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PROJECT: 23-26- Sequoyah Bus Parking
Bid Date 3-28-2023 at 3pm

PROJECT NO. 21330

Narrative For Addendum #1

PREPARED BY: Joseph
Parks

DATE: 3-21-2023

The following amendments to the specifications and/or revisions to the drawing shall be considered part of the contract, and shall replace documents by the same name.

General Documents

See attached copy of the *Pre-bid meeting sign in sheet* for information.

See attached copy of the *Storm Water Pollution Prevention Plan Narrative* to be taken as part of contract documents.

Bid/Proposal Form:

The Bid/Proposal Form has been updated to include an bid alternative and the new Bid/Proposal Form has been uploaded with this addendum.

Bidders MUST use the new Bid/Proposal Form when submitting their bid. Failure to do so will result in Bidder being deemed non-responsive and therefore ineligible for award.

The following documents have been revised to address bidder question and/or revised at engineers' directive:

Specifications:

1. Revised Table of Contents, removing 262726 Wiring Devices and changing title of 32 31 13 to fencing.
2. See revised section 01 02 10 Allowances raising general purpose allowance.
3. See revised section 32 31 13, which uses galvanized fence with no additional coating.

SHEET C100

1. See added chain link fence height callouts.
2. Noted RCC as alternative 1
3. Noted HD Concrete as base bid for bus parking
4. Adjust swinging gate location

SHEET C200

5. Added note regarding relocation of ROTC equipment.

SHEET C301

1. Lowered proposed grade of bus parking lot 3-ft to reduce volume of haul in.

SHEET C302

1. Adjust drainage pipes and structure in or near bus parking based on revised grading.
2. Revised diameter of drainage culvert E1-E6 from 12" to 15" and reduced its length.
3. Revised diameter of E2 to E3 from 12" to 10".
4. Added underdrain in bio-retention Pond E connecting to Riser E4

SHEET C500

1. Revised sediment trap nomenclature to match TDEC standard.

SHEET C501

1. Shifted location of diversion and sediment basin berms east side based on revised grading

SHEET C502

1. Adjusted erosion control blanket based on revised grading of bus area.
2. Added rip-rap outlet protection callout into SE bio-retention.

SHEET C503

1. Adjusted background based on revised grading.

SHEET C600

1. Listed bio-retention native seed, with seed area.
2. Listed slopes as Bermuda seed.

SHEET C700

1. Revised asphalt to grass detail 13 to say pavement to grass
2. Revised 90-degree parking detail 1 to match plan view.
3. Added swinging bar gate detail 14
4. Added accessible parking symbol detail 15.
5. Added stop bar detail 16
6. Added painted traffic arrow detail 17
7. Listed chain link fence as 6 ft tall on detail 10.
8. Revised concrete pavement detail to use 6x6 WWF instead of rebar.

SHEET C800

1. Revised Bioretention Area detail 1 to specify native seed mix, instead of mulch.
2. Added reference to bio-retention media specification in detail 1.

SHEET ES101, ES102, ES201

1. Revised to add power for trailer to be set by owner



BID/PROPOSAL FORM **ADDENDUM 1**

COMPANY NAME: _____

SOLICITATION: **BID 23-26, SEQUOYAH BUS PARKING**

Having carefully examined the Solicitation/Contract Documents, Contractor/Vendor proposes to furnish the Scope of Services as described herein and within all applicable proposal submission documents for the fee(s) as presented below.

Pricing shall be inclusive of all labor, equipment, supplies, overhead, profit, material, and any other incidental costs required to perform and complete all work as specified in the Solicitation/Contract Documents. All Unit Prices shall be bid at the nearest whole penny.

In the event there is a discrepancy between a subtotal or total amount and the unit prices and extended amounts, the unit prices shall prevail and the corrected extension(s) and total(s) will be considered the price.

HCS requests bids/proposals be submitted on bid/proposal forms provided by the HCS for this solicitation. Fee(s) submitted on other forms, other than those provided by the HCS, may be deemed Non-Responsive upon review by and at the sole discretion of the HCS Purchasing Office.

SEQUOYAH BUS PARKING

BASE BID & ALLOWANCE

Item	Description	Extended Amount
1	BASE BID – Lump Sum	\$
2	GENERAL PURPOSE ALLOWANCE	\$100,000

Allowance Unit Prices Rates

Item	Description	Unit of Measure	Unit Price	Allowance Quantity	Allowance
3	Undercut unsuitable soil and dispose of at location determined by owner on site	CY	\$	3,700	\$
4	Replace undercut soil with suitable fill from onsite	CY	\$	1,000	\$
5	Replace undercut soil with suitable fill form offsite	CY	\$	2,700	\$
6	Replace undercut soil with crushed rock from offsite	CY	\$	1,000	\$
7	Rock Excavation in trench	CY	\$	100	\$
8	Rock Mass Excavation	CY	\$	30	\$

BID SUMMARY

PROJECT TOTAL (Items 1-8)	\$
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PROJECT TOTAL (Items 1-8, Including AA):

(Use Words to Write Total)

**Quantities are not guaranteed. Final payment will be based on actual quantities.

ALTERNATE – All Bidders must provide Alternate pricing. Alternate pricing to be utilized at the sole discretion of the Owner.

AA	Alternate 1: Roller Compacted Concrete pavement in place of Heavy Duty Concrete Pavement [CL1]in bus parking (as noted on C100)	\$
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Sequoyah Bus Parking Questions

1. What is the scope surrounding the building?
responses in blue: contractor shall compact soil per earthwork specification. pour curbs, and sidewalks as shown. Wood deck and bus office trailer will be installed by owner.
 - a. Do we need to place stone base underneath the trailer location?
No
2. Could we get more clarification on the concrete paving alternate spec?
See revised C100 & C700
 - a. Will soil cement be required for cast-in-place concrete paving or 6" of crusher run?No soil cement is not required for cast in place concrete pavement. Reference detail 9/C700
 - b. Are dowel baskets at saw joints required? Lead time may be an issue here...
A method of vertical stabilization will be required at construction joints. See two options on detail 11/C700
 - i. Could we receive a saw joint spacing plan if dowel baskets are required?Dowel baskets are not required, specifically. See response to 2b.
3. Plans call out architectural drawings that are not present, could these notes either be removed or can we receive architectural drawings that they are referring to?
Reference to architectural drawings have been removed. Those items, the wood deck and trailer, will be installed directly by owner.
4. Could we get some clarification on the fencing height, as well as finish?
6 ft - galvanized. See revised C100 and revised fence spec.
5. Is there a CAD file available to share with dirt contractors?
Yes, if a file share agreement is signed a CAD file can be provided. Email request to directly to: joe.parks@marchadams.com
6. Was section 262726 Wiring Devices left out intentionally.
See revised Specification Table of Contents removing 262726 which is not needed.
7. Is there a sign in list available for the pre bid meeting for the bus lot at Sequoyah High School?
Yes, there is a sign in sheet from the meeting. See attached copy in Addendum 1.



Storm Water Pollution Prevention Plan Narrative

**HCDE Bus Barn
9517 W Ridge Trail Road
Soddy Daisy, Hamilton COUNTY, TENNESSEE**

**Date: March 6, 2023
Project # 21330**

Prepared for

**Hamilton County Department of Education
3074 Hickory Valley Rd
Chattanooga, TN 37421
Phone: (423) 498-7020**

Prepared by

March Adams & Associates, Inc.
310 Dodds Avenue, PO Box 3689, Chattanooga, TN 37404
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General Information

This Storm Water Pollution Prevention Plan (SWPPP) is developed in accordance with the Tennessee General NPDES Permit (TNR100000) for Storm Water Discharges Associated with Construction Activity (TNNCGP), issued on September 27, 2021 and may be found at the following link

https://tnepsc.org/2016_CGPpdfs/Permit.pdf

and is prepared using sound engineering practices. March Adams & Associates, Inc. personnel involved with the development of this plan have completed the *Design of Vegetative and Structural Measures for Erosion Prevention and Sediment Control* course available from the State of Tennessee.

As instructed by Part III.F of the TNCGP, this plan and all attachments are hereby submitted to the local Environmental Assistance Center (EAC), along with the complete, correctly signed Notice of Intent (NOI). Construction will not be initiated prior to 30 days from the date of submittal of this document, or prior to receipt of a Notice of Coverage (NOC) from the Tennessee Department of Environment and Conservation (TDEC).

Owner/Developer: Hamilton County Department of Education
 3074 Hickory Valley Rd
 Chattanooga, Tennessee 37421
 Contact Person: Witt Justin
 (423) 209-5600
 Email: Witt_Justin@hcde.org

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.

Representative of owner/developer and title; print or type	Signature (must be signed by president, V.P., or equivalent, or ranking elected official)	Date
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Primary Contractor: Name of Company TBD
 Street Address _____

 Contact Person: _____ Title _____
 Phone: _____
 Email: _____

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.

Company name of primary contractor; print or type	Signature (must be signed by president, V.P., or equivalent)	Date
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Project Responsibilities

Current versions of this SWPPP, the NOI, and the NOC will be kept on the site for the duration of the project. These items will be available for the use of all operators and site personnel involved with erosion and sediment controls, and will be available to TDEC personnel visiting the site. A notice will be posted near the construction entrance containing a copy of the NOC with the tracing number assigned by the EAC, the name and telephone number of a contact person for the development, and a brief description of the project.

Any new contractor on the project that has any responsibility to install, inspect, or maintain erosion or sediment control measures will sign the contractor's certification on a copy of the NOI (Appendix) and will submit it to the local EAC. Any correspondence with TDEC or any EAC will reference the tracking number assigned by TDEC to the project. The contractor shall submit a Notice of Termination (NOT; Appendix) after the complete installation and successful establishment of the final stabilization activities at the site.

It is the intention and goal of the TNCGP and this SWPPP that any discharge from the property described in this document have no objectionable color contrast to the water body that receives it. The construction activity will be carried out in such a manner as will prevent any discharge that would cause a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of the waters on the property or downstream of the property for fish and aquatic life, livestock watering and wildlife, recreation, irrigation, navigation, industrial or domestic water supply.

This plan may be amended for reasons described below, within 7 days of erosion problem identification or for other reasons. When the plans are revised, the contractor will implement the changes to erosion protection and sediment controls within 48 hours after the need for modification is identified.

Listed below is a summary of general requirements and sequences that the contractor shall follow during construction:

1. EPA Clean Water Act and Tennessee Clean Water Act guidelines must be followed. The contractor shall adhere to the *Tennessee General NPDES Permit (TNR100000) for Storm Water Discharges Associated with Construction Activity (TNNCGP)*, latest permit. This permit may be found online at the following link http://environment-online.state.tn.us:8080/pls/enf_reports/f?p=9034:34051:::NO:34051:P34051_PERMIT_NUMBER:TNR100000 or contact TDEC at local office.
2. Maintain the SWPPP plan (copy of engineered stamped plan, not an original) on site. The SWPPP must be continuously updated and kept on site at all times. The SWPPP will be located on site for the duration of the permitted project. The SWPPP shall be posted along with the Notice of Coverage (NOC) on a job board located at or near the construction entrance. If the SWPPP is filed off site (if permit is active or inactive), then its location must be posted on said board along with the NOC. All posted information must be maintained in a legible condition. Other information that shall be posted must include: site contact/owner, company name, e-mail address (if available), address and telephone number of the contact/owner.
3. Retention of Records

- The following records shall be maintained on or near the site:
 1. The dates when major grading activities occur.
 2. Dates when construction activities temporarily or permanently cease on a portion of a site.
 3. Dates when stabilization measures are initiated.
 4. Inspection Reports
 5. Rainfall Records
 - All required records noted in the TNCGP shall be retained by the permittee for a period of at least three (3) years from the date the Notice of Termination (NOT) is filed.
4. SWPPP plan on site must be signed.
 5. Required inspections after a storm event are as follows: all sediment and erosion control measures must be checked and, if necessary repaired, twice weekly (72 hours apart). The permittee shall maintain record of such checks and repairs. These records must be kept on site and available for review within 10 days of request by storm water personnel. These records must be submitted to the storm water office on a yearly basis. Projects permitted under the state NPDES permit program must follow its requirements.
 6. Quality assurance of erosion prevention and sediment controls (EPSCs) shall be done by performing site assessments. The 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) A licensed professional engineer or landscape architect.
 - b) A Certified Professional in Erosion and Sediment Control (CPESC).
 - c) A person who has successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course.
 7. Twice weekly Inspections must be conducted by a TNEPSC Level I qualified inspector.
 8. All areas disturbed by construction must be inspected.
 9. All discharge locations are inspected each time to insure proper operation.
 10. Vehicle entrance/exit points are inspected each time to insure proper operation.
 11. Site inspection report must include: date, name, qualifications of inspector, weather, locations of discharge points, BMP’s requiring any maintenance, any failed BMP’s with corrective action noted and when, new BMP measures that are now required due to new site conditions.
 12. Inspection reports must be signed by the qualified inspector.

13. Jobsite poster board must include copy of signed NOI and SWPPP information (contact person, where plan is located on site, with a note on when plan can be reviewed by the public).
14. Inspect velocity dissipation devices.
15. Sediment removal procedures noted on SWPPP plan.
16. Any required excavation de-watering will be done in a manner to direct muddy water toward a sediment storage area, such as a sediment basin or temporary sediment trap. If no sediment storage area is available muddy water shall be pumped through a geo-textile dewatering bag.
17. Rain gauge must be maintained on site, at location shown on the plans.

Introduction

This narrative is to supplement the Storm Water Pollution Prevention Plan (SWPPP), sheets C-302 dated 03/03/23, and prepared by March Adams & Associates, Inc. The reader shall also refer to these plans for further information. The contractor is responsible for documenting changes made to this narrative and the plans. Enclosed with this narrative are Drainage Area Exhibits, which show the anticipated drainage patterns pre and post development conditions.

Project Description

The project is located 9517 W Ridge Road in Hamilton County, Tennessee. The project improvements include a 74 car parking spaces, 40 bus parking spaces and an office building. The total land disturbance for this project is 4.50± acres. Soil Types are Bodine chesty silt loam (BOC), Holston loam (uHnB) and Woodmont silt loam (Wo).

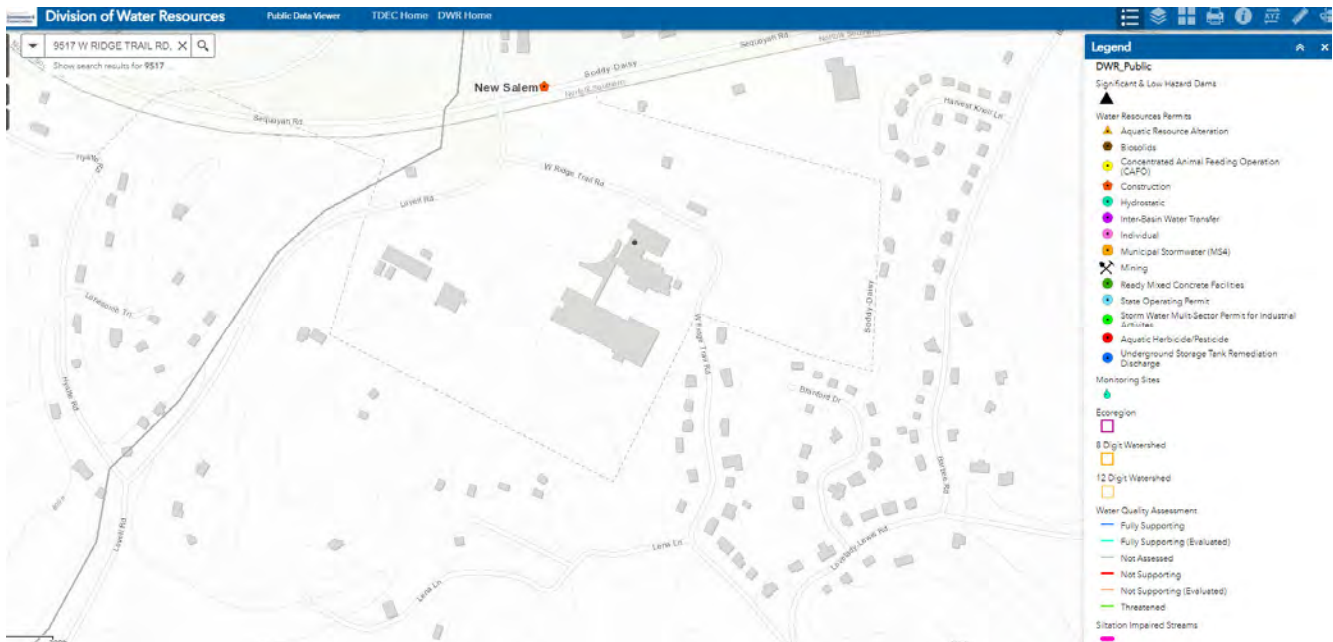
Existing Conditions

Currently, the site is woods and drains to northwest to an existing drainage swale.

The Hamilton County Soil Survey indicates that the soils present in the construction area consist of Bodine chesty silt loam (BOC), Holston loam (uHnB) and Woodmont silt loam (Wo).

Receiving Waters

- Site will drain to unnamed tributary to Chickamauga Reservoir, as in GIS map shown below.
- Any wetlands on site must be located on the SWPPP plans. Also, measures to protect said wetland(s) must be included in the SWPPP along with affected acreage of the wetland(s).
- Prior to issuance of a NOC, any applicable permits i.e. Aquatic Resource Alteration Permits, septic approvals, and other wastewater permits must be obtained. At this time no know aquatic features are on site.



Additional or Excess Fill Material

Additional fill material from off of the property is anticipated in the grading plan. A separate permit is required for the borrow site. It is the responsibility of the contractor to engage the owner to revise this SWPPP to include those areas. A separate NOC must be obtained for the off-site disposal of excess fill material and/or any borrow areas for needed additional fill.

Runoff Calculations

Erosion Control measures for this project have been designed for the 2 year, 24-hour storm event with type II distribution.

The SCS Method was utilized on this project to estimate the existing and post-development runoff. The calculations indicate that there was a net increase in runoff coefficient and in peak discharge as a result of this project. Therefore, the temporary sediment basin(s) will be cleaned out and regraded for use as (a) storm water detention pond(s) once the site is fully stabilized. Post-development curve number method was used to determine the peak discharge will be 10.11 cfs during the 2-year erosion control design storm. Worksheets for the calculations are found in Appendix.

One temporary sediment basin and four excavated inlet sediment traps will be constructed at the site. The requirement of a 9,590 cubic foot wet and dry storage volume has been exceeded by the designed volume of 10,000 cubic feet wet storage and 77,900 cubic feet wet storage. Water discharged from the basin will be controlled using a retrofitted outlet control structure.

Spills and Non-Storm Water Contingencies

All fueling of equipment and vehicles on site will be conducted near the construction entrance/staging area located as shown on the plans. The contractor shall adhere to the following items concerning spill control practices:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept ventilated and personnel will wear appropriate protective clothing.
- The spill prevention plan will be adjusted to include measures to prevent a particular type of spill from re-occurring. A description of each spill, the cause, and cleanup measures will be included.
- The site superintendent, who is responsible for the day-to-day onsite construction operations, will be the spill prevention and cleanup coordinator and will assign other personnel, whose names will be posted in the onsite office trailer or other accessible place suitable for the purpose, to receive spill prevention and cleanup training.
- If a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period, the contractor will immediately notify the permittee who shall then do the following: notify the National Response Center (NRC) (800-424-8802) and the Tennessee Emergency Management Agency (TEMA) (emergencies: 800-262-3300; non-emergencies: 800-262-3400); as well as the local Environmental Assistance Center.

Also, the SWPPP engineer will prepare a revision of this document to identify measures to prevent the reoccurrence of such releases.

- Concrete trucks will wash out at the designated area near the construction entrance. Each contractor is responsible to provide litter control for trash generated by his crew. A dumpster for garbage will be located near the construction trailer and is limited to garbage and paper trash only. Paint cans, oil cans, used oil, and filters will be contained and disposed of by the contractor by taking them to the local County Hazardous Waste Disposal Center.

Construction Sequence

Listed below is a brief summary of general items the contractor shall adhere to:

Installation and Maintenance:

- Pre-construction vegetation shall not be disturbed more than 10 days prior to any excavating activities.
- All controls shall be installed according to manufacturer's specs and good engineering practices.
- Any off site sediment accumulations shall be removed daily. Off site accumulations deposited on private property shall be removed by methods agreed upon by the contractor and the adjacent land owner(s).
- If sediment enters waters of the State, TDEC-WPC will be notified immediately and consulted with concerning removal of said sediment if required.
- Sediment shall be removed from any sediment control device when the design capacity has been reduced by 50%.
- Exposed litter, debris, chemicals, etc., shall be properly stored or disposed of prior to anticipated storm events.
- Removal of standing muddy water from the site shall be accomplished with a pump/filter bag combination or said water will be diverted into existing sediment control devices via a pump.

Stabilization:

- Temporary or permanent stabilization for any area of the project must be completed no later than 15 days after the construction activity for said area has temporarily or permanently ceased.
- **Steep slopes (greater than or equal to 35%) shall be stabilized no later than 7 days after construction activity on these slopes has temporarily or permanently ceased.**

Material Management Practices:

- The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substance to storm water runoff.
 1. Only enough product required for the job will be stored onsite.
 2. All materials stored onsite will be in a neat and orderly manner in their appropriate containers, and if possible, under roof or other enclosure.
 3. Products will be kept in their original containers with the original manufacture's labels.
 4. Substances will not be mixed with one another unless recommended by the manufacturer.
 5. All of product will be used up before disposing of container whenever possible.
 6. Manufacturer's recommendations for proper use and disposal will be followed.
 7. The site superintendent will inspect daily to ensure proper use and disposal practices are followed.

An Anticipated Activity Schedule may be found on the Sediment and Erosion Control Plan, which describes the anticipated schedule of construction events. Listed below is a summary of the events:

Phase I: Clearing and Rough Grading

1. Prior to clearing operations, the contractor will construct the sediment pond and retrofitted outlet control structure as well as diversion swales and associated rip rap. The contractor shall also install perimeter silt fencing, construction exit, and rock check dams prior to clearing operations, as shown on C501.
2. The contractor may begin onsite (**only**) clearing and grading operations under the following conditions.
 - a. An approved NOC has been obtained for this project.
 - b. All BMP's as listed in item #1 are complete and stabilized.
 - c. No fill or trash may be transported offsite unless it is to an approved state landfill or placed on other properties that are covered by an approved NOC.
3. Once onsite excavation begins, the contractor shall implement BMP's that are required in areas that are under construction. The contractor shall work in specific areas in a manner as to install BMP's downhill first prior to beginning excavation and/or fill in areas uphill of proposed BMP locations.
4. Stripped topsoil will be stockpiled in a designated location (to be determined later) and covered with plastic.
5. If excess fill hauled offsite, The contractor may begin hauling excess fill onto the site from the borrow site once an approved NOC has been obtained for Land Disturbance Activities for the borrow site (separate permit) has been obtained and the following conditions have been met.
 - a. Off-site property sediment basin and BMP's are in place to receive excess fill from HCDE Bus Barn.
 - b. All BMP's as shown or listed in the HCDE Bus Barn SWPPP narrative and plans are complete and stabilized, the contractor shall begin clearing and grading operations.
 - c. See also HCDE Bus Barn SWPPP narrative and permit requirements.
6. The contractor shall insure that areas that have been cleared/graded and will be stabilized with temporary fast growing ground cover in areas no later than 2 weeks after work has been completed or ceased and fine grading will not take place for at least 15 days.
7. Once the cut slopes have been established in accordance with the construction documents, the contractor shall immediately install erosion control matting where specified.
8. A temporary dewatering structure shall be installed at the low point of the site for settling and/or filtering sediment-laden water prior to discharging the water off-site.
9. The contractor shall install and maintain BMP's and insure/supplement additional seeding as required of inactive areas.

Phase II: Mass Grading

1. Contractor shall maintain and insure that all BMP's installed in Phase I are working properly and records and logs are up to date.
2. The inspector shall perform a detailed inspection of the property perimeter and confirm that sediment and construction debris are not exiting the site. Should the inspector find breached areas, the contractor shall take necessary measures to prevent the escape of sediment or debris by repairing existing BMP's or installing additional BMP's.
3. The inspector shall insure that disturbed areas are draining to the sediment pond and that the sediment pond storage is functioning properly. The sediment pond shall be re-excavated when

the capacity has been reduced to 50% of the original design capacity. By the same rule, sediment from sediment traps, silt fences, and other sediment controls will also be removed when the capacity of the structure has been reduced by 50%.

4. Construction of the storm drainage system will include implementation of BMP's as indicated on the Sediment and Erosion Control Plan. Inlet protection will be installed around catch basins until pavement is applied to the road and parking. Immediately prior to paving installation, storm drain inlet protection will be removed.
5. Construction of the building pad and foundation will commence. The contractor shall insure that concrete truck operators are utilizing the concrete truck wash down areas and that the construction exit is being properly maintained.
6. Construction of parking areas, curbs and gutter and sidewalks will begin and topsoil will be stockpiled in a designated area (to be determined later) and shall be covered with black plastic.
7. Temporary measures may be removed at the beginning of a work day, but will be replaced at the end of the work day.
8. It is anticipated that a lag of site work will occur once the building is under construction. The contractor shall make periodic inspections as per *Tennessee Erosion & Sediment Control Handbook, latest edition*. The contractor is responsible for maintaining BMP's, inspections and reports during this time unless the NOI/NOC is amended to place the responsibility in the possession of another party.
9. Once the building, pavement areas and final landscaping have been completed, the contractor shall begin removal of BMP's in areas that have been stabilized with permanent vegetation.
10. Care should be taken to prevent the removal of silt fence from becoming a pollutant source for storm water discharges.
11. Once the site is deemed substantial complete by the project Architect/Engineer, the contractor shall repair or fill in the sediment pond and obtain the final grades as shown on the drawings.
12. The NOT may be filed under the following conditions (Appendix):
 - a. Once the project has been determined to be 100% complete by the project Architect/Engineer and all areas disturbed have received final hardscape and landscaping.
 - b. All requirements and conditions have been met according to the *Tennessee Erosion & Sediment Control Handbook, latest edition*
 - c. The NOT may be downloaded from the following link:
https://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1175

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SECTION 01 02 10 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Selected materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Material Quantity allowances.

1.3 SELECTION AND PURCHASE

Not Applicable

1.4 SUBMITTALS

Not Applicable

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.2 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1:

1. Include a lump sum General Purpose Allowance of Forty Thousand Dollars (\$100,000.00) for use upon the Owner's Instructions.
 2. The General Purpose Allowance shall be used only as directed for the Owner's purposes or only by Construction Change Directives that designate amounts to be charged to this allowance.
 3. General Contractor's overhead and profit will not be allowed on items applied to the General Allowance. Subcontractor's overhead and profit will be allowed according to the Supplementary Conditions.
 4. In the event all or part of this allowance is not directed to be utilized by the Owner, then that amount shall be credited to the Owner by Change Order at the end of the project.
 5. This allowance is separate and apart from any allowances listed in other sections of the specification.
- B. Allowance No. 2: Undercut Unsuitable Soil, per unit price bid, see section 01 27 00
- C. Allowance No. 3: Replace undercut soil with suitable fill from onsite, per unit price bid, see section 01 27 00
- D. Allowance No. 4: Replace undercut soil with suitable fill from offsite, per unit price bid, see section 01 27 00
- E. Allowance No. 5: Replace undercut soil with stone from offsite, per unit price bid, see section 01 27 00
- F. Allowance No. 6: Rock Excavation in trench, per unit price bid, see section 01 27 00
- D. Allowance No. 7: Rock Excavation in mass grading, per unit price bid, see section 01 27 00

END OF SECTION

SECTION 32 31 13 - FENCING

PART 1 - GENERAL

1.01 SCOPE

- A. The work covered by this section includes furnishing all labor, materials, and equipment required to install galvanized, chain link fence, including all excavation, concrete, and accessories, as shown on the Drawings or specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

1.03 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work.

1.04 SUBMITTALS

- A. Submittals shall be made showing material and configuration of fencing to be installed.
- B. The Contractor shall examine the areas to receive chain link fencing and notify Owner of any conditions that may be detrimental to the finished work or may interfere with the timely completion of the work. Beginning work constitutes

PART 2 - PRODUCTS

2.01 GENERAL

- A. All ferrous materials entering into the construction of required fencing shall be heavily galvanized by the hot dip process in accordance with ASTM A120 or A123 as applicable.
- B. See Construction Drawings for Fence heights:
 - 1. Minimum of 72 inches of chain link fabric

2.02 FENCE MATERIALS

- A. Fabric
 - 1. 9 gage
 - 2. 2-inch mesh
 - 3. Galvanized ASTM A392, Class II with twisted and barbed selvage top and bottom.
 - 4. 6' - 0" height
- B. Posts: Steel pipe, ASTM A120
 - 1. Line post: 2-3/8 inch O.D., Schedule 40 (3.65 lb./ft.)
 - 2. Corner, end, angle, and pull posts: 2-7/8 inch O.D., Schedule 40, (5.8 lbs./ft.)
 - 3. Gate posts, 20 feet wide: 4 inch O.D., Schedule 40, (7.58 lbs./ft.)
- C. Top rail: 1 5/8 inch O.D., Schedule 40 (2.27 lb./ft.), with expansion couplings spaced at not less than 20 feet intervals.
- D. Braces: material same as Top rail; provided wherever fabric is not continuous.

- E. Bottom tension wire: 6 gage.
- F. Fittings: heavy malleable iron or pressed steel
 - 1. Pressed steel arms on intermediate posts

2.03 GATE

- A. Type: See Construction Drawings for gate widths.
- B. Frames
 - 1. 2 inch O.D. pipe Schedule 40, (2.72 lb./ft.) or 2 inch square tubing, 2.8 lb. linear foot.
 - 2. Material: Zinc-coated steel.
 - 3. Construction: Welded corners or assembled with corner fittings and 3/8 inch steel truss rods.
 - 4. Provide horizontal 1 1/4 inch brace rail and 3/8 inch truss rod for gates 5 feet wide or greater.
 - 5. Provide vertical 1 1/4 inch brace rail for gates 6 feet wide or wider, spacing not to exceed 5 foot centers.
- C. Fabric: Same as fence fabric.
- D. Hinges
 - 1. Standard type.
 - 2. Size to accommodate gate frame and post.
- E. Latches
 - 1. Industrial gate latch with drop rod or center stop.
- F. Keepers
 - 1. Mechanical keeper for each gate leaf.
 - 2. Secure free end of gate when in full open position.
- G. Locks
 - 1. Contractor to keep station locked until final acceptance by the Owner.
 - 2. The Contractor shall provide the Owner with lock and three sets of keys per lock. If more than one lock is provided, the contractor shall provide locks that use the same key.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Verify that final grading in fence location is complete without irregularities which would interfere with fence installation.
- B. Measure and lay out complete fence line.
- C. Locate line posts at equal distance spacing, not exceeding 10 foot centers.
- D. Use corner posts at positions where fence changes direction more than 10 degrees.

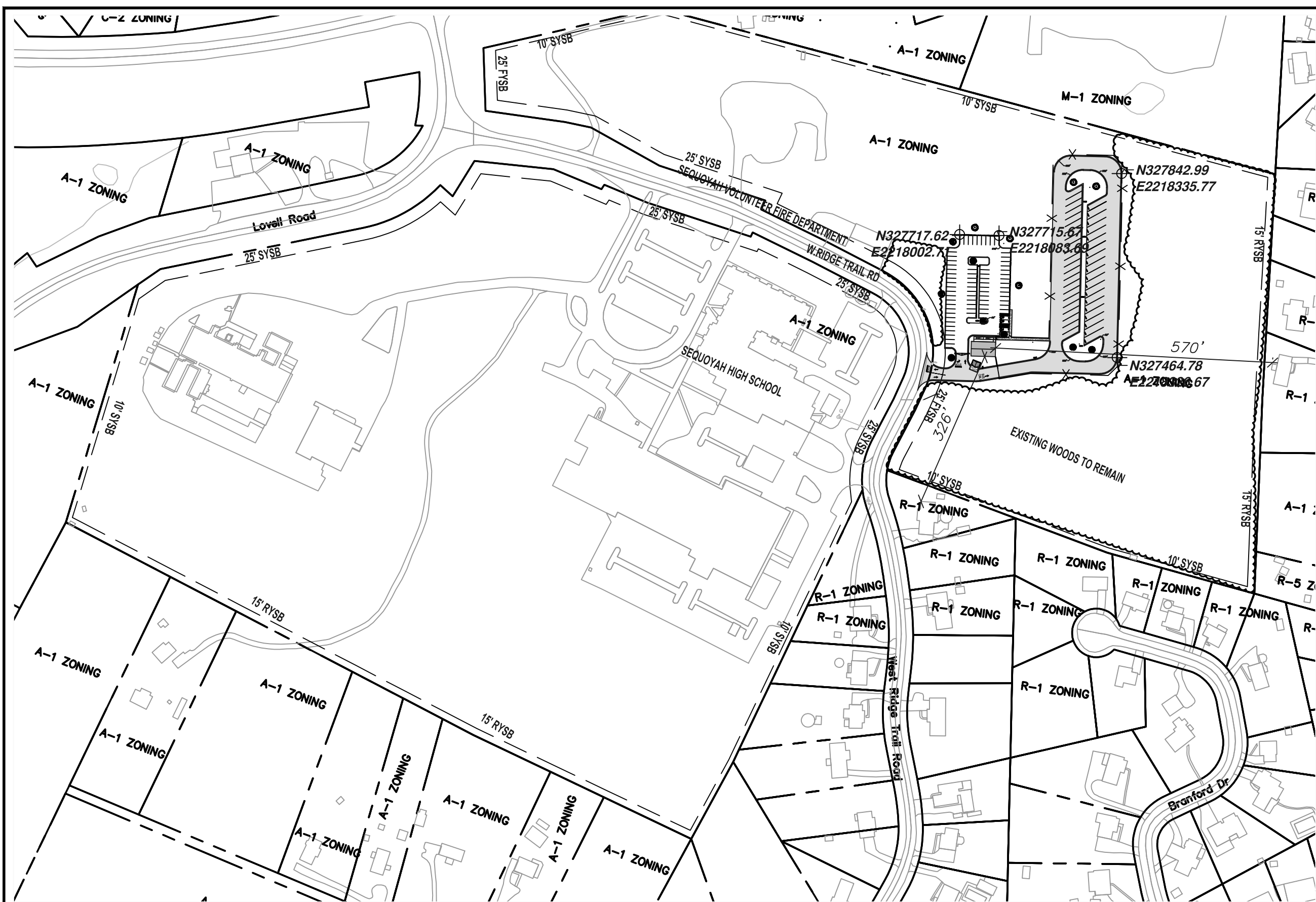
3.02 INSTALLATION

- A. Posts
 - 1. Minimum post hole diameter three times outside post diameter or 10 inches, whichever is larger.
 - 2. Minimum post hole depth below grade.
 - a. Line posts: 3 feet.
 - b. Corner posts, end posts, and gate posts: 3 1/2 feet.
 - 3. Set posts 3 inches above hole bottom.
 - 4. Set post plumb to 1/4 inch in 10 feet.
 - 5. Fill hole with concrete to 2 inches above grade.
 - 6. Crown surface of concrete to slope away from posts.
 - 7. Brace each gate and terminal post with a horizontal pipe brace and an adjustable truss extending to an adjacent line post.
 - 8. Brace corner posts in both directions.
- B. Fence Fabric
 - 1. Install top rails and tension wires before the fabric.
 - 2. Install tension wires approximately 6 inches above grade and attach to each post and securely anchor to terminal or gate posts.
 - 3. Position bottom of fabric approximately 2 inches above ground at each post.
 - 4. Join ends of fabric by weaving with single strand of fabric wire to form continuous mesh pattern.
 - 5. Attach fabric to outside of line posts using wire ties or clips, spacing not to exceed 15 inches on centers.
 - 6. Attach top edge of fabric to top rail using wire ties or clips, spacing not to exceed 24 inches on centers.
 - 7. Attach bottom edge of fabric to bottom tension wire using wire ties or clips, spacing not to exceed 24 inches on centers.
 - 8. Thread stretcher bar through fabric and anchor to the post at 15 inch centers by positive mechanical means.
- C. Gates
 - 1. Install gates plumb and level to 1/4 inch in 10 feet.
 - 2. Install ground-set items in concrete.
 - 3. Adjust hardware to provide smooth operation.
 - 4. Brace and reinforce as necessary to prevent sagging.

3.03 ADJUST AND CLEAN

- A. Adjust brace rails and tension rods for rigid installation.
- B. Tighten hardware, fasteners and accessories.

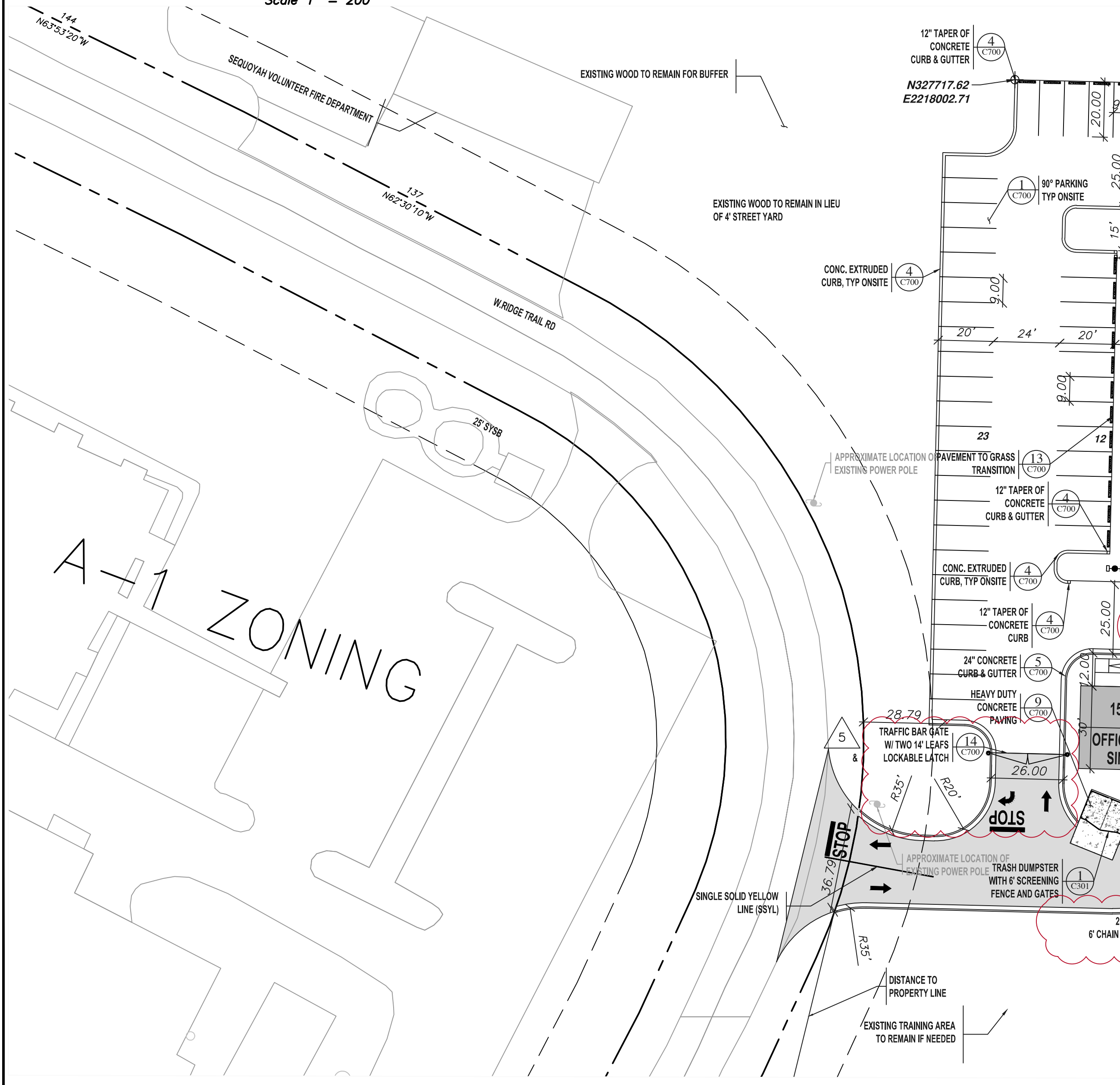
END OF SECTION



VICINITY MAP

Scale 1" = 200'

M-1 ZONING



Scale 1" = 30'

SITE INFORMATION:
 SITE AREA: 2.46 ACRES
 SITE IS ZONED: A-1
 LAND DISTURBANCE AREA: 4.524 ACRES
 TAX MAP PARCEL #: 026M D 014
 BUILDING AREA: 1500± SF
 STREET ADDRESS: 9517 W RIDGE TRAIL RD
 FRONT YARD SETBACK: 25 FEET
 SIDE YARD SETBACK: 10 FEET
 REAR YARD SETBACK: 15 FEET
 SANITARY SEWER AVAILABILITY: EX. PRIVATE GRINDER PUMP LOCATED IN SCHOOL PROPERTY
 POTABLE WATER: EX. WATER LINE LOCATED IN SCHOOL PROPERTY
 STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING SWALE ON SITE
 NUMBER OF EMPLOYEES: 2
 NUMBER OF BUS DRIVERS: 40
 NUMBER OF BUS ATTENDANTS: 30
 REGULAR PARKING SPACES: 21
 REGULAR H/CAP SPACES: 0
 VAN ACCESSIBLE H/CAP SPACES: 3
 LARGE BUS PARKING: 16
 SMALL BUS PARKING: 24
 FLOODZONE: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SCALED FROM THE FIRM MAP COMMUNITY-PANEL NUMBER 47055C02310 MAP REVISED FEBRUARY 3, 2016.
 PROPERTY OWNER: HAMILTON COUNTY DEPARTMENT OF EDUCATION
 3074 HICKORY VALLEY RD
 CHATTANOOGA, TN 37421
 PHONE NO.: (423)498-7020

LEGEND

- Ex. Curb
- Ex. Centerline
- Ex. Fence
- EX W - Ex. Water Line
- EX FL - Ex. Fire Line
- EX IRR - Ex. Irrigation Line
- EX SD - Ex. Storm Drainage Line
- EX SS - Ex. Sanitary Sewer Line
- EX FM - Ex. Sanitary Sewer Force Main
- EX G - Ex. Gas Line
- EX OHE - Ex. Overhead Elect. or Utility Line
- EX UGE - Ex. Underground Electrical
- EX UGFO - Ex. Underground Fiber Optics
- EX UGT - Ex. Underground Telephone

PROPERTY LINE

- BUILDING LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOT LINE
- ROW LINE
- CURB
- CENTERLINE
- PROP. FENCE LINE

OHE - PROP. OVERHEAD ELECT. OR UTILITY LINE

ABBREVIATIONS:
 SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
 L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
 FFB - FRONT YARD SETBACK - SEE YARD SETBACK / RFB - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL
 SDD / SDD - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DG - ROOF DOWNSPOUT CONNECTION
 SSWL - SINGLE SOLID WHITE LINE, DSWL - DOUBLE SOLID YELLOW LINE
 SOWL - SINGLE DASHED WHITE LINE

AVAILABLE MINIMUM LEFT TURN SIGHT DISTANCE= 337'
 AVAILABLE MINIMUM RIGHT TURN SIGHT DISTANCE= 300'
 FOR SCHOOL HOURS, 15 MPH SPEED LIMIT:
 REQUIRED MINIMUM LEFT TURN SITE DISTANCE= 170'
 REQUIRED MINIMUM RIGHT TURN SITE DISTANCE= 145'
 FOR NON SCHOOL HOURS, 30 MPH SPEED LIMIT:
 REQUIRED MINIMUM LEFT TURN SITE DISTANCE= 335'
 REQUIRED MINIMUM RIGHT TURN SITE DISTANCE= 290'

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	12/12/22	AE	CITY COMMENTS
2	01/06/23	JP	CITY COMMENTS
3	02/04/23	JP	CITY COMMENTS
4	02/04/23	JP	OWNER COMMENTS
5	03/03/23	JP	ADDENDUM #1
6			
7			
8			
9			
10			
11			

HCDE Bus Barn
 at
 9517 W Ridge Trail Road
 for
 HAMILTON CO
 DEPT. EDUCATION
 3074 Hickory Valley Rd
 Chattanooga, TN 37421
 423-498-7020



March Adams & Associates
 Consulting Engineers

310 Dodds Ave.
 P.O. Box 3689
 Chattanooga, Tennessee 37404
 PH: (423)698-6675



DRAWN: AE
 CHECKED: JP
 JOB No. 21330
 DATE: 03/03/2023

C100

SITE STAKING PLAN

MAA CIVIL CONTACT: JOSEPH PARKS, P.E.
 DIRECT LINE: 423-664-1482

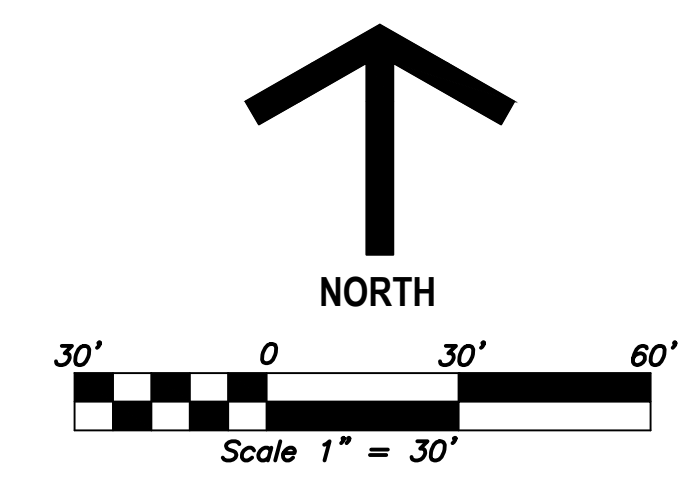


LEGEND

	Ex. Curb
	Ex. Centerline
	Ex. Fence
	Ex. Water Line
	Ex. Fire Line
	Ex. Irrigation Line
	Ex. Storm Drainage Line
	Ex. Sanitary Sewer Line
	Ex. Sanitary Sewer Force Main
	Ex. Swale Centerline
	Ex. Ditch Centerline
	Ex. Gas Line
	Ex. Overhead Elect. or Utility Line
	Ex. Underground Electrical
	Ex. Underground Fiber Optics
	Ex. Underground Telephone
	PROPERTY LINE
	LANDSCAPE BUFFER LINE
	LOT LINE
	LOC
	PROP. LIMITS OF CONSTRUCTION

ABBREVIATIONS:
 SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
 WS - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
 LA BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
 FOSH - FRONT YARD SETBACK / SWS - SIDE YARD SETBACK / RYSH - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TG - FINISH GRADE AT TOP OF RETAINING WALL
 BG - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL
 SDOD / SDCD - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION
 SSWL - SINGLE SOLID WHITE LINE, DSWL - DOUBLE SOLID YELLOW LINE
 SOWL - SINGLE DASHED WHITE LINE

SPECIAL NOTE: EXISTING UNDERGROUND UTILITIES AS SHOWN ARE APPROXIMATE. EXISTING UNDERGROUND UTILITIES (NOT SHOWN ON THESE DRAWINGS) MAY BE PRESENT IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EXCAVATION. SHOULD THE CONTRACTOR UNCOVER UNKNOWN UTILITIES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE SOURCE AND DISCHARGE OF THE UNKNOWN UTILITIES AND CONTACT THE OWNER AND ENGINEER PRIOR TO CONTINUING CONSTRUCTION.



MAA CIVIL CONTACT: JOSEPH PARKS, P.E.
 DIRECT LINE: 423-664-1482

REVISIONS

NO.	DESCRIPTION	DATE

HCDE Bus Barn
 at
 9517 W Ridge Trail Road

for
 HAMILTON CO
 DEPT. EDUCATION
 3074 Hickory Valley Rd
 Chattanooga, TN 37421
 423-498-7020



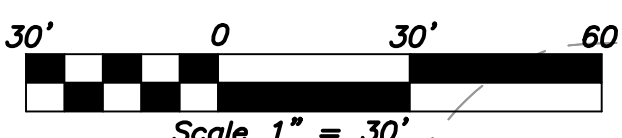
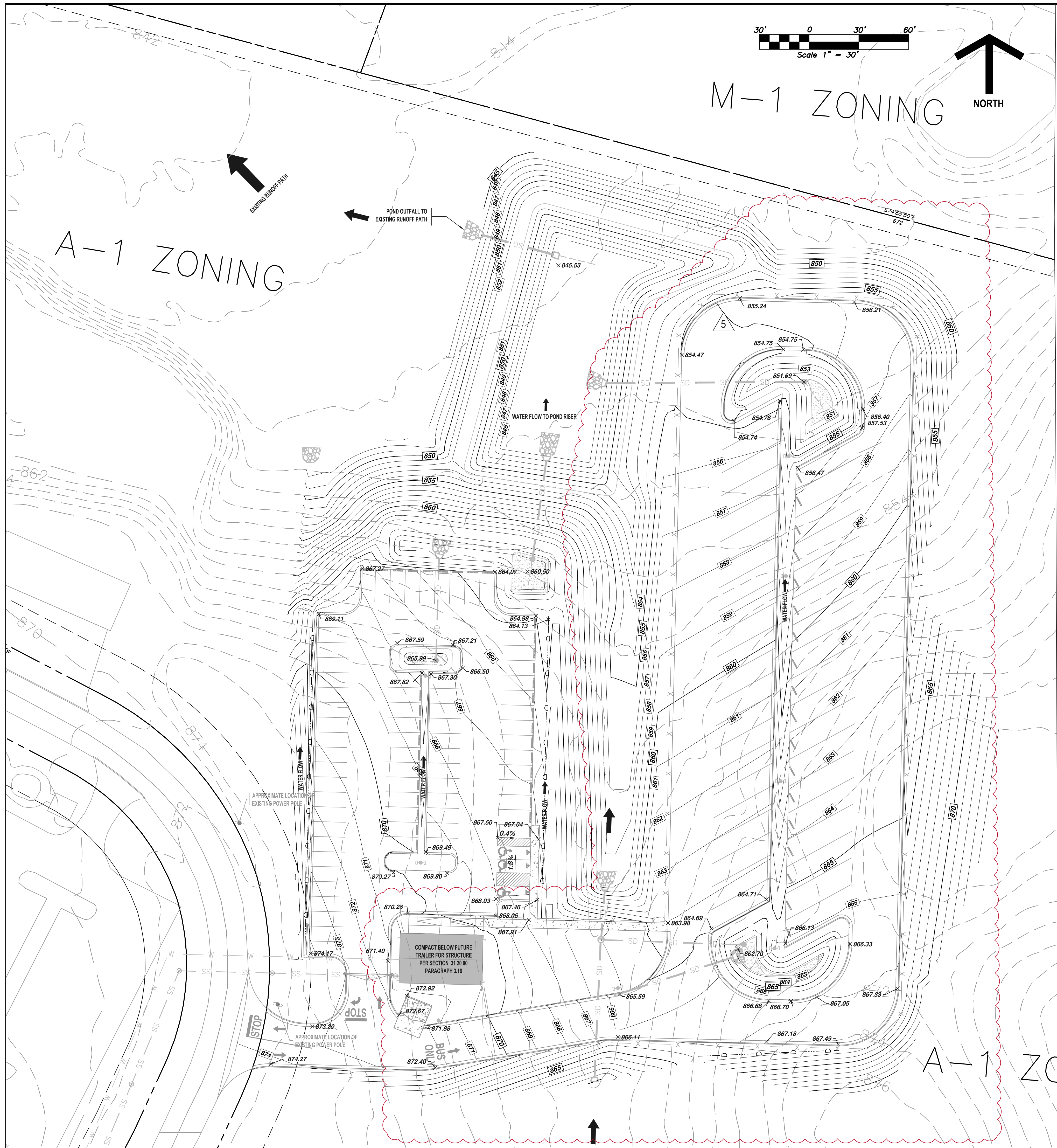
March Adams & Associates
 Consulting Engineers
 310 Dodds Ave.
 P.O. Box 3689
 Chattanooga, Tennessee 37404
 PH: (423)698-6675



DRAWN:	AE
CHECKED:	JP
JOB No.	21330
DATE:	03/03/2023

C200
 EXISTING CONDITIONS
 AND DEMOLITION
 PLAN

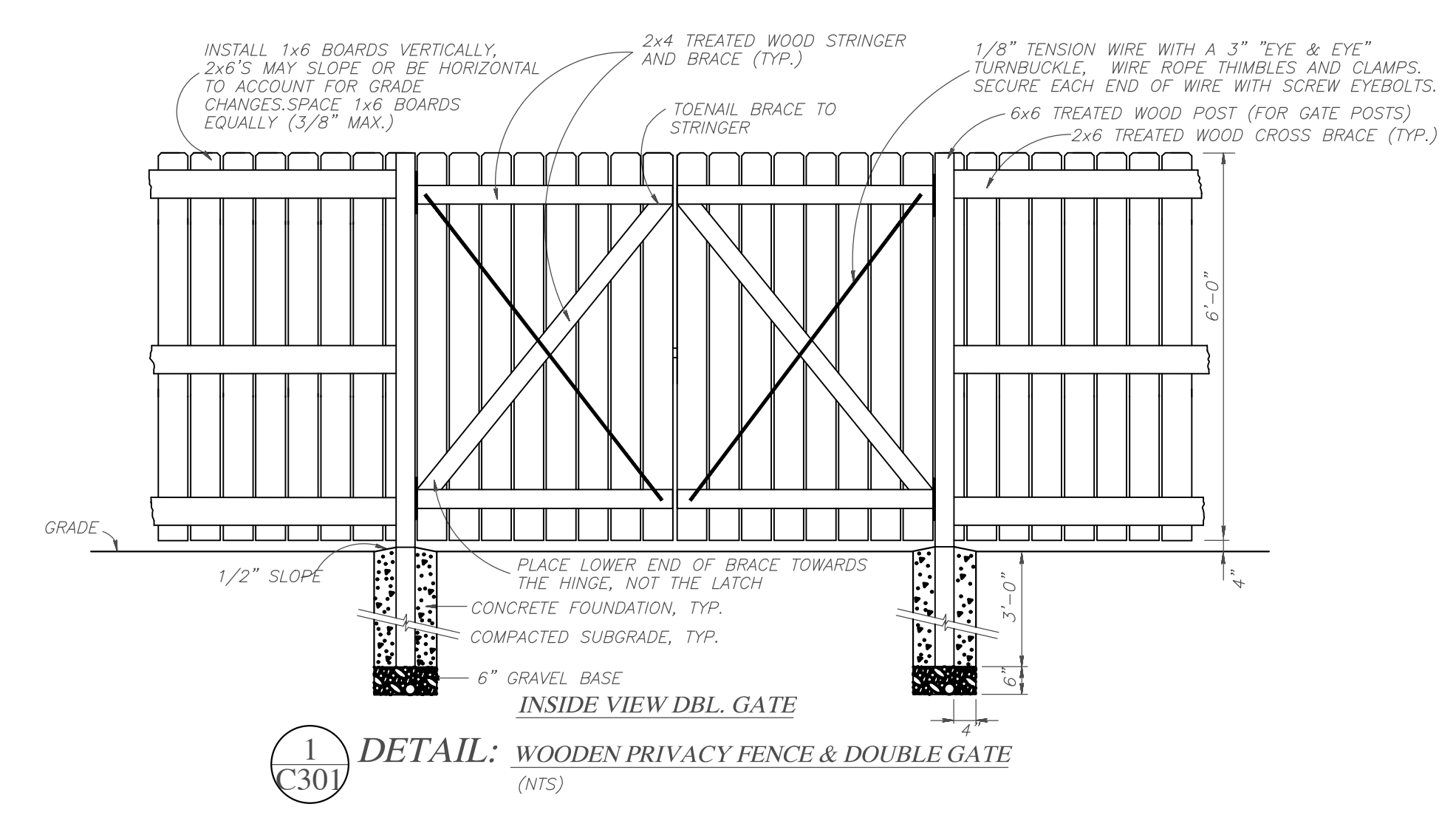
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M-1 ZONING

NORTH

A-1 ZONING



1 C301

NOTES

- SEE SHEET C000 FOR GENERAL AND GRADING AND DRAINAGE NOTES.
- CROSS SLOPES OF SIDEWALKS NOT TO EXCEED 2.00% SLOPE.
- ANY EXCAVATED SLOPE 3:1 OR STEEPER IS TO BE STABILIZED WITHIN 7 DAYS.
- CONTRACTOR SHALL NOTIFY SURVEYOR AND COUNTY STORM WATER INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY COVER PLACED ON UNDERGROUND SYSTEMS. FAILURE TO DO SO MAY RESULT IN RE-EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A STORM WATER AS-BUILT (STAMPED BY A LICENSED SURVEYOR) AT THE CLOSE OUT OF PROJECT. AS-BUILT DRAWINGS SHALL MEET THE CONDITIONS BELOW, FROM HAMILTON COUNTY WATER QUALITY DEPT.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST COMPLY WITH THE CURRENT EDITION OF THE TN EROSION & SEDIMENT CONTROL MANUAL.

LEGEND

Ex. Curb	---
Ex. Centerline	---
Ex. Fence	---
Ex. Water Line	---
Ex. Fire Line	---
Ex. Irrigation Line	---
Ex. Storm Drainage Line	---
Ex. Sanitary Sewer Line	---
Ex. Sanitary Sewer Force Main	---
Ex. Swale Centerline	---
Ex. Ditch Centerline	---
Ex. Gas Line	---
Ex. Overhead Elect. or Utility Line	---
Ex. Underground Electrical	---
Ex. Underground Fiber Optics	---
Ex. Underground Telephone	---
PROPERTY LINE	
BUILDING LINE	---
EASEMENT LINE	---
BUILDING SETBACK LINE	---
LANDSCAPE BUFFER LINE	---
LOT LINE	---
ROW LINE	---
CURB	---
CENTERLINE	---
PROP. FENCE LINE	---
PROPOSED SWALE CENTERLINE	---
PROPOSED DITCH CENTERLINE	---
PROP. WATER LINE	---
PROP. FIRE LINE	---
PROP. IRRIGATION LINE	---
PROP. GAS LINE	---
PROP. STORM DRAINAGE LINE	---
PROP. SANITARY SEWER LINE	---
PROP. SANITARY SEWER FORCE MAIN	---
PROP. OVERHEAD ELECT. OR UTILITY LINE	---
PROP. UNDERGROUND ELECTRICAL	---
PROP. UNDERGROUND FIBER OPTICS	---
PROP. UNDERGROUND TELEPHONE	---

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 FTE - FINISHED FLOOR ELEVATION.
 TW - FINISH GRADE AT TOP OF RETAINING WALL.
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 SDCO / SSCO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT.
 CS - ROOF DOWNSPOUT CONNECTION.
 SSWL - SINGLE SOLID WHITE LINE, DSYL - DOUBLE SOLID YELLOW LINE.
 SCSL - SINGLE DASHED WHITE LINE.

Hamilton County Water Quality Storm Water As-Built/Record Drawing Requirement List

Prior to final acceptance by the County Engineer and issuance of any Certificate of Occupancy or Final Plan Approval, all new developments, redevelopments, and/or additions shall submit an inventory of the constructed stormwater drainage system, whether public or private, to the Hamilton County Water Quality Program in electronic format. Electronic As-Built drawings shall be submitted in AutoCAD and .pdf format and shall show the approved and constructed layout of the stormwater systems at the associated site. The as-built drawing shall include all stormwater features on the development, whether new or existing, including the outfall to the County drainage system (ex: catch basins, conduits, hydrologic features including ponds, streams, culvert inlets and outfalls, and all pervious surfaces, etc.).

Certain engineered water quality conveyances such as engineered swales and grass filter strips have a required slope and cross section to give maximum water quality benefits for the area and will therefore also require as-built cross sections to determine if they are built per designed specifications.

As-Built Drawings shall at a minimum comply with the following items:

- A registered professional engineer and surveyor will certify that the information furnished is a true and complete representation of the improvements that were constructed by the developer.
- The registered professional engineer shall certify that the information reflects the original design or is an approved substitute for the original design by completing the As-Built Detention Facility Engineer's Certification Form (Attached).
- The As-Built drawings shall be furnished in electronic format (both an AutoCAD R13 or greater and .pdf file) and shall be the true and accurate location and elevation of the structures shown, with a positional tolerance of 0.07 feet horizontal and 0.14 feet vertical.
- English units and NAD 83 State Plane co-ordinates shall be used. ASCII format may be used if the table is included in the drawing.
- All drainage structures and manholes shall be located by the center of the structure or the manhole cover when fully seated.
- Drainage features (including drainage manholes) shall at a minimum include the following:
 - Drainage Structure Label (ex: oil skimmer, water quality unit type/model, etc.);
 - Northing, Easting, and Rim Elevation;
 - Invert Elevations;
 - Size, Material, and Direction of flow for each pipe entering and leaving the drainage features;
 - Detail drawings of water quality features including, but not limited to, profiles, contours, and elevations (ex: bio-retention areas, swales, grass filter strips, etc.).

REVISIONS

NO.	DATE	DESCRIPTION
1	03/03/2023	ISSUED FOR PERMITS
2	03/03/2023	ISSUED FOR PERMITS
3	03/03/2023	ISSUED FOR PERMITS
4	03/03/2023	ISSUED FOR PERMITS

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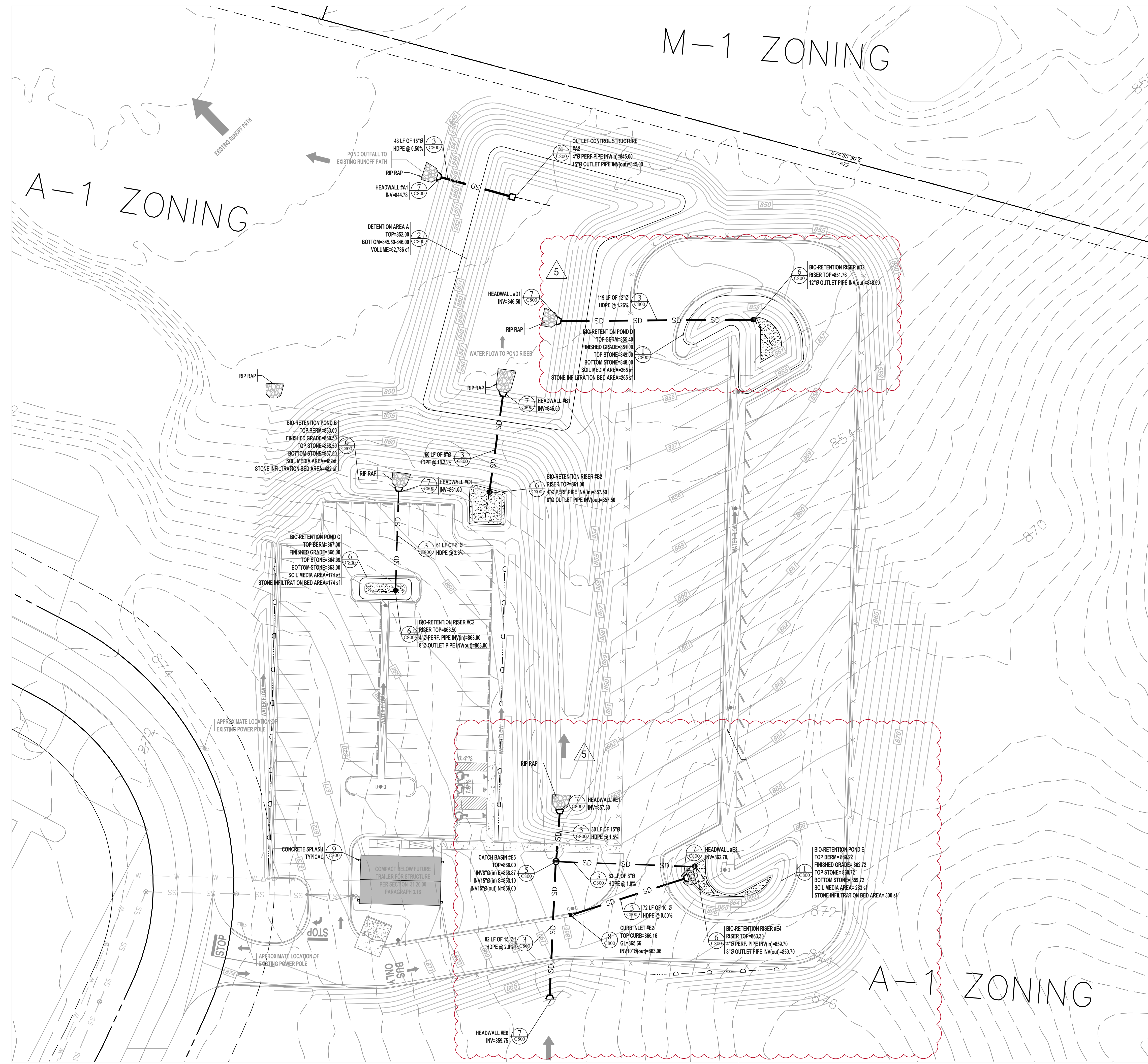
DRAWN: AE
 CHECKED: JP
 JOB No. 21330
 DATE: 03/03/2023

C301

SITE GRADING
 PLAN

M-1 ZONING

A-1 ZONING



LEGEND

---	Ex. Curb
---	Ex. Centerline
---	Ex. Fence
---	Ex. Water Line
---	Ex. Fire Line
---	Ex. Irrigation Line
---	Ex. Storm Drainage Line
---	Ex. Sanitary Sewer Line
---	Ex. Sanitary Sewer Force Main
---	Ex. Swale Centerline
---	Ex. Ditch Centerline
---	Ex. Gas Line
---	Ex. Overhead Elect. or Utility Line
---	Ex. Underground Electrical
---	Ex. Underground Fiber Optics
---	Ex. UGT Telephone

PROPERTY LINE

---	BUILDING LINE
---	EASEMENT LINE
---	BUILDING SETBACK LINE
---	LANDSCAPE BUFFER LINE
---	LOT LINE
---	ROW LINE
---	CURB
---	CENTERLINE
---	PROP. FENCE LINE

PROPOSED

---	PROPOSED SWALE CENTERLINE
---	PROPOSED DITCH CENTERLINE
---	PROP. WATER LINE
---	PROP. FIRE LINE
---	PROP. IRRIGATION LINE
---	PROP. GAS LINE
---	PROP. STORM DRAINAGE LINE
---	PROP. SANITARY SEWER LINE
---	PROP. SANITARY SEWER FORCE MAIN
---	PROP. OVERHEAD ELECT. OR UTILITY LINE
---	PROP. UNDERGROUND ELECTRICAL
---	PROP. UNDERGROUND FIBER OPTICS
---	PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
 SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
 DS - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
 L/LA BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
 F/SB - FRONT YARD SETBACK / S/SB - SIDE YARD SETBACK / R/SB - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL
 S/SO - STORM DRAINAGE / S/SO - SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION
 SSW - SINGLE SOLID WHITE LINE, DSYL - DOUBLE SOLID YELLOW LINE
 SDWL - SINGLE DASHED WHITE LINE

REVISIONS

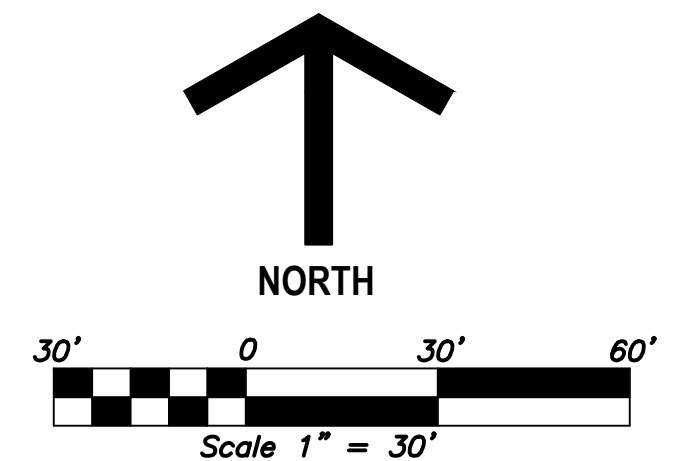
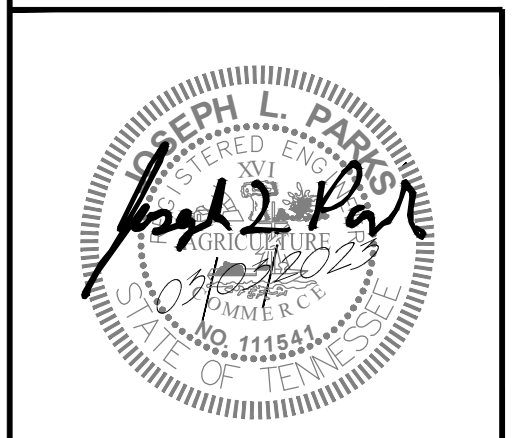
1		
2		
3		
4	LDP COMMENTS	
5	ADDITIONAL #1	

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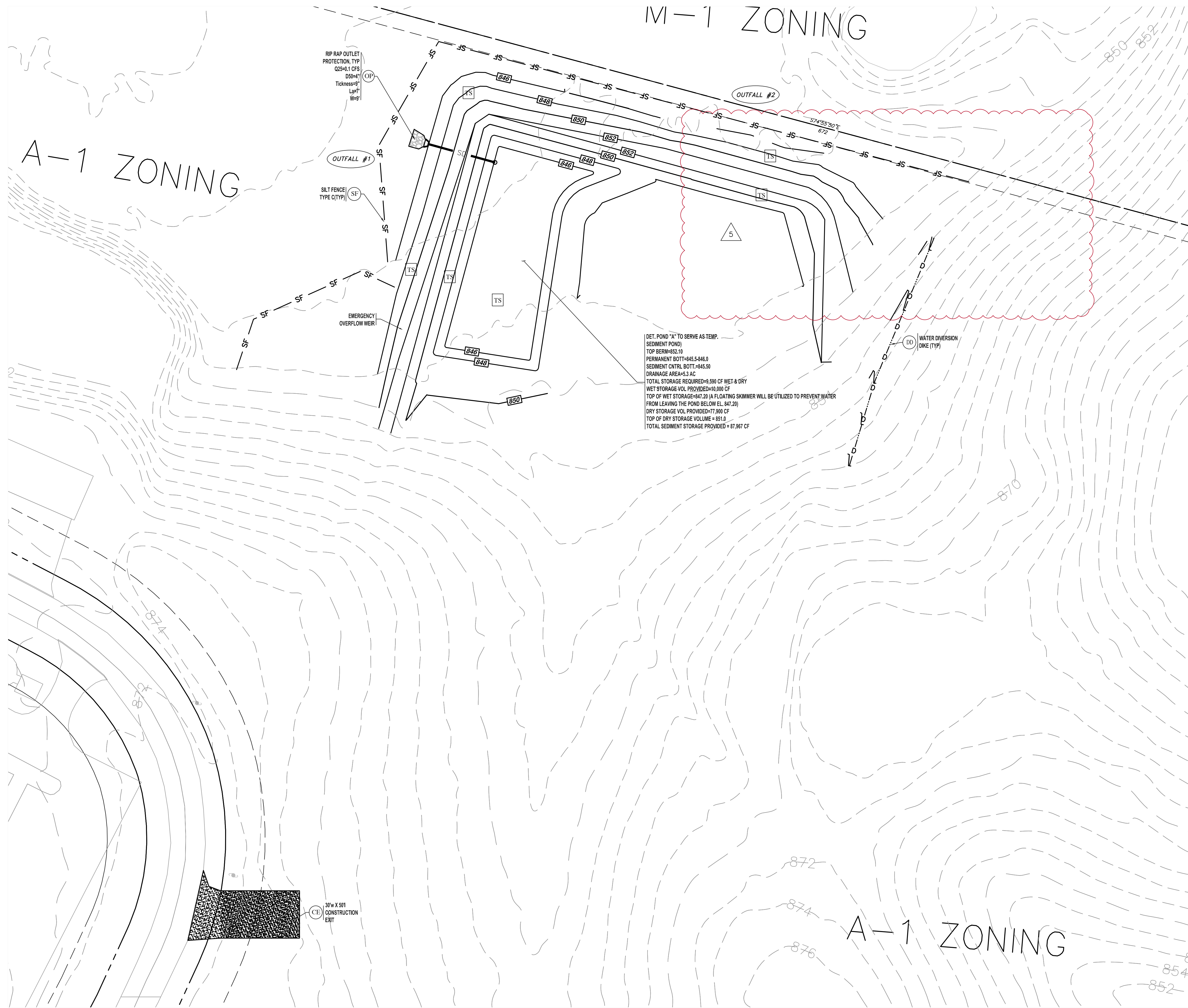
DRAWN: AE
 CHECKED: JP
 JOB No. 21330
 DATE: 03/03/2023

C302

SITE DRAINAGE PLAN

MAA CIVIL CONTACT: JOSEPH PARKS, P.E.
 DIRECT LINE: 423-684-1482

SEE SHEET C500 FOR ALL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS



DET. POND "A" TO SERVE AS TEMP. SEDIMENT POND.
 TOP BERM=852.10
 PERMANENT BOTT=845.5-846.0
 SEDIMENT CNTRL BOTT=845.50
 DRAINAGE AREA=3.3 AC
 TOTAL STORAGE REQUIRED=9,500 CF WET & DRY
 WET STORAGE VOL PROVIDED=10,000 CF
 TOP OF WET STORAGE=847.20 (A FLOATING SKIMMER WILL BE UTILIZED TO PREVENT WATER FROM LEAVING THE POND BELOW EL. 847.20)
 DRY STORAGE VOL PROVIDED=77,900 CF
 TOP OF DRY STORAGE VOLUME = 851.0
 TOTAL SEDIMENT STORAGE PROVIDED = 87,907 CF

LEGEND

- Ex. Curb
- Ex. Centerline
- Ex. Fence
- Ex. Water Line
- EX FL
- EX FL W
- EX FL
- EX IRR
- EX SD
- EX SS
- EX FM
- EX S
- EX D
- EX G
- EX OHE
- EX UGPE
- EX UGFO
- EX UGT

PROPERTY LINE

- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- LOT LINE

TF --- PROPOSED TREE PROTECTION

SF --- PROP. SILT FENCE OR SILT WADDLE

ABBREVIATIONS

- SSS - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
- DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
- WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
- L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
- TSB - FRONT YARD STRIP, SOB - SIDE YARD SETBACK / ROB-BEAR YARD SETBACK
- FFE - FINISHED FLOOR ELEVATION
- TM - FINISH GRADE AT TOP OF RETAINING WALL
- BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL
- SODD / SSOD - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
- DS - ROOF DOWNSPOUT CONNECTION
- SSWL - SINGLE SOLID WHITE LINE, DSYL - DOUBLE SOLID YELLOW LINE, SDWL - SINGLE DASHED WHITE LINE

REVISIONS

HCDE Bus Barn
 at
 9517 W Ridge Trail Road

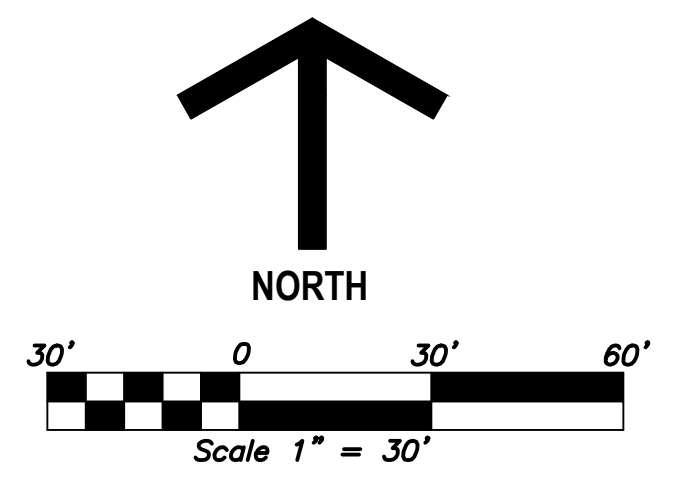
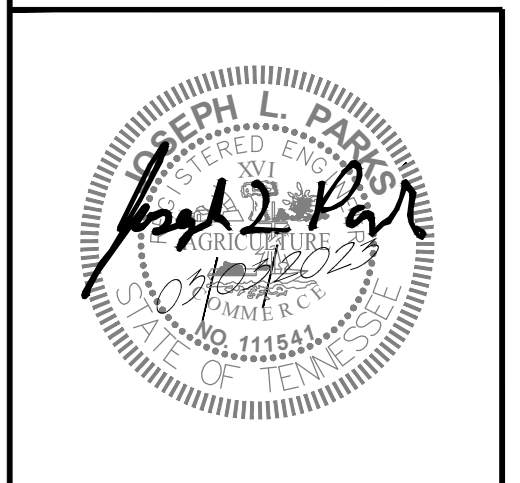
for

HAMILTON CO
 DEPT. EDUCATION
 3074 Hickory Valley Rd
 Chattanooga, TN 37421
 423-498-7020

MA & A

March Adams & Associates
 Consulting Engineers

310 Dodds Ave.
 P.O. Box 3689
 Chattanooga, Tennessee 37404
 PH: (423)698-6675



DRAWN: AE
 CHECKED: JP
 JOB No. 21330
 DATE: 03/03/2023

C501

SEDIMENT AND EROSION CONTROL PHASE I

SEE SHEET C500 FOR ALL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

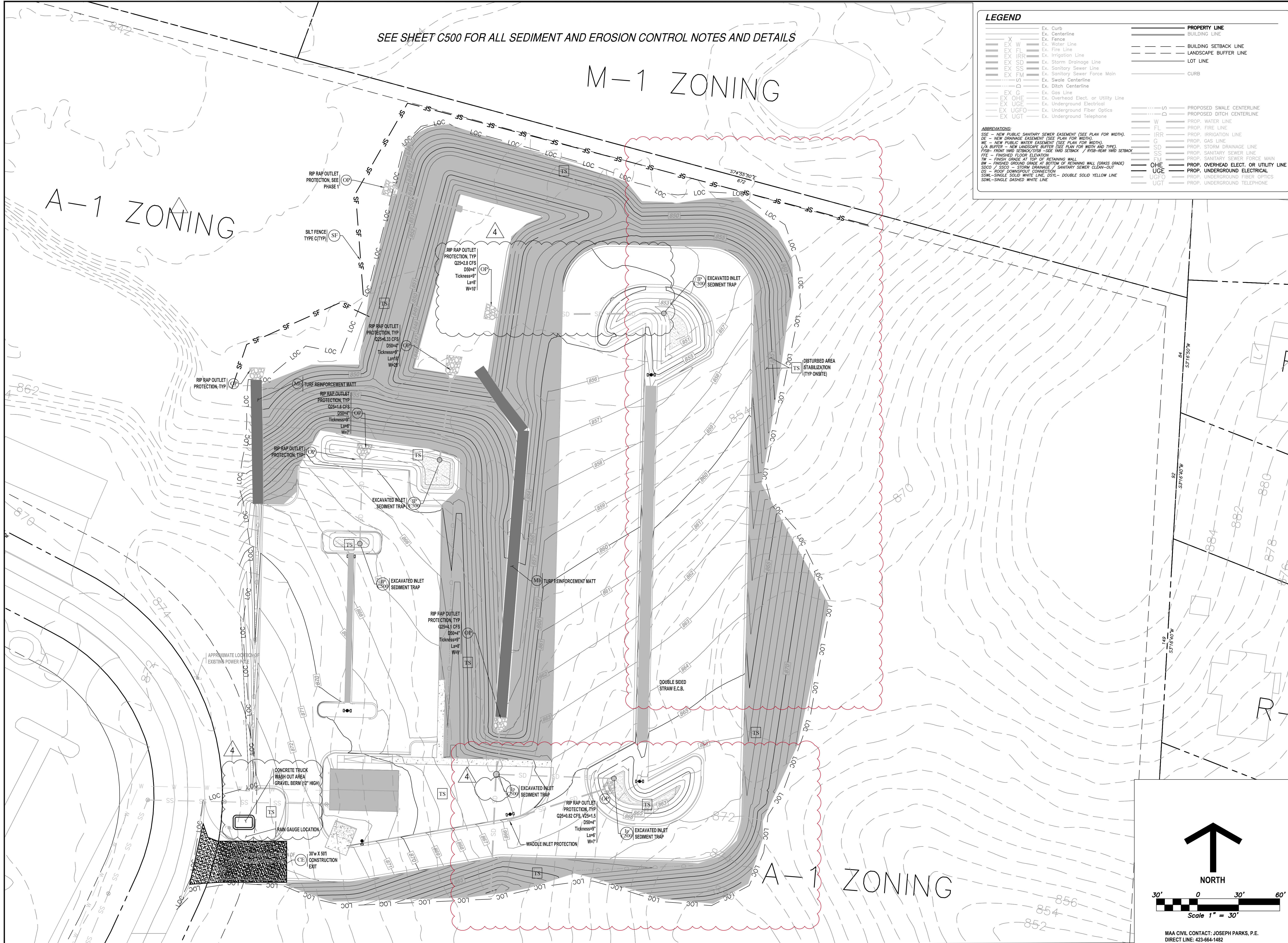
M-1 ZONING

A-1 ZONING

LEGEND

Ex. Curb	PROPERTY LINE
Ex. Centerline	BUILDING LINE
Ex. W	BUILDING SETBACK LINE
Ex. FL	LANDSCAPE BUFFER LINE
Ex. Fire Line	LOT LINE
Ex. IRR	CURB
Ex. Irrigation Line	
Ex. SD	PROPOSED SWALE CENTERLINE
Ex. Storm Drainage Line	PROPOSED DITCH CENTERLINE
Ex. SS	PROP. WATER LINE
Ex. Sanitary Sewer Line	PROP. FIRE LINE
Ex. Sanitary Sewer Force Main	PROP. IRRIGATION LINE
Ex. FM	PROP. GAS LINE
Ex. Swale Centerline	PROP. STORM DRAINAGE LINE
Ex. D	PROP. SANITARY SEWER FORCE MAIN
Ex. Ditch Centerline	PROP. STORM DRAINAGE LINE
Ex. G	PROP. OVERHEAD ELECT. OR UTILITY LINE
Ex. Gas Line	PROP. UNDERGROUND ELECTRICAL
Ex. OHE	PROP. UNDERGROUND FIBER OPTICS
Ex. UGE	PROP. UNDERGROUND TELEPHONE
Ex. UGFO	
Ex. UGT	

ABBREVIATIONS:
 SSC - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
 LVA BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
 FISH - FRONT YARD SETBACK / FISH - SIDE YARD SETBACK / FISH-REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
 SDOO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 CS - ROOF DOWNSPOUT CONNECTION
 SSW - SINGLE SOLID WHITE LINE, DSW - DOUBLE SOLID YELLOW LINE
 SSW - SINGLE DASHED WHITE LINE



REVISIONS

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4	LIP COMMENTS	
5	ADDITIONAL #	
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HCDE Bus Barn
 at
 9517 W Ridge Trail Road

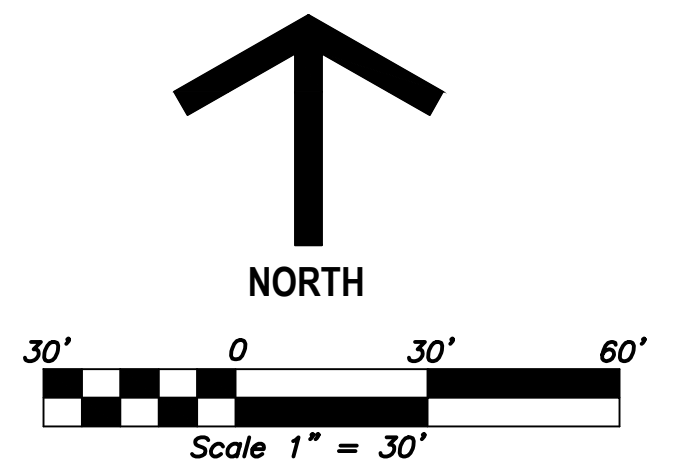
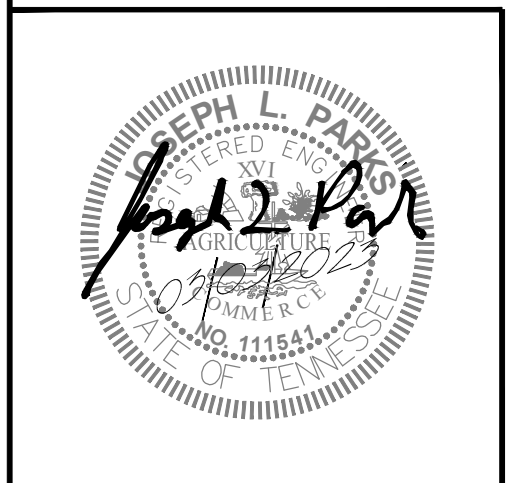
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 DATE: 03/03/2023

C502

SEDIMENT AND EROSION CONTROL PHASE II

SEE SHEET C500 FOR ALL SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

M-1 ZONING

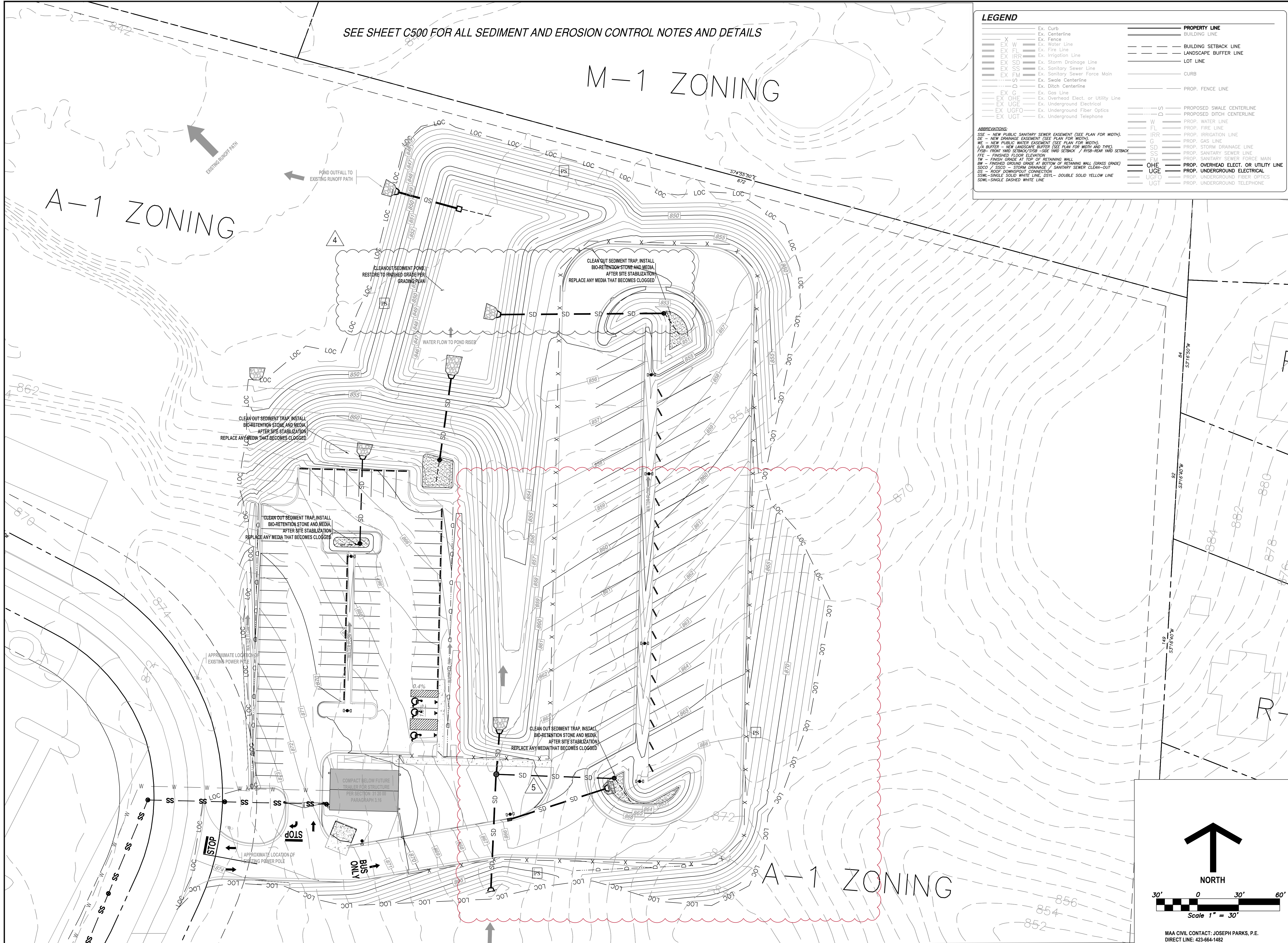
A-1 ZONING

LEGEND

— Ex. Curb	— PROPERTY LINE
— Ex. Centerline	— BUILDING LINE
— Ex. Water Line	— BUILDING SETBACK LINE
— Ex. Fire Line	— LANDSCAPE BUFFER LINE
— Ex. Irrigation Line	— LOT LINE
— Ex. Storm Drainage Line	— CURB
— Ex. Sanitary Sewer Line	— PROP. FENCE LINE
— Ex. Sanitary Sewer Force Main	— PROPOSED SWALE CENTERLINE
— Ex. Swale Centerline	— PROPOSED DITCH CENTERLINE
— Ex. Ditch Centerline	— W — PROP. WATER LINE
— Ex. Gas Line	— FL — PROP. FIRE LINE
— Ex. Overhead Elect. or Utility Line	— IRR — PROP. IRRIGATION LINE
— Ex. Underground Electrical	— G — PROP. GAS LINE
— Ex. Underground Fiber Optics	— SD — PROP. STORM DRAINAGE LINE
— Ex. Underground Telephone	— SS — PROP. SANITARY SEWER LINE
	— FM — PROP. SANITARY SEWER FORCE MAIN
	— OHE — PROP. OVERHEAD ELECT. OR UTILITY LINE
	— UGE — PROP. UNDERGROUND ELECTRICAL
	— UGFO — PROP. UNDERGROUND FIBER OPTICS
	— UGT — PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS

SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
 L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
 FISH - FRONT YARD SETBACK/STOP - SEE YARD SETBACK / RTSB-REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL (GRASS GRADE)
 BW - FINISHED GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
 SDOO / SDOO - STORM DRAINAGE, SANITARY SEWER CLEAN-OUT
 DS - ROCK DOWNSPOUT CONNECTION
 SSM - SINGLE SOLID WHITE LINE, DSYL - DOUBLE SOLID YELLOW LINE
 SSM - SINGLE DASHED WHITE LINE



REVISIONS

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HCDE Bus Barn
 at
 9517 W Ridge Trail Road

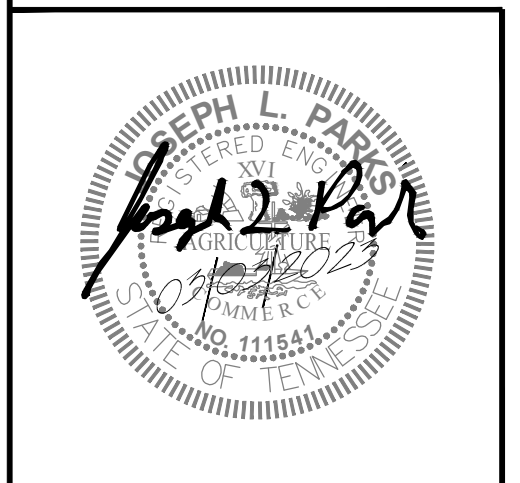
for

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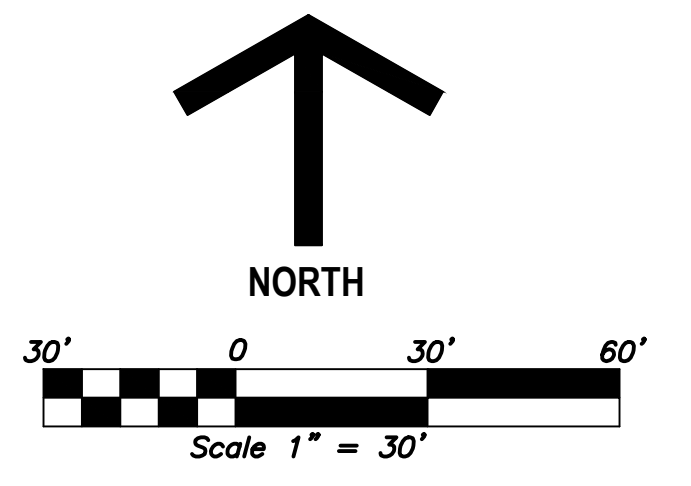
310 Dodds Ave.
 P.O. Box 3689
 Chattanooga, Tennessee 37404
 PH: (423)698-6675



DRAWN: AE
 CHECKED: JP
 JOB No. 21330
 DATE: 03/03/2023

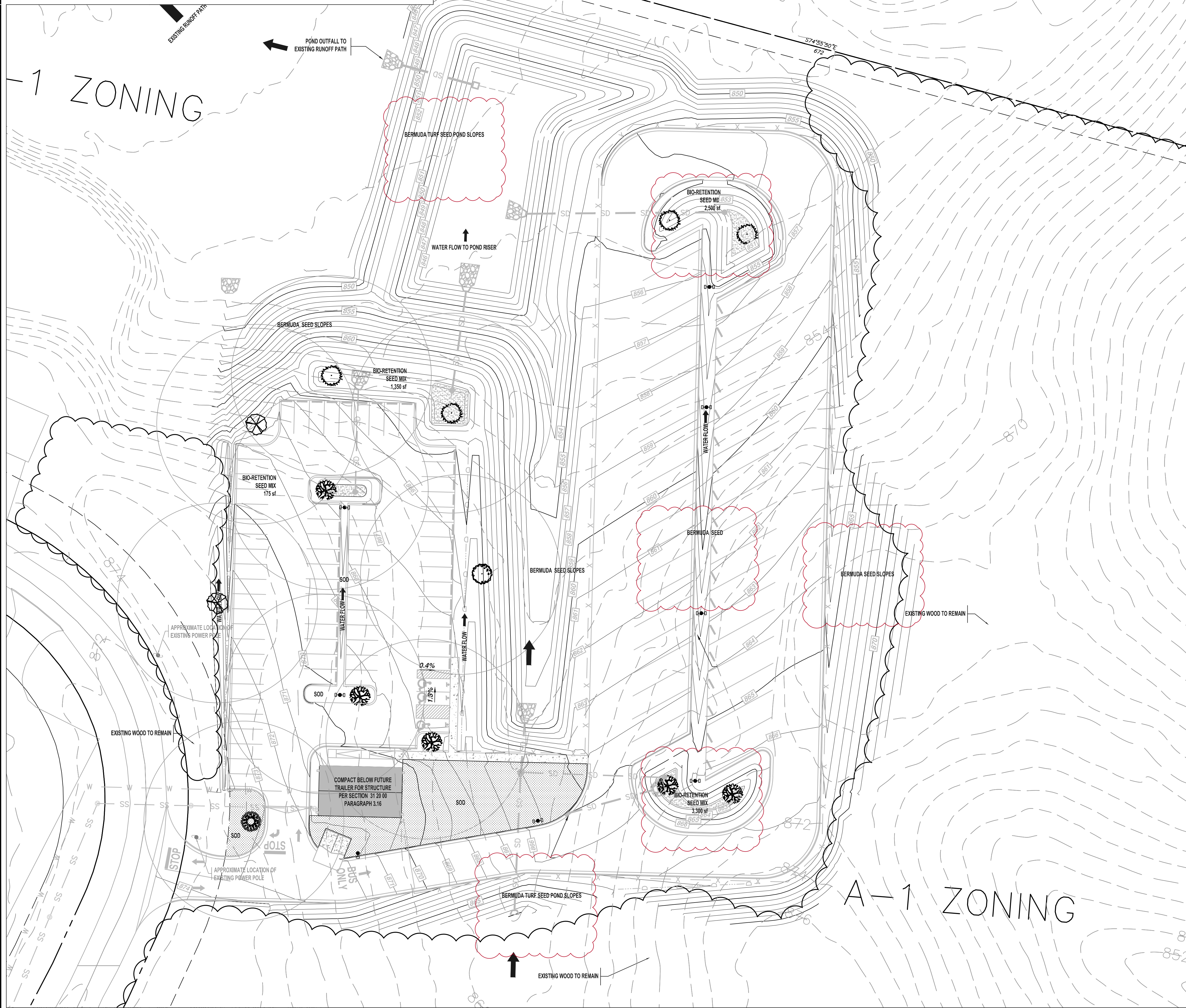
C503

SEDIMENT AND EROSION CONTROL PHASE III



MAA CIVIL CONTACT: JOSEPH PARKS, P.E.
 DIRECT LINE: 423-664-1482

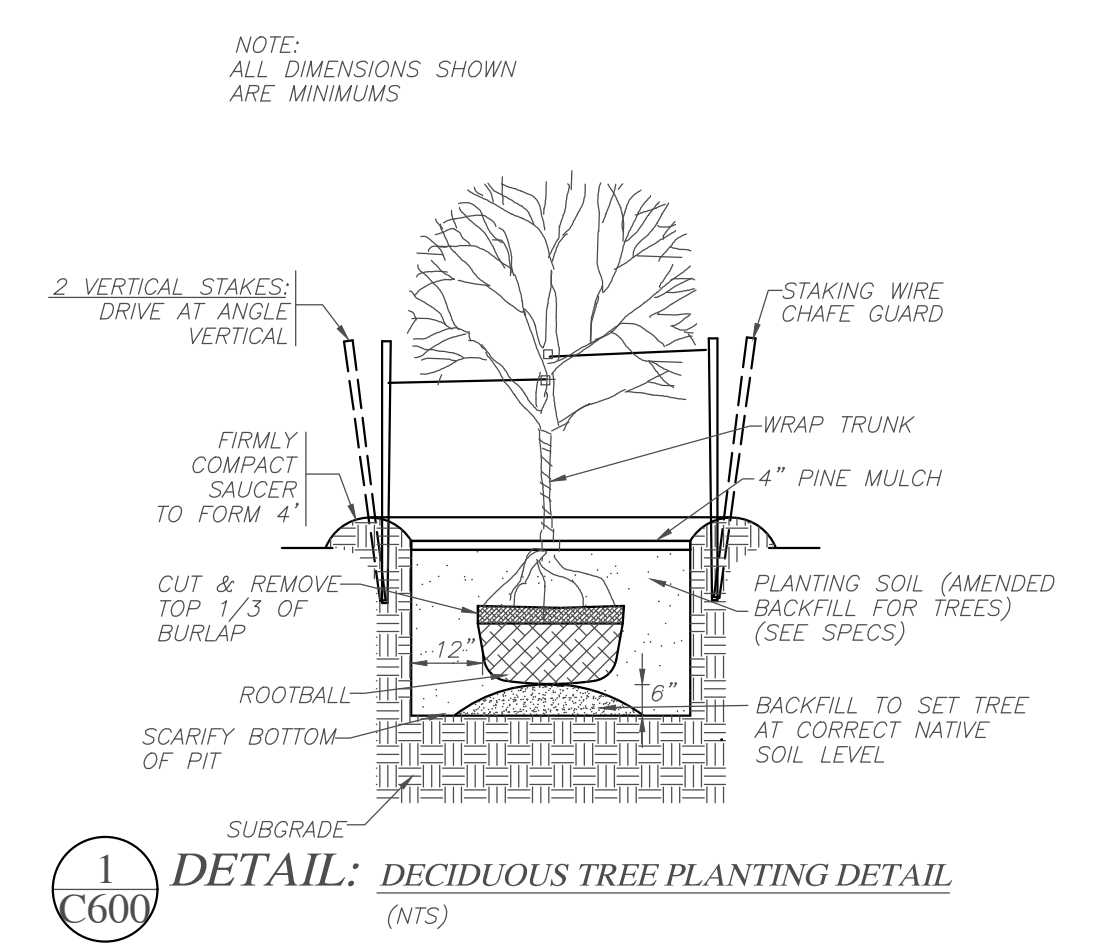
TREES SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CALIPER (DBH)	SPACING	REMARKS
	5	ACER RUBRUM	RED MAPLE	2"	AS SHOWN	'OCTOBER GLORY'
	1	GINKGO BILOBA	GINKGO	2"	AS SHOWN	FULL, SINGLE TRUNK
	2	QUERCUS PHellos	WILLOW OAK	2"	AS SHOWN	FULL, SINGLE TRUNK
	4	RIVER BIRCH	BETULA NIGRA	2"	AS SHOWN	FULL, SINGLE TRUNK
	1	FLOWERING DOGWOOD	CORNUS FLORIDA AND CULTIVARS	1.5"	AS SHOWN	FULL



LEGEND

	Ex. Curb
	Ex. Centerline
	Ex. Fence
	Ex. Water Line
	Ex. Fire Line
	Ex. Irrigation Line
	Ex. Storm Drainage Line
	Ex. Sanitary Sewer Line
	Ex. Sanitary Sewer Force Main
	Ex. Swale Centerline
	Ex. Ditch Centerline
	Ex. Gas Line
	Ex. Overhead Elect. or Utility Line
	Ex. Underground Electrical
	Ex. Underground Fiber Optics
	Ex. Underground Telephone
	PROPERTY LINE
	BUILDING LINE
	EASEMENT LINE
	BUILDING SETBACK LINE
	LANDSCAPE BUFFER LINE
	LOT LINE
	ROW LINE
	CURB
	CENTERLINE
	PROP. FENCE LINE
	PROPOSED TREE PROTECTION
	PROPOSED SWALE CENTERLINE
	PROPOSED DITCH CENTERLINE
	PROP. WATER LINE
	PROP. FIRE LINE
	PROP. IRRIGATION LINE
	PROP. GAS LINE
	PROP. STORM DRAINAGE LINE
	PROP. SANITARY SEWER LINE
	PROP. SANITARY SEWER FORCE MAIN
	PROP. OVERHEAD ELECT. OR UTILITY LINE
	PROP. UNDERGROUND ELECTRICAL
	PROP. UNDERGROUND FIBER OPTICS
	PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
 SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH)
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH)
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH)
 L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE)
 F/SB - FRONT YARD SETBACK, S/SB - SIDE YARD SETBACK, P/SB - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TM - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL
 SDOO / SSSO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION
 SOW - SINGLE SOLID WHITE LINE, DSWL - DOUBLE SOLID YELLOW LINE
 SOWL - SINGLE DASHED WHITE LINE



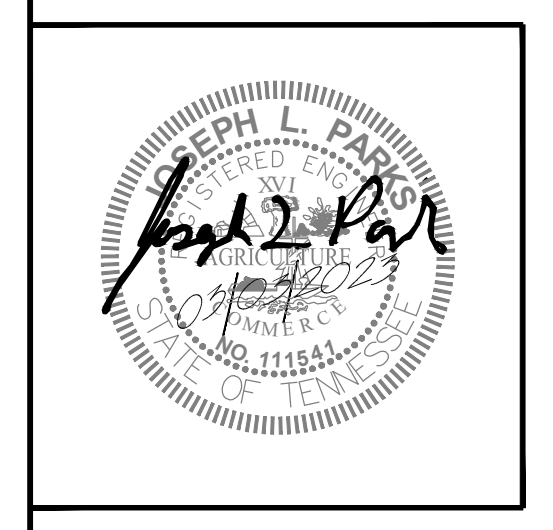
REVISIONS

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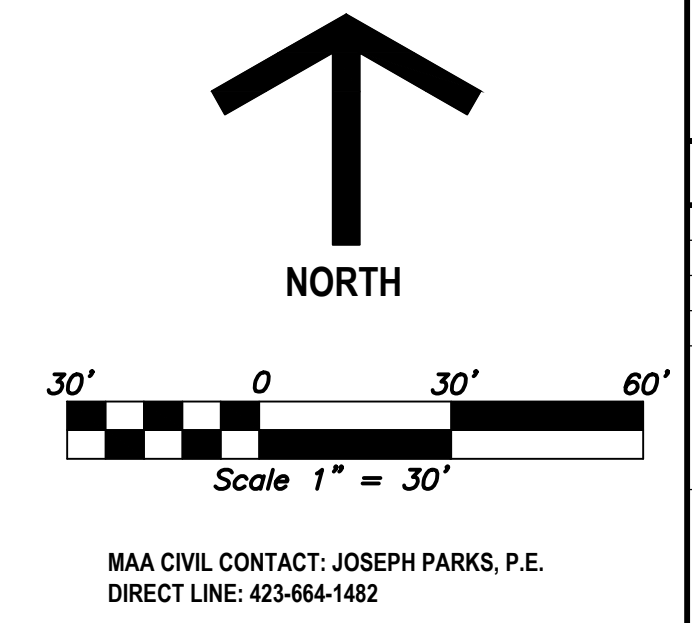
HCDE Bus Barn
 at
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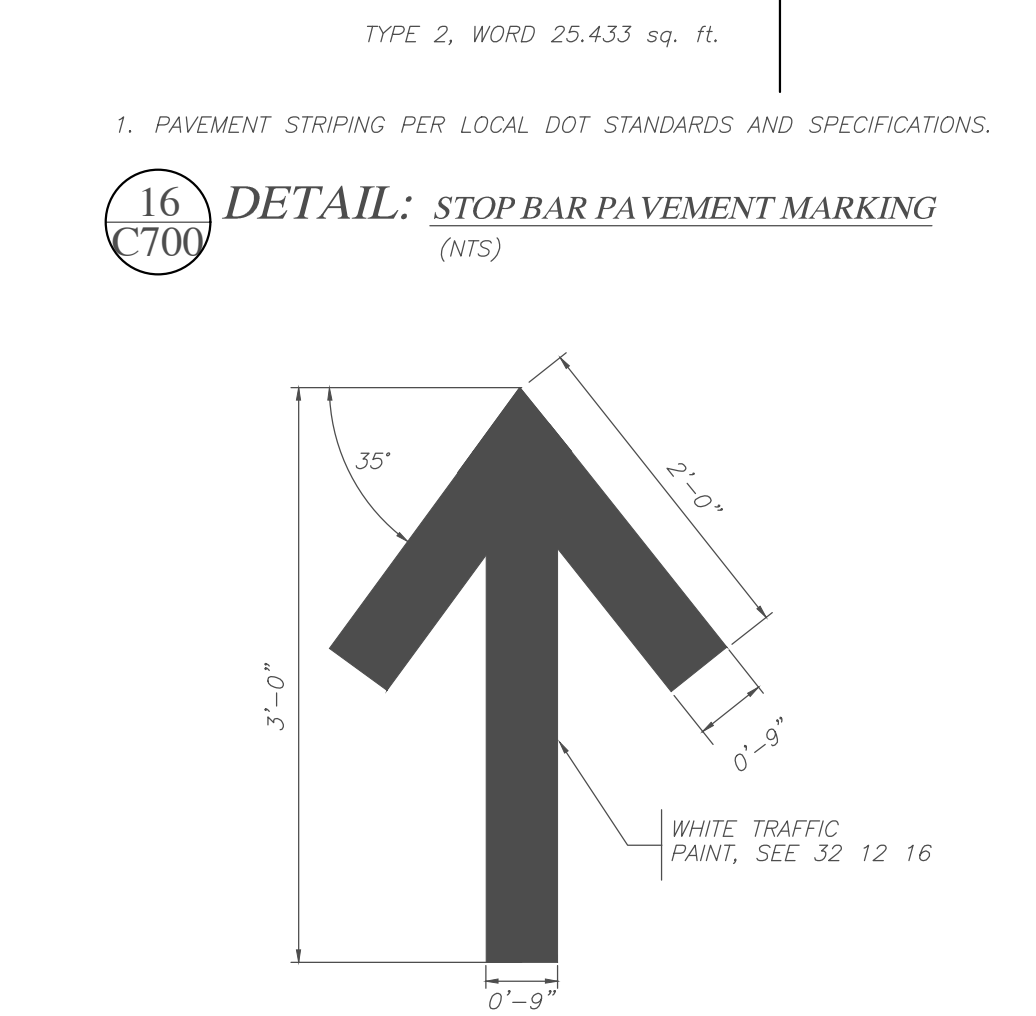
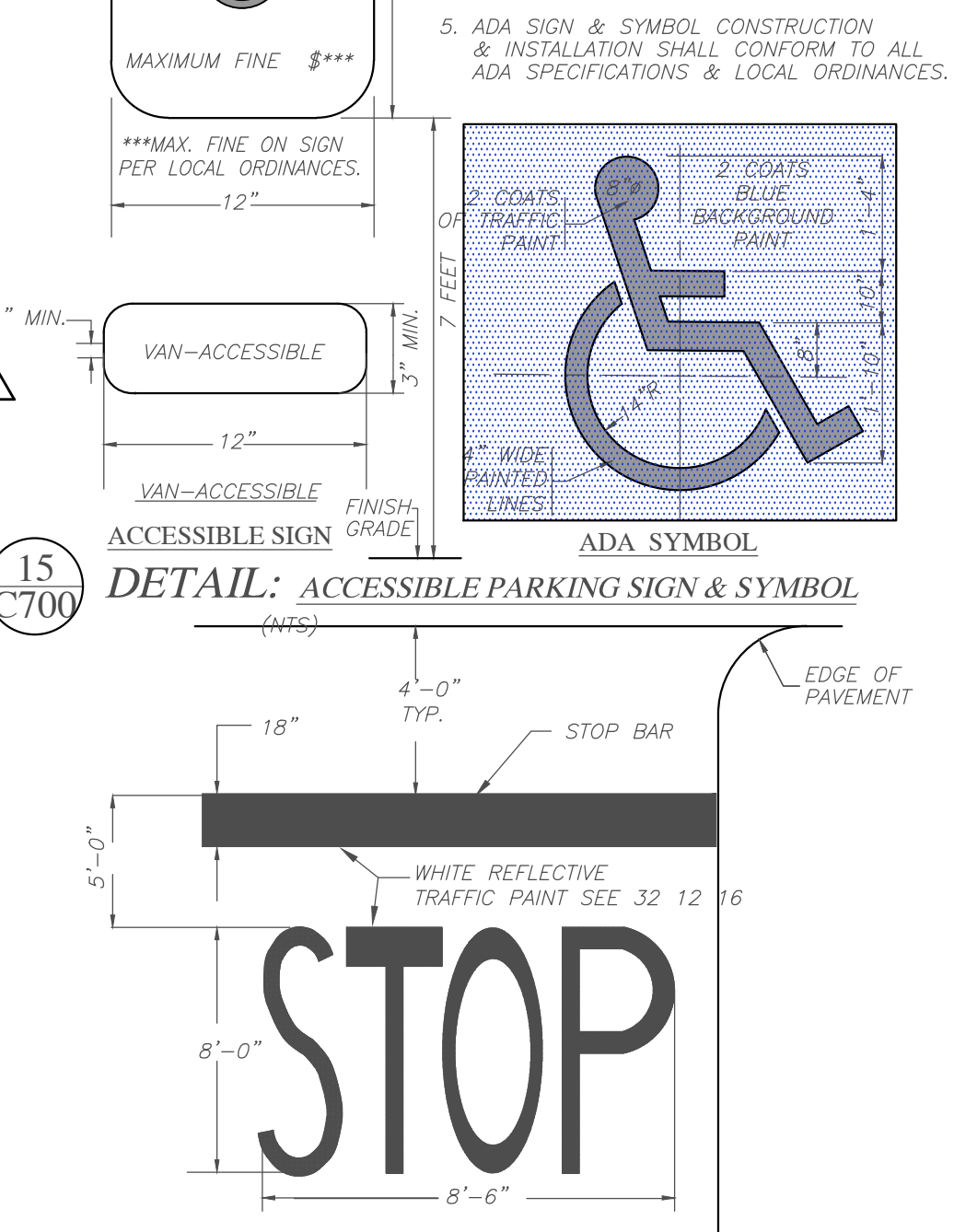
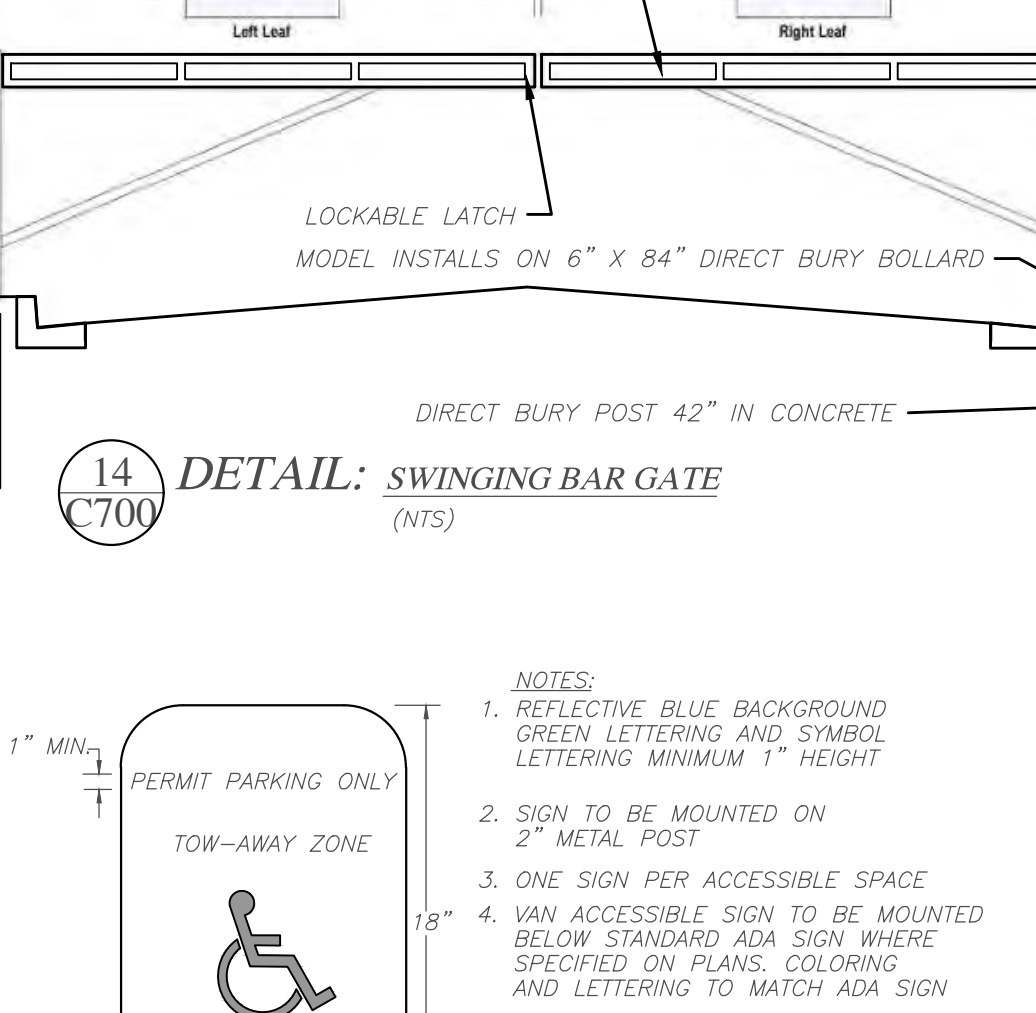
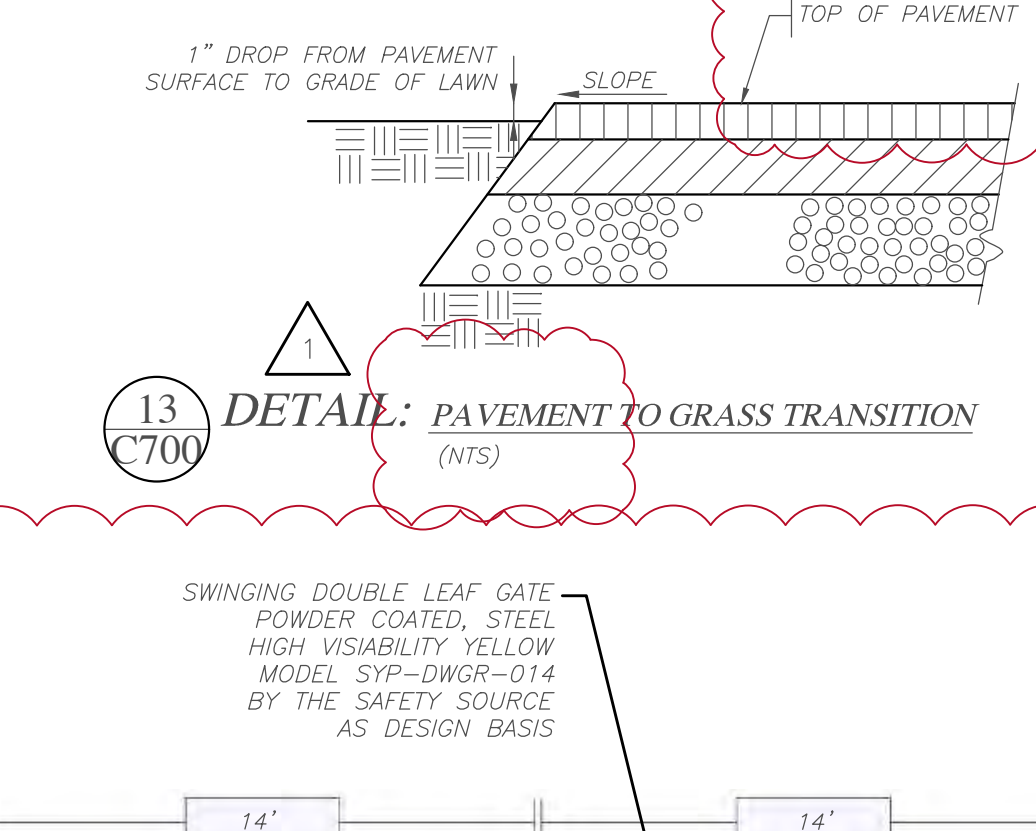
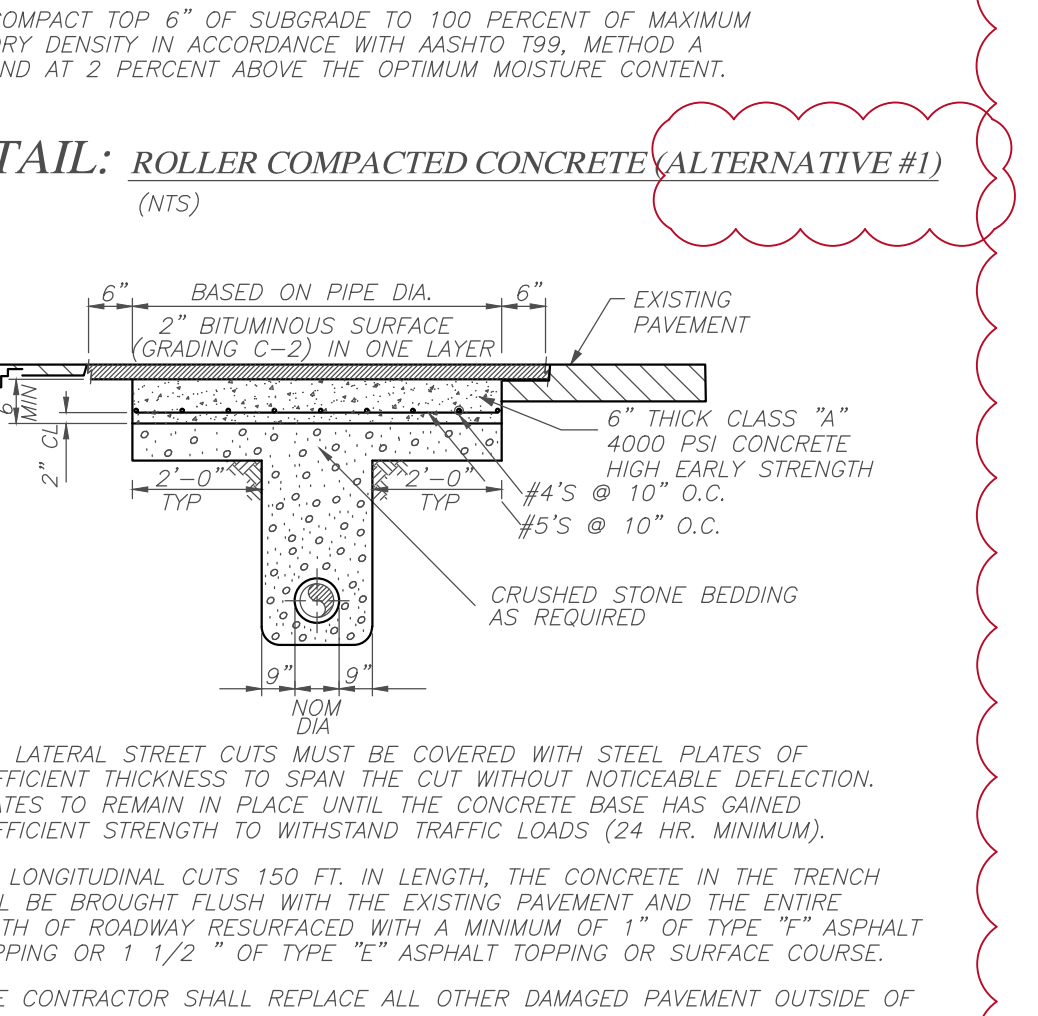
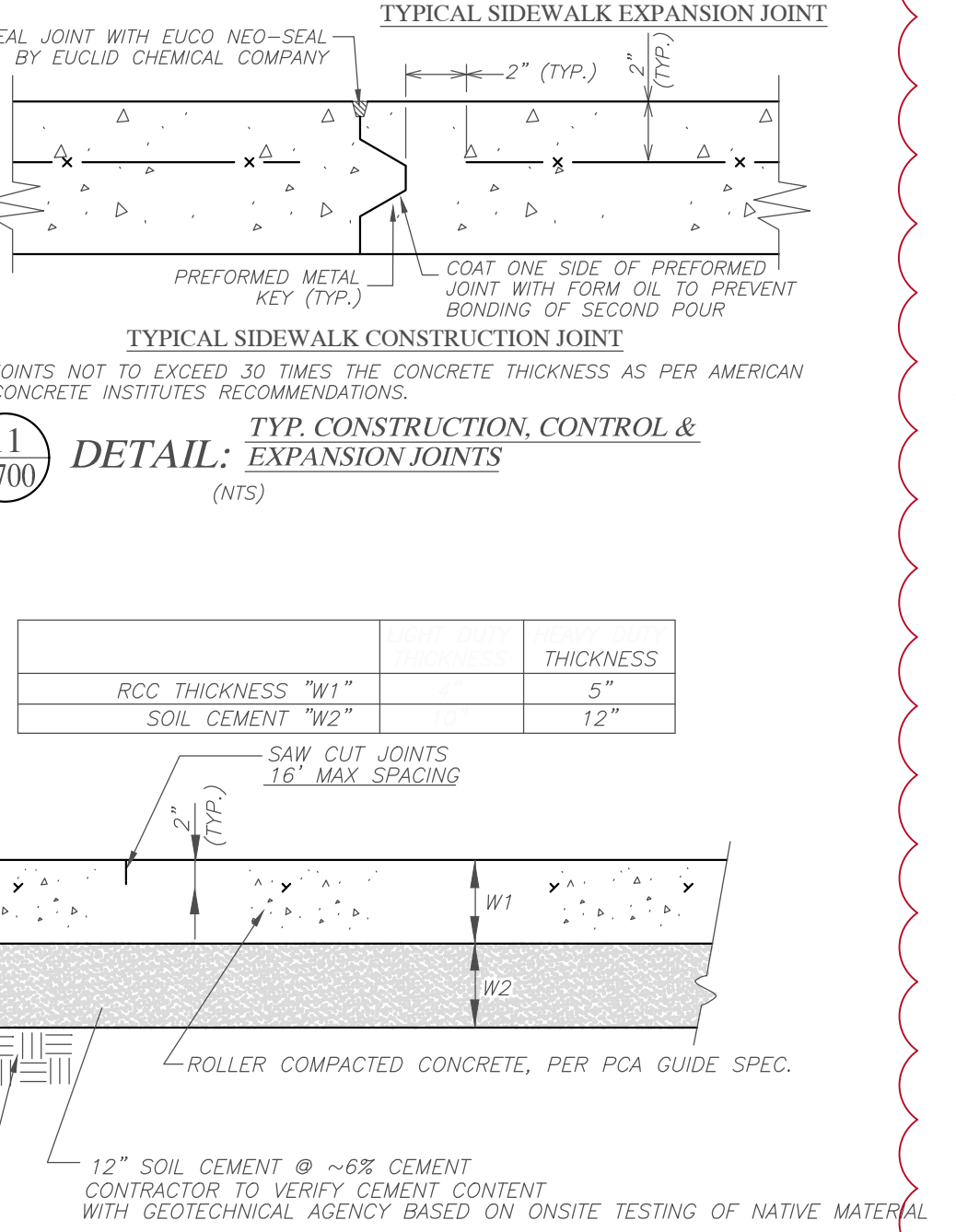
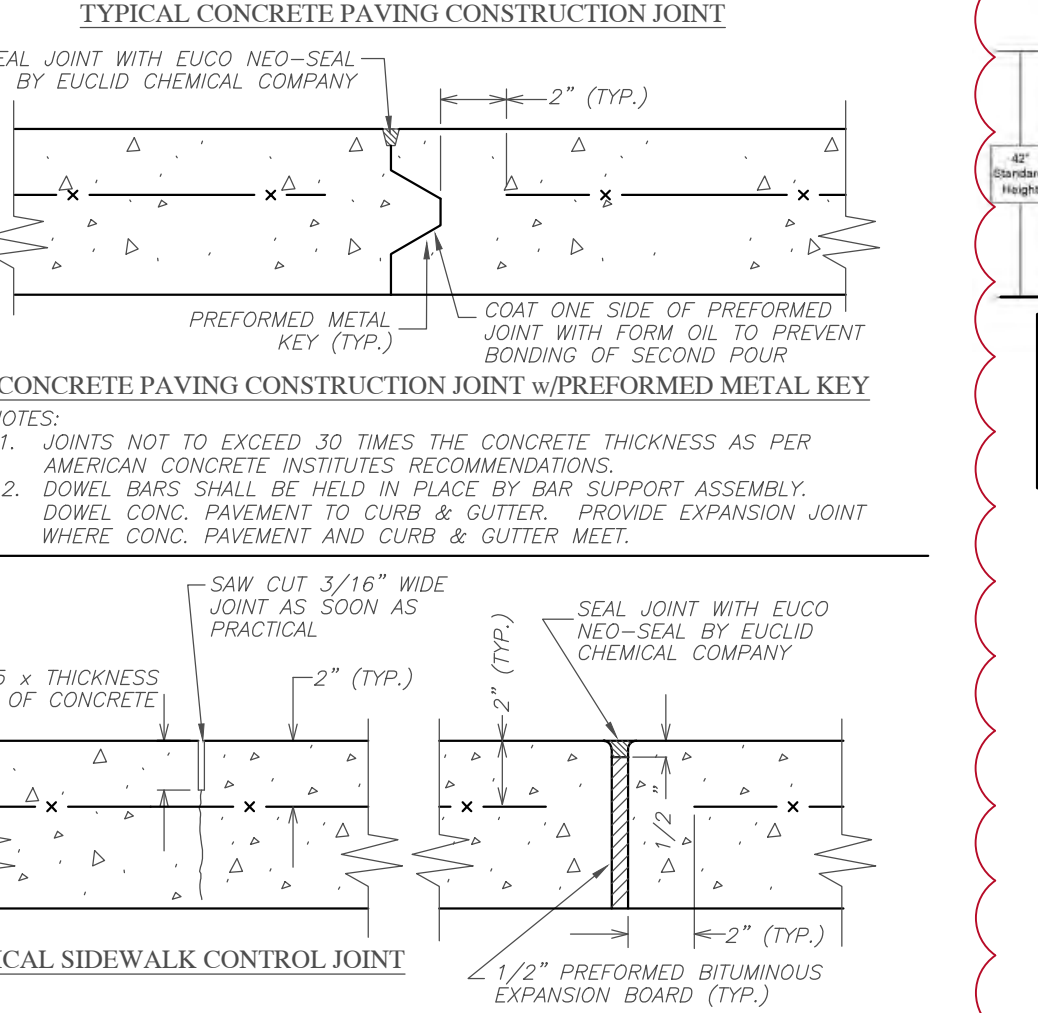
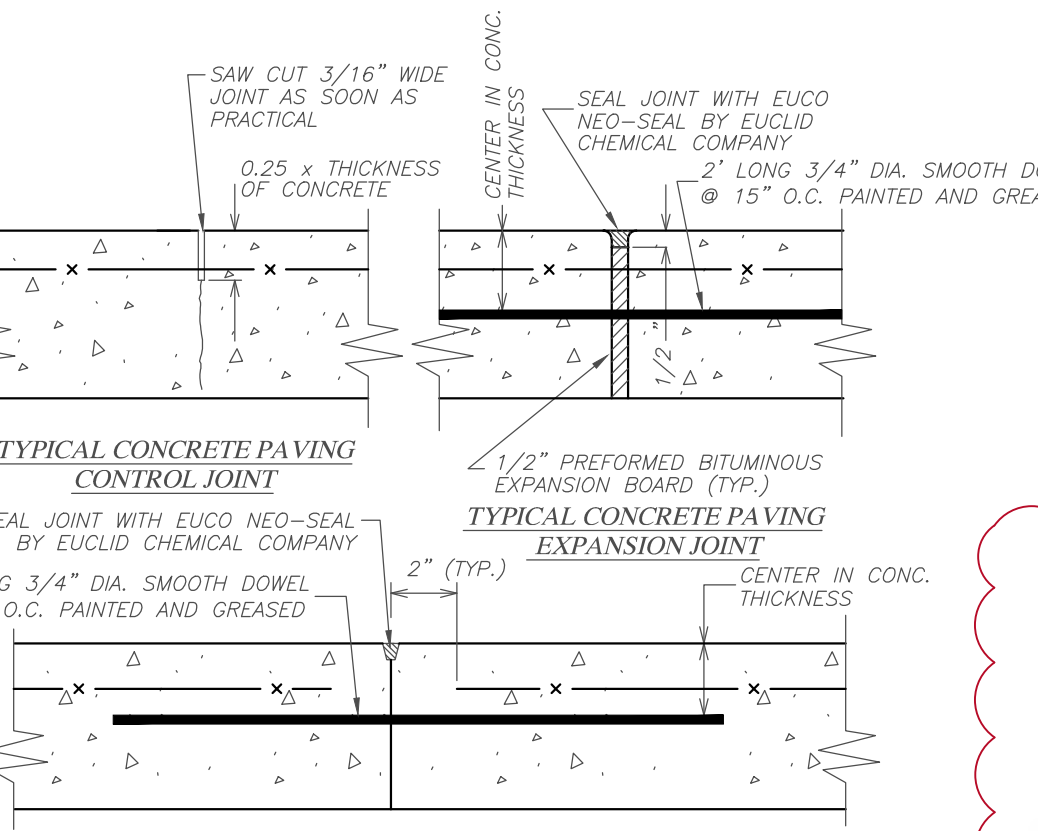
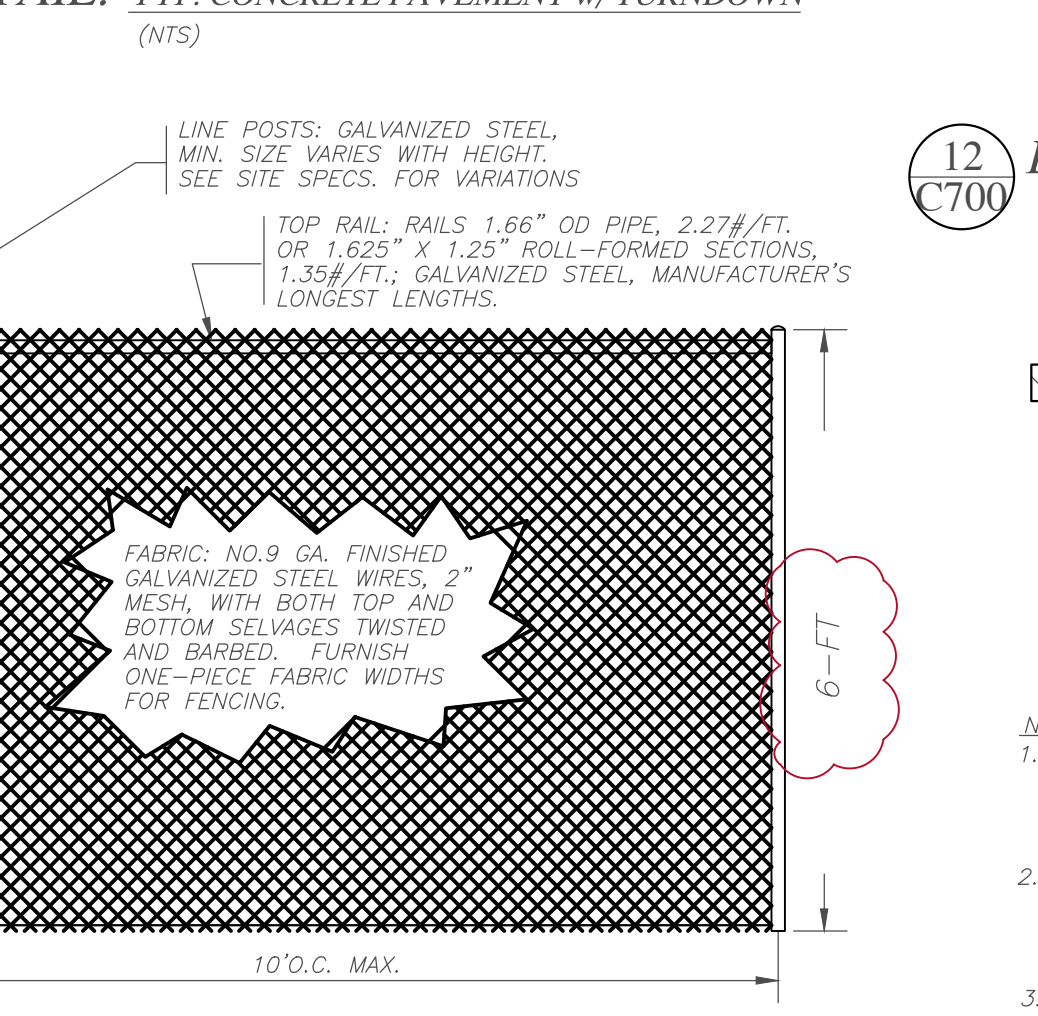
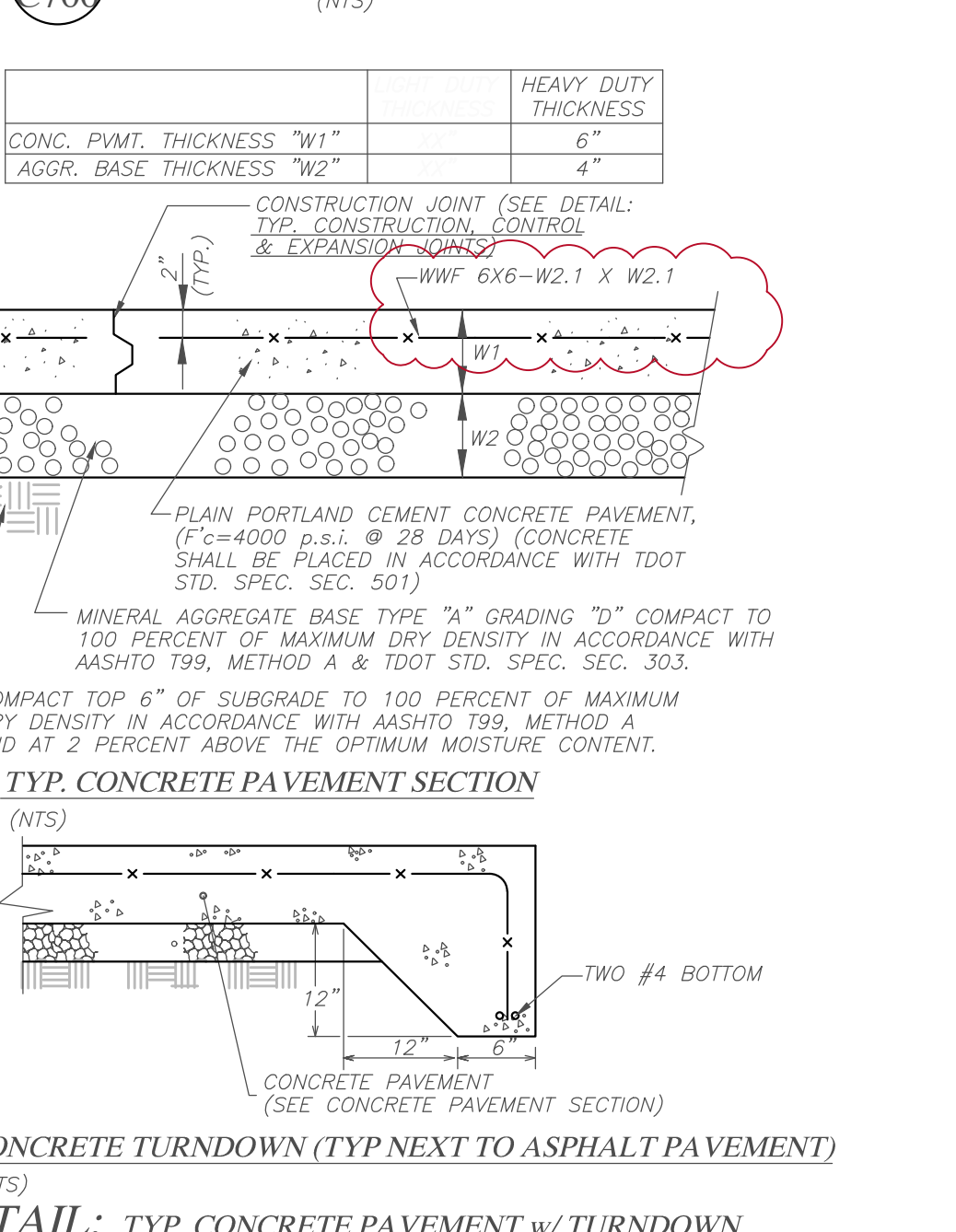
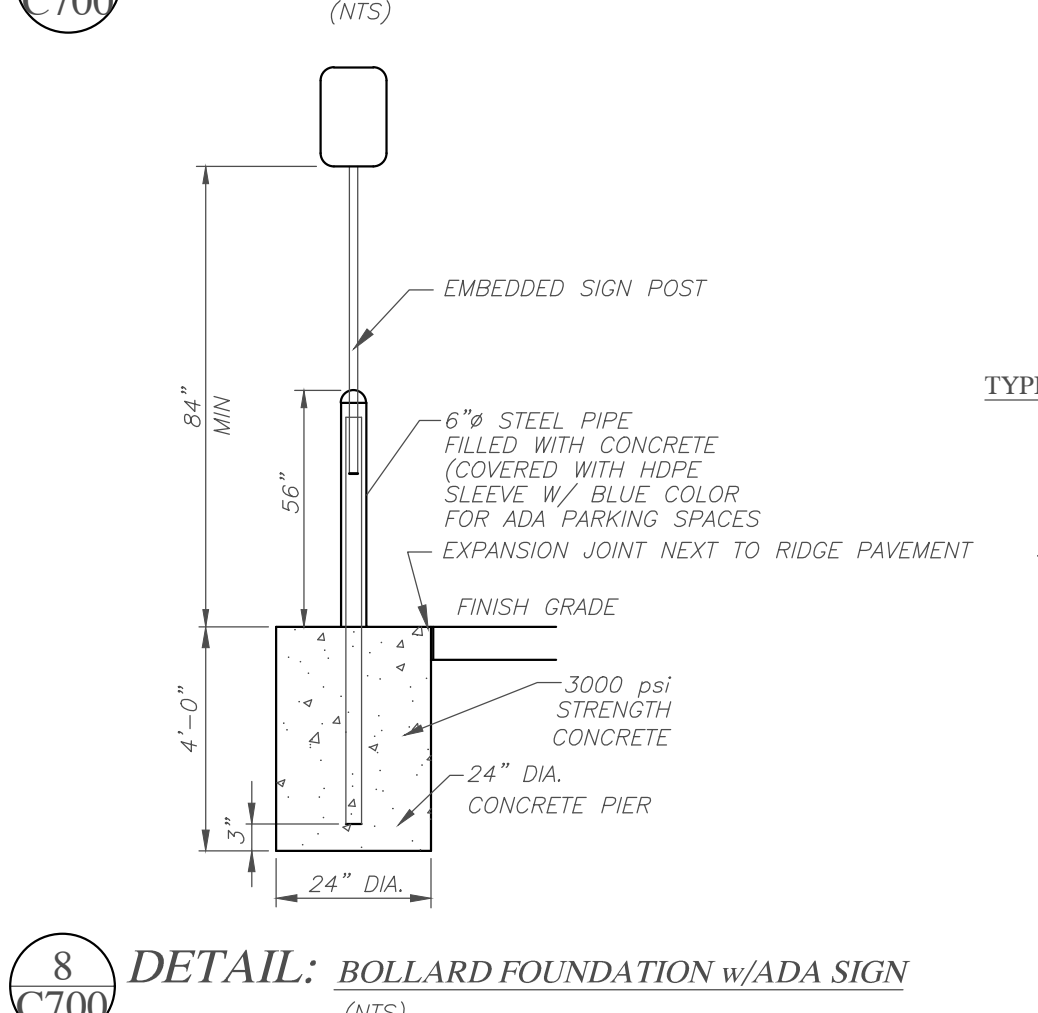
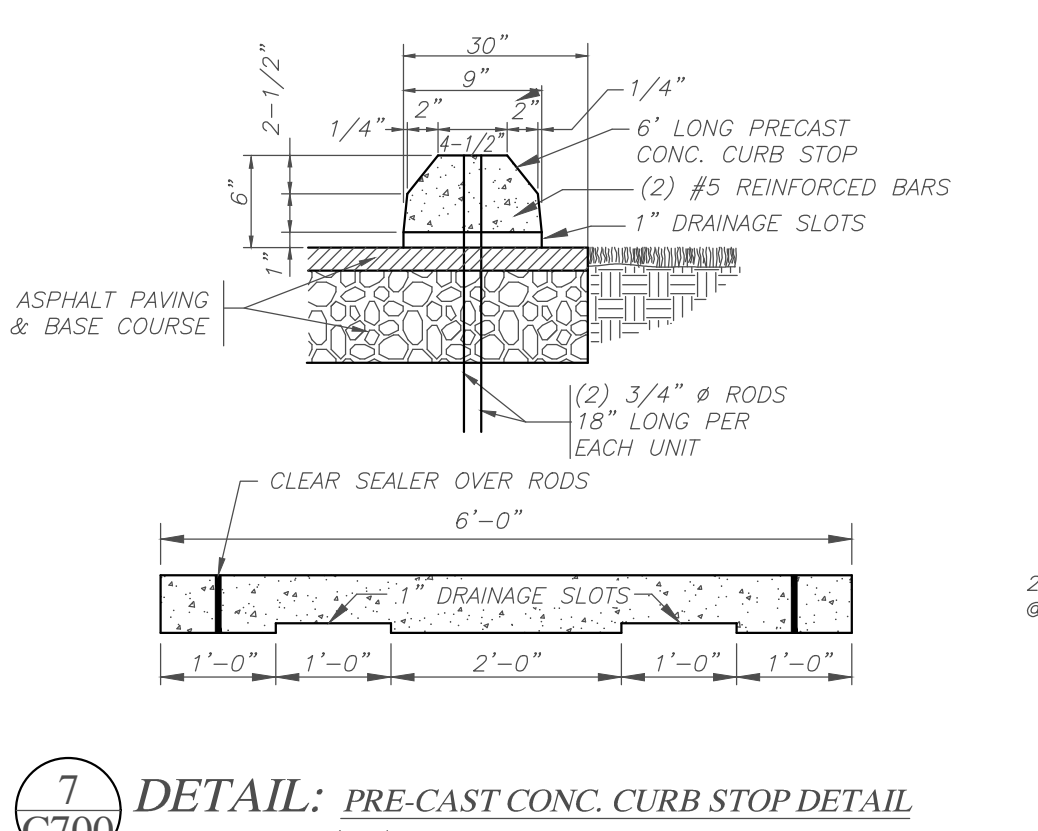
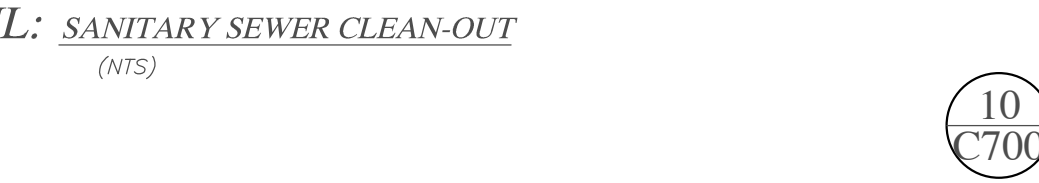
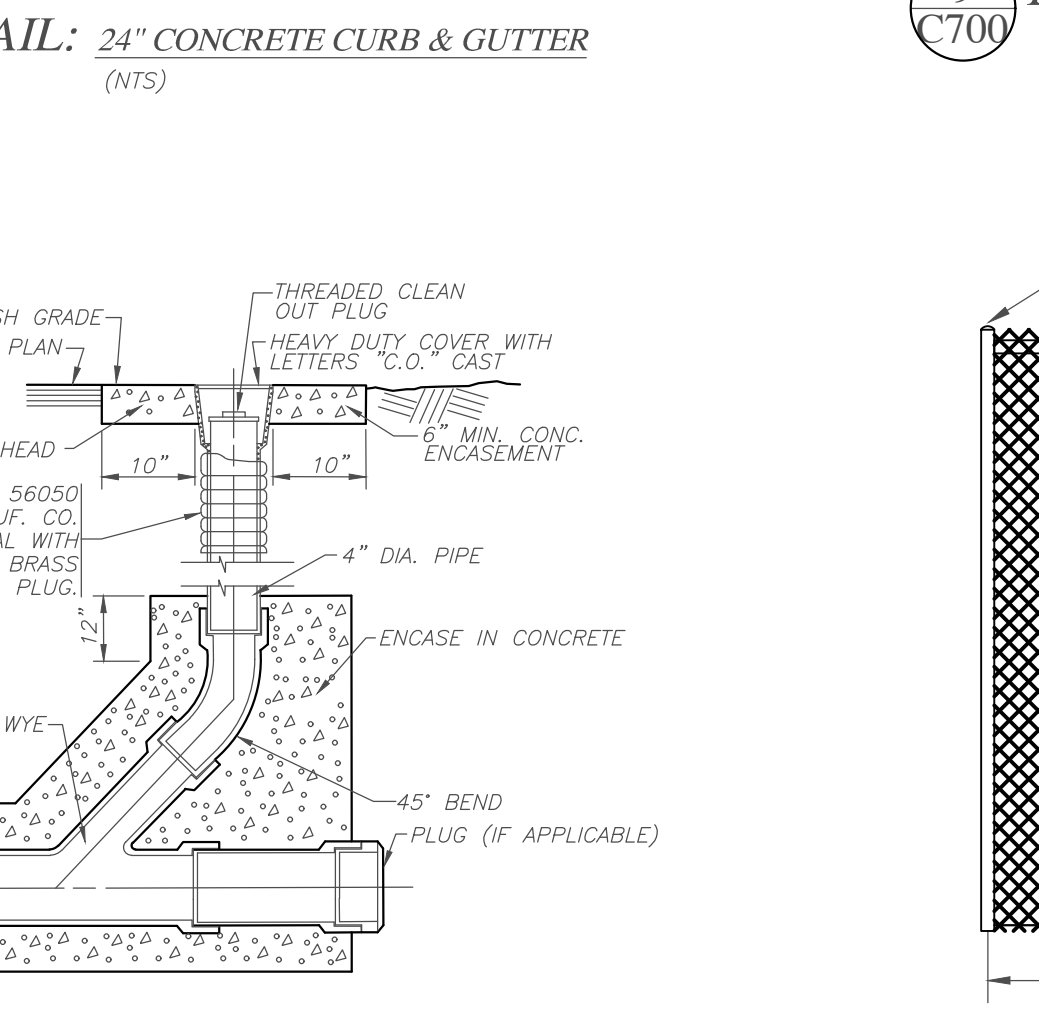
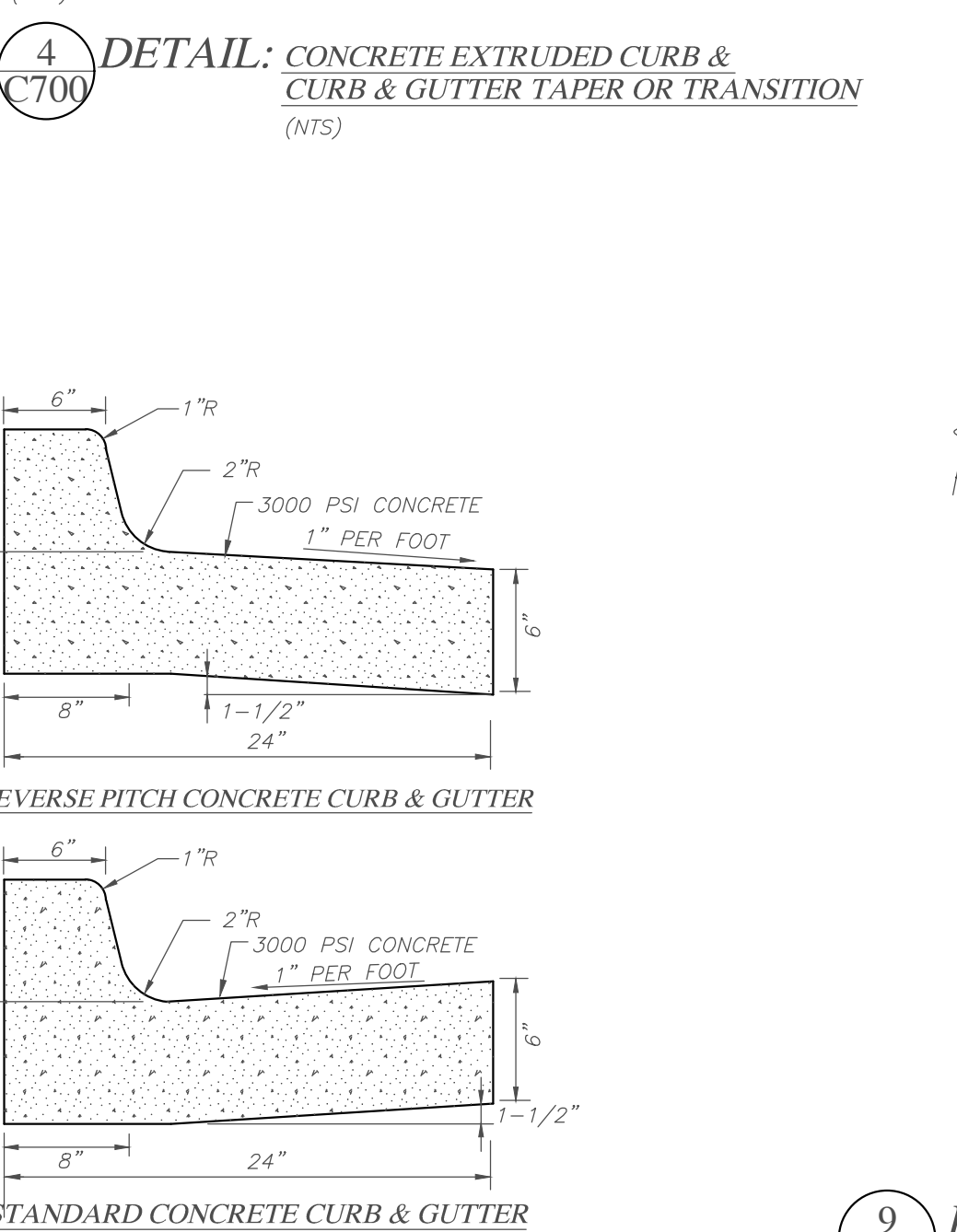
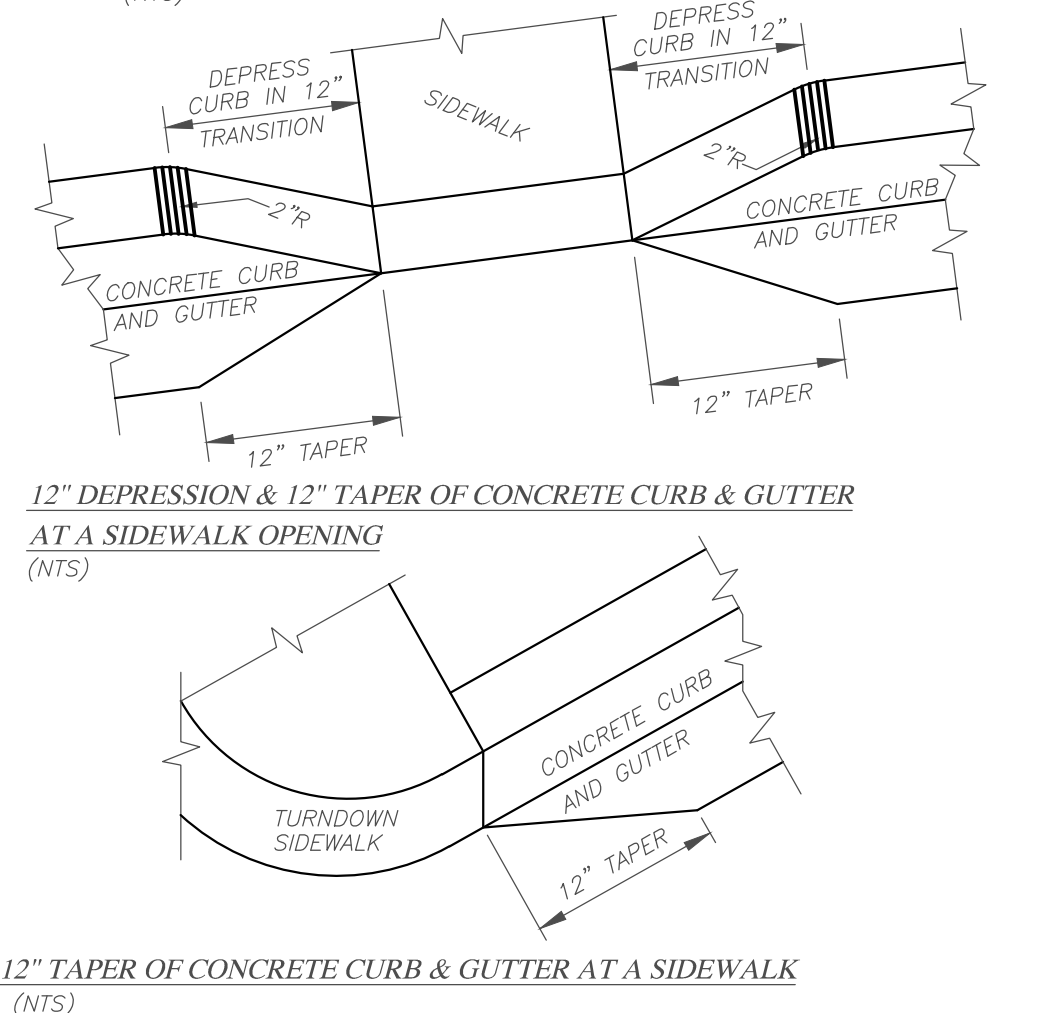
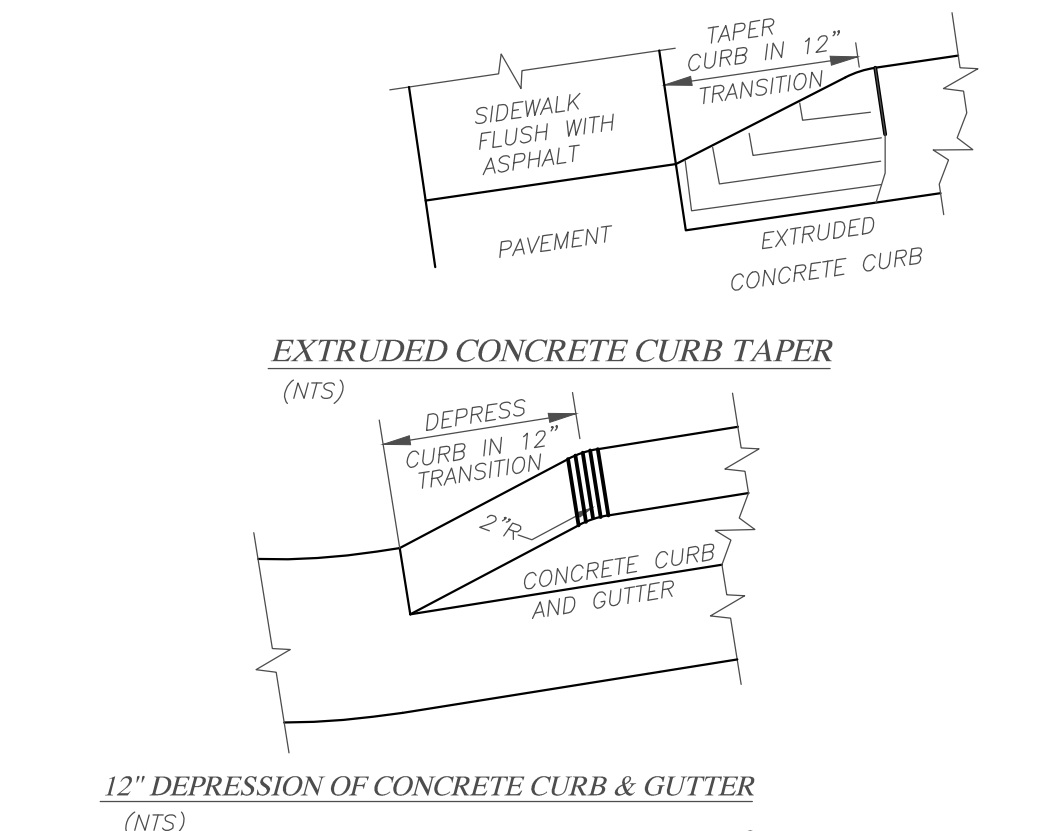
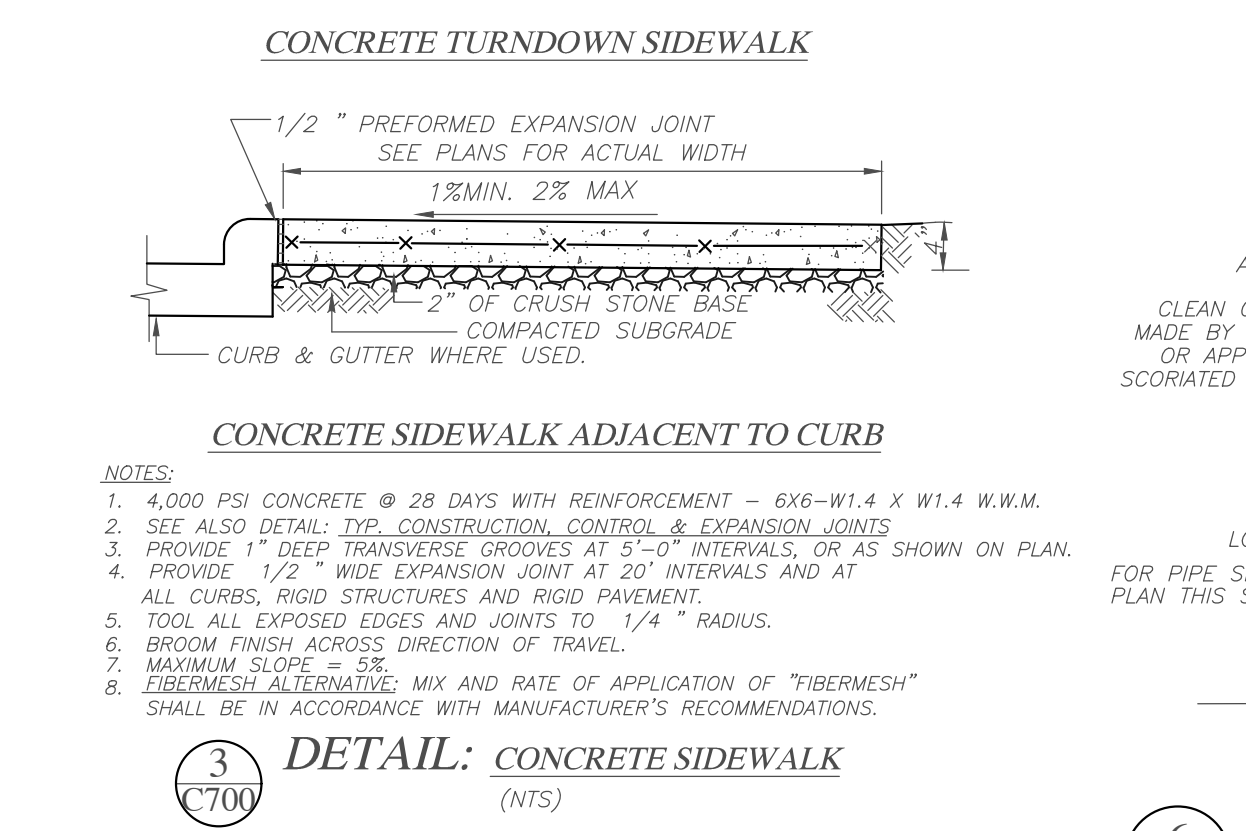
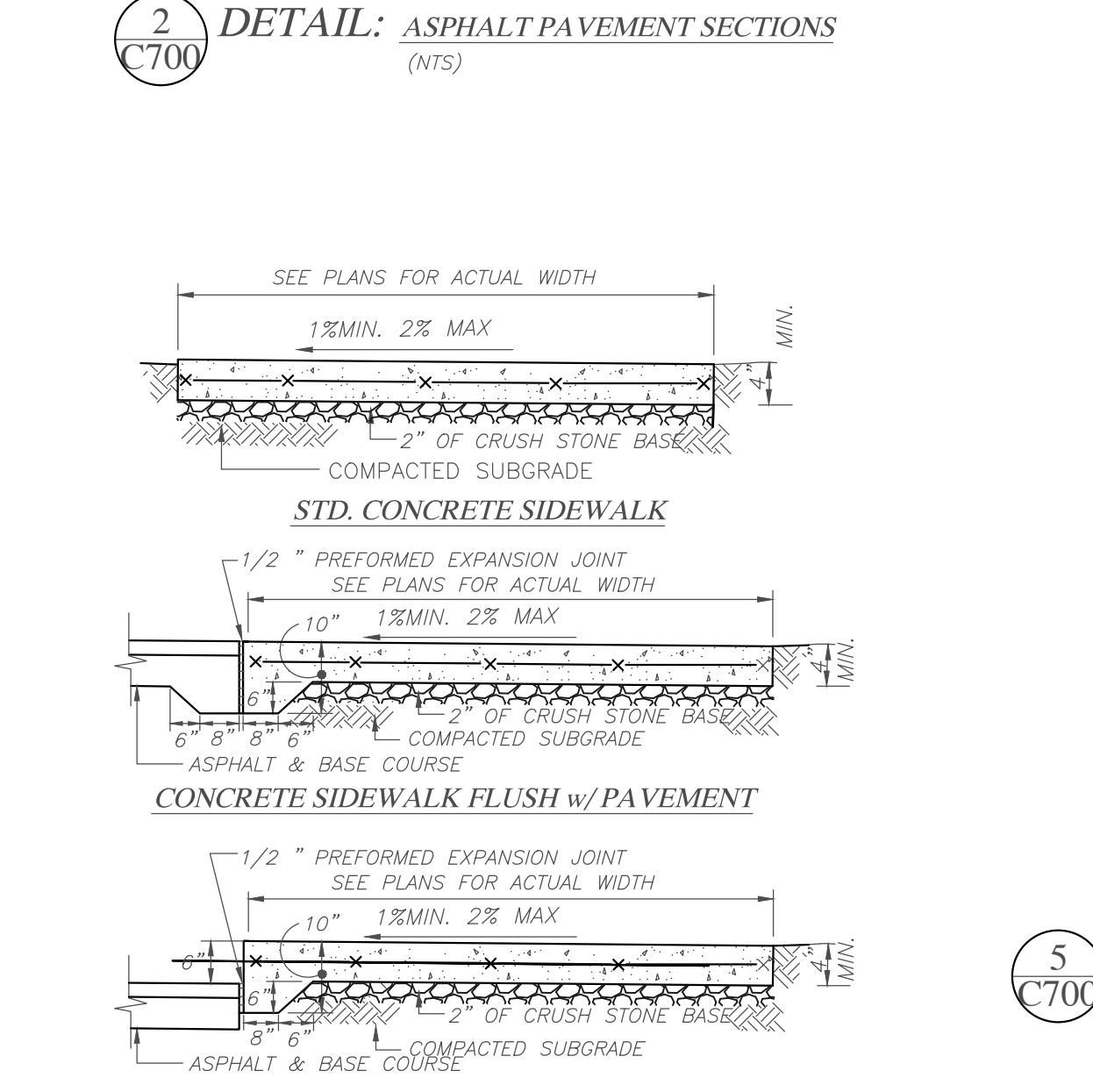
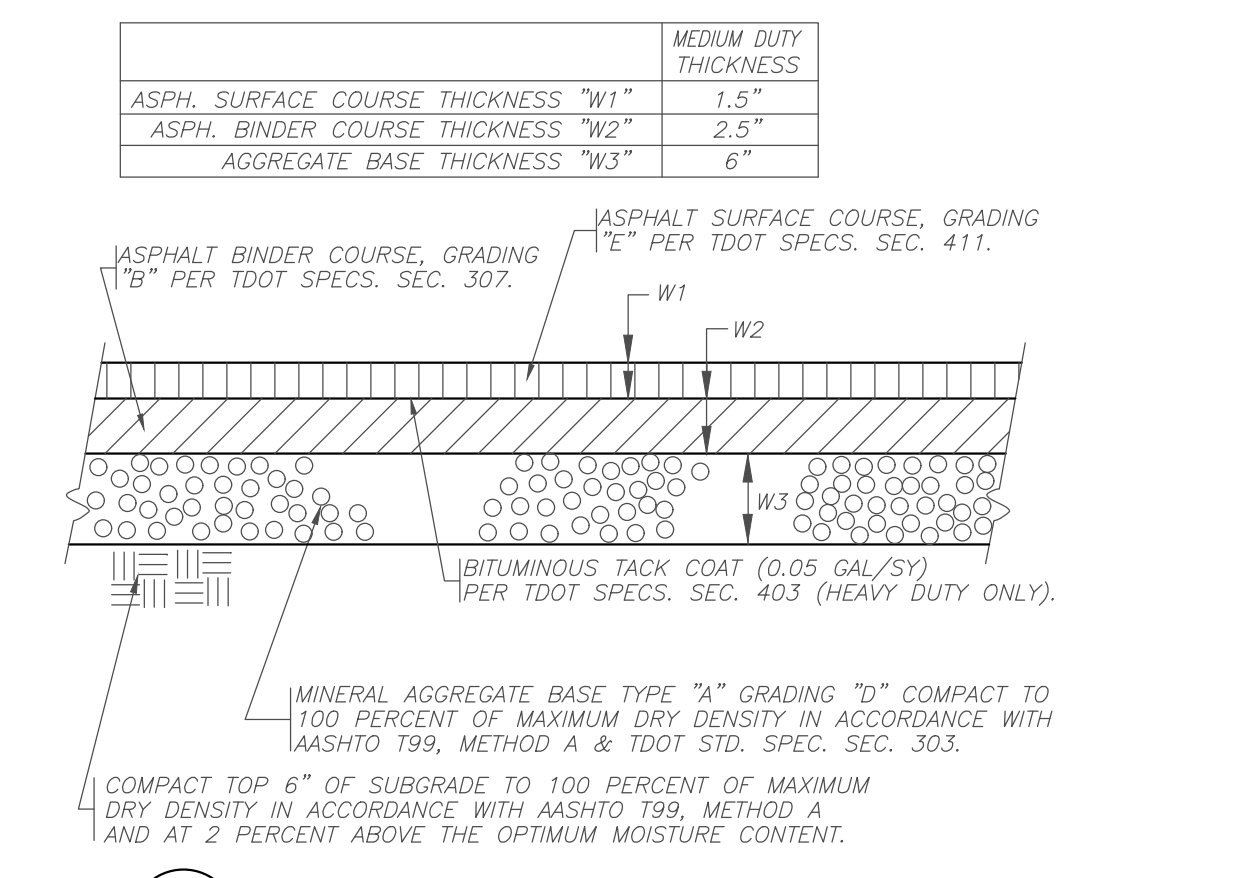
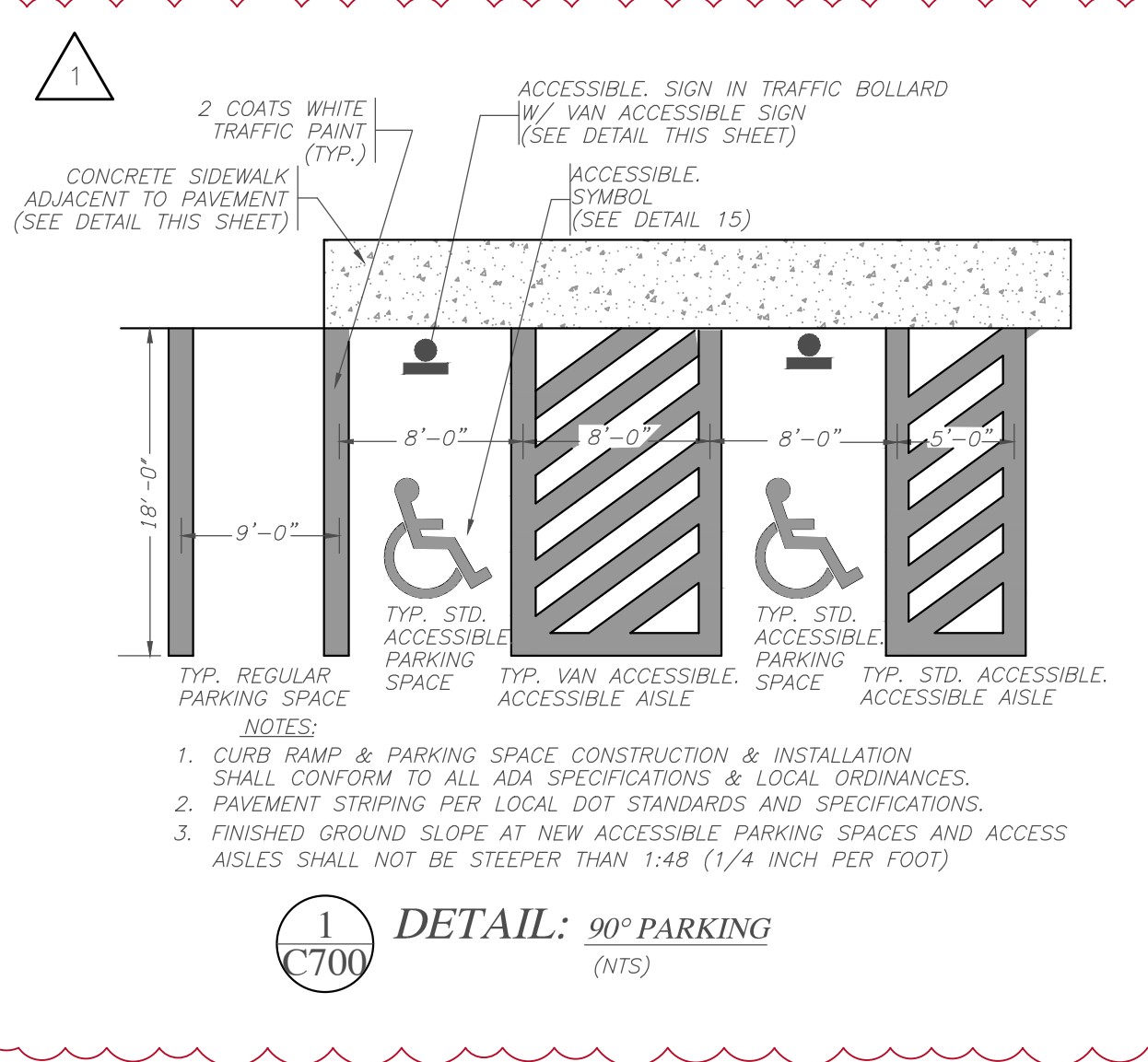
for
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 3074 Hickory Valley Rd
 Chattanooga, TN 37421
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 DATE: 03/03/2023
C600
 SITE LANDSCAPE PLAN



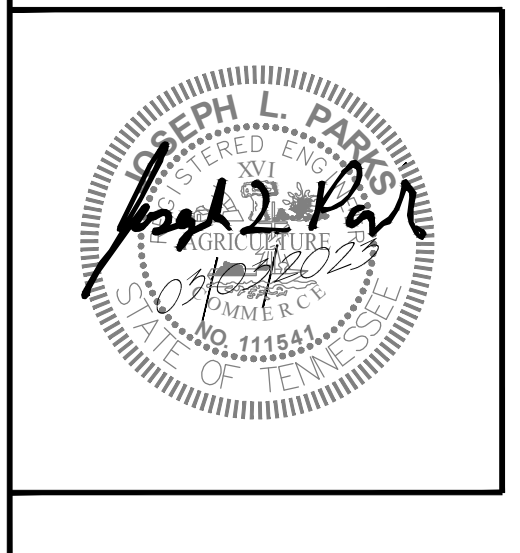


REVISIONS

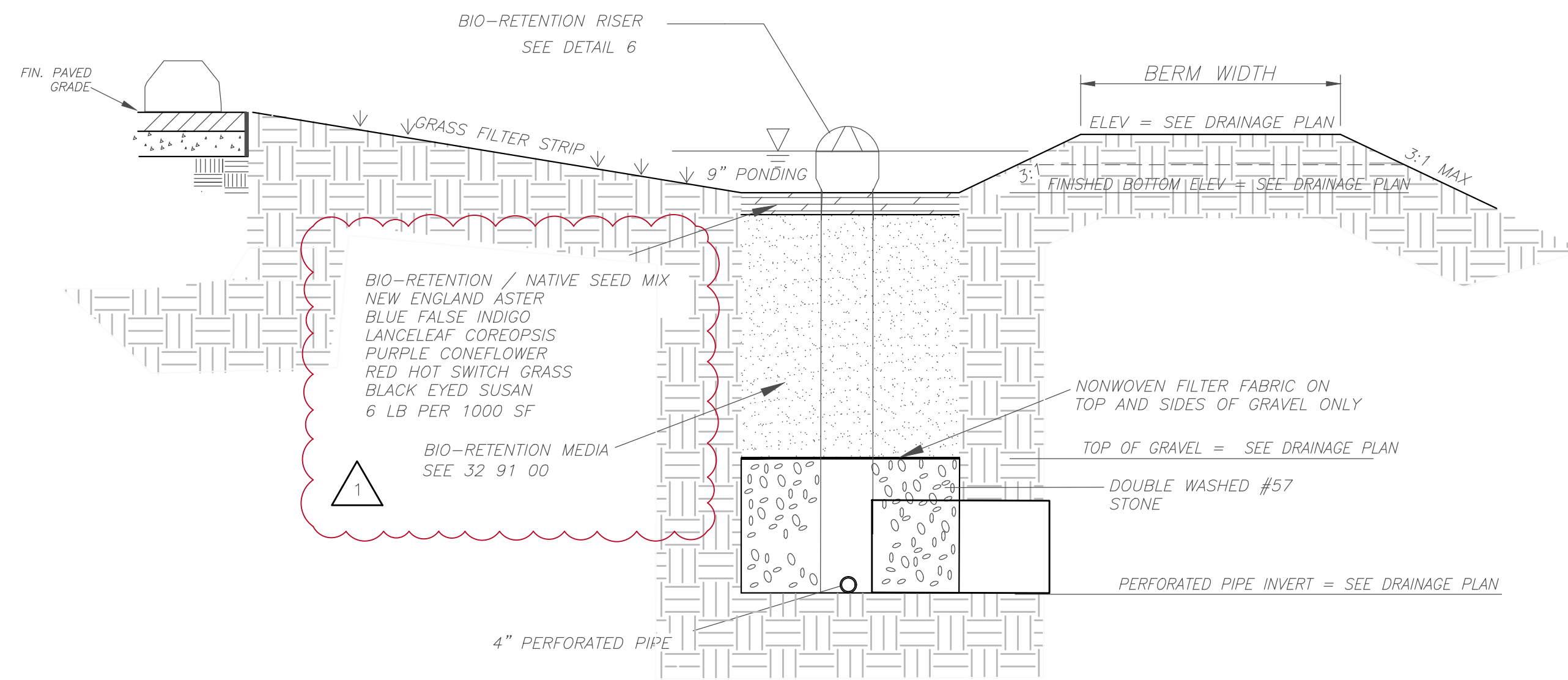
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HCDE Bus Barn
at
9517 W Ridge Trail Road
for
HAMILTON CO
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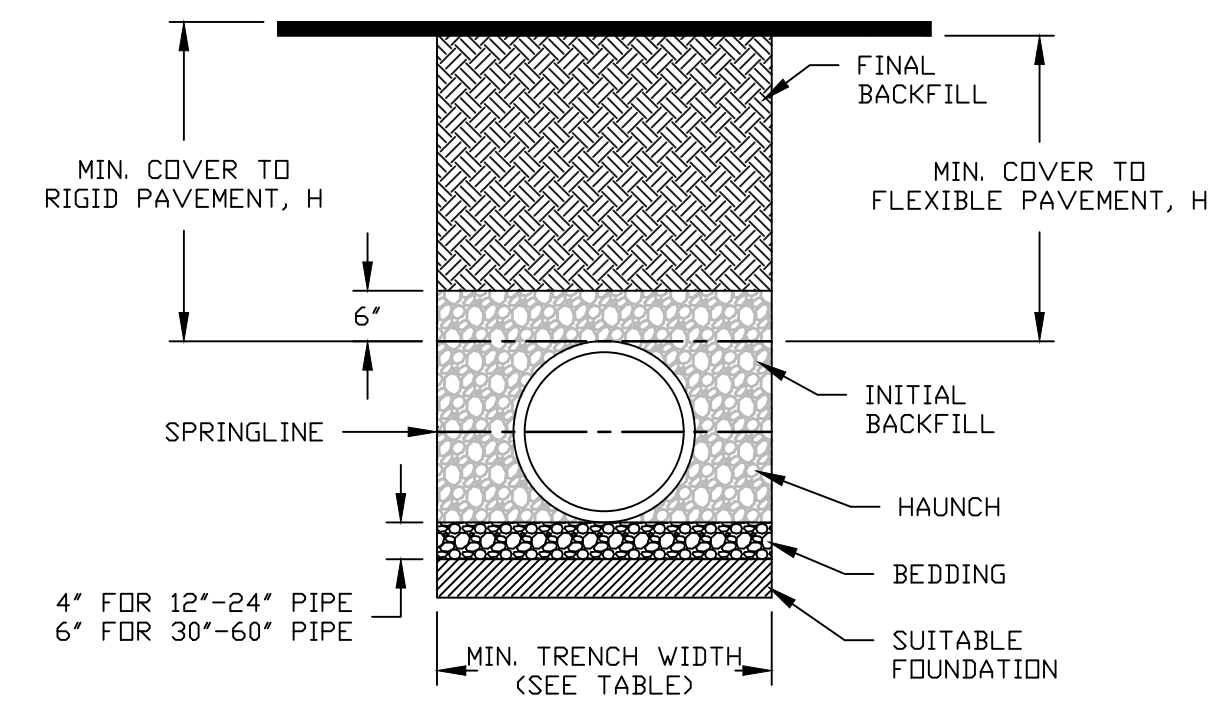
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JOB No. 21330
DATE: 03/03/2023
C700
SITE DETAILS



1
C800
DETAIL: BIO-RETENTION AREA
(NTS)

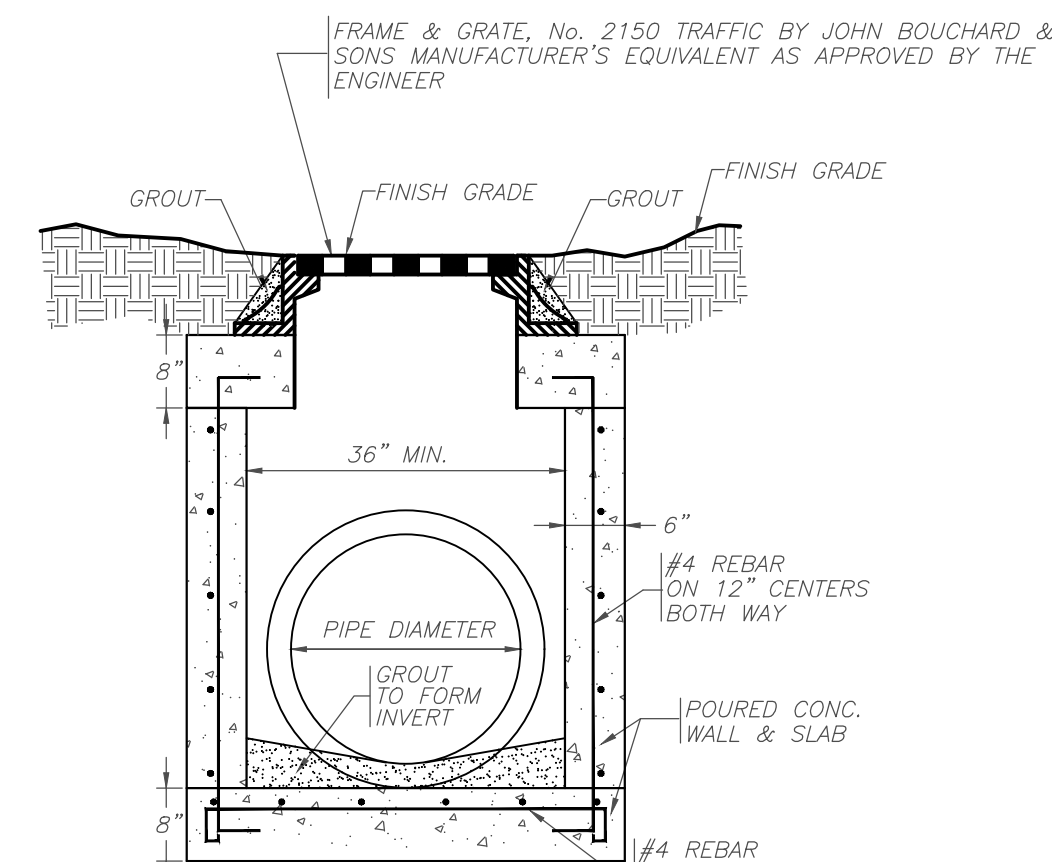
- NOTES:**
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS II, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
 5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

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3
C800
DETAIL: HDPE PIPE TRENCH
(NTS)

- NOTES:**
1. 8" CONCRETE BRICK MAY BE USED FOR WALL CONSTRUCTION.
 2. BOXES OVER 4' IN DEPTH SHALL HAVE 12" WIDE POLYPROPYLENE PLASTIC STEPS PROTRUDE 4" MIN. FROM INSIDE OF STRUCTURE.
 3. PRE-CAST CONCRETE MANHOLES MAY BE USED AS APPROVED BY THE ENGINEER.
 4. STRUCTURES OVER 6' IN DEPTH SHALL BE PRE-CAST CONCRETE MANHOLES.



5
C800
DETAIL: STANDARD CATCH BASIN (GRASSED AREAS)
(NTS)

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

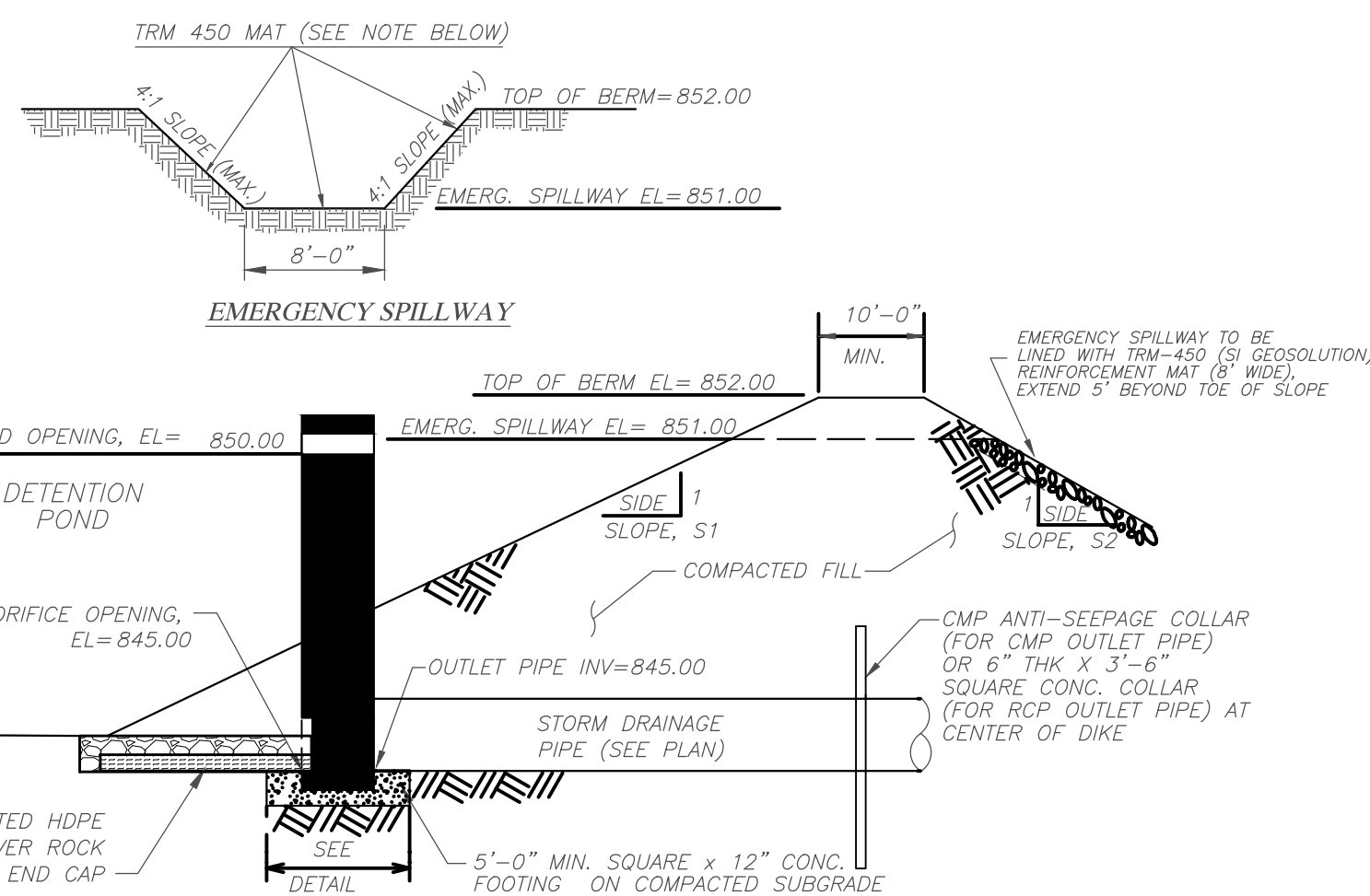
PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD)**
12" - 48"	12"	48"
54" - 60"	24"	60"

** VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

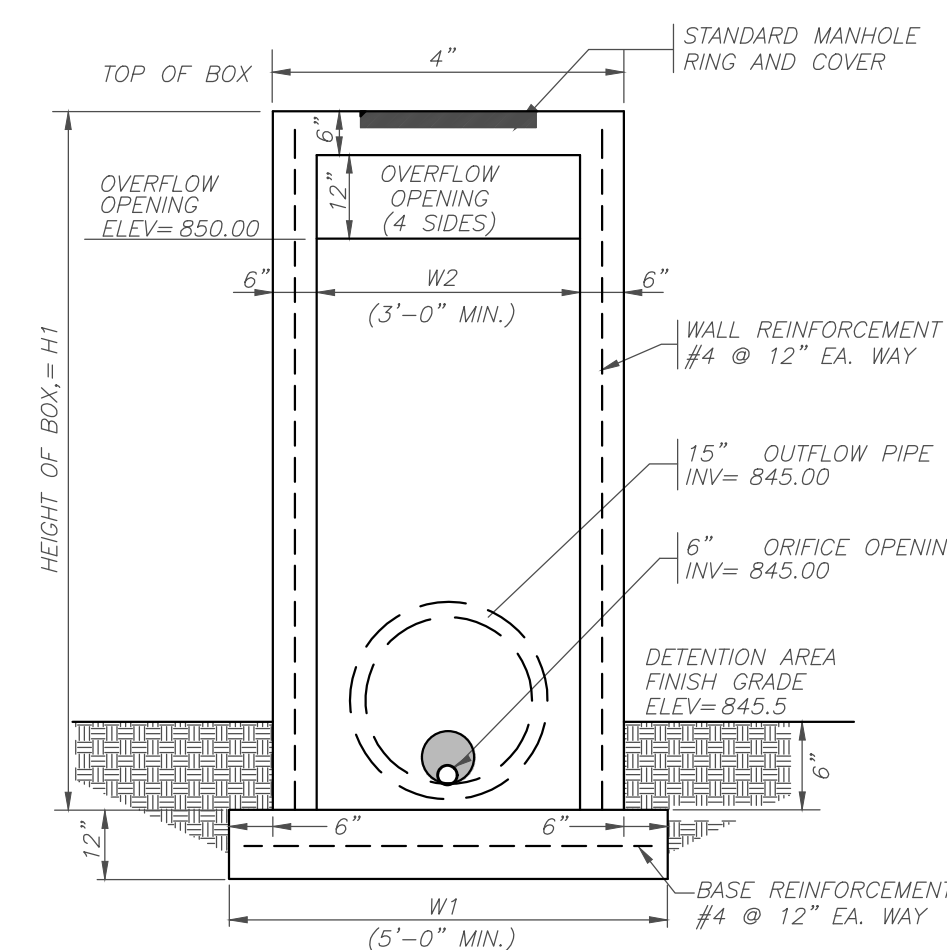
MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**	
	UP TO 24"	24"
30" - 36"	36"	
42" - 60"	48"	

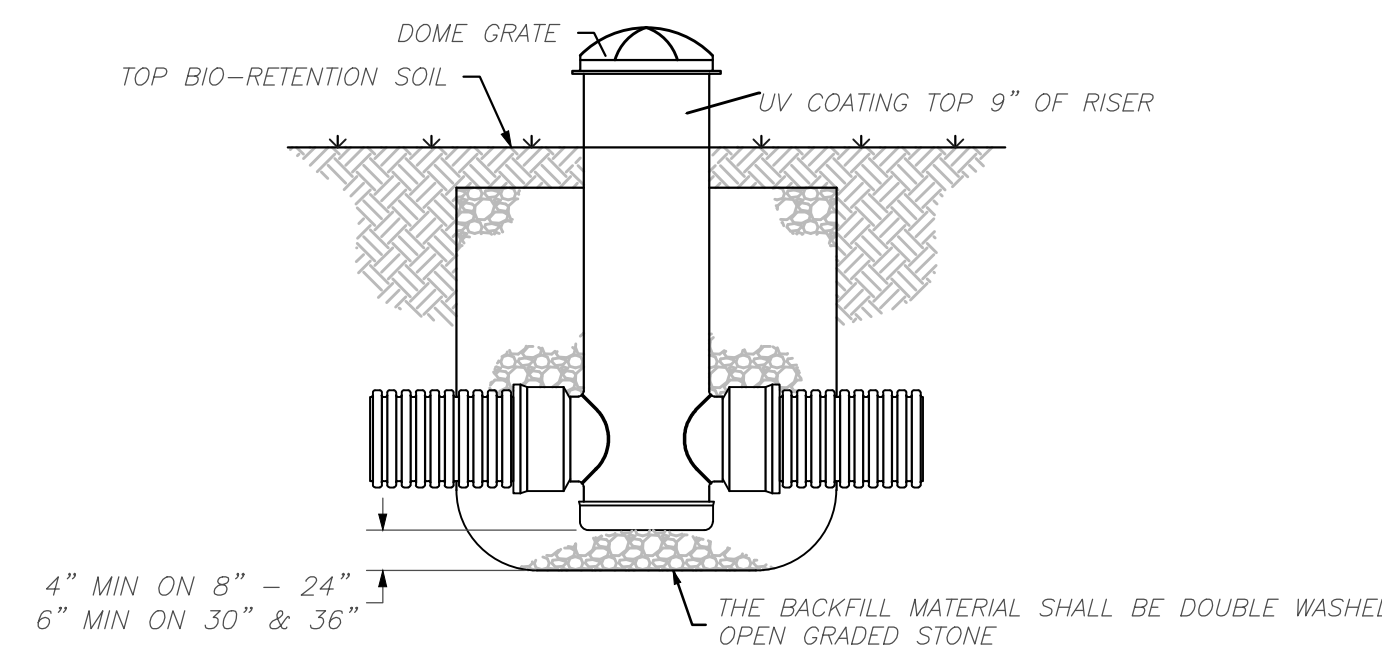
** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.



2
C800
DETAIL: DETENTION POND w/ OUTLET CONTROL STRUCTURE
(NTS)



4
C800
DETAIL: OUTLET CONTROL STRUCTURE
(NTS)

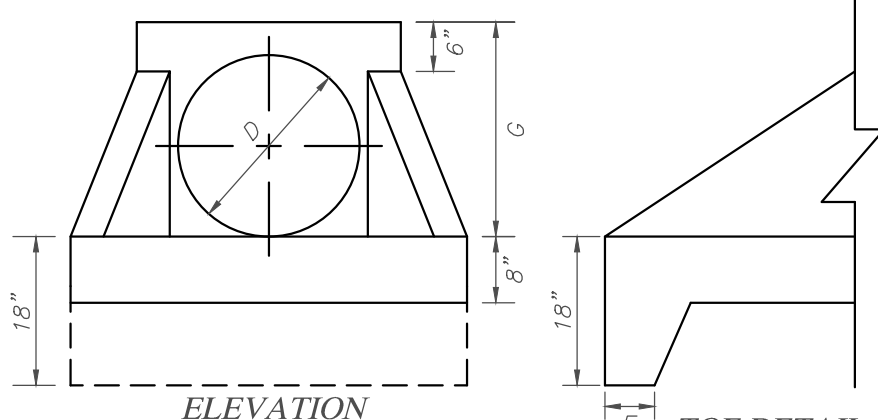


6
C800
DETAIL: DRAIN BASIN RISER (FOR BIO-RETENTION)
(NTS)

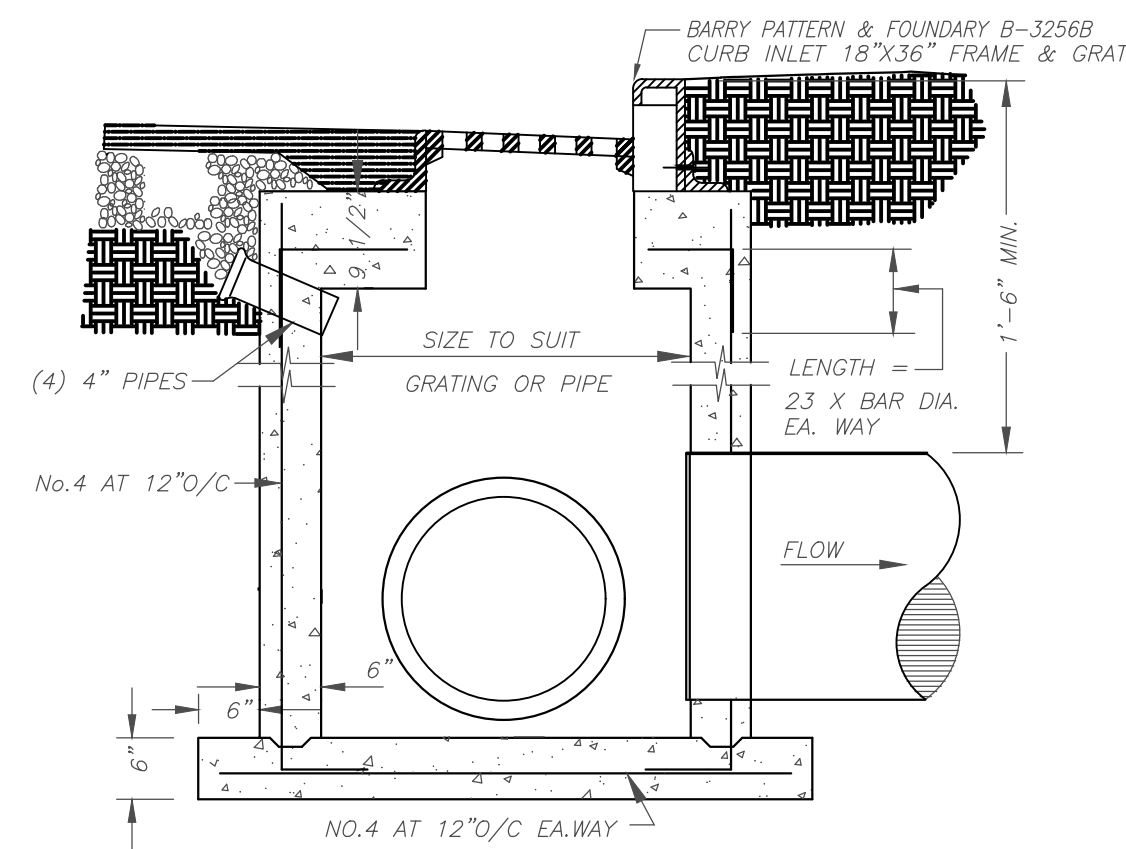
PLAN

PIPE SIZE	18"	24"	30"-42"	48"-60"
A	32"	48"	80"	99"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	22"	32"	55"	60"
E	24"	36"	64"	63"
F	6"	8"	8"	8"
G	26"	36"	60"	66"

- NOTES:**
1. CONCRETE 3000 PSI @ 28 DAYS.
 2. REINFORCING: #4 BAR @ 12" EACH WAY - GR. 60
 3. MINIMUM REBAR COVERAGE - 2"
 4. 3/4" CHAMFER ON ALL EXPOSED EDGES.
 5. CONTRACTOR MAY USE EQUIVALENT PRE-CAST STRUCTURE BY FORTERRA AS APPROVED BY THE ENGINEER.



7
C800
DETAIL: CONCRETE HEADWALL
(NTS)



8
C800
DETAIL: CURB INLET W. FRAME & GRATE
(NTS)

REVISIONS

HCDE Bus Barn
at
9517 W Ridge Trail Road
for
HAMILTON CO
DEPT. EDUCATION
3074 Hickory Valley Rd
Chattanooga, TN 37421
423-498-7020



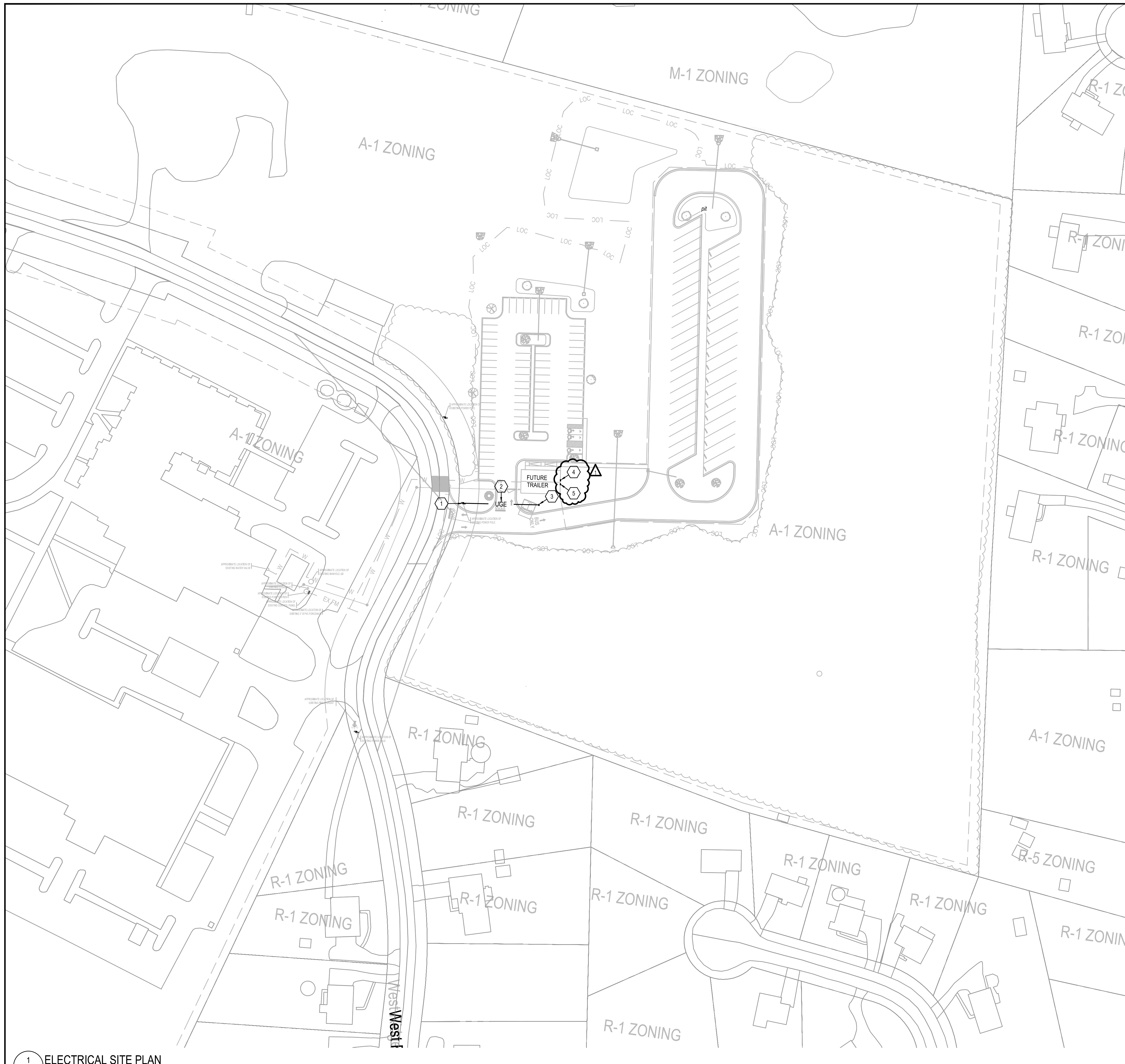
March Adams & Associates
Consulting Engineers
310 Dodds Ave.
P.O. Box 3689
Chattanooga, Tennessee 37404
PH: (423)698-6675



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CHECKED: JP
JOB No. 21330
DATE: 03/03/2023

C800
DRAINAGE DETAILS

MAA CIVIL CONTACT: JOSEPH PARKS, P.E.
DIRECT LINE: 423-664-1482



GENERAL SITE NOTES

1. ALL CONDUCTOR SIZES SHOWN ARE BASED ON THE NEC AMPACITIES OF COPPER CONDUCTORS, TYPE THW UNLESS OTHERWISE NOTED. SECONDARY CONDUCTORS TO MAIN ARE ALUMINUM.
2. ALL UNDERGROUND WIRING IS TO BE INSTALLED IN SCHEDULE 40 PVC CONDUIT PER THE WRITTEN SPECIFICATIONS. RIGID STEEL ELBOWS ARE TO BE USED ON THE CONDUIT WHEREVER IT TURNS UP AND EXITS THE GROUND.
3. THE CONTRACTOR SHALL SUPPLY A SEPARATE GREEN INSULATED GROUND WIRE IN ALL RUNS OF PVC CONDUIT, WHETHER SHOWN ON THE DRAWINGS OR NOT.
4. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL CONCRETE AND RELATED WORK FOR ALL POLE BASES, TRANSFORMER PADS, ETC., WHICH ARE IN HIS SCOPE OF WORK.
5. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVISION OF ELECTRICAL WIRING AND ASSOCIATED EQUIPMENT REQUIRED TO PROVIDE SERVICE TO ALL PYLON SIGNS.
6. ALL WORK IS TO COMPLY WITH THE LATEST VERSION OF THE NEC AND ALL APPLICABLE STATE, LOCAL, AND MUNICIPAL CODES.
7. THE ELECTRICAL CONTRACTOR IS TO COORDINATE ALL OF HIS WORK WITH ALL OF THE OTHER DISCIPLINES AND TRADES, WATER, SEWER, STORM DRAINAGE, ETC., ROUTING TAKE PRECEDENCE OVER THE ELECTRICAL WIRE AND CONDUIT ROUTING. THE ELECTRICAL CONTRACTOR IS TO RELOCATE OR REROUTE AS REQUIRED TO CLEAR SUCH.
8. COORDINATE ALL SITE WORK WITH CIVIL DRAWINGS.

UTILITY SUPPLY NOTES

1. ALL UTILITY SERVICES SHOWN ARE FOR SCHEMATIC REPRESENTATION ONLY. NO EXPRESSED OR IMPLIED GUARANTEE IS GIVEN AS TO THE EXACT LOCATION, GRADE OR ELEVATION OF THE ABOVE MENTIONED ITEMS. ACTUAL LOCATIONS ARE TO BE BASED ON UTILITY COMPANY AND OWNER INSTRUCTIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE SECONDARY SERVICES AND METER INSTALLATION FEES. ANY POWER CO. AID TO CONSTRUCTION COST TO BE PAID BY THE OWNER.
3. BECAUSE OF ALL OF THE ABOVE REASONS, ALL ELECTRICAL CONTRACTORS DESIRING TO BID ON THIS PROJECT ARE REQUIRED TO VISIT THE JOB SITE PRIOR TO BIDDING SO THAT THEY MAY BECOME FAMILIAR WITH ALL CIRCUMSTANCES WHICH WILL AFFECT THE ELECTRICAL WORK.
4. CONTRACTOR SHALL INCLUDE OVERTIME AND AFTER HOURS PREMIUM LABOR CHANGES IN HIS BID AS REQUIRED TO COMPLETE THE INSTALLATION OF THIS PROJECT IN ACCORDANCE PROJECT IN ACCORDANCE WITH THE ARCHITECTS SCHEDULE.
5. ALL ELECTRICAL CONTRACTORS ARE REQUIRED TO VISIT THE JOB SITE PRIOR TO BID AND TO INCLUDE ALL REQUIRED COST TO PROVIDE A COMPLETE, FUNCTIONAL AND CODE COMPLIANT ELECTRICAL INSTALLATION.
6. COORDINATE SERVICE PROVISIONS FOR TELEPHONE, CATV AND POWER FOR UNDERGROUND SERVICE TO BUILDING.
7. OWNER WILL BE RESPONSIBLE FOR AID TO CONSTRUCTION UTILITY COST FOR PROVISION OF SERVICE TO THIS BUILDING.
8. ALL REQUIRED 90° ELBOWS OF UTILITY CONDUITS TO BE OF SWEEPING TYPE.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL COST ASSOCIATED WITH TEMPORARY POWER, BE IT 10 OR 30, AS REQUIRED FOR THIS PROJECT.

ELECTRICAL KEYED NOTES

1. EXISTING POWER POLE, POWER CO. TO SET NEW AERIAL TRANSFORMER BANK FOR NEW ELECTRICAL SERVICE. POWER CO. TO REPLACE POLE AS REQUIRED.
2. UNDERGROUND ELECTRICAL SECONDARY FROM POLE TO METER & PANEL. INCLUDE AN EMPTY 2" (WITH PULL ROPE) FROM POWER POLE TO STUB NEAR FUTURE TRAILER FOR COMMUNICATIONS.
3. METER & PANEL MAIN PIPE & STRUT RACK. SEE RISER DIAGRAM.
4. PANEL "A" LOCATED ON FUTURE BUILDING. FIELD LOCATE PANEL AFTER BUILDING I INSTALLED. LAND WIRING ON LUGS IN PANEL. REFER TO RISER FOR WIRE SIZE.
5. PANEL "B" LOCATED ON FUTURE BUILDING. FIELD LOCATE PANEL AFTER BUILDING I INSTALLED. LAND WIRING ON LUGS IN PANEL. REFER TO RISER FOR WIRE SIZE.

REVISIONS

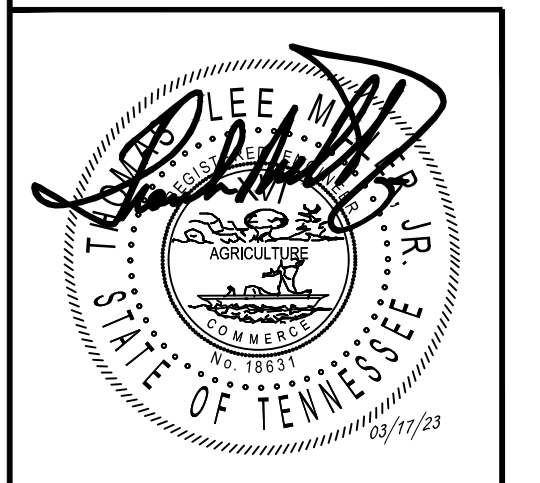
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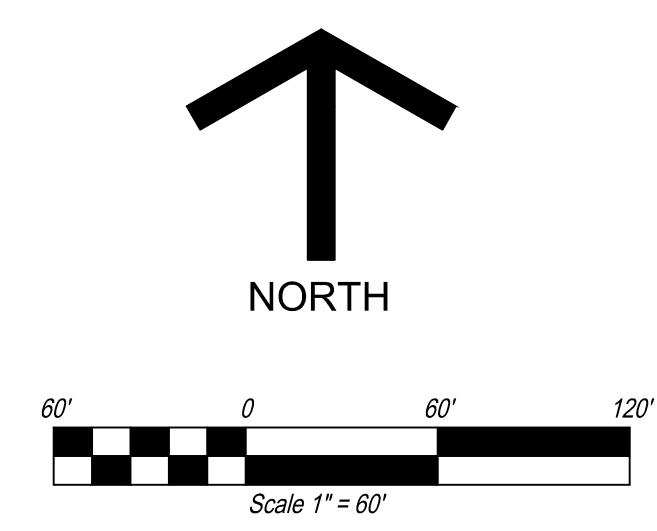


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ES101

ELECTRICAL SITE PLAN

1 ELECTRICAL SITE PLAN
ES1.1 SCALE: 1"=60'-0"



LIGHTING CONTACTOR SCHEDULE							
CONTACTOR	CIRCUITS CONTROLLED	CONTROLLED BY	POLES	AMPS PER POLE	COIL	MFG.	MODEL NUMBER
LC-M-1	M-1, 3, 5, 7	TC-M-1	6	30	120V	-	-

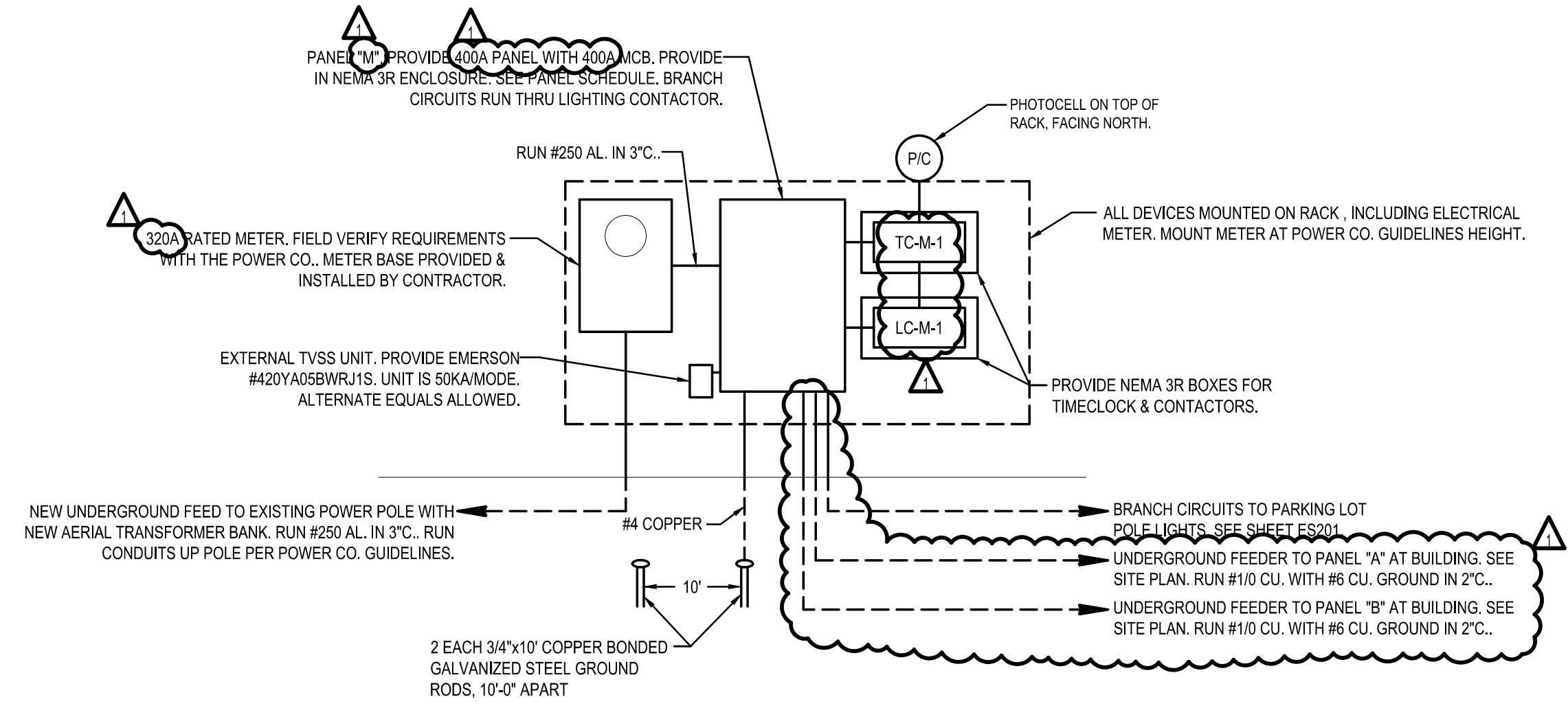
SCHEDULE NOTES:

- ALL CONTACTORS SHALL BE ELECTRICALLY HELD/ELECTRICALLY OPERATED.
- ALL CONTACTORS TO BE LOCATED AT PANEL.
- ALL CONTACTORS TO BE EQUIPPED WITH HDA SWITCH ON COVER.
- PROVIDE LABEL ON COVER OF ALL CONTACTORS.

TIMECLOCK SCHEDULE						
TIMECLOCK	CONTACTOR CONTROLLED	CONTROLLED BY	AMPS PER POLE	CLOCK MOTOR VOLTAGE	MFG.	MODEL NUMBER
TC-M-1	LC-M-1	PHOTOCELL	40A	120V	INTERMATIC	T103

SCHEDULE NOTES:

- ALL TIMECLOCKS TO BE LOCATED ADJACENT TO ASSOCIATED PANEL.
- ALL TIMECLOCK SETTINGS TO BE DETERMINED BY OWNER.
- PROVIDE 120V CONNECTION TO TIMECLOCK MOTORS AND CONTACTOR COILS FROM ASSOCIATED PANEL.
- PROVIDE LABEL ON COVER OF ALL TIMECLOCKS.



1 PANEL "M" ELECTRICAL SERVICE PANEL RISER DIAGRAM
SCALE: NONE

PANEL SCHEDULE										
NAME: M		VOLTAGE: 208/120, 3 PH., 4 WIRE								
FRAME: 400A		FEEDS FROM: METER								
MAIN: 400A MCB		PROVIDE NEUTRAL BAR								
TRIM: SURFACE, NEMA 3R		PROVIDE GROUND BAR								
AIC RATING: SERIES RATED AT 65K										
CKT	LOAD	TRIP	PLS	PHASE LOAD TOTALS			TRIP	LOAD	CKT	
				A	B	C				
L 1	POLE LIGHTS	30	2	735			-	-	SPACE ONLY	2
3				735			-	-	SPACE ONLY	4
L 5	POLE LIGHTS	30	2		840		-	-	SPACE ONLY	6
7				840			-	-	SPACE ONLY	8
9	SPACE ONLY	-	-				-	-	SPACE ONLY	10
11	SPACE ONLY	-	-				-	-	SPACE ONLY	12
13	SPACE ONLY	-	-				-	-	SPACE ONLY	14
15	SPACE ONLY	-	-				-	-	SPACE ONLY	16
17	SPACE ONLY	-	-				-	-	SPACE ONLY	18
19	SPACE ONLY	-	-				-	-	SPACE ONLY	20
21	SPACE ONLY	-	-				-	-	SPACE ONLY	22
23	SPACE ONLY	-	-				-	-	SPACE ONLY	24
25	SPACE ONLY	-	-				-	-	SPACE ONLY	26
27	SPACE ONLY	-	-				-	-	SPACE ONLY	28
29	SPACE ONLY	-	-				-	-	SPACE ONLY	30
31	SPACE ONLY	-	-				-	-	SPACE ONLY	32
33	SPACE ONLY	-	-				-	-	SPACE ONLY	34
35	SPACE ONLY	-	-			15000	2	150	BUILDING PANEL "A"	36
37	TVSS UNIT	30	3	15000						38
39				15350			2	150	BUILDING PANEL "B"	40
41					15350					42
L - RUN CIRCUIT THRU LIGHTING CONTACTOR.				PHASE LOAD TOTALS			PROVIDE TYPEWRITTEN SCHEDULES WITH PLASTIC COVER. CIRCUIT NAMES TO BE EXACTLY AS LISTED HERE. PROVIDE ENGRAVED NAMEPLATE ON FACE OF PANEL.			
				A	B	C				
				16575	16085	31190				
TOTAL CONNECTED LOAD = 63.9 KVA						TOTAL CONNECTED AMPS = 177.2 AMPS				

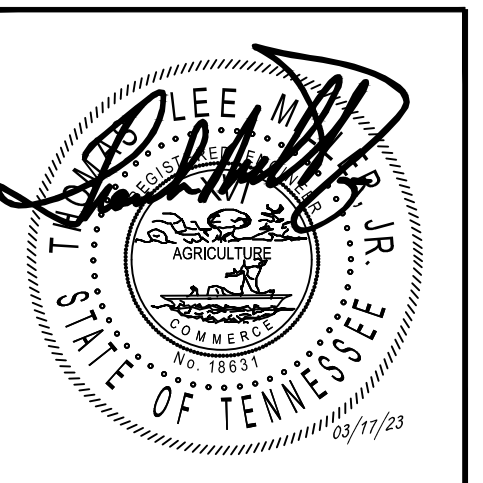
03/17/23																				
1	ADDENDUM #1																			

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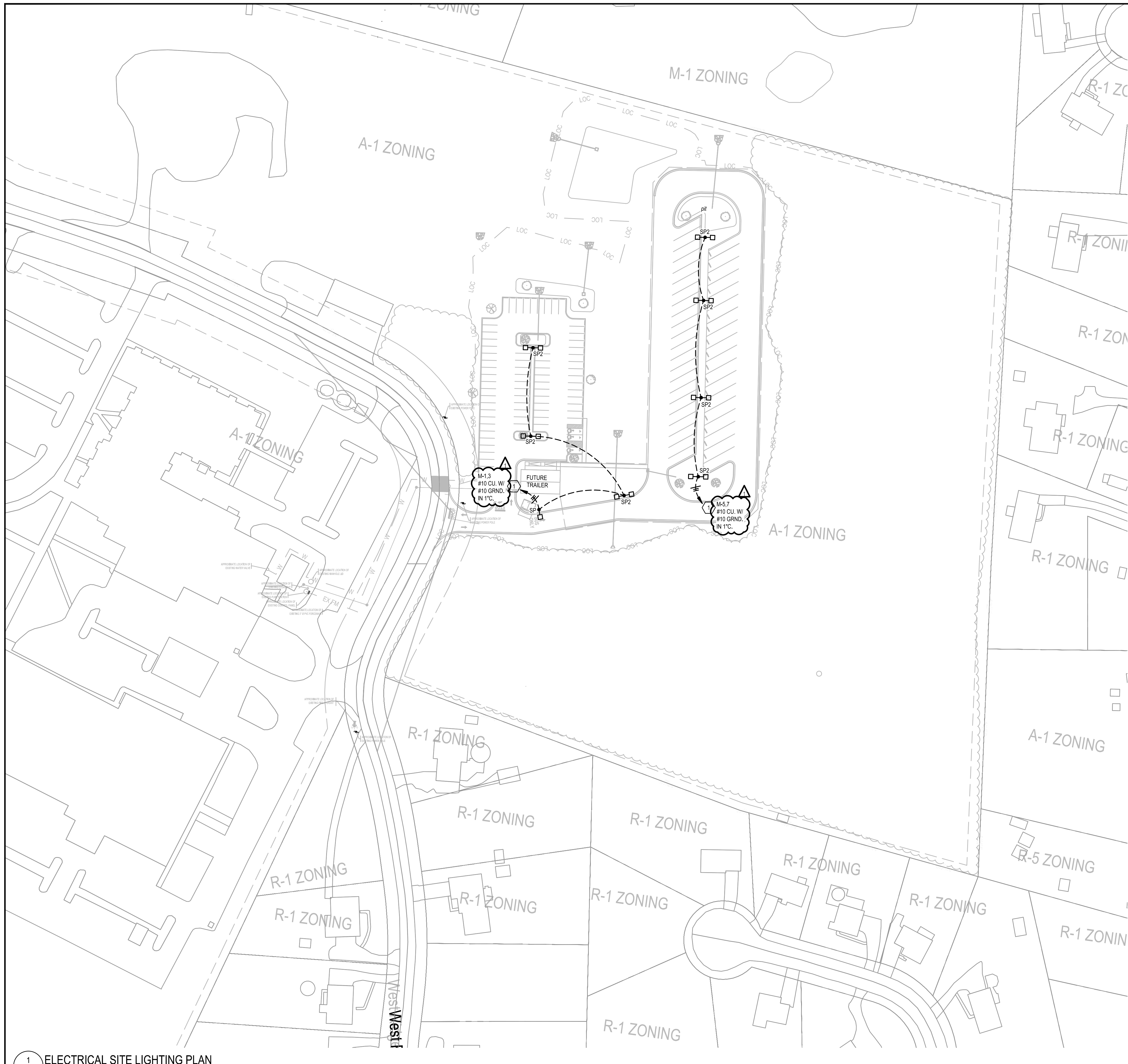
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ES102
ELECTRICAL SITE
DETAILS



GENERAL PLAN NOTES

1. ALL POLE BASES ARE TO BE LOCATED 18" MINIMUM OFF BACK FACE OF CURB TO EDGE OF POLE BASE. THOSE LOCATED IN AN ISLAND ARE TO BE CENTERED IN ISLAND.
2. ALL POLE MOUNTED LIGHT FIXTURES ARE TO BE INSTALLED AT 25' ABOVE FINISHED GRADE (MAX BY CITY ORDINANCE). PROVIDE DIFFERENT POLE LENGTHS FOR POLES LOCATED IN PAVED AND NON PAVED AREAS.

SITE LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION
SP	POLE MOUNTED AREA LIGHT. SEE SHEET ES2.2 FOR DESCRIPTION.
SP2	POLE MOUNTED AREA LIGHT. SEE SHEET ES2.2 FOR DESCRIPTION.

ELECTRICAL KEYED NOTES

1. RUN CIRCUIT THRU LIGHTING CONTACTOR. CONTACTOR TO BE CONTROLLED BY TIMECLOCK & PHOTOCELL ASSEMBLY.

REVISIONS

NO.	DATE	DESCRIPTION
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1 APPENDIX #1

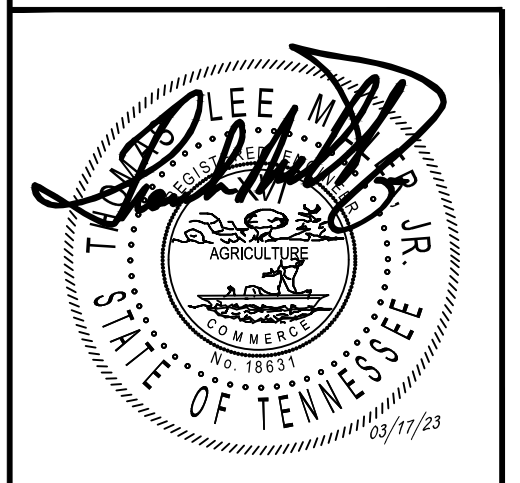
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ES201
ELECTRICAL SITE LIGHTING PLAN

1 ELECTRICAL SITE LIGHTING PLAN
 ES101 SCALE: 1"=60'-0"

