

Comments on #SDP-26-0005 - Planning & Zoning: Site Development Plan

Application Number: #SDP-26-0005
Application Type: Site Development Plan
Date: June 29, 2026
Address: 4502 VINEYARD PINE LN, ROLESVILLE
Parcel: 1758453022



THIS DOCUMENT IS NOT YOUR PERMIT.

The Rolesville Planning Department has reviewed your application for a Site Development Plan Application and has responded with a set of comments that require your attention. These comments must be addressed in full before an approval will be issued.

Reviewing this document on GovWell, our online portal, will allow you to view interactive markups on the document. If you are viewing this as a PDF or offline, a list of all comments will be provided below in this cover sheet. These comments must be acknowledged before a permit is issued.

After you have addressed all comments, please upload corrected versions of the plans by clicking [here](#) or by visiting <https://app.govwell.com/record/ea071922-ee79-4b0f-82b5-d503a097ff64>.

Contacts

Austin Bain

City of Raleigh Engineer

(919) 996-3468

austin.bain@raleighnc.gov

Updates Requested

David Simmons

Police Chief

dsimmons@rolesvillenc.gov

Approved

Eddie Henderson

Parks & Recreation

ehenderson@rolesvillenc.gov

Repeat Comment(s)

Elizabeth Powell

Wake County Watershed Mgmt

elizabeth.powell@wake.gov

Updates Requested

Isaac Poelman

Public Works Superintendent

ipoelman@rolesvillenc.gov

No Comment

Jacob Butler Interim Fire Chief	jbutler@rolesvillenc.gov	No Comment
Jacqueline Thompson On-Call Civil Engineer	jacqueline.thompson@bolton-menk.com	Updates Requested
Meredith Gruber Senior Planner	mgruber@rolesvillenc.gov	Updates Requested
Michael Elabarger Assistant Planning Director	melabarger@rolesvillenc.gov	Repeat Comment(s)
Michele Raby Planner II	mraby@rolesvillenc.gov	Updates Requested
Scott Miles Town Engineer PE	smiles@rolesvillenc.gov	Repeat Comment(s)
Stephen Wensman Planning Director	swensman@rolesvillenc.gov	Repeat Comment(s)
Tanner Hayslette Planner I	thayslette@rolesvillenc.gov	Updates Requested

Comments on Plan

Reviewer feedback tied to specific locations on the plan. The number on each comment corresponds to a matching number marked on the plan page. Each comment must be resolved in GovWell.

- 1


Michael Elabarger
 Assistant Planning Director

revise to "Site Development Plan".

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 • June 26, 2026, 1:52pm
- 2


Austin Bain
 City of Raleigh Engineer

Submit to COR Energov portal. Include SDP-26-0005 in the Energov details for cross-reference purposes.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 • June 25, 2026, 9:36am
- 3


Michael Elabarger
 Assistant Planning Director

with this resubmittal, into the 'new' Govwell, SDP-26-0005 is automatically generated. Please add that to SDP-23-06 and this Application will be referred to by both, tying the past to the present. Add "SDP-26-0005" somewhere consistent on every sheet. Long term, the Govwell # will be more important.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 • June 26, 2026, 1:53pm

4



Jacqueline Thompson
On-Call Civil Engineer

Please include current and proposed impervious areas.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 24, 2026, 10:25am

5



Elizabeth Powell
Wake County Watershed Mgmt

No comments from Wake County Watershed Management at this time. Please make an erosion control/stormwater (SEC/SWF) submittal to Wake County for a review to be conducted.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 2, 2026, 4:48pm

6



Michele Raby
Planner II

Please add PIN and update the date.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 8, 2026, 8:10am

7



Michael Elabarger
Assistant Planning Director

Add revision dates to this original date - Use V1, V2 to connotate.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 26, 2026, 4:33pm

8



Jacqueline Thompson
On-Call Civil Engineer

Please include seal and signature for final approval.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 24, 2026, 10:26am

9



Michele Raby
Planner II

Please add zoning conditions under REZ-23-04 to cover sheet.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 8, 2026, 8:07am

10



Michele Raby
Planner II

Please add sheet index.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 1 · June 8, 2026, 8:08am

11



Jacqueline Thompson
On-Call Civil Engineer

Please include existing zoning for all adjacent properties.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 2 · June 24, 2026, 10:26am

12



Michele Raby
Planner II

Please show sign easement for entrance sign if applicable.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 8, 2026, 8:26am

13



Jacqueline Thompson
On-Call Civil Engineer

Missing concrete hatch on proposed concrete ramp. It would be extremely helpful to grey back the existing conditions to differentiate existing vs. proposed.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 24, 2026, 10:28am

14



Stephen Wensman
Planning Director

The transition between the multi-use trail and the sidewalk needs to be revised so the trail transitions to concrete.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 3, 2026, 4:07pm

15



Stephen Wensman
Planning Director

Add curbstops for these 2 parking stalls

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 3, 2026, 4:08pm

16



Stephen Wensman
Planning Director

Curb stops are not needed here as there is no abutting sidewalk

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 3, 2026, 4:09pm

17



Tanner Hayslette
Planner I

Please add a bicycle lane on Jonesville Road per the 2022 Bicycle Plan.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 23, 2026, 9:32am

18



Jacqueline Thompson
On-Call Civil Engineer

Please include street buffer requirements per LDO Section 6.2.2.2

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 24, 2026, 10:29am

19



Michele Raby
Planner II

Retaining wall may require a WC building permit.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 8, 2026, 8:27am

20



Meredith Gruber
Senior Planner

Please add labels on the site plan to designate pedestrian amenities as per LDO Section 6.8.4.B.2.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 29, 2026, 2:53pm

21



Michele Raby
Planner II

Dumpster will require a building permit. Please review LDO Sections 5 & 6 re: dumpsters/trash containment if not already reviewed.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 8, 2026, 8:30am

22



Michele Raby
Planner II

Please review LDO Section 6.5 re: fence height, type, materials if not already reviewed.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 3 · June 8, 2026, 8:33am

23



Jacqueline Thompson
On-Call Civil Engineer

Please clarify the intent of the storm bypass. The existing system does not seem to be in conflict, unless the proposed sewer is the concern? Is a crossing able to be done?

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:22am

24



Jacqueline Thompson
On-Call Civil Engineer

There is a detail for 24" rolled curb and 24" standard curb. The labels call out 24" standard curb. Please clarify where/if the curb transitions from one style to another. Also, there is a detail for reverse pitch curb; please indicate where this curb is intended.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:30am

25



Jacqueline Thompson
On-Call Civil Engineer

Please clarify what these bold lines are going from the 371 contour to curb.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:27am

26



Jacqueline Thompson
On-Call Civil Engineer

How will handicap access occur next to the vehicle? If there is sidewalk between the parking, will a ramp be proposed? Please label the width of the accessible path

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:24am

27



Scott Miles
Town Engineer PE

is this a public or private easement?

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 22, 2026, 10:46am

28



Jacqueline Thompson
On-Call Civil Engineer

Please include inserts or spot elevations (whichever is cleanest) to provide spot elevations at pedestrian ramps to ensure ADA compliance.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:14am

29



Jacqueline Thompson
On-Call Civil Engineer

Due to all the linework, it is extremely difficult to tell where the concrete walk starts/stops. Please consider including the hatching to differentiate.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:26am

30



Jacqueline Thompson
On-Call Civil Engineer

Please adjust contour labels so they are legible.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:19am

31



Jacqueline Thompson
On-Call Civil Engineer

This TOW / BOW label doesn't appear to be pointing at a wall. Please review and adjust accordingly.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:18am

32



Jacqueline Thompson
On-Call Civil Engineer

The spot elevations appear to be on the sidewalk but not along the edges; please review the placement of the spot elevations to ensure it helps dictate the design. ADA compliance will need to be met for access and spot elevations need to be provided to ensure drainage is positive.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:16am

33



Jacqueline Thompson
On-Call Civil Engineer

Please add additional top and bottom wall elevations at the end, or provide a retaining wall design.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:11am

34



Jacqueline Thompson
On-Call Civil Engineer

Typo.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:06am

35



Jacqueline Thompson
On-Call Civil Engineer

This FES outlets directly at the retaining wall; this could cause erosion of the wall over time or cause water to pool. Additional grading may need completed to outlet the drainage into the buffer. The FES invert is lower than the bottom of wall at the corner, which would cause water to collect and potentially back up into the pipe depending on the grading.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:10am

36



Jacqueline Thompson
On-Call Civil Engineer

Fall protection is required for walls greater than 4'. Please include a detail for the type of fall protection.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4 · June 24, 2026, 11:08am

37



Jacqueline Thompson
On-Call Civil Engineer

Please confirm all crossings are being provided with a minimum 18" separation; labeling crossing elevations would be extremely helpful in both review and construction.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 5 · June 24, 2026, 11:22am

38



Michele Raby
Planner II

Please contact C. DeCarlo Sanders, Utilities Analyst (*Required only for food service/vehicle maintenance) courtney.sanders@raleighnc.gov 919-996-2334 before requesting a pre-construction meeting.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 5 · June 8, 2026, 8:35am

39



Meredith Gruber
Senior Planner

Is this a fence in the diagram? TA-26-0005 included amendments to perimeter buffers. Plant materials only may be used to meet 75% opacity. If you'd like to discuss this, let me know.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 6 · June 29, 2026, 2:57pm

40



Eddie Henderson
Parks & Recreation

Please revise to show more of a diversity of native trees and shrubs in the landscape plan, which currently only shows one. Per Rolesville LDO 6.2.4.7c: "All developments shall provide a diverse plant palette..." Please see the following links for alternative native bush species:

<https://ncwildflower.org/recommended-native-species/>

<https://content.ces.ncsu.edu/extension-gardener-handbook/12-native-plants>

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 6 · June 23, 2026, 9:31am

41



Eddie Henderson
Parks & Recreation

Please revise landscape plan to remove *Ulmus parvifolia*, which is considered by the state to be an invasive – https://nc-ipc.weebly.com/uploads/6/8/4/6/6846349/invasive_plant_list_-_ranked_-_2023-11-16.pdf

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 6 · June 23, 2026, 9:25am

42



Tanner Hayslette
Planner I

Please add a standard detail for a 10' concrete sidepath in accordance with Section 1: Streets, part 2..b.iii. of the Town's Standard Engineering Plan.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 8 · June 23, 2026, 9:41am

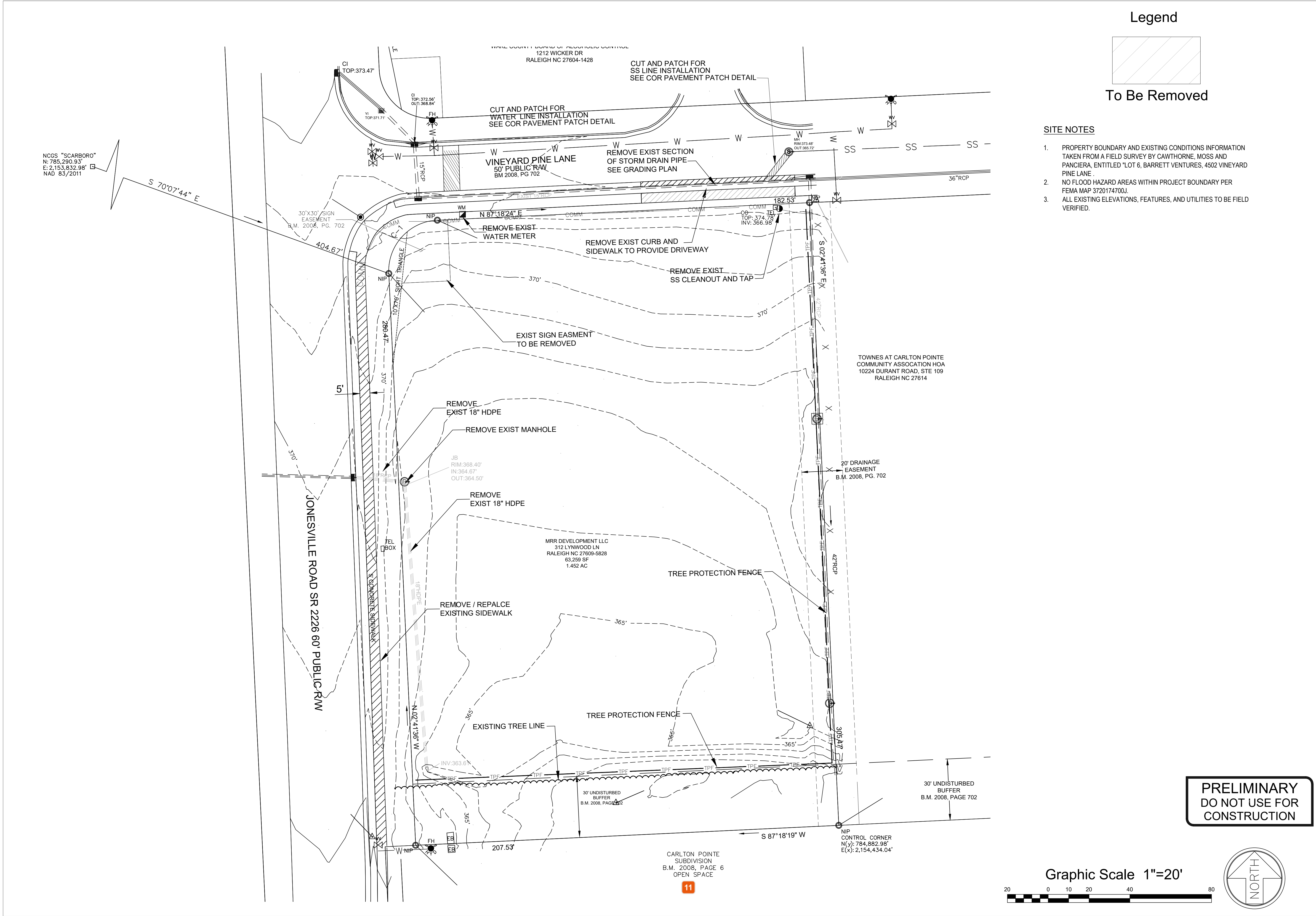
43



Meredith Gruber
Senior Planner

Thank you for noting compliance with transparency requirements. Please add similar notes for Facades, Building Blank Wall Area, Materials, Colors, Roof Design Standards, etc. as per LDO Section 6.8.2.D.

Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 25 · June 29, 2026, 2:41pm



Legend

To Be Removed

- SITE NOTES
1. PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION TAKEN FROM A FIELD SURVEY BY CAWTHORNE, MOSS AND PANCIERA, ENTITLED "LOT 6, BARRETT VENTURES, 4502 VINEYARD PINE LANE.
 2. NO FLOOD HAZARD AREAS WITHIN PROJECT BOUNDARY PER FEMA MAP 3720174700J.
 3. ALL EXISTING ELEVATIONS, FEATURES, AND UTILITIES TO BE FIELD VERIFIED.

NO	DATE	REVISION DESCRIPTION	BY
1	8/28/2023	Initial Submittal	WGS
2	8/28/2023	Townes at Carlton Pointe	WGS
3	DATE	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	Comment	By

Exist. Conditions & Demo Plan

Vineyard Pine Commercial

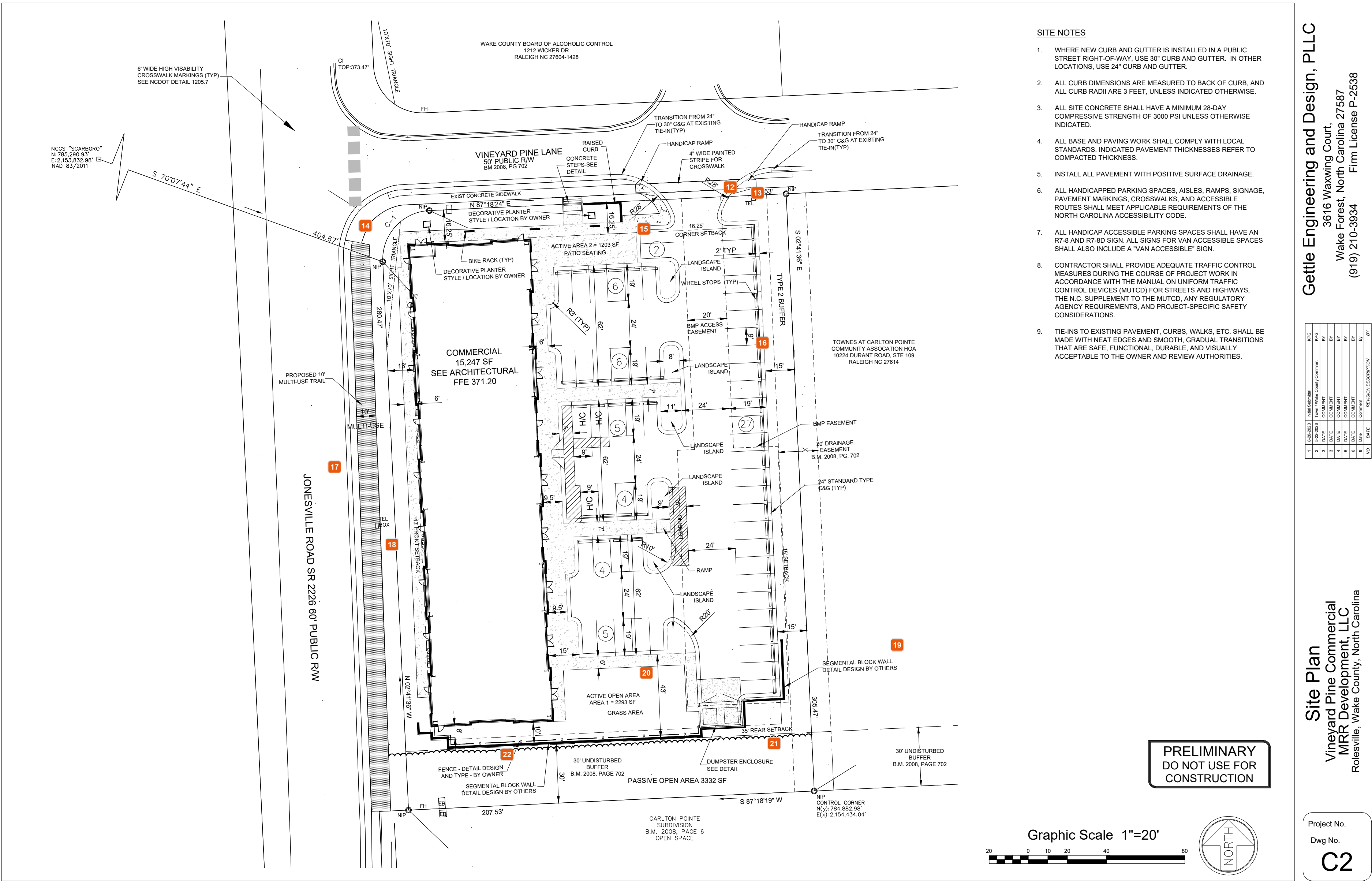
MRR Development, LLC

Rolesville, Wake County, North Carolina

Project No.23005

Dwg No.

C1



- 12

Michele Raby
Please show sign easement for entrance sign if applicable.
- 13

Jacqueline Thompson
Missing concrete hatch on proposed concrete ramp. It would be extremely helpful to grey back the existing conditions to differentiate existing vs. proposed.
- 14

Stephen Wensman
The transition between the multi-use trail and the sidewalk needs to be revised so the trail transitions to concrete.
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Add curbstops for these 2 parking stalls
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Curb stops are not needed here as there is no abutting sidewalk
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Tanner Hayslette
Please add a bicycle lane on Jonesville Road per the 2022 Bicycle Plan.
- 18

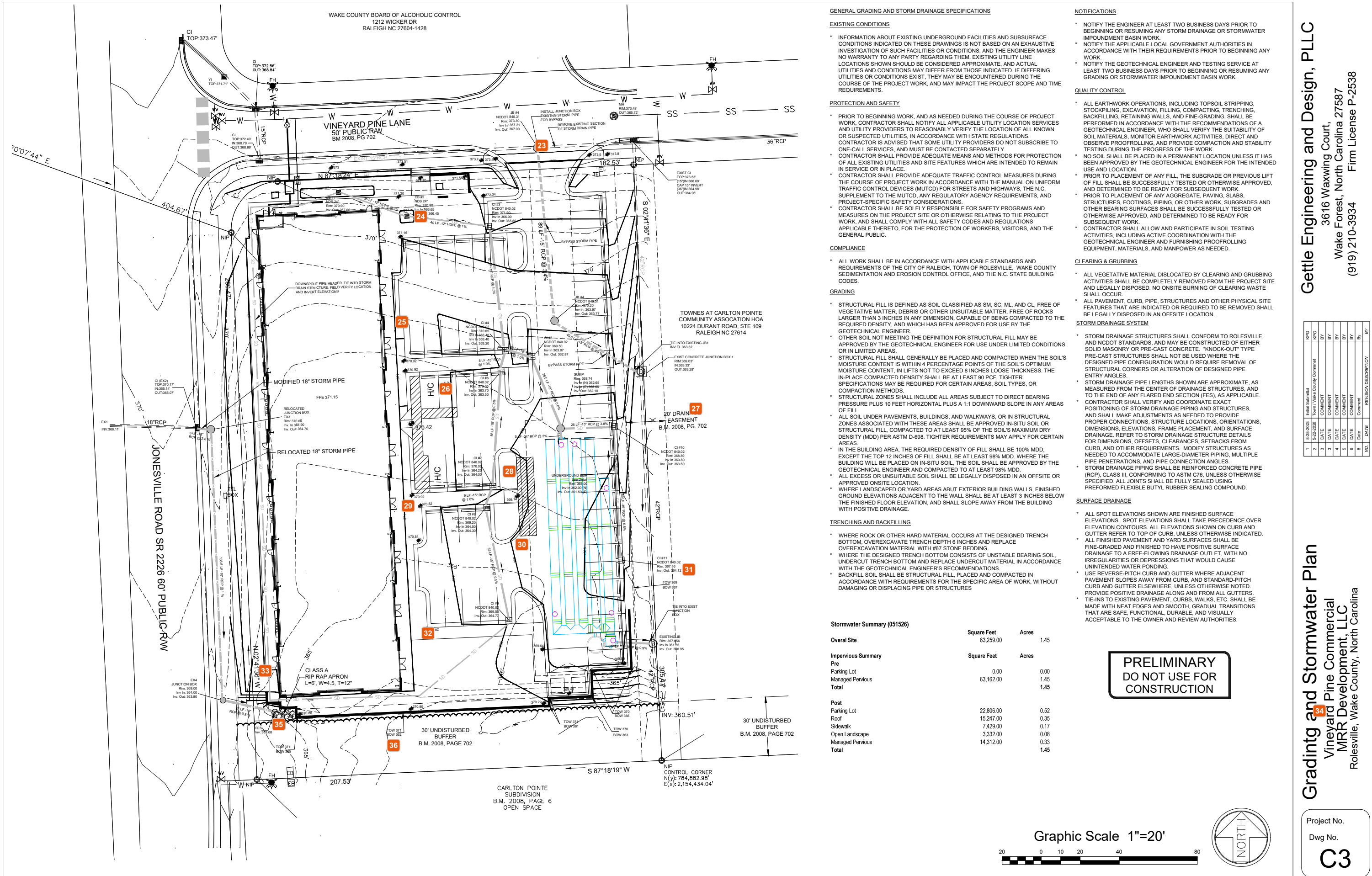
Jacqueline Thompson
Please include street buffer requirements per LDO Section 6.2.2.2
- 19

Michele Raby
Retaining wall may require a WC building permit.
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Meredith Gruber
Please add labels on the site plan to designate pedestrian amenities as per LDO Section 6.8.4.B.2.
- 21

Michele Raby
Dumpster will require a building permit. Please review LDO Sections 5 & 6 re: dumpsters/trash containment if not already reviewed.
- 22

Michele Raby
Please review LDO Section 6.5 re: fence height, type, materials if not already reviewed.



Rolesville SDP-23-06 (OLD)_SDP-26-0005 (GW)_Site Plan Documents 052226.pdf · Page 4

23 Jacqueline Thompson
Please clarify the intent of the storm bypass. The existing system does not seem to be in conflict, unless the proposed sewer is the concern? Is a crossing able to be done?

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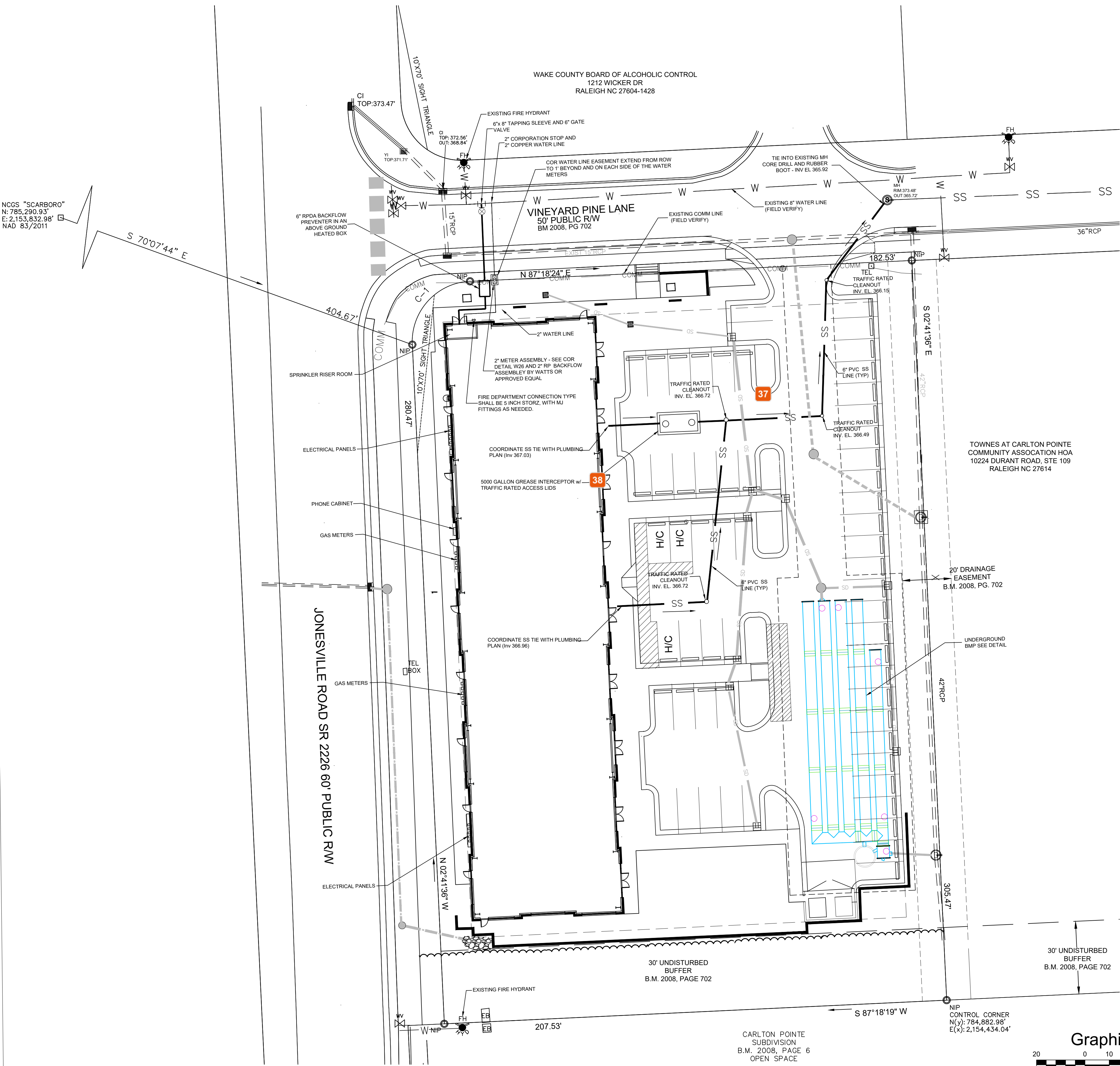
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Please add additional top and bottom wall elevations at the end, or provide a retaining wall design.

34 Jacqueline Thompson
Typo.

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36 Jacqueline Thompson
Fall protection is required for walls greater than 4'. Please include a detail for the type of fall protection.



- CITY OF RALEIGH UTILITY NOTES:**
1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: COR PLD HANDBOOK, CURRENT EDITION).
 2. UTILITY SEPARATION REQUIREMENTS:
 - a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - b) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - c) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - d) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - e) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS. MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49).
 - f) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
 4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
 5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS. 4' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
 6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER AND SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
 7. INSTALL 2" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2x2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. (NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW AND PRESSURE).
 8. INSTALL 4" PVC SEWER SERVICES AT 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE AND SPACED EVERY 75 LINEAR FEET MAXIMUM.
 9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
 10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
 11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS AND SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
 12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS AND INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919)996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
 13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST - THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 212-5563 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.

- SEPARATION NOTES:**
1. MINIMUM SEPARATION BETWEEN STORM DRAINAGE AND SANITARY SEWER IS 24 INCHES.
 2. MINIMUM SEPARATION BETWEEN WATER AND STORM DRAINAGE IS 16 INCHES.
 3. MINIMUM SEPARATION BETWEEN WATER AND SANITARY SEWER IS 18 INCHES.

HYDRANT, METER, AND CLEAN-OUT NOTES:
ALL HYDRANTS, METERS, AND SEWER SERVICES ARE SHOWN AT APPROXIMATE LOCATIONS. HYDRANTS, AND METERS, ARE TO BE PLACED WITHIN THE RIGHT-OF-WAY AS INDICATED ON CITY OF RALEIGH DETAIL. SEWER SERVICE SHALL BE PLACED INSIDE LOT AS SHOWN ON CITY OF RALEIGH DETAIL. CONTRACTOR SHALL VERIFY AND CONFIRM PROPER LOCATION ACCORDING TO MUNICIPALITY REQUIREMENTS PRIOR TO INSTALLATION. CONTRACTOR SHALL VERIFY PROPER LOCATION WITH MUNICIPALITY INSPECTOR PRIOR TO INSTALLATION.

ATTENTION CONTRACTORS
The **Construction Contractor** responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Works Department** at (919) 996-2409, and the **Public Utilities Department** at (919) 996-4540 at least **twenty-four hours** prior to beginning any of their construction.

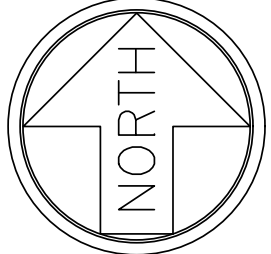
Failure to notify both **City Departments** in advance of beginning construction, will result in the issuance of **monetary fines**, and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for **Inspection, Install a Downstream Plug**, have **Permitted Plans** on the **Jobsite**, or any other **Violation of City of Raleigh Standards** will result in a **Fine and Possible Exclusion** from future work in the **City of Raleigh**.

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations.
Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans and on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval _____
City of Raleigh Review Officer _____

**PRELIMINARY
DO NOT USE FOR
CONSTRUCTION**



37 Jacqueline Thompson
Please confirm all crossings are being provided with a minimum 18" separation; labeling crossing elevations would be extremely helpful in both review and construction.

38 Michele Raby
Please contact C. DeCarlo Sanders, Utilities Analyst (*Required only for food service/vehicle maintenance) courtney.sanders@raleighnc.gov 919-996-2334 before requesting a pre-construction meeting.

Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

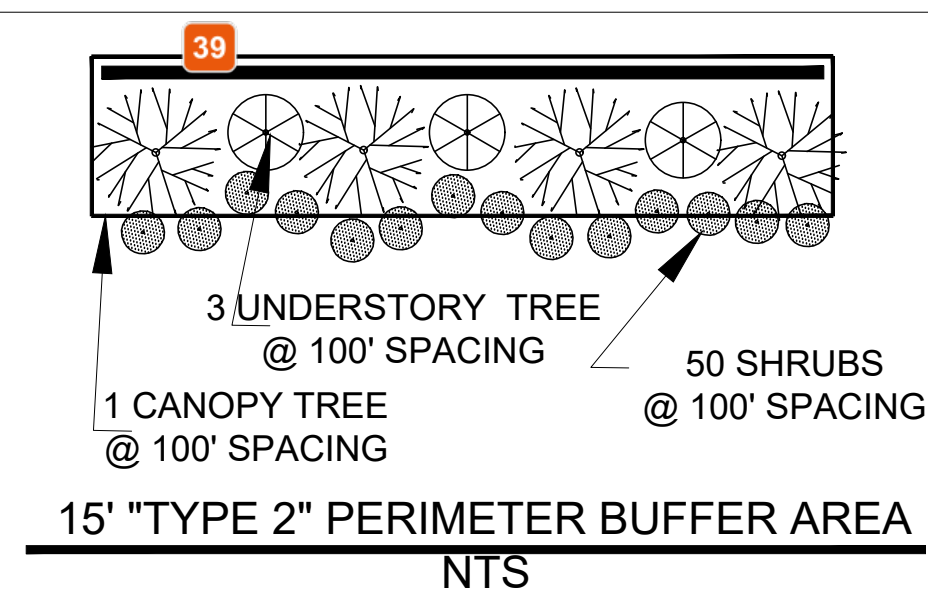
NO	DATE	INITIALS	REVISION DESCRIPTION
1	8-28-2023	Initial Submission	
2	9-28-2023	Wake County Comment	
3	DATE	BY	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
7	DATE	COMMENT	BY
8	DATE	COMMENT	BY

Utility Plan
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.

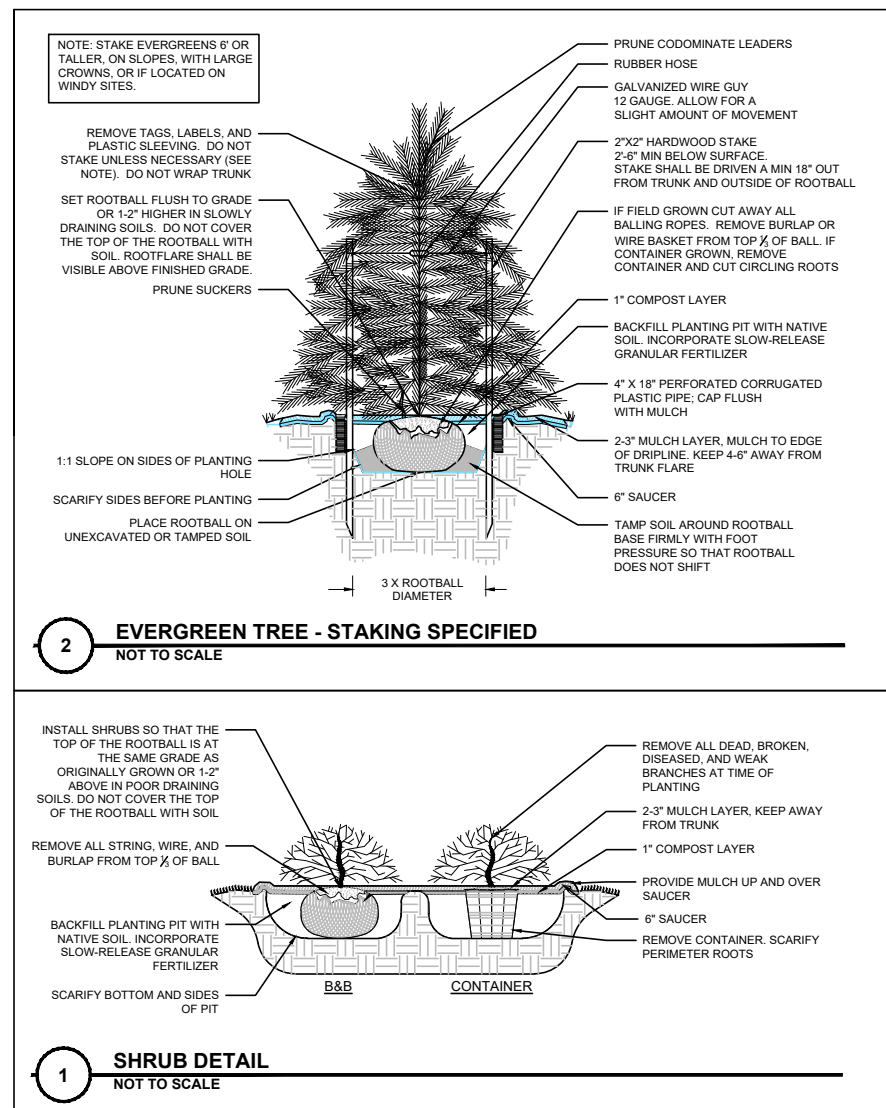
Dwg No.

C4



1. LST IS FOR PLANTING PURPOSES ONLY. FOR INFORMATION RELATING TO GRADING, REFER TO GRADING PLAN.
2. VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
3. ALL PLANTS AND PLANTING PROCEDURES SHALL CONFORM TO ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN LATEST EDITION.
4. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
5. ALL TREES AND SHRUBS SHALL BE FULL WELL BRANCHED PLANTS WHICH ARE CHARACTERISTIC OF THE SPECIES.
6. ALL PERMANENT GRASS IS TO BE BERMUDA.
7. ALL ROOT BALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING.
8. REMOVE ALL STRING AND WIRE FROM BASE OF ALL PLANT MATERIAL.
9. MULCH ALL BEDS WITH 3" OF HARDWOOD MULCH, UNLESS OTHERWISE NOTED.
10. IF SHRUB PLANTING BEDS DO NOT HAVE A MIN. 6" TOPSOIL THEN AMENDED WITH 3" PINE PARK TILLED INTO THE SOIL TO A DEPTH OF 6".
11. ALL AREAS NOT COVERED WITH PAVING, GRAVEL, BUILDINGS OR PLANTING BEDS SHALL BE SEEDED AS SHOWN IN THE SEEDED PREP. AND SEEDING SCHEDULE.
12. LAWN AREAS SHALL BE RAKED TO REMOVE ROCKS, STICKS, ROOTS AND OTHER TRASH AND DEBRIS AND SHALL BE SMOOTH FOR EASE OF MOWING.
13. ALL PLANTINGS OF TREES AND SHRUBS SHALL BE A MINIMUM 4' FROM EDGE OF PARKING SPACES.

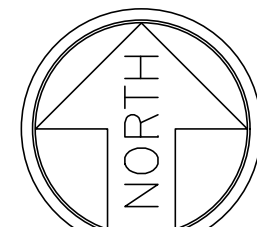
PLANT LIST STREETS - JONESVILLE AND VINEYARD PINE						
REQUIRED	KEY	BOTANICAL NAME	COMMON NAME	CALIPER / HT	QUAN.	
CANOPY 462 / 40 ± 11.5	ULPA	CHINESE ELM	Ulmus Parvifolia	2.5"	5	
	GIN	MAIDENHAIR TREE	Ginkgo biloba (Male)	2.5"	6	
UNDERSTORY (25%)	THPL	NATCHES CREPE MYRTLE	Lag. Indica 'Natchez'	2.5"	9	



Graphic Scale 1"=20'



30 0 15 30 60 12



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1	2	3	4	5	6	7	8
8-28-2023	5-22-2026	DATE	DATE	DATE	DATE	DATE	DATE
Initial Submittal	Town / Wake County Comment	COMMENT	COMMENT	COMMENT	COMMENT	COMMENT	REVISION DESCRIPTION
KPG	KPG	BY	BY	BY	BY	BY	BY

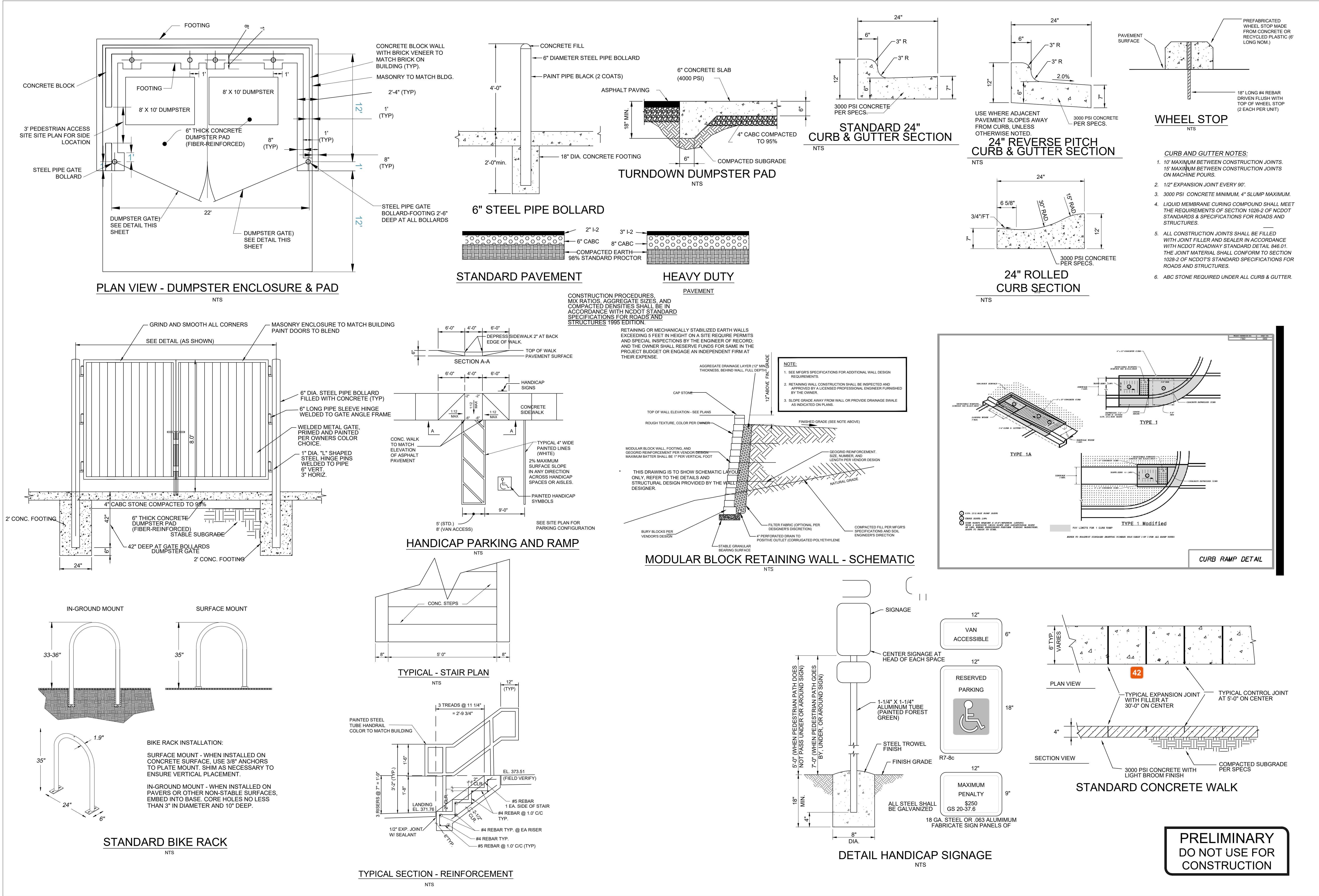
Landscape Plan

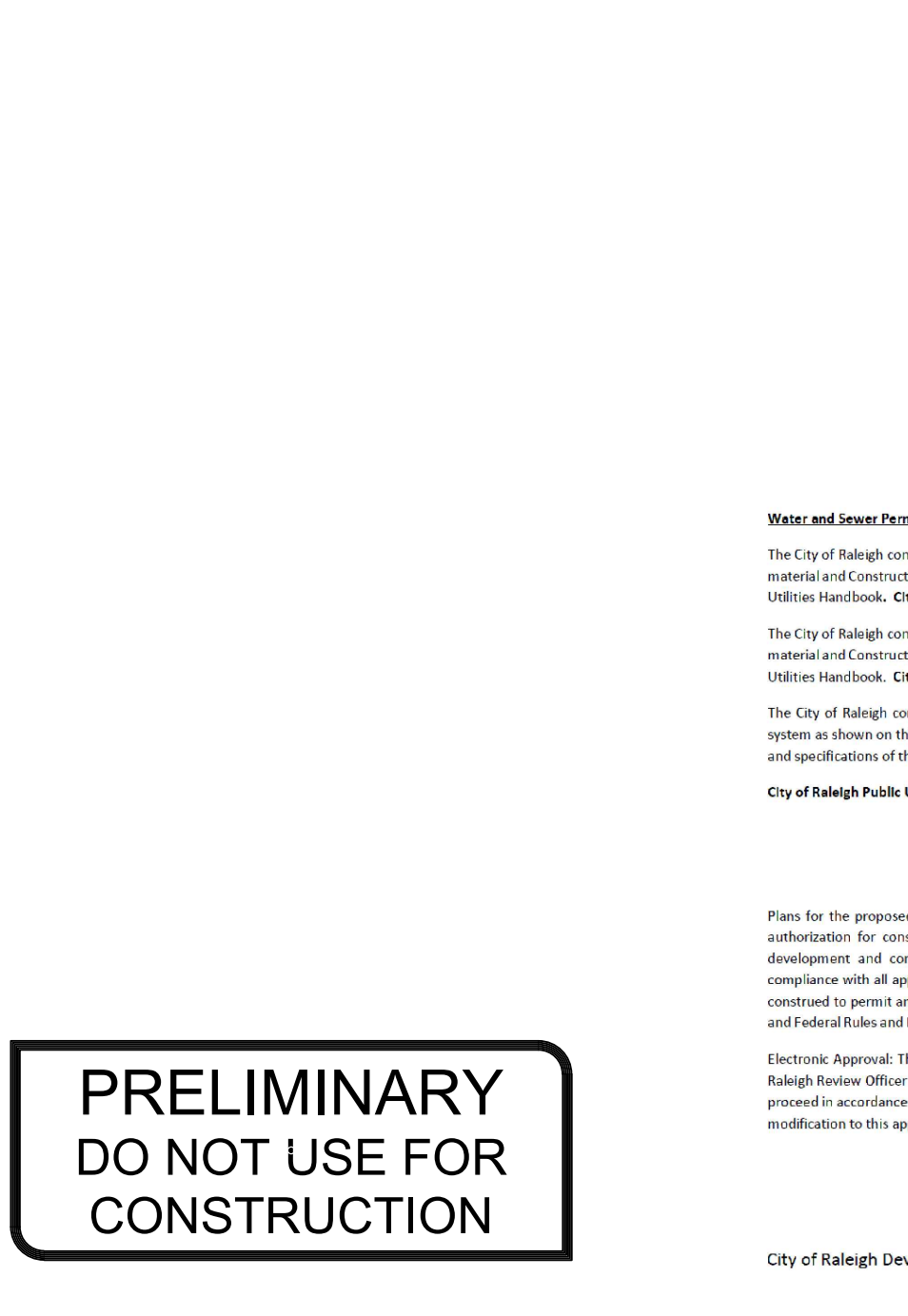
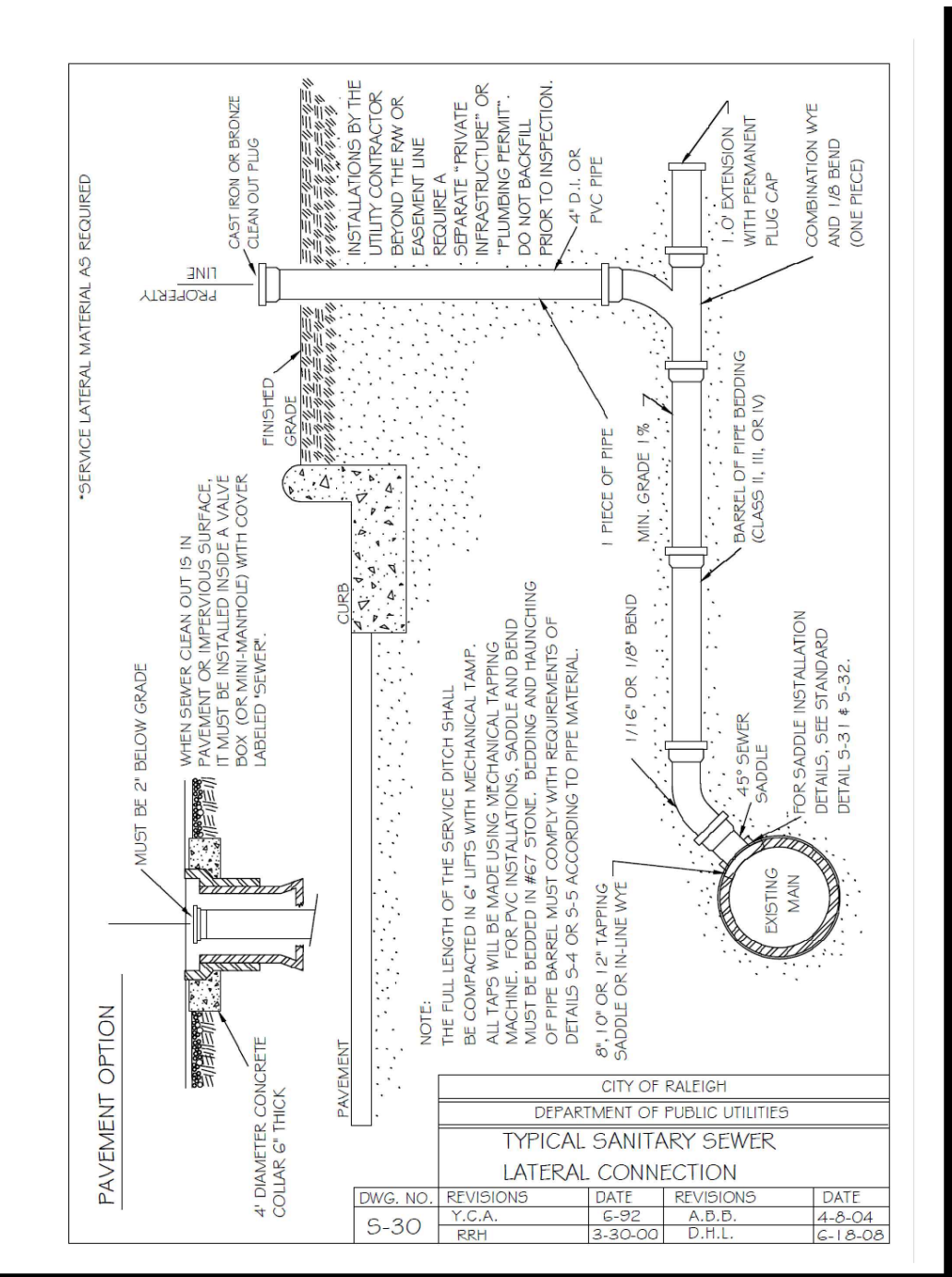
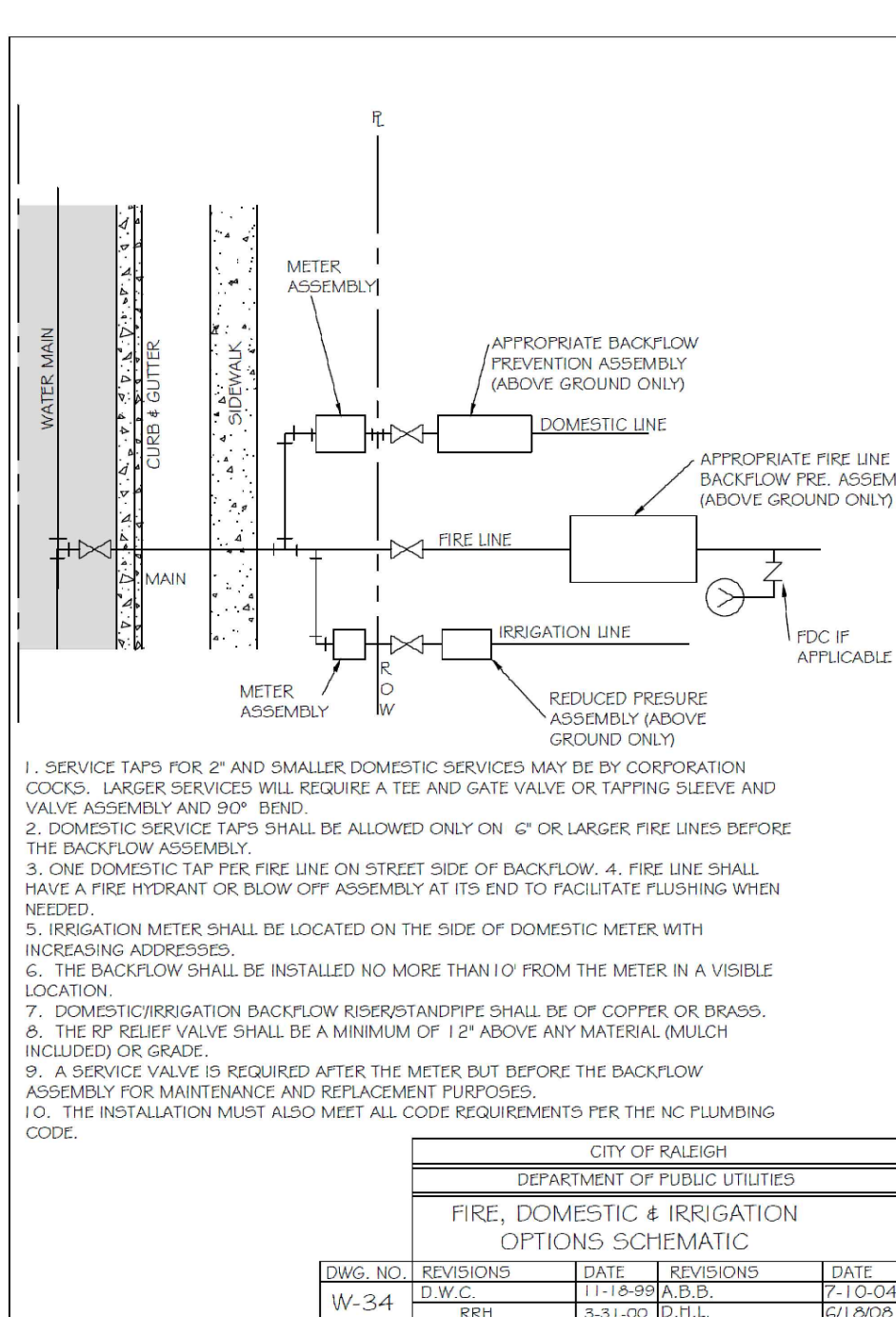
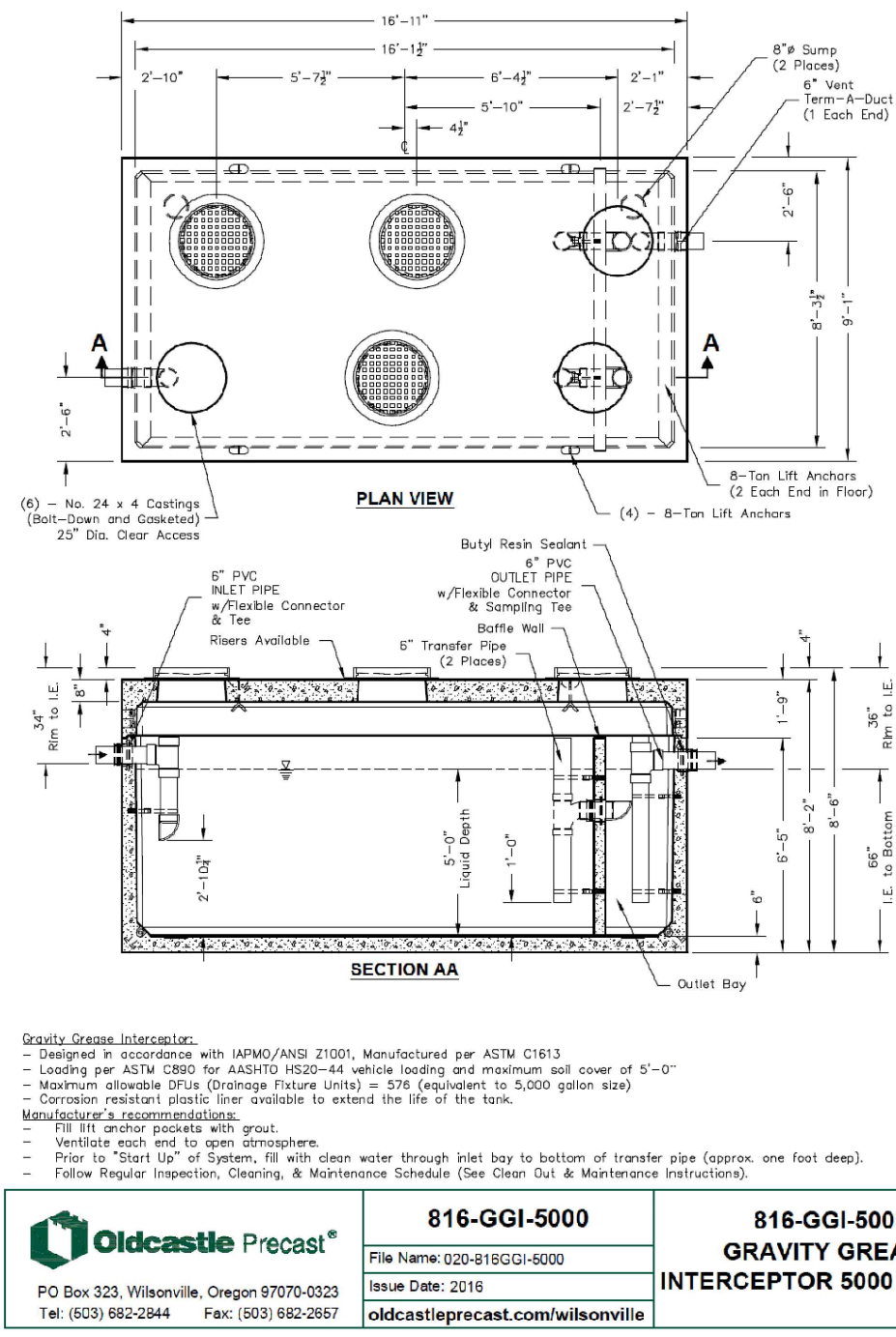
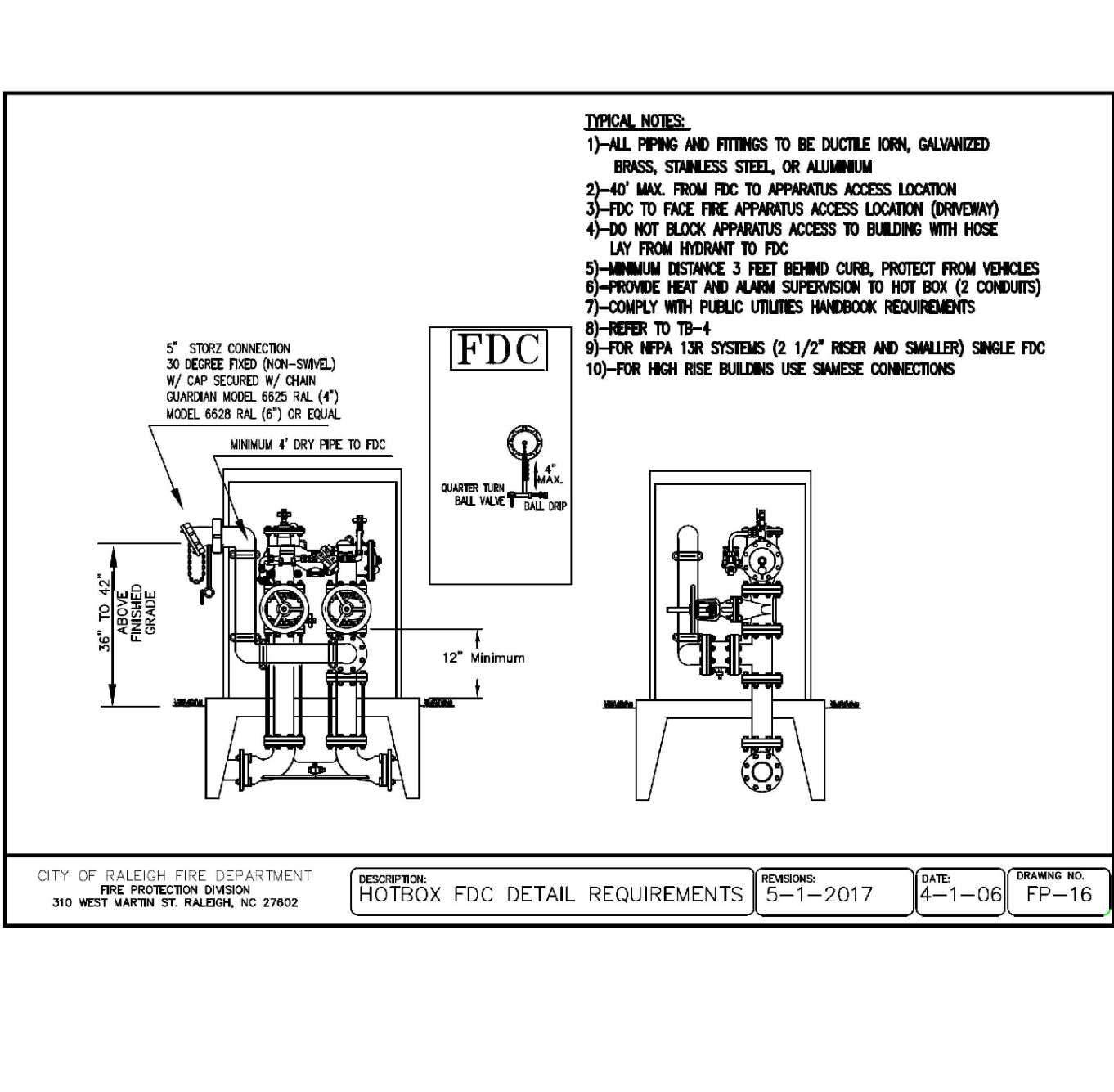
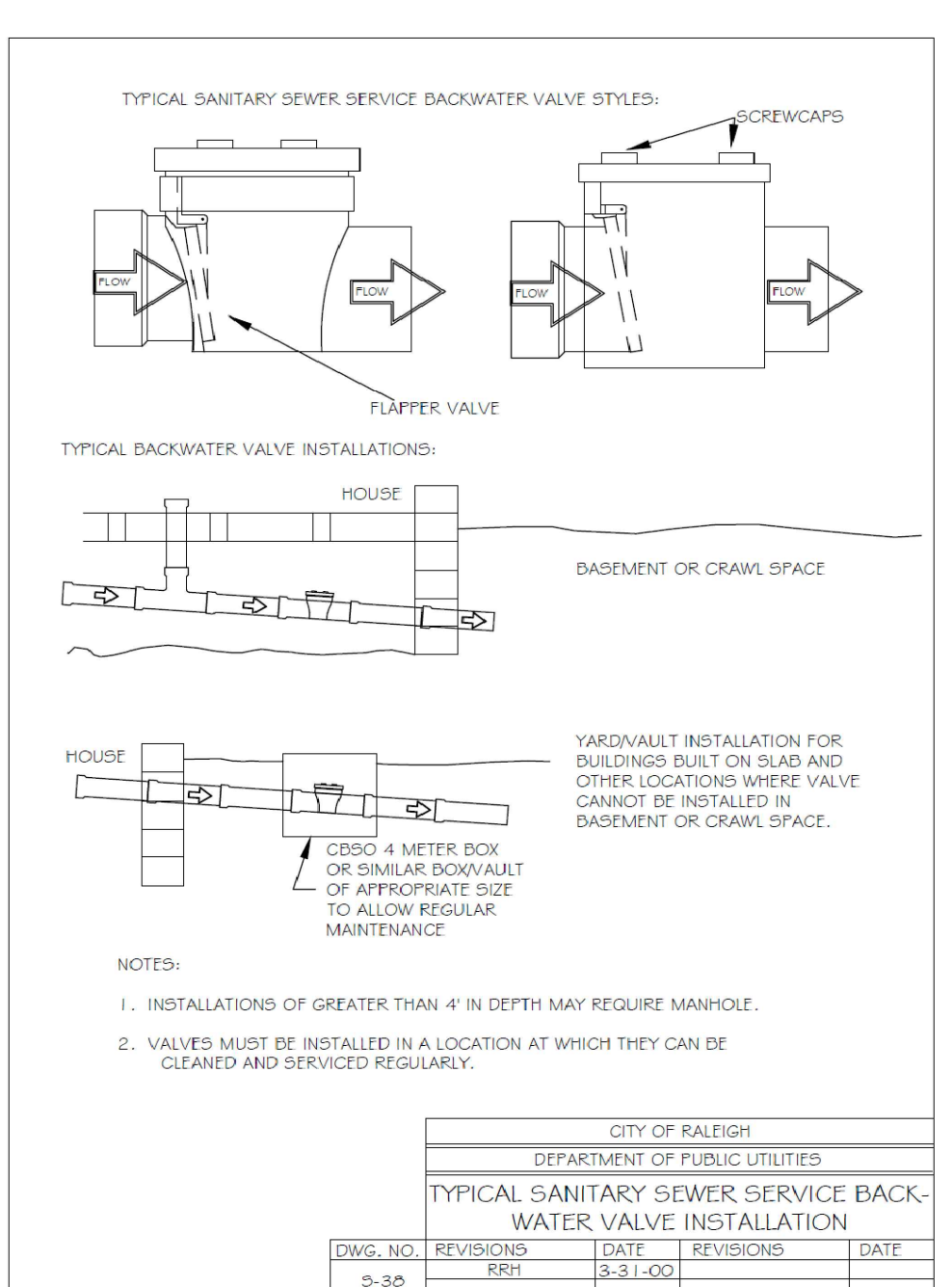
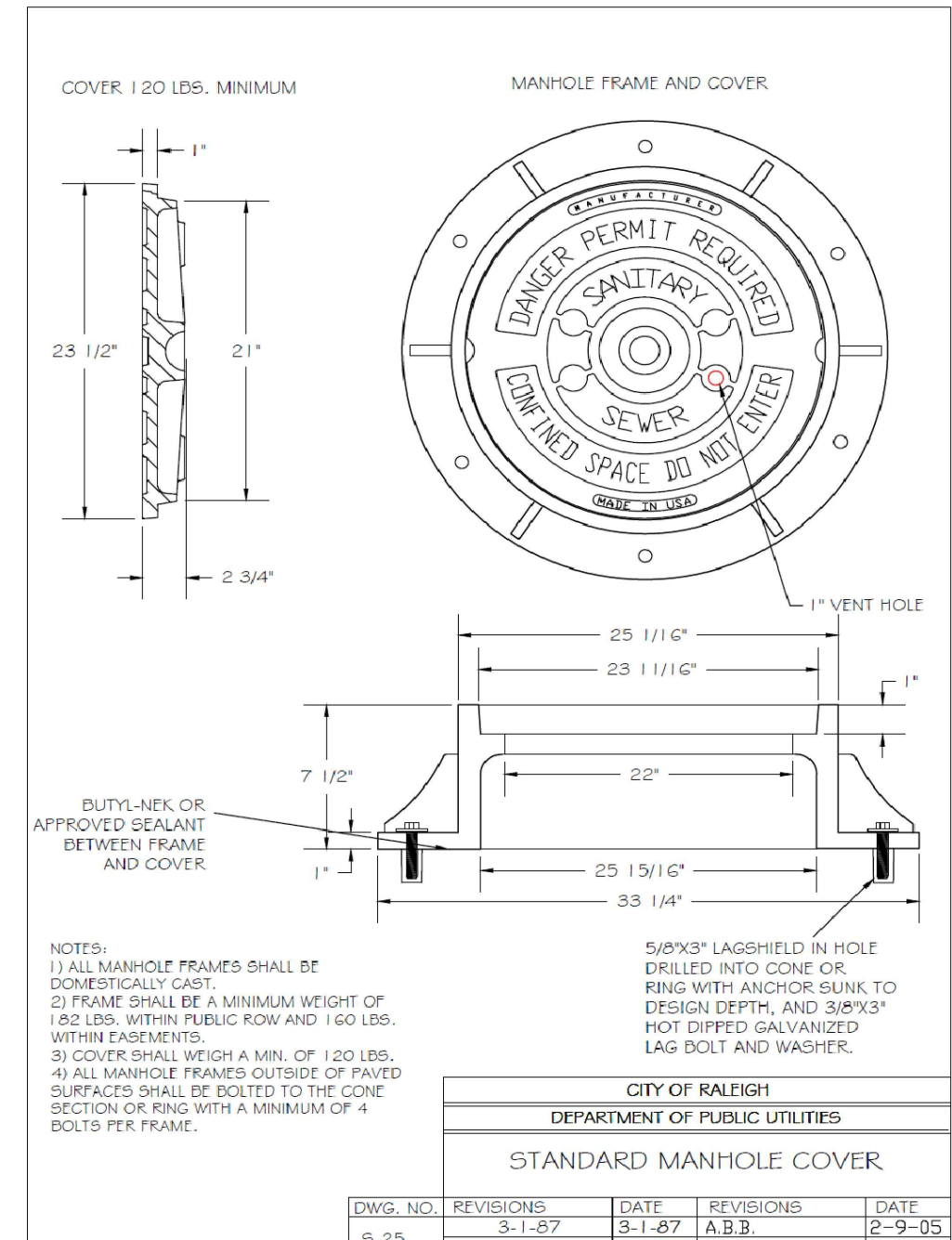
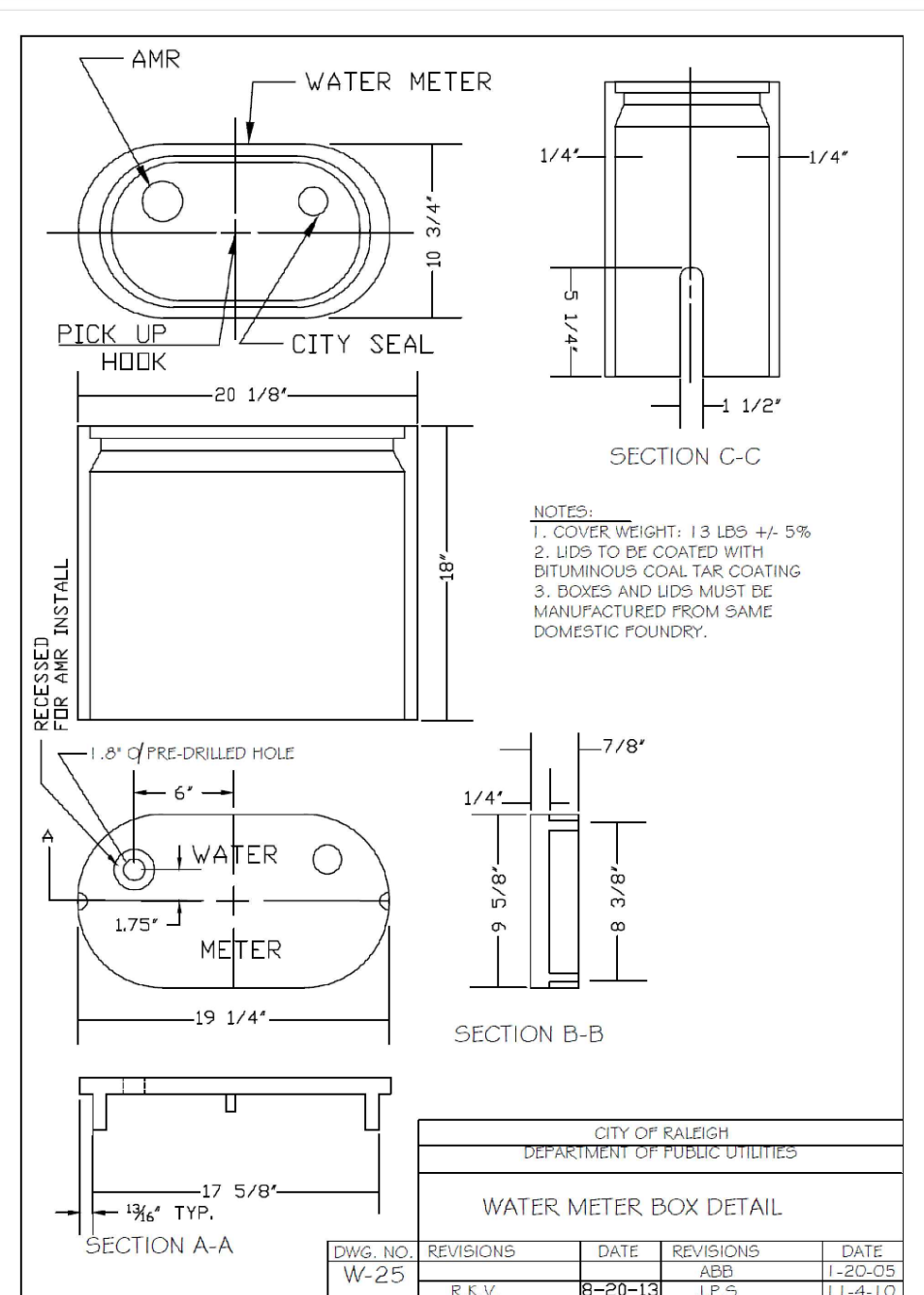
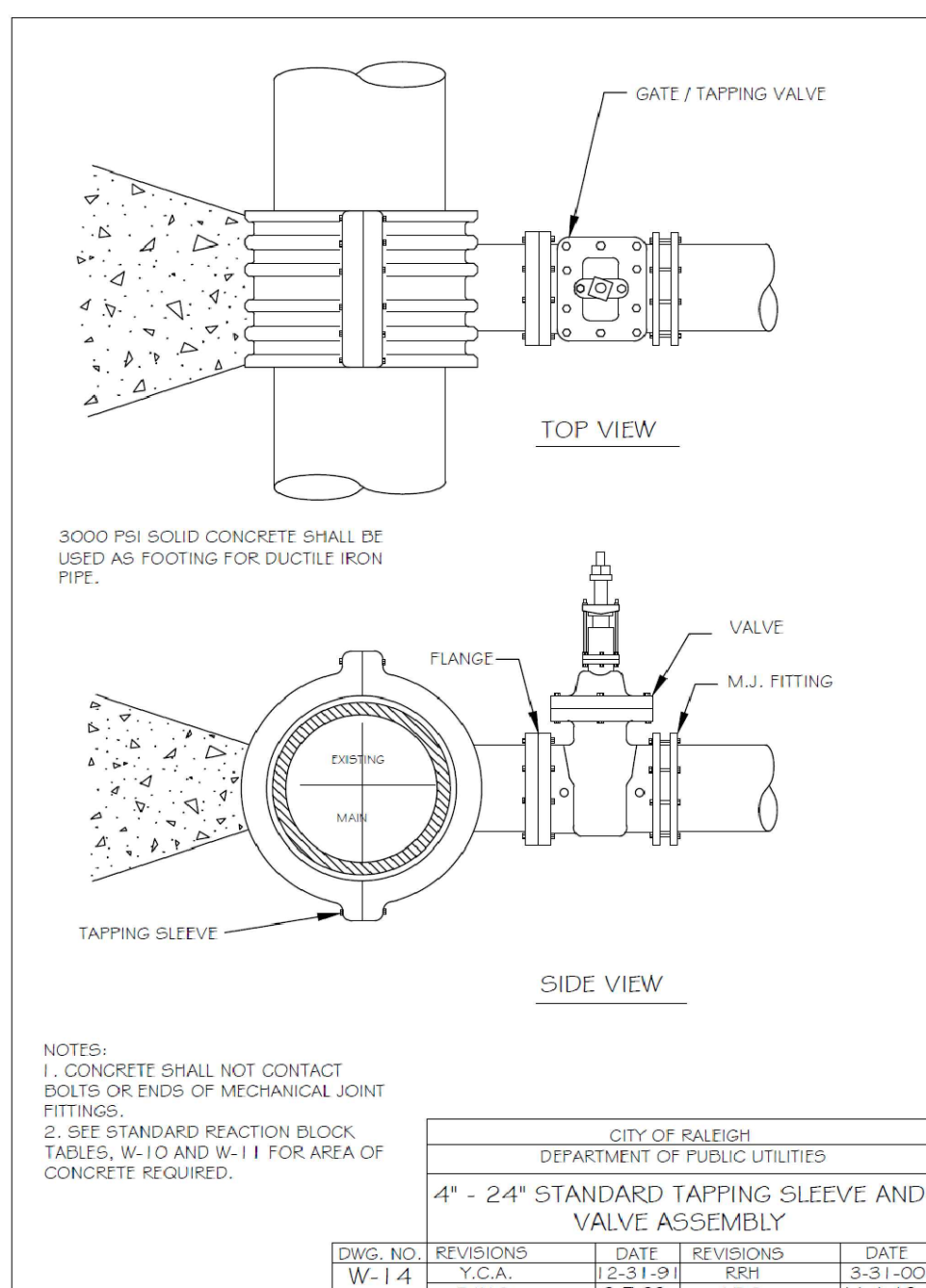
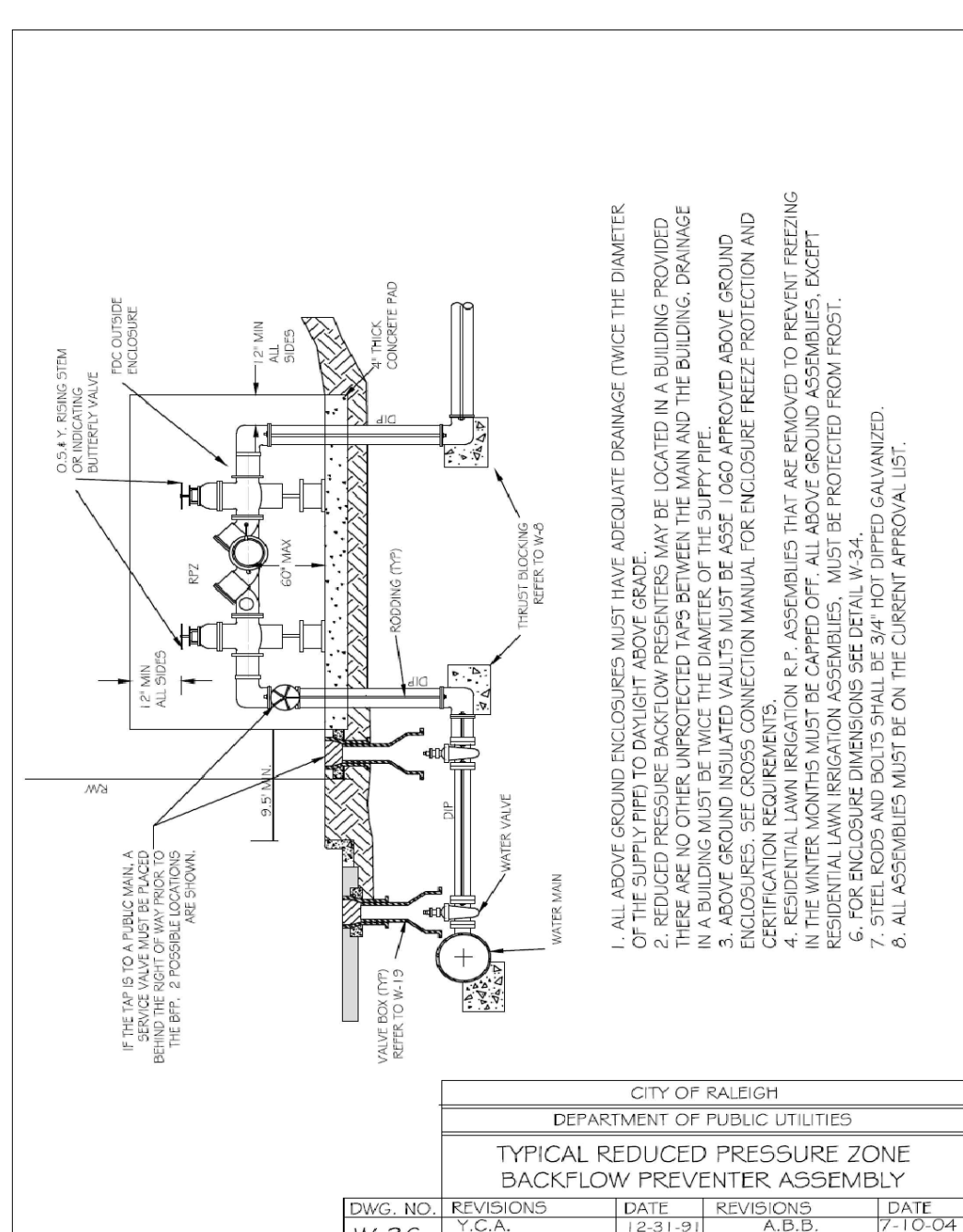
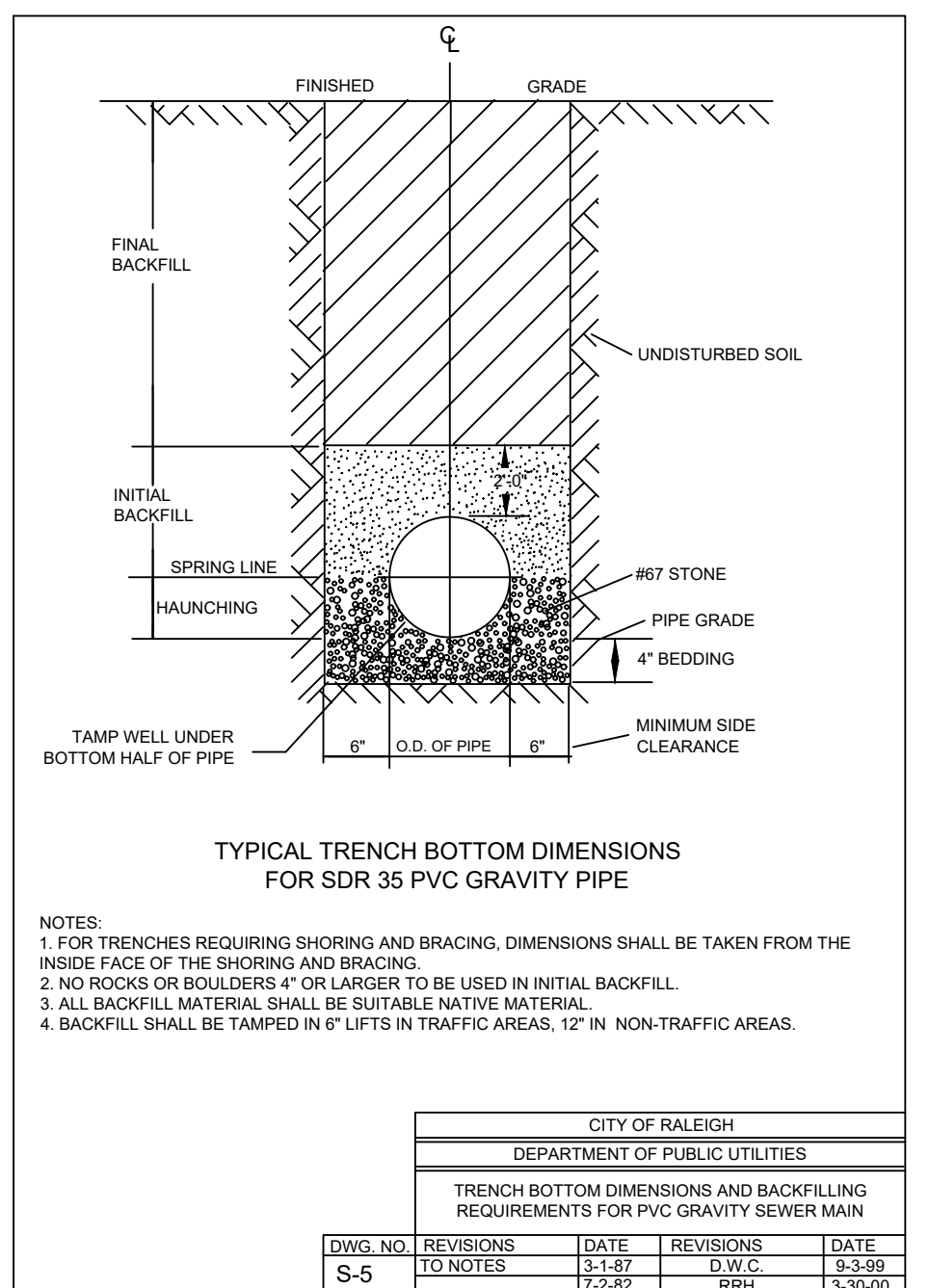
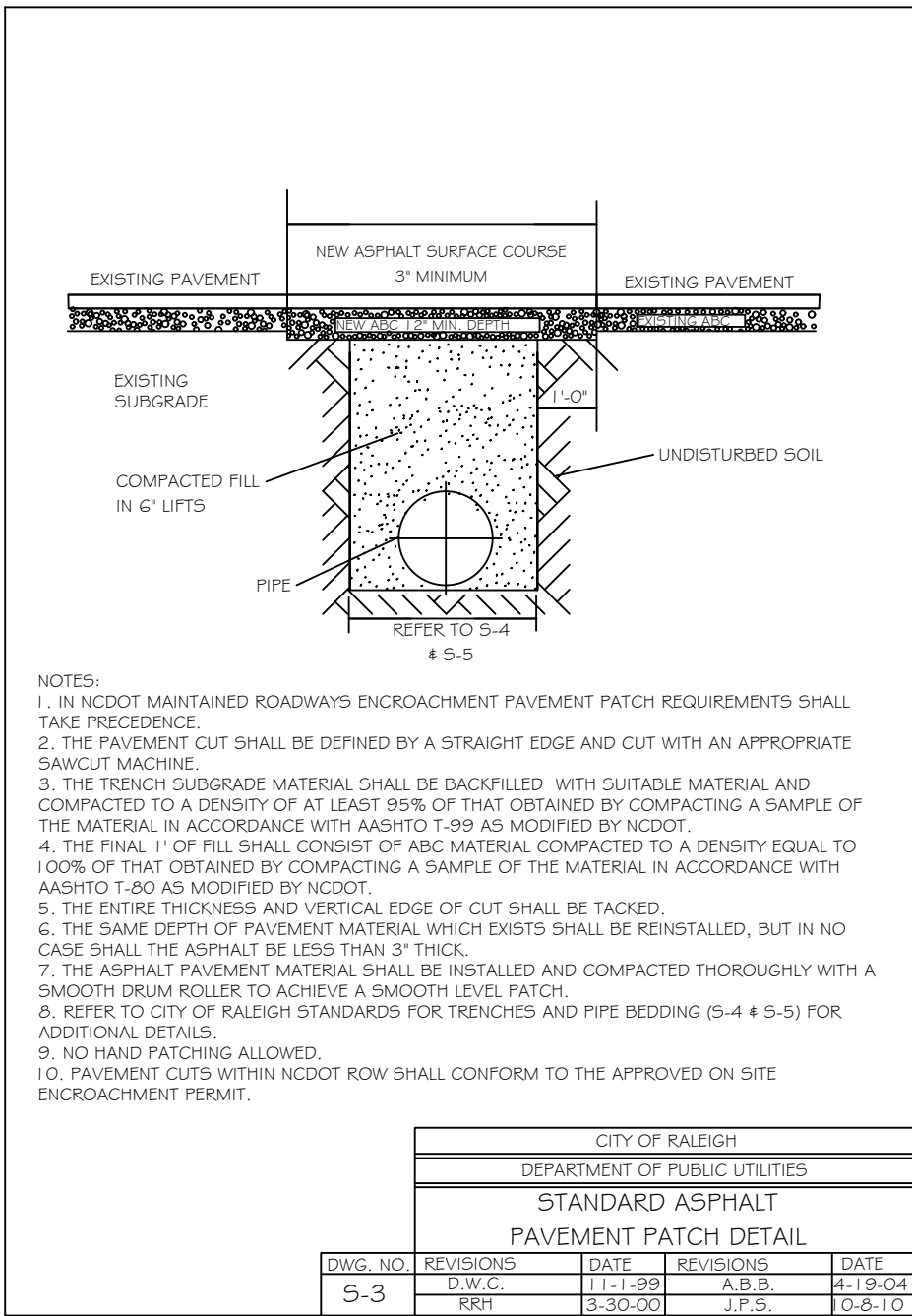
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.
Dwg No.

C5

C5



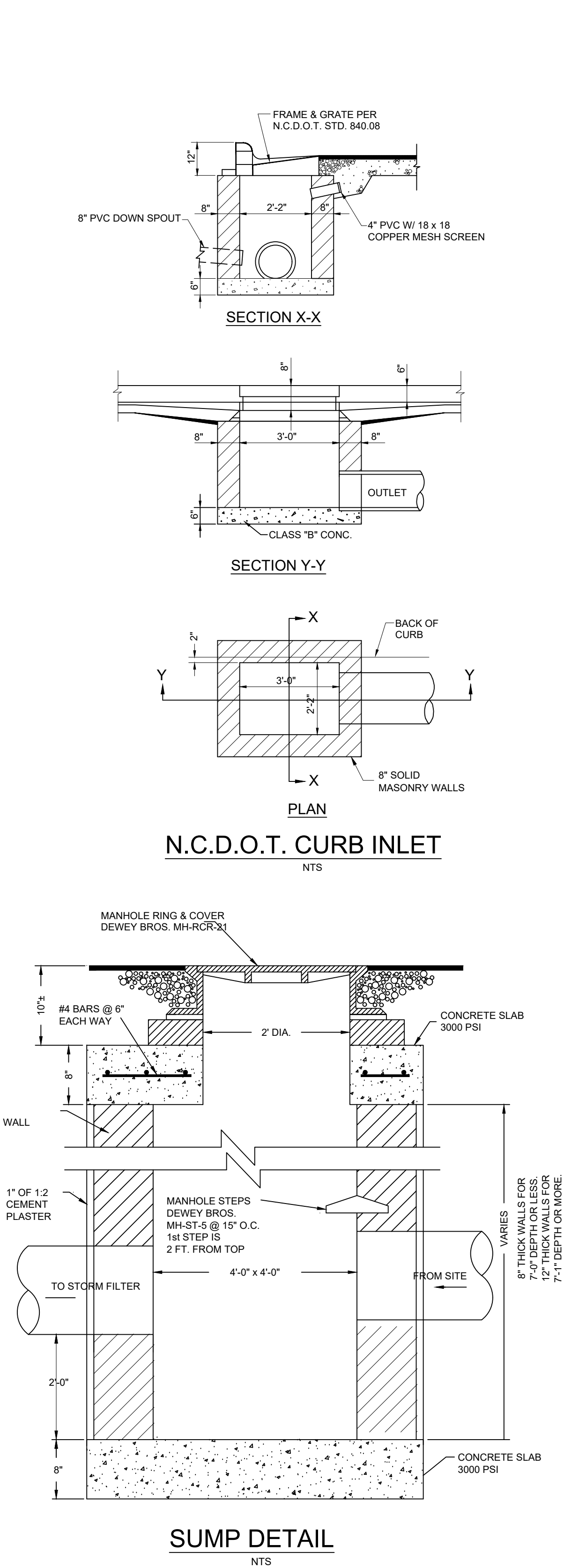
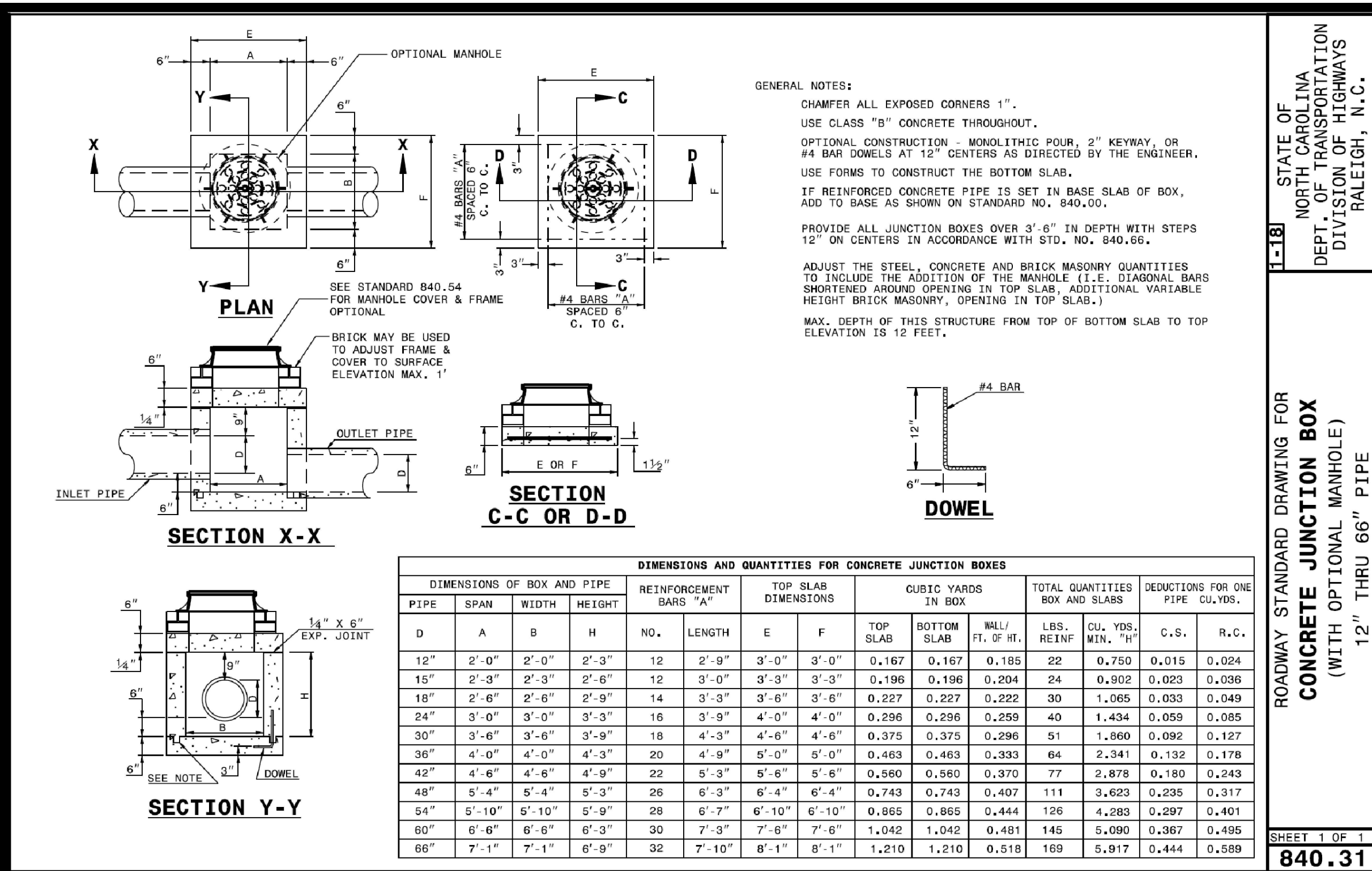
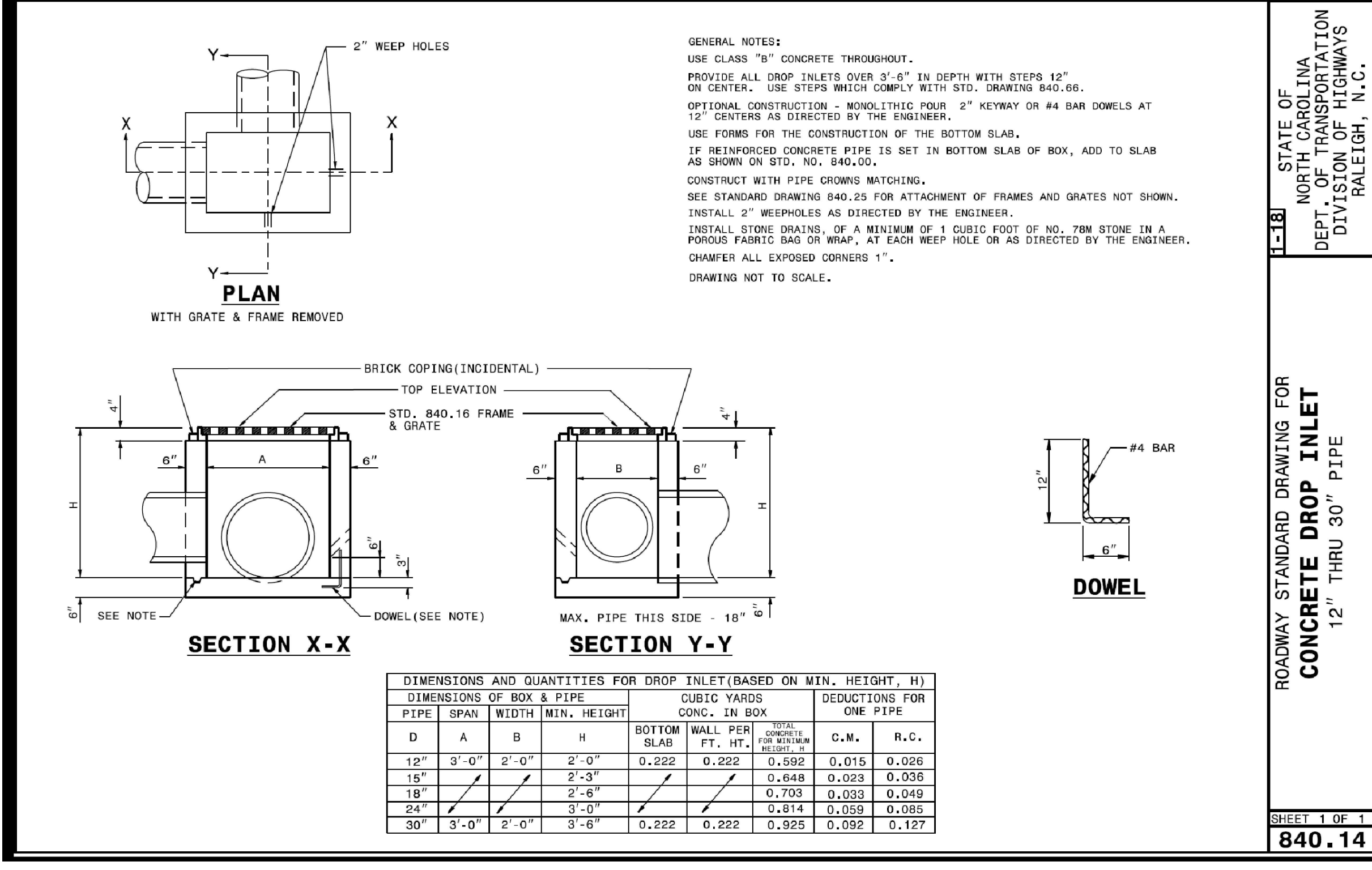
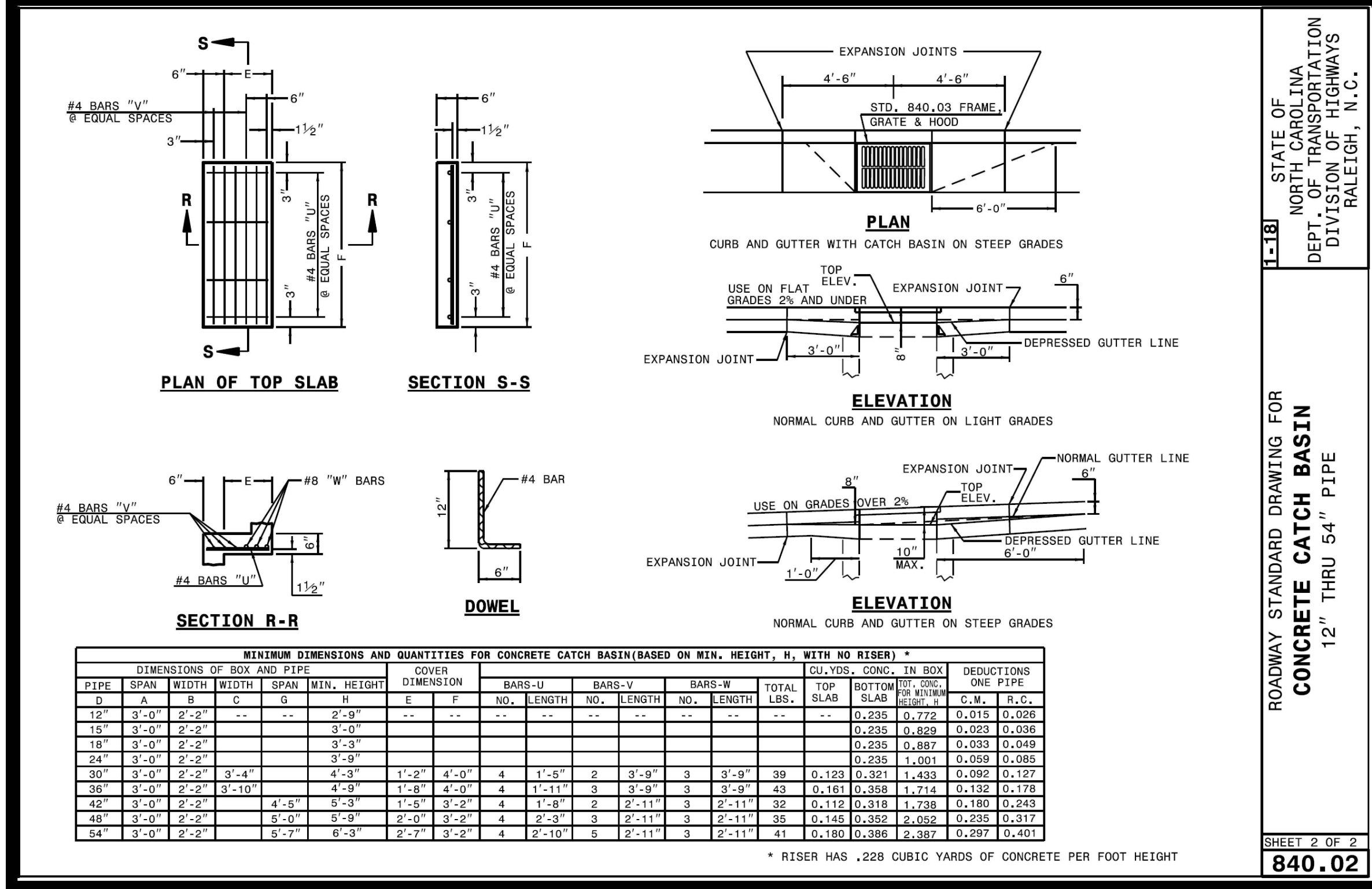
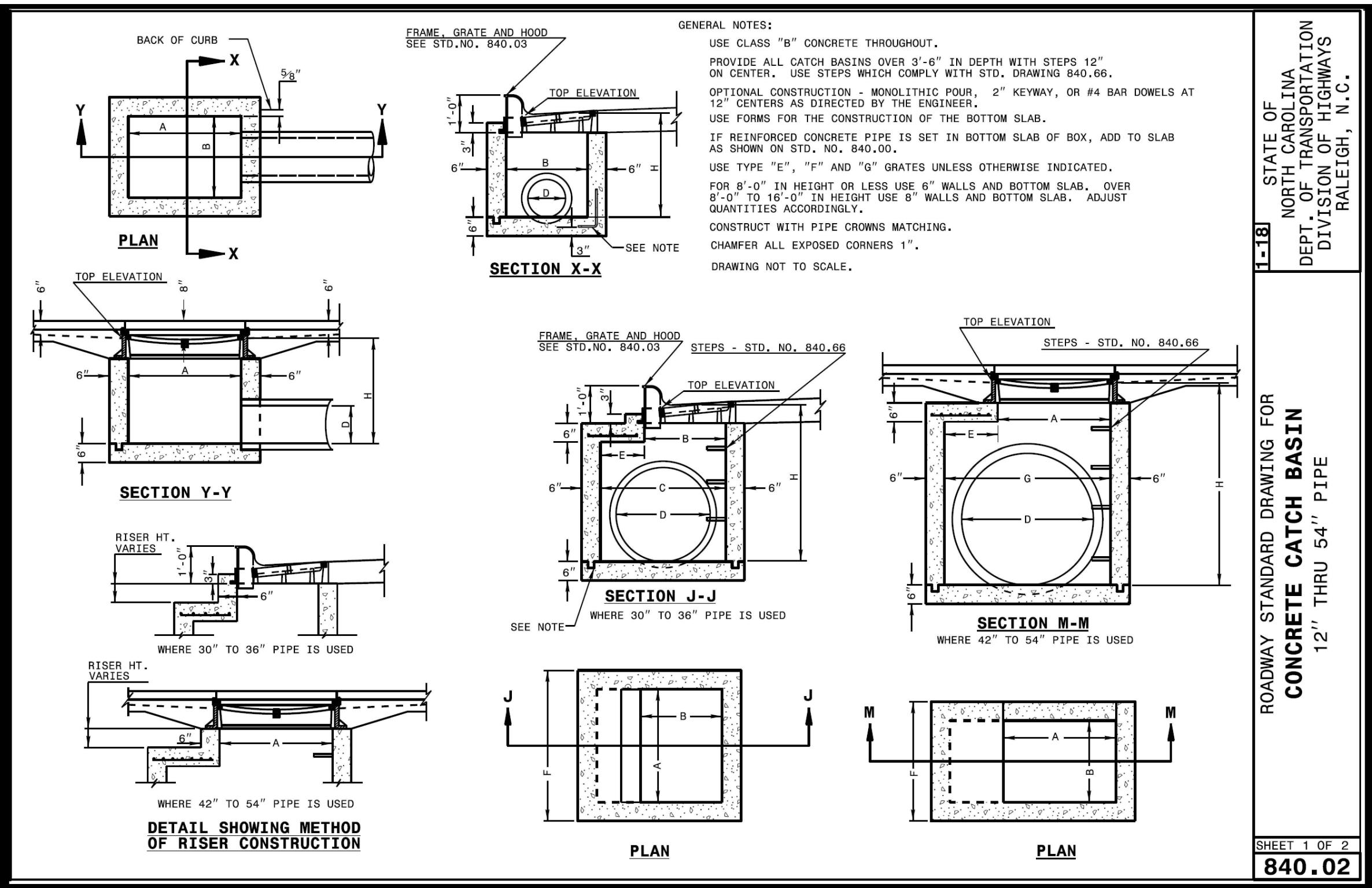


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NO.	DATE	BY	REVISION DESCRIPTION
1	8-26-2023	Initial Submittal	
2	8-26-2023	Initial Submittal	
3	8-26-2023	Initial Submittal	
4	8-26-2023	Initial Submittal	
5	8-26-2023	Initial Submittal	
6	8-26-2023	Initial Submittal	
7	8-26-2023	Initial Submittal	
8	8-26-2023	Initial Submittal	
9	8-26-2023	Initial Submittal	
10	8-26-2023	Initial Submittal	

Water and Sewer Details
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.
Dwg No.
D2



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Storm Drainage Details
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.
Dwg No.
D3

PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

\\P\SUWCKTVC\RMF01\QUIKRETE\NETMER\PROJECT\ACTIVE\765900765974065974-15-CMP DETENTION\DRAWINGS\PROPOSAL\54 INCH DIAMETER - CMP DETENTION - 4502 JONESVILLE COMMERCIAL - DWG 8/7/2023 3:48 PM

PROJECT SUMMARY

CALCULATION DETAILS

- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 489 LF

STORAGE SUMMARY

- STORAGE VOLUME REQUIRED = 7634 CF
- PIPE STORAGE VOLUME = 7,777 CF
- BACKFILL STORAGE VOLUME = 0 CF
- TOTAL STORAGE PROVIDED = 7,777 CF

PIPE DETAILS

- DIAMETER = 54"
- CORRUGATION = 5x1
- GAGE = 14
- COATING = ALT2
- WALL TYPE = SOLID
- BARREL SPACING = 27"

BACKFILL DETAILS

- WIDTH AT ENDS = 12"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 0"

NOTES

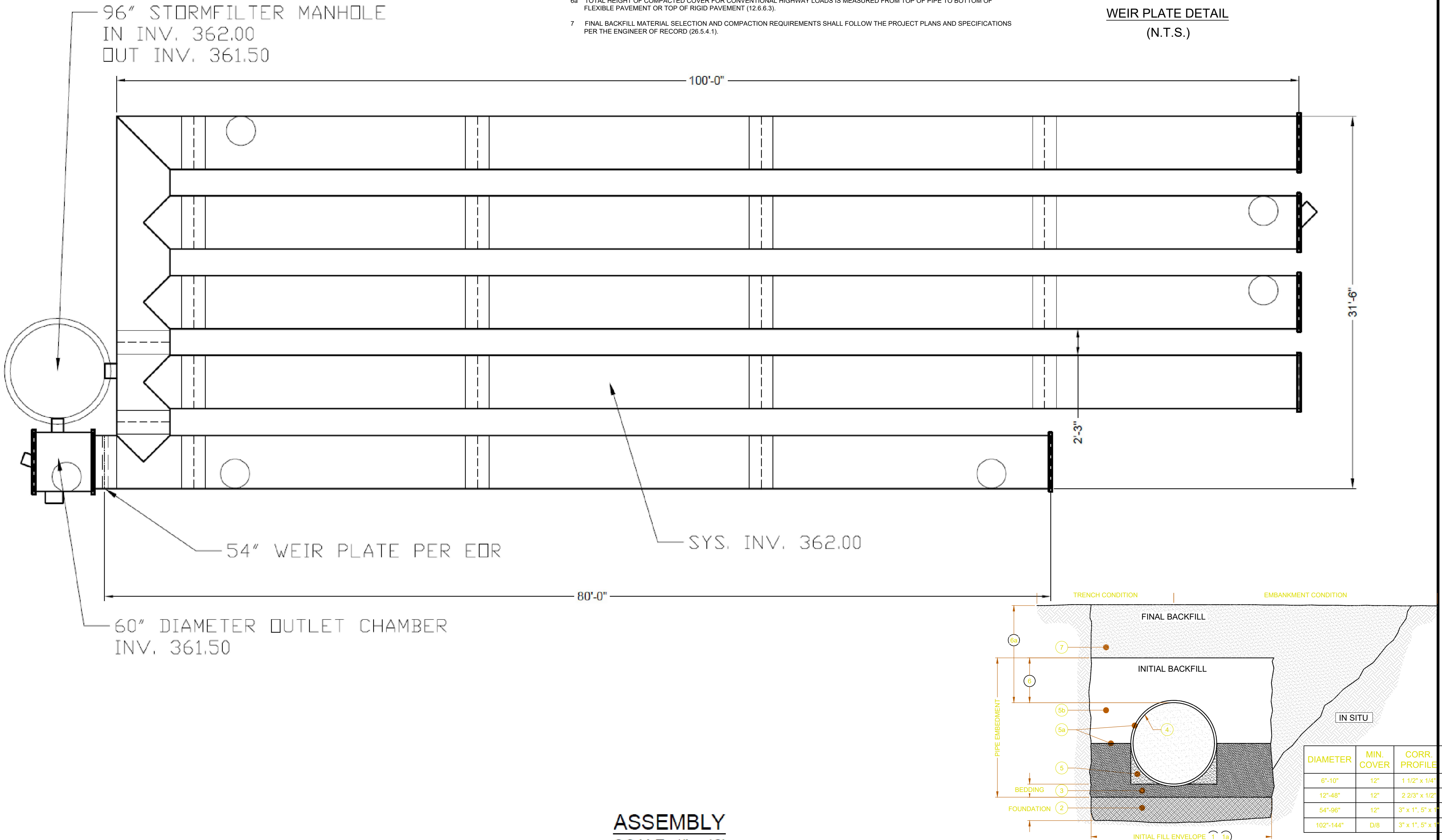
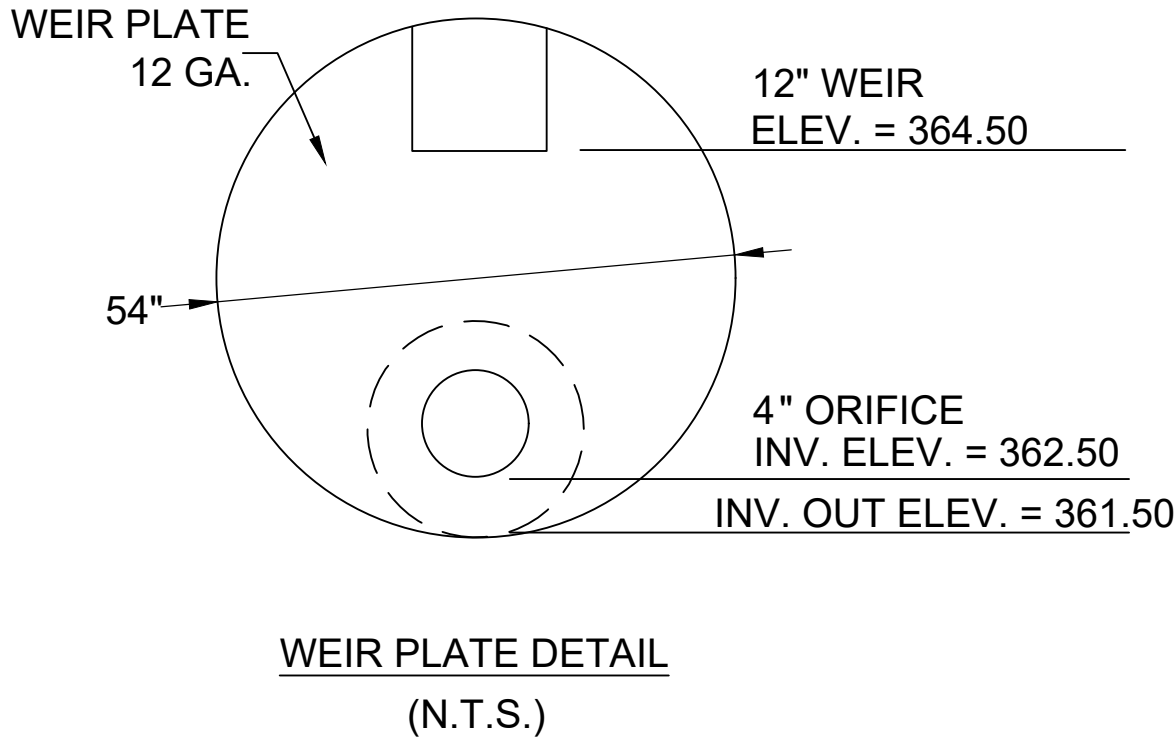
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 23/8" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN. QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

Pre and Post Summary Table

	Pre	Post
Q1	1.35	0.07
Q10	4.74	3.87

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

- 1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE.
THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": 1.5D + 12"
- 1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE < 24": 3.0D
PIPE 24" - 144": D + 4'0"
PIPE > 144": D + 10'0"
- 2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
- 3 BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE FROM SPRINGLINE OF PIPE TO 4'-6" BELOW BOTTOM OF PIPE.
- 4 CORRUGATED STEEL PIPE (CSP / HEL-COR).
- 5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
- 5a GEOTEXTILE SHALL BE USED IF REQUIRED BY ENGINEER TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES.
- 5b BACKFILL PLACED ABOVE SPRINGLINE TO MEET AASHTO 145, A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
- 6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
- 6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
- 7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).



ASSEMBLY
SCALE: 1" = 10'

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH
DYODS
DRAWING

Jonesville Road Rolesville Commercial Site
CMP System
Rolesville, NC
DETENTION SYSTEM

PROJECT No:	SEQ. No:	DATE:
24294	35777	8/2/2023
DESIGNED:	DRAWN:	
DYO	DYO	
CHECKED:	APPROVED:	
DYO	DYO	
SHEET NO.:		1

NO.	DATE	REVISION DESCRIPTION	BY
1	8-28-2023	Initial Submittal	KPG
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PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

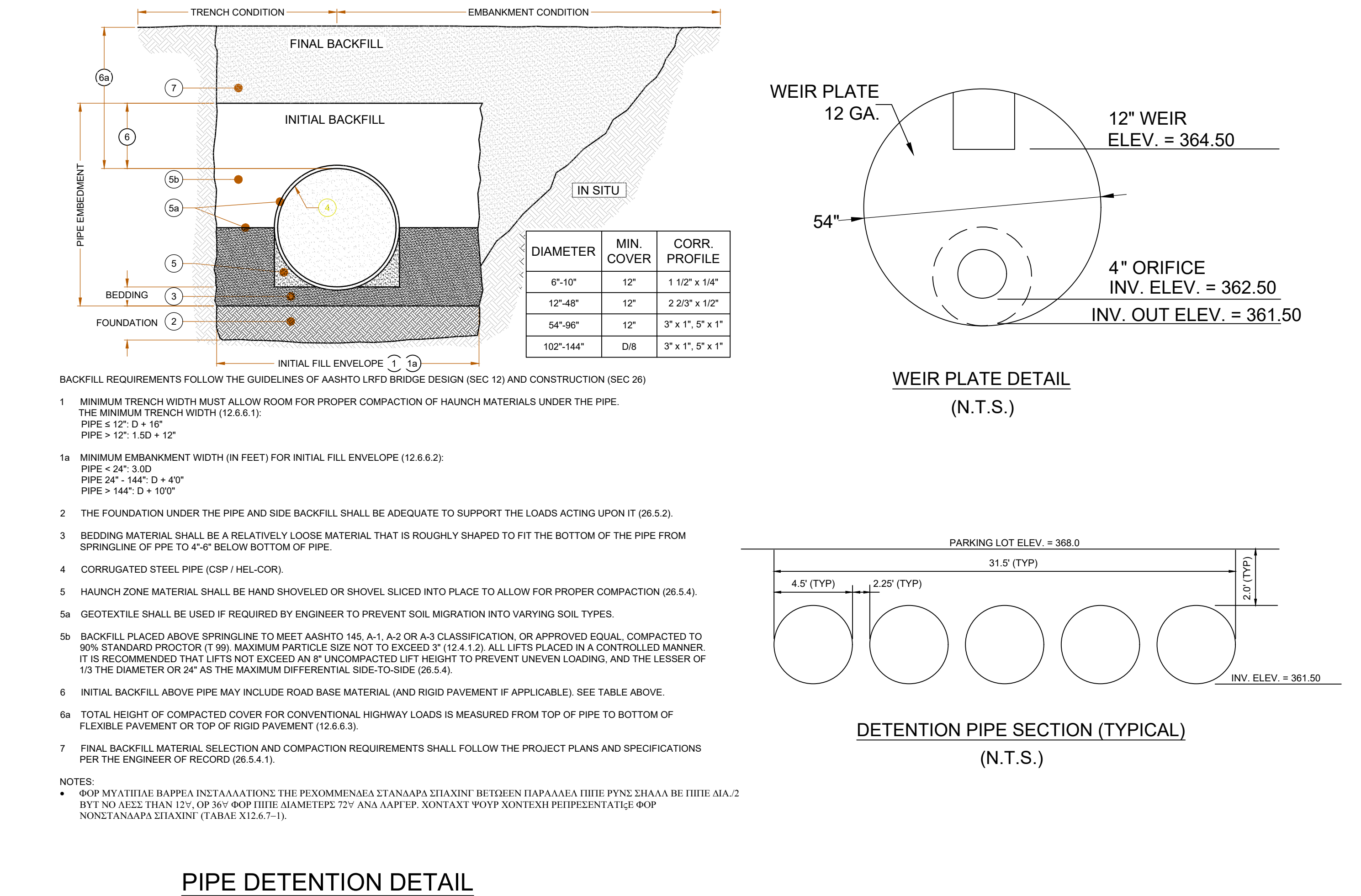
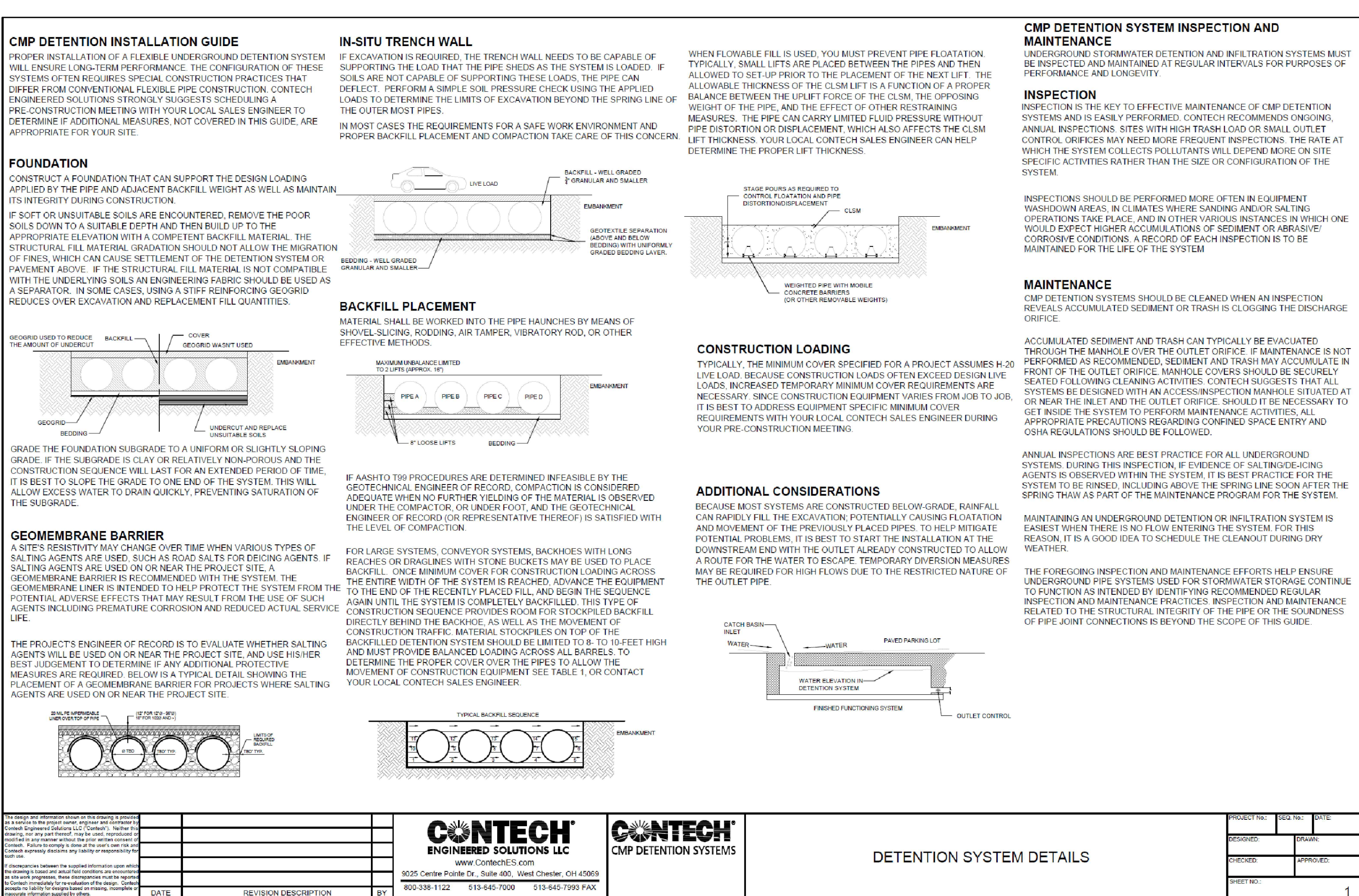
Detention System Details
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.
Dwg No.

D4

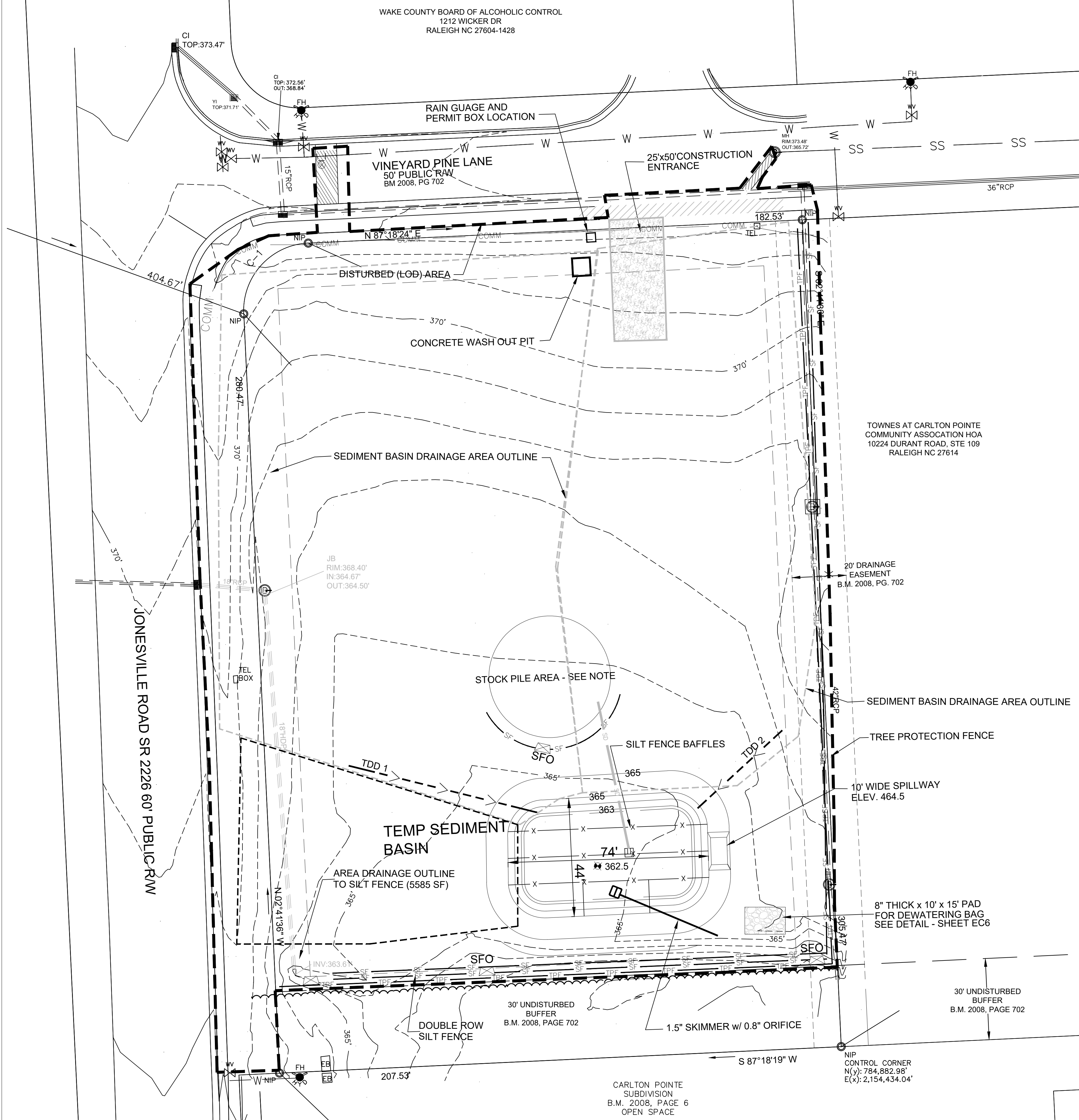
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Channel Design Calculations													
Channel	Drain Area, ac	Channel Length, ft	Channel Drop, ft	C	Q10 I, in/hr	Flow cfs	Channel Slope, ft/ft	n	Side Slope:1	Bottom Width, ft	Depth of Flow, ft	Velocity fps	Liner
TDD1	0.48	72	3	0.55	5.48	1.4	0.0417	0.024	3.00	2.0	0.17	3.39	Jute Mesh
TDD2	0.39	43	3	0.55	5.48	1.2	0.0698	0.020	3.00	2.0	0.12	4.25	Jute Mesh

WAKE COUNTY BOARD OF ALCOHOLIC CONTROL
1212 WICKER DR
RALEIGH NC 27604-1428



EROSION CONTROLGENERAL NOTES

- PER NPDES REQUIREMENTS, A RAIN GUAGE, SELF INSPECTION RECORDS, PERMIT, CERTIFICATE OF COVERAGE, AND S&E PLANS ARE REQUIRED TO BE MAINTAINED ON SITE AND ACCESSIBLE DURING INSPECTION. IT IS RECOMMENDED THESE ITEMS ARE TO BE PLACED IN A PERMIT BOX AT THE ENTRANCE OF THE PROJECT. (NCG01 PART III SECTIONS A AND B, 15A NCAC 04B .0131)
- THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES AND COMPETE THE FOLLOWING COMBINED SELF-INSPECTION FORM FOUND ON THE DEMLR WEBSITE <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms>. TWELVE MONTHS OF COMPLETED INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS RECOMMENDED A COPY BE KEPT IN A PERMIT BOX. (GS 113A-54.1 (E), 15A NCAC 04B.0131, NCG01 PART III SECTIONS A AND B) .
- STOCKPILES, LAYDOWN OR WASTE AREAS, CONCRETE WASHOUTS, PORTABLE TOILETS, AND FUELS MUST BE LOCATED AT LEAST 50 FEET AWAY FROM ANY OPEN WATER CONVEYANCES, SUCH AS BASINS, DITCHES, STORM DRAIN INLETS, ETC. THE LOCATION OF THESE ACTIVITIES MAY BE FIELD ADJUSTED IF THE DISTANCE REQUIREMENTS ARE MET." (GS113A-57(3), 15A NCAC 04B .0105, 15A NCAC 04B .0106(S), GS113A-57(4), NCG01 SECTION I(F) .
- PERIMETER MEASURES MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE. SEDIMENT BASINS MAY NOT BE REMOVED OR CONVERTED TO PERMANENT SCMS UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED.
- WAKE COUNTY SHOULD BE NOTIFIED 10-DAYS PRIOR TO REMOVAL OF A BASIN " (GS 113A-57(3), 15A NCAC 04B .0113). GROUND STABILIZATION WILL BE APPLIED WITHIN 14 CALENDAR DAYS FROM LAST LAND DISTURBING ACTIVITY. FOR STEEP SLOPES, THAT AREA MUST BE STABILIZED WITHIN 7 CALENDAR DAYS." (15A NCAC 04B .0106, NCG01 PART II SECTION E (1) .
- SILT BAG(S) WILL BE CONTINUOUSLY MONITORED DURING OPERATION. (GS 113A-57(3), 15A NCAC 04B .0113).
- SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING." (GS 113A-54.1 (E), 15A NCAC 04B.0131, NCG01 PART III SECTIONS A AND B) .
- INSTALL POLYACRYLAMIDE IMPREGNATED STRAW WATTLES (IE: TERRA TUBES) DIRECTLY BELOW STORM WATER OUTFALL. PLACE EROSION CONTROL LINER UNDERNEATH A SERIES OF WATTLES (SEE DETAIL)
- SURROUND THE SKIMMER WITH A BAFFLE AND "KEY" BOTH ENDS INTO THE SIDE OF THE BASIN. INSTALL A TARP UNDERNEATH THE SKIMMER, COVERING THE ENTIRE AREA AROUND THE SKIMMER. PROVIDE A 6'-8" BLOCK TO PLACED UNDER THE SKIMMER ALLOWING THE DEVICE TO REST ON AFTER DEWATERING.
- INSTALL STANDARD GRAVEL YARD INLET PROTECTION UNTIL CURB IS INSTALLED. INSTALL STANDARD GRAVEL BAG CURB INLET PROTECTION AT ALL CURB INLETS.

LINE AND SYMBOL LEGEND

	SILT FENCE OUTLET
	DENUDED AREA OUTLINE
	SILT FENCE
	TEMPORARY DIVERSION DITCH
	BAFFLES
	TREE PROTECTION FENCE
	CHECK DAM
	INLET PROTECTION
	SLOPE DRAIN

Temporary Sediment Basin Simplified design

Okay	
0.87 Disturbed Area (Acres)	Imported from t
5.48 Peak Flow from 10-year Storm (cfs)	
1566 Required Volume ft³	Minimum sedin
2387 Required Surface Area ft²	Required surfac
34.5 Suggested Width ft	
69.1 Suggested Length ft	
44 Trial Top Width at Emergency Spillway Invert ft	
74 Trial Top Length at Emergency Spillway Invert ft	
2.5 Trial Side Slope Ratio Z:1 (2.5:1 or flatter)	
2 Trial Depth ft (2 to 13.5 feet above grade)	
34 Bottom Width ft	
64 Bottom Length ft	
2176 Bottom Area ft²	
5399 Actual Volume ft³	Okay
3256 Actual Surface Area ft²	Okay

Use Spillway Capacity Sheet to Size Primary and Emergency Spillw

1.5 Skimmer Size (inches)	
0.125 Head on Skimmer (feet)	
0.8 Orifice Size (1/4 inch increments)	
3.00 Dewatering Time (days)	
Suggest about 3 days	

Skimmer Size (Inches)
1.5
2
2.5
3

EROSION CONTROL CONSTRUCTION SEQUENCE - PHASE 1

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL WATERSHED MANAGER. OBTAIN A LAND DISTURBING PERMIT.
- INSTALL TREE PRETECTION FENCE AND PERIMETER SILT FENCE AS SHOWN ON THE PLANS.
- INSTALL EROSION CONTROL MEASURES INCLUDING GRAVEL CONSTRUCTION ENTRANCE /EXIT, PERMIT BOX, SEDIMENT TRAPPING MEASURES, STABILIZATION AT PIPE OUTLETS, AND OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT, JEEVEAN NEUPANE (919) 819-8907, FOR AN ONSITE INSPECTION TO OBTAIN A CERTIFICATE OF COMPLIANCE.
-
- EXCAVATE AREAS FOR TEMPORARY SEDIMENT BASIN 1, AND SKIMMER BASIN NO 2. INSTALL EMBANKMENTS, SPILLWAYS AS SHOWN ON THE APPROVED PLANS. EMERGENCY SPILLWAYS ARE TO BE LOCATED IN CUT OR UNDISTURBED GRADE. PROVIDE STONE PADS AND ROPE FOR THE SKIMMER TO REST AND MAINTENANCE ACCESS. SEE SHEET D5 FOR THE RISER INSTALLATION USED IN TEMPORARY BASIN 1. SURROUND THE SKIMMER WITH A BAFFLE AND "KEY" BOTH ENDS INTO THE SIDE OF THE BASIN. INSTALL A TARP UNDERNEATH THE SKIMMER, COVERING THE ENTIRE AREA AROUND THE SKIMMER. PROVIDE A 6'-8" BLOCK TO PLACED UNDER THE SKIMMER ALLOWING THE DEVICE TO REST ON AFTER DEWATERING.
- INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA.
- BEGIN CLEARING AND GRUBBING AND PERFORM ROUGH GRADING AS SHOWN ON SHEET C3, INSTALLING AND MAINTAINING TEMPORARY DIVERSIONS AS NECESSARY. SEED AND MULCH PERIMETER SLOPES AS SOON AS POSSIBLE.
- STABILIZE DISTURBED AREAS WITHIN 14 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
- REGULARLY INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY.
- KEEP MUD AND DEBRIS OFF THE PUBLIC STREETS AT ALL TIMES. IF MUD OR DEBRIS IS TRACKED FROM THE SITE, USE A SHOVEL AND BROOM TO REMOVE IT IMMEDIATELY. IF MUD AND DEBRIS ARE NOT KEPT OFF THE STREET, ENFORCEMENT ACTION (REVOKING THE GRADING PERMIT AND/OR STOP WORK ORDER) MAY BE TAKEN.
- IF IT IS DETERMINED DURING THE COURSE OF CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE APPROVED EROSION CONTROL PLAN, THE PERSON RESPONSIBLE FOR THE LAND-DISTURBING ACTIVITY IS OBLIGATED TO TAKE ADDITIONAL PROTECTIVE ACTION.
- CONTINUE TO PHASE 2 EROSION CONTROL ACTIVITIES.

STOCKPILE DESIGN CRITERIA

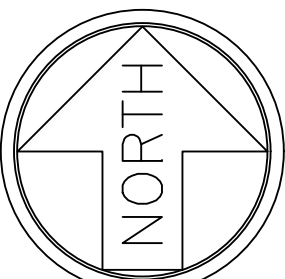
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
- STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
- STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
- STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
- OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFF-SITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL, FILL OF FEMA FLOODWAYS AND ON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).
- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

DRAINAGE AREA TO SEDIMENT BASIN = 37,897 SF (.87 AC)

TOTAL DENUDED AREA 64,597 SF (1.48 AC)

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Graphic Scale 1"=20'



Gettle Engineering and Design, PLLC

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Wake Forest, North Carolina 27587

(919) 210-3934 Firm License P-2538

Erosion Control Phase 1

Vineyard Pine Commercial

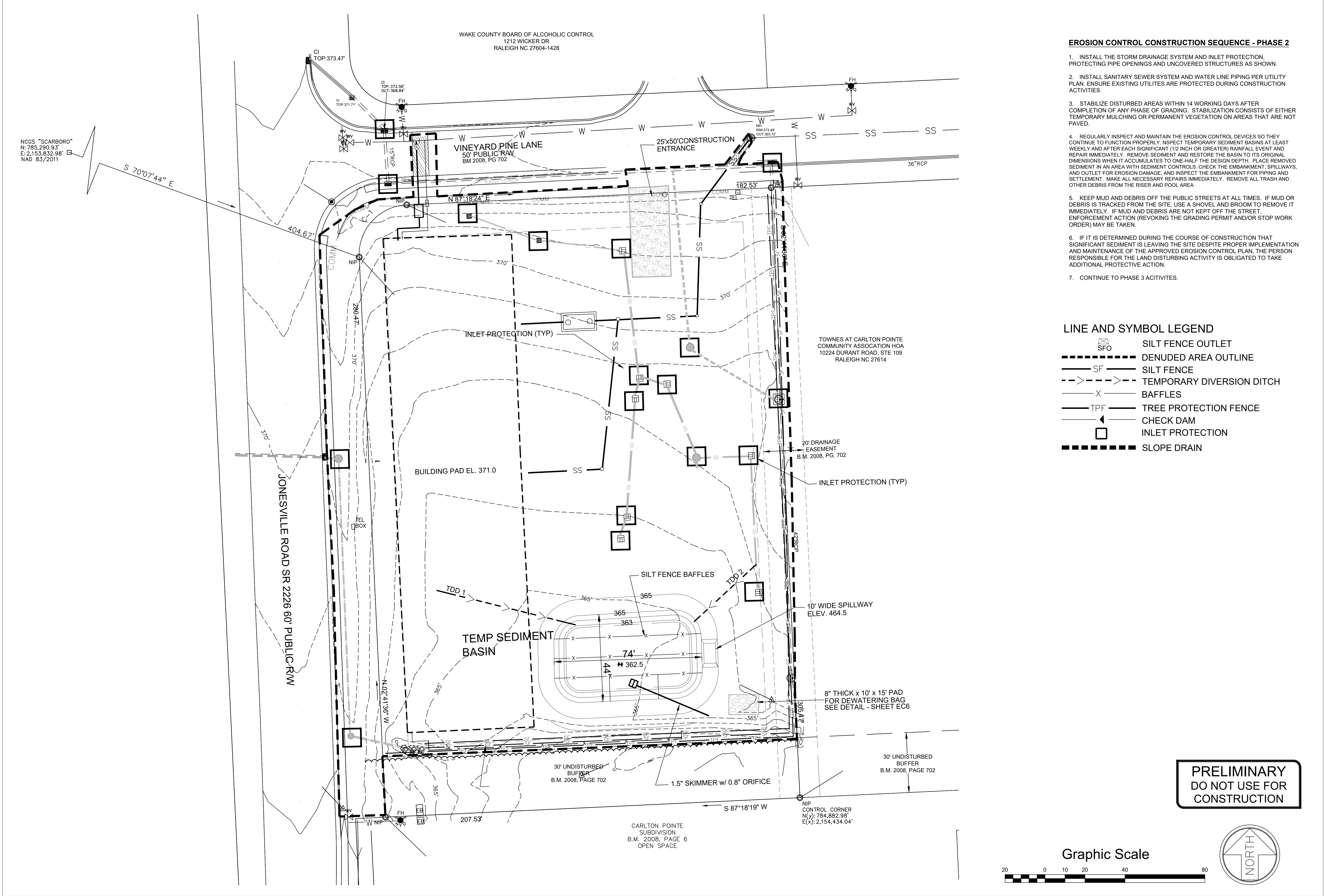
MRR Development, LLC

Rolesville, Wake County, North Carolina

Project No.

Dwg No.

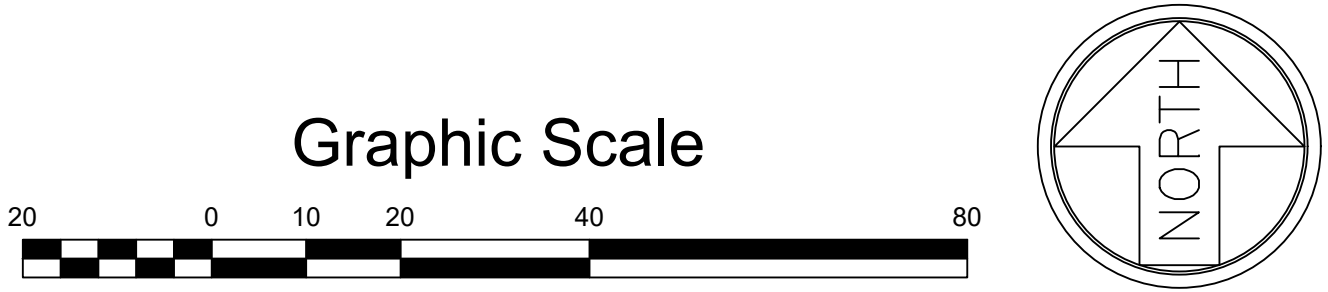
EC1



- EROSION CONTROL CONSTRUCTION SEQUENCE - PHASE 2**
1. INSTALL THE STORM DRAINAGE SYSTEM AND INLET PROTECTION, PROTECTING PIPE OPENINGS AND UNCOVERED STRUCTURES AS SHOWN.
 2. INSTALL SANITARY SEWER SYSTEM AND WATER LINE PIPING PER UTILITY PLAN. ENSURE EXISTING UTILITIES ARE PROTECTED DURING CONSTRUCTION ACTIVITIES.
 3. STABILIZE DISTURBED AREAS WITHIN 14 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
 4. REGULARLY INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY. INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE RISER AND POOL AREA
 5. KEEP MUD AND DEBRIS OFF THE PUBLIC STREETS AT ALL TIMES. IF MUD OR DEBRIS IS TRACKED FROM THE SITE, USE A SHOVEL AND BROOM TO REMOVE IT IMMEDIATELY. IF MUD AND DEBRIS ARE NOT KEPT OFF THE STREET, ENFORCEMENT ACTION (REVOKING THE GRADING PERMIT AND/OR STOP WORK ORDER) MAY BE TAKEN.
 6. IF IT IS DETERMINED DURING THE COURSE OF CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE APPROVED EROSION CONTROL PLAN, THE PERSON RESPONSIBLE FOR THE LAND DISTURBING ACTIVITY IS OBLIGATED TO TAKE ADDITIONAL PROTECTIVE ACTION.
 7. CONTINUE TO PHASE 3 ACTIVITIES.

- LINE AND SYMBOL LEGEND**
- SFO SILT FENCE OUTLET
 - DENUDE AREA OUTLINE
 - SF SILT FENCE
 - - - - - TEMPORARY DIVERSION DITCH
 - X Baffles
 - TPF TREE PROTECTION FENCE
 - CHECK DAM
 - INLET PROTECTION
 - SLOPE DRAIN

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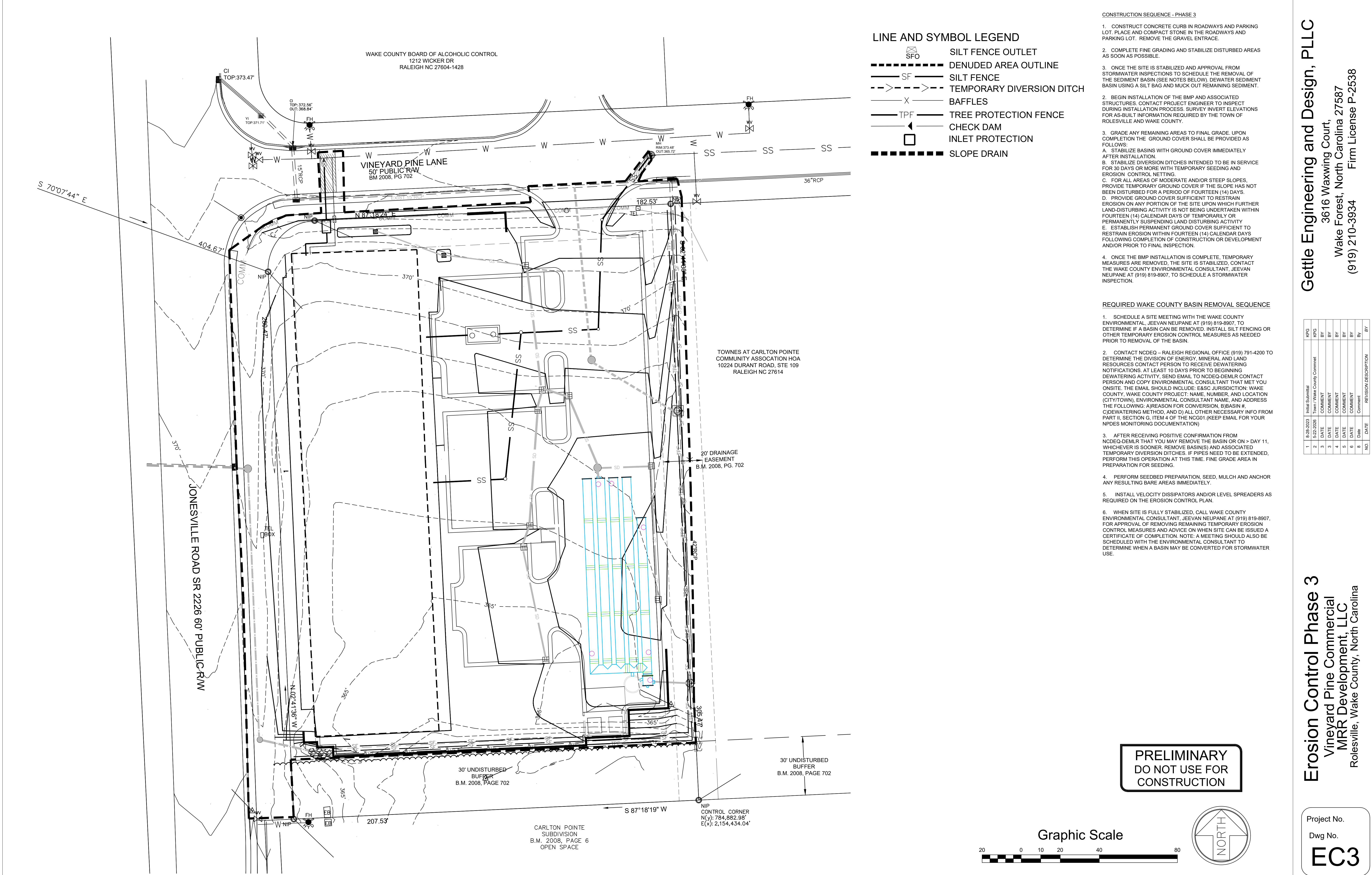


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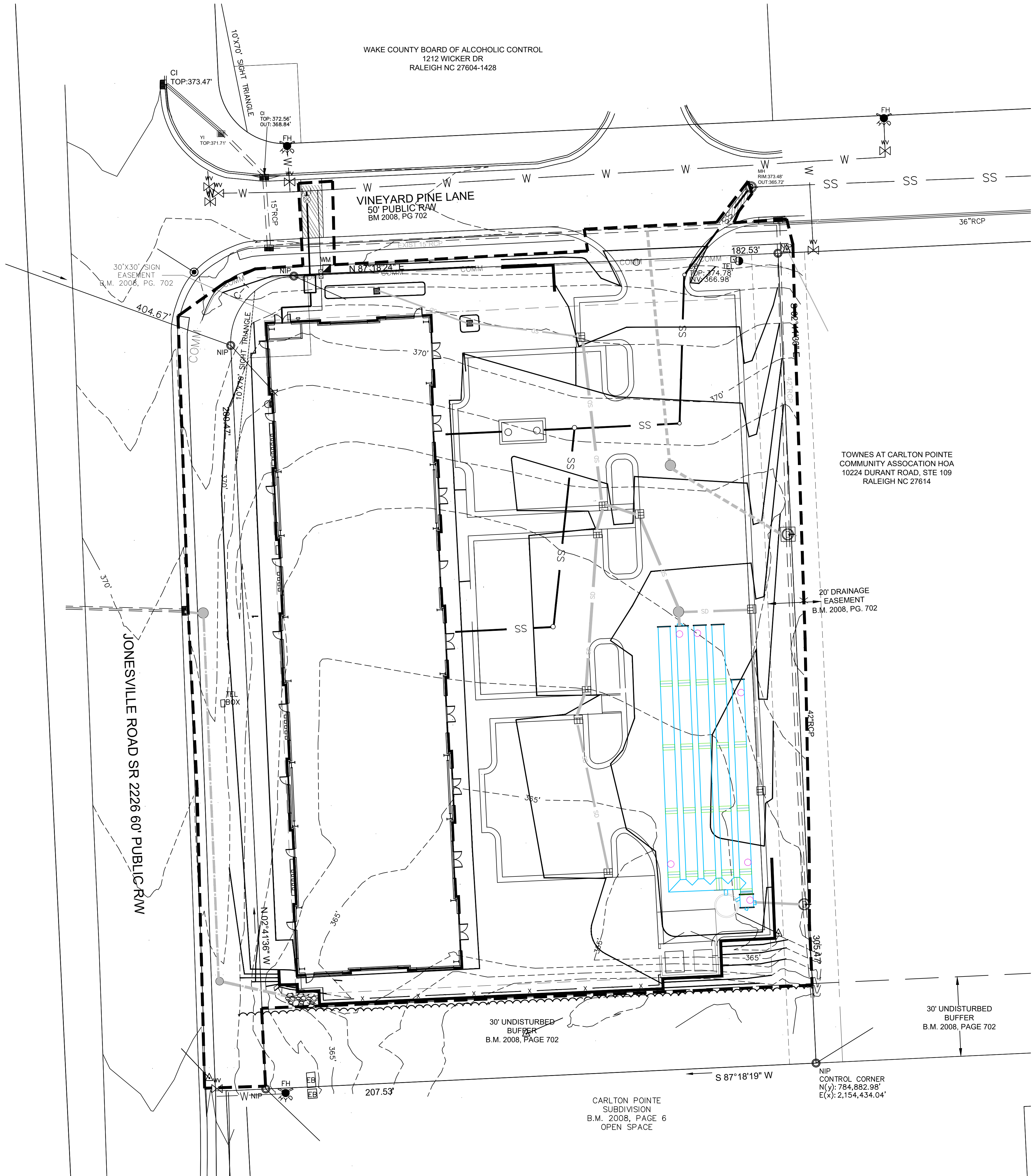
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Erosion Control Phase 2
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.
Dwg No.
EC2



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LINE AND SYMBOL LEGEND

- SFO SILT FENCE OUTLET
- DENUDED AREA OUTLINE
- SF SILT FENCE
- TEMPORARY DIVERSION DITCH
- X BAFFLES
- TPF TREE PROTECTION FENCE
- CHECK DAM
- INLET PROTECTION
- SLOPE DRAIN

CONSTRUCTION SEQUENCE - PHASE 4

- ENSURE THE SITE IS COMPLIANT WITH THE NCG01 SELF INSPECTION AND GROUND STABILIZATION AND MATERIAL HANDLING.
- FOR ALL AREAS OF MODERATE AND / OR STEEP SLOPES, PROVIDE TEMPORARY GROUND COVER IF THE SLOPE HAS NOT BEEN DISTURBED FOR A PERIOD OF FOURTEEN (14) DAYS.
- PROVIDE GROUND COVER SUFFICIENT TO RESTRAIN EROSION ON ANY PORTION OF THE SITE UPON WHICH FURTHER LAND-DISTURBING ACTIVITY IS NOT BEING UNDERTAKEN WITHIN FOURTEEN (14) CALENDAR DAYS OF TEMPORARILY OR PERMANENTLY SUSPENDING LAND DISTURBING ACTIVITY.
- REMOVE SILT FENCE AND TREE PROTECTION FENCING WHEN GRADING ACTIVITIES ARE COMPLETE AND THE PROJECT SITE IS STABILIZED.
- ONCE THE BMP INSTALLATION IS COMPLETE, TEMPORARY MEASURES ARE REMOVED, THE SITE IS STABILIZED, CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT JEEVAN NEUPANE AT (919) 819-8807 TO SCHEDULE A STORMWATER FINAL INSPECTION. BMP CERTIFICATIONS AND AS-BUILT PLANS MUST BE PROVIDED TO WAKE COUNTY / TOWN OF ROLESVILLE PRIOR TO FINAL PLATTING.
- ONCE THE STORMWATER FINAL INSPECTION IS APPROVED, CLOSE THE GRADING PERMIT AND OBTAIN A CERTIFICATE OF COMPLETION.

NPDES NOTES

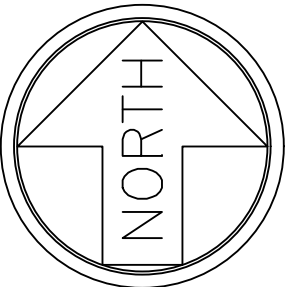
- THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
- THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
- THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
- THE CITY / COUNTY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR PURPOSES OF ENFORCEMENT ACTION UNDER THE CITY / COUNTY CODE.
- DOCUMENTATION REQUIRED UNDER THE SITE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY SHALL BE SUBMITTED TO WAKE COUNTY.

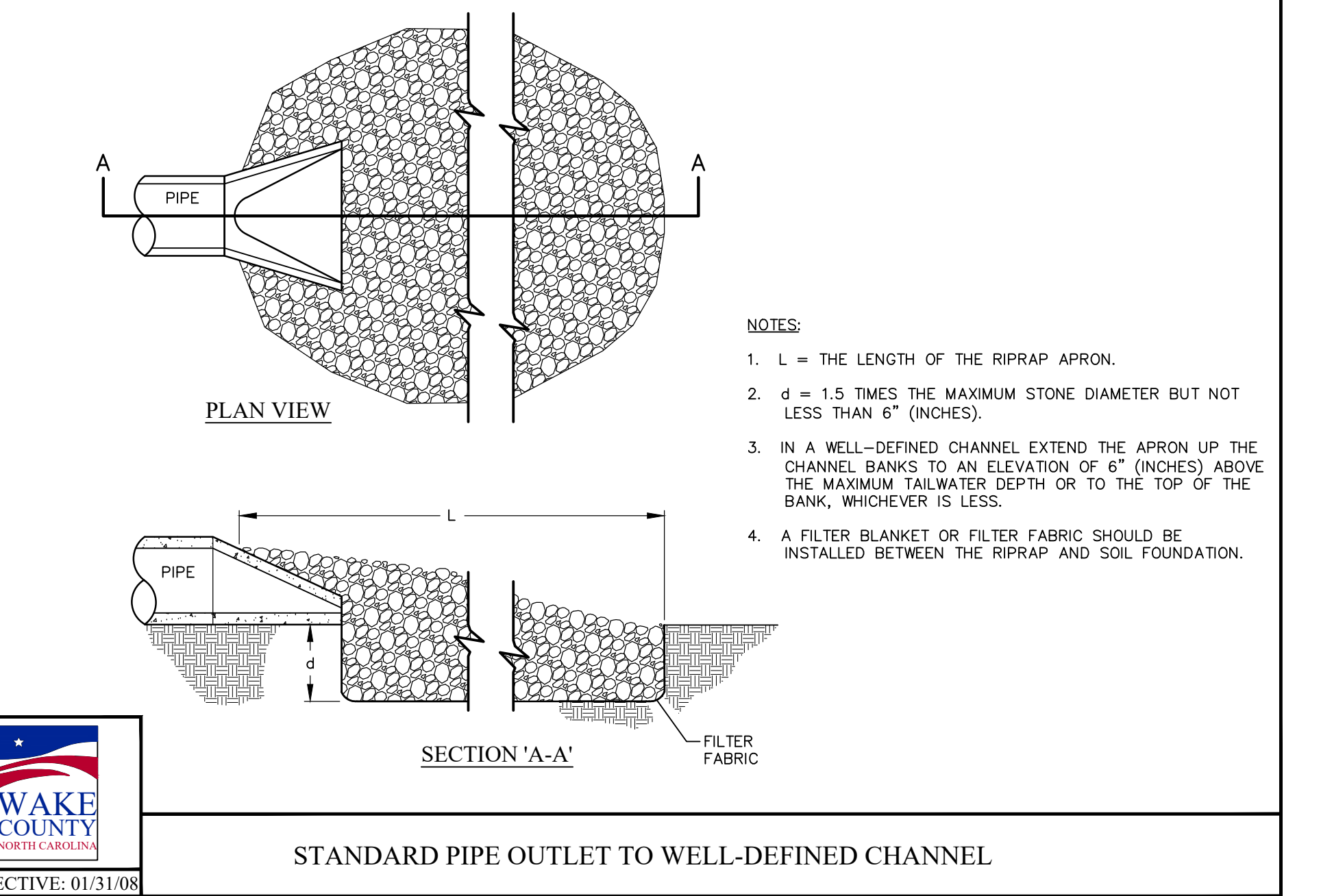
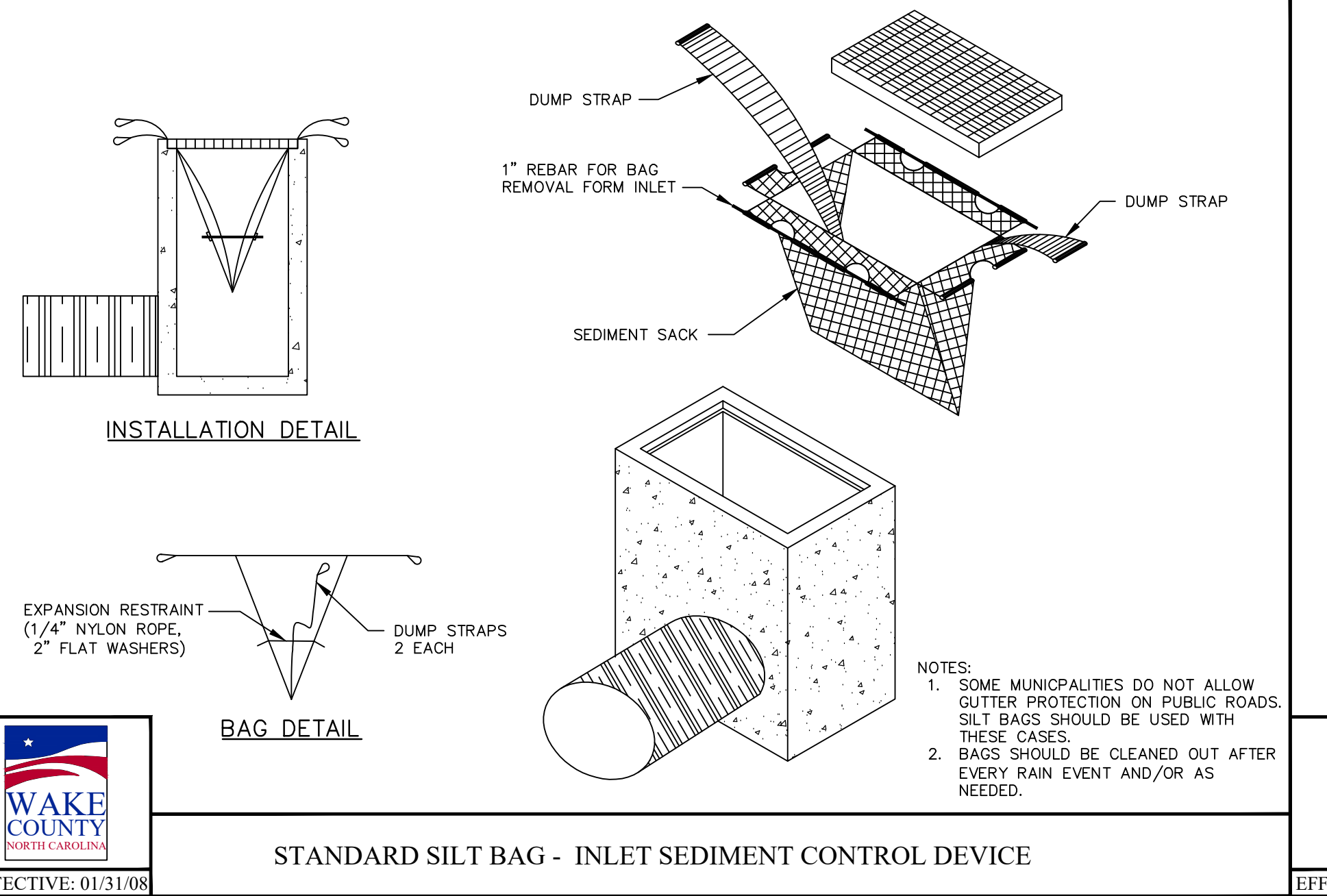
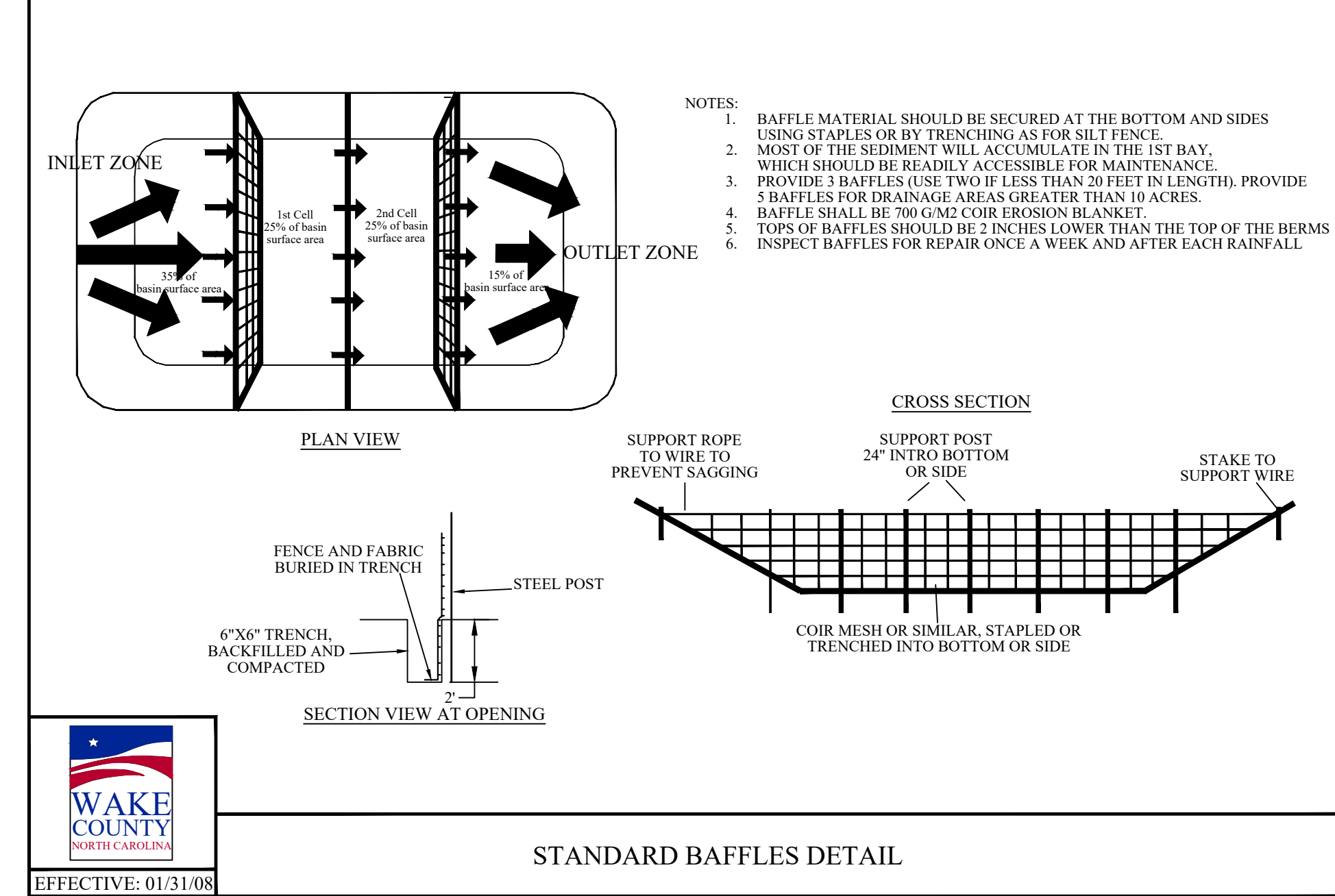
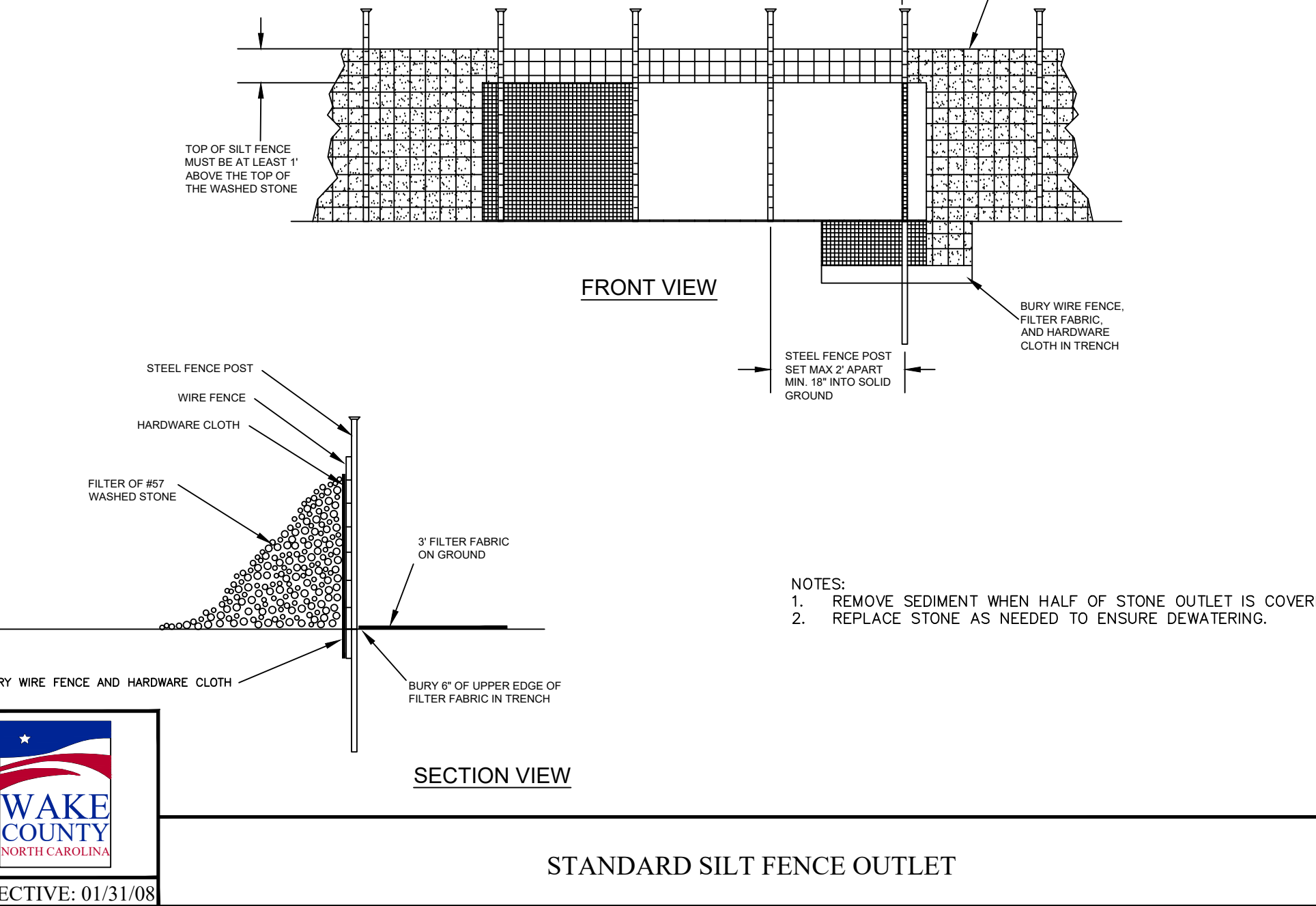
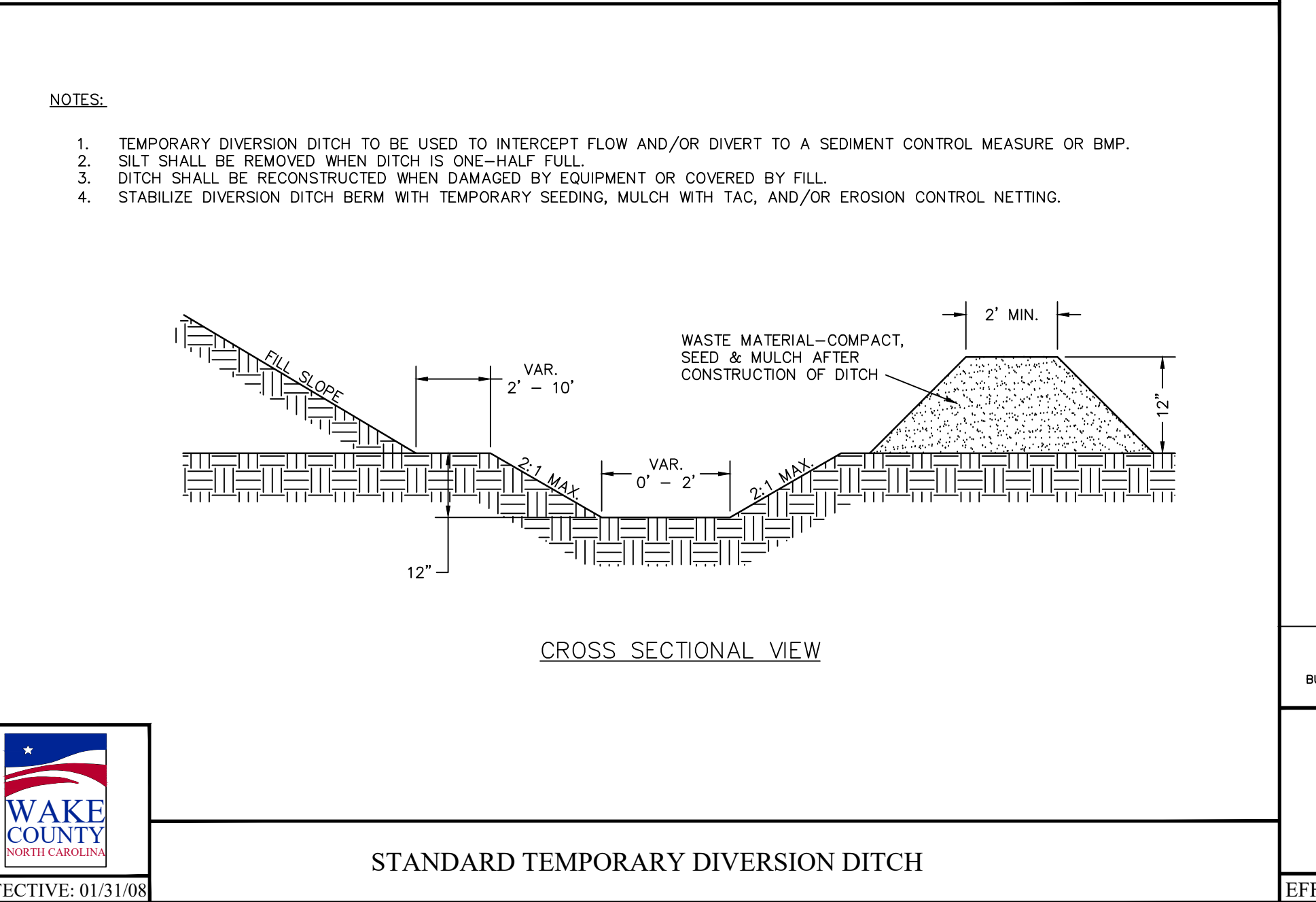
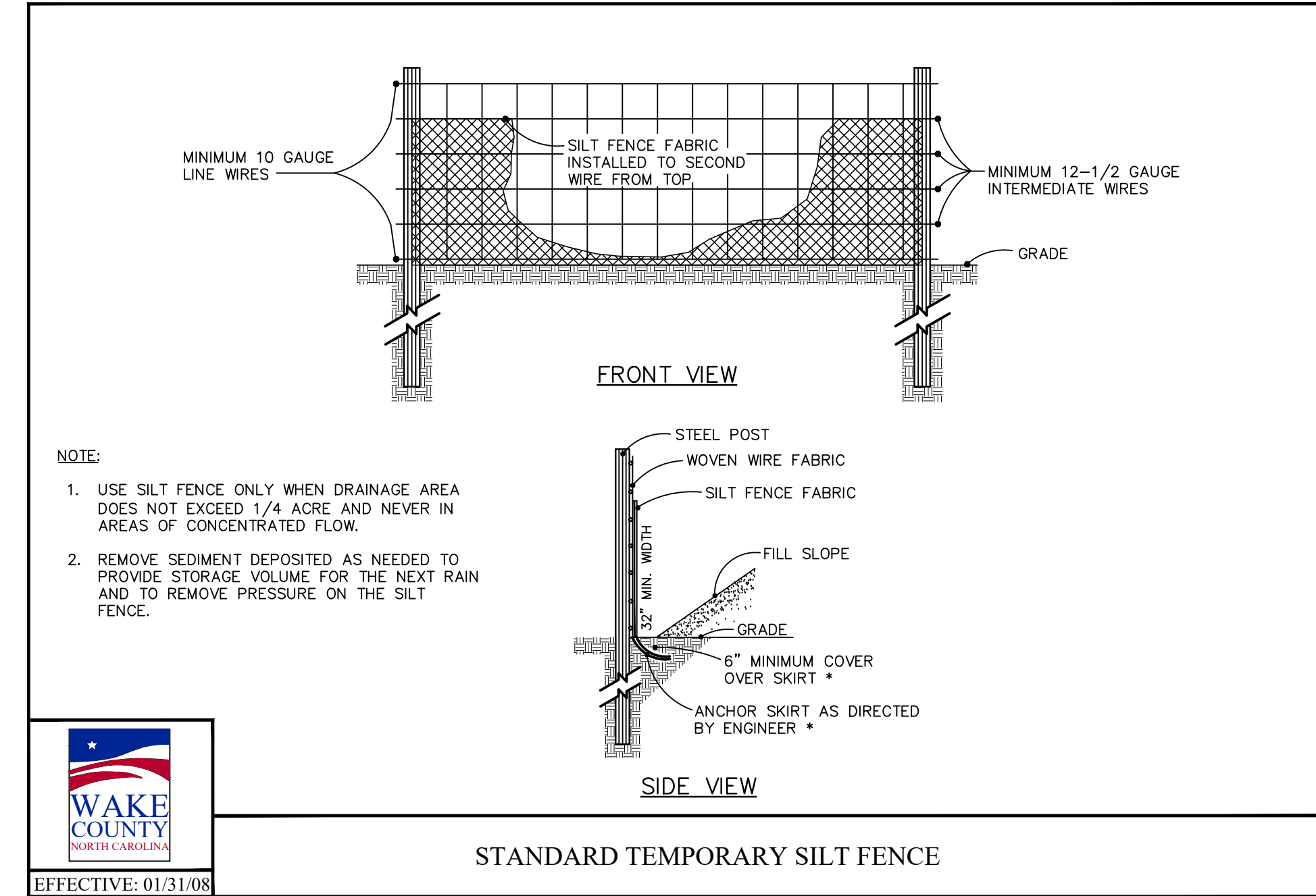
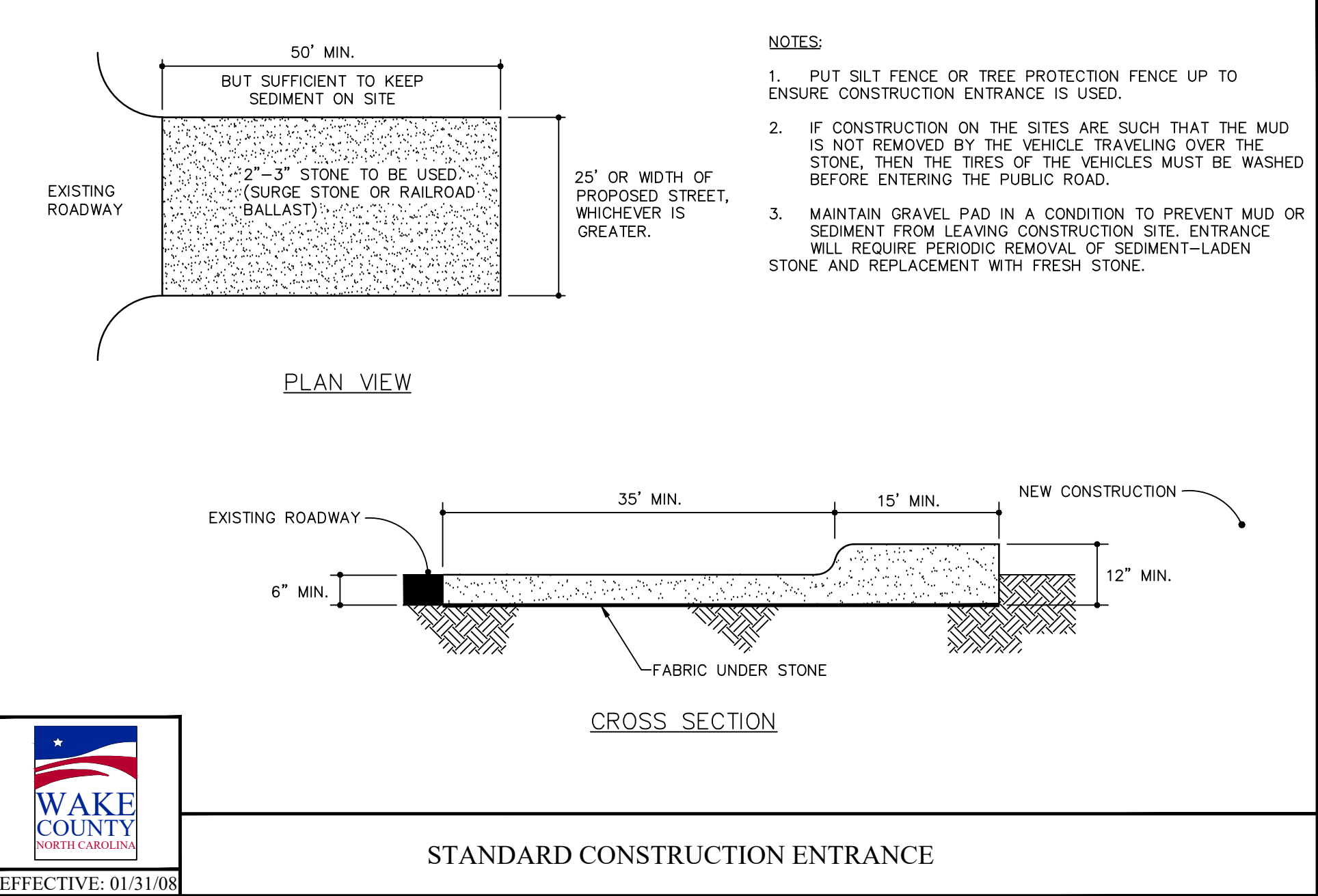
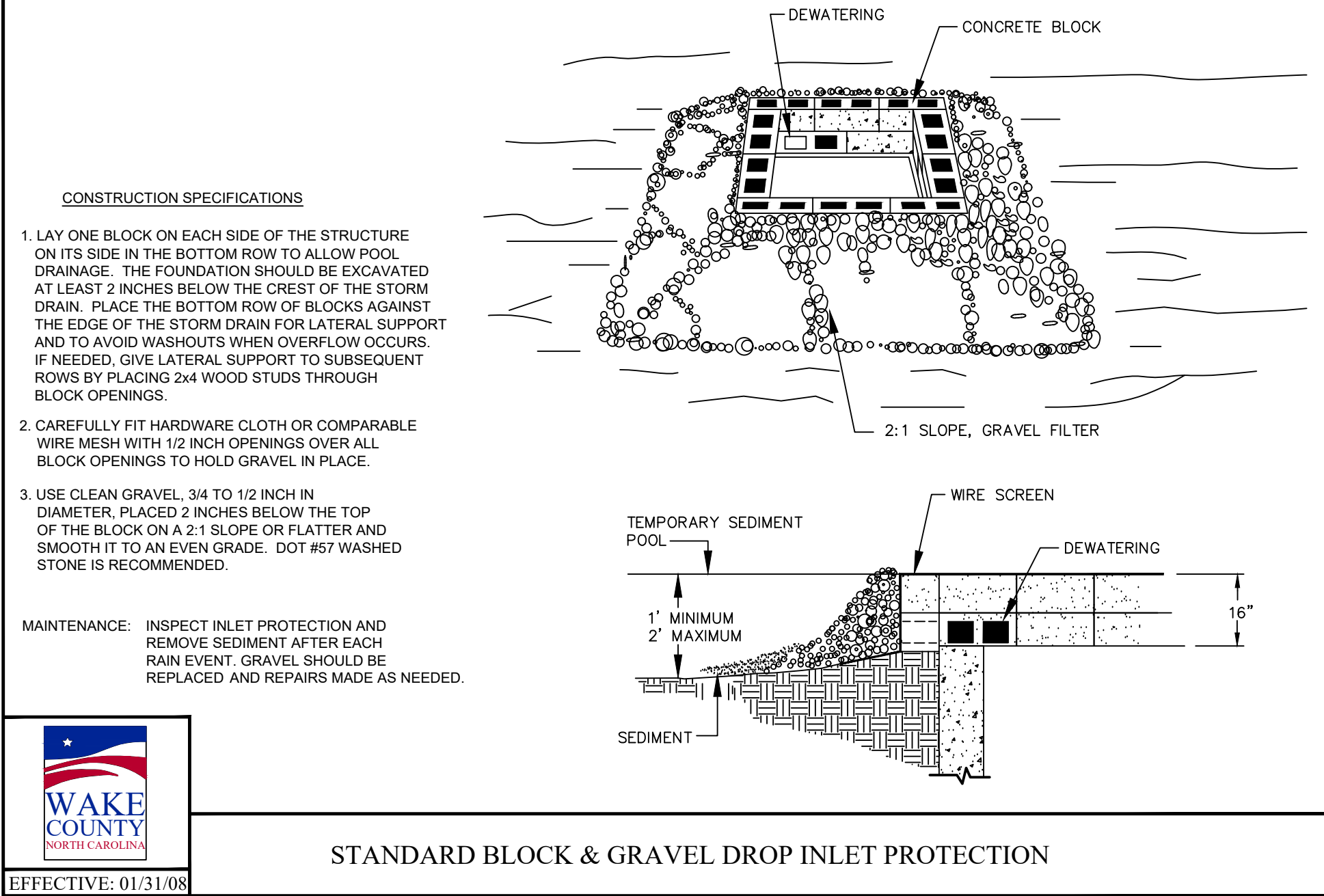
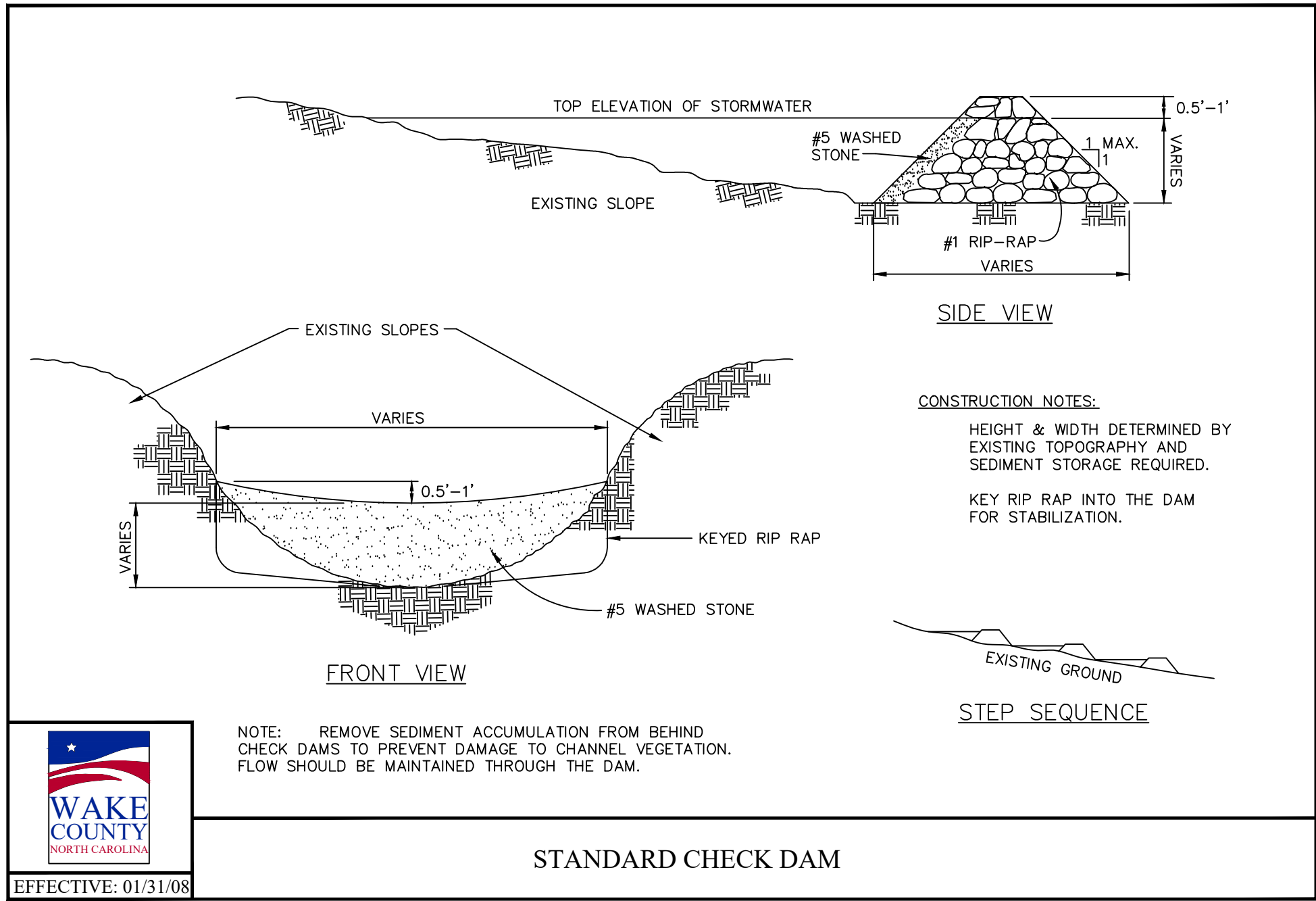
NPDES GROUND STABILIZATION SCHEDULE

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	APPLICABLE AREA ON THIS SITE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED	NONE
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH	AS SHOWN
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)	REMAINDER OF SITE

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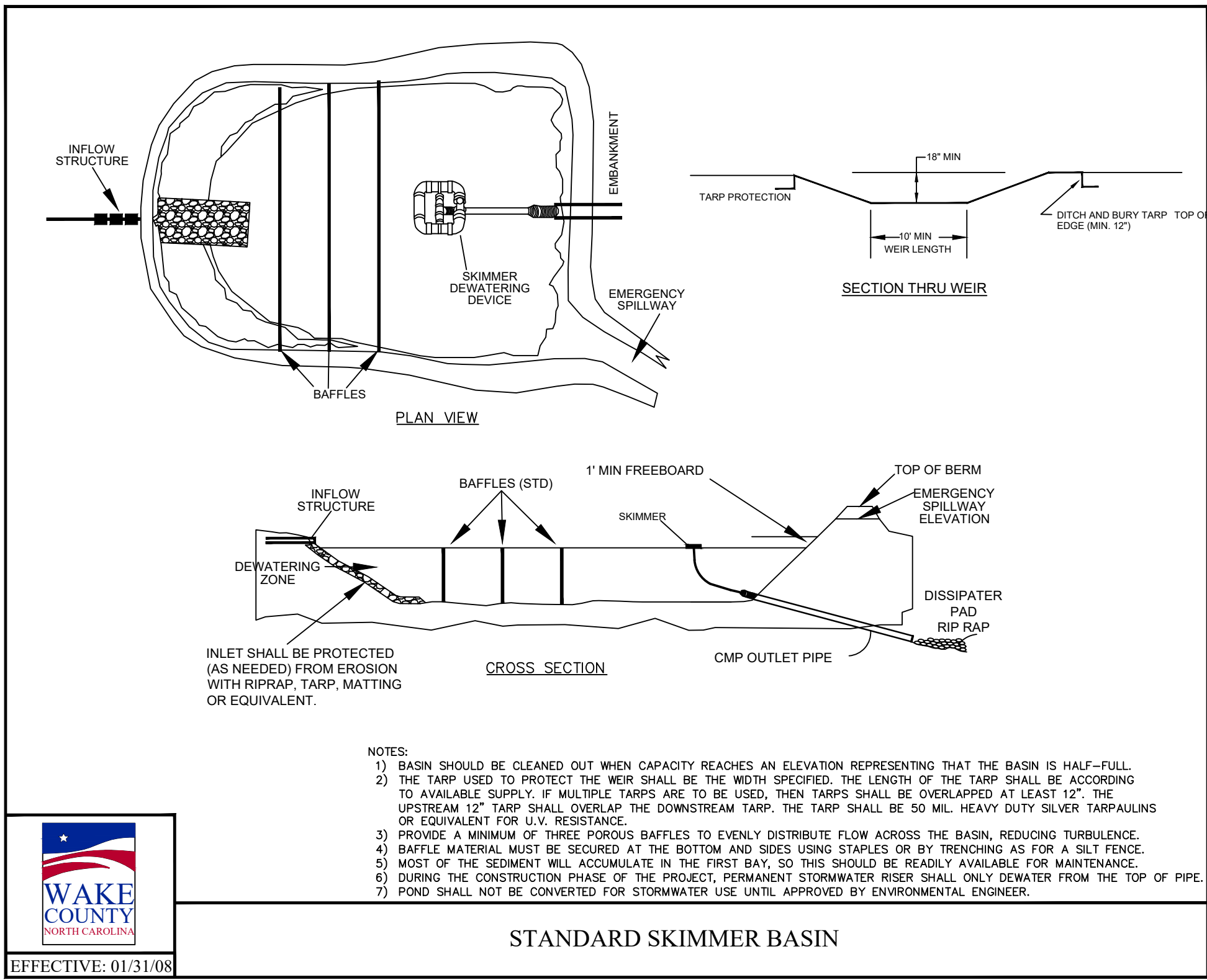
Graphic Scale





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BASIN CONSTRUCTION SPECIFICATIONS

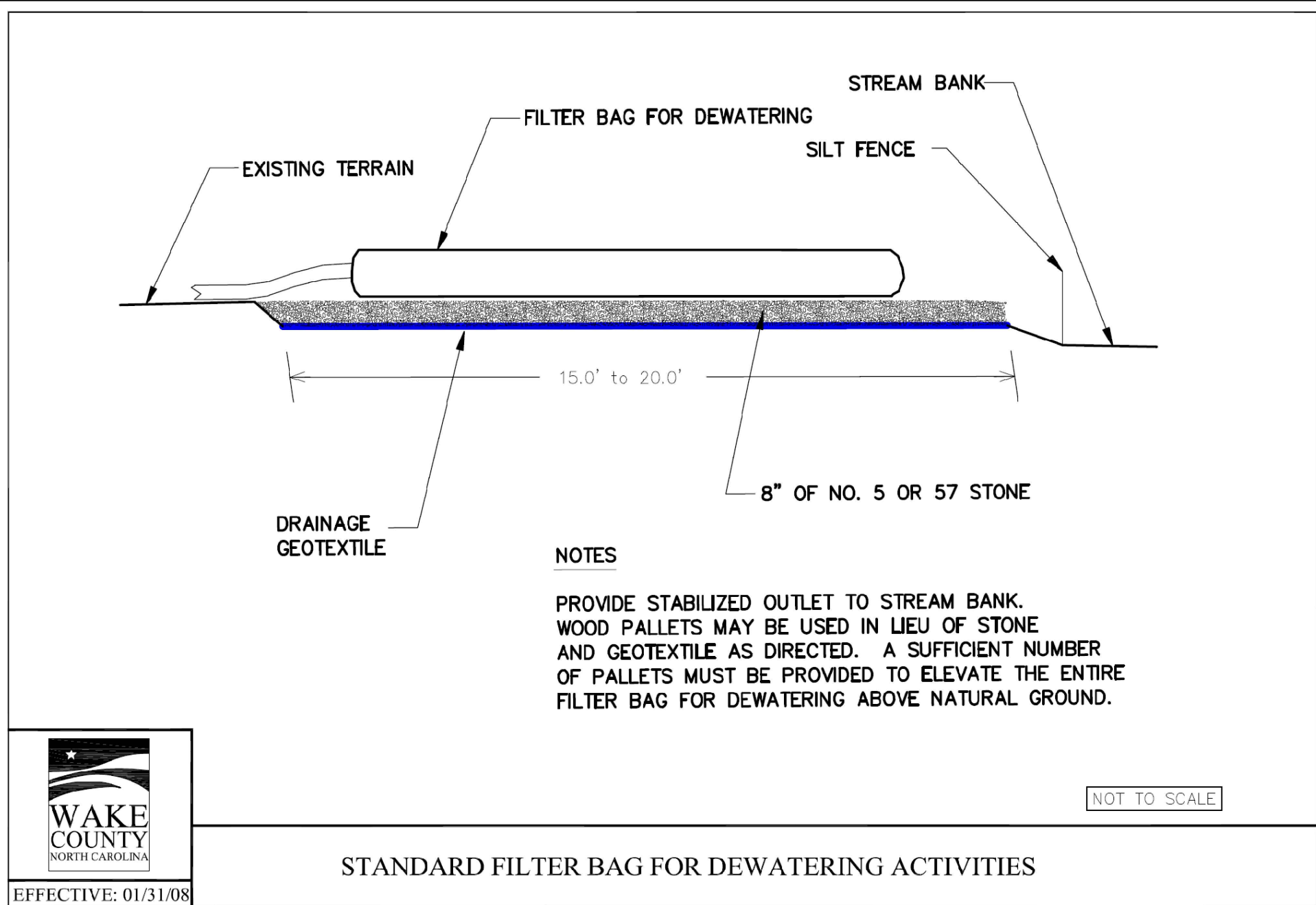
1. SITE PREPARATIONS- CLEAR, GRUB, AND STRIP TOPSOIL FROM AREAS UNDER THE EMBANKMENT TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. DELAY CLEARING THE POOL AREA UNTIL THE DAM IS COMPLETE AND THEN REMOVE BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS TO FACILITATE SEDIMENT CLEANOUT. STOCKPILE ALL TOPSOIL OR SOIL CONTAINING ORGANIC MATTER FOR USE ON THE OUTER SHELL OF THE EMBANKMENT TO FACILITATE VEGETATIVE ESTABLISHMENT. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW THE BASIN AS NEEDED.
2. CUT-OFF TRENCH- EXCAVATE A CUT-OFF TRENCH ALONG THE CENTER LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 2 FEET DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE RISER CREST. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 2 FEET. MAKE SIDE SLOPES OF THE TRENCH NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS ARE THE SAME AS THOSE FOR THE EMBANKMENT. KEEP THE TRENCH DRY DURING BACKFILLING AND COMPACTION OPERATIONS.
3. EMBANKMENT- TAKE FILL MATERIAL FROM THE APPROVED AREAS SHOWN ON THE PLANS. IT SHOULD BE CLEAN MINERAL SOIL, FREE OF ROOTS, WOODY VEGETATION, ROCKS, AND OTHER OBJECTIONABLE MATERIAL. SCARIFY AREAS ON WHICH FILL IS TO BE PLACED BEFORE PLACING FILL. THE FILL MATERIAL MUST CONTAIN SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION. PLACE FILL MATERIAL IN 6 TO 8 INCH CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND COMPACT IT. COMPACTION MAY BE OBTAINED BY ROUTING THE CONSTRUCTION HAULING EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF HEAVY EQUIPMENT, OR A COMPACTOR MAY BE USED. CONSTRUCT THE EMBANKMENT TO AN ELEVATION 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLING.
4. CONDUIT SPILLWAYS- SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATERTIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN BARREL SECTIONS BY APPROVED WATERTIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR OTHER SATISFACTORY MEANS TO PREVENT FLOTATION. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
5. EMERGENCY SPILLWAY- INSTALL THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE EMERGENCY SPILLWAY.
6. INLETS- DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).
7. EROSION CONTROL- CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION (REFERENCES: SURFACE STABILIZATION).
8. INSTALL POROUS BAFFLES.
9. SAFETY- SEDIMENT BASINS MAY ATTRACT CHILDREN AND CAN BE DANGEROUS. AVOID STEEP SIDE SLOPES AND FENCE AND MARK BASINS WITH WARNING SIGNS IF TRESPASSING IS LIKELY. FOLLOW ALL STATE AND LOCAL REQUIREMENTS.

BASIN DEWATERING SPECIFICATIONS

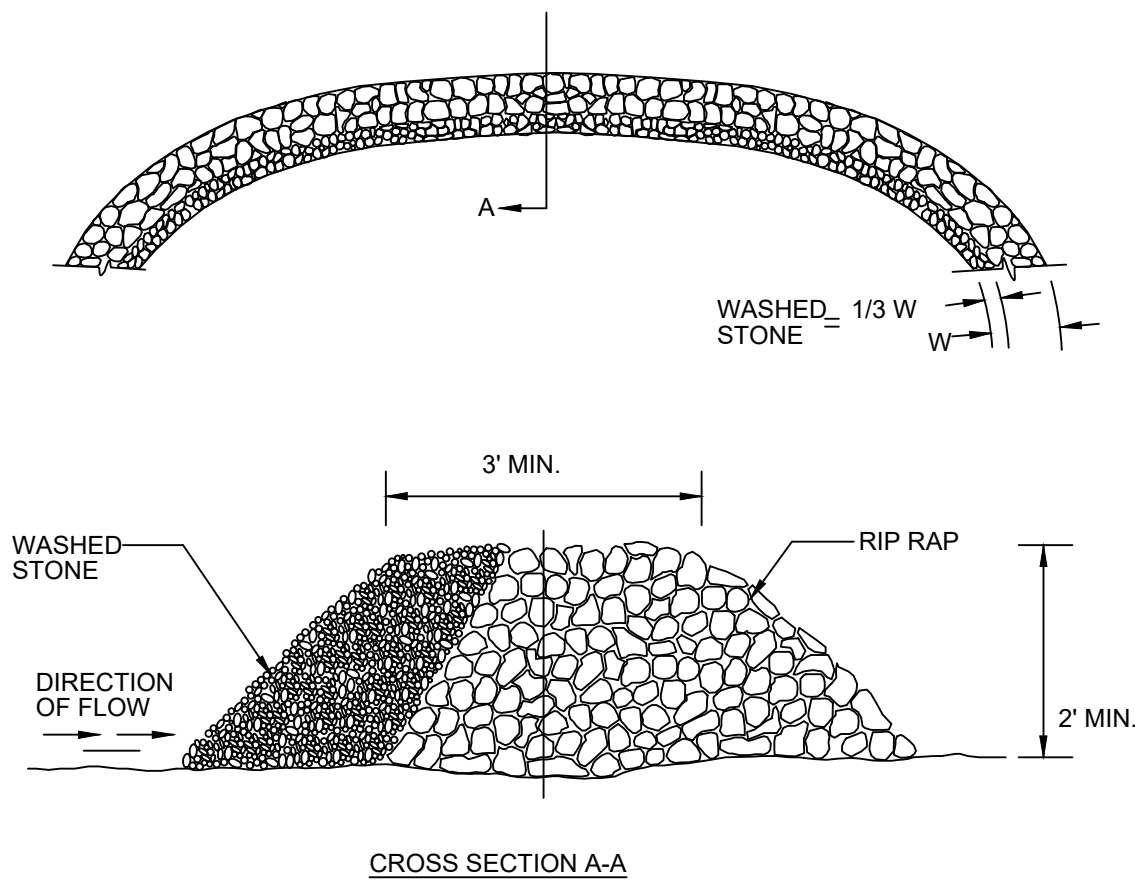
- SEDIMENT FILTER BAG**
- SEDIMENT FILTER BAGS ARE SPECIFICALLY DESIGNED TO CONTROL PUMPED WATER AND CONNECT DIRECTLY TO THE PUMP DISCHARGE LINE.
 - BAGS SHOULD BE PLACED ON A LEVEL, STABLE SURFACE THAT IS PREPARED WITH MULCH, STRAW, SMALL AGGREGATE, OR OTHER MATERIAL AS RECOMMENDED BY THE MANUFACTURER. THE BAG SHOULD BE MADE OF A NON-WOVEN, NEEDLE-PUNCHED, GEOTEXTILE THAT MEETS THE FOLLOWING MINIMUM CRITERIA: 205 LBS MINIMUM TENSILE STRENGTH USING ASTM D4632 TEST METHOD FOR GRAB BREAKING LOAD AND ELONGATION OF GEOTEXTILES.
 - 130 LBS MINIMUM PUNCTURE STRENGTH USING ASTM D4833 TEST METHOD FOR INDEX PUNCTURE RESISTANCE OF GEOTEXTILES, GEOMEMBRANES, AND RELATED PRODUCTS.
 - 400 PSI MINIMUM MULLEN BURST STRENGTH USING ASTM D3786 STANDARD TEST METHOD FOR HYDRAULIC BURSTING STRENGTH OF TEXTILE FABRICS-DIAPHRAGM BURSTING STRENGTH TESTER METHOD.
 - MINIMUM 70 PERCENT AT 500 HOURS ULTRAVIOLET RESISTANCE USING ASTM D4355 STANDARD TEST METHOD FOR DETERIORATION OF GEOTEXTILES BY EXPOSURE TO LIGHT, MOISTURE, AND HEAT IN A XENON ARC TYPE APPARATUS.
 - 85 TO 110 GPM/FT2 WATER FLOW RATE USING ASTM D4491 STANDARD TEST METHODS FOR WATER PERMEABILITY OF GEOTEXTILES BY PERMITTIVITY.

DEWATERING PUMP

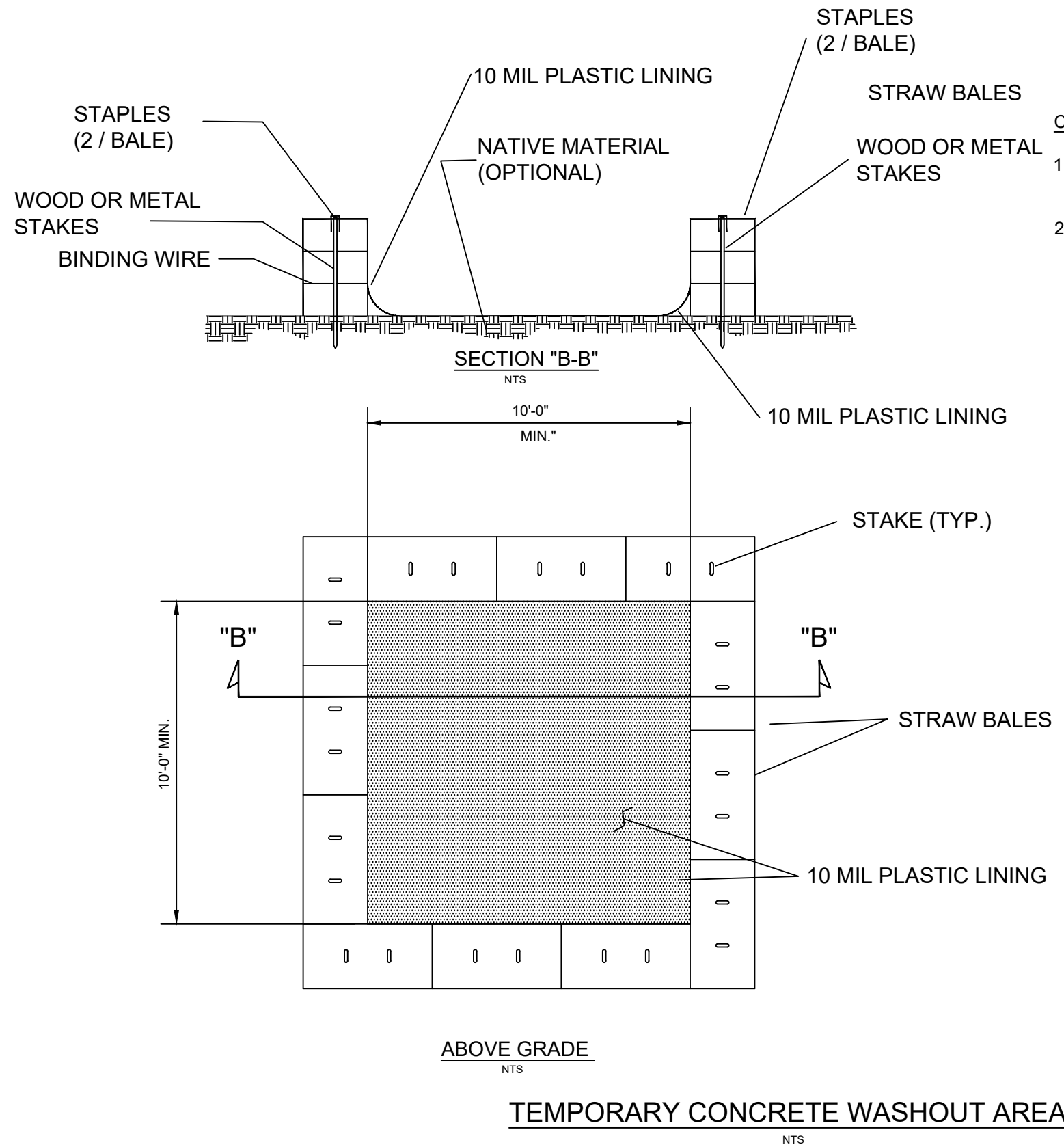
- THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/4 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



STANDARD FILTER BAG FOR DEWATERING ACTIVITIES



STONE FILTER CHECK DAM



MIXTURE:

AGRICULTURAL LIMESTONE:	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER:	1,000 LBS/ACRE - 10-10-10
SUPERPHOSPHATE:	500 LBS/ACRE - 20% ANALYSIS
MULCH:	2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR:	ASPHALT EMULSION AT 300 GALS/ACRE

SEEDING SCHEDULE

FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1):

DATE	TYPE	PLANTING RATE
AUG 15 - NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1 - APR 15	TALL FESCUE	300 LBS/ACRE
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL 1-AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	125 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

DATE	TYPE	PLANTING RATE
MAR 1 - JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND USE THE FOLLOWING COMBINATIONS:	50 LBS/ACRE (SERICEA LESPEDEZA);
MAR 1 - APR 15	ADD TALL FESCUE	120 LBS/ACRE
MAR 1 - JUN 30	OR ADD WEEPING LOVE GRASS	10 LBS/ACRE
MAR 1 - JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN 1 - SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	120 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)
SEPT 1 - MAR 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE (SERICEA LESPEDEZA); 120 LBS/ACRE (TALL FESCUE)
NOV 1 - MAR 1	AND ABRUZZI RYE	25 LBS/ACRE

PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

Erosion Control Details
Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.

Dwg No.

EC6

Gettle Engineering and Design, PLLC

3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT
Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

Temporary and Permanent Groundcover*

STABILIZATION TIMEFRAMES (Effective Aug. 3, 2011)		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter ditches, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 60' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

*For Falls Lake watershed, in disturbed areas where grading activities are incomplete, provide temporary groundcover no later than seven (7) days for slopes steeper than 3:1; ten (10) days for slopes equal to or flatter than 3:1; fourteen (14) days for areas with no slope.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
- Temporary grass seed covered with straw or other mulches and tackifiers - Hydroseeding - Rollled erosion control products with or without temporary grass seed - Appropriately applied straw or other mulch - Plastic sheeting	- Permanent grass seed covered with straw or other mulches and tackifiers - Geotextile fabrics such as permanent soil reinforcement matting - Hydroseeding - Strips or other permanent plantings covered with mulch - Uniform and evenly distributed ground cover sufficient to restrain erosion - Structural methods such as concrete, asphalt or retaining walls

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.



EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number of waste containers on site to manage the quantity of waste produced.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow.
- Dispose waste off-site at an approved disposal facility.

PAINT AND OTHER LIQUID WASTE

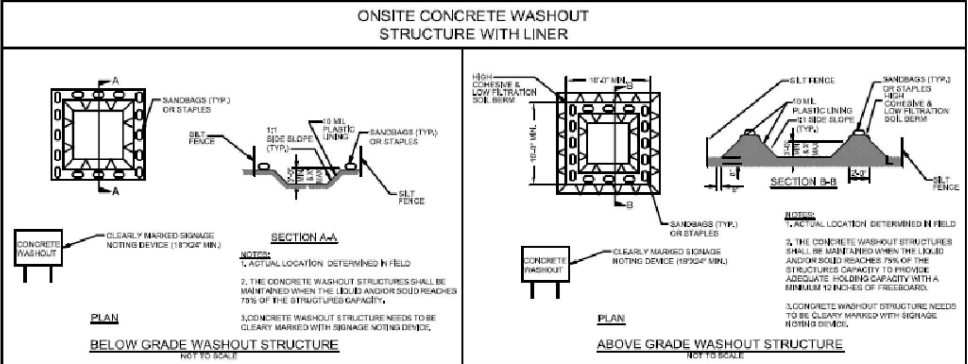
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 03/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the inspection record.

Inspect	Frequency (during normal business hours)	Inspection records must include [40 CFR 122.41]:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero". The permittee may use another rain-measuring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Corrective action taken, and 7. Date of actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Actions taken to correct/prevent sedimentation, and 7. Date of actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Date of actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Evidence and actions taken to reduce sediment contributions, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 03/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation

In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This general permit as well as the certificate of coverage, after it is received.
- Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.05.
- Anticipated bypasses and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

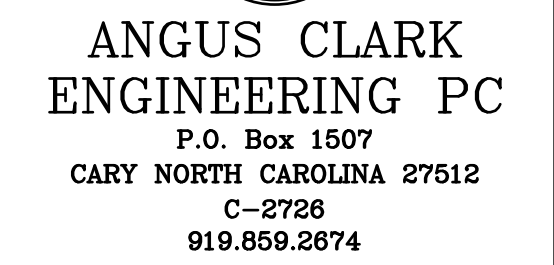
2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. - If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per item 1(b)-(c) above	Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(i)(6). - Division staff may waive the requirement for a written report on a case-by-case basis.

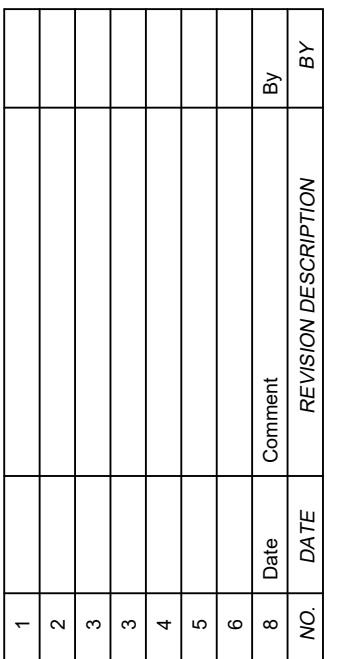
NO.	DATE	REVISION DESCRIPTION	BY
1	8-28-2023	Initial Submittal	KPG
2	5-22-2026	Town / Wake County Comment	KPG
3	DATE	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY

PRELIMINARY
DO NOT USE FOR
CONSTRUCTION



Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

Statistics					
Description	Symbol	Avg	Max	Min	Avg/Min
PARKING LOT	+	2.0 fc	4.8 fc	0.8 fc	2.5:1
PROPERTY LINE	+	1.4 fc	3.8 fc	0.1 fc	14.0:1



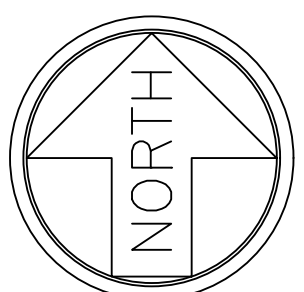
Site Lighting Plan

Vineyard Pine Commercial
MRR Development, LLC
Rolesville, Wake County, North Carolina

Project No.

Dwg No.

SL1



FIXTURE TYPE "DL"

CALVIN™WALL

PROJECT: 4502 Vineyard Pine Lane

TYPE: Display Light

QUANTITY:

PN: 2W	
APPLICATION	- WALL MOUNT - INDOOR OR OUTDOOR RATED
DIMENSION	16" (41CM)
ILLUMINATION	- DIRECT - LED 90CRI - INCANDESCENT MEDIUM BASE SOCKET 753 - 1802 LUMENS
ELECTRICAL	120V, 277V, AND 347V 10KA SURGE SUPPRESSION STANDARD
DIFFUSERS	- CLEAR OR FROSTED, ELONGATED, GLASS GLOBE - CLEAR, FLAT LENS
DRIVER	- WALL MOUNT (INTEGRAL) - REMOTE MOUNT (INDOOR OR OUTDOOR)
MOUNTING	WALL, MOUNTED TO A 4" (10CM) J-BOX
CONSTRUCTION	ALUMINUM
FINISHES	- AVAILABLE ANODIZED, BRUSHED, AND IN SEVERAL TMS POWDER COATED FINISHES - CUSTOM RAL FINISHES AVAILABLE
DIMMING	0 - 10V STANDARD DIMMING
WEIGHT	7.5 LBS MAXIMUM

TMSLIGHTING

CALVIN™WALL

PROJECT: 4502 Vineyard Pine Lane

TYPE: Display Light

QUANTITY:

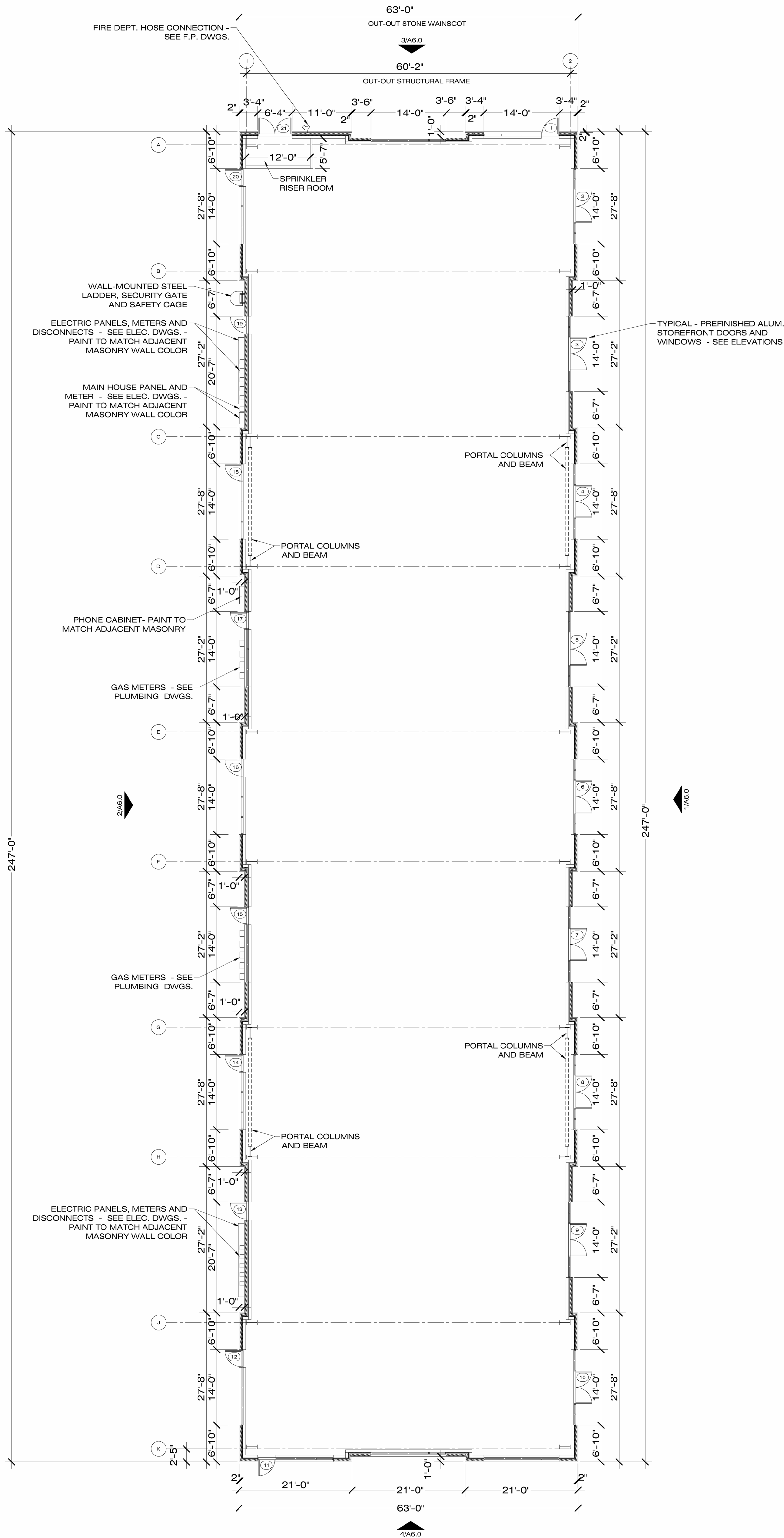
2W

120V

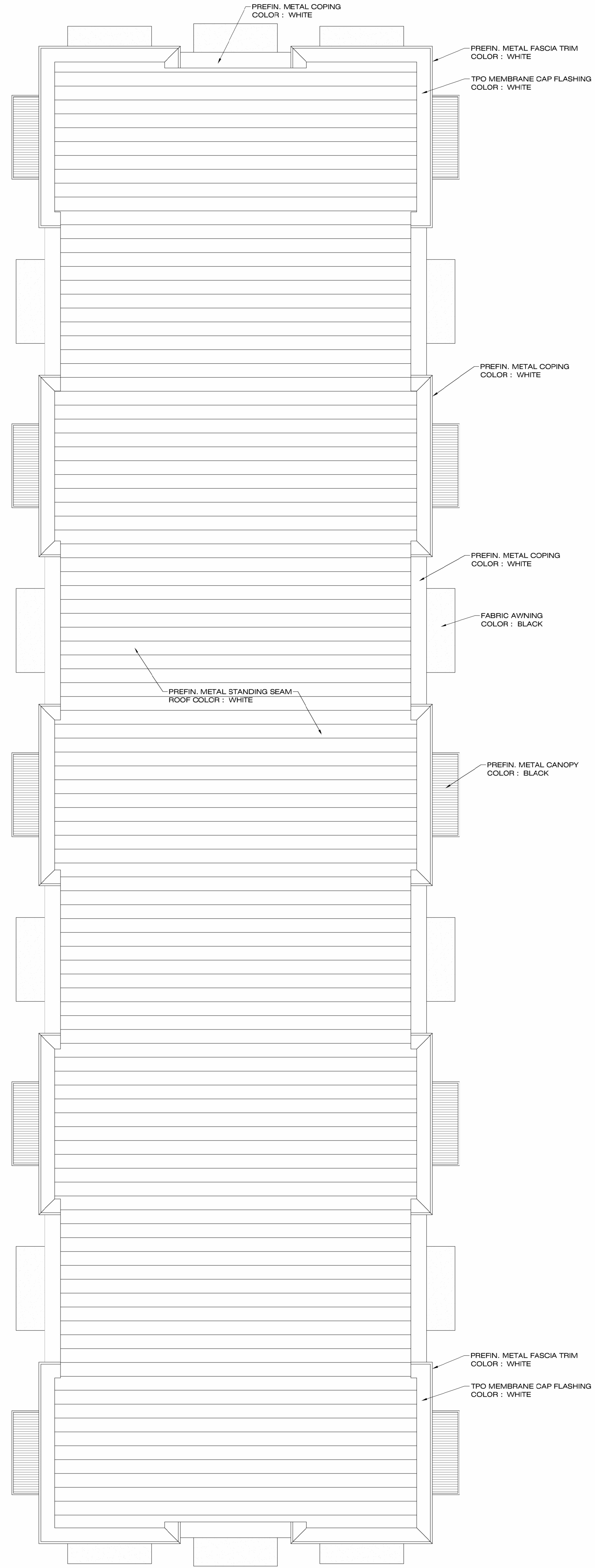
277V

347V

1.	INDOOR		OUTDOOR	
2.	ILLUMINATION			
	150IN	15LED	16LED	19LED
LED (W)	150W	15W	16W	19W
LUMENS	2158	1351	1440 (27/30/35/40/45/50/55/60/65/70/75/80/85/90/95/100/105/110/115/120/125/130/135/140/145/150/155/160/165/170/175/180/185/190/195/200/205/210/215/220/225/230/235/240/245/250/255/260/265/270/275/280/285/290/295/300/305/310/315/320/325/330/335/340/345/350/355/360/365/370/375/380/385/390/395/400/405/410/415/420/425/430/435/440/445/450/455/460/465/470/475/480/485/490/495/500/505/510/515/520/525/530/535/540/545/550/555/560/565/570/575/580/585/590/595/600/605/610/615/620/625/630/635/640/645/650/655/660/665/670/675/680/685/690/695/700/705/710/715/720/725/730/735/740/745/750/755/760/765/770/775/780/785/790/795/800/805/810/815/820/825/830/835/840/845/850/855/860/865/870/875/880/885/890/895/900/905/910/915/920/925/930/935/940/945/950/955/960/965/970/975/980/985/990/995/1000/1005/1010/1015/1020/1025/1030/1035/1040/1045/1050/1055/1060/1065/1070/1075/1080/1085/1090/1095/1100/1105/1110/1115/1120/1125/1130/1135/1140/1145/1150/1155/1160/1165/1170/1175/1180/1185/1190/1195/1200/1205/1210/1215/1220/1225/1230/1235/1240/1245/1250/1255/1260/1265/1270/1275/1280/1285/1290/1295/1300/1305/1310/1315/1320/1325/1330/1335/1340/1345/1350/1355/1360/1365/1370/1375/1380/1385/1390/1395/1400/1405/1410/1415/1420/1425/1430/1435/1440/1445/1450/1455/1460/1465/1470/1475/1480/1485/1490/1495/1500/1505/1510/1515/1520/1525/1530/1535/1540/1545/1550/1555/1560/1565/1570/1575/1580/1585/1590/1595/1600/1605/1610/1615/1620/1625/1630/1635/1640/1645/1650/1655/1660/1665/1670/1675/1680/1685/1690/1695/1700/1705/1710/1715/1720/1725/1730/1735/1740/1745/1750/1755/1760/1765/1770/1775/1780/1785/1790/1795/1800/1805/1810/1815/1820/1825/1830/1835/1840/1845/1850/1855/1860/1865/1870/1875/1880/1885/1890/1895/1900/1905/1910/1915/1920/1925/1930/1935/1940/1945/1950/1955/1960/1965/1970/1975/1980/1985/1990/1995/2000/2005/2010/2015/2020/2025/2030/2035/2040/2045/2050/2055/2060/2065/2070/2075/2080/2085/2090/2095/2100/2105/2110/2115/2120/2125/2130/2135/2140/2145/2150/2155/2160/2165/2170/2175/2180/2185/2190/2195/2200/2205/2210/2215/2220/2225/2230/2235/2240/2245/2250/2255/2260/2265/2270/2275/2280/2285/2290/2295/2300/2305/2310/2315/2320/2325/2330/2335/2340/2345/2350/2355/2360/2365/2370/2375/2380/2385/2390/2395/2400/2405/2410/2415/2420/2425/2430/2435/2440/2445/2450/2455/2460/2465/2470/2475/2480/2485/2490/2495/2500/2505/2510/2515/2520/2525/2530/2535/2540/2545/2550/2555/2560/2565/2570/2575/2580/2585/2590/2595/2600/2605/2610/2615/2620/2625/2630/2635/2640/2645/2650/2655/2660/2665/2670/2675/2680/2685/2690/2695/2700/2705/2710/2715/2720/2725/2730/2735/2740/2745/2750/2755/2760/2765/2770/2775/2780/2785/2790/2795/2800/2805/2810/2815/2820/2825/2830/2835/2840/2845/2850/2855/2860/2865/2870/2875/2880/2885/2890/2895/2900/2905/2910/2915/2920/2925/2930/2935/2940/2945/2950/2955/2960/2965/2970/2975/2980/2985/2990/2995/3000/3005/3010/3015/3020/3025/3030/3035/3040/3045/3050/3055/3060/3065/3070/3075/3080/3085/3090/3095/3100/3105/3110/3115/3120/3125/3130/3135/3140/3145/3150/3155/3160/3165/3170/3175/3180/3185/3190/3195/3200/3205/3210/3215/3220/3225/3230/3235/3240/3245/3250/3255/3260/3265/3270/3275/3280/3285/3290/3295/3300/3305/3310/3315/3320/3325/3330/3335/3340/3345/3350/3355/3360/3365/3370/3375/3380/3385/3390/3395/3400/3405/3410/3415/3420/3425/3430/3435/3440/3445/3450/3455/3460/3465/3470/3475/3480/3485/3490/3495/3500/3505/3510/3515/3520/3525/3530/3535/3540/3545/3550/3555/3560/3565/3570/3575/3580/3585/3590/3595/3600/3605/3610/3615/3620/3625/3630/3635/3640/3645/3650/3655/3660/3665/3670/3675/3680/3685/3690/3695/3700/3705/3710/3715/3720/3725/3730/3735/3740/3745/3750/3755/3760/3765/3770/3775/3780/3785/3790/3795/3800/3805/3810/3815/3820/3825/3830/3835/3840/3845/3850/3855/3860/3865/3870/3875/3880/3885/3890/3895/3900/3905/3910/3915/3920/3925/3930/3935/3940/3945/3950/3955/3960/3965/3970/3975/3980/3985/3990/3995/4000/4005/4010/4015/4020/4025/4030/4035/4040/4045/4050/4055/4060/4065/4070/4075/4080/4085/4090/4095/4100/4105/4110/4115/4120/4125/4130/4135/4140/4145/4150/4155/4160/4165/4170/4175/4180/4185/4190/4195/4200/4205/4210/4215/4220/4225/4230/4235/4240/4245/4250/4255/4260/4265/4270/4275/4280/4285/4290/4295/4300/4305/4310/4315/4320/4325/4330/4335/4340/4345/4350/4355/4360/4365/4370/4375/4380/4385/4390/4395/4400/4405/4410/4415/4420/4425/4430/4435/4440/4445/4450/4455/4460/4465/4470/4475/4480/4485/4490/4495/4500/4505/4510/4515/4520/4525/4530/4535/4540/4545/4550/4555/4560/4565/4570/4575/4580/4585/4590/4595/4600/4605/4610/4615/4620/4625/4630/4635/4640/4645/4650/4655/4660/4665/4670/4675/4680/4685/4690/4695/4700/4705/4710/4715/4720/4725/4730/4735/4740/4745/4750/4755/4760/4765/4770/4775/4780/4785/4790/4795/4800/4805/4810/4815/4820/4825/4830/4835/4840/4845/4850/4855/4860/4865/4870/4875/4880/4885/4890/4895/4900/4905/4910/4915/4920/4925/4930/4935/4940/4945/4950/4955/4960/4965/4970/4975/4980/4985/4990/4995/5000/5005/5010/5015/5020/5025/5030/5035/5040/5045/5050/5055/5060/5065/5070/5075/5080/5085/5090/5095/5100/5105/5110/5115/5120/5125/5130/5135/5140/5145/5150/5155/5160/5165/5170/5175/5180/5185/5190/5195/5200/5205/5210/5215/5220/5225/5230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1 FLOOR PLAN
SCALE: 3/32" = 1'-0"



2 ROOF PLAN
SCALE: 3/32" = 1'-0"



RED LINE

6601 Six Forks Rd.
Suite 130
Raleigh, NC 27615
919.878.1660
www.redlinedg.com

xx.xx.26

JONESVILLE ROAD COMMERCIAL BUILDING

5402 VINEYARD PINE LANE
ROLESVILLE, NC

#	△	DESCRIPTION	DATE
1		SITE PLAN SUBMITTAL	04.29.26
2			
3			
4			
5			
6			
7			
8			
9			
10			

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PROJECT # RDU 23-039

FLOOR PLAN

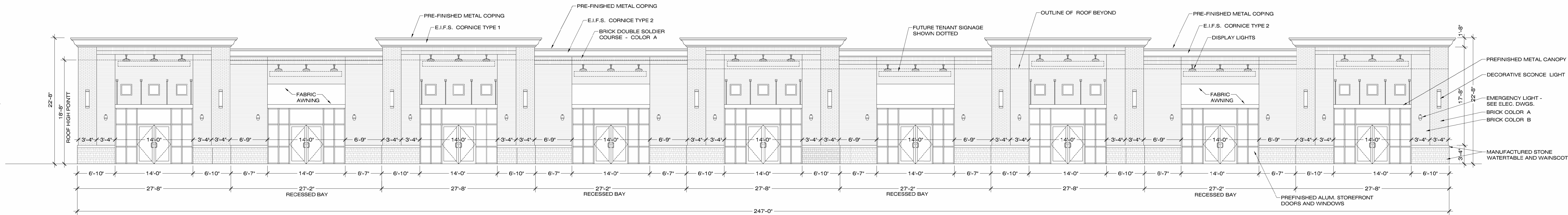
SHEET #

A1.1



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Suite 130
Raleigh, NC 27615
919.878.1660
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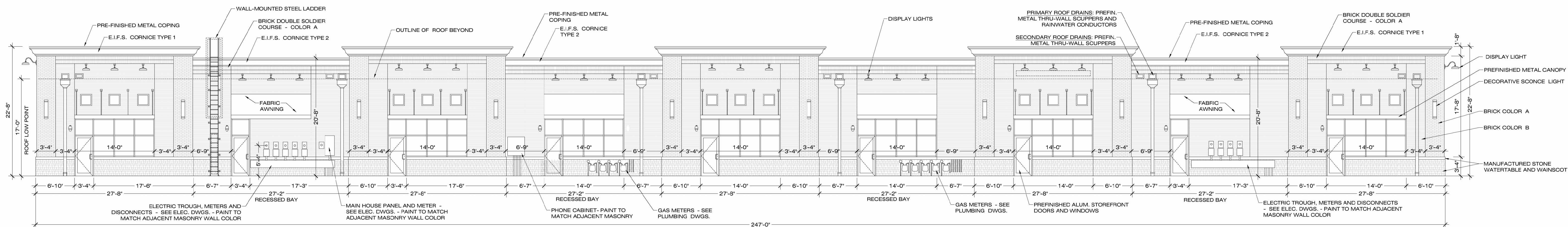


WEST FACADE:
GROSS FACADE AREA: 2,980 S.F.
MASONRY AREA: 2,036 S.F. = 67.3 %
EIFS PERCENTAGE: 274 S.F. = 9.2 %
TRANSPARENCY ZONE: 1,370 S.F.
GLASS AREA: 700 S.F. = 23.5 %

1 WEST ELEVATION (FACING PARKING LOT)

SCALE: 1/8" = 1'-0"

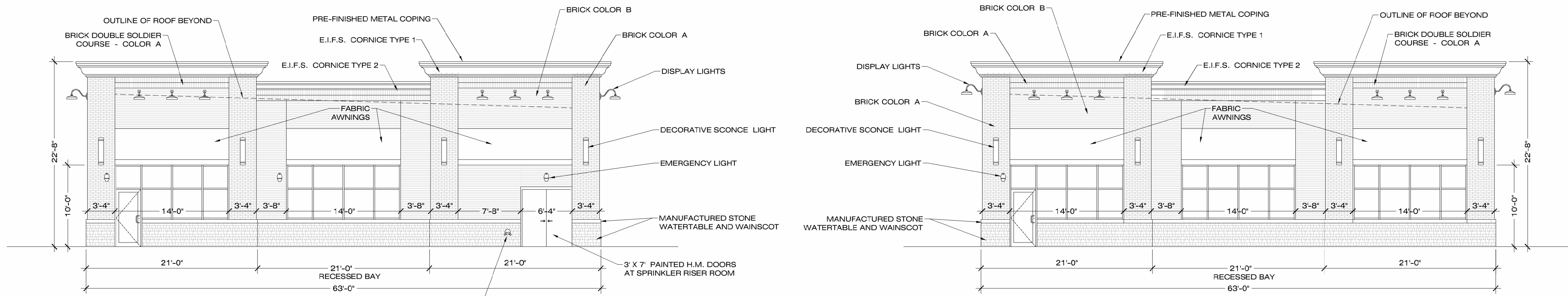
43



EAST FACADE:
GROSS FACADE AREA: 5,302 S.F.
MASONRY AREA: 4,087 S.F. = 77.0 %
EIFS PERCENTAGE: 494 S.F. = 9.3 %
TRANSPARENCY ZONE: 2,470 S.F.
GLASS AREA: 819 S.F. = 15.3 %

2 EAST ELEVATION (FACING JONESVILLE ROAD)

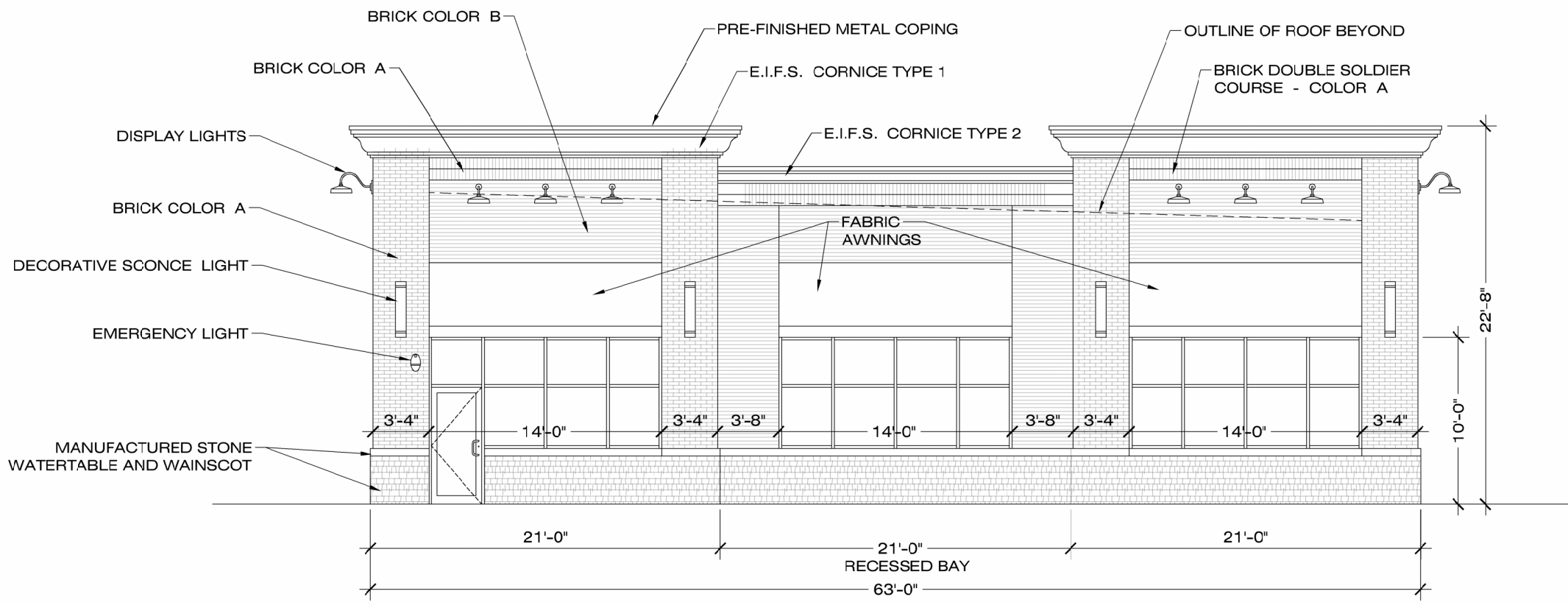
SCALE: 1/8" = 1'-0"



NORTH FACADE:
GROSS FACADE AREA: 1,321 S.F.
MASONRY AREA: 973 S.F. = 73.6 %
EIFS PERCENTAGE: 120 S.F. = 9.1 %
TRANSPARENCY ZONE: 630 S.F.
GLASS AREA: 228 S.F. = 17.3 %

3 NORTH ELEVATION (FACING VINEYARD PINE LANE)

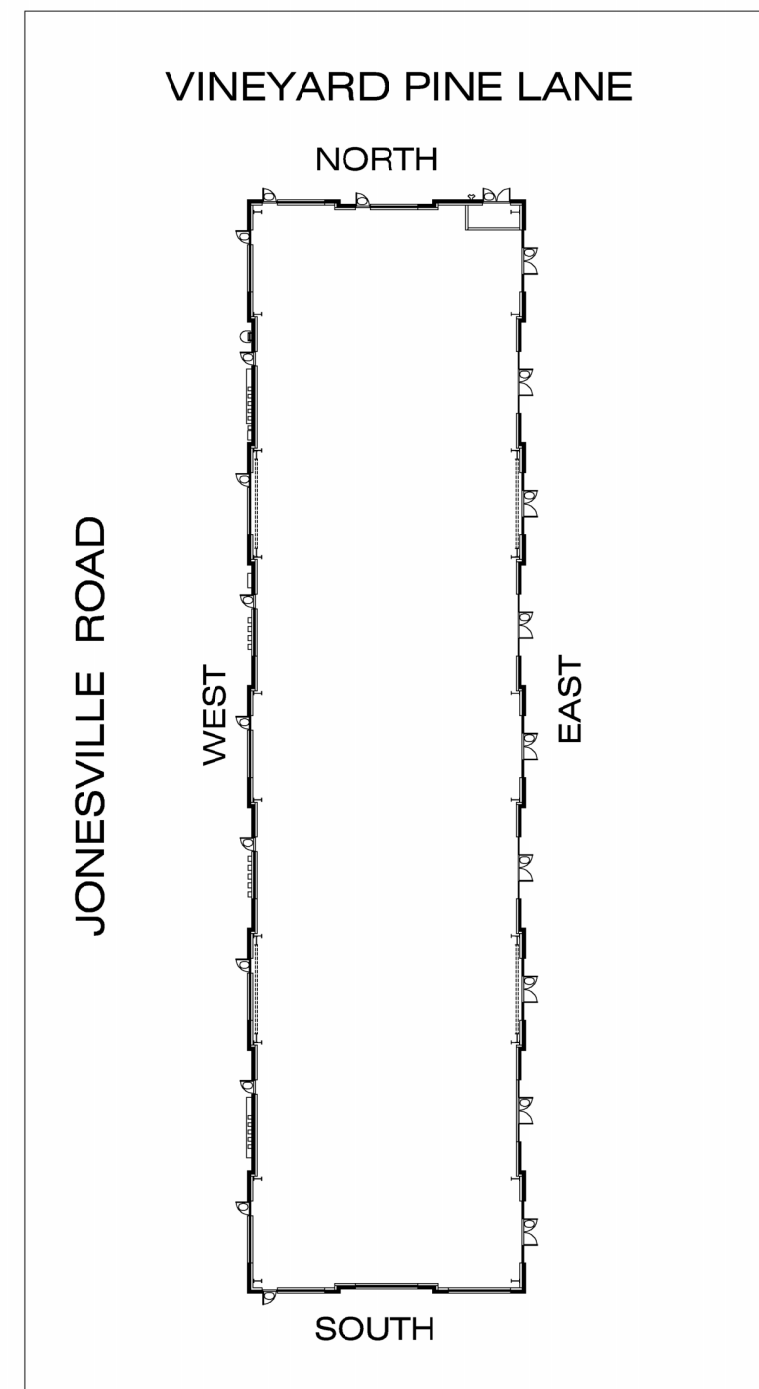
SCALE: 1/8" = 1'-0"



SOUTH FACADE:
GROSS FACADE AREA: 1,321 S.F.
MASONRY AREA: 922 S.F. = 70.0 %
EIFS PERCENTAGE: 120 S.F. = 9.1 %
TRANSPARENCY ZONE: 630 S.F.
GLASS AREA: 279 S.F. = 21.1 %

4 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



KEY PLAN
NOT TO SCALE

xx.xx.26

JONESVILLE ROAD COMMERCIAL BUILDING

5402 VINEYARD PINE LANE
ROLESVILLE, NC

#	DESCRIPTION	DATE
1	SITE PLAN SUBMITTAL	04.29.26
2		
3		
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PROJECT # RDU 23-039

BUILDING ELEVATIONS

SHEET #

A6.0

Site Development Plan Checklist

Town of Rolesville Planning Department | PO Box 250 | Rolesville, NC 27571 | 919-554-6517 | planning@rolesvillenc.gov

Disclaimer: This checklist does not cover all codified requirements, but is intended to provide guidance based on best practices. Where applicable, requirements are referenced within the [Town of Rolesville Land Development Ordinance](#) and/or other State Ordinances.

For items marked "YES", instead of a "Check", please place the sheet number where the requirement is shown.

TO BE COMPLETED BY APPLICANT	YES	N/A
COVER SHEET		
1. Please confirm that you have the required items as shown on the corresponding example cover sheet.		
1. Project name (shall not duplicate an existing name)	✓	
2. Application reference number (request Pre-submittal or add placeholder SDP-YR-XX) on all sheets.	✓	
3. Date (original submittal and all revisions located in a table)	✓	
4. Address + Location (distinguish if within Town limits, Town ETJ, or Wake County)	✓	
5. Vicinity map with north arrow.	✓	
6. Sheet index, preferably with 1-X numbering along with typical Sheet identifiers (ie, C-5.00)	✓	
7. Overall development map (if part of larger project) with project area clearly identified	✓	
8. <u>Site Data Table</u> including: Property Identification Numbers (PIN) for all properties, Zoning District (inc. REZ#/approval date), Watershed, River Basin, Current Use(s), Proposed Use(s), Current Impervious, Proposed Impervious, Parking Data per use, Tree Coverage Data, Building Height, and Building Square Footage(s) and/or Multifamily residential unit #/density.	✓	
9. If located in the floodplain, provide the correct Flood Insurance Rate Map (FIRM) panel number and date	✓	
10. Contact information for the Property owner, applicant/representatives, and all consultants	✓	✓
11. Professional seal	✓	✓
12. Application reference numbers of previous approvals, including Rezoning, Final Plat, etc. Existing and Proposed Conditions related to the development (Special use permits, conditional zonings, etc.)	✓	
13. List any Conditions of Approval or Development Agreement stipulations that apply to property or project (ie, Conditional Rezoning, Special Use Permit, etc.)	✓	
EXISTING CONDITIONS AND/OR DEMOLITION PLAN SHEET(S) **RECENT SURVEY RECOMMENDED**		
1. Dimensions, scale, and north arrow	✓	
2. Professional seal		✓
3. Site size, metes and bounds of property boundary, with north arrow, scale (in graphic and list format), and measurable graphic of larger site showing context of area of proposed change	✓	
4. Property lines and Property Identification Number (PIN) of the site and adjacent properties	✓	
5. Zoning districts (of site and Adjacent properties to confirm buffer yard requirements)	✓	
6. Register of Deeds Book of Maps or Deed Book/Page reference for site and Adjacent properties	✓	
7. Adjacent property owner information	✓	
8. Owner information for the parcel of the project location	✓	
9. Adjacent streets (name, right-of-way width, clarify if NCDOT or Town)	✓	
10. Existing Land use (of site and adjacent properties)	✓	
11. Any existing features located within the right-of-way	✓	
12. Setbacks – LDO Section 3 per Zoning District	✓	
13. Existing building footprint(s) with square footage and number of stories	✓	

14. Existing infrastructure: loading areas, parking, driveways, alleys, streets, sidewalks, dumpsters, lighting, septic tanks, drain fields, wells, hydrants (within 500 feet of site), water meters, culverts (other subsurface features), utility or other easements (type, size, and whether public or private), railroads, cemeteries, etc.	✓	
15. Existing recorded open space or common areas (including easements)	✓	
16. Topographic contours shall extend 100' past property limits	✓	
18. Water features (name/location), stream buffers, drainage ways, wetlands, other environmental features	✓	
19. Existing vegetation (with general description and location)	✓	
20. Demolition proposed (on this sheet or separate if existing conditions under demolition are illegible)	✓	
21. Dimensions, scale, and north arrow	✓	
SITE PLAN SHEET(S)		
1. Scale and north arrow	✓	
2. Base information to remain (clearly distinguish between existing and proposed conditions)	✓	
3. Address Plan approved by Wake Co. GIS/911 – if multiple non-residential suites / multifamily	✓	
4. Building Setback lines per the zoning district – LDO Section 3	✓	
5. Flood protection zones (if applicable)	✓	
6. Building footprint(s) with square footage per floor and per use(s), height, number of stories, and entries	✓	
7. Distances between buildings, as applicable per zoning district – LDO Section 3	✓	
8. Parking calculations (vehicle, handicapped, guests, and bicycle) – LDO Section 6.4	✓	
9. Driveways, stacking spaces, and parking areas (with number of spaces per bay, space size, and pavement type labeled) – LDO Section 6.4.4		✓
10. Handicap aisles, spaces, signage, and accessible routes to the main entrance are labeled & dimensioned	✓	
11. Bicycle parking location (with rack details) – LDO Section 6.4.7	✓	
12. Sight distance triangles – LDO Section 9.2 (10' x 70' on all Collector roads and NCDOT required driveway permits)		✓
13. Sidewalks, walkways, and trails dimensioned, and material noted – LDO Section 9.2	✓	
14. ADA ramps are shown; directional crossings shall be provided at intersections	✓	
15. Trash handling and recycling facilities (with required screening and details) – LDO Section 6.2.4	✓	
16. Show all fire lanes and access routes, as applicable	✓	
17. Utilities (existing and proposed) (above ground utilities to be screened, with details) – LDO Section 6.2.4 & 6.8.8	✓	
18. ROW and streets are labeled and dimensioned; Public vs. Private should be clearly defined – LDO Section 9.2	✓	
19. Easements are labeled & dimensioned; Public vs. Private should be clearly defined – LDO Sec. 9.2.4	✓	
20. Radii labeled for all intersections, or a typical label included	✓	
22. Tree protection fencing location with details and standard notes – LDO Section 6.2.4 & 6.2.5	✓	
22. Stream buffers, drainage ways, wetlands, wetland buffers with/ necessary setbacks – LDO Section 4.2.9		✓
23. Open space and Greenways (dedicated or reserved) and any proposed improvements within them – LDO Section 6.2.1	✓	
24. Landscape buffer locations and widths – LDO Section 6.2.2	✓	
25. Location of grass strip – LDO Section 6.2.2.2.D. D	✓	
26. Location of any proposed monument or ground signs – LDO Section 6.1.2		✓
27. If a multi-tenant complex, clarify if a Master Sign Plan is intended – LDO Section 6.1.2.J		✓
28. Other site features unique to the proposed use	✓	
EROSION CONTROL PLAN SHEET(S)		
1. Scale and north arrow	✓	
2. Limits of land disturbance	✓	
3. Grading (contours at 2-foot intervals within 100 feet of developed area). Clearly distinguish between existing and proposed contours; Contours should be labeled regularly enough to follow drainage patterns.	✓	
4. Impervious surfaces (label and provide calculations)	✓	
5. Existing vegetation (types and locations) – LDO Section 6.2.4.5	✓	

6. Retaining walls labeled with top/bottom of wall elevations (wall detail required for construction drawings)	✓	
7. Stormwater ponds, bioretention facilities, and other similar facilities.	✓	
8. Preliminary storm drainage features and easements	✓	
9. Erosion control features defined by notes and/or a legend	✓	
10. Tree protection fencing location (reference detail location if on separate sheet)	✓	
11. Label critical root zones – LDO Section 6.2.4	✓	✓
12. The erosion control design shall meet Wake County standards. Please reference the Wake County Sediment and Erosion Control Construction Checklist	✓	
GRADING AND DRAINAGE PLAN SHEET(S)		
1. Scale and north arrow	✓	
2. Grading (contours at 2-foot intervals); Clearly distinguish between existing and proposed contours; Contours should be labeled regularly enough to follow drainage patterns	✓	
3. Proposed infrastructure including streets, sidewalks, greenways, retaining walls (labeled with top and bottom elevations), ponds, storm sewer, and utilities	✓	
4. Utility or other easements (type, size, and whether public or private); 20' PDE shall be required around the outfall from the ROW	✓	
5. Existing vegetation (types and locations) – LDO Section 6.2.4.5	✓	
UTILITY PLAN SHEET(S)		
1. All utilities (shown underground); Storm sewer should be clearly depicted separately from sewer and water – LDO Section 4.1.2	✓	
2. Dimensions, scale, and north arrow	✓	
3. Above-ground utilities and equipment (screened and with details) – LDO Section 6.2.4 and 9.2.6	✓	
4. Tree protection fencing location (reference detail location if on separate sheet)	✓	
5. Sewer and water design are to meet the City of Raleigh Public Utility standards	✓	
LIGHTING PLAN SHEET(S)		
A lighting plan is required per LDO Section 6.6.F. It shall be prepared, signed, and sealed by a licensed engineer. It shall be of an engineered scale that is easily legible and include the following:		
1. Title of project	✓	
2. Professional seal	✓	
3. Dimensions, scale, and north arrow	✓	
4. All proposed and existing buildings on the site	✓	
5. Pedestrian and vehicular areas	✓	
6. Other above-ground improvements	✓	
7. The horizontal location of all proposed and existing outdoor lighting fixtures, including pole and wall-mounted fixtures	✓	
8. Mounting heights of each fixture	✓	
9. Overall height of each pole above grade	✓	
10. Location of externally illuminated signs and associated fixtures	✓	
11. The location of all architectural and landscape lighting fixtures	✓	
12. Lighting plans shall be specified and calculated in maintained footcandles (FC). Measurements of light levels shall be taken at finished grade with an accurate and calibrated light meter – LDO 6.6.F.3	✓	
13. The plan must include a footcandle plan that provides typical footcandle contours and a point photometric grid that indicates footcandle levels measured at grade across the site. Maximum, average, and minimum site foot-candles, uniformity ratio (both average and minimum), and depreciation factors are also required. The plan must show initial horizontal illuminance values in foot-candles for the illuminated area. These values must be calculated at the grade level and include contributions from all on-site fixtures.	✓	
14. The plan must plot foot-candles of illumination at ground level to the nearest tenth of a foot-candle, and at horizontal grid intervals of no more than ten feet.	✓	
15. The plan shall show illumination level at the lot line (or perimeter of a development, if applicable) to ensure maximum illumination levels are not exceeded.	✓	
16. The manufacturer's cut sheets (specifications) for each proposed fixture must be submitted.	✓	
17. A lighting fixture schedule that presents the following information: Fixture type, including the manufacturer's product identification catalog number and fixture mounting height.	✓	
18. Any other information required to ensure compliance with LDO Section 6.6 lighting design standards	✓	

LANDSCAPE PLAN SHEET(S)

Preservation plan (LDO 6.2.4.5) – This can also be on the landscape plan sheet, but Staff would suggest this be its own plan sheet as it must include all the following:

a. A tree and/or vegetative survey preferred to be prepared by a Certified Arborist (LDO Section 6.2.4.5B)	✓	✓
b. Demonstration of no disturbance within a Tree critical root zone (CRZ), as defined in LDO.		✓
c. Protect critical root zones (CRZ) from encroachment and damage; restrict access by installing a barrier to keep materials, people, or equipment out of the critical root zone (CRZ).		✓
d. Barriers shall be accompanied by temporary signs labeling the critical root zone (CRZ).		✓
e. Graphically identify a location plan and boundary line survey of the property.		✓
f. Graphically identify the size, location, and species of trees.		✓
g. Graphically identify areas where trees, vegetation, and soils are to be protected and preserved and areas where trees, vegetation, and soil are to be removed or modified.		✓
h. Graphically identify each tree to be saved or removed.		✓
i. Demonstration of compliance with all Vegetation Preservation standards (LDO Sec. 6.8.4.5C).		✓
j. Tree protection fencing location (reference detail location if on separate sheet)	✓	
A licensed Landscape Architect shall prepare a landscape plan. Refer to LDO Section 6.2.4.2 for a complete list of the Landscape Plan review requirements. The plan shall include the following:		✓
1. Title of project	✓	
2. Dimensions, scale, and north arrow	✓	
3. Professional seal		✓
4. All required open space, including the size of each area and which open space type - LDO 6.2	✓	✓
5. Indigenous or native vegetation to remain		✓
6. Identify all LDO required landscaping	✓	
7. Vehicle use areas, including parking, aisles, and driveways	✓	
8. Roadways and access points	✓	
9. Plant spacing and native status	✓	
10. Overhead and underground utilities	✓	
11. Tree coverage calculations and areas, with samples, if applicable to the changes proposed		✓
12. Existing vegetation to remain (with critical root zones shown) – LDO Article 6.2.4.5		✓
13. Tree protection fencing location (reference detail location if on separate sheet)	✓	
14. Proposed landscaping (meeting minimum size and species mixing requirements)	✓	
15. Detailed Plant list (keyed to plan and showing what requirement each plant will fulfill, caliper size and height of plants, condition of root ball, common name and botanical name, number of each plant)	✓	
16. Landscape buffers (labeled with slope, required width, required plantings, and required fencing, walls, or berms) - LDO Article 6.2.2	✓	
17. Stream buffers		✓
18. Samples of existing vegetation in required buffers (with critical root zones) – LDO Article 6.2.4.5		✓
19. Street trees (with calculations) per LDO Section 6.2.2.2	✓	
20. Screening (with height, details, cross-sections, etc.) – LDO Article 6.8.8	✓	
21. Lighting, water, sewer, storm drainage systems, and easements (half-toned) to check for conflicts	✓	
22. Planting details (for trees, shrubs, and groundcover)	✓	
23. Fences, walls, and/or berms (with height and details) – LDO Article 6.5	✓	

ARCHITECTURAL DRAWINGS

1. Compliance with Applicable Standards: Please refer to the specific standards that may apply to your project. Applicants are required to demonstrate compliance with the applicable standards as follows. Compliance means that all dimensions are measured and specified, and all materials are identified.	✓	
a. Nonresidential building design standards – LDO Article 6.8.2	✓	
b. Multifamily design standards – LDO Article 6.8.6		✓
c. Industrial design standards – LDO Article 6.8.7		✓
2. Drawings must be to scale and have a graphic scale	✓	
3. Building elevations with total building height and finish floor elevations labeled	✓	

4. All building materials must be labeled	✓	
5. Building façade width and width of materials on the façade shall be labeled	✓	
WAKE COUNTY FIRE ADDITIONAL REQUIREMENTS (AS APPLICABLE)		
1. Fire Lanes are dimensioned and shown as being painted or striped per the Fire Code.	✓	
2. Any entrance gate shall have a means for emergency vehicle access and shall not decrease roadway width to below the required widths or height for emergency vehicles		✓
NCDOT REQUIREMENTS (AS APPLICABLE if Property fronts on/connects to DOT road)		
1. Driveway and/or Encroachment Permit submitted; include Permit # if submitted: _____		✓
2. Interior Stem is protected (100' minimum)	✓	
3. Driveway radius ties into the tangent in front of the project's property	✓	
4. Driveway turnout grades meet NCDOT standards	✓	
5. Driveway is not in the Functional Area of the Intersection	✓	
6. Above-ground utility appurtenances are placed as close to the ROW as possible		✓
7. All storm drainage crosses 90 degrees to the roadway	✓	
8. All drainage structures are not under the pavement unnecessarily	✓	
9. Catch basins shall be provided at the end of the curb and gutter; 5' is provided after a catch basin, before the end of the curb	✓	
10. All hazards are outside of the clear recovery area or outside the proposed ROW Landscaping	✓	
11. Turn lanes are required if AADT is over 4,000, and at the NCDOT District Engineer's discretion		✓
12. Turn lanes are required by the TIA; a copy of the TIA shall be provided		✓
13. Plans shall be approved by the Division Roadside Engineer, 919-816-8290		✓
14. Traffic Signal Plans shall be approved by the Division Traffic Engineer, 919-536-4000		✓
15. Wedging detail is provided when applicable		✓
16. All details for work with the ROW along DOT roadways are NCDOT details.	✓	

Last Revised: June 13, 2025

SDP-23-06 - Vineyard Pine Commercial - 1st Submittal Planning/Zoning Comments

1. Review Comments: General Comments 1. Cover Sheet/Sheet Index – this lists 19 sheets, whereas plan set is 21 sheets – rectify this, whichever is incorrect.

Response: Plan list update.

2. Sheet Order – the order of 21 sheets don't match the order listed on Cover Sheet.

Response: Noted.

3. Cover Sheet /Building Setbacks/LDO 3.2.1.C. – this lists Setbacks but not those that appear to be utilized, exercising the Setback Reduction of LDO 3.2.1.C. This whole topic needs discussed with Staff as to the intent to use execution of use as an outcome of TA-23-04 to expand the dimension of the Main Street Corridor definition so as to allow this property to utilize the Building Setback option, which eliminates the (Jonesville Rd) 30' Streetscape Buffer.

Response: Comment noted. Setback adjustment used along Jonesville Road.

4. A portion of the dumpster enclosure is located within the required 35' Building setback – remove/relocate or explain how LDO permits this site feature to be WITHIN a building setback area. Cover Sheet

Response: Dumpster relocated outside the setback line.

5. Add case number SDP-23-06 to the cover sheet.

Response: Case number added to the cover sheet.

6. Please add a reference box to the recently approved REZ-23-04 and TA-23-04 and any conditions of approval or concessions approved by the Board.

Response: Added to the cover sheet.

7. Please update the Site Data Table with the following information: a. Proposed Use. b. The correct zoning district designation (REZ-23-04, a GC-CZ district). c. Required setbacks and Proposed Setback (Sec. 3.2.1.C. if utilized). d. Update open space to note which open space type is provided per LDO Section 6.2.1.3.D. 1 e. Loading parking spaces required per LDO Section 6.4.5.C. f. Lighting Plan Loading parking spaces provided.

Response: Updated the cover sheet.

8. Please label the proposed location of any building mounted lighting and where lights are provided, the iso footcandle measurements should be revised to reflect the additional light output.

Response: See Architectural

9. Building façade and accent lighting will not be approved unless the light fixtures are carefully selected, located, aimed, and shielded so that light is directed only onto the building façade and spillover light is negligible. Existing Conditions/Demolition Sheet

Response: See Architectural

10. Please label limits of disturbance, trees to be removed, new tree line, critical root zones and tree protection fencing as applicable.

Response: Limit of disturbance noted on erosion control plans.

11. If possible, please include the Book and Map page number of Vineyard Pine Lane.

Response: Info shown on the site plan.

12. Though we understand the sign easement a platted easement, the sign easement shall not overlap with any other required buildings, easements or right-of-way.

Response: The sign easement will be removed.

13. Please provide the width of the existing sidewalk.

Response: Width noted on the existing conditions plan.

14. Within the existing tree line, please note any trees that are to be preserved, including species type and size. Site Plan

Response: Per conversation between Mac McIntyre and Rolesville Planning staff it was noted the site had been previously cleared and any preserved tree vegetation is not noted.

15. Please remove the reference to the overall site area as it is confusing when shown on top of the tenant space square footage.

Response: Reference removed.

16. Please straighten all parking lines. Some appear slanted and thus not to the scale shown.

Response: Parking lines revised.

17. Pedestrian amenity Active Open Space Area #1 and #2 are noted as "Patio Seating Open Area" however, no seating has been labeled or provided. Please update.

Response: Seating noted on the plan set.

18. The loading area is shown within a 24' drive aisle, is a hazard for pedestrians, drivers, and the workers unloading in this area. It must be relocated per LDO Section 6.4.5.C.6 which states that "No area allocated to loading and unloading may be used to satisfy the area requirements for off street parking, nor shall any portion of any off-street parking area be used to satisfy the area requirements for loading and unloading facilities."

Response: Loading area shifted outside of the drive aisle.

19. The building is shown within the sign easement

Response: Sign easement to be removed and noted on sheet C1.

20. Crosswalks, sidewalk connections, and other pedestrian paths should be shown on the plan in accordance with Section 6.8.4.B.4

Response: Crosswalk shown on the site plan.

21. Wheel stops should be considered in areas where the overhang from cars will reduce the width of sidewalks and walkways in divider medians to less than 6' as required by Section 6.8.4.B.4. 2

Response: Parking area revised.

22. No turnaround or "bump-out" is provided at the end of the parking aisles. This is difficult for cars parked in the end space to maneuver and further requires cars to back out of the aisle if no spaces are available.
Landscape Plan

Response: Parking area modified.

23. Is it possible to move the street trees away from the building and closer to the sidewalk? We understand that the site was made a part of the Main Street Corridor during the Rezoning and Text Amendment process and thus not providing the required street buffer. However, if possible, the street trees should be closer to the sidewalk, improving the overall aesthetics of the site and healthy growth of the trees.

Response: Trees shifted slightly towards the sidewalk.

24. Per LDO Section 6.2.4.4.D, terminal parking islands are also required to provide shrubs.

Response: Shrubs added to the islands.

25. Within the plant list, clearly label what requirement each plant is meeting. (i.e., Buffer, Street Tree, Terminal Island Shrub, etc.)

Response: Plant list adjustment noted on the Landscape plan.

26. Per LDO 6.2.4.3.A.5, no more than 60% of any genera is permitted as a canopy tree. Overcup Oaks make up 64% of the canopy trees provided.

Response: Landscape plan modified.

27. Regarding the proposed Type 2 Buffer: a. Please reconsider the symbols used here as it is difficult to confirm/count trees given the size and color of the shrub symbol. Currently, we are unable to confirm compliance. b. Please provide a table of the buffer calculations for this site according to the length in linear feet. c. A 20-foot drainage easement is shown on the site plan sheet and the utility plan sheet in the exact location of the Type 2 buffer. i. ii. Per LDO Section 6.2.2.1.C.3, the required buffer shall be adjacent to the

easement, as close to the property line as possible. Furthermore, the fence shall also be shifted as it is not permitted in the easement.

Response: Landscape plan modified.

28. Per LDO Section 6.2.4.4.C, all parking spaces being within sixty (60) feet of the trunk of a canopy tree. Please provide a buffer around each canopy tree to showcase compliance with this requirement.

Response: Tree circles noted on the Landscape plan.

29. Please label the 30-foot, undisturbed buffer shown on previous sheets.

Response: Buffer noted.

30. In utilizing the setback reduction of the Main Street Corridor, the applicant is to provide enhanced landscaping over the required standards. The plans should be revised to show this landscaping and to demonstrate compliance with Section 3.2.1.C.4 (and/or 5, 6)

Response: Enhanced landscaping noted.

31. Fence details should be provided.

Response: Per recent text change the fence has been removed.

32. Please verify that the plants used on the plans are the same as the plants listed in the Plant List. A number of plant "keys" are not identified in the Plan List. Architectural Drawings Please demonstrate compliance with the following: 3

Response: Plan modified.

33. From the drawings provided, it is unclear where the "L" shape of the building occurs. Only one facade was provided showing this portion of the building, "East Elevation (Facing Entrance Drive).

Response: See Architectural

34. Per LDO Section 6.8.2.D.1.b, to limit box-like building forms, roofs shall include differing planes, pitches, forms, heights, or materials that are distinct from one another. Roof lines shall not exceed a linear distance of one hundred (100) feet without the introduction of physical articulation. Illustrated as "B" in Figure 6.8.1.

Response: See Architectural

35. Per LDO Section 6.8.2.D.1.c., building facades shall not exceed a linear distance of thirty-five (35) feet without the introduction of a physical articulation no less than one (1) foot wide and extending in a horizontal direction along the façade. Illustrated as "C" in Figure 6.8.1.

Response: See Architectural

36. Per LDO Section 6.8.2.D.1.d., facades of 60 or greater feet in width shall incorporate wall offsets of at least one (1) foot of depth a minimum of every forty (40) feet. Illustrated as “D” in Figure 6.8.1.

Response: See Architectural

37. Per LDO Section 6.8.2.D.1.e., facades greater than one hundred (100) feet in length shall require a repeating, consistent pattern of change in color, texture, and material. Please provide a table or chart with a list of the proposed materials.

Response: See Architectural

38. Per LDO Section 6.8.2.D.2.a., ground floor transparency shall be calculated based on the total façade area located between the finished ground floor level and beginning of the upper floor. All ground floor transparency shall be a minimum thirty (30) percent, unless stated otherwise in the LDO. a. Upper floor transparency is calculated based on total façade area located between the surface of any floor to the surface of the floor above it. If there is no floor above, then the measurement shall be taken from the surface of the floor to the top of the wall plate. All upper floor transparency shall be a minimum twenty (20) percent unless stated otherwise in the LDO.

Response: See Architectural

39. Please update the plan to confirm that the minimum amount of design items noted in Per LDO Section 6.8.2.D.6 are being provided.

Response: See cover sheet for the items beign provided.

40. Per LDO Section 6.8.2.D.8.b., if a building contains several storefronts, each individual storefront shall be unified in design elements, including materials, colors, window and door placement, and signage. Materials and colors may however be utilized to separate storefronts so long a unified design is maintained.

Response: See Architectural

41. Per LDO Section 6.8.4.B, Every entrance for a building shall require two (2) of the following elements: Awning or covered entry way of at least three (3) feet in overhang length, variation in building height, arches, columns, and/or architectural details.

Response: See Architectural

Vineyard Pine Commercial - Rolesville NC

Response to Wake County Comments

- 3. Notarized Wake County Financial Responsibility/Ownership Form (Required to initiate processing) -Please clarify whether the responsible party is MRR Development, LLC or Omar El-Kaissi. If Landowner and Responsible Party are different a notarized letter of consent will be required. -Provide a copy of the most current deed as noted in #8 of the form. Complete 2(b) on page 2 if the LLC is the Responsible Party.

Response: Omar El-Kaissi is the responsible party. The land owner is MRR Development LLC., and Omar El-Kaissi is member of the LLC. Current deed included in resubmittal.

- 4a- Engineering Approval: Copy of approval notification for projects in a municipality's zoning jurisdiction Provide Town of Rolesville approval.

Response: Noted

- 4c-Encroachment agreement(s) completed, signed and notarized for all off-site construction (including DOT right of way)

Response: Noted

- 5 - NCDOT Approval (provide documentation upon receipt for our records)

Response: Noted

- 7- Copy of the USGS Quad Map with delineated project limits

- **Response: Noted**

- 8. Copy of the Wake County Soil Survey map with delineated project limits

- **Response: Project limits added.**

- 12a - Sediment basin design (See website for Wake County design criteria) -No calculations were found for the sediment basin. Please provide. Please Note: $-435 \times Q_{10}^*$ = surface area required for ALL types of Wake County sediment basins. -Sediment Basin volume is determined by 1,800 cu/ft per Drainage Acre.

Response: Included in the submittal is the Erosion Control calculations. The State spreadsheet noting the sizing of the sediment basin is included and uses the formula noted in surface area and volume.

- 12 b- Ditches, swales, and channels: Q_{10}/V_{10} . Tractive force (shear stress), capacity and geometry. -Channel Design calculations on EC1 are incomplete

Response: Channel design info on the plan sheet and in the Erosion Control calculations.

- 9- Provide Stormwater Tool in excel and as pdf. The input information should match.

Response: Tool included with resubmittal.

- 10- Drainage Area Maps with stormwater discharge points and Tc flow paths (existing/post construction/post BMP) Provide Tc flow paths for drainage areas. Drainage areas should include offsite drainage to site. Also, so drainage areas that are not going to SCM. Drainage area information should match Stormwater Design Tool.

Response: Drainage maps modified.

- 11- Drainage Area Map showing drainage areas to erosion control devices (can delineate on plan sheets) Include the drainage area to silt fence.

Response: Area to silt fence shown on the erosion control plan.

- 13- Draft Stormwater Agreement, Draft Maintenance Agreement

Response: O&M and Stormwater agreement included in re-submittal.

- 14k - TEMPORARY SEDIMENT CONTROLS: locations and dimensions of gravel entrances, diversion ditches, silt fence, sediment basins, inlet protection, etc. -Sediment basin sizing calculations not found

Response: Basin sizing included in EC Calculations.

- 14t- PERMANENT STORMWATER MANAGEMENT STRUCTURES: locations and types of all proposed stormwater management structures (grass swale, wet/dry detention basin, filtering/infiltration basin, bioretention, etc.) -Please provide calculations for the detention. Underground detention is a separate device from the stormfilter. The one Stormfilter is proprietary, the detention is not.

Response: the pipe detention calcs are noted in the Hydraflow data sheet number 8 (Pond Report).

- 14u- DETAILED COMMENTS REGARDING PERMANENT STORMWATER MANAGEMENT: Provide a cross-section for SCMs

Response: Cross-section shown on sheet D5.

- General Standards: • Downstream Impact Analysis – DIA must be performed in accordance with the “10% rule”, and a copy provided with the application. It is required for all applications.

Response: 10% DIA included in the Stormwater Summary Report.

April 30, 2026

Re: Jonesville Road Commercial Building
Town of Rolesville Site Review Comments
5402 Vineyard Pine Lane
Rolesville, NC
Redline Project # RDU 23-039



Town Comments.

8. Please label the proposed location of any building mounted lighting and where lights are provided, the iso footcandle measurements should be revised to reflect the additional light output.

Response: See revised building elevations.

9. Building façade and accent lighting will not be approved unless the light fixtures are carefully selected, located, aimed, and shielded so that light is directed only onto the building façade and spillover light is negligible. Existing Conditions/Demolition Sheet.

Response: See attached light fixture specification/data sheets.

33. From the drawings provided, it is unclear where the "L" shape of the building occurs. Only one facade was provided showing this portion of the building, "East Elevation (Facing Entrance Drive).

Response: Building size and configuration has changed to a 63' x 247' rectangle and "L" portion has been deleted. See revised building plan and elevations.

34. Per LDO Section 6.8.2.D.1.b, to limit box-like building forms, roofs shall include differing planes, pitches, forms, heights, or materials that are distinct from one another. Roof lines shall not exceed a linear distance of one hundred (100) feet without the introduction of physical articulation. Illustrated as "B" in Figure 6.8.1.

Response: See revised building elevations showing façade variation in parapet heights and bay sizes.

35. Per LDO Section 6.8.2.D.1.c., building facades shall not exceed a linear distance of thirty-five (35) feet without the introduction of a physical articulation no less than one (1) foot wide and extending in a horizontal direction along the façade. Illustrated as "C" in Figure 6.8.1.

Response: See revised building elevations showing 24" nominal height cornice and 16" high brick soldier courses.

36. Per LDO Section 6.8.2.D.1.d., facades of 60 or greater feet in width shall incorporate wall offsets of at least one (1) foot of depth a minimum of every forty (40) feet. Illustrated as "D" in Figure 6.8.1.

Response: See revised building plan and elevations showing 12" recessed bays.

37. Per LDO Section 6.8.2.D.1.e., facades greater than one hundred (100) feet in length shall require a repeating, consistent pattern of change in color, texture, and material. Please provide a table or chart with a list of the proposed materials.

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919-878-1660 redline.com

Response: See elevations for changes to materials and attached chart showing materials and colors of proposed materials.

38. Per LDO Section 6.8.2.D.2.a., ground floor transparency shall be calculated based on the total façade area located between the finished ground floor level and beginning of the upper floor. All ground floor transparency shall be a minimum thirty (30) percent, unless stated otherwise in the LDO. a. Upper floor transparency is calculated based on total façade area located between the surface of any floor to the surface of the floor above it. If there is no floor above, then the measurement shall be taken from the surface of the floor to the top of the wall plate. All upper floor transparency shall be a minimum twenty (20) percent unless stated otherwise in the LDO.

Response: See revised building elevations showing glass transparency calculations meeting minimum 30%.

39. Please update the plan to confirm that the minimum amount of design items noted in Per LDO Section 6.8.2.D.6 are being provided.

Response: See revised building elevations showing minimum of four design elements being used. These include façade setbacks, articulated cornices, awnings, canopies, changes in building materials, and storefront articulation.

40. Per LDO Section 6.8.2.D.8.b., if a building contains several storefronts, each individual storefront shall be unified in design elements, including materials, colors, window and door placement, and signage. Materials and colors may however be utilized to separate storefronts so long a unified design is maintained.

Response: See revised building elevations showing unified design elements including storefront entry materials, awnings, canopies, brick features, glass articulation and door placement.

41. Per LDO Section 6.8.4.B, Every entrance for a building shall require two (2) of the following elements: Awning or covered entry way of at least three (3) feet in overhang length, variation in building height, arches, columns, and/or architectural details.

Response: See revised building elevations showing minimum of two entry elements including canopies, awnings, stone watertable, and brick features.