of 2022. Note that the alterations with this site plan are not attributed to Revision 2 of the Factory at Franklin PUD Subdivision (COF 7891) that went to the FMPC on August 25th and is currently tracking through the Board of Mayor and Aldermen. Because this property is located within the Historic Preservation Overlay (HPO), site plans must be reviewed and approved by the Franklin Municipal Planning Commission.

PROCEDURAL REQUIREMENTS:
1. The applicant shall upload the corrected plan to the online plan review website (https://franklin.contractorsplanroom.com/secure/). All revisions to the approved plans shall be "clouded." With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.
2. Once the corrected site plan has been approved, one (1) full-size and one (1) half-sized copy of the final approved landscape plans shall be submitted to the Department of Building and Neighborhood Services for future landscape inspection purposes.
3. Once the project has obtained Site Plan approval, the applicant will be notified by COF Engineering Department with instructions regarding the status of their digitally stamped construction

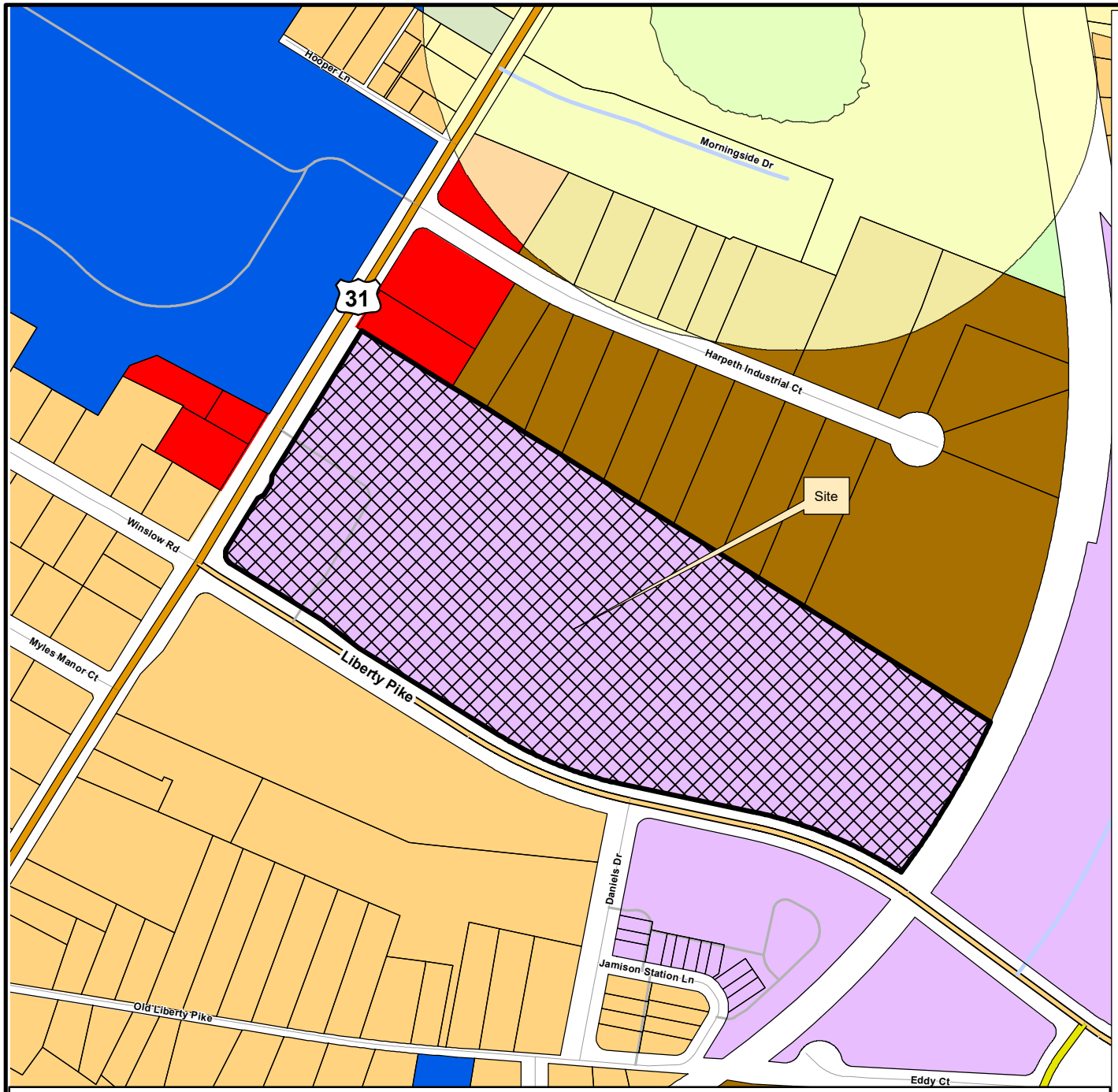
plans.
4. The applicant shall upload complete building plans, including the approved, revised site plans, to the City's IDT site for Building and Neighborhood Services Department review and approval prior to the issuance of a building permit.
5. Prior to the start of any excavation work, the developer and/or contractor shall notify AT&T and Comcast.
6. The City’s project identification number shall be included in all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends approval of the revised site plan for the Factory at Franklin PUD Subdivision with conditions.



THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN, REVISION 1

Project Information
Existing Zoning: PD
Proposed Zoning: PD 0.2/263,100
Overlay Districts: HPO, CFO
Site Acreage: 20.06 acres

Zoning Districts

- The Factory At Franklin PUD

Overlays

- Hillside/Hillcrest Overlay
- 500 Ft Buffer of Hillside
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
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N

0 250 500 1,000
Feet

COF no: 7941

CONDITIONS OF APPROVAL:

Open Issues: 22 These issues are currently being filtered

Engineering - Site Plan Checklist

General Issues

19. Final Plat

joe.marlo@franklintn.gov *Comment to remain open as a Condition of Approval, but **does not hinder approval of the Site Plan.***

Prior to issuance of a Grading Permit, a revised final plat shall be approved and recorded to dedicate right-of-way, modify/abandon existing easements on the property and create new easements as necessary for the proposed site development. The final plat shall reference the Instrument Number where the Long Term Maintenance Plan (LTMP) agreement and attachments are recorded.

28. Cross Access

lance.fittro@franklintn.gov Applicant shall provide a cross access easement from right-of-way to the adjacent properties to the north. *[COF Zoning Ordinance 9.5.3]*

34. J. Stormwater Managment Plan

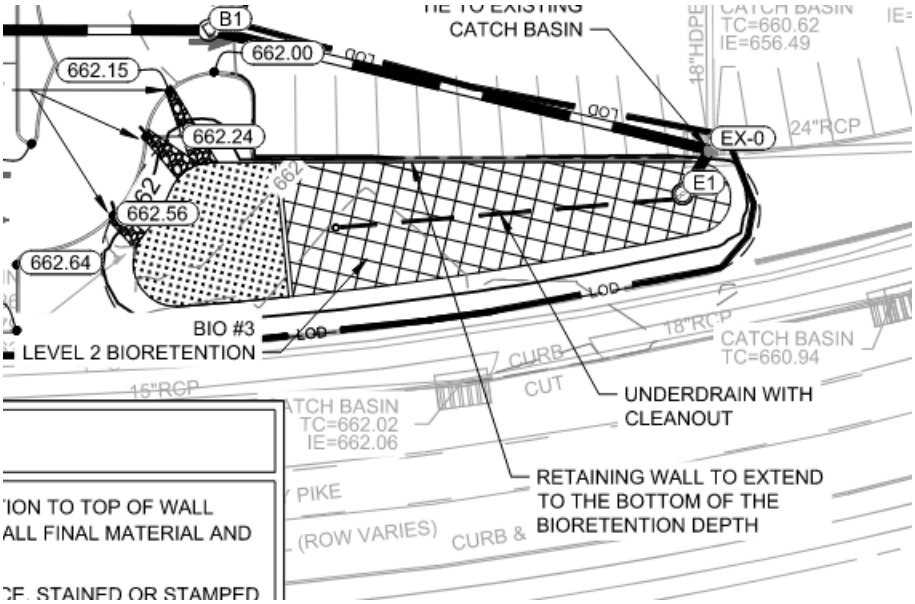
lance.fittro@franklintn.gov This is an advisory comment which **does not hinder approval of the site plan**:

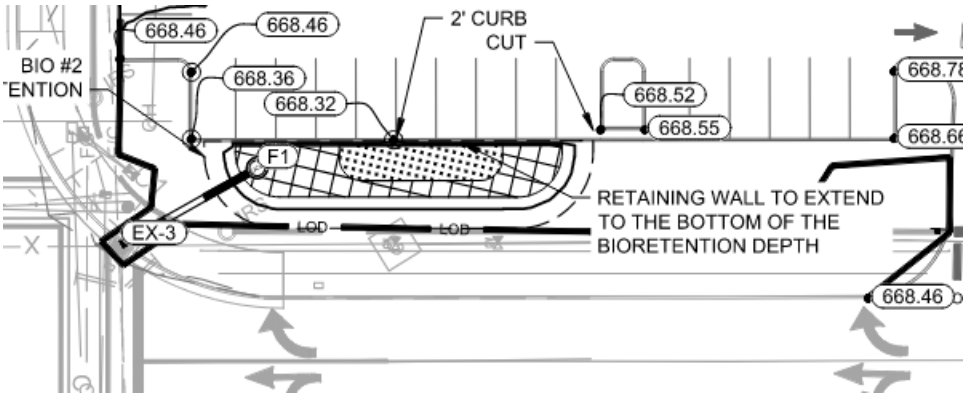
Due to the redevelopment credit being requested, which is based on the impervious coverage for the entire development, and the partial redevelopment and treatment of the site proposed with the current plan, applicant shall be aware that comprehensive analysis of future site plans for stormwater quality shall be provided, to include stormwater management features and development areas associated with this site plan, as well as future development areas. Upon cumulative disturbance of more than 50% of the total site area, stormwater quality treatment for the entire site shall be provided with the site plan which reaches that threshold.

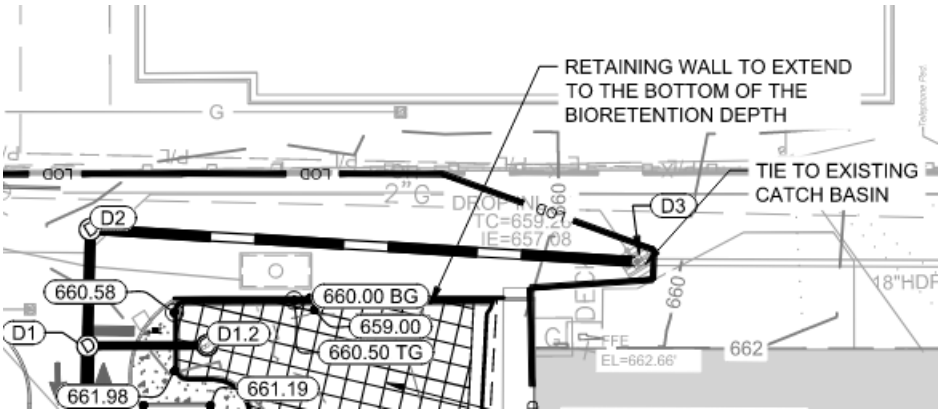
Offsetting of stormwater treatment for the current development area to provide treatment in other portions of the site which may be redeveloped in the future will not be approved.

36. J. Stormwater Managment Plan

lance.fittro@franklintn.gov **This is an advisory comment which does not hinder approval of the site plan:** A wall permit is required to construct the retaining walls shown on the plans, including the subgrade walls adjacent to stormwater management features. This may be submitted as one permit that includes designs for all walls.







46. T. Stormwater Management Report

lance.fittro@franklintn.gov This comment to remain open as a reminder to staff and **does not hinder approval of the site plan**:

The water quality spreadsheet tool specific to this project site and which reflects the approved Redevelopment Rv Reduction credit has been uploaded to the root folder for this project. This project-specific water quality spreadsheet tool is to be used for the stormwater quality analysis for this and future development on the site.

The Factory At Franklin PUD - Green Infrastructure Spreadsheet v2021.0 (Redevelopment).xlsx 9/12/22 8.5x11 0.08 MB 1 [ver.1]

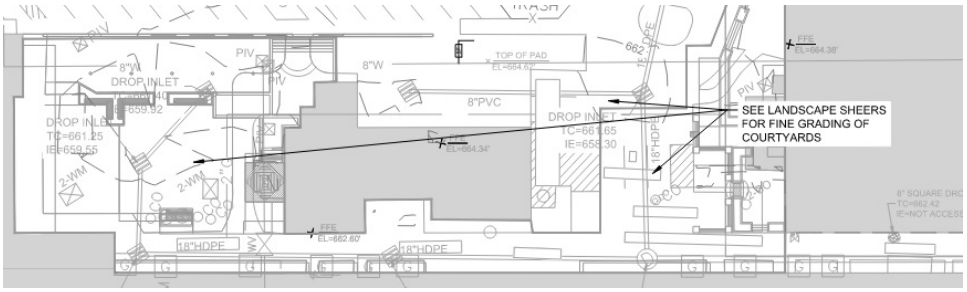
51. Street Cuts

joe.marlo@franklintn.gov Where open-cut of public streets is proposed, the applicant shall provide the following information on the drawings:

2. Hatch the relevant mill/overlay areas on the drawings, including at Franklin Road in the case that the storm infrastructure is not installed with the current road project. (Notes can be added accordingly if the storm infrastructure is installed with the current road project)

63. I. Grading Plan

lance.fittro@franklintn.gov This is a new comment due to the note below being added with this submittal: Because the courtyard area is not accounted for in the site disturbance or stormwater calculations, and no landscape sheets are provided which reflect the courtyard area development, applicant shall remove the note below to avoid confusion as to what work is permitted with the site plan approval:



[Edited By Lance Fittro]

Performance Agreement and Surety

General Issues

40. Engineering Sureties

kevin.long@franklintn.gov

Applicant shall post sureties in the following amounts:	
I. City Water:	**$4,000**
II. City Sewer:	$ -
III. Public Sidewalk:	$ -
IV. City Streets:	$ -
V. Private Streets (Including Shared Access):	**$17,000**
VI. Street Access (1)	**$20,000**
VII. Temporary Turnarounds	$ -
VIII. Traffic Signals:	$ -
IX. ITS Elements:	$ -
X. Stormwater Drainage:	**$11,000**
XI. Green Infrastructure:	**$655,000**

(1) Includes the access on Franklin Road, as TDOT has ceded permitting in this case to the City of Franklin for that access location.

NOTE: Performance Calculations - Sureties are calculated from the Site Plan and approved during the Site Plan approval process. Sureties shall be posted prior to obtaining a building permit. Where a building permit is not expected, sureties shall be posted prior to obtaining a grading permit. If a Final Plat is approved at any time during the development process, all sureties will be transferred to said plat as a Condition of Approval. Sureties posted should include Public Infrastructure, Erosion Control, Street Access, and all necessary repairs for work completed within the public right-of-way. ***Any driveway or related encroachment on City of Franklin right-of-way, including the modification, revision, or change in use of any existing driveway facilities, shall require a Street Access Surety.*** *A 10% contingency is applied to each surety category. EPSC is based on a flat $7,500 per acre of disturbed area and is distributed proportionally across all surety categories.*

Line Items (For Reference Only:)		
12" MAIN	30	LF
CONCRETE DRIVEWAY - COMMERCIAL	888	SF
CONCRETE CURB	56	LF
SIGNS/STRIPING/ETC	0.05	OF TOTAL
NEW OR MODIFIED STREET CONNECTIONS	1	EA
18" RCP CULVERT	62	LF
36" RCP CULVERT	30	LF
NON-STANDARD RCP (Elliptical, smaller than 15", etc., indicate dimension in description)	96	LF
SINGLE INLET/JUNCTION BOX	1	EA
SPECIAL ITEM 01 (UNDERGROUND DETENTION, ETC.)	1	EA
BIORETENTION/RAIN GARDEN (Water Quality Volume)	14018	CY

[Edited By Kevin Long]

61. Landscape

jason.arnold@franklintn.gov Landscape surety $52,000

Planning

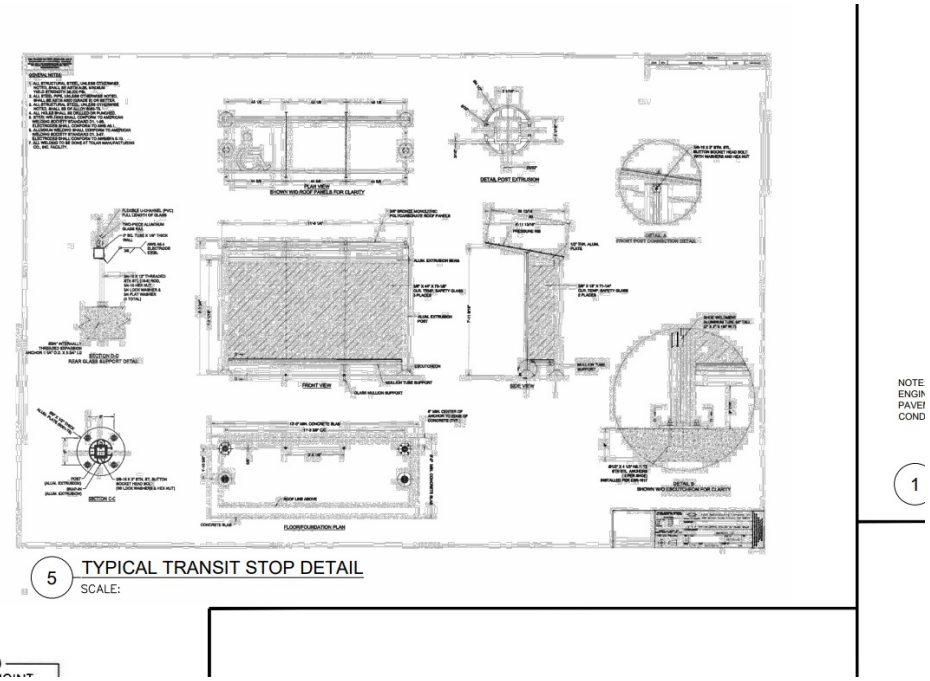
General Issues

21. Project name

joseph.bryan@franklintn.gov Comment not fully addressed. Applicant shall add "Revision 1" to all sheets, including pages 19-32.

31. Transit Infrastructure

joseph.bryan@franklintn.gov Transit detail is illegible. Applicant shall provide a clear detail of stop and shelter with plan set.



53. Project number

joseph.bryan@franklintn.gov Comment not addresses. Applicant shall add the project number to sheets 19-32.

Planning (Landscape)

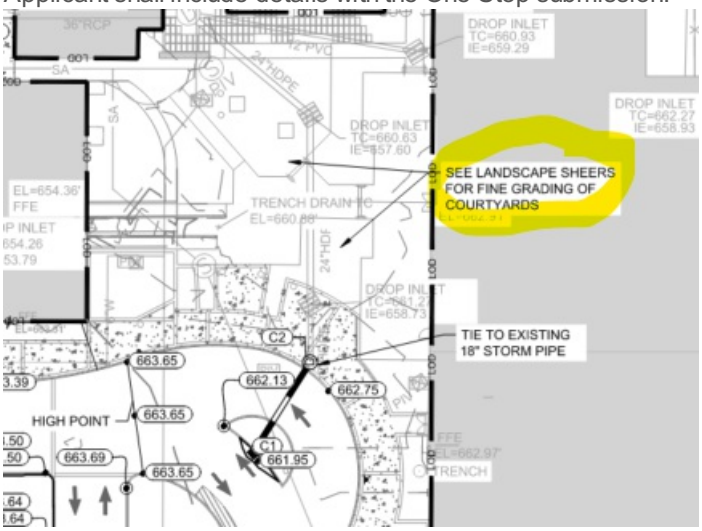
General Issues

38. Magnolias

jason.arnold@franklintn.gov Comment to not hinder approval, provided only as a reminder.
Please be advised, transplanting of trees needs to be done during dormancy. Also, if the trees die prior to the release of the landscape bond from maintenance, the magnolias will have to be replaced.

60. Missing Info

jason.arnold@franklintn.gov From Sheet C3.0, Landscape Sheets do not include details or grading information. Applicant shall include details with the One Stop submission.



Stormwater

General Issues

1. SWPPP & NOI (NPDES)

Doug.Noonan@franklintn.gov

- Ensure all outfalls are identified on all EPSC plans. No outfalls identified on the initial EPSC sheet.
- Outfall 1 is incorrectly called out.

10. Stormwater Management Plan

ellen.moore@franklintn.gov Pretreatment cell depth is still shown on the details as 6 inches (enhanced check dam height above final grade) and calculations show more than 6 inches of depth in 2 of the bioretention areas. Underdrains shall be shown within bioretention areas #1 and #2. [Edited By Ellen Moore]

18. Drainage

ellen.moore@franklintn.gov Downstream structures at Harlinsdale Farm shall be included within the downstream analysis.

32. Bioretention

jeff.willoughby@franklintn.gov PIDIST is still on sheet L2.5. Please substitute.

37	IG	Ilex glabra 'Shamrock'	Shamrock Inkberry	5'		EVERGREEN	AS SHOWN
16	IV	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetspire	3 GAL		DECIDUOUS	5' O.C.
10	DP	Distylium 'PIIDIST-I' PP #24,410	Emerald Heights® Evergreen Distylium		30"	EVERGREEN	AS SHOWN
27	PL	Prunus Laurocerasus 'Otto Luyken'	Otto Luyken Laurel		30"	EVERGREEN	AS SHOWN
GRASSES							

42. EPSC

Doug.Noonan@franklintn.gov Provide a detail for filter ring. Ensure it matches or is equivalent to TDEC's TNESC Handbook.

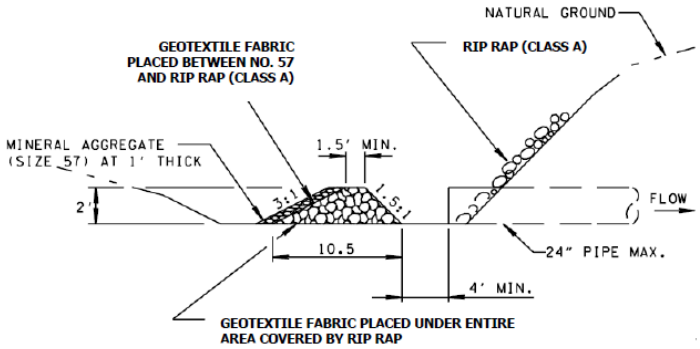


Figure 7.30-1 Filter Ring Detail (Source: TDOT Standard Drawing)

43. SWPPP & NOI (NPDES)

Doug.Noonan@franklintn.gov QLP fee of $1,000 is due prior to permitting. This comment shall remain open as a reminder to applicant/staff.

- Checks shall be made out to City of Franklin, submitted to the City of Franklin Engineering Department, and reference the COF# & QLP-NOI fee.
- Fee may be paid over the phone with a credit card by calling our BNS Department (615-794-7012).

59. Show all work

Doug.Noonan@franklintn.gov Ensure the EPSC plans include the work across Franklin Road. The plans are clipped and this area is not shown.

Water/Sewer

General Issues

55. Water

ben.mcneil@franklintn.gov ***This comment is for staff use only***

The 15' of 12" waterline to be relocated under proposed storm must receive the state approval for the relocation. 15' is the max length to be stamped with this plan.

SITE PLAN

THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION 1)

FRANKLIN, TENNESSEE

AUGUST 8, 2022; SEPTEMBER 1, 2022

COF PROJECT # 7941

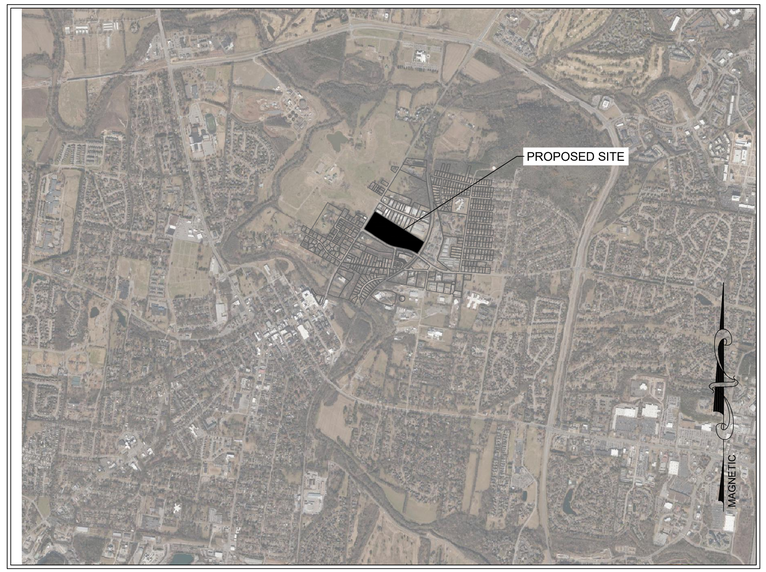
SITE DATA TABLE	
PROJECT NAME:	FRANKLIN FACTORY PARKING REDEVELOPMENT PRE-APPLICATION SITE PLAN
COF PROJECT #:	7941
MAP:	MAP # 063M
PARCEL #:	063M D 02100
ADDRESS:	230 FRANKLIN RD
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	229,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
EXISTING PARKING ACROSS SITE:	917 SPACES
UNCHANGED PARKING:	672 SPACES
NEW PROPOSED PARKING:	251 SPACES
TOTAL POST REDEVELOPMENT PARKING:	923 SPACES

NOTES:

1. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS, SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
2. THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF PLANNING COMMISSION. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER RELEVANT DEPARTMENT SUPERINTENDENT OR THE PLANNING COMMISSION. IN ADDITION, THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FLIPZONE 4100 AND NAD 83 DATUM.
3. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PERFORMED BY S&ME DATED, 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

STORMWATER ASSURANCE

ALL REGIONAL STORMWATER QUALITY INFRASTRUCTURE SHALL BE INSTALLED AND FUNCTIONING PROPERTY PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR ANY DEVELOPMENTS USING THEM.



VICINITY MAP
1" = 2000'

PREPARED BY:

Kimley»Horn

4031 Aspen Grove Drive Suite 200, Franklin, TN 37067
Main: 615.564.2701 | www.kimley-horn.com

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Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C0.2	CITY OF FRANKLIN NOTES
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C1.1	FRANKLIN ROAD ENLARGEMENT
C2.0	OVERALL SITE PLAN
C2.1	SITE DETAILS
C3.0	OVERALL GRADING & DRAINAGE PLAN
C3.1	EXISTING IMPERVIOUS AREA
C3.1A	WATER QUALITY MAP
C3.2	INITIAL EPSC - PRE-CONSTRUCTION PLAN
C3.3	INTERIM EPSC - CONSTRUCTION PLAN
C3.4	FINAL EPSC - WATER QUALITY
C3.5	GRADING DRAINAGE AND EPSC DETAILS
C3.6	GRADING DRAINAGE DETAILS
C4.1	ENLARGED ROW & ACCESS PLAN - FIRE
C4.2	ENLARGED ROW & ACCESS PLAN - GARBAGE
C5.0	WATER PLAN AND PROFILE
L1.0	TREE PRESERVATION SHEET
L2.0	OVERALL LANDSCAPE PLAN
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L2.2	LANDSCAPE PLAN ENLARGEMENT
L2.3	LANDSCAPE PLAN ENLARGEMENT
L2.4	BORETENTION ENLARGEMENT
L2.5	BIORETENTION ENLARGEMENT
L3.0	LANDSCAPE DETAILS & NOTES
	PHOTOMETRIC STUDY
	PHOTOMETRIC STUDY

AGENCY CONTACTS

WATER
CITY OF FRANKLIN
124 LUMBER DRIVE
A: FRANKLIN, TN 37064
(615) 550-6855
CONTACT: BEN MCNEIL

GAS
ATMOS ENERGY
200 NOAH DRIVE
FRANKLIN, TN 37064
PHONE: (615) 794-2596
CONTACT: RON MYATT

CITY OF FRANKLIN
109 3rd AVENUE SOUTH, FRANKLIN, TN 37067
CONTACT:
ENGINEERING : AMY DIAZ-BARRIGA 615-550-6977
ENGINEERING : LANCE FITTRO 615-550-6676

ELECTRIC
MIDDLE TN ELECTRIC
2156 EDWARD CURD LN.
FRANKLIN, TN 37067
PHONE: (615) 595-4693
CONTACT: DALE HOOD

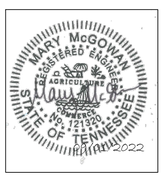
SANITARY SEWER
CITY OF FRANKLIN
124 LUMBER DRIVE
FRANKLIN, TN 37064
PHONE: (615)550-6855
CONTACT: UTILITY INSPECTOR

ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
4031 ASPEN GROVE DRIVE SUITE 200
FRANKLIN, TENNESSEE 37067
PHONE: (615) 564-2701
CONTACT: MARY MCGOWAN, P.E.

CABLE
COMCAST
2501 McGAVOCK PK,
SUITE 1206
NASHVILLE, TN 37214
(615)440-2920
CONTACT: PAULA BROOKS

TELEPHONE
AT&T
(615) 595-7816
CONTACT: DAVID TUTTEROW

SURVEYOR
S&ME
658 GRASSMERE PARK DRIVE
NASHVILLE, TN 37211
A: (931) 385-4144
CONTACT: JEFFREY KIMBRO



Tennessee 811

PLAN REVISIONS

REVISION NO.	DATE	REMARKS

FILE NUMBER	SHEET NUMBER	TOTAL SHEETS
017010010	C0.0	28

Drawing name: K:\FRA_LDEV\017010010 - franklin factory\4-CADD\plansheets\site plan\C0.0 COVER SHEET.dwg C0.0 COVER SHEET Sep 01, 2022 2:54pm by: Shawn.Schaub

CONTRACTOR RESPONSIBILITIES

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

   A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS, CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF CONSTRUCTION.

   B. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.

   C. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

DURING CONSTRUCTION:

   A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

   B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.

   C. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

   D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING MUNICIPALITIES.

   E. CONSTRUCTION SHALL MEET ALL STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT (VERSION 2010).

   F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

   G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION, AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

   H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR TENNESSEE DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.

   I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, METRO NASHVILLE STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.

   J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.

   K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.

   L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.

   M. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.

   N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

   O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

   P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

   Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDINGS THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE.

   R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.

   S. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.

   T. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

   U. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.

   V. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.

ADA COMPLIANCE:

A. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.

B. PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES.

C. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

D. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

E. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

F. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

GENERAL NOTES:

1. THE PROJECT SITE IS SHOWN ON WILLIAMSON COUNTY, TAX MAP # 062K, PARCEL D 02209 .
2. BASE INFORMATION WAS TAKEN FROM A COMBINATION OF AN ALTA SURVEY PREPARED BY S&ME, DATED 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. THE INFORMATION PROVIDED SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
3. EXISTING PAVEMENT OF PUBLIC ROADWAYS SHALL BE PATCHED IN ACCORDANCE WITH LOCAL AGENCY STANDARDS WHEREVER UTILITY INSTALLATION REQUIRES REMOVAL OF THE EXISTING PAVEMENT.
4. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. SLIGHT FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY.
5. WHERE NOT SPECIFIED, THE CONTRACTOR WILL BE REQUIRED TO ADJUST GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES AND PRIVATE DRIVES IN ORDER TO ASSURE POSITIVE DRAINAGE TO STORM INLETS.
6. ALL DIMENSIONS ARE TO FACE OF CURB AND/OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
7. CONCRETE FOR CURBS AND SIDEWALKS SHALL BE 3500 PSI MIN. CONCRETE.
8. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
9. ALL ROADWAY AND SIDEWALK CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL MUNICIPALITY.
10. ALL CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO THE LOCAL MUNICIPALITY AND STATE DOT REGULATIONS AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL PAVE AND COLD PLANE IN THE DIRECTION OF TRAFFIC.
12. ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR TO THE LOCAL GOVERNING AUTHORITY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

DEMOLITION INFORMATION:

1. NOTIFICATIONS:

   THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

2. DISPOSAL GUIDELINES:

   A. ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE.

   B. REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.

   C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.

   D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

3. TREE PROTECTION GUIDELINES:

   PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

4. UTILITIES:

   A. PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.

   B. ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE GRADING:

1. THE DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY 5.20 ACRES.
2. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016.
3. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUTE AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL BE UTILIZED TO PREVENT LOSS OF TOPSOIL MATERIAL.
2. UNSUITABLE SOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.
3. FILL AREA SHALL BE PROOF-ROLLED UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND.
4. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12".
5. ALL FILL AREAS SHALL BE RAISED IN LIFTS NOT EXCEEDING 6 INCHES. UNLESS OTHERWISE APPROVED BY QUALIFIED SOIL ENGINEER TO OBTAIN REQUIRED COMPACTION.
6. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.
7. ALL AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND PREVENT STANDING WATER.
8. ELEVATIONS SHOWN ON THE PLANS ARE THE FINISH GRADE ELEVATIONS.
9. ALL BACKFILL BEHIND WALLS SHALL BE INSTALLED PER WALL MANUFACTURER'S INSTALLATION SPECIFICATIONS OR AS NOTED ON PLANS, WHICHEVER IS MORE RESTRICTIVE.
10. CONTRACTOR SHALL REFER TO SITE SPECIFIC GEOTECHNICAL REPORT AND SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PRIOR TO COMMENCING WITH EARTHWORK ACTIVITIES.
11. PERMANENT CUT AND FILL SLOPES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE NOTED.
12. THE PROPOSED GRADING PLAN IS A RESULT OF AN ENGINEERED DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO SLOPES AND STORM RUNOFF. SHOULD THE CONTRACTOR HAVE QUESTIONS OR COMMENTS RELATED TO THE PROPOSED DESIGN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
13. THE CONTRACTOR SHALL NOTIFY "ONE CALL" (811) AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT IS NOT A MEMBER OF TN ONE CALL. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT TO LOCATE WATER AND/OR SEWER AT LEAST 72 HOURS PRIOR TO THE ESTIMATED TIME OF EXCAVATION.
14. EARTHWORK ACTIVITIES MUST BE SUPERVISED BY A LICENSED GEOTECHNICAL ENGINEER.
15. THE CONTRACTOR SHALL PROVIDE AS-BUILT CONDITIONS OF ALL UTILITIES AND STORMWATER PONDS PER THE LOCAL MUNICIPALITY REGULATIONS. AS-BUILT CONDITIONS MUST BE LOCATED BY A LICENSED LAND SURVEYOR.

EROSION AND SEDIMENT CONTROL INFORMATION:

1. COMPREHENSIVE:

   A. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.

   B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK. LATEST EDITION. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE STANDARDS SPECIFIED IN THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOKS, CURRENT EDITION.

   D. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

   E. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

   F. CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

   G. EROSION CONTROL DEVICES ARE TO BE INSTALLED AND FULLY OPERATIONAL PRIOR TO ANY DEMOLITION.

   H. SILT FENCE SHALL BE TYPE C TEMPORARY SILT FENCE AND BE WIRE ENFORCED, UNLESS OTHERWISE NOTED.

   I. ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS.

2. DURING CONSTRUCTION:

   A. ON-SITE DUST CONTROL DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS.

   B. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT HAS ACCUMULATED TO ½ THE ORIGINAL HEIGHT OF THE BARRIER.

   C. ALL OPEN SWALES MUST BE GRASSED AND RIP-RAP MUST BE PLACED AS REQUIRED TO CONTROL EROSION. STONE FOR RIP-RAP SHALL CONSIST OF ROUGH UN-HEWN QUARRY GRANITE AS NEARLY IN RECTANGULAR SECTION AS PRACTICAL. THE MINIMUM SIZE STONE SHALL WEIGH BETWEEN 75 AND 150 POUNDS AND SHALL BE HAND PLACED AS A LOOSE STONE EMBANKMENT.

   D. AT ANY TIME DURING CONSTRUCTION IF IT BECOMES NECESSARY TO PUMP STORM WATER OR GROUNDWATER FROM AN EXCAVATION, THE PUMPED WATER MUST NOT HAVE AN OBJECTIONABLE COLOR CONTRAST WHEN COMPARED TO THE RECEIVING WATERS AND MUST NOT IMPAIR IN ANY WAY THE RECEIVING WATERS. WATER THAT DOES NOT MEET THESE REQUIREMENTS MUST BE FILTERED OR DISCHARGED INTO A TEMPORARY SEDIMENT BASIN, WEIR TANK, DEWATERING TANK, GRAVITY BAG FILTER, SAND MEDIA FILTER, OR OTHER APPROVED DEVICE UNTIL IT MEETS THE EFFLUENT REQUIREMENTS. ONCE THE EFFLUENT REQUIREMENTS HAVE BEEN MET THE WATER MAY BE DISCHARGED INTO THE STORM SEWER SYSTEM.

      THESE SAME REQUIREMENTS APPLY TO ALL AUTHORIZED NON-STORM WATER DISCHARGES UNDER THE STATE OF TENNESSEE GENERAL NPDES PERMIT NO. TNR 100000, AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

   E. NO GRADED SLOPE SHALL EXCEED 3H:1V UNLESS OTHERWISE NOTED.

   F. EPSC MEASURES SHALL ONLY BE REMOVED AFTER THE SITE HAS ESTABLISHED A SOLID, STABILIZED STAND OF GRASS.

STORM DRAINAGE INFORMATION:

1. PIPES:

   A. UNLESS OTHERWISE NOTED ON THE DRAWING RCP SHALL BE CLASS III WITH "O" RING JOINTS.

   B. THE PIPE MANUFACTURER SHALL SUPPLY A CLASSIFICATION OF THE PIPE SPECIFICATIONS FOR EACH PIPE PRIOR TO INSTALLATION.

   C. PIPE INSTALLATION SHALL CONFORM TO THE LOCAL MUNICIPALITY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

   D. IF UNDERGROUND WATER/SPRINGS ARE UNCOVERED DURING CONSTRUCTION, PERMANENT FRENCH DRAINS MAY BE REQUIRED. CONSULTATION WITH THE ONSITE GEOTECHNICAL ENGINEER WILL BE REQUIRED.

2. STRUCTURES:

   A. ALL STRUCTURES SHALL BE MADE OF PRECAST CONCRETE. ALL INVERTS SHALL BE NEATLY FORMED UP TO THE SPRING LINE WITH MORTAR OR BRICK TO INSURE PROPER FLOW.

   B. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL INVERTS AND PIPE SLOPES PRIOR TO INSTALLATION TO ENSURE PROPER COVER AND LENGTHS OF PIPE.

   C. CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL STORM STRUCTURES PRIOR TO ACCEPTANCE BY LOCAL MUNICIPALITY.

   D. THE CONTRACTOR SHALL COMPACT FILL SUFFICIENTLY AROUND ALL STRUCTURES, PIPES, ETC. WITHIN PROPOSED PAVEMENT TO AVOID SETTLEMENT. ANY SETTLEMENT DURING THE WARRANTY/MAINTENANCE PERIOD SHALL BE RESTORED AT THE CONTRACTORS EXPENSE.

SANITARY SEWER NOTES:

1. CONSTRUCTION CRITERIA:

   A. ALL INSTALLATION, MATERIALS, AND SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY STANDARD SPECIFICATIONS.

   B. ALL WASTEWATER EASEMENTS MUST BE DRESSED AND GRASSED TO CONTROL EROSION AND SEDIMENTATION IN ACCORDANCE WITH REGULATIONS PRIOR TO ACCEPTANCE. TREES SHALL NOT BE PLANTED IN THE PERMANENT EASEMENT AREA.

   C. THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO 98% OF THE THEORETICAL MAXIMUM DENSITY. BACKFILL MATERIAL SHALL BE FREE OF ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

   D. THE CONTRACTOR FOR VERTICAL CONSTRUCTION SHALL VERIFY THE ELEVATION OF THE SANITARY SEWER SERVICE VS. FINISH FLOOR ELEVATION FOR EACH BUILDING AND ADJUST THE PROPOSED FINISH FLOOR ELEVATION AS NECESSARY IN ORDER TO ASSURE PROPER SEWER SERVICE.

   E. PROPOSED LOT CORNERS SHALL BE STAKED IN THE FIELD PRIOR TO UTILITY SERVICE INSTALLATION.

1. PIPES:

   A. THE MINIMUM VERTICAL DISTANCE BETWEEN WATER AND SEWER LINES SHALL BE 18 INCHES. THE MINIMUM HORIZONTAL DISTANCE BETWEEN WATER AND SEWER LINES SHALL BE 10 FEET WHERE PRACTICAL.

   B. LOW PRESSURE AIR TESTING IS REQUIRED FOR ALL WASTEWATER PIPE SYSTEMS. THIS TEST MUST MEET ALL REQUIREMENTS AS OUTLINED IN ASTM C-828-80 OR CURRENT REVISION.

   C. WHERE A SEWER LINE CROSSES UNDER A WATER MAIN, THE TOP OF THE SEWER LINE SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF PROPER SEPARATION CANNOT BE PROVIDED, CONSTRUCT THE WATER CROSSING WITH MECHANICAL JOINT DIP FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER LINE.

   D. ALL SEWER SERVICES SHALL BE 6 INCHES IN DIAMETER AND EXTEND TO THE PROPERTY LINE.

   E. CONTRACTOR SHALL PROVIDE #8 WIRE WITH ALL SEWER SERVICES.

3. STRUCTURES:

   A. CONTRACTOR SHALL FIELD VERIFY LOCATION AND INVERT ELEVATIONS OF WASTEWATER PIPE FOR CONNECTION TO EXISTING WASTEWATER SYSTEMS PRIOR TO STARTING UTILITY WORK.

   B. EXISTING MANHOLES LOCATED WITHIN PROPOSED CUT/FILL AREAS SHALL BE ADJUSTED TO ASSURE THAT THE TOP OF GRATE MATCHED PROPOSED FINISH GRADE.

   C. THE OUTSIDE OF ALL MANHOLES SHALL BE COATED WITH BITUMINOUS PAINT.

   D. ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE BY CORING AND RESILIENT SEAL METHOD.

WATER SYSTEM INFORMATION:

1. NOTIFICATIONS:

   A. NOTIFY LOCAL MUNICIPALITY AND UTILITY DISTRICT PRIOR TO THE START OF CONSTRUCTION AND THE WATER AND SEWER INSPECTOR FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY AND ANY METER WORK.

   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITIES SO THAT WATER MAINS DO NOT CONFLICT WITH OTHER UTILITIES.

   C. THE CONTRACTOR SHALL PROVIDE ALL HORIZONTAL BENDS IN ORDER TO PROVIDE THE ALIGNMENT SHOWN ON THE PLANS. VERTICAL BENDS SHALL BE PROVIDED IN ORDER TO PASS UNDER/OVER OTHER UTILITY LINES, PROVIDING MINIMUM COVER AS SPECIFIED BY THE LOCAL MUNICIPALITY. PROVIDE BRACING AND SUPPORT AS REQUIRED BY THE LOCAL MUNICIPALITY.

2. HYDRANTS:

   A. FOR FIRE HYDRANT INSTALLATION REFER TO DETAILS.

3. PIPES:

   A. ALL EXISTING DOMESTIC WATER LINES ARE TO BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

   B. D.I.P. SHALL BE USED THROUGHOUT THE ENTIRE PROJECT UNLESS OTHERWISE NOTED ON THE PLANS. ALL INSTALLATION, MATERIAL, DISINFECTION, AND INSPECTIONS SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY STANDARD SPECIFICATIONS.

   C. PROVIDE A MINIMUM OF 36 INCHES OF COVER OVER ALL WATER MAINS.

4. WATER MAIN INSTALLATION:

   A. ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND STANDARD DETAILS OF THE LOCAL MUNICIPALITY.

   B. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE WATER MAIN, AS NECESSARY, IN ORDER TO PROVIDE PROPER SEPARATION OF UTILITIES AND ALLOW SPACING NECESSARY FOR BRACING AT BENDS AND TEES.

   C. WATER SERVICES SHALL BE ¾ INCH TYPE K COPPER AND SHALL INCLUDE CORPORATION STOPS, METER BOXES, AND OTHER FITTINGS AS REQUIRED.

   D. ALL WATER LINE SERVICES SHALL EXTEND BEYOND THE RIGHT-OF-WAY AND INTO PRIVATE LOTS.

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SUBDIVISION, SITE PLAN
(REVISION1)
FRANKLIN, TENNESSEE
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MARY McGOWAN
REGISTERED ENGINEER
AGRICULTURE
No. 121133
STATE OF TENNESSEE
09/01/2022

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CHECKED BY:	MMc
DATE:	09/01/2022

KIMLEY-HORN PROJECT NO. 017010010

GENERAL NOTES

SHEET NUM

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STORMWATER EROSION PREVENTION AND SEDIMENT CONTROL REQUIREMENTS:

• EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 5 YEAR, 24 HOUR STORM, AS A MINIMUM.
• EROSION PREVENTION AND SEDIMENT CONTROLS MUST BE INSPECTED ONCE A WEEK AND 24 HOURS BEFORE A RAIN EVENT AFTER A.25 INCH RAIN EVENT AND DOCUMENTED ON THE INSPECTION SITE CHECKLIST.
• SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
• STABILIZATION MEASURES MUST BE PERFORMED WITHIN SEVEN (7) DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND WITHIN FIFTEEN (15) DAYS AFTER FINAL GRADING. THIS IS A COVER CROP WITH AT LEAST 75% COVERAGE.
• DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION

• STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
• STRAW MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER."
• STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
• EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCIRCLED WITH SILT FENCING. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET, STOCKPILE SLOPES MUST BE 2:1 OR FLATTER. STOCKPILES WHICH HAVE NOT BEEN USED FOR 14 CALENDAR DAYS SHALL BE STABILIZED THROUGH THE APPLICATION OF SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES.
• OFF-SITE SPOIL OR BORROW AREAS MUST HAVE APPROVED SEDIMENT CONTROL PLANS.
• A 25 FOOT UNDISTURBED STREAMSIDE BUFFER ZONE WILL BE LEFT FROM TOP OF BANK ON BOTH SIDES FOR THE ENTIRE LENGTH OF STREAMS THAT TDEC DETERMINES TO BE A PERENNIAL OR INTERMITTENT STREAM. THE STREAMSIDE BUFFER SHALL BE FENCED OFF WHERE THERE IS NO ENCROACHMENT. BUFFER MEANS A VEGETATED AREA, INCLUDING TREES AND SHRUBS THAT EXISTS OR IS ESTABLISHED TO PROTECT A STREAM SYSTEM, LAKE, OR RESERVOIR AREA. THIS BUFFER ALSO APPLIES TO OTHER SENSITIVE AREAS SUCH AS SPRINGS, WETLANDS AND SINKHOLES. TDEC REQUIRES A 60 FOOT CONSTRUCTION BUFFER ON SOME STREAMS.
• AN ORANGE CONSTRUCTION FENCE IS REQUIRED TO DESIGNATE THE BUFFER AREA BEFORE CLEARING OR TREE REMOVAL HAS BEGUN.
• THIS STREAMSIDE BUFFER WILL BE LEFT IN UNDISTURBED OR ENHANCED (WHEN REQUIRED BY THE CITY) AND WILL BE PART OF OPEN SPACE AND RECOGNIZED ON COVENANTS WITH RESTRICTIONS OF HOW IT IS TO BE MAINTAINED BY HOMEOWNER ASSOCIATION OR NONRESIDENTIAL PROPERTY OWNER. IF MORE THAN REGULAR MAINTENANCE IS EVER NEEDED, I.E. REMOVAL OF SMALL BRUSH OR TREES THAT HAVE FALLEN, A LANDSCAPE PLAN AND A TREE CUTTING PERMIT IS REQUIRED.
• ALL SEDIMENT BASINS, TRAP EMBANKMENTS, SWALES, PERIMETER DIKES, AND PERMANENT SLOPES STEEPER OR EQUAL TO 3:1 SHALL BE STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH OR OTHER APPROVED STABILIZATION MEASURES, WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. RESTABILIZATION OR OVERSEEDING WILL BE REQUIRED, IF NECESSARY.
• IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
• CONSTRUCT AND STABILIZE SEDIMENT POND AND CONVEYANCES FIRST. STABILIZE MEANS:

A.) A UNIFORM (E. G,, EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF A MINIMUM OF 75 PERCENT OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR

B.) EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEOTEXTILE) HAVE BEEN EMPLOYED WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
• IF THERE IS A GRAVEL ENVELOPE IN FRONT OF THE OUTLET ORIFICE, IT WILL BE REMOVED AS SOON AS THE SITE IS STABILIZED AND BEFORE BONDS ARE RELEASED.
• INCLUDE A FOREBAY IN ANY DETENTION POND TO FACILITATE EASIER MAINTENANCE.
• WITH EARTHEN WALLS, PLACE AN ANTISEEP COLLAR (OR COLLARS) AROUND THE OUTLET PIPE.

SEDIMENT FENCE

SEDIMENT FENCES OR OTHER SEDIMENT BARRIERS, HAS BEEN INSTALLED PROPERLY ALONG TOPOGRAPHICAL CONTOURS DOWNSLOPE OF THE AREA TO BE DISTURBED PRIOR TO ANY GRADING, CLEARING AND/OR ANY OTHER CONSTRUCTION ACTIVITY.
SEDIMENT FENCES:
USE PRINCIPALLY IN AREAS WHERE SHEET FLOW OCCURS.
INSTALL ALONG A LEVEL CONTOUR, SO WATER DOES NOT POND MORE THAN 1.5 FEET (0.5 M) AT ANY POINT.
THE MAXIMUM SLOPE PERPENDICULAR TO THE FENCE LINE SHOULD BE 1:1. NO MORE THAN 0.25 ACRE (0.1 HA) PER 100 FT. (31.4 M), OR 0.5 CFS (1.4 X 10-2 M3/S) OF CONCENTRATED FLOW SHOULD DRAIN TO ANY POINT ALONG THE SILT FENCE.
TURN ENDS OF FENCE UPHILL TO PREVENT SCOUR FROM WASH AROUND. INTERMITTENTLY, TURN FENCE UPHILL.
PROVIDE AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE (APPROX. 1200 SQ. FT. (111.5 M2) PER ACRE (0.4 HA) DRAINING TO THE SILT FENCE).
SELECT FILTER FABRIC THAT RETAINS 85% OF THE SOIL, BY WEIGHT, BASED ON SIEVE ANALYSIS, BUT IS NOT FINER THAN AN EQUIVALENT OPENING SIZE OF 70.

• STRAW/HAY BALES (ARE NOT RECOMMENDED) SILT FENCES, SAND BAG BARRIERS, AND ROCK FILTERS (ESPECIALLY CONTINUOUS BERMS) ARE PREFERRED OVER STRAW/HAY BALES BECAUSE SEDIMENT REMOVAL EFFICIENCIES, DURABILITY, AND MAINTENANCE REQUIREMENTS ARE FAR LESS DESIRABLE IN STRAW/HAY BALES.

• INLET PROTECTION: WHERE APPLICABLE, INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS HAVE BEEN INSTALLED.

• IDENTIFY STORM DRAIN PROTECTION: WHERE APPLICABLE, PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS HAVE BEEN INSTALLED.

SAND BAG BARRIER: USED TO CREATE A SMALL SEDIMENT TRAP UPSTREAM OF INLETS ON SLOPED, PAVED STREETS.

EXCAVATED DROP INLET SEDIMENT TRAP: AN EXCAVATED AREA AROUND THE INLET TO TRAP.

GUTTERBUDDY TYPE PROTECTION: USED TO CREATE A SMALL WATER PONDING AREA TO SETTLE SEDIMENT OUT BEFORE WATER ENTERS STORM DRAIN.

(EXCERPT FROM FRANKLIN BEST MANAGEMENT PRACTICE MANUAL)
SEDIMENT FENCES:
USE PRINCIPALLY IN AREAS WHERE SHEET FLOW OCCURS.
- INSTALL ALONG A LEVEL CONTOUR, SO WATER DOES NOT POND MORE THAN 1.5 FEET (0.5 M) AT ANY POINT.
- THE MAXIMUM SLOPE PERPENDICULAR TO THE FENCE LINE SHOULD BE 1:1.
- NO MORE THAN 0.25 ACRE (0.1 HA) PER 100 FT. (31.4 M), OR 0.5 CFS (1.4 X 10-2 M3/S) OF CONCENTRATED FLOW SHOULD DRAIN TO ANY POINT ALONG THE SILT FENCE.
- TURN ENDS OF FENCE UPHILL TO PREVENT SCOUR FROM WASH AROUND.
- PROVIDE AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE (APPROX. 1200 SQ. FT. (111.5 M2) PER ACRE (0.4 HA) DRAINING TO THE SILT FENCE).
- SELECT FILTER FABRIC THAT RETAINS 85% OF THE SOIL, BY WEIGHT, BASED ON SIEVE ANALYSIS, BUT IS NOT FINER THAN AN EQUIVALENT OPENING SIZE OF 70.

• SEDIMENT MUST BE REMOVED FROM SEDIMENT BARRIERS, PONDS AND OTHER SEDIMENT CONTROLS WHEN DESIGN CAPACITY HAD BEEN REDUCED BY 33%. ALL EP&SC DEVICES ARE TO REMAIN IN PLACE UNTIL THE SITE HAS BEEN STABILIZED AND A GOOD STAND OF GRASS HAS BEEN ESTABLISHED.
• WHEN A SEDIMENT FENCE'S CAPACITY HAS BEEN REDUCED 33%, IT SHALL BE REPLACED.
• EROSIONS PREVENTION AND SEDIMENT CONTROL DEVICES, EP&SC, SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD; GENERALLY CONSIDERED TO BE THROUGH THE COMPLETION OF RESTORATION. A COPY OF YOUR EP&SC PLAN ALONG WITH AN INSPECTION CHECKLIST AND STORMWATER PERMIT, IF APPLICABLE, MUST BE AT THE PROJECT SITE AT ALL TIMES. THE INSPECTION CHECKLIST SHALL HAVE A RECORD OF DATES EP&SC DEVICES ARE INSPECTED AND ANY CORRECTION ACTION TAKEN OR MAJOR OBSERVATIONS.
• EXCAVATED TOPSOIL TO BE REUSED MUST BE STOCKPILED AND ENCIRCLED WITH SILT FENCING.

CONSTRUCTION ENTRANCE: THIS SITE SHALL CONTAIN A TEMPORARY STONE CONSTRUCTION ENTRANCE THAT CONFORMS TO THE CITY OF FRANKLIN'S STORMWATER ORDINANCE AND BEST MANAGEMENT PRACTICE MANUAL. IT MUST BE INSTALLED WITHIN 24 HOURS OF GRADING OR THE PERMIT WILL BE REVOKED. THE USE OF FILTER CLOTH BENEATH CONSTRUCTION ENTRANCE IS REQUIRED. STONES SHOULD BE 3 INCH CRUSHED, WASHED, AND WELL GRADED ROCK TO AT LEAST A 6-INCH (15.2) DEEP AND SHALL BE KEPT CLEAN BY ADDING STONE AS NEEDED. IT SHALL BE 20 FEET WIDE. SEE DETAIL TCP-03 FOR SPECIFIC CONSTRUCTION ENTRANCE DETAILS. SEE HTTP://WWW.FRANKLIN-GOV.COM/ENGINEERING/STORMWATER/BMP/TCP/TCP-03.PDF
• A QUALIFIED PERSON WHO HAS TAKEN AN APPROVED EROSION AND SEDIMENTATION COURSE MUST INSPECT BMPS.
• WHERE APPLICABLE, INLET PROTECTIONS FOR NEARBY STORM SEWER CURB AND DROP INLETS HAVE BEEN INSTALLED.
• WHERE APPLICABLE, EXISTING VEGETATION AND BUFFER WILL BE MAINTAINED AND TEMPORARY COVER CROPS WILL BE USED.
• SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
• BUILDING AND WASTE MATERIALS, AND NON-STORM WATER DISCHARGES, SUCH AS CONCRETE, PAINT WASHWATER, OR MACHINERY LEAKAGE OR SPILLAGE MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORMWATER SYSTEM, GROUND WATER OR NEARBY WATER BODY.
• EP&SC AND STORMWATER CONTROLS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO FRANKLIN'S BMP MANUAL. YOU CAN FIND A COPY OF IT AT: HTTP://WWW.FRANKLINGOV. COM/ENGINEERING/STORMWATER/INDEX.HTM
• STORMWATER DETENTION/RETENTION AND SEDIMENT PONDS WILL BE INSTALLED AT THE BEGINNING OF THE PROJECT.
• LARGE CONSTRUCTION SITES SHALL BE BUILT IN PHASES.
• STORMWATER DETENTION/RETENTION AND SEDIMENT PONDS WILL BE INSTALLED AT THE BEGINNING OF THE PROJECT.

DEWATERING: SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE CITY OF FRANKLIN INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR
B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NONWOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.
D. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER UNDISTURBED VEGETATED AREAS.
• ANY REQUEST FOR CHANGES TO THE APPROVED SEDIMENT CONTROL PLAN OR SEQUENCE OF CONSTRUCTION MUST BE SUBMITTED TO THE SEDIMENT CONTROL INSPECTOR AND APPROVED BEFORE IMPLEMENTING CHANGES. MAJOR CHANGES WILL REQUIRE A PLAN REVISION.
• THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
• OBTAINING OF ANY PERMITS IS THE RESPONSIBILITY OF THE STORMWATER MANAGEMENT PERMIT HOLDER OR DEVELOPER.
• PERMITTEES SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE, OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.

STORMWATER PONDS AND WATER QUALITY MAINTENANCE NOTES

• CHECK OUTLET REGULARLY FOR CLOGGING AND REMOVE ANY DEBRIS.
• CHECK BANKS AND BOTTOM SURFACE OF BASIN FOR EROSION AND CORRECT AS NECESSARY.
• CHECK AT LEAST ANNUALLY AND AFTER EACH EXTREME STORM EVENT, THE FACILITY SHOULD BE CLEANED OF ACCUMULATED DEBRIS. THE BANKS OF SURFACE PONDS SHOULD BE CHECKED AND AREAS OF EROSION REPAIRED. REMOVE NUISANCE WETLAND SPECIES AND TAKE APPROPRIATE MEASURES TO CONTROL MOSQUITOES.
• THIS MAINTENANCE TYPICALLY INCLUDES SEDIMENT, FLOATABLE, AND DEBRIS REMOVAL FROM INLETS, OUTLETS AND SKIMMERS
• POND VEGETATION NEEDS TO BE TRIMMED OR HARVESTED AS APPROPRIATE, GRASSY AREAS FREQUENTLY MOWED.
• THE OUTLET STRUCTURE FILTER SHALL BE CHECKED REGULARLY FOR CLOGGING AND SHALL BE CLEANED AND REPAIRED AS NECESSARY.
• REMOVE SEDIMENT WHEN ACCUMULATION REACHED 6 INCHES, OR IF RE-SUSPENSION IS OBSERVED OR PROBABLE. SEDIMENT MAY BE PERMITTED TO ACCUMULATE DEEPER THAN 6 INCHES IF THERE IS A PERMANENT MARKER INDICATING DEPTH WHERE SEDIMENT NEEDS TO BE REMOVED, AND THAT MARK HAS NOT BEEN MET.
• SOME SEDIMENT MAY CONTAIN CONTAMINANTS OR WHICH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REQUIRES SPECIAL DISPOSAL PROCEDURE. IF THERE IS ANY UNCERTAINTY ABOUT WHAT THE SEDIMENT CONTAINS OR IT IS KNOWN TO CONTAIN CONTAMINANTS, THEN TDEC SHOULD BE CONSULTED AND THEIR DISPOSAL RECOMMENDATIONS FOLLOWED. THE TDEC DIVISION OF WATER POLLUTION CONTROL SHOULD BE CONTACTED AT (615) 532-0625. GENERALLY, SPECIAL ATTENTION OR SAMPLING SHOULD BE GIVEN TO SEDIMENT ACCUMULATED IN FACILITIES SERVING INDUSTRIAL, MANUFACTURING OR HEAVY COMMERCIAL SITES, FUELING CENTS OR AUTOMOTIVE MAINTENANCE AREAS, LARGE PARKING AREAS, IR OTHER AREAS WHERE POLLUTANTS (OTHER THAN CLEAN SOIL) ARE SUSPECTED TO ACCUMULATE AND BE CONVEYED BY STORM RUNOFF. SOME SEDIMENT COLLECTED MY BE INNOCUOUS (FREE OF POLLUTANTS) AND CAN BE USED AS FILL MATERIAL, COVER OR LAND SPREADING. IT IS IMPORTANT THAT THIS MATERIAL NOT BE PLACED IN ANY WAY THAT WILL PROMOTE OR ALLOW RE-SUSPENSION IN STORM RUNOFF.

ENHANCED SWALE INSPECTION AND MAINTENANCE NOTES

ACTIVITY	SCHEDULE
FOR DRY SWALES, MOW GRASS TO MAINTAIN A HEIGHT OF 4 TO 6 INCHES. REMOVE GRASS CLIPPINGS.	AS NEEDED (FREQUENT/SEASONAL)
INSPECT GRASS ALONG SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES AND CORRECT.	ANNUALLY (SEMI-ANNUALY THE FIRST YEAR)
REMOVE TRASH AND DEBRIS ACCUMULATED IN THE INFLOW FOREBAY.	
INSPECT AND CORRECT EROSION PROBLEMS IN THE SAND/SOIL BED OF DRY SWALES.	
BASED ON INSPECTION, PLANT AN ALTERNATIVE GRASS SPECIES IF THE ORIGINAL GRASS COVER HAS NOT BEEN SUCCESSFULLY ESTABLISHED.	
REPLANT WETLAND SPECIES (FOR WET SWALE) IF NOT SUFFICIENTLY ESTABLISHED.	
INSPECT PEA GRAVEL DIAPHRAGM FOR CLOGGING AND CORRECT THE PROBLEM.	
ROTO-TILL OR CULTIVATE THE SURFACE OF THE SAND/SOIL BED OF DRY SWALES IF TEH SWALE DOES NOT DRAW DOWN WITHIN 48 HOURS.	AS NEEDED
REMOVE SEDIMENT BUILDUP WITHIN THE BOTTOM OF THE SWALE ONCE IT HAS ACCUMULATED 25% OF THE ORIGINAL DESIGN VOLUME.	

STORMWATER INFRASTRUCTURE "AS BUILTS": FRANKLIN CODE SECTION 16-706 (2)(GG): AS NEW DEVELOPMENT CONSTRUCTION IS COMPLETED, AN "AS-BUILT" PLAN, CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER, MUST BE SUBMITTED UPON COMPLETION OF THE STORMWATER MANAGEMENT FACILITIES INCLUDED IN THE APPROVED CONSTRUCTION PLANS THE LICENSED PROFESSIONAL SHALL CERTIFY THAT: THE FACILITIES HAVE BEEN CONSTRUCTED AS SHOWN ON THE "ASBUILT" PLAN, AND FACILITIES MEET THE APPROVED STORMWATER MANAGEMENT PLAN AND SPECIFICATIONS, OR ACHIEVE THE FUNCTION FOR WHICH THEY WERE DESIGNED. COORDINATE DATA SHALL BE PRESENTED IN THE STATE OF TENNESSEE PLANE SYSTEM WITH THE NORTH AMERICAN DATUM 1983 (NAD83) AND NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. ELECTRONIC AND 2 PAPER COPIES (PER CITY REQUIREMENTS) ARE REQUIRED.
A. (SEE WEB SITE HTTP://WWW.FRANKLIN-GOV.COM/PDF/ASBUILTREQUIREMENTS.)

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THE FACTORY AT FRANKLIN PUD
SUBDIVISION, SITE PLAN
(REVISION1)
FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN — REGISTERED ENGINEER — AGRICULTURE — No. 121339 — STATE OF TENNESSEE — 09/01/2022

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: SAS
DRAWN BY: SAS
CHECKED BY: MMc
DATE: 09/01/2022
KIMLEY-HORN PROJECT NO. 017010010

CITY OF FRANKLIN NOTES

SHEET NUMBER
C0.2



SITE DATA TABLE

PROJECT NAME:	FRANKLIN FACTORY PARKING REDEVELOPMENT PRE-APPLICATION SITE PLAN
COF PROJECT #:	7941
MAP:	MAP # 063M
PARCEL #:	063M D 02100
ADDRESS:	230 FRANKLIN RD
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
EXISTING PARKING ACROSS SITE:	917 SPACES
UNCHANGED PARKING:	672 SPACES
NEW PROPOSED PARKING:	251 SPACES
TOTAL POST REDEVELOPMENT PARKING:	923 SPACES

NOTES:
1. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS, SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
2. THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF PLANNING COMMISSION. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER RELEVANT DEPARTMENT SUPERINTENDENT OR THE PLANNING COMMISSION. IN ADDITION, THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FLIPZONE 4100 AND NAD 83 DATUM.
3. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PERFORMED BY S&ME DATED, 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

SURVEY NOTES

1. THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLAN COORDINATE SYSTEM, AND NAD 83 DATUM.
2. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PREPARED BY S&ME, A TOPOGRAPHIC SURVEY PREPARED BY TTL DATES 11/19/21, AND THE FRANKLIN CORRIDOR IMPROVEMENTS PROJUECT 07ST00015. THE INFORMATION PROVIDED SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
3. INFORMATION WAS ALSO TAKEN FROM THE CITY OF FRANKLIN GIS AND AERIAL PHOTOGRAPHS.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. THIS PROJECT IS LOCATED IN ZONE "X" AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0211G, WITH AN EFFECTIVE DATE OF DECEMBER 22, 2016, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE PROGRAM. ZONE "X" IS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN.

EXISTING STORMWATER NARRATIVE

STORMWATER RUNOFF FOR THIS SITE ENCOUNTERS MAINLY DEVELOPED AREAS OF BUILDINGS AND PARKING LOTS. DEPENDING ON WHERE RAINWATER FALLS, IT TRAVELS VIA SHEET FLOW INTO STORM INFRASTRUCTURE TOWARDS THE NORTHERN CORNER OF THE SITE OUTFALLING TO STRUCTURES IN FRANKLIN ROAD OR TOWARDS THE SOUTHERN CORNER OF THE SITE OUTFALLING TO STRUCTURES IN LIBERTY PIKE. BIORETENTION AND DETENTION AREAS ARE CURRENTLY ABSENT WITHIN THE EXISTING CONDITIONS OF THIS SITE. POST-OUTFALLS THE WATER CONTINUES TO FLOW IN PUBLIC STORMWATER INFRASTRUCTURE ALONG FRANKLIN ROAD AND LIBERTY PIKE.

SITE SLOPE TABLE

	14% - 19.99%
	20% and above

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

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THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN — REGISTERED ENGINEER — STATE OF TENNESSEE — 121370 — 09/01/2022

No.	REVISIONS	DATE	BY
1			
2			
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5			
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7			
8			
9			
10			

DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022
KIMLEY-HORN PROJECT NO.	017010010

OVERALL EXISTING CONDITIONS

SHEET NUMBER
C1.0

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Drawing name: K:\FRA_LDEV\017010010 - franklin factory\4-CADD\plansheets\site plan\C1.0 OVERALL EXISTING CONDITIONS.dwg EXISTING CONDITIONS Sep 01, 2022 2:56pm by: Shawn.Schaub

FRANKLIN ROAD DEVELOPMENT NOTE

THE DEVELOPMENT PLAN FOR FRANKLIN FACTORY HAS INCLUDED THE PROPOSED LAYOUT AND UTILITY LAYOUT FOR THE COF 07ST00015 FRANKLIN ROAD CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. CAD FILES HAVE BEEN PROVIDED BY JAMES GOLIAS WITH CT CONSULTANTS DATED 2022-07-29. THE FRANKLIN ROAD CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT SHOULD BE REFERENCED FOR ALL DESIGN FEATURES ASSOCIATED WITH FRANKLIN ROAD.

EXISTING STORMWATER NARRATIVE

STORMWATER RUNOFF FOR THIS SITE ENCOUNTERS MAINLY DEVELOPED AREAS OF BUILDINGS AND PARKING LOTS. DEPENDING ON WHERE RAINWATER FALLS, IT TRAVELS VIA SHEET FLOW INTO STORM INFRASTRUCTURE TOWARDS THE NORTHERN CORNER OF THE SITE OUTFALLING TO STRUCTURES IN FRANKLIN ROAD OR TOWARDS THE SOUTHERN CORNER OF THE SITE OUTFALLING TO STRUCTURES IN LIBERTY PIKE. BIORETENTION AND DETENTION AREAS ARE CURRENTLY ABSENT WITHIN THE EXISTING CONDITIONS OF THIS SITE. POST-OUTFALLS THE WATER CONTINUES TO FLOW IN PUBLIC STORMWATER INFRASTRUCTURE ALONG FRANKLIN ROAD AND LIBERTY PIKE.

SURVEY NOTES

1. THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLAN COORDINATE SYSTEM, AND NAD 83 DATUM.
2. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PREPARED BY S&ME, A TOPOGRAPHIC SURVEY PERFORMED BY TTL, AND THE PROPOSED DESIGN FOR THE COF 07ST00015 FRANKLIN ROAD CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. THE INFORMATION PROVIDED SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
3. INFORMATION WAS ALSO TAKEN FROM THE CITY OF FRANKLIN GIS AND AERIAL PHOTOGRAPHS.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. THIS PROJECT IS LOCATED IN ZONE "X" AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0211G, WITH AN EFFECTIVE DATE OF DECEMBER 22, 2016, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE PROGRAM. ZONE "X" IS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANGE FLOODPLAIN.

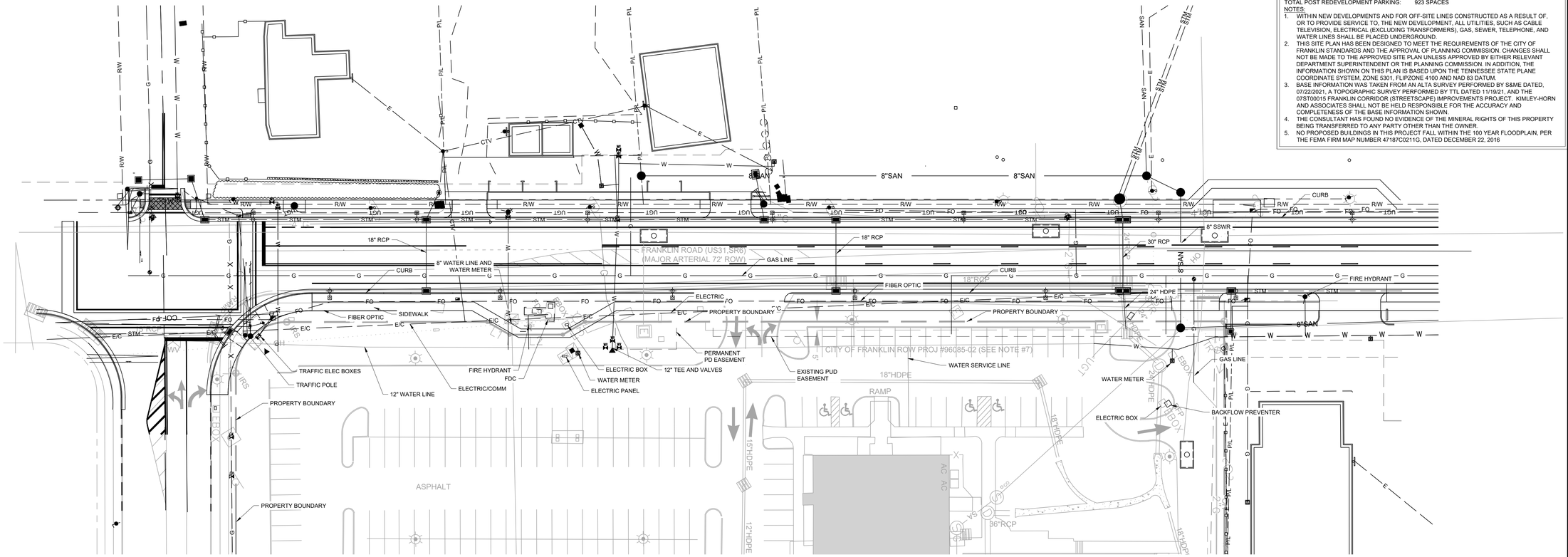
SITE SLOPE TABLE

	14% - 19.99%
	20% and above

SITE DATA TABLE

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PARCEL #:	063M D 02100
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CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
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APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
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NOTES:
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5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016



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THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN — REGISTERED — AGRICULTURE — SOIL SCIENTIST — STATE OF TENNESSEE — 2022

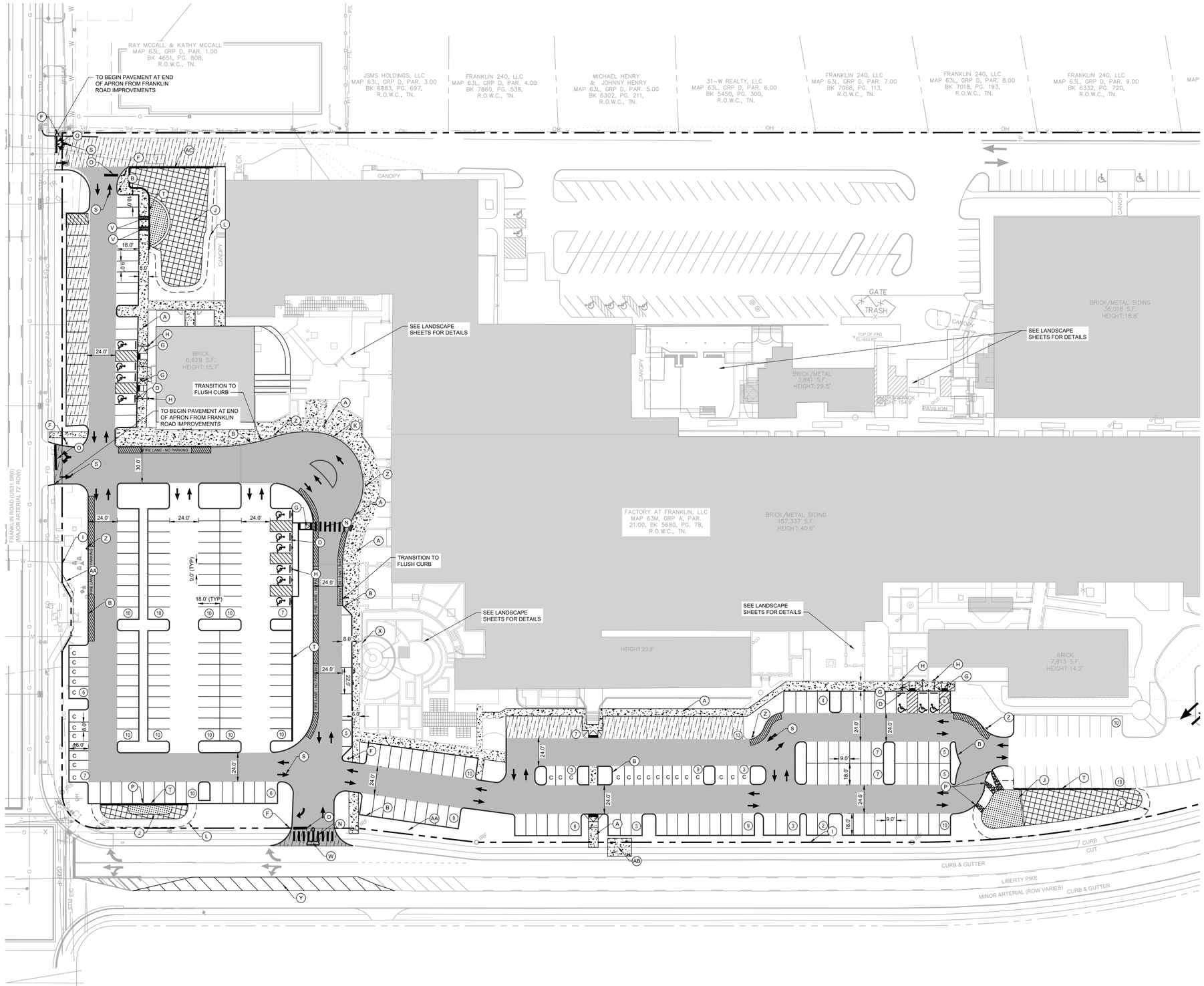
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DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	----
DATE:	09/01/2022
KIMLEY-HORN PROJECT NO.	017010010

FRANKLIN ROAD ENLARGEMENT

SHEET NUMBER
C1.1

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SITE DATA TABLE

PROJECT NAME:	FRANKLIN FACTORY PARKING REDEVELOPMENT PRE-APPLICATION SITE PLAN
COF PROJECT #:	7941
MAP:	MAP # 063M
PARCEL #:	063M D 02100
ADDRESS:	230 FRANKLIN RD
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
EXISTING PARKING ACROSS SITE:	917 SPACES
UNCHANGED PARKING:	672 SPACES
NEW PROPOSED PARKING:	251 SPACES
TOTAL POST REDEVELOPMENT PARKING:	923 SPACES

NOTES:
1. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS, SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
2. THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF PLANNING COMMISSION. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER RELEVANT DEPARTMENT SUPERINTENDENT OR THE PLANNING COMMISSION. IN ADDITION, THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FIUPZONE 4100 AND NAD 83 DATUM.
3. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PERFORMED BY S&ME DATED, 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

SITE PLAN KEYNOTE LEGEND

A	CONCRETE SIDEWALK
B	6" POST CURB
C	FIRE LANE STRIPING, SEE ARCH. SHEETS FOR DETAILS
D	CONCRETE WHEEL STOP (TYP.)
E	4" PARKING STRIPE (TYP.)
F	STOP SIGN (TYP.)
G	ACCESSIBLE RAMP AND TACTILE WARNING
H	ACCESSIBLE PARKING SIGN
I	PROPERTY BOUNDARY
J	BIORETENTION POND
K	+/-210 LF OF FLUSH CURB
L	GREEN INFRASTRUCTURE EASEMENT
M	LOADING ZONE
N	CROSSWALK
O	STOP BAR
P	CURB CUT
Q	PRE TREATMENT AREA
R	PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT
S	THERMOPLASTIC ROAD MARKINGS
T	CAST IN PLACE RETAINING WALL WITH PEDESTRIAN/VEHICULAR GUARDRAIL
U	LEVEL SPREADER
V	CURB CUT WITH STEEL PLATE
W	MEDIAN WITH CURB
X	EXISTING RETAINING WALL
Y	RESTRIPING
Z	NO PARKING SIGN
AA	ALL ACCESS PUBLIC EASEMENT
AB	15' X 20' CONCRETE PAD FOR TRANSIT STOP
AC	SUBGRADE CAST IN PLACE RETAINING WALL

SITE LEGEND

DESCRIPTION	HATCH
HEAVY DUTY PAVEMENT	
LIGHT DUTY PAVEMENT	
SIDEWALK	
BIORETENTION	
DETENTION	
MILL AND OVERLAY	
PRE-TREATMENT AREA	

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

Kimley»Horn
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THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN
REGISTERED ENGINEER
AGRICULTURE
No. 121350
STATE OF TENNESSEE
09/01/2022

No.	REVISIONS	DATE	BY
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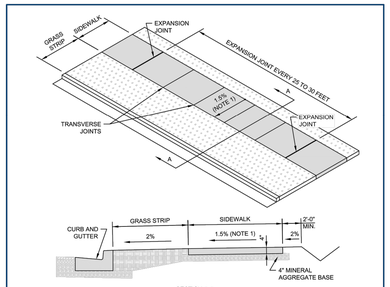
DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022

KIMLEY-HORN PROJECT NO.
017010010

OVERALL SITE PLAN

SHEET NUMBER
C2.0

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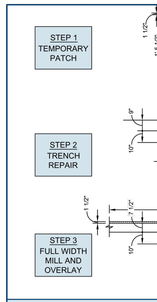


SECTION A-A

NOTES

1. SIDEWALK CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAX.
2. MINERAL AGGREGATE BASE: 4" MIN. THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
3. CONCRETE: 4" MIN. THICK CLASS A (3,000 PSI, 6% AIR) WITH SYNTHETIC FIBER REINFORCEMENT, BROOM FINISH
4. EXPANSION JOINTS: SEE DRAWING RP-10
5. PROVIDE TRANSVERSE JOINTS FORMING BLOCKS AS NEARLY TO SQUARE AS PRACTICAL
6. PROVIDE A LONGITUDINAL JOINT CENTERED ON WALK WHERE SIDEWALK WIDTH IS 8'-0" OR GREATER

HISTORIC FRANKLIN TENNESSEE	CONCRETE SIDEWALK			DWG. NO.
	CITY OF FRANKLIN	CITY ENGINEER:	DATE: 7/1/2021	RP-8
	NOT TO SCALE			



FLOWABLE FILL NOTE
DEPENDING ON FIELD CONDITIONS, SUBSTITUTE FLOWABLE FILL BACKFILL (200 PSI MAX.) FOR THAT SHOWN AS DIRECTED BY THE COF WATER MANAGEMENT OR STREET DEPTS.

PAVEMENT SCHEDULE

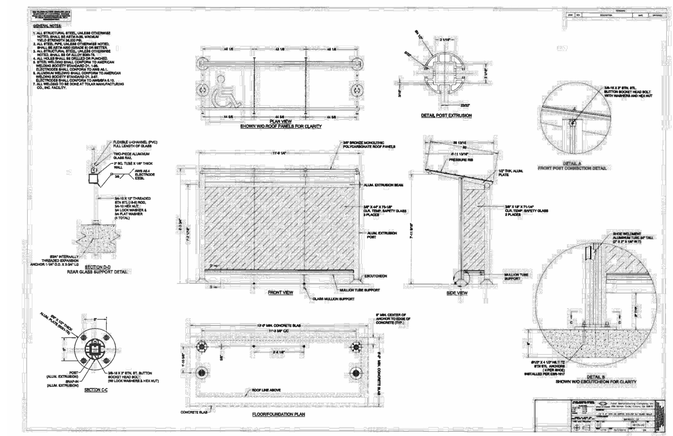
1. 1.5" - BITUMINOUS SURFACE COURSE 411-01.11 ACS MIX (PG 64-22) GRADING E RDWY
2. BITUMINOUS AGGREGATE BASE 307-01.08 ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING B-M2
3. MINERAL AGGREGATE BASE (PLACED IN LIFTS NOT EXCEEDING 6") 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

TACK AND PRIME COATS NOT SHOWN FOR CLARITY. SEE DRAWING RD-3.

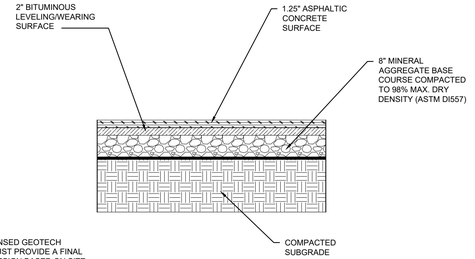
NOTES

1. CONTRACTOR SHALL COORD. TRENCH, BACKFILL, AND PAVEMENT INSPECTIONS WITH THE COF STREET DEPARTMENT.
2. ALL CUTS IN PUBLIC STREETS REQUIRE A STREET CROSSING PERMIT AND APPROVED TRAFFIC CONTROL PLAN.
3. SAWCUT EXISTING PAVEMENTS, BASES, CURB AND GUTTER, AND SIDEWALKS (CUT JOINT TO JOINT) IN NEAT LINES.
4. AT PERPENDICULAR STREET CUTS, MILL AND OVERLAY SHALL EXTEND A MINIMUM OF 100 FEET CENTERED ON THE TRENCH. AT PARALLEL STREET CUTS, MILL AND OVERLAY SHALL EXTEND A MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE CENTERLINE OF STREET. FINAL LIMITS SHALL BE DETERMINED BY THE CITY ENGINEER.

HISTORIC FRANKLIN TENNESSEE	ASPHALT PAVEMENT TRENCH REPAIR LOCAL STREET			DWG. NO.
	CITY OF FRANKLIN	CITY ENGINEER:	DATE: 7/1/2021	RD-6
	NOT TO SCALE			

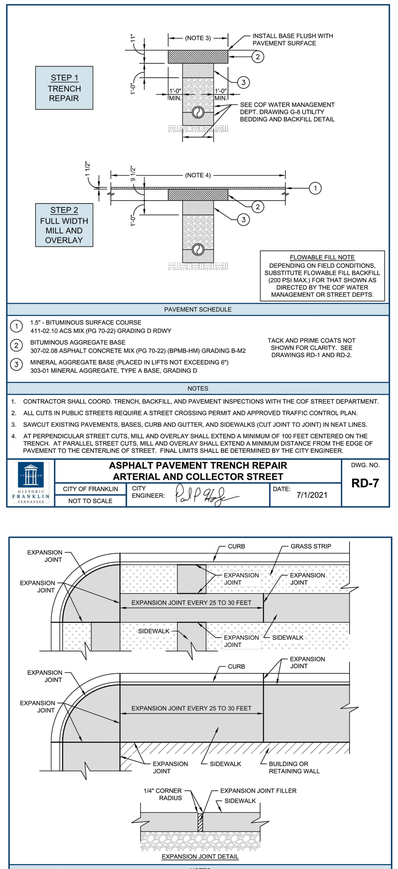


5 TYPICAL TRANSIT STOP DETAIL
SCALE:



NOTE: A LICENSED GEOTECH ENGINEER MUST PROVIDE A FINAL PAVEMENT DESIGN BASED ON SITE CONDITIONS

1 TYPICAL PAVEMENT SECTION - HEAVY DUTY
SCALE:



PAVEMENT SCHEDULE

1. 1.5" - BITUMINOUS SURFACE COURSE 411-02.10 ACS MIX (PG 70-22) GRADING D RDWY
2. BITUMINOUS AGGREGATE BASE 307-02.09 ASPHALT CONCRETE MIX (PG 70-22) (BPMB-HM) GRADING B-M2
3. MINERAL AGGREGATE BASE (PLACED IN LIFTS NOT EXCEEDING 6") 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

TACK AND PRIME COATS NOT SHOWN FOR CLARITY. SEE DRAWINGS RD-1 AND RD-2.

NOTES

1. CONTRACTOR SHALL COORD. TRENCH, BACKFILL, AND PAVEMENT INSPECTIONS WITH THE COF STREET DEPARTMENT.
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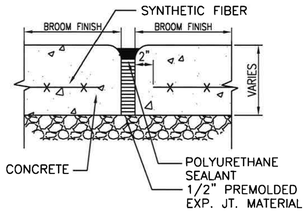
HISTORIC FRANKLIN TENNESSEE	ASPHALT PAVEMENT TRENCH REPAIR ARTERIAL AND COLLECTOR STREET			DWG. NO.
	CITY OF FRANKLIN	CITY ENGINEER:	DATE: 7/1/2021	RD-7
	NOT TO SCALE			

EXPANSION JOINT DETAIL

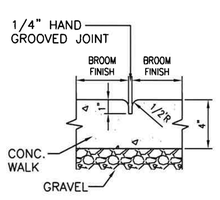
NOTES

1. EXPANSION JOINTS:
   - A. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
   - B. POLYPROPYLENE FOAM JOINT FILLER (ASTM D6139)
2. 1/2" THICK EXPANSION JOINTS SHALL BE PLACED AS FOLLOWS:
   - A. TRANSVERSE TO SIDEWALK AT 25 TO 30 FEET APART DEPENDING ON TRANSVERSE JOINT MARKINGS
   - B. TRANSVERSE TO SIDEWALK AT CURB EXPANSION JOINTS WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB
   - C. BETWEEN CURB AND SIDEWALK WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB
   - D. AT ABUTTING RIGID DRIVEWAYS OR OTHER SIDEWALKS
   - E. AT CHANGES IN SIDEWALK DIRECTION, INCLUDING AT STREET CORNERS AND AT CURVED SECTIONS
   - F. AT OTHER PLACES WHERE STRESSES MAY DEVELOP
3. 1" THICK EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS CIRCULAR CURBS, BUILDINGS, AND WALLS.

HISTORIC FRANKLIN TENNESSEE	SIDEWALK EXPANSION JOINT			DWG. NO.
	CITY OF FRANKLIN	CITY ENGINEER:	DATE: 7/1/2021	RP-10
	NOT TO SCALE			

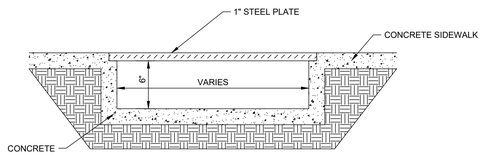


EXPANSION JOINT



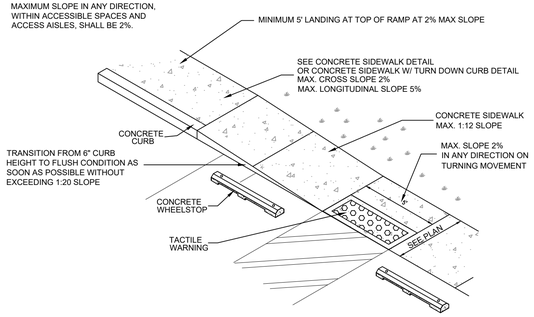
CONTROL JOINT

8 SIDEWALK JOINT DETAIL
SCALE:



9 CURB CUT WITH STEEL PLATE
SCALE:

NOTE:
MAXIMUM SLOPE IN ANY DIRECTION, WITHIN ACCESSIBLE SPACES AND ACCESS AISLES, SHALL BE 2%.



10 DETECTABLE WARNING RAMP
SCALE:

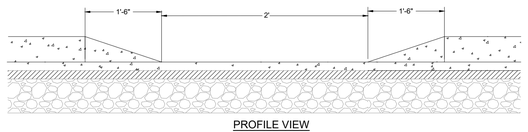


MUTCD R-8

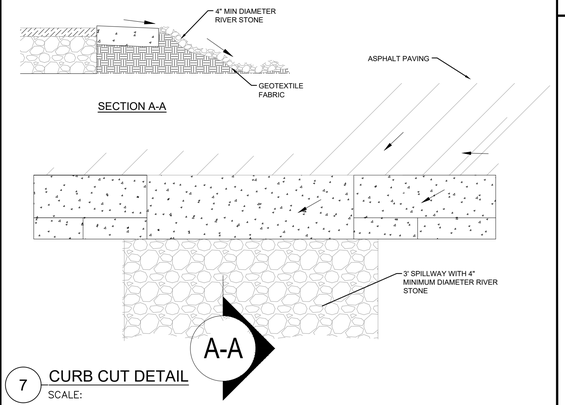


MUTCD R-8A

6 ACCESSIBLE PARKING SPACE SIGNAGE DETAIL
SCALE:

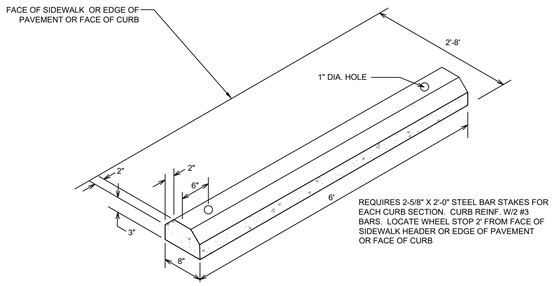


PROFILE VIEW



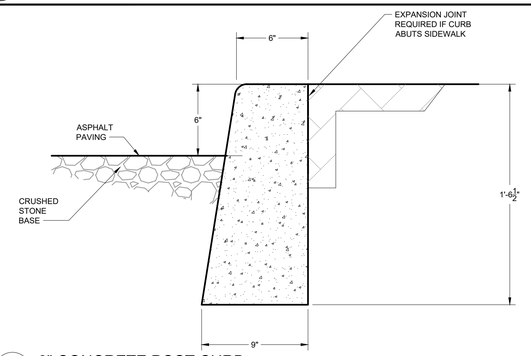
SECTION A-A

7 CURB CUT DETAIL
SCALE:



REQUIRES 2-5/8" X 2'-0" STEEL BAR STAKES FOR EACH CURB SECTION. CURB REINF. W/2 #3 BARS. LOCATE WHEEL STOP 2' FROM FACE OF SIDEWALK HEADER OR EDGE OF PAVEMENT OR FACE OF CURB

3 PRECAST CONCRETE WHEEL STOP
SCALE:



4 6" CONCRETE POST CURB
NOT TO SCALE

Kimley»Horn
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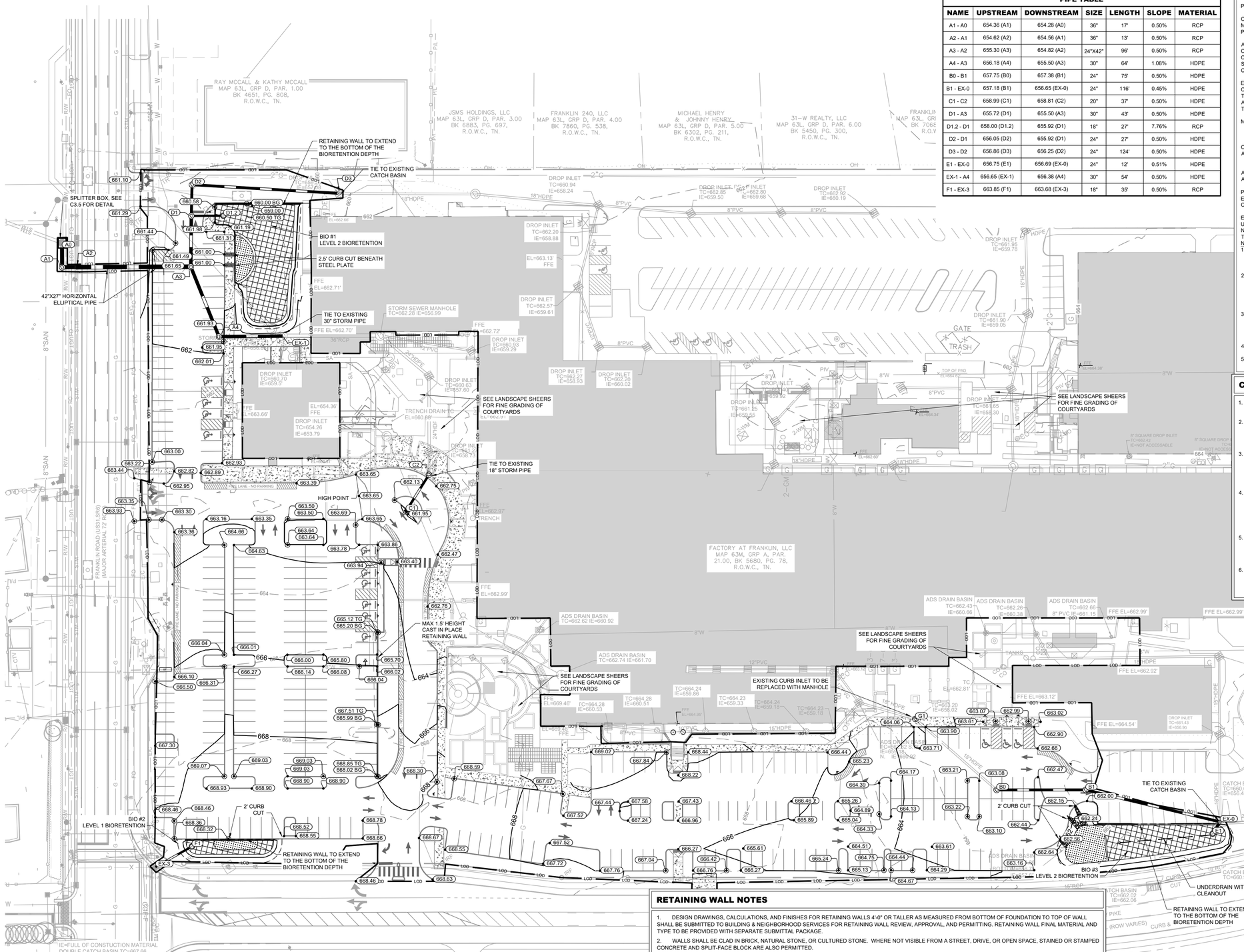
DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022

KIMLEY-HORN PROJECT NO. 017010010

SITE DETAILS

SHEET NUMBER
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PIPE TABLE						
NAME	UPSTREAM	DOWNSTREAM	SIZE	LENGTH	SLOPE	MATERIAL
A1 - A0	654.36 (A1)	654.28 (A0)	36"	17'	0.50%	RCP
A2 - A1	654.62 (A2)	654.56 (A1)	36"	13'	0.50%	RCP
A3 - A2	655.30 (A3)	654.82 (A2)	24"X42"	96'	0.50%	RCP
A4 - A3	656.18 (A4)	655.50 (A3)	30"	64'	1.08%	HDPE
B0 - B1	657.75 (B0)	657.38 (B1)	24"	75'	0.50%	HDPE
B1 - EX-0	657.18 (B1)	656.65 (EX-0)	24"	116'	0.45%	HDPE
C1 - C2	658.99 (C1)	658.81 (C2)	20"	37'	0.50%	HDPE
D1 - A3	655.72 (D1)	655.50 (A3)	30"	43'	0.50%	HDPE
D1.2 - D1	658.00 (D1.2)	655.92 (D1)	18"	27'	7.76%	RCP
D2 - D1	656.05 (D2)	655.92 (D1)	24"	27'	0.50%	HDPE
D3 - D2	656.86 (D3)	656.25 (D2)	24"	124'	0.50%	HDPE
E1 - EX-0	656.75 (E1)	656.69 (EX-0)	24"	12'	0.51%	HDPE
EX-1 - A4	656.65 (EX-1)	656.38 (A4)	30"	54'	0.50%	HDPE
F1 - EX-3	663.85 (F1)	663.68 (EX-3)	18"	35'	0.50%	RCP

SITE DATA TABLE

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COF PROJECT #:	7941
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PARCEL #:	063M D 02100
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CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
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5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

COF GRADING & DRAINAGE GENERAL NOTES

1. GRADING PERMIT IS REQUIRED FOR ANY PROJECT DISTURBING MORE THAN 10,000 SF, ADDING MORE THAN 5,000 SF OF IMPERVIOUS SURFACE OR FOR ANY SITE GRADING REQUIRING STOCKPILING OF MATERIAL.
2. THE DEVELOPER SHALL PROVIDE THE NECESSARY LABOR AND SUPERVISION REQUIRED TO SUPPORT FIELD TESTING BY THE INDEPENDENT TESTING FIRM AND INSPECTIONS BY CITY OFFICIALS AT NO COST TO THE CITY. TEST REPORTS OF FIELD TESTING IF APPLICABLE SHALL BE SUBMITTED DIRECTLY TO THE STREET DEPARTMENT. DEFECTS DISCLOSED BY TESTS SHALL BE RECTIFIED.
3. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
4. DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, CULVERTS, DETENTION BASINS AND DITCHES, AS WELL AS THE ROADWAY SUB-GRADE, BASE STONE AND BINDER & SURFACE COARSE SHALL BE INSPECTED, TESTED AND GIVEN APPROVAL AT EACH STAGE OF INSTALLATION PRIOR TO PROCEEDING TO THE NEXT STAGE OF CONSTRUCTION. FINAL CONSTRUCTION INSPECTION FOR APPROVAL AND ACCEPTANCE OF STREETS AND DRAINAGE SYSTEMS WILL NOT BE GRANTED UNTIL ALL WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. ANY PROPOSED RETAINING WALL GREATER THAN 48" IN HEIGHT AS MEASURED FROM THE BOTTOM OF THE FOOTING SHALL BE A SEPARATE SUBMITTAL TO A BUILDING & NEIGHBORHOOD SERVICES FOR REVIEW, APPROVAL, AND PERMITTING. A MATERIAL AND COLOR SAMPLE SHALL BE SUBMITTED WITH THE BUILDING PLANS.

STORMWATER NARRATIVE

STORMWATER RUNOFF FOR THIS SITE ENCOUNTERS PRIMARILY IMPERVIOUS AREA OF BUILDINGS AND PARKING LOTS THROUGHOUT THE PROPERTY. DEPENDING ON WHERE RAINWATER FALLS, IT TRAVELS VIA SHEET FLOW INTO STORMWATER STRUCTURES/PIPES TOWARDS TWO BIORETENION AREAS PROPOSED ON SITE. DETENTION LOCATIONS ARE PROPOSED UNDERGROUND BELOW THE BIORETENTION LOCATIONS. OUTFALL #1 IS AN EXISTING INLET ALONG FRANKLIN ROAD AND OUTFALL #2 IS AN EXISTING INLET ALONG LIBERTY PIKE.

CITY OF FRANKLIN STREET CUT NOTES:

1. ALL CUTS IN THE PUBLIC STREETS REQUIRE A STREET CROSSING PERMIT AND TRAFFIC CONTROL PLAN APPROVED BY THE STREET DEPARTMENT.
2. TRENCH BACKFILL AND STREET REPAIR SHALL BE MADE IN ACCORDANCE WITH CITY OF FRANKLIN STREET STANDARD DRAWING RD-6 LOCAL OR RD-7 (COLLECTOR AND ARTERIAL).
3. AT PERPENDICULAR STREET CUTS, TRENCH EXCAVATIONS SHALL BE MILLED AND OVERLAID A MINIMUM OF 100' CENTERED ON THE TRENCH.

RETAINING WALL NOTES

1. DESIGN DRAWINGS, CALCULATIONS, AND FINISHES FOR RETAINING WALLS 4'-0" OR TALLER AS MEASURED FROM BOTTOM OF FOUNDATION TO TOP OF WALL SHALL BE SUBMITTED TO BUILDING & NEIGHBORHOOD SERVICES FOR RETAINING WALL REVIEW, APPROVAL, AND PERMITTING. RETAINING WALL FINAL MATERIAL AND TYPE TO BE PROVIDED WITH SEPARATE SUBMITTAL PACKAGE.
2. WALLS SHALL BE CLAD IN BRICK, NATURAL STONE, OR CULTURED STONE. WHERE NOT VISIBLE FROM A STREET, DRIVE, OR OPEN SPACE, STAINED OR STAMPED CONCRETE AND SPLIT-FACE BLOCK ARE ALSO PERMITTED.
3. TIMBER WALLS SHALL NOT BE USED.
4. WALLS ADJACENT TO BIORETENTION AREAS SHALL NOT RELY ON BIORETENTION MEDIA OR STONE DRAINAGE MEDIA FOR STABILITY OR LATERAL RESISTANCE. BOTTOM OF WALL STEM (OR BLOCK) / TOP OF FOOTING ELEVATION SHALL BE LOCATED AT OR BELOW BOTTOM OF LOWERMOST STONE DRAINAGE MEDIA.
5. RETAINING WALLS SHALL BE DESIGNED FOR A LIVE LOAD SURCHARGE CORRESPONDING TO THE MAXIMUM DESIGN LOADING, BUT IN NO CASE LESS THAN 250 PSF APPLIED OVER THE FULL EXTENTS OF RIGHT-OF-WAY.
6. RETAINING WALLS SHALL PROVIDE A MINIMUM SLIDING AND OVERTURNING FACTOR OF SAFETY OF 1.50 AND A MINIMUM GLOBAL STABILITY FACTOR OF SAFETY OF 1.30.
7. ALL RETAINING WALLS AND ASSOCIATED COMPONENTS SHALL BE WHOLLY LOCATED OUTSIDE OF RIGHT-OF-WAY AND PUBLIC EASEMENTS.
8. RETAINING WALLS OUTSIDE OF, BUT SUPPORTING, RIGHT-OF-WAY OR PUBLIC EASEMENTS SHALL NOT BE CONSTRUCTED OF TIMBER OR GROUTED OR UNGROUTED STACKED STONE.
9. PEDESTRIAN AND/OR VEHICULAR GUARDS SHALL BE PROVIDED WHEN A PEDESTRIAN AND/OR VEHICULAR PATH, RESPECTIVELY, EXTENDS TO WITHIN FIVE (5) FEET OF THE TOP OF A RETAINING WALL OR WHERE OTHERWISE DEEMED NECESSARY BY THE CITY ENGINEER.
10. A WALL PERMIT IS REQUIRED TO CONSTRUCT THE WALLS AT EACH LOCATION DUE TO THE WALL HEIGHT SHOWN, (MAY BE SUBMITTED AS ONE PERMIT THAT INCLUDES DESIGNS FOR ALL WALLS).

STRUCTURE TABLE		
NAME	DESCRIPTION	TOP GRATE
A0	CONNECT TO SPLITTER BOX	658.70
A1	MANHOLE	661.27
A2	CURB INLET	661.14
A3	MANHOLE	661.69
A4	MANHOLE	661.80
B0	MANHOLE	663.43
B1	MANHOLE	662.41
C1	CURB INLET	662.22
C2	MANHOLE	661.02
D1	MANHOLE	660.82
D1.2	OUTLET CONTROL STRUCTURE	659.71
D2	MANHOLE	661.15
D3	AREA DRAIN W/ __ STANDARD GRATE	659.04
E1	JBS 2215	661.00
EX-0	EXISTING CURB INLET	661.00
EX-1	EXISTING MANHOLE	659.37
EX-3	EXISTING CURB INLET	665.32
F1	JBS 2215	667.10
G1	MANHOLE	663.56

SITE AREA TABLE

TOTAL SITE AREA =	20.06 ACRES
LIMITS OF DISTURBANCE =	5.20 ACRES
LIMITS OF DISTURBANCE IMPERVIOUS AREA =	166,132 SF

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

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4031 Aspen Grove Drive, Franklin, TN 37067
Main: 615.564.2701 | www.kimley-horn.com
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THE FACTORY AT FRANKLIN PUD
SUBDIVISION, SITE PLAN
(REVISION1)
FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
No. 121290
09/01/2022

No.	REVISIONS	DATE	BY
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DESIGNED BY: SAS
DRAWN BY: SAS
CHECKED BY: MMc
DATE: 09/01/2022
KIMLEY-HORN PROJECT NO. 017010010

OVERALL GRADING & DRAINAGE PLAN

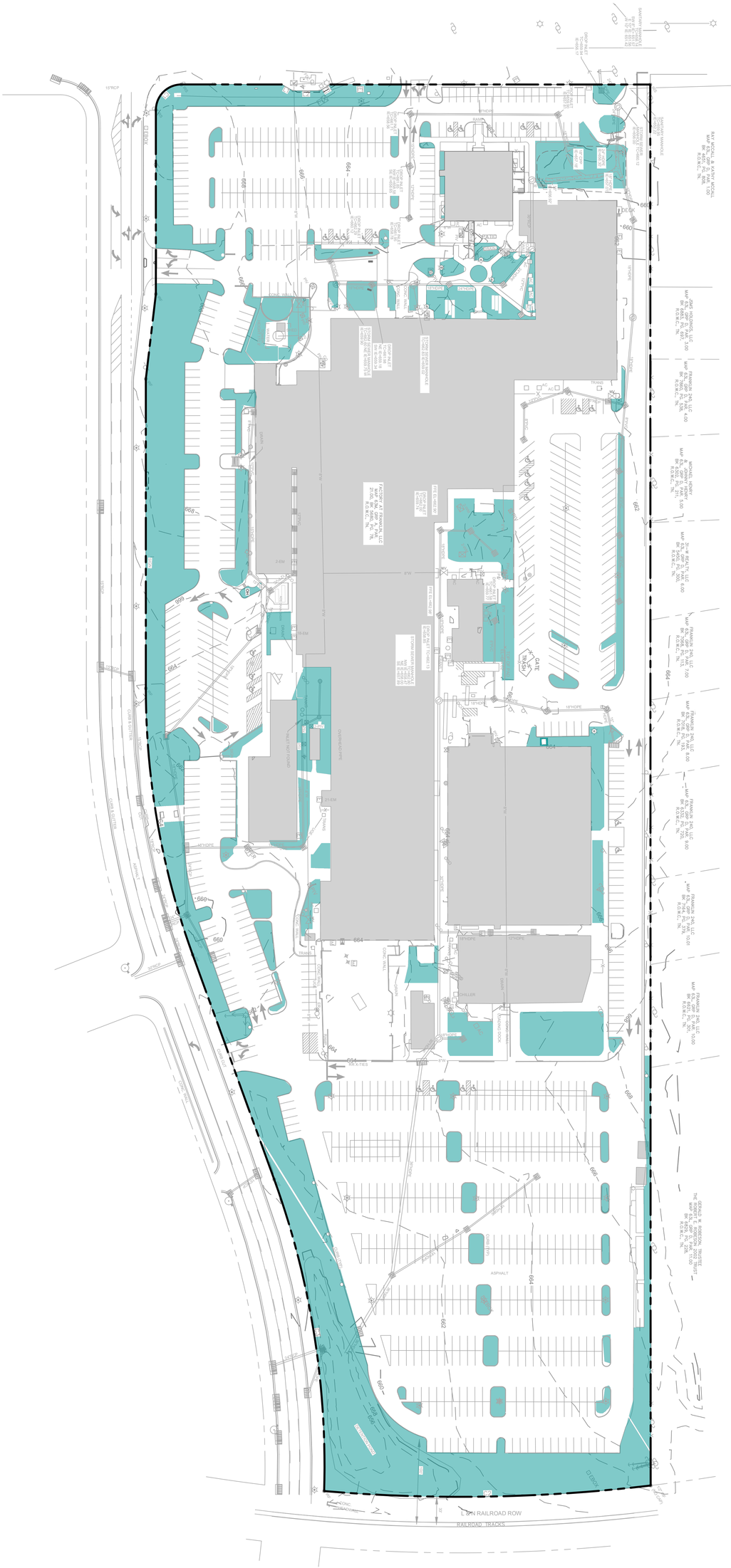
SHEET NUMBER
C3.0

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Drawing name: K:\FRA_LDEV\017010010 - franklin factory\4-CADD\plansheets\site plan\C3.0 OVERALL GRADING AND DRAINAGE PLAN.dwg GRADING & DRAINAGE PLAN Sep 01, 2022 2:59pm by: Shawn.Schaub

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Drawing name: K:\FRA_LDEV\017010\10 - franklin factory\4-CAD\Plansheets\site plan\C3.3 BIORETENTION DRAWAGE MAP.dwg C3.1 EXISTING IMPERVIOUS AREA Sep 01, 2022 3:00pm by Shawn Schaub



PRE DEVELOPMENT IMPERVIOUS AREA		
IMPERVIOUS	PERVIOUS	TOTAL SITE
710,923	166,514	877,437

GRAPHIC SCALE IN FEET
0 30 60 120

NORTH

EXISTING IMPERVIOUS AREA

SHEET NUMBER
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DESIGNED BY: SAS
DRAWN BY: MAc
CHECKED BY: SAS
DATE: 09/01/2022
KIMLEY-HORN PROJECT NO. 017010010

MARY MCGOWAN SHEA
REGISTERED LANDSCAPE ARCHITECT
STATE OF TENNESSEE
09/01/2022

THE FACTORY AT FRANKLIN PUD
SUBDIVISION, SITE PLAN
(REVISION1)
FRANKLIN, TENNESSEE
COF# 7941

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BIORETENTION AREAS

WATER QUALITY DRAINAGE AREA	DRAINAGE AREA SF	TREATMENT TYPE	REQUIRED AREA (SF)	PROVIDED AREA (SF)
1	77,014	LEVEL 2 BIORETENTION	4287	4391
2	13,329	LEVEL 1 BIORETENTION	692	806
3	68,103	LEVEL 2 BIORETENTION	3141	3239
BYPASS	75,179	N/A	N/A	N/A

SITE DATA TABLE

PROJECT NAME:	FRANKLIN FACTORY PARKING REDEVELOPMENT PRE-APPLICATION SITE PLAN
COF PROJECT #:	7941
MAP:	MAP # 063M
PARCEL #:	063M D 02100
ADDRESS:	230 FRANKLIN RD
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
EXISTING PARKING ACROSS SITE:	917 SPACES
UNCHANGED PARKING:	672 SPACES
NEW PROPOSED PARKING:	251 SPACES
TOTAL POST REDEVELOPMENT PARKING:	923 SPACES

NOTES:
1. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS, SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
2. THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF PLANNING COMMISSION. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER RELEVANT DEPARTMENT SUPERINTENDENT OR THE PLANNING COMMISSION. IN ADDITION, THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FLIPZONE 4100 AND NAD 83 DATUM.
3. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PERFORMED BY S&ME DATED, 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

DRAINAGE AREA NOTE

BIORETENTION LOCATIONS 1 AND 3 HAVE BEEN SIZED TO ACCOUNT FOR ADDITIONAL TREATMENT AREA FOR THE HIGHLIGHTED UNDISTURBED AREAS. THIS HAS ALLOWED FOR GREATER BYPASS OF DISTURBED AREAS WITHIN THE LIMITS OF DISTURBANCE.
BIORETENTION AMOUNTS HAVE BEEN PROVIDED ASSUMING THE SITE MEETS THE REQUIREMENTS FOR A 65% RV REDUCTION VALUE.

DA 1
DA 2
DA 3
BYPASS
BYPASS
BYPASS
UNDISTURBED AREA TO BE TREATED BY BIORETENTION 1
UNDISTURBED AREA TO BE TREATED BY BIORETENTION 1
UNDISTURBED AREA TO BE TREATED BY BIORETENTION 3
BIORETENTION 1
BIORETENTION 2
BIORETENTION 3
CURB CUT 1
CURB CUT 2
CURB CUT 3
CURB CUT 4
CURB CUT 5
CURB CUT 6
LOD
RAY MCCALL & KATHY MCCALL MAP 63L, GRP D, PAR. 1.00 BK 4651, PG. 808, R.O.W.C., TN.
JSMS HOLDINGS, LLC MAP 63L, GRP D, PAR. 3.00 BK 6883, PG. 697, R.O.W.C., TN.
FRANKLIN 240, LLC MAP 63L, GRP D, PAR. 4.00 BK 7860, PG. 538, R.O.W.C., TN.
MICHAEL HENRY & JOHNNY HENRY MAP 63L, GRP D, PAR. 5.00 BK 6302, PG. 211, R.O.W.C., TN.
31-W REALTY, LLC MAP 63L, GRP D, PAR. 6.00 BK 5450, PG. 300, R.O.W.C., TN.
FACTORY AT FRANKLIN, LLC MAP 63M, GRP A, PAR. 21.00, BK 5680, PG. 78, R.O.W.C., TN.
FRANKLIN ROAD (US31 SRW) (MAJOR ARTERIAL 72' ROW)
LIBERTY PIKE MINOR ARTERIAL (ROW VARIES)
SANITARY MANHOLE TC=659.95 IE=652.22
STORM SEWER MANHOLE TC=660.12 IE=656.00
STORM SEWER MANHOLE TC=662.83 IE=659.02
STORM SEWER MANHOLE TC=662.60 NE IE=659.75 W IE=659.90
STORM SEWER MANHOLE TC=662.80 NW IE=658.47 NE IE=658.00 SE IE=657.89
DROP INLET TC=661.98 NE IE=659.19 SW IE=659.34
DROP INLET TC=662.00 IE=659.74
DROP INLET TC=662.13 IE=658.85
DROP INLET TC=661.58 IE=659.77
DROP INLET TC=662.29 IE=660.78
DROP INLET TC=662.29 IE=660.78
DROP INLET TC=662.29 IE=660.78
DROP INLET TC=662.29 IE=660.78
INLET 559.94 556.17
FFE EL=662.90'
FFE EL=662.98'
TOP OF PAD EL=664.62'
INLET NOT FOUND
GATE
TRASH
DRAIN
CURB & GUTTER
ASPHALT
CONC. WALL
CONC.
EBOX
TRANS
18"HDPE
15"HDPE
24"RCP
18"RCP
15"RCP
12"PVC
8"PVC
30"HDPE
24"HDPE
662
664
666
668

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

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THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

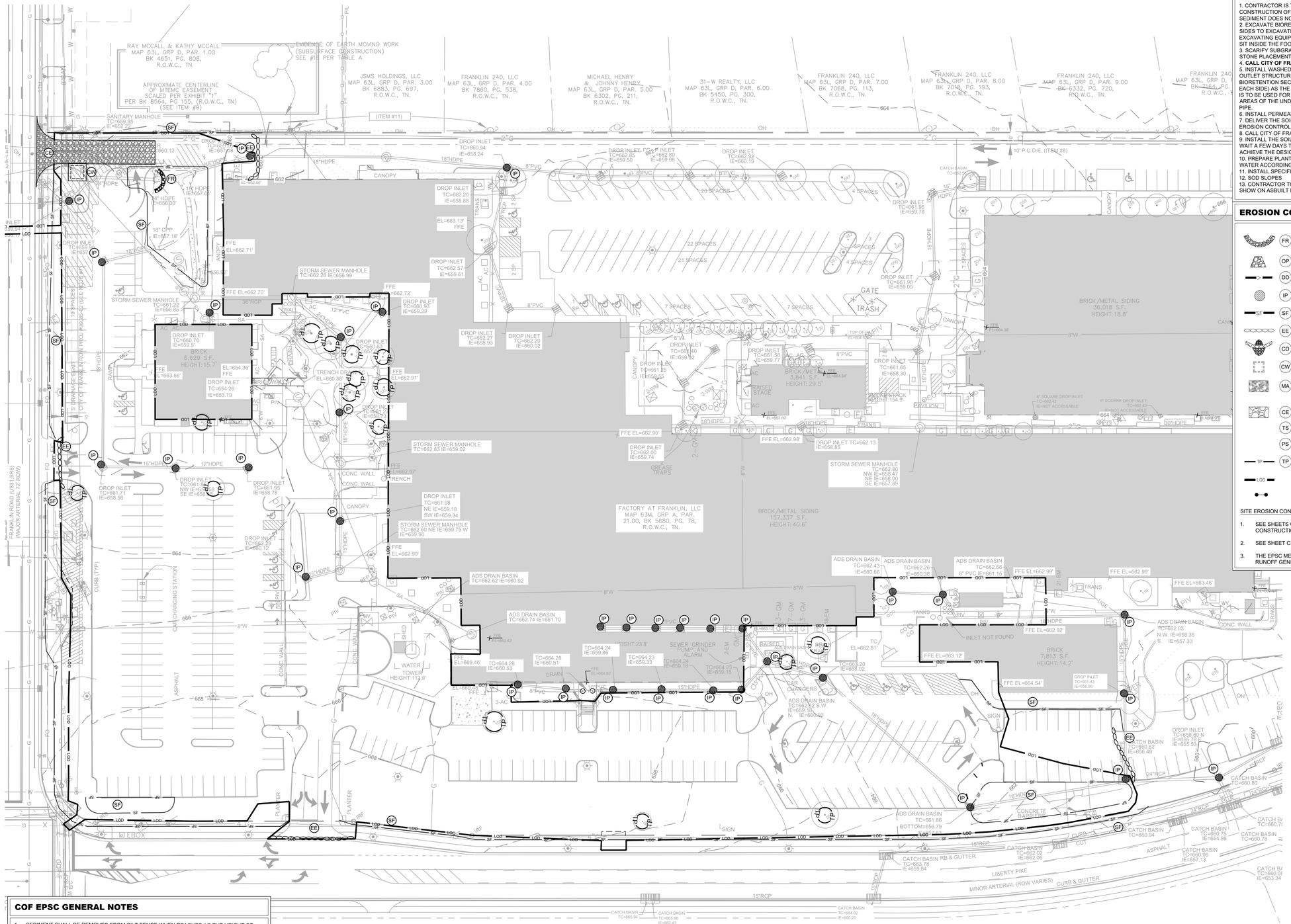
MARY McGOWAN REGISTERED ENGINEER AGRICULTURE STATE OF TENNESSEE 121390
09/01/2022

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DESIGNED BY: SAS
DRAWN BY: SAS
CHECKED BY: MMc
DATE: 09/01/2022
KIMLEY-HORN PROJECT NO. 017010010

WATER QUALITY MAP

SHEET NUMBER
C3.1A



BIORETENTION CONSTRUCTION SEQUENCING

1. CONTRACTOR IS TO PROVIDE METHOD OF DIVERTING RUNOFF FLOW AROUND THE CONSTRUCTION OF THE BIORETENTION AREA DURING PERIODS OF RAINFALL TO ENSURE SEDIMENT DOES NOT ENTER BIORETENTION AREA.
2. EXCAVATE BIORETENTION AREA. EXCAVATORS OR BACKHOES SHOULD WORK FROM THE SIDES TO EXCAVATE THE BIORETENTION AREA TO THE DESIGN DEPTH AND DIMENSIONS. EXCAVATING EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT SIT INSIDE THE FOOTPRINT OF THE BIORETENTION AREA.
3. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12 INCHES PRIOR TO STONE PLACEMENT.
4. **CALL CITY OF FRANKLIN INSPECTOR FOR INSPECTION 615-791-3218**
5. INSTALL WASHED STONE LAYER. INSTALL UNDERDRAIN PIPES AND CONNECT TO THE OUTLET STRUCTURE. INSTALL ADDITIONAL STONE ON THE UNDERDRAIN PIPES AS PER THE BIORETENTION SECTION DETAIL. CONTRACTOR TO FLAG THE UNDERDRAIN LOCATIONS (3 FT EACH SIDE) AS THE ADDITIONAL SECTIONS ARE BEING INSTALLED. A SMALL BOBCAT LOADER IS TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AND IS TO AVOID ACCESSING THE AREAS OF THE UNDERDRAIN PIPE INSTALLATION TO PREVENT DAMAGE TO THE PERFORATED PIPE.
6. INSTALL PERMEABLE GEOTEXTILE FABRIC.
7. DELIVER THE SOIL MEDIA AND STORE IT ON PLASTIC SHEETING WITH THE APPROPRIATE EROSION CONTROL MEASURES ON THE DOWNHILL AND BIORETENTION SIDES.
8. CALL CITY OF FRANKLIN INSPECTOR FOR INSPECTION 615-791-3218
9. INSTALL THE SOIL MEDIA IN 12" LIFTS UNTIL THE DESIRED TOP ELEVATION IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT AND ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS. DO NOT COMPACT WITH EQUIPMENT.
10. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL THE VEGETATION AND WATER ACCORDINGLY.
11. INSTALL SPECIFIED GROUNDCOVER IN BOTTOM OF BIORETENTION AREA
12. SOD SLOPES
13. CONTRACTOR TO FLAG LIMITS OF BIORETENTION BASIN FOR SURVEY TO LOCATE AND SHOW ON ASBUILT PLANS.

EROSION CONTROL LEGEND

FR	STONE FILTER RING - CLASS A RIP-RAP, 2' THICK	
OP	OUTLET PROTECTION - REFER TO DETAIL SHEET C3-5	
DD	DIVERSION DITCH - REFER TO DETAIL SHEET C3-5	
IP	INLET PROTECTION - REFER TO DETAIL SHEET C3-5	
SF	SILT FENCE - REFER TO DETAIL SHEET C3-5	
EE	EROSION EELS - REFER TO DETAIL SHEET C3-5	
CD	ROCK CHECK DAM - REFER TO DETAIL SHEET C3-5	
CW	CONCRETE WASHOUT AREA - REFER TO DETAIL SHEET C3-5	
MA	EROSION CONTROL MATTING - CONTECH LANDLOK S2 OR APPROVED EQUAL CONTRACTOR TO INSTALL ON ALL SLOPES 3(H):1(V) OR STEEPER - REFER TO DETAIL SHEET C3-5	
CE	CONSTRUCTION EXIT - REFER TO DETAIL SHEET C3-5	
TS	TEMPORARY STABILIZATION - REFER TO DETAIL SHEET C3-5	
PS	PERMANENT STABILIZATION - REFER TO DETAIL SHEET C3-5	
TP	TREE PROTECTION FENCE / HIGH VISIBILITY FENCE - REFER TO DETAIL SHEET C3-5	
LOD	LIMITS OF DISTURBANCE	
	CONSTRUCTION SIGN	

SITE EROSION CONTROL NOTES:

1. SEE SHEETS C0.1 AND C0.2 FOR GENERAL AND SPECIAL NOTES REGARDING DEMOLITION, CONSTRUCTION, AND EROSION PREVENTION AND SEDIMENT CONTROL.
2. SEE SHEET C3.5 FOR ADDITIONAL EROSION CONTROL NOTES AND DETAILS.
3. THE EPSC MEASURES USED AT THIS SITE ARE DESIGNED TO CONTROL THE STORM RUNOFF GENERATED BY A 5-YR, 24-HOUR STORM EVENT

COF EPSC GENERAL NOTES

1. SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN REACHES 1/3 THE HEIGHT OF THE FENCE; SEDIMENT SHALL BE REMOVED FROM ALL OTHER EPSC MEASURES AND CONTROL AS RECOMMENDED IN THE TNEPSC HANDBOOK, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
2. EPSCS SHALL BE IMPLEMENTED BEFORE EARTHMOVING BEGINS.
3. AREAS WHERE CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED SHALL BE STABILIZED WITHIN 15 DAYS (7 DAYS FOR ≥35% SLOPES)
4. INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE CONDUCTED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART
5. VEGETATION, EPSCS & OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED, OR MODIFIED WITHIN 7 DAYS OF BEING NOTIFIED OF AN ISSUE.
6. CONSTRUCTION SHALL BE PHASED FOR ACTIVITIES THAT WILL DISTURB >50 ACRES.
7. EPSCS SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 2-YEAR, 24-HOUR RETURN INTERVAL STORM; BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 5-YEAR, 24-HOUR RETURN INTERVAL STORM.
8. TEMPORARY SEDIMENT BASIN(S) SHALL BE PROVIDED FOR ON-SITE OUTFALLS THAT RECEIVE DRAINAGE FROM ≥10 ACRES; ≥5 ACRES FOR SITES THAT DISCHARGE TO IMPAIRED OR EXCEPTIONAL TN WATERS.
9. GREEN INFRASTRUCTURE BMPS SHALL BE PROTECTED DURING SITE WORK, WITH SILT FENCE, TO PREVENT SEDIMENTATION AND COMPACTION.

EPSC PHASE 1 CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE/EXIT AND CONCRETE WASHOUT
2. A GRADING PERMIT WILL NOT BE ISSUED ON THIS LOT UNTIL RURAL PLAINS CIRCLE IS PAVED OR AN ALTERNATE CITY-APPROVED MEANS OF ACCESS IS PROVIDED.
3. INSTALL SILT FENCE AND TREE PROTECTION.
4. CONTRACTOR TO CONTACT ENGINEERING DEPARTMENT TO OBTAIN STORMWATER PERMIT. THE CONTRACTOR SHALL CONTACT APPROPRIATE PARTY FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT.

WATER QUALITY BMP NOTES

1. WATER QUALITY BMPS SHALL NOT BE INSTALLED UNTIL BUILD OUT IS NEAR COMPLETION TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING WATER QUALITY BMPS. WATER QUALITY AREAS SHALL NOT BE USED AS SEDIMENT BASINS DURING CONSTRUCTION. INSTALLER'S OF WATER QUALITY BMP'S SHOULD FOLLOW ALL INSTALLATION GUIDELINES SET FORTH IN THE CITY OF FRANKLIN BMP MANUAL, LOCATED ON THE CITY'S WEBSITE.
2. CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION FOR ALL GIP'S FROM COMPACTION.

GRAPHIC SCALE IN FEET
0 20 40 80

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THE FACTORY AT FRANKLIN PUD SUBDIVISION, SITE PLAN (REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

MARY MCGOWAN
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
121350
09/01/2022

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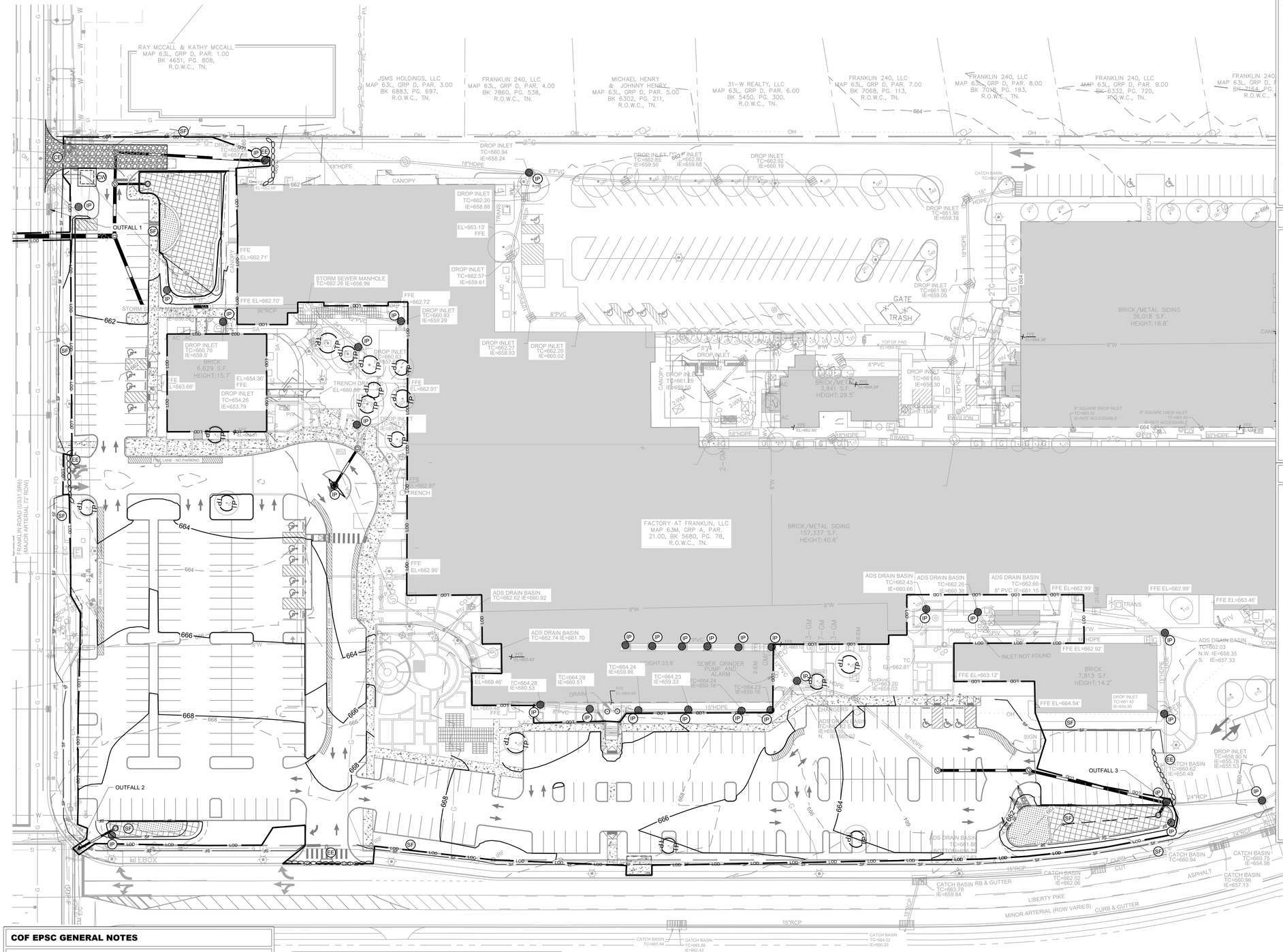
DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022
KIMLEY-HORN PROJECT NO.	017010010

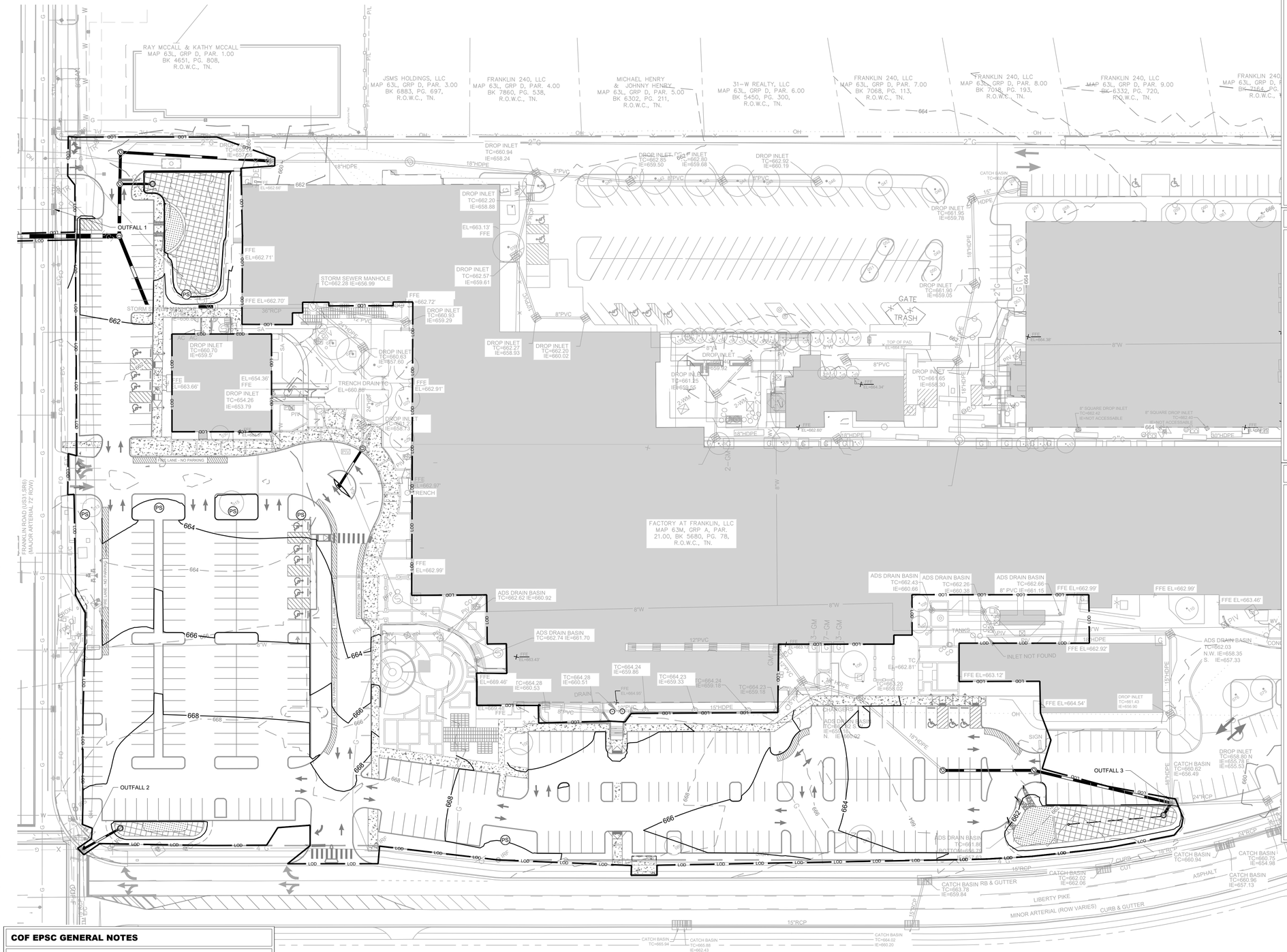
INITIAL EPSC - PRE-CONSTRUCTION PLAN

SHEET NUMBER
C3.2

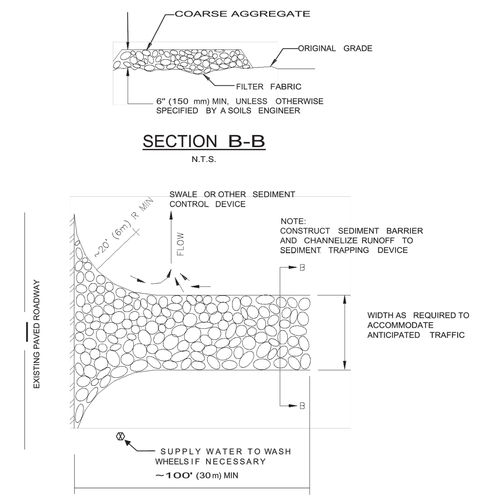
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Drawing name: K:\FRA_LDEV\017010010 - franklin factory\4-CADD\plansheets\site plan\C3.2 INITIAL EPSC - PRE-CONSTRUCTION PLAN.dwg C3.2 INITIAL EPSC - PRE-CONSTRUCTION PLAN Sep 01, 2022 3:36pm by: Shawn.Schaub


RAY MCCALL & KATHY MCCALL
MAP 63L, GRP D, PAR. 1.00
BK 4651, PG. 808,
R.O.W.C., TN.
JSMS HOLDINGS, LLC
MAP 63L, GRP D, PAR. 3.00
BK 6883, PG. 697,
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FRANKLIN 240, LLC
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MICHAEL HENRY
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FRANKLIN 240, LLC
MAP 63L, GRP D, PAR. 9.00
BK 6332, PG. 720,
R.O.W.C., TN.
FRANKLIN 240
MAP 63L, GRP D, P
BK 7764, PG.
R.O.W.C.,
FACTORY AT FRANKLIN, LLC
MAP 63M, GRP A, PAR.
21.00, BK 5680, PG. 78,
R.O.W.C., TN.
BRICK/METAL SIDING
157,337 S.F.
HEIGHT: 40.6'
BRICK/METAL SIDING
36,018 S.F.
HEIGHT: 18.8'
BRICK/METAL SIDING
3,841 S.F.
HEIGHT: 29.5'
BRICK
6,629 S.F.
HEIGHT: 15.7'
BRICK
7,813 S.F.
HEIGHT: 14.2'
PAVILION
HEIGHT: 15'
TRASH
GATE
CANOPY
OUTFALL 1
OUTFALL 2
OUTFALL 3
FRANKLIN ROAD (US31 SRW)
(MAJOR ARTERIAL 72' ROW)
LIBERTY PIKE
MINOR ARTERIAL (ROW VARIES)
CURB & GUTTER
ASPHALT
TRENCH
TRANS
EBOX
INLET NOT FOUND
SIGN
DROP INLET
TC=662.20
IE=658.88
DROP INLET
TC=660.94
IE=658.24
DROP INLET
TC=662.85
IE=659.50
DROP INLET
TC=662.80
IE=659.68
DROP INLET
TC=662.92
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DROP INLET
TC=661.95
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DROP INLET
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TC=662.27
IE=658.93
DROP INLET
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IE=660.02
DROP INLET
TC=660.93
IE=659.29
DROP INLET
TC=660.70
IE=659.5'
DROP INLET
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DROP INLET
TC=654.26
IE=653.79
DROP INLET
TC=661.15
IE=659.55
DROP INLET
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DROP INLET
TC=661.43
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DROP INLET
TC=661.43
IE=659.24
DROP INLET
TC=661.95
IE=659.78
DROP INLET
TC=660.62
IE=656.49
DROP INLET
TC=658.80 N
IE=655.78
IE=655.53
STORM SEWER MANHOLE
TC=662.28 IE=656.99
STORM SEWER MANHOLE
TC=660.68 IE=657.07
CATCH BASIN
TC=662.62 IE=660.92
CATCH BASIN
TC=662.03
N.W. IE=658.35
S. IE=657.33
CATCH BASIN
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CATCH BASIN
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TC=665.88
IE=662.43
CATCH BASIN
TC=664.02
IE=660.20
CATCH BASIN RB & GUTTER
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IE=659.84
CATCH BASIN
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ADS DRAIN BASIN
TC=662.66
8" PVC IE=661.15
ADS DRAIN BASIN
TC=662.92
IE=659.92
ADS DRAIN BASIN
TC=662.74 IE=661.70
ADS DRAIN BASIN
TC=662.92
IE=659.92
ADS DRAIN BASIN
TC=662.03
N.W. IE=658.35
S. IE=657.33
ADS DRAIN BASIN
TC=661.43
IE=657.92
ADS DRAIN BASIN
BOTTOM=656.15
8" SQUARE DROP INLET
TC=662.42
IE=657 ACCESSABLE
8" SQUARE DROP INLET
TC=662.45
IE=657 ACCESSABLE
SEWER GRINDER
PUMP AND
ALARM
TANKS
DRAIN
FFE EL=662.71'
FFE EL=662.70'
FFE EL=662.72'
FFE EL=662.91'
FFE EL=662.92'
FFE EL=662.99'
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FFE EL=663.46'
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FFE EL=654.36'
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TC=662.81'
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IE=659.23


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(MAJOR ARTERIAL 72' ROW)
OUTFALL 1
OUTFALL 2
OUTFALL 3
GATE
TRASH
DROP INLET TC=660.94 IE=658.24
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DROP INLET TC=662.57 IE=659.61
DROP INLET TC=662.27 IE=658.93
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DROP INLET TC=660.70 IE=659.5'
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ADS DRAIN BASIN BOTTOM=656.55
CATCH BASIN TC=664.24 IE=659.86
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CATCH BASIN TC=660.78
CATCH BASIN TC=660.77
CATCH BASIN TC=660.04 IE=653.34
CATCH BASIN TC=663.78 IE=659.84
CATCH BASIN TC=662.02 IE=662.06
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CATCH BASIN TC=665.88 IE=662.43
CATCH BASIN TC=664.02 IE=660.20
DROP INLET TC=661.43 IE=657.92
DROP INLET TC=661.91 IE=658.90
DROP INLET TC=660.45 IE=655.78 IE=655.53
8' SQUARE DROP INLET TC=662.42 IE=NOT ACCESSABLE
8' SQUARE DROP INLET TC=662.45 IE=NOT ACCESSABLE
CATCH BASIN TC=662.42 IE=NOT ACCESSABLE
TOP OF PAD EL=664.67
FFE EL=662.70'
FFE EL=662.71'
FFE EL=662.72'
FFE EL=662.91'
FFE EL=662.97'
FFE EL=662.99'
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FFE EL=664.36'
EL=654.36' FFE
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EL=663.43'
EL=664.95'
EL=665.00'
INLET NOT FOUND
TANKS
TC=662.81'
TC=663.20 IE=658.02
TC=664.24 IE=659.86
TC=664.28 IE=660.51
TC=664.23 IE=659.33
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TC=660.77
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TC=662.03 N.W. IE=658.35 S. IE=657.33
TC=661.43 N.

ACTIVITY: Stabilized Construction Entrance — TCP- 01

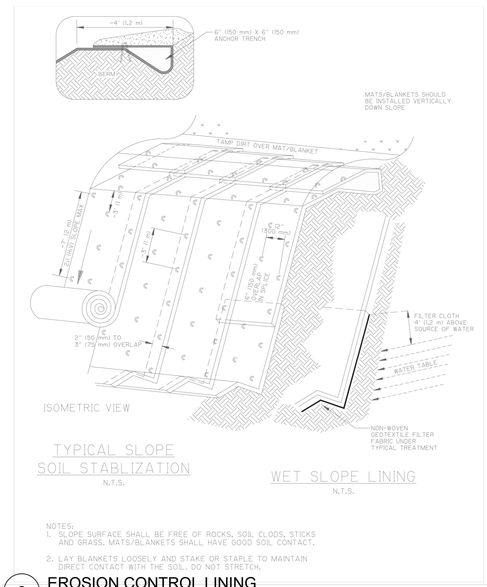


1 CONSTRUCTION ENTRANCE
SCALE:

Figure TCP-01-1
Stabilized Construction Entrance

Stormwater Best Management Practices - Temporary Construction Site Runoff Management — TCP-01-5 — January 2014

ACTIVITY: Geotextiles — PESC – 02

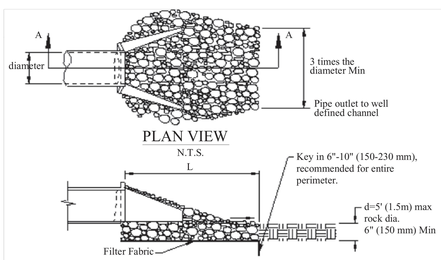


2 EROSION CONTROL LINING
SCALE:

Figure PESC-02-2
Anchoring Geotextiles on Embankments

Stormwater Best Management Practices – Permanent EP&SC — PESC-02-4 — January 2014

ACTIVITY: Outlet Protection — PESC – 07



Adapted from: Virginia Erosion & Sediment Control Handbook, 1992

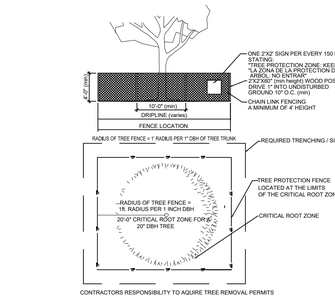
Pipe Diameter in (mm)	Discharge ft³/s (m³/s)	Apron Length, L ft (m)	Rip-Rap D_{50} Diameter Min in (mm)
12 (300)	4.9 (0.14)	10 (3)	4 (100)
	9.89 (0.28)	13 (4)	6 (150)
18 (450)	9.89 (0.28)	10 (3)	6 (150)
	20.13 (0.57)	16 (5)	8 (200)
	30.01 (0.85)	23 (7)	12 (300)
	39.90 (1.13)	26 (8)	16 (400)
24 (600)	30.01 (0.85)	16 (5)	8 (200)
	39.90 (1.13)	26 (8)	8 (200)
	50.14 (1.42)	26 (8)	12 (300)
	60.03 (1.70)	30 (9)	16 (400)
For larger or higher flows, consult a registered civil engineer			

Source: Adapted from USDA-SCS

3 OUTLET PROTECTION DETAIL
SCALE:

Figure PESC-07-1
Outlet Protection Sizing

Stormwater Best Management Practices – Permanent EP&SC — PESC-07-3 — January 2014



TREE PROTECTION FENCING DETAIL FOR SAVED TREES

NOTE
ALL TP FENCE SHALL BE INSTALLED PRIOR TO INSPECTIONS FOR GRADING PERMIT. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED OUTSIDE THE LIMITS OF TP.

TREE PROTECTION DETAIL
NOT TO SCALE

TREE PROTECTION NOTES:
1. The tree protection barriers shall be constructed before the issuance of any permits, and shall remain intact throughout the entire period of construction.

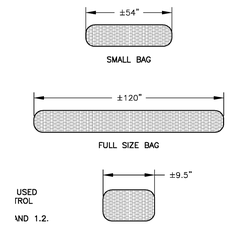
2. The tree protection barrier shall be installed as labeled on this plan or a distance to the radius of the dripline, whichever is greatest, as measured from the trunk of the protected tree.

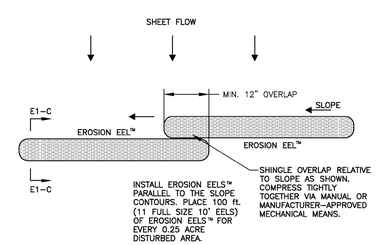
3. Any required excavation in or around the protection zone to accommodate underground services, footings, etc; shall be indicated on the plan, and shall be excavated by hand. In addition, related root pruning shall be accomplished via ANSI A-300-95 standard so as to minimize impact on the general root system.

4. The storage of building materials or stock piling shall not be permitted within the limits of or against the protection barriers.

5. Trees within the protection barriers must be adequately cared for throughout the construction process (i.e., they must be watered sufficiently). Fill shall not be placed upon the root system as to endanger the health or life of the affected tree.

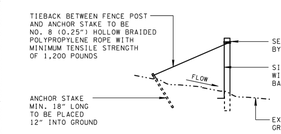
4 TREE PROTECTION DETAIL
SCALE:





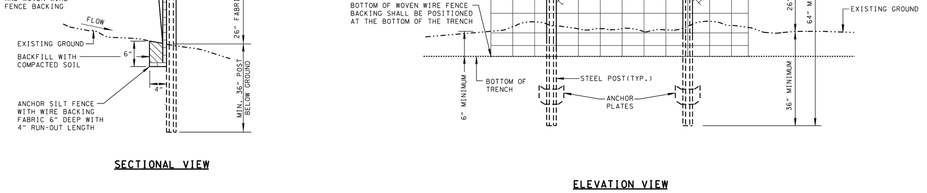
DETAIL E1-A: EROSION EELs™
N.T.S.

7 EROSION EEL DETAIL
SCALE:

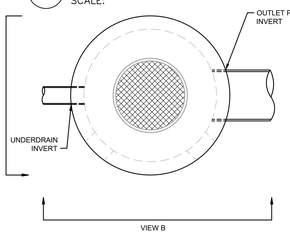


SILT FENCE TIEBACK

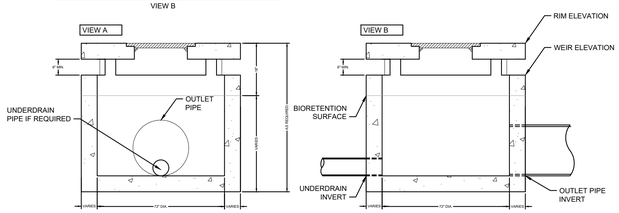
(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS, COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE WITH WIRE BACKING)



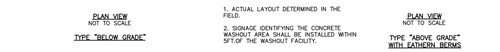
5 SILT FENCE DETAIL
SCALE:



GENERAL NOTES:
1. ALL MATERIAL DESIGNED, MANUFACTURE, PHYSICAL TEST REQUIREMENTS, FINISH MARKING INSPECTION, REJECTION AND REPAIRS TO MEET "SPECIFICATIONS FOR PRECAST-REINFORCED CONCRETE MANHOLE SECTIONS." PER ASTM C-478 (LATEST VERSION).
2. OPENINGS TO BE CORED OR CAST-IN.
3. FOR INVERT ELEVATIONS OF UNDER DRAINS SEE SHEET C3.6.



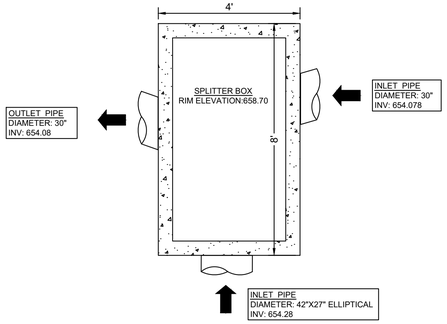
8 BIORETENTION OUTLET CONTROL STRUCTURE
SCALE:



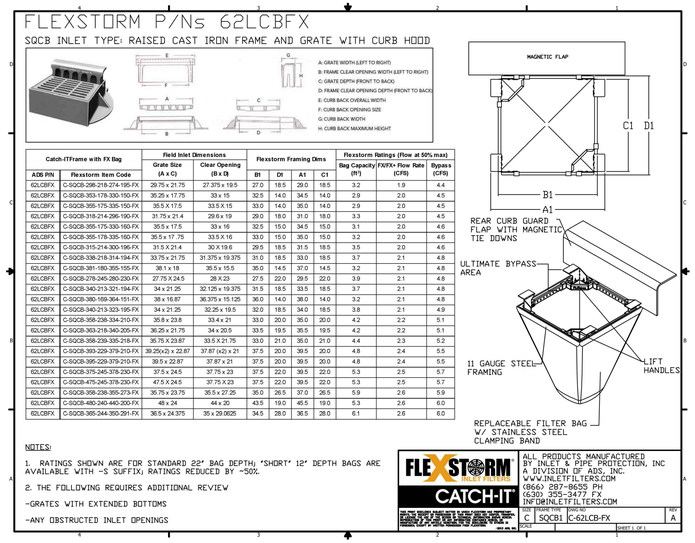


NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT OF THE WASHOUT FACILITY.

6 CONCRETE WASHOUT DETAIL
SCALE:



9 SPLITTER BOX DETAIL
SCALE:



Catch-ITFrame with FX Bag		Field Inlet Dimensions		Flexstorm Framing Dims				Flexstorm Ratings (Flow at 50% max)		
		Grate Size (A x C)	Clear Opening (B x D)	B1	D1	A1	C1	Bag Capacity (ft³)	FX/FX+ Flow Rate (CFS)	Bypass (CFS)
ADS P/N	Flexstorm Item Code									
62LCBFX	C-SQCB-226-218-274-195-FX	26.75 x 21.75	27.375 x 19.5	27.0	18.5	29.0	18.5	3.2	1.9	4.4
62LCBFX	C-SQCB-353-178-330-150-FX	35.25 x 17.75	33 x 15	32.5	14.0	34.5	14.0	2.9	2.0	4.5
62LCBFX	C-SQCB-355-175-335-150-FX	35.5 X 17.5	33.5 X 15	33.0	14.0	35.0	14.0	2.9	2.0	4.5
62LCBFX	C-SQCB-318-214-296-190-FX	31.75 x 21.4	29.6 x 19	29.0	18.0	31.0	18.0	3.3	2.0	4.5
62LCBFX	C-SQCB-355-175-330-160-FX	35.5 x 17.5	33 x 16	32.5	15.0	34.5	15.0	3.1	2.0	4.6
62LCBFX	C-SQCB-355-178-335-160-FX	35.5 x 17. 75	33.5 X 16	33.0	15.0	35.0	15.0	3.2	2.0	4.6
62LCBFX	C-SQCB-315-214-300-196-FX	31.5 X 21.4	30 X 19.6	29.5	18.5	31.5	18.5	3.5	2.0	4.6
62LCBFX	C-SQCB-338-218-314-194-FX	33.75 x 21.75	31.375 x 19.375	31.0	18.5	33.0	18.5	3.7	2.1	4.8
62LCBFX	C-SQCB-381-180-355-155-FX	38.1 x 18	35.5 x 15.5	35.0	14.5	37.0	14.5	3.2	2.1	4.8
62LCBFX	C-SQCB-278-245-280-230-FX	27.75 X 24.5	28 X 23	27.5	22.0	29.5	22.0	3.9	2.1	4.8
62LCBFX	C-SQCB-340-213-321-194-FX	34 x 21.25	32.125 x 19.375	31.5	18.5	33.5	18.5	3.7	2.1	4.8
62LCBFX	C-SQCB-380-169-364-151-FX	38 x 16.87	36.375 x 15.125	36.0	14.0	38.0	14.0	3.2	2.1	4.8
62LCBFX	C-SQCB-340-213-323-195-FX	34 x 21.25	32.25 x 19.5	32.0	18.5	34.0	18.5	3.8	2.1	4.9
62LCBFX	C-SQCB-358-238-334-210-FX	35.8 x 23.8	33.4 x 21	33.0	20.0	35.0	20.0	4.2	2.2	5.1
62LCBFX	C-SQCB-363-218-340-205-FX	36.25 x 21.75	34 x 20.5	33.5	19.5	35.5	19.5	4.2	2.2	5.1
62LCBFX	C-SQCB-358-239-335-218-FX	35.75 X 23.87	33.5 X 21.75	33.0	21.0	35.0	21.0	4.4	2.3	5.2
62LCBFX	C-SQCB-393-229-379-210-FX	39.25x23 x 22.87	37.87 (x2) x 21	37.5	20.0	39.5	20.0	4.6	2.4	5.5
62LCBFX	C-SQCB-395-229-379-210-FX	39.5 x 22.87	37.87 x 21	37.5	20.0	39.5	20.0	4.8	2.4	5.5
62LCBFX	C-SQCB-375-245-378-230-FX	37.5 x 24.5	37.75 x 23	37.5	22.0	39.5	22.0	5.3	2.5	5.7
62LCBFX	C-SQCB-475-245-378-230-FX	47.5 X 24.5	37.75 X 23	37.5	22.0	39.5	22.0	5.3	2.5	5.7
62LCBFX	C-SQCB-358-238-355-273-FX	35.75 x 23.75	35.5 x 27.25	35.0	26.5	37.0	26.5	5.9	2.6	5.9
62LCBFX	C-SQCB-480-240-440-200-FX	48 x 24	44 x 20	43.5	19.0	45.5	19.0	5.3	2.6	6.0
62LCBFX	C-SQCB-385-244-350-291-FX	36.5 x 24.375	35 x 29.0625	34.5	28.0	36.5	28.0	6.1	2.6	6.0

NOTES:
1. RATINGS SHOWN ARE FOR STANDARD 22" BAG DEPTH; "SHORT" 12" DEPTH BAGS ARE AVAILABLE WITH -S SUFFIX; RATINGS REDUCED BY ~50%.
2. THE FOLLOWING REQUIRES ADDITIONAL REVIEW
-GRATES WITH EXTENDED BOTTOMS
-ANY OBSTRUCTED INLET OPENINGS

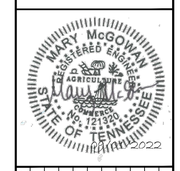
FLEXSTORM PURE MARINE
CATCH-IT
ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC A DIVISION OF ADS, INC.
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM
SIZE C | DRAWING TYPE SQCB1 | ASSY NO. C-62LCB-FX | REV A
SCALE | SHEET 1 OF 1

10 INLET PROTECTION
SCALE:

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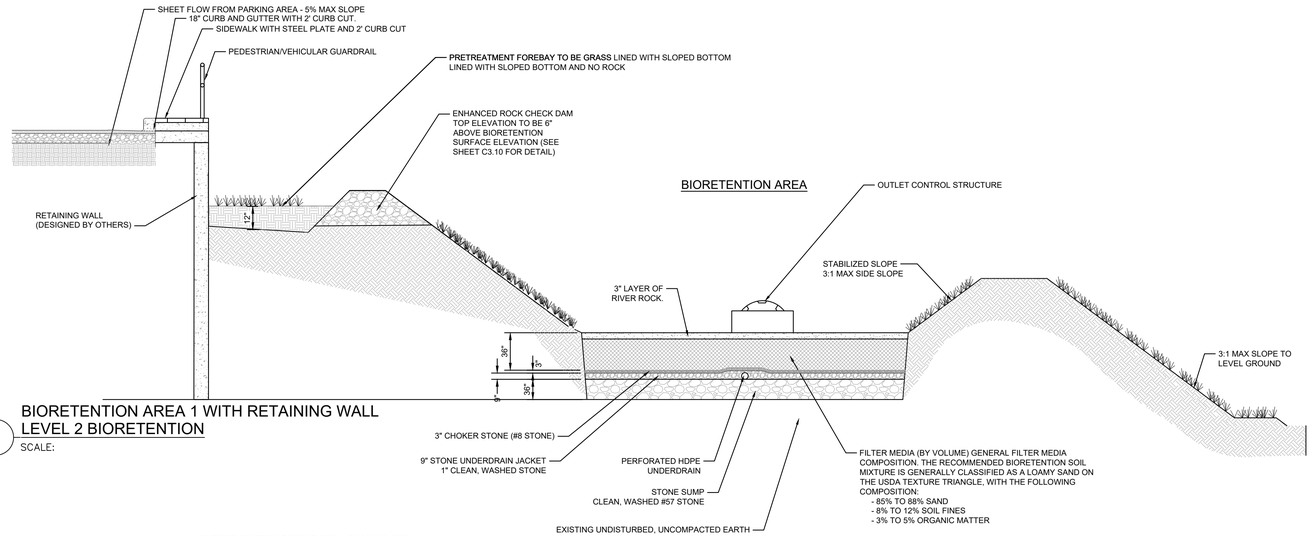
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DESIGNED BY: SAS
DRAWN BY: SAS
CHECKED BY: MMc
DATE: 09/01/2022
KIMLEY-HORN PROJECT NO. 017010010

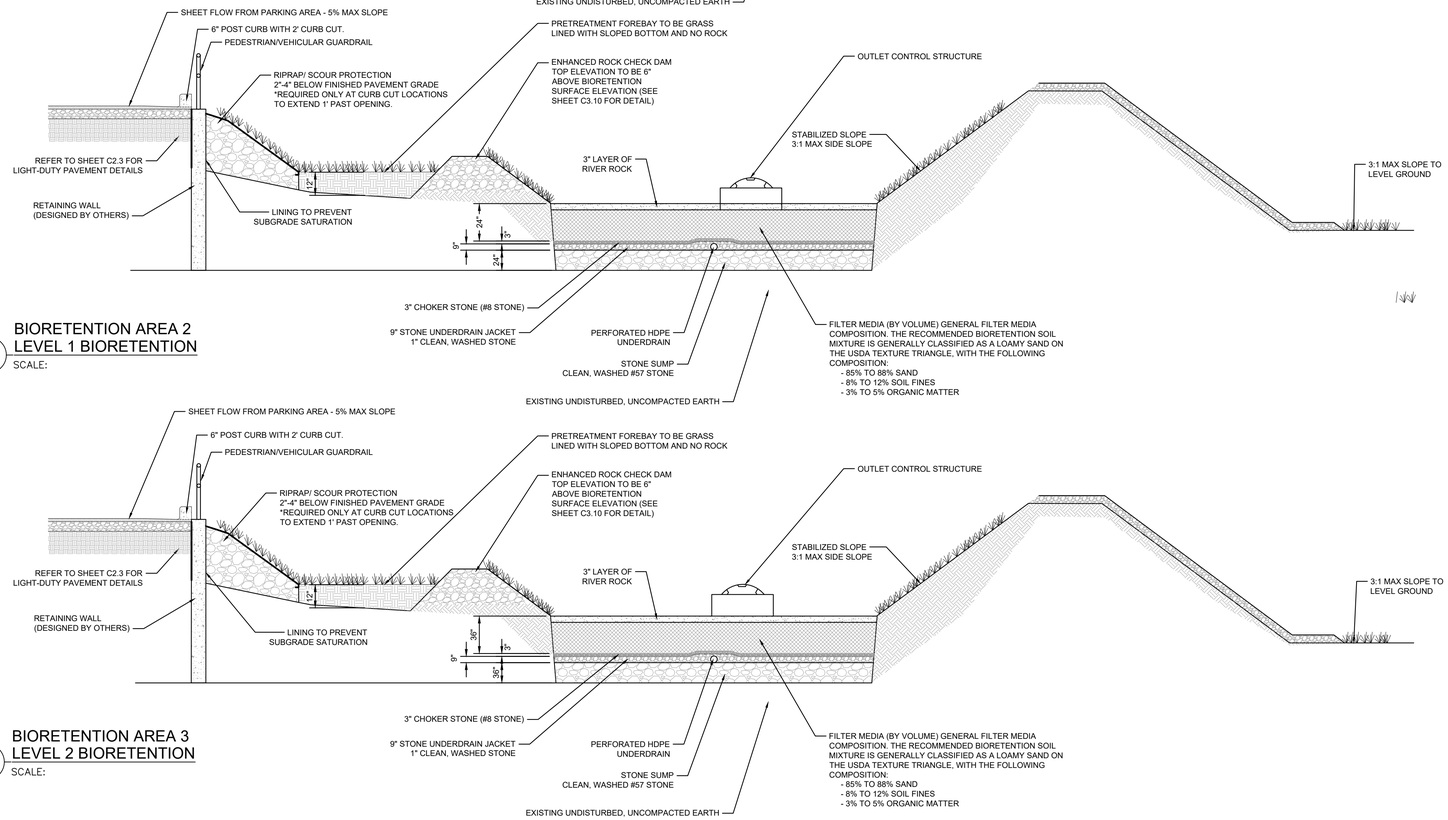
GRADING DRAINAGE AND EPSC DETAILS

SHEET NUMBER
C3.5

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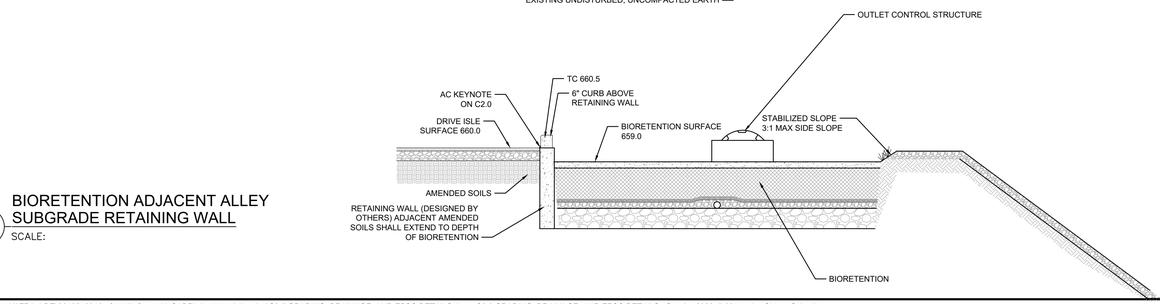


1 BIORETENTION AREA 1 WITH RETAINING WALL
LEVEL 2 BIORETENTION
SCALE:



2 BIORETENTION AREA 2
LEVEL 1 BIORETENTION
SCALE:

3 BIORETENTION AREA 3
LEVEL 2 BIORETENTION
SCALE:



4 BIORETENTION ADJACENT ALLEY
SUBGRADE RETAINING WALL
SCALE:

BIO #1

INPUT DATA

Treatment Volume (Tv)	6,564	CF	
Pretreatment Cell Depth	0.75	FT	
Bioretention Surface Elevation	659.0	FT	*Not Accurate*

BIORETENTION SECTION

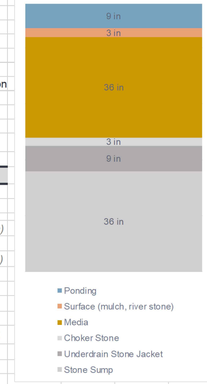
	Depth in	Depth ft	Porosity	Bot. Elev. ft	
Ponding	9	0.75	1.00	659.00	
Surface (mulch, river stone)	3	0.25	0.00	658.75	
Media	36	3.00	0.25	655.75	
Choker Stone	3	0.25	0.40	655.50	
Underdrain Stone Jacket	9	0.75	0.40	654.75	< Max outlet pipe invert elevation
Stone Sump	36	3.00	0.40	651.75	

Total Section Depth (incl. ponding)	8.00	FT	
Effective Depth (D_E)	3.10	FT	*(SUMPRODUCT of Depth x Porosity)*

RESULTS

Required Pretreatment Volume	1230.75	CF	*(15% of total treatment volume (Tv)) (1.25)*
Req'd Bioretention Volume	6564.00	CF	*(Total treatment volume)*
Req'd Pretreatment Area	1641	SF	*(Pretreatment vol. divided by avg pretreatment depth)*
Pretreatment Area Provided	1641	SF	
Req'd Bioretention Surface Area	2647	SF	*(Bioretention volume divided by effective depth)(1.25)*
Bioretention Surface Area Provided	2,912	SF	
Total Area Required	4287.77	SF	
Treatment Volume (Tv) Provided	7221.76	CF	*(Pretreatment Area x Depth + Bioretention SA x D_E)*
Percent of Required Tv Provided	110%		

Section Illustration



BIO #2

INPUT DATA

Treatment Volume (Tv)	734	CF	
Pretreatment Cell Depth	0.5	FT	
Bioretention Surface Elevation	667.1	FT	*Not Accurate*

BIORETENTION SECTION

	Depth in	Depth ft	Porosity	Bot. Elev. ft	
Ponding	6	0.50	1.00	667.10	
Surface (mulch, river stone)	3	0.25	0.00	666.85	
Media	24	2.00	0.25	664.85	
Choker Stone	3	0.25	0.40	664.60	
Underdrain Stone Jacket	9	0.75	0.40	663.85	< Max outlet pipe invert elevation
Stone Sump	24	2.00	0.40	661.85	

Total Section Depth (incl. ponding)	5.75	FT	
Effective Depth (D_E)	2.20	FT	*(SUMPRODUCT of Depth x Porosity)*

RESULTS

Required Pretreatment Volume	137.63	CF	*(15% of total treatment volume (Tv)) (1.25)*
Req'd Bioretention Volume	734.00	CF	*(Total treatment volume)*
Req'd Pretreatment Area	275	SF	*(Pretreatment vol. divided by avg pretreatment depth)*
Pretreatment Area Provided	275	SF	
Req'd Bioretention Surface Area	417	SF	*(Bioretention volume divided by effective depth)(1.25)*
Bioretention Surface Area Provided	531	SF	
Total Area Required	692.30	SF	
Treatment Volume (Tv) Provided	934.56	CF	*(Pretreatment Area x Depth + Bioretention SA x D_E)*
Percent of Required Tv Provided	127%		

Section Illustration

BIO #3

INPUT DATA

Treatment Volume (Tv)	5,603	CF	
Pretreatment Cell Depth	1	FT	
Bioretention Surface Elevation	660.9	FT	*Not Accurate*

BIORETENTION SECTION

	Depth in	Depth ft	Porosity	Bot. Elev. ft	
Ponding	12	1.00	1.00	660.90	
Surface (mulch, river stone)	3	0.25	0.00	660.65	
Media	36	3.00	0.25	657.65	
Choker Stone	3	0.25	0.40	657.40	
Underdrain Stone Jacket	9	0.75	0.40	656.65	< Max outlet pipe invert elevation
Stone Sump	36	3.00	0.40	653.65	

Total Section Depth (incl. ponding)	8.25	FT	
Effective Depth (D_E)	3.35	FT	*(SUMPRODUCT of Depth x Porosity)*

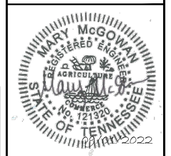
RESULTS

Required Pretreatment Volume	1050.56	CF	*(15% of total treatment volume (Tv)) (1.25)*
Req'd Bioretention Volume	5603.00	CF	*(Total treatment volume)*
Req'd Pretreatment Area	1051	SF	*(Pretreatment vol. divided by avg pretreatment depth)*
Pretreatment Area Provided	1051	SF	
Req'd Bioretention Surface Area	2091	SF	*(Bioretention volume divided by effective depth)(1.25)*
Bioretention Surface Area Provided	2,188	SF	
Total Area Required	3141.23	SF	
Treatment Volume (Tv) Provided	5863.84	CF	*(Pretreatment Area x Depth + Bioretention SA x D_E)*
Percent of Required Tv Provided	105%		

Section Illustration

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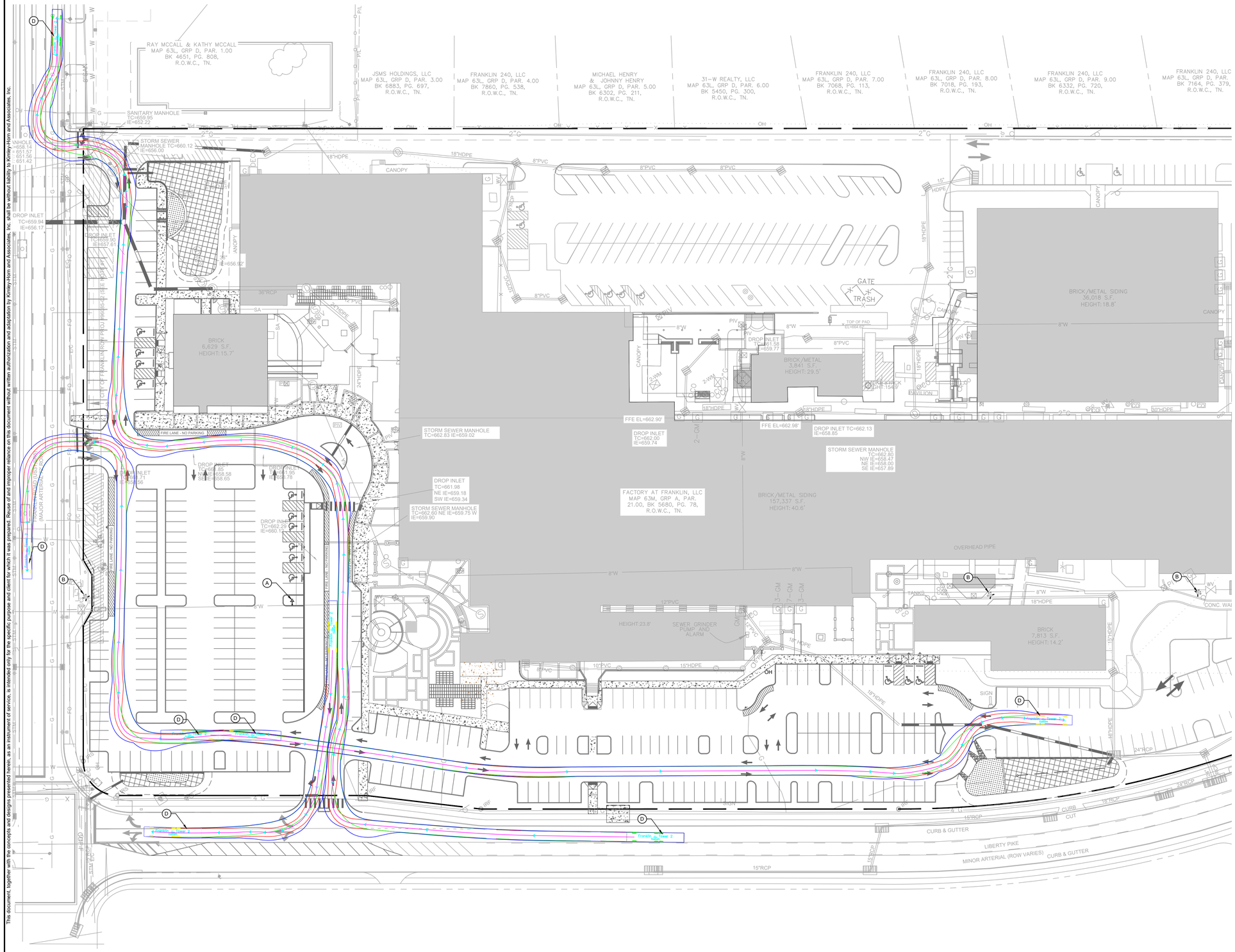
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DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022
KIMLEY-HORN PROJECT NO.	017010010

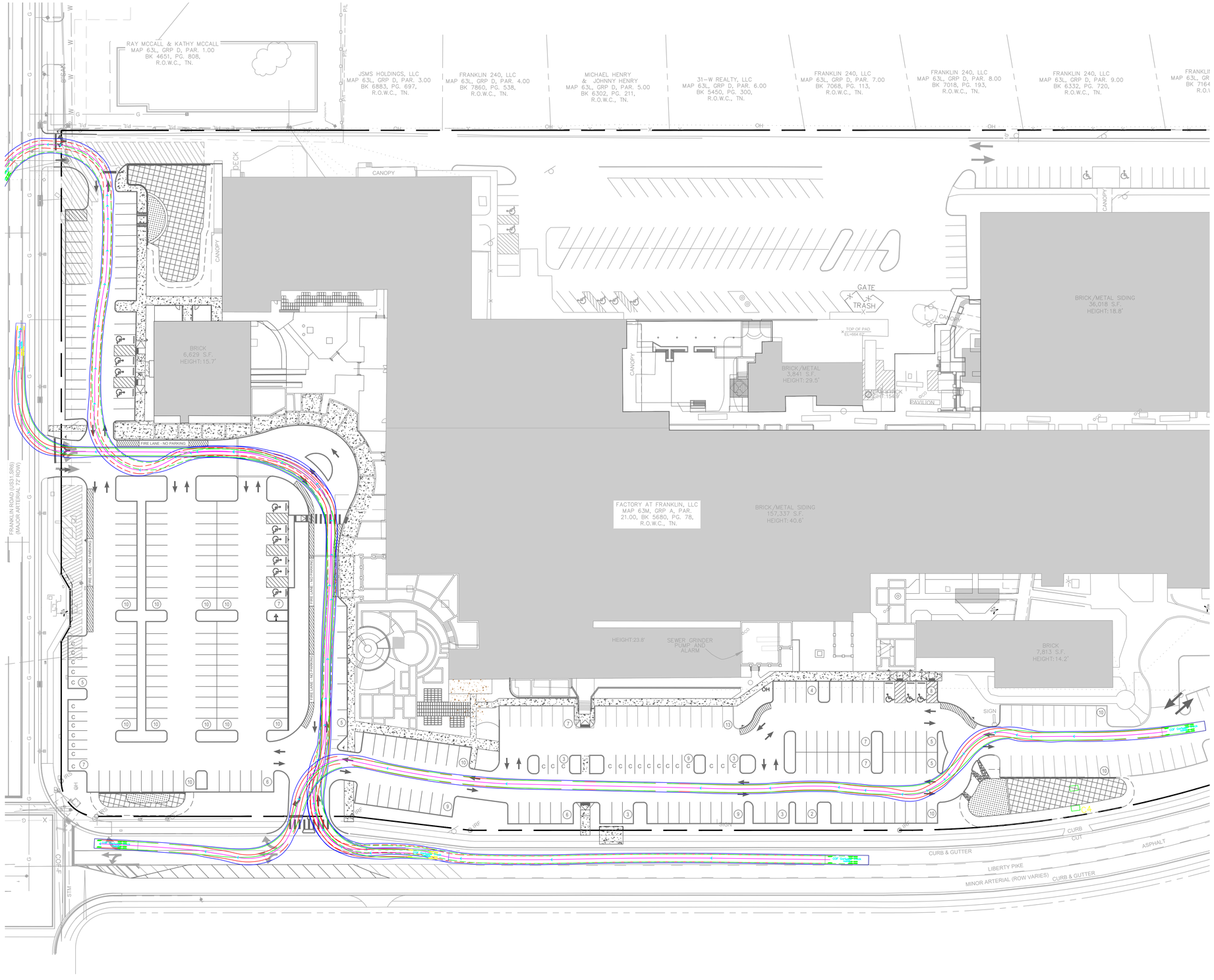
GRADING DRAINAGE DETAILS

SHEET NUMBER
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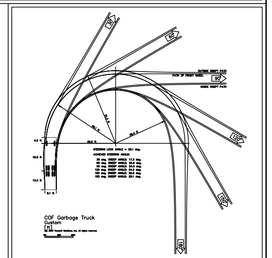

RAY MCCALL & KATHY MCCALL
MAP 63L, GRP D, PAR. 1.00
BK 4651, PG. 808,
R.O.W.C., TN.
JSMS HOLDINGS, LLC
MAP 63L, GRP D, PAR. 3.00
BK 6883, PG. 697,
R.O.W.C., TN.
FRANKLIN 240, LLC
MAP 63L, GRP D, PAR. 4.00
BK 7860, PG. 538,
R.O.W.C., TN.
MICHAEL HENRY
& JOHNNY HENRY
MAP 63L, GRP D, PAR. 5.00
BK 6302, PG. 211,
R.O.W.C., TN.
31-W REALTY, LLC
MAP 63L, GRP D, PAR. 6.00
BK 5450, PG. 300,
R.O.W.C., TN.
FRANKLIN 240, LLC
MAP 63L, GRP D, PAR. 7.00
BK 7068, PG. 113,
R.O.W.C., TN.
FRANKLIN 240, LLC
MAP 63L, GRP D, PAR. 8.00
BK 7018, PG. 193,
R.O.W.C., TN.
FRANKLIN 240, LLC
MAP 63L, GRP D, PAR. 9.00
BK 6332, PG. 720,
R.O.W.C., TN.
FRANKLIN 240, LLC
MAP 63L, GRP D, PAR.
BK 7164, PG. 379,
R.O.W.C., TN.
FACTORY AT FRANKLIN, LLC
MAP 63M, GRP A, PAR.
21.00, BK 5680, PG. 78,
R.O.W.C., TN.
BRICK
6,629 S.F.
HEIGHT: 15.7'
BRICK/METAL SIDING
36,018 S.F.
HEIGHT: 18.8'
BRICK/METAL
3,841 S.F.
HEIGHT: 29.5'
BRICK/METAL SIDING
157,337 S.F.
HEIGHT: 40.6'
BRICK
7,813 S.F.
HEIGHT: 14.2'
GATE
TRASH
PAVILION
CANOPY
SANITARY MANHOLE
TC=659.95
IE=652.22
STORM SEWER MANHOLE TC=660.12
IE=650.00
MANHOLE
658.14
651.57
651.56
651.42
DROP INLET
TC=659.94
IE=656.17
DROP INLET
TC=659.94
IE=657.61
IE=656.92
STORM SEWER MANHOLE
TC=662.83 IE=659.02
DROP INLET
TC=661.98
NE IE=659.19
SW IE=659.34
STORM SEWER MANHOLE
TC=662.60 NE IE=659.75 W
IE=659.90
DROP INLET
TC=662.00
IE=659.74
DROP INLET TC=662.13
IE=658.85
STORM SEWER MANHOLE
TC=662.80
NW IE=658.47
NE IE=658.00
SE IE=657.89
DROP INLET
TC=661.88
NW IE=659.58
SE IE=658.65
DROP INLET
TC=661.95
IE=659.78
DROP INLET
TC=662.20
IE=660.12
DROP INLET
TC=661.58
IE=659.77
FFE EL=662.90'
FFE EL=662.98'
TOP OF PAD
EL=664.82'
FIRE LANE - NO PARKING
CITY OF FRANKLIN PROJ. #2018-01-SP
MAJOR ARTERIAL (ROW VARIES)
LIBERTY PIKE
CURB & GUTTER
CURB CUT
SIGN
OVERHEAD PIPE
TANK
SEWER GRINDER PUMP AND ALARM
CONC. WALL
Franklin T-2 Tower 2
Franklin T-2 Tower
Franklin T-2 Tower 2
Franklin T-2 Tower 2
Franklin T-2 Tower 2

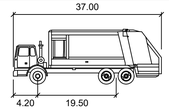
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ROW & ACCESS GENERAL NOTES

1. PRIOR TO BEGINNING ANY CONSTRUCTION, THE DEVELOPER AND/OR CONTRACTOR, SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY LAW. SUCH PERMITS MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE REQUIRED BY STATE OF TENNESSEE, WILLIAMSON COUNTY AND OTHER CITY OF FRANKLIN AGENCIES.
2. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OFWAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
3. CONSTRUCTION MATERIALS SHALL BE FULLY TESTED IN ACCORDANCE WITH THE DESIGNATIONS AND REQUIREMENTS WITHIN THE REFERENCED "TDOT STANDARD SPECIFICATIONS" SECTIONS, UNLESS OTHERWISE NOTED WITHIN THE "STANDARD SPECIFICATIONS" SECTION OF THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.
4. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. ALL TEMPORARY STRIPING SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," PUBLISHED BY TDOT, THE LATEST REVISION EXCEPT AS HEREIN AMENDED. WHEN APPROVED, TEMPORARY STRIPING SHALL BE REQUIRED PRIOR TO THE OPENING OF A STREET FOR TRAVEL WHERE PAVEMENT AND/OR PERMANENT STRIPING CANNOT BE COMPLETED DUE TO WEATHER AND/OR TIME CONSTRAINTS.
7. THERMOPLASTIC PAVEMENT MARKINGS SHOULD BE USED ON ALL PUBLIC AND PRIVATE CITY STREET PROJECTS. THERMOPLASTIC TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO SECTION 716.03 "THERMOPLASTIC PAVEMENT MARKINGS", OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS (TDOT), AND TO THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.





COF Garbage Truck

	feet
Width	: 8.10
Track	: 6.50
Lock to Lock Time	: 6.0
Steering Angle	: 25.1

VEHICLE LEGEND

VEHICLE FENDER PATH
VEHICLE FRONT WHEEL PATH
VEHICLE REAR WHEEL PATH

GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

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THE FACTORY AT FRANKLIN PUD
SUBDIVISION, SITE PLAN
(REVISION1)

FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN
REGISTERED ENGINEER
No. 121339
STATE OF TENNESSEE
09/01/2022

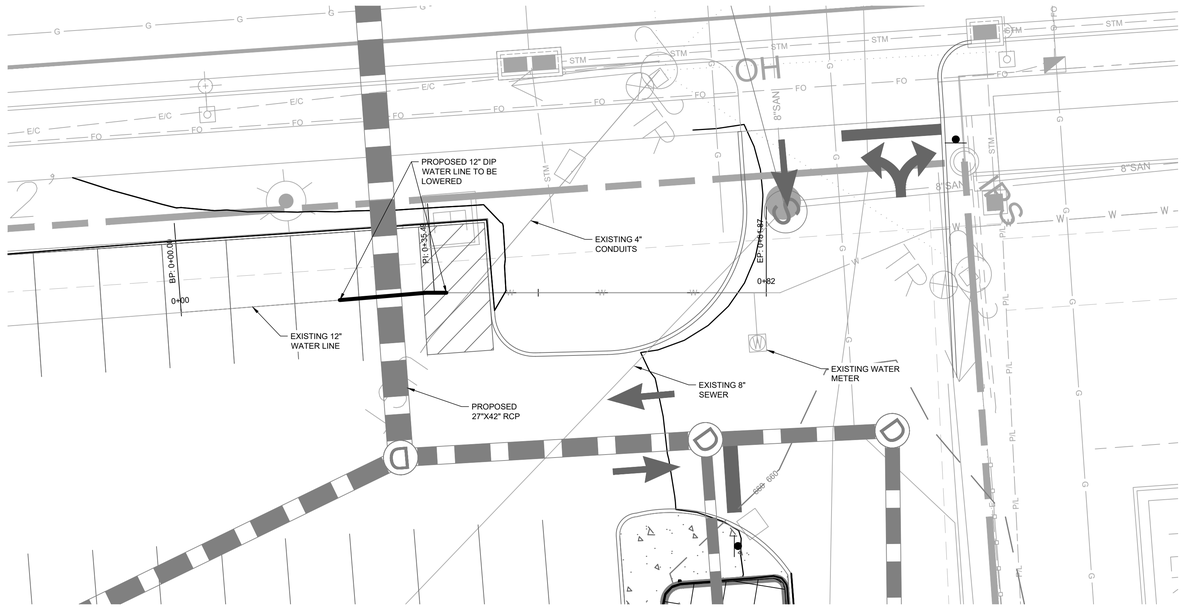
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DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022

KIMLEY-HORN PROJECT NO.
017010010

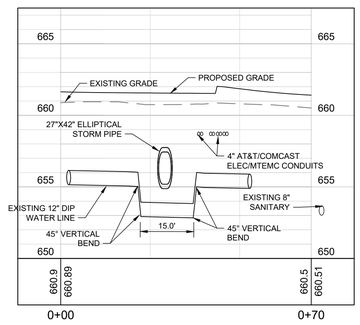
ENLARGED ROW & ACCESS PLAN - GARBAGE

SHEET NUMBER
C4.2



GRAPHIC SCALE IN FEET
0 5 10 20

NORTH



WATER LINE PROFILE
H 1"=20'; V 1"=4'

SITE DATA TABLE

PROJECT NAME:	FRANKLIN FACTORY PARKING REDEVELOPMENT PRE-APPLICATION SITE PLAN
COF PROJECT #:	7941
MAP:	MAP # 063M
PARCEL #:	063M D 02100
ADDRESS:	230 FRANKLIN RD
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH CIVIL DISTRICT
EXISTING ZONING:	PD, PLANNED DISTRICT
CHARACTER AREA OVERLAY:	HISTORIC PRESERVATION, CENTRAL FRANKLIN
TOTAL ACREAGE OF SITE:	20.06 ACRES
ACREAGE OF LOD:	5.20 ACRES
TOTAL SQUARE FOOTAGE OF SITE:	226,076 SF
MIN. REQUIRED SETBACK LINES:	FRONT: 10' SIDE: 5' REAR: 5'
OWNERS:	FACTORY PARTNERS, LLC
ADDRESS:	230 FRANKLIN RD FRANKLIN, TN 37064
APPLICANT:	KIMLEY-HORN & ASSOCIATES
ADDRESS:	4031 ASPEN GROVE DRIVE, SUITE 200, FRANKLIN, TN 37067
PHONE:	615-564-2701
EMAIL:	MARY.MCGOWAN@KIMLEY-HORN.COM
CONTACT NAME:	MARY MCGOWAN, P.E.
EXISTING PARKING ACROSS SITE:	917 SPACES
UNCHANGED PARKING:	672 SPACES
NEW PROPOSED PARKING:	251 SPACES
TOTAL POST REDEVELOPMENT PARKING:	923 SPACES

NOTES:
1. WITHIN NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO, THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL (EXCLUDING TRANSFORMERS), GAS, SEWER, TELEPHONE, AND WATER LINES SHALL BE PLACED UNDERGROUND.
2. THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF PLANNING COMMISSION. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER RELEVANT DEPARTMENT SUPERINTENDENT OR THE PLANNING COMMISSION. IN ADDITION, THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 5301, FLIPZONE 4100 AND NAD 83 DATUM.
3. BASE INFORMATION WAS TAKEN FROM AN ALTA SURVEY PERFORMED BY S&ME DATED, 07/22/2021, A TOPOGRAPHIC SURVEY PERFORMED BY TTL DATED 11/19/21, AND THE 07ST00015 FRANKLIN CORRIDOR (STREETSCAPE) IMPROVEMENTS PROJECT. KIMLEY-HORN AND ASSOCIATES SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE BASE INFORMATION SHOWN.
4. THE CONSULTANT HAS FOUND NO EVIDENCE OF THE MINERAL RIGHTS OF THIS PROPERTY BEING TRANSFERRED TO ANY PARTY OTHER THAN THE OWNER.
5. NO PROPOSED BUILDINGS IN THIS PROJECT FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47187C0211G, DATED DECEMBER 22, 2016

UTILITY NOTES

1. ALL PERSONS WHO UNDERTAKE THE CONSTRUCTION OF WATER, SEWER AND/OR RECLAIMED WATER LINES LOCATED IN, OR AFFECTING SERVICES PROVIDED BY THE CITY OF FRANKLIN SHALL COMPLY WITH THE REQUIREMENTS AND REGULATIONS SET FORTH IN THE "GENERAL REQUIREMENTS & TECHNICAL SPECIFICATIONS, WATER MANAGEMENT DEPARTMENT, CITY OF FRANKLIN, TENNESSEE" LATEST EDITION, ALONG WITH ANY AMENDMENTS, ADDITIONS, OR ALTERATION THAT MAY THEREAFTER BE ADOPTED BY THE BOARD OF MAYOR AND ALDERMEN BY RESOLUTION.
2. CONTRACTOR SHALL OBTAIN WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT PRIOR TO SCHEDULING REQUIRED PRE-CONSTRUCTION SITE MEETING. CONTRACTOR SHALL COMPLETE THE PRECONSTRUCTION SITE MEETING PRIOR TO COMMENCING WITH CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN AND KEEP ALL OF THE FOLLOWING ITEMS ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION:
   a. APPROVED, STAMPED AND SIGNED WATER AND/OR SEWER PLANS
   b. WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT, WITH ALL STEPS COMPLETED AND SIGNED BY APPROPRIATE CITY EMPLOYEES.
   c. COPY OF APPROVED AVAILABILITY REQUEST RESPONSE LETTER.
   d. A COPY OF ALL APPROVED CUT SHEETS.
4. ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE SHALL BECOME THE RESPONSIBILITY OF THE CITY OF FRANKLIN, TN FOLLOWING APPROVAL FROM THE CITY OF FRANKLIN INSPECTORS AND ACCEPTANCE BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION. THE ACCEPTANCE DATE SHALL BE BASED ON THE DAY MAINTENANCE SURETIES ARE ESTABLISHED BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION.
5. PRIOR TO THE ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AS-BUILT DRAWINGS TO THE PLANNING AND SUSTAINABILITY DEPARTMENT.
6. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
7. ANY DAMAGES CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL, AT HIS OWN EXPENSE, BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY, BY THE CONTRACTOR.

IMPACT STATEMENT

WATER
WATER IS PROVIDED BY THE CITY OF FRANKLIN UTILITY DISTRICT VIA EXISTING 12" WATER LINES THAT RUN IN LIBERTY PIKE AND CAROTHERS PARKWAY.
SANITARY SEWER
SANITARY SEWER WILL NOT BE IMPACTED BY THIS DEVELOPMENT
RECLAIMED WATER LINE
RECLAIMED WATER INFRASTRUCTURE IS NOT PRESENT OR PROPOSED ON THIS SITE.
STORMWATER
STORMWATER FLOWS WILL BE TREATED FOR WATER QUALITY BY GREEN INFRASTRUCTURE THROUGHOUT THE SITE.
ELECTRICITY
ELECTRICITY WILL NOT BE IMPACTED BY THIS DEVELOPMENT.
GAS
NATURAL GAS WILL NOT BE IMPACTED DURING THIS DEVELOPMENT.

UTILITY LAYOUT NOTE

DETAILS AND LAYOUT OF UTILITIES SHOWN GRAPHICALLY ON THIS PLAN ARE SUBJECT TO CHANGE BETWEEN DEVELOPMENT PLAN AND SITE PLAN SUBMITTALS.

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING. COF DOES NOT PARTICIPATE IN 811/TN ONE CALL. CONTACT COF WATER/SEWER DEPT. FOR LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

WATER INFRASTRUCTURE NOTE

WATER LAYOUT SHOWN ON THIS PLAN IS CONCEPTUAL. REFER TO FINAL DRAWINGS PROVIDED BY MALLORY VALLEY UTILITY DISTRICT FOR CONSTRUCTION.

Kimley»Horn

4031 Aspen Grove Drive, Franklin, TN 37067
Main: 615.564.2701 | www.kimley-horn.com
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THE FACTORY AT FRANKLIN PUD
SUBDIVISION, SITE PLAN
(REVISION1)
FRANKLIN, TENNESSEE
COF# 7941

MARY McGOWAN
REGISTERED ENGINEER
AGRICULTURE
POSTSECONDARY
121350
STATE OF TENNESSEE
09/01/2022

No.	REVISIONS	DATE	BY
1			
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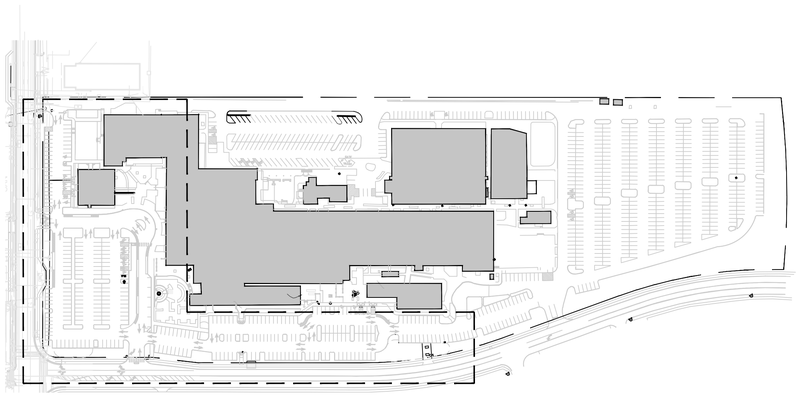
DESIGNED BY:	SAS
DRAWN BY:	SAS
CHECKED BY:	MMc
DATE:	09/01/2022

KIMLEY-HORN PROJECT NO.
017010010

WATER PLAN AND PROFILE

SHEET NUMBER
C5.0

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



KEY MAP

Specimen Tree Chart				
Tree #	Species	Size (DBH)	Condition	Removed
21	Tulip Poplar	26"	Good	x
23	Baldcypress	26"	Good	
27	Baldcypress	27"	Good	
28	Baldcypress	26"	Good	
29	Baldcypress	24"	Good	
37	Sugar Hackberry	24"	Fair	x
74	Cottonwood	24"	Fair	
Total Specimen In.		**177**		
Specimen In. Removed		**50**		
Required Replacement In.		**100**		

TREE CANOPY RETENTION - OVERALL

OVERALL SITE AREA = 877,734 SF (20.15 AC)

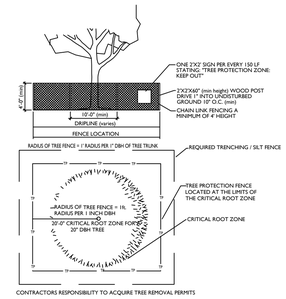
TOTAL EXISTING TREE CANOPY:	34,707 SF; 0.81 AC
EXISTING SITE COVER:	4%
REQUIRED TREE CANOPY RETENTION:	26% (PD - MIXED USE)
REQUIRED CANOPY PRESERVATION:	9,024 SF; 0.21 AC
PROVIDED CANOPY PRESERVATION:	19,827 SF; 0.46 AC (57% OF EXISTING)

TREE PRESERVATION KEY

- REMOVED CANOPY
- PRESERVED CANOPY
- RELOCATED MAGNOLIAS
- SPECIMEN TREES
- SPECIMEN TREES [REMOVED]

SITE DATA CHART

PROJECT NAME:	The Factory at Franklin PUD, Site Plan
PROJECT NUMBER:	XXXX
ADDRESS:	230 Franklin Road Franklin, Williamson County, TN
PARCEL(S):	063 M A 02100
ACREAGE / SF OF SITE:	20.15 AC / 877,436 SF
BASE ZONING:	PD
ZONING OVERLAY:	HPO



TREE PROTECTION FENCING DETAIL NTS

TREE PROTECTION NOTES:

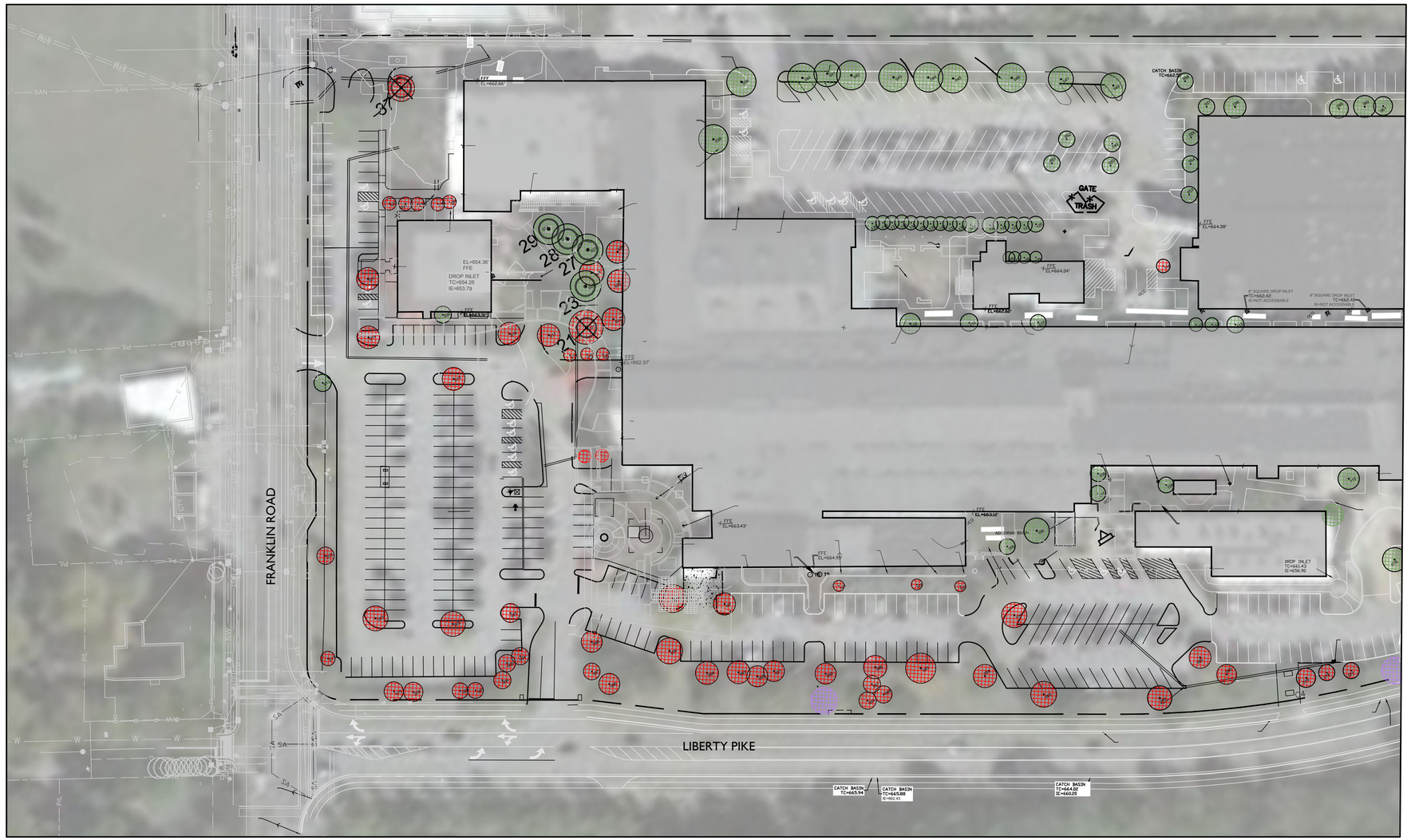
1. The tree protection barriers shall be constructed before the issuance of any permits, and shall remain intact throughout the entire period of construction.

2. The tree protection barrier shall be installed as labeled on this plan or a distance to the radius of the dripline, whichever is greatest, as measured from the trunk of the protected tree.

3. Any required excavation in or around the protection zone to accommodate underground services, footings, etc; shall be indicated on the plan, and shall be excavated by hand. In addition, related root pruning shall be accomplished via ANSI A-300-95 standard so as to minimize impact on the general root system.

4. The storage of building materials or stock piling shall not be permitted within the limits of or against the protection barriers.

5. Trees within the protection barriers must be adequately cared for throughout the construction process (i.e., they must be watered sufficiently). Fill shall not be placed upon the root system as to endanger the health or life of the affected tree.



811 Know what's below. Call before you dig.

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION
SITE PLAN
230 FRANKLIN ROAD
Franklin, Williamson County, Tennessee

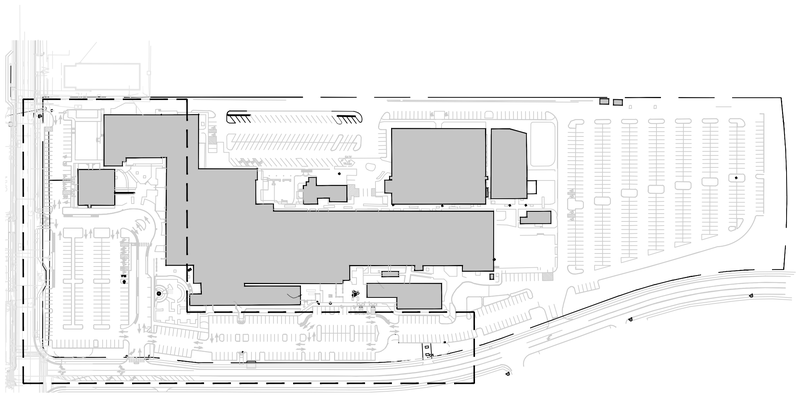
HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE No. 329 04.01.22

Revision Date
1
2
3

TREE PRESERVATION

SHEET
L1.0
COF #
XXXX



KEY MAP

L2.0 STREET TREES

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
CANOPY TREES								
10	AB	Acer buergerianum	Trident Maple	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
15	AR	Acer rubrum 'October Glory'	October Glory Red Maple	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
7	UP	Ulmus parvifolia	Lacebark Elm	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
3	QS	Quercus shumardii	Shumard Oak	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
17	QS	Quercus phellos	Willow Oak	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER

LANDSCAPE REQUIREMENTS (ACI)

Site Area: 20.15 AC — Canopy (82" per AC): 313

Required LSA: 0.2 AC [20.15x0.2 = 4.03] — Understory (21" per AC): 80

4.03 - 0.21 (Preserved Tree Canopy) = 3.82 — Shrubs (96 per AC): 367

Provided Quantity Breakdown

Required Canopy Inches — **313**

	3" Caliper Trees Provided	Caliper Inches Provided
Site Plan 1:	61	183
Future Site Plans:		
Total Inches Provided:		183
Total Inches Remaining:		130

Required Understory Inches — **80**

	2" Caliper Trees Provided	Caliper Inches Provided
Site Plan 1:	8	24
Future Site Plans:		
Total Inches Provided:		24
Total Inches Remaining:		56

Required Shrubs — **367**

	Minimum 18" Height Shrubs	Minimum 30" Height Shrubs
Site Plan 1:	647	0
Future Site Plans:		
Total:	647	0
Total Shrubs Provided:		647
Total Shrubs Remaining:		-280

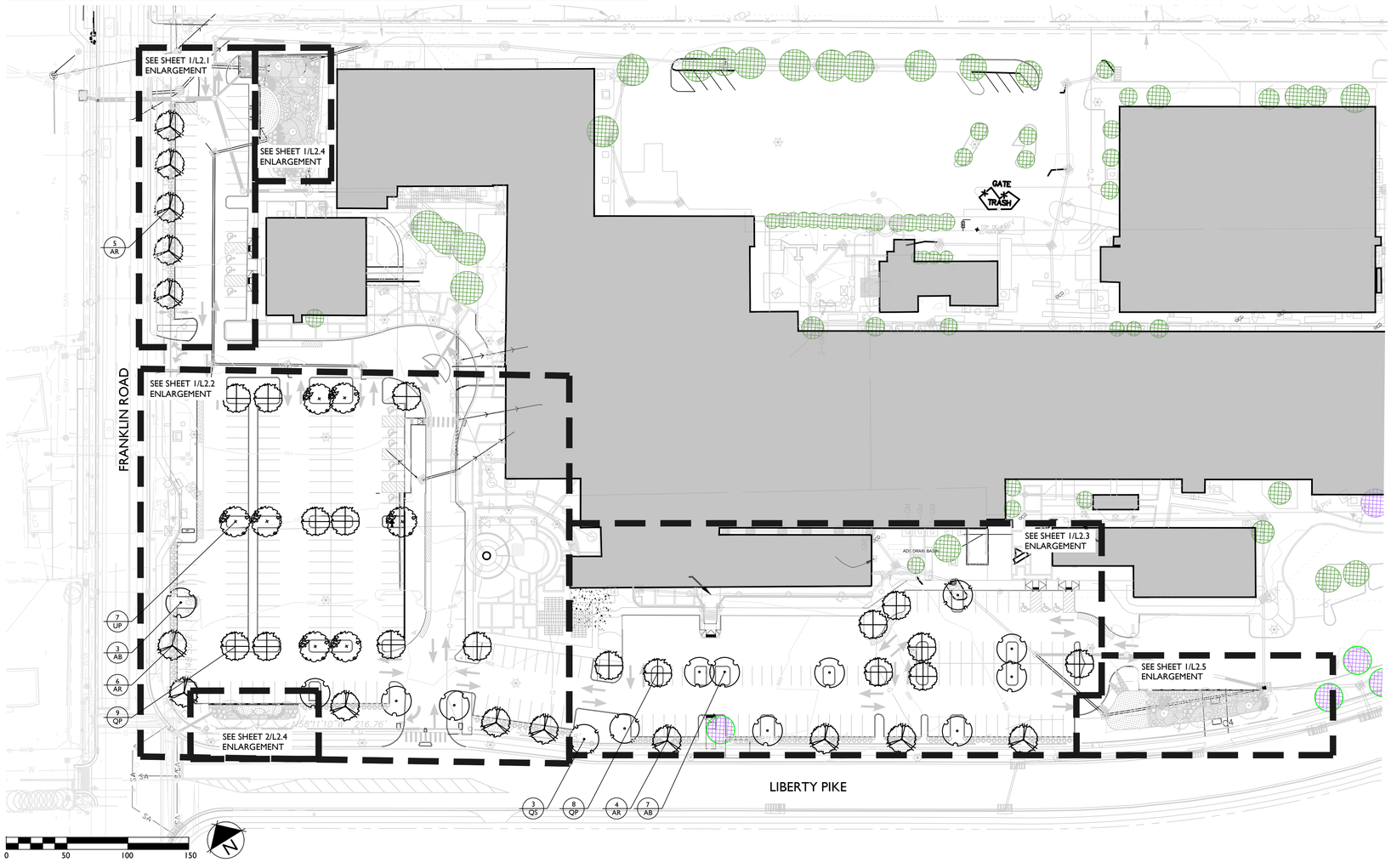
SITE DATA CHART

PROJECT NAME:	The Factory at Franklin PUD, Site Plan
PROJECT NUMBER:	XXXX
ADDRESS:	230 Franklin Road Franklin, Williamson County, TN
PARCEL(S):	063 M A 02100
ACREAGE / SF OF SITE:	20.15 AC / 877,436 SF
BASE ZONING:	PD
ZONING OVERLAY:	HPO

Specimen Tree Chart

Tree #	Species	Size (DBH)	Condition	Removed
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28	Baldcypress	26"	Good	
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74	Cottonwood	24"	Fair	
Total Specimen In.		**177**		
Specimen In. Removed		**50**		
Required Replacement In.		**100**		

NOTE: SPECIMEN TREES TO BE PLANTED IN FUTURE SITE PLAN.



KEY

- PRESERVED CANOPY
- RELOCATED MAGNOLIAS

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION
SITE PLAN
230 FRANKLIN ROAD
Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

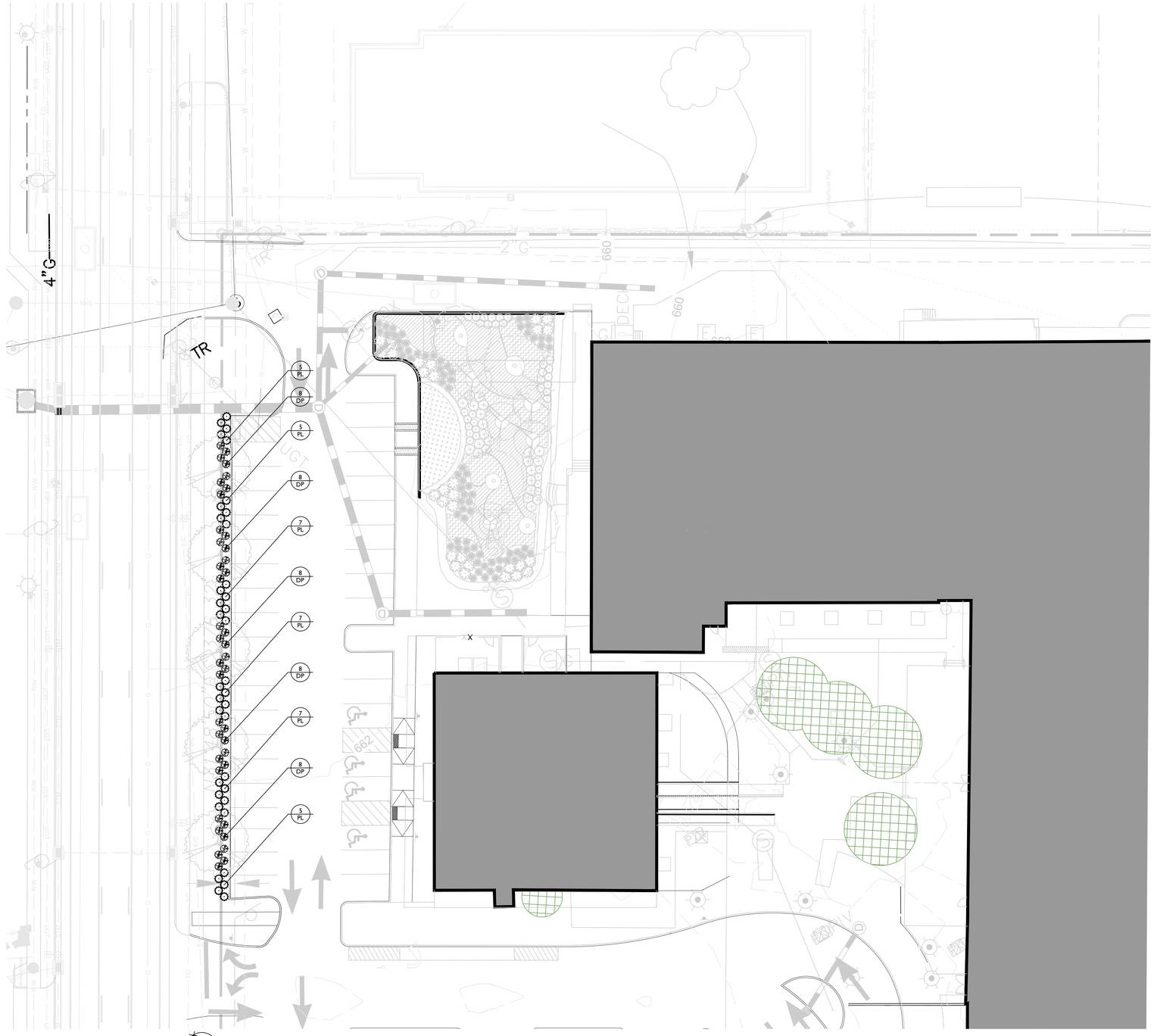
DRAKE A. REEDER REGISTERED 09.02.22 TENNESSEE NO. 2300 LANDSCAPE ARCHITECT

Revision Date
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△
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OVERALL LANDSCAPE

SHEET
L2.0

COF #
XXXX



KEY

- PRESERVED CANOPY
- RELOCATED MAGNOLIAS

L2.1 PERIMETER LANDSCAPE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
SHRUBS								
40	DP	Distylium 'PIIDIST-I' PP #24,410	Emerald Heights® Evergreen Distylium		30"	EVERGREEN	AS SHOWN	
36	PL	Prunus Laurocerasus 'Otto Luyken'	Otto Luyken Laurel		30"	EVERGREEN	AS SHOWN	

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION

SITE PLAN

230 FRANKLIN ROAD

Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 329 TENNESSEE

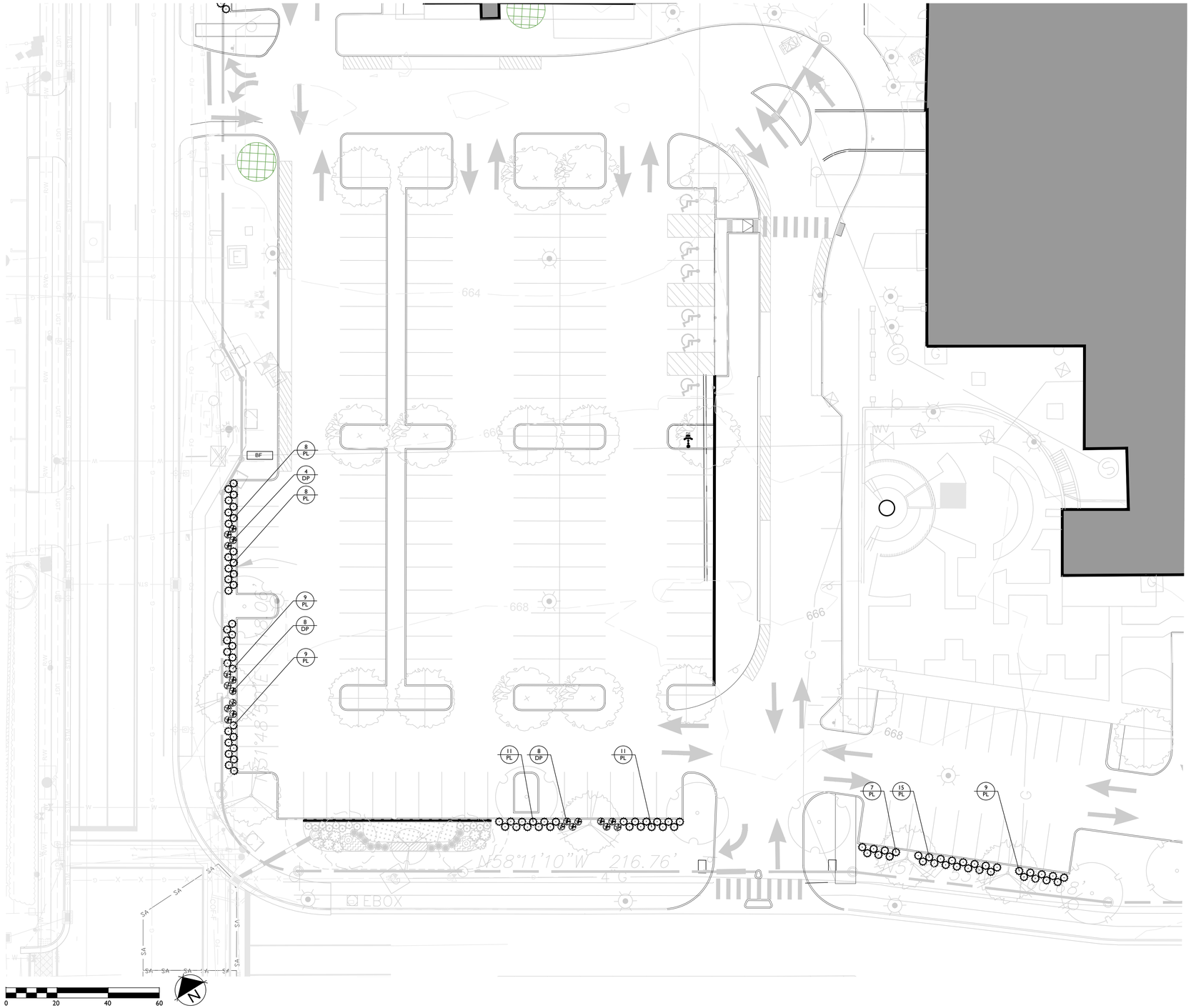
Revision Date

LANDSCAPE PLAN ENLARGEMENT

SHEET

L2.1

COF # XXXX



KEY

- PRESERVED CANOPY
- RELOCATED MAGNOLIAS

L2.2 PERIMETER LANDSCAPE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
SHRUBS								
20	DP	Distylium 'PIIDIST-I' PP #24,410	Emerald Heights® Evergreen Distylium		30"	EVERGREEN	AS SHOWN	
87	PL	Prunus Lauroceraus 'Otto Luyken'	Otto Luyken Laurel		30"	EVERGREEN	AS SHOWN	

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION

SITE PLAN

230 FRANKLIN ROAD

Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED 09.01.22 TENNESSEE NO. 1270 LANDSCAPE ARCHITECT

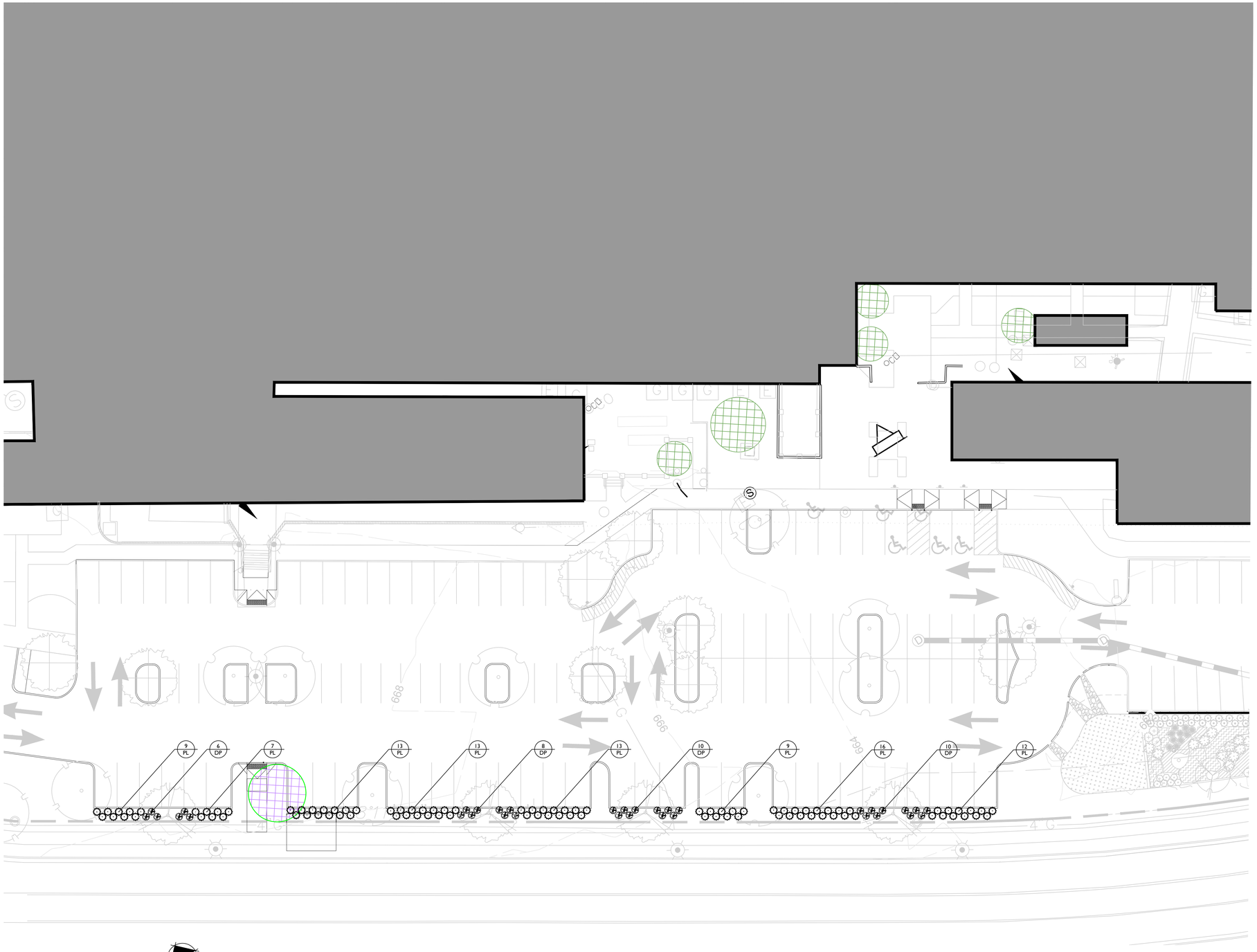
Revision Date

LANDSCAPE PLAN ENLARGEMENT

SHEET

L2.2

COF # XXXX



0 20 40 60

N

KEY

- PRESERVED CANOPY
- RELOCATED MAGNOLIAS

L2.3 PERIMETER LANDSCAPE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
SHRUBS								
28	DP	Distylium 'PIIDIST-I' PP #24,410	Emerald Heights® Evergreen Distylium		30"	EVERGREEN	AS SHOWN	
92	PL	Prunus Laurocerasus 'Otto Luyken'	Otto Luyken Laurel		30"	EVERGREEN	AS SHOWN	

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION

SITE PLAN

230 FRANKLIN ROAD

Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE No. 1215 TENNESSEE

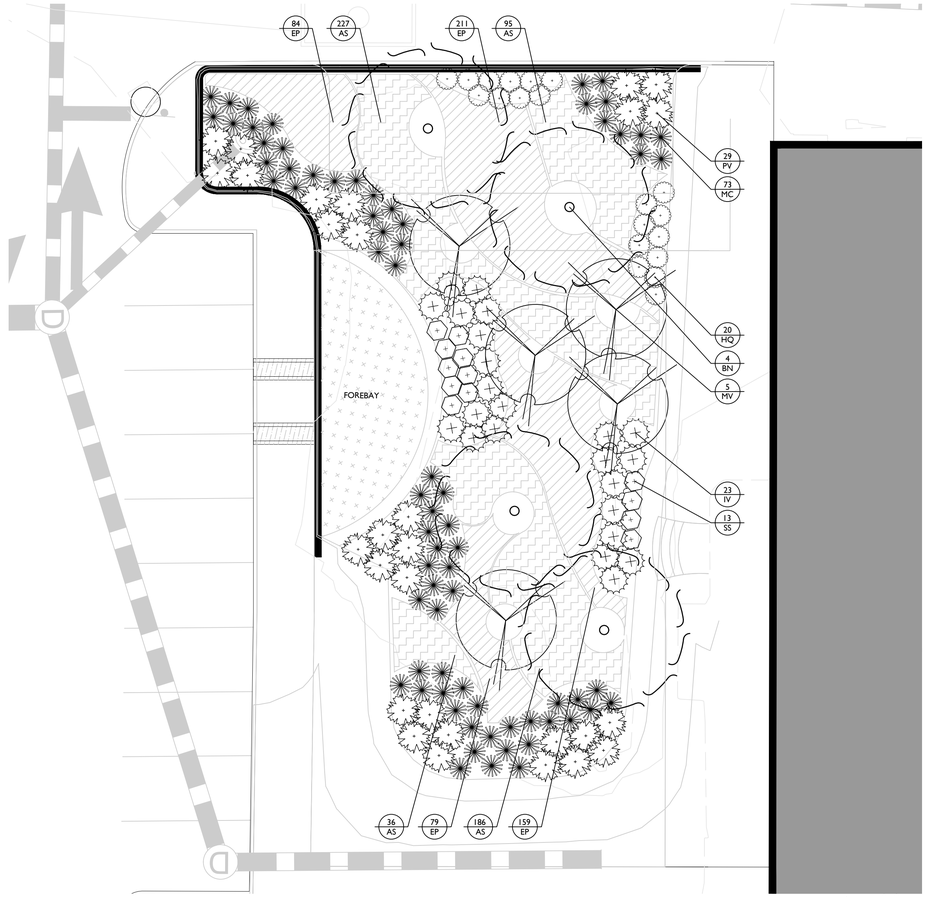
Revision Date

LANDSCAPE PLAN ENLARGEMENT

SHEET

L2.3

COF # XXXX



1 L2.4 BIORETENTION #1 - LEVEL 2 - 3,815 SF - ORNAMENTAL

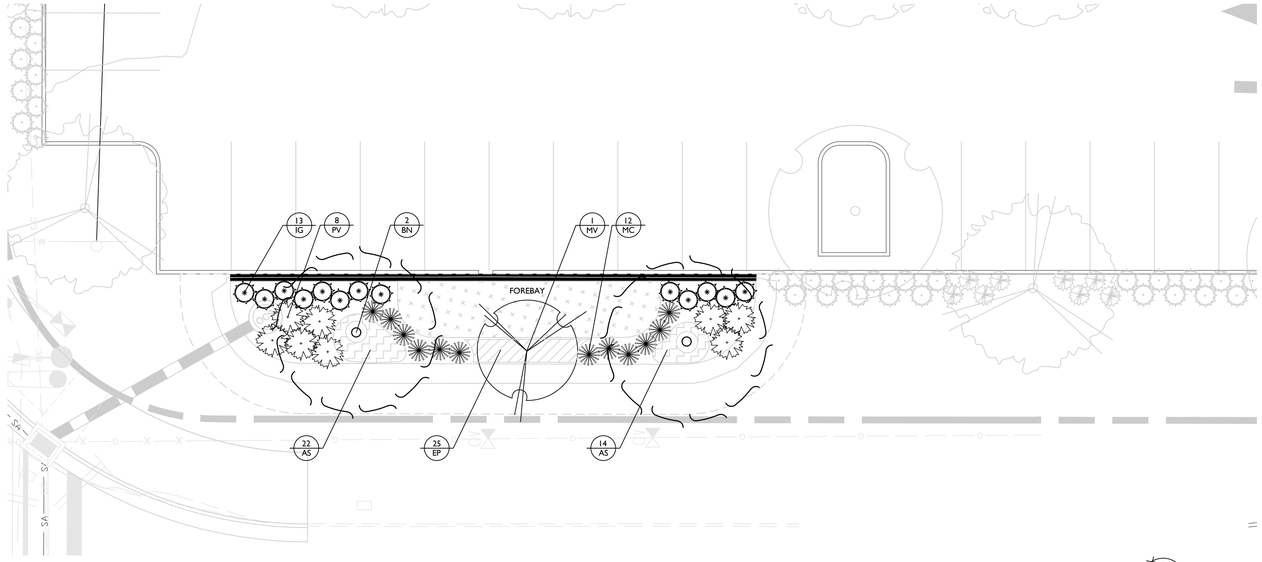
PLAN

BIORETENTION #1 PLANT SCHEDULE								
QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
CANOPY TREES								
4	BN	Betula nigra	River Birch	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
UNDERSTORY TREES								
5	MV	Magnolia virginiana	Sweetbay Magnolia	2" CAL, B/B	8'-10'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
SHRUBS								
23	IV	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetspire	3 GAL		DECIDUOUS	5' O.C.	
20	HQ	Hydrangea quercifolia	Oakleaf Hydrangea	3 GAL			4' O.C.	
GRASSES								
73	MC	Muhlenbergia capallaris	Muhly Grass	1 GAL			24" O.C.	
29	PV	Panicum virgatum	Switchgrass	1 GAL			48" O.C.	
13	SS	Schizachyrium scoparium	Little Blue Stem	1 GAL			24" O.C.	
PERENNIALS/GROUNDCOVERS								
544	AS	Asclepias syriaca	Common Milkweed	1 GAL			18" O.C.	
533	EP	Echinacea purpurea	Purple Coneflower	1 GAL			18" O.C.	

KEY

PRESERVED CANOPY

RELOCATED MAGNOLIAS



2 L2.4 BIORETENTION #2 - LEVEL 2 - 730 SF - ORNAMENTAL

PLAN

BIORETENTION #2 PLANT SCHEDULE								
QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
CANOPY TREES								
2	BN	Betula nigra	River Birch	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
UNDERSTORY TREES								
1	MV	Magnolia virginiana	Sweetbay Magnolia	2" CAL, B/B	8'-10'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
SHRUBS								
13	IG	Ilex glabra 'Shamrock'	Shamrock Inkberry	5'	EVERGREEN	AS SHOWN	AS SHOWN	
GRASSES								
12	MC	Muhlenbergia capallaris	Muhly Grass	1 GAL			24" O.C.	
8	PV	Panicum virgatum	Switchgrass	1 GAL			48" O.C.	
PERENNIALS/GROUNDCOVERS								
36	AS	Asclepias syriaca	Common Milkweed	1 GAL			18" O.C.	
25	EP	Echinacea purpurea	Purple Coneflower	1 GAL			18" O.C.	

GAMBLE DESIGN COLLABORATIVE

DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION

SITE PLAN

230 FRANKLIN ROAD

Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 1230 COMMERCE

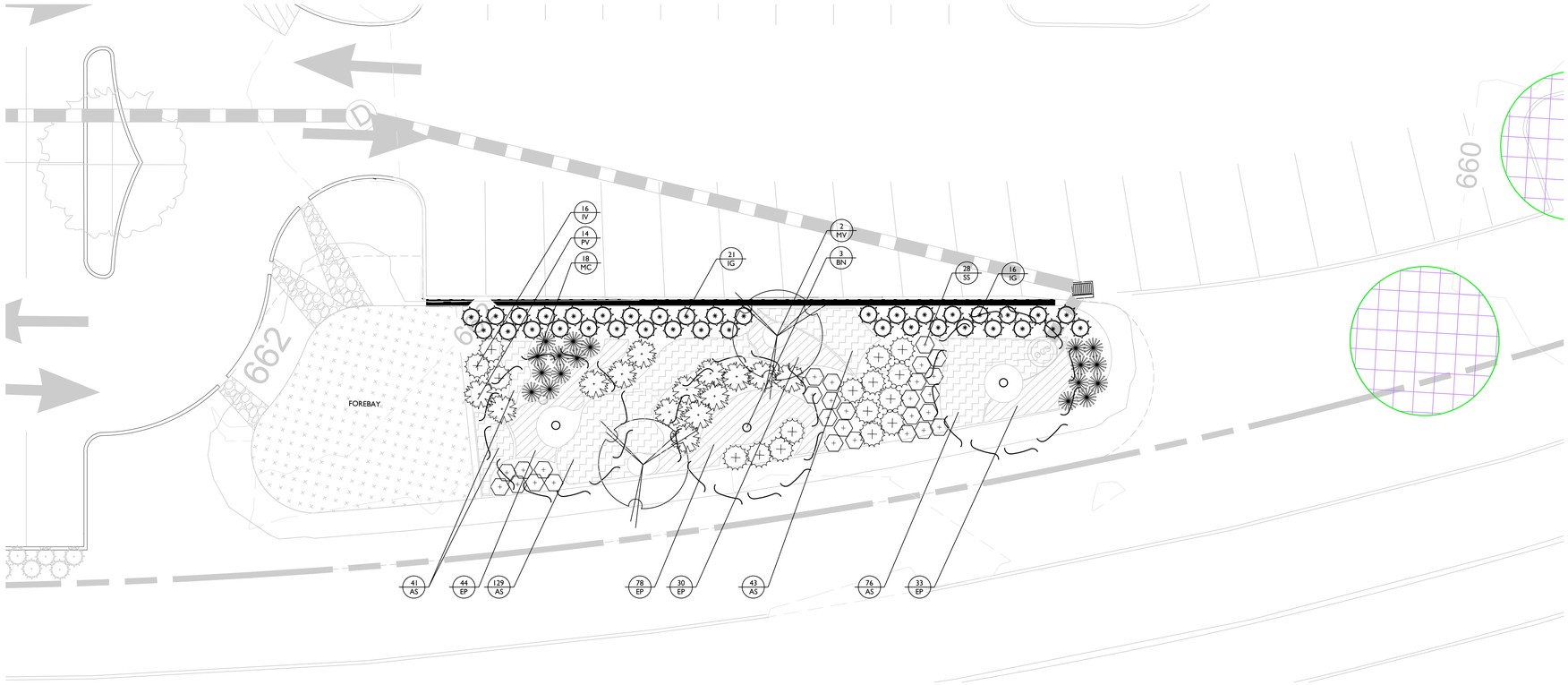
Revision Date

BIORETENTION ENLARGEMENT

SHEET

L2.4

COF # XXXX



1 L2.5

BIORETENTION #3 - LEVEL 2 - 2,348 SF - ORNAMENTAL

PLAN

0' 10' 20'

BIORETENTION #3 PLANT SCHEDULE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	NOTES
CANOPY TREES								
3	BN	Betula nigra	River Birch	3" CAL, B/B	12'-14'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
UNDERSTORY TREES								
2	MV	Magnolia virginiana	Sweetbay Magnolia	2" CAL, B/B	8'-10'	DECIDUOUS	AS SHOWN	CENTRAL LEADER
SHRUBS								
37	IG	Ilex glabra 'Shamrock'	Shamrock Inkberry	5'		EVERGREEN	AS SHOWN	
16	IV	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetspire	3 GAL		DECIDUOUS	5' O.C.	
10	DP	Distylium 'PIIDIST-I' PP #24,410	Emerald Heights® Evergreen Distylium		30"	EVERGREEN	AS SHOWN	
27	PL	Prunus Lauroceraus 'Otto Luyken'	Otto Luyken Laurel		30"	EVERGREEN	AS SHOWN	
GRASSES								
21	MC	Muhlenbergia capallaris	Muhly Grass	1 GAL			24" O.C.	
14	PV	Panicum virgatum	Switchgrass	1 GAL			48" O.C.	
28	SS	Schizachyrium scoparium	Little Blue Stem	1 GAL			24" O.C.	
PERENNIALS/GROUNDCOVERS								
289	AS	Asclepias syriaca	Common Milkweed	1 GAL			18" O.C.	
185	EP	Echinacea purpurea	Purple Coneflower	1 GAL			18" O.C.	

KEY

- PRESERVED CANOPY
- RELOCATED MAGNOLIAS

GAMBLE DESIGN COLLABORATIVE

DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION

SITE PLAN

230 FRANKLIN ROAD

Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 329 COMMERCE

Revision Date

BIORETENTION ENLARGEMENT

SHEET

L2.5

COF # XXXX

CITY OF FRANKLIN LANDSCAPE NOTES:

1. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES SHALL BE REPLACED WITHIN ONE YEAR OR BY THE NEXT GROWING SEASON, WHICH EVER COMES FIRST. OTHER DEFECTIVE LANDSCAPE MATERIAL SHALL BE REPLACED WITHIN THREE MONTHS.

2. ALL TREES SHALL MEET FRANKLIN'S MINIMUM SIZE AND QUALITY STANDARDS. ALL PLANTS SHALL BE HEALTHY, VIGOROUS MATERIAL, FREE OF PEST AND DISEASE. ALL ROOTBALLS, CONTAINERS, AND HEIGHT TO WIDTH RATIOS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN THE AMERICAN STANDARDS FOR NURSERY STOCK, CURRENT EDITION.

3. ALL REQUIRED TREES AND SHRUBS SHALL MEET THE MINIMUM SIZE AND QUANTITY AS LISTED IN THE PLANT SCHEDULE.

4. PLANT MATERIAL SHALL NOT OBSCURE TRAFFIC OR PARKING SIGNS/SIGNALS OR VEHICULAR SIGHT LINES.

5. TREE TOPPING IS NOT PERMITTED.

6. ADDITIONAL SCREENING MAY BE REQUIRED IF THE INSPECTION FOR THE RELEASE OF THE PERFORMANCE SURETY REVEALS THAT THE REQUIRED SCREENING IS NOT EFFECTIVE.

7. ALL REQUIRED TREE PROTECTION FENCING SHALL BE INSTALLED AND INSPECTED BY THE CODES DEPARTMENT PRIOR TO LAND DISTURBING ACTIVITIES.

8. ANY SITE OR LANDSCAPE CHANGES (INCLUDING BUT NOT LIMITED TO A CHANGE IN DESIGN, A REDUCTION IN SIZE OR NUMBER OF PLANT MATERIAL, OR THE RELOCATION OF OVERHEAD OR UNDERGROUND UTILITIES) SHALL REQUIRE A REVISED LANDSCAPE PLAN TO BE SUBMITTED AND APPROVAL PRIOR TO THE LANDSCAPE INSTALLATION.

9. EXISTING TREES ACCEPTED IN PARTIAL COMPLIANCE OF THE LANDSCAPE REQUIREMENTS FOR THIS SITE SHALL BE ACCESSIBLE AND FLAGGED PRIOR TO ALL LANDSCAPE INSPECTIONS.

10. ANY EXISTING TREE, SHOWN AS BEING PRESERVED ON APPROVED PLANS THAT IS REMOVED, DIES OR IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AS REQUIRED IN THE ZONING ORDINANCE.

11. SCREENING PROPOSED AROUND ANY UTILITY BOX OR TRANSFORMER IS REQUIRED TO BE EVERGREEN AND ADEQUATELY SCREEN THE OBJECT. THE PROPOSED EVERGREEN PLANT MATERIAL SHALL BE REPLACED IF IT IS NOT OF A HEIGHT SUFFICIENT TO SCREEN THE OBJECT.

12. ALL PLANT MATERIAL SHALL BE FROM THE FRANKLIN PLANT LIST UNLESS PRIOR APPROVAL IS RECEIVED FROM THE CITY.

13. ALL TREE-PROTECTION FENCING SHALL BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT AND SHALL BE MAINTAINED IN GOOD WORKING ORDER UNTIL ALL CONSTRUCTION ACTIVITY IS COMPLETED. ANY REQUIRED EROSION CONTROL MEASURES SHALL BE PLACED OUTSIDE OF ANY TREE PROTECTION FENCING.

14. TOP SOIL USED IN ALL LANDSCAPE AREAS SHALL BE SCREENED PRIOR TO DEPOSITION IN PLANTING AREAS AND ISLANDS.

15. ANY PLANT MATERIAL LOCATED ADJACENT TO A PARKING AREA SHALL BE PLANTED SO AS TO ALLOW FOR A TWO AND A HALF FOOT VEHICULAR BUMPER OVERHANG FROM THE FACE OF CURB TO THE EDGE OF THE MATURE ADJACENT PLAN MATERIAL.

16. THE OWNER ACKNOWLEDGES THAT PLANTING LANDSCAPE MATERIAL IN A DEDICATED EASEMENT DOES NOT WAIVE OR MODIFY THE CITY OF FRANKLIN'S RIGHTS AS THE EASEMENT HOLDER. THE OWNER UNDERSTANDS THAT THE CITY OF FRANKLIN, ITS AUTHORIZED CONTRACTOR OR APPLICABLE PRIVATE UTILITY MAY AT ANY TIME AND FOR ANY REASON PERFORM WORK WITHIN THE DEDICATED EASEMENT. THE CITY, ITS AUTHORIZED CONTRACTOR OR APPLICABLE PRIVATE UTILITY SHALL HAVE NO LIABILITY TO THE OWNER FOR ANY DAMAGE TO THE LANDSCAPE MATERIAL IN THE EASEMENT WHEN SAID DAMAGE IS DUE TO WORK WITHIN THE EASEMENT. THE OWNER MAY BE HELD RESPONSIBLE FOR THE REMOVAL OF THE LANDSCAPE MATERIAL TO ENABLE WORK TO BE DONE. THE OWNER SHALL BE SOLELY RESPONSIBLE FOR ANY COST INCURRED IN REPAIRING AND/OR REPLACING THE REQUIRED LANDSCAPE MATERIAL.

CITY OF FRANKLIN MINIMUM PLANT QUALITY AND SIZE STANDARDS

1. ALL NEWLY PLANTED LANDSCAPE PLANT MATERIALS SHALL CONFORM TO THE LATEST VERSIONS OF THE AMERICAN STANDARD OF NURSERY STOCK (ANSI Z60.

2. ALL TYPE 1, 2, AND 3 TREES (AS DEFINED IN ANSI Z60.1) USED TO MEET THE REQUIREMENTS OF THIS SUBSECTION SHALL HAVE THE FOLLOWING CHARACTERISTICS:

A. DECIDUOUS TREES SHALL HAVE ONE DOMINANT TRUNK WITH THE TIP OF THE LEADER ON THE MAIN TRUNK LEFT INTACT AND THE TERMINAL BUD ON THE CENTRAL LEADER AT THE HIGHEST POINT ON THE TREE.

B. TREES WITH FORKED TRUNKS ARE ACCEPTABLE IF ALL THE FOLLOWING CONDITIONS ARE MET:
1. THE FORK OCCURS IN THE UPPER ONE-THIRD OF THE TREE.
2. ONE FORK IS LESS THAN TWO-THIRDS OF THE TREE.
3. THE TOP ONE-THIRD OF THE SMALLER FORK IS REMOVED AT THE TIME OF PLANTING.

C. NO BRANCH IS GREATER THAN TWO-THIRDS THE DIAMETER OF THE TRUNK DIRECTLY ABOVE THE BRANCH.

D. SEVERAL BRANCHES ARE LAGER IN DIAMETER AND OBVIOUSLY MORE DOMINANT.

E. BRANCHING HABIT IS MORE HORIZONTAL THAN VERTICAL AND NO BRANCHES ARE ORIENTED NEARLY VERTICAL TO THE TRUNK.

F. BRANCHES ARE EVENLY DISTRIBUTED AROUND THE TRUNK WITH NO MORE THANK ONE MAJOR BRANCH LOCATED DIRECTLY ABOVE ANOTHER AND THE CROWN IS FULL OF FOLIAGE THAT IS EVENLY DISTRIBUTED AROUND THE TREE.

TREE PROTECTION GENERAL NOTES:

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL STAKE THE LIMITS OF THE TREE PRESERVATION AREAS AND ASSOCIATED TREE CANOPY.

2. TREE PROTECTION FENCING, ORANGE PLASTIC BARRIER CONSTRUCTION FENCING, SHALL BE INSTALLED AND MAINTAINED AT THE LIMITS OF THE TREE PRESERVATION AREAS PRIOR TO CONSTRUCTION. REVIEW AND APPROVAL OF THE FENCING BY THE CITY OF FRANKLIN IS REQUIRED PRIOR TO GRADING PERMIT.

3. ALL GRADING WITHIN THE ROOT ZONE OF TREES WITHIN THE TREE PRESERVATION AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO REDUCE DAMAGE TO THE TREE ROOTS.

4. EQUIPMENT STORAGE AND/OR MATERIALS STORAGE WITHIN THE TREE PRESERVATION AREA IS STRICKLY PROHIBITED.

5. ROOTS EXPOSED BY CONSTRUCITON ACTIVITES SHALL BE PRUNED FLUSH WITH THE GROUND AND/OR BACKFILLED WITH TOP SOIL AS SOON AS POSSIBLE.

LANDSCAPE PLANTING GENERAL NOTES

1. THE LANDSCAPE CONTACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE QUANITIES OF ALL MATERIALS. THE QUANTIES ON THE PLAN SHALL TAKE PRECEDENCE OVER THE PLANT LIST.

2. SUBSTITUTIONS OF TYPE, SIZE, OR SPACING OF PLANTS MAY NOT BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER'S LANDSCAPE ARCHITECT, AND MAY RESULT IN THE RESUBMITTAL OF LANDSCAPE PLANS TO THE CITY OF FRANKLIN FOR APPROVAL PRIOR TO INSTALLATION.

3. ALL CONSTRUCTION ACTIVITY SHALL BE COORDINATED WITH TENNESSEE ONE CALL PRIOR TO DIGGING. ALL DAMAGE TO UTILITES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE PER UTILITY PROVIDER'S STANDARDS.

4. THE PLANT LIST SPECIFICATIONS PROVIDED WITHIN THE PLANT LIST FOR HEIGHT AND SIZE ARE MINIMUMS.

5. ALL PLANT BEDS SHALL BE RAKED AND CLEARED OF LARGE ROCKS. ALL LARGE DIRT CLODS SHALL BE PULVERIZED OR REMOVED PRIOR TO PLANTING.

6. ALL LARGE DIRT CLODS RESULTING FROM PLANTING SHALL BE PULVERIZED AND REMOVED PRIOR TO MULCHING.

7. PRE-EMERGINT HERBICIDE SHALL BE APPLIED AFTER INSTALLATION AND IMMEDIATELY PRIOR TO MULCHING.

8. ALL PLANT BEDS ARE TO BE MULCHED WITH A MINIMUM OF 4 INCHES OF SHREDDED PINE BARK. ALL ANNUAL BEDS SHALL BE MULCHED WITH A MINIMUM OF 2 INCHES OF SOIL CONDITIONER, PINE BARK FINES.

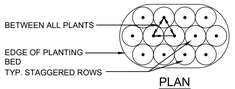
9. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL OR ANY DEFECTIVE WORKMANSHIP.

10. ALL SOD AREAS SHALL BE TILLED AND RAKED SMOOTH, WITH LARGE DIRT CLODS AND ROCKS REMOVED, PRIOR TO SOD INSTALLATION.

11. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STAKING AND LAYOUT OF PLANT BEDS.

12. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE DRAINAGE OF ALL TREE AND SHRUB PITS. A PVC OR GRAVEL SUMP AT THE BASE OF THE TREE WELL MAY BE REQUIRED IN AREAS WHERE CLAY SOILS DO NOT ADEQUATELY DRAIN.

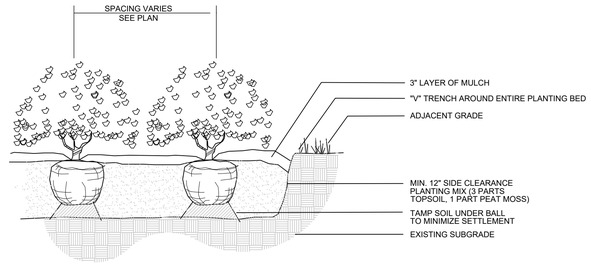
13. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT WHEN THE PLANT MATERIALS ARE AT THE JOB SITE FOR REVIEW PRIOR TO INSTALLATION.



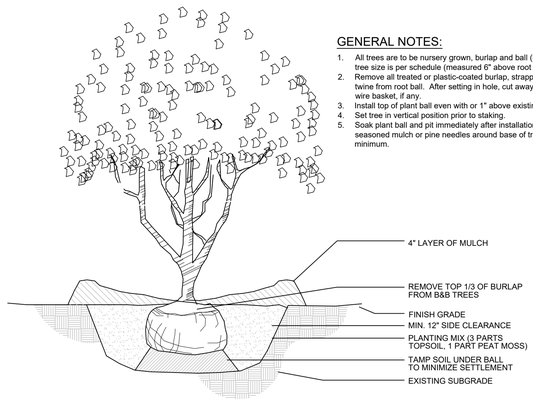
PLAN

GENERAL NOTES:

1. Install top of plant ball 2" above adjacent grade.
2. Tamp planting mix firmly as pit is filled around each plant ball.
3. Soak each plant ball and pit immediately after installation.



SHRUB PLANTING

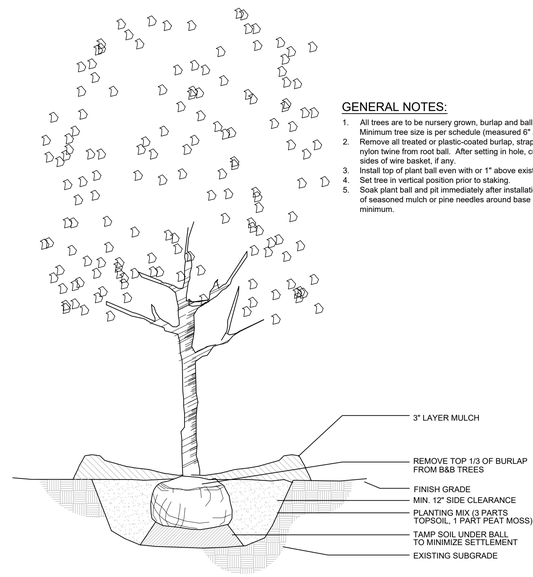


GENERAL NOTES:

1. All trees are to be nursery grown, burlap and ball (B&B). Minimum tree size is per schedule (measured 6" above root ball).
2. Remove all treated or plastic-coated burlap, strapping, wire or nylon twine from root ball. After setting in hole, cut away top and sides of wire basket, if any.
3. Install top of plant ball even with or 1" above existing grade.
4. Set tree in vertical position prior to staking.
5. Soak plant ball and pit immediately after installation. Place 4-6" of seasoned mulch or pine needles around base of tree, 3' diameter minimum.

UNDERSTORY TREE

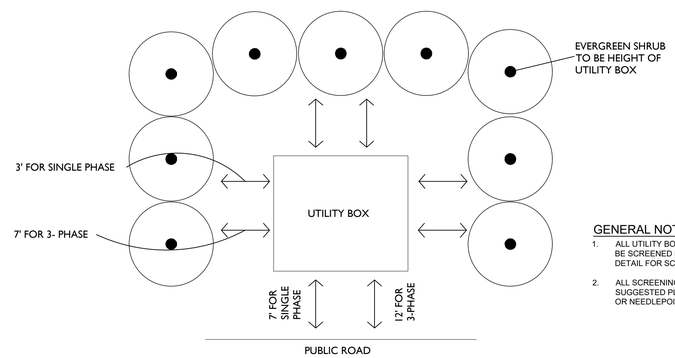
SECTION



GENERAL NOTES:

1. All trees are to be nursery grown, burlap and ball (B&B). Minimum tree size is per schedule (measured 6" above root ball).
2. Remove all treated or plastic-coated burlap, strapping, wire or nylon twine from root ball. After setting in hole, cut away top and sides of wire basket, if any.
3. Install top of plant ball even with or 1" above existing grade.
4. Set tree in vertical position prior to staking.
5. Soak plant ball and pit immediately after installation. Place 4-6" of seasoned mulch or pine needles around base of tree, 3' diameter minimum.

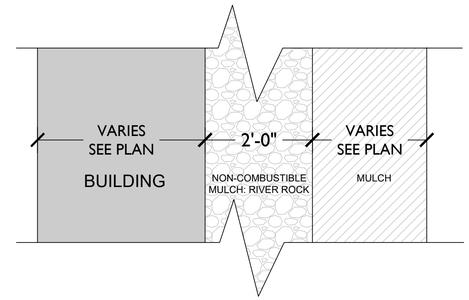
SINGLE TRUNK DECIDUOUS TREE



GENERAL NOTES:

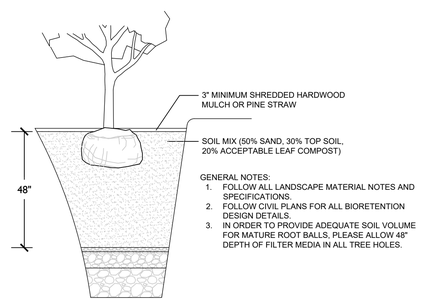
1. ALL UTILITY BOXES AND METERS MUST BE SCREENED FROM VIEW. PLEASE USE THIS STANDARD DETAIL FOR SCREENING REQUIREMENTS.
2. ALL SCREENING PLAN MATERIAL SHALL BE EVERGREEN. SUGGESTED PLAN MATERIAL TO INCLUDE: INKBERRY HOLLY OR NEEDLEPOINT HOLLY.

UTILITY BOX SCREEN



Sec. 7-231. - Combustible mulch.
Combustible mulch shall not be applied or maintained within two feet of any building around entire exterior perimeter, except one and two family dwellings, buildings with exterior walls and exterior wall coverings constructed of noncombustible materials

NON-COMBUSTIBLE MULCH



BIORETENTION TREE PLANTING

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

CENTRIC ARCHITECTURE

Kimley»Horn

THE FACTORY AT FRANKLIN PUD SUBDIVISION
SITE PLAN
230 FRANKLIN ROAD
Franklin, Williamson County, Tennessee

HOLLADAY PROPERTIES

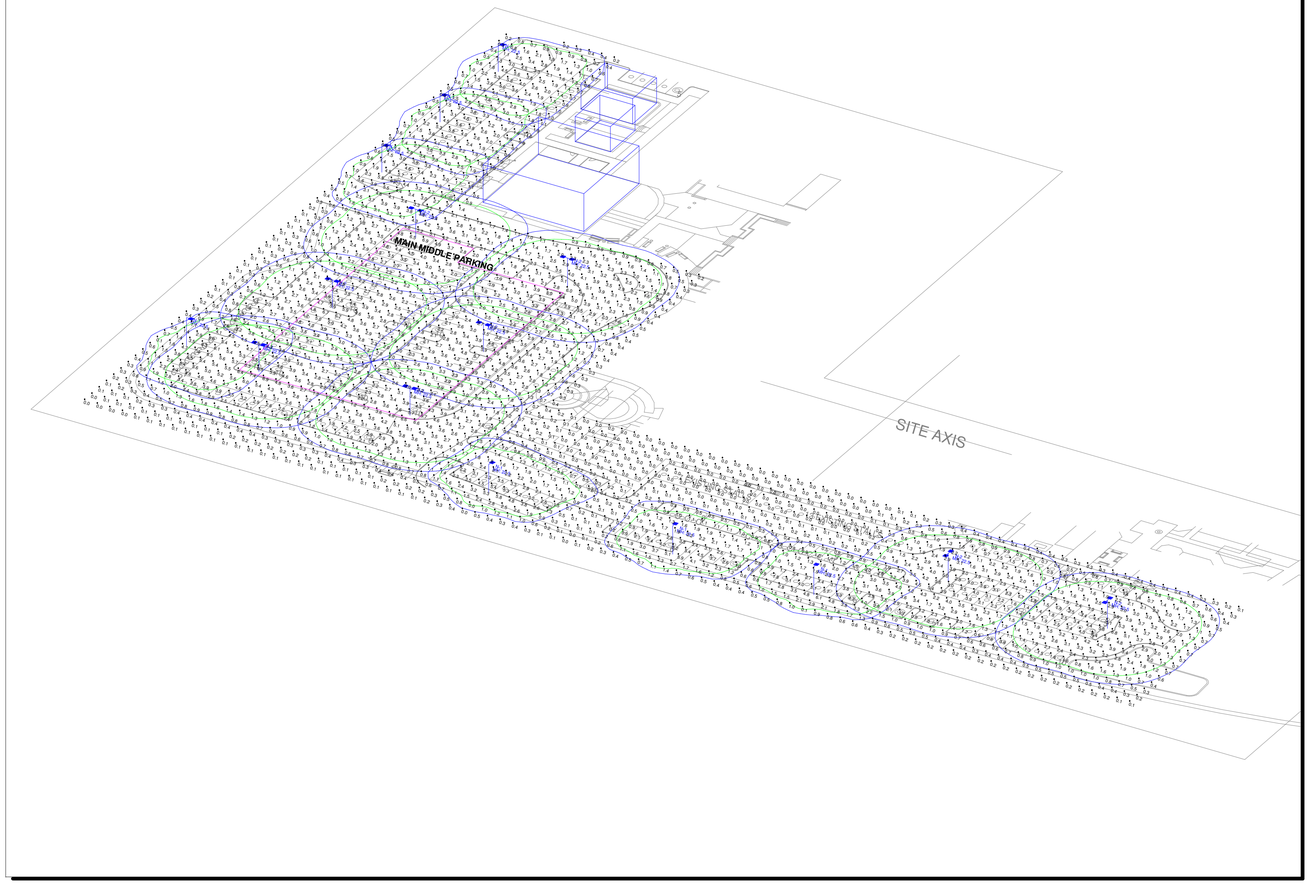
DRAKE A. REEDER REGISTERED TENNESSEE NO. 329802 LANDSCAPE ARCHITECT 09.02.22

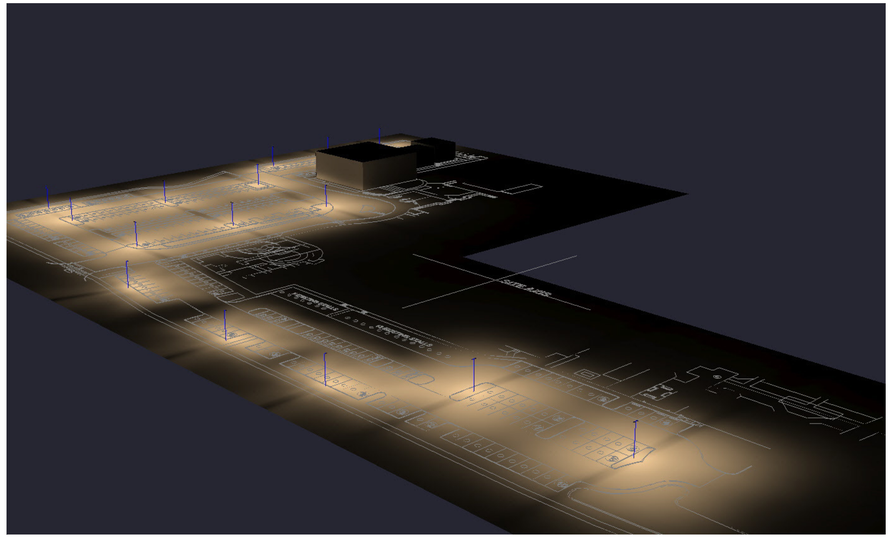
Revision Date
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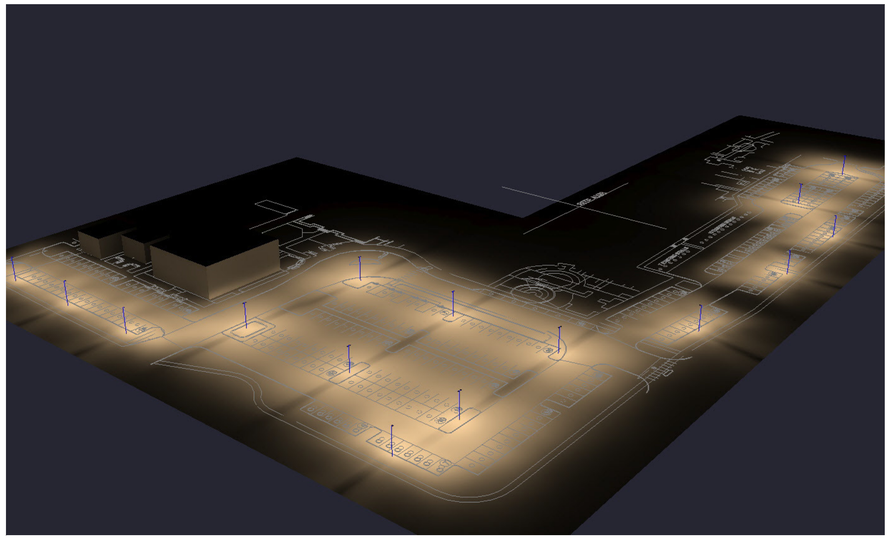
LANDSCAPE DETAILS & NOTES

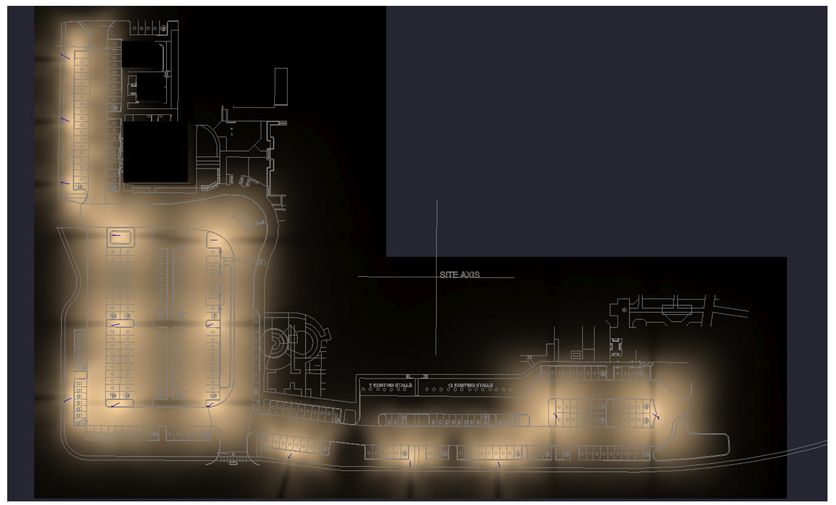
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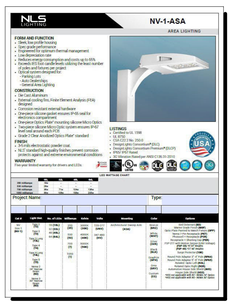
COF #
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SUMMARY TABLES:

Calculation Summary							
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**
SITE CALCS	Illuminance	Fc	1.86	7.4	0.0	N.A.	N.A.
MAIN MIDDLE PARKING	Illuminance	Fc	3.08	7.4	1.2	2.57	6.17

Luminaire Schedule					
Symbol	**Qty**	**Label**	**LLF**	**Description**	**Lum. Watts**
	7	N-1	0.950	NV-1-T4-48L-1-40K-SINGLE @ 22.5FT	156
	8	N-2	0.950	NV-1-T5-48L-1-40K-TWIN @ 22.5FT	156

NLS LIGHTING

Date:6/3/2022

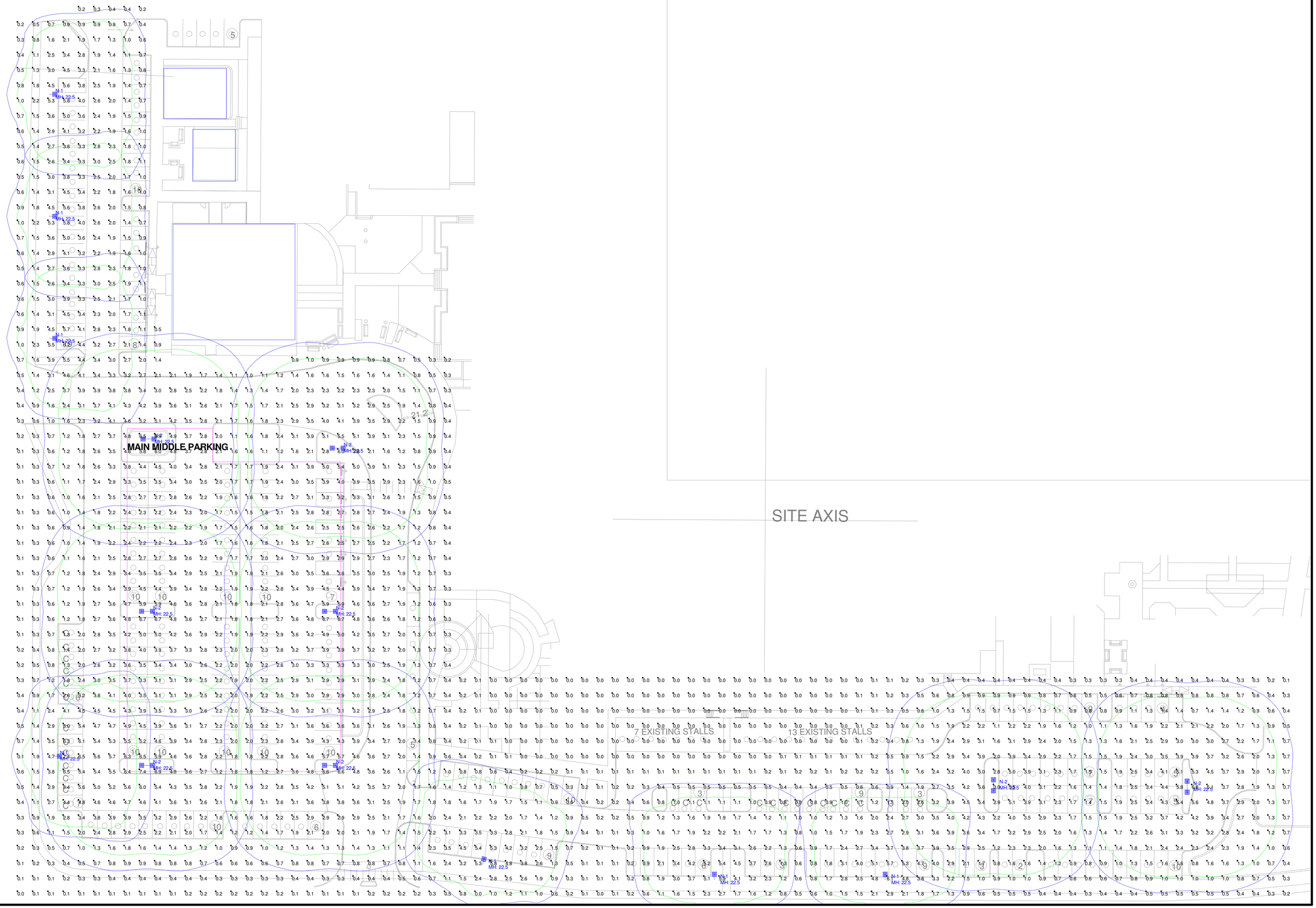
PROJECT:

The Factory Site

PRIORITY LIGHTING

Drawing:

Photometric Study



NLS LIGHTING

Date:6/3/2022

PROJECT:

The Factory Site

PRIORITY LIGHTING

Drawing:

Photometric Study

NOTES

1. SURVEYOR'S LIABILITY FOR THE DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY WHOSE SIGNATURE APPEARS UPON THE SURVEY.

2. PARCEL NUMBERS SHOWN AS THUS (00) REFER TO TAX MAP 63M, GROUP A WILLIAMSON COUNTY, TENNESSEE, UNLESS NOTED OTHERWISE.

3. ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.

4. THE TENNESSEE STATE PLANE COORDINATE SYSTEM IS THE BASIS FOR THIS SURVEY, AND WAS ESTABLISHED USING RTK-GPS POSITIONAL DATA THAT WAS ACQUIRED ON THE DATE OF 07/22/2021 UTILIZING TRIMBLE R8S OR R10 DUAL FREQUENCY RECEIVERS. THE GRID COORDINATES OF THE SURVEY CONTROL POINT SHOWN HEREON WERE DERIVED USING A VRS NETWORK OF MULTIPLE TDOT CORS STATIONS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, NAD 83 (2011) (EPOCH 2010) GEOID 12B. THE POSITIONAL ACCURACY OF THE GPS VECTORS DOES NOT EXCEED: H=0.2'/V=0.2'. THE COMBINED GRID FACTOR OF 0.99992246 WAS CALCULATED AT SURVEY CONTROL POINT #211 AS SHOWN HEREON.

5. THE PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLAIN AND IS DETERMINED TO BE IN ZONE "X" AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM NUMBER 47187C0211G, DATED DECEMBER 22, 2016.

6. PRIOR TO ANY CONSTRUCTION, EXCAVATION OR ANY DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE OWNER AND / OR CONTRACTOR SHOULD ASSUME RESPONSIBILITY OF CONTACTING THE LOCAL UTILITY AUTHORITIES FOR EXACT LOCATION OF UNDERGROUND GAS LINES, TELEPHONE LINES, ELECTRIC CABLES, WATER LINES, ETC. TO AVOID ANY HAZARD OR CONFLICT. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) NOR MORE THAN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR EXCAVATION TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. DIAL 811 FOR A ONE CALL CENTER.

7. UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATIONS THAT WERE APPARENT AND COPIED FROM APPROPRIATE GOVERNING AGENCIES MAPS AND ARE APPROXIMATE AT BEST. THERE MAY BE UTILITIES, THE EXISTENCE OF WHICH IS UNKNOWN TO THE SURVEYOR.

8. ALL DEED & PLAT REFERENCES ARE MADE TO THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE (ROWC).

9. SURVEY FIELD DATA COLLECTED ON 07/22/2021.

10. TWO DRAINAGE EASEMENTS AND SIGHT DISTANCE EASEMENT WERE TAKEN FROM CITY OF FRANKLIN ROW PROJECT #96085-02. NO OTHER DOCUMENTATION WAS FOUND.

11. EVIDENCE OF RECENT EARTH MOVING WORK WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.

12. THE PROPERTY DESCRIPTION SHOWN HEREON DESCRIBES THE SAME PROPERTY DESCRIBED IN THE COMMITMENT.

CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHD BEARING
C1	385.03'	1898.28'	11°37'17"	193.18'	384.37'	S30°49'10"W
C2	373.98'	989.93'	21°38'44"	189.25'	371.76'	N67°18'38"W
C3	219.97'	919.93'	13°41'42"	161.62'	318.36'	N68°10'08"W
C4	47.12'	30.00'	90°00'00"	30.00'	42.43'	N13°12'17"W

PARKING SUMMARY	
REGULAR SPACES	897
HANDICAP SPACES	25
TOTAL	922

SURVEYOR'S COMMENTS

COMMITMENT OF TITLE INSURANCE BY: FIRST AMERICAN TITLE INSURANCE COMPANY
COMMITMENT FILE NUMBER: NCS- 1074083-NAS
EFFECTIVE DATE: JUNE 24, 2021 AT 7:30 A.M.

SCHEDULE B, PART II
ITEM #

10. TERMS AND PROVISIONS OF RIGHT-OF-WAY OR EASEMENT, BY AND BETWEEN NEWT CANNON JR. AND WIFE, MRS. JANE CANNON AND TENNESSEE ELECTRIC POWER COMPANY, A CORPORATION, ITS SUCCESSORS AND ASSIGNS, OF RECORD IN DEED BOOK 64, PAGE 29, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(EASEMENT APPEARS TO AFFECT PROPERTY, LOCATION UNDETERMINED).*

11. TERMS AND PROVISIONS OF RIGHT OF WAY, BY AND BETWEEN W.P. CANNON AND LOUISVILLE AND NASHVILLE RAILROAD COMPANY, OF RECORD IN DEED BOOK 67, PAGE 587, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(NON-PLOTTABLE - NO FENCES FOUND IN THIS LOCATION).*

12. TERMS AND PROVISIONS OF AGREEMENT FOR DEDICATION OF PUBLIC UTILITIES AND DRAINAGE EASEMENT, BY AND BETWEEN CITY OF FRANKLIN AND UNITED CITIES GAS COMPANY, ITS SUCCESSORS AND ASSIGNS FOREVER, OF RECORD IN BOOK 1157, PAGE 126, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY AS SHOWN).*

13. TERMS AND PROVISIONS OF UNRECORDED LEASE, AS EVIDENCED BY MEMORANDUM OF LEASE BY AND BETWEEN THE FACTORY AT FRANKLIN, LLC AND POWERTEL/MEMPHIS, INC., OF RECORD IN BOOK 1743, PAGE 987, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY AS SHOWN).*

14. TERMS AND PROVISIONS OF RIGHT OF WAY EASEMENT, BY AND BETWEEN FACTORY AT FRANKLIN, LLC/ROD L. PEWITT AND MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, A COOPERATIVE CORPORATION, ITS SUCCESSORS OR ASSIGNS, OF RECORD IN BOOK 4485, PAGE 919, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY BLANKET EASEMENT).*

15. TERMS AND PROVISIONS OF RIGHT OF WAY EASEMENT, BY AND BETWEEN THE FACTORY AT FRANKLIN, LLC AND MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, A COOPERATIVE CORPORATION, ITS SUCCESSORS OR ASSIGNS, OF RECORD IN BOOK 4486, PAGE 22, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY BLANKET EASEMENT).*

16. TERMS AND PROVISIONS OF RIGHT OF WAY EASEMENT, BY AND BETWEEN THE FACTORY AT FRANKLIN, G.P. AND MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, A COOPERATIVE CORPORATION, ITS SUCCESSORS OR ASSIGNS, OF RECORD IN BOOK 5512, PAGE 588, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(APPEARS TO AFFECT PROPERTY-NON-PLOTTABLE).*

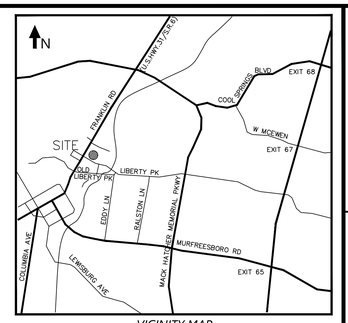
17. TERMS AND PROVISIONS OF AGREEMENT FOR DEDICATION OF EASEMENTS, BY AND BETWEEN THE FACTORY AT FRANKLIN, LLC AND CITY OF FRANKLIN, TENNESSEE, OF RECORD IN BOOK 8122, PAGE 464, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY AS SHOWN).*

18. TERMS AND PROVISIONS OF RIGHT OF WAY EASEMENT, BY AND BETWEEN THE FACTORY AT FRANKLIN, LLC AND MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION, A COOPERATIVE CORPORATION, ITS SUCCESSORS OR ASSIGNS, OF RECORD IN BOOK 8564, PAGE 155, IN THE REGISTER'S OFFICE OF WILLIAMSON COUNTY, TENNESSEE. *(AFFECTS PROPERTY AS SHOWN).*

19. RIGHTS OF THE RAILROAD COMPANY TO EXPAND ITS RIGHT OF WAY TO ITS FULL CHARTER WIDTH. *(AFFECTS PROPERTY AS SHOWN).*

N
T.S.P.C. (SEE NOTE No. 4)

0 50' 100' 150'
GRAPHIC SCALE: 1" = 50' (IN FEET)



VICINITY MAP
NOT TO SCALE

PROPERTY DESCRIPTION

Being a tract of land lying in the 9th District of Williamson County, Franklin, Tennessee. Bounded on the west by the eastern Right of Way (ROW) of Franklin Road (U.S. Highway 31, State Route 6); bounded on the north by Ray McCall and Kathy McCall as recorded in Deed Book 4651, Page 808, Register's Office of Williamson County (ROWC), by JSMS Holdings, LLC, as recorded in Deed Book 6883, Page 697, ROWC, by Franklin 240, LLC, as recorded in Deed Book 7860, Page 538, ROWC, by Michael and Johnny Henry as recorded in Deed Book 6302, Page 211, ROWC, by 31-W Realty, LLC, as recorded in Deed Book 5450, Page 300, ROWC, by Franklin 240, LLC, as recorded in Deed Book 7068, Page 113, ROWC, by Franklin 240, LLC, as recorded in Deed Book 7018, Page 193, ROWC, by Franklin 240, LLC, as recorded in Deed Book 6332, Page 720, ROWC, by Franklin 240, LLC, as recorded in Deed Book 7164, Page 379, ROWC, by Franklin 240, LLC, as recorded in Deed Book 6621, Page 301, ROWC, and by Robert E. Robeson 2002 Trust No. 1 as recorded in Deed Book 6829, Page 228, ROWC; bounded on the east by the Railroad ROW; and bounded on the south by the northern ROW of Liberty Pike. Tract being more particularly described as follows:

POINT OF BEGINNING being a set iron rod lying on the northeast ROW intersection of said Franklin Road and Liberty Pike; thence along said ROW of Franklin Road North 31°47'43" East 551.90 feet to a found iron rod lying 12.00 feet east of a found 5/8" iron rod; thence along the common line of said northern adjoiners, which are more particularly described in the preceding paragraph, South 58°12'49" East 1649.70 feet to a found 1/2" iron rod; thence along said Railroad ROW on a curve to the right having a length of 385.03 feet, a radius of 1898.28 feet, a central angle of 11°37'17", a tangent of 193.18 feet, and having a chord bearing and distance of South 30°49'10" West 384.37 feet to a found iron rod; thence along said ROW of Liberty Pike with the following: on a curve to the left having a length of 373.98 feet, a radius of 989.93 feet, a central angle of 21°38'44", a tangent of 189.25 feet, and having a chord bearing and distance of North 67°18'38" West 371.76 feet to a found iron rod; thence North 78°07'59" West 281.40 feet to a found iron rod; thence on a curve to the right having a length of 319.97 feet, a radius of 919.93 feet, a central angle of 19°55'42", a tangent of 161.62 feet, and having a chord bearing and distance of North 68°10'08" West 318.36 feet to a found iron rod; thence North 58°12'17" West 364.31 feet to a found iron rod; thence North 51°21'44" West 100.72 feet to a found iron rod; thence North 58°12'17" West 216.76 feet to a found iron rod; thence on a curve to the right having a length of 47.12 feet, a radius of 30.00 feet, a central angle of 90°00'00", a tangent of 30.00 feet, and having a chord bearing and distance of North 13°12'17" West 42.43 feet to the point of beginning.

Tract contains 877,800 square feet or 20.15 acres.
Bearings based on Tennessee State Platte Coordinate System.

LEGEND

PARCEL NO.	( )
IRON ROD (OLD)	IR(O)
IRON ROD (SET)	IR(N)
IRON PIPE (OLD)	IP(O)
PROPERTY LINE	
FENCE	X X
UNDERGROUND TELEPHONE LINE	UGT
UNDERGROUND ELECTRIC LINE	UGE
OVERHEAD POWER LINE	OH
SANITARY SEWER LINE	8"SA
STORM SEWER LINE	15"RCP
WATER LINE	8"W
GAS LINE	2"G
TELEPHONE MANHOLE	T
TELEPHONE RISER	TR
TELEPHONE PEDESTAL	TP
ELECTRIC RISER	ER
ELECTRIC METER	E
TRANSFORMER	TRANS
TRAFFIC SIGNAL POST	
UTILITY POLE	
LIGHT POST	
GUY POLE	
GUY WIRE	
TRAFFIC SIGNAL BOX	TSB
SANITARY SEWER MANHOLE	S
STORM DRAINAGE MANHOLE	D
CURB INLET	
CATCH BASIN	
YARD DRAIN	
CLEANOUT	CO
FIRE HYDRANT	
WATER METER	W
WATER VALVE	
POST INDICATOR VALVE	PIV
FIRE DEPT. CONNECTION	FDC
BACK FLOW PREVENTER	BFP
GAS METER	G
GAS VALVE	
SIGN	
BOLLARD	
CONCRETE	

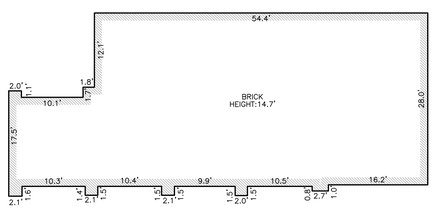
SITE DATA

PROPERTY LOCATED ON WILLIAMSON COUNTY
TAX MAP 63M, GROUP "A", PARCEL 21

CITY: FRANKLIN
COUNTY: WILLIAMSON
STATE: TENNESSEE
DISTRICT: 9

SITE ADDRESS: 230 FRANKLIN RD.
FRANKLIN, TN 37064

OWNER: FACTORY AT FRANKLIN, LLC
230 FRANKLIN RD
FRANKLIN, TN 37064
BK. 5680, PG. 78



BUILDING DIMENSION DETAIL
SCALE: 1" = 10'

SURVEYOR'S CERTIFICATE

To Factory Partners, LLC, a Tennessee limited liability company, Teachers Credit Union, its successors and assigns, Holladay Properties Midwest, Inc., and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1,2,3,4,6(a)(b),7(a),8,9,13,16 & 18 of Table A thereof. The field work was completed on 07/22/2021.

Date of Plat or Map: 09/29/2021

By: Date: 09/29/2021
Jeffery K. Kimbro PLS, Tennessee Registered Land Surveyor No. 1756

658 GRASSMERE PARK DR
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144
ENGINEERING FIRM
LICENSE NUMBER: F-0176

HOLLADAY PROPERTIES, LLC
2710 OLD LEBANON ROAD
SUITE 5
NASHVILLE, TN 37214
(615) 244-9620

JEFFREY K. KIMBRO — LAND SURVEYOR — STATE OF TENNESSEE

NO.	DATE	BY	CHK	APV
3	09/29/2021	JMK	RS	JMK
2	09/02/2021	JMK	MBD	JMK
1	08/12/2021	JMK	MBD	JMK

1 - ADDED PROPERTY CORNERS, AND ADDITIONAL BUILDING UPDATES
2 - REVISED ENTITIES IN CERTIFICATE, AS REQUESTED
3 - REVISED CERTIFICATE, & ADDED NOTE 12

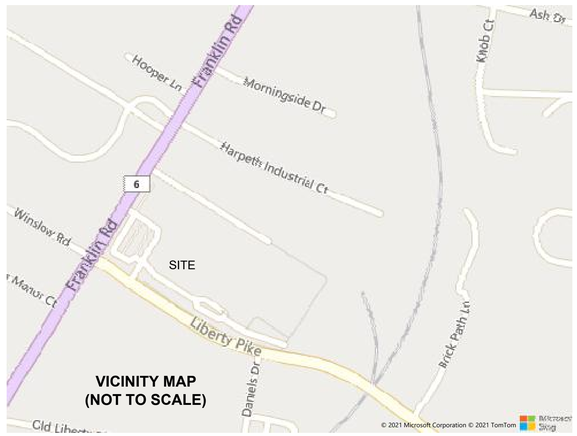
ALTA/NSPS LAND TITLE SURVEY

THE FACTORY - 230 FRANKLIN ROAD
TAX MAP 63M, GROUP A, PARCEL 21
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

PROJECT NUMBER
216265

DATE
07/31/2021

DRAWING PATH: L:\EMS Survey\Projects\2021\216265_Holladay Properties_Factory at Franklin_Franklin\CAD\Survey\216265_TheFactory_ALTA.dwg



VICINITY MAP
(NOT TO SCALE)

SITE LEGEND

- BOUNDARY LINE
- ADJOINING BOUNDARY LINE
- X — FENCE
- G — GAS LINE PER UTILITY MARKINGS
- W — WATER LINE PER UTILITY MARKINGS
- P — OVERHEAD UTILITY LINE
- 515 — CONTOUR LINE INDEX
- 515 — CONTOUR LINE INTERVAL
- SA — SANITARY SEWER LINE
- P (UG) — UNDERGROUND POWER PER UTILITY MARKINGS
- OH — OVERHEAD POWER

N.A.D.= NORTH AMERICAN DATUM
N.A.V.D.=NORTH AMERICAN VERTICAL DATUM
AC= AIR CONDITIONING UNIT
TYP.= TYPICAL
FFE= FINISHED FLOOR ELEVATION
RCP= REINFORCED CONCRETE PIPE
PVC= POLY VINYL CHLORIDE PIPE
CMP= CORRUGATED METAL PIPE
DI= DUCTILE IRON PIPE
TC= TOP OF CASTING
IE= INVERT ELEVATION
RLS= REGISTERED LAND SURVEYOR
PB= PLAT BOOK
PG.= PAGE
S.W.= SIDEWALK
TD=TRENCH DRAIN
EM=ELECTRIC METER

- G — LIGHT POLE
- LIGHT POLE
- FIRE HYDRANT
- UTILITYP POLE
- POST INDICATOR VALVE
- SIGN
- WV — WATER VALVE
- E — ELECTRIC BOX

NORTH BASED ON
TENNESSEE STATE PLANE COORDINATES
N.A.D. 83
GRID NORTH
VERTICAL DATUM: N.A.V.D. 88

The topography shown here is per a Survey made on the ground, and the survey is correct to the best of my knowledge, belief and professional opinion. Boundary information and most 2D features are based on an ALTA survey CAD file provided by the client. This survey is for topographic purposes only.

This tract does not lay within a Special Flood Hazard Area of the Federal Emergency Management Agency according to the Flood Insurance Rate Map (47187C0211G) Dated: 12/22/2016, unless otherwise noted on survey.

For some topographic aspects of this survey, RTK GPS positional data was observed on/between the dates of 11/02/2021 and 11/17/2021 utilizing a Spectra Precision SP80 and SP85 dual frequency receiver base and Rover. The grid coordinates of the onsite base station was derived using a network CORS station. The on site base station was utilized with information as shown on the drawing. Positional accuracy of the GPS vectors does not exceed: H 0.05', V 0.07'

This survey was done in compliance with current Tennessee minimum standards of practice.

Bearing and distance shown take precedence over scale.

W. LOGAN MCCRAW
REGISTERED LAND SURVEYOR
AGRICULTURE
COMMERCE
TENNESSEE NO. 2887

11-19-21

W. Logan McCraw, TN RLS #2887
TTL INC.

MATCH LINE PAGE 2
MATCH LINE PAGE 1

GPS BASE REFERENCE POINT
TN STATE PLANE (NAD 83)
NORTHING:582719.33'
EASTING:1714380.79'
ELEVATION: 662.66'
LATITUDE: N035° 55' 52.05"
LONGITUDE: W086° 51' 30.11"
SCALE FACTOR 0.99994983
COMBINED SCALE FACTOR 0.9992264
NOTE: DISTANCES SHOWN ARE BASED ON GRID COORDINATES.

DISCLAIMER

THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT," THAT WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS. NO LESS THAN (3) THREE OR NO MORE THAN (10) TEN WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT, TENNESSEE ONE CALL 1-800-351-1111.

TTL
330 North Second Street | Clarksville, TN 37040
931.647.6959 | www.ttlusa.com

TOPOGRAPHIC SURVEY

OF THE FACTORY OF FRANKLIN
230 FRANKLIN RD, FRANKLIN, TN 37064
TAX ID: 063M A 021.00
THE FACTORY PARTNERS LLC PROPERTY
WILLIAMSON COUNTY, TN
DATES: 11/18/2021

NO.	ISSUED	DATE

THIS DRAWING IS THE PROPERTY OF TTL, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT AUTHORIZATION FROM TTL, INC. IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN, AND IS NOT TO BE USED ON ANY OTHER PROJECT. IT IS TO BE RETURNED UPON REQUEST. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE. ALL DRAWINGS AND DESIGNS SHOWN ON THESE DRAWINGS ARE COPYRIGHT © OF TTL, INC.

FIELD CREW: CM,JC,JJ,JL
DRAWN BY: LM
CHECKED BY:

SHEET
1 OF 3

PROJECT NUMBER 000211203153.00

I:\065185RVS\SURVEY\1 20-00-00000.00 THE FACTORY TOPO\SURVEY\THE FACTORY.DWG
PLOTTED: 11/19/2021 12:32 PM

NORTH BASED ON
TENNESSEE STATE PLANE COORDINATES
N.A.D. 83
GRID NORTH
VERTICAL DATUM: N.A.V.D. 88

GRAPHIC SCALE 1"=30'

0 30 60 90

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W. LOGAN MCCRAW
REGISTERED LAND SURVEYOR
AGRICULTURE
COMMERCE
TENNESSEE NO. 2887
11-19-21

W. Logan McCraw, TN RLS #2887
TTL INC.

MATCH LINE PAGE 3

MATCH LINE PAGE 2

MATCH LINE PAGE 2

MATCH LINE PAGE 1

LIBERTY PIKE (PUBLIC ROW)

DANIELS DR.

(TAX MAP 63L GROUP D, PARCEL 6.00)
31-W REALTY, LLC
D.B. 5450, PG. 300

(TAX MAP 63L GROUP D, PARCEL 7.00)
FRANKLIN 240, LLC
D.B. 7068, PG. 113

(TAX MAP 63L GROUP D, PARCEL 8.00)
FRANKLIN 240, LLC
D.B. 7018, PG. 193

(TAX MAP 63L GROUP D, PARCEL 9.00)
FRANKLIN 240, LLC
D.B. 6332, PG. 720

(TAX MAP 63L GROUP D, PARCEL 10.001)
LOT No. 1 - RESUBDIVISION OF THE
FRANKLIN 240, LLC
D.B. 7164, PG. 379
DOUGLAS J. PARSONS PROP.
PLAT BOOK 7, PAGE 25

(TAX MAP 63L GROUP D, PARCEL 10.00)
LOT No. 2 - RESUBDIVISION OF THE
FRANKLIN 240, LLC
D.B. 6621, PG. 301
DOUGLAS J. PARSONS PROP.
PLAT BOOK 7, PAGE 25

INGRESS/EGRESS & P.U.E. BK. 1743, PG. 987 (ITEM #7)

LEASEHOLD AREA BK. 1743, PG. 987 (ITEM #13)

2-GM 8"W 12-EM 2-CM 2-WM 2"G

BRICK/METAL SIDING HEIGHT:40.6

BRICK/METAL HEIGHT:29.5'

SMOKE STACK HEIGHT:154.4'

BRICK HEIGHT:14.2'

BRICK/METAL SIDING HEIGHT:18.8'

WOOD SIDING HEIGHT:25.0'

BRICK HEIGHT:14.7'

CANOPY

PAVILION

PICNIC AREA

CHILLER

10' P.U.D.E. BK. 1157, PG. 126 (ITEM #12)

S58°12'49"E 1640.70'

RR X-TIES

TTL

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931.647.6959 | www.ttlusa.com

TOPOGRAPHIC SURVEY

OF THE FACTORY OF FRANKLIN
230 FRANKLIN RD, FRANKLIN, TN 37064
TAX ID: 063M A 021.00
THE FACTORY PARTNERS LLC PROPERTY
WILLIAMSON COUNTY, TN
DATES: 11/18/2021

NO.	ISSUED	DATE

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FIELD CREW: CM,JC,JJ,JL
DRAWN BY: LM
CHECKED BY:

SHEET 2 OF 3

PROJECT NUMBER 000211203153.00

I:\2021\211203153.00\SURVEY\1.20-00-000000.00 THE FACTORY TOPO\SURVEY\THE FACTORY.DWG
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NORTH BASED ON
TENNESSEE STATE PLANE COORDINATES
N.A.D. 83
GRID NORTH
VERTICAL DATUM: N.A.V.D. 88

GRAPHIC SCALE 1"=30'

0 30 60 90

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Bearing and distance shown take precedence over scale.

W. LOGAN MCCRAW
REGISTERED LAND SURVEYOR
XVI
COMMERCE
TENNESSEE NO. 2887

11-19-21

W. Logan McCraw, TN RLS #2887
TTL INC.

MATCH LINE PAGE 3

MATCH LINE PAGE 2

(TAX MAP 63M, GROUP A, PARCEL 21.00)
FACTORY AT FRANKLIN, LLC
D.B. 5680, PG. 78

(TAX MAP 63L, GROUP D, PARCEL 3.00)
JSMS HOLDINGS, LLC
D.B. 6883, PG. 697

(TAX MAP 63L, GROUP D, PARCEL 4.00)
FRANKLIN 240, LLC
D.B. 7860, PG. 538

(TAX MAP 63L, GROUP D, PARCEL 5.00)
MICHAEL HENRY & JOHNNY HENRY
D.B. 6302, PG. 211

(TAX MAP 63L, GROUP D, PARCEL 6.00)

APPROXIMATE CENTERLINE OF NTEMC EASEMENT SCALED PER EXHIBIT "1" D.B. 8564, PG. 135 (ITEM #18) (AREA UNDER CONSTRUCTION)

TTL
330 North Second Street | Clarksville, TN 37040
931.647.6959 | www.ttlusa.com

TOPOGRAPHIC SURVEY

OF THE FACTORY OF FRANKLIN
230 FRANKLIN RD, FRANKLIN, TN 37064
TAX ID: 063M A 021.00
THE FACTORY PARTNERS LLC PROPERTY
WILLIAMSON COUNTY, TN
DATES: 11/18/2021

NO.	ISSUED	DATE

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FIELD CREW: CM,JC,JJ,JL
DRAWN BY: LM
CHECKED BY:

SHEET
3 OF 3

PROJECT NUMBER 000211203153.00

I:\2021\63SRV\SURVEY\1.20-00-00000.00 THE FACTORY TOPO\SURVEY\THE FACTORY.DWG
PLOTTED: 11/19/2021 12:32 PM

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03589

DATE: September 9, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Amy Diaz-Barriga, Planning Supervisor
Joseph Bryan, Principal Planner

SUBJECT:

Shawnee PUD Subdivision, Site Plan, Developing 26 Attached Residential Units And 1 Open Space Lot, On 2.24 Acres, Located At 1101 Shawnee Drive. (CONSENT AGENDA)

PURPOSE:

PROJECT INFORMATION
COF Project Number: 7916
Applicant: Jamie Gillespie, James + Associates Engineers and Planners, Inc.
Owner: Franklin Housing Authority, Derwin Jackson, Rep.

BACKGROUND/STAFF COMMENTS:
The purpose of this site plan is to develop 26 attached residential units on 2.24 acres in conjunction with the approved Shawnee PUD Subdivision. The development plan for the Shawnee PUD subdivision received final approval in March of 2022. The development is comprised of multifamily, townhome, and duplex building types. Three modifications of standards for parking minimums, transitional buffer encroachment, and foundation height were previously approved with the development plan and those modifications are correctly reflected with this submittal. Because this property is adjacent to single-family residential and incorporates a transitional buffer, site plans for the property must be reviewed and approved by the Franklin Municipal Planning Commission.

PROCEDURAL REQUIREMENTS:
1. The applicant shall upload the corrected plan to the online plan review website (https://franklin.contractorsplanroom.com/secure/). All revisions to the approved plans shall be "clouded." With the resubmittal, each condition of approval/open issue in the online plan review system shall contain a full response from the applicant as to the satisfaction or completion of that condition.
2. Once the corrected site plan has been approved, one (1) full-size and one (1) half-sized copy of the final approved landscape plans shall be submitted to the Department of Building and Neighborhood Services for future landscape inspection purposes.
3. Once the project has obtained Site Plan approval, the applicant will be notified by COF Engineering Department with instructions regarding the status of their digitally stamped construction plans.

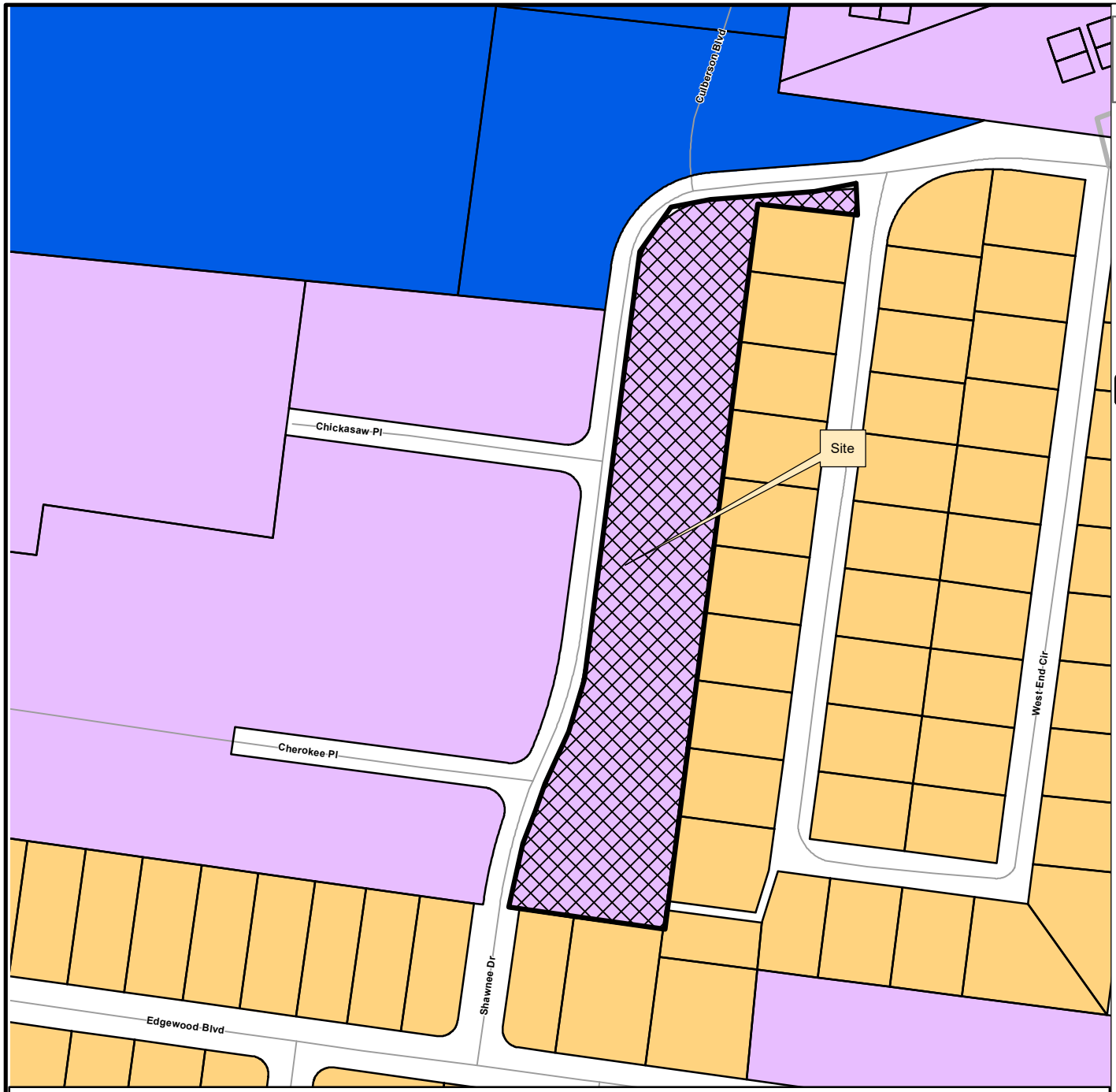
4. The applicant shall upload complete building plans, including the approved, revised site plans, to the City's IDT site for Building and Neighborhood Services Department review and approval prior to the issuance of a building permit.
5. Prior to the start of any excavation work, the developer and/or contractor shall notify AT&T and Comcast.
6. The City’s project identification number shall be included in all correspondence with any City department relative to this project.

FINANCIAL IMPACT:

Unknown.

RECOMMENDATION:

Staff recommends approval of the site plan for the Shawnee PUD Subdivision with conditions.



SHAWNEE PUD SUBDIVISION, SITE PLAN

Project Information
Existing Zoning: PD 11.51
Overlay Districts: N/A
Site Acreage: 2.24 acres
Proposed Number of Dwelling Units: 26
Proposed Nonresidential Square Footage: 0

Legend

- Shawnee PUD, SP
- Hillside/Hillcrest Overlay
- 500 Ft Buffer of Hillside
- AG Agricultural District
- ER Estate Residential District
- R1 Residential 1 District
- R2 Residential 2 District
- R3 Residential 3 District
- R4 Residential 4 District
- R6 Residential 6 District
- MR Mixed Residential District
- PD Planned District
- OR Office Residential District
- CI Civic Institutional District
- NC Neighborhood Commercial
- CC Central Commercial District
- DD Downtown District
- 1ST Avenue District
- 5TH Avenue District
- RC6 Regional Commerce 6 District
- RC12 Regional Commerce 12 District
- GO General Office District
- LI Light Industrial District
- HI Heavy Industrial District

This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
All data and materials (c) copyright 2021. All rights reserved.

N

0 250 500 1,000
Feet

COF no: 7916

CONDITIONS OF APPROVAL:

Open Issues: 14 These issues are currently being filtered

Engineering - Site Plan Checklist

General Issues

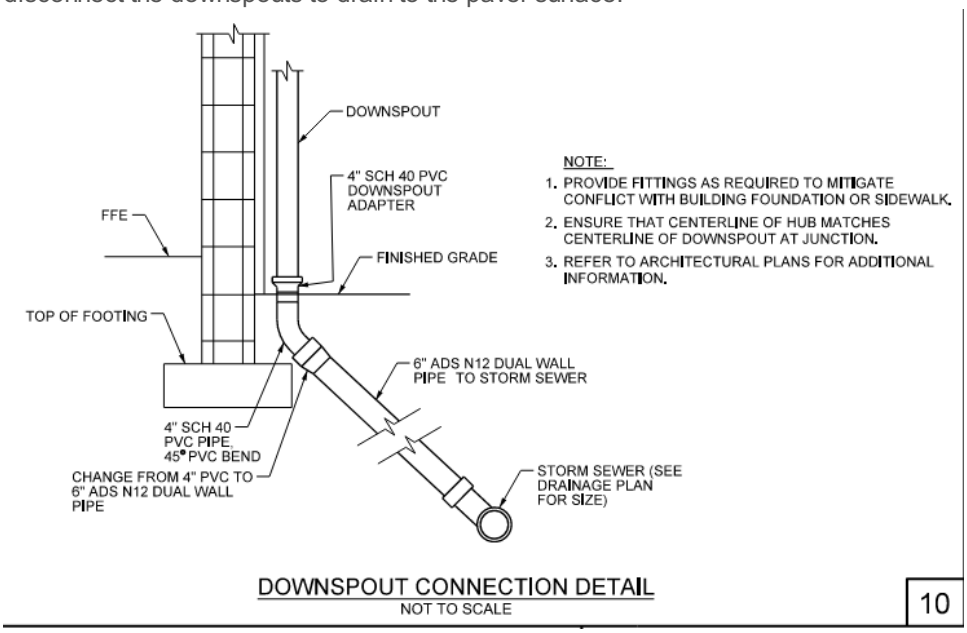
24. B. General Information

lance.fittro@franklintn.gov A revised final plat will be required in order to modify/abandon existing easements on the property and create new easements as necessary for the proposed site development. The revised plat shall be approved and recorded prior to issuance of a building permit.

25. J. Stormwater Managment Plan

lance.fittro@franklintn.gov Applicant shall address the issues below for the stormwater quality and quantity analysis for the proposed site development:

- The response of "The east side of the units will be routed to flow onto the paver surface via sidewalk modifications" does not appear to be reflected on the submitted site plan. Applicant shall provide clear direction of this intent to the contractor on the plans, and remove or revise details such as the one below which contradict the stated intent to disconnect the downspouts to drain to the paver surface:



- Pervious paver areas are input into Step 2 Proposed Land Use correctly, but should not have P1 entered in Step 4 for the paver areas themselves (i.e. the pavers do not treat themselves)

24	P2 IMP TO PAVERS	IA	5720	0.95		0.00	0.95	P1	0.45	0.53	
25	P2 PAVERS AREA	P1	8614	0.29		0.00	0.29	P1	0.45	0.16	

- Similarly, the bioretention areas are correctly entered as BMP in Step 2 Proposed Land Use, but should not have B2 entered in Step 4a for the bio areas themselves

P2 BIO POND AREA	BMP	459	0.15		0.00	0.15		0.00	0.15		0.00	-	B2	0.80	0.03	

- Applicant shall be advised that the Curve Number Adjustment portion of the water quality spreadsheet tool does not account for outflow through underdrains. Where underdrains are present, standard hydraulic analysis of the site must be used for pipe sizing and pre- vs. post-development runoff calculations, with the underdrain modeled as an orifice in the analysis.

29. E. Roadway Design and Plan & Profile

joe.marlo@franklintn.gov *Mid-block crossing relocated (thank you).*

1. Applicant shall provide the following City of Franklin standard drawings for the western curb ramp connection at the mid-block crossing.

RP-14 Parallel Curb Ramp
RP-18 Parallel Curb Ramp Layout

2. Applicant shall modify Note 21 (C2.1) to reflect parallel curb ramp at the western end of crosswalk and to specify signs to be W11-2 and W16-7P using black legend on fluorescent yellow-green background and VIP diamond grade reflectivity.

48. I. Grading Plan

lance.fittro@franklintn.gov This is an advisory comment when **does not hinder approval of the site plan:**

The retaining wall shown on the plans which is greater than 48" in height as measured from the bottom of the footing requires a separate submittal to Building & Neighborhood Services for review, approval and permitting.

53. Sight Triangles

david.chang@franklintn.gov Sight distance triangles need to be adjusted to the correct lengths based on the design speed.

Performance Agreement and Surety

General Issues

28. Engineering Sureties

kevin.long@franklintn.gov

Applicant shall post sureties in the following amounts:	
I. City Water:	**$63,000**
II. City Sewer:	**$110,000**
III. Public Sidewalk:	**$41,000**
IV. City Streets:	**$311,000**
V. Private Streets (Including Shared Access):	$ -
VI. Street Access	**$20,000**
VII. Temporary Turnarounds	$ -
VIII. Traffic Signals:	$ -
IX. ITS Elements:	$ -
X. Stormwater Drainage:	**$83,000**
XI. Green Infrastructure:	**$307,000**

NOTE: Performance Calculations - Sureties are calculated from the Site Plan and approved during the Site Plan approval process. Sureties shall be posted prior to obtaining a building permit. Where a building permit is not expected, sureties shall be posted prior to obtaining a grading permit. If a Final Plat is approved at any time during the development process, all sureties will be transferred to said plat as a Condition of Approval. Sureties posted should include Public Infrastructure, Erosion Control, Street Access, and all necessary repairs for work completed within the public right-of-way. ***Any driveway or related encroachment on City of Franklin right-of-way, including the modification, revision, or change in use of any existing driveway facilities, shall require a Street Access Surety.*** *A 10% contingency is applied to each surety category. EPSC is based on a flat $7,500 per acre of disturbed area and is distributed proportionally across all surety categories.*

Line Items (For Reference Only:)		
8" MAIN	800	LF
8" MAIN	700	LF
4' MANHOLES	6	EA
CONCRETE SIDEWALK (4" CLASS A, 4" BASE)	4500	SF
MAJOR AND MINOR COLLECTOR PAVEMENT (1.5", 2", 4", 8")	3100	SY
SIGNS/STRIPING/ETC	0.05	OF TOTAL
NEW OR MODIFIED STREET CONNECTIONS	2	EA
15" RCP CULVERT	195	LF
18" RCP CULVERT	41	LF
HEADWALLS (Concrete Volume)	1	CY
SINGLE INLET/JUNCTION BOX	8	EA
SAFETY GRATES	24	EA
DITCH WORK	675	SY
PERMEABLE PAVEMENT/PAVERS	17700	SF
BIORETENTION/RAIN GARDEN (Water Quality Volume)	205	CY

54. Landscape

jason.arnold@franklintn.gov Landscape surety $90,000

Stormwater

General Issues

16. Stormwater Management Plan

ellen.moore@franklintn.gov	2 and 5 yr. storm flows post construction are greater than the pre construction flows. Applicant shall revise.

17. Drainage

ellen.moore@franklintn.gov	Downstream structures appear to be flowing full and in inlet control. Downstream structures shall safely pass the 10 year storm.

19. Details

ellen.moore@franklintn.gov	Based on the roof runon and the additional runon from the drive aisle draining to the lower bioretention area, the maximum 21 paver runon area appears to have been exceeded. An exhibit shall be included within the stormwater management report showing the runon area compared to the paver area.

Water/Sewer

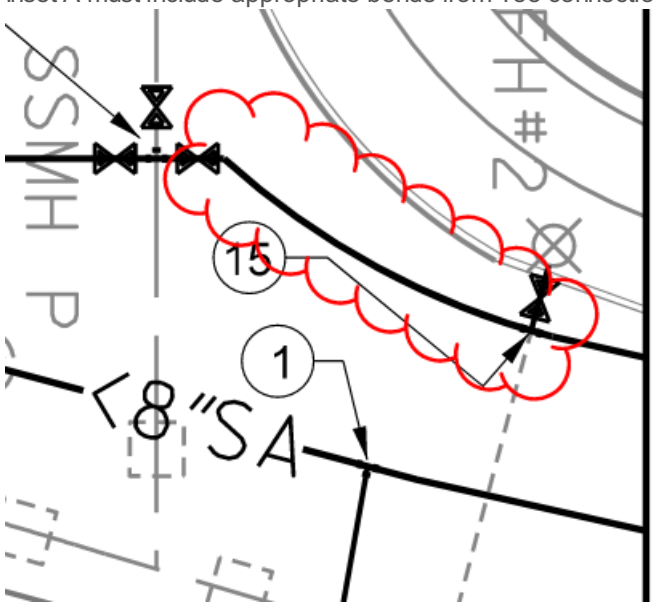
General Issues

9. Water services

ben.mcneil@franklintn.gov

The applicant has provided a blow up detail of each service location, the applicant shall revise meters and services as outlined below. This may require sidewalk design to shift.

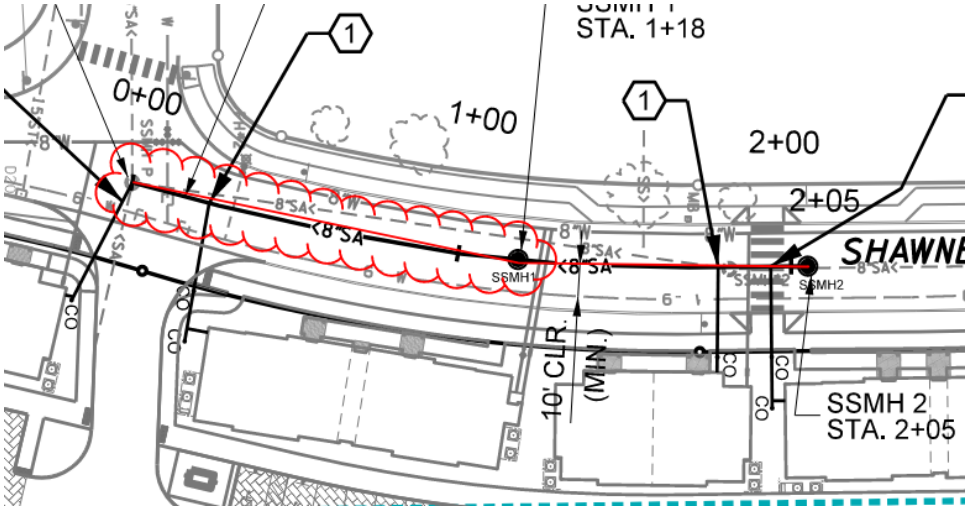
- Water meters must be set at the property line.
- All service connection must be shown as 90 degree connection to main line.
- Minimum separation of 10' between water and sewer must be maintained.
- Water services must be clear of manholes and provide spacing for manhole excavations.
- Inset A must include appropriate bends from Tee connection.



- Inset F has utilities shown and its not clear what the proposed utility will be. The minimum of 10' separation must be maintained.

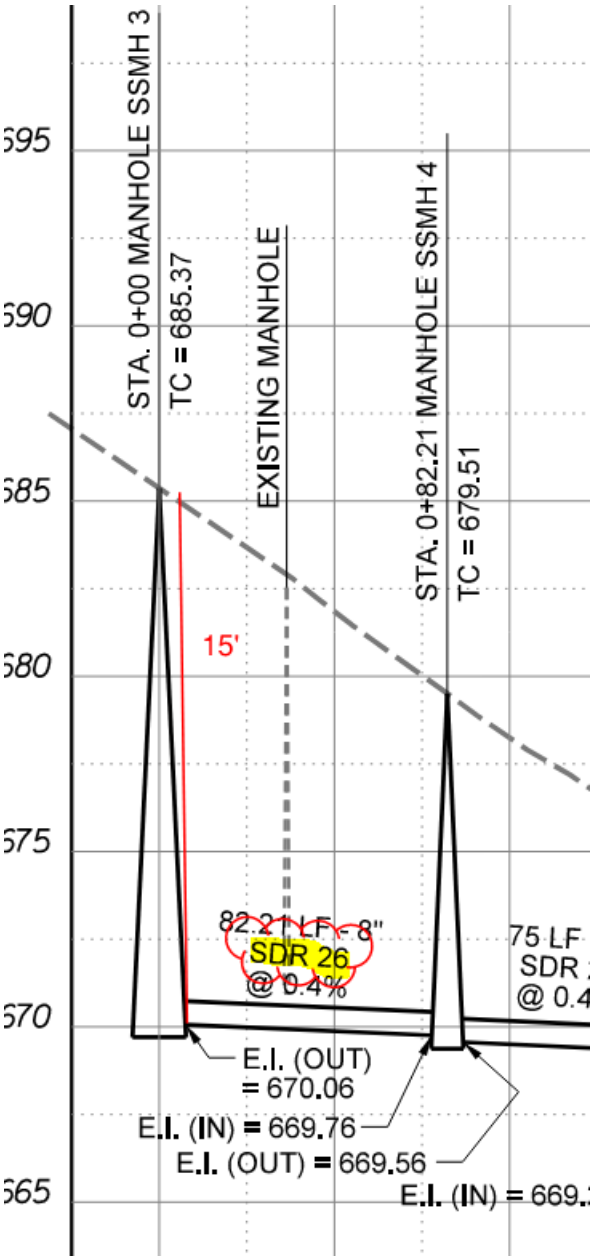
34. Sanitary sewer

ben.mcneil@franklintn.gov The applicant has modified the sanitary sewer main for sewer main 1, but the alignment appears to have bends. No bends are permitted within the sanitary sewer alignments. The applicant shall revise.



41. Stationing for sanitary sewer

ben.mcneil@franklintn.gov The applicant has added the stationing to the sanitary sewer, the line segment below must be changed to DI as the line is at 15' in depth.



42. Water and sewer

ben.mcneil@franklintn.gov	The applicant shall verify that the proposed electric plan does not encroach proposed water and sewer service locations.

SITE DATA CHART

PROJECT NAME: SHAWNEE PLANNED UNIT DEVELOPMENT
PROJECT #: 7694
ADDRESS: 1101 SHAWNEE DRIVE, FRANKLIN, TENNESSEE, 37064
PARCEL(S): 078H A 00400
ACREAGE/SQUARE FOOTAGE OF SITE: 2.24 ACRES/97,532 SF
VESTING (DATE DEVELOPMENT FIRST BECAME VESTED, IF A REVISION): N/A

REGULATIONS:
BASE ZONING: PD
PROPOSED ZONING: PD 11.61
OVERLAY ZONING: N/A
BUILDING TYPES APPLIED: MULTIFAMILY, TOWNHOME, DUPLEX, MULTIPLEX
FRONTAGE TYPES APPLIED: URBAN LANDSCAPE FRONTAGE
LOT WIDTH (RESIDENTIAL): N/A
LOT SIZE (RESIDENTIAL): N/A
SET BACKS-
FRONT YARD: 5 FT. FROM BACK OF CURB
SIDE YARD: 10 FT. FROM PROPERTY LINE
REAR YARD: 10 FT. FROM PROPERTY LINE
DWELLING UNIT COUNT, BY TYPE:
2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
COMMERCIAL SF, BY USE: N/A
HOTEL KEYS: N/A
BUILDING HEIGHT: 30'-3" MAX.
MINIMUM LANDSCAPE SURFACE AREA: 20%
OPEN SPACE SF REQUIRED: 4,877 S.F (5%)
NATURAL AREA SF REQUIRED: 9,753 S.F. (ADDITIONAL 10%)
TREE CANOPY RETENTION ACREAGE: 0.52 AC
PARKING REQUIRED, BY USE: 74 SPACES
PARKING PROVIDED, BY USE: 69 SPACES
HISTORIC RESOURCE TREATMENT (Y/N): N

OPEN SPACE PROVIDED: 5,342 S.F.
NATURAL AREA PROVIDED: 10,450 S.F.

OPEN SPACE PROVIDED:
POCKET PARKS (ZONING ORDINANCE 11.6)

POCKET PARK 1: GAZEBO; BIKE RACK; BENCHES; WALKING PATH

POCKET PARK 2: GAZEBO / PAVILION; SEATING; ADA PICNIC TABLE

COMPLIANCE WITH THE OBJECTIVES OF "ENVISION FRANKLIN"

GUIDING PRINCIPLES: THIS DEVELOPMENT PLAN IS CONSISTENT WITH ENVISION FRANKLIN'S GOAL OF CREATING EXCEPTIONAL PLACES FOR CITIZENS WHILE PRESERVING THE CITY'S UNIQUE IDENTITY AND CHARACTER.
MANAGED GROWTH: DENSITY IS ONLY INCREASING SLIGHTLY AND IS SUPPORTED BY IMPROVEMENTS TO THE CITY UTILITY INFRASTRUCTURE ONSITE.
ECONOMIC VITALITY: THE DEVELOPMENT WILL INCREASE THE AMOUNT OF AFFORDABLE AND LOW-INCOME HOUSING IN THE CITY.
VIBRANT NEIGHBORHOODS: BUILDINGS ON THE DEVELOPMENT SITE ARE BEING DESIGNED TO BE VISUALLY APPEALING. COMMUNITY FACILITIES ARE BEING MADE AVAILABLE AND ACCESSIBLE TO RESIDENTS.
HISTORIC PRESERVATION: THE DEVELOPMENT SITE DOES NOT LIE WITHIN A HISTORIC DISTRICT AND DOES NOT CONTAIN ANY SITES ELIGIBLE FOR INCLUSION ON THE NATIONAL REGISTER OF HISTORIC PLACES.
NATURAL BEAUTY: THE DEVELOPMENT WILL COMPLY WITH ZONING ORDINANCE REQUIREMENTS REGARDING LANDSCAPING, TREE CANOPY, NATURAL AREA, AND OPEN SPACE. THERE ARE NO SCENIC VISTAS OR VIEWSHEDS TO PRESERVE ONSITE.
EXCEPTIONAL DESIGN: BUILDINGS WILL BE COMPOSED OF HIGH-QUALITY MATERIALS AND WILL FRONT THE STREET. OPEN SPACE AND NATURAL AREA ARE BEING SET ASIDE FOR PUBLIC GATHERING AND PASSIVE ENJOYMENT.
CONNECTED COMMUNITY: THE DEVELOPMENT LIES ADJACENT TO AN EXISTING PUBLIC TRANSIT NETWORK, BICYCLE PARKING IS PROVIDED, AND A PEDESTRIAN CIRCULATION SYSTEM CONNECTS THE BUILDINGS AND OPEN SPACE IN THE DEVELOPMENT.
CONTEXT-RESPONSIVE INFILL: AS A "TRANSITIONAL AREA" INFILL (PER APPENDIX E), THE REDEVELOPMENT OF THE DEVELOPMENT SITE WILL SERVE TO ENHANCE COMMUNITY CHARACTER, WITH NEW, WELL-DESIGNED BUILDINGS AND LANDSCAPING THAT ARE AN IMPROVEMENT OVER THE EXISTING SITE.
CHARACTER AREA: ACCORDING TO APPENDIX B OF ENVISION FRANKLIN, THE DEVELOPMENT SITE LIES WITHIN THE CENTRAL FRANKLIN CHARACTER AREA. THE DEVELOPMENT DOES NOT LIE WITHIN THE CENTRAL FRANKLIN OVERLAY DISTRICT.
SPECIAL AREA: THE DEVELOPMENT SITE DOES NOT LIE WITHIN A "SPECIAL AREA".
DESIGN CONCEPTS: THE DEVELOPMENT WILL BE A MIXED RESIDENTIAL NEIGHBORHOOD COMPOSED PRIMARILY OF MULTIFAMILY BUILDINGS, WHICH IS CONSISTENT WITH THE "MIXED RESIDENTIAL" DESIGNATION SHOWN IN APPENDIX F, FIGURE F.2 ("CORRIDOR CHARACTER MAP") OF ENVISION FRANKLIN. THE DEVELOPMENT HAS BEEN DESIGNED TO BE WALKABLE FOR RESIDENTS. OPEN SPACE AND NATURAL AREA HAVE BEEN SIT ASIDE, AND LANDSCAPING HAS BEEN INCLUDED THROUGHOUT, IN ORDER TO ENHANCE THE NEIGHBORHOOD FEEL OF THE DEVELOPMENT. A BUFFER IN TRANSITION ZONE 1 ADJACENT TO THE SOUTHERN AND EASTERN BOUNDARIES HELPS WITH STREAMLINING THE DEVELOPMENT SITE INTO THE EXISTING ADJACENT RESIDENTIAL AREAS.

STATEMENT OF IMPACTS:

THE NEW DEVELOPMENT ONLY REPRESENTS A NET INCREASE OF 10 DWELLING UNITS OVER THE PREVIOUS DEVELOPMENT LOCATED ONSITE. BECAUSE THIS INCREASE IN UNITS IS LIMITED IN SIZE, THE IMPACT ON POLICE, FIRE, SOLID WASTE, AND PUBLIC RECREATIONAL FACILITIES WILL BE RELATIVELY SMALL. THE PUBLIC STREETS ABUTTING THE DEVELOPMENT SITE (NORTH PETWAY STREET AND SHAWNEE DRIVE) ARE REMAINING BASICALLY UNCHANGED, SO POLICE AND FIRE ACCESSIBILITY WILL REMAIN THE SAME. THERE WILL BE A FEW MORE BUILDINGS FOR POLICE AND FIRE TO SERVICE ONSITE, BUT ONLY A LIMITED INCREASE. LIKE WISE, THE NET INCREASE OF 10 UNITS WILL NOT SIGNIFICANTLY IMPACT SOLID WASTE, AND DUMPSTERS LOCATED ONSITE WILL SERVE RESIDENTS. THE DEVELOPMENT WILL HAVE ITS OWN PRIVATE POCKET PARKS, WHICH WILL ALLEVIATE THE POTENTIAL IMPACTS ON PUBLIC PARKS SUCH AS JIM WARREN PARK.

RESIDENTIAL USE

3 BUILDING TYPES
6 BUILDINGS TOTAL

2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
TOTAL UNITS = 26

URBAN LANDSCAPE FRONTAGE

NOTE: THE CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL EQUIPMENT IS COMPLETELY SCREENED FROM ALL DIRECTIONS AND OFF SITE VIEWS.

NOTE: THE CHANGE OUT OF ANY EQUIPMENT TO A LARGER DIMENSIONAL HEIGHT OR MOUNTING HEIGHT WILL REQUIRE THAT ADDITIONAL MEASURES BE TAKEN TO MEET CITY OF FRANKLIN SCREENING REQUIREMENTS.

PARKING REQUIRED
ZONING ORDINANCE TABLE 10.1.6
RESIDENTIAL MULTI-FAMILY

2 BEDROOM - 8 @ 2.5 PER UNIT	= 20
3 BEDROOM - 12 @ 3.0 PER UNIT	= 36
4 BEDROOM - 6 @ 3.0 PER UNIT	= 18
TOTAL REQUIRED	= 74
TOTAL PROVIDED	= 69

UNCONTROLLED PEDESTRIAN CROSSING LOCATIONS WILL BE DETERMINED BY CITY OF FRANKLIN ENGINEERING STAFF ON A CASE-BY-CASE BASIS WITH THE REVIEW OF SUBSEQUENT SITE PLANS.

TOTAL SITE ACREAGE	2.24 ACRES
TOTAL HOUSING UNITS	26 UNITS
PROPOSED DENSITY	11.61 UNITS PER ACRE

LEGEND

- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

SITE KEY NOTES:

1. CONCRETE PATH.
2. BIKE RACK W/ CONCRETE PAD.
3. MAIL KIOSK W/ CONCRETE PAD.
4. DUMPSTER ENCLOSURE.
5. GAZEBO.
6. BENCH.
7. GAZEBO WITH SEATING.
8. ADA PICNIC TABLE.
9. ACCESSIBLE RAMP WITH HANDRAILS AND LANDINGS (TYPICAL).
10. PERVIOUS PAVERS.

RETAINING WALL ELEVATION TABLE

LOCATION	TOP OF WALL	BOTTOM OF WALL
1	696.00	691.50
2	697.50	692.70
3	696.90	690.90
4	695.20	689.20
5	694.00	688.00
6	692.70	686.70
7	691.50	685.60
8	689.50	684.60
9	687.50	684.10
10	685.00	681.10
11	680.00	674.00
12	680.00	674.00
13	680.10	675.00
14	681.00	676.50
15	681.00	676.50
16	682.00	676.50
17	681.00	677.00
18	680.00	679.00

NOTE: MAXIMUM HEIGHT OF RETAINING WALL = 6'-0".

FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- W.V. WATER VALVE
- FIRE HYDRANT
- G.V. GAS VALVE
- SANITARY SEWER MANHOLE
- SANITARY SEWER
- STORM SEWER
- W WATER LINE
- OHP OVERHEAD POWER
- FENCE
- G.M. GAS METER
- UG UNDERGROUND
- CO SEWER CLEAN OUT

50' FROM SITE

DATE OF ONE STOP APPROVAL: 3-16-22

COF PROJECT NO. 7694

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE
REGISTERED PROFESSIONAL ENGINEER
AGRICULTURE
NO. 102500
STATE OF TENNESSEE
02-28-22

APPROVED - DEVELOPMENT PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
AYS	JRG	08-31-21	PRELIMINARY - CITY / OWNER REVIEW
AYS	JRG	09-24-21	PRE-APPLICATION SUBMITTAL
TEAM	JRG	10-11-21	DEVELOPMENT PLAN SUBMITTAL
TEAM	JRG	11-04-21	DEVELOPMENT PLAN RESUBMITTAL
TEAM	JRG	02-28-22	ONE STOP SUBMITTAL

C2.0

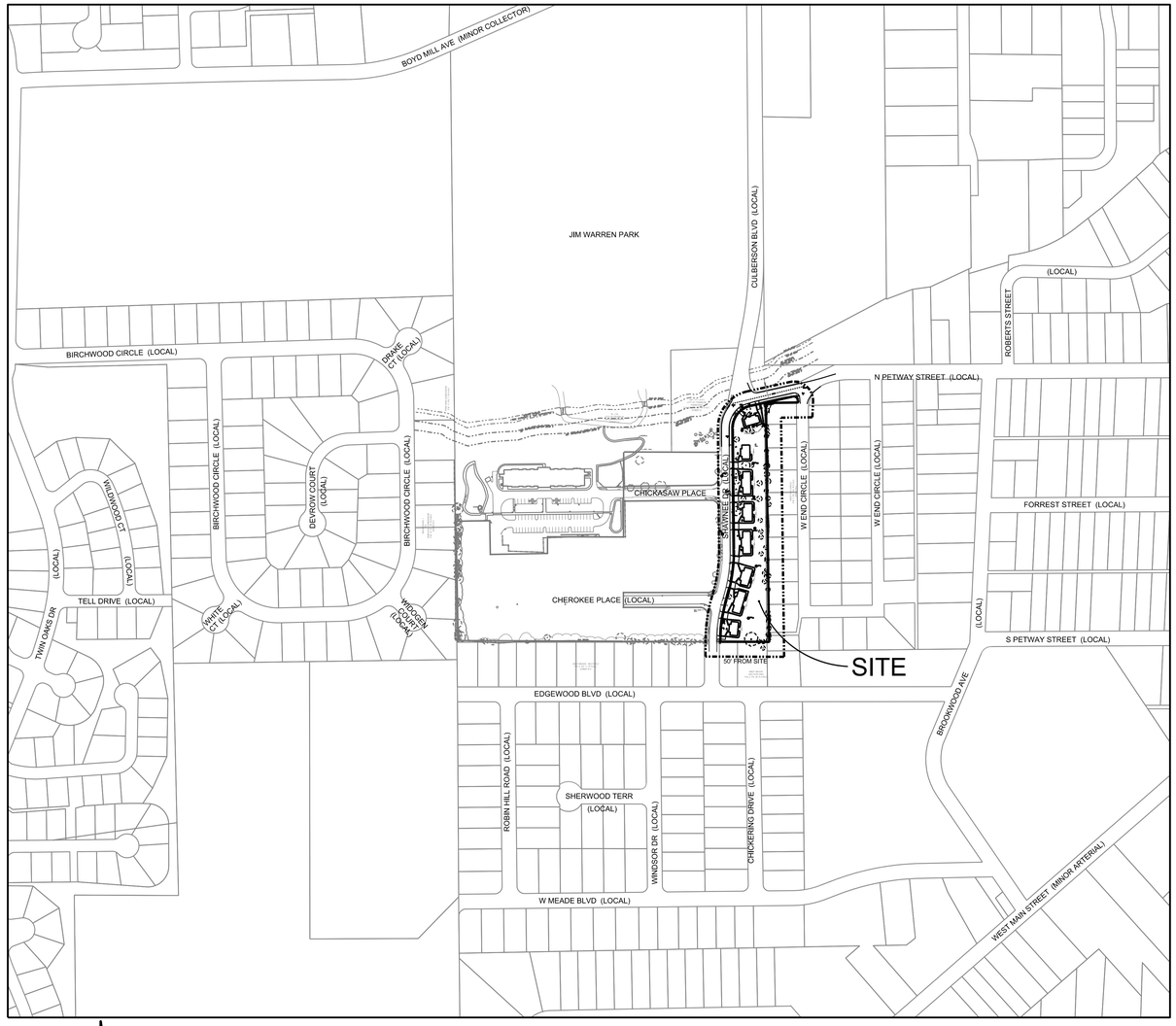
FILE NO. 1716-22

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C2.4	SITE DETAILS
C2.5	SITE DETAILS
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J-A0.1	BUILDING J
J-A3.1	BUILDING J
J-A3.2	BUILDING J
Y-A0.1	BUILDING Y
Y-A3.1	BUILDING Y
Y-A3.2	BUILDING Y
A2.1	DUMPSTER DETAIL & MATERIAL BOARD
A3.1	MAIL KIOSK

SHAWNEE PLANNED UNIT DEVELOPMENT
SITE PLAN SUBMITTAL

FRANKLIN HOUSING AUTHORITY
1101 SHAWNEE DRIVE
FOURTH ALDERMANIC WARD
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE



SITE DATA CHART

PROJECT NAME: SHAWNEE PLANNED UNIT DEVELOPMENT
PROJECT #: 7694
ADDRESS: 1101 SHAWNEE DRIVE, FRANKLIN, TENNESSEE, 37064
PARCEL(S): 078H A 00400
ACREAGE/SQUARE FOOTAGE OF SITE: 2.24 ACRES/97,532 SF
VESTING (DATE DEVELOPMENT FIRST BECAME VESTED,
IF A REVISION): 2/22/2022

REGULATIONS:
BASE ZONING: PD 11.61
OVERLAY ZONING: N/A
BUILDING TYPES APPLIED: MULTIFAMILY, TOWNHOME AND DUPLEX
FRONTAGE TYPES APPLIED: URBAN LANDSCAPE FRONTAGE
LOT WIDTH (RESIDENTIAL): N/A
LOT SIZE (RESIDENTIAL): N/A
SET BACKS-
FRONT YARD: 5 FT. FROM BACK OF CURB
SIDE YARD: 10 FT. FROM PROPERTY LINE
REAR YARD: 10 FT. FROM PROPERTY LINE
DWELLING UNIT COUNT, BY TYPE:
2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
COMMERCIAL SF, BY USE: N/A
HOTEL KEYS: N/A
BUILDING HEIGHT: 36'-6" MAX.
MINIMUM LANDSCAPE SURFACE AREA: 20%
OPEN SPACE SF REQUIRED: 4,877 S.F (5%)
NATURAL AREA SF REQUIRED: 9,753 S.F. (ADDITIONAL 10%)
TREE CANOPY RETENTION ACREAGE: 0.52 AC
PARKING REQUIRED, BY USE: 74 SPACES
PARKING PROVIDED, BY USE: 69 SPACES
HISTORIC RESOURCE TREATMENT (Y/N): N

One Vantage Way, Suite E-220 Nashville, Tennessee 37228-1515 615/726/4848
JA Engineers Planners and Computer Applications
JAMES + ASSOCIATES, INC.

TENNESSEE STATE PLANE COORDINATE SYSTEM, NAD 83(2011), US SURVEY FEET, NAVD 88 DATUM

200 0 200
scale feet

PARCEL 4.00
GROUP A
TAX MAP 078H

PARKLAND IMPACT FEE:
26 UNITS TOTAL WITH 16 EXISTING
10 NEW UNITS x $4,304 = $43,040
FEES SHALL BE PAID AT FINAL PLAT

JAMES R. GILLESPIE REGISTERED ENGINEER No. 102690 STATE OF TENNESSEE
09-01-22

REQUIRED LOCATION REQUEST INFORMATION

NAME OF CALLER
TELEPHONE NUMBER
BEST TIME TO CALL
COUNTY
TOWN
STREET ADDRESS
START DATE START TIME
TYPE OF WORK
BLASTING ?
WORK BEING DONE BY
WORK BEING DONE FOR

CALL THREE WORKING DAYS BEFORE YOU DIG
1-800-351-1111
IN NASHVILLE : 366-1987
TENNESSEE ONE CALL SYSTEM INCORPORATED

OWNER
FRANKLIN HOUSING AUTHORITY
200 SPRING STREET
FRANKLIN, TN 37064
(615) 794-1247
CONTACT: DERWIN JACKSON
EMAIL: djackson@franklinhousingauthority.com

CIVIL ENGINEER / APPLICANT
JAMES + ASSOCIATES, INC.
ONE VANTAGE WAY
SUITE E-220
NASHVILLE, TN 37228
(615) 726-4848
CONTACT: R. DARRELL JAMES, P.E.
EMAIL: darrell.james@jamesplus.net

ARCHITECT
NICKLE ARCHITECTS, PLLC
1612 17TH AVENUE SOUTH
NASHVILLE, TN 37212
(615) 269-3130
CONTACT: JAMES D. NICKLE, AIA
EMAIL: jnickle@nicklearchitects.com

ELECTRIC
OLG ENGINEERING, INC.
2605 ELM HILL PIKE, SUITE C
NASHVILLE, TN 37214
(615) 678-6022
CONTACT: TONY GIPSON, PE
EMAIL: adgipson@olgengineering.com

LANDSCAPE ARCHITECT
HEIBERT + BALL, LAND DESIGN
1894 GENERAL GEORGE PATTON DRIVE
SUITE 400
FRANKLIN, TN 37067
(615) 376-2421 EXT. 2
CONTACT: CONNOR BALL, PLA
EMAIL: connor@hblanddesign.com

APPROVED MODIFICATION OF STANDARDS:

MOS #1: Modification of Zoning Ordinance Section 10.1.5 ("Calculation of Minimum Parking") and Section 10.1.6 ("Minimum Parking") to allow the development site to be served by 69 vehicle parking spaces. Based on the current breakdown of residential dwelling units onsite, the unmodified Section 10.1.6 would require a minimum of 74 vehicle parking spaces:

2 Bedroom - 8 @ 2.5 per unit =	20
3 Bedroom - 12 @ 3.0 per unit =	36
4 Bedroom - 6 @ 3.0 per unit =	18
Minimum Vehicle Parking Spaces =	74

The site presents significant challenges for parking, as Applicant is unable to utilize parallel parking along Shawnee Drive due to insufficient geometry. The tract of land is unusually narrow, and areas reserved for parking are constrained by the boundary of Transition Zone 1.

Applicant hereby requests a modification of the table entitled "Minimum Parking" in Section 10.1.6, for the row entitled "Duplexes/Multiplexes/Townhouses/Multifamily Residential," to read as follows:

1.5 spaces for a studio
1.5 spaces for a 1 bedroom unit
2.25 spaces for a 2 bedroom unit
2.75 spaces for a 3 bedroom unit
3 spaces for a 4+ bedroom unit

With the approval of MOS #1, the calculation of minimum parking under Sections 10.1.5 and 10.1.6 would be as follows:

2 Bedroom - 8 @ 2.25 per unit =	18
3 Bedroom - 12 @ 2.75 per unit =	33
4 Bedroom - 6 @ 3.0 per unit =	18
Minimum Vehicle Parking Spaces =	69

MOS #2: Modification of Zoning Ordinance Section 6.6 ("Building Types: Townhouse") to remove, for non-multifamily buildings (containing fewer than 5 units per building), the requirement that the finished floor elevation must be a minimum of 18 inches above grade at front façade.

In order to serve the Franklin community and to comply with applicable regulations, Franklin Housing Authority (FHA) must provide a minimum number of accessible units and adaptable units. With accessibility requirements in mind, it would be a substantial burden for FHA to provide 18-inch minimum foundations for non-multifamily buildings, as this would require constructing complex ramps in order to make these units accessible or adaptable. Removing the requirement to provide these 18-inch minimum foundations would better enable FHA to serve its residents and the Franklin community.

Applicant hereby requests a modification of Zoning Ordinance Section 6.6, Subsection "Foundations, Porches, and Stoops" by deleting the words "Finished Floor Elevation: Minimum 18 inches above grade at front façade" and thereby removing the requirement to provide the same.

MOS #3: Modification of Zoning Ordinance Section 8.1.4 ("Transition Zone 2: Restricted Use") to allow a limited section of a new residential building to lie within Transition Zone 2. This tract of land has an unusually narrow shape, especially in its northern portion. This hardship is further compounded by the existence of Transition Zones 1 and 2, which take up a sizeable portion of the most buildable part of the tract, the southern end. Furthermore, at COF request, the applicant is proposing to align the southern access drive with Cherokee Place, which takes up a part of the buildable area on the southern portion of the tract.

The applicant requests that approximately 550 SF of a new residential building footprint be permitted to be within Transition Zone 2. Impact is lessened compared with the existing conditions, since an existing residential building has been lying over the same area since the 1970s and already lies within both Transition Zone 1 and Transition Zone 2. As applied to the new building, this MOS #3 would result in an improvement over the current impact of the existing building.

COF PROJECT NO. 7916
J+A PROJECT NO. 1716-24
ISSUE DATE: 09.01.22

GENERAL NOTES:

1. THE CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, TAKING CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. THE CONTRACTOR SHALL REPAIR CONTRACTOR CAUSED-DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND OBTAIN ALL PERMITS. THE CONTRACTOR SHALL GIVE ALL NOTICES AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
4. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY AND THE FIELD ADJUSTMENT REQUIRES THE ENGINEER'S APPROVAL. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF PAVEMENT.
5. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE, NOR STORE MATERIALS WITHIN THE DRIPLINES OF TREES OR OUTSIDE THE LIMIT OF CONSTRUCTION.
6. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN WHICH RESULTS FROM NEW CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE AND TO OWNER'S STANDARDS.
7. DIMENSIONS ARE TO THE FACE OF THE CURBS, EDGE OF CONCRETE, OR TO FACE OF BUILDING, UNLESS OTHERWISE NOTED.
8. NEW SPOT ELEVATIONS AND CONTOURS REPRESENT FINISHED GRADE AND TOP OF FINISHED PAVEMENT.
9. CONTRACTORS SHALL CONTACT LOCAL UTILITY OWNERS 48 HOURS PRIOR TO BEGINNING WORK.
10. PARKING STALLS ARE 9' x 18' UNLESS SHOWN OTHERWISE. STRIPING FOR STALLS SHALL BE PAINTED WHITE AND BLUE FOR ADA SPACES.
11. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE FOLLOWING:
"MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY AOC OF AMERICA, INC.
"SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" ISSUED BY THE U.S. DEP. OF LABOR.
"ALL PERTINENT OSHA REGULATIONS AS PUBLISHED WITH CFR 1910 & 1926"
12. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
13. CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PER DRAWINGS PRIOR TO COMMENCING WITH GRADING ACTIVITIES.
14. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED. REPLACE DAMAGED AND WORN OUT SILT BARRIERS AS DIRECTED BY THE EROSION CONTROL SPECIALIST.
15. ALL LOCATIONS OF TEMPORARY EROSION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE EROSION CONTROL SPECIALIST.
16. WHEN THE TEMPORARY SOIL EROSION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE (IN THE OPINION OF THE EROSION CONTROL SPECIALIST), THEY SHALL BE REMOVED.
17. ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO FINAL ACCEPTANCE.

SPECIAL NOTES:

1. ALL ROADWAY WORK IS TO CONFORM TO TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS (CURRENT EDITION)
2. THE CONTRACTOR SHALL PROPERLY BARRICADE AND PROTECT THE WORK ZONE AT ALL TIMES.

CLEARING AND GRUBBING:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, REMOVING, AND DISPOSING OF ALL TREES, BRUSH, STUMPS, ROOTS, AND WEEDS ENCOUNTERED WITHIN THE CONSTRUCTION AREA. DISPOSAL SHALL BE BY MEANS OF CHIPPERS, LANDFILLS, OR OTHER APPROVED METHODS NOT IN CONFLICT WITH STATE OR LOCAL ORDINANCES.
2. CARE SHALL BE TAKEN TO AVOID UNNECESSARY CUTTING OR DAMAGE TO TREES NOT IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOSS OR DAMAGE TO TREES OUTSIDE THE PERMANENT EASEMENT OR RIGHTS-OF-WAY.
3. ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

STRIPPING, STOCKPILING, AND PLACING TOPSOIL:

1. ALL TOPSOIL SHALL BE STRIPPED WITHIN THE LIMITS OF PROPOSED GRADING AND FROM ANY OTHER AREAS DESIGNATED BY THE ENGINEER. TOPSOIL SHALL BE STORED IN STOCKPILES. ALL ORGANIC MATTER WITHIN THE DEVELOPMENT AREA SHALL BE STRIPPED AND DISPOSED OF UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. A SIX-INCH (6") LAYER OF TOPSOIL SHALL BE PLACED WHERE SEEDING IS REQUIRED OR WHERE REQUIRED BY THE ENGINEER.
3. AFTER THE STOCKPILED TOPSOIL HAS BEEN PLACED AS SPECIFIED ABOVE, THE AREAS WHERE THE TOPSOIL WAS STOCKPILED SHALL BE NEATLY GRADED AND DRESSED.

EXCAVATION:

1. WHEN UNSUITABLE MATERIAL OR SOFT ORGANIC OR PLASTIC CLAYS ARE ENCOUNTERED IN THE SUBGRADE, THE AREA SHALL BE UNDERCUT AND BACKFILLED WITH SUITABLE MATERIAL.
2. EXCAVATION SHALL CONFORM TO LIMITS INDICATED ON THE PLANS. EXCAVATION MATERIALS SHALL BE REMOVED IN SUCH MANNER THAT THE SLOPES CAN BE NEATLY TRIMMED. EXCAVATION SHALL NOT BE MADE BELOW GRADE EXCEPT WHERE ROCK OR STONE MASONRY IS ENCOUNTERED OR UNDERCUTTING OF UNSTABLE MATERIALS IS REQUIRED. MATERIALS REMOVED BELOW GRADE SHALL BE REPLACED WITH THE APPROVED MATERIALS THOROUGHLY COMPACTED. WHERE BORROW MATERIALS ARE REQUIRED TO COMPLETE EMBANKMENTS OR FILLS THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THEM.
3. ROCK EXCAVATION SHALL BE REMOVED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE SUBGRADE AND BACKFILLED WITH APPROVED MATERIALS WHICH SHALL BE THOROUGHLY COMPACTED.
4. WHERE A SPRING OR SEEPAGE WATER IS ENCOUNTERED THAT IS NOT PROVIDED FOR ON DRAINAGE PLANS, IT SHALL BE REPORTED TO THE ENGINEER.

SUBGRADE CONSTRUCTION AND PREPARATION:

1. ALL TRACES OF UTILITY TRENCHES SHALL BE FILLED AND THOROUGHLY TAMPED. SPONGY AND UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH STABLE MATERIAL. ALL SUBGRADES SHALL BE MAINTAINED IN SATISFACTORY CONDITION, PROTECTED AGAINST TRAFFIC AND PROPERLY DRAINED UNTIL BASE IS PLACED.
2. ANY AREAS WHERE SETTLEMENT OCCURS DUE TO SHRINKAGE SHALL BE FILLED TO THE REQUIRED FINISHED GRADE.
3. ALL EXCAVATION AND EMBANKMENT AREAS SHALL BE PROOF ROLLED WITH A MINIMUM 12 CUBIC YARD TANDEM AXLE DUMP TRUCK, FULLY LOADED WITH SOIL, OR OTHER EQUIPMENT APPROVED BY THE SOILS ENGINEER THAT WILL REVEAL ANY SOFT, YIELDING, OR SPONGY AREAS. ANY INSTABILITY OBSERVED SHALL BE CORRECTED DURING THE PROOF ROLL, TO THE SATISFACTION OF THE SOILS ENGINEER BY DISKING, AERATING, RECOMPACTING, REMOVING AND REPLACING MATERIAL. AFTER TAKING CORRECTIVE MEASURES, AFFECTED AREAS SHALL BE PROOF ROLLED TO ENSURE THE STABILITY. THE SOILS ENGINEER MAY REQUIRE ADDITIONAL TESTING AS OUTLINED IN SECTION 205 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
4. THE CONTRACTOR MAY BE REQUIRED TO ADDRESS DUST CONTROL AT VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL SPRINKLE THE STREET CONSTRUCTION SURFACES WITH WATER OR APPLY A DUST-ALLAYING MATERIAL WHEN SUCH OPERATIONS ARE NECESSARY TO PREVENT A DUST NUISANCE OR IF DIRECTED BY THE ENGINEER.
5. THE SUBGRADE SHALL BE WITHIN 0.10 FOOT (PLUS OR MINUS) THE PLAN ELEVATIONS SHOWN. GRADE AREAS ADJACENT TO THE BUILDING TO DRAIN WATER AWAY FROM THE BUILDING.
6. GRADING OF SUBGRADE SHALL BE PERFORMED IN SUCH MANNER AS TO PROVIDE READY DRAINAGE OF WATER, DITCHES AND DRAINS SHALL BE MAINTAINED TO PROVIDE PROPER DRAINAGE DURING CONSTRUCTION.
7. HAULING OVER FINISHED SUBGRADE SHALL BE LIMITED TO THAT WHICH IS ESSENTIAL FOR CONSTRUCTION PURPOSES, AND ALL RUTS OR ROUGH PLACES THAT DEVELOP IN A COMPLETED SUBGRADE SHALL BE SMOOTHED AND RECOMPACTED. SOFT AREAS SHALL BE REMOVED AND REPLACED WITH CRUSHED STONE OR AS DIRECTED BY THE ENGINEER.
8. THE SUBGRADE SHALL BE CHECKED AND APPROVED BY THE SOILS ENGINEER FOR ADHERENCE TO THE PLANS BEFORE ANY BASE MATERIALS ARE PLACED.

FILLS AND EMBANKMENTS:

1. FILL AND BACKFILL ARE TO BE DEPOSITED IN LOOSE LAYERS NOT MORE THAN EIGHT (8) INCHES THICK, OR AS DIRECTED BY THE SOILS ENGINEER. ROCKS, BLOCKS OF CONCRETE AND MASONRY MATERIALS, NOT MORE THAN SIX (6) INCHES MAXIMUM DIMENSION, BUT NO DEBRIS, MAY BE USED FOR FILLS IF WELL DISTRIBUTED IN THE EARTH AND PROVIDED FURTHER, THAT SUCH MATERIALS SHALL NOT BE PLACED AGAINST MANHOLES, UNDERGROUND STRUCTURES, OR UTILITIES, OR IN THE TOP 24 INCHES OF FILL BELOW FINISHED GRADE. NO FROZEN MATERIAL SHALL BE PLACED IN BACKFILL.
2. EMBANKMENTS AND FILL MATERIALS SHALL BE FREE FROM FROST, STUMPS, TREES, ROOTS, SOD, OR MUCK. ONLY MATERIALS FROM EXCAVATION OR BORROW PITS, OR OTHER MATERIALS APPROVED BY THE SOILS ENGINEER SHALL BE USED. MATERIALS SHALL NOT BE PLACED ON FROZEN GROUND.
3. WHERE EXCAVATED MATERIALS ARE USED IN FILL CONSTRUCTION AND THE MATERIALS CONSIST OF EARTH AND VARIOUS GRADES OF ROCK, THE FILLS SHALL BE CAREFULLY CONSTRUCTED WITH THE LARGER OR HARD ROCK ON THE BOTTOM FOLLOWED BY THE SMALLER OR SOFT ROCK AND FINALLY THE EARTH FILL TO PROVIDE A WELL-COMPACTED AND VOID-FREE EMBANKMENT.
4. ALL DEPRESSIONS OR HOLES BELOW THE NATURAL GROUND SURFACE, WHETHER CAUSED BY GRUBBING, ROCK REMOVAL, UNDERCUTTING, OR OTHERWISE, SHALL BE FILLED WITH SUITABLE MATERIALS AND COMPACTED TO GROUND SURFACE BEFORE FILL CONSTRUCTION IS STARTED.
5. BACKFILLING AROUND A STRUCTURE SHALL HAVE BEEN COMPLETED AND THOROUGHLY COMPACTED TO GROUND SURFACE BEFORE ANY EMBANKMENT MATERIALS ARE PLACED THEREON.
6. EMBANKMENTS SHALL BE SO CONSTRUCTED THAT ADEQUATE SURFACE DRAINAGE WILL BE PROVIDED AT ALL TIMES.
7. FILL AREAS SHALL BE COMPACTED BY A SHEEP'S FOOT ROLLER, TO A DENSITY OF NOT LESS THAN 98 PERCENT OF OPTIMUM DENSITY AND EACH LIFT OF FILL MATERIALS SHALL BE ROLLED UNTIL THE ROLLER "WALK OUT." FILL AREAS FOR STRUCTURAL PADS, ROADWAY, AND PARKING SHALL BE COMPACTED TO 98 PERCENT OPTIMUM DENSITY WITHIN +/- 3% OF OPTIMUM MOISTURE CONTENT. DENSITY TESTS SHALL BE: 1 TEST PER 1,000 SQUARE FEET FOR PAVED AREAS AND BUILDING PADS, AND 1 TEST PER 5,000 SQUARE FEET FOR UNPAVED AREAS. TESTING SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.
8. THE FINISHED GRADE SHALL BE TEST ROLLED WITH A TRUCK TO BE SELECTED BY THE SOILS ENGINEER. ANY AREAS FOUND TO BE SOFT OR "PUMPING" SHALL BE CUT OUT AND REPLACED WITH SUITABLE MATERIALS IN LIFTS, EACH LIFT SHALL BE COMPACTED UNTIL THE EXCAVATION HAS BEEN BROUGHT BACK TO FINISH GRADE.
9. FILL MATERIALS SHALL BE PLACED IN EIGHT (8) INCH LIFTS, MAXIMUM THICKNESS. WHERE EXCAVATION MATERIALS CONSIST MAINLY OF ROCK TOO LARGE TO BE PLACED IN THE NORMAL EIGHT (8) INCH THICKNESS WITHOUT CRUSHING OR FURTHER BREAKING DOWN THE PIECES, SUCH MATERIALS SHALL BE PLACED IN THE FILL LAYERS NOT EXCEEDING THREE FEET IN DEPTH. NO ROCK LARGER THAN SIX (6) INCHES IN DIMENSION SHALL BE PLACED IN FILL. CARE SHALL BE TAKEN TO FILL ALL VOIDS BETWEEN LARGE ROCK AND TO ASSURE THAT FILL MATERIALS ARE COMPACTED SUCH THAT SETTLING IS MINIMIZED. COMPACTION OF THE TOP SIX INCHES OF CUTS OR FILLS SHALL BE ACCOMPLISHED WITH PNEUMATIC-TIRE ROLLERS.
10. BACKFILL AROUND STRUCTURES SHALL BE OF CRUSHED STONE OR EARTH MEETING THE APPROVAL OF THE SOILS ENGINEER, AND THE FILL SHALL BE PLACED AND COMPACTED IN EIGHT-INCH LIFTS AND BROUGHT UP EVENLY ON ALL SIDES OF THE STRUCTURE.
11. SHOT ROCK FILL SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 12" A D-8 CLASS DOZER (10-TON CLASS VIBRATORY ROLLER) OR EQUIVALENT.

UNDERCUTTING:

1. THIS WORK SHALL CONSIST OF THE REMOVAL AND DISPOSAL OF UNSATISFACTORY MATERIALS BELOW GRADE IN CUT SECTIONS OR AREAS UPON WHICH EMBANKMENTS ARE TO BE PLACED. IT SHALL ALSO INCLUDE UNDERCUTTING FOR PIPES AND BOX CULVERTS WHERE REQUIRED.
2. KNOWN AREAS TO BE UNDERCUT SHALL BE DESIGNATED ON THE MATERIALS APPROVED BY THE ENGINEER. THE BACKFILL MATERIALS SHALL BE PLACED IN EIGHT-INCH LIFTS AND COMPACTED AS SPECIFIED FOR FILL CONSTRUCTION.
3. DISPOSAL OF UNSATISFACTORY MATERIALS SHALL BE APPROVED BY THE ENGINEER.

REMOVAL OF OBSTRUCTIONS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, SAFEGUARDING, AND REPLACEMENT OF FENCES, CULVERTS, STREET SIGNS, TREES, SHRUBS, MAILBOXES, OR OTHER OBSTRUCTIONS WHICH MUST BE MOVED TO FACILITATE CONSTRUCTION. SUCH OBSTRUCTIONS SHALL BE RESTORED TO ORIGINAL CONDITION.

TRAFFIC CONTROL AND SAFETY:

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO AND FROM ALL PROPERTIES ALONG THE LINE OF HIS WORK. THE CONTRACTOR SHALL ALSO PROVIDE TEMPORARY BYPASSES AND BRIDGES WHERE NECESSARY TO ROUTE TRAFFIC AND SHALL MAINTAIN THEM IN A SAFE AND USABLE CONDITION WHENEVER, IN THE OPINION OF THE ENGINEER, DETOURING OF TRAFFIC TO PARALLEL ROUTES CANNOT BE DONE WITHOUT HARDSHIP OR EXCESSIVE INCREASE IN TRAVEL BY THE PUBLIC.
2. WHERE SINGLE-LANE BYPASSES ARE PROVIDED, THE CONTRACTOR SHALL FURNISH SIGNALMEN TO CONTROL TRAFFIC OPERATIONS AND MINIMIZE DELAYS.
3. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ADEQUATE BARRICADES, WARNING SIGNS, AND LIGHTS AT ALL EXCAVATIONS, CLOSURES, DETOURS, POINTS OF DANGER, AND UNCOMPLETED PAVEMENT.
4. TRAFFIC CONTROL ALONG ROADWAYS SHALL BE IN ACCORDANCE WITH T.D.O.T. REGULATIONS AND STANDARDS AND SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

UTILITY NOTES:

1. THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF THE UTILITIES IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED.
2. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
3. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH M.T.E.M.C ON THE ADJUSTMENT AND OR RELOCATION OF EXISTING POWER POLES. ADDITIONALLY THE CONTRACTOR SHALL VERIFY PROPOSED FINISH GRADE WITH EXISTING AND PROPOSED ELECTRIC LINES TO ENSURE THERE IS ADEQUATE CLEARANCE BETWEEN FINISH GRADE AND THE ELECTRIC LINES.
4. WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS OF FRANKLIN WATER & SEWER.
5. MAINTAIN 18-INCH VERTICAL AND 10-FOOT HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND WATER SUPPLY LINES WHERE FEASIBLE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES, GAS LINES AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO FINAL PAVEMENT CONSTRUCTION.
7. BACKFILL UTILITY TRENCHES UNDER PAVEMENT AREAS WITH CRUSHED STONE (TDOT # 67) OR GRAVEL. BACKFILL UTILITY TRENCHES IN LAWN AREAS WITH SATISFACTORY FILL MATERIAL.
8. ADJUST ALL EXISTING CASTINGS TO MATCH PROPOSED FINISH GRADE.
9. THE CONTRACTOR SHALL FIELD VERIFY THE DEPTHS OF EXISTING WATER, SEWER, AND GAS LINES AT LOCATIONS WHERE THEY ARE PROPOSED TO BE CROSSED BY NEW UTILITY OR STORM SEWER LINES.
10. REDUCED PRESSURE BACKFLOW PREVENTER (R.P.B.P.) OR DUAL CHECK WILL BE REQUIRED ON ALL TESTS AND FILL LINES (JUMPER) NEEDED FOR WATER MAIN CONSTRUCTION AND MUST BE APPROVED BY FRANKLIN WATER & SEWER.
11. ALL WATER METERS SHALL BE A MINIMUM OF 24" NOT TO EXCEED A MAXIMUM OF 28" BELOW GRADE.
12. THE CONTRACTOR SHALL COORDINATE TELEPHONE AND DATA SERVICES WITH THE APPROPRIATE UTILITY PROVIDER.
13. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT AND BE SECURED USING MEGA-LUGS. ALL PIPE FITTINGS SHALL BE SECURED USING MEGA-LUGS.
14. UPON COMPLETION OF CONSTRUCTION OF WATER, THE CONTRACTOR SHALL PROVIDE THE DEPARTMENT WITH A COMPLETE SET OF AS-BUILT PLANS ON MYLAR OR IN DIGITAL FORMAT. WATER LINE PLANS SHALL BE SEALED BY A LICENSED PROFESSIONAL ENGINEER OR A REGISTERED LAND SURVEYOR AND SHALL INCLUDE OFFSET DISTANCE FROM THE ROADWAY CENTERLINE, OR PROPERTY LINE RIGHT OF WAY, LINE DEPTH, LOCATIONS OF HYDRANTS, VALVES, REDUCERS, TEES AND PRESSURE REDUCING DEVICES WHERE APPLICABLE. ALL DRAWINGS MUST BE COMPLETED AND SUBMITTED PRIOR TO ACCEPTANCE OF THE WATER LINE AND BEFORE ANY CONNECTIONS ARE MADE.
15. PRESSURE REGULATING DEVICES WILL BE REQUIRED ON THE CUSTOMER SIDE OF THE METER WHEN PRESSURE EXCEEDS 100 psi.
16. PRESSURE REGULATION DEVICES WILL BE REQUIRED ON THE STREET SIDE OF THE METER WHEN PRESSURE EXCEEDS 150 psi.
17. CARE SHALL BE TAKEN IN LAYING COPPER SERVICE LINES TO PROHIBIT KINKS IN THE LINE. IN PLACING BACKFILL AROUND PIPE, USE ONLY SELECT MATERIALS WHICH WILL BED AND SUPPORT THE PIPE AND NOT CAUSE INJURY TO IT.
18. COPPER TUBING SHALL ONLY BE CUT AND FLARED WITH TOOLS SPECIFICALLY DESIGNED FOR THOSE PURPOSES.
19. DUCTILE IRON PIPE SHALL BE CLASS #52 IF USED. IF PVC IS USED FOR WATER LINES 3" AND LARGER IT SHALL BE C900 CLASS 200 PIPE. WATER LINES 2" AND SMALLER SHALL BE EITHER TYPE K COPPER OR SDR 21 PVC. SANITARY SEWER GRAVITY LINES SHALL BE SDR 26 PVC. SANITARY SEWER FORCE MAIN LINES SHALL BE SDR 21 PVC.
20. CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING TENNESSEE ONE CALL (811) 72 HOURS PRIOR TO COMMENCING WITH EXCAVATION ACTIVITIES.

SURVEYING:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGAGING THE SERVICES OF A SURVEYOR LICENSED IN THE STATE OF TENNESSEE TO COMPLETE ALL SURVEYING RELATED WORK.

ACCESSIBLE RAMPS:

1. ALL NEWLY CONSTRUCTED ACCESSIBLE RAMPS SHALL BE CONCRETE AND BE A MINIMUM 42" WIDE BETWEEN THE HANDRAILS AND HAVE A MINIMM 5'X5' TURNING AREA AT EACH LANDING. RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1:12 AND A MAXIMUM RISE OF 30". ALL RAMPS SHALL HAVE A MINIMUM LOAD CAPACITY OF 1,500 POUNDS. EXISTING RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1:8.

BUILDING IDENTIFICATION:

1. ADDRESSES SHALL BE IN ACCORDANCE WITH THE FRANKLIN ADDRESSING MANUAL.
2. ADDRESSES SHALL BE APPROVED BY THE PLANNING AND SUSTAINABILITY DEPARTMENT AND THE FMPC.
3. BUILDING ADDRESS NUMBERS SHALL BE CLEARLY VISIBLE FROM THE STREET. THEY SHALL BE INSTALLED HIGH ENOUGH TO BE VISIBLE FROM THE STREET.
4. BUILDING ADDRESS NUMBERS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED.
5. BUILDING ADDRESS NUMBERS SHALL BE INSTALLED ABOVE THE PRIMARY ENTRANCE INTO THE BUILDING.
6. WHERE THE MAIN ENTRANCE DOES NOT FACE THE STREET, ADDITIONAL BUILDING ADDRESS NUMBERS ARE REQUIRED ON THE SIDE OF THE BUILDING FACING THE STREET.
7. BUILDING ADDRESSES MAY BE INSTALLED ON MONUMENT SIGNS, BUT ADDRESSES MUST ALSO BE INSTALLED ON THE BUILDING.
8. THE BUILDING ADDRESS NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND.
9. THE BUILDING ADDRESS NUMBERS SHALL BE IN ARABIC NUMERALS.
10. BUILDING ADDRESS NUMBERS SHALL BE SIZED AS FOLLOWS:
    A. THE HEIGHT OF THE NUMBERS SHALL BE 2-INCHES TALLER THAN 1/10 THE SETBACK DISTANCE FROM THE CENTERLINE OF THE STREET MEASURED IN FEET BUT EXPRESSED IN INCHES.
    B. THE WIDTH OF THE NUMBER, EXCEPT FOR THE NUMBER 1, SHALL BE 1/2 ITS HEIGHT.
    C. THE BRUSH STROKE SHALL BE 1/10 THE HEIGHT.
    D. MINIMUM HEIGHT IS 4-INCHES.

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JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL
ENGINEER
No. 102900
STATE OF TENNESSEE
09-01-22

GENERAL NOTES

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

COF PROJECT NO. 7916

C0.1

FILE NO. 1716-24

FINAL DRESSING, SEEDING, AND SODDING:

FINAL DRESSING:

1. THIS WORK SHALL CONSIST OF DRESSING ALL SLOPES AND AREAS TO WITHIN REASONABLE CLOSE CONFORMITY TO THE LINES AND GRADES INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. FINAL DRESSING SHALL BE PERFORMED BY HAND OR MACHINE TO PRODUCE A UNIFORM FINISH TO ALL PARTS OF THE ROADWAY INCLUDING EMBANKMENTS, DITCHES, ETC. ROCK CUTS SHALL BE CLEANED OF ALL LOOSE FRAGMENTS; SIDE SLOPES SHALL BE LAID BACK TO A THREE TO ONE SLOPE AND SEEDED.
2. THE ENTIRE DEVELOPMENT SHALL BE CLEANED OF ALL WEEDS AND BRUSH AND ALL STRUCTURES BOTH OLD AND NEW SHALL BE CLEARED OF ALL BRUSH, RUBBISH, SEDIMENT, OR OTHER OBJECTIONABLE MATERIALS.

SEEDING:

1. IN ALL AREAS DAMAGED OR DISTURBED BY THE CONSTRUCTION OPERATIONS WHERE ESTABLISHED GROUND COVER WAS PRESENT BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE GROUND COVER AFTER COMPLETION OF CONSTRUCTION, UNLESS NOTED OTHERWISE ON THE PLANS. ALL AREAS SEEDED SHALL BE GRADED SMOOTH PRIOR TO SEEDING AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE SMOOTH FINISHED GRADE UNTIL GRASS IS ESTABLISHED.
2. AFTER DESIGNATED AREAS HAVE BEEN CAREFULLY HAND GRADED, SOIL SHALL BE PREPARED FOR FERTILIZING AND SEEDING. FERTILIZER SHALL BE A STANDARD COMMERCIAL FERTILIZER GRADE 10-10-10, OR EQUIVALENT, AND SHALL BE APPLIED AT A RATE OF NOT LESS THAN 15 POUNDS PER 1,000 SQUARE FEET. THE FERTILIZER SHALL BE LIGHTLY HARROWED, RAKED, OR OTHERWISE INCORPORATED INTO THE SOIL FOR A DEPTH OF APPROXIMATELY ONE-HALF INCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY REGRADING OR RESEEDING REQUIRED TO PRODUCE AN ACCEPTABLE GRASS COVER. RUTTING AND WASHING SHALL BE RESTORED BY RESEEDING AND STRAWING; IN AREAS OF EXTREME EROSION, SODDING SHALL BE REQUIRED.
3. THE SEED SHALL BE AS FOLLOWS:

   NAME: % BY WEIGHT:

   LESPEDEZA.....20
   SERICEA LESPEDEZA.....15
   KENTUCKY 31 FESCUE.....40
   ENGLISH RYE.....15
   WHITE DUTCH CLOVER.....5
   WEEPING LOVE GRASS.....5

   OR

   KENTUCKY 31 FESCUE.....55
   REDTOP.....15
   ENGLISH RYE.....20
   WHITE DUTCH CLOVER.....5
   WEEPING LOVE GRASS.....5

4. THE SEED SHALL BE SOWN UNIFORMLY AT THE RATE OF 5 POUNDS PER 1,000 SQUARE FEET.
5. SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.
6. SEEDING (WITHOUT MULCH) AND EROSION CONTROL BLANKET, SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS AS WELL AS LOCATIONS DIRECTED BY THE ENGINEER.
7. WHEN MULCHING, THE APPROVED MATERIAL IS STRAW; IT SHALL BE SPREAD EVENLY OVER THE SEEDED AREA AT AN APPROXIMATE RATE OF 100 POUNDS PER 1,000 SQUARE FEET. (THIS RATE MAY BE VARIED BY THE ENGINEER DEPENDING ON THE TEXTURE AND CONDITION OF THE MULCH MATERIAL AND THE CHARACTERISTICS OF THE AREA SEEDED.)
8. THE CONTRACTOR SHALL NOT ALLOW ANY EQUIPMENT OR MATERIAL TO BE PLACED ON ANY PLANTED AREA, AND SHALL ERECT SUITABLE BARRICADES AND GUARDS TO PREVENT EQUIPMNET, LABOR OR THE PUBLIC FROM TRAVELING ON OR OVER ANY AREA PLANTED WITH SOD OR SEED.
9. INSPECT FREQUENTLY WITHIN THE FIRST SIX WEEKS OF PLANTING TO SEE IF STANDS ARE UNIFORM AND DENSE AND TO ASSURE THAT APPROPRIATE MOISTURE LEVELS ARE MAINTAINED.
10. MAKE PROVISIONS TO WATER AS NEEDED TO PENETRATE TO A DEPTH OF 6 INCHES (15.2 cm).
11. CHECK FOR DAMAGE CAUSED BY EQUIPMENT OR HEAVY RAINS.

SODDING:

1. SODDING SHALL CONSIST OF FURNISHING AND PLACING SOD AT ALL LOCATIONS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. WORK SHALL INCLUDE THE FURNISHING AND PLACING OF NEW SOD, CONSISTING OF LIVE, DENSE, WELL-ROOTED GROWTH OF PERMANENT GRASSES FREE FROM JOHNSON GRASS AND OTHER OBNOXIOUS GRASSES OR WEEDS, WELL SUITED FOR THE SOIL ON WHICH IT IS PLACED. ALL SOD SHALL BE CLEANLY CUT IN STRIPS HAVING A UNIFORM THICKNESS OF NOT LESS THAN 2-1/2 INCHES. SOD SHALL BE SET WHEN THE SOIL IS MOIST AND FAVORABLE TO GROWTH. NO SETTING SHALL BE DONE BETWEEN OCTOBER 1 AND APRIL 1, WITHOUT PERMISSION OF THE ENGINEER. THE AREA TO BE SODDED SHALL BE BROUGHT TO THE LINES AND GRADES SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
2. THE SURFACE OF THE GROUND TO BE SODDED SHALL BE LOOSENED TO A DEPTH OF NOT LESS THAN ONE INCH WITH A RAKE OR OTHER DEVICE. IF NECESSARY, IT SHALL BE SPRINKLED UNTIL SATURATED FOR A MINIMUM DEPTH OF ONE INCH AND KEPT MOIST UNTIL THE SOD IS PLACED. IMMEDIATELY BEFORE PLACING THE SOD, FERTILIZER AND LIME SHALL BE APPLIED UNIFORMLY TO THE PREPARED SURFACE OF THE GROUND. FERTILIZER SHALL BE APPLIED AT THE RATE OF FIVE POUNDS OF GRADE 10-10-10, OR EQUIVALENT, PER 1,000 SQUARE FEET.
3. SOD SHALL BE PLACED AS SOON AS PRACTICAL AFTER REMOVAL FROM THE POINT OF ORIGIN, AND IT SHALL BE KEPT IN A MOIST CONDITION DURING THE INTERIM. IN NO CASE SHALL SOD BE USED WHICH HAS BEEN ON A PALLET MORE THAN 1 DAY, AND SOD SHOULD BE PLACED THE SAME DAY AS DELIVERY AT THE CONSTRUCTION SITE. SOD SHALL BE CAREFULLY PLACED BY HAND ON THE PREPARED GROUND SURFACE WITH THE EDGES IN CLOSE CONTACT AND, AS FAR AS POSSIBLE, IN A POSITION TO BREAK JOINTS. EACH STRIP OF SOD LAID SHALL BE FITTED INTO PLACE AND TAMPED. IMMEDIATELY AFTER PLACING, THE SOD SHALL BE THOROUGHLY WETTED AND ROLLED WITH AN APPROVED ROLLER. ON SLOPES OF TWO TO ONE OR STEEPER, PINNING OR PEGGING MAY BE REQUIRED TO HOLD THE SOD IN PLACE.
4. THE SOD SHALL BE WATERED AS DIRECTED BY THE ENGINEER FOR A PERIOD OF TWO WEEKS. THE CONTRACTOR SHALL NOT PERMIT ANY EQUIPMENT OR MATERIALS TO BE PLACED ON ANY PLANTED AREA AND SHALL ERECT SUITABLE BARRICADES AND GUARDS TO PREVENT EQUIPMENT, LABOR, OR THE PUBLIC FROM TRAVELING ON OR OVER ANY AREA PLANTED WITH SOD.
5. SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.
6. SOD SHALL BE BERMUDA GRASS OR BLENDED FESCUES. SOD SHALL BE SET OR RESET ONLY WHEN THE SOIL IS MOIST AND FAVORABLE TO GROWTH. SETTING WILL BE AS FOLLOWS UNLESS PERMISSION IS GRANTED BY THE ENGINEER: 1) BLENDED FESCUES - ANYTIME WEATHER PERMITS; 2) BERMUDA GRASS - APRIL 15 THROUGH AUGUST 14.
7. ON STEEP SLOPES SOD SHALL BE FASTENED TO THE GROUND WITH WIRE STAPLES. WHERE SURFACE WATER CANNOT BE DIVERTED FROM FLOWING OVER THE FACE OF SLOPES, INSTALL A STRIP OF PLASTIC NETTING AND FASTEN TIGHT ALONG THE CROWN OR TOP OF THE SLOPE FOR EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD.

CONSTRUCTION WORK ZONE:

1. ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
2. IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID.
3. A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
4. TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
5. USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FOOT SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
6. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC, UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE, WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FOOT SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
7. ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

DRAINAGE SYSTEM:

PIPE CULVERTS AND STORM SEWERS:

1. ALL MATERIAL SHALL BE IN ACCORDANCE WITH SUBSECTION 607.02 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
2. EXCAVATION FOR TRENCHES, MANHOLES AND STRUCTURES SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 607.05 AND 611.05 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
3. BACKFILLING SHALL BEGIN AFTER LINE CONSTRUCTION IS COMPLETED, INSPECTED AND APPROVED BY THE ENGINEER. BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 607.09 AND 611.05 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
4. AT LOCATIONS BENEATH OR CLOSELY ADJACENT TO PAVEMENTS, ROAD SHOULDERS, OR OTHER IMPROVEMENTS SUBJECT TO DAMAGE BY DISPLACEMENT, BACKFILL SHALL BE TAMPED AND THOROUGHLY COMPACTED IN SIX (6) INCH LAYERS (BEFORE COMPACTION). IN OTHER AREAS, BACKFILL FOR THE UPPER PORTION OF THE TRENCHES MAY BE PLACED WITHOUT TAMPING BUT THE BACKFILL SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO THAT WHICH WILL RESULT FROM SPREADING BY A DOZER THERON, THE CONTRACTOR SHALL EXERCISE PRECAUTION TO PREVENT DAMAGE TO PIPES FROM THE OPERATION OF BACKFILLING EQUIPMENT.
5. WHERE TRENCHES HAVE BEEN CUT ACROSS OR ALONG EXISTING PAVEMENT, THE BACKFILL OF SUCH TRENCHES SHALL BE TEMPORARILY PAVED BY THE CONTRACTOR WITH THE PLACING OF CRUSHED STONE FOR THE TOP SIX (6) INCHES OF BACKFILL. SUCH TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL RESTORATION OF PERMANENT PAVEMENT OR UNTIL ACCEPTANCE OF THE PROJECT.
6. LAYING PIPE CULVERTS AND STORM SEWERS SHALL BE PERFORMED IN ACCORDANCE WTIH SUBSECTION 607.07 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
7. JOINING PIPES SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 607.07 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
8. DRIVEWAY CULVERTS SHALL BE A MINIMUM DIAMETER OF 15 INCHES AND A MINIMUM LENGTH OF 16 FEET; CROSS DRAINS SHALL BE A MINIMUM DIAMETER OF 18 INCHES.
9. CORRUGATED METAL PIPES SHALL CONFORM TO MINIMUM STANDARDS ALUMINUM COATED PIPE, AASHTO M 274.
10. FOR PIPES SMALLER THAN 48 INCHES IN DIAMETER, A MINIMUM COVER OF ONE FOOT, EXCLUSIVE OF BASE AND PAVING, IS REQUIRED FROM TOP OF PIPES TO FINISHED SUBGRADE. A MINIMUM COVER OF TWO FEET IS REQUIRED FOR PIPES 48 INCHES IN DIAMETER AND LARGER. ALL PIPES SHALL BE BUILT ON STRAIGHT LINE AND GRADE AND SHALL BE LAID WITH THE SPIGOT END POINTING IN THE DIRECTION OF THE FLOW, WITH THE ENDS FITTED AND MATCHED TO PROVIDE TIGHT JOINTS AND A SMOOTH UNIFORM INVERT.
11. PIPES SHALL BE BEDDED ON A SIX-INCH THICKNESS OF CLASS B MATERIALS AND BACKFILLED TO A DEPTH OF 50 PERCENT OF THE DIAMETER OF THE PIPES. RECESSES SHALL BE DUG IN THE BEDDING MATERIALS TO ACCOMMODATE THE BELL. CLASS B BEDDING SHALL BE SIZE N0.7. CULVERTS AND STORM DRAINS IN EXISTING ROADWAYS SHALL BE BACK-FILLED TO THE DEPTH OF THE CUT.
12. CULVERT EXCAVATION WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
13. WHERE A CULVERT IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.
14. DURING CONSTRUCTION OF DRAINAGE STRUCTURES, ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.
15. ALL CONCRETE PIPE SHALL BE CLASS III, UNLESS NOTED OTHERWISE.

CONCRETE AND BRICK CONSTRUCTION:

1. CONCRETE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 611.06 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". BRICK CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 611.08 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

SPECIAL PROTECTION:

1. SHEATHING AND BRACING GENERALLY SHOULD BE REMOVED ONLY WHEN THE TRENCH BELOW IT HAS BECOME SUBSTANTIALLY FILLED, AND EVERY PRECAUTION SHALL BE TAKEN TO PREVENT ANY SLIDES OF MATERIAL FROM THE SIDES OF THE TRENCH ONTO OR AGAINST THE TOP OF THE SEWER.
2. THE CONTRACTOR SHALL PUMP, BAIL OR OTHERWISE REMOVE ANY WATER WHICH MAY BE FOUND OR ACCUMULATE IN THE TRENCHES OR OTHER EXCAVATIONS, AND SHALL PROVIDE ALL DAMS, FLUMES AND WELL POINTS OR OTHER WORKS NECESSARY TO KEEP THEM ENTIRELY FREE FROM WATER UNTIL THE PIPE HAS BEEN LAID AND THE MORTAR JOINTS AND MASONRY HAS HARDENED SUFFICIENTLY, IN THE OPINION OF THE ENGINEER, TO WITHSTAND ANY DAMAGING EFFECT THAT MIGHT BE CAUSED BY THE PRESENCE OF WATER.
3. SHOULD UNDERGROUND CONDITIONS BE ENCOUNTERED THAT, IN THE OPINION OF THE ENGINEER, MIGHT REQUIRE SPECIAL PROTECTION, THE CONTRACTOR SHALL PROVIDE SUCH PROTECTION EITHER IN THE FORM OF SHEETING LUMBER LEFT IN PLACE, TIMBER FOUNDATIONS, GRAVEL STABILIZATION OF SUBGRADE OR RIGID CONCRETE FOUNDATION AS DIRECTED BY THE ENGINEER.

STRUCTURES: (MANHOLES, CATCHBASINS, INLETS, AND PIPE END WALLS)

1. MANHOLES, CATCHBASINS, INLETS AND PIPE END WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBSECTION 611.02 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". TOPS OF MANHOLE CASTINGS SHALL BE AT EXACT FINISHED GRADES UNLESS OTHERWISE SPECIFIED. TOP OF YARD DRAINAGE OPENINGS SHALL BE DEPRESSED TWO (2) INCHES BELOW FINISHED GRADES. IN CIRCULAR STRUCTURES, ALL BRICK SHALL BE LAID AS HEADERS. ALL JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR.
2. MANHOLES SHALL BE NEATLY AND ACCURATELY BUILT OF BRICK AND CONCRETE ACCORDING TO CITY STANDARDS. PRECAST CONCRETE MANHOLES SHALL CONFORM TO THE LATEST REVISION OF THE APPROPRIATE SPECIFICATIONS SET FORTH IN SUBSECTION 611.02 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
3. BRICK SHALL BE NEW, GRADE MK SEWER BRICK OR GRADE A CONCRETE BUILDING BRICK. ALL BRICK SHALL BE WETTED AND CAREFULLY LAID AND BEDDED FULL IN MORTAR. ALL BRICK IN EACH COURSE OF CIRCULAR BRICK MASONRY SHALL BE HEADERS, BREAKING JOINTS FOR THOSE IN ADJOINING PORTIONS WITH ALL JOINTS ENTIRELY FILLED WITH MORTAR.
4. MORTAR FOR MANHOLES SHALL BE PORTLAND CEMENT MORTAR COMPOSED OF ONE PART PORTLAND CEMENT AND TWO PARTS CLEAN, SHARP SAND WITH A MIXTURE OF HYDRATED LIME IN THE AMOUNT OF TEN PERCENT (10%) OF THE PORTLAND CEMENT. ALL MEASUREMENTS SHALL BE BY VOLUME.
5. BRICK MANHOLES SHALL BE PLASTERED ON THE OUTSIDE WITH A COATING OF MORTAR NOT LESS THAN ONE HALF (1/2) INCH IN THICKNESS OF THE SAME COMPOSITION USED IN LAYING BRICK TO PREVENT EXCESSIVE INFILTRATION OF WATER, AND ON THE INSIDE OF THE MANHOLES THE VERTICAL PORTION OF THE WALLS SHALL BE PLASTERED AND THE SLOPING SECTION NEATLY POINTED WITH TROWEL. THE COVER SHALL BE SEALED WATER TIGHT TO EXCLUDE ALL SURFACE WATER.
6. STEPS IN MANHOLES SHALL BE STAGGERED AND SPACED NOT MORE THAN EIGHTEEN (18) INCHES VERTICALLY, AND SHALL BE SO ARRANGED THAT THE LOWEST STEP SHALL BE NO MORE THAN TWO (2) FEET ABOVE THE BENCH. THE TOP SHALL BE NO MORE THAN EIGHTEEN (18) INCHES BELOW THE MANHOLE COVER.
7. INVERTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBSECTION 611.07 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
8. CAST IRON RIM AND COVERS MATCHING THE STANDARD CITY CAST IRON RIM AND COVERS ARE TO BE USED ON ALL INLETS. CASTING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBSECTION 611.10 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
9. CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOTBLASTING. CIRCULAR MANHOLE FRAMES, COVERS AND GRATES SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES UNLESS OTHERWISE SPECIFIED. ALL SQUARE AND RECTANGULAR UNITS SHALL BE FURNISHED WITH AN AS-CAST BEARING SURFACE.
10. CONCRETE AND REINFORCING STEEL FOR MANHOLES, CATCH BASINS, CULVERTS, ETC., SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH SUBSECTION 611.06 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
11. INLETS AND OUTLET PIPES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBSECTION 611.09 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

COF PROJECT NO. 7916

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STATE OF TENNESSEE
09-01-22

GENERAL NOTES

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C0.2

FILE NO. 1716-24

ROADWAY BASE AND PAVING:

CRUSHED STONE BASE (MINERAL AGGREGATE BASE):

1. THE BASE STONE SECTION OF THE ROAD SHALL BE CONSTRUCTED WITH MINERAL AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 903.05 OF THE T.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
2. ALL BASE STONE SHALL BE PLACED AND COMPACTED ACCORDING TO SECTION 303 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
3. PRIOR TO INSTALLATION OF THE BASE STONE, THE CONTRACTOR AND/OR DEVELOPER SHALL HAVE THE SUBGRADE INSPECTED BY THE ENGINEER. PROOF ROLLING OR TESTING OF SUBGRADE SHALL BE IN ACCORDANCE WITH THESE SPECIFICATIONS. SHOULD THE CONTRACTOR BEGIN PLACEMENT OF THE BASE STONE PRIOR TO OBTAINING THE CERTIFICATION OF INSPECTION FOR THE SUBGRADE, THE ENGINEER SHALL HAVE THE RIGHT TO REQUIRE THE CONTRACTOR TO EXPOSE AS MANY AREAS AS DEEMED NECESSARY TO OBTAIN VALID TESTING OF THE SUBGRADE. IF THE SUBGRADE FAILS, THE CONTRACTOR SHALL REMOVE ALL STONE IN THE FAILED AREAS AND PERFORM THE NECESSARY WORK TO BRING THESE AREAS INTO COMPLIANCE.
4. THE CRUSHED STONE BASE SHALL BE CONSTRUCTED IN ONE OR MORE LAYERS WITH THE COMPACTED THICKNESS BEING THAT AS SHOWN ON THE APPROVED PLANS OR THE STANDARD DRAWINGS. IF THE REQUIRED COMPACTED DEPTH OF THE CRUSHED STONE BASE COURSE EXCEEDS SIX (6) INCHES, THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE LAYERS OF APPROXIMATE EQUAL THICKNESS.
5. EXCEPT WHERE MECHANICAL AGGREGATE SPREADING EQUIPMENT IS USED TO PLACE THE MINERAL AGGREGATE BASE MATERIAL, FINAL SHAPING OF EACH LAYER PRIOR TO COMPACTION SHALL BE ACCOMPLISHED BY MOTOR GRADER. IN THE EVENT THAT MECHANICAL SPREADING EQUIPMENT FAILS TO SHAPE THE BASE MATERIAL PROPERLY, FINAL SHAPING SHALL BE DONE BY MOTOR GRADER OR OTHER APPROVED MEANS. IMMEDIATELY FOLLOWING SPREADING, THE MIMERAL AGGREGATE BASE MATERIAL SHALL BE SHAPED TO THE REQUIRED DEGREE OF UNIFORMITY AND SMOOTHNESS AND COMPACTED TO THE REQUIRED DENSITY PRIOR TO ANY APPRECIABLE EVAPORATION OF SURFACE MOISTURE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS UNTIL THE MINIMUM DENSITY REQUIREMENT IS ATTAINED.
6. THE THICKNESS OF THE COMPLETED MINERAL AGGREGATE BASE SHALL BE IN REASONABLY CLOSE CONFORMITY TO THE THICKNESS SHOWN ON THE APPROVED PLANS OR AS CALLED FOR BY THE CONSTRUCTION STANDARDS. THE THICKNESS TOLERANCE SHALL BE MEASURED AT SUCH FREQUENCY AS ESTABLISHED BY THE ENGINEER BY MEANS OF TEST HOLES OR OTHER APPROVED METHODS.
7. AFTER COMPLETION OF THE CRUSHED STONE BASE, IT SHALL BE MAINTAINED, SMOOTH AND UNIFORM UNTIL COVERED BY THE FOLLOWING STAGE OF CONSTRUCTION.
8. ALL MANHOLES, WATER LINE VALVE BOXES, AND APPURTENANCES SHALL BE ADJUSTED TO THE CORRECT ELEVATION. WHEN THE STONE BASE IS AT A PROPER GRADE, ALL CASTING SHOULD BE ABOVE THE FINISHED GRADE OR THE BASE STONE.
9. ONCE THE CONTRACTOR AND/OR DEVELOPER BELIEVES THERE IS SUFFICIENT STONE DEPTH, COMPACTION, AND PROPER ADJUSTMENT OF ALL CASTING, THE ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS (EXCLUDING SATURDAY AND SUNDAY) IN ADVANCE OF PAVING, WRITTEN NOTICE IS PREFERRED AND IS LESS LIKELY TO RESULT IN DELAY. ALL CASTINGS SHALL BE SET TO THE BINDER COURSE LEVEL.
10. TESTING OF THE MINERAL AGGREGATE BASE FOR LOCAL STREETS SHALL BE PERFORMED BY THE PROOF ROLLING METHOD AS DESCRIBED ABOVE.
11. ONCE THE BASE STONE AND CASTINGS HAVE BEEN INSPECTED AND APPROVED, THE CONTRACTOR SHALL BE PERMITTED TO BEGIN PAVING. SHOULD ANY CASTINGS BE DISTURBED PRIOR TO PAVING, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE THE PROPER ADJUSTMENTS PRIOR TO PAVING.

BITUMINOUS PRIME COAT:

1. A BITUMINOUS PRIME COAT SHALL BE APPLIED UNIFORMLY OVER THE SURFACE OF THE CRUSHED STONE BASE BY MEANS OF A PRESSURE DISTRIBUTOR AT AN APPROVED UNIFORM RATE. THE PRIME COAT SHALL BE APPLIED AT AN APPROVED RATE. ANY AREAS CONTAINING AN EXCESS OR FEFICIENCY OF PRIMING MATERIAL SHALL BE CORRECTED BY THE ADDITION OF BLOTTER MATERIAL OR BITUMINOUS MATERIAL, AS DIRECTED BY THE CITY ENGINEER.
2. THE CONTRACTOR SHALL PROTECT ALL STRUCTURES AND CONCRETE SURFACES FROM THE BITUMINOUS MATERIAL DURING CONSTRUCTION. IF AFTER THE BITUMINOUS PRIME COAT HAS BEEN APPLIED, IT FAILS TO PENETRATE BEFORE THE TIME THAT TRAFFIC MUST USE THE STREET, OR PAVING IS INTERRUPTED OVERNIGHT, A DRY COVER MATERIAL SHALL BE SPREAD AT AN APPROVED RATE TO PREVENT DAMAGE TO THE PRIMED SURFACE. AN EXCESS OF COVER MATERIAL SHALL BE AVOIDED.
3. THE CONTRACTOR SHALL MAINTAIN THE PRIME COAT AND THE SURFACE INTACT UNTIL IT HAS BEEN COVERED BY THE FOLLOWING STAGE OF CONSTRUCTION. NO SUCCEEDING STAGE OF CONTRUCTION SHALL BE PLACE UPON THE PRIME COAT UNTIL IT HAS PROPERLY CURED.
4. THE BITUMINOUS MATERIALS AND AGGREGATE COVER MATERIAL FOR THE BITUMINOUS PRIME COAT SHALL CONFORM TO SUBSECTIONS 904.03 AND 903.13 OF THE T.D.O.T. "STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
5. INSTALLATION OF THE BITUMINOUS PRIME COAT SHALL CONFORM TO SECTION 402 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

BITUMINOUS TACK COAT:

1. THE BITUMINOUS MATERIALS AND AGGREGATE COVER MATERIAL FOR THE BITUMINOUS TACK COAT SHALL CONFORM TO SUBSECTIONS 904.03 AND 904.01 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
2. INSTALLATION OF THE BITUMINOUS TACK COAT SHALL CONFORM TO SECTION 403 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

DOUBLE BITUMINOUS SURFACE TREATMENT:

1. DOUBLE BITUMINOUS SURFACE TREATMENT SHALL BE INSTALLED PER SECTION 404 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

BITUMINOUS PLANT MIX BINDER COURSE:

1. THE BITUMINOUS PLANT MIX BINDER COURSE SHALL BE GRADING "BM2" AS INDICATED IN THE PLANS OR IN THE STANDARD DRAWINGS MEETING THE REQUIREMENTS OF SUBSECTION 903.06 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE APPROVED.
2. THE BINDER COURSE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 407 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
3. THE BITUMINOUS PLANT MIX BASE COURSE MUST HAVE BEEN INSPECTED AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION OF THE BINDER COURSE(S).
4. THE ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS (EXCLUDING SATURDAY AND SUNDAY) IN ADVANCE OF PAVING SO THAT A REPRESENTATIVE CAN BE AVAILABLE FOR INSPECTION THROUGHOUT THE PLACEMENT OF ASPHALT, WRITTEN NOTICE IS PREFERRED AND IS LESS LIKELY TO RESULT IN DELAY.
5. WEATHER LIMITATIONS FOR THE PLACEMENT OF ASPHALTIC CONCRETE COURSES SHALL BE AS INDICATED IN SUBSECTION 407.09 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

BITUMINOUS PLANT MIX SURFACE COURSE:

1. THE BITUMINOUS PLANT MIX SURFACE COURSE SHALL BE AS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL MEET THE REQUIREMENTS OF SECTION 903.11 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE APPROVED.
2. INSTALLATION OF THE FINAL SURFACE COURSE OF ASPHALT ON NEW STREETS SHALL NOT OCCUR BEFORE CONSTRUCTION IS COMPLETE OR AS DIRECTED BY THE ENGINEER.
3. THE SURFACE COURSE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 411 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
4. THE BITUMINOUS PLANT MIX BASE AND/OR BINDER COURSE MUST HAVE BEEN INSPECTED AND APPROVED BY THE ENGINEER AND ANY FAILED AREAS CORRECTED PRIOR TO INSTALLATION OF THE SURFACE COURSE.
5. THE ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS (EXCLUDING SATURDAY AND SUNDAY) IN ADVANCE OF PAVING SO THAT A REPRESENTATIVE CAN BE AVAILABLE FOR INSPECTION THROUGHOUT THE PLACEMENT OF ASPHALT, WRITTEN NOTICE IS PREFERRED AND IS LESS LIKELY TO RESULT IN DELAY.
6. WEATHER LIMITATIONS FOR THE PLACEMENT OF ASPHALTIC CONCRETE COURSES SHALL BE AS INDICATED IN SUBSECTION 407.09 OF THE T.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

FLEXIBLE PAVEMENT TESTING REQUIREMENTS:

1. ALL PVEMENT INSTALLATION AND REPAIRS SHALL CONFORM TO SECTION 407 OF THE T.D.O.T. "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION".

SURFACE AND THICKNESS TOLERANCE:

1. THE PAVEMENT SURFACE MUST BE CONSTRUCTED TO A 0.25 INCH TOLERANCE. TO CHECK THE SURFACE TOLERANCE, A 10 FEET STRAIGHT EDGE SHALL BE PLACED PARALLEL TO THE CENTERLINE OF THE PAVEMENT AND A 10 FEET STRAIGHT EDGE PLACED TRANSVERSELY TO THE CENTERLINE OF THE PAVEMENT ON ANY PORTION OF THE PAVEMENT.
2. THE NOMINAL THICKNESS REQUIRED (PER PLAN) FOR THE COURSE(S) SPECIFIED AND THE TOTAL THICKNESS OF ALL HOT MIX ASPHALT "HMA" MIXTURE COURSES SHALL NOT VARY FROM THE TOTAL NOMINAL THICKNESS INDICATED ON THE PLANS BY MORE THAN 0.25 INCH.

BITUMINOUS PLANT MIX INSTALLATION (BASE, BINDER, AND SURFACE COURSES):

1. BITUMINOUS PLANT MIX BASE, BINDER AND SURFACE COURSES SHALL BE INSTALLED TO THE COMPACTED THICKNESSES SHOWN ON THE PLANS OR IN THE STANDARD DRAWINGS.
2. BITUMINOUS MIXTURES SHALL BE DELIVERED AND SPREAD ON THE ROADWAY IN AMPLE TIME TO SECURE THOROUGH COMPACTION DURING DAYLIGHT HOURS.
3. PRIOR TO INSTALLING THE BINDER AND SURFACE COURSES OF ASPHALT, A BITUMINOUS TACK COAT SHALL BE APPLIED UNIFORMLY BY MEANS OF A PRESSURE DISTRIBUTOR AT A UNIFORM RATE. THE TACKED SURFACE SHALL BE ALLOWED TO DRY UNTIL IT IS IN A PROPER CONDITION TO RECEIVE THE NEXT COURSE. TACK COAT SHALL ONLY BE APPLIED AS FAR IN ADVANCE OF THE PAVING OPERATIONS AS IS NECESSARY TO OBTAIN THE PROPER CONDITION OF TACKINESS. THE CONTRACTOR SHALL PROTECT THE TACK COAT FROM DAMAGE UNTIL THE NEXT COURSE IS PLACED.
4. THE BITUMINOUS PLANT MIX SHALL BE PLACED UPON THE APPROVED STONE BASE OR ASPHALT COURSE, SPREAD AND STRUCK OFF TO ESTABLISHED LINE, GRADE AND ELEVATION BY MEANS OF AN APPROVED ASPHALT PAVING MACHINE. ON AREAS WHERE IRREGULARITIES OR UNAVOIDABLE OBSTACLES MAKE THE USE OF MECHANICAL SPREADING AND FINISHING EQUIPMENT IMPRACTICAL, THE MIXTURE SHALL BE TAKEN FROM THE HOPPER OF THE SPREADING MACHINE AND SHALL BE DISTRIBUTED INTO PLACE BY MEANS OF SHOVELS AND SPREAD WITH RAKES AND LUTES IN A UNFORMLY LOOSE LAYER OF SUCH DEPTH AS WILL RESULT IN A COMPLETED COURSE HAVING THE REQUIRED THICKNESS.
5. THICKNESS SHALL BE CONTROLLED DURING THE SPREADING OPERATION BY FREQUENT MEASUREMENTS OF THE FRESHLY SPREAD MIXTURE. THICKNESS OR SPREAD RATE SHALL BE WITHIN REASONABLY CLOSE CONFORMITY WITH THAT SPECIFIED IN THE PLANS OR IN THE STANDARD DRAWINGS.
6. AFTER THE BITUMINOUS MIXTURE HAS BEEN SPREAD, STRUCK OFF, AND SURFACE IRREGULARITIES ADJUSTED, IT SHALL BE THOROUGHLY COMPACTED BY MEANS OF ROLLERS.

EXISTING UTILITY PROTECTION

1. UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH OTHER UTILITIES.
2. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
3. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
4. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES, PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

SURVEY AND LOCATION DATA:

1. EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATIONS AND AS-BUILT PLANS. CONTRACTOR SHALL VERIFY PRIOR TO DIGGING.
2. ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS, ETC. OR ALONG THE CENTER LINE OF SEWER MAINS AND WATER MAINS.
3. THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW AND EXISTING SERVICES SHALL BE VERIFIED IN THE FIELD.
4. BENCHMARK DATA: ⌖ SEE SHEET C5.0

WATER AND SEWER GENERAL NOTES:

1. ALL PERSONS WHO UNDERTAKE THE CONSTRUCTION OF WATER, SEWER AND/OR RECLAIMED WATER LINES LOCATED IN, OR AFFECTING SERVICES PROVIDED BY THE CITY OF FRANKLIN SHALL COMPLY WITH THE REQUIREMENTS AND REGULATIONS SET FORTH IN THE "GENERAL REQUIREMENTS AND TECHNICAL SPECIFICATIONS, WATER MANAGEMENT DEPARTMENT, CITY OF FRANKLIN, TENNESSEE" LATEST EDITION, ALONG WITH ANY AMENDMENTS, ADDITIONS, OR ALTERATION THAT MAY THEREAFTER BE ADOPTED BY THE BOARD OF MAYOR AND ALDERMEN BY RESOLUTION.
2. CONTRACTOR SHALL OBTAIN WATER AND SEWER INFRASTRUCTURE INSTALLATION PERMIT PRIOR TO SCHEDULING REQUIRED PRE-CONSTRUCTION SITE MEETING. CONTRACTOR SHALL COMPLETE THE PRE-CONSTRUCTION SITE MEETING PRIOR TO COMMENCING WITH CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN AND KEEP ALL OF THE FOLLOWING ITEMS ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION: A) APPROVED, STAMPED AND SIGNED WATER AND/OR SEWER PLANS. B) WATER AND SEWER INFRASTRUCTURE INSTALLATION PERMIT, WITH ALL STEPS COMPLETED AND SIGNED BY APPROPRIATE CITY EMPLOYEES. C) COPY OF APPROVED AVAILABILITY REQUEST RESPONSE LETTER. D) A COPY OF ALL APPROVED CUT SHEETS.
4. ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE SHALL BECOME THE RESPONSIBILITY OF THE CITY OF FRANKLIN, TN FOLLOWING APPROVAL FROM THE CITY OF FRANKLIN INSPECTORS AND ACCEPTANCE BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION. THE ACCEPTANCE DATE SHALL BE BASED ON THE DAY MAINTENANCE SURETIES ARE ESTABLISHED BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION.
5. PRIOR TO THE ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AS-BUILT DRAWINGS TO THE PLANNING AND SUSTAINABILITY DEPARTMENT.
6. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTNON EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
7. ANY DAMAGES CAUSED TO EXISTING UTILITIES DURING CONSTRUCITON SHALL, AT HIS OWN EXPENSE, BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY, BY THE CONTRACTOR.

BIDDING EXCAVATION NOTE

1. ALL EXCAVATION FOR THIS PROJECT IS CONSIDERED UNCLASSIFIED, WHICH SHALL BE THE BASIS FOR ALL BIDS.

AS-BUILT SURVEY NOTE

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DETAILED SURVEY INFORMATION OF ALL BURIED PIPING, FITTINGS, MANHOLES, WYES, ENDS OF LATERALS, AND ELEVATIONS OF MAINS, MANHOLE INVERTS, AND TOP OF CASTINGS. AS-BUILT SURVEYS SHALL BE COMPLETED AND CERTIFIED BY A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF TENNESSEE. SURVEY SHALL BE SUBMITTED TO, AND APPROVED BY THE ENGINEER PRIOR TO CERTIFYING WORK COMPLETION. ANY COSTS SHALL BE INCLUDED IN THE PRICE BID FOR ITEMS OF CONSTRUCTION.

WORK SCHEDULING

1. WORK HOURS SHALL BE LIMITED TO MONDAY THROUGH FRIDAY - 7:00 AM TO 5:00 PM - UNLESS REQUIRED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.
2. WORKING ON SITE DURING FEDERALLY OBSERVED HOLIDAYS IS PROHIBITED UNLESS REQUESTED BY THE CONTRACTOR AND APPROVED IN WRITING BY THE OWNER.
3. THE CONSTRUCTION TIMELINE IS CRITICAL FOR THE OWNERS OPERATIONS, THEREFORE THE WATER AND SEWER CONSTRUCTION MAY HAVE TO BE CONCURRENT.

SPECIAL NOTE

1. THE PROJECT SIGN IS BEING SUPPLIED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROJECT SIGN.

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE — REGISTERED — PROFESSIONAL ENGINEER — No. 102999 — STATE OF TENNESSEE
08-01-22

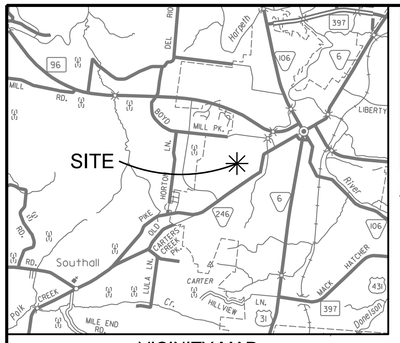
GENERAL NOTES

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C0.3

FILE NO. 1716-24



VICINITY MAP

NOT TO SCALE

CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH	CHORD
C1	16°57'46"	475.00'	70.83'	140.63'	140.11' ∅ N16°37'19"E
C2	17°39'46"	550.00'	85.45'	169.55'	168.88' ∅ N16°16'19"E
C3	78°00'14"	75.00'	60.74'	102.11'	94.40' ∅ N46°26'33"E
C4	105°22'14"	15.00'	19.68'	27.59'	23.86' ∅ S41°52'13"E
C5	02°59'27"	92.00'	2.40'	4.80'	4.80' ∅ S09°19'10.5"W

LINE TABLE

NO.	BEARING	DISTANCE
L1	N08°08'26"E	3.86'

STORMWATER NARRATIVE

THE EXISTING PROJECT SITE IS APPROXIMATELY 2.24 ACRES IN SIZE, AND CONSISTS OF MULTIPLE HOUSING UNITS. THE CURRENT SITE COVERAGE CONSISTS OF OPEN TURF GRASS MEADOWS, EXISTING ROADWAYS, SIDEWALKS, AND SMALL PARKING AREAS ADJACENT TO THE HOUSING UNITS. THE SOIL TYPE OF THE SITE RANGES FROM HYDROLOGIC A SOILS TO HYDROLOGIC B SOILS, AND THE NATIVE VEGETATION APPEARS TO BE IN GOOD CONDITION OVERALL. THE SITE IS AT THE TOP OF AN EXISTING DRAINAGE BASIN THAT DRAINS INTO THREE AREAS, SOUTHEAST NEAR THE INTERSECTION OF CHEROKKE PLACE, TO THE EAST NEAR THE INTERSECTION OF CHICKASAW PLACE AND TO THE NORTH AT NORTH PETWAY STREET. DRAINAGE INEVITABLY OUTFALLS AT SHARPS BRANCH LOCATED TO THE NORTH OF THE PROPOSED DEVELOPMENT. DRAINAGE FROM THE SOUTHERN AND EASTERN BASINS MAKES ITS WAY TO SHARPS BRANCH BY WAY OF OVERLAND AND SHEET FLOW, STREET GUTTER FLOW, AND EXISTING STORM SEWER NETWORKS. THIS EXISTING DRAINAGE EXITS THE SITE PRIMARILY BY WAY OF A STORM SEWER LINE WHICH DISCHARGES AT A NEW LEVEL SPREADER COMPLETED WITH THE CHICKASAW DEVELOPMENT. THIS TRUNK LINE IS A 30 INCH DIAMETER RCP, AND FLOW FROM THE DEVELOPMENT IS CAPTURED BY WAY OF TWO NETWORK BRANCHES THAT FLOW SOUTH TO NORTH THROUGH THE CENTER OF THE ADJACENT CHEROKEE SITE AND EAST TO WEST THROUGH THE CENTER OF THE SITE TOWARD CHICKASAW PLACE. THE NORTHERN PORTION OF THE SITE DRAINS OVERLAND AND THROUGH EXISTING STORM NETWORK IN NORTH PETWAY AND THEN DIRECTLY TO SHARPS BRANCH. THE STORMWATER RUNOFF FROM THE EXISTING DEVELOPMENT IS NOT TREATED OR DETAINED IN ANYWAY PRIOR TO EXITING THE SITE.

GRADING AND DRAINAGE DATA CHART

- SITE ANALYSIS AREA: 2.24 +/- ACRES
- IMPERVIOUS AREA: 0.56 ACRES
- DISTURBED AREA: 2.24 ACRES
- RV VALUE: 0.20
- PEAK FLOW RUNOFF (ACTUAL CONDITIONS)
  - 2 YEAR: 0.05 CFS
  - 5 YEAR: 0.36 CFS
  - 10 YEAR: 0.90 CFS
  - 25 YEAR: 1.95 CFS
  - 50 YEAR: 3.04 CFS
  - 100 YEAR: 4.31 CFS

STORM SEWER STRUCTURE TABLE

NO.	CASTING ELEV.	INVERT ELEV.
D20	684.70	680.35
D50	670.99	666.79
D51	671.06	666.24
D52	N/A	653.32

NOTES

1. BEARINGS SHOWN HEREON BASED ON THE TENNESSEE STATE COORDINATE SYSTEM, NAD83.
2. DEED AND PLAT BOOK REFERENCES SHOWN HEREON PERTAIN TO THE REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.
3. SUBJECT PROPERTY IS LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM FLOOD INSURANCE RATE MAP) COMMUNITY PANEL No. 47187C0192F DATED SEPTEMBER 29, 2006.
4. DIMENSIONS SHOWN THUS: (100') ARE DEED OR PLAT DIMENSIONS.
5. RIGHTS-OF-WAY FOR SHAWNEE DRIVE, CHICKASAW PLACE AND CHEROKEE PLACE ESTABLISHED BY DEED OF DEDICATION BETWEEN FRANKLIN HOUSING AUTHORITY AND CITY OF FRANKLIN OF RECORD IN DEED BOOK 181, PAGE 31, R.O.W.C..
6. CURRENT ZONING IS PD, PLANNED DISTRICT.
7. EXISTING CONDITIONS ARE BASED ON FIELD-RUN TOPOGRAPHIC SURVEY DEVELOPED BY JAMES + ASSOCIATES PERFORMED IN MAY 20, 2022.
8. SITE AREA IS 97,532 SQUARE FEET OR 2.24 ACRES, MORE OR LESS.
9. FOR LOCATION OF EXISTING DRAINAGE BASINS WITHIN SITE, REFER TO SHEET D1.0, EXISTING DRAINAGE CONDITIONS.

SANITARY SEWER STRUCTURE TABLE

STRUCTURE NO.	CASTING ELEV.	INVERT IN	INVERT IN	INVERT OUT
SSMH J	685.80	681.46	677.11	677.01
SSMH P	685.48	679.88	679.98	677.64
SSMH 2	690.20	684.85		684.65
SSMH 3	693.24			687.44
SSMH 4	682.53	SEE NOTE		670.98
SSMH 5	675.12	668.97		668.77
SSMH 6	674.42	668.17		667.97

SLOPE LEGEND

14% - 19.99%

20% +

NOTE: SANITARY SEWER LINE FLOWING INTO SSMH 4 WAS TAKEN OUT OF SERVICE IN 2019.

TAX REFERENCE

PROPERTY MAP 78H
GROUP "A"
PARCEL NO. 4

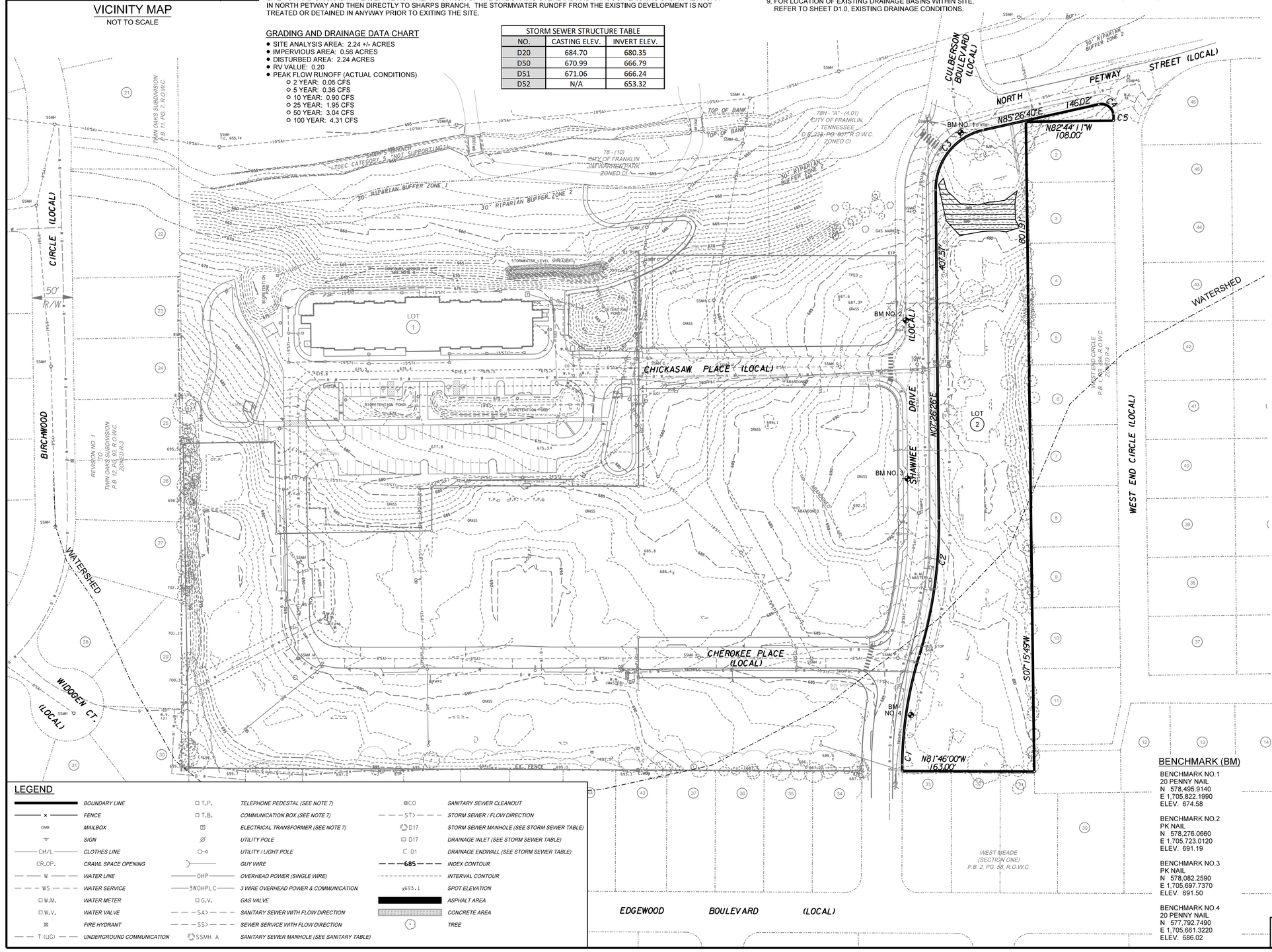
PLAT REFERENCE

PART OF LOT 2
CHICKASAW PUD SUBDIVISION
PLAT BOOK P69, PAGE 40, R.O.W.C.

DEED REFERENCE

TO: FRANKLIN HOUSING AUTHORITY
FROM: MRS. ELLA K. WARF
DEED BOOK 127, PAGE 33, R.O.W.C.
FROM: MARTIN TOHRNER,
et ux. PEGGY TOHRNER
DEED BOOK 130, PAGE 161, R.O.W.C.

	Parcel ID	Name	Mailing Address	Mailing City, State, Zip
1	078H B 00100 00000578H	ALATORRE-PONSECA JOSE DE JESUS	1301 ROBIN HILL RD	Franklin, TN 37064
2	078H B 01500 00000578H	MORTON ANTHONY	817 EDGEWOOD BLVD	Franklin, TN 37064
3	078H B 01400 00000578H	ALTAMIRANO FABERTO	819 EDGEWOOD BLVD	Franklin, TN 37064
4	078H B 01700 00000578H	SMITHSON ROBBIE A	1317 COLUMBIA AVE	Franklin, TN 37064
5	078H B 01800 00000578H	ORTEGA GUADALUPE SANCHEZ	811 EDGEWOOD BLVD	Franklin, TN 37064
6	078H B 01900 00000578H	QUEZADA ARACELI BARTA	801 LOCUST ST	Columbia, TN 38401
7	078H B 02000 00000578H	HOMEPOINTE PROP LLC	1146 DEER LAKE RD	Franklin, TN 37069
8	078H A 00800 00000578H	REED MARY BLAINE	1293 WINDSOR DR	Franklin, TN 37064
9	078H A 00900 00000578H	ANDREWS STEPHEN C	1252 CHICKERING DR	Franklin, TN 37064
10	078I A 02700 00000578H	KENNEY STEVEN B	1191 CHICKERING DR	Franklin, TN 37064
11	078H A 02800 00000578H	FRANKLIN HOUSING AUTHORITY	100 SPRING ST	Franklin, TN 37064
12	078H A 01500 00000578H	WRAY CASSANDRA B	826 EDGEWOOD BLVD	Franklin, TN 37064
13	078H A 01400 00000578H	MOTA A LOSE	1068 HARVEY SPRINGS DR	Spring Hill, TN 37174
14	078H A 01300 00000578H	LUTER BYRON H	822 EDGEWOOD BLVD	Franklin, TN 37064
15	078H A 01200 00000578H	LACEY RUSSELL B	2016 CEDARMONT DR	Franklin, TN 37067
16	078H A 01102 00000578H	SMITHSON DEBORAH L	2021 CEDARMONT DR	Franklin, TN 37067
17	078H A 01101 00000578H	FRANCO-CHEN MILDRED	1129 E OLLIE ST	Pulaski, TN 38478
18	078H A 01100 00000578H	SMITHSON ROBBIE A	1317 COLUMBIA AVE	Franklin, TN 37064
19	078H A 01000 00000578H	MULLINS JANE	914 EDGEWOOD BLVD	Franklin, TN 37064
20	078H A 00900 00000578H	BUTLER AMANDA P	808 EDGEWOOD BLVD	Franklin, TN 37064
21	078H A 00800 00000578H	PRITZEL WENDELL L	219 DEVRON CT	Franklin, TN 37064
22	078H A 00700 00000578H	HORTON JOEL MARK	1305 IRVIN LN	Franklin, TN 37064
23	078H A 00600 00000578H	SMITHSON JAMES W	1317 COLUMBIA AVE	Franklin, TN 37064
24	078H A 00500 00000578H	CROVE MARK	600 EDGEWOOD BLVD	Franklin, TN 37064
25	078H A 00300 00000578H	DORNSTEIN RANDLE EDLE	550 EDGEWOOD BLVD	Franklin, TN 37064
26	078H A 00200 00000578H	COMMUNITY HOUSING TYNDSHP WMSN	129 W POWLESTS#128	Franklin, TN 37064
27	078H A 00100 00000578H	MOORE ROBERT A JR	PO BOX 969	Franklin, TN 37065
28	078 A 02800 00000578H	FRANKLIN HOUSING AUTHORITY	100 SPRING ST	Franklin, TN 37064
29	078G B 02700 00000578H	YAN NYOOD DOKA	700 WEST END CIR	Franklin, TN 37064
30	078G B 02800 00000578H	VEETAMATH ESTES	114 GRENADIER DR	Franklin, TN 37064
31	078G B 02900 00000578G	DAVIS SHARON J	706 W END CIR	Franklin, TN 37064
32	078G B 03000 00000578G	WOODSIDE LINDA TR	124 PEBBLE VIEW DR	Franklin, TN 37064
33	078G B 03100 00000578G	BERGER ROBERT H	710 WEST END CIR	Franklin, TN 37064
34	078G B 03900 00000578G	ROSS TRACIE D	801 WEST END CIR	Franklin, TN 37064
35	078G B 03800 00000578G	MCRAE MONIE MAE	309 MEADOWLAWN DR	Franklin, TN 37064
36	078G B 03700 00000578G	JACKSON LINDA CROCKETT	803 WEST END CIR	Franklin, TN 37064
37	078G B 03601 00000578G	HARPER DUSTIN H	807 WEST END CIR	Franklin, TN 37064
38	078G B 03600 00000578G	ROBERTSON SHEILA M	809 WEST END CIR	Franklin, TN 37064
39	078G B 03500 00000578G	ROSS GEORGE V	811 WEST END CIR	Franklin, TN 37064
40	078G B 03400 00000578G	SMITH REBECCA	813 W END CIR	Franklin, TN 37064
41	078G B 03300 00000578G	BLALOCK THOMAS T	815 WEST END CIR	Franklin, TN 37064
42	078G B 03200 00000578G	WILLIAMS RUTH ANN LE	817 WEST END CIR	Franklin, TN 37064
43	078G B 03100 00000578G	SULLIVAN MITCHEL	PO BOX 682066	Franklin, TN 37065
44	078G B 01701 00000578G	VALLEY VIEW BUILDERS LLC	418 N PETWAY ST	Franklin, TN 37064
45	078G B 01700 00000578G	VALLEY VIEW BUILDERS LLC	418 N PETWAY ST	Franklin, TN 37064
46	078G B 01601 00000578G	VALLEY VIEW BUILDERS LLC	418 N PETWAY ST	Franklin, TN 37064
47	078G B 01600 00000578G	VALLEY VIEW BUILDERS LLC	418 N PETWAY ST	Franklin, TN 37064
48	078G B 01500 00000578G	AMJ PARTNERS LLC "E"	1834 CHARITY DR	Brentwood, TN 37027
49	078G B 01400 00000578G	PARNELL GINGER	911 W END CIR	Franklin, TN 37064
50	078G B 01300 00000578G	GIVENS CHASE	913 WEST END CIR	Franklin, TN 37064
51	078G B 01200 00000578G	MCCLURE RICHARD H	915 WEST END CIR	Franklin, TN 37064
52	078G B 01100 00000578G	ADAMS GENE TR	2249 OSBURN RD	Arlington, TN 37014
53	078G B 01000 00000578G	GRAHAM LISA	919 W END CIR	Franklin, TN 37064
54	078G B 02400 00000578H	TALLEY GARY WAYNE	920 WEST END CIR	Franklin, TN 37064
55	078G B 02501 00000578H	KAMITHEY NIKOLAY	922 WEST END CIR	Franklin, TN 37064
56	078G B 02500 00000578H	PORCI EDDU ANTHONY	918 WEST END CIR	Franklin, TN 37064
57	078G B 02400 00000578H	VINSON JOYCE	914 WEST END CIR	Franklin, TN 37064
58	078G B 02300 00000578H	SMITH ERIN A	814 W END CIR	Franklin, TN 37064
59	078G B 02200 00000578H	IWANN STELLA T	812 WEST END CIR	Franklin, TN 37064
60	078G B 02100 00000578H	BLANCHARD ROBERT J	1831 PRESTON PL	Brentwood, TN 37027
61	078G B 02000 00000578H	FERGUSON BRIANA D	806 WEST END CIR	Franklin, TN 37064
62	078G B 01900 00000578H	HAMMOND PHILLIP T	804 WEST END CIR	Franklin, TN 37064
63	078G B 01800 00000578H	PARSONS JOSHUA M	802 WEST END CIR	Franklin, TN 37064
64	078B D 04100C059078G	SHEARON MYRL L	514 N PETWAY ST #201	Franklin, TN 37064
65	078B D 04100C060978G	MORRIS PAUL	514 N PETWAY ST APT 202	Franklin, TN 37064
66	078B D 04100C059778G	TIDWELL DANIEL M	8120 DODDS PL	Brentwood, TN 37027
67	078B D 04100D089978G	RICKMAN JAMES D	3599 GREENS MILL RD	Spring Hill, TN 37174
68	078B D 04100D117978G	106 LEWISBURG PK	NR PROPERTIES LLC	Franklin, TN 37064
69	078B D 04100D039978G	SIMON MITCHELL H	1087 MORAN RD	Franklin, TN 37064
70	078B D 04100D111978G	SCHUSTER DANIEL O	314 N PETWAY ST #207	Franklin, TN 37064
71	078B D 04100D049978G	PITTMAN LILL	1101 DOWNS BLVD #127	Franklin, TN 37064
72	078B H 00100C079978G	JULIAN MICHAEL C	2000 BARCLAY LN	Franklin, TN 37064
73	078B H 00100C072978G	MIRRON JEFFREY S	6501 RIDGEWOOD AVE	Cocoa Beach, FL 32931
74	078B H 00100C073978G	BEARD JOHNNY	601 BOYD MILL AVE #A-1	Franklin, TN 37064
75	078B H 00200C073978G	REVEE CHARLOTTE	601 BOYD MILL AVE #A-2	Franklin, TN 37064
76	078B H 00100C082978G	BEAN LEDON PAY	601 BOYD MILL AVE #A-4	Franklin, TN 37064
77	078B H 00200C084978G	AMJ PARTNERS LLC C	1834 CHARITY DR	Brentwood, TN 37027
78	078B H 00100C088978G	HALL ANDREW E	601 BOYD MILL AVE #N-3	Franklin, TN 37064
79	078B H 00100C079978G	MORENO JUAN	1561 FAWN CREEK RD	Brentwood, TN 37027
80	078H A 00401 00000578H	CITY OF FRANKLIN	PO BOX 305	Franklin, TN 37064
81	078 D 01000 00000978	CITY OF FRANKLIN	PO BOX 305	Franklin, TN 37064
82	078H E 01300 00000578H	LOVORN GREGORY M	1584 BIRCHWOOD CIRCLE	Franklin, TN 37064
83	078H E 01400 00000578H	WESTERVELT HOLLY	1580 BIRCHWOOD CIR	Franklin, TN 37064
84	078H E 01500 00000578H	CAVELL STEVEN C AND JULIE A CAVELL	1576 BIRCHWOOD CIR	Franklin, TN 37064
85	078H E 01600 00000578H	STOUT STEVEN R	1572 BIRCHWOOD CIR	Franklin, TN 37064
86	078H E 01700 00000578H	CHASE KATHLEEN M	161 BINTON BLVD	Freeport, FL 32439
87	078H E 01800 00000578H	CAVENESS BARRY L	112 DRAKE COURT	Franklin, TN 37064
88	078H E 01900 00000578H	PATILLO GABRIEL	109 DRAKE CT	Franklin, TN 37064
89	078H E 02000 00000578H	HENRY JAMES DARYL	1570 BIRCHWOOD CIR	Franklin, TN 37064
90	078H E 02100 00000578H	BOOKART FILIZ	206 OXFORD DR	Franklin, TN 37064
91	078H E 02200 00000578H	STRAINTIS LEONHARDT	1568 BIRCHWOOD CIR	Franklin, TN 37064
92	078H E 02300 00000578H	SILLIMAN IVA L	1560 BIRCHWOOD CIR	Franklin, TN 37064
93	078H E 02400 00000578H	WILSON RICHARD W	1556 BIRCHWOOD CIR	Franklin, TN 37064
94	078H E 02500 00000578H	BANALES AURELIO GARCIA	1552 BIRCHWOOD CIR	Franklin, TN 37064
95	078H E 02600 00000578H	ARTMEIER PAUL	1548 BIRCHWOOD CIRCLE	Franklin, TN 37064
96	078H E 02700 00000578H	COMPTON ROGER LEE	1544 BIRCHWOOD CIRCLE	Franklin, TN 37064
97	078H E 02800 00000578H	CHARLTON DUANE P	1540 BIRCHWOOD CIR	Franklin, TN 37064
98	078H E 02900 00000578H	SMITH MARK S	308 WIDGEN CT	Franklin, TN 37064
99	078H E 03000 00000578H	KERN DANIEL T	312 WIDGEN COURT	Franklin, TN 37064
100	078H E 03100 00000578H	MITCHELL PATTY	309 WIDGEN CT	Franklin, TN 37064
101	078H E 03200 00000578H	ROGERS FRANCES A	1536 BIRCHWOOD CIRCLE	Franklin, TN 37064
102	078H E 03300 00000578H	CUNNINGHAM LORI A	1532 BIRCHWOOD CIRCLE	Franklin, TN 37064
103	078H E 03400 00000578H	LEWIS EILEEN M	1528 BIRCHWOOD CIRCLE	Franklin, TN 37064
104	078H E 03500 00000578H	PEERCY DEBORAH N	1524 BIRCHWOOD CIR	Franklin, TN 37064
105	078H E 03600 00000578H	MARTIN TYLER D	1520 BIRCHWOOD CIR	Franklin, TN 37064
106	078 D 01400 00005078	FRANKLIN EST MOBILE HOME PARK LLC	6400 TELEGRAPH RD #1000	Bloomfield Hills, MI, 48301
107	078 D 01500 00005078	FRANKLIN EST MOBILE HOME PARK LLC	6400 TELEGRAPH RD #1000	Franklin, TN 37064
108	078H E 03810 00000578H	PARTINGTON DIANA P	1538 BIRCHWOOD CIR	Franklin, TN 37064
109	078H E 03600 00000578H	COCHOSTEPSKI ELIZABETH	143 KILLER TRL	Franklin, TN 37064
110	078H E 07900 00000578H	GERMANO RONALD D	1547 BIRCHWOOD CIRCLE	Franklin, TN 37064
111	078H E 07800 00000578H	DYER LUCINDA	1551 BIRCHWOOD CIRCLE	Franklin, TN 37064
112	078H E 07700 00000578H	GOSA KENNETH J	1555 BIRCHWOOD CIRCLE	Franklin, TN 37064
113	078H E 07600 00000578H	LENHART KATHY	1559 BIRCHWOOD CIR	Franklin, TN 37064
114	078H E 07500 00000578H	DICKSON TARA E	1563 BIRCHWOOD CIR	Franklin, TN 37064
115	078H E 07400 00000578H	O'DELL LANA M	1567 BIRCHWOOD CIR	Franklin, TN 37064
116	078H E 07300 00000578H	HUFFMAN RORY	224 DEVRON COURT	Franklin, TN 37064
117	078H E 07200 00000578H	LOCKWOOD PROP LLC	P O BOX 123	Franklin, TN 37064
118	078H E 07100 00000578H	PHILKINSON BRYAN DAVID ETAL	214 DEVRON CT	Franklin, TN 37064
119	078H E 07000 00000578H	KELLY RICHARD	212 DEVRON CT	Franklin, TN 37064
120	078H E 06900 00000578H	MCDOWELL LARRY D	208 DEVRON CT	Franklin, TN 37064
121	078H E 06800 00000578H	BEDEN SEAN R	204 DEVRON CTR	Franklin, TN 37064
122	078H E 06700 00000578H	RIGGS GEORGE KEVIN	200 DEVRON CT	Franklin, TN 37064
123	078H E 06600 00000578H	JOHNSON MICHAEL D	203 DEVRON CT	Franklin, TN 37064
124	078H E 06500 00000578H	AVILES CESAR M	207 DEVRON CT	Franklin, TN 37064
125	078H E 06400 00000578H	MARSHALL MARILYN	211 DEVRON CT	Franklin, TN 37064
126	078H E 06300 00000578H	BRADSHA DANIEL	213 DEVRON CT	Franklin, TN 37064
127	078H E 06200 00000578H	MCLARTY ADAM C	219 DEVRON CT	Franklin, TN 37064
128	078H E 06100 00000578H	FOSTER CONSTANCE	223 DEVRON CT	Franklin, TN 37064
129	078H E 06000 00000578H	LEGEL JENIFER	227 DEVRON CT	Franklin, TN 37064
130	078H E 05900 00000578H	STEPENS DAVID W	231 DEVRON CT	Franklin, TN 37064
131	078H E 05800 00000578H	SEMON MITCH	1578 BIRCHWOOD CIR	Franklin, TN 37064
132	078H E 05700 00000578H	RAWLINS MARY	1582 BIRCHWOOD CIR	Franklin, TN 37064
133	078H E 05600 00000578H	WALSH TIMOTHY ALANSON	1585 BIRCHWOOD CIR	Franklin, TN 37064
134	078H E 05500 00000578H	WOLF LEON HENRY	1589 BIRCHWOOD CIR	Franklin, TN 37064
135	078H A 00400 00000578H	FRANKLIN HOUSING AUTHORITY	100 SPRING ST	Franklin, TN 37064
136	078H B 00200 00000578H	HILL JUANITA E	1305 ROBIN HILL RD	Franklin, TN 37064
137	078 A 00700 00000578H	RAMIREZ RAFAEL	1293 WINDSOR DR	Franklin, TN 37064
138	078 A 01000 00000578H	MCCULLOUGH ANDREA L	1294 CHICKERING DR	Franklin, TN 37064
139	078I A 02600 00000578H	WHITE BARRY BRANAN II	241 CREEKSIDE DR	Lewisburg, TN 37091
140	078H A 01100 00000578H	MCALHANY JAMES A	1588 BIRCHWOOD CIR	Franklin, TN 37064
141	078H E 01100 00000578H	CRESWELL JOHN E	1592 BIRCHWOOD CIR	Franklin, TN 37064
142	078H E 01000 00000578H	SMITH BLAKE L	1596 BIRCHWOOD CIR	Franklin, TN 37064



LEGEND

BOUNDARY LINE	T.P. TELEPHONE PEDESTAL (SEE NOTE 7)
FENCE	T.B. COMMUNICATION BOX (SEE NOTE 7)
MB MAILBOX	ELECTRICAL TRANSFORMER (SEE NOTE 7)
SIGN	UTILITY POLE
CH/L CLOTHES LINE	UTILITY / LIGHT POLE
CR.OP. CRAWL SPACE OPENING	GUY WIRE
W WATER LINE	OHP OVERHEAD POWER (SINGLE WIRE)
WS WATER SERVICE	3WOHPLC 3 WIRE OVERHEAD POWER & COMMUNICATION
W.M. WATER METER	G.V. GAS VALVE
W.V. WATER VALVE	SA SANITARY SEWER WITH FLOW DIRECTION
FIRE HYDRANT	SS SEWER SERVICE WITH FLOW DIRECTION
T (UG) UNDERGROUND COMMUNICATION	SSMH A SANITARY SEWER MANHOLE (SEE SANITARY TABLE)
CO SANITARY SEWER CLEANOUT	
ST STORM SEWER / FLOW DIRECTION	
D17 STORM SEWER MANHOLE (SEE STORM SEWER TABLE)	
D17 DRAINAGE INLET (SEE STORM SEWER TABLE)	
D1 DRAINAGE ENDWALL (SEE STORM SEWER TABLE)	
685 INDEX CONTOUR	
x693.1 SPOT ELEVATION	
ASPHALT AREA	
CONCRETE AREA	
TREE	

BENCHMARK (BM)

BENCHMARK NO.1
20 PENNY NAIL
N 578,495.9140
E 1,705,822.1990
ELEV. 674.58

BENCHMARK NO.2
PK NAIL
N 578,276.0660
E 1,705,723.0120
ELEV. 691.19

BENCHMARK NO.3
PK NAIL
N 578,082.2590
E 1,705,697.7370
ELEV. 691.50

BENCHMARK NO.4
20 PENNY NAIL
N 577,792.7490
E 1,705,661.3220
ELEV. 686.02

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1555 • 615/726-4848

JAMES R. GILLESPIE — REGISTERED — No. 102994 — STATE OF TENNESSEE
09-01-22

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

EXISTING CONDITIONS PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

C1.0

FILE NO. 1716-24

SITE DATA CHART

PROJECT NAME: SHAWNEE PLANNED UNIT DEVELOPMENT
PROJECT #: 7694
ADDRESS: 1101 SHAWNEE DRIVE, FRANKLIN, TENNESSEE, 37064
PARCEL(S): 078H A 00400
ACREAGE/SQUARE FOOTAGE OF SITE: 2.24 ACRES/97,532 SF
VESTING (DATE DEVELOPMENT FIRST BECAME VESTED,
IF A REVISION): 2/22/2022

REGULATIONS:
BASE ZONING: PD 11.61
OVERLAY ZONING: N/A
BUILDING TYPES APPLIED: MULTIFAMILY, TOWNHOME AND DUPLEX
FRONTAGE TYPES APPLIED: URBAN LANDSCAPE FRONTAGE
LOT WIDTH (RESIDENTIAL): N/A
LOT SIZE (RESIDENTIAL): N/A
SET BACKS-
FRONT YARD: 5 FT. FROM BACK OF CURB
SIDE YARD: 10 FT. FROM PROPERTY LINE
REAR YARD: 10 FT. FROM PROPERTY LINE
DWELLING UNIT COUNT, BY TYPE:
2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
COMMERCIAL SF, BY USE: N/A
HOTEL KEYS: N/A
BUILDING HEIGHT: 36'-6" MAX.
MINIMUM LANDSCAPE SURFACE AREA: 20%
OPEN SPACE SF REQUIRED: 4,877 S.F (5%)
NATURAL AREA SF REQUIRED: 9,753 S.F. (ADDITIONAL 10%)
TREE CANOPY RETENTION ACREAGE: 0.52 AC
PARKING REQUIRED, BY USE: 74 SPACES
PARKING PROVIDED, BY USE: 69 SPACES
HISTORIC RESOURCE TREATMENT (Y/N): N

OPEN SPACE PROVIDED: 5,342 S.F.
NATURAL AREA PROVIDED: 10,450 S.F.

OPEN SPACE PROVIDED:
POCKET PARKS (ZONING ORDINANCE 11.6)

POCKET PARK 1: GAZEBO; BIKE RACK; BENCHES; WALKING PATH

POCKET PARK 2: GAZEBO / PAVILION; SEATING; ADA PICNIC TABLE

RESIDENTIAL USE

3 BUILDING TYPES
6 BUILDINGS TOTAL

2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
TOTAL UNITS = 26

URBAN LANDSCAPE FRONTAGE

BUILDING IDENTIFICATION:

1. ADDRESSES SHALL BE IN ACCORDANCE WITH THE FRANKLIN ADDRESSING MANUAL.
2. ADDRESSES SHALL BE APPROVED BY THE PLANNING AND SUSTAINABILITY DEPARTMENT AND THE FMPC.
3. BUILDING ADDRESS NUMBERS SHALL BE CLEARLY VISIBLE FROM THE STREET. THEY SHALL BE INSTALLED HIGH ENOUGH TO BE VISIBLE FROM THE STREET.
4. BUILDING ADDRESS NUMBERS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED.
5. BUILDING ADDRESS NUMBERS SHALL BE INSTALLED ABOVE THE PRIMARY ENTRANCE INTO THE BUILDING.
6. WHERE THE MAIN ENTRANCE DOES NOT FACE THE STREET, ADDITIONAL BUILDING ADDRESS NUMBERS ARE REQUIRED ON THE SIDE OF THE BUILDING FACING THE STREET.
7. BUILDING ADDRESSES MAY BE INSTALLED ON MONUMENT SIGNS, BUT ADDRESSES MUST ALSO BE INSTALLED ON THE BUILDING.
8. THE BUILDING ADDRESS NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND.
9. THE BUILDING ADDRESS NUMBERS SHALL BE IN ARABIC NUMERALS.
10. BUILDING ADDRESS NUMBERS SHALL BE SIZED AS FOLLOWS:
    - A. THE HEIGHT OF THE NUMBERS SHALL BE 2-INCHES TALLER THAN 1/10 THE SETBACK DISTANCE FROM THE CENTERLINE OF THE STREET MEASURED IN FEET BUT EXPRESSED IN INCHES.
    - B. THE WIDTH OF THE NUMBER, EXCEPT FOR THE NUMBER 1, SHALL BE 1/2 ITS HEIGHT.
    - C. THE BRUSH STROKE SHALL BE 1/10 THE HEIGHT.
    - D. MINIMUM HEIGHT IS 4-INCHES.

NOTE: THE CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL EQUIPMENT IS COMPLETELY SCREENED FROM ALL DIRECTIONS AND OFF SITE VIEWS.

NOTE: THE CHANGE OUT OF ANY EQUIPMENT TO A LARGER DIMENSIONAL HEIGHT OR MOUNTING HEIGHT WILL REQUIRE THAT ADDITIONAL MEASURES BE TAKEN TO MEET CITY OF FRANKLIN SCREENING REQUIREMENTS.

NOTE: EXTERIOR DIMENSIONS OF BUILDINGS ARE SHOWN ON SHEETS C3.3, C3.4, AND C3.5.

NOTE: ALL SIDEWALKS ARE 5'-0" WIDE.

NOTE: ENTRANCE DRIVEWAYS ARE PARKING LOT DRIVE AISLES ARE 20'-0" WIDE.

NOTE: STANDARD PARKING SPACES ARE 9'-0"X18'-0". COMPACT PARKING SPACES ARE 8'-0"X16'-0". ALL PARKING SPACES ADJACENT TO A CONCRETE CURB ARE 10'-0" WIDE.

NOTE: UNCONTROLLED PEDESTRIAN CROSSING LOCATIONS WILL BE DETERMINED BY CITY OF FRANKLIN ENGINEERING STAFF ON A CASE-BY-CASE BASIS WITH THE REVIEW OF SUBSEQUENT SITE PLANS.

PARKING REQUIRED ZONING ORDINANCE TABLE 10.1.6 RESIDENTIAL MULTI-FAMILY	
2 BEDROOM - 8 @ 2.5 PER UNIT	= 20
3 BEDROOM - 12 @ 3.0 PER UNIT	= 36
4 BEDROOM - 6 @ 3.0 PER UNIT	= 18
TOTAL REQUIRED	= 74
TOTAL PROVIDED	= 69
HANDICAP	= 3
BICYCLE	= 7

RETAINING WALL ELEVATION TABLE

LOCATION	TOP OF WALL	BOTTOM OF WALL
1	696.00	691.50
2	697.50	692.70
3	696.90	690.90
4	695.20	689.20
5	694.00	688.00
6	692.70	686.70
7	691.50	685.60
8	689.50	684.60
9	687.50	684.10
10	685.00	681.10
11	680.00	674.00
12	680.00	674.00
13	680.10	675.00
14	681.00	676.50
15	681.00	676.50
16	682.00	676.50
17	681.00	677.00
18	680.00	679.00

NOTE: MAXIMUM HEIGHT OF RETAINING WALL = 6'-0".

FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- W.V. WATER VALVE
- FIRE HYDRANT
- G.V. GAS VALVE
- SANITARY SEWER MANHOLE
- X"SA SANITARY SEWER
- X"ST STORM SEWER
- W WATER LINE
- OHP OVERHEAD POWER
- FENCE
- G.M. GAS METER
- UG UNDERGROUND
- CO SEWER CLEAN OUT

LEGEND

- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

50' FROM SITE

TENNESSEE GRID NORTH

scale 50 0 50 feet

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102900 STATE OF TENNESSEE
09-01-22

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

SITE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

C2.0

FILE NO. 1716-24

SITE DATA CHART

PROJECT NAME: SHAWNEE PLANNED UNIT DEVELOPMENT
PROJECT #: 7694
ADDRESS: 1101 SHAWNEE DRIVE, FRANKLIN, TENNESSEE, 37064
PARCEL(S): 078H A 00400
ACREAGE/SQUARE FOOTAGE OF SITE: 2.24 ACRES/97,532 SF
VESTING (DATE DEVELOPMENT FIRST BECAME VESTED, IF A REVISION): 2/22/2022

REGULATIONS:
BASE ZONING: PD 11.61
OVERLAY ZONING: N/A
BUILDING TYPES APPLIED: MULTIFAMILY, TOWNHOME AND DUPLEX
FRONTAGE TYPES APPLIED: URBAN LANDSCAPE FRONTAGE
LOT WIDTH (RESIDENTIAL): N/A
LOT SIZE (RESIDENTIAL): N/A
SET BACKS:
FRONT YARD: 5 FT. FROM BACK OF CURB
SIDE YARD: 10 FT. FROM PROPERTY LINE
REAR YARD: 10 FT. FROM PROPERTY LINE
DWELLING UNIT COUNT, BY TYPE:
2 BEDROOM UNIT = 8
3 BEDROOM UNIT = 12
4 BEDROOM UNIT = 6
COMMERCIAL SF, BY USE: N/A
HOTEL KEYS: N/A
BUILDING HEIGHT: 36'-6" MAX.
MINIMUM LANDSCAPE SURFACE AREA: 20%
OPEN SPACE SF REQUIRED: 4,877 S.F (5%)
NATURAL AREA SF REQUIRED: 9,753 S.F. (ADDITIONAL 10%)
TREE CANOPY RETENTION ACREAGE: 0.52 AC
PARKING REQUIRED, BY USE: 74 SPACES
PARKING PROVIDED, BY USE: 69 SPACES
HISTORIC RESOURCE TREATMENT (Y/N): N

OPEN SPACE PROVIDED: 5,342 S.F.
NATURAL AREA PROVIDED: 10,450 S.F.

OPEN SPACE PROVIDED:
POCKET PARKS (ZONING ORDINANCE 11.6)

POCKET PARK 1: GAZEBO; BIKE RACK; BENCHES; WALKING PATH

POCKET PARK 2: GAZEBO / PAVILION; SEATING; ADA PICNIC TABLE

SITE KEY NOTES:

1. 5'-0" WIDE CONCRETE PATH.
2. BIKE RACK W/CONCRETE PAD, SEE SHEET C2.3/6.
3. MAIL KIOSK W/CONCRETE PAD, SEE SHEET C2.3/4.
4. DUMPSTER ENCLOSURE W/PEDESTRIAN ACCESS RAMP, SEE SHEET C2.3/5.
5. GAZEBO, SEE ARCHITECTURAL SHEET FOR DETAILS.
6. BENCH, SEE ARCHITECTURAL SHEET FOR DETAILS.
7. GAZEBO WITH SEATING, SEE ARCHITECTURAL SHEET FOR DETAILS.
8. ADA PICNIC TABLE, SEE ARCHITECTURAL SHEET FOR DETAILS.
9. CONCRETE STEPS WITH HANDRAIL, SEE SHEET C2.3/3.
10. PERVIOUS PAVERS, SEE SHEET C2.3/5 AND 6.
11. BEGIN RETAINING WALL
12. END RETAINING WALL
13. RETAINING WALL - INTERLOCKING MODULAR STACKED STONE BLOCKS, SEE SHEET C2.3/1.
14. HANDICAP PARKING, SEE SHEET C2.2/5-9.
15. ASPHALT PARKING AREAS, SEE SHEET C2.2 AND C2.5 FOR DETAILS.
16. ADA ACCESSIBLE CONCRETE RAMP W/DETECTABLE WARNING, SEE SHEET C2.2 FOR DETAIL.
17. POST CONCRETE CURB. SEE SHEET C2.2 FOR DETAIL.
18. BIORETENTION AREAS, SEE SHEET C3.4 FOR ELEVATIONS AND DETAILS.
19. SOLID WOOD FENCE ON THREE SIDES OF HVAC UNITS TO SCREEN FROM VIEW. SEE DETAIL OF TYPICAL HVAC SCREEN ON SHEET L1.2.
20. STANDARD CONCRETE DRIVEWAY APRON WITH GRASS STRIP. SEE DETAIL 5 ON SHEET C2.4.
21. 10'-0" WIDE MIDBLOCK CROSSWALK, MARKED WITH A LADDER PATTERN CONSISTING OF REFLECTIVE WHITE THERMOPLASTIC TAPE PLACED IN 24" WIDE "CENTINENTAL" STYLE BARS. TO BE INSTALLED ON BOTH SIDES OF CROSSING ARE THE FOLLOWING: SAFETY STREET LIGHTING, PEDESTRIAN CROSSING SIGN (MUTCD W11-2), COMBINATION CURB RAMP - FLARED SIDES, COF DWG. NO. RP-12 (SEE SHEET C2.4). ALL PAVEMENT MARKINGS SHALL COMPLY WITH "TDOT STANDARD SPECIFICATIONS" AND "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) CURRENT EDITIONS.
22. 3'-6" TALL PEDESTRIAN GUARDRAIL, SEE SHEET C2.3/2.

NOTE: THE CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL EQUIPMENT IS COMPLETELY SCREENED FROM ALL DIRECTIONS AND OFF SITE VIEWS.

NOTE: THE CHANGE OUT OF ANY EQUIPMENT TO A LARGER DIMENSIONAL HEIGHT OR MOUNTING HEIGHT WILL REQUIRE THAT ADDITIONAL MEASURES BE TAKEN TO MEET CITY OF FRANKLIN SCREENING REQUIREMENTS.

NOTE: EXTERIOR DIMENSIONS OF BUILDINGS ARE SHOWN ON SHEETS C3.12, C3.13, AND C3.14.

NOTE: ALL SIDEWALKS ARE 5'-0" WIDE UNLESS NOTED OTHERWISE.

NOTE: ENTRANCE DRIVEWAYS AND PARKING LOT DRIVE AISLES ARE 20'-0" WIDE.

NOTE: STANDARD PARKING SPACES ARE 9'-0"X18'-0". COMPACT PARKING SPACES ARE 8'-0"X16'-0". ALL PARKING SPACES ADJACENT TO A CONCRETE CURB ARE 10'-0" WIDE.

NOTE: UNCONTROLLED PEDESTRIAN CROSSING LOCATIONS WILL BE DETERMINED BY CITY OF FRANKLIN ENGINEERING STAFF ON A CASE-BY-CASE BASIS WITH THE REVIEW OF SUBSEQUENT SITE PLANS.

PARKING REQUIRED
ZONING ORDINANCE TABLE 10.1.6
RESIDENTIAL MULTI-FAMILY

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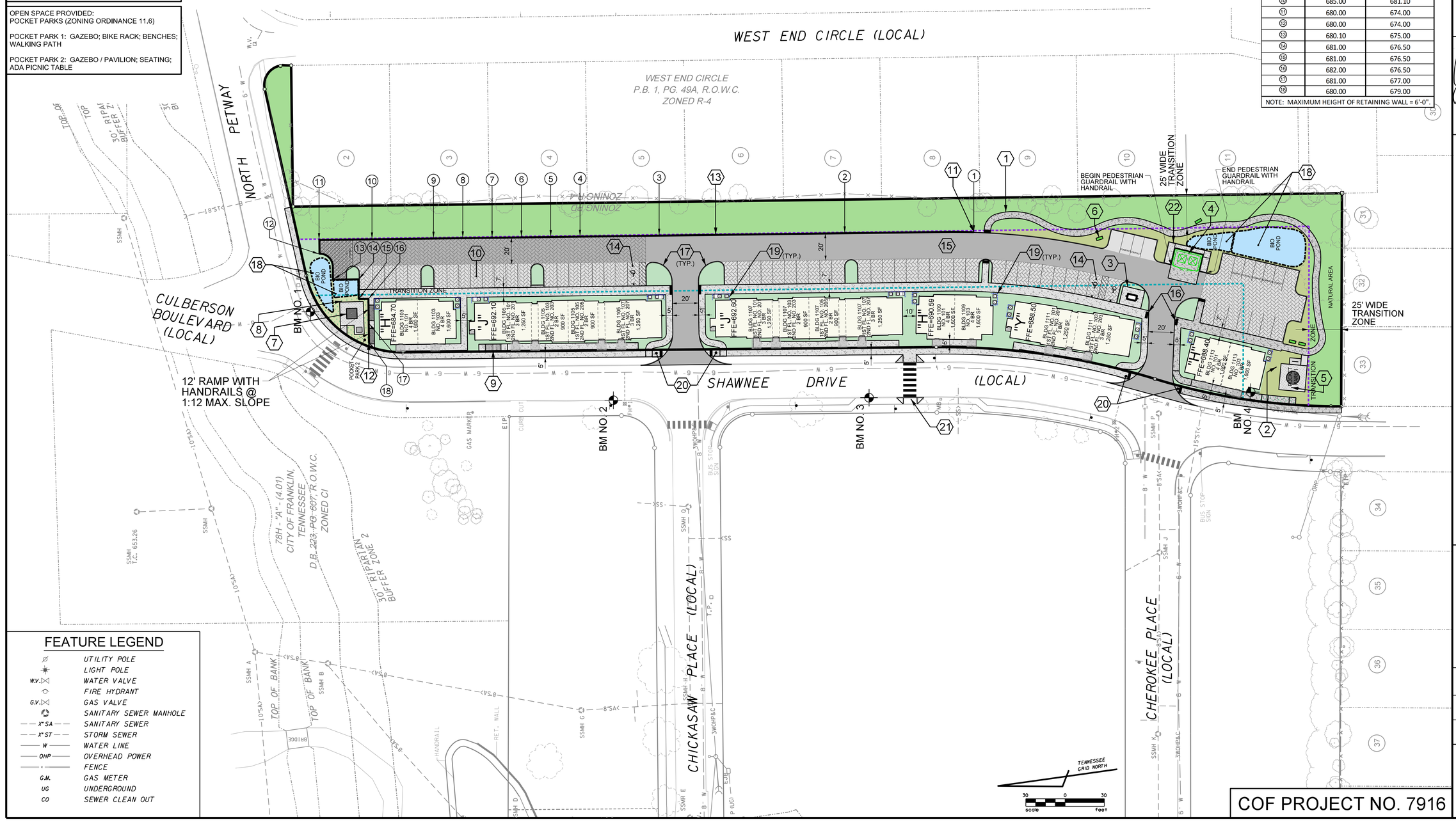
LEGEND

- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

RETAINING WALL ELEVATION TABLE

LOCATION	TOP OF WALL	BOTTOM OF WALL
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4	695.20	689.20
5	694.00	688.00
6	692.70	686.70
7	691.50	685.60
8	689.50	684.60
9	687.50	684.10
10	685.00	681.10
11	680.00	674.00
12	680.00	674.00
13	680.10	675.00
14	681.00	676.50
15	681.00	676.50
16	682.00	676.50
17	681.00	677.00
18	680.00	679.00

NOTE: MAXIMUM HEIGHT OF RETAINING WALL = 6'-0".



FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- W.V. WATER VALVE
- FIRE HYDRANT
- G.V. GAS VALVE
- SANITARY SEWER MANHOLE
- X"SA SANITARY SEWER
- X"ST STORM SEWER
- W WATER LINE
- OHP OVERHEAD POWER
- FENCE
- G.M. GAS METER
- UG UNDERGROUND
- CO SEWER CLEAN OUT

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1505 • 615/726-4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102600 STATE OF TENNESSEE
09-01-22

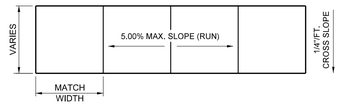
ENLARGED SITE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

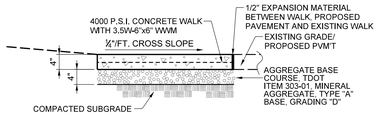
DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C2.1

FILE NO. 1716-24



SIDEWALK PLAN VIEW



SIDEWALK SECTION VIEW

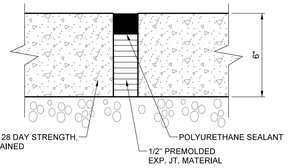
NOTE: EXPANSION JOINTS TO BE SPACED A MAX. OF 20' APART OR AS DIRECTED BY THE ENGINEER TO MEET SPACING OF MARKINGS. CONTRACTION JOINTS TO BE EQUALLY SPACED AT 5' MAXIMUM CENTERS BETWEEN EXPANSION JOINTS.

NOTE: SIDEWALKS SHALL BE 4000 PSI @ 28 DAY STRENGTH. AIR-ENTRAINED MEDIUM BROOM FINISH TEXTURE.

SIDEWALK DETAIL

NOT TO SCALE

1

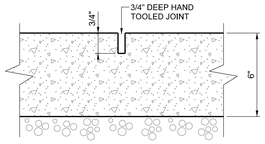


NOTE: CONCRETE PAVING EXPANSION JOINTS @ 40' (MAX.)

EXPANSION JOINT DETAIL

NOT TO SCALE

2



NOTE: CONCRETE PAVING CONTROL JOINTS @ 10' O.C., E.W. (MAX.) STRAIGHT, UNIFORM 3/4" DEEP HAND TOOLED AT PAVING.

CONSTRUCTION (CONTROL) JOINT DETAIL

NOT TO SCALE

3

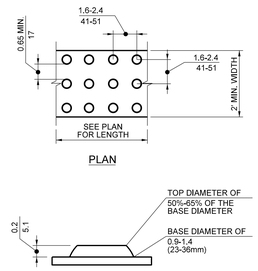
GENERAL:
DETECTABLE WARNINGS SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES AND SHALL COMPLY WITH ADA REQUIREMENTS, 705 DETECTABLE WARNINGS.

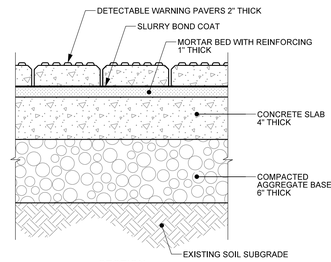
DOME SIZE:
TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A BASE DIAMETER OF 0.9 INCH (23 mm) MINIMUM AND 1.4 INCHES (36 mm) MAXIMUM. A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE BASE DIAMETER MAXIMUM, AND A HEIGHT OF 0.2 INCH (5.1 mm). 705.1.1 DOME SIZE

DOME SPACING:
TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6 INCHES (41 mm) MINIMUM AND 2.4 INCHES (61 mm) MAXIMUM, AND A BASE-TO-BASE SPACING OF 0.65 INCH (17 mm) MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID. 705.1.2 DOME SPACING

CONTRAST:
DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. 705.1,3 CONTRAST

PLATFORM EDGES:
DETECTABLE WARNING SURFACES AT PLATFORM BOARDING EDGES SHALL BE 24 INCHES (610 mm) WIDE AND SHALL EXTEND THE FULL LENGTH OF THE PUBLIC USE ARES OF THE PLATFORM. 705.2 PLATFORM EDGES



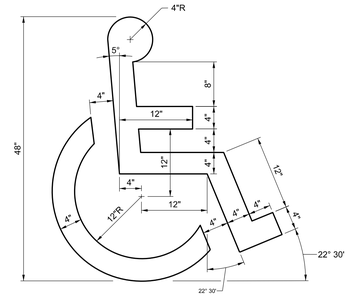


GENERAL NOTE:
JOINTS SHOULD BE SWEPT WITH SAND OR GROUT.

DETECTABLE WARNINGS DETAIL

NOT TO SCALE

4

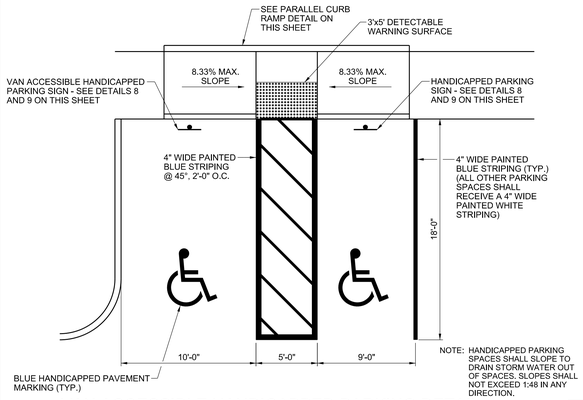


NOTE: SYMBOL TO BE PAINTED BLUE ON ALL HANDICAP SURFACES.

PAINTED HANDICAP SYMBOL DETAIL

NOT TO SCALE

5

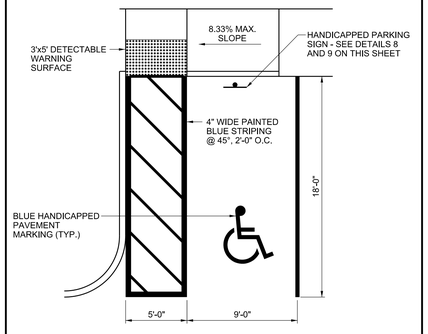


NOTE: HANDICAPPED PARKING SPACES SHALL SLOPE TO DRAIN STORM WATER OUT OF SPACES. SLOPES SHALL NOT EXCEED 1:48 IN ANY DIRECTION.

VAN ACCESSIBLE HANDICAPPED PARKING DETAIL

NOT TO SCALE

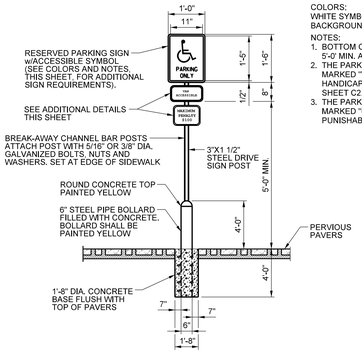
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HANDICAPPED PARKING DETAIL

NOT TO SCALE

7

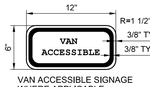


COLORS:
WHITE SYMBOL ON BLUE BACKGROUND.
BACKGROUD - WHITE.

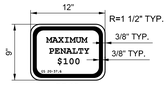
NOTES:
1. BOTTOM OF SIGN SHALL BE MOUNTED 5'-0" MIN. ABOVE THE FINISHED GRADE.
2. THE PARKING SPACE SIGN SHALL BE MARKED "VAN ACCESSIBLE " (SEE HANDICAPPED PARKING LAYOUT, SHEET C2.1 FOR SIGN LOCATION).
3. THE PARKING SPACE SIGN SHALL BE MARKED "UNAUTHORIZED PARKING PUNISHABLE WITH $100.00 FINE,"



COLORS:
LEGEND AND BORDERS - GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND - WHITE



VAN ACCESSIBLE SIGNAGE WHERE APPLICABLE



R7-8D

COLORS:
LEGEND AND BORDERS - GREEN
BACKGROUND - WHITE

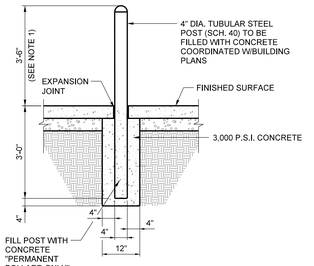
HANDICAP SIGNS

HANDICAP SIGN POST WITH BOLLARD DETAIL

NOT TO SCALE

8

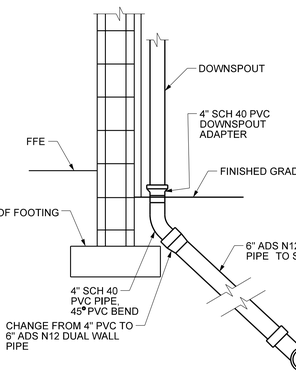
NOTE:
1. BOLLARD TO BE CUT TO HEIGHT OF 42" BY IDEALSHIELD. TOP OF BOLLARDS WITHIN HANDICAP PARKING SPACE TO BE CUT BY IDEALSHIELD TO INCORPORATE POST FOR HANDICAP PARKING SIGN.
2. COLOR OF ALL BOLLARDS ON SITE TO BE COORDINATED W/BUILDING PLANS



PERMANENT BOLLARD DETAIL

NOT TO SCALE

9

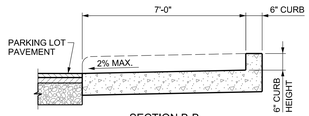


NOTE:
1. PROVIDE FITTINGS AS REQUIRED TO MITIGATE CONFLICT WITH BUILDING FOUNDATION OR SIDEWALK.
2. ENSURE THAT CENTERLINE OF HUB MATCHES CENTERLINE OF DOWNSPOUT AT JUNCTION.
3. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

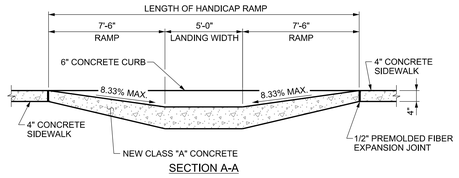
DOWNSPOUT CONNECTION DETAIL

NOT TO SCALE

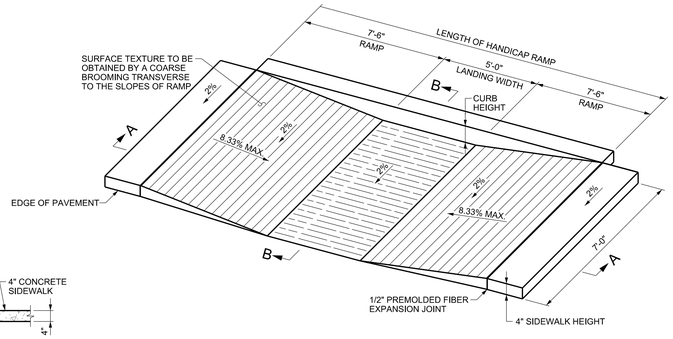
10



SECTION B-B



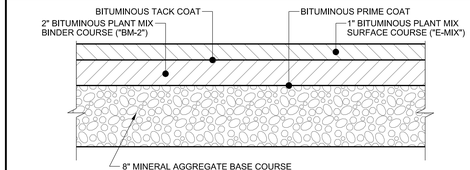
SECTION A-A



PARALLEL CURB RAMP DETAIL

NOT TO SCALE

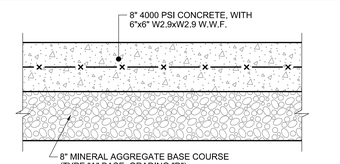
11



HEAVY DUTY DRIVE AISLE PAVEMENT SECTION

NOT TO SCALE

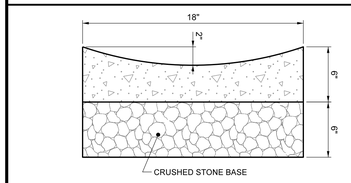
12



CONCRETE PAVING SECTION

NOT TO SCALE

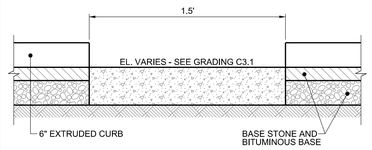
13



CONCRETE VALLEY GUTTER DETAIL

NOT TO SCALE

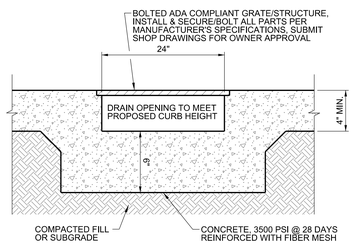
14



CURB CUT DETAIL

NOT TO SCALE

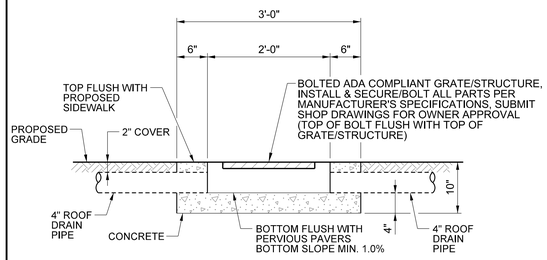
15



SURFACE CROSS DRAIN

NOT TO SCALE

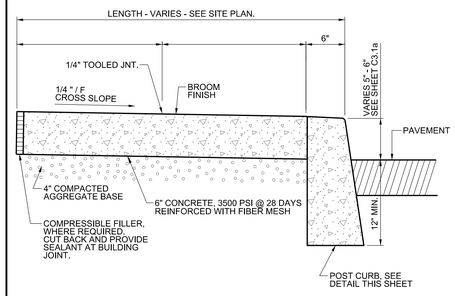
16



ROOF DRAINAGE TROUGH DETAIL

NOT TO SCALE

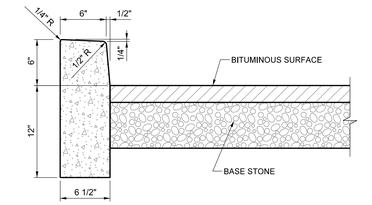
17



TYPICAL INTEGRAL SIDEWALK DETAIL

NOT TO SCALE

18



POST CONCRETE CURB DETAIL

NOT TO SCALE

19

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JAMES R. GILLESPIE — REGISTERED — 102855 — STATE OF TENNESSEE
09-01-22

SITE DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
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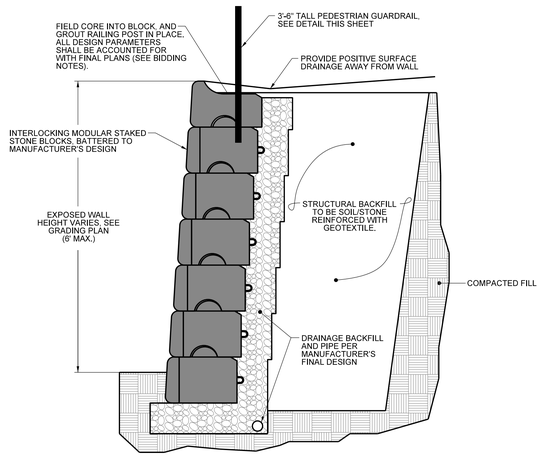
C2.2

COF PROJECT NO. 7916

FILE NO. 1716-24

BIDDING NOTES:

1. DETAIL SHOWN PROVIDED FOR BIDDING PURPOSES ONLY, AND IS NOT INTENDED FOR CONSTRUCTION. CONTRACTOR'S BID PRICE WILL INCLUDE ALL ASSOCIATED DESIGN AND INSTALLATION COST.
2. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A COMPLETE WALL DESIGN, TO INCLUDE PLAN, PROFILE, AND TYPICAL SECTIONS. FINAL DRAWINGS SHALL BE CERTIFIED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF TENNESSEE. FINAL DRAWINGS WILL BE PROVIDED TO THE CITY OF FRANKLIN FOR REVIEW/APPROVAL PRIOR TO CONSTRUCTION.
3. CONTRACTOR MAY USE THE MANUFACTURER OF THEIR CHOICE TO PROVIDE A SIMILAR TYPE WALL. BASIS OF BID DETAIL TAKEN FROM "REDI ROCK" (www.redi-rock.com) STANDARD DETAIL "TYPICAL REINFORCED WALL SECTION". MATERIAL SHALL BE A NATURAL LOOKING STONE IN APPEARANCE, WITH FINAL SELECTION OF COLORS COMPLETED BY OWNER/ARCHITECT DURING THE SUBMITTAL PROCESS.



TYPICAL WALL SECTION

SCHEMATIC RETAINING WALL DETAIL

NOT TO SCALE

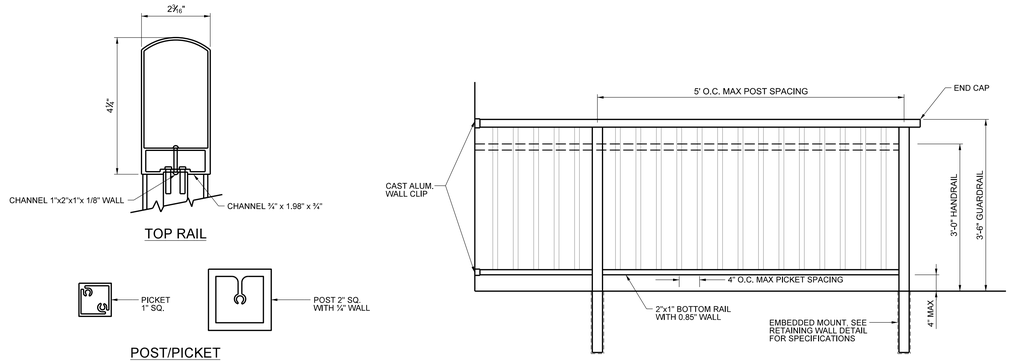
1

BIDDING NOTES:

1. DETAIL SHOWN TO PROVIDE BASIS OF BID. WHICH SHALL MEET THE GENERAL DIMENSIONS AND PARTIAL SPECIFICATIONS LISTED BELOW. SEE PROJECT MANUAL FOR A FULL LISTING OF RAILING SPECIFICATIONS.
2. CONTRACTOR MAY USE THE MANUFACTURER OF THEIR CHOICE TO PROVIDE A SIMILAR RAIL. BASIS OF BID DETAIL TAKEN FROM "AMERICAN RAILING SYSTEMS INC." (www.americanrailing.com) STANDARD DETAIL "HEAVY DUTY ARCHITECTURAL PICKET RAILING ARS HDP2066B".
3. RAILING SHALL BE ALUMINUM ALLOY WITH A BLACK ANODIZED FINISH.

NOTES:

1. HANDRAIL SHALL BE INCLUDED ONLY AT THE DUMPSTER ACCESS RAMP.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING MATERIALS.



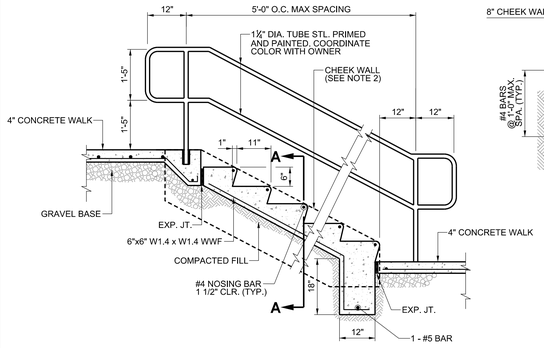
PEDESTRIAN GUARDRAIL DETAIL

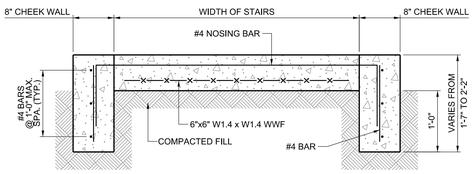
NOT TO SCALE

2

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JAMES R. GILLESPIE — REGISTERED PROFESSIONAL ENGINEER — No. 102600 — STATE OF TENNESSEE
08-01-22





SECTION A-A

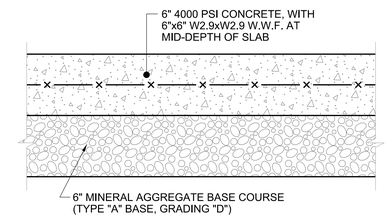
NOTES:

1. SEE PLAN FOR NUMBER OF RISERS.
2. CHEEK WALL - 8" WIDE CONCRETE, TIE WALL TO STEPS WITH REBAR (#4). IF NEEDED, EMBED RAILING POST INTO WALL. EXTEND WALL 12" BELOW CONCRETE BASE FOR STEPS.
3. HANDRAILS SHALL BE LOCATED ON EACH SIDE OF CONCRETE STEPS.

CONCRETE STEPS WITH HANDRAILS

NOT TO SCALE

3

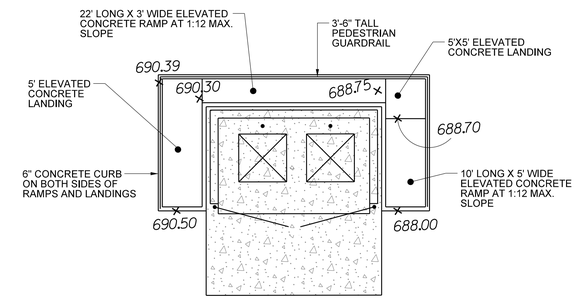


NOTE: SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS.

MAIL KIOSK CONCRETE PAD SECTION

NOT TO SCALE

4

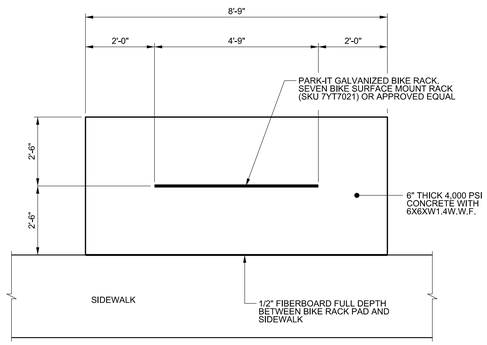


NOTE: REFER TO ARCHITECTURAL PLANS FOR ENCLOSURE DETAILS.

DUMPSTER ENCLOSURE PEDESTRIAN ACCESS RAMP

NOT TO SCALE

5



BIKE RACK DETAIL

NOT TO SCALE

6

SITE DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
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TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C2.3

FILE NO. 1716-24

COF PROJECT NO. 7916

DRAINAGE STRUCTURES, MANHOLES, GRATES, PIPE CULVERTS, AND ENDWALLS

TYPE	TDOT STANDARD DRAWINGS
CATCH BASINS	TDOT CATCH BASINS 10, 12, 13, 14, 16, AND 17 TYPE (SEE NOTE 3)
CATCH BASIN GRATES	SEE CITY OF FRANKLIN DRAWINGS RP-1 THRU RP-4
AREA DRAINS - 1 GRATE	D-CB-42 SERIES
AREA DRAINS - 2 GRATES	D-CB-43 SERIES
AREA DRAIN GRATES	D-CBB-42
JUNCTION BOX	D-JBS-1 THRU D-JBS-5
MANHOLES	D-MH-2 THRU DRF-1
TRENCH DRAINS	D-TD-1
PROTECTED ENDWALLS	D-PE-1 THRU D-PE-9F
SAFETY CROSS DRAIN ENDWALLS	D-PE-15A THRU D-PE-48A, AND D-PE-99
SAFETY SIDE DRAIN ENDWALLS	D-SEW-1A
PIPE CULVERTS AND FLUMES	D-FLU-1, D-PB-1 THRU D-PB-3
PIPE CULVERT INSTALLATION	D-PB-1, D-PB-2

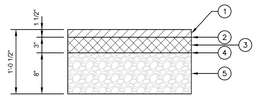
NOTES

1. STRUCTURES NOTED IN TABLE ABOVE TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS.
2. REFERENCE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
3. MODIFY TDOT STRUCTURES ABOVE AS NEEDED TO PROVIDE FULL BEARING FOR INLET CASTINGS NOTED ON CITY OF FRANKLIN DRAWINGS RP-1 THRU RP-4.

DRAINAGE STRUCTURES, MANHOLES, GRATES, PIPE CULVERTS AND END WALLS — DWG. NO. **D-1**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

1



PAVEMENT SCHEDULE

1. 1.5" - BITUMINOUS SURFACE COURSE
   411-01.11 ACS MIX (PG 64-22) GRADING E RDWY
2. TACK COAT
   403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) @0.07 GAL/SY (@0.10 GAL/SY MILLED SURFACES)
3. 3" - BITUMINOUS AGGREGATE BASE
   307-01.08 ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING B-M2
4. PRIME COAT
   402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @0.30-0.35 GAL/SY
   402-02 AGGREGATE FOR COVER MATERIAL (PC) @8-12 LB/SY
5. 8" - MINERAL AGGREGATE BASE
   303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

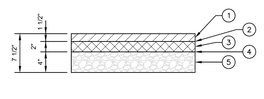
NOTES

1. THICKNESSES SHOWN ARE MINIMUMS. FINAL DESIGN THICKNESS TO BE DETERMINED BY A GEOTECHNICAL ENGINEER.
2. REFERENCE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION

LOCAL, ALLEY, AND MEWS PAVEMENT SECTION — DWG. NO. **RD-3**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

2



PAVEMENT SCHEDULE

1. 1.5" - BITUMINOUS SURFACE COURSE
   411-01.05 ACS MIX (PG 64-22) GRADING E RDWY
2. TACK COAT
   403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) @0.07 GAL/SY (@0.10 GAL/SY MILLED SURFACES)
3. 2" - BITUMINOUS AGGREGATE BASE
   307-01.08 ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING B-M2
4. PRIME COAT
   402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) @0.30-0.35 GAL/SY
   402-02 AGGREGATE FOR COVER MATERIAL (PC) @8-12 LB/SY
5. 4" - MINERAL AGGREGATE BASE
   303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

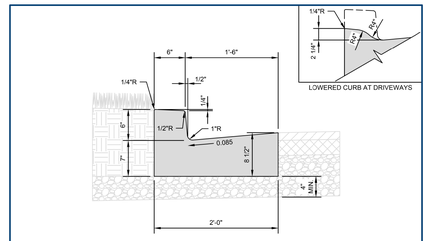
NOTES

1. THE ASPHALT PAVEMENT MULTI-USE PATH SHOWN HEREON SHALL ONLY BE USED WHERE SPECIFICALLY PERMITTED BY THE CITY ENGINEER. THE CONCRETE MULTI-USE PATH SECTION ON DWG. NO. RP-9 SHALL BE USED IN ALL OTHER LOCATIONS.
2. MULTI-USE PATH CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAXIMUM
3. THICKNESSES SHOWN ARE MINIMUMS. FINAL DESIGN THICKNESS TO BE DETERMINED BY A GEOTECHNICAL ENGINEER.
4. REFERENCE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION

MULTI-USE PATH PAVEMENT SECTION — DWG. NO. **RD-4**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

3



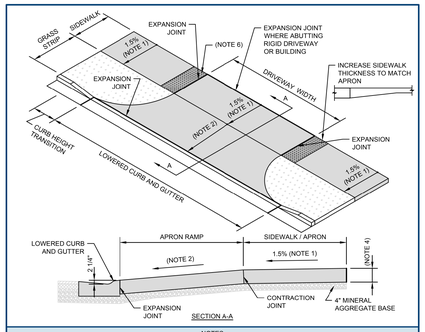
NOTES

1. REFERENCE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, SECTION 702 - CEMENT CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER
2. THE FRONT FACE OF THE CONCRETE CURBS FOR ALL DEGREES OF CURVATURE SHALL CONFORM TO THE CONTOUR OF THE CURVE. NO CHORD SECTIONS WILL BE PERMITTED
3. CONCRETE: CLASS A (3,000 PSI, 6% AIR)
4. EXPANSION JOINTS: 1/2" THICK U.N.O. (SEE ALSO DRAWING RP-10)
   A. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
   B. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139)
5. EXPANSION JOINTS SHALL BE PLACED AS FOLLOWS:
   A. AT TANGENT POINTS OF CIRCULAR CURBS
   B. BETWEEN CURBS AND ABUTTING RIGID OBJECTS
   C. AT OTHER PLACES WHERE STRESSES MAY DEVELOP
   D. TO LINE UP WITH PAVEMENT JOINTS WHERE THE ADJACENT PAVEMENT IS CONCRETE.
   E. AT A MAXIMUM SPACING OF 100 FEET
6. CONTRACTION JOINTS: SPACED AT 10 FEET. SPACING MAY BE REDUCED FOR CLOSURES, BUT NOT LESS THAN 6 FEET.
7. INLET CASTING: JBS 3080-V OR APPROVED EQUAL WITH DIRECTIONAL VANE GRATES AND SURFACE MOUNT ENVIONGTICE PLATES STATING "DUMP NO WASTE DRAINS TO RIVER". MODIFY TDOT STRUCTURES AS NEEDED TO PROVIDE FULL BEARING AT CASTING.

LOCAL STREET CURB AND GUTTER — DWG. NO. **RP-3**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

4



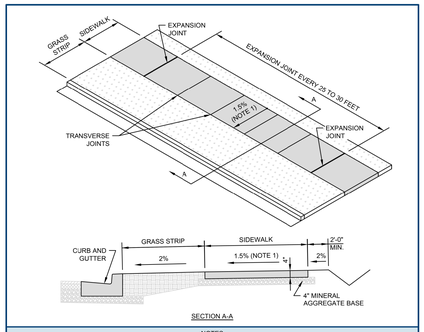
NOTES

1. SIDEWALK CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAX.
2. APRON RAMP SLOPE:
   A. 6% MAX., 1.5% MIN. AT RESIDENTIAL DRIVEWAYS, EXCEPT MULTI-FAMILY RESIDENTIAL
   B. 6% MAX., 1.5% MIN. AT ALL OTHER DRIVEWAYS
3. MINERAL AGGREGATE BASE: 4" MIN. THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
4. CONCRETE: CLASS A (3,000 PSI, 6% AIR) WITH SYNTHETIC FIBER REINFORCEMENT
   A. 6" MIN. THICK AT RESIDENTIAL DRIVEWAYS, EXCEPT MULTI-FAMILY
   B. 8" MIN. THICK AT NONRESIDENTIAL, MIXED-USE, AND MULTI-FAMILY RESIDENTIAL DRIVEWAYS
5. EXPANSION JOINTS: 1/2" THICK U.N.O. (SEE ALSO DRAWING RP-10)
   A. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
   B. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139)
6. DETECTABLE WARNING: YELLOW (EXCEPT PER SECTION 2.4.8), CAST-IN-PLACE (ADA SOLUTIONS OR APPROVED EQUAL)
   A. PROVIDE AT DRIVEWAYS WITH YIELD OR STOP CONTROL ONLY

STANDARD CONCRETE DRIVEWAY APRON WITH GRASS STRIP — DWG. NO. **RP-5**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

5



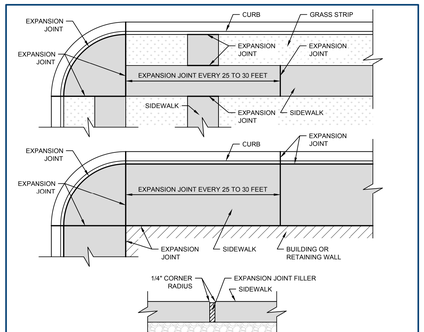
NOTES

1. SIDEWALK CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAX.
2. MINERAL AGGREGATE BASE: 4" MIN. THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
3. CONCRETE: 4" MIN. THICK CLASS A (3,000 PSI, 6% AIR) WITH SYNTHETIC FIBER REINFORCEMENT, BROOM FINISH
4. EXPANSION JOINTS: SEE DRAWING RP-10
5. PROVIDE TRANSVERSE JOINTS FORMING BLOCKS AS NEARLY TO SQUARE AS PRACTICAL
6. PROVIDE A LONGITUDINAL JOINT CENTERED ON WALK WHERE SIDEWALK WIDTH IS 8'-0" OR GREATER

CONCRETE SIDEWALK — DWG. NO. **RP-8**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

6



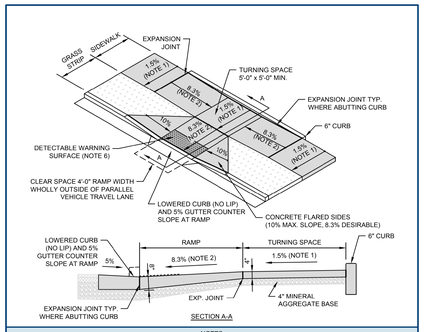
NOTES

1. EXPANSION JOINTS:
   A. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
   B. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139)
2. 1/2" THICK EXPANSION JOINTS SHALL BE PLACED AS FOLLOWS:
   A. TRANSVERSE TO SIDEWALK AT 25 TO 30 FEET APART DEPENDING ON TRANSVERSE JOINT MARKINGS
   B. TRANSVERSE TO SIDEWALK AT CURB EXPANSION JOINTS WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB
   C. BETWEEN CURB AND SIDEWALK WHERE SIDEWALK IS BUILT DIRECTLY AGAINST CURB
   D. AT ABUTTING RIGID DRIVEWAYS OR OTHER SIDEWALKS
   E. AT CHANGES IN SIDEWALK DIRECTION, INCLUDING AT STREET CORNERS AND AT CURVED SECTIONS
   F. AT OTHER PLACES WHERE STRESSES MAY DEVELOP
3. 1" THICK EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS CIRCULAR CURBS, BUILDINGS, AND WALLS.

SIDEWALK EXPANSION JOINT — DWG. NO. **RP-10**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

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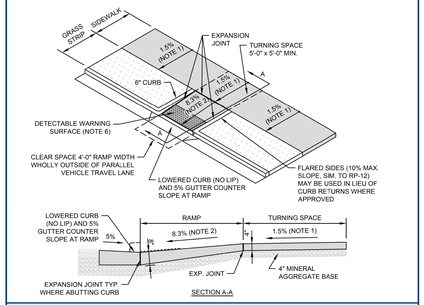
NOTES

1. SIDEWALK CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAX.
2. RAMP SLOPE: 8.3% MAX., 5% MIN. SLOPE SHALL NOT REQUIRE RAMP LENGTH TO EXCEED 15 FEET.
3. MINERAL AGGREGATE BASE: 4" MIN. THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
4. CONCRETE: CLASS A (3,000 PSI, 6% AIR) WITH SYNTHETIC FIBER REINFORCEMENT
   A. 8" MIN. THICK AT RAMP CONNECTION TO STREET.
   B. 4" MIN. THICK AWAY FROM RAMP CONNECTION TO STREET. TAPER THICKNESS ACCORDINGLY.
5. EXPANSION JOINTS: 1/2" THICK U.N.O. (SEE ALSO DRAWING RP-10)
6. DETECTABLE WARNING: YELLOW (EXCEPT PER SECTION 2.4.8), CAST-IN-PLACE (ADA SOLUTIONS OR APPROVED EQUAL)
   A. EXTEND SURFACE FULL WIDTH OF RAMP (EXCLUDING FLARED SIDES) AND 2'-0" IN THE DIRECTION OF TRAVEL
7. RAMP FINISH: COARSE BROOM FINISH TRANSVERSE TO SLOPE
8. RAMPS SHALL BE PROVIDED AT ALL STREET INTERSECTIONS, WALK LOCATIONS, AND MID-BLOCK CROSSINGS AND COMPLY WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY.
9. POSITIVE DRAINAGE SHALL BE PROVIDED ACROSS ALL ELEMENTS SUCH THAT WATER DOES NOT ACCUMULATE.

COMBINATION CURB RAMP - FLARED SIDES — DWG. NO. **RP-12**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

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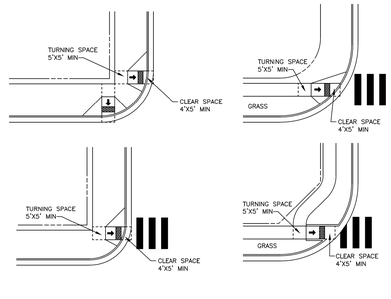
NOTES

1. SIDEWALK CROSS SLOPE: 1.5% DESIRABLE, 2.0% MAX.
2. RAMP SLOPE: 8.3% MAX., 5% MIN. SLOPE SHALL NOT REQUIRE RAMP LENGTH TO EXCEED 15 FEET.
3. MINERAL AGGREGATE BASE: 4" MIN. THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D
4. CONCRETE: CLASS A (3,000 PSI, 6% AIR) WITH SYNTHETIC FIBER REINFORCEMENT
   A. 8" MIN. THICK AT RAMP CONNECTION TO STREET.
   B. 4" MIN. THICK AWAY FROM RAMP CONNECTION TO STREET. TAPER THICKNESS ACCORDINGLY.
5. EXPANSION JOINTS: 1/2" THICK U.N.O. (SEE ALSO DRAWING RP-10)
6. DETECTABLE WARNING: YELLOW (EXCEPT PER SECTION 2.4.8), CAST-IN-PLACE (ADA SOLUTIONS OR APPROVED EQUAL)
   A. EXTEND SURFACE FULL WIDTH OF RAMP (EXCLUDING FLARED SIDES) AND 2'-0" IN THE DIRECTION OF TRAVEL
7. RAMP FINISH: COARSE BROOM FINISH TRANSVERSE TO SLOPE
8. RAMPS SHALL BE PROVIDED AT ALL STREET INTERSECTIONS, WALK LOCATIONS, AND MID-BLOCK CROSSINGS AND COMPLY WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY.
9. POSITIVE DRAINAGE SHALL BE PROVIDED ACROSS ALL ELEMENTS SUCH THAT WATER DOES NOT ACCUMULATE.

PERPENDICULAR CURB RAMP — DWG. NO. **RP-11**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

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GENERAL NOTES

1. TURNING SPACE SHALL BE 5'X5'.
2. THE RUNNING SLOPE OF THE CURB RAMP SHALL CUT THROUGH OR SHALL BE BUILT UP TO THE CURB AT RIGHT ANGLES OR SHALL MEET THE GUTTER GRADE BREAK AT RIGHT ANGLES WHERE THE CURB IS CURVED. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 5% MIN AND 8.3% MAX BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15'. THE RUNNING SLOPE OF THE TURNING SPACE SHALL BE 1.5%.
3. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE SLOPED 10% MAX, MEASURED PARALLEL TO THE CURB LINE.
4. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACES. SURFACE SLOPE THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
5. CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK SHALL BE 4'X5' IN WIDTH AND AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
6. THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF CURB RAMP RUNS SHALL BE 5% MAX.

N.T.S

PERPENDICULAR RAMP LAYOUT — DWG. NO. **RP-16**

CITY OF FRANKLIN | NOT TO SCALE | CITY ENGINEER: | DATE: 7/1/2021

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JAMES R. GILLESPIE — REGISTERED PROFESSIONAL ENGINEER — No. 102900 — STATE OF TENNESSEE
09-01-22

SITE DETAILS

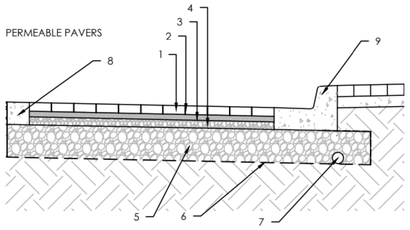
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

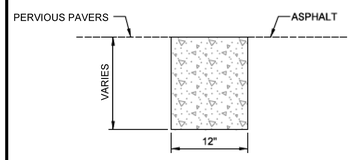
C2.4

COF PROJECT NO. 7916

FILE NO. 1716-24



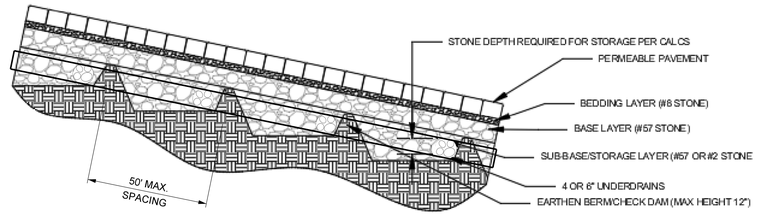
1	3 1/8" THICKNESS CONCRETE PAVERS 8,000 PSI STRENGTH
2	1/4" JOINTS NO. 8 STONE
3	2" BEDDING COURSE NO. 8 AGGREGATE
4	3" OPEN-GRADED BASE NO. 57 STONE
5	12" STONE SUBBASE NO. 2 STONE
6	GEOTEXTILE FILTER FABRIC U.S. FABRIC INC. 200 NON-WOVEN (ENVIRONMENTAL) (OR APPROVED EQUAL)
7	4" OR 6" P.V.C. UNDERDRAIN
8	RIBBON CURB (SEE C.O.F. STANDARD CURB DETAIL)
9	STANDARD C.O.F. CURB AS SPECIFIED ON PLANS
10	PERVIOUS CONCRETE PER ACI STANDARD



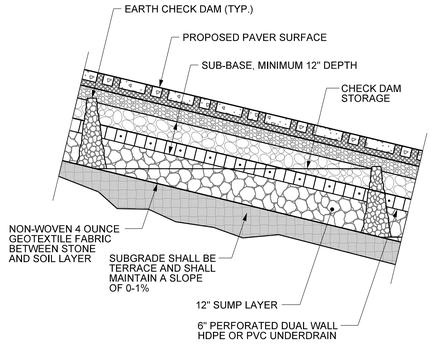
RIBBON CURB DETAIL
NOT TO SCALE

PERVIOUS PAVER DETAIL
NOT TO SCALE

1



PERVIOUS PAVER DETAIL
NOT TO SCALE



NOTE: MAXIMUM DISTANCE BETWEEN CHECK DAMS SHALL BE 50'.

NOTE: EARTH CHECK DAMS ARE TO BE INSTALLED PARALLEL TO CONTOUR LINES SO THEY ARE PERPENDICULAR TO THE FLOW PATH.

PERVIOUS PAVERS CHECK DAM DETAIL
NOT TO SCALE

2

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JAMES R. GILLESPIE
REGISTERED
No. 102501
STATE OF TENNESSEE
09-01-22

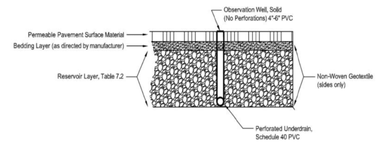


Figure 3.4. Typical Section Permeable Pavement Level 1 (Source: VADEQ, 2013)

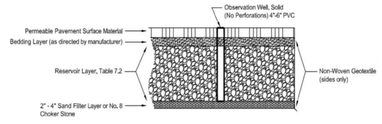
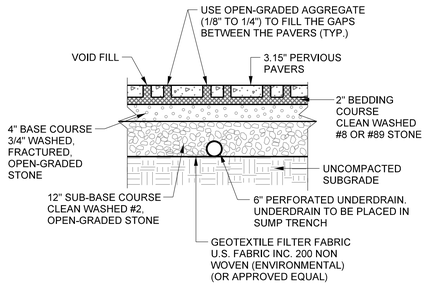


Figure 3.5. Typical Section Permeable Pavement Level 2 with Infiltration (Source: VADEQ, 2013)

PERMEABLE PAVEMENT CLEANOUT DETAIL
NOT TO SCALE

3



NOTE: CONTRACTOR SHALL NOTIFY CITY OF FRANKLIN INSPECTORS, ENGINEER, AND OWNER AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF THE PERVIOUS LAYER TO OBSERVE THE SUBBASE MATERIAL.

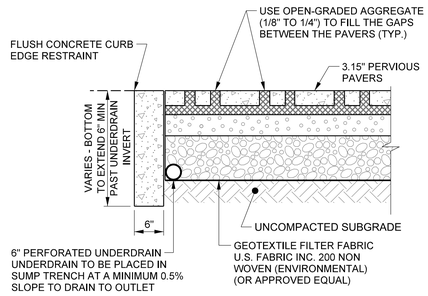
NOTE: PERVIOUS PAVERS SHALL BE APPROVED FOR COMMERCIAL USE AND SHALL BE INSTALLED WITH CONCRETE EDGE RESTRAINT.

NOTE: UNDERDRAIN PIPE: USE 6 INCH CORRUGATED HDPE OR PVC PIPE WITH 3/8-INCH PERFORATIONS AT 6 INCHES ON CENTER; POSITION EACH UNDERDRAIN ON A MIN. 0.5% SLOPE LOCATED NO MORE THAN 20 FEET FROM THE NEXT PIPE. UNDERDRAIN TO BE LAID ALONG FLUSH CONCRETE CURB IN SUMP TRENCH TO ACHIEVE DESIRED UNDERDRAIN INVERT ELEVATIONS.

NOTE: SEE GRADING PLAN FOR LOCATION OF 6" UNDERDRAIN PIPES.

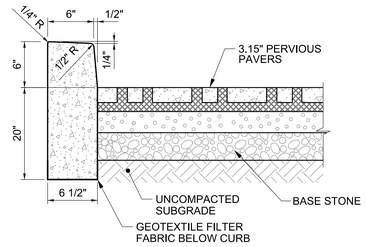
PERVIOUS PAVERS WITH UNDERDRAIN DETAIL
NOT TO SCALE

4



FLUSH CONCRETE CURB
NOT TO SCALE

5



POST CONCRETE CURB
AT PERVIOUS PAVERS DETAIL
NOT TO SCALE

6

SITE DETAILS

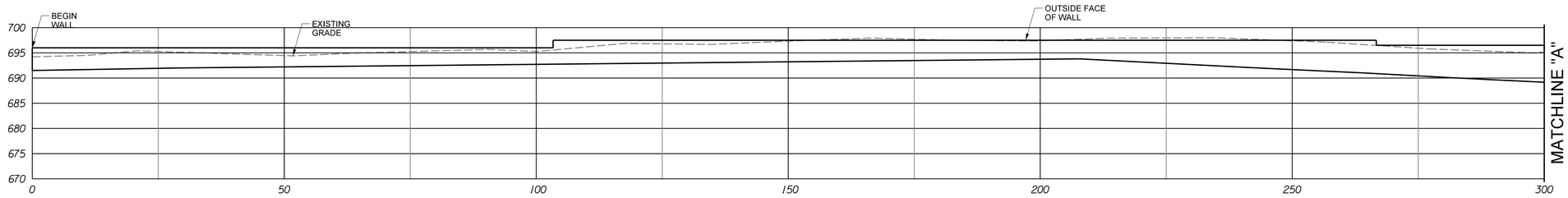
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

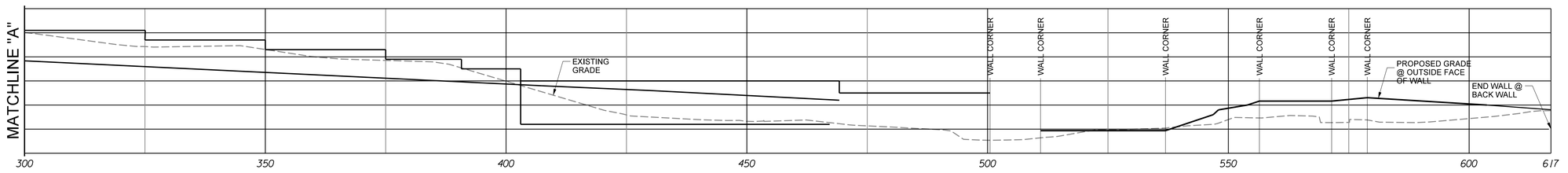
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TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
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C2.5

FILE NO. 1716-24

COF PROJECT NO. 7916





COF PROJECT NO. 7916

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JAMES R. GILLESPIE
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STATE OF TENNESSEE
09-01-22

RETAINING WALL PROFILES

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C2.6

FILE NO. 1716-24

GRADING AND DRAINAGE GENERAL NOTES

1. GRADING PERMIT IS REQUIRED FOR ANY PROJECT DISTURBING MORE THAN 10,000 SF, ADDING MORE THAN 5,000 SF OF IMPERVIOUS SURFACE OR FOR ANY SITE GRADING REQUIRING STOCKPILING OF MATERIAL.
2. THE DEVELOPER SHALL PROVIDE THE NECESSARY LABOR AND SUPERVISION REQUIRED TO SUPPORT FIELD TESTING BY THE INDEPENDENT TESTING FIRM AND INSPECTIONS BY CITY OFFICIALS AT NO COST TO THE CITY. TEST REPORTS OF FIELD TESTING IF APPLICABLE SHALL BE SUBMITTED DIRECTLY TO THE STREET DEPARTMENT. DEFECTS DISCLOSED BY TESTS SHALL BE RECTIFIED.
3. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
4. DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, CULVERTS, DETENTION BASINS AND DITCHES, AS WELL AS THE ROADWAY SUB-GRADE, BASE STONE AND BINDER & SURFACE COARSE SHALL BE INSPECTED, TESTED AND GIVEN APPROVAL AT EACH STAGE OF INSTALLATION PRIOR TO PROCEEDING TO THE NEXT STAGE OF CONSTRUCTION. FINAL CONSTRUCTION INSPECTION FOR APPROVAL AND ACCEPTANCE OF STREETS AND DRAINAGE SYSTEMS WILL NOT BE GRANTED UNTIL ALL WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. WATER QUALITY BMPs SHALL NOT BE INSTALLED UNTIL BUILD OUT IS NEAR COMPLETION TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING WATER QUALITY BMPs. WATER QUALITY AREAS SHALL NOT BE USED AS SEDIMENT BASINS DURING CONSTRUCTION. INSTALLER'S OF WATER QUALITY BMPs SHOULD FOLLOW ALL INSTALLATION GUIDELINES SET FORTH IN THE CITY OF FRANKLIN BMP MANUAL LOCATED ON THE CITY'S WEBSITE.
7. WATER QUALITY SIGNS SHALL BE PLACED WITHIN THE WATER QUALITY AREAS. THE SIGNS, MATERIALS, AND LABOR WILL BE PROVIDED BY CITY STAFF.
8. FOR PROPOSED DRAINAGE BASIN LOCATIONS WITHIN SITE, REFER TO SHEET D2.0, PROPOSED DRAINAGE CONDITIONS.

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- × 674.92 SPOT ELEVATIONS
- ——ST—— STORM SEWER
- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

RETAINING WALL ELEVATION TABLE

LOCATION	TOP OF WALL	BOTTOM OF WALL
①	696.00	691.50
②	697.50	692.70
③	696.90	690.90
④	695.20	689.20
⑤	694.00	688.00
⑥	692.70	686.70
⑦	691.50	685.60
⑧	689.50	684.60
⑨	687.50	684.10
⑩	685.00	681.10
⑪	680.00	674.00
⑫	680.00	674.00
⑬	680.10	675.00
⑭	681.00	676.50
⑮	681.00	676.50
⑯	682.00	676.50
⑰	681.00	677.00
⑱	680.00	679.00

NOTE: MAXIMUM HEIGHT OF RETAINING WALL = 6'-0".

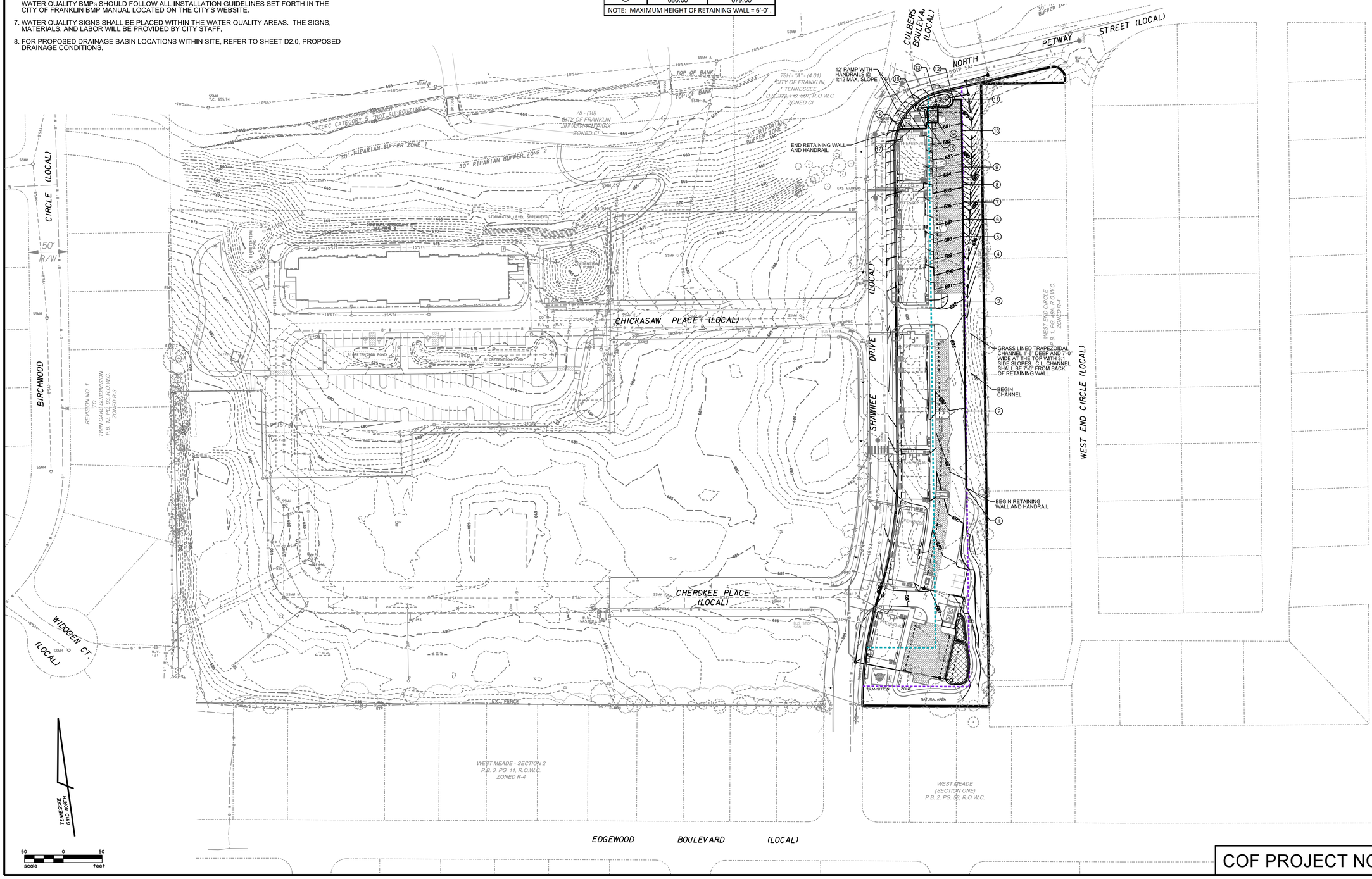
STORMWATER NARRATIVE AND STATEMENT OF IMPACTS

THE PROPOSED DEVELOPMENT IS APPROXIMATELY 2.24 ACRES IN SIZE, AND CONSISTS OF SIX HOUSING STRUCTURES WITH MULTIPLE UNITS AND A REAR PARKING AREA. THE SITE COVERAGE WILL CONSIST OF OPEN TURF GRASS MEADOWS, SIDEWALKS, DRIVE AISLES AND PARKING SPACES. WITHIN THIS DEVELOPMENT WILL ALSO BE 2 POCKET PARKS AND NATURAL AREAS TO SERVE THE RESIDENTS OF THE DEVELOPMENT. OVERALL DRAINAGE PATHS WILL REMAIN SIMILAR TO EXISTING CONDITIONS, WITH OFF-SITE WATER BYPASSED THROUGH THE SITE UTILIZING A SWALE BEHIND THE PROPOSED RETAINING WALL. THE PROPOSED REAR PARKING LOT WILL BE CONSTRUCTED TO CONVEY STORM WATER RUNOFF FROM THE HIGH POINT IN THE PARKING LOT TO THE NORTH AND TO THE SOUTH INTO BIORETENTION PONDS UTILIZING PERVIOUS PAVERS WITH UNDERDRAIN PIPES IN PARKING STALL AREAS ON THE NORTH END AND THE SOUTH END OF THE DEVELOPMENT. THESE PONDS AND PAVERS WILL BE USED TO TREAT AND DETAIN WATER TO LIMIT POST-DEVELOPED PEAK FLOWS TO VALUES LESS THAN OR EQUAL TO THE PRE-DEVELOPED CONDITIONS. BY LIMITING POST-DEVELOPED FLOWS TO VALUES LESS THAN OR EQUAL TO THE PRE-DEVELOPED CONDITIONS, IMPACTS ON DOWNSTREAM STRUCTURES SHOULD NOT OCCUR. THE PROPOSED DEVELOPMENT WILL UTILIZE THE OUTFALLS FROM THE EXISTING CONDITIONS, WITH THE OUTFLOW FROM THE NORTHERN BIORETENTION POND ROUTED TO THE EXISTING STORM DRAINAGE SYSTEM IN NORTH PETWAY STREET AND THE OUTFLOW FROM THE SOUTHERN BIORETENTION POND ROUTED TO THE EXISTING STORM DRAINAGE SYSTEM IN SHAWNEE DRIVE.

GRADING AND DRAINAGE DATA CHART

- SITE ANALYSIS AREA: 2.44 +/- ACRES
- IMPERVIOUS AREA: 0.96 ACRES
- DISTURBED AREA: 2.24 ACRES
- RV VALUE: 0.18
- PEAK FLOW RUNOFF (ACTUAL CONDITIONS)
  - 2 YEAR: 1.79 CFS
  - 5 YEAR: 2.61 CFS
  - 10 YEAR: 3.31 CFS
  - 25 YEAR: 4.65 CFS
  - 50 YEAR: 5.82 CFS
  - 100 YEAR: 7.00 CFS

NOTE: SEE "D" SERIES SHEETS FOR EXISTING AND PROPOSED DRAINAGE INFORMATION.


CIRCLE (LOCAL)
50' R/W
BIRCHWOOD
REVISION NO. 1 TO TWIN OAKS SUBDIVISION P.B. 12, PG. 93, R.O.W.C. ZONED R-3
WIDOGEN CT. (LOCAL)
CHICKASAW PLACE (LOCAL)
CHEROKEE PLACE (LOCAL)
EDGEWOOD BOULEVARD (LOCAL)
SHAWNEE DRIVE (LOCAL)
CULBERS BOULEVARD (LOCAL)
PETWAY STREET (LOCAL)
NORTH
WEST END CIRCLE (LOCAL)
78H - "A" - (4.01) CITY OF FRANKLIN TENNESSEE D.B. 228, PG. 907 R.O.W.C. ZONED CI
78 - (10) CITY OF FRANKLIN JIM WARREN PARK ZONED CI
WEST MEADE - SECTION 2 P.B. 3, PG. 11, R.O.W.C. ZONED R-4
WEST MEADE (SECTION ONE) P.B. 2, PG. 58, R.O.W.C.
WEST END CIRCLE P.B. 1, PG. 49A, R.O.W.C. ZONED R-4
30' RIPARIAN BUFFER ZONE
TOP OF BANK
BOTTOM OF BANK
STORMWATER LEVEL SPREADER
BIORETENTION POND
BIO-DETENTION POND
12' RAMP WITH HANDRAILS @ 1:12 MAX. SLOPE
END RETAINING WALL AND HANDRAIL
GRASS LINED TRAPEZOIDAL CHANNEL 1'-6" DEEP AND 7'-0" WIDE AT THE TOP WITH 3:1 SIDE SLOPES. C.L. CHANNEL SHALL BE 7'-0" FROM BACK OF RETAINING WALL.
BEGIN CHANNEL
BEGIN RETAINING WALL AND HANDRAIL
TRANSITION ZONE
NATURAL AREA
EXISTING TREE LINE TO REMAIN
EXISTING TREE LINE TO BE REMOVED
EXISTING TREE LINE NOT SUPPORTING
EXISTING TREE LINE TO BE REMOVED
EXISTING TREE LINE TO REMAIN

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4	695.20	689.20
5	694.00	688.00
6	692.70	686.70
7	691.50	685.60
8	689.50	684.60
9	687.50	684.10
10	685.00	681.10
11	680.00	675.00
12	680.00	675.00
13	680.10	675.00
14	681.00	676.50
15	681.00	676.50
16	682.00	676.50
17	681.00	677.00
18	680.00	679.00

NOTE: MAXIMUM HEIGHT OF RETAINING WALL = 6'-0".

NOTE: SEE SHEET C2.3 FOR RETAINING WALL DETAILS.

STRUCTURES							
STRUCTURE NO.	TYPE	CASTING TYPE	TOC ELEV	INV OUT ELEV	UPSTREAM STRUCTURE	DEPTH (FT)	LOCATION
S1	TYPE D 4'X4'	TYPE 5	671.9	666.30	2	5.60	LINE A
S2	TYPE D 4'X4'	TYPE 3	672.00	666.57	14	5.73	LINE A
S3	TYPE P 24" BASIN	TYPE P4 DOME	674.50	666.70	N/A	7.80	LINE A
S4	TYPE P 24" BASIN	TYPE P3 SOLID	689.12	686.65	5	2.47	LINE C (UNDERDRAIN)
S5	TYPE P 24" BASIN	TYPE P1 STANDARD	688.63	686.86	N/A	1.77	LINE C (UNDERDRAIN)
S6	TYPE P 24" BASIN	TYPE P3 SOLID	686.20	683.68	N/A	2.52	ROOF DRAIN - LINE 1
S7	TYPE D 4'X4'	TYPE 2V	685.90	680.58	8	5.85	LINE D
S8	TYPE P 24" BASIN	TYPE P1 STANDARD	687.40	680.86	9	6.54	LINE D
S9	TYPE P 24" BASIN	TYPE P1 STANDARD	687.40	681.08	10	6.32	LINE D
S10	TYPE P 24" BASIN	TYPE P4 DOME	687.00	681.15	N/A	5.32	LINE D
S11	SIZE AW ENDWALL	N/A	N/A	686.50	4	N/A	LINE C (UNDERDRAIN)
S12	SIZE AW ENDWALL	N/A	N/A	674.00	N/A	N/A	ROOF DRAIN - LINE 2
S13	TYPE E 48" DIAMETER	TYPE 2V	684.35	680.35	7	4.00	LINE D
S14	TYPE D 4'X4'	TYPE 3	672.00	666.65	3	5.35	LINE A

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STORMWATER NARRATIVE AND STATEMENT OF IMPACTS

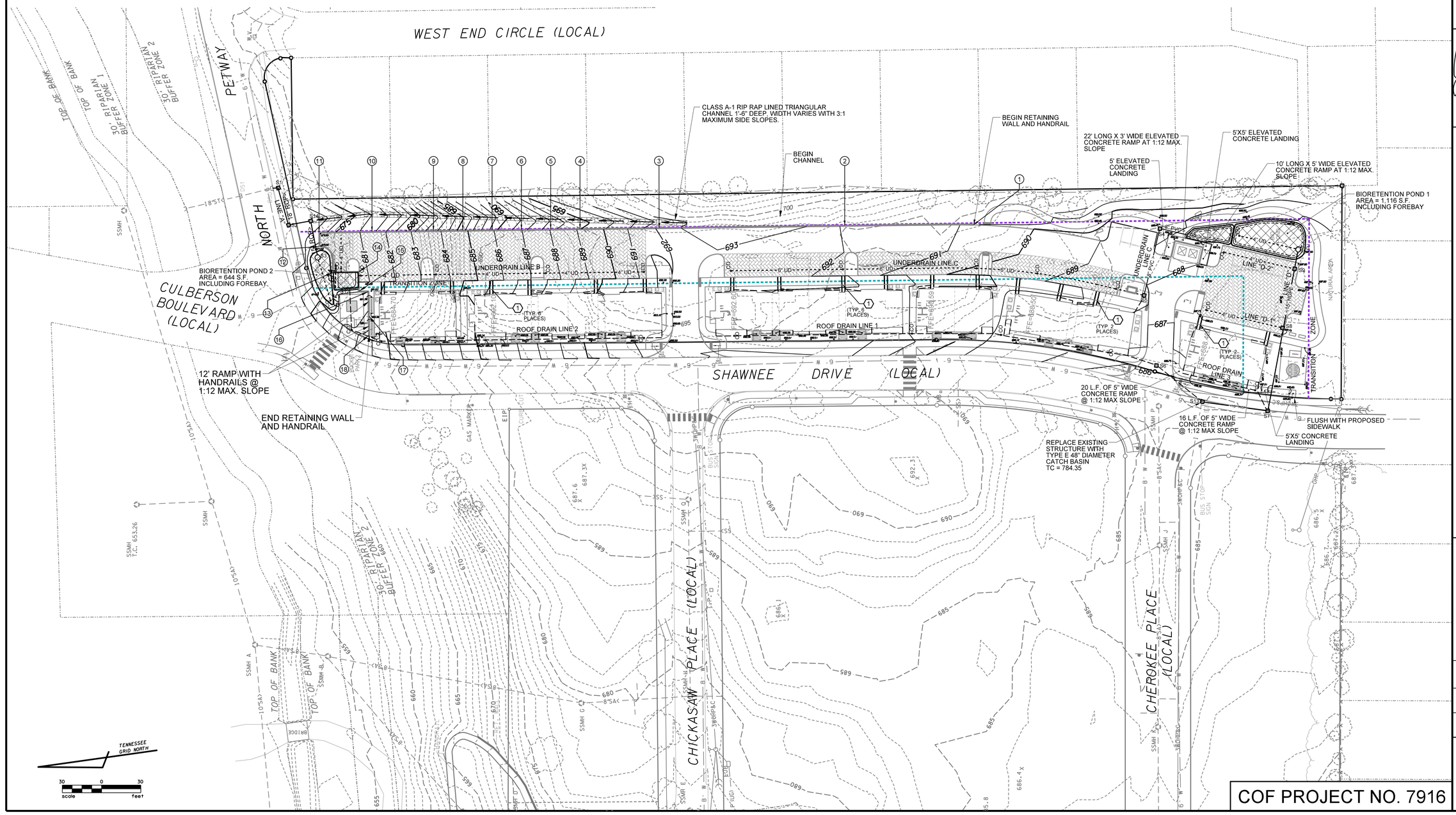
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KEY NOTES:

(1) SIDEWALK CROSS DRAIN, SEE SHEET C2.5/4 (TYP. 16 PLACES)

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- × 674.92 SPOT ELEVATIONS
- ST STORM SEWER
- UD UNDERDRAIN



COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102600 STATE OF TENNESSEE
09-01-22

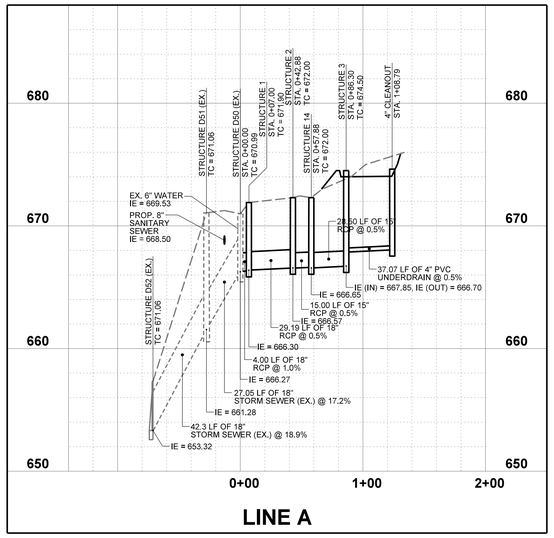
ENLARGED GRADING AND DRAINAGE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

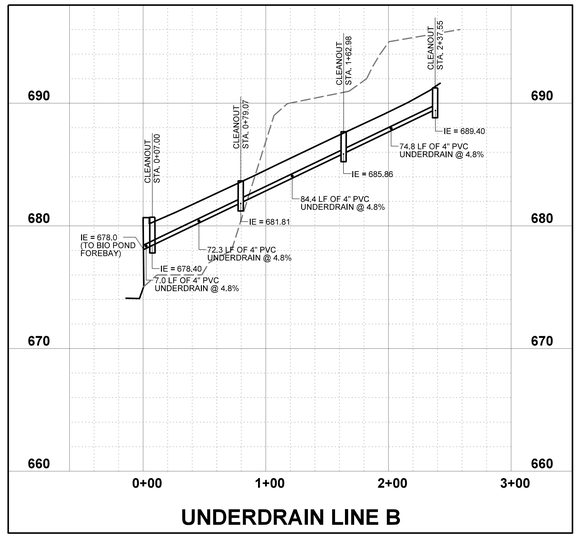
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C3.1

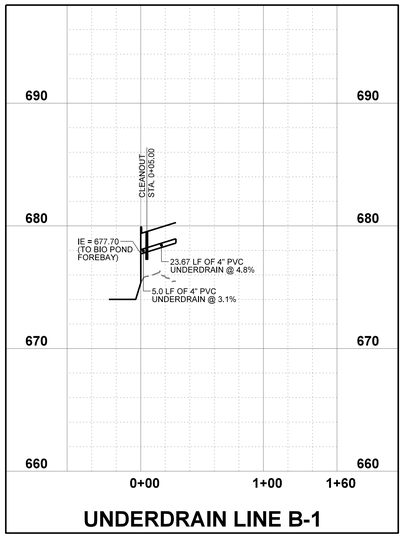
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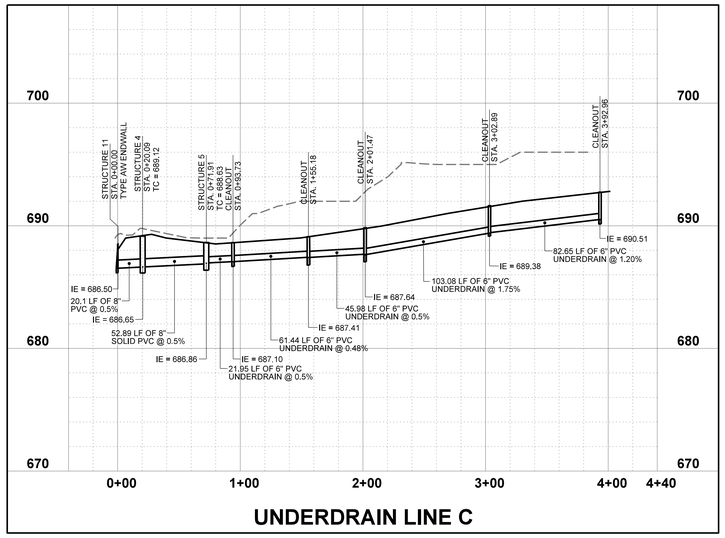
LINE A



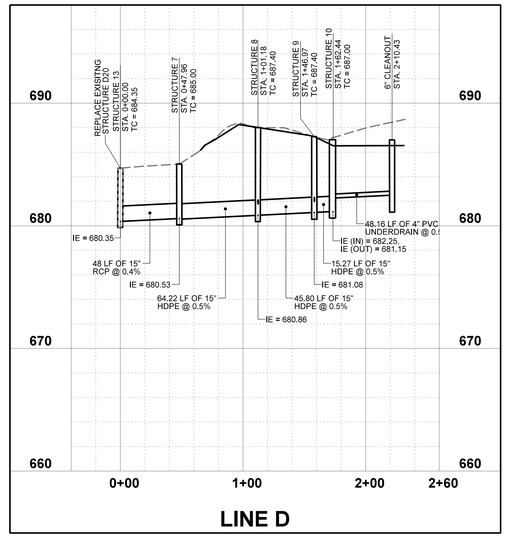
UNDERDRAIN LINE B



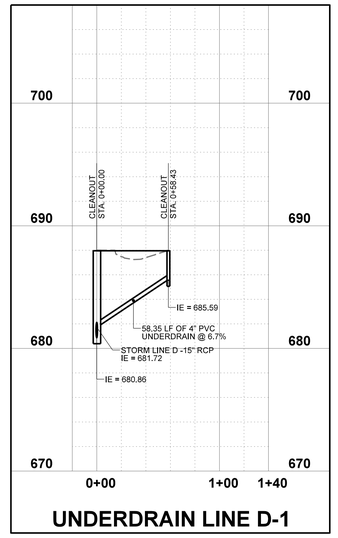
UNDERDRAIN LINE B-1



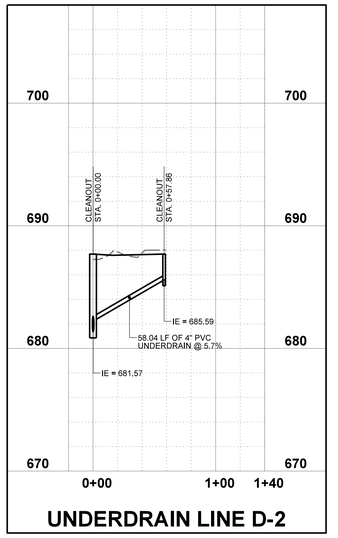
UNDERDRAIN LINE C



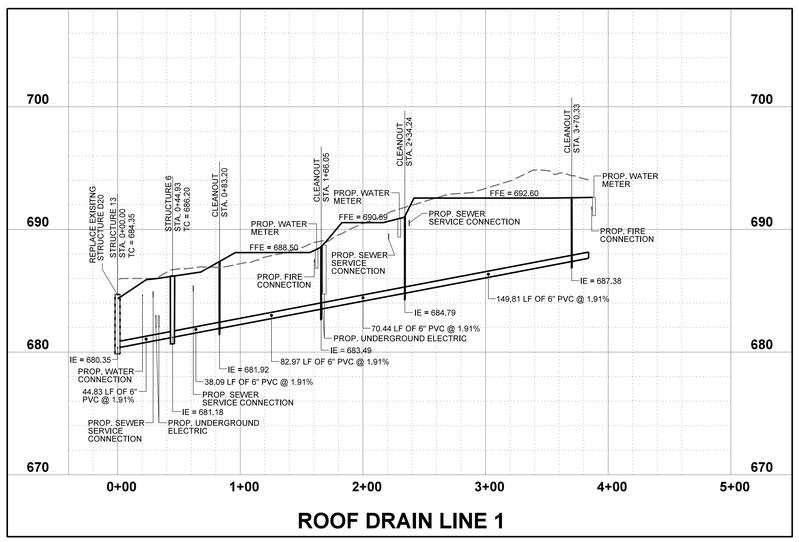
LINE D



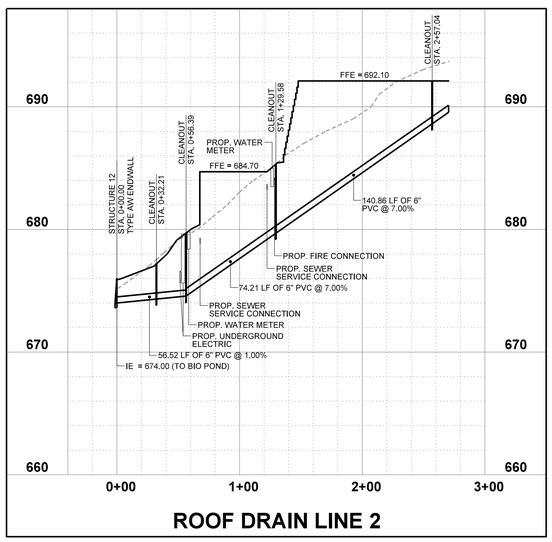
UNDERDRAIN LINE D-1



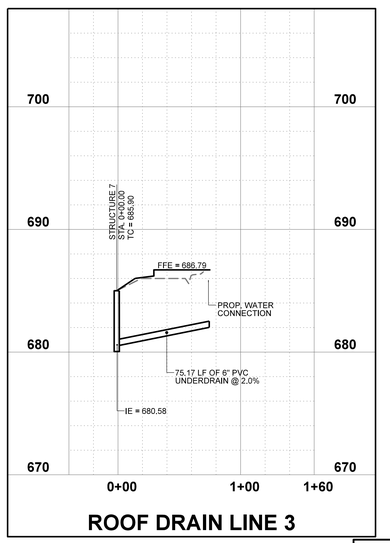
UNDERDRAIN LINE D-2



ROOF DRAIN LINE 1



ROOF DRAIN LINE 2



ROOF DRAIN LINE 3

5 0 5
scale feet
VERTICAL

50 0 50
scale feet
HORIZONTAL
SCLAE IN FEET

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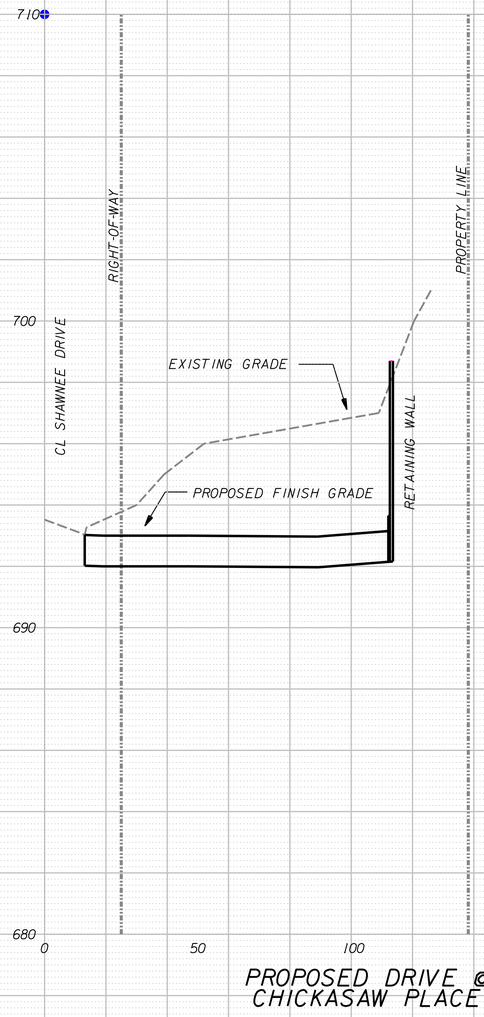
STORM SEWER PROFILES

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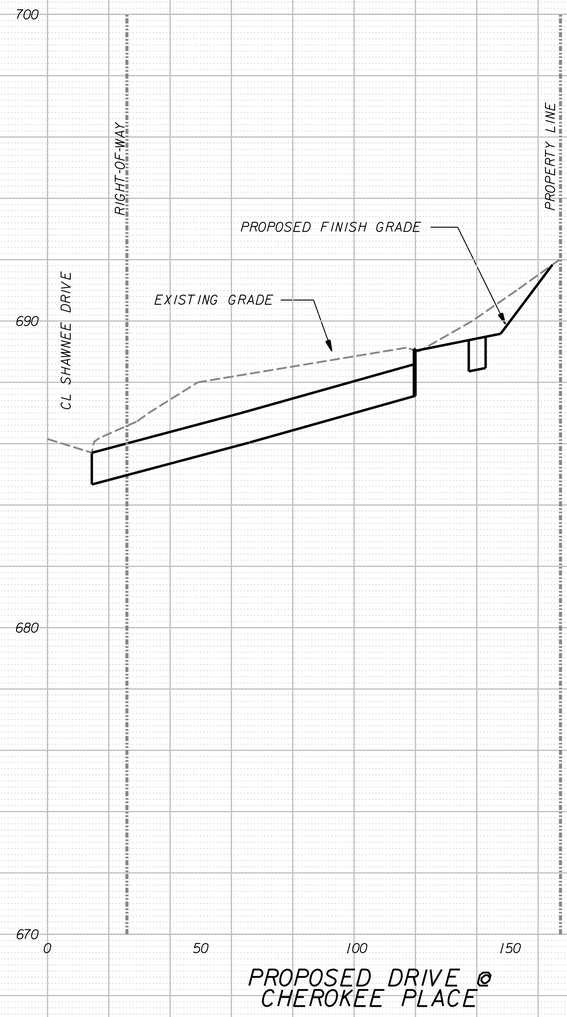
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C3.2

FILE NO. 1716-24



PROPOSED DRIVE @
CHICKASAW PLACE



PROPOSED DRIVE @
CHEROKEE PLACE

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JAMES R. GILLESPIE
REGISTERED
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No. 102855
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09-01-22

DRIVEWAY PROFILES

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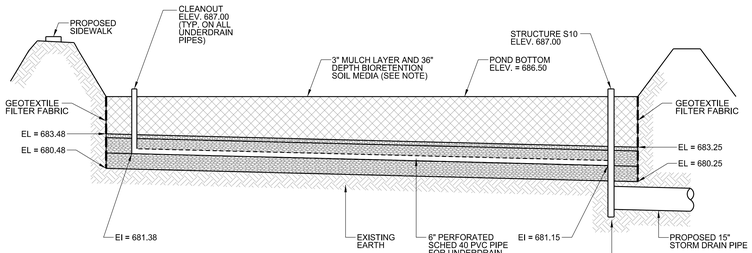
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C3.3

COF PROJECT NO. 7916

FILE NO. 1716-24

BIORETENTION POND 1 AREA (INCLUDING FOREBAY) = 1116 SF



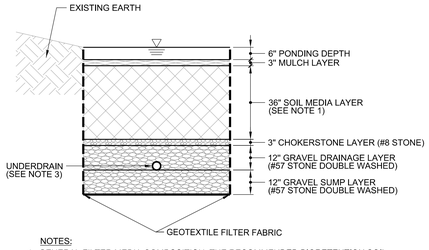
NOTES:

1. BIORETENTION POND PIPE UNDERDRAIN SYSTEM MAY BE EXCLUDED IF SUBSOIL INFILTRATION RATES EXCEED 0.5 INCHES PER HOUR. FOR INFILTRATION RATE TESTING PROCEDURE, SEE CITY OF FRANKLIN BEST MANAGEMENT PRACTICE STORMWATER MANAGEMENT MANUAL, GIP-01, APPENDIX 1-A.
2. SEE TYPICAL LEVEL 2 BIORETENTION DETAIL THIS SHEET.

BIORETENTION POND 1 DETAIL

NOT TO SCALE

1



NOTES:

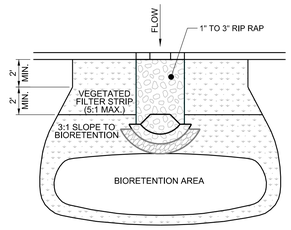
1. GENERAL FILTER MEDIA COMPOSITION. THE RECOMMENDED BIORETENTION SOIL MIXTURE IS GENERALLY CLASSIFIED AS A LOAMY SAND ON THE USDA TEXTURE TRIANGLE WITH THE FOLLOWING COMPOSITION: 85% TO 88% SAND, 8% TO 12% SOIL FINES, AND 3% TO 5% ORGANIC MATTER.
2. THE MULCH LAYER MUST CONSIST OF 3 INCHES OF COMMERCIALLY AVAILABLE FINE SHREDDED HARDWOOD MULCH OR SHREDDED HARDWOOD CHIPS.
3. UNDERDRAIN PIPE: PVC OR CORRUGATED HDPE MUST HAVE 3/8-INCH PERFORATIONS, SPACED ON 6-INCH CENTERS WITH A MINIMUM OF 4 HOLES PER ROW MIN. 0.5% SLOPE.
4. BIORETENTION POND PIPE UNDERDRAIN SYSTEM MAY BE EXCLUDED IF SUBSOIL INFILTRATION RATES EXCEED 0.5 INCHES PER HOUR FOR INFILTRATION RATE TESTING PROCEDURE.
5. BIORETENTION SEED MIX SHALL ACHIEVE FULL COVERAGE AND SOIL STABILIZATION BEFORE LANDSCAPE BONDS WILL BE RELEASED.

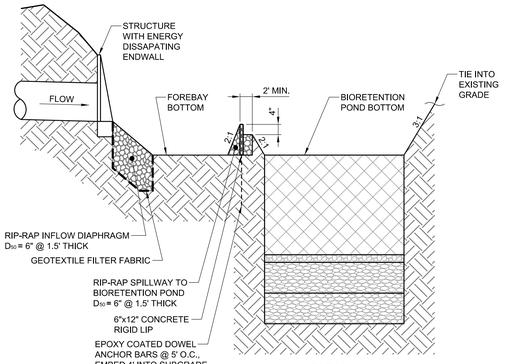
TYPICAL LEVEL 2 BIORETENTION DETAIL

NOT TO SCALE

2

NOTE: FOREBAY BOTTOM TO HAVE RIVER ROCK D_{50} = 3" @ 8" THICK GROUND COVER.





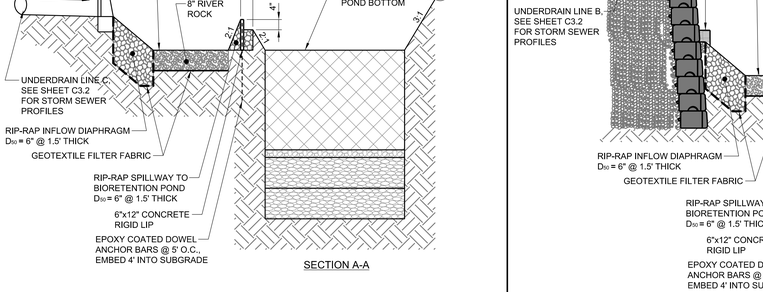
SECTION A-A

BIORETENTION PONDS PRE-TREATMENT DETAIL

NOT TO SCALE

3

BIORETENTION POND 2 AREA (INCLUDING FOREBAY) = 644 SF



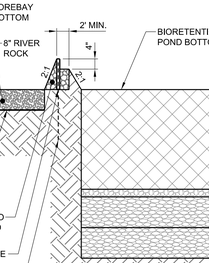
NOTES:

1. BIORETENTION POND PIPE UNDERDRAIN SYSTEM MAY BE EXCLUDED IF SUBSOIL INFILTRATION RATES EXCEED 0.5 INCHES PER HOUR. FOR INFILTRATION RATE TESTING PROCEDURE, SEE CITY OF FRANKLIN BEST MANAGEMENT PRACTICE STORMWATER MANAGEMENT MANUAL, GIP-01, APPENDIX 1-A.
2. SEE TYPICAL LEVEL 2 BIORETENTION DETAIL THIS SHEET.

BIORETENTION POND 2 DETAIL

NOT TO SCALE

4



NOTE: SPREADER LIP STRUCTURE DESIGN TO BE COMPLETED PRIOR TO CONSTRUCTION.

BIORETENTION POND CONCRETE SPEADER LIP DETAIL

NOT TO SCALE

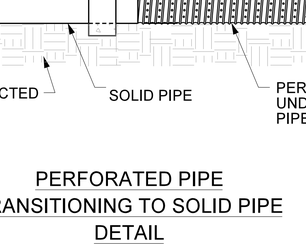
5

NOTES:

1. FOR CONTINUOUS CONDUIT IN TRENCH CONDITIONS, THE WIDTH OF TRENCH (W) SHALL BE OD+2X MAXIMUM.
2. THE WIDTH OF TRENCH FOR ALL PIPE DIAMETERS SHALL BE ACCORDING TO TABLE.
3. BACKFILL MATERIAL IN ROADWAY SHALL BE CRUSHED STONE #67 COMPACTED IN 6" LAYERS FOR THE FULL DEPTH OF THE TRENCH.

TABLE	
PIPE SIZE	X
12" - 30"	12"
33" - 42"	15"
48" & LARGER	18"

WIDTH OF TRENCH (W) = OD+2X WHERE X IS DISTANCE FROM OUTSIDE OF PIPE TO EDGE OF TRENCH.



RIGID PIPE TRENCH DETAIL

NOT TO SCALE

6

NOTES:

1. IF NATIVE SOIL CANNOT CARRY LOAD, IMPORT, COMPACT AND LEVEL ADEQUATE BEDDING MATERIAL.
2. COMPACTED BACKFILL OR SELECT BORROW IN 6 INCH LAYERS AT A MIN. OF 95% DENSITY COMPACTION. BACKFILL MATERIAL UNDER PAVED AREAS SHALL BE CRUSHED STONE #67 COMPACTED IN 6" LAYERS FOR THE FULL DEPTH OF THE TRENCH. MINIMUM COVER SHALL BE 12" FOR PIPE DIAMETERS UP TO 48" AND 24" FOR PIPE DIAMETERS OF 54" THROUGH 60". MINIMUM COVER SHALL BE MEASURED AS FOLLOWS:

   ASPHALT PAVEMENT: FROM BOTTOM OF ASPHALT SECTION
   CONCRETE PAVEMENT: FROM TOP OF CONCRETE SECTION.
3. SEE RIGID PIPE SECTION FOR TRENCH WIDTH REQUIREMENTS.



FLEXIBLE (HDPE) PIPE TRENCH DETAIL

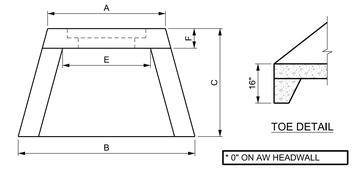
NOT TO SCALE

7

BIORETENTION CELL OR WATER QUALITY SWALE CONSTRUCTION SEQUENCING:

1. CONTRACTOR TO PROVIDE METHOD OF DIVERTING RUNOFF FLOW AROUND THE CONSTRUCTION OF THE BIORETENTION AREA DURING PERIODS OF RAINFALL TO ENSURE SEDIMENT DOES NOT ENTER BIORETENTION AREA.
2. EXCAVATE BIORETENTION AREA. EXCAVATORS OR BACKHOES SHOULD WORK FROM THE SIDES TO EXCAVATE THE BIORETENTION AREA TO THE DESIGN DEPTH AND DIMENSIONS. EXCAVATING EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT SIT INSIDE THE FOOTPRINT OF THE BIORETENTION AREA.
3. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12 INCHES PRIOR TO STONE PLACEMENT.
4. CALL CITY OF FRANKLIN INSPECTOR FOR INSPECTION 615-791-3218.
5. INSTALL WASHED STONE LAYER. INSTALL UNDERDRAIN PIPES AND CONNECT TO THE OUTLET STRUCTURE. INSTALL ADDITIONAL STONE ON THE UNDERDRAIN PIPES AS PER THE BIORETENTION SECTION DETAIL. CONTRACTOR TO FLAG THE UNDERDRAIN LOCATIONS (3 FT EACH SIDE) AS THE ADDITIONAL SECTIONS ARE BEING INSTALLED. A SMALL BOBCAT LOADER IS TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AND IS TO AVOID ACCESSING THE AREAS OF THE UNDERDRAIN PIPE INSTALLATION TO PREVENT DAMAGE TO THE PERFORATED PIPE.
6. INSTALL PERMEABLE GEOTEXTILE FABRIC.
7. DELIVER THE SOIL MEDIA AND STORE IT ON PLASTIC SHEETING WITH THE APPROPRIATE EROSION CONTROL MEASURES ON THE DOWNHILL AND BIORETENTION SIDES.
8. CALL CITY OF FRANKLIN INSPECTOR FOR INSPECTION 615-791-3218.
9. INSTALL THE SOIL MEDIA IN 12 INCH LIFTS UNTIL THE DESIRED TOP ELEVATION IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT AND ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS. DO NOT COMPACT WITH EQUIPMENT.
10. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS. INSTALL THE VEGETATION AND WATER ACCORDINGLY.
11. INSTALL SPECIFIED GROUNDCOVER IN BOTTOM OF BIORETENTION AREA.
12. SOD SLOPES.
13. CONTRACTOR TO FLAG LIMITS OF BIORETENTION BASIN FOR SURVEY TO LOCATE AND SHOW ON AS-BUILT PLANS.

8



SIZE	AW	BW	CW	DW
PIPE SIZE	12"-15"-18"	24"	30"-36"-42"	48"-54"-60"
A	32"	48"	80"	99"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	26"	36"	54"	60"
E	24"	36"	64"	83"
F	6"	8"	8"	8"
MAX.OPENING	22"	32"	55"	75"
WT/LB	1,380	3,100	8,100	11,400

GENERAL NOTES:

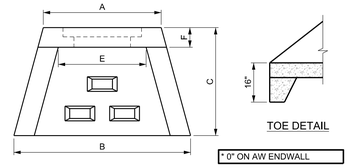
1. ONE MAT OF #5 BARS @ 8" O.C. EACH WAY WITH EXCEPTION OF OVER OPENING WHICH WILL BE #5 BARS @ 4" O.C. EACH WAY.
2. f'c - 4,500 Psi
3. fy - 60 Ksi
4. PIPE OPENING IN FACE OF WALL WILL EQUAL PIPE I.D. FOR 12"-36" DIA. PIPE

NOTE: DIMENSIONS PER SHERMAN DIXIE PRODUCT LINE.

PRECAST WINGED HEADWALL DETAIL

NOT TO SCALE

9



SIZE	AW	BW	CW	DW
PIPE SIZE	12"-15"-18"	24"	30"-36"-42"	48"-54"-60"
A	32"	48"	80"	99"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	26"	36"	54"	60"
E	24"	36"	64"	83"
F	6"	8"	8"	8"
MAX.OPENING	22"	32"	55"	75"
WT/LB	1,380	3,100	8,100	11,400

GENERAL NOTES:

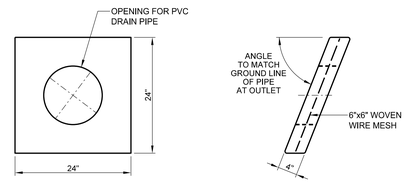
1. MINIMUM REINFORCING WIRE REINFORCEMENT 4x4 W7xW7.
2. f'c - 4,500 Psi
3. fy - 60 Ksi
4. PIPE OPENING IN FACE OF WALL WILL EQUAL PIPE I.D. FOR 12"-36" DIA. PIPE
5. ENERGY DISSIPATORS, AS NEEDED (12"x6"x12").
6. INCLUDE ENERGY DISSIPATOR ON ALL OUTLET HEADWALLS. ENERGY DISSIPATORS NOT REQUIRED ON INLET HEADWALLS.
7. TOE TO BE ADDED TO ALL INLET AND OUTLET HEADWALLS.

NOTE: DIMENSIONS PER SHERMAN DIXIE PRODUCT LINE.

PRECAST WINGED ENDWALL DETAIL

NOT TO SCALE

10



NOTE: FILL GAP BETWEEN HDPE PIPE & COLLAR WITH NON-SHRINK GROUT

HDPE PIPE AND CONCRETE OUTLET COLLAR DETAIL

NOT TO SCALE

11

NOTE: FOREBAY BOTTOM TO HAVE RIVER ROCK D_{50} = 3" @ 8" THICK GROUND COVER.

SECTION A-A

BIORETENTION POND 1 PRE-TREATMENT DETAIL

NOT TO SCALE

12

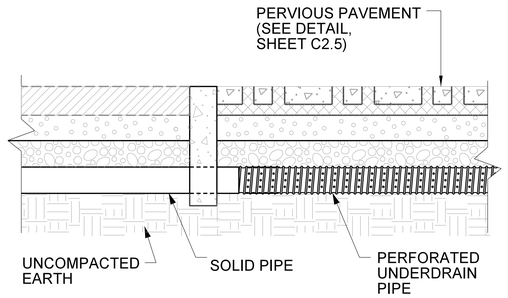
NOTE: FOREBAY BOTTOM TO HAVE RIVER ROCK D_{50} = 3" @ 8" THICK GROUND COVER.

SECTION A-A

BIORETENTION POND 2 PRE-TREATMENT DETAIL

NOT TO SCALE

13



PERFORATED PIPE TRANSITIONING TO SOLID PIPE DETAIL

NOT TO SCALE

14

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09-01-22

GRADING & DRAINAGE DETAILS

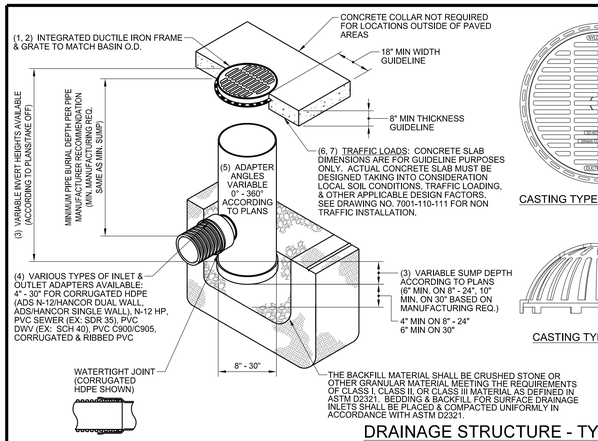
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.4

COF PROJECT NO. 7916

FILE NO. 1716-24





CASTING TYPE P1 - STANDARD



CASTING TYPE P2 - PEDESTRIAN



CASTING TYPE P3 - SOLID

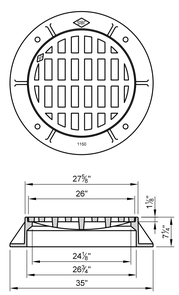


CASTING TYPE P4 - DOME

NOTES:
1. 8" - 30" STANDARD GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" STANDARD GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6. 12" - 30" STANDARD GRATES SHALL MEET H-20 LOAD RATING.
7. 8" & 10" STANDARD GRATES ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

DRAINAGE STRUCTURE - TYPE P WITH CASTINGS
NOT TO SCALE

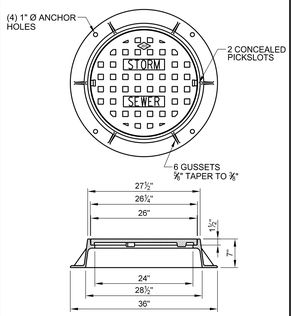
1



NOTES:
1. CASTING SHALL BE JOHN BOUCHARD & SONS (JBS 2150), OR APPROVED EQUAL.
2. CLASS 35B GRAY IRON MACHINED BEARING SURFACES HEAVY DUTY, H20 LOAD RATED.
3. OPEN AREA = 1.21 SF.

DRAINAGE CASTING TYPE 3
NOT TO SCALE

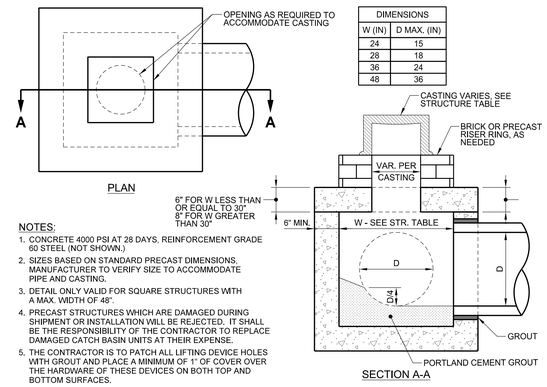
2



NOTES:
1. CASTING SHALL BE JOHN BOUCHARD & SONS (JBS 1247), OR APPROVED EQUAL.
2. CLASS 35B GRAY IRON MACHINED BEARING SURFACES HEAVY DUTY, H20 LOAD RATED.

DRAINAGE CASTING TYPE 5
NOT TO SCALE

3

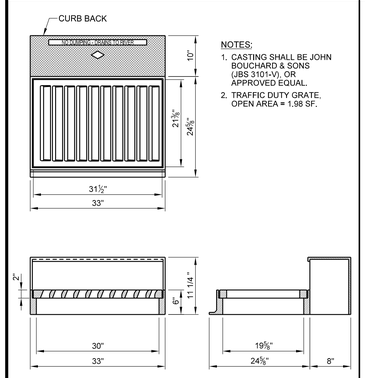


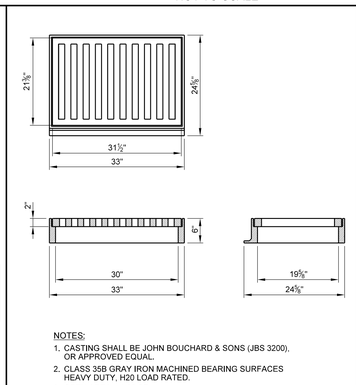
DIMENSIONS	
W (IN)	D MAX. (IN)
24	15
28	18
36	24
48	36

NOTES:
1. CONCRETE 4000 PSI AT 28 DAYS. REINFORCEMENT GRADE 60 STEEL (NOT SHOWN.)
2. SIZES BASED ON STANDARD PRECAST DIMENSIONS. MANUFACTURER TO VERIFY SIZE TO ACCOMMODATE PIPE AND CASTING.
3. DETAIL ONLY VALID FOR SQUARE STRUCTURES WITH A MAX. WIDTH OF 48".
4. PRECAST STRUCTURES WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR EXPENSE.
5. THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF 1" OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

DRAINAGE STRUCTURE - TYPE D
NOT TO SCALE

4





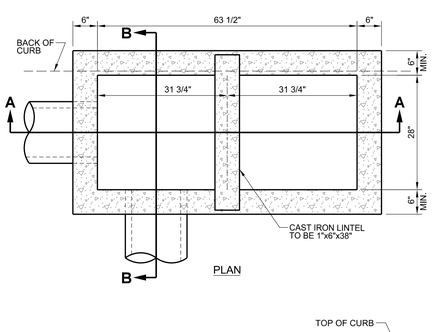
NOTES:
1. CASTING SHALL BE JOHN BOUCHARD & SONS (JBS 3200), OR APPROVED EQUAL.
2. CLASS 35B GRAY IRON MACHINED BEARING SURFACES HEAVY DUTY, H20 LOAD RATED.
3. OPEN AREA = 1.98 SF.

DRAINAGE CASTING - TYPE 2V
NOT TO SCALE

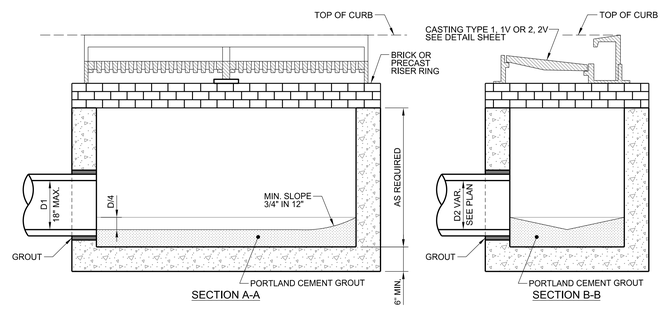
5

DRAINAGE CASTING - TYPE 6
NOT TO SCALE

6

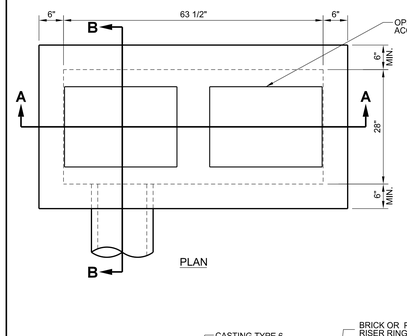


NOTES:
1. CONCRETE 4000 PSI AT 28 DAYS. REINFORCEMENT GRADE 60 STEEL (NOT SHOWN.)
2. SIZES BASED ON STANDARD PRECAST DIMENSIONS. MANUFACTURER TO VERIFY SIZE TO ACCOMMODATE PIPE AND CASTING.
3. PRECAST STRUCTURES WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR EXPENSE.
4. THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF 1" OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

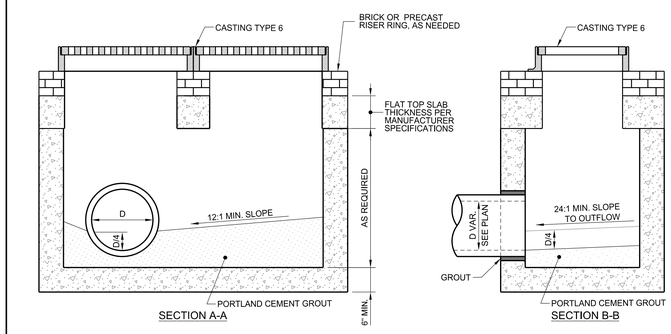


DRAINAGE STRUCTURE - TYPE B
NOT TO SCALE

7

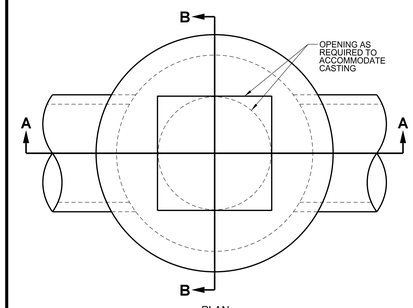


NOTES:
1. CONCRETE 4000 PSI AT 28 DAYS. REINFORCEMENT GRADE 60 STEEL (NOT SHOWN.)
2. SIZES BASED ON STANDARD PRECAST DIMENSIONS. MANUFACTURER TO VERIFY SIZE TO ACCOMMODATE PIPE AND CASTING.
3. PRECAST STRUCTURES WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR EXPENSE.
4. THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF 1" OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.



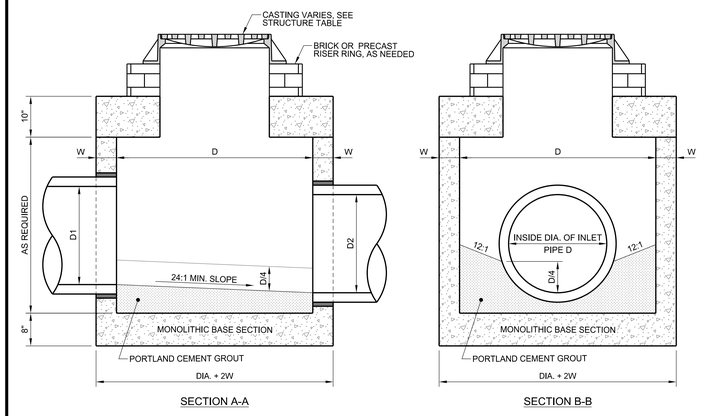
DRAINAGE STRUCTURE - TYPE G
NOT TO SCALE

8



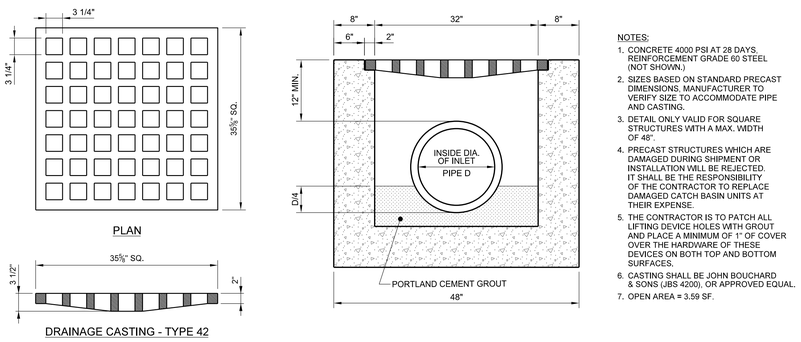
NOTES:
1. CONCRETE 4000 PSI AT 28 DAYS. REINFORCEMENT GRADE 60 STEEL (NOT SHOWN.)
2. SIZES BASED ON STANDARD PRECAST DIMENSIONS. MANUFACTURER TO VERIFY SIZE TO ACCOMMODATE PIPE AND CASTING.
3. DETAIL ONLY VALID FOR ROUND STRUCTURES WITH A MAX. DIAMETER OF 72".
4. PRECAST STRUCTURES WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR EXPENSE.
5. THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF 1" OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.

DIMENSIONS			
D (IN)	W (IN)	D1 MAX.-STRAIGHT (IN)	D1 MAX.-90° (IN)
48	5	24	18
60	6	36	24
72	7	48	30



DRAINAGE STRUCTURE - TYPE E
NOT TO SCALE

9



NOTES:
1. CONCRETE 4000 PSI AT 28 DAYS. REINFORCEMENT GRADE 60 STEEL (NOT SHOWN.)
2. SIZES BASED ON STANDARD PRECAST DIMENSIONS. MANUFACTURER TO VERIFY SIZE TO ACCOMMODATE PIPE AND CASTING.
3. DETAIL ONLY VALID FOR SQUARE STRUCTURES WITH A MAX. WIDTH OF 48".
4. PRECAST STRUCTURES WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT THEIR EXPENSE.
5. THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF 1" OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
6. CASTING SHALL BE JOHN BOUCHARD & SONS (JBS 4200), OR APPROVED EQUAL.
7. OPEN AREA = 3.59 SF.

DRAINAGE STRUCTURE - TYPE F
NOT TO SCALE

10

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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 120201 STATE OF TENNESSEE
09-01-22

GRADING & DRAINAGE DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.5

COF PROJECT NO. 7916

FILE NO. 1716-24

EROSION AND SEDIMENT CONTROL LEGEND:

STRUCTURAL PRACTICES

- CE — CONSTRUCTION ENTRANCE (CE) (REFER TO SHEET C3.9, DETAIL 1)
- SFB — SILT FENCE WITH WIRE BACKING (SFB) (REFER TO SHEET C3.9, DETAILS 3 AND 4)
- SF — SILT FENCE (SF) (REFER TO SHEET C3.9, DETAILS 3 AND 4)
- IP — INLET PROTECTION (IP) (REFER TO SHEET C3.9, DETAIL 7)
- OP — OUTLET PROTECTION (OP) (REFER TO SHEET C3.9, DETAIL 8)
- ST — SEDIMENT TUBE (ST) (REFER TO SHEET C3.9, DETAIL 3)
- CD — STONE CHECK DAM (CD) (REFER TO SHEET C3.9, DETAILS 10 AND 11)
- CWA — CONCRETE WASHOUT AREA (CWA) NOTE: CONCRETE WASHOUT SHALL BE PERFORMED ONLY IN DESIGNATED AREAS. WASHOUT AREA SHALL BE AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES OR OTHER BODIES OF WATER. A TEMPORARY PIT OR BERMED AREA LARGE ENOUCH FOR LIQUID AND SOLID WASTE SHALL BE CONSTRUCTED IN ORDER TO PROHIBIT RUNOFF FROM LEAVING THE AREA. A SEDIMENT TRAP OR OTHER MEANS SHALL BE UTILIZED IN ORDER TO PROTECT THE STORMWATER SYSTEM. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF WASHOUT AREA WITH NPDES PERSONNEL DURING PRECONSTRUCTION MEETING.
- TW — TIRE WASHING FACILITY, SEE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK, DETAIL 7.29. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A WATER SUPPLY, BY TANKER TRUCK OR CONNECTION TO PUBLIC SUPPLY. CONTRACTOR WILL BE RESPONSIBLE FOR FEES ASSOCIATED WITH PUBLIC CONNECTION, INCLUDING BUT NOT LIMITED TO TAP FEES, TEMPORARY METER AND CROSS CONNECTION DEVICE AND COST OF WATER.

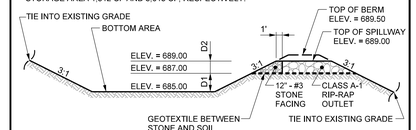
VEGETATIVE PRACTICES

- MA — EROSION CONTROL MATTING (MA) NA GREEN DS-150 (OR EQUIVALENT) (REFER TO SHEET C3.9, DETAIL 9)
- PS — DISTURBED AREA STABILIZATION w/PERMANENT SEEDING (PS) (TYPICAL FOR ALL DISTURBED AREAS)
- MU — STRAW MULCH
- TS — DISTURBED AREA STABILIZATION w/TEMPORARY SEEDING (< ONE YEAR)
- GR — GRAVEL STABILIZATION FOR BUILDING PADS, SEE ARCHITECTURAL PLANS FOR STONE TYPE AND DEPTH
- HVF — HIGH-VISIBILITY CONSTRUCTION FENCE
- DBIP — DROP BAG INLET PROTECTION (DBIP) NOTE: DROP BAG INLET PROTECTION WITH OVERFLOW PORTS SHALL BE INSTALLED IN CATCH BASIN ON CITY OF FRANKLIN STREETS, THE LOWEST CATCH BASINS ON THE SITE OR AT AREA DRAINS THAT MAY CAUSE FLOODING. DROP BAG INLET PROTECTION SHALL BE ADS FLEX STORM OR AN APPROVED EQUAL PRODUCT.

SEDIMENT TRAP NOTES:
1. MINIMUM BOTTOM AREA = 710 SF
2. D1 = WET STORAGE DEPTH = 2.00 FT
3. D2 = DRY STORAGE DEPTH = 2.00 FT

CONTRIBUTING DRAINAGE AREA = 1.7 AC WITH A REQUIRED VOLUME OF 4,590 CF. PROVIDED VOLUMES FOR WET AND DRY STORAGE AREA 1,512 CF AND 3,015 CF, RESPECTIVELY.

SEDIMENT TRAP WEIR: SEDIMENT TRAP TO HAVE A WEIR LENGTH OF 30 FT AT THE TOP, WITH A BERM / OUTLET WIDTH OF 5 FT.

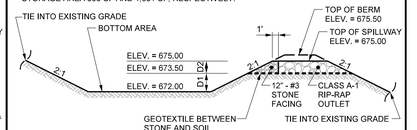


SEDIMENT TRAP NO. 1 DETAIL
(NOT TO SCALE)

SEDIMENT TRAP NOTES:
1. MINIMUM BOTTOM AREA = 232 SF
2. D1 = WET STORAGE DEPTH = 1.50 FT
3. D2 = DRY STORAGE DEPTH = 1.50 FT

CONTRIBUTING DRAINAGE AREA = 0.60 AC WITH A REQUIRED VOLUME OF 1,539 CF. PROVIDED VOLUMES FOR WET AND DRY STORAGE AREA 508 CF AND 1,031 CF, RESPECTIVELY.

SEDIMENT TRAP WEIR: SEDIMENT TRAP TO HAVE A WEIR LENGTH OF 30 FT AT THE TOP, WITH A BERM / OUTLET WIDTH OF 5 FT.



SEDIMENT TRAP NO. 2 DETAIL
(NOT TO SCALE)

Basin	Turf A (sf)	Turf B (sf)	Turf C (sf)	Woods-Grass (sf)	Pervious Pavers (sf)	Ponds - Water (sf)	Impervious (sf)	Total Area (sf)	Total Area (ac)	Weighted CN	Tc Design (min.)
PRE-DEVELOPED - TOTAL SITE											
E1	45360	24702						70062	**1.61**	56	8
E2	31759	10958						42717	**0.98**	54	6
Total Existing Site	77119	35660	0	0	0	0	0	112779	**2.59**	55	
							Total Existing Study Area =		**2.59**		

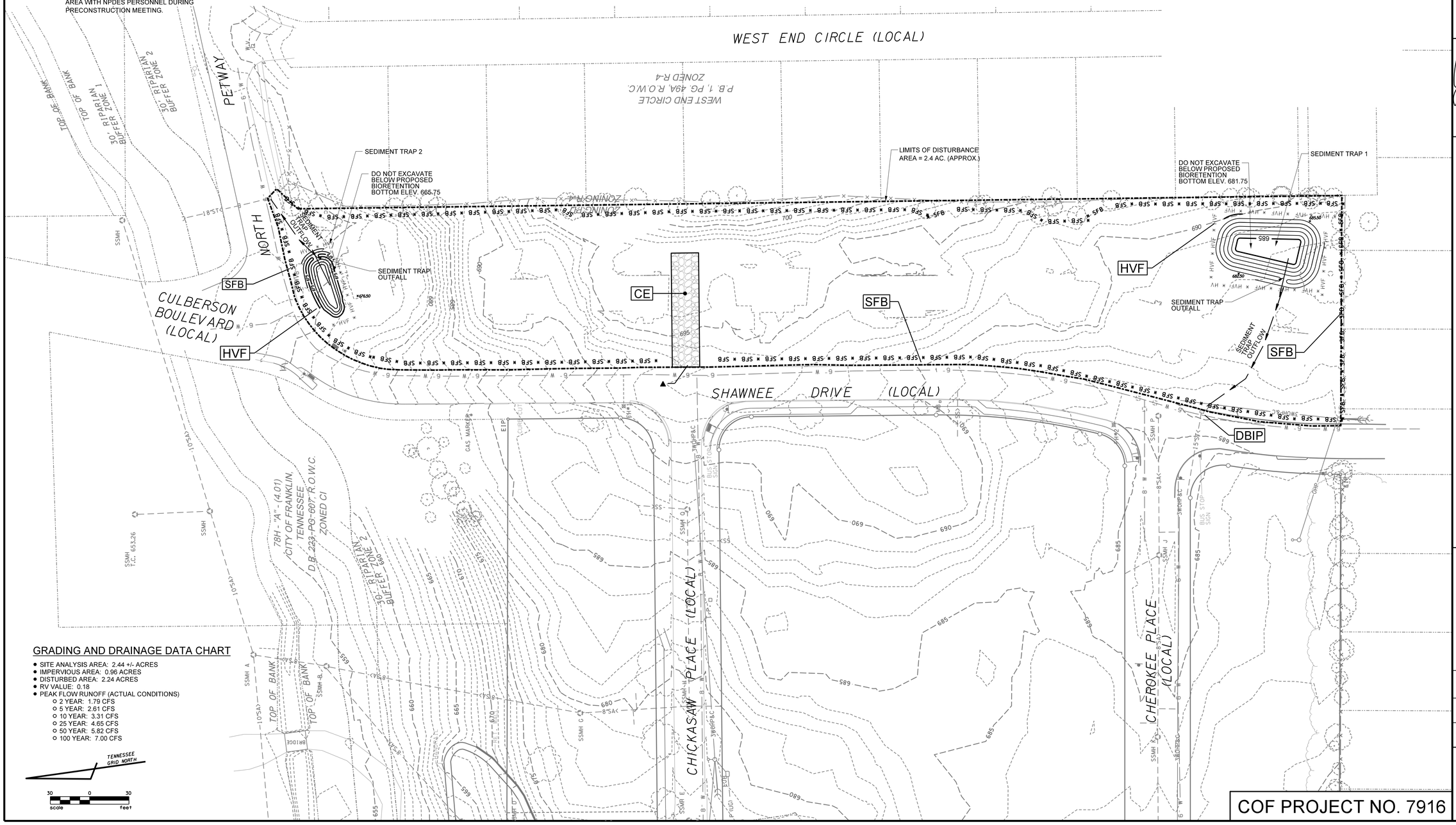
THE CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS PRIOR TO SCHEDULING A PRECONSTRUCTION MEETING:
1. INSTALL CONSTRUCTION ENTRANCE/EXIT.
2. DESIGNATE STORAGE AREAS.
3. INSTALL SILT FENCE AND TREE PROTECTION.

NOTES:

1. REFER TO SHEETS C3.9 AND C3.10 FOR EROSION CONTROL NOTES AND DETAILS.
2. DISTURBED AREA SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE BOUNDARY SHOWN ON THIS SHEET. THE SIZE OF THIS AREA TOTALS 2.4 ACRES.
3. REFER TO SHEET C3.10 FOR QLP CHECKLIST.
4. REFER TO SHEET D1.0 FOR EXISTING DRAINAGE CONDITIONS AND SHEET D1.1 FOR EXISTING LAND USE CONDITIONS.
5. TEMPORARY SEDIMENT TRAPS TO BE INSTALLED IMMEDIATELY FOLLOWING PRE-CONSTRUCTION MEETING, AND SHALL BE COMPLETED BEFORE ANY LAND DISTURBANCE TAKES PLACE WITHIN THE CONTRIBUTING DRAINAGE AREA.

▲ DENOTES: TERMINATE AT EDGE OF PAVEMENT. INSTALL TEMPORARY RUMBLE STRIPS AND TIRE WASHING FACILITY AT END OF ENTRANCE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A WATER SOURCE. IF A PUBLIC CONNECTION IS UTILIZED, CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING AND FURNISHING ALL CROSS-CONNECTION AND METERING DEVICES. COST OF WATER SHALL BE COORDINATED WITH THE OWNER PRIOR TO COMMENCING WITH CONSTRUCTION ACTIVITIES.

NOTE: SILT FENCE ALONG SHAWNEE DRIVE AND NORTH PETWAY STREET SHALL BE INSTALLED BEHIND CURBS.



GRADING AND DRAINAGE DATA CHART

- SITE ANALYSIS AREA: 2.44 +/- ACRES
- IMPERVIOUS AREA: 0.96 ACRES
- DISTURBED AREA: 2.24 ACRES
- RV VALUE: 0.18
- PEAK FLOW RUNOFF (ACTUAL CONDITIONS)
  - 2 YEAR: 1.79 CFS
  - 5 YEAR: 2.61 CFS
  - 10 YEAR: 3.31 CFS
  - 25 YEAR: 4.65 CFS
  - 50 YEAR: 5.82 CFS
  - 100 YEAR: 7.00 CFS

TENNESSEE GRID NORTH

30 0 30
scale feet

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JAMES R. GILLESPIE — REGISTERED — No. 102501 — STATE OF TENNESSEE
09-01-22

INITIAL EPSC/PRE-CONSTRUCTION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C3.6

COF PROJECT NO. 7916

FILE NO. 1716-24

EROSION AND SEDIMENT CONTROL LEGEND:

STRUCTURAL PRACTICES

- **CE** — CONSTRUCTION ENTRANCE (CE) (REFER TO SHEET C3.9, DETAIL 1)
- **SFB** — SILT FENCE WITH WIRE BACKING (SFB) (REFER TO SHEET C3.9, DETAILS 3 AND 4)
- **SF** — SILT FENCE (SF) (REFER TO SHEET C3.9, DETAILS 3 AND 4)
- **IP** — INLET PROTECTION (IP) (REFER TO SHEET C3.9, DETAIL 7)
- **OP** — OUTLET PROTECTION (OP) (REFER TO SHEET C3.9, DETAIL 8)
- **ST** — SEDIMENT TUBE (ST) (REFER TO SHEET C3.9, DETAIL 3)
- **CD** — STONE CHECK DAM (CD) (REFER TO SHEET C3.9, DETAILS 10 AND 11)
- **CWA** — CONCRETE WASHOUT AREA (CWA) NOTE: CONCRETE WASHOUT SHALL BE PERFORMED ONLY IN DESIGNATED AREAS. WASHOUT AREA SHALL BE AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES OR OTHER BODIES OF WATER. A TEMPORARY PIT OR BERMED AREA LARGE ENOUCH FOR LIQUID AND SOLID WASTE SHALL BE CONSTRUCTED IN ORDER TO PROHIBIT RUNOFF FROM LEAVING THE AREA. A SEDIMENT TRAP OR OTHER MEANS SHALL BE UTILIZED IN ORDER TO PROTECT THE STORMWATER SYSTEM. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF WASHOUT AREA WITH NPDES PERSONNEL DURING PRECONSTRUCTION MEETING.
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VEGETATIVE PRACTICES

- **MA** — EROSION CONTROL MATTING (MA) NA GREEN DS-150 (OR EQUIVALENT) (REFER TO SHEET C3.9, DETAIL 9)
- **PS** — DISTURBED AREA STABILIZATION w/PERMANENT SEEDING (PS) (TYPICAL FOR ALL DISTURBED AREAS)
- **MU** — STRAW MULCH
- **TS** — DISTURBED AREA STABILIZATION w/TEMPORARY SEEDING (< ONE YEAR)
- **GR** — GRAVEL STABILIZATION FOR BUILDING PADS, SEE ARCHITECTURAL PLANS FOR STONE TYPE AND DEPTH
- **HVF** — HIGH-VISIBILITY CONSTRUCTION FENCE
- **DBIP** — DROP BAG INLET PROTECTION (DBIP) NOTE: DROP BAG INLET PROTECTION WITH OVERFLOW PORTS SHALL BE INSTALLED IN CATCH BASIN ON CITY OF FRANKLIN STREETS, THE LOWEST CATCH BASINS ON THE SITE OR AT AREA DRAINS THAT MAY CAUSE FLOODING. DROP BAG INLET PROTECTION SHALL BE ADS FLEX STORM OR AN APPROVED EQUAL PRODUCT.

GRADING AND DRAINAGE DATA CHART

- SITE ANALYSIS AREA: 2.44 +/- ACRES
- IMPERVIOUS AREA: 0.96 ACRES
- DISTURBED AREA: 2.24 ACRES
- RV VALUE: 0.18
- PEAK FLOW RUNOFF (ACTUAL CONDITIONS)
  - 2 YEAR: 1.79 CFS
  - 5 YEAR: 2.61 CFS
  - 10 YEAR: 3.31 CFS
  - 25 YEAR: 4.65 CFS
  - 50 YEAR: 5.82 CFS
  - 100 YEAR: 7.00 CFS

NOTES:

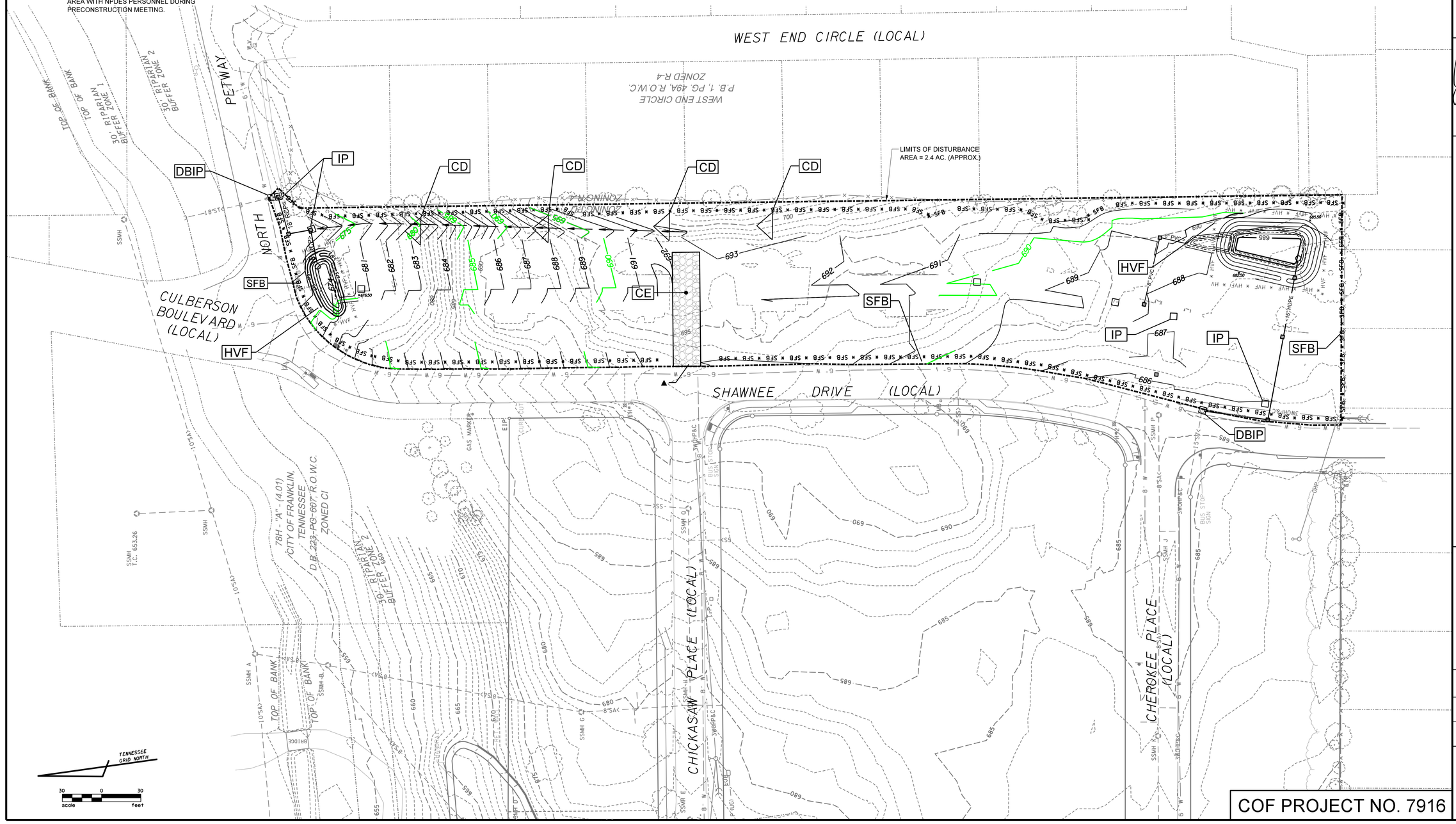
1. REFER TO SHEETS C3.9 AND C3.10 FOR EROSION CONTROL NOTES AND DETAILS.
2. DISTURBED AREA SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE BOUNDARY SHOWN ON THIS SHEET. THE SIZE OF THIS AREA TOTALS 2.4 ACRES.
3. REFER TO SHEET C3.10 FOR QLP CHECKLIST.
4. REFER TO SHEET D2.0 FOR PROPOSED DRAINAGE CONDITIONS AND SHEET D2.1 FOR PROPOSED LAND USE CONDITIONS.

▲ DENOTES: TERMINATE AT EDGE OF PAVEMENT. INSTALL TEMPORARY RUMBLE STRIPS AND TIRE WASHING FACILITY AT END OF ENTRANCE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A WATER SOURCE. IF A PUBLIC CONNECTION IS UTILIZED, CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING AND FURNISHING ALL CROSS-CONNECTION AND METERING DEVICES. COST OF WATER SHALL BE COORDINATED WITH THE OWNER PRIOR TO COMMENCING WITH CONSTRUCTION ACTIVITIES.

NOTE: SILT FENCE ALONG SHAWNEE DRIVE AND NORTH PETWAY STREET SHALL BE INSTALLED BEHIND CURBS.

THE CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS:

1. CONSTRUCT CHECK DAMS AND PROVIDE REQUIRED MAINTENANCE.
2. INSTALL AND MAINTAIN INLET PROTECTION.
3. MAINTAIN HIGH-VISIBILITY CONSTRUCTION FENCE AT SEDIMENT TRAPS.
4. PROVIDE ALL REQUIRED INSPECTION COMPLETE WITH DOCUMENTATION.
5. MAINTAIN SILT FENCES AND CONSTRUCTION ENTRANCE/EXIT.
6. PROVIDE PROTECTION OF SENSATIVE AREAS.



COF PROJECT NO. 7916

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JAMES R. GILLESPIE — REGISTERED PROFESSIONAL ENGINEER — No. 102501 — STATE OF TENNESSEE
09-01-22

INTERIM EPSC/CONSTRUCTION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.7

FILE NO. 1716-24

EROSION AND SEDIMENT CONTROL LEGEND:

STRUCTURAL PRACTICES

CE CONSTRUCTION ENTRANCE (CE)
(REFER TO SHEET C3.9, DETAIL 1)

SFB SILT FENCE WITH WIRE BACKING (SFB)
(REFER TO SHEET C3.9, DETAILS 3 AND 4)

SF SILT FENCE (SF)
(REFER TO SHEET C3.9, DETAILS 3 AND 4)

IP INLET PROTECTION (IP)
(REFER TO SHEET C3.9, DETAIL 7)

OP OUTLET PROTECTION (OP)
(REFER TO SHEET C3.9, DETAIL 8)

ST SEDIMENT TUBE (ST)
(REFER TO SHEET C3.9, DETAIL 3)

CD STONE CHECK DAM (CD)
(REFER TO SHEET C3.9, DETAILS 10 AND 11)

CWA CONCRETE WASHOUT AREA (CWA)
NOTE: CONCRETE WASHOUT SHALL BE PERFORMED ONLY IN DESIGNATED AREAS. WASHOUT AREA SHALL BE AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES OR OTHER BODIES OF WATER. A TEMPORARY PIT OR BERMED AREA LARGE ENOUCH FOR LIQUID AND SOLID WASTE SHALL BE CONSTRUCTED IN ORDER TO PROHIBIT RUNOFF FROM LEAVING THE AREA. A SEDIMENT TRAP OR OTHER MEANS SHALL BE UTILIZED IN ORDER TO PROTECT THE STORMWATER SYSTEM. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF WASHOUT AREA WITH NPDES PERSONNEL DURING PRECONSTRUCTION MEETING.

TW TIRE WASHING FACILITY, SEE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK, DETAIL 7.29. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A WATER SUPPLY, BY TANKER TRUCK OR CONNECTION TO PUBLIC SUPPLY. CONTRACTOR WILL BE RESPONSIBLE FOR FEES ASSOCIATED WITH PUBLIC CONNECTION, INCLUDING BUT NOT LIMITED TO TAP FEES, TEMPORARY METER AND CROSS CONNECTION DEVICE AND COST OF WATER.

VEGETATIVE PRACTICES

MA EROSION CONTROL MATTING (MA)
NA GREEN DS-150 (OR EQUIVALENT)
(REFER TO SHEET C3.9, DETAIL 9)

PS DISTURBED AREA STABILIZATION w/PERMANENT SEEDING (PS) (TYPICAL FOR ALL DISTURBED AREAS)

MU STRAW MULCH

TS DISTURBED AREA STABILIZATION w/TEMPORARY SEEDING (< ONE YEAR)

GR GRAVEL STABILIZATION FOR BUILDING PADS, SEE ARCHITECTURAL PLANS FOR STONE TYPE AND DEPTH

DBIP DROP BAG INLET PROTECTION (DBIP)
NOTE: DROP BAG INLET PROTECTION WITH OVERFLOW PORTS SHALL BE INSTALLED IN CATCH BASIN ON CITY OF FRANKLIN STREETS, THE LOWEST CATCH BASINS ON THE SITE OR AT AREA DRAINS THAT MAY CAUSE FLOODING. DROP BAG INLET PROTECTION SHALL BE ADS FLEX STORM OR AN APPROVED EQUAL PRODUCT.

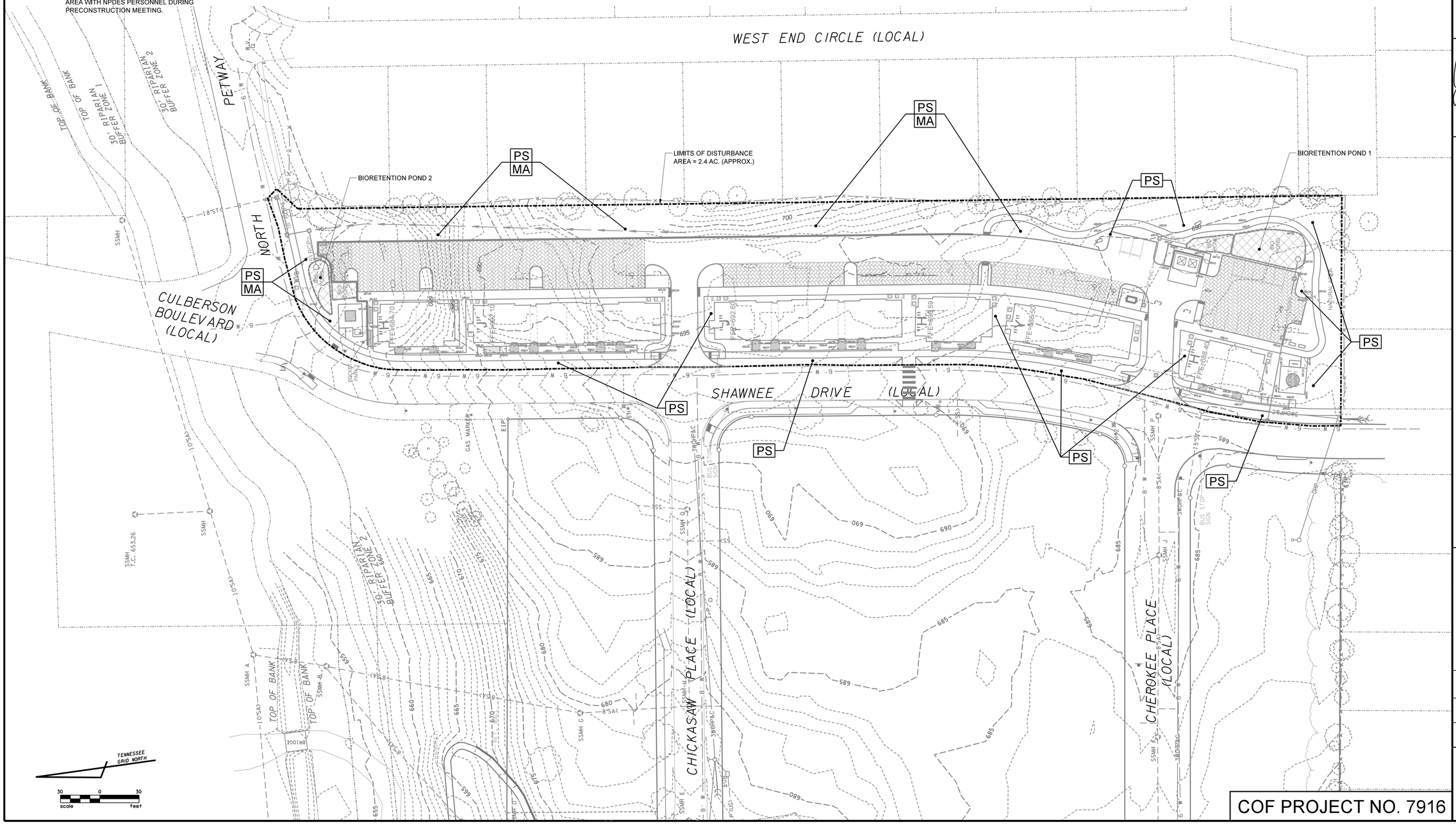
NOTES:

1. REFER TO SHEETS C3.9 AND C3.10 FOR EROSION CONTROL NOTES AND DETAILS.
2. DISTURBED AREA SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE BOUNDARY SHOWN ON THIS SHEET. THE SIZE OF THIS AREA TOTALS 2.4 ACRES.
3. REFER TO SHEET D2.0 FOR PROPOSED DRAINAGE CONDITIONS AND SHEET D2.1 FOR PROPOSED LAND USE.

THE CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS:

1. CONTINUE PROVIDING INSPECTIONS AND DOCUMENTATION.
2. CONTINUE TO PROVIDE MAINTENANCE TO EPSC MEASURES.
3. REMOVE SEDIMENT FROM SEDIMENT TRAPS AND CONSTRUCT BIORETENTION PONDS.
4. REMOVE EPSC MEASURES WHEN THEY ARE NO LONGER REQUIRED.
5. INSTALL DISTURBED AREA STABILIZATION.
6. INSTALL EROSION CONTROL MATTING.
7. PROVIDE WATER AND MAINTENANCE REQUIRED TO PROVIDE PROPER SITE STABILIZATION.

Basin	Turf A (sf)	Turf B (sf)	Turf C (sf)	Woods-Grass (sf)	Pervious Pavers (sf)	Ponds - Water (sf)	Impervious (sf)	Total Area (sf)	Total Area (ac)	Weighted CN	Tc Design (min.)
POST-DEVELOPED - TOTAL SITE											
P1 TO BIO	15277	3897			8075		26848	54097	**1.24**	73	N/A
P1 BYPASS	9478	2909					3853	16240	**0.37**	57	N/A
P2 TO BIO	2499	526			3614		13542	20181	**0.46**	83	N/A
P2 TO BYPASS	6928	1489					7138	15556	**0.36**	68	N/A
Total Proposed Site	34182	8821	0	0	11689	0	51381	106074	**2.44**	72	
							Total Proposed Study Area =		**2.44**		



COF PROJECT NO. 7916

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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102501 STATE OF TENNESSEE
09-01-22

FINAL EPSC PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.8

FILE NO. 1716-24

EROSION AND SEDIMENT CONTROL NOTES:

1. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
2. MAINTENANCE, EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
3. EROSION CONTROL WORK PERFORMED BY THE CONTRACTOR SHALL BE IN ACCORDANCE WITH TDEC STANDARD SPECIFICATIONS AND DETAILS.
4. ALL STEEP SLOPES MUST BE STABILIZED WITHIN SEVEN CALENDAR DAYS OF DISTURBANCE. ALL OTHER DISTURBED AREAS OF THE PROJECT SITE MUST BE STABILIZED WITHIN FOURTEEN CALENDAR DAYS.
5. ALL POINTS OF INGRESS AND EGRESS SHALL BE PROTECTED TO MINIMIZE TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS AND ROADS.
6. ANY EARTH, GRAVEL, AND/OR OTHER MATERIAL TRACKED, SPILLED, OR WASHED ONTO ROAD OR ADJACENT PROPERTIES MUST BE IMMEDIATELY REMOVED AND DISPOSED OF IN A PROPER MANNER. FLUSHING WILL NOT BE PERMITTED. ALL MATERIAL MUST BE REMOVED BY MEANS OF SHOVELING AND SWEEPING.
7. SEDIMENT CONTROL DEVICES ARE TO REMAIN IN PLACE UNTIL SITE IS PERMANENTLY STABILIZED.
8. AFTER SITE IS PERMANENTLY STABILIZED AND BEFORE EROSION CONTROL MEASURES ARE REMOVED, THE CONTRACTOR SHALL CLEAN DEBRIS AND SILT FROM ALL STORM SEWERS, STRUCTURES AND DITCHES IN AREA OF WORK.
9. ALL EXCAVATED MATERIAL SHALL BE PLACED ON HIGH SIDE WHEREVER POSSIBLE AND CONFINED TO AN AREA WHERE IT WILL NOT OBSTRUCT THE NORMAL FLOW OF THE DRAINAGE.
10. PUMPING OF SEDIMENT LADEN WATER WILL NOT BE ALLOWED UNLESS IT IS FILTERED BY WAY OF AN APPROVED SEDIMENT TRAPPING DEVICE.
11. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING STONE/FABRIC FILTERS AND SILT FENCES CLEAR OF SEDIMENT BUILDUP DURING CONSTRUCTION.
12. CONTINUOUS INSPECTION AND MAINTENANCE OF THE SEDIMENT CONTROL DEVICES IS MANDATORY.
13. ANY SEDIMENT CONTROL DEVICES DISTURBED DURING SITE GRADING AND CONSTRUCTION MUST BE RESTORED IMMEDIATELY.
14. ALL SILT BARRIERS MUST BE PLACED IMMEDIATELY FOLLOWING CLEARING. NO GRADING SHALL BE DONE.
15. WHEN, IN THE OPINION OF THE NPDES DEPT., THE TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THEIR INTENDED PURPOSES, THEY SHALL BE REMOVED BY THE GRADING CONTRACTOR.
16. EXPOSE THE SMALLEST AREAS OF SOIL FOR AS SHORT A TIME AS POSSIBLE.
17. KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS.
18. USE TEMPORARY VEGETATION AND/OR MULCH TO PROTECT BASE AREAS FROM EROSION DURING CONSTRUCTION.
19. ALL CUT/FILL AREAS TO HAVE A MINIMUM OF 4-INCH DEPTH TOPSOIL COVER. AREAS DRESSED WITH TOPSOIL WILL RECEIVE 5 POUNDS PER 1000 SQUARE FEET OF 10-10-10 FERTILIZER, 4 POUNDS OR MORE OF SEED PER 1000 SQUARE FEET AND A STRAW MULCH OF 70% - 80% COVERAGE (APPROXIMATELY 125 POUNDS PER 1000 SQUARE FEET) EXCEPT AS OTHERWISE DETERMINED BY PLAN.
20. DISTURBED AREAS ARE TO BE GRADED TO DRAIN AS INDICATED ON PLAN TO SEDIMENT BARRIERS DURING AND UPON COMPLETION OF CONSTRUCTION.
21. INSTALL TEMPORARY CONSTRUCTION ENTRANCE ACCORDING TO DETAIL 1 ON THIS SHEET AT ENTRANCES TO PROJECT SITE.
22. THE PLACING AND SPREADING OF ANY FILL MATERIAL IS TO BE STARTED AT THE LOWEST POINT AND BROUGHT UP IN HORIZONTAL LAYERS OF 8" THICKNESS. SAID FILL MATERIAL IS TO BE FREE OF SOD, ROOTS, FROZEN SOILS OR ANY OTHER DECOMPOSABLE MATERIAL. THE RELATIVE COMPACTION OF EACH LAYER SHALL NOT BE LESS THAN 98% OF STANDARD PROCTOR TEST FOR CLASS I (FILL BENEATH STRUCTURES, PARKING AREAS, AND ACCESS ROADS) FILLS AND 95% OF STANDARD PROCTOR TEST FOR CLASS II (ALL OTHER FILLS) FILLS.
23. IF, AT ANY TIME DURING THE CONSTRUCTION PHASE OF THIS PROJECT, THE EROSION/ SEDIMENTATION CONTROL MEASURES INSTALLED FAIL TO FUNCTION PROPERLY, NEED MAINTENANCE OR REPAIR, OR NEED NEW REPLACEMENT IN KIND, THE CONTRACTOR WILL EFFECT SUCH ACTIONS AS ARE NEEDED TO CORRECT THE THE SITUATION AT NO ADDITIONAL COST TO THE OWNER.
24. UPON STABILIZATION OF THE PROJECT SITE WITH A GOOD (ACCEPTABLE) STAND OF GRASS AND/OR GROUND COVER, THE EROSION/SEDIMENTATION CONTROL INSTALLATIONS WILL BE REMOVED AND THE AREA DISTURBED WILL BE SODDED AND MULCHED WITH THE SAME TREATMENT AS OTHER NEW GRASSED AREAS OF THE PROJECT. ANY AREAS THAT ARE LEFT DISTURBED FOR OVER 14 DAYS, THE CONTRACTOR SHALL STABILIZE WITH TEMPORARY SEEDING AND MULCHING.
25. THE CONTRACTOR WILL BE REQUIRED TO INSTALL THE EROSION CONTROL DEVICES PER THE PLAN, AND NOTIFY THE ENGINEER WHEN THIS HAS BEEN COMPLETED. THE ENGINEER WILL THEN VISIT THE SITE FOR FIELD OBSERVATION AND PROVIDE NOTIFICATION TO THE CITY OF FRANKLIN REQUESTING INSPECTION. UPON ACCEPTANCE FROM THE CITY OF FRANKLIN, THE GRADING PERMIT WILL BE OBTAINED.
26. ANY ADDITIONAL EROSION CONTROL REQUIRED BY GOVERNING AUTHORITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT GRASSING OR FINISHED SURFACES ARE ESTABLISHED.
27. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED WITH EROSION CONTROL BLANKET/ MATTING (TDOT TYPE 1, NORTH AMERICAN GREEN DS150, OR APPROVED EQUAL).
28. CONTRACTOR TO SECURE EROSION CONTROL BLANKET/MATTING USING MANUFACTURE'S SPECIFIED METHOD AND STAPLE PATTERN.

SILT BARRIER CONSTRUCTION NOTES:

SILT BARRIER ATTACHMENT NOTES:

- WHEN TWO SECTIONS OF SILT FENCE ARE JOINED TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE TO BE FASTENED SECURELY EVERY 6" ALONG POST.
- ACCUMULATED SEDIMENT MUST BE REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE FABRIC.
- WOOD POSTS, 2"x2" HARDWOOD WITH MIN. CROSS SECTION AREA OF 3 INCHES.
- STEEL POST, EITHER T OR U TYPE, NOT WEIGHING LESS THAN 1 LB./L.F.
- SILT FENCE: PER TDOT SECTION S-B.27, AASHTO M 298, CLASS A.

EROSION CONTROL CONSTRUCTION NOTES:

SILT BARRIER INSTALLATION

INSTALL SILT BARRIER AS FOLLOWS:

- DIG MINIMUM 6"x6" TRENCH WHERE FENCE IS TO BE INSTALLED OR INSURE SUFFICIENT FILL MATERIAL IS AVAILABLE.
- UNROLL SILT BARRIER BY SECTION (POLE TO POLE) ALONG TRENCH OR PREDETERMINED PATH.
- DRIVE POST INTO UNDISTURBED SOIL UNTIL SUPPORT NETTING IS IN THE TRENCH OR BEGINNING TO LAY ON THE GROUND.

LOCATION:

- SILT BARRIERS SHALL BE LOCATED TO INTERCEPT ALL SILT/WATER RUN-OFF FROM THE SITE.
- SUFFICIENT EXTENSION OF EACH FENCE SECTION SHALL BE INSTALLED (PREFERABLY UPHILL) TO INSURE RUN-OFF WILL NOT GO AROUND THE ENDS.
- A SERIES OF SILT FENCES MAY BE REQUIRED IF THE VOLUME OF RUN-OFF FILLS THE RETENTION AREA AND FLOWS OVER THE FENCE.

SLOPE DRAINS:

- PROVIDE TEMPORARY SLOPE DRAINS AND SWALES AT TOP OF SLOPES AS REQUIRED TO PREVENT RUTTING AND MAINTAIN UNTIL PERMANENT STAND OF GRASS IS ESTABLISHED.

SITE DESCRIPTION:

1. THE SITE IS LOCATED AT FRANKLIN TENNESSEE, WILLIAMSON COUNTY TAX MAP 78H, GROUP "A", PORTION OF PARCEL 4. THE SITE IS LOCATED ADJACENT TO AND EAST OF SHAWNEE DRIVE.
2. APPROXIMATE CONSTRUCTION TIME TABLE: BEGIN CONSTRUCTION - APRIL 2023 AND COMPLETE CONSTRUCTION - APRIL 2024.
3. CONSTRUCTION SEQUENCE: A) INSTALL CONSTRUCTION EXIT AND DESIGNATE STORAGE AREAS. B) INSTALL SILT FENCE ANG TREE PROTECTION (SEE LANDSCAPE PLANS FOR TREE PROTECTION FENCING). C) INSTALL DIVERSION DRAINAGE SYSTEM CONSISTING OF CONCRETE PIPE AND DRAINAGE STRUCTURES WITH INLET PROTECTION. D) CONTACT CITY OF FRANKLIN - STORMWATER MANAGEMENT SECTION TO OBTAIN STORMWATER PERMIT. THE STORMWATER MANAGEMENT SECTION WILL CONTRACT THE STREET DEPARTMENT FOR INSPECTION OF EROSION CONTROL DEVICES AND TO OBTAIN FULL GRADING PERMIT. E) CONSTRUCT DETENTION POND. F) CLEAR, GRUB, AND GRADE THE REMAINING SITE IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF FRANKLIN. G) UPON PERMANENT SITE STABILIZATION, REMOVE SILT FENCE, TREE PROTECTION, AND ALL OTHER TEMPORARY EROSION CONTROL DEVICES.
4. TOTAL SITE AREA = 2.4+/- ACRES DISTURBED AREA = 2.4 ACRES
5. FOR ANY INFORMATION REGARDING SOIL DATA, REFER TO THE GEOTECHNICAL REPORT.
6. THE RECEIVING WATER FOR THE DISCHARGE FROM THIS SITE IS SHARPS BRANCH WHICH FLOWS INTO THE HARPETH RIVER.

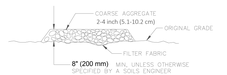
GENERAL NOTES FOR SCHEDULE OF INSPECTIONS AND MAINTENANCE

1. INSPECTION SHALL BE PERFORMED BEFORE ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS), AND WITHIN 24 HOURS AFTER THE END OF A STORM EVENT OF 0.25 INCHES OR GREATER, AND AT LEAST TWICE EVERY SEVEN CALENDAR DAYS. WHEN PORTIONS OF THE SITE HAVE BEEN FINALLY OR TEMPORARILY STABILIZED, OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (E.G., SITE COVERED WITH SNOW, ICE OR FOZEN GROUND), SUCH INSPECTION ONLY HAS TO BE CONDUCTED ONCE PER MONTH.
2. INSPECTIONS AND ASSOCIATED NECESSARY REPAIRS DONE 60 HOURS BEFORE A RAIN EVENT CONSTITUTE COMPLIANCE WITH "BEFORE ANTICIPATED STORM EVENTS," AND INSPECTIONS AND REPAIRS ON A FRIDAY MEET THE REQUIREMENTS FOR RAIN EVENTS OVER THE WEEKEND.
3. QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
4. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASUREAS IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN AND IN THE CONTRACT DOCUMENTS SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY.
5. OUTFALL POINTS (WHERE DISCHARGES FROM THE SITE ENTER STREAMS OR WET WEATHER CONVEYANCES) SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED IF POSSIBLE. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.
6. BASED ON THE RESULTS OF THE INSPECTION, ANY INADEQUATE CONTROL MEASURES OR CONTROL MEASURES IN DISREPAIR SHALL BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE RAIN EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE NEED IS IDENTIFIED. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRATICABLE.
7. BASED ON THE RESULTS OF THE INSPECTION, THE SITE DESCRIPTION PROVIDED, AND THE POLLUTION PREVENTION MEASURES PRESENTED IN THIS PLAN MAY BE REVISED AS APPROPRIATE, BUT IN NO CASE LATER THAN 14 CALENDAR DAYS FOLLOWING THE INSPECTION. SUCH MODIFICATIONS SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THIS PLAN IN NO CASE LATER THAN 21 CALENDAR DAYS FOLLOWING THE INSPECTION.
8. IMSPECTIONS SHALL BE DOCUMENTED AND INCLUDE THE SCOPE OF THE INSPECTION, NAME(S) AND TITLE OR QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (INCLUDING THE LOCATIONS(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE AND OF ANY CONTROL DEVICE THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION AND ACTIONS TAKEN IN ACCORDANCE IN PARAGRAPH 6 ABOVE.

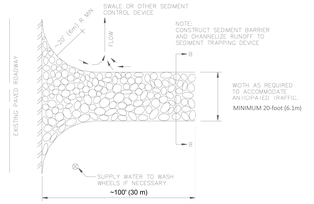
CITY OF FRANKLIN - EPSC GENERAL NOTES

1. SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN REACHES 1/3 THE HEIGHT OF THE FENCE; SEDIMENT SHALL BE REMOVED FROM ALL OTHER EPSC MEASURES AND CONTROL AS RECOMMENDED IN THE TNEPSC HANDBOOK, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
2. EPSCS SHALL BE IMPLEMENTED BEFORE EARTH-MOVING BEGINS.
3. AREAS WHERE CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED SHALL BE STABILIZED WITHIN 15 DAYS (7 DAYS FOR ≥35% SLOPES).
4. INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE CONDUCTED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART.
5. VEGETATION, EPSCS & OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED, OR MODIFIED WITHIN 7 DAYS OF BEING NOTIFIED OF AN ISSUE.
6. CONSTRUCTION SHALL BE PHASED FOR ACTIVITIES THAT WILL DISTURB >50 ACRES.
7. EPSCS SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 2-YEAR, 24-HOUR RETURN INTERVAL STORM; BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROMA 5-YEAR, 24-HOUR RETURN INTERVAL STORM.
8. TEMPORARY SEDIMENT BASIN(S) SHALL BE PROVIDED FOR ON-SITE OUTFALLS THAT RECEIVE DRAINAGE FROM ≥10 ACRES; ≥5 ACRES FOR SITES THAT DISCHARGE TO IMPAIRED OR EXCEPTIONAL TN WATERS.
9. GREEN INFRASTRUCTURE BMPS SHALL BE PROTECTED DURING SITE WORK, WITH SILT FENCE, TO PREVENT SEDIMENTATION AND COMPACTION.

ACTIVITY: Stabilized Construction Exit — TCP – 03



SECTION B–B
N.T.S.



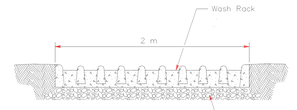
PLAN VIEW
N.T.S.

Figure TCP-03-1
Stabilized Construction Exit

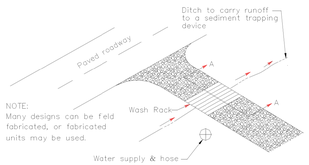
Volume 4: Stormwater Best Management Practices – Temp. Construction Site Management Practices TCP-03-5 2021

1

ACTIVITY: Tire Washing Facility — TCP – 01



SECTION A–A
NOT TO SCALE



TYPICAL TIRE WASH
NOT TO SCALE

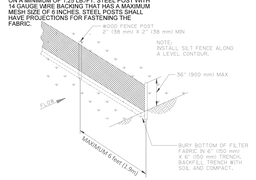
Figure TCP-01-1
Mud Tracking Removal

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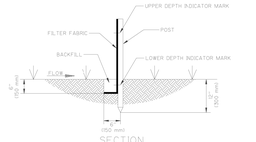
2

ACTIVITY: Silt Fence — TCP – 13

NOTE FOR SF2: SILT FENCE WITH BACKING SHALL BE INSTALLED ON A MINIMUM OF 1.25 LB./FT. STEEL POST WITH 14 GAUGE WIRE BACKING THAT HAS A MAXIMUM SPACING OF 8" (200 mm) INCHES. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING THE FABRIC.



TYPICAL PREFABRICATED SILT FENCE INSTALLATION
N.T.S.



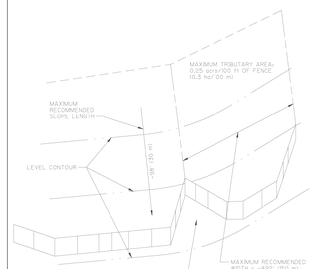
SECTION
N.T.S.

Figure TCP-13-1
Silt Fence Anchoring

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3

ACTIVITY: Silt Fence — TCP – 13



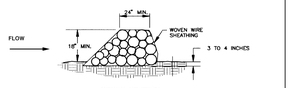
PLAN VIEW
N.T.S.

Figure TCP-13-2
Silt Fence End Layout

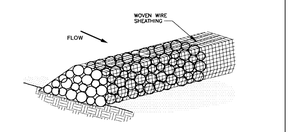
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4

ACTIVITY: Temporary Diversions, Drains and Swales — TCP – 22



CROSS SECTION
N.T.S.



ISOMETRIC PLAN VIEW
N.T.S.

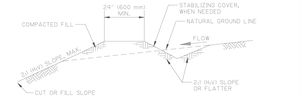
Note: This technique is similar to methods presented in TCP-15: Sand Bag Barrier and TCP-16: Brush or Rock Filters and Continuous Berms.

Figure TCP-22-2
Rock Berm

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5

ACTIVITY: Temporary Diversions, Drains and Swales — TCP – 22



DIVERSION BERM/SWALE
N.T.S.

NOTES:
1. STABILIZE INLET, OUTLETS AND SLOPES.
2. PROPERLY COMPACT THE SUBGRADE.



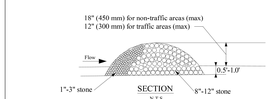
DIVERSION BERM
N.T.S.

Figure TCP-22-4
Diversion Berm and Berm/Swale

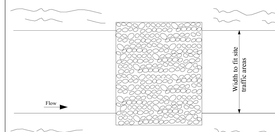
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6

ACTIVITY: Brush or Rock Filters and Continuous Berms — TCP – 16



SECTION
N.T.S.



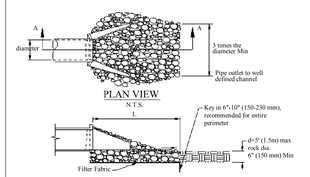
PLAN
N.T.S.

Figure TCP-16-1
Rock Filter Construction

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7

ACTIVITY: Temporary Outlet Protection — TCP – 25



PLAN VIEW
N.T.S.

SECTION A-A
N.T.S.

Adapted from: Virginia Erosion & Sediment Control Handbook, 1992

Pipe Diameter in (mm)	Discharge ft ³/s(m ³ /s)	Apron Length, L ft (m)	Rip-Rap D_{50} Diameter Min in (mm)
12 (300)	4.9 (0.14)	10 (3)	4 (100)
	9.89 (0.28)	13 (4)	6 (150)
18 (450)	9.89 (0.28)	10 (3)	6 (150)
	20.13 (0.57)	16 (5)	8 (200)
	30.01 (0.85)	23 (7)	12 (300)
	39.90 (1.13)	26 (8)	16 (400)
24 (600)	30.01 (0.85)	16 (5)	8 (200)
	39.90 (1.13)	26 (8)	8 (200)
	50.14 (1.42)	26 (8)	12 (300)
	60.03 (1.70)	30 (9)	16 (400)
For larger or higher flows, consult a registered civil engineer			

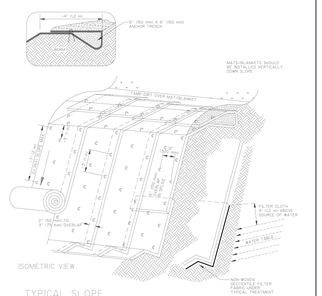
Source: USDA-SCS

Figure TCP-25-1
Outlet Protection Sizing

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8

ACTIVITY: Geotextiles — TCP – 10



ISOMETRIC VIEW

TYPICAL SLOPE SOIL STABLIZATION
N.T.S.

WET SLOPE LINING
N.T.S.

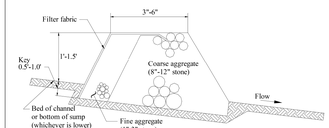
NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS AND GRASS. MATS/BLANETS SHALL HAVE GOOD SOIL CONTACT.
2. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

Figure TCP-10-2
Anchoring Geotextiles on Embankments

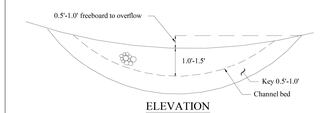
Volume 4: Stormwater Best Management Practices – Temp. Construction Management Practices TCP-10-9 2021

9

ACTIVITY: Check Dams — TCP – 12



CROSS-SECTION
N.T.S.



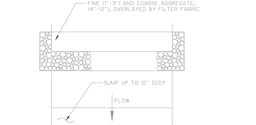
ELEVATION
N.T.S.

Figure TCP-12-1
Stone Check Dam Construction

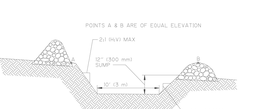
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10

ACTIVITY: Check Dams — TCP – 12



PLAN VIEW
N.T.S.



TYPICAL SPACING BETWEEN CHECK DAMS
N.T.S.

Figure TCP-12-2
Stone Check Dam Spacing

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11

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09-01-22

EPSC NOTES AND DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.9

COF PROJECT NO. 7916

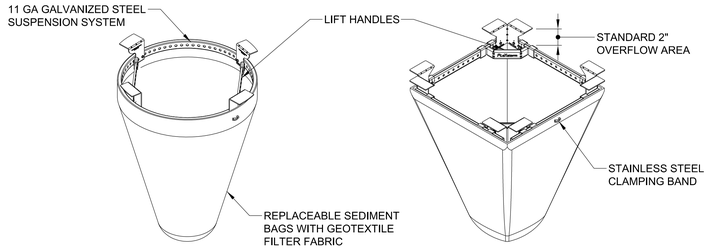
FILE NO. 1716-24

1. INDENTIFY YOUR FRAME STYLE AND SIZE		
STYLE	*FRAME STYLE AND SIZE*	Frame P/N:
ROUND	Small Round (up to 20.0" dia grates (A) dim)	62SRD
	Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B))	62MRD
	Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B))	62LRD
	XL Round (32.1" dia - 39" dia grates (A) up to 37" dia openings (B))	62XLRD
RECT/ SQUARE	Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	62SSQ
	Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	62MSQ
	Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	62LSQ
	XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	62XLSQ
COMBO INLETS	Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62SCB
	Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62MCB
	Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62LCB
	XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62XLCB
NYLOPLAST	12" diameter Nyloplast castings (Stainless Steel Framing standard)	6212NY
	15" diameter Nyloplast castings (Stainless Steel Framing standard)	6215NY
	18"diameter Nyloplast castings (Stainless Steel Framing standard)	6218NY
	24" diameter Nyloplast castings (Stainless Steel Framing standard)	6224NY
	30" diameter Nyloplast castings (Stainless Steel Framing standard)	6230NY

2. SELECT YOUR BAG PART NUMBER				
FLEXSTORM FILTER BAGS	(22" depth) STD Bag P/N	(12" depth) Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
FX: Standard Woven Bag	FX	FX-S	200	40
IL: IDOT Non-Woven Bag	IL	IL-S	145	70

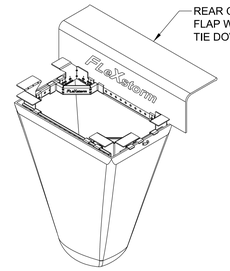
3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

Frame P/N from Step 1. Filter Bag P/N from Step 2.

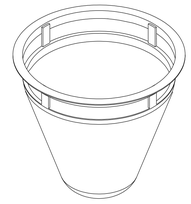


TYPICAL ROUND INLET FILTER

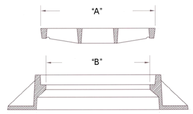
TYPICAL RECTANGULAR INLET FILTER

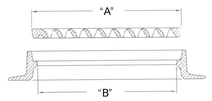


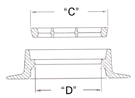
COMBINATION INLET FILTER FOR CURB HOODS



STAINLESS STEEL ROUND INLET FILTERS FOR NYLOPLAST CASTINGS CATCH-ITS SPECIFIED W/ FX OR FX-S BAGS







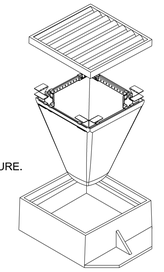
SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE			
Nominal Bag Size	Solids Storage (CuFt)	Filtered Flow Rate at 50% Max (CFS)	
		FX (Woven)	IL (NonWoven)
Small	1.6	1.2	0.9
Medium	2.1	1.7	1.3
Large	3.8	2.7	1.9
XL	4.2	3.6	2.6

NOTES:

1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
2. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
3. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM.

INSTALLATION:

1. REMOVE GRATE.
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE.
3. REPLACE GRATE.



FLEX CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION DETAIL

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction Activities (TNR100000)
Located within a Qualifying Local Program (QLP)

QLP

Date Received: _____ Staff Review Completion Date: _____ New NPDES Tracking Number: _____ MS4 Jurisdiction: _____
Reviewer: _____ # of Disturbed Acres: _____ Site/Project Name: _____
Unavailable Waters: Yes ☐ No ☐ Exceptional Waters: Yes ☐ No ☐ T & E Species: Yes ☐ No ☐ USACE/EPA JD: Yes ☐ No ☐ Fee Collected: Yes ☐ No ☐

This checklist pertains to the current CGP and is used during the NOI review process to help determine whether the submittal provides enough information to grant a Notice of Coverage under the permit. This checklist does not specifically address every condition of the permit or preclude the Division or the QLP from asking for additional information.

Yes	No		Yes	No	
		Correct site-wide permittee (Owner/Developer) entity name included			Start/End dates listed
		Proper signature for the owner/developer provided			Disturbed acreage given
		Receiving waters listed			Latitude/Longitude given and is correct
		ARAP Required? ☐ ARAP #(s):			Secretary of State Control # (if applicable)
		Appropriate portion of USGS topo map provided showing the boundaries of the construction	County(ies):		

Yes	No	N/A	SWPPP Requirements	CGP pg #
			For comprehensive SWPPPs - All foreseeable construction-related activities are addressed *[1.4.2]*	6
			Plans and specs for structural control measures have been prepared and stamped by Professional Engineer or Landscape Architect *[5.23]*	25
			Includes engineering design of sediment basin/controls for projects 10 acres or greater (5 acres if impaired/exceptional waters) *[5.2]*	25
			Includes Quality Assurance Site Assessment requirement criteria if applicable *[5.3.3.9]*	36
			Signed by the operator(s) *[5.2.3]*	26
			Includes multi-phase sheets: >5 ac. - 2-phase plan min.; ≥5 ac. - 3-phase plan min. *[5.5.2]*	29
			Depicts disturbance limits, buffer zones, watershed drainage patterns, and drainage area serving each outfall *[5.5.1.f]*	28
			Includes a description of all construction activities (not just grading and street construction) *[5.5.1.a]*	28
			Includes a description sequence of major activities (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.) *[5.5.1.a]*	28
			Includes estimates of the total site area versus the total area of the site to be disturbed *[5.5.1.b]*	28
			Identification of aquatic resources (stream, sinkhole, pond, wetland, etc.) on or adjacent to the project and any proposed alterations *[5.5.1.h]*	29
			Includes a description of appropriate erosion prevention and sediment controls (EPSCs) and the general timing of implementation *[5.5.3]*	29
			Specifies which permittee is responsible for implementation of which EPSC *[2.2.2][5.1]*	13, 24
			Specifies removal of trapped sediment from sediment controls at or before 50% design capacity *[5.5.3.1.d]*	30
			Specifies EPSCs will be implemented before earth-moving begins *[5.5.3.1.f]*	31
			Specifies stabilization within 14 days (7 days for ≥35% slopes) on site areas where construction has temporarily/permanently ceased *[5.5.3.4]*	33
			Specifies inspections of outfalls/EPSC measures at least twice weekly and at least 72 hours apart *[5.5.3.1.b]*	37
			Specifies that control measures are repaired, replaced, or modified before the next rain event, but in no case later than 7 days *[5.5.3.1.f.a]*	38
			Depicts the proposed location of all major structural/nonstructural controls and all proposed stabilization practices *[5.5.1.f]*	28
			Identifies all outfall locations intended for coverage under the CGP *[5.5.1.f]*	28
			Includes the name of the receiving water(s), and assessment status (unavailable, supporting, not assessed) *[5.5.1.c,h]*	29
			Identifies construction phasing for activities that will disturb >50 acres and includes all requirements *[5.5.3.2] [5.3.3.2]*	31
			EPSCs have been designed to control the rainfall and runoff from a 2-year, 24-hour return interval storm *[5.5.3.5]*	34
			Specifies sediment basins for construction sites with drainage areas >10 acres *[5.5.3.5]*	34
			Specifies a 30' natural riparian buffer zone adjacent to all streams, lakes, wetlands on/adjacent to the construction site *[4.1.2]*	20
			Specifies a 15' natural riparian buffer zone adjacent to wet weather conveyances identified as WOTUS by the USACE or EPA *[4.1.2]*	21

Rev 10/2021 (Page 1 of 2)

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction General Permit Activities (CGP)

Yes	No	N/A	Additional SWPPP Requirements for Discharges into Impaired or Exceptional TN Waters	CGP pg #
			Specifies that EPSCs proposed for the site have been designed to control storm runoff generated by a 5-year, 24-hour storm event *[6.4.1.b]*	41
			Specifies sediment basins for construction sites with drainage areas >5 acres that discharge to impaired or exceptional waters *[6.4.1.a]*	41
			Specifies sediment trap for outfalls with drainage areas totaling 3.5–4.9 acres discharging to impaired or exceptional waters *[6.4.1.f]*	42
			Specifies a 60' natural riparian buffer zone adjacent to all impaired or exceptional waters on/adjacent to the construction site *[6.4.2]*	42
			SWPPP Requirements for Permanent (Post-Development) Stormwater Management	CGP pg #
			Specifies velocity dissipation devices at discharge locations and along the length of any outfall channel *[5.5.3.5]*	34
			Description of stormwater runoff and run-on at the site, expected flows, and permanent stormwater controls *[5.5.3.6.a]*	35

Identification indicators of possible streams or wetlands utilizing site information and resources include:

1. Contour and stream indicators on USGS TOPO maps
2. Drainage area to a defined conveyance (20 acres east TN/40 middle TN/75 west TN),
3. Aerial photography identifying a sinuous tree line or grouping of remaining forest in an agricultural setting
4. Springhouse/Box
5. Comparable nearby drainage that has previously been determined to have a stream
6. Onsite or adjacent ponds or impoundments
7. Check EFO HQ GIS for previous determinations
8. NRCS soil maps or Web Soil Survey: (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
9. Wetlands on National Wetlands Inventory: (http://www.fws.gov/wetlands/data/mapper.HTML)

If sufficient indicators exist, a stream determination may need to be performed. Stream determinations must be performed by a Qualified Hydrologic Professional: (http://rthdt.org/).

Comments

Rev 10/2021 (Page 2 of 2) RDA 2366

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102600 STATE OF TENNESSEE
09-01-22

EPSC DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C3.10

FILE NO. 1716-24

COF PROJECT NO. 7916

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- × 674.92 SPOT ELEVATIONS
- ST STORM SEWER
- UD UNDERDRAIN

CIRCLE (LOCAL)

50' R/W

BIRCHWOOD

TWIN OAKS SUBDIVISION REVISION NO. 1 P.B. 12, PG. 93, R.O.W.C. ZONED R-3

WIDDOGEN CT. (LOCAL)

CHICKASAW PLACE (LOCAL)

CHEROKEE PLACE (LOCAL)

EDGEWOOD BOULEVARD (LOCAL)

CULBERS BOULEVARD (LOCAL)

PETWAY STREET (LOCAL)

SHAWNEE DRIVE

WEST END CIRCLE (LOCAL)

78H - "A" - (4.01) CITY OF FRANKLIN / TENNESSEE D.B. 229, PG. 907 R.O.W.C. ZONED CI

78 - (10) CITY OF FRANKLIN JIM WARREN PARK ZONED CI

WEST END CIRCLE P.B. 1, PG. 48A, R.O.W.C. ZONED R-3

WEST MEADE - SECTION 2 P.B. 3, PG. 11, R.O.W.C. ZONED R-4

WEST MEADE (SECTION ONE) P.B. 2, PG. 58, R.O.W.C.

TDEC CATEGORY 5 "NOT SUPPORTING"

30' RIPARIAN BUFFER ZONE 1

30' RIPARIAN BUFFER ZONE 2

30' RIPARIAN BUFFER ZONE

STORMWATER LEVEL SPREADER

BIORETENTION POND

12' RAMP WITH HANDRAILS @ 1:12 MAX. SLOPE

END RETAINING WALL AND HANDRAIL

GRASS LINED TRIANGULAR CHANNEL 1'-6" DEEP WITH 3:1 SIDE SLOPES. C.L. CHANNEL SHALL BE 7'-0" FROM BACK OF RETAINING WALL.

BEGIN CHANNEL

BEGIN RETAINING WALL AND HANDRAIL

EX. FENCE

C3.12

C3.13

C3.14

TENNESSEE GRID NORTH

50 0 50
scale feet

COF PROJECT NO. 7916

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One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1155 • 615/726/4848

JAMES R. GILLESPIE REGISTERED No. 102501 STATE OF TENNESSEE
09-01-22

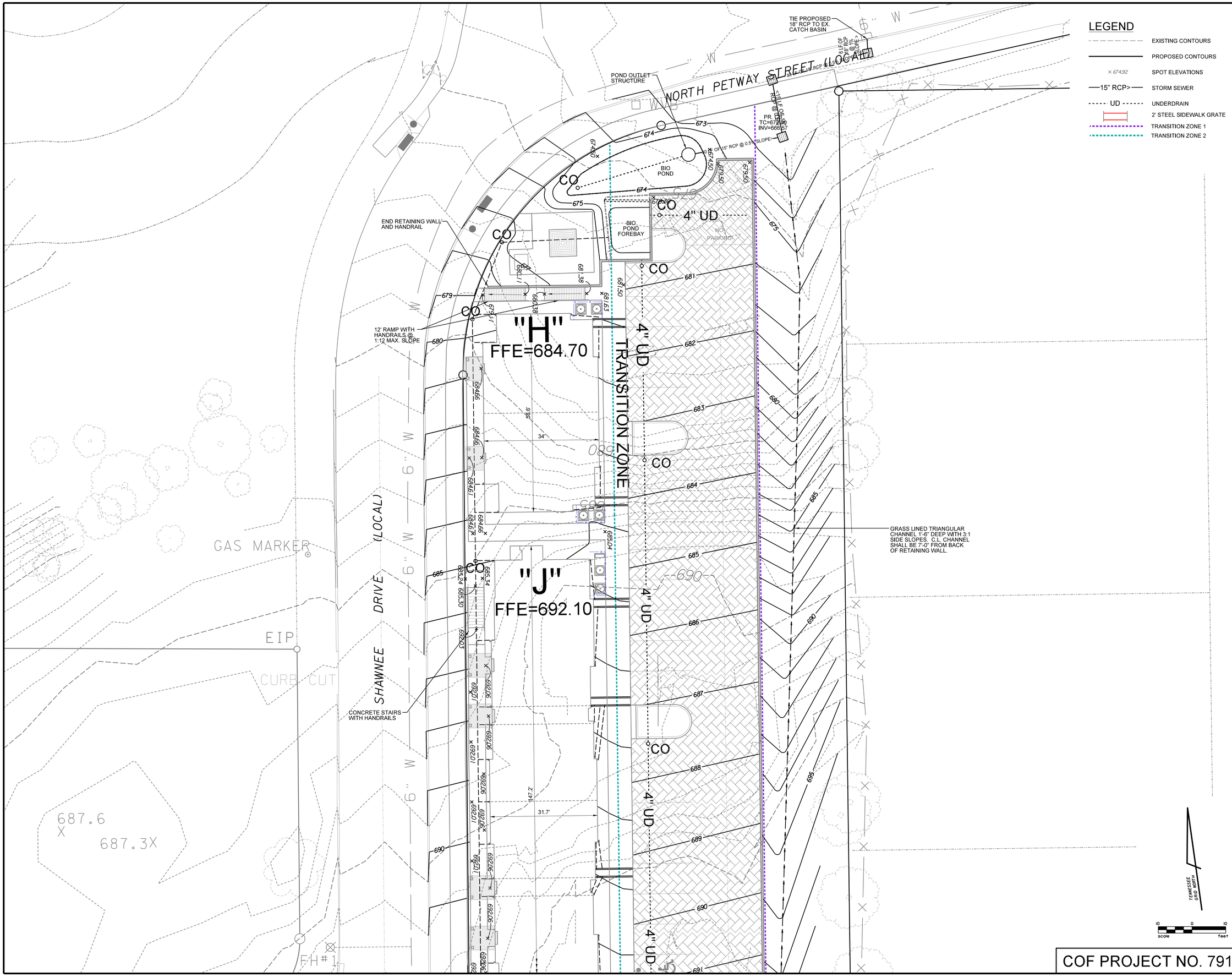
OVERALL ACCESSIBLE GRADING AND DRAINAGE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C3.11

FILE NO. 1716-24



COF PROJECT NO. 7916

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Computer Applications
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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102501 STATE OF TENNESSEE
09-01-22

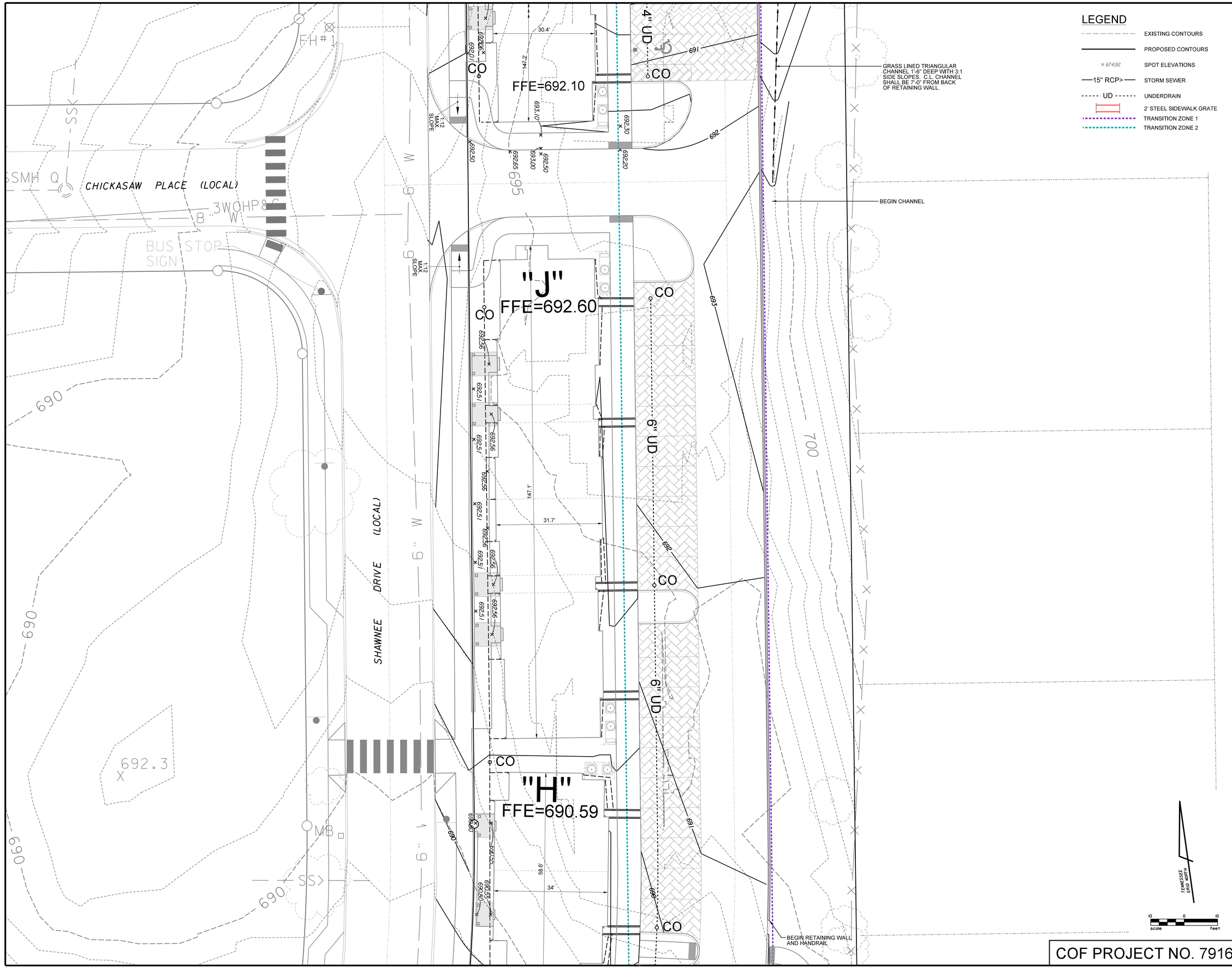
ENLARGED ACCESSIBLE GRADING AND DRAINAGE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C3.12

FILE NO. 1716-24



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STATE OF TENNESSEE
09-01-22

ENLARGED ACCESSIBLE GRADING AND DRAINAGE PLAN

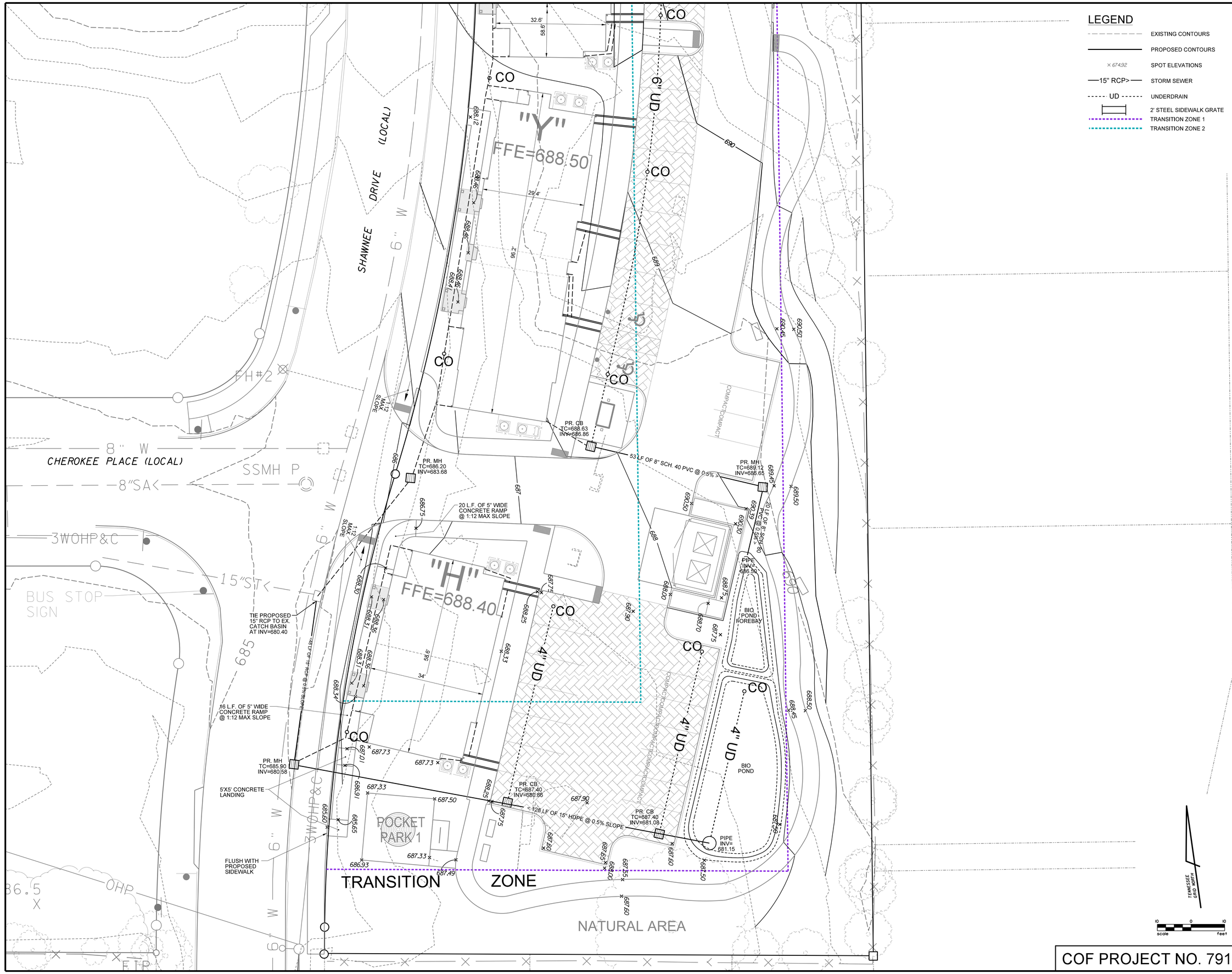
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C3.13

FILE NO. 1716-24

COF PROJECT NO. 7916



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One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1555 • 615.726.4848
JA Engineers Planners and Computer Applications
JAMES + ASSOCIATES, INC.

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102830 STATE OF TENNESSEE
09-01-22

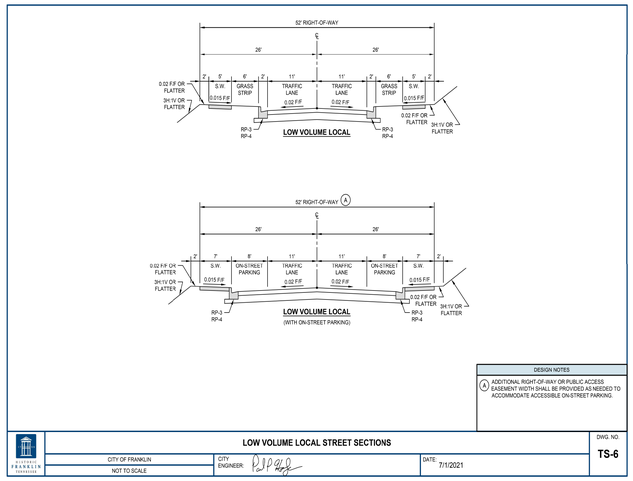
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C3.14

FILE NO. 1716-24



DESIGN NOTES

A ADDITIONAL RIGHT-OF-WAY OR PUBLIC ACCESS EASEMENT WIDTH SHALL BE PROVIDED AS NEEDED TO ACCOMMODATE ACCESSIBLE ON-STREET PARKING.

LOW VOLUME LOCAL STREET SECTIONS			DWG. NO.
CITY OF FRANKLIN	CITY ENGINEER:	DATE: 7/1/2021	TS-6
NOT TO SCALE			

STATEMENT OF IMPACTS:

THE PROPOSED DEVELOPMENT WILL HAVE A TOTAL OF 26 UNITS. CURRENTLY THERE ARE 16 UNITS ON THE SITE THAT WILL BE DEMOLISHED AND REPLACED. THE IMPROVEMENT WILL RESULT IN 10 NEW UNITS AND TRIP GENERATION FOR THIS USE HAS BEEN ANALYZED. BASED ON INFORMATION FROM THE TRIP GENERATION MANUAL IT APPEARS THE ADDITIONAL UNITS WILL RESULT IN 8 ADDITIONAL TRIPS IN THE A.M. PEAK AND 10 ADDITIONAL TRIPS IN THE P.M. PEAK.

Land Use & Data Source	Independent Variable	Size	Time Period	Method Rate/Equation	Entry Split%	Exit Split%	Total
210 - Single-Family Detached Housing	Dwelling Units	10	Weekday	Average	47	47	94
				9.44	50%	50%	
			AM Peak Hour	Average	2	6	8
				0.74	25%	75%	
			PM Peak Hour	Average	6	4	10
				0.99	63%	37%	

THE PROPOSED DEVELOPMENT WILL HAVE MINIMAL IMPACT ON THE EXISTING ROADWAY NETWORK. CHICKASAW PLACE HAS BEEN RECENTLY EXTENDED TO CONNECT TO CHEROKEE PLACE TO PROVIDE A CONTINUOUS ACCESS. THE PROPOSED DEVELOPMENT IS DESIGNED TO PROVIDE ACCESS POINTS THAT ALIGN WITH THE CHICKASAW PLACE AND CHEROKEE PLACE ROADWAYS.

THE INTERSECTIONS OF CHEROKEE PLACE/SHAWNEE AND CHICKASAW PLACE/SHAWNEE ARE STOP CONTROLLED AND THEY WILL CONTINUE TO OPERATE THIS WAY. CROSS WALKS AT THESE INTERSECTIONS AND A SIDEWALK ALONG THE BOUNDARY COMMON TO THE DEVELOPMENT AND WESTERLY BOUNDARY OF SHAWNEE DRIVE WILL PROVIDE PEDESTRIAN ACCESS.

NOTE: STREET LIGHTS SHALL HAVE A LED LIGHT SOURCE.

SHAWNEE PLACE PUD - R.O.W. & ACCESS DATA CHART

DAILY TRIP GENERATION: 94 VEH PER DAY
PEAK HOUR TRIP GENERATION: 10 VEH PER HOUR
TRAFFIC IMPACT STUDY REQUIRED: NO
CIRCULATION PLAN REQUIRED: NO

SHAWNEE PLACE PUD - DESIGN PARAMETERS

FRANKLIN TRANSPORTATION STREET TECHNICAL STANDARDS EDITION: 2017
DESIGN VEHICLE:
DESIGN SPEED/POSTED SPEED: 20 MPH/20 MPH
STOPPING SIGHT DISTANCE: 115 FT
INTERSECTION/DRIVEWAY SIGHT DISTANCE: 280 FT

HORIZONTAL ALIGNMENT

MIN. CENTERLINE RADIUS: 70 FT
MIN. TANGENT BETWEEN CURVES/INTERSECTIONS: 0 FT
MIN. CENTERLINE ARC LENGTH:

VERTICAL ALIGNMENT

MIN./MAX. CENTERLINE GRADE: 0.5%/10%
MAX. APPROACH CENTERLINE GRADE: 2% FOR 60 FT
MIN. CREST/SAG CURVE K-VALUE: 7/17

ACCESS MANAGEMENT

MIN. DISTANCE BETWEEN INTERSECTION: 200 FT
MIN. DISTANCE BETWEEN HIGH VOLUME/ALLEYS & INTERSECTIONS: 200 FT
MIN. DISTANCE BETWEEN DRIVEWAY & INTERSECTIONS: 50 FT
DRIVEWAY WIDTH (TWO-WAY): 10 FT - 20 FT
DRIVEWAY APPROACH STREET CONFIGURATION: CURB CUT

KEY NOTE

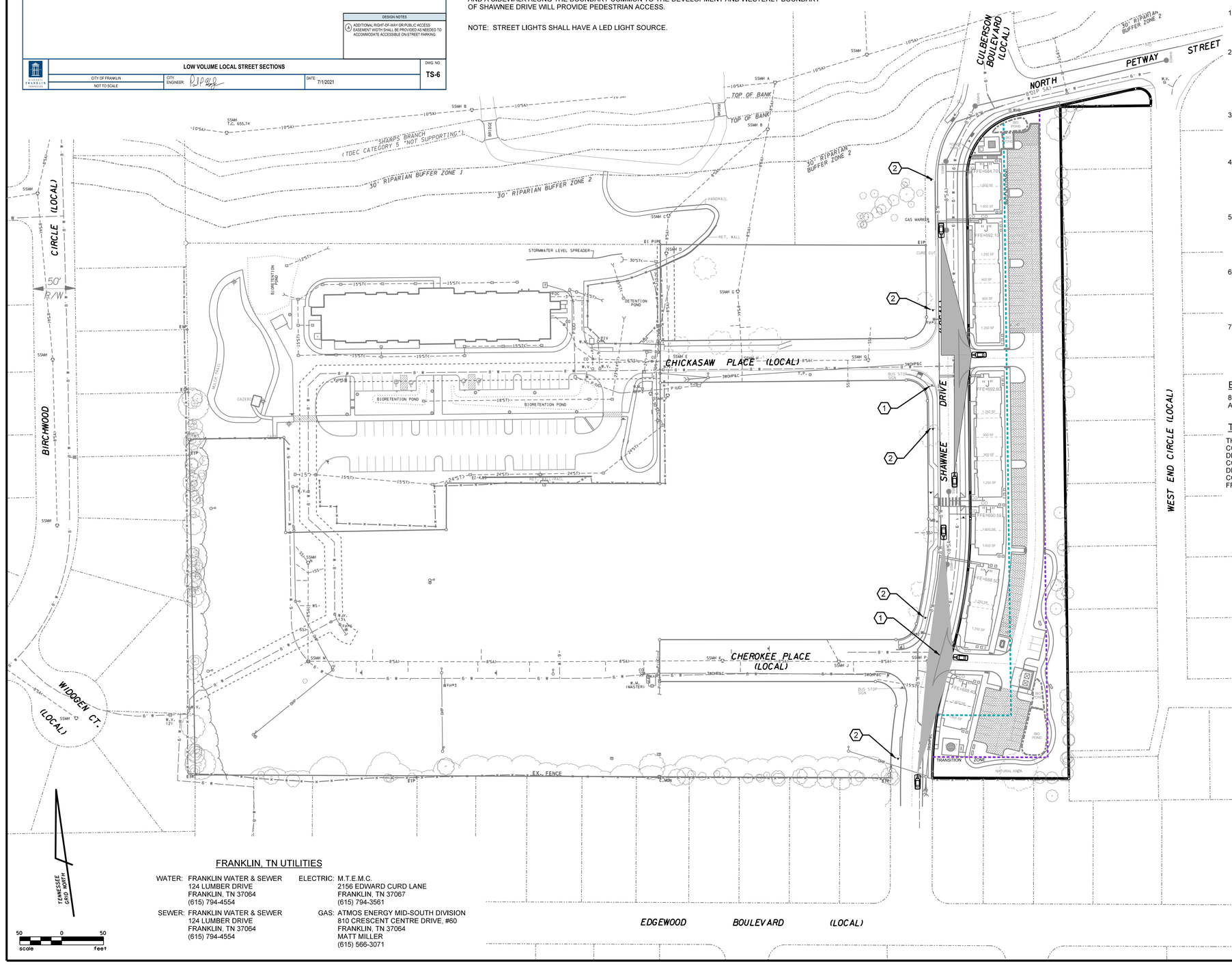
1. EXISTING TRANSIT STOP TO REMAIN.
2. INSTALL SIGN "FIRE LANE NO PARKING".

LEGEND

- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- W.V. WATER VALVE
- FIRE HYDRANT
- G.V. GAS VALVE
- SANITARY SEWER MANHOLE
- X" SA SANITARY SEWER
- X" ST STORM SEWER
- W WATER LINE
- OHP OVERHEAD POWER
- FENCE
- G.M. GAS METER
- UG UNDERGROUND
- CO SEWER CLEAN OUT



FRANKLIN, TN UTILITIES

WATER: FRANKLIN WATER & SEWER
124 LUMBER DRIVE
FRANKLIN, TN 37064
(615) 794-4554

SEWER: FRANKLIN WATER & SEWER
124 LUMBER DRIVE
FRANKLIN, TN 37064
(615) 794-4554

ELECTRIC: M.T.E.M.C.
2156 EDWARD CURD LANE
FRANKLIN, TN 37067
(615) 794-3561

GAS: ATMOS ENERGY MID-SOUTH DIVISION
810 CRESCENT CENTRE DRIVE, #60
FRANKLIN, TN 37064
MATT MILLER
(615) 566-3071

R.O.W. & ACCESS GENERAL NOTES

1. PRIOR TO BEGINNING ANY CONSTRUCTION, THE DEVELOPER AND/OR CONTRACTOR, SHALL OBTAIN ALL NECESSARY PERMITS AS REQUIRED BY LAW. SUCH PERMITS MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE REQUIRED BY STATE OF TENNESSEE, WILLIAMSON COUNTY AND OTHER CITY OF FRANKLIN AGENCIES.
2. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
3. CONSTRUCTION MATERIALS SHALL BE FULLY TESTED IN ACCORDANCE WITH THE DESIGNATIONS AND REQUIREMENTS WITHIN THE REFERENCED "TDOT STANDARD SPECIFICATIONS" SECTIONS, UNLESS OTHERWISE NOTED WITHIN THE "STANDARD SPECIFICATIONS" SECTION OF THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.
4. AN AUTHORIZED REPRESENTATIVE OF THE CITY SHALL MAKE A FINAL INSPECTION OF THE PROJECT AFTER COMPLETION TO DETERMINE ACCEPTABILITY OF THE WORK AND FOR RELEASE OF PERFORMANCE BONDS IF REQUIRED. BEFORE THIS FINAL INSPECTION CAN BE MADE, THE ENGINEER RESPONSIBLE FOR THE PROJECT SHALL CERTIFY IN WRITING TO THE CITY ENGINEER THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
5. LOCATING AND COORDINATION FOR THE RELOCATION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. TENNESSEE'S ONE-CALL AND THE CITY OF FRANKLIN UTILITY LOCATION SERVICE SHALL BE UTILIZED IN ADDITION TO COORDINATION WITH LOCAL UTILITY OWNERS. THE CONTRACTOR SHALL AT ALL TIMES PROTECT EXISTING UTILITIES AND WILL BE RESPONSIBLE FOR COSTS DUE TO DAMAGE CAUSED TO ANY UTILITY LINES.
6. ALL TEMPORARY STRIPING SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," PUBLISHED BY TDOT. THE LATEST REVISION EXCEPT AS HEREIN AMENDED. WHEN APPROVED, TEMPORARY STRIPING SHALL BE REQUIRED PRIOR TO THE OPENING OF A STREET FOR TRAVEL WHERE PAVEMENT AND/OR PERMANENT STRIPING CANNOT BE COMPLETED DUE TO WEATHER AND/OR TIME CONSTRAINTS.
7. THERMOPLASTIC PAVEMENT MARKINGS SHOULD BE USED ON ALL PUBLIC AND PRIVATE CITY STREET PROJECTS. THERMOPLASTIC TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO SECTION 716.03 "THERMOPLASTIC PAVEMENT MARKINGS", OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIFICATION (TDOT), AND TO THE CITY OF FRANKLIN TRANSPORTATION & STREET TECHNICAL STANDARDS.

ENTRANCE DRIVEWAY PAVEMENT SECTION:

8" MINERAL AGGREGATE, 2.5" BM-2 BINDER
AND 1.25" E-MIX SURFACE COURSE.

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL RELATED TO WORK IN SHAWNEE DRIVE. PRIOR TO ANY WORK IN SHAWNEE DRIVE, THE CONTRACTOR SHALL CREATE AND SUBMIT FOR APPROVAL A TRAFFIC CONTROL PLAN THAT COMPLIES WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY OF FRANKLIN REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE ALL WORK AND ROAD AND SIDEWALK CLOSURES WITH THE CITY OF FRANKLIN.

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE III REGISTERED PROFESSIONAL ENGINEER No. 120501 STATE OF TENNESSEE
09-01-22

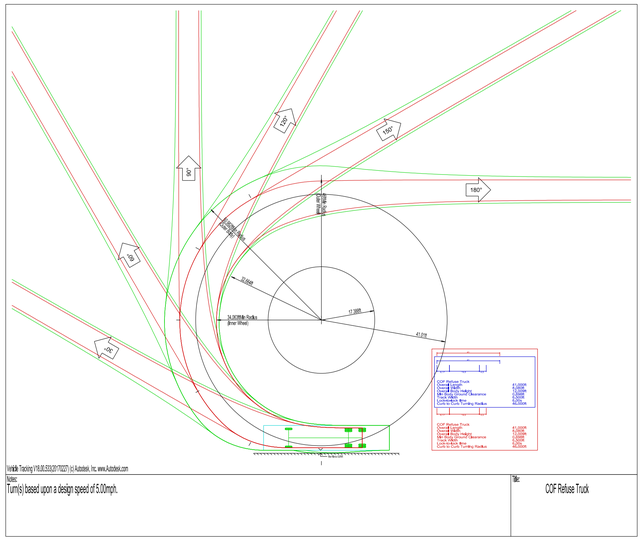
ROW AND ACCESS PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C4.0

FILE NO. 1716-24



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JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL ENGINEER
No. 102931
STATE OF TENNESSEE
09-01-22

AUTOTURN PLAN

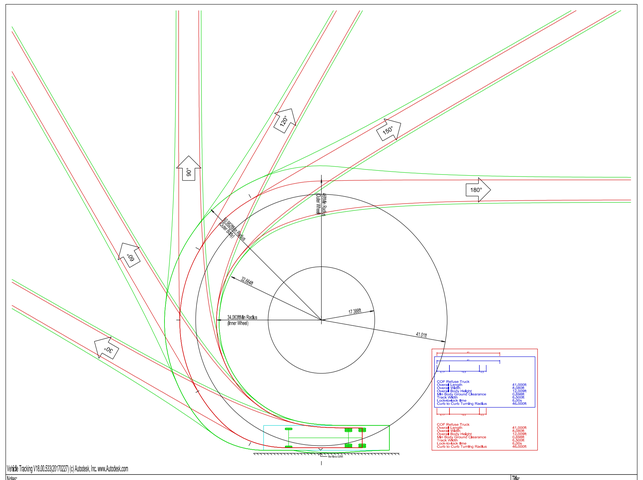
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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER NO. 102801 STATE OF TENNESSEE
09-01-22

AUTOTURN PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C4.2

FILE NO. 1716-24

COF PROJECT NO. 7916

WATER AND SEWER GENERAL NOTES:

1. ALL PERSONS WHO UNDERTAKE THE CONSTRUCTION OF WATER, SEWER AND/OR RECLAIMED WATER LINES LOCATED IN OR AFFECTING SERVICES PROVIDED BY THE CITY OF FRANKLIN SHALL COMPLY WITH THE REQUIREMENTS AND REGULATIONS SET FORTH IN THE "GENERAL REQUIREMENTS AND TECHNICAL SPECIFICATIONS, WATER MANAGEMENT DEPARTMENT, CITY OF FRANKLIN, TENNESSEE" LATEST EDITION, ALONG WITH ANY AMENDMENTS, ADDITIONS, OR ALTERATION THAT MAY THEREAFTER BE ADOPTED BY THE BOARD OF MAYOR AND ALEDERMEN BY RESOLUTION.
2. CONTRACTOR SHALL OBTAIN WATER AND SEWER INFRASTRUCTURE INSTALLATION PERMIT PRIOR TO SCHEDULING REQUIRED PRE-CONSTRUCTION SITE MEETING. CONTRACTOR SHALL COMPLETE THE PRE-CONSTRUCTION SITE MEETING PRIOR TO COMMENCING WITH CONSTRUCITON.
3. CONTRACTOR SHALL OBTAIN AND KEEP ALL OF THE FOLLOWING ITEMS ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION: A) APPROVED, STAMPED AND SIGNED WATER AND/OR SEWER PLANS. B) WATER AND SEWER INFRASTRUCTURE INSTALLATION PERMIT, WITH ALL STEPS COMPLETED AND SIGNED BY APPROPRIATE CITY EMPLOYEES. C) COPY OF APPROVED AVAILIABILITY REQUEST RESPONSE LETTER. D) A COPY OF ALL APPROVED CUT SHEETS.
4. ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE SHALL BECOME THE RESPONSIBILITY OF THE CITY OF FRANKLIN, TN FOLLOWING APPROVAL FROM THE CITY OF FRANKLIN INSPECTORS AND ACCEPTANCE BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION. THE ACCEPTANCE DATE SHALL BE BASED ON THE DAY MAINTENANCE SURETIES ARE ESTABLISHED BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION.
5. PRIOR TO THE ACCEPTANCE OF CITY OF FRANKLIN PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AS-BUILT DRAWINGS TO THE PLANNING AND SUSTAINABILITY DEPARTMENT.
6. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF FRANKLIN BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF FRANKLIN TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.
7. ANY DAMAGES CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL, AT HIS OWN EXPENSE, BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY, BY THE CONTRACTOR.
8. WATER AND SEWER DATA CHART:
   FACILITY TYPE - RESIDENTIAL HOUSING UNITS
   UNIT FLOW IN GPD - VARIES 250-350 GPD PER UNIT TYPE
   NUMBER OF UNITS - 26 RESIDENTIAL HOUSING UNITS
   TOTAL FLOW IN GPD - 8,710 GPD
9. WATER FOR EACH HOUSING UNIT WILL BE SUB-METERED.
10. HOUSING UNITS WILL UTILIZE 13R AND 13D BASED ON GROSS SQUARE FOOTAGE OF STRUCTURE.
11. HORIZONTAL UTILITY CLEAR SEPARATIONS:
    WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY WASTEWATER MAIN, STORM SEWER OR SEWER MANHOLE. THE DISTANCE SHALL BE MEASURED EDGE-TO-EDGE.
12. ANTICIPATED UTILITY DEPTHS:
    THE DEPTH OF COVER OVER WATER AND SEWER LINES IS ANTICIPATED TO BE 36" OR GREATER. MINIMUM DEPTH OF COVER FOR WATER MAINS SHALL BE 36" AND THE FOLLOWING: 36" UNDER DRIVEWAYS AND 42" UNDER ROADWAYS. MINIMUM DEPTH OF COVER FOR GRAVITY SEWER PIPE SHALL BE 2'-0". CONCRETE PROTECTION OR CONCRETE CAP SHALL BE PROVIDED FOR INSTALLATIONS THAT HAVE LESS THAN 2.5 FEET OF COVER IN NON-TRAFFIC AREAS AND LESS THAN 4.0 FEET OF COVER IN TRAFFIC AREAS.
13. SANITARY SEWER SERVICE CLEANOUTS SHALL BE LOCATED AT THE EDGE OF SANITARY SEWER EASEMENTS FOR EACH BUILDING. TRAFFIC RATED CLEANOUTS SHALL BE IN SANITARY SEWER CASTING AND BOX.
14. DOMESTIC AND FIRE PREVENTION BACKFLOW DEVICES SHALL BE LOCATED INSIDE BUILDING. U.N.O. THESE DEVICES SHALL BE ACCESSIBLE TO THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT FOR REQUIRED TESTING.
15. SEE SHEET C5.2 FOR SANITARY SEWER PLAN/PROFILE AND STATIONING.
16. UNDERGROUND FIRE MAIN SHOP DRAWINGS MUST BE SUBMITTED TO THE FIRE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. BE ADVISED THAT APPROVAL OF THE UNDERGROUND FIRE MAIN PLANS IS SEPARATE FROM THE APPROVAL OF THE SITE/UTILITY PLANS. PLANS MUST BE PREPARED BY A TN LICENSED FIRE PROTECTION CONTRACTOR AND BE SUBMITTED THROUGH THE CITY'S IDT ELECTRONIC PLAN REVIEW SITE. https://franklin.idtplans.com/secure/ PLANS MUST BE APPROVED BY THE ENGINEER PREPARING THE STANDARD OF CARE/DESIGN INTENT.

UTILITY KEY NOTES

1. ABANDON EXISTING 6" WATER MAIN IN PLACE.
2. REMOVE APPROXIMATELY 360 L.F. OF EXISTING 8" SEWER MAIN AND MANHOLES IN SHAWNEE DRIVE AND REPLACE WITH 8" SDR-26 SANITARY SEWER LINE AND NEW MANHOLES.
3. 6" SDR-26 SANITARY SEWER LATERAL WITH CLEANOUT AT PROPERTY LINE. TIE LATERAL TO NEW 8" SDR-26 SANITARY SEWER LINE IN SHAWNEE DRIVE. APPROXIMATELY 80 L.F. OF PIPE.
4. COORDINATE WITH MTEMC ON UTILITY POLE RELOCATION.
5. CUT, CAP, AND REMOVE EXISTING 2" WATER LINE.
6. 6" SDR-26 SANITARY SEWER LATERAL WITH CLEANOUT AT PROPERTY LINE. TIE LATERAL TO NEW 8" SDR-26 SANITARY SEWER LINE IN SHAWNEE DRIVE. APPROXIMATELY 150 L.F. OF PIPE.
7. NFPA 13R FIRE PROTECTION: 3" DUCTILE IRON PIPE FIRE LINE WITH POST INDICATOR VALVE (PIV). FIRE LINE SHALL BE PRESSURE CLASS 350 MADE AND TESTED IN ACCORDANCE WITH ASTM A536, LATEST REVISION. TOTAL LENGTH OF PIPE FOR 3 STRUCTURES WILL BE APPROX. 90 L.F.
8. 2" DOMESTIC WATER METER WITH 1 1/2" DIAMETER WATER SERVICE PIPE. TOTAL LENGTH OF 1 1/2" PIPE FOR 6 STRUCTURES WILL BE APPROX. 240 L.F.
9. LIMITS OF MILLING AND OVERLAY (SEE DETAIL 13 ON SHEET C5.4 FOR ADDITIONAL INFORMATION).
10. REMOVE APPROXIMATELY 350 L.F. OF EXISTING 8" SEWER MAIN AND 3 MANHOLES IN SHAWNEE DRIVE AND NORTH PETWAY STREET AND REPLACE WITH 8" SDR-26 SANITARY SEWER LINE AND NEW MANHOLES.
11. PROPOSED ELECTRICAL POWER LAYOUT FOR NEW BUILDINGS. PRIMARY ELECTRICAL LINES SHALL MAINTAIN A MINIMUM OF 10'-0" CLEARANCE FROM BUILDING FOUNDATIONS.
12. PAD MOUNTED ELECTRICAL TRANSFORMER.
13. ABANDON EXISTING 6" WATER MAIN IN PLACE.

HYDRANT FLOW TEST REPORT

TEST DATE: 06-20-2022
TEST TIME: 9:00 A.M.
LOCATION: CHEROKEE PLACE & SHAWNEE DRIVE, FRANKLIN, TN
TESTED BY: GRAND FIRE PROTECTION
WITNESSED BY BEN CONNER, CITY OF FRANKLIN WATER DEPARTMENT
TEST HYDRANT #2: 70 PSI STATIC PRESSURE
54 PSI RESIDUAL PRESSURE
FLOW HYDRANT #1: 35 PSI
1000 GPM

STATEMENT OF IMPACTS FOR WATER AND SEWER:

THE PROPOSED DEVELOPMENT WILL HAVE A TOTAL OF 26 UNITS. CURRENTLY THERE ARE 16 UNITS ON THE SITE THAT WILL BE DEMOLISHED AND REPLACED. THE IMPROVEMENT WILL RESULT IN 10 NEW UNITS WHICH WILL HAVE AN EFFECT OF APPROXIMATELY 8,710 GPD ADDITIONAL WATER USAGE AND SANITARY SEWER FLOW.

FEATURE LEGEND

⌀	UTILITY POLE
✳	LIGHT POLE
W.V.	WATER VALVE
◇	FIRE HYDRANT
G.V.	GAS VALVE
	SANITARY SEWER MANHOLE
— — S"SA — —	SANITARY SEWER
— — S"ST — —	STORM SEWER
—— W ——	WATER LINE
—— OHP ——	OVERHEAD POWER
—— x ——	FENCE
G.M.	GAS METER
UG	UNDERGROUND
CO	SEWER CLEAN OUT

WATER & SEWER DATA CHART

FACILITY TYPE: RESIDENTIAL DEVELOPMENT
UNIT FLOW IN GPD: 8-2 BEDROOM UNITS @ 300 GPD/UNIT- 2,400 GPD
12-3 BEDROOM UNITS @ 350 GPD/UNIT- 4,200 GPD
6-4 BEDROOM UNITS @ 350 GPD/UNIT- 2,100 GPD
NUMBER OF UNITS: 26
TOTAL FLOW IN GPD: 8,700 GPD

DOMESTIC WATER SERVICE LINE CONSTRUCTION

1. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE "TECHNICAL SPECIFICATIONS FOR UTILITY INSTALLATION", WATER MANAGEMENT DEPARTMENT, CITY OF FRANKLIN, TENNESSEE. (APPROVED FOR CONSTRUCTION, FEBRUARY 14, 2020)
2. TAPPING SADDLES SHALL BE UTILIZED FOR 1 1/2" AND 2" SERVICE PIPES AND SHALL HAVE DOUBLE STRAPS OR A DOUBLE WIDE BAND COMPATIBLE WITH THE TYPE OF PIPE UTILIZED AT THE INSTALLATION POINT. TAPPING SADDLES SHALL BE SMITH-BLAIR DOUBLE BALE MODEL 313, MUELLER BR2B, FORD METER BOX STYLE 202B, OR AN APPROVED EQUAL.
3. CORPORATION VALVES SHALL CONFORM TO AWWA C800-84 AND ASTM B-62. INLET THREADS SHALL BE AWWA TAPER THREAD CC. CORPORATION VALVE SHALL BE DIRECTLY TAPPED INTO THE WATER MAIN USING A TAPPING SADDLE. CORPORATION VALVES SHALL BE BALL VALVE TYPE SUITABLE FOR PRESSURES UP TO 300 PSI. CORPORATION VALVES SHALL BE FORD METER BOX FB1000 FOR 1 1/2" AND 2" LINES, MUELLER B-20046N, OR APPROVED EQUAL.
4. BELOW GRADE WATER SERVICE PIPE UP TO 2" IN DIAMETER SHALL BE TYPE K COPPER PIPE IN ACCORDANCE WITH ASTM B88 AND SHALL BE ONE SOLID CONTINUOUS RUN FROM THE TAP TO THE WATER METER.
5. WATER METERS SHALL BE INSTALLED WITH A LINESETTER MANUFACTURED IN COMPLIANCE WITH ANSI/AWWA C700 (LATEST EDITION). THE LINESETTER SHALL UTILIZE A CHECK VALVE LOCKWING BALL STYLE METER VALVE AND SHALL BE A MCDONALD 720 SERIES OR AN APPROVED EQUAL.
6. WATER METERS IN SIZES UP TO 2" SHALL BE PROVIDED BY THE WMD.
7. ALL RESIDENTIAL WATER METERS SHALL BE INSTALLED BY THE WMD.
8. WATER METER BOXES SHALL BE HIGH DENSITY POLYETHYLENE STRAIGHT WALL STYLE. THE METER LID SHALL BE TRAFFIC RATED DUCTILE IRON METER READING LID IN ACCORDANCE WITH ASTM A536. THE LID SHALL HAVE LETTERING "WATER METER" AND BE REMOVABLE. METER BOXES SHALL BE MANUFACTURED BY SIGMA-RAVEN RMB173018-SE OR APPROVED EQUAL. METER LIDS SHALL BE MANUFACTURED BY SIGMA OR AN APPROVED EQUAL.
9. REDUCED PRESSURE BACKFLOW PREVENTER SHALL BE A REDUCED PRESSURE ZONE ASSEMBLY INSTALLED AT EACH POSSIBLE CROSS-CONNECTION TO PREVENT BACKSIPHONAGE AND BACKPRESSURE BACKFLOW OF HAZARDOUS MATERIALS INTO THE POTABLE WATER SUPPLY. THE DEVICE SHALL BE A WATTS INDUSTRIES, INC. SERIES 909 WITH SERIES 909AG AIRGAP. OR AN APPROVED EQUAL. CONTRACTOR SHALL REVIEW THE CROSS CONNECTION CONTROL PLAN AT THE WMD OFFICE OR ON THE CITY OF FRANKLIN WEBSITE (FRANLINTN.GOV).
10. DOUBLE-CHECK ASSEMBLIES SHALL COMPLY WITH ASSE 1048 AND FMG APPROVED, OR UL LISTED. DEVICES SHALL BE MANUFACTURED BY WALLS INDUSTRIES, INC., WATER PRODUCTS DIVISION OR AN APPROVED EQUAL.
11. MINIMUM WATER SERVICE PIPE COVER SHALL BE 36" UNDER ROADWAYS.
12. WATER SERVICE PIPE INSTALLED PARALLEL TO A ROADWAY SHALL HAVE A MINIMUM PIPE COVER OF 30".
13. WATER SERVICE PIPE SHALL BE INSTALLED AT A MINIMUM DEPTH OF 24" FROM THE CORPORATION VALVE TO THE WATER METER BOX.
14. THE WATER METER BOX SHALL BE INSTALLED AT A LOCATION SUCH THAT IT WILL NOT BE IN A DRIVEWAY, SIDEWALK, OR UNDER SHRUBS OR TREES. A MARKER POLE SHALL BE INSTALLED AT THE METER BOX WITH A MINIMUM OF 3 FEET IN THE GROUND AND 2 FEET ABOVE GRADE. THE ABOVE GRADE PORTION OF THE PIPE SHALL BE PAINTED BLUE.

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL RELATED TO WORK IN SHAWNEE DRIVE. PRIOR TO ANY WORK IN SHAWNEE DRIVE, THE CONTRACTOR SHALL CREATE AND SUBMIT FOR APPROVAL A TRAFFIC CONTROL PLAN THAT COMPLIES WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY OF FRANKLIN REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE ALL WORK AND ROAD AND SIDEWALK CLOSURES WITH THE CITY OF FRANKLIN.

NOTE:
CITY OF FRANKLIN REQUIRES THE FDC TO BE INSTALLED ON THE BUILDING AND REQUIRES A HORN / STROBE ABOVE THE FDC.

NOTE:
BUILDINGS WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM AND / OR FIRE ALARM SYSTEM SHALL HAVE A KNOX BOX 3200 SERIES. THE BOX SHALL BE INSTALLED IN AN APPROVED LOCATION NO MORE THAN 60-INCHES ABOVE GRADE.

FRANKLIN, TN UTILITIES

WATER: FRANKLIN WATER & SEWER
124 LUMBER DRIVE
FRANKLIN, TN 37064
(615) 794-4554

SEWER: FRANKLIN WATER & SEWER
124 LUMBER DRIVE
FRANKLIN, TN 37064
(615) 794-4554

ELECTRIC: M.T.E.M.C.
2156 EDWARD CURD LANE
FRANKLIN, TN 37067
(615) 794-3561

GAS: ATMOS ENERGY MID-SOUTH DIVISION
810 CRESCENT CENTRE DRIVE, #60
FRANKLIN, TN 37064
MATT MILLER
(615) 566-3071

LEGEND

- PUBLIC ACCESS EASEMENT
- DRAINAGE EASEMENT
- UTILITY EASEMENT
- TRANSITION ZONE 1
- TRANSITION ZONE 2
- TRANSITION ZONE 3

TENNESSEE GRID NORTH

scale 50 0 50 feet

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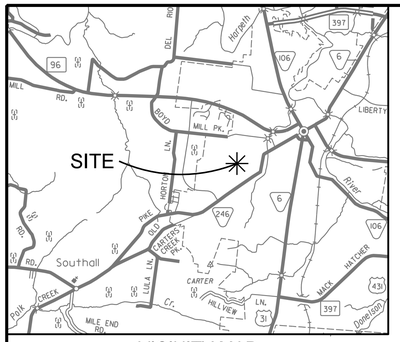
UTILITY PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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FILE NO. 1716-24



VICINITY MAP
NOT TO SCALE

UTILITY DEMOLITION KEY NOTES

1. DEMOLISH/REMOVE EXISTING WATER SERVICE LINES FROM BUILDING TO PROPERTY LINE. CAP WATER LINE AS REQUIRED.
2. CAP AND DEMOLISH/REMOVE EXISTING SANITARY SEWER SERVICES FROM BUILDING TO PROPERTY LINE. CAP LINE AS REQUIRED.
3. REMOVE 2" WATER LINE ON-SITE, CAP WATER LINE AS REQUIRED AT PROPERTY LINE.
4. REMOVE WATER METER AND BACKFLOW DEVICE. CAP EXISTING WATER LINE IN GRASS STRIP BETWEEN SIDEWALK AND CURB AND GUTTER. COORDINATE WORK WITH CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT.
5. OVERHEAD POWER LINES AND POLES WILL BE REMOVED FROM SHAWNEE DRIVE IN FRONT OF THE PROPOSED DEVELOPMENT. UNDERGROUND ELECTRIC SERVICE TO THE SITE WILL ORIGINATE FROM AN EXISTING POWER POLE ON THE WEST SIDE OF SHAWNEE DRIVE NEAR NORTH PETWAY STREET.
6. PROPOSED DEVELOPMENT WILL NOT UTILIZE NATURAL GAS. REMOVE EXISTING GAS LINE ON SITE TO THE PROPERTY LINE AND CAP. COORDINATE WORK WITH ATMOS ENERGY.

NOTE: ALL VOIDS SHALL BE BACKFILLED FULL DEPTH WITH CRUSHED STONE.

NOTE: FENCES ALONG OR ADJACENT TO PROPERTY LINES SHALL NOT BE DISTURBED.

NOTE: FOR WATER AND SEWER LINES, CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL ALL MATERIALS AND PROCESSES UTILIZED TO PERMANENTLY CAP PIPES. ALL WORK SHALL BE COORDINATED WITH THE CITY OF FRANKLIN WATER MANAGEMENT DEPARTMENT.

NOTE: THE PLACING OR TRANSFERRING OF TRASH DUMPSTERS IN THE RIGHT-OF-WAY OF SHAWNEE DRIVE IS NOT ALLOWED.

NOTE: THERE SHALL BE NO DEMOLITION WORK PERFORMED IN THE RIGHT-OF-WAY OF SHAWNEE DRIVE UNLESS NOTED OTHERWISE.

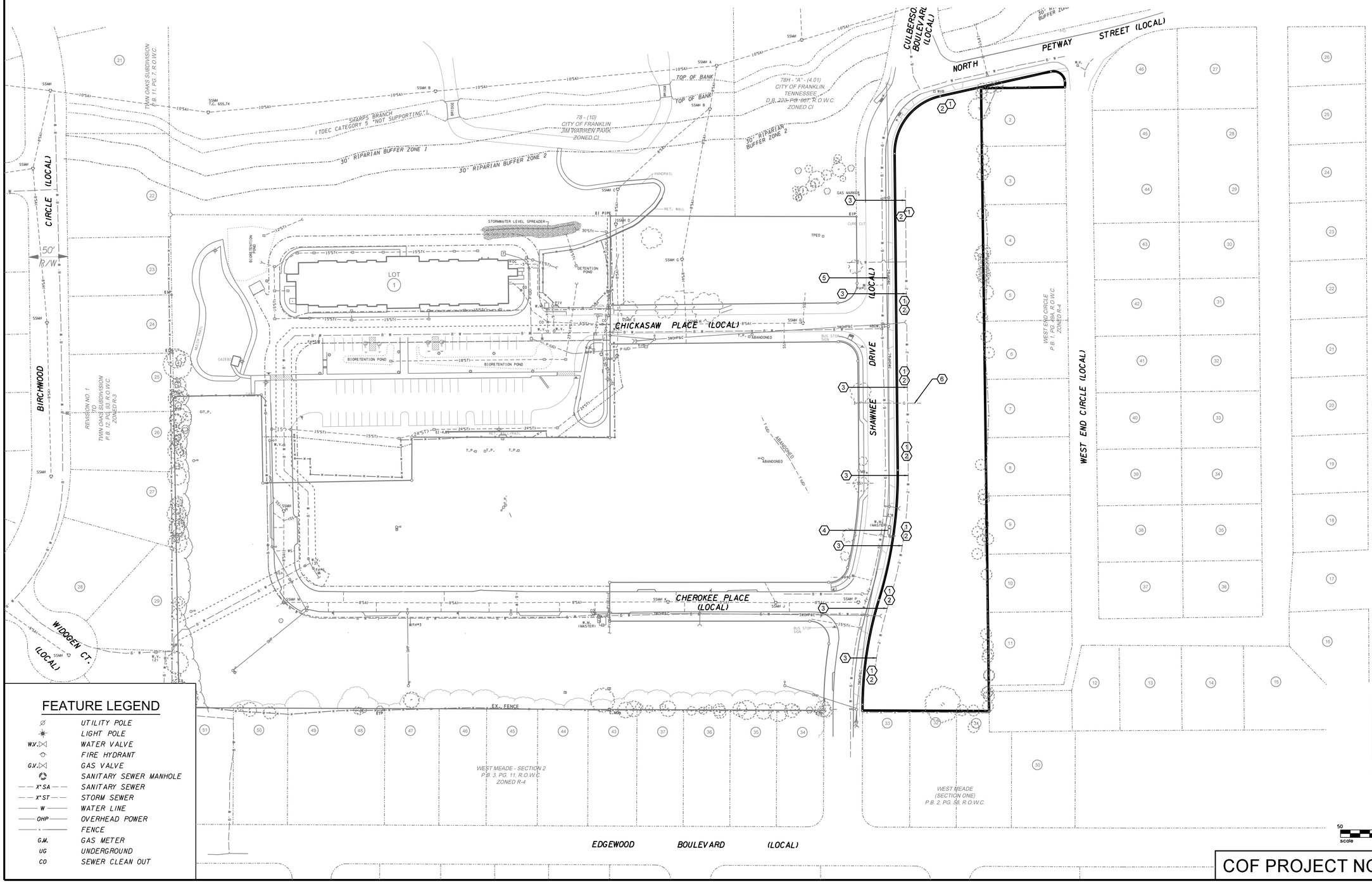
NOTE: DO NOT DISTURB POWER POLE GUY WIRES.

DEMOLITION LEGEND

- EXISTING WATER SERVICE TO BE REMOVED
- EXISTING SANITARY SEWER SERVICE TO BE REMOVED

EASEMENT LEGEND

- PUBLIC ACCESS EASEMENT
- PUBLIC SEWER EASEMENT
- PUBLIC WATER EASEMENT
- DRAINAGE EASEMENT



FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- WATER VALVE
- FIRE HYDRANT
- GAS VALVE
- SANITARY SEWER MANHOLE
- SANITARY SEWER
- STORM SEWER
- WATER LINE
- OHP — OVERHEAD POWER
- FENCE
- GAS METER
- UG — UNDERGROUND
- CO — SEWER CLEAN OUT

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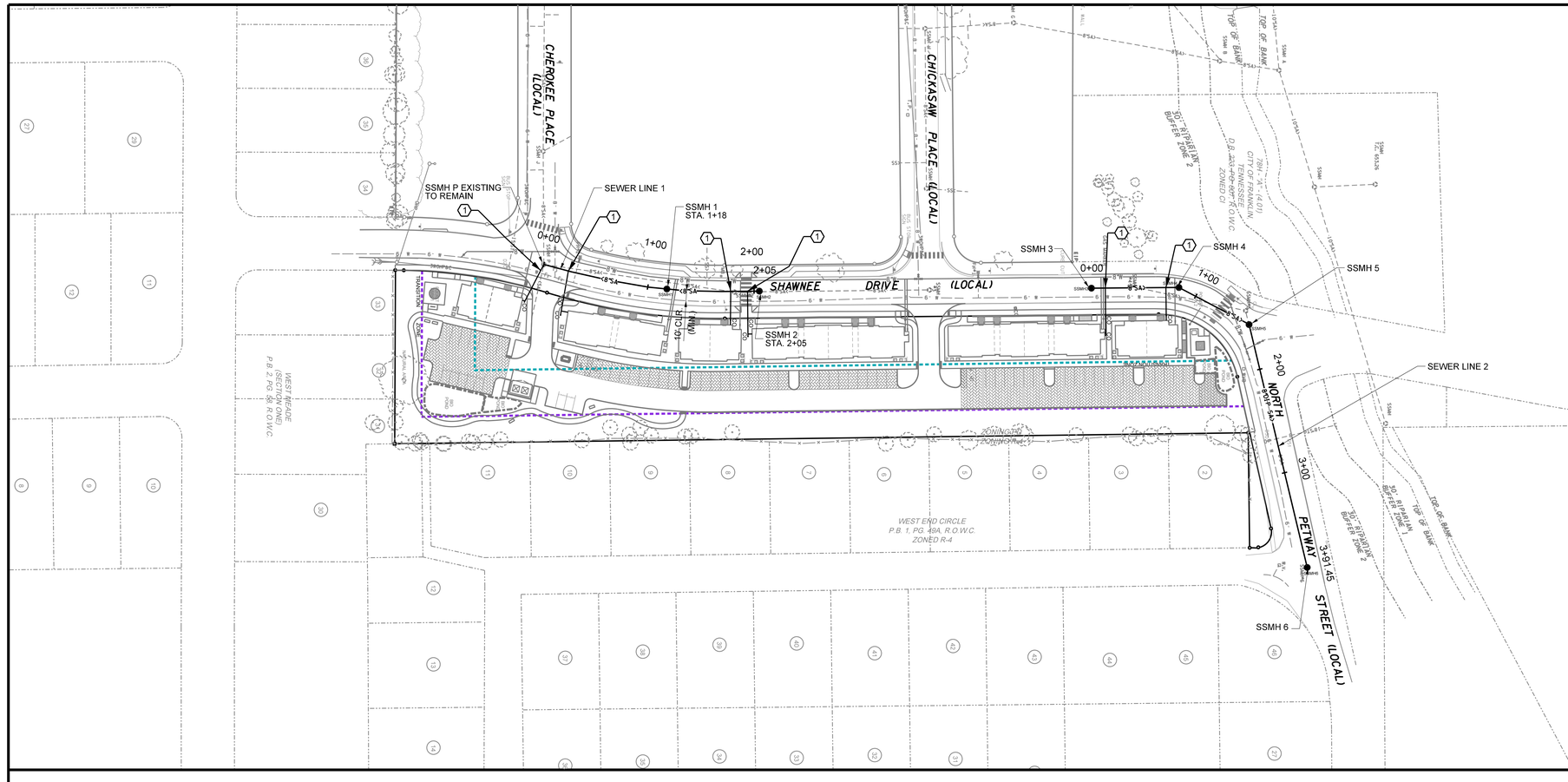
UTILITY DEMOLITION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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FEATURE LEGEND

⌀	UTILITY POLE
✳	LIGHT POLE
W.V.	WATER VALVE
◇	FIRE HYDRANT
G.V.	GAS VALVE
S	SANITARY SEWER MANHOLE
— X" SA —	SANITARY SEWER
— X" ST —	STORM SEWER
— W —	WATER LINE
— OHP —	OVERHEAD POWER
— x —	FENCE
G.M.	GAS METER
UG	UNDERGROUND
CO	SEWER CLEAN OUT

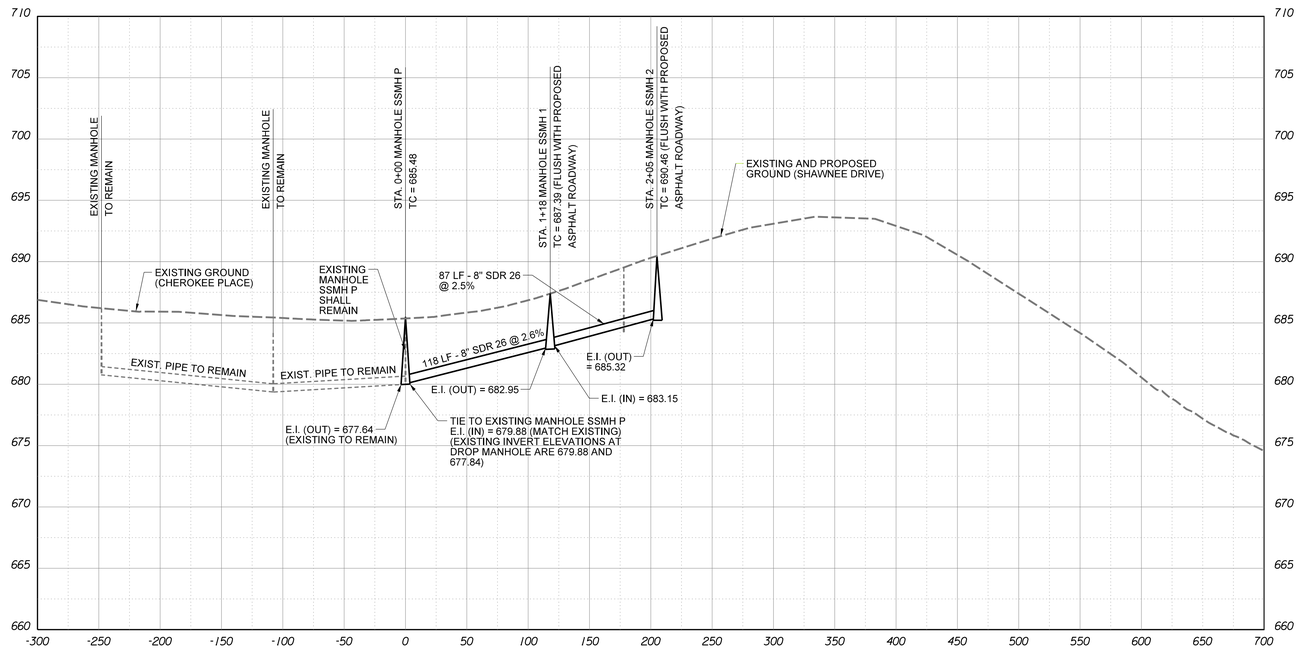
SEWER KEY NOTES:

1. CONSTRUCT 6" SDR-26 SANITARY SEWER LATERAL FROM NEW SEWER LINE TO THE PROPERTY LINE. LATERAL SHALL HAVE A 6" CLEANOUT AT THE PROPERTY LINE. MINIMUM SLOPE ON LATERAL SHALL BE 1%.

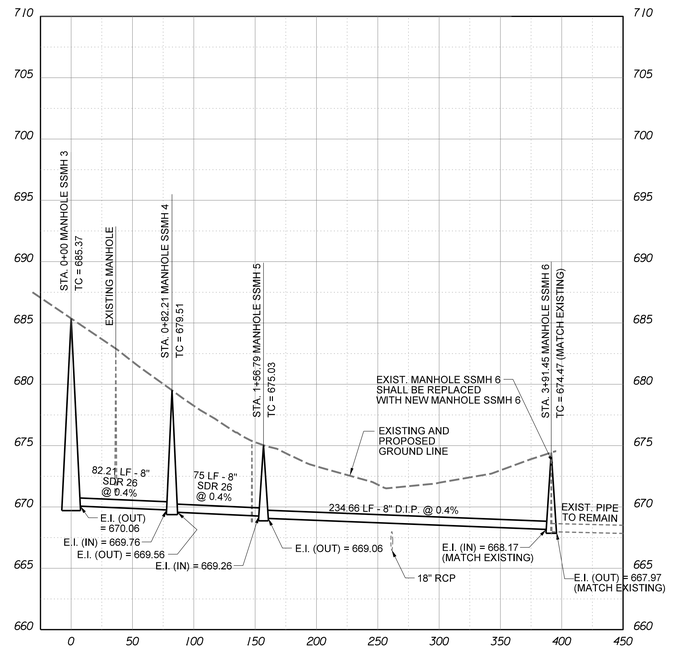
NOTE: EXISTING SANITARY SEWER SHALL BE REPLACED WITH NEW 8" PIPES & NEW MANHOLES FOR SEWER LINES 1 & 2

EXISTING SANITARY SEWER STRUCTURE TABLE				
STRUCTURE NO.	CASTING ELEV.	INVERT IN	INVERT IN	INVERT OUT
SSMH J	685.80	681.46	677.11	677.01
SSMH P	685.48	679.88	679.98	677.64
SSMH 2	690.20	684.85		684.65
SSMH 3	693.24			687.44
SSMH 4	682.53	SEE NOTE		670.98
SSMH 5	675.12	668.97		668.77
SSMH 6	674.42	668.17		667.97

NOTE: SANITARY SEWER LINE FLOWING INTO SSMH 4 WAS TAKEN OUT OF SERVICE IN 2019.



SEWER LINE 1



SEWER LINE 2

COF PROJECT NO. 7916

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09-01-22

SANITARY SEWER PLAN AND PROFILE

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C5.2

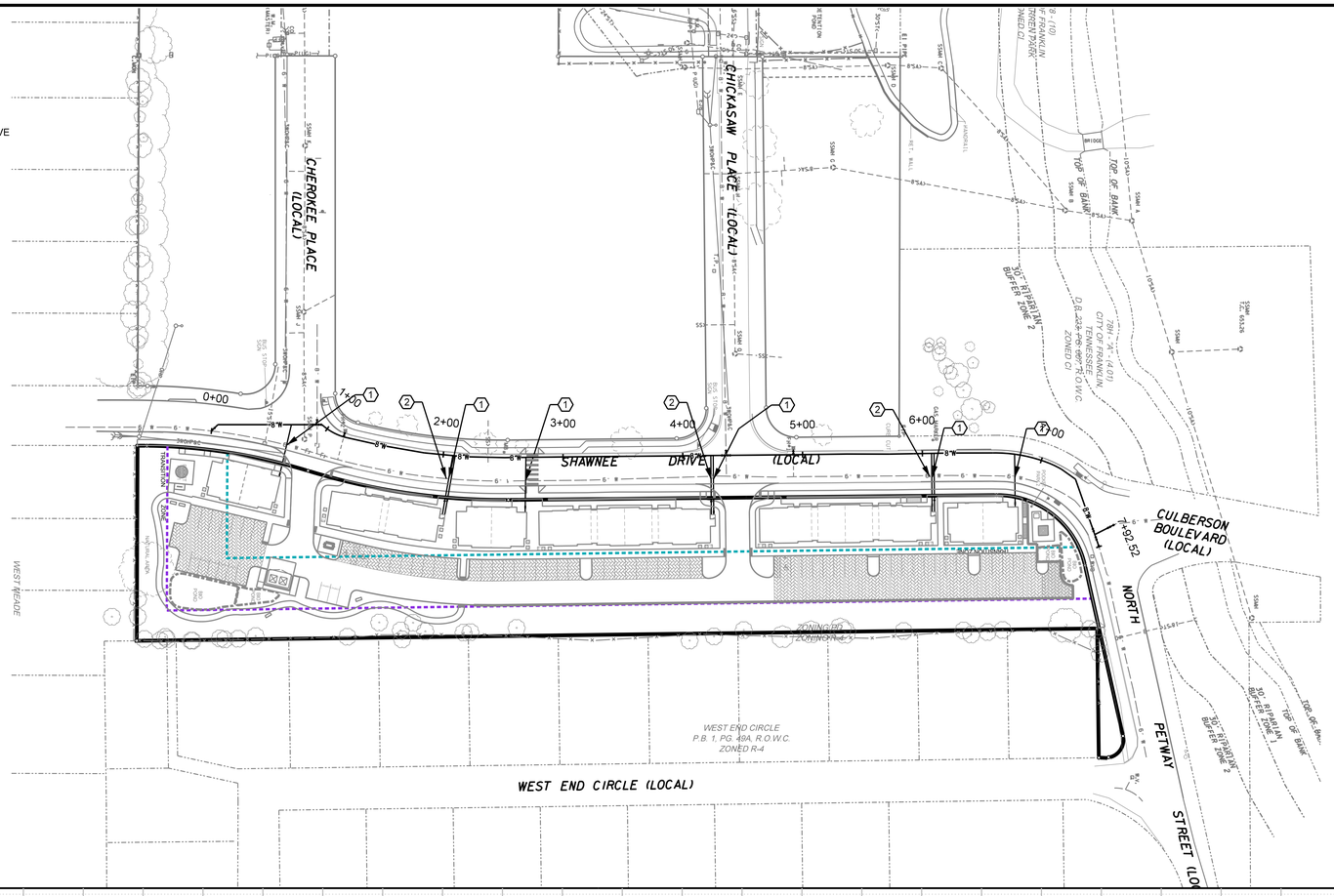
FILE NO. 1716-24

WATER KEY NOTES:

1. CONSTRUCT 1 1/2" DOMESTIC WATER SERVICE LINE FROM NEW WATER MAIN TO THE PROPERTY LINE. CONSTRUCTION SHALL INCLUDE WATER METER BOX WITH LINESETTER. SEE "DOMESTIC SERVICE LINE CONSTRUCITON" ON SHEET C5.0 FOR ADDITIONAL INFORMATION.
2. CONSTRUCT 3" CLASS 350 DUCTILE IRON PIPE FIRE LINE FROM 8"X8"X3" TEE IN NEW WATER MAIN TO THE PROPERTY LINE. CAP 3" PIPE AND PLACE AN ABOVE GROUND MARKER. PIPE SHALL HAVE A MINIMUM OF 36" OF COVER.

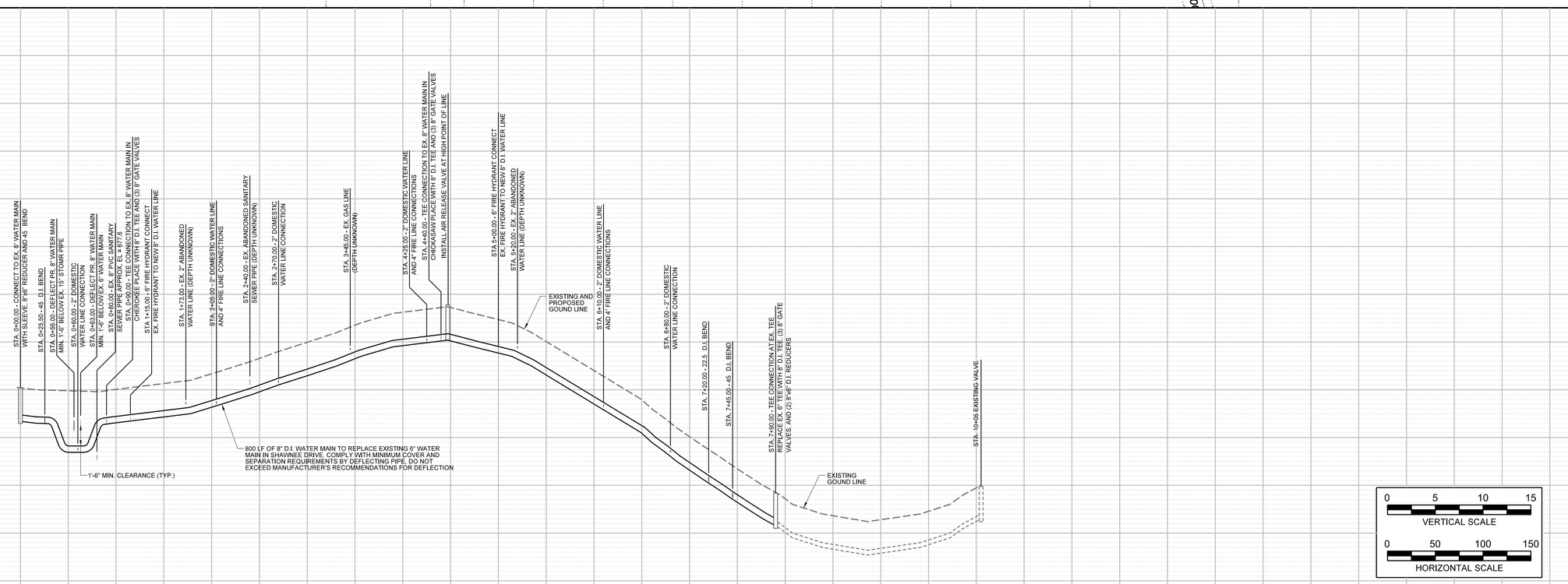
NOTE: WATER LINE SHALL BE CONSTRUTED WITH 5'-0" OR LESS COVER WHERE FEASIBLE. WATER LINE SHALL NOT BE IN CONFLICT WITH SANITARY OR STORM SEWER.

NOTE: VERTICAL SEPARATION BETWEEN WATER LINE AND ALL OTHER UTILITY LINES SHALL BE 18 INCHES MINIMUM.



FEATURE LEGEND

- UTILITY POLE
- LIGHT POLE
- W.V. WATER VALVE
- FIRE HYDRANT
- G.V. GAS VALVE
- SANITARY SEWER MANHOLE
- X"SA SANITARY SEWER
- X"ST STORM SEWER
- W WATER LINE
- OHP OVERHEAD POWER
- FENCE
- G.M. GAS METER
- UG UNDERGROUND
- CO SEWER CLEAN OUT
- PROPOSED SEWER MANHOLE



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09-01-22

WATER PLAN AND PROFILE

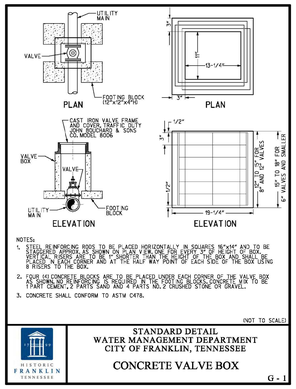
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

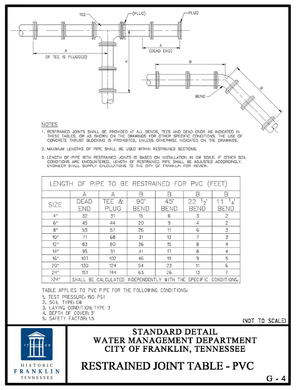
DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

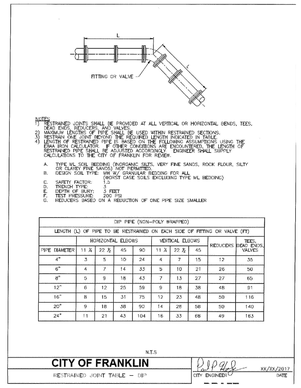
C5.3

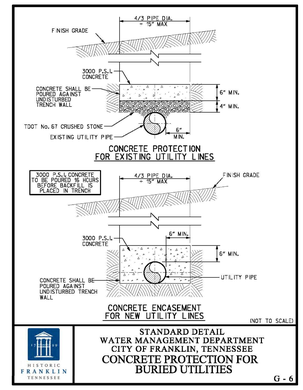
FILE NO. 1716-24

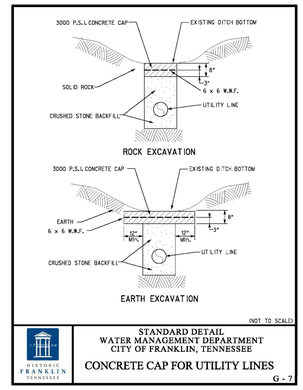
COF PROJECT NO. 7916

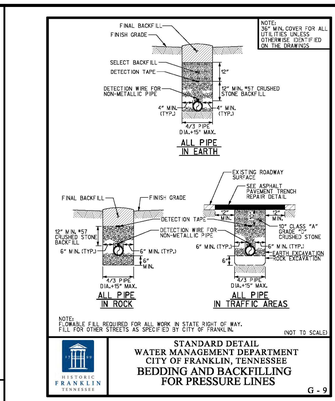


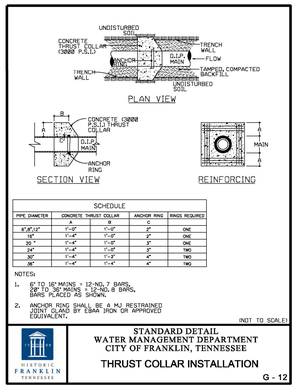


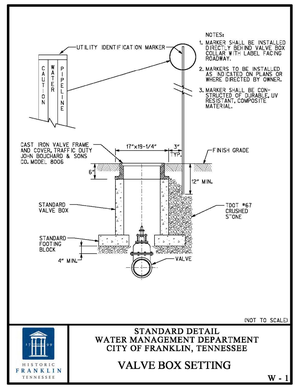


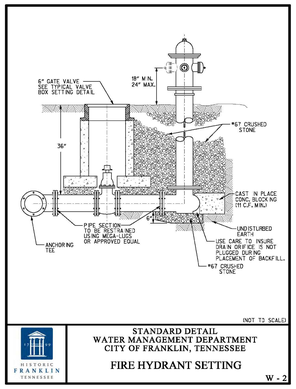


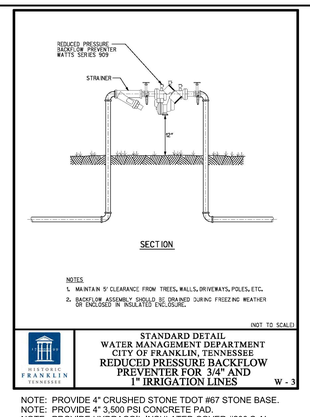




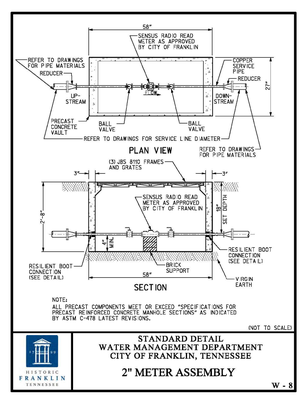


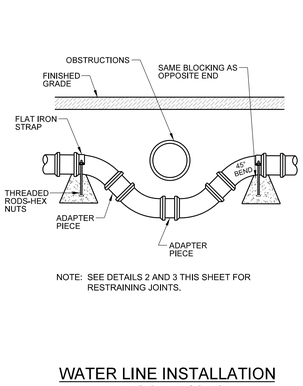






NOTE: PROVIDE 4" CRUSHED STONE TDOT #67 STONE BASE.
NOTE: PROVIDE 4" 3,500 PSI CONCRETE PAD.
NOTE: PROVIDE HYDRACOIL INSULATED COVER #200 S-AL OR APPROVED EQUAL.

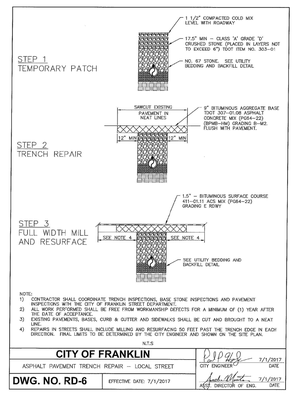


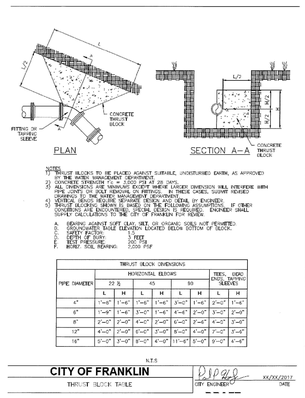


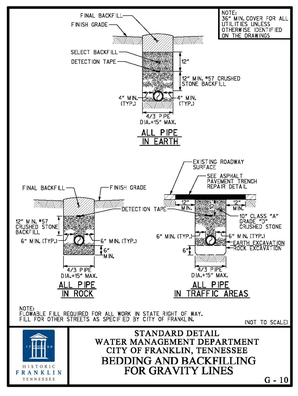
NOTE: SEE DETAILS 2 AND 3 THIS SHEET FOR RESTRAINING JOINTS.

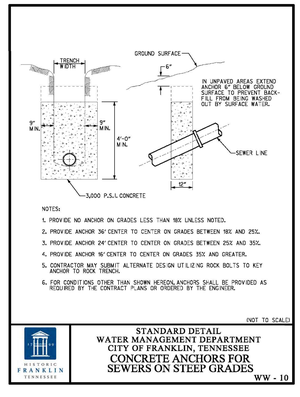
WATER LINE INSTALLATION AT CONFLICTS
NOT TO SCALE

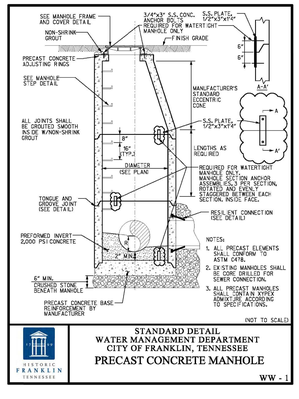
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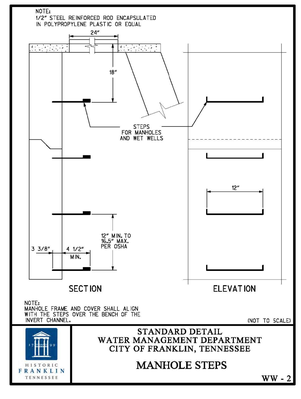


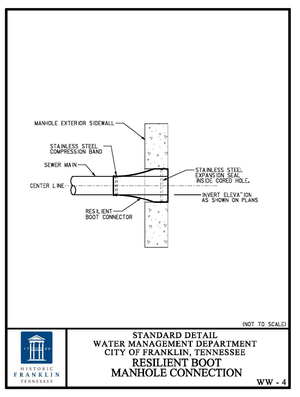


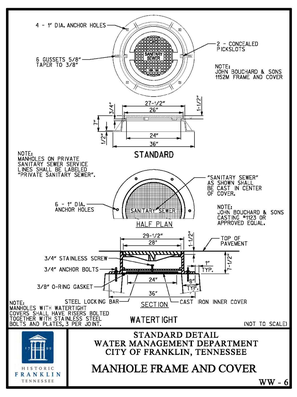


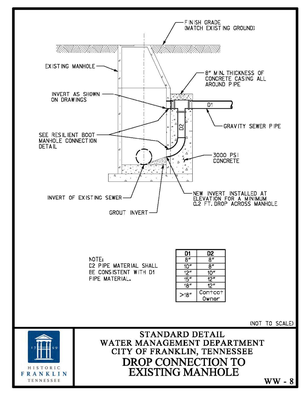


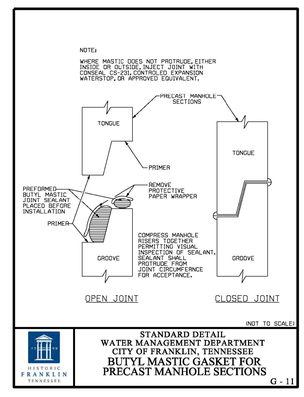












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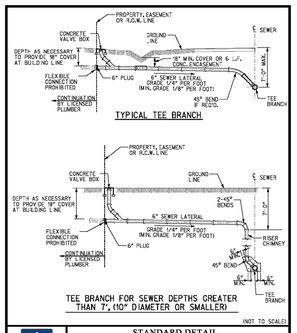
JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102900 STATE OF TENNESSEE
09-01-22

UTILITY DETAILS

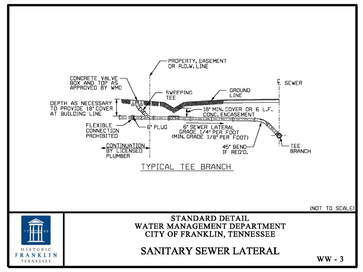
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
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TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
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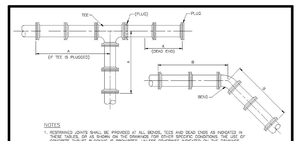
C5.4
FILE NO. 1716-24



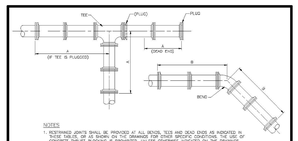
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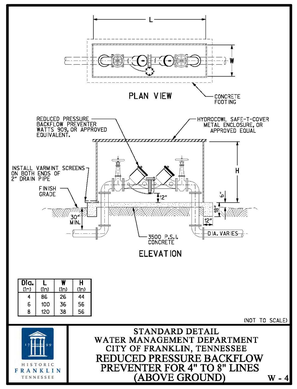
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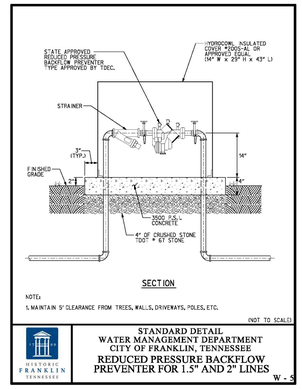
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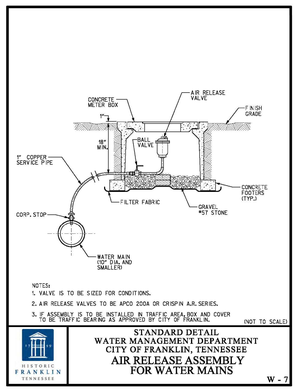
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5



6



7

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JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL ENGINEER
No. 102600
STATE OF TENNESSEE
09-01-22

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
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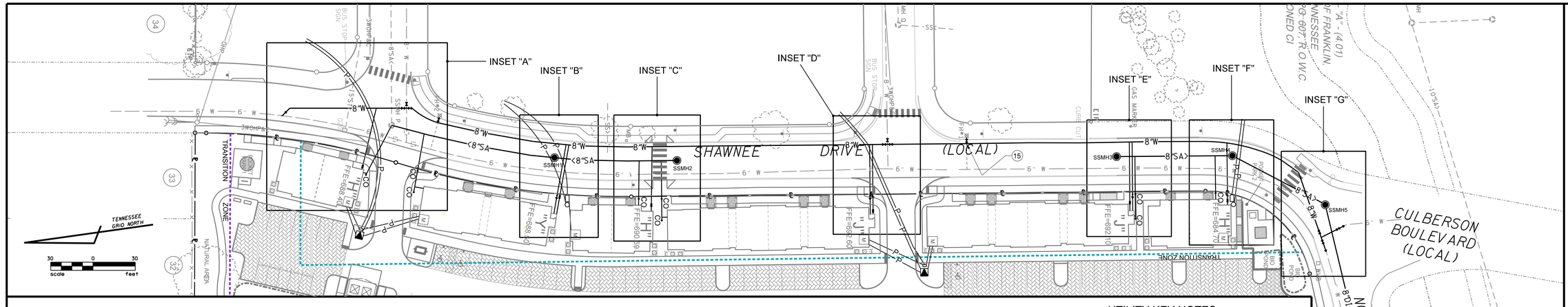
UTILITY DETAILS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

C5.5

FILE NO. 1716-24

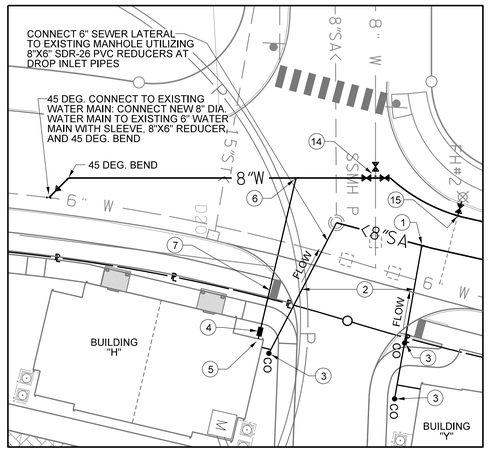
COF PROJECT NO. 7916



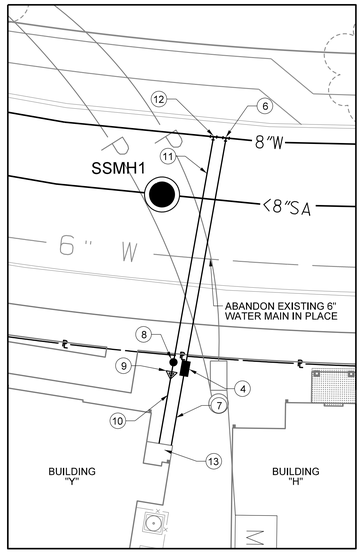
UTILITY KEY NOTES:

1. 8"X8"X6" SDR-26 PVC TEE ON 8" PVC SEWER MAIN.
2. 6" SDR-26 PVC SANITARY SEWER LATERAL @ 1.0% MIN. SLOPE.
3. 6" SDR-26 PVC SANITARY SEWER CLEANOUT IN A TRAFFIC RATED BOX AND LID MARKED "SEWER".
4. 2" DOMESTIC WATER METER IN HDPE METER BOX (17"WX30"L).
5. 2" RPBP IS LOCATED IN THE BUILDING.
6. 2" TAPPING SADDLE ON 8" DIP WATER MAIN.
7. 2" DIA. TYPE K COPPER PIPE.
8. P.I.V. ON 4" FIRE LINE.
9. 4" TO 3" DIP REDUCER.
10. 3" DIP FIRE LINE PRESSURE CLASS 350.
11. 4" DIP FIRE LINE PRESSURE CLASS 350.
12. 8"X8"X4" DIP TEE ON 8" DIP WATER MAIN.
13. 2" RPBP AND 3" DOUBLE DETECTOR CHECK VALVE ASSEMBLY ARE LOCATED IN THE BUILDING.
14. TEE CONNECTION AT EXISTING TEE 8" DUCTILE IRON TEE AND 3-8" GATE VALVES IN TRAFFIC RATED VALVE BOXES SHALL REPLACE EXISTING 6" TEE
15. EXISTING FIRE HYDRANT CONNECT TO NEW 8" WATER MAIN WITH 8"X8"X6" TEE AND NEW 6" VALVE.

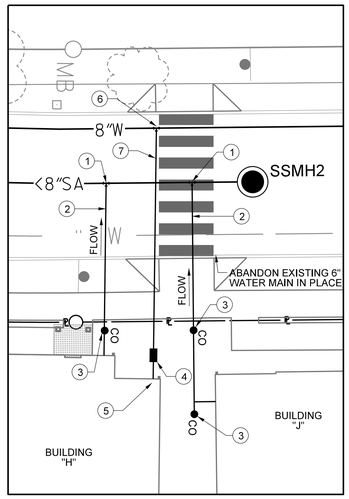
NOTE: P.I.V. SHALL BE LOCATED 1'-0" BEHIND SIDEWALK.



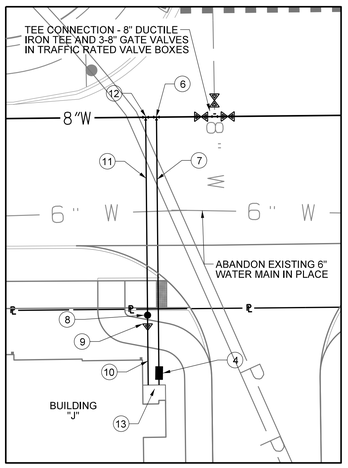
INSET "A"



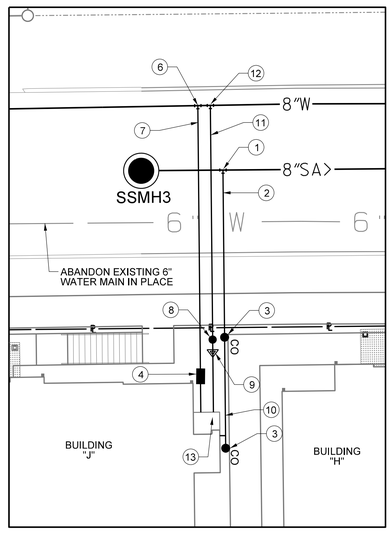
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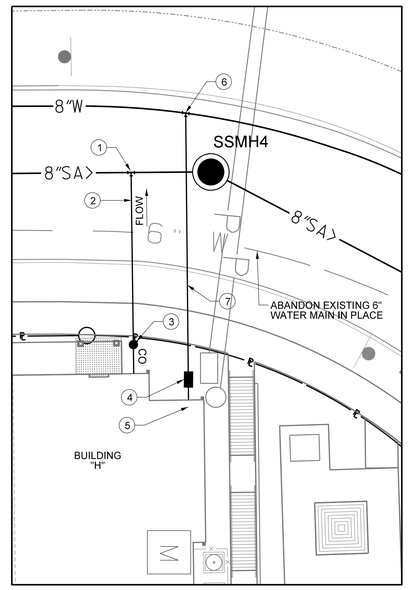
INSET "C"



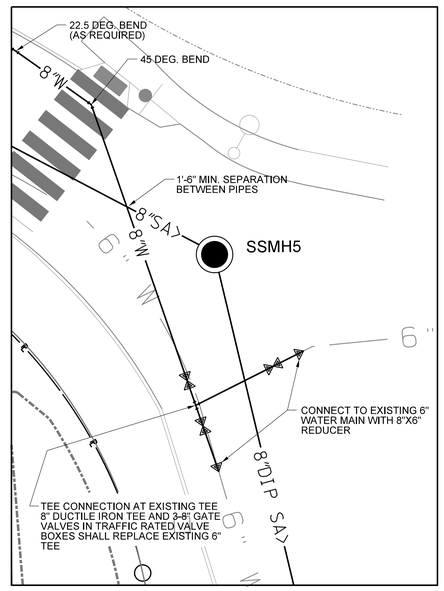
INSET "D"



INSET "E"



INSET "F"



INSET "G"

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JAMES R. GILLESPIE REGISTERED No. 102501 STATE OF TENNESSEE
09-01-22

ENLARGED UTILITY LAYOUTS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C5.6

FILE NO. 1716-24

COF PROJECT NO. 7916

HYDRANT FLOW TEST REPORT

TEST DATE: 06-20-2022
TEST TIME: 9:00 A.M.
LOCATION: CHEROKEE PLACE & SHAWNEE DRIVE, FRANKLIN, TN
TESTED BY: GRAND FIRE PROTECTION
WITNESSED BY BEN CONNER, CITY OF FRANKLIN WATER DEPARTMENT
TEST HYDRANT #2: 70 PSI STATIC PRESSURE
54 PSI RESIDUAL PRESSURE
FLOW HYDRANT #1: 35 PSI
1000 GPM

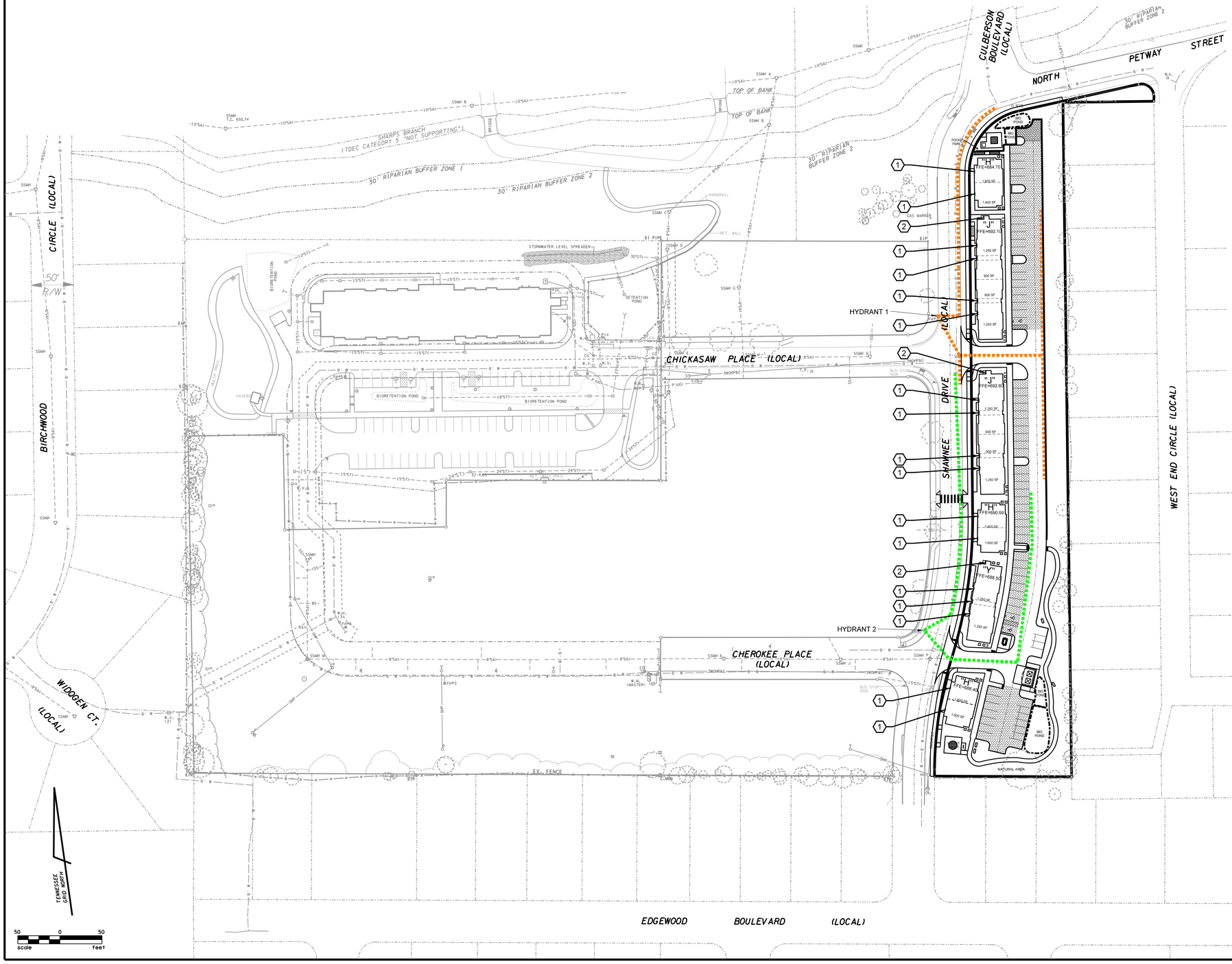
INTERNATIONAL BUILDING CODE BUILDING TYPE: TYPE V-B

KEY NOTE

1. BUILDING ENTRANCE
2. FIRE DEPARTMENT CONNECTION

FEATURE LEGEND

⌀	UTILITY POLE
✳	LIGHT POLE
W.V.	WATER VALVE
⌀	FIRE HYDRANT
G.V.	GAS VALVE
⌀	SANITARY SEWER MANHOLE
— — X" SA — —	SANITARY SEWER
— — X" ST — —	STORM SEWER
—— W ——	WATER LINE
—— OHP ——	OVERHEAD POWER
—— x ——	FENCE
G.M.	GAS METER
UG	UNDERGROUND
CO	SEWER CLEAN OUT



JAMES + ASSOCIATES, INC.
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One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1155 • 615/726-4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102501 STATE OF TENNESSEE
09-01-22

EMERGENCY MANAGEMENT PLAN

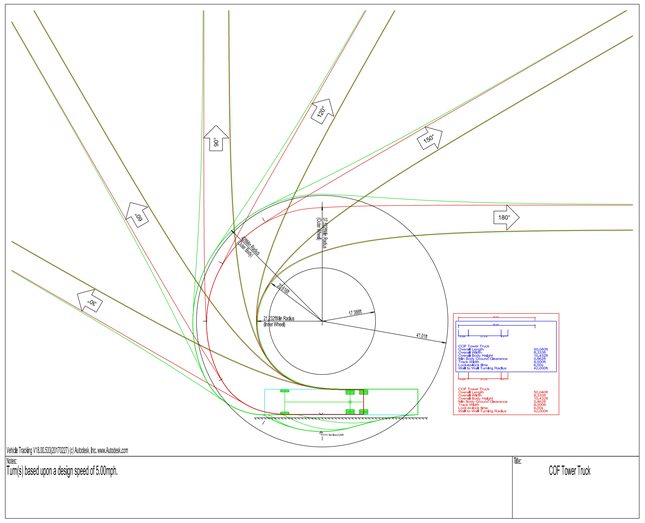
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C6.0

FILE NO. 1716-24

COF PROJECT NO. 7916



COF PROJECT NO. 7916

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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102800 STATE OF TENNESSEE
09-01-22

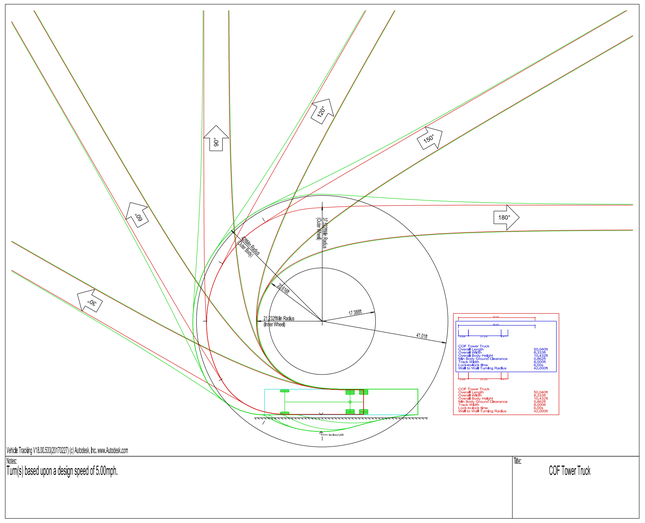
EMERGENCY MANAGEMENT PLAN - AUTOTURN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C6.1

FILE NO. 1716-24



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JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL ENGINEER
No. 102603
STATE OF TENNESSEE
09-01-22

EMERGENCY MANAGEMENT PLAN - AUTOTURN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

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C6.2

FILE NO. 1716-24

COF PROJECT NO. 7916

1.0 SWPPP REQUIREMENTS

1.1 HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS?
[X] YES (CHECK ALL THAT APPLY BELOW) OR [ ] NO

[X] CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

[X] A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT

[X] HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

1.2 DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC, OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS)?
[ ] YES [X] NO

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT?
[ ] YES [ ] NO

1.3 DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING?
[X] YES (CHECK ALL THAT APPLY BELOW) [ ] NO

[X] WATERS WITH UNAVAILABLE PARAMETERS (303(d)) FOR SILTATION OR HABITAT ALTERATION)

[ ] EXCEPTIONAL TENNESSEE WATERS

IF YES, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS?
[X] YES (CHECK ALL THAT APPLY BELOW) OR [ ] NO

[X] CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)

[X] A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT

[X] HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

2.0 SITE DESCRIPTION

2.1. PROJECT LIMITS: REFER TO EROSION CONTROL PLAN SHEETS C7.0 AND C7.1

2.2. PROJECT DESCRIPTION:
TITLE: FRANKLIN HOUSING AUTHORITY SHAWNEE PUD
ADDRESS OR STREET REF: 1101 SHAWNEE DRIVE
CITY: FRANKLIN
COUNTY: WILLIAMSON
LAT./LONG. 35.919300° N, -86.887281°W

2.3. SITE MAP(S): SEE VICINITY MAP THIS SHEET FOR USGS QUADRANGLE MAP.

2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY: REFER TO SHEET C1.0 FOR EXISTING CONTOURS.

2.5. MAJOR SOIL DISTURBING ACTIVITIES (CHECK ALL THAT APPLY):

[X] CLEARING AND GRUBBING
[X] EXCAVATION
[X] CUTTING AND FILLING
[X] FINAL GRADING AND SHAPING
[X] UTILITIES
[X] OTHER (DESCRIBE): BUILDING FOUNDATION REMOVAL

2.6. TOTAL PROJECT AREA: 2.4 ACRES

2.7. TOTAL AREA TO BE DISTURBED: 2.4 ACRES

2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? [ ] YES [X] NO
IF YES, LIST THE CORRESPONDING PLAN SHEET:

2.10. SOIL PROPERTIES: SEE SHEET C7.7 FOR SOILS MAP AND LISTING.

2.11. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES: SEE TABLES 1 AND 2 THIS SHEET.

TABLE 1 - RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS

Runoff Coefficients For Existing Conditions				
Area Type	Acreage	Percentage of Total Area (%)	Runoff CN	C Factor
Impervious	0.63	25%	98	0.95
Pervious A (Turf)	1.38	54%	39	0.2
Pervious B (Turf)	0.55	21%	61	0.3
Pervious Pavers	0	0%	60	0.92
Weighted CN or C Factor=			58	0.40

TABLE 2 - RUNOFF COEFFICIENTS FOR PROPOSED CONDITIONS

Runoff Coefficients For Proposed Conditions				
Area Type	Acreage	Percentage of Total Area (%)	Runoff CN	C Factor
Impervious	1.18	48%	98	0.95
Pervious A (Turf)	0.78	32%	39	0.2
Pervious B (Turf)	0.2	8%	61	0.3
Pervious Pavers	0.27	11%	60	0.92
Weighted CN or C Factor=			72	0.65

3.0 GENERAL ORDER OF CONSTRUCTION ACTIVITIES

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE ORDER OF CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE EPSC PLAN SHEETS C7.0 AND C7.1)

3.2. INSTALL STABILIZED CONSTRUCTION EXITS.

3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.

3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

3.5. DEMOLITION AND REMOVAL OF EXISTING BUILDINGS TO BE REMOVED.

3.6. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).

3.7. REMOVE AND STORE TOPSOIL.

3.8. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.

3.9. INSTALL UTILITIES AND CULVERTS.

3.10. INSTALL CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.

3.11. CONSTRUCTION OF PROPOSED BUILDINGS.

3.12. PERFORM FINAL GRADING AND INSTALL BASE STONE.

3.13. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.

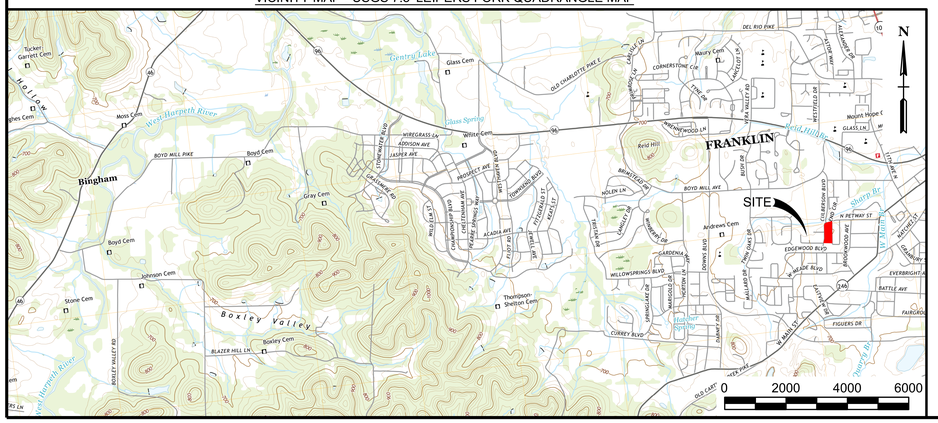
3.14. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.

3.15. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION/CONTROL BLANKET, SOD, ETC.)

3.16. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.

3.17. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

VICINITY MAP - USGS 7.5' LEIPERS FORK QUADRANGLE MAP



4.0 STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? [X] YES [ ] NO

IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

[X] 303(d) WITH UNAVAILABLE PARAMETERS FOR SILTATION
[X] 303(d) WITH UNAVAILABLE PARAMETERS FOR HABITAT ALTERATION
[ ] EXCEPTIONAL TENNESSEE WATERS (ETW)

4.1.3. RECEIVING WATERS OF THE STATE

RECEIVING WATERS OF THE STATE INFORMATION						
STATE WATER LABEL	NAME OF RECEIVING STATE WATER	303(d) UNAVAILABLE FOR SILTATION (YES OR NO)	303(d) UNAVAILABLE FOR HABITAT ALTERATION (YES OR NO)	ETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ONE FLOW MILE DOWNSTREAM OF PROJECT LIMITS (YES OR NO)
TN05130204016_1600	SHARPS BRANCH	YES	YES	NO	YES	YES

4.1.4. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE?
[X] YES [ ] NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S).

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.

[X] 60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE, WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

[ ] 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP?
[ ] YES [X] NO

4.1.6. ARE THERE WATER QUALITY RIPARIAN BUFFER ZONE EXEMPTIONS?
[ ] YES [X] NO

IF YES, EXISTING CONDITIONS DESCRIPTION:

4.1.7. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED.

4.1.8. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.9. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENGINEER SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.0 STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION (CONT.D)

4.2. RECEIVING WATERS OF THE UNITED STATES (WOTUS) (EPHEMERAL)

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WOTUS (EPHEMERAL)? [ ] YES [X] NO

RECEIVING WOTUS (EPHEMERAL) INFORMATION		
WOTUS LABEL	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN 15 FEET OF THE PROJECT LIMITS (YES OR NO)

4.2.1. ARE WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WOTUS?
[ ] YES [X] NO

IF YES, A 15 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING EPHEMERAL STREAM IDENTIFIED AS A WOTUS (EPHEMERAL) BY THE U.S. ARMY CORPS OF ENGINEERS (USAGE) OR THE ENVIRONMENTAL PROTECTION AGENCY SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE.

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S)

4.2.2. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR WOTUS (EPHEMERAL) DUE TO A USAGE PERMIT?
[ ] YES [X] NO

4.3. OUTFALL INFORMATION.

4.3.1. OUTFALL TABLE, SEE SHEETS C2.1, D1.0, D2.0 FOR OUTFALL INFORMATION.

4.3.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS?
[X] YES [ ] NO

4.3.3. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP?
[ ] YES [X] NO

4.3.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF, THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?
[ ] YES [ ] NO [X] N/A

4.3.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)?
[ ] YES [ ] NO [X] N/A

4.3.6. A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. A TEMPORARY (OR PERMANENT) SEDIMENT BASIN, OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE;

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE.

TWO PRINCIPAL OBJECTIVES IN SEDIMENT BASIN DESIGN SHOULD BE RECOGNIZED:

(A) LOWER WET AND DRY SEDIMENT TREATMENT STORAGE WITH A PERMANENT POOL, WITH A TOTAL MINIMUM VOLUME BELOW THE PRINCIPAL SPILLWAY RISER CREST OF 134 YD3/ACRE.

(B) UPPER HYDROLOGIC STORAGE (I.E., 2-YR OR 5-YR AND 25-YR, 24-HR STORMS) FOR DESIGNING HYDRAULIC CONTROLS SUCH AS PRINCIPAL AND EMERGENCY SPILLWAYS. PRINCIPAL AND EMERGENCY SPILLWAYS WILL BE DESIGNED AT A MINIMUM TO PASS THE 25-YR, 24-HR STORM WITHOUT OVERTOPPING OR THAT REQUIRED BY THE GOVERNING MUNICIPALITY, WHICHEVER IS GREATER.

4.4. WETLAND INFORMATION
WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS?
[ ] YES [X] NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION		
WETLAND LABEL	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)

4.5. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION

4.5.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?
[ ] YES [X] NO

4.5.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUB WATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?
[ ] YES [ ] NO

4.5.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?
[ ] YES [ ] NO

4.5.4. IF YES, HAS A SUMMARY OF THE CONSULTATION LETTER BEEN SUBMITTED/RECEIVED?
[ ] YES [ ] NO

COF PROJECT NO. 7916

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JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL ENGINEER
No. 120999
STATE OF TENNESSEE
09-01-22

STORMWATER POLLUTION PREVENTION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
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C7.0

FILE NO. 1716-24

5.0 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES

5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION.

5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS.

5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED PER THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA?
[X] YES [ ] NO

5.4. THE CONTROL MEASURES ARE TO BE DESIGNED FOR THE 2-YEAR, 24 HOUR STORM EVENT FOR RECEIVING WATERS WITH AVAILABLE PARAMETERS OR THE 5-YEAR, 24 HOUR STORM EVENT FOR RECEIVING WATERS WITH UNAVAILABLE PARAMETERS. FOR THIS PROJECT, MEASURES WERE DESIGNED FOR:

[ ] 2-YEAR, 24 HOUR STORM
[X] 5-YEAR, 24 HOUR STORM

5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS?
[X] YES [ ] NO

5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

5.7. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT?
[X] YES [ ] NO (IF YES, CHECK ONE BELOW)

5.7.1. [X] PROJECT DISTURBED AREA IS LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)

5.7.2. [ ] PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)

5.8. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER, REGARDLESS OF HEIGHT. HAVE STEEP SLOPES BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE?
[ ] YES [ ] NO [X] N/A

5.9. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.

5.10. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.

5.11. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE FROM TDEC'S LOCAL ENVIRONMENTAL FIELD OFFICE (EFO).

5.12. OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

5.13. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS.

5.14. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.

5.15. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.

5.16. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.

5.17. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED, OR OTHER TEMPORARY COVER IS INSTALLED.

5.18. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE.

5.19. A SOIL ANALYSIS SHALL BE PERFORMED PRIOR TO THE APPLICATION OF FERTILIZERS TO ANY PORTION OF THE SITE. SOILS SHOULD BE ANALYZED FOR pH, BUFFER VALUE, PHOSPHOROUS, POTASSIUM, CALCIUM AND MAGNESIUM. SOIL SAMPLES SHOULD BE REPRESENTATIVE OF THE AREA FOR WHICH FERTILIZER WILL BE APPLIED. SAMPLE TYPE SHOULD BE COLLECTED AND ANALYZED IN ACCORDANCE WITH THE UT EXTENSION "SOIL TESTING" BROCHURE PB1061.

5.20. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED FROM THE ANALYSES. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.

5.21. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

6.0 UTILITIES

ARE UTILITIES INCLUDED IN THE CONTRACT?
[X] YES [ ] NO IF YES, THE FOLLOWING APPLY:

6.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.

6.2. SILT FENCE SHALL BE INSTALLED ON THE DOWN GRADIENT SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED AND STABILIZED BY THE END OF THE WORK DAY.

6.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDEC STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. IF ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.

6.4. IT IS THE RESPONSIBILITY OF THE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE EPSC MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME, SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

6.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN FOURTEEN (14) DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN PROJECT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE UTILITY CONTRACTOR UNTIL THE TRENCH IS BACKFILLED.

6.6. IN REGARDS TO EPSC, TDEC REGULATIONS APPLY TO THE UTILITY CONTRACTORS ON THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE CONTRACT.

6.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE PROJECT ENGINEER.

6.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE PROJECT LIMITS, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.

6.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE RESPONSIBLE PARTY.

6.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ON SITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE ENGINEER BEFORE COMMENCING WORK.

6.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:

6.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.

6.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAL.

6.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL.

7.0 MAINTENANCE AND INSPECTION

7.1. INSPECTION PRACTICES

7.1.1. EPSC INSPECTORS RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS:

7.1.1.1. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.

7.1.1.2. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.

7.1.1.3. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

7.1.1.4. SUCCESSFULLY COMPLETED TDEC "LEVEL II - DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.

7.1.2. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDEC EPSC INSPECTION REPORT FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.

7.1.3. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT, INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

7.1.4. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY.

7.1.5. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION TO THE TDEC LOCAL ENVIRONMENTAL FIELD OFFICE (EFO). WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION.

7.1.6. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED.

7.1.7. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE.

7.1.8. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION.

7.1.9. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

7.1.10. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION, OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION, SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES.

7.2. MAINTENANCE PRACTICES

7.2.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER AND IN ACCORDANCE WITH STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.

7.2.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

7.2.3. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE, MORE THAN 7 DAYS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 7 DAY TIME FRAME WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE EPSC INSPECTION REPORT.

7.2.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%).

7.2.5. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED, AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.

7.2.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

7.2.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S.

7.2.8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED.

8.0 SITE ASSESSMENTS

ARE SITE ASSESSMENTS REQUIRED? [ ] YES [X] NO

SITE ASSESSMENT SHALL BE CONDUCTED AT EACH OUTFALL DRAINING 10 OR MORE ACRES OR 5 OR MORE ACRES IF DRAINING TO WATERS WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. SITE ASSESSMENTS SHALL COVER THE ENTIRE DISTURBED AREA AND OCCUR WITHIN 30 DAYS OF CONSTRUCTION COMMENCING AT EACH PORTION OF THE SITE THAT DRAINS THE QUALIFYING ACREAGE. THE SITE ASSESSMENT SHALL BE PERFORMED BY INDIVIDUALS WITH ONE OR MORE OF THE FOLLOWING QUALIFICATIONS:

A. CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).

B. A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.

C. HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE.

9.0 STORMWATER MANAGEMENT

9.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE DEPICTED ON THE PLANS AND NOTED AS PERMANENT.

9.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION: DETENTION PONDS AND RIPRAP APRONS

9.3. OTHER ITEMS NEEDING CONTROL

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

[X] LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
[X] CONCRETE WASHOUT
[X] PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
[X] MINERAL AGGREGATES, ASPHALT
[X] EARTH
[X] LIQUID TRAFFIC STRIPING MATERIALS, PAINT
[ ] ROCK
[ ] CURING COMPOUND
[ ] EXPLOSIVES
[X] OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.4. WASTE MATERIALS

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO, NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

9.5. HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

9.6. SANITARY WASTE

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR, OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

9.7. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

[X] FERTILIZERS AND LIME
[ ] PESTICIDES AND/OR HERBICIDES
[X] DIESEL AND GASOLINE
[X] MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.0 NON-STORMWATER DISCHARGES

10.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):

[X] DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER. WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.

[X] WATER USED TO CONTROL DUST. (3.5.3.1.n)

[X] POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.

[ ] UNCONTAMINATED GROUNDWATER OR SPRING WATER.

[X] FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.

[ ] OTHER:

10.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER THE TDEC EROSION CONTROL HANDBOOK.

10.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

10.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

10.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON- CONSTRUCTION STORMWATER) ACTIVITY EXPECTED?
[ ] YES [X] NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER:

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE
REGISTERED
PROFESSIONAL
ENGINEER
No. 102999
STATE OF TENNESSEE
08-01-22

STORMWATER POLLUTION PREVENTION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C7.1

COF PROJECT NO. 7916

FILE NO. 1716-24

11.0 SPILL PREVENTION, MANAGEMENT AND NOTIFICATION

11.1. SPILL PREVENTION

11.1.1. CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

11.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY LAW.

11.1.3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE.

11.2. MATERIAL MANAGEMENT

11.2.1. HOUSEKEEPING

ONLY NEEDED PRODUCTS WILL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

11.2.2. HAZARDOUS MATERIALS

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RE-SEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL pH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

11.3. PRODUCT SPECIFIC PRACTICES

11.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

11.3.2 FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE SOIL ANALYSIS. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

11.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

11.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

11.4. SPILL MANAGEMENT
IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

11.4.1. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

11.4.2. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.

11.4.3. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

11.4.4. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

11.4.5. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.

11.4.6. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

11.4.7. IF A SPILL OCCURS THE CONTRACTOR'S SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE PRIMARY PERMITTEE. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

11.4.8. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

11.5. SPILL NOTIFICATION

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

11.5.1. THE PRIMARY PERMITTEE WILL NOTIFY THE LOCAL TDEC ENVIRONMENT FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

11.5.2. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE (EFO) WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.

11.5.3. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

12.0 RECORD-KEEPING

12.1. REQUIRED RECORDS

THE PERMITTEE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES:

12.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.

12.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.

12.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

12.1.4. RECORDS OF EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.

12.1.5. RECORDS OF SITE ASSESSMENTS.

12.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING.

12.1.7. COPY OF REQUIRED SOIL ANALYSIS.

12.1.8. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

12.2. RAINFALL MONITORING PLAN:

12.2.1. EQUIPMENT
AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. IF A RAIN GAUGE CANNOT BE MAINTAINED ON SITE, A REFERENCE SITE MAY BE USED FOR A RECORD OF DAILY RAINFALL.

12.2.2. LOCATION
THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC.).

12.2.3. METHODS
RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

12.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE, SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

12.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON A RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

12.2.6. IF THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

12.3. KEEPING PLANS CURRENT

12.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

12.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

12.3.3. THE PRIMARY PERMITTEE OR THEIR REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

12.3.3.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP;

12.0 RECORD-KEEPING (CONT)

12.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

12.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

12.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA; OR

12.3.3.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

12.3.3.6. ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 7 DAYS BY THE EPSC INSPECTOR.

12.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER

12.4. MAKING PLANS ACCESSIBLE

12.4.1. A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER) SHOULD BE KEPT AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION.

12.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, THE PRIMARY PERMITTEE OR THEIR REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION:

12.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

12.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

12.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

12.4.2.4. THE LOCATION OF THE SWPPP.

12.4.3. ALL INFORMATION DESCRIBED IN SECTION 12.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

12.5. NOTICE OF TERMINATION

12.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE PRIMARY PERMITTEE WILL SUBMIT A NOTICE OF TERMINATION (N.O.T.) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC LOCAL ENVIRONMENTAL FIELD OFFICE (EFO).

12.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS:

12.5.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED;

12.5.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED;

12.5.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED;

12.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED;

12.5.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE;

12.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND

12.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

12.6. RETENTION OF RECORDS

THE PRIMARY PERMITTEE WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE N.O.T. WAS FILED.

13.0 SITE WIDE / PRIMARY PERMITTEE CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED BY ME, OR UNDER MY DIRECTION OR SUPERVISION. THE SUBMITTED INFORMATION IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED PERSONNEL SIGNATURE

PRINTED NAME

TITLE

DATE

14.0 SECONDARY PERMITTEE (OPERATOR) CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ON SITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT, FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED PERSONNEL SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

15.0. ENVIRONMENTAL PERMITS

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT.

ENVIRONMENTAL PERMITS			
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE
TDEC ARAP	NO		
CORPS OF ENGINEERS (COE)	NO		
TVA 26A	NO		
TDEC CGP	YES	TBD	TBD
OTHER			

16.0 OUTFALL TABLE

SEE EPSC PLAN SHEET C2.1, D1.0, D2.0 FOR ADDITIONAL INFORMATION.

Site Run-off Comparison Table (CFS)						
	2-Year	5-Year	10-Year	25- Year	50 -Year	100 -Year
OUTFALL 1 Pre-Developed	1.04	2.05	2.95	4.35	5.56	6.89
OUTFALL 2 Pre-Developed	0.36	0.8	1.23	1.9	2.49	3.13
TOTAL Pre-Developed	1.39	2.85	4.18	6.25	8.05	10.02
OUTFALL 1 Post- Developed	0.24	0.49	0.71	1.05	1.56	1.96
OUTFALL 2 Post-Developed	0.72	1.21	1.53	2.08	2.47	2.84
TOTAL Post-Developed	0.95	1.7	2.24	3.13	4.03	7.73

COF PROJECT NO. 7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726-4848

JAMES R. GILLESPIE — REGISTERED — PROFESSIONAL ENGINEER — No. 102900 — STATE OF TENNESSEE
05-01-22

STORMWATER POLLUTION PREVENTION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

C7.2

FILE NO. 1716-24

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
DIVISION OF WATER RESOURCES (DWR)
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITES (CGP) CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (INSPECTION FORM)

Site or Project Name:		NPDES Tracking Number: TNR
Primary Permittee Name:		Date of Inspection:
Current approximate disturbed acreage:	Has rainfall been checked/documented daily? ☐ Yes ☐ No	Name of Inspector:
Current weather/ground conditions:	Rainfall total since last inspection:	Inspector's TNEPSC Certification Number:
Site Assessment ☐ Yes ☐ No	Assessor's TN PE registration number:	Assessor's TNEPSC Level II/CPESC number:

Check the box if the following items are on-site:	
☐ ☐	Notice of Coverage (NOC)
☐ ☐	Stormwater Pollution Prevention Plan (SWPPP)
☐ ☐	Weekly inspection documentation
☐ ☐	Site contact information
☐ ☐	Rain Gage
Off-site Reference Rain Gage Location	

Best Management Practices (BMPs):

Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly? If "No," describe below in Comment Section				
1.	Are all applicable EPSCs installed and maintained per the SWPPP per the current phase?		☐ Yes	☐ No
2.	Are EPSCs functioning correctly at all disturbed areas/material storage areas? (permit section 4.1.5)		☐ Yes	☐ No
3.	Are EPSCs functioning correctly at outfall/discharge points such that there is no objectionable color contrast in the receiving stream, and no other water quality impacts? (permit section 5.3.2)		☐ Yes	☐ No
4.	Are EPSCs functioning correctly at ingress/egress points such that there is no evidence of track out?		☐ Yes	☐ No
5.	If applicable, have discharges from dewatering activities been managed by appropriate controls? (permit section 4.1.3) If "No," describe below the measure to be implemented to address deficiencies.	☐ N/A	☐ Yes	☐ No
6.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days? (permit section 3.5.3.2) If "No," describe below each location and measures taken to stabilize the area(s).	☐ N/A	☐ Yes	☐ No
7.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from wash waters, exposure of materials and discharges from spills and leaks per section 4.1.4? If "No," describe below the measure to be implemented to address deficiencies.	☐ N/A	☐ Yes	☐ No
8.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No," describe below the measures to be implemented to address deficiencies.	☐ N/A	☐ Yes	☐ No
9.	Have all previous deficiencies been addressed? If "No," describe the remaining deficiencies in the Comments section. ☐ Check if deficiencies/corrective measures have been reported on a previous form.	☐ N/A	☐ Yes	☐ No

Comment Section. If the answer is "No" for any of the above, describe the problem and summarize corrective actions to be taken. Otherwise, describe any pertinent observations:

Certification and Signature (must be signed by the certified inspector and the permittee per Sections 5.5.3.11 (g) and 8.7.2 of the CGP)

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Inspector Name and Title :	Signature:	Date:
Primary Permittee Name and Title:	Signature:	Date:

HISTORIC FRANKLIN TENNESSEE

QLP

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000) Located within a Qualifying Local Program (QLP)

Purpose of this Form: The State of Tennessee General NPDES Permit for Stormwater Discharges from Construction Activities allows for construction activities within the jurisdiction of a Qualifying Local Program (QLP) to only have to apply and obtain coverage for both the TNCGP and the local program from the QLP itself. By signing this Notice of Intent, the permittee agrees to be responsible for compliance under the requirements of the TNCGP. The permittee will not be required to submit an NOI, a SWPPP, a notice of termination, or a permit fee to the local TDEC Environmental Field Office. For additional information, please see Section 1.4.5 of the TNCGP or the state's QLP webpage at http://www.tn.gov/environment/article/tennessee-qualifying-local-program.

Site or Project Name: Shawnee Drive PUD			QLP Tracking Number: TNQ
Street Address or Location:	Cherokee Place at Shawnee Drive		Start date: April 2023
Site Description:	Construction of 6 residential buildings		Estimated End Date: April 2024
			Latitude (dd.dddd): 35.9183
			Longitude (dd.dddd): 86.887281
County(ies): Williamson	QLP/MS4 Jurisdiction: Franklin		Acres Disturbed: 2.40
			Total Acres: 2.44

Has a jurisdictional determination been made by the USACE or EPA identifying waters of the United States? Yes ☐ No ☒
Note: If yes, attach the jurisdictional determination

If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? NR(S):

Receiving waters: Sharps Branch

Attach the SWPPP with the NOI ■ SWPPP Attached | Attach a site location map ■ Map Attached

Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications): Franklin Housing Authority

For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number: 000073646
(an incorrect SOS control number may delay NOI processing)

Site Owner or Developer Contact name: (individual responsible for site)		Title or Position: (the party who signs the certification below)		
Derwin Jackson		Executive Director		
Mailing Address: 200 Spring Street		City: Franklin	State: TN	Zip: 37064
Phone: ( ) 615-794-1247	Fax: ( )	E-mail: djackson@franklinhousingauthority.com		

Optional Contact:	Title or Position:		
Address:	City:	State:	Zip:
Phone: ( )	Fax: ( )	E-mail:	

Owner/Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Owner/Developer name; print or type	Signature	Date
Owner/Developer name; print or type	Signature	Date

Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (Secondary Permittee)

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR120000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.

Contractor name and address	Signature	Date
Contractor name and address	Signature	Date

HISTORIC FRANKLIN TENNESSEE

QLP

Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000) Located within a Qualifying Local Program (QLP)

Purpose of this Form: This form is required to be submitted to the local QLP when requesting termination of coverage from the CGP. The purpose of this form is to notify the QLP that either all stormwater discharges associated with construction activity from the portion of the identified facility where you. as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the local QLP from which you received your coverage. For additional information, please contact the QLP or the state's QLP webpage at http://www.tn.gov/environment/article/tennessee-qualifying-local-program or contact your local EFO at the numbers identified below.

Type or print clearly, using ink and not markers or pencil.

Site or Project Name: Shawnee Drive PUD	QLP Tracking Number: TNQ
Street Address or Location: Shawnee Dr. and Cherokee Place, Franklin, TN	County(ies): Williamson

Name of Permittee Requesting Termination of Coverage: Franklin Housing Authority			
Permittee Contact Name: Derwin Jackson	Title or Position: Director		
Mailing Address: 200 Spring Street	City: Franklin	State: TN	Zip: 37064
Phone: 615 794 - 1247	E-mail: djackson@franklinhousingauthority.com		

Check the reason(s) for termination of permit coverage:

☐ Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.

☐ You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected official)

I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

For the purposes of this certification, elimination of stormwater discharges associated with construction activity means that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have been eliminated from the portion of the construction site where the operator had control. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Permittee name (print or type):	Signature:	Date:

Custom Soil Resource Report
Soil Map



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ArA	Armour silt loam, 0 to 2 percent slopes	1.2	17.0%
Hu	Huntington silt loam, phosphatic	0.5	7.4%
MoB2	Mayo silt loam, 2 to 5 percent slopes, eroded	1.8	25.8%
StD3	Stiversville clay loam, 12 to 20 percent slopes, severely eroded	0.8	12.4%
StB2	Stiversville silt loam, 2 to 5 percent slopes	0.9	13.4%
StC2	Stiversville silt loam, 5 to 12 percent slopes, eroded	1.6	24.0%
Totals for Area of Interest		6.8	100.0%

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction Activities (TNR100000) Located within a Qualifying Local Program (QLP)

Date Received: _____ Staff Review Completion Date: _____ New NPDES Tracking Number: _____ MS4 Jurisdiction: _____
Reviewer: _____ # of Disturbed Acres: _____ Site/Project Name: _____
Unavailable Waters: Yes ☐ No ☐ Exceptional Waters: Yes ☐ No ☐ T & E Species: Yes ☐ No ☐ Fee Collected: Yes ☐ No ☐

This checklist pertains to the current CGP and is used during the NOI review process to help determine whether the submittal provides enough information to grant a Notice of Coverage under the permit. This checklist does not specifically address every condition of the permit or preclude the Division or QLP from asking for additional information.

Yes	No		Yes	No	
-		Correct site-wide permittee (Owner/Developer) entity name included	-		Start/End dates listed
-		Proper signature for the owner/developer provided	-		Disturbed acreage given
-		Receiving waters listed	-		Latitude/Longitude given and is correct
	-	ARAP Required? ☐ ARAP #(s):	-		Secretary of State Control # (if applicable)
-		Appropriate portion of USGS topo map provided showing the boundaries of the construction	County(ies): Williamson		

Yes	No	N/A	SWPPP Requirements	CGP pg #
-		•	For comprehensive SWPPPs - All foreseeable construction-related activities are addressed *[1.4.2]*	1
-			Plans and specs for structural control measures have been prepared and stamped by Professional Engineer or Landscape Architect *[3.1.1]*	14
		•	Includes engineering design of sediment basin/controls for projects 10 acres or greater (5 acres if impaired/exceptional waters) *[3.1.1]*	14
		•	Includes Quality Assurance Site Assessment requirement criteria if applicable *[3.1.2]*	14
-			Signed by the operator(s) *[3.3.1]*	15
-			Includes multi-phase sheets: <5 ac. – 2-phase plan min.; ≥5 ac. – 3-phase plan min. *[3.5.2]*	18
-			Depicts disturbance limits, buffer zones, watershed drainage patterns, and drainage area serving each outfall *[3.5.1; 4.1.1]*	17, 26
-			Includes a description of all construction activities (not just grading and street construction) *[3.5.1.a]*	17
-			Includes a description sequence of major activities (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.) *[3.5.1.b]*	17
-			Includes estimates of the total site area versus the total area of the site to be disturbed [3.5.1.c]	17
-			Includes a complete inventory of aquatic resources (including any stream, sinkhole or wetland) on or adjacent to the project *[3.5.1.d]*	17
-			Includes a description of appropriate erosion prevention and sediment controls (EPSCs) and the general timing of implementation *[3.5.2]*	18
-			Specifies which permittee is responsible for implementation of which EPSC *[3.5.2]*	18
-			Specifies removal of trapped sediment from sediment controls at or before 50% design capacity *[3.5.3.1.e]*	19
-			Specifies EPSCs will be implemented before earth-moving begins *[3.5.3.1.f]*	20
-			Specifies stabilization within 14 days (7 days for ≥35% slopes) on site areas where construction has temporarily/permanently ceased [3.5.3.2]	21
-			Specifies inspections of outfalls/EPSC measures at least twice weekly and at least 72 hours apart *[3.5.8.2.a]*	24
-			Specifies that vegetation, EPSCs & other protective measures are repaired, replaced, or modified within 7 days *[3.5.7; 3.5.8.2.f]*	24, 25
-			Depicts the proposed location of all major structural/nonstructural controls and all proposed stabilization practices *[3.5.1.g; 3.5.3.3]*	18
-			Identifies all outfall locations intended for coverage under the CGP *[3.5.1.g]*	17
-			Includes the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site *[3.5.1.j]*	17
		•	Identifies construction phasing for activities that will disturb >50 acres *[3.5.1.m & 3.5.3.1.h]*	17, 20
		•	EPSCs have been designed to control the rainfall and runoff from a 2-year, 24-hour return interval storm *[3.5.3.3]*	21
		•	Specifies sediment basins for construction sites with drainage areas >10 acres *[3.5.3.3]*	21
		•	Specifies a 30' natural riparian buffer zone adjacent to all streams, lakes, wetlands on/adjacent to the construction site *[4.1.2]*	26

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction Activities (TNR100000) Located within a Qualifying Local Program (QLP)

Yes	No	N/A	Additional SWPPP Requirements for Discharges into Impaired or Exceptional TN Waters	CGP pg #
-			Specifies that EPSCs proposed for the site have been designed to control storm runoff generated by a 5-year, 24-hour storm event *[5.4.1.a]*	30
		•	Specifies sediment basins for construction sites with drainage areas >5 acres that discharge to impaired or exceptional waters *[3.5.3.3] [5.4.1.f]*	31
		•	Specifies a 60' natural riparian buffer zone adjacent to all impaired or exceptional waters on/adjacent to the construction site *[4.1.2] [5.4.2]*	31
			SWPPP Requirements for Permanent (Post-Development) Stormwater Management	CGP pg #
		•	Specifies velocity dissipation devices at discharge locations and along the length of any outfall channel *[3.5.4]*	22
		•	Includes technical basis used to select velocity dissipation devices where flows exceed predevelopment levels *[3.5.4]*	23

Identification indicators of possible streams or wetlands utilizing site information and resources include:

1. Contour and stream indicators on USGS TOPO maps
2. Drainage area to a defined conveyance (20 acres east TN/40 middle TN/ 75 west TN).
3. Aerial photography identifying a sinuous tree line or grouping of remaining forest in an agricultural setting
4. Springhouse/box
5. Comparable nearby drainage that has previously been determined to have a stream
6. Onsite or adjacent ponds or impoundments
7. Check EFO HD GIS for previous determinations
8. NRCS soil maps or Web Soil Survey: (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
9. Wetlands on National Wetlands Inventory: (http://www.fws.gov/wetlands/data/mapper.HTML)

If sufficient indicators exist, a stream determinaton may need to be performed. Stream determinations must be performed by a Qualified Hydrologic Professional: (http://tnqhp.org/).

Comments

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One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615.726.4848

JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 110200 STATE OF TENNESSEE
09-01-22

STORMWATER POLLUTION PREVENTION PLAN

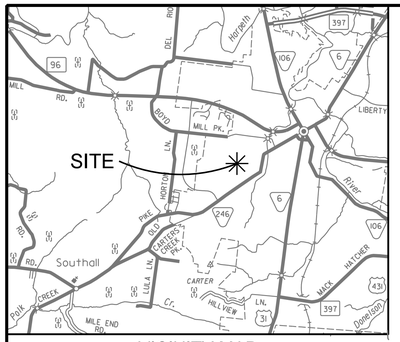
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
SHAWNEE DRIVE
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

C7.3

COF PROJECT NO. 7916

FILE NO. 1716-24



VICINITY MAP
NOT TO SCALE

LEGEND:

- PRIMARY DRAINAGE BOUNDARY
- SECONDARY DRAINAGE BOUNDARY
- TIME OF CONCENTRATION FLOW PATH
- DP1 ● PRIMARY DRAINAGE POINT

DRAINAGE AREA LABELING:

E1-A
- EXISTING CORRESPONDING DRAINAGE POINT
- CORRESPONDING SUBAREA

NOTE: EXISITNG DOWNSTREAM STRUCTURE AT DP 1 HAS A CAPACITY OF 3.95 CFS AND EXISITNG DOWNSTREAM STRUCTURE AT DP 2 HAS A CAPACITY OF 45.72 CFS. REFER TO PROJECT DRAINAGE REPORT FOR COMPLETE CALCULATIONS.



TENNESSEE GRID NORTH

30 0 30
scale feet

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JAMES R. GILLESPIE
REGISTERED
No. 102603
STATE OF TENNESSEE
08-01-22

EXISTING DRAINAGE CONDITIONS

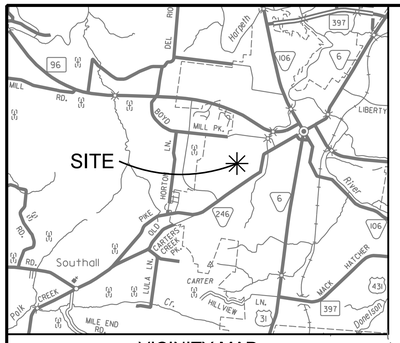
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	08-01-22	SITE PLAN RESUBMITTAL

D1.0

COF PROJECT NO. 7916

FILE NO. 1716-24



VICINITY MAP

NOT TO SCALE

LEGEND:

- TURF A SOIL, CN = 49
- TURF B SOIL, CN = 69
- IMPERVIOUS AREA, CN = 98
- BUILDING, CN = 98
- PRIMARY DRAINAGE BOUNDARY
- SECONDARY DRAINAGE BOUNDARY
- SOIL GROUP BOUNDARY
- DP1 PRIMARY DRAINAGE POINT

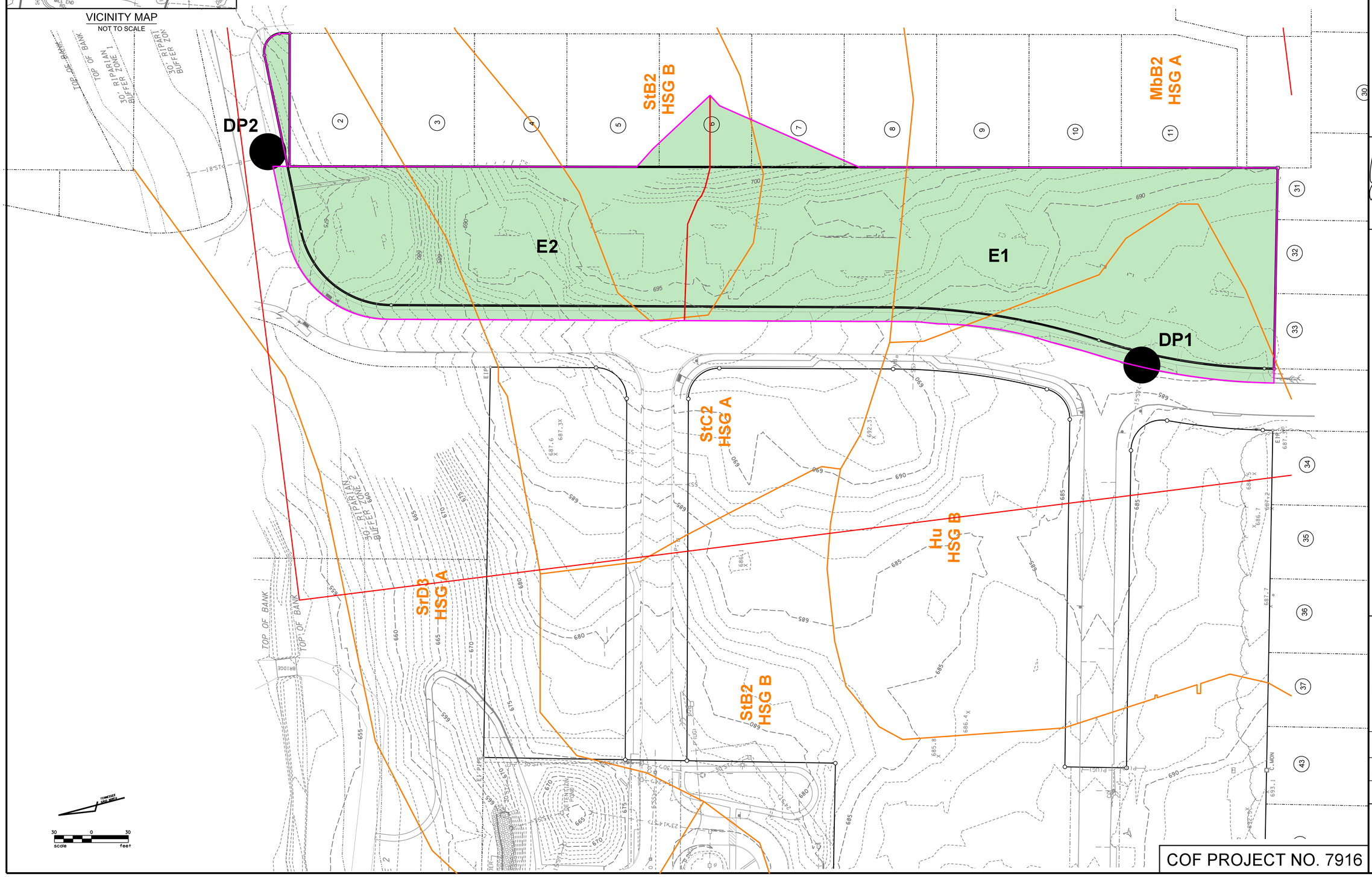
DRAINAGE AREA LABELING:

E1-A
- EXISTING
- CORRESPONDING SUBAREA
- CORRESPONDING DRAINAGE POINT

SOIL GROUP LABELING:

StB2 HSG B
- SOIL SYMBOL
- HYDROLOGIC SOIL GROUP

Basin	Turf A (sf)	Turf B (sf)	Turf C (sf)	Woods-Grass (sf)	Pervious Pavers (sf)	Ponds - Water (sf)	Impervious (sf)	Total Area (sf)	Total Area (ac)	Weighted CN	Tc Design (min.)
PRE-DEVELOPED - TOTAL SITE											
E1	45360	24702						70062	**1.61**	56	8
E2	31759	10958						42717	**0.98**	54	6
Total Existing Site	77119	35660	0	0	0	0	0	112779	**2.59**	55	
							Total Existing Study Area =		**2.59**		



30 0 30
scale feet

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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102936 STATE OF TENNESSEE
09-01-22

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

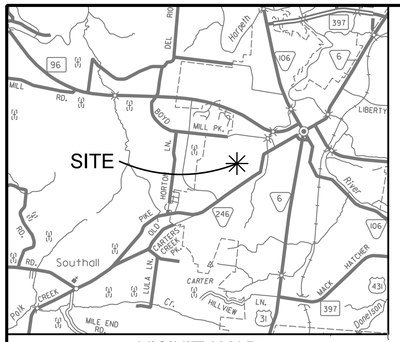
EXISTING LAND USE

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

D1.1

COF PROJECT NO. 7916

FILE NO. 1716-24



VICINITY MAP
NOT TO SCALE

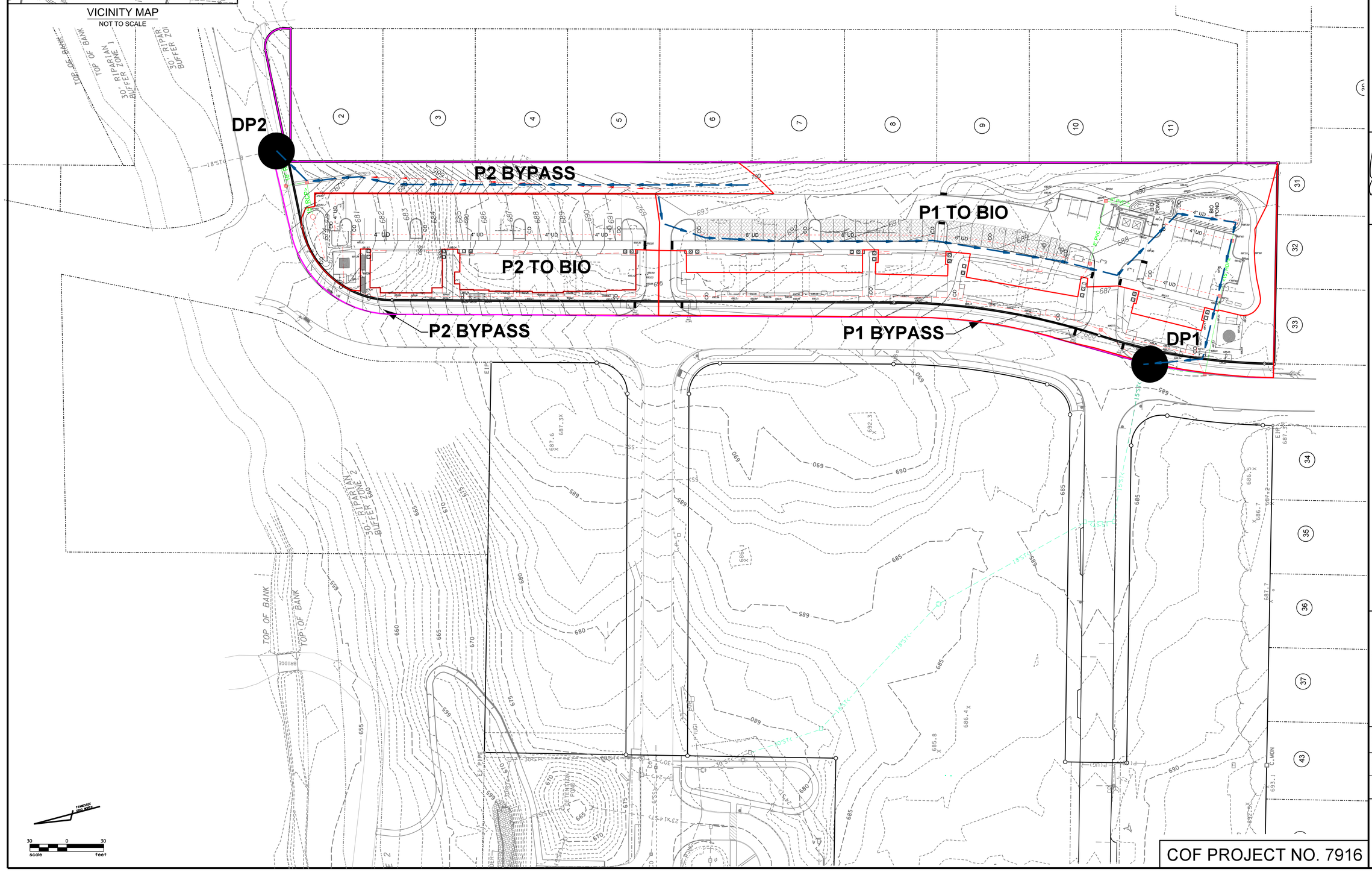
LEGEND:

- PRIMARY DRAINAGE BOUNDARY
- SECONDARY DRAINAGE BOUNDARY
- TIME OF CONCENTRATION FLOW PATH
- DP1 PRIMARY DRAINAGE POINT

DRAINAGE AREA LABELING:

P1-A
- EXISTING CORRESPONDING DRAINAGE POINT
- CORRESPONDING SUBAREA

NOTE: EXISTING DOWNSTREAM STRUCTURE AT DP 1 HAS A CAPACITY OF 3.95 CFS AND EXISTING DOWNSTREAM STRUCTURE AT DP 2 HAS A CAPACITY OF 45.72 CFS. REFER TO PROJECT DRAINAGE REPORT FOR COMPLETE CALCULATIONS.



TENNESSEE
SCALE: 1" = 30'
30 0 30
scale feet

COF PROJECT NO. 7916

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JAMES R. GILLESPIE
REGISTERED
No. 102501
STATE OF TENNESSEE
09-01-22

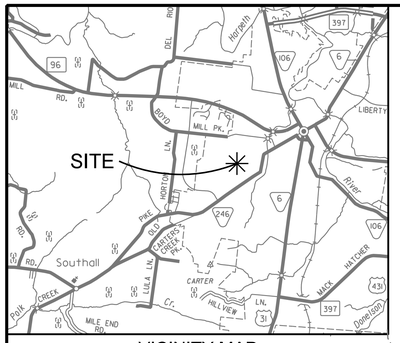
PROPOSED DRAINAGE CONDITIONS

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

D2.0

FILE NO. 1716-24



VICINITY MAP
NOT TO SCALE

LEGEND:

- TURF A SOIL, CN = 49
- TURF B SOIL, CN = 69
- PERVIOUS PAVERS, CN = 69
- BIORETENTION POND, CN = 69
- IMPERVIOUS AREA, CN = 98
- BUILDING, CN = 98
- PRIMARY DRAINAGE BOUNDARY
- SECONDARY DRAINAGE BOUNDARY
- SOIL GROUP BOUNDARY
- DP1 PRIMARY DRAINAGE POINT

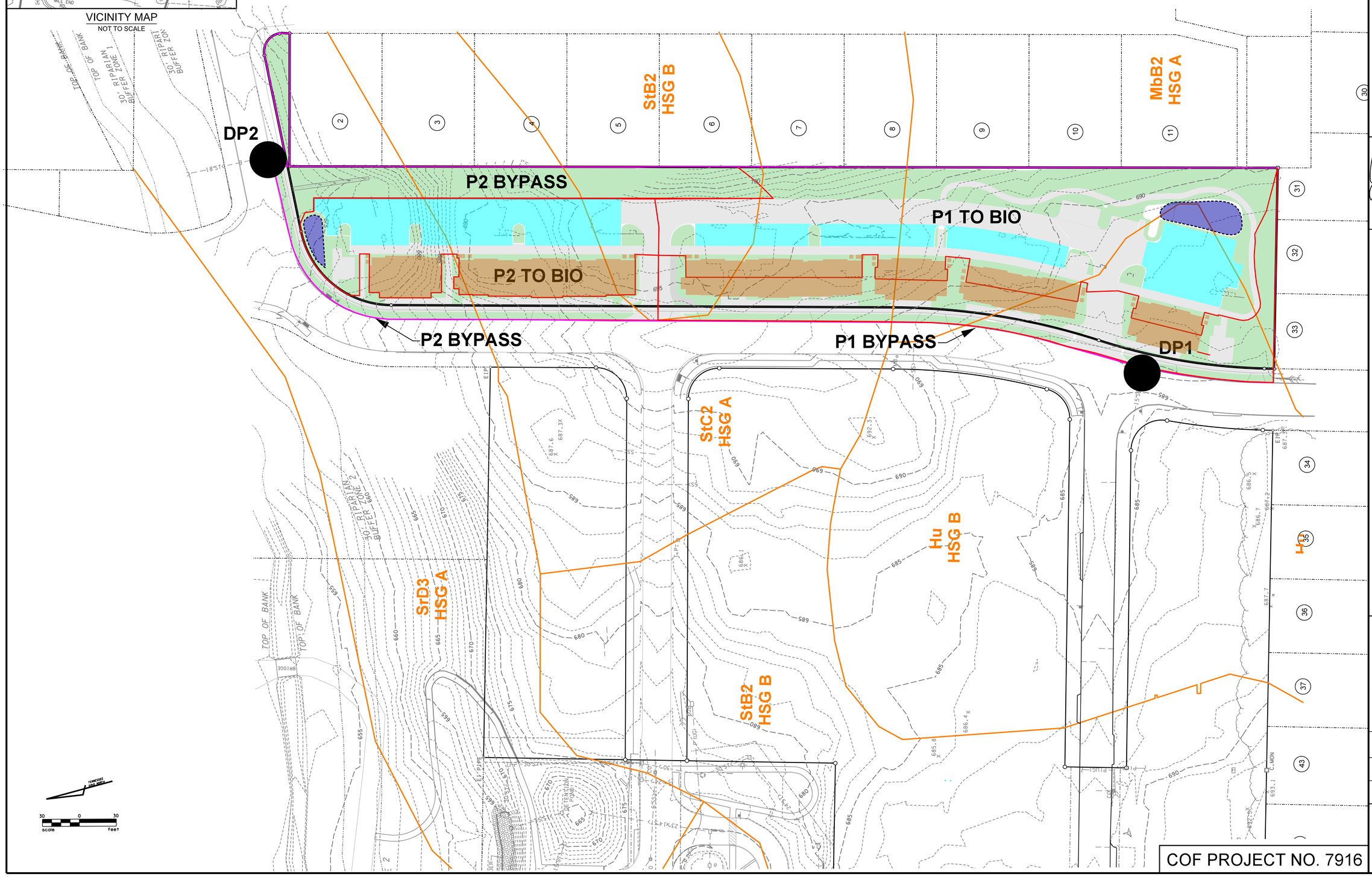
DRAINAGE AREA LABELING:

P1-A
- P: PROPOSED
- 1: CORRESPONDING DRAINAGE POINT
- A: CORRESPONDING SUBAREA

SOIL GROUP LABELING:

StB2 HSG B
- StB2: SOIL SYMBOL
- HSG B: HYDROLOGIC SOIL GROUP

Basin	Turf A (sf)	Turf B (sf)	Turf C (sf)	Woods-Grass (sf)	Pervious Pavers (sf)	Ponds (sf)	Impervious (sf)	Total Area (sf)	Total Area (ac)	Weighted CN	Tc Design (min.)
PROPOSED SITE - OUTFALL 1											
P1 TO BIO	14220	1740			9015	1726	19401	46102	**1.06**	75	6
P1 BYPASS	9478	2768					6750	18996	**0.44**	69	6
P2 TO BIO	1800	462			8614	459	11947	23282	**0.53**	82	6
P2 TO BYPASS	10191	4044					3927	18162	**0.42**	64	6
Total Proposed Site	35689	9014	0	0	17629	2185	42025	106542	**2.45**	74	
							Total Proposed Study Area =		**2.45**		



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JAMES R. GILLESPIE REGISTERED PROFESSIONAL ENGINEER No. 102501 STATE OF TENNESSEE
09-01-22

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

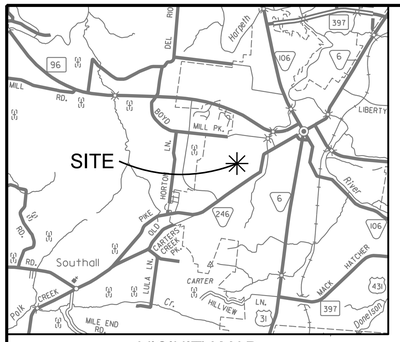
PROPOSED LAND USE

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

D2.1

COF PROJECT NO. 7916

FILE NO. 1716-24



VICINITY MAP
NOT TO SCALE

LEGEND:

- TURF A SOIL, CN = 49
- TURF B SOIL, CN = 69
- PERVIOUS PAVERS, CN = 69
- BIORETENTION POND, CN = 69
- IMPERVIOUS AREA, CN = 98
- BUILDING, CN = 98
- PRIMARY DRAINAGE BOUNDARY
- SECONDARY DRAINAGE BOUNDARY
- SOIL GROUP BOUNDARY
- DP1 ● PRIMARY DRAINAGE POINT

DRAINAGE AREA LABELING:

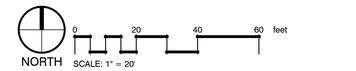
P1-A
- PROPOSED
- CORRESPONDING SUBAREA
- CORRESPONDING PROJECT OUTFALL

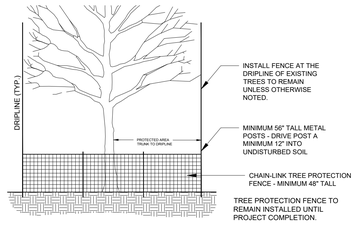
SOIL GROUP LABELING:

StB2 HSG B
- SOIL SYMBOL
- HYDROLOGIC SOIL GROUP

Basin	Turf A (sf)	Turf B (sf)	Turf C (sf)	Woods-Grass (sf)	Pervious Pavers (sf)	Ponds (sf)	Impervious (sf)	Total Area (sf)	Total Area (ac)	Weighted CN	Tc Design (min.)
PROPOSED LID - TOTAL SITE											
P1-A (TO BIO)	13002	441				1726	5093	20262	**0.47**	63	6
P1-B (PAVERS)	271	603			1661		4842	7377	**0.17**	87	6
P1-C (PAVERS)	511				1682		3843	6036	**0.14**	86	6
P1-D (PAVERS)	436				1793		3526	5755	**0.13**	85	6
P1-E (PAVERS)		696			3877		2097	6670	**0.15**	78	6
P1 TO BIO (TOTAL)	14220	1740	0	0	9013	1726	19401	46100	**1.06**	75	6
P1 BYPASS	9478	2768					6750	18996	**0.44**	69	6
P2-A (PAVERS)	363	462			3071		3080	6976	**0.16**	81	6
P2-B (PAVERS)	130				3018		1523	4671	**0.11**	78	6
P2-C (PAVERS)	345				2525		1117	3987	**0.09**	75	6
P2-D (TO BIO)	962					459	668	2089	**0.05**	69	6
P2-E (ROOF DRAINS)							5559	5559	**0.13**	98	6
P2 TO BIO (TOTAL)	1800	462	0	0	8614	459	11947	23282	**0.53**	82	6
P2 TO BYPASS	10191	4044					3927	18162	**0.42**	64	6
Total Proposed Site	35689	9014	0	0	17627	2185	42025	106540	**2.45**	74	6
							Total Proposed Study Area =		**2.45**		

BIO POND 2
P2 BYPASS (NOT IN LID STUDY)
P2-A (PAVERS)
P2-B (PAVERS)
P2-C (PAVERS)
P2-D (TO BIO)
P2-E (TO BIO)
P2 BYPASS
P1-A (TO BIO)
P1-B (PAVERS)
P1-C (PAVERS)
P1-D (PAVERS)
P1-E (PAVERS)
BIO 1
P1 BYPASS
StB2 HSG B
StC2 HSG A
SrD3 HSG A
Hu HSG B
MbB2 HSG A
TOP OF BANK
30' RIPARIAN BUFFER ZONE 1
30' RIPARIAN BUFFER ZONE 2
DETENTION POND
EI PIPE
BRIDGE
18'STC
30'STC
24'STC
23'X14'STC
2-CSSD
P (UG)
SS
687.6 X
687.3X
692.3 X
685.1 X
686.4 X
685.8 X
684.5 X
686.7 X
687.2 X
687.7 X
693.1 X
687.3 X
ETR
2-MON
2-CSSD
2-CSSD
2-CSSD





CHAIN LINK FENCING TREE PROTECTION

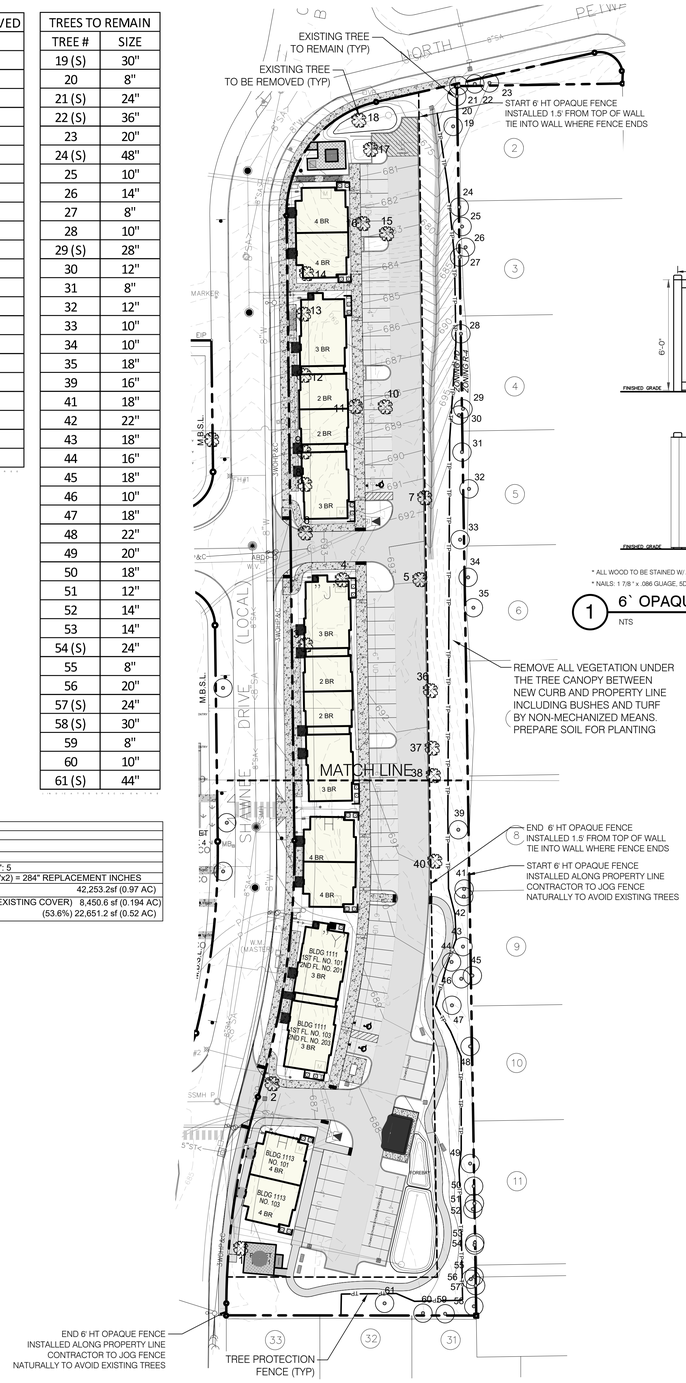
TREE PROTECTION NOTES:

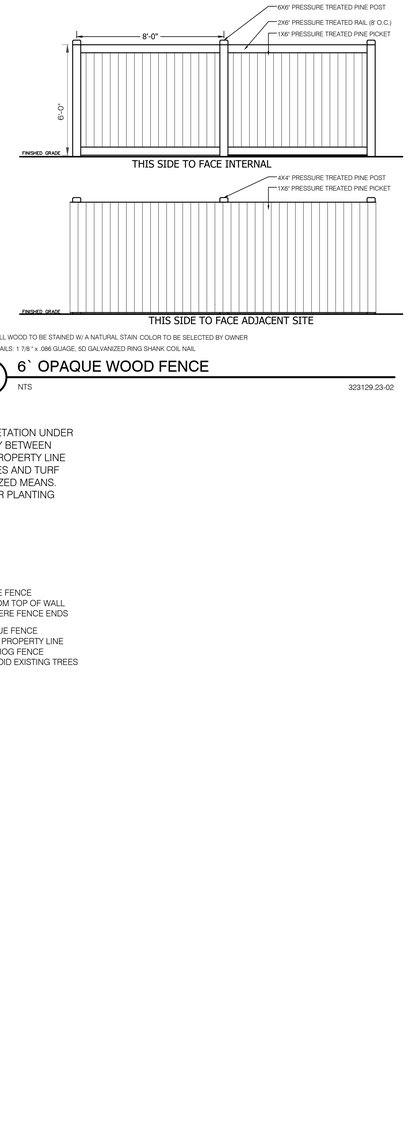
1. The tree protection barriers shall be constructed before the issuance of any permits, and shall remain intact throughout the entire period of construction.
2. The tree protection barrier shall be installed as labeled on this plan or a distance to the radius of the dripline, whichever is greatest, as measured from the trunk of the protected tree.
3. Any required excavation in or around the protection zone to accommodate underground services, footings, etc; shall be indicated on the plan, and shall be excavated by hand. In addition, related root pruning shall be accomplished via ANSI A-300 standard so as to minimize compact on the general root system. Root prunning to occur prior to grading.
4. The storage of building materials or stockpiling shall not be permitted within the limits of or against the protection barriers.
5. Trees within the protection barriers must be adequately cared for throughout the construction pro cess (i.e., they must be watered sufficiently, particularly if the tree's root system has been disturbed by excavation.) Fill shall not be placed upon the root system as to endanger the health or life of the affected tree.
6. Heavy accumulation of dust from construction activity may occur on the surface of tree foliage. To control dust, tree foliage may be hosed down upon the request of the Landscape Architect or Owners Representative.
7. Removal of all tree protection fencing will be done by the Contractor. Restoration of all areas disturbed by the fencing will be the Contractor's responibility.

TREES TO BE REMOVED	
TREE #	SIZE
1	6"
2	15"
3 (S)	30"
4	16"
5 (S)	30"
6	4"
7	12"
8	22"
9 (S)	30"
10	14"
11 (S)	28"
12	6"
13	4"
14	18"
15	14"
16	22"
17	12"
18 (S)	24"
36	16"
37	10"
38	20"
40	20"

TREES TO REMAIN	
TREE #	SIZE
19 (S)	30"
20	8"
21 (S)	24"
22 (S)	36"
23	20"
24 (S)	48"
25	10"
26	14"
27	8"
28	10"
29 (S)	28"
30	12"
31	8"
32	12"
33	10"
34	10"
35	18"
39	16"
41	18"
42	22"
43	18"
44	16"
45	18"
46	10"
47	18"
48	22"
49	20"
50	18"
51	12"
52	14"
53	14"
54 (S)	24"
55	8"
56	20"
57 (S)	24"
58 (S)	30"
59	8"
60	10"
61 (S)	44"

Total Healthy Trees to Remain <14": 17	
Total ACI of Trees <14" to Remain: 178	
Total Healthy Trees to Remain >14": 22	
Total ACI of Trees >14" to Remain: 532	
Total Healthy Trees to be Removed >24": 5	
Total Caliper Inch of Replacement: (142"x2) = 284" REPLACEMENT INCHES	
EXISTING TREE CANOPY ON SITE:	42,253.2sf (0.97 AC)
REQ. CANOPY RETENTION (20% OF EXISTING COVER)	8,450.6 sf (0.194 AC)
PROPOSED CANOPY RETENTION	(53.6%) 22,651.2 sf (0.52 AC)





* ALL WOOD TO BE STAINED W/ A NATURAL STAIN COLOR TO BE SELECTED BY OWNER
* NAILS: 1 7/8 " x .086 GUAGE, SD GALVANIZED RING SHANK COIL NAIL

1 6` OPAQUE WOOD FENCE
NTS 323129.23-02

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1515 • 615/726/4848



TREE PRESERVATION PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

Heibert+Ball
LAND DESIGN
Suite 400
1894 Gen. George Patton Dr.
Franklin, TN 37067-4668
615.376.2421 www.hblandsdesign.com

L1:0

COF PROJECT NO.7916

FILE NO. 1716-24

LANDSCAPE DATA CHART

AREA OF CALCULATION	2.24 AC
SITE ZONING:	PD
MIN. REQ. LSA:	20.0% (0.448 AC.)
PROVIDED LSA:	66.5% (64,904.4 SF OR 1.49 AC.)
MIN. REQ. FORMAL OPEN SPACE:	5% (4,877 SF)

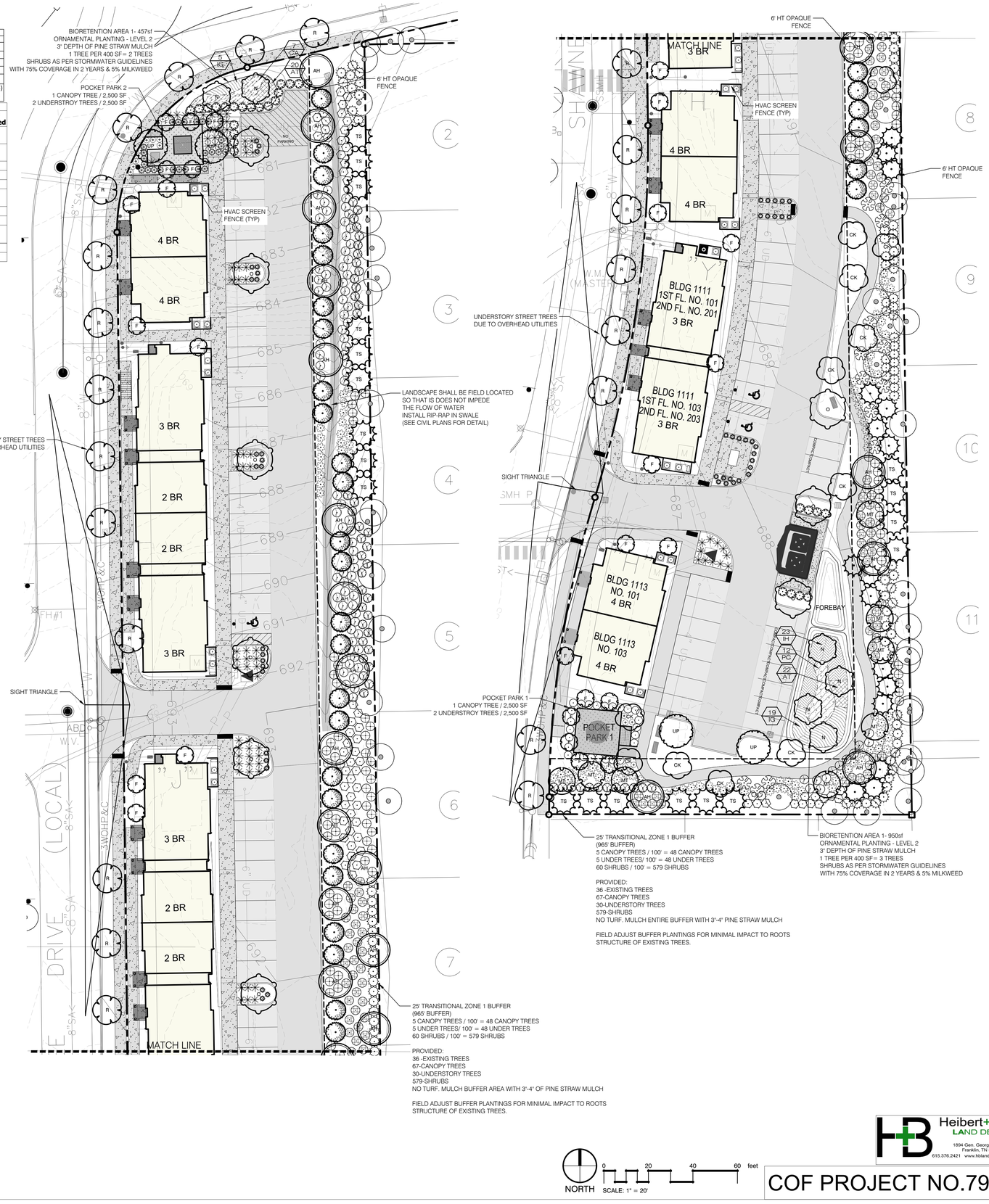
PROVIDED FORMAL OPEN SPACE: 5,342 SF
PROVIDED NATURAL AREA: 10,450 SF
SEE C2.0 FOR FORMAL OPEN SPACE AREAS

Total Healthy Trees to Remain <14": 17	
Total ACI of Trees <14" to Remain: 178	
Total Healthy Trees to Remain >14": 22	
Total ACI of Trees >14" to Remain: 532	
Total Healthy Trees to be Removed >24": 5	
Total Caliper Inch of Replacement: (142"x2) = 284" REPLACEMENT INCHES	
EXISTING TREE CANOPY ON SITE:	42,253.2sf (0.97 AC)
REQ. CANOPY RETENTION (20% OF EXISTING COVER)	8,450.6 sf (0.184 AC)
PROPOSED CANOPY RETENTION	(53.6%) 22,651.2 sf (0.52 AC)

Landscape Requirements: (ACI)		
Provided LSA: 2.24 AC Credit for 0.52 AC OF PRESERVATION LSA =1.72	**QuantityProvided**	**Inches Provided**
	Proposed Trees	Caliper Inches
Aggregate Canopy Caliper Inches Required (82x1.72):		141"
Aggregate Canopy Caliper Inches Provided:		*141"
EXISTING CALIPER INCH >14" (532x1.25):	22	665"
3" Canopy Trees :	0	0"
2" Canopy Trees :	0	0"
Aggregate Understory Caliper Inches Required (21x1.72):		36"
Aggregate Understory Caliper Inches Provided:		*36"
2" Understory Trees :	0	0"
1.5" Understory trees :	0	0"
Replacement Caliper Inches Required (142x2"):		284"
Replacement Caliper Inches Provided:		285"
3" Replacement Trees :	68	204"
2" Replacement Trees :	42	84"
Total Shrubs Required (96x1.72):	165	
Min. 18" Height Shrubs:	626	
Min. 30" Height Shrubs:		
Total Shrubs Provided:	626	

REPLACEMENT TO BE MET WITH ONSITE TREES,
DONATION TO TREE BANK, OR COMBINATION

* REQUIREMENTS MET BY EXISTING PRESERVED TREES



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LANDSCAPE PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
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L1:1

COF PROJECT NO.7916

FILE NO. 1716-24

PLANTING NOTES:

1. Refer to all written specifications; adhere to Plans and Specifications for all phases of work.
2. Verify all utility locations in the field before work begins. Repair damaged utilities to owners satisfaction at no additional cost.
3. Verify all material quantities on the drawing during bidding and pricing. In the event of a discrepancy, the quantities drawn on the plan will take precedence over the material schedule.
4. All materials are subject to the approval of the Landscape Architect, City, and Owner.
5. Once unloaded from truck, immediately stand all trees up. DO NOT lie the trees down. This will reduce the risk of sunscald.
6. Plants shall meet specifications. Root balls shall meet or exceed size standards as set forth by 'American Standards for Nursery Stock'. Main leaders of all trees shall remain intact.
7. Mulch plant pits and planting beds with specified mulch to the depth indicated on drawings.
8. Prepare all topsoil used in tree, shrub, and seed mixes in accordance with the specifications
9. Discard any material which turns brown or defoliates within 5 days after planting. Replace immediately with approved specified material at no additional cost.
10. Maintain all plant material and lawns until project is accepted in full by the City.
11. Guarantee all workmanship and materials for a period of 1 calendar year.
12. Install all plant material in accordance with all local codes and ordinances. Obtain any required permits necessary to complete the work.
13. Provide 6" of topsoil for lawn areas (12" min. over rock), min. 24" of topsoil for shrub zones, and min. 48" deep for tree pits. Refer to specific root ball sizes for the min. diameter tree pit.
14. Trees shall be first quality representatives of their species and shall meet all requirements otherwise stipulated. The Landscape Architect reserves the right to reject plant materials in the field, at the growing location, or at the job site at any time during the project.
15. Test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using filter fabric wrapped perforated drainage tube (sloped to low point) and a washed pea gravel pit well drain

PLANT STANDARDS

The standards set forth in 'American Standard for Nursery Stock' represent general guideline specifications only and will constitute minimum quality requirements for plant material. All plants must meet minimum size noted at the materials schedule. And meet the characteristics stated on this drawing. All material installed on the site MUST meet or exceed these specifications. Any trees or shrubs not meeting these standards can be rejected at time of inspection.

TREE SPECIFICATIONS: ALL TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS:

1. Deciduous trees shall have one dominant single straight trunk with the tip of the leader on the main trunk left intact and the terminal bud on the central leader is at the highest point on the tree.
2. Trees with forked trunks are acceptable if all the following conditions are met:
   a. The fork occurs in the upper 1/3 of the tree.
   b. One fork is less than 2/3 the diameter of the dominant fork.
   c. The top 1/3 of the smaller fork is removed at the time of planting.
3. No branch is greater than 2/3 the diameter of the trunk directly above the branch.
4. The trunk and/or major branches shall not touch
5. Several branches are larger in diameter and obviously more dominant.
6. Branching habit is more horizontal than vertical, and no branches are oriented nearly vertical to the trunk.
7. Branches are evenly distributed around the trunk with no more than one major branch located directly above another and the crown is full of foliage evenly distributed around the tree
8. Crown spread shall look proportional to the tree.
9. NO flush cuts or open trunk wounds or other bark injury
10. Root ball meets all ANSI standards and is appropriately sized

DEFICIENCIES NOT ACCEPTED:

1. Tip dieback on 5% of branches
2. Crown thin/spasely foliated
3. Included bark
4. Major Branches touching
5. Asymmetrical branching

Landscape shall not obstruct visibility or access to fire protection equipment including, but not limited to, fire hydrants and fire department connections

FRANKLIN WATER MANAGEMENT IS NOT RESPONSIBLE TO MAINTAIN OR REPLACE ANY PROPOSED LANDSCAPING WITHIN THE SANITARY SEWER EASEMENT.

NOTE TO CONTRACTOR
*Shrubs installed at the perimeter parking strip shall be located 3' behind the curb.

ATTENTION OWNER/INSTALLER:
This landscape plan has been designed to meet the minimum requirements of the City of Franklin zoning ordinance, the approval of the planning commission, and planning department policy. Relocating, substituting, resizing, reducing, or deleting material may cause the site to no longer conform to the requirements; thus problems may arise with releasing the performance/maintenance surety for the landscape material.
Deviation from the approved landscape plan shall not be made without first consulting the Landscape Architect who designed the project. The designing Landscape Architect shall review proposed substitutions to ensure that all City standards and requirements are met. The City shall be notified in writing upon final approval of any plant substitutions.

BIORETENTION NOTES:

1. Verify that the bioretention areas have been constructed in compliance of the requirements of the construction documents prior to beginning work
2. Care should be taken to minimize compaction to soils within the limits of the bioretention area(s)
3. No machinery (other than walk behind rototillers) shall be used within the limits of the bioretention area(s)
4. Dig a test percolation pit (1'x1'x1'x deep and fill with water. Monitor to verify that all the water has drained from the pit within a 24 hour period. If water remains after 24 hours, cease all work on the bioretention area(s) and contact the Civil Engineer for further instructions
5. The work required for construction of the bioretention area(s) consists of removal of weeds, preparation of planting areas, mulching, and clean up.
6. Contractor is responsible for keeping the bioretention area free from sediment resulting from storm-water runoff.
7. The contractor shall conduct all site preparation activities to not allow "sediment loss" to the bioretention areas.
8. Provide or verify installation of a silt fence prior to commencement of construction around the circumference of the bioretention area(s)
9. Begin construction of the bioretention area(s) after adjacent areas have been stabilized with stone or vegetation.
10. Comply with the Water Quality Control Act of 1971, including revisions, and other applicable laws, ordinances, and regulations.
11. The Contractor shall correct, at his own expense, any work that does not comply with the requirements of the contract.
12. The Contractor shall assume responsibility for protection of public streets, curbs, and utilities from damages from the Contractor's operations. Plan work to avoid ponding, flooding, ad sediment loss on site and upon adjacent properties.
13. Meet the requirements of all rules and regulations governing the respective utilities. Protect active utilities from damage during construction.
14. If active utilities are encountered in the course of excavation other than those indicated on the survey or civil plans, protect them from damage and relocate them in accordance with the Engineer's written instructions. Remove inactive utilities if such are encountered
15. The finished surface shall be free from any lumps of earth, rocks, stones, debris, or other improper materials. No trees, trunks, shrubs, stumps, undergrowth, or building rubbish will be permitted in the grading grading.
16. 17. Scarify top 6" of soil by hand or with a walk behind rotoriller to the planting area. Tractors or other heavy machinery are NOT allowed within the bioretention area(s)
17. Remove all weeds with three applications (at 2 week intervals) of a systemic herbicide such as Roundup during the period that weeds are actively growing and prior to preparing the bioretnetion area for planting.

LANDSCAPE NOTES:

1. Contractor responsible for locating and protecting all underground utilities prior to digging.
2. Contractor responsible for protecting existing trees from damage during construction as shown on plans.
3. Contractor to install 6" minimum depth of clean, friable topsoil at all planting beds and lawn areas prior to fine grading. see topsoil specification sheet I-1.3.
4. All shrub beds (existing and new) to be mulched with a 3-4 inch minimum layer of mulch.
5. Existing grass in proposed planting areas to be killed and removed and area to be hand raked to remove all rocks and debris larger than 1 inch in diameter prior to planting shrubs or laying sod. Landscape contractor to provide fine grading.
6. Any existing grass disturbed during construction to be fully removed, re-graded and replaced. All tire marks and indention to be repaired.
7. Soil to be tested to determine fertilizer and lime requirements and distributed prior to laying sod.
8. Sod to be delivered fresh (cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. edge of sod adjacent to mulch beds to be shovel cut. All sod to be delivered in largest rolls available. there shall be no gaps between sod joints.
9. Planting mix to be provided as specified in the landscape specifications.
10. The landscape contractor shall guarantee all plants installed for one full year from date of acceptance. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The landscape contractor shall not be responsible for acts of god or vandalism.
11. Any plant that is determined dead, in an unhealthy or unsightly condition, lost its shape due to dead branches or other symptoms of poor, non-vigorous growth, as determined by the landscape architect, shall be replaced by the landscape contractor at no cost to owner.
12. Prior to installation, the landscape contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by general contractor and observe the site conditions under which the work is to be done. Notify general contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected.
13. Water all plant material that are newly planted thoroughly twice in first 24 hours and apply mulch immediately.
14. All trees and shrubs shall be coordinated with lighting plan prior to installation.
15. All shrubs to be 3' back of curb.
16. All areas of disturbance outside of landscape beds shall be repaired with turf.
17. Any utility structure, light poles, sign, or other feature may not be added to any required landscape island in such a manner that would displace the required element(s) (trees, shrubs, etc.)

SUBSTITUTION NOTE:

1. Requirements shown are per the City Zoning Ordinance. Substitutions are not allowed unless approved by the City and Heibert+Ball Land Design

TO AVOID OVERHEAD LIGHT POLE CONFLICTS:

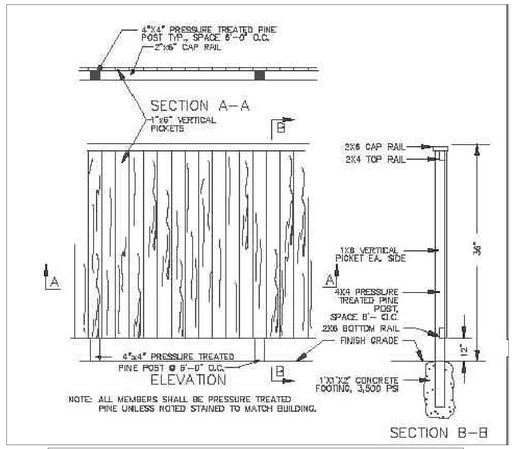
In the event proposed canopy trees are in conflict (within 10') with proposed or existing light pole locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment

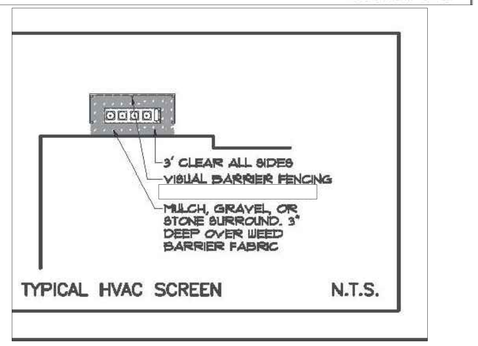
TO AVOID OVERHEAD UTILITY CONFLICTS:

In the event proposed canopy trees are in conflict (within 25') with proposed or existing overhead utility locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment.

UTILITY SCREEN

All utility structures, transformers, meters, and/or units shall be screened with plant material tall enough to provide an effective screen. Structures not shown on landscape plans will be required to be screened. If utilities are added to the site, contact Heibert+Ball Land Design for screening recommendations





HVAC SCREEN FENCE

PLANT SCHEDULE SITE

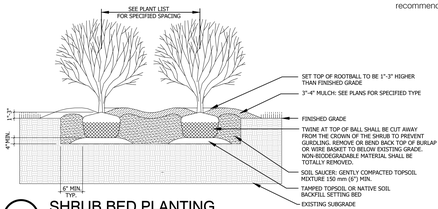
CANOPY TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
AH REPLACEMENT	21	Summer Red Maple / Acer rubrum 'HOSR' TM 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	3"Cal	12`-14` HT
F REPLACEMENT	27	Franz Fontaine Hornbeam / Carpinus betulus `Franz Fontaine` 3` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	3"Cal	10`-12` HT
	31	Brodie Columnar Cedar / Juniperus virginiana `Brodie` Full To Base. Full Dense Form. Matched. See Tree Specifications	B & B		10`-12` HT
O REPLACEMENT	9	Overcup Oak / Quercus lyrata 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	3"Cal	14`-15` HT
TS	19	Green Giant Arborvitae / Thuja standishii x plicata `Green Giant` Full to Base. Full Dense Form. Matched. See Tree Specifications	B & B		10`-12` HT
UP REPLACEMENT	4	Bosque Elm / Ulmus parvifolia `Bosque` 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications.	B & B	3"Cal	12`-14` HT
UNDERSTORY TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
R REPLACEMENT	22	Merlot Redbud / Cercis canadensis `Merlot` 4` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2"Cal	10`-12` HT
CK REPLACEMENT	12	Milky Way Kousa Dogwood / Cornus kousa `Milky Way` 4` Clear Trunk. Full Symmetrcal Crown. Matched. See Tree Specifications	B & B	2"Cal	10`-12` HT
	16	Tree From Foster's No.2 Holly / Ilex x attenuata 'Fosteri' -Tree Form 4' Clear Trunk. Full Dense Form. Matched. See Tree Specifications	B & B		8`-10` HT
MT REPLACEMENT	8	Thundercloud Crabapple / Malus x 'Thundercloud' 4' Clear Trunk. Envnly Branched Matched. See Tree Specifications	B & B	2"Cal	10`-12` HT

PLANT SCHEDULE SITE

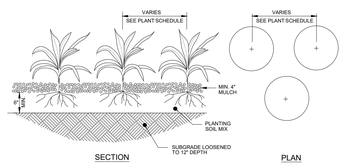
SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	HT / CONT.	WIDTH
	DC	27	Vintage Jade Distylium / Distylium x 'Vintage Jade' Full; Dense; Well Rooted	#3 Container	
	IS	29	Sky Pencil Japanese Holly / Ilex crenata `Sky Pencil` Full, Dense Upright Form	30" HT Min.	
	JO	77	Grey Owl Juniper / Juniperus x 'Grey Owl' Full; Dense Form	16"x16"	
	VP	28	Cree Viburnum / Viburnum x cree Full; Dense Form	30" HT Min.	
BUFFER SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	HT / CONT.	WIDTH
	AB	87	Glossy Abelia / Abelia x grandiflora Full; Dense Form	24" HT	
	FI	94	Lynwood Gold Forsythia / Forsythia x intermedia `Lynwood Gold` Full; Dense; Well Rooted	24" HT	
	ID	81	Dwarf Burford Holly / Ilex cornuta `Burfordii Nana` Full; Dense Form	24" HT	
	IW	49	Winterberry / Ilex verticillata Fill; Dense Form 1 Male Per 20	24" HT	
	IV	100	Virginia Sweetspire / Itea virginica `Little Henry` TM Full; Dense Form	24" HT	
	PH	64	Ninebark / Physocarpus opulifolius Full; Dense Form	24" HT	
	VP2	86	Prague Viburnum / Viburnum x pragense Full; Dense Form	24" HT	
	VS	13	Shoal Creek Chaste Tree / Vitex agnus-castus 'Shoal Creek' Full; Dense Form	24" HT	
GRASSES	CODE	QTY	COMMON / BOTANICAL NAME	HT / CONT.	WIDTH
	EB	51	Blue Dune Lyme Grass / Elymus arenarius Blue Dune Full; Dense; Well Rooted	#1 Container	
	NW	17	Walkers Low Catmint / Nepeta x faassenii ``Walkers Low` Full; Heavy; Well Rooted	#1 Container	

PLANT SCHEDULE BIORETENTION

CANOPY TREES	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
N REPLACEMENT	N	6	Wildfire Tupelo / Nyssa sylvatica `Wildfire` 5` Clear Trunk. Full Symmetrcal Crown. Matched. See Tree Specifications.	B & B	3"Cal	14`-15` HT
BIORETENTION PLANTS	CODE	QTY	COMMON / BOTANICAL NAME	CONT		
	AT	42	Butterfly Milkweed / Asclepias tuberosa Full; Well Rooted Containers. Installed 18" O.C.	1 Quart		
	IG	24	Butterfly Bush / Buddleia davidii Full; Well Rooted Containers #3 Containers Installed 48" O.C. in Triangular Pattern	#3 Container		
	CA	7	Beautyberry / Callicarpa americana Full; Well Rooted Containers #3 Containers Installed 60" O.C. in Triangular Pattern	#3 Container		
	IH	23	Inkberry Holly / Ilex glabra Full; Well Rooted Containers #3 Containers Installed 48" O.C. in Triangular Pattern	#3 Container		
	PC	12	Cheyenne Sky Switch Grass / Panicum virgatum `Cheyenne Sky` Full; Well Rooted Containers #1 Containers Installed 54" O.C. in Triangular Pattern	#1 Container		

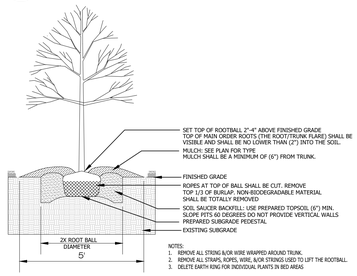


SHRUB BED PLANTING



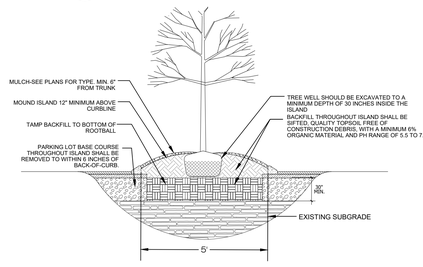
GROUNDCOVER PLANTINGS

GROUNDCOVER, GRASSES, AND PERENNIALS



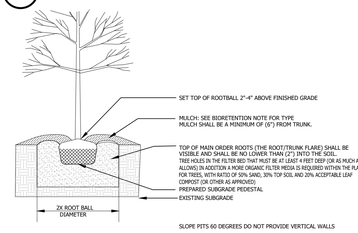
NOTES:
1. REMOVE ALL STRING &/OR WIRE WRAPPED AROUND TRUNK.
2. REMOVE ALL STRAPS, ROPES, WIRE, &/OR STRINGS USED TO LIFT THE ROOTBALL.
3. DELETE EARTH RING FOR INDIVIDUAL PLANTS IN BED AREAS

DECIDUOUS TREE PLANTING



PARKING ISLAND TREE PLANTING

FOR PARKING LOT ISLAND OR MEDIAN



BIORETENTION TREE PLANTING

NOTES:
1. REMOVE ALL STRING &/OR WIRE WRAPPED AROUND TRUNK.
2. REMOVE ALL STRAPS, ROPES, WIRE, &/OR STRINGS USED TO LIFT THE ROOTBALL.
3. DELETE EARTH RING FOR INDIVIDUAL PLANTS IN BED AREAS

TREE HOLES IN THE FILTER BED THAT MUST BE AT LEAST 4 FEET DEEP (OR AS MUCH AS DESIGN ALLOWS) TO PROVIDE ENOUGH SOIL VOLUME FOR THE ROOT STRUCTURE OF MATURE TREES. IN ADDITION A MORE ORGANIC FILTER MEDIA IS REQUIRED WITHIN THE PLANTING HOLES FOR TREES, WITH RATIO OF 50% SAND, 30% TOP SOIL AND 20% ACCEPTABLE LEAF COMPOST (OR OTHER AS APPROVED).

WHEN THE TERMS "POT", "CONTAINER", OR "CALIPER" ARE USED TO DESCRIBE MINIMUM SIZE AT PLANTING, THE ESTABLISHED AMERICAN STANDARD FOR NURSERY STOCK SHALL APPLY. THAT IS: •"ALL CONTAINER GROWN (DECIDUOUS OR CONIFER) SHRUBS SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THEY SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION." "AN ESTABLISHED CONTAINER GROWN (DECIDUOUS OR CONIFER) SHRUB SHALL BE A (DECIDUOUS OR CONIFER) SHRUB TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER." •CONTAINER SIZE MAY BE CONVERTED TO MINIMUM HEIGHT/SPREAD AS FOLLOWS:
1 GALLON = 12" TO 15" HEIGHT OR SPREAD
3 GALLON = 15"-18" HEIGHT OR SPREAD
5 GALLON = 18" TO 24" HEIGHT OR SPREAD
7 GALLON = 24" TO 30" HEIGHT OR SPREAD

BUILDING LANDSCAPE - FOUNDATION SCHEDULE

NORTH / SOUTH FACE PLANT SELECTIONS
48" HT Thuja: Emerald Green, Degroot (At Corners)
18" HT Ilex: Soft Touch, Carissa
18" HT Taxus: Hicks, Dense, Taunton
12" HT Spirea: Lime Mound, Tracy, Lil Sizzle
18" HT Hydrangea: Limelight, Bobo
Groundcover: Liriope, Vinca, Pachysandra

EAST / WEST FACE PLANT SELECTIONS
48" HT Thuja: Emerald Green, Degroot (At Corners)
18" HT Distylium: Coppertone, Vintage Jade
18" HT Buxus: Chicagoland, Green Gem, Winter Gem
12" HT Abelia: Rose Creek, Kaleidoscope
12" HT Nandina: Flirt, Firepower
Groundcover: Var. Liriope, Daylily, Vinca

MUNICIPAL CODE 7-231 DOES NOT PERMIT THE INSTALLATION OF COMBUSTIBLE MULCH WITHIN 24" OF BUILDINGS OF CONSTRUCTION TYPES III, IV, AND V AND BUILDINGS WITH COMBUSTIBLE EXTERIOR SHEATHING

PLAN NOTES:

1. ALL LANDSCAPE BEDS SHALL BE NEATLY TRENCHED WITH A BED EDGE AND HAVE 3" MINIMUM DEPTH OF PINE STRAW MULCH. LANDSCAPE BUFFER SHALL BE FULLY MULCHED. NO TURF WITHIN BUFFER.
2. ALL LANDSCAPE BEDS AROUND THE BUILDING FOUNDATION SHALL BE MULCHED WITH RIVER COBBLES PER FRANKLIN CODE. SIZE AND COLOR OF STONE TO BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION
3. BIO-RETENTION PONDS SHALL BE MULCHED WITH 3" PINE STRAW MULCH; TAMPED WITH RAKE. INLETS AND DRAINS SHALL BE SURROUNDED WITH 2' OF 6" ROUND RIVER ROCKS
4. ALL TREES AND SHRUBS SHALL BE COORDINATED WITH LIGHTING PLAN PRIOR TO INSTALLATION.
5. ALL TREES AND SHRUBS SHALL BE PLANTED 3' BEHIND BACK OF CURB.
6. ALL AREAS OF DISTURBANCE SHALL BE SEEDED WITH REBEL III TALL FESCUE UNLESS OTHERWISE NOTED ON GRADING PLANS
7. AUTOMATIC IRRIGATION SYSTEM DESIGN TO BE PROVIDED BY THE CONTRACTOR AND SHALL MEET ALL CITY OF FRANKLIN REQUIREMENTS. SHOP DRAWINGS, DETAILS, AND PLANS SHALL BE PROVIDED TO THE OWNER FOR REVIEW.

Heibert+Ball LAND DESIGN
Suite 400
1894 Gen. George Patton Dr.
Franklin, TN 37067-6868
615.376.2421 www.hblanddesign.com

COF PROJECT NO.7916

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-220 Nashville, Tennessee 37228-1515 615/726/4848

LANDSCAPE NOTES

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JRG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TEAM	JRG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JRG	09-01-22	SITE PLAN RESUBMITTAL

L1:2

FILE NO. 1716-24



SITE PHOTOMETRIC PLAN
SCALE: 1" = 40'-0"

Luminaire Schedule				
Qty	Label	Arrangement	LLF	Description
1	EX	SINGLE	0.900	APX-1-T3-128LC-5-4K-UNV, WITH 20' POLE, BLACK FINISH, 4000K LAMP COLOR, LED
18	P4	SINGLE	0.900	BNS2-36L-800-4K7-4W-BC, WITH 14' POLE, BLACK FINISH, 4000K LAMP COLOR, LED
8	P2	SINGLE	0.900	APX-1-T2-64LC-5-4K-UNV, WITH 16' POLE, BLACK FINISH, 4000K LAMP COLOR, LED

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Residential Parking	Illuminance	Fc	1.23	3.3	0.1	12.30	33.00
Shawnee Drive	Illuminance	Fc	2.54	9.6	0.3	8.47	32.00

SITE LIGHTING DATA

DEVELOPMENT STANDARD: TRADITIONAL
LAND USE: RESIDENTIAL
ZONING DISTRICT: PD – MULTI-FAMILY
PROPOSED BUILDING HEIGHT: 2-STORY UNITS, SEE ARCHITECTURAL

POLE HEIGHT: 20'-0"
POLE COLOR: BLACK
COLOR OF LIGHT: 4000K (DAYLIGHT)

TYPE P2 AND EX

Control Number: ARCHITECTURAL-APX-1-06_13_2022

Apex LED Specifications



Project Name:

Catalog Number:

Type:

The new **Apex** LED Series offers clean, functional styling that blends with a broad range of architecture. The cast aluminum housing with integrated pole top fitter anchors aluminum mounting rods to support the cast aluminum shade that houses the LED light engine. The LED's performance and the driver's life are maximized by enclosing them in the two separate compartments.

The LED light assemblies come with 64 or 128 LED's. Five optical distribution patterns are available. Choose between 3000, 4000 or 5000 Kelvin temperature of the LED's. A durable polyester powder coat finish is guaranteed for five years; and is available in standard or custom colors.

The **Apex** LED series is an exceptional choice for college campus's, architectural buildings, and many other architectural projects that want to use sustainable LED lighting.

Ordering Information

MODEL	OPTICS	SOURCE	CURRENT	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS
APX-1	T2 Type 2 T3 Type 3 T4 Type 4 T5 Type 5 T5W Type 5 Wide	64LC 128LC	1 175mA 3 350mA 5 530mA	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V 8 347V	PT Post Top *Slips over 4" tenon X 4.5" tall as standard AM Arm Mount * Works only with arm mount# VA1130, VA1131, VA132	BZ Bronze BK Black SBK Smooth Black WH White SWH Smooth White GP Graphite GY Grey SL Silver Metallic CC Custom Color	PC-120 PC-208 PC-240 PC-277 Button Type Photocell WSC-8 Motion Sensor 8' Mounting Height WSC-20 Motion Sensor 9-20' Mounting Height WSC-40 Motion Sensor 21-40' Mounting Height *The options will require the use of a remote for programming DIM 0-10v Dimming Driver VWC Visionaire Wireless Controls *Consult Factory

VISIONAIRE LIGHTING

VL-PA-ING-001-F37 REV. 0 CRCABR22-03

TYPE P4

KIM LIGHTING

BNSP2
ARCHITECTURAL AREA/SITE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

FEATURES

- Available in 595nm, 3000K, 4000K and 5000K standard CCT
- High performance optics up to 9,264 delivered lumens
- Type 1, 2, 3, 4, 4W, SQM distributions
- 0-10V dimming drivers standard
- Sealed optical chamber, IP65 certified

3000K and warmer CCTs only

CONTROL TECHNOLOGY

Bounce



Bounce Small

RELATED PRODUCTS

Bounce, Ballard | Bounce, UpGrade Kit | BNM

SPECIFICATIONS

CONSTRUCTION
- One piece non die-cast housing, low copper (<0.6% Cu) Aluminum Alloy with integral cooling ribs over the optical chamber and electrical compartment
- Double-thick wall with gussets on the support-arm mounting end
- Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail
- All hardware is stainless steel or electro-zinc plated steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Clear 1/8" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimete
- Optional, fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens. CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance

OPTICS
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate
- Molded silicone gasket ensures a weather-proof seal around each individual LED

OPTICS (CONTINUED)
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- Optional BackLight Control for complete control of unwanted backlight.
- IP66 Optical assembly
- Type 1, 2, 3, 4, 4W, and SQM standard distributions Custom available
- 3000K, 4000K, 5000K standard CCT. Amber and custom available
- Die-cast, low copper aluminum heat sink modules provide thermal transfer at PCB level, clear lens is standard.
- Anodized aluminum heat sink modules

INSTALLATION
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

ELECTRICAL
- Dimming range from 10% to 100% through the use of standard 0-10V interface on the programmable driver
- Modular wiring harness in the service area provides user access to the dimming circuitry
- Optional factory programmed dimming profile
- Surge protection: 10kV surge suppression
- SF for 120, 277, 347 Line volts DF for 208, 240, 480 Line volts
- Wiring: 14GA wires rated 150°C

KEY DATA	
Lumen Range	1,780 - 9,264
Wattage Range	47.67 - 91.24W
Efficacy Range (LPW)	33 -115 lm/W
Reported Life (Hours)	L70>60,000
Weight	26 lbs - 11.8 Kg
EPA	1.2

CONTROLS
- Standard photocell and 7 pin receptacle

CERTIFICATIONS AND LISTINGS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- RoHS compliant
- IDA approved, 3000K and warmer CCTs only
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

WARRANTY
- 5 year warranty
- See HLI Standard Warranty for additional information

Page **1/1** Rev. **11/05/21** BNSP2

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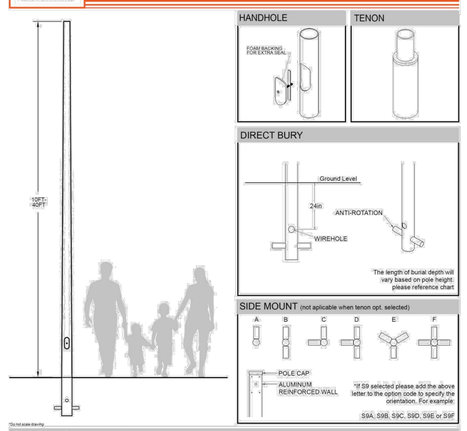
HUBBELL Lighting

POLE FOR P2 AND P4

DIRECT BURY POLE
EOS 300 SERIES (EPA:3)

Max EPA: 3 • Material: Fiberglass • Non-conductive • Non-corrosive • Compliant with NAAMM & AASHTO •

HYPERIA



ORDERING EXAMPLE

MODEL #	TENON MOUNT	SIDE MOUNT	COLOR	HANDHOLE	*E HOLDER	*GFI	*SHROUD
(please reference charts for model #)	T4 = 2 3/8in x 4 5/8in T5 = 3in x 4 5/8in T7 = (custom tenon)	S6 = reinforced side mat (no predrilling) S9* = reinforced side mat (with predrilling)	BLK = black BRZ = bronze WH = white GR = grey CM = color match	H0 = no handhole H2 = 2 1/2in x 5in H3 = 4in x 6in CH = custom handhole	FLH = 15w holder	GFI = standard Ground Fault Circuit Interrupter GFIU = in use Ground Fault Circuit Interrupter	SSH = side shield RSH = round shield ZSH = ZSH shield
(leave it blank if you selected a side mount)		(leave blank if you selected a tenon mount)			(leave blank if you do not want this option)	(leave blank if you do not want this option)	(leave blank if you do not want this option)
SFLD316	+ T4	+ S6	+ BLK	+ H2	+	+	+

*If T7 S6 OR CM, GFI or GFIU selected please call for further instructions

= SFLD316-S6-BLK-H2

*See accessories pages for info on F. Holder, GFI, and Shroud

MODEL #	SHAFT LENGTH (FT)	MOUNTING HEIGHT (FT)	TIP OUTER Ø (IN)	GROUND LEVEL Ø (IN)	BURIAL DEPTH (FT)	NOMINAL POLE WEIGHT (LBS)	3 EPA MAX (MPH)
D310	13	10	4.5	5.3	3	29	100
D311	14	11	4.5	5.3	3	31	100
D312	15	12	4.5	5.5	3	32	100
D313	16	13	4.5	5.5	3	34	100
D314	17	14	4.5	5.5	3	36	100
D315	18	15	4.5	5.5	3	37	100
D316	19	16	4.5	5.75	3	39	100
D317	20	17	4.5	6.3	3	44	100
D318	21	18	4.5	6.5	3	46	100
D319	22	19	4.5	6.5	3	51	100
D320	24	20	4.5	6.5	4	57	100
D322	26	22	4.5	6.5	4	62	100
D324	28	24	4.5	6.75	4	67	100
D325	30	25	4.5	6.75	5	70	100
D330	35	30	5.3	8.5	5	112	100
D335	40	35	5.3	8.5	5	133	100
D340	45	40	5.3	8.5	5	176	100
FLD310	14	10	4.5	5.3	4	30	140
FLD311	15	11	4.5	5.3	4	31	140
FLD312	16	12	4.5	5.5	4	34	140
FLD313	17	13	4.5	5.5	4	38	140
FLD314	18	14	4.5	5.5	4	40	140
FLD315	19	15	4.5	5.5	4	44	140
FLD316	20	16	4.5	5.75	4	51	140
FLD317	21	17	4.5	6.3	4	51	140
FLD318	22	18	4.5	6.5	4	58	140
FLD319	23	19	4.5	6.5	4	60	140
FLD320	25	20	4.5	6.5	5	65	140
FLD322	27	22	4.5	6.5	5	77	140
FLD324	29	24	4.5	6.75	5	85	140
FLD325	31	25	4.5	6.75	6	88	140
FLD330	36	30	5.3	8.5	6	122	140
FLD335	41	35	5.3	8.5	6	179	140
FLD340	46	40	5.3	8.5	6	242	140
SFLD310	14	10	4.5	5.3	4	38	180
SFLD311	15	11	4.5	5.3	4	41	180
SFLD312	16	12	4.5	5.5	4	44	180
SFLD313	17	13	4.5	5.5	4	50	180
SFLD314	18	14	4.5	5.5	4	58	180
SFLD315	19	15	4.5	5.5	4	61	180
SFLD316	20	16	4.5	5.75	4	63	180
SFLD317	21	17	4.5	6.3	4	78	180
SFLD318	22	18	4.5	6.5	4	80	180
SFLD319	23	19	4.5	6.5	4	85	180
SFLD320	25	20	4.5	6.5	5	91	180
SFLD322	27	22	4.5	6.5	5	112	180
SFLD324	29	24	4.5	6.75	5	128	180
SFLD325	31	25	4.5	6.75	6	136	180
SFLD330	36	30	5.3	8.5	6	176	180
SFLD335	41	35	5.3	8.5	6	230	180
SFLD340	46	40	5.3	8.5	6	274	180

FL = (Florida) rated for 140mph
SFL = (South Florida) rated for 180mph

PLP Composite Technologies • 57 Creamery Rd Fitzwilliam NH 03447 • PO Box 429 • Tel: 603 585 9100 • www.plpcomp.com • www.hyperialightpoles.com

Oliver • Little • Gipson
OLG Engineering, Inc.
301 Industrial Blvd.
Tullahoma, TN 37388
Office: 931.454.9940
2605 Elm Hill Pk/St C
Nashville, TN 37214
Office: 615.678.6022
olgengineering.com

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications

TENNESSEE REGISTERED ENGINEERING CONSULTANT CERTIFICATE OF AUTHORIZATION 104952 STATE OF TENNESSEE

SITE PHOTOMETRICS PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TAS	ADG	05-27-22	PRELIMINARY - CITY/OWNER REVIEW
TAS	ADG	07-08-22	SITE PLAN SUBMITTAL
ADG	ADG	09-01-22	SITE PLAN SUBMITTAL

ES1.1

FILE NO. 1716-24

COF PROJECT NO. 7916

OLG NO. 18121

Oliver • Little • Gipson
OLG Engineering, Inc.
301 Industrial Blvd.
Tullahoma, TN 37388
Office: 931.454.9940
2605 Elm Hill Pk/St C
Nashville, TN 37214
Office: 615.678.6022
olgengineering.com



SITE POWER PLAN
SCALE: 1" = 40'-0"

NOTE:
ALL WORK TO BE PER MTEMC REQUIREMENTS.
COORDINATE ALL WORK WITH MTEMC.

SITE LEGEND

SEC	3-PHASE SECTOR
PB	PRIMARY PULLBOX
PBS	LARGE SECONDARY PULLBOX
▼	TRANSFORMER
CH1	COMMUNICATIONS HANDHOLE 17"X30"X18"
CH2	COMMUNICATIONS HANDHOLE 10" FLOWER POT

COF PROJECT NO. 7916

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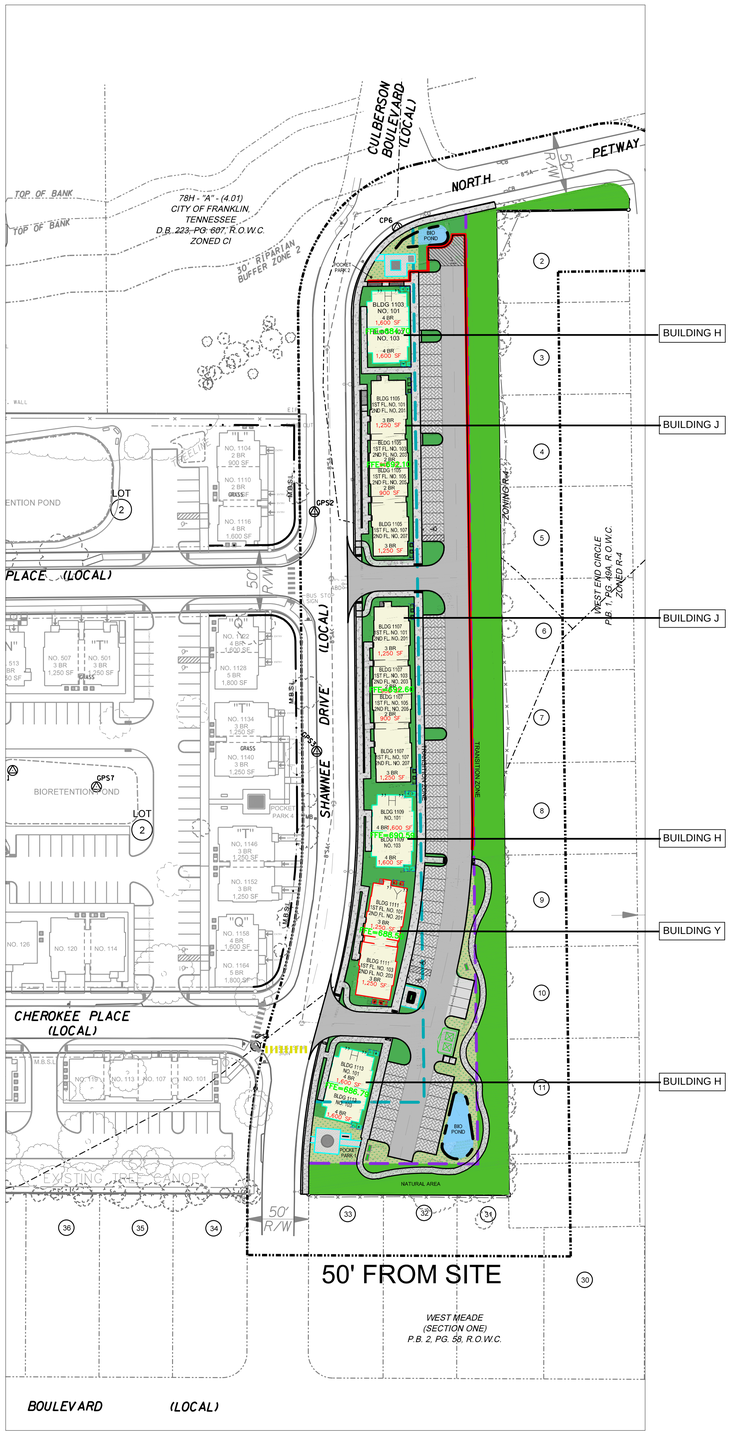
SITE POWER PLAN

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
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TAS	ADG	07-08-22	SITE PLAN SUBMITTAL
ADG	ADG	09-01-22	SITE PLAN SUBMITTAL

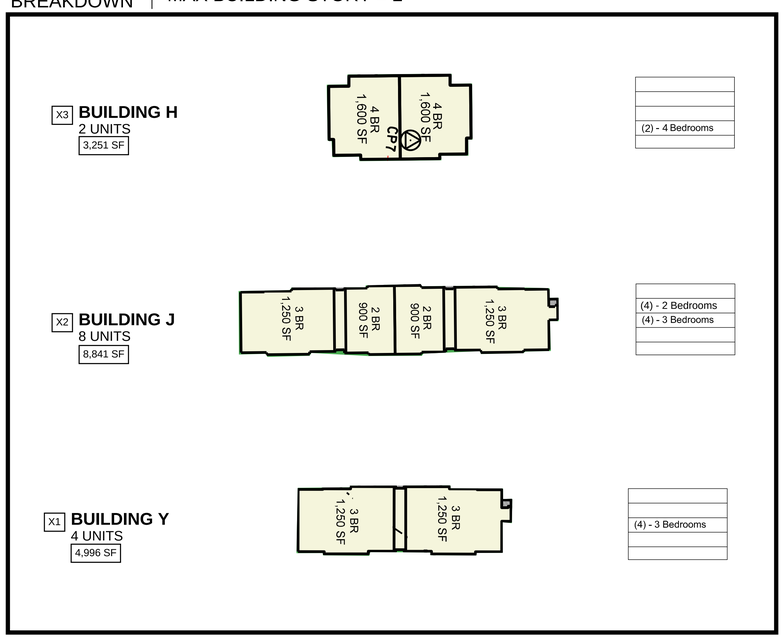
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FILE NO. 1716-24
OLG NO. 18121



3 BUILDING TYPES
6 BUILDINGS TOTAL
26 UNITS TOTAL
MAX BUILDING HEIGHT RANGE: 29'-4" TO 36'-6"
MAX BUILDING STORY = 2

PROJECT BREAKDOWN



NICKLE ARCHITECTS PLLC — ESTD 2001

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-226 Nashville, Tennessee 37228-1515 615/7284948

JAMES DAVID NICKLE — REGISTERED ARCHITECT — 102358 — STATE OF TENNESSEE
01 SEP 2022
08-01-22

SITE PLAN & BUILDING BLOCKS

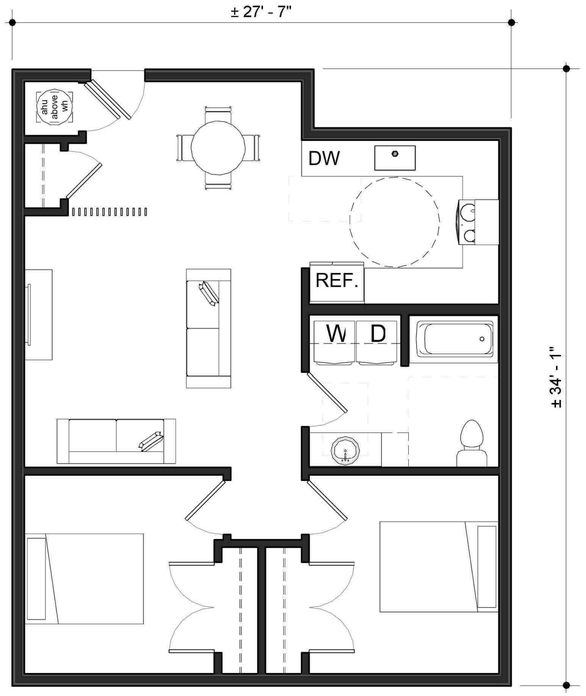
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

PRELIMINARY - CITY/OWNER REVIEW

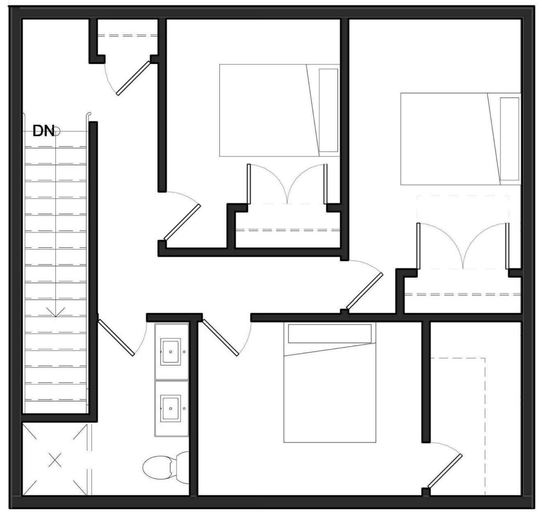
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TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	08-01-22	SITE PLAN SUBMITTAL

COF PROJECT NO.7916

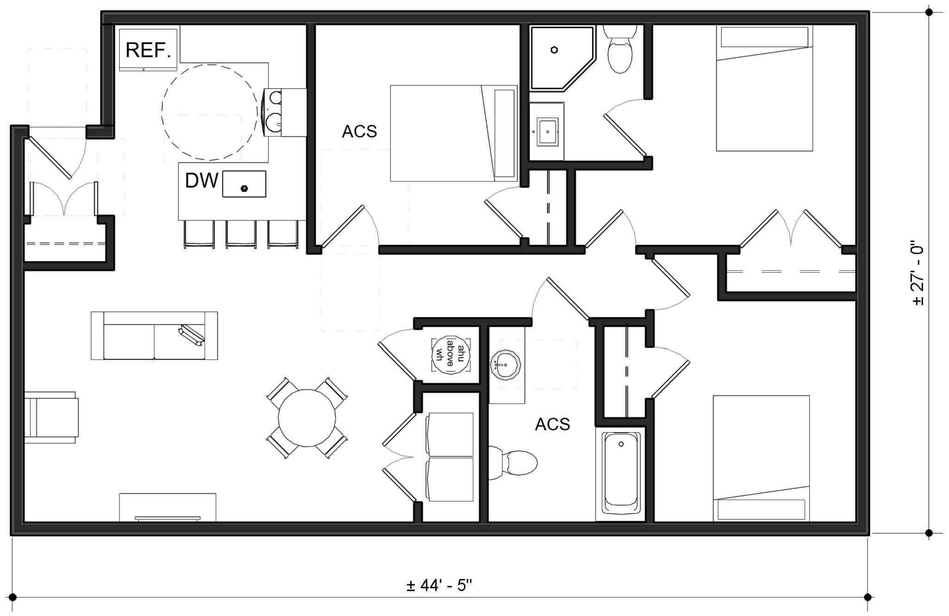
A1
SITE PLAN
FILE NO. 1716-24



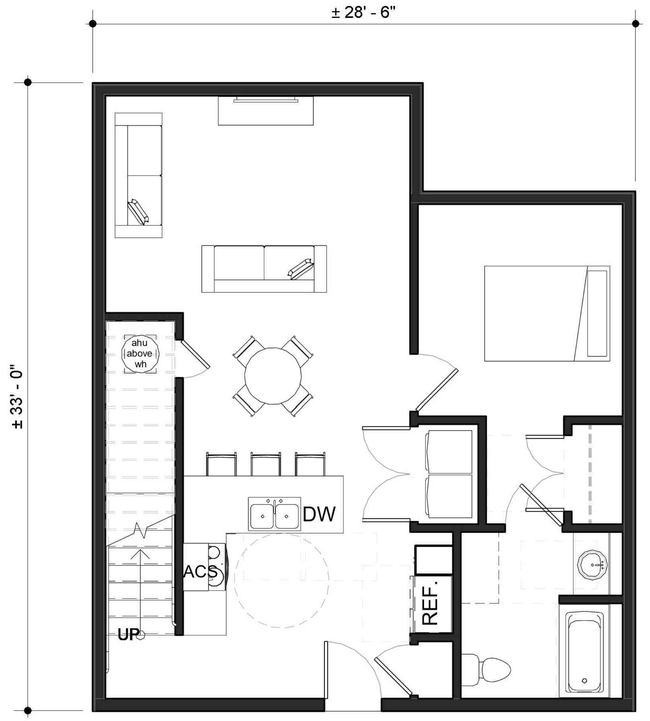
2 BEDS - 900 SF



4 BEDS - 1,600 SF - LEVEL 2



3 BEDS - 1,175 SF



4 BEDS - 1,600 SF - LEVEL 1

NICKLE ARCHITECTS PLLC — ESTD 2001

JAMES + ASSOCIATES, INC.
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Computer Applications
One Vantage Way, Suite E-220 • Nashville, Tennessee 37228-1565 • 615/726/4848

JAMES DAVID NICKLE — REGISTERED ARCHITECT — No. 102098 — STATE OF TENNESSEE
01 SEP 2022
08-01-22

FLOOR PLANS

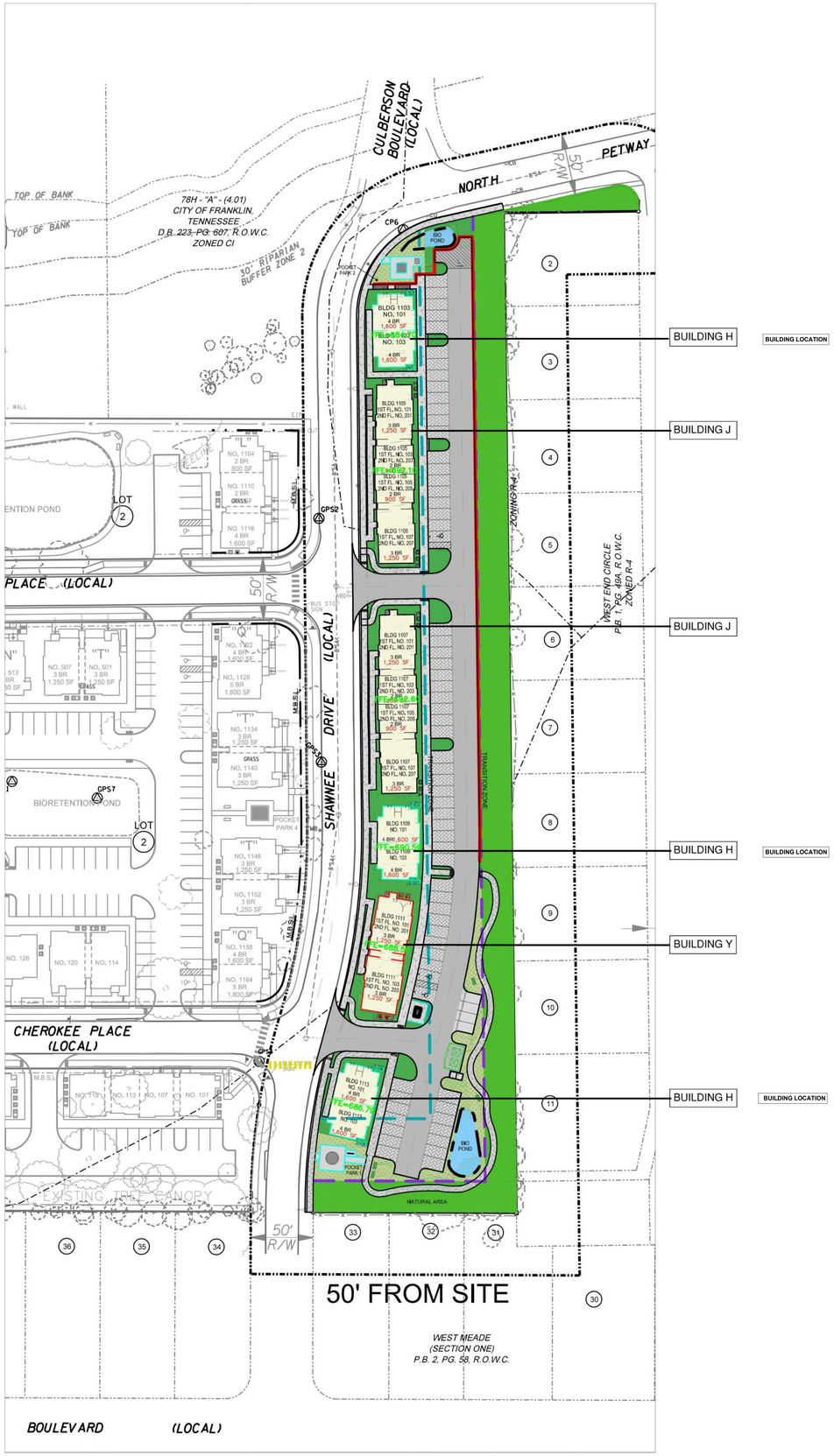
SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

A2

COF PROJECT NO.7916

FILE NO. 1716-24



NICKLE ARCHITECTS PLLC

PLAN REVIEW DATA

GOVERNING CODES (WILLIAMSON COUNTY):

BUILDING	2018 INTERNATIONAL BUILDING CODE (w/ LOCAL AMENDMENTS)
FIRE	2018 INTERNATIONAL FIRE CODE (w/ LOCAL AMENDMENTS)
LIFE SAFETY	2018 LIFE SAFETY CODE (NFPA 101) (w/ LOCAL AMENDMENTS)
MECHANICAL	2018 INTERNATIONAL MECHANICAL CODE (w/ LOCAL AMENDMENTS)
PLUMBING	2018 INTERNATIONAL PLUMBING CODE (w/ LOCAL AMENDMENTS)
GAS	2018 INTERNATIONAL FUEL GAS CODE (w/ LOCAL AMENDMENTS)
ENERGY	2018 INTERNATIONAL ENERGY CONSERVATION CODE (w/ LOCAL AMENDMENTS)
ELECTRICAL	2017 NATIONAL ELECTRICAL CODE
HANDICAP	2017 ICC A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES FEDERAL FAIR HOUSING ACT DESIGN MANUAL

BUILDING INDEX

Sheet Number	Sheet Name
H-A0.1	GENERAL INFORMATION
H-A0.2	LIFESAFETY PLANS
H-A1.1	FOUNDATION PLAN
H-A1.2	FIRST FLOOR PLAN
H-A1.3	SECOND FLOOR PLAN
H-A1.4	ROOF PLAN
H-A2.1	FIRST FLOOR RCP
H-A2.2	SECOND FLOOR RCP
H-A3.1	ELEVATIONS
H-A3.2	ELEVATIONS
H-A4.1	BUILDING SECTIONS

CATEGORY	ALLOWABLE / REQUIRED	PROPOSED	REFERENCE
CLASSIFICATION BY OCCUPANCY / USE	NOT APPLICABLE	GROUP R-2 - RESIDENTIAL OCCUPANCY (APARTMENTS)	IBC 304 IBC 310.3
SPRINKLER SYSTEM	SPRINKLER SYSTEM REQUIRED - IBC 2018	AUTOMATIC SPRINKLER SYSTEM - NFPA 13R	IBC 903
CONSTRUCTION TYPE	IBC TYPE V-B	IBC TYPE V-B w/ HEIGHT & AREA SPRINKLER INCREASE	IBC TABLE 601
BUILDING HEIGHT	3 STORIES - 60'-0" (1 STORY & 20'-0" w/ INCREASE)	2 STORIES - 30'-3"	IBC TABLE 504.3 IBC TABLE 504.4
BUILDING AREA	7,000 SF / FLOOR	3,733 SF FIRST FLOOR 3,510 SF SECOND FLOOR	IBC TABLE 506.2
MINIMUM FIRE RESISTANCE OF STRUCTURAL ELEMENTS & EXTERIOR WALLS	IBC TYPE V-B CONSTRUCTION	IBC TYPE V-B CONSTRUCTION	IBC TABLE 601
STRUCTURAL FRAME	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
FLOOR CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
ROOF CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
MINIMUM FIRE RESISTANCE OF INTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
SEPARATION BETWEEN USES (R-2 TO R-2)	0 HOURS	0 HOURS	IBC TABLE 508.4
ASSEMBLIES BETWEEN DWELLING UNITS	1/2 HOUR (FP) w/ SPRINKLER SYSTEM	1 HOUR (FP) w/ SPRINKLER SYSTEM	IBC 420
MINIMUM FIRE RESISTANCE OF EXTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
EXTERIOR WALLS 5'≤X<10' SEPARATION (BREEZEWAYS)	1 HOUR (FP)	1 HOUR (FP)	IBC TABLE 602
MAXIMUM % OPENINGS IN RATED EXTERIOR WALLS UNPROTECTED, SPRINKLERED 5'≤X<10' SEPARATION	25%	3.39%	IBC TABLE 705.8
INTERIOR WALL & CEILING FINISHES MAXIMUM ALLOWED FLAME SPREAD INDEX			
EXIT ENCLOSURES	CLASS C	CLASS C	IBC TABLE 803.9
CORRIDORS	CLASS C	CLASS C	IBC TABLE 803.9
OTHER ROOMS	CLASS C	CLASS C	IBC TABLE 803.9
FIRE PROTECTION SYSTEMS			
SPRINKLER SYSTEM	NFPA 13R	NFPA 13R	IBC 903
STANDPIPE	NOT REQUIRED	NOT PROVIDED	IBC 905.4
PORTABLE FIRE EXTINGUISHERS	TYPE 1-A:10-B:C 1,250 SF / EXTINGUISHER 75'-0" MAX. TRAVEL DISTANCE	ONE TYPE 1-A:10-B:C PORTABLE FIRE EXTINGUISHER PROVIDED PER DWELLING UNIT UNDER KITCHEN SINK	IBC 906
MANUAL FIRE ALARM BOXES	REQUIRED THROUGHOUT	PROVIDED	IBC 907
SMOKE ALARMS / DETECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
VISIBLE & AUDIBLE ALARMS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
FIRE DEPARTMENT CONNECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 912
CLEARANCES			
CORRIDOR WIDTH	36" MINIMUM	54"	IBC TABLE 1018.2
CEILING HEIGHT	7'-6" MINIMUM	9'-0" MAIN SPACES - 8'-6" BREEZEWAYS	IBC 1003.2
DOOR HEIGHT	6'-8" MINIMUM	6'-8"	IBC 1008.1.1
DOOR WIDTH (ON ACCESSIBLE ROUTE)	32" MINIMUM CLEAR	32"	IBC 1008.1.1
EGRESS DOOR WIDTH / OCCUPANT	0.2" / OCCUPANT (SPRINKLERED)	32" MINIMUM	IBC 1005.3.2
DOOR HARDWARE HEIGHT	34" MINIMUM - 48" MAXIMUM	40"	IBC 1008.1.9.2
STAIR HEAD ROOM	7'-6" MINIMUM	8'-6"	IBC 1009.5
STAIR WIDTH	36" MINIMUM	54"	IBC 1009.4
EGRESS STAIR WIDTH / OCCUPANT	0.3" / OCCUPANT (SPRINKLERED)	54"	IBC 1005.3.1
STAIR RISERS	7" MAXIMUM	7" MAXIMUM	IBC 1009.7.2
STAIR TREADS	11" MINIMUM	11"	IBC 1009.7.2
HANDRAIL HEIGHT	34" MINIMUM - 38" MAXIMUM	36"	IBC 1012.2
GUARDRAIL HEIGHT	42" MINIMUM	42"	IBC 1013.3
EGRESS REQUIREMENTS	GROUP R-2 - SPRINKLERED	GROUP R-2 - SPRINKLERED	
OCCUPANT LOAD	200 GSF / OCCUPANT	**40 OCCS** SEE SHEETS X-A0.2	IBC TABLE 1004.5
NUMBER OF EXITS	1 EXIT + 1 EMERGENCY ESCAPE	1 EXIT + 1 EMERGENCY ESCAPE	IBC 1006.3.3(1) & 1006.3.3 & 2018 LSC 30.2.4.6
TRAVEL DISTANCE	250'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC 1017.2
COMMON PATH OF TRAVEL	125'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC TABLE 1006.2.1
MAXIMUM DEAD END CORRIDOR	50'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC 1020.4
STC & IIC RATINGS			
FLOOR / CEILING ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM IIC 50 (45 IF FIELD TESTED) MINIMUM	STC 58 PER USG DESIGN STUDIO IIC 50 PER USG DESIGN STUDIO	NOT APPLICABLE
WALL ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM	STC 50 PER NATIONAL GYPSUM DESIGN CENTER	NOT APPLICABLE

COMcheck Software Version 4.1.5.1

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Franklin Housing Authority - Building X
Location:	Franklin, Tennessee
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	32%

Construction Site:
Cherokee Place @Shawnee Dr.
Franklin, TN 37064

Owner/Agent:
Derwin Jackson
Franklin Housing Authority
200 Spring St.
Franklin, TN 37064
615-794-1247
djackson@franklinhousingauthority.com

Designer/Contractor:
James D. Nickle
Nickle Architects
1612 Seventeenth Ave. South
Nashville, TN 37212
615-269-3130
jnickle@nicklearchitects.com

Additional Efficiency Package(s)
High efficiency HVAC. Systems that do not meet the performance requirement will be identified in the mechanical requirements checklist report.

Building Area	Floor Area
1-Multifamily : Residential	7243

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor$_{max}$
Roof: Attic Roof with Wood Joists: [Bldg. Use 1 - Multifamily]	3974	38.0	1.5	0.026	0.027
Floor: Slab-On-Grade:Unheated: [Bldg. Use 1 - Multifamily] (c)	334	---	---	0.730	0.540
NORTH					
North Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	2705	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.25, [Bldg. Use 1 - Multifamily] (b)	595	---	---	0.240	0.450
Fiberglass Doors: Glass (> 50% glazing):Nonmetal Frame, Non-Entrance Door, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	108	---	---	0.240	0.450
EAST					
East Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	861	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	861	---	---	0.240	0.450
SOUTH					
South Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	2571	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	506	---	---	0.240	0.450
Fiberglass Doors: Glass (> 50% glazing):Nonmetal Frame, Non-Entrance Door, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	36	---	---	0.240	0.450
WEST					
West Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	846	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	100	---	---	0.240	0.450

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 22% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JAMES D. NICKLE — Name - Title
Signature
07/08/2022 — Date

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/73545948

JAMES DAVID NICKLE — REGISTERED ARCHITECT — 102355 — STATE OF TENNESSEE
01 SEP 2022
08-01-22

BUILDING H

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	08-01-22	SITE PLAN SUBMITTAL

H-A0.1

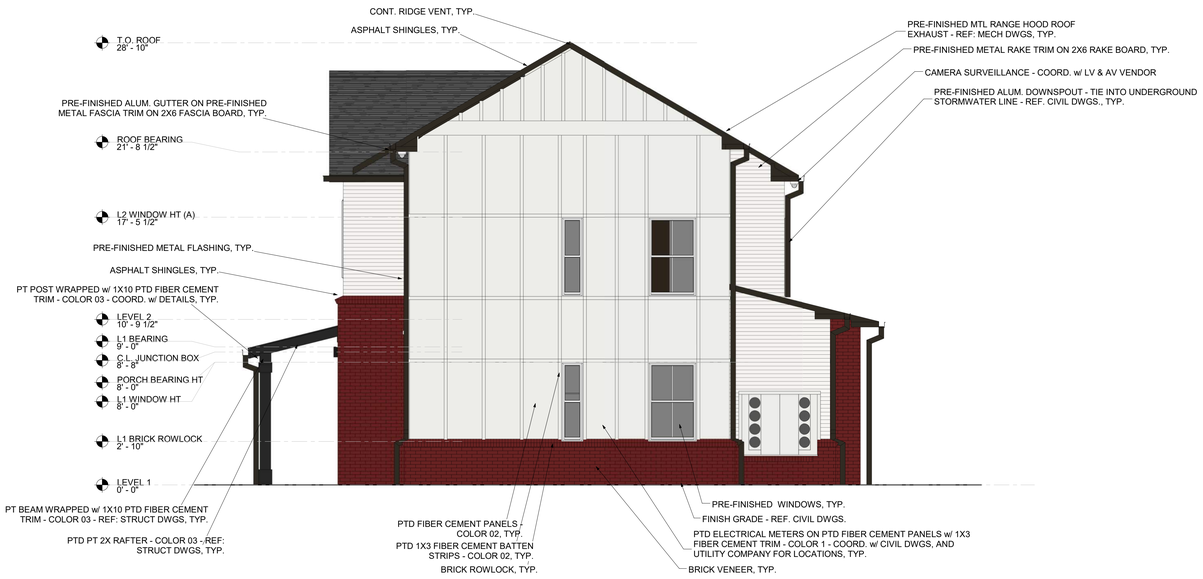
COF PROJECT NO.7916

FILE NO. 1716-24



FRONT ELEVATION 1

8' 4' 2' 0



RIGHT ELEVATION 2

8' 4' 2' 0

FRONT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	1,254 SF	N/A
NET OF WALL	1,003 SF	N/A
NET BRICK VENEER	403 SF	40%
NET CEMENTITIOUS SIDING	559 SF	56%
GLAZING	211 SF	17% (GROSS)

RIGHT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	771 SF	N/A
NET OF WALL	732 SF	N/A
NET BRICK VENEER	152 SF	21%
NET CEMENTITIOUS SIDING	544 SF	71%
GLAZING	39 SF	5% (GROSS)

COF PROJECT NO.7916

NICKLE ARCHITECTS PLLC — ESTD 2001 —

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/7294948

JAMES DAVID NICKLE REGISTERED ARCHITECT No. 102359 STATE OF TENNESSEE
01 SEP 2022
08-01-22

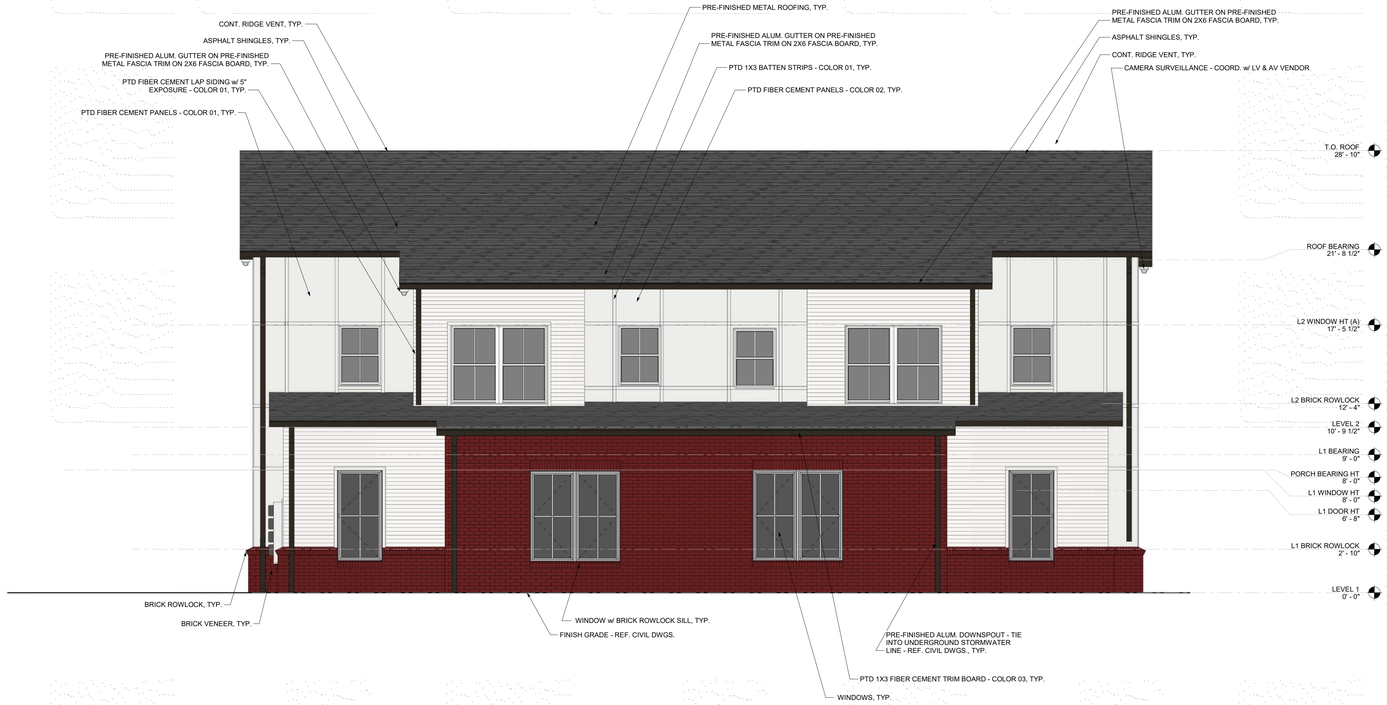
BUILDING H

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

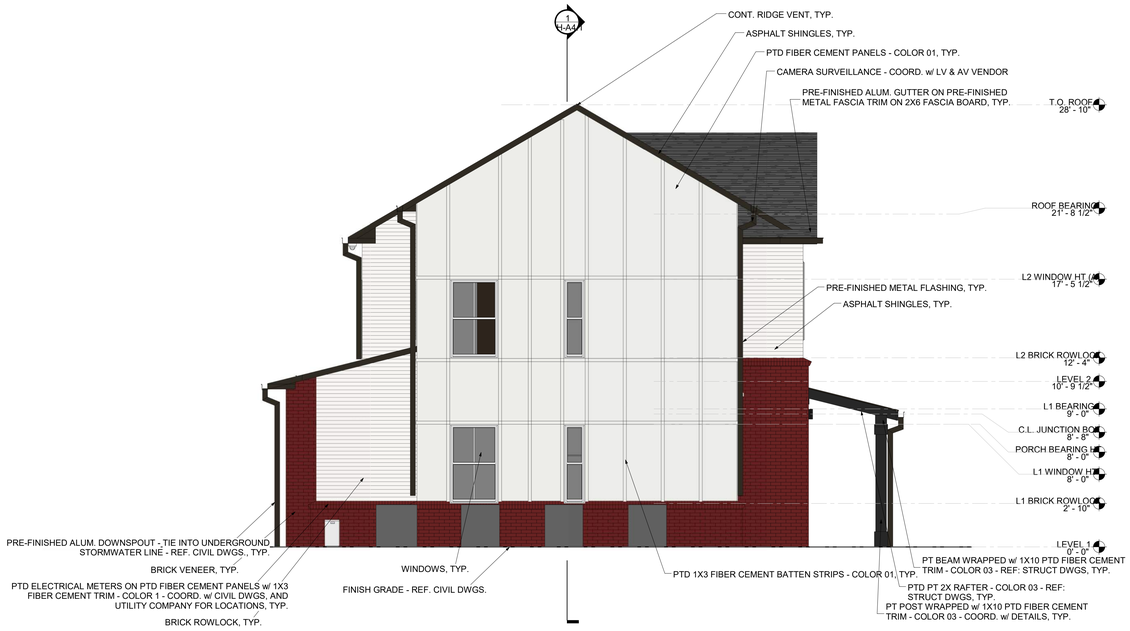
DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

H-A3.1

FILE NO. 1716-24



REAR ELEVATION 3



LEFT ELEVATION 4

REAR ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	1,199 SF	N/A
NET OF WALL	1,000 SF	N/A
NET BRICK VENEER	337 SF	38%
NET CEMENTITIOUS SIDING	526 SF	53%
GLAZING	199 SF	17% (GROSS)

LEFT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	763 SF	N/A
NET OF WALL	721 SF	N/A
NET BRICK VENEER	166 SF	23%
NET CEMENTITIOUS SIDING	557 SF	77%
GLAZING	42 SF	5% (GROSS)

COF PROJECT NO.7916

NICKLE ARCHITECTS PLLC — ESTD 2001

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Planners and
Computer Applications
One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/7294948

JAMES DAVID NICKLE — REGISTERED ARCHITECT — No. 102358 — STATE OF TENNESSEE
01 SEP 2022
08-01-22

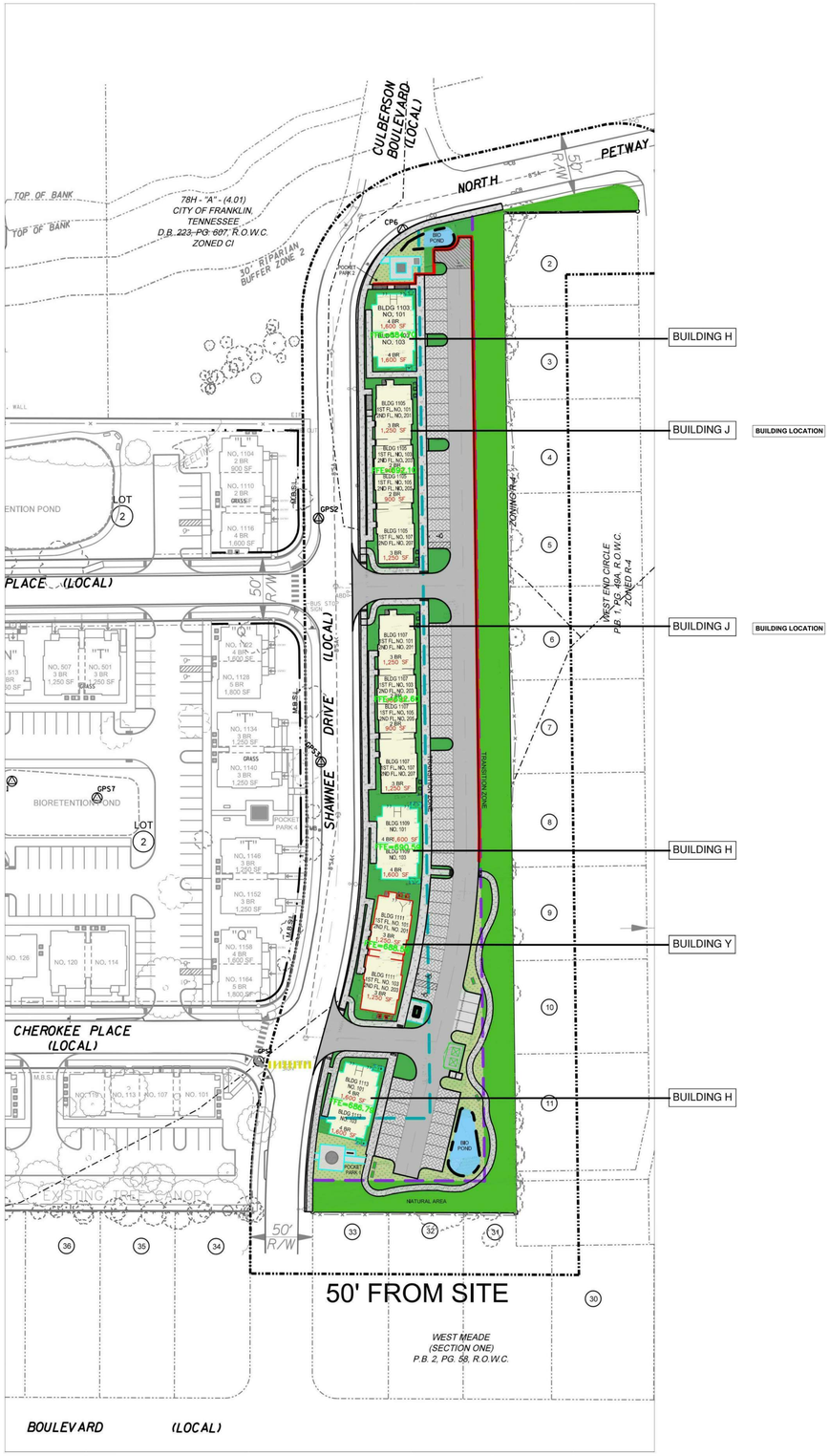
BUILDING H

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

H-A3.2

FILE NO. 1716-24



NICKLE ARCHITECTS PLLC

PLAN REVIEW DATA

GOVERNING CODES (WILLIAMSON COUNTY):

BUILDING	2018 INTERNATIONAL BUILDING CODE (w/ LOCAL AMENDMENTS)
FIRE	2018 INTERNATIONAL FIRE CODE (w/ LOCAL AMENDMENTS)
LIFE SAFETY	2018 LIFE SAFETY CODE (NFPA 101) (w/ LOCAL AMENDMENTS)
MECHANICAL	2018 INTERNATIONAL MECHANICAL CODE (w/ LOCAL AMENDMENTS)
PLUMBING	2018 INTERNATIONAL PLUMBING CODE (w/ LOCAL AMENDMENTS)
GAS	2018 INTERNATIONAL FUEL GAS CODE (w/ LOCAL AMENDMENTS)
ENERGY	2018 INTERNATIONAL ENERGY CONSERVATION CODE (w/ LOCAL AMENDMENTS)
ELECTRICAL	2017 NATIONAL ELECTRICAL CODE
HANDICAP	2017 ICC A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES FEDERAL FAIR HOUSING ACT DESIGN MANUAL

BUILDING INDEX

Sheet Number	Sheet Name
J-A0.1	GENERAL INFORMATION
J-A0.2	LIFESAFETY PLANS
J-A1.1	FOUNDATION PLAN
J-A1.2	FIRST FLOOR PLAN
J-A1.3	SECOND FLOOR PLAN
J-A1.4	ROOF PLAN
J-A2.1	FIRST FLOOR RCP
J-A2.2	SECOND FLOOR RCP
J-A3.1	ELEVATIONS
J-A3.2	ELEVATIONS
J-A4.1	BUILDING SECTIONS

CATEGORY	ALLOWABLE / REQUIRED	PROPOSED	REFERENCE
CLASSIFICATION BY OCCUPANCY / USE	NOT APPLICABLE	GROUP R-2 - RESIDENTIAL OCCUPANCY (APARTMENTS)	IBC 304 IBC 310.3
SPRINKLER SYSTEM	SPRINKLER SYSTEM REQUIRED - IBC 2018	AUTOMATIC SPRINKLER SYSTEM - NFPA 13R	IBC 903
CONSTRUCTION TYPE	IBC TYPE V-B	IBC TYPE V-B w/ HEIGHT & AREA SPRINKLER INCREASE	IBC TABLE 601
BUILDING HEIGHT	3 STORIES - 60'-0" (1 STORY & 20'-0" w/ INCREASE)	2 STORIES - 30'-3"	IBC TABLE 504.3 IBC TABLE 504.4
BUILDING AREA	7,000 SF / FLOOR	3,733 SF FIRST FLOOR 3,510 SF SECOND FLOOR	IBC TABLE 506.2
MINIMUM FIRE RESISTANCE OF STRUCTURAL ELEMENTS & EXTERIOR WALLS	IBC TYPE V-B CONSTRUCTION	IBC TYPE V-B CONSTRUCTION	IBC TABLE 601
STRUCTURAL FRAME	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
FLOOR CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
ROOF CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
MINIMUM FIRE RESISTANCE OF INTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
SEPARATION BETWEEN USES (R-2 TO R-2)	0 HOURS	0 HOURS	IBC TABLE 508.4
ASSEMBLIES BETWEEN DWELLING UNITS	1/2 HOUR (FP) w/ SPRINKLER SYSTEM	1 HOUR (FP) w/ SPRINKLER SYSTEM	IBC 420
MINIMUM FIRE RESISTANCE OF EXTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
EXTERIOR WALLS 5'≤X≤10' SEPARATION (BREEZEWAYS)	1 HOUR (FP)	1 HOUR (FP)	IBC TABLE 602
MAXIMUM % OPENINGS IN RATED EXTERIOR WALLS UNPROTECTED, SPRINKLERED 5'≤X≤10' SEPARATION	25%	3.39%	IBC TABLE 705.8
INTERIOR WALL & CEILING FINISHES MAXIMUM ALLOWED FLAME SPREAD INDEX			
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CORRIDORS	CLASS C	CLASS C	IBC TABLE 803.9
OTHER ROOMS	CLASS C	CLASS C	IBC TABLE 803.9
FIRE PROTECTION SYSTEMS			
SPRINKLER SYSTEM	NFPA 13R	NFPA 13R	IBC 903
STANDPIPE	NOT REQUIRED	NOT PROVIDED	IBC 905.4
PORTABLE FIRE EXTINGUISHERS	TYPE 1-A:10-B:C 1,250 SF / EXTINGUISHER 75'-0" MAX. TRAVEL DISTANCE	ONE TYPE 1-A:10-B:C PORTABLE FIRE EXTINGUISHER PROVIDED PER DWELLING UNIT UNDER KITCHEN SINK	IBC 906
MANUAL FIRE ALARM BOXES	REQUIRED THROUGHOUT	PROVIDED	IBC 907
SMOKE ALARMS / DETECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
VISIBLE & AUDIBLE ALARMS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
FIRE DEPARTMENT CONNECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 912
CLEARANCES			
CORRIDOR WIDTH	36" MINIMUM	54"	IBC TABLE 1018.2
CEILING HEIGHT	7'-6" MINIMUM	9'-0" MAIN SPACES - 8'-6" BREEZEWAYS	IBC 1003.2
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STAIR RISERS	7" MAXIMUM	7" MAXIMUM	IBC 1009.7.2
STAIR TREADS	11" MINIMUM	11"	IBC 1009.7.2
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EGRESS REQUIREMENTS	GROUP R-2 - SPRINKLERED	GROUP R-2 - SPRINKLERED	
OCCUPANT LOAD	200 GSF / OCCUPANT	**40 OCCS** SEE SHEETS X-A0.2	IBC TABLE 1004.5
NUMBER OF EXITS	1 EXIT + 1 EMERGENCY ESCAPE	1 EXIT + 1 EMERGENCY ESCAPE	IBC 1006.3.3(1) & 1006.3.3 & 2018 LSC 30.2.4.6
TRAVEL DISTANCE	250'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC 1017.2
COMMON PATH OF TRAVEL	125'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC TABLE 1006.2.1
MAXIMUM DEAD END CORRIDOR	50'-0" MAXIMUM	SEE SHEETS X-A0.2	IBC 1020.4
STC & IIC RATINGS			
FLOOR / CEILING ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM IIC 50 (45 IF FIELD TESTED) MINIMUM	STC 58 PER USG DESIGN STUDIO IIC 50 PER USG DESIGN STUDIO	NOT APPLICABLE
WALL ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM	STC 50 PER NATIONAL GYPSUM DESIGN CENTER	NOT APPLICABLE

COMcheck Software Version 4.1.5.1

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Franklin Housing Authority - Building X
Location:	Franklin, Tennessee
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	32%

Construction Site:
Cherokee Place @Shawnee Dr.
Franklin, TN 37064

Owner/Agent:
Derwin Jackson
Franklin Housing Authority
200 Spring St.
Franklin, TN 37064
615-794-1247
djackson@franklinhousingauthority.com

Designer/Contractor:
James D. Nickle
Nickle Architects
1612 Seventeenth Ave. South
Nashville, TN 37212
615-269-3130
jnickle@nicklearchitects.com

Additional Efficiency Package(s)

High efficiency HVAC. Systems that do not meet the performance requirement will be identified in the mechanical requirements checklist report.

Building Area	Floor Area
1-Multifamily : Residential	7243

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof: Attic Roof with Wood Joists: [Bldg. Use 1 - Multifamily]	3974	38.0	1.5	0.026	0.027
Floor: Slab-On-Grade:Unheated: [Bldg. Use 1 - Multifamily] (c)	334	---	---	0.730	0.540
NORTH					
North Wall: Wood-Framed, 16" o.c.: [Bldg. Use 1 - Multifamily]	2705	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.25, [Bldg. Use 1 - Multifamily] (b)	595	---	---	0.240	0.450
Fiberglass Doors: Glass (> 50% glazing):Nonmetal Frame, Non-Entrance Door, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	108	---	---	0.240	0.450
EAST					
East Wall: Wood-Framed, 16" o.c.: [Bldg. Use 1 - Multifamily]	861	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	861	---	---	0.240	0.450
SOUTH					
South Wall: Wood-Framed, 16" o.c.: [Bldg. Use 1 - Multifamily]	2571	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	506	---	---	0.240	0.450
Fiberglass Doors: Glass (> 50% glazing):Nonmetal Frame, Non-Entrance Door, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	36	---	---	0.240	0.450
WEST					
West Wall: Wood-Framed, 16" o.c.: [Bldg. Use 1 - Multifamily]	846	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	100	---	---	0.240	0.450

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 22% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JAMES D. NICKLE — Name - Title
Signature
07/08/2022 — Date

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/73545948

JAMES DAVID NICKLE — REGISTERED ARCHITECT — 102359 — STATE OF TENNESSEE
01 SEP 2022
08-01-22

BUILDING J

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

J-A0.1

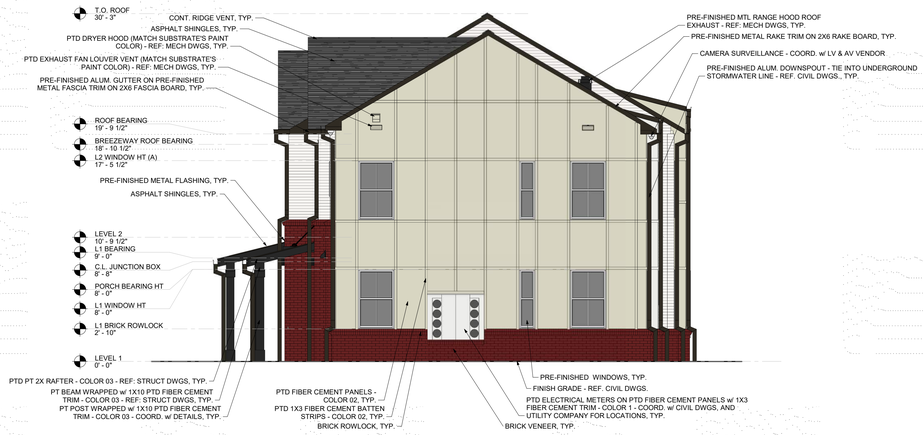
COF PROJECT NO.7916

FILE NO. 1716-24



FRONT ELEVATION 1

8' 4' 2' 0



RIGHT ELEVATION 2

8' 4' 2' 0

FRONT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	3,345 SF	N/A
NET OF WALL	2,559 SF	N/A
NET BRICK VENEER	1,021 SF	40%
NET CEMENTITIOUS SIDING	1,424 SF	56%
GLAZING	646 SF	19% (GROSS)

RIGHT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	847 SF	N/A
NET OF WALL	779 SF	N/A
NET BRICK VENEER	141 SF	18 %
NET CEMENTITIOUS SIDING	604 SF	78 %
GLAZING	68 SF	8% (GROSS)

COF PROJECT NO.7916

NICKLE ARCHITECTS PLLC

JAMES + ASSOCIATES, INC.
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Computer Applications
One Vantage Way, Suite E-226 Nashville, Tennessee 37228-1515 615/7294948

JAMES DAVID NICKLE
REGISTERED ARCHITECT
No. 103208
STATE OF TENNESSEE
01 SEP 2022
08-01-22

BUILDING J

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	DATE	DESCRIPTION
TEAM	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	07-08-22	SITE PLAN SUBMITTAL
TEAM	09-01-22	SITE PLAN SUBMITTAL

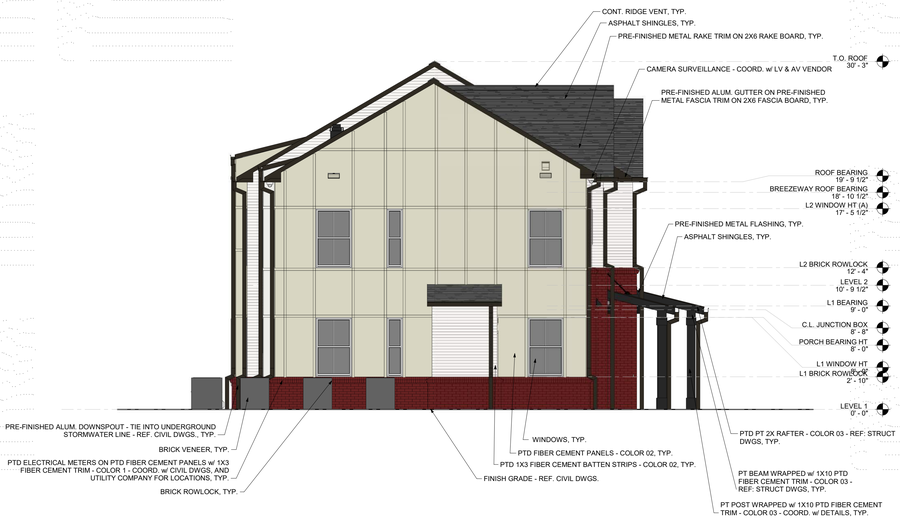
J-A3.1

FILE NO. 1716-24



REAR ELEVATION 3

8' 4' 2' 0



LEFT ELEVATION 4

8' 4' 2' 0

REAR ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	3,109 SF	N/A
NET OF WALL	2,455 SF	N/A
NET BRICK VENEER	606 SF	25%
NET CEMENTITIOUS SIDING	1,843 SF	75%
GLAZING	654 SF	21% (GROSS)

LEFT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	841 SF	N/A
NET OF WALL	768 SF	N/A
NET BRICK VENEER	121 SF	16%
NET CEMENTITIOUS SIDING	639 SF	83%
GLAZING	73 SF	9% (GROSS)

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NICKLE ARCHITECTS PLLC

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JAMES DAVID NICKLE
REGISTERED ARCHITECT
No. 102058
STATE OF TENNESSEE
01 SEP 2022

08-01-22

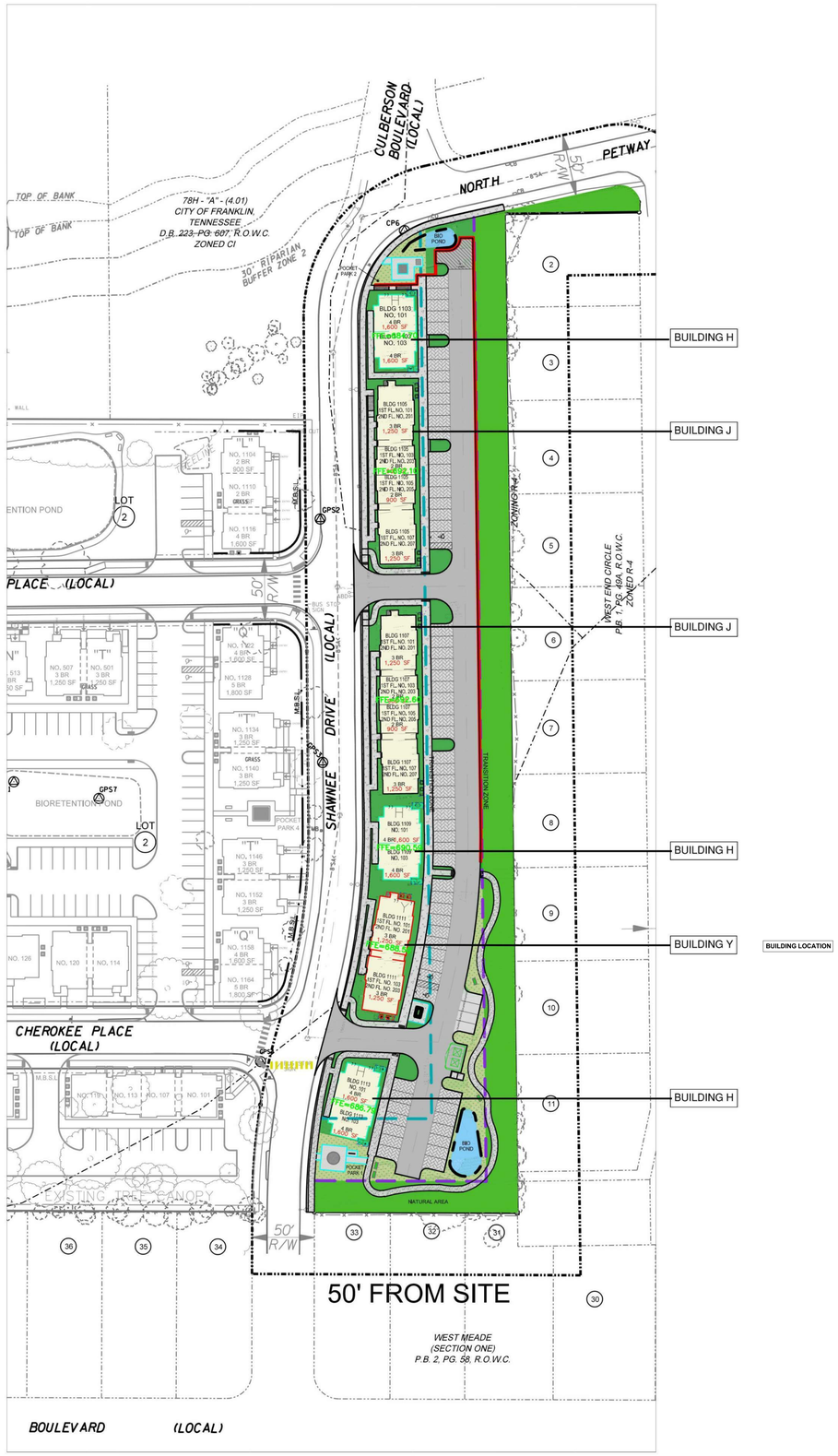
BUILDING J

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
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TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

J-A3.2

FILE NO. 1716-24



PLAN REVIEW DATA

GOVERNING CODES (WILLIAMSON COUNTY):

BUILDING	2018 INTERNATIONAL BUILDING CODE (w/ LOCAL AMENDMENTS)
FIRE	2018 INTERNATIONAL FIRE CODE (w/ LOCAL AMENDMENTS)
LIFE SAFETY	2018 LIFE SAFETY CODE (NFPA 101) (w/ LOCAL AMENDMENTS)
MECHANICAL	2018 INTERNATIONAL MECHANICAL CODE (w/ LOCAL AMENDMENTS)
PLUMBING	2018 INTERNATIONAL PLUMBING CODE (w/ LOCAL AMENDMENTS)
GAS	2018 INTERNATIONAL FUEL GAS CODE (w/ LOCAL AMENDMENTS)
ENERGY	2018 INTERNATIONAL ENERGY CONSERVATION CODE (w/ LOCAL AMENDMENTS)
ELECTRICAL	2017 NATIONAL ELECTRICAL CODE
HANDICAP	2017 ICC A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES FEDERAL FAIR HOUSING ACT DESIGN MANUAL

BUILDING INDEX

Sheet Number	Sheet Name
Y-A0.1	GENERAL INFORMATION
Y-A0.2	LIFESAFETY PLANS
Y-A1.1	FOUNDATION PLAN
Y-A1.2	FIRST FLOOR PLAN
Y-A1.3	SECOND FLOOR PLAN
Y-A1.4	ROOF PLAN
Y-A2.1	FIRST FLOOR RCP
Y-A2.2	SECOND FLOOR RCP
Y-A3.1	ELEVATIONS
Y-A3.2	ELEVATIONS
Y-A4.1	BUILDING SECTIONS

CATEGORY	ALLOWABLE / REQUIRED	PROPOSED	REFERENCE
CLASSIFICATION BY OCCUPANCY / USE	NOT APPLICABLE	GROUP R-2 - RESIDENTIAL OCCUPANCY (APARTMENTS)	IBC 304 IBC 310.3
SPRINKLER SYSTEM	SPRINKLER SYSTEM REQUIRED - IBC 2018	AUTOMATIC SPRINKLER SYSTEM - NFPA 13R	IBC 903
CONSTRUCTION TYPE	IBC TYPE V-B	IBC TYPE V-B w/ HEIGHT & AREA SPRINKLER INCREASE	IBC TABLE 601
BUILDING HEIGHT	3 STORIES - 60'-0" (1 STORY & 20'-0" w/ INCREASE)	2 STORIES - 28'-10"	IBC TABLE 504.3 IBC TABLE 504.4
BUILDING AREA	7,000 SF / FLOOR	2,544 SF FIRST FLOOR 2,452 SF SECOND FLOOR	IBC TABLE 506.2
MINIMUM FIRE RESISTANCE OF STRUCTURAL ELEMENTS & EXTERIOR WALLS	IBC TYPE V-B CONSTRUCTION	IBC TYPE V-B CONSTRUCTION	IBC TABLE 601
STRUCTURAL FRAME	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS EXTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
NON-BEARING WALLS INTERIOR	0 HOURS	0 HOURS	IBC TABLE 601
FLOOR CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
ROOF CONSTRUCTION	0 HOURS	0 HOURS	IBC TABLE 601
MINIMUM FIRE RESISTANCE OF INTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
SEPARATION BETWEEN USES (R-2 TO R-2)	0 HOURS	0 HOURS	IBC TABLE 508.4
ASSEMBLIES BETWEEN DWELLING UNITS	1/2 HOUR (FP) w/ SPRINKLER SYSTEM	1 HOUR (FP) w/ SPRINKLER SYSTEM	IBC 420
MINIMUM FIRE RESISTANCE OF EXTERIOR BARRIERS, PARTITIONS & ASSEMBLIES	(FP) FIRE PARTITION	(FP) FIRE PARTITION	
EXTERIOR WALLS 5'≤X<10' SEPARATION (BREEZEWAYS)	1 HOUR (FP)	1 HOUR (FP)	IBC TABLE 602
MAXIMUM % OPENINGS IN RATED EXTERIOR WALLS UNPROTECTED, SPRINKLERED 5'≤X<10' SEPARATION	25%	3.39%	IBC TABLE 705.8
INTERIOR WALL & CEILING FINISHES MAXIMUM ALLOWED FLAME SPREAD INDEX			
EXIT ENCLOSURES	CLASS C	CLASS C	IBC TABLE 803.9
CORRIDORS	CLASS C	CLASS C	IBC TABLE 803.9
OTHER ROOMS	CLASS C	CLASS C	IBC TABLE 803.9
FIRE PROTECTION SYSTEMS			
SPRINKLER SYSTEM	NFPA 13R	NFPA 13R	IBC 903
STANDPIPE	NOT REQUIRED	NOT PROVIDED	IBC 905.4
PORTABLE FIRE EXTINGUISHERS	TYPE 1-A:10-B:C 11,250 SF / EXTINGUISHER 75'-0" MAX. TRAVEL DISTANCE	ONE TYPE 1-A:10-B:C PORTABLE FIRE EXTINGUISHER PROVIDED PER DWELLING UNIT UNDER KITCHEN SINK	IBC 906
MANUAL FIRE ALARM BOXES	REQUIRED THROUGHOUT	PROVIDED	IBC 907
SMOKE ALARMS / DETECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
VISIBLE & AUDIBLE ALARMS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 907
FIRE DEPARTMENT CONNECTIONS	REQUIRED	PROVIDED - INSTALL PER NFPA 72	IBC 912
CLEARANCES			
CORRIDOR WIDTH	36" MINIMUM	54"	IBC TABLE 1018.2
CEILING HEIGHT	7'-6" MINIMUM	9'-0" MAIN SPACES - 8'-6" BREEZEWAYS	IBC 1003.2
DOOR HEIGHT	6'-8" MINIMUM	6'-8"	IBC 1008.1.1
DOOR WIDTH (ON ACCESSIBLE ROUTE)	32" MINIMUM CLEAR	32"	IBC 1008.1.1
EGRESS DOOR WIDTH / OCCUPANT	0.2" / OCCUPANT (SPRINKLERED)	32" MINIMUM	IBC 1005.3.2
DOOR HARDWARE HEIGHT	34" MINIMUM - 48" MAXIMUM	40"	IBC 1008.1.9.2
STAIR HEAD ROOM	7'-6" MINIMUM	8'-6"	IBC 1009.5
STAIR WIDTH	36" MINIMUM	54"	IBC 1009.4
EGRESS STAIR WIDTH / OCCUPANT	0.3" / OCCUPANT (SPRINKLERED)	54"	IBC 1005.3.1
STAIR RISERS	7" MAXIMUM	7" MAXIMUM	IBC 1009.7.2
STAIR TREADS	11" MINIMUM	11"	IBC 1009.7.2
HANDRAIL HEIGHT	34" MINIMUM - 38" MAXIMUM	36"	IBC 1012.2
GUARDRAIL HEIGHT	42" MINIMUM	42"	IBC 1013.3
EGRESS REQUIREMENTS	GROUP R-2 - SPRINKLERED	GROUP R-2 - SPRINKLERED	
OCCUPANT LOAD	200 GSF / OCCUPANT	**28 OCCS** SEE SHEETS Y-A0.2	IBC TABLE 1004.5
NUMBER OF EXITS	1 EXIT + 1 EMERGENCY ESCAPE	1 EXIT + 1 EMERGENCY ESCAPE	IBC 1006.3.3(1) & 1006.3.3 & 2018 LSC 30.2.4.6
TRAVEL DISTANCE	250'-0" MAXIMUM	SEE SHEETS Y-A0.2	IBC 1017.2
COMMON PATH OF TRAVEL	125'-0" MAXIMUM	SEE SHEETS Y-A0.2	IBC TABLE 1006.2.1
MAXIMUM DEAD END CORRIDOR	50'-0" MAXIMUM	SEE SHEETS Y-A0.2	IBC 1020.4
STC & IIC RATINGS			
FLOOR / CEILING ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM IIC 50 (45 IF FIELD TESTED) MINIMUM	STC 58 PER USG DESIGN STUDIO IIC 50 PER USG DESIGN STUDIO	IBC 1206.3
WALL ASSEMBLIES SEPARATING DWELLING UNITS	STC 50 (45 IF FIELD TESTED) MINIMUM	STC 50 PER NATIONAL GYPSUM DESIGN CENTER	IBC 1206.2

COMcheck Software Version 4.1.5.1

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Franklin Housing Authority - Building Y
Location:	Nashville, Tennessee
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	20%

Construction Site:
Cherokee Place@Shawnee Dr,
Franklin, TN 37064

Owner/Agent:
Derwin Jackson
Franklin Housing Authority
200 Spring St.
Franklin, TN 37064
615-794-1247
djackson@franklinhousingauthority.com

Designer/Contractor:
James D. Nickle
Nickle Architects
1612 Seventeenth Ave. South
Nashville, TN 37212
615-269-3130
jnickle@nicklearchitects.com

Additional Efficiency Package(s)
High efficiency HVAC. Systems that do not meet the performance requirement will be identified in the mechanical requirements checklist report.

Building Area	Floor Area
1-Multifamily : Residential	4996

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor[a]
Roof 1: Attic Roof with Wood Joists, [Bldg. Use 1 - Multifamily]	2775	38.0	1.5	0.026	0.027
Floor 1: Slab-On-Grade:Unheated, Vertical 4 ft., [Bldg. Use 1 - Multifamily] (c)	254	---	10.0	0.480	0.540
NORTH					
North Wall: Wood Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	1968	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	427	---	---	0.240	0.450
Fiberglass Doors: Glass (> 50% glazing):Nonmetal Frame, Non-Entrance Door, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	84	---	---	0.240	0.450
EAST					
East Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	722	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	77	---	---	0.240	0.450
SOUTH					
South Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	1838	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	381	---	---	0.240	0.450
WEST					
West Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Multifamily]	722	19.0	0.0	0.067	0.064
Fiberglass Windows: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID SunDefense Low E Dual Pane Glass, SHGC 0.27, [Bldg. Use 1 - Multifamily] (b)	77	---	---	0.240	0.450

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 24% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JAMES D. NICKLE — 07/08/2022
Name - Title — Signature — Date

NICKLE ARCHITECTS PLLC

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-226 Nashville, Tennessee 37228-1515 615/7354848

JAMES DAVID NICKLE
REGISTERED ARCHITECT
AGENCY
08 JUL 2022
No. 102058
STATE OF TENNESSEE

07-08-22

BUILDING Y

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

Y-A0.1

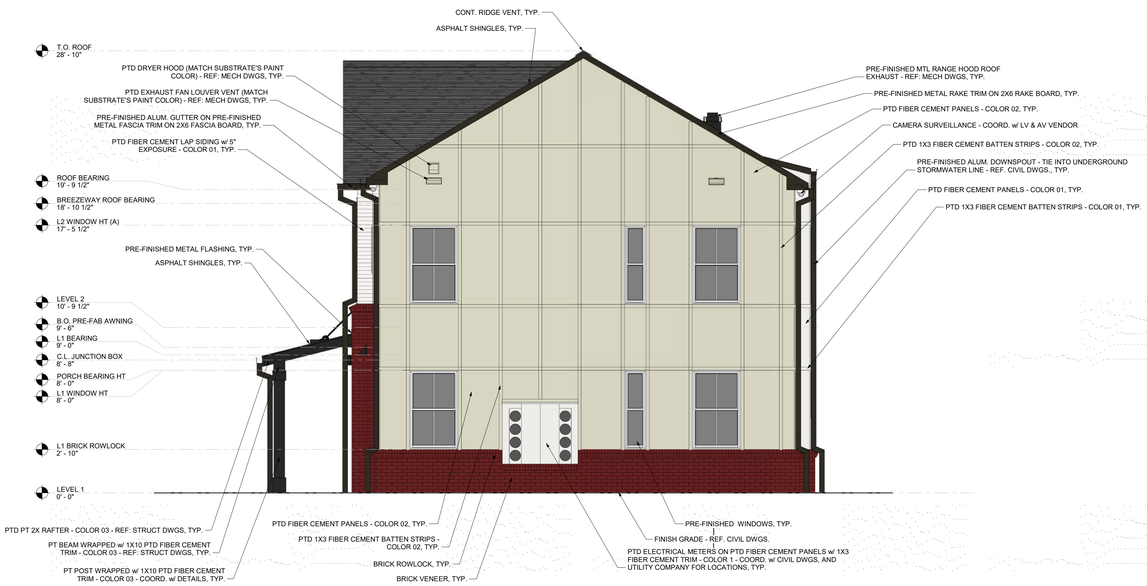
COF PROJECT NO.7916

FILE NO. 1716-24



FRONT ELEVATION 1

8' 4' 2' 0



RIGHT ELEVATION 2

8' 4' 2' 0

FRONT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	1,968 SF	N/A
NET OF WALL	1,501 SF	N/A
NET BRICK VENEER	695 SF	47%
NET CEMENTITIOUS SIDING	806 SF	53%
GLAZING	427 SF	22% (GROSS)

RIGHT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	722 SF	N/A
NET OF WALL	713 SF	N/A
NET BRICK VENEER	111 SF	16%
NET CEMENTITIOUS SIDING	522 SF	73%
GLAZING	68 SF	9% (GROSS)

These elevations are conceptual in nature. Individual building elevations may vary but will be reviewed and approved by the BNS Department according to City requirements at the time of permitting.

COF PROJECT NO.7916

NICKLE ARCHITECTS PLLC — ESTD 2001

JAMES + ASSOCIATES, INC.
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One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/7294948

JAMES DAVID NICKLE REGISTERED ARCHITECT 08 JUL 2022 STATE OF TENNESSEE

07-08-22

BUILDING Y

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

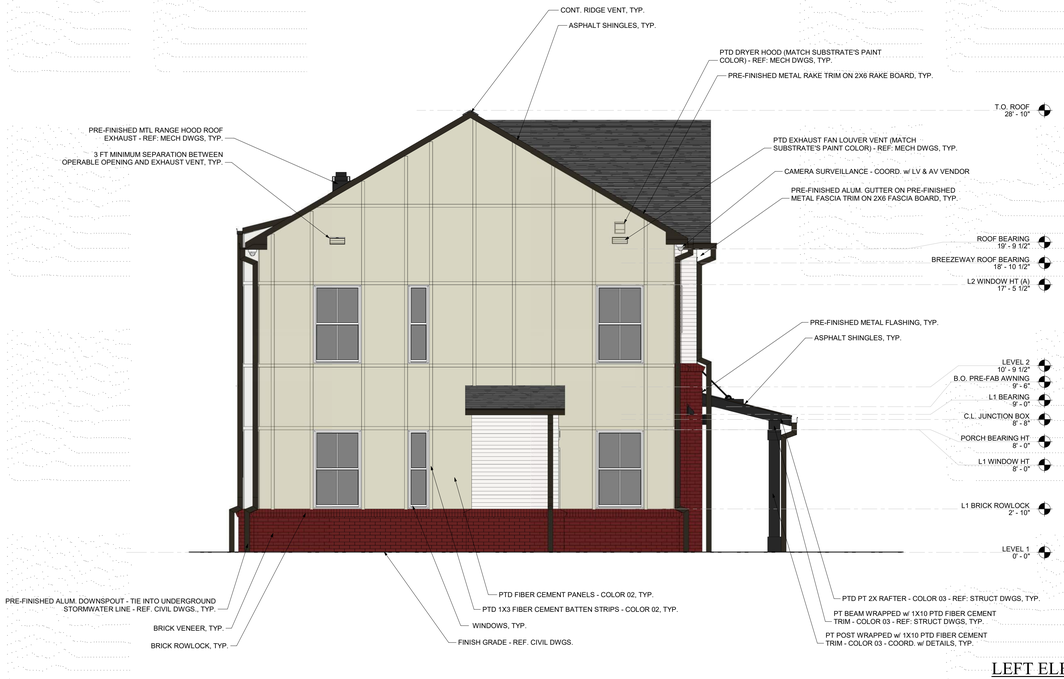
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TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

Y-A3.1
ALTERNATE
FILE NO. 1716-24

NICKLE
ARCHITECTS PLLC
EST'D 2001



REAR ELEVATION 3
8' 4' 2' 0



LEFT ELEVATION 4
8' 4' 2' 0

REAR ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	1,837 SF	N/A
NET OF WALL	1,658 SF	N/A
NET BRICK VENEER	469 SF	28%
NET CEMENTITIOUS SIDING	835 SF	50%
GLAZING	354 SF	21% (GROSS)

LEFT ELEVATION FACADE MATERIAL	SURFACE AREA	PERCENT OF NET
GROSS OF WALL	722 SF	N/A
NET OF WALL	706 SF	N/A
NET BRICK VENEER	102 SF	15%
NET CEMENTITIOUS SIDING	525 SF	75%
GLAZING	69 SF	9% (GROSS)

These elevations are conceptual in nature. Individual building elevations may vary but will be reviewed and approved by the BNS Department according to City requirements at the time of permitting.

COF PROJECT NO.7916

JAMES + ASSOCIATES, INC.
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Planners and
Computer Applications
One Vantage Way, Suite E-224 Nashville, Tennessee 37228-1515 615/7294948

JAMES DAVID NICKLE
REGISTERED ARCHITECT
No. 102359
STATE OF TENNESSEE
08 JUL 2022
07-08-22

BUILDING Y

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

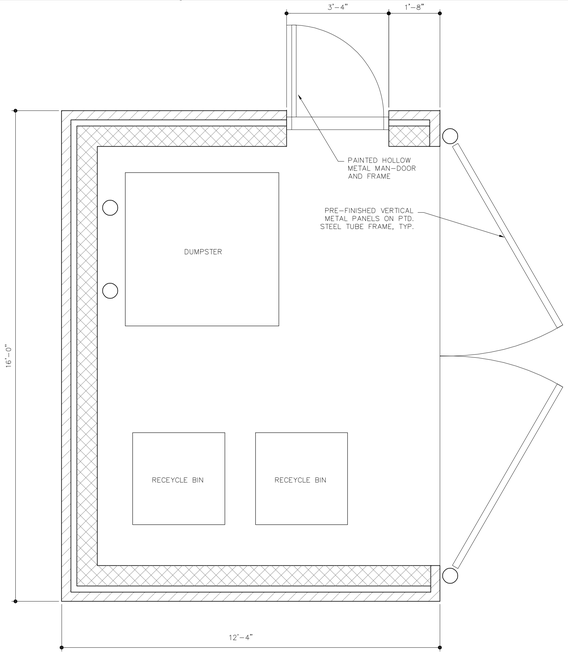
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TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

Y-A3.2

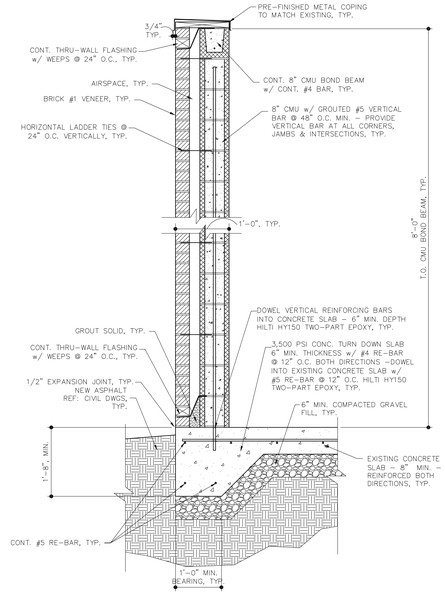
FILE NO. 1716-24

DUMPSTER GATES
VERTICAL PREFINISHED METAL PANELS





ENCLOSURE PLAN 1



ENCLOSURE WALL SECTION 2



ROOFING SHINGLES
GAF TIMBERLINE NATURAL SHADOW- CHARCOAL



ROOFING - STANDING SEAM METAL
MCELROY METAL -MEDALLION-LOK CHARCOAL

SW 6258
Tricorn Black
Interior / Exterior
Location Number: 251-C1

SHUTTER AND GUTTER COLOR
SHERWIN WILLIAMS

SW 7005
Pure White
Interior / Exterior
Location Number: 255-C1

SIDING COLOR #1
SHERWIN WILLIAMS

SW 7596
Only Natural
Interior / Exterior
Location Number: 266-C7

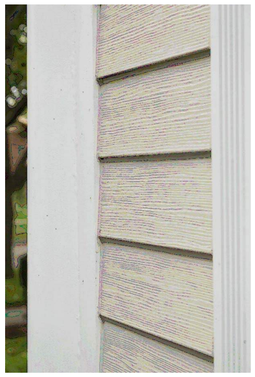
SIDING COLOR #2
SHERWIN WILLIAMS



BRICK VENEER
GLEN GERY MODULAR IRONWOOD CLASSIC



CEMENT SIDING
HARDI PANEL w/ HARDI TRIM



CEMENT SIDING
HARDI LAP SIDING w/ HARDI TRIM



WINDOWS
VINYL - ANDERSON SILVERLINE CASEMENT AND FIXED w/ SCREEN
"STONE WHITE"

COF PROJECT NO.7916

NICKLE ARCHITECTS PLLC — ESTD 2001 —

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-226 Nashville, Tennessee 37228-1515 6157294548

JAMES DAVID NICKLE — REGISTERED ARCHITECT — STATE OF TENNESSEE — No. 103588 — COMMERCE
08 JUL 2022
TE
07-08-22

DUMPSTER DETAIL & MATERIAL BOARD

SHAWNEE PLANNED UNIT DEVELOPMENT
FRANKLIN HOUSING AUTHORITY
CHEROKEE PLACE AND SHAWNEE DRIVE
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
TEAM	JG	05-27-22	PRE-APPLICATION SUBMITTAL
TEAM	JG	07-08-22	SITE PLAN SUBMITTAL
TEAM	JG	09-01-22	SITE PLAN SUBMITTAL

A2.1

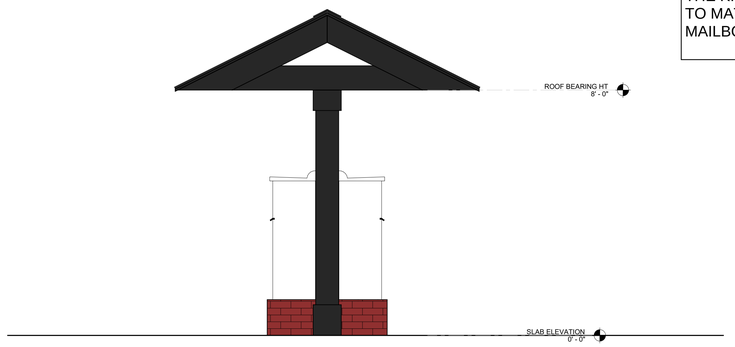
FILE NO. 1716-24

MAIL KIOSK

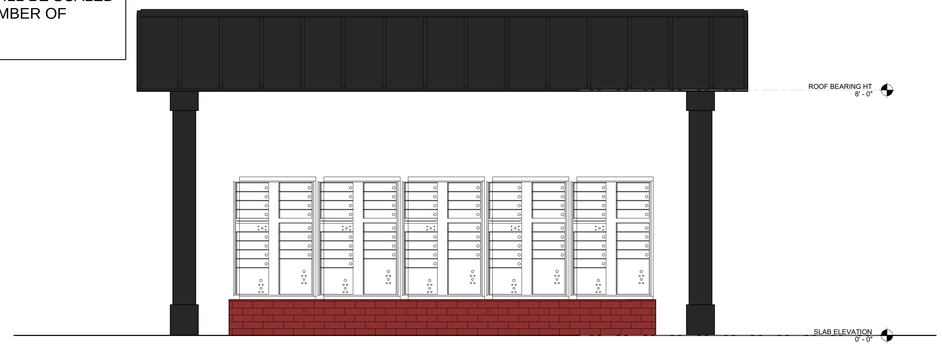




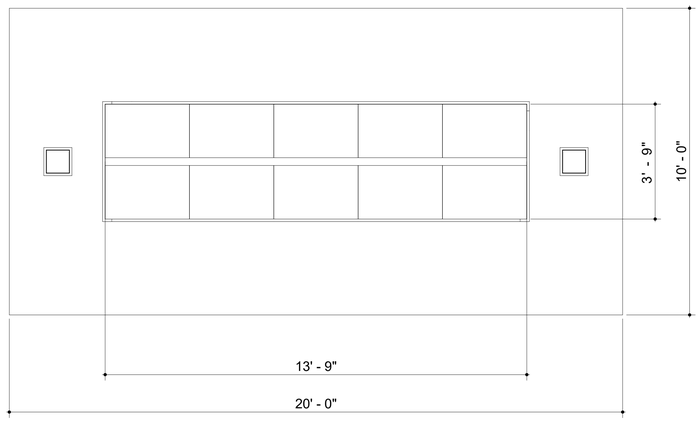
NOTE: THIS REPRESENTS THE MAIL KIOSK USED ELSEWHERE IN THIS DEVELOPMENT. THE KIOSK FOR THIS PHASE WILL BE SCALED TO MATCH THE REQUIRED NUMBER OF MAILBOXES AS REQUIRED.



SIDE ELEVATION 1
4' 2' 1' 0



FRONT ELEVATION 2
4' 2' 1' 0



PLAN 3
4' 2' 1' 0

COF PROJECT NO.7916

NICKLE
ARCHITECTS PLLC
— ESTD 2001 —

JAMES + ASSOCIATES, INC.
Engineers
Planners and
Computer Applications
One Vantage Way, Suite E-226 Nashville, Tennessee 37228-1515 615/7294848

JAMES DAVID NICKLE
REGISTERED ARCHITECT
No. 102358
COMMERCE
STATE OF TENNESSEE
01 SEP 2022
08-01-22

MAIL KIOSK

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A3.1

FILE NO. 1716-24

City of Franklin

109 3rd Ave S.
Franklin, TN 37064
(615) 791-3217

File #: 21-03586

DATE: September 8, 2022

TO: Franklin Municipal Planning Commission

FROM: Emily Wright, Planning Director
Kelly Dannenfelser, Asst. Director of Planning

SUBJECT:

Consideration Of Ordinance 2022-26, An Ordinance To Amend The Franklin Zoning Ordinance And Zoning Map As Part Of An Annual Update.
BOMA/FMPC JCW 7/28/22
BOMA WS 8/23/22
BOMA WS 9/13/22

PURPOSE:

The purpose of this memorandum is to provide information to the Franklin Board of Mayor and Aldermen (BOMA) concerning the annual Zoning Ordinance update.

BACKGROUND/STAFF COMMENTS:

The City adopted a major update to the Franklin Zoning Ordinance in 2019. Since then, the City has undertaken annual updates to keep the Ordinance up to date, responsive to the community, and working well. This year's amendment includes updates to:

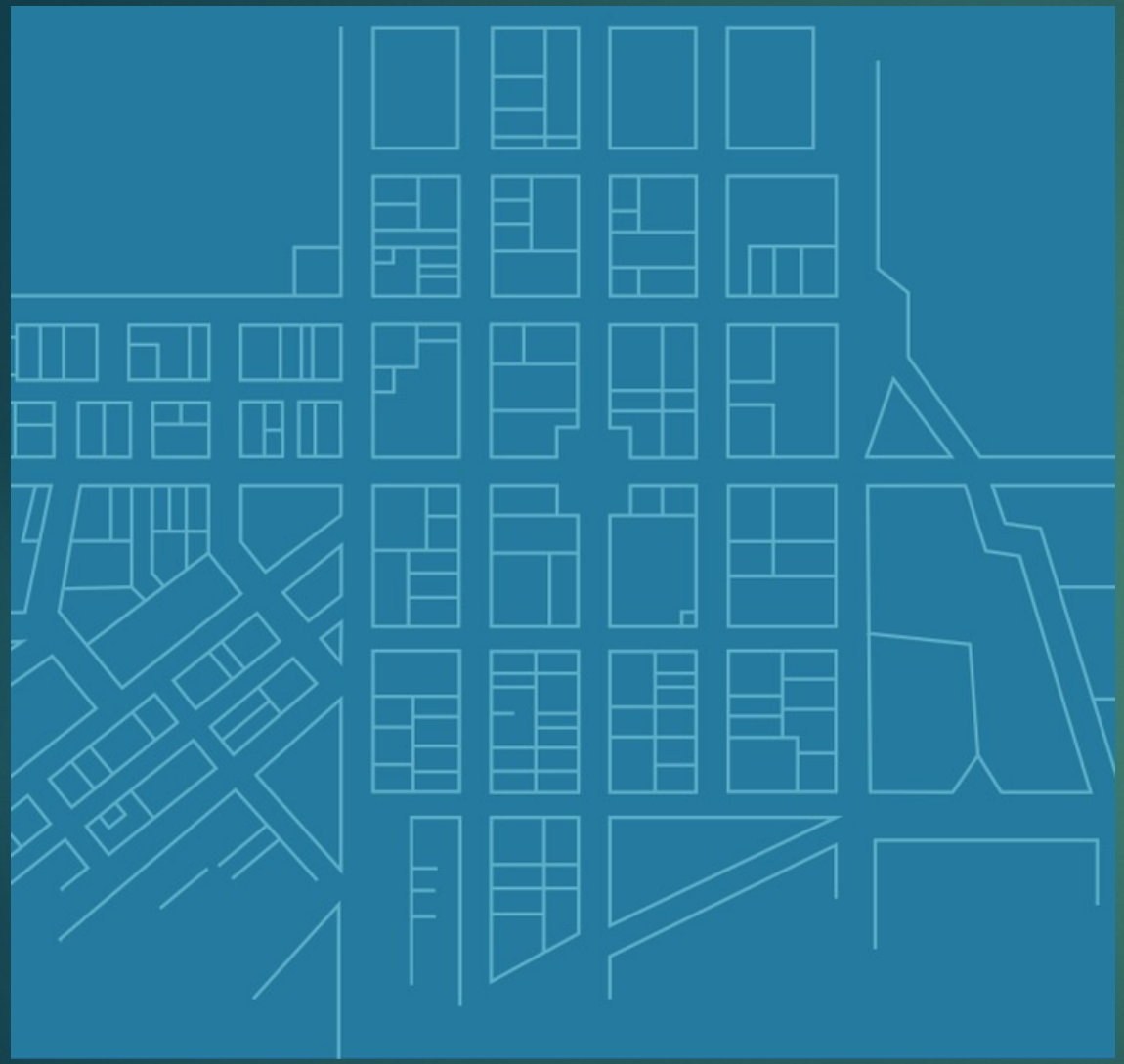
- Reflect the State Model Floodplain Ordinance requirements;
- Permit parking areas for publicly-owned and operated parks within the floodway;
- Provide some parking relief for small additions under 1,000 SF to commercial uses in the Downtown District;
- Clarify maximum rentals for part-time usage of homes as short-term vacation rentals;
- Allow for overhead utility line improvements for system upgrades in developments that already have overhead utility service;
- Address parking signs in parking lots (as part of the convenience sign type);
- Improve the performance agreements and sureties requirements to ensure adequate coverage for required improvements as part of a development approval;
- References, clarifications, and non-substantive amendments;
- Rezoning for linework refinement to the Scenic Corridor Overlay District (that more accurately reflects the setback distances already in place); and
- Rezoning to several properties on Natchez Street from R6 to Civic Institutional (CI) District and the Historic Preservation Overlay (HPO) District.

FINANCIAL IMPACT:

N/A

RECOMMENDATION:

Staff recommends that the Planning Commission recommend to the Board of Mayor and Aldermen to approve Ordinance 2022-26.



Franklin Zoning Ordinance Annual Update

FMPC RECOMMENDATION

SEPTEMBER 22, 2022

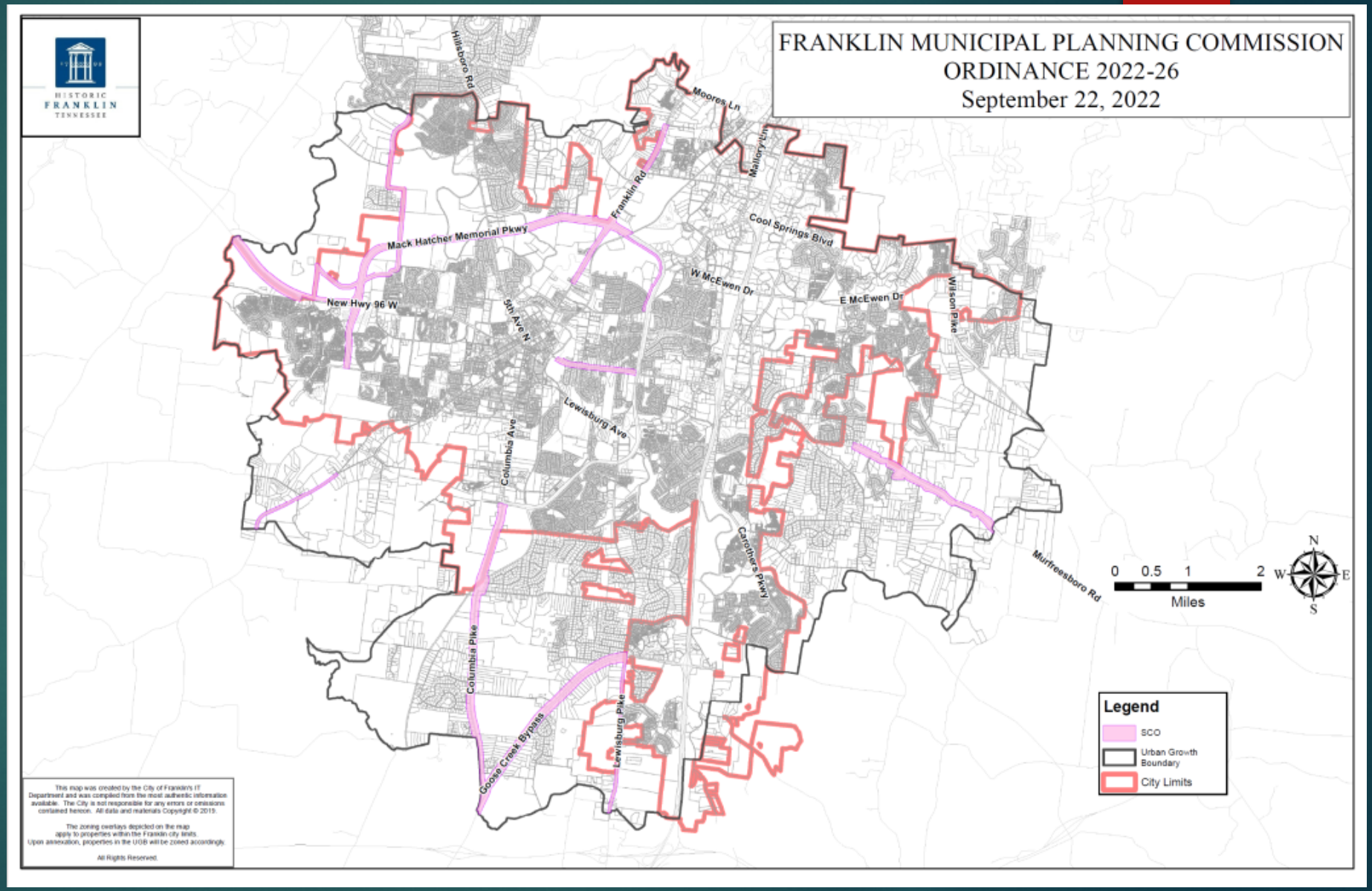
Proposed Amendments

- State Model Floodplain Ordinance update
- Parking in floodway for public parks
- Parking requirements in the Downtown District
- Short term vacation rental part-time usage
- Overhead utility line improvements for system upgrades
- Convenience signs for parking areas
- Performance agreements and sureties
- Rezonings
- References, clarifications, and non-substantive amendments

REZONING:

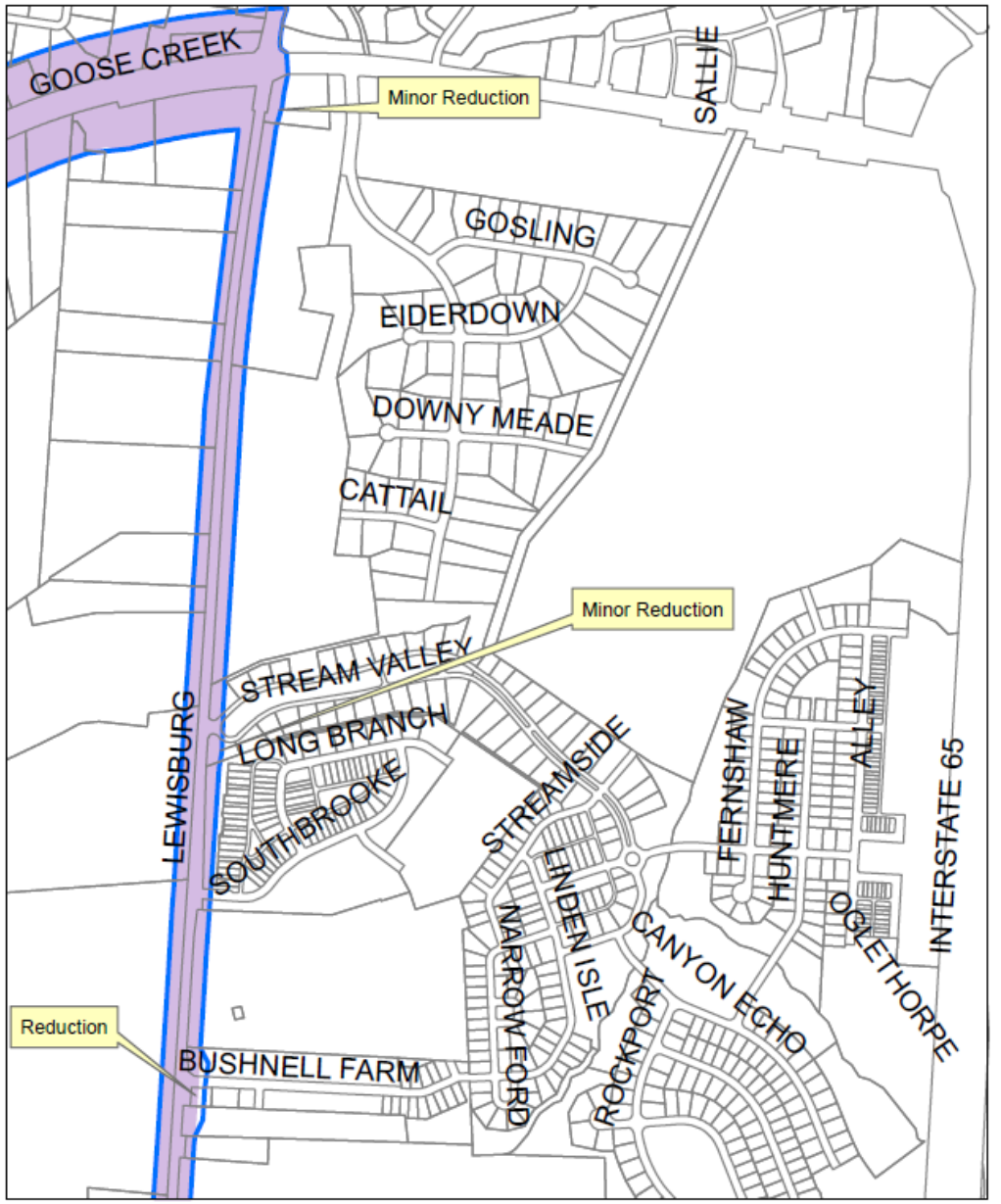
Scenic Corridor Overlay District Linework Refinement

Previously hand drawn (clicked) but a newer GIS tool allowed GIS staff to match the right-of-way lines, from which the setback is drawn.



SCO:

Lewisburg Pike

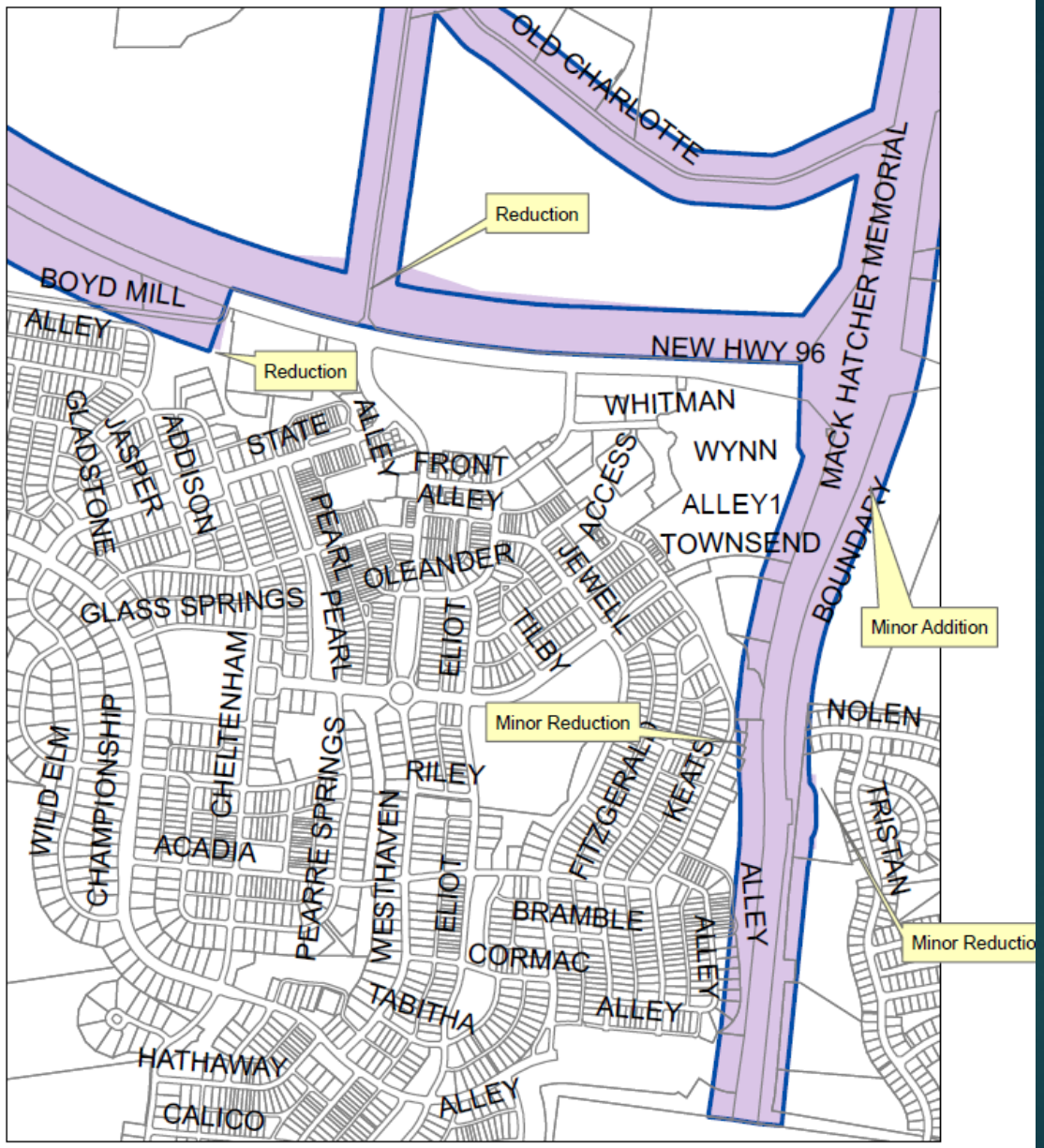


SCO:

Mack Hatcher Pkwy

New Highway 96 W

Old Charlotte

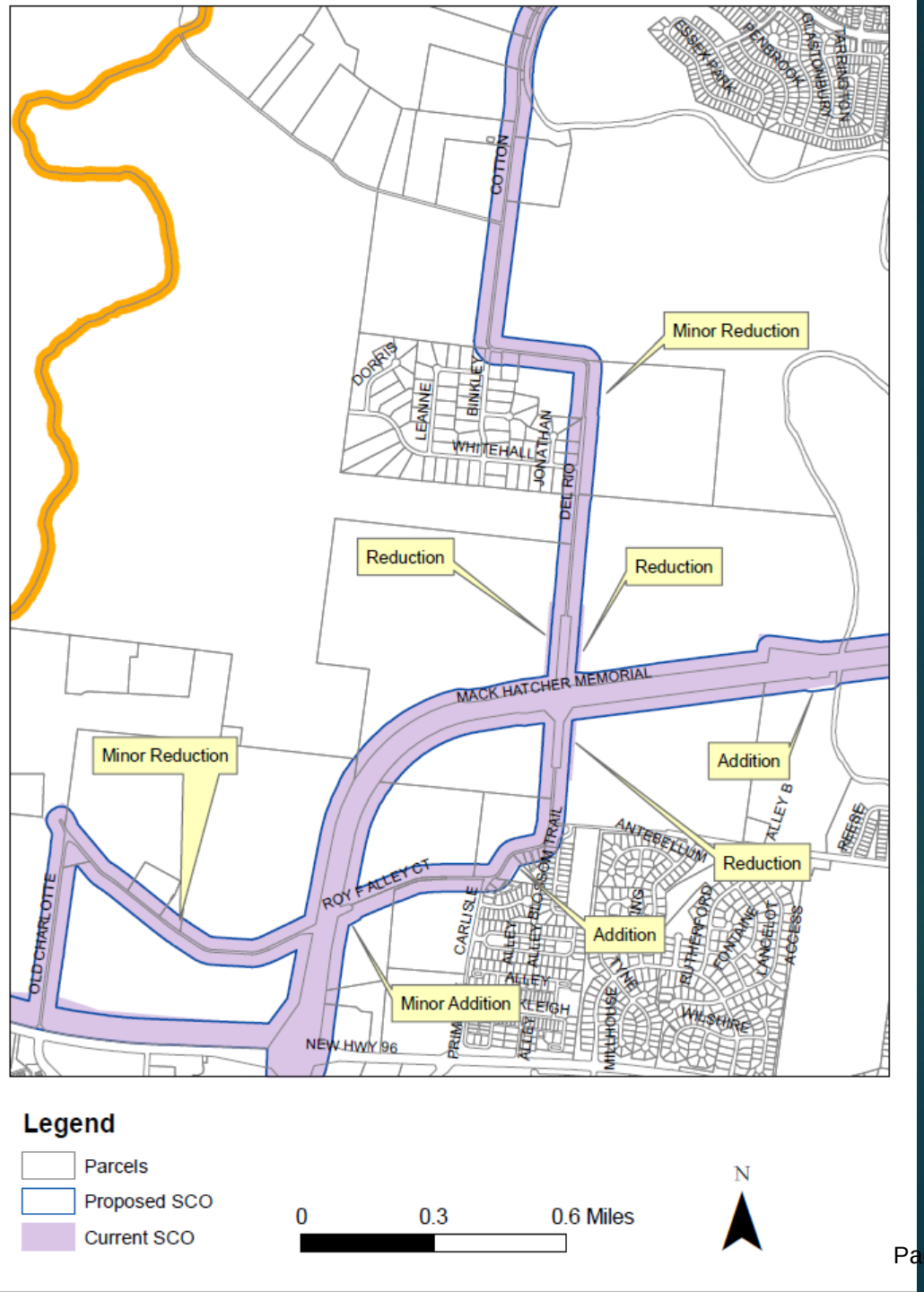


SCO:

Del Rio Pike

Carlisle Lane

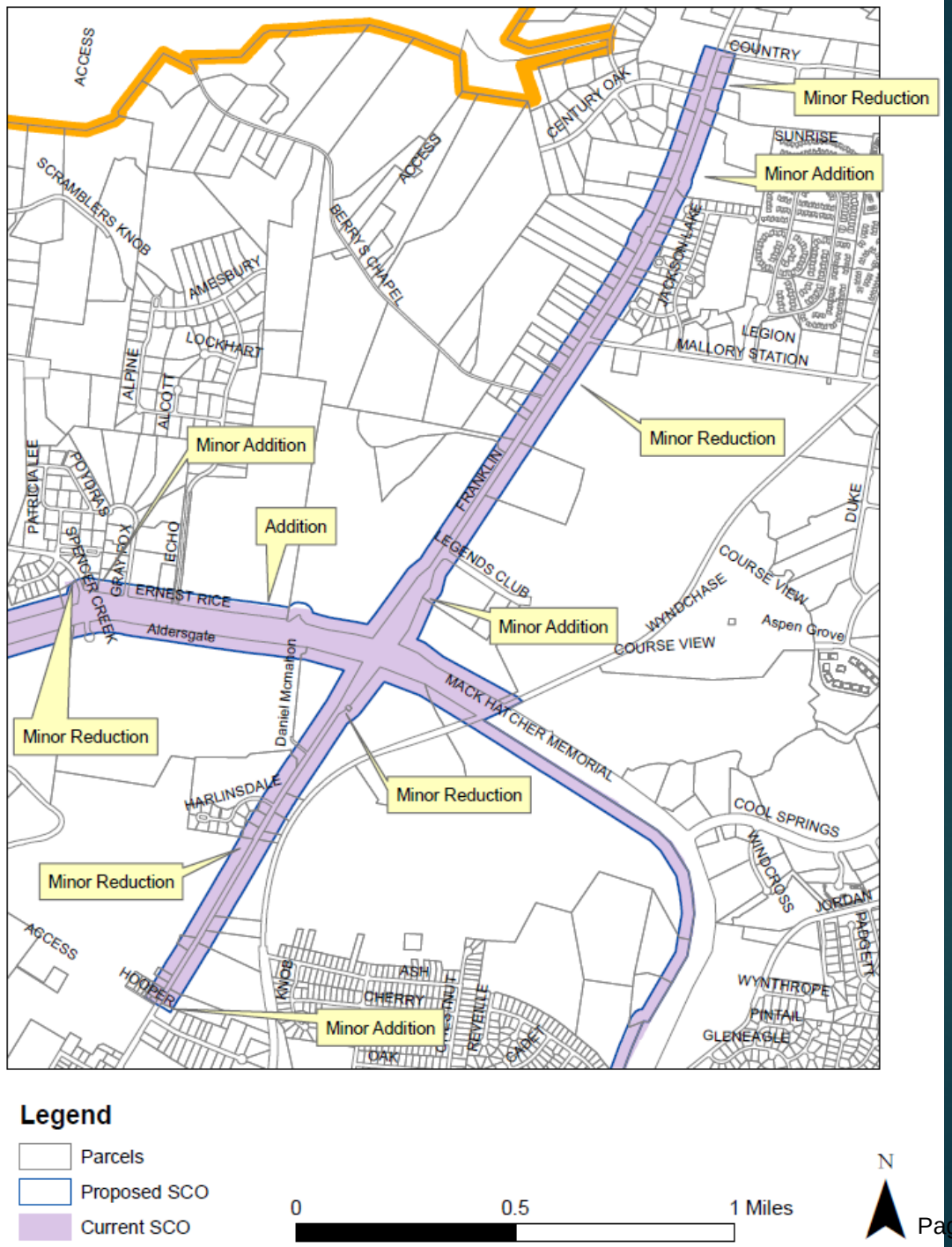
Old Charlotte



SCO:

Franklin Road

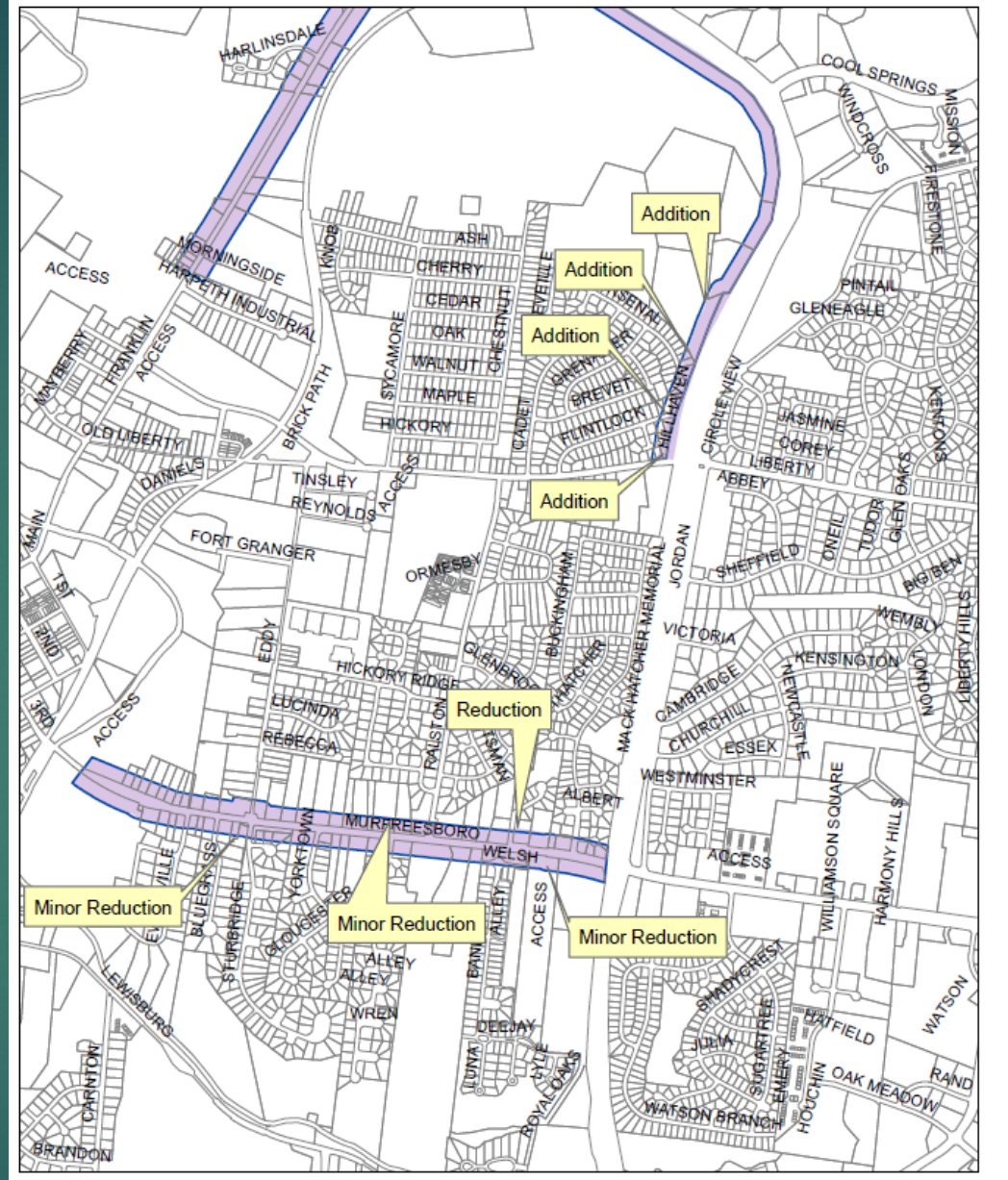
Mack Hatcher Pkwy



SCO:

Mack Hatcher Pkwy

Murfreesboro Rd



REZONING: R6 to Civic/Institutional (CI) District and Historic Preservation Overlay (HPO)



Shorter Chapel African Methodist Episcopal Church

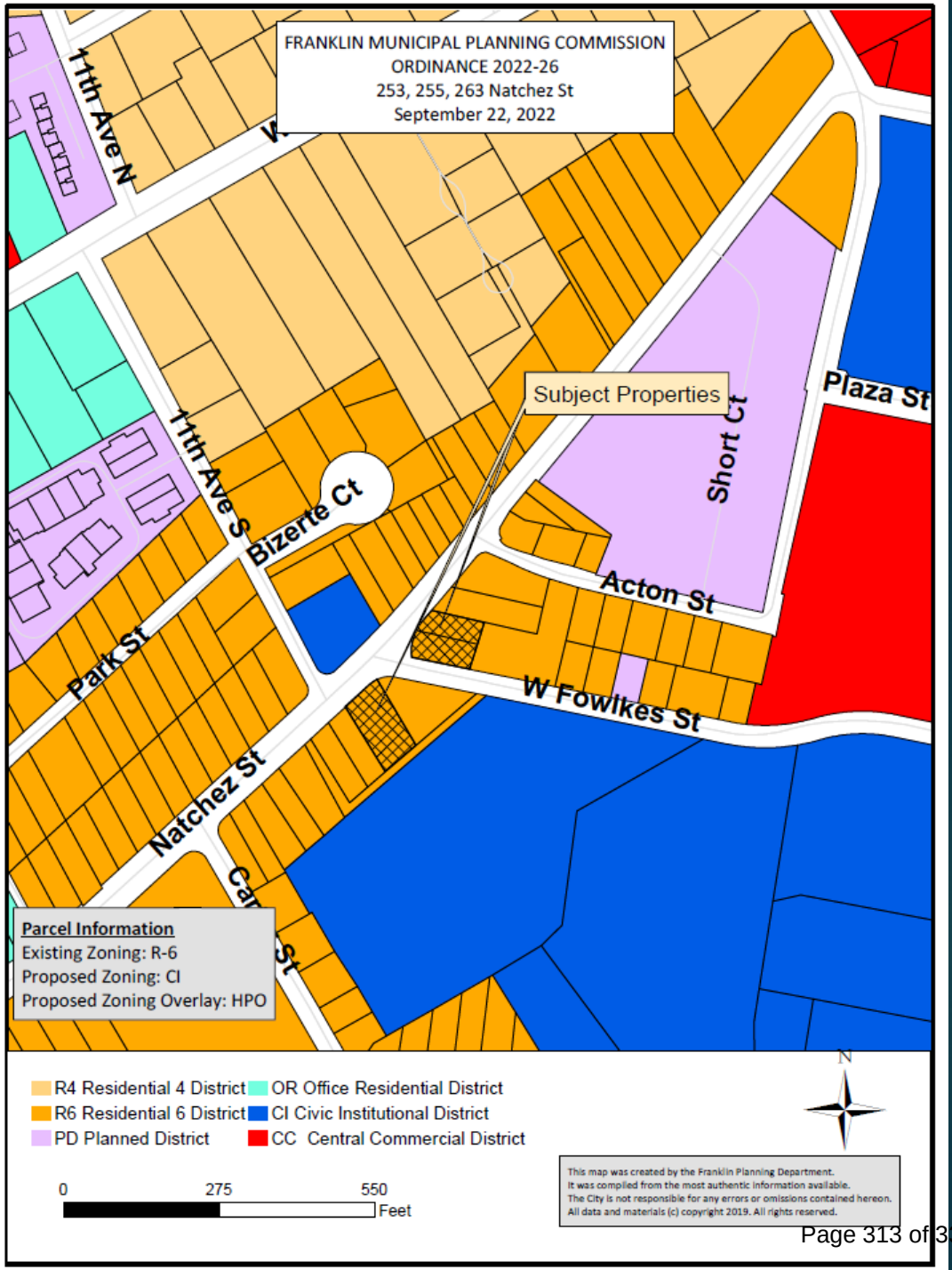
The City has rezoned larger civic/institutional properties to Civic/Institutional (CI) district over time but has left smaller properties in residential districts unless they have requested rezoning.



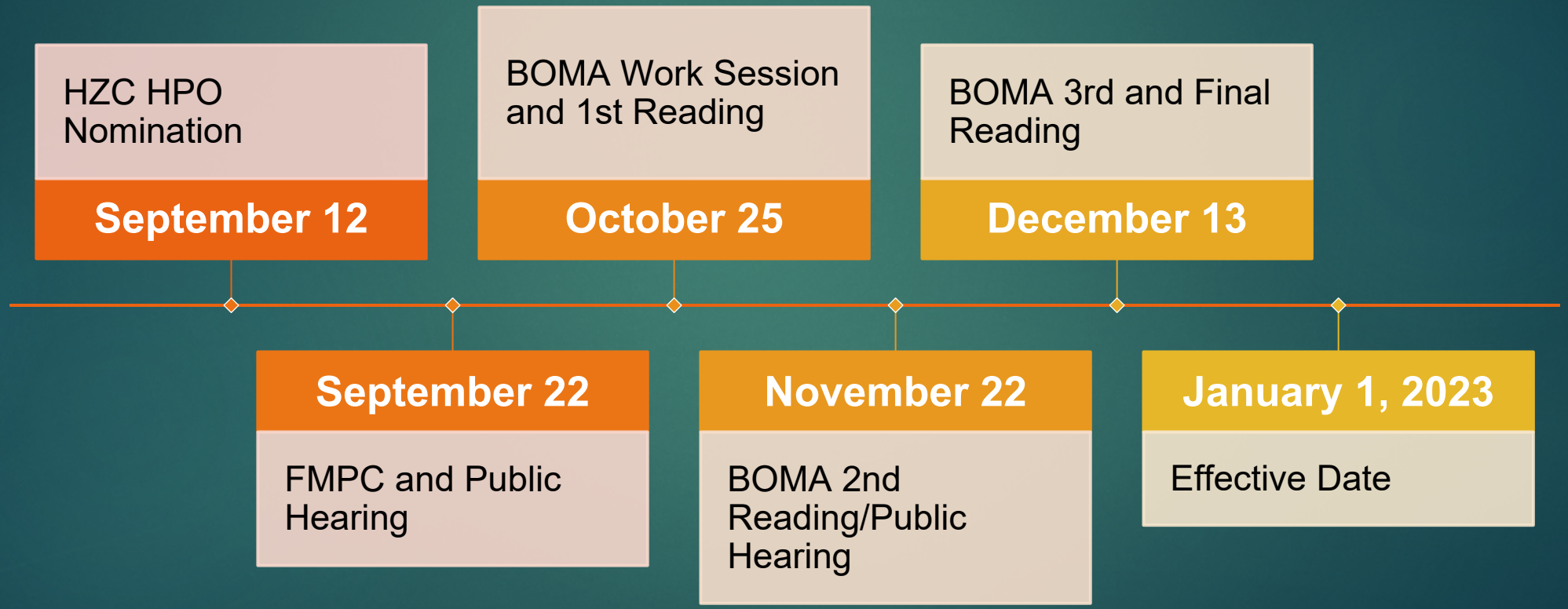
Franklin's Green Book House



Bazelia S. Harris Community Life Center



Ordinance Amendment Approval Process



ORDINANCE 2022-26

AN ORDINANCE TO AMEND THE FRANKLIN ZONING ORDINANCE AND ZONING MAP AS PART OF AN ANNUAL UPDATE.

WHEREAS, Envision Franklin is the City's long-range plan that guides growth and development in the City; and

WHEREAS, the Franklin Zoning Ordinance regulates uses and sets community development standards for development; and

WHEREAS, the Board of Mayor and Aldermen (BOMA) adopted a comprehensive Zoning Ordinance update on December 31, 2019; and

WHEREAS, the City strives to keep the Zoning Ordinance up to date and completes an annual review and ordinance update; and

WHEREAS, this Ordinance includes a text and zoning map amendment, which is in the best interest of the public health, safety, and welfare of the citizens of Franklin, Tennessee.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That Chapter 1, Introductory Provisions, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…

1.1.3 Effective Date
This Ordinance was adopted by the Board of Mayor and Aldermen (BOMA) and it became effective on January 1, 2023 by Ordinance 2022-26.

1.2.1 Pending Applications
All applications submitted on or after January 1, 2023 shall comply with this Ordinance, including applications submitted for the March 23, 2023 FMPC or administrative agenda.
…

SECTION II. That Chapter 2, Nonconformities, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…
2.3.5 Multifamily Residential
New ~~structures~~ **principal buildings** for a nonconforming multifamily residential use may be reconstructed only in the event of damage, whether partial or complete, by involuntary fire or wind damage or other natural disaster, pursuant to T.C.A. § 13-7-208.
…

SECTION III. That Chapter 3, Zoning Districts, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

3.7.5 (R4 Dimensional Standards) Alternate Standards

Where there is not an existing house on a block face to establish the lot standards, principal building setbacks, or building height, then the house(s) on the opposite block face shall be used to determine the applicable requirements.

For lots in recorded subdivisions…

…

3.12.4.(CI) **D Urban Frontage**

…

3.20.4.(GO) **C Urban Frontage**

…

SECTION IV. That Chapter 4, Overlay Zoning Districts, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

4.2.4.**C** (FWO) **Parking areas for public parks that are City-owned and operated;**

…

4.2.5.**C Minimal floodway alteration for uses and encroachments permitted by Subsections 4.2.4, Permitted Uses, and 4.2.5, Permitted Encroachments.**

…

~~4.7.4.C.2 (CAO) For one-story buildings, the facade shall be differentiated so that it appears to be comprised of two or more adjacent buildings, by dividing into 35-50 foot segments.~~

4.7.4.C.**2** ~~3~~ (CAO) For **commercial/mixed use** buildings of two or more stories **with a façade width greater than 100 feet**, the facade shall be differentiated so that it appears to be comprised of two or more adjacent buildings, by dividing into 35-100 foot segments. ~~4.~~ Each facade segment shall…

…

4.7.8.B (CAO5) Dimensional Standards

Building Setbacks (Minimum)

~~Front Yard 250 feet~~ **See the SCO**

2. **See the SCO for landscape requirements.** ~~There shall be a 20-foot landscape treatment along the entire length of each frontage that consists of the following:~~

~~a. At least two canopy trees per 100 linear feet. In overhead utility easements, understory trees may be substituted for canopy trees; and~~

~~b.~~ **In addition, there shall be a**~~A~~ historically-based fence or a dry stacked stone wall consistent in design and stone type, as applicable, with historic antecedents in the County.

…

4.9.3 (SCO) District Boundaries

Scenic Corridor	Intersecting Street	Intersection Street	Minimum Front Yard Setback
Columbia Pike	**South of Mack Hatcher Parkway**	**-**	**250 feet**

…

SECTION V. That Chapter 5, Use Regulations, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

~~5.1.4.R.4. (Short-Term Vacation Rentals) On a lot that has a dwelling without an accessory dwelling, the owner shall rent out the entire dwelling and vacate the premises for the duration of the rental, but only on an occasional basis that complies with Clause 5.1.4.R.2.~~

5.1.4.R.4 (Short-Term Vacation Rentals) **On a lot that has a dwelling with no accessory dwelling, the owner of the lot may rent out the dwelling only under the following:**

a. Nightly rentals shall not exceed 113 nights in any 12 month period, calculated on a rolling basis; and

b. The owner of the lot shall vacate the premises for the duration of the rental.

…

5.1.4.X.2 (Vehicles Service, Repair, or Wash Facilities) ~~Any other v~~**V**ehicle service areas or washing bays shall be placed to the side or rear of the building and **they shall be** screened from off-site **when not within an enclosed structure**.

…

~~5.2.7.K.1.a. (Outdoor Storage) Vehicle sales or rental;~~

…

SECTION VI. That Chapter 6, Building Types, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

The Zoning Ordinance is hereby amended to revise Section 6.2, Overview of Building Types, to remove OR from the permitted districts lists for duplex, multiplex, and townhouse in the table.

…

6.3 House: A building containing one dwelling unit on its own lot, surrounded by yards on all sides. In certain districts, ~~commercial~~ **nonresidential** uses may be housed in this building type...

…

6.8 Commercial/Mixed-Use Building (Vertical Articulation)

Façade Articulation for One-Story Buildings A façade **greater than 70 feet in width** shall be differentiated…

…

SECTION VII. That Chapter 7, Frontage Types, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

7.5 (Landscape Frontage)

Description: The landscape frontage is intended for nonresidential, **and** mixed-use~~, and certain residential~~ areas where buildings have a landscaped area between the sidewalk and the front facade.

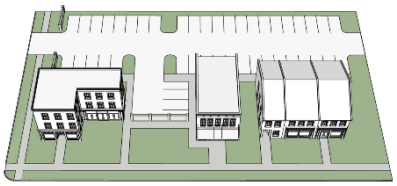
…

Parking Placement

Principal buildings shall anchor intersections and any side parking shall be located away from the intersection. ~~Priority shall be given to the higher classification street~~

…

The Franklin Zoning Ordinance shall be hereby amended to replace the Section 7.5 graphics with the below graphics:





…

SECTION VIII. That Chapter 8, Transitional Features, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…

8.2.4 Building Height, Scale, and Massing
A. Residential development other than multifamily shall comply with the following:
1.A. Facade width**s** ~~and height on facades~~ of adjacent buildings and buildings on opposing sides of a street shall be consistent with each other such that neither façade exceeds the other's dimensions by more than 25 percent. ~~Topography, viewshed analysis, and methods outlined in Paragraph 8.2.4.C may be included in this assessment.~~
2. Building height shall not exceed one-half story above the average height of existing residential buildings on the same block face, but in no case shall exceed the zoning district maximum height.
…

SECTION IX. That Chapter 9, Streets and Circulation, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…

9.3.2.A Where permitted, internal drives shall be designed per the Transportation and Street Technical Standards as public or private streets having an equivalent street classification based on traffic volume capacity (vehicles per day), except that internal drives shall have**:**
1. T~~t~~wo ten-foot travel lanes**;** and
2. P~~p~~arallel parking along **the internal drive where a building facade faces it** ~~both sides~~.
…
9.6.1.A Sidewalks and curb shall be required on both sides of public and private streets and internal drives, except along Mack Hatcher Parkway~~,~~ **or** I-65~~, and undeveloped edges of natural areas~~.
…
9.6.5.B The **determination of whether** payment of fees in-lieu **are applicable** shall be reviewed by the DRT or FMPC as part of the development plan, site plan, or final plat. **If the BOMA decides to waive a sidewalk requirement by MOS, then fees-in-lieu shall be required.**
…

SECTION X. That Chapter 10, Parking and Transit, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

10.1.2.B (Parking Exemptions DD) When a building is expanded, additional parking spaces are required for the new square footage only. **After January 1, 2023, a one-time building expansion of up to 1,000 square feet shall not require additional parking spaces; however, the number of existing parking spaces on the lot shall not be reduced to accommodate the expansion**; and

…

10.1.6 Minimum Parking

Use	Minimum Vehicle Parking Spaces	Reduced Minimum Vehicle Parking Spaces in CFO, CAO1, CAO2, and CAO3
Vehicle Sales and Rental	2 spaces per 1,000 square feet[2] + 1 space per service bay **+ inventory parking spaces[1]**	No reduction

SECTION XI. That Chapter 12, Landscape, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

12.2.1 Calculation of Landscape Surface Area

A. The minimum landscape surface area (LSA) **requirement** shall be calculated by multiplying the total development site acreage **or square feet** by the minimum LSA percentage for the applicable district.

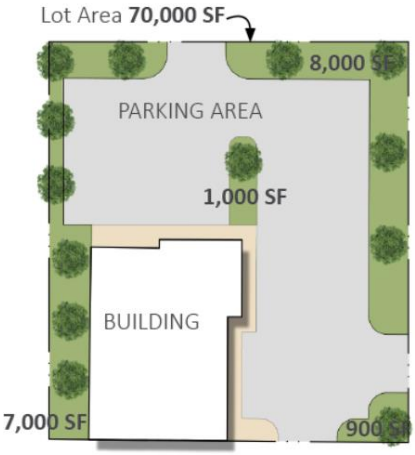
B. The existing or proposed landscape surface area on a lot shall be measured as follows:

1. Calculate the total amount of area not covered by impervious surface and available for accommodating landscape material on the lot; then

2. Divide by the total lot area.

Figure 12.2.1 Example Calculation of Landscape Surface Area of an Existing Lot in Square Feet (SF)

The Franklin Zoning Ordinance is hereby amended to add the graphic and example calculation below:



Lot Area	70,000 SF
Minimum LSA per the Applicable Zoning District	15%
Multiply the Lot Area by the Minimum LSA to Find the Required LSA in Square Feet	70,000 SF x 0.15 = 10,500 SF
Find the Sum of All the Pervious Areas Available for Landscape Material to Find the Total Pervious Area of the Lot	8,000 SF + 900 SF + 7,000 SF + 1,000 = 16,900 SF
Divide the Total Pervious Area by the Lot Area	16,900 SF / 70,000 SF = 24%
LSA	**24%**

…

SECTION XII. That Chapter 13, Fences, Walls, and Screening, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

13.2.1.B Retaining walls used for stormwater management features ~~shall comply with Subsection 13.2.6, Materials, but are exempt from all other Subsections within this Section.~~ **are exempt from Subsection 13.2.4, Retaining Walls for Residential Lots, and Subsection 13.2.5, Retaining Walls for Multifamily, Nonresidential, and Mixed-Use Lots, but shall comply with the other Subsections within this Section.**

…

13.2.3.A Retaining wall height shall be measured from lowest finished grade **or permanent pool elevation** to the top of the wall.

…

13.2.4 Retaining Walls for Residential **Uses** ~~Lots~~

Retaining walls for residential **uses, other than multifamily,** ~~lots~~ shall comply with the following:

The table heading shall be changed to Residential Uses

…

13.2.5 Retaining Walls for Multifamily, Nonresidential, and Mixed Use**s** ~~Lots~~

Retaining walls for multifamily, nonresidential, and mixed use**s** ~~lots or building sites~~ shall comply with the following:

The table heading shall be changed to Multifamily, Nonresidential, and Mixed Uses

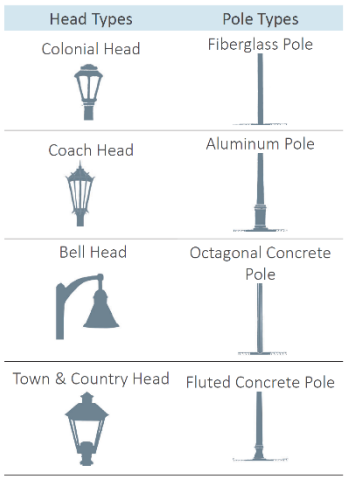
…

SECTION XIII. That Chapter 14, Lighting, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

The Franklin Zoning Ordinance shall be hereby amended to replace Figure 14.3.1.A with the below Figure.

Figure 14.3.1.A This graphic demonstrates examples of ornamental light fixtures.



…

SECTION XIV. That Chapter 15, Signs, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

15.6 Convenience Sign

Quantity

Limited additional signs may be approved when they are not visible from the right-of way~~ for developments with multiple buildings or tenants and at least one internal drive~~

Additional convenience signs that designate parking spaces may be used in parking areas and are not further regulated by this Ordinance. Parking signs for accessible parking spaces shall comply with the building codes. Parking signs in the HPO are subject to the Historic District Design Guidelines.

…

~~Sandwich board signs may also be counted as convenience signs~~ **Sandwich board signs qualify as convenience signs when located in convenience sign locations**

…

15.11 Sandwich Board Signs

~~Sandwich board signs are also permitted in convenience sign locations~~ **Sandwich board signs qualify as convenience signs when located in convenience sign locations**

…

SECTION XV. That Chapter 16, Utilities, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

16.1.3 Underground Requirements

To provide safe, reliable delivery of utility services and avoid the visual clutter of overhead utility lines, the following shall apply:

A. All new telephone, gas, sewer, water, fiber optic, and cable lines **associated with development** shall be placed underground**. Where not associated with development, the provider of telephone, fiber optic, and cable lines may complete system upgrades in existing service areas using overhead poles that were in place prior to January 1, 2023. Existing poles may be replaced with poles of the same or smaller dimensions; however, no new pole locations may be added.** ~~; and~~

B. All new electrical distribution lines ~~that serve~~ **associated with** development…

C. Where not associated with development, the provider of electrical distribution lines may complete system upgrades in existing service areas on overhead poles that were in place prior to January 1, 2023. Existing poles may be replaced with poles of the same or smaller dimensions; however, no new pole locations may be added.

SECTION XVI. That Chapter 17, Natural Resources, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:

…

17.5.1.A **The design and lot configuration for all** ~~All~~ stormwater management features, such as bioretention, detention ponds, and retention ponds, shall comply with the Stormwater Management Ordinance and Stormwater BMP Manual design specifications.

17.5.1.D Walls and retaining walls for stormwater management features shall comply with **Section 13.2, Retaining Walls.** ~~Subsection 13.2.6, Materials~~.

…

17.6.3.B.1.a An elevation certificate is required at the application stage in accordance with Clause 17.6.3.B.2.a, b, **c, d,** or **e** ~~c~~, as applicable.

…

~~17.6.3.B.1.d. An elevation certificate in accordance with Clause 17.6.3.B.2.c, d, or e, as applicable.~~

…

~~17.6.3.B.2.b A third and final elevation certificate is required with the final inspection in accordance with Clause 17.6.3.B.2.c, d, or e, as applicable.~~

…

17.6.3.B.1.**g In order to determine if improvements or damage meet the Substantial Improvement or Substantial Damage criteria, the applicant shall provide to the Floodplain Administrator a detailed cost to repair all damages and/or cost of improvements which includes the complete costs associated with all types of work necessary to completely repair or improve a building. These include the costs of all materials, labor, and other items necessary to perform the proposed work. These must be in the form of:**

i. An itemized costs of materials, and labor, or estimates of materials and labor that are prepared by licensed contractors or professional construction cost estimators

ii. Building valuation tables published by building code organizations and cost-estimating manuals and tools available from professional building cost-estimating services.

iii. A qualified estimate of costs that is prepared by the local official using professional judgement and knowledge of local and regional construction costs.

iv. A detailed cost estimate provided and prepared by the building owner. This must include as much supporting documentation as possible (such as pricing information from lumber companies, plumbing and electrical suppliers, etc). In addition, the estimate must include the value of labor, including the value of the owner's labor.

…

17.6.3.B.**3 Finished Construction Stage**

A final Finished Construction Elevation Certificate is required after construction is completed and prior to Certificate of Use and Occupancy issuance in accordance with Clause 17.6.3.B.2.c, d, or e. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Administrator will keep the certificate on file in perpetuity.

…

17.6.3.C**.12 A final Finished Construction Elevation Certificate (FEMA Form 086-0-33) is required after construction is completed and prior to Certificate of Use and Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Use and Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Use and Occupancy. The Finished Construction Elevation Certificate certifier shall provide at least two photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least two additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" × 3". Digital photographs are acceptable.**

…

17.6.4.A.5 All electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located **at required freeboard level** so as to prevent water from entering or accumulating within the components during conditions of flooding;

…

17.6.4.C Standards for Special Flood Hazard Areas with Established Base Flood Elevations and With Floodways Designated

Located within the special flood hazard areas established in Subsection 17.6.2, General Provisions, are areas designated as floodways. A floodway may be an extremely hazardous area due to the velocity of floodwaters, debris, or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights and velocities. Therefore, the following provisions shall apply:

1. Encroachments are prohibited, including ~~earthen~~ fill ~~material~~, new construction, substantial improvements or other development within the **adopted** regulatory floodway. Development may be permitted~~;~~ however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice~~s~~ that the ~~cumulative effect of the proposed~~ encroachment~~s or new development~~ shall not result in any increase in~~ the water surface elevation of the base flood elevation, velocities, or floodway widths during the occurrence of a base flood discharge at any point within the community.~~ **flood levels or floodway widths during a base flood discharge.** A ~~Tennessee~~ registered professional engineer must provide supporting technical data~~, using the same methodologies as in the effective Flood Insurance Study for the City~~ and certification, thereof; ~~and~~

~~2. New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of Subsection 17.6.4, Provisions for Flood Hazard Reduction.~~

2. A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the applicant first applies for a conditional letter of map revision (CLOMR) and floodway revision, fulfills the requirements for such revisions as established under the provisions of T.C.A § 65.12, and receives the approval of FEMA;

3. ONLY if Clauses 17.6.4.C.1 and 2 above are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Paragraphs 17.6.4.A, General Standards, and 17.6.4.B, Specific Standards.

…

17.6.4.D. Standards for Areas of Special Flood Hazard Zones AE with Established Base Flood Elevations but Without Floodways Designated

Located within the special flood hazard areas established in Subsection 17.6.2, General Provisions, where streams exist with base flood data provided but where no floodways have been designated (Zones AE), the following provisions shall apply:

~~1. No encroachments, including fill material, new construction and substantial improvements shall be located within areas of special flood hazard, unless certification by a Tennessee registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles; and~~

~~2. New construction and substantial improvements of buildings, where permitted, shall comply with all applicable flood hazard reduction provisions of Subsection 17.6.4, Provisions for Flood Hazard Reduction.~~

1. Require until a regulatory floodway is designated, that no new construction, substantial, or other development, including fill shall be permitted within Zone AE on the community's FIRM, unless it is demonstrated through hydrologic and hydraulic analyses performed that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

2. A community may permit encroachments within Zones AE on the community's FIRM, that would result in an increase in the water surface elevation of the base flood, provided that the applicant first applies for a conditional letter of map revision (CLOMR) and floodway revision, fulfills the requirements for such revisions as established under the provisions of T.C.A § 65.12, and receives the approval of FEMA;

3. ONLY if Clauses 17.6.4.D.1 and 2 above are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Paragraphs 17.6.4.A, General Standards, and 17.6.4.B, Specific Standards.

…

~~17.6.4.F Standards for Areas of Shallow Flooding (AO and AH Zones)~~

~~Located within the special flood hazard areas established in Subsection 17.6.2, General Provisions, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions, in addition to those set forth in Subsection 17.6.4, shall apply:~~

~~1. All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated to at least one foot above as many feet as the depth number specified on the FIRM, in feet, above the highest adjacent grade. If no flood depth number is specified on the FIRM, the lowest floor, including basement, shall be elevated to at least three feet above the highest adjacent grade. Openings sufficient to facilitate automatic equalization of hydrostatic flood forces on exterior walls shall be provided in accordance with standards of Subsection 17.6.4, Provisions for Flood Hazard Reduction;~~

~~2. All new construction and substantial improvements of nonresidential buildings may be floodproofed in lieu of elevation. The structure together with attendant utility and sanitary facilities must be floodproofed~~

~~and designed watertight to be completely floodproofed to at least one foot above the flood depth number specified on the FIRM, with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If no depth number is specified on the FIRM, the structure shall be floodproofed to at least three feet above the highest adjacent grade. A Tennessee registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this Section and shall provide such certification to the floodplain administrator as set forth above and as required in accordance with Paragraph 17.6.3.B, Permit Procedures; and~~

~~3. Adequate drainage paths shall be provided around slopes to guide floodwaters around and away from proposed structures.~~

17.6.4.**F Standards For Areas of Shallow Flooding (Zone AO)**

Located within the Special Flood Hazard Areas established in Subsection 17.6.2, General Provisions, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Paragraphs 17.6.4.A, General Standards, and 17.6.4.B, Specific Standards, all new construction and substantial improvements shall meet the following requirements:

1. The lowest floor (including basement) shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of one foot above the highest adjacent grade; or at least three feet above the highest adjacent grade, if no depth number is specified.

2. Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Clause 17.6.4.F.1 above so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with Clauses 17.6.3.B.1.d and 17.6.4.B.2.

3. Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

…

17.6.4.**G Standards For Areas of Shallow Flooding (Zone AH)**

Located within the Special Flood Hazard Areas established in Subsection 17.6.2, General Provisions, are areas designated as shallow flooding areas. These areas are subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are one to three feet. Base Flood Elevations are derived from detailed hydraulic analyses are shown in this zone. In addition to meeting the requirements of Paragraphs 17.6.4.A, General Standards, and 17.6.4.B, Specific Standards, all new construction and substantial improvements shall meet the following requirements:

1. Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

…

17.6.4.H Standards for Unmapped Streams

Located within the City are unmapped streams where areas of special flood hazard are neither indicated nor identified. Adjacent to such streams, the following provisions shall apply:

1. No encroachments including fill material or other development including structures shall be located within an area of at least equal to twice the width of the stream, measured from the top of each stream bank, unless certification by a Tennessee registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and

anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the locality.
2. When a new flood hazard risk zone, and base flood elevation and floodway data is available, new construction and substantial improvements shall meet the standards established in accordance with Subsections 17.6.3, Administration, and 17.6.4, Provisions for Flood Hazard Reduction.
3. ONLY if Clauses 17.6.4.H.1 and 2 above are satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Paragraphs 17.6.4.A, General Standards, and 17.6.4.B, Specific Standards.
…
17.6.5.A.2 Variances ~~for~~ may be issued for the repair or rehabilitation of historic structures…
…

SECTION XVII. That Chapter 20, Procedures, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…
20.2.7.B.6. For single-family residential site plans, an applicant may request a ~~partial certificate of appropriateness~~ **preliminary HZC recommendation** prior to final action on a site plan, **as applicable,** and then request the certificate of appropriateness prior to the issuance of a building permit.
…
20.7.10.D (HPO District Rezoning) The Department of Planning and Sustainability shall**:**
1. Prepare and mail the required mailed notice to property owners within 500 feet of the subject property; and
2. P~~p~~repare a notice of nomination and mail it to the owners of the affected properties at least 15 days prior to the FMPC meeting.
E. The notice of nomination shall…
…
20.8.16.C.**2** (Development Plan Minor Revisions) **Minor revisions to an existing golf course development that include small increases in nonresidential square footage or other improvements determined to be minor in nature.**
…
20.11.2.C For single-family residential site plans, an applicant may request a ~~partial certificate of appropriateness~~ **preliminary HZC recommendation** prior to final action on a site plan, **as applicable,** and then request the certificate of appropriateness prior to the issuance of a building permit.
…
20.19.1.A.4 A revision to a development plan, site plan, or preliminary plat that **was originally approved prior to January 1, 2015 and** receives approval by the original review body.
…

SECTION XVIII. That Chapter 21, Performance Agreements, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…
21.2.1.A The performance agreement shall be in the amount of ~~110~~ **125** percent of the actual estimated cost of the listed improvements. The performance agreement shall secure satisfactory completion of each required improvement per Subsection 21.2.2, Surety Requirements.
…

21.4.2 One Time Performance Reduction

The amount of each improvement **in performance** may be reduced~~: A. O~~**o**nly one time when at least ~~50~~ **75** percent of the **applicable** public improvements, private improvements, landscape improvements, or off-site improvements ~~(as applicable),~~ have been completed**.** ~~; and~~
~~B. When the applicant has submitted all information necessary to adequately review the request.~~
…
21.4.3 Maximum Reductions for Public Improvements or Applicable Private Infrastructure
A. ~~A~~ **The one-time** reduction of the amount for public improvements, private improvements, or off-site improvements (excluding landscape improvements as per Subsection 21.4.4, Maximum Reductions for Landscape Improvements):
1. Shall not be reduced to less than the actual amount needed to complete the remaining improvements plus estimated inflation increases and/or repairs;
2. Shall not be reduced to less than ~~25~~ **50** percent of the **performance agreement amount calculated per Paragraph 21.2.1.A** ~~original amount of the improvements~~, irrespective of the estimated cost of completing the improvements; and
3. ~~1.~~ Shall not be reduced to an amount less than the required maintenance agreement**.**~~;~~
~~3. Shall range from 50 to 75 percent of the original amount of the improvements, contingent upon the actual amount of completion of the improvements;~~
~~B. The request for a reduction for each improvement allowed in Paragraph 21.4.3.A above may be reduced by the applicable City department by up to ten percent to account for possible future inflation costs and/or repairs.~~
…
21.5.1.**F Any other information necessary to adequately review the request.**
…
21.5.2.A Following a complete submittal, the Department of Planning and Sustainability shall request the appropriate City departments to inspect the public improvements, private improvements, landscape improvements, and off-site improvements (as applicable) to determine compliance with approved plans. ~~Inspections shall be performed at no cost to the applicant.~~ Inspection periods shall be posted on the City website.
21.5.2.**B A fee shall be charged to the applicant for each improvement and each inspection. The fee shall be specified under Appendix A, Comprehensive Fees and Penalties found in the City of Franklin Municipal Code, and shall cover the administrative costs of on-site inspections performed by the City.**
…
21.5.2.**D The reduction recommended or approved by the applicable City department may differ from the requested reduction based on Subsection 21.4.3, Maximum Reductions for Public Improvements or Applicable Private Infrastructure.**
…
21.5.3.A.**2** Make a decision within 60 days whether to approve or disapprove ~~the request~~ **a reduction or release**, or forward the request to the FMPC for review with a recommendation; and
…

SECTION XIX. That Chapter 23, Definitions and Interpretations, of the Franklin Zoning Ordinance is hereby amended to delete the following text with a ~~strikethrough~~ and add the following text noted in **bold**, renumber the subsequent Sections, Subsections, Figures, and pages accordingly, and is approved to read as follows:
…

23.2.5.C ~~For the purposes of measuring height in the R4, R6, and OR districts and for transitional features: 1. To calculate the average height, building heights for principal buildings along the same block face shall be added, then divided by the total number of principal buildings on the block face; and~~

~~2. To calculate a half-story above the average height, 0.5 shall be added to the average height (calculated above), then rounded to the nearest half or whole story.~~

In the R4, R6, and OR districts and for transitional features, the building height for 'one-half story above the average height of existing buildings on the same block face' is calculated as follows:

1. Divide the sum of the stories on the block face by the total number of principal buildings on the block face to find the average height;

2. Add 0.5 story to the average height of the block face, then

3. Round the height to the nearest half or whole story.

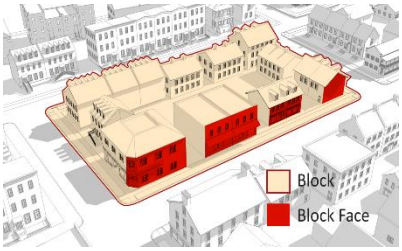
4. See the example scenario below:

The Franklin Zoning Ordinance is hereby amended to add the table with the example scenario to the right:

Principle Buildings On the Block Face	Stories
102 Street A	1.5
104 Street A	1.0
106 Street A	1.0
108 Street A	1.5
110 Street A	1.5
112 Street A	1.0
114 Street A	1.0
116 Street A	1.0
118 Street A	1.5
120 Street A	1.0
Sum of Stories	**12.0**
Number of Principle Buildings	10
Average Height (Sum of Stories Divided by Number of Principal Buildings)	1.2
Add 0.5 to Average Height	1.7
Round to Nearest Half or Whole Story	1.5
Maximum Permitted Height	**1.5**

…

The Franklin Zoning Ordinance is hereby amended to replace the graphic under the definition for Block Face with the graphic below:



…

Essential Services

~~Government facilities, public utilities, and private utilities necessary for the exercise of a principal use or service of a principal building.~~

Public buildings, government facilities, or public or private utilities.

…

Event Venue

A~~n~~ **commercial** establishment **for private rental for events** ~~that hosts special events~~, such as weddings, wedding receptions, bridal receptions, rehearsal luncheons and dinners, anniversary celebrations, galas, birthday parties, family reunions, retirement parties, corporate meetings, conferences, trade shows, speaker luncheon series, auctions, ~~museum exhibits,~~ and similar events.

…

Flood **or Flooding**

~~A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters or the unusual and rapid accumulation or runoff of surface waters from any source.~~

A. A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters.

2. The unusual and rapid accumulation or runoff of surface waters from any source.

3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in Paragraph A.2 of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

B. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in Paragraph A.1 of this definition.

…

~~Partial Certificate of Appropriateness~~

~~A partial certificate of appropriateness (COA) is a type of COA specific to single family residential site plans that limits approval to conceptual elevations, height, massing, scale, setbacks, and types of historic resource edge treatment. A partial COA does not permit the issuance of a building permit.~~

…

Place of Public Assembly

An institution or facility that congregations of people regularly attend to participate in or hold meetings, workshops, lectures, civic activities, religious services, ~~performances,~~ and other similar activities**.** ~~,including buildings or performance venues in which such functions and activities are held.~~

…

Porch

~~A projection from an outside wall of a dwelling that is covered by a roof and/or sidewalls (other than the sides of the building to which the porch is attached) for the purpose of providing shade or shelter from the elements, which is at least six feet deep.~~

A projection from an exterior wall of a building that is covered by a roof, for the purpose of providing shade or shelter from the elements. A porch is at least six feet deep and may be screened in, but shall not have impermeable walls greater than 48 inches in height.

…

Principal Building

~~A building in which the principal use of the lot is conducted on which it is situated~~.

The main building or structure on a lot in which the principal use occurs.

…

Regulatory Flood Protection Elevation

The Base Flood Elevation plus the Freeboard. In Special Flood Hazard Areas where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus one foot. In Special Flood Hazard Areas where no BFE has been established, this elevation shall be at least three feet above the highest adjacent grade.

…

Substantial Improvement

For the purposes of Section 17.6, Floodplain Regulations, any reconstruction, rehabilitation, addition, alteration, or other improvement of a structure in which the cost equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the initial improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work

performed. The market value is determined either by the assessed value of the structure per the Williamson County Property Assessor, plus an additional 15 percent of that assessed value, or by independent appraisal by a State of Tennessee licensed or certified real estate appraiser. In calculating the substantial improvement, construction improvement costs are tracked cumulatively over a five year period. The term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been pre-identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions and not solely triggered by an improvement or repair project or;

(2) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure~~.~~" **as approved by the Board of Zoning Appeals following a determination by the Historic Zoning Commission.**

…

Unified Site Plan

…landscape surface ~~ratios~~ **area…**

SECTION XX. That the Department of Planning and Sustainability is authorized to make administrative clerical revisions to the zoning text so long as the changes are not substantive, such as cleaning up tables, clerical word corrections, typographical errors, table of contents adjustments, header and footer adjustments, font adjustments, amending graphics and supporting explanations based on approved zoning text, and adding or correcting references.

SECTION XXI. That the following described properties shall be, and are hereby, rezoned from its existing zoning classification to the proposed zoning district:

Premises Considered

Zoning District Changes				
Address/Site	Map-Parcel	Acres	Existing Zoning District	Proposed Zoning District
253 Natchez Street	078F A-02300	0.10	R6	CI
255 Natchez Street	078F A-02200	0.12	R6	CI
263 Natchez Street	078G G-00700	0.22	R6	CI

Overlay Zoning District Changes		
Location	Acres	Proposed Overlay Zoning District
253 Natchez Street	0.10	HPO
255 Natchez Street	0.12	HPO
263 Natchez Street	0.22	HPO
Minor Linework Adjustments to the Scenic Corridor Overlay District As Shown on the Attached Maps		SCO

SECTION XXII. That the attached Location Maps shall serve the purpose of further delimiting the geographical boundaries as described by this Ordinance.

SECTION XXIII. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee that this Ordinance shall take effect on January 1, 2023, pending its passage on third and final reading, the public health, safety, and welfare requiring it.

ATTEST:

BY: _____
Eric S. Stuckey
City Administrator

CITY OF FRANKLIN, TENNESSEE:

BY: _____
Dr. Ken Moore
Mayor

Approved as to Form:

_____
Shauna R. Billingsley, City Attorney

PLANNING COMMISSION RECOMMENDED: _____

PASSED FIRST READING: _____

PUBLIC HEARING HELD: _____

PASSED SECOND READING: _____

PASSED THIRD READING: _____

HISTORIC FRANKLIN TENNESSEE

FRANKLIN MUNICIPAL PLANNING COMMISSION
ORDINANCE 2022-26
September 22, 2022

Hillsboro Rd
Moores Ln
Mallory Ln
Franklin Rd
Mack Hatcher Memorial Pkwy
Cool Springs Blvd
W McEwen Dr
E McEwen Dr
Wilson Pike
New Hwy 96 W
5th Ave N
Lewisburg Ave
Columbia Ave
Carothers Pkwy
Murfreesboro Rd
Columbia Pike
Goose Creek Bypass
Lewisburg Pike

0 0.5 1 2
Miles

N
W E
S

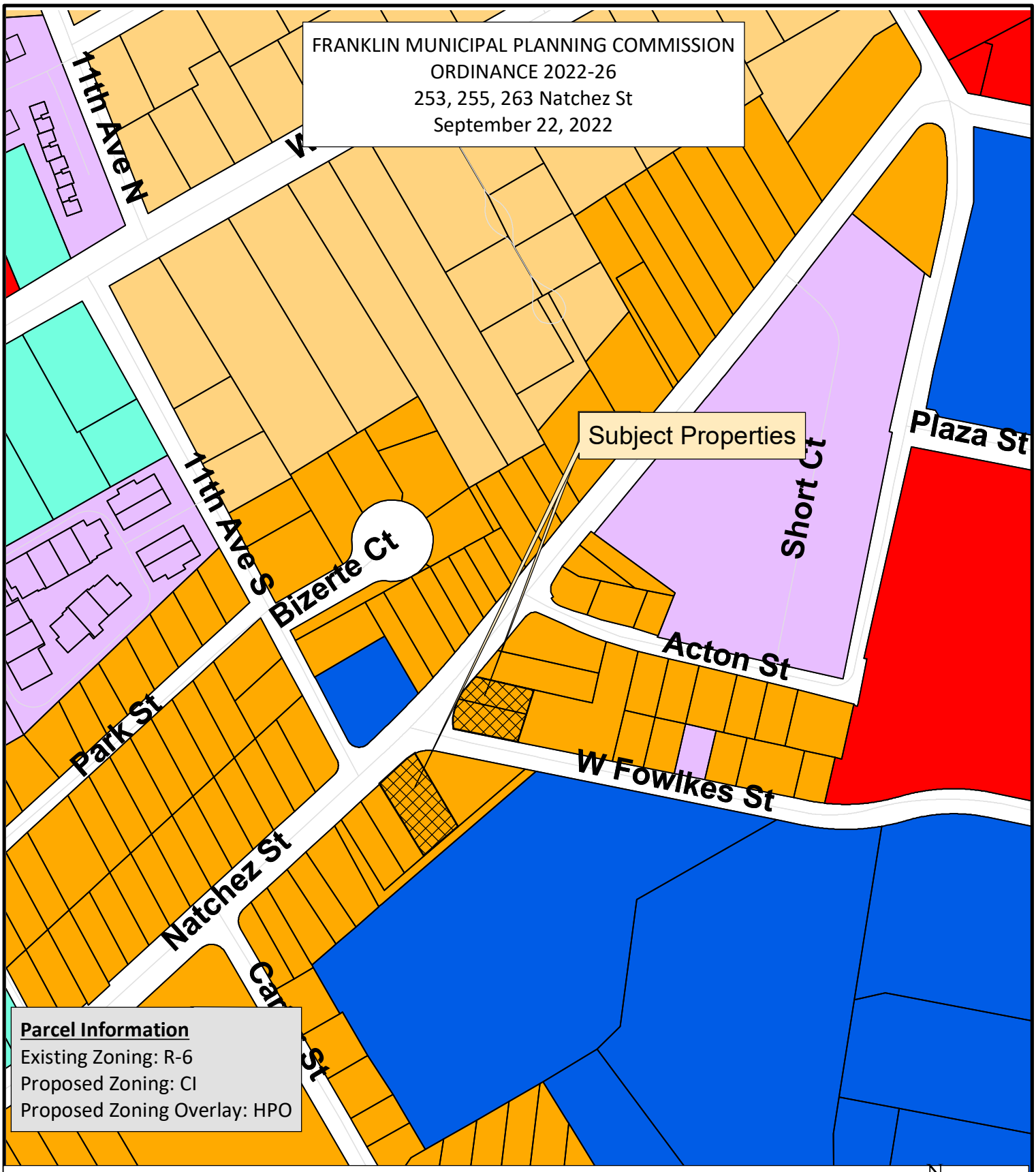
Legend

- SCO
- Urban Growth Boundary
- City Limits

This map was created by the City of Franklin's IT Department and was compiled from the most authentic information available. The City is not responsible for any errors or omissions contained hereon. All data and materials Copyright © 2019.

The zoning overlays depicted on the map apply to properties within the Franklin city limits. Upon annexation, properties in the UGB will be zoned accordingly.

All Rights Reserved.


FRANKLIN MUNICIPAL PLANNING COMMISSION
ORDINANCE 2022-26
253, 255, 263 Natchez St
September 22, 2022
11th Ave N
11th Ave S
Subject Properties
Short Ct
Plaza St
Bizerte Ct
Acton St
Park St
W Fowlkes St
Natchez St
Parcel Information
Existing Zoning: R-6
Proposed Zoning: CI
Proposed Zoning Overlay: HPO
R4 Residential 4 District
R6 Residential 6 District
PD Planned District
OR Office Residential District
CI Civic Institutional District
CC Central Commercial District
N
0
275
550
Feet
This map was created by the Franklin Planning Department.
It was compiled from the most authentic information available.
The City is not responsible for any errors or omissions contained hereon.
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