



# **Boiling Springs Town Council**

Regular Meeting Agenda  
December 05, 2023



## Town of Boiling Springs

PO Box 1014 | Boiling Springs, NC 28017  
Phone 704-434-2357 | Fax 704-434-2358  
www.BoilingSpringsNC.net

## TOWN COUNCIL

MEETING AGENDA  
December 05, 2023

### ROUTINE BUSINESS

1. Call to Order
2. Adoption of Agenda
3. Public Comment
4. Gardner-Webb University Update

### CONSENT AGENDA

1. November 14th Council Minutes
2. Capital Reserve Funds
3. Budget Amendment

### SPECIAL PRESENTATION

1. Broad River Campground Recognition

### REGULAR BUSINESS

1. Recognition of departing Councilmembers
2. Swearing in of Councilmembers
3. Selection of a Mayor Pro-Tem
4. Parcels 2986 & 61597 Zoning Map Amendment
5. Audit Contract
6. Council Committee Appointments
7. 2024 Council Meeting Schedule

### DISCUSSION ITEMS

1. Dollar General Development Plans
2. Old Town Hall Update
3. Property Acquisition Update



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## TOWN COUNCIL

MEETING AGENDA  
December 05, 2023

### REPORTS

- [1.](#) Manager, Council & Mayor Reports

### CLOSED SESSION

1. Motion to go into closed session pursuant to

NCGS 143-318.11

(6) To consider the qualifications, competence, performance, character, fitness, conditions of appointment, or conditions of initial employment of an individual public officer or employee or prospective public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee.

### ADJOURNMENT



## CONSENT AGENDA

One motion to approve the consent agenda will approve the following items.

If Council wishes to remove an item, it can be pulled from the consent agenda and placed as the first item under new business.

## SUMMARY

### **Council Meeting Minutes**

Minutes from the November 14th Council meeting

### **Budget Amendment**

Budget amendment BA231205.1 appropriates additional funds to complete the two (2) culvert replacements on Lindsey Lee Lane and Twin Lake Drive.

### **Capitol Reserve Fund Resolution**

NCGS 162A, Art. 8 requires that all system development fee proceeds be accounted for in a capital reserve fund. When the Town receives system development fees, they will be placed in this capitol reserve fund. The Council may then appropriate the system development fees for water and wastewater system capital improvements.

## MATERIALS PROVIDED

- **Consent Agenda Items**



**Town of Boiling Springs  
Town Council  
Regular Meeting Minutes  
November 14, 2023**

**ROUTINE BUSINESS**

**Call to Order**

PRESENT

Mayor Daniel Thomas  
Mayor Pro-Tem Patrick Litton  
Councilmember Caleb Edwards  
Councilmember Tommy Greene  
Councilmember Tonya Gantt  
Danna Stansbury, Interim Town Manager  
Zachary Parker, Town Planner  
Noah Saldo, Town Clerk  
Rhonda Allen, Finance Director  
Nathan Phillips, Police Chief  
Mike Gibert, Public Works Director  
Tracy Holland, Program Support Specialist

ABSENT

Councilmember Marty Thomas

Mayor Thomas called the meeting to order at 6:30 P.M.

**Adoption of Agenda**

Action: Upon a motion made by Councilmember Greene and seconded by Councilmember Gantt, it was unanimously voted to approve the agenda as presented.

**Gardner-Webb University Update**

Vice-President Nate Evans gave an update on activities at Gardner-Webb:

- Thanks for participating in the homecoming events
- Opening of Amphitheater included a sold out first concert. Next concert this weekend
- Football championship game upcoming
- Founders Day and Festival of Lights scheduled for November 30th

**REGULAR BUSINESS**

Consent Agenda

Action: Upon a motion made by Councilmember Greene and seconded by Councilmember Gantt, it was unanimously voted to approve the following consent agenda as presented:

October 3, 2023 Council Meeting Minutes

Budget Amendments:

BA231114.1

BA231114.2

BA231114.3

BA231114.4

Policies: The Conflict of Interest Policy and The Eligible Use Policy

FY 23-24 First Quarter Financials

Safe Streets For All Grant firm selection of Bolton & Menk Inc.

## **REGULAR BUSINESS**

### *Culvert Repair*

Action: Upon a motion made by Councilmember Edwards and seconded by Councilmember Greene, it was unanimously voted to award Father and Sons Enterprises the culvert replacement project.

### *Land Use Plan*

Town Planner Zachary Parker introduced the Land Use Plan.

Andrew Babb PE, AICP, with Bolton & Menk presented the updated Land Use Plan.

Action: Upon a motion made by Councilmember Edwards and seconded by Councilmember Gantt, it was unanimously voted to approve the Land Use Plan update as presented including the following areas:

### **Centers**

**Central Business** refers to areas located in Boiling Springs' traditional downtown area. Uses include shops, restaurants, and other compatible light commercial activities that are set close to the street to encourage pedestrian activity and serve the core needs of the community.

**Neighborhood Nodes** provide spaces for smaller commercial or mixed-use areas at key areas within the community. Most development in these areas include retail and office buildings and may include mixed housing types including townhomes, duplexes, and small apartment buildings. These areas are intentionally connected to nearby residential areas with direct roadway and walkway connections.

### **Residential Areas**

**Low-Density Residential** includes single-family detached residential units on individual lots at a density of no more than one to one and a half dwelling units per acre. Local roadways should promote connectivity and access to major roadways.

**Medium-Density Residential** covers areas of individual homes that have no more than three dwelling units per acre. These areas are centered on the downtown core, in close proximity to community facilities, and infrastructure. When adjacent to commercial areas, direct connections that support walking and bicycling should be included.

**High-Density Residential** includes residential units at a maximum of seven dwelling units per acre. This classification includes a mixture of single-family detached homes, townhomes, and multi-family structures, including residence halls, apartments, and retirement housing.

### **Employment Areas**

**Institutional** areas include town hall and other government facilities, churches, cemeteries, hospitals, educational uses, as well as the Ruby C. Hunt YMCA. This category includes Gardner-Webb University and includes all University-owned land and uses that complement the University's operation.

**Industrial** areas include manufacturing and warehousing facilities. These uses should generally be separated from other uses and screened appropriately.

### **Environmental Resources**

**Open Space/Farmland Preservation** includes lands identified for conservation and other undeveloped lands that can serve as passive recreational and future residential areas.

## **REPORTS**

### *Manager, Council, and Mayor Reports*

Interim Town Manager Danna Stansbury-

- The Courtyard project will move into the bidding phase in February 2024
- The Park Master Plan will be ready for full Council review at the January meeting

Councilmember Edwards-

- Congratulations to winners of election
- Thank you to Council for the opportunity to serve

Councilmember Litton-

- Thank you to Councilmembers Edwards and Gantt for their service

Councilmember Greene-

- Congratulations winners of the election
- Thank you to Councilmembers Edwards and Gantt for their service on the Council

Mayor Thomas-

- Thank you to Council and staff
- Thank you to Mr. Evans and best of luck on the upcoming football game
- Charger football in the playoffs
- Christmas parade is a week from Sunday, on November 26
- Christmas tree lighting is scheduled for December 2
- Thank you to Councilmembers Gantt and Edwards
- Congratulations to newly elected members

### **Closed Session**

Motion to go into closed session pursuant to NCGS 143-318.11,

(5) To establish, or to instruct the public body's staff or negotiating agents concerning the position to be taken by or on behalf of the public body in negotiating (i) the price and other material terms of a contract or proposed contract for the acquisition of real property by purchase, option, exchange, or lease; or (ii) the amount of compensation and other material terms of an employment contract or proposed employment contract.  
And

(6) To consider the qualifications, competence, performance, character, fitness, conditions of appointment, or conditions of initial employment of an individual public officer or employee or prospective public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee.

Action: Upon a Motion made by Councilmember Edwards and Seconded by Councilmember Gantt, it was unanimously voted to go into closed session at 6:54 P.M.

Action: Upon a motion made by Councilmember Edwards and seconded by Councilmember Litton, it was unanimously voted to return to open session at 7:57 P.M.

During Closed Session, Council provided instruction to staff on a potential lease. The Council also discussed the Town Manager position.

Action: Upon a motion made by Councilmember Greene and seconded by Councilmember Litton, it was unanimously voted to appoint Zachary Parker as the new

Town Manager effective immediately with a base salary of \$95,000 and a monthly phone allowance of \$50.

Mayor Thomas declared the meeting Adjourned at 8:04 P.M.

**TOWN OF BOILING SPRINGS  
CAPITAL RESERVE FUND RESOLUTION**

**WHEREAS**, there is a need in the Town of Boiling Springs to provide funds for future capital projects related to its combined water and wastewater system, and to make debt service payments on existing debt related to past capital projects for its water and wastewater system, and

**WHEREAS**, NCGS 159-18 authorizes the creation of a capital reserve fund, and

**WHEREAS**, NCGS 162A, Art. 8 requires that all system development fee proceeds be accounted for in a capital reserve fund,

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF BOILING SPRINGS THAT:**

Section 1. The Town Council of the Town of Boiling Springs hereby creates a Capital Reserve Fund for the purpose of accumulating funds for improvements to the town’s water and wastewater system.

Section 2. The CRF shall remain operational for a period not to exceed ten years (beginning December 5, 2023, and ending June 30, 2033), and unless terminated sooner, shall automatically renew for each succeeding year following June 30, 2033 until terminated by the Town of Boiling Springs Town Council.

Section 3. This Resolution shall become effective and binding upon its adoption.

Adopted this 5<sup>th</sup> of December 2023.

\_\_\_\_\_  
Daniel Thomas, Mayor

ATTEST:

\_\_\_\_\_  
Tracy Holland, Deputy Town Clerk

**TOWN OF BOILING SPRINGS  
BUDGET ORDINANCE AMENDMENT #BA231205.1**

**WHEREAS**, the Town Council of the Town of Boiling Springs adopted a budget ordinance on June 27, 2023 which established revenues and authorized expenditures for fiscal year 2023-2024; and

**WHEREAS**, since the time of the adoption of said ordinance, it has become necessary to appropriate Powell Bill funds for culvert replacements on Lindsey Lee Lane and Twin Lakes Drive;

**NOW, THEREFORE, BE IT HEREBY ORDAINED** by the Town Council of the Town of Boiling Springs that the budget ordinance as adopted on June 27, 2023 be and is hereby amended as follows:

<u>Section 1.</u>	Revenues	
	Transfer from Powell Bill Reserves	<u>Increase</u> <u>\$ 40,000</u>
<u>Section 2.</u>	Expenditures	
	Powell Bill-contract services	<u>Increase</u> <u>\$ 40,000</u>

This the 5<sup>th</sup> day of December 2023.

\_\_\_\_\_  
Daniel Thomas, Mayor

ATTEST:

\_\_\_\_\_  
Tracy Holland, Deputy Town Clerk

**Our Story:** The idea for Broad River Campground generated in 2020 when SRI (Student Rental Investments) sought to continue growing its portfolio and the multifamily sector was out pricing itself. With multiple successful projects under our belt, we decided to explore the RV Industry and see if there was an opportunity. After completing our market research, we decided we wanted to build an RV park. Call us crazy, (won't be the first time!) but no one in our group had ever built an RV park and myself, had never built anything from the ground up. I've had numerous obstacles tossed at me before, so I didn't let this stop us from succeeding. I made it my mission to surround our development group with the best contractors,engineers, and mentors that we could find. They all believed in the vision and because of them, Broad River Campground is and will continue to be a successful project.

The idea grew from there and the hunt was on to find land! Naturally we wanted to identify land that was close by, as I, (Tyler Watts) would be overseeing the development, so we settled on a piece of land adjacent to the Broad River in a small town called Mooresboro, NC. After a year of permitting and engineering and multiple development meetings on what we were actually going to build, around September of 2021 we began construction on BRC to bring phase I online. We faced many, many challenges from financing to determining where septic systems will be to building glamping domes (that didn't come with any directions!). With our dedicated team, we didn't let anything stop us and on July 1, 2022, Broad River Campground opened to a fully booked park! 16 RV sites, 10 Cabins, 5 Glamping Domes.

Since that day, and oh what a day it was, we have continued to grow the park by building a 6,000 sq ft clubhouse with a massive pool and splash pad, adding 5 primitive tent sites, multiple hiking trails, playground area and December 1, 2023 we will be bringing on an additional 40 RV sites that will be catering to transient and long term guest. These next 40 sites are huge, with the majority of them being over 85' long, with a private sodded yard and custom utility hookups so Rvers don't have to use extensions. We are very blessed and humbled to be crowned 2023 Small Park of the Year, but don't think that's it for us, we are just getting started!

**How are the winners selected?** The Awards of Excellence are peer reviewed and judged. Many categories are reviewed ranging from amenities,operations, to parks that are leading the industry through development and growth.

**What does this mean to know Broad River Campground won small park of the year?** Small Park of the Year is a national award presented by OHI (Outdoor Hospitality Industry) (Formerly ARVC). OHI hosts an annual national conference where park owners/operators across the nation gather to network and gain inside knowledge. Being crowned Small Park of the Year is a prestigious honor. To even be selected as Park of the Year in our first full year of operation is monumental, winning it was a dream come true. It reveals the hard work and dedication of the entire team from development to operations. We have the absolute best team of staff who constantly dedicate their time to ensuring that all guest are comfortable and happy when they check in, our 5 Star review is proof of that!



**What do you think it offers that attracts the attention it has?** Broad River Campground offers numerous ways to stay. From Glamping on the side of a mountain, to staying in a cozy cabin with a hot tub, to catering to your full time RVers who want a clean and organized place to stay. You can stay at BRC year after year, and gain a different experience every time; which has resulted in high return of repeat guests. BRC offers weekend activities for children along with plenty of games at the clubhouse ranging from ping-pong, giant chess/checkers, gaga pit, playground set, community fire pit and our massive pool area and private access to Broad River. Being able to provide a family friendly environment for all ages has proven to be a success at BRC, it's not uncommon seeing kids riding their bikes, running through the woods, or picking up a backyard football game with a Dad being the all time quarterback, it truly is a place to relax and enjoy mother nature.

**What's the next step for the park? I know some future expansions are in the works.** BRC will be bringing on 40 additional RV sites (Phase II) opening December 1, 2023. Our RV sites stay booked, therefore we decided to expand the park so we can accommodate the demand. Phase II RV sites will be huge, with the majority of the sites being 85' long, with a larger privated sodded yard. We further ran the sewer utility line in front of the electrical hookup station, allowing RVer's to easily connect without extensions. We took the feedback from Phase I and answered the call, I don't know of anyone that will have bigger sites than us. We are further expanding our reach as well, instead of just overnight guests, we are now welcoming long term guests as well. We couldn't offer that with phase I (Just 16 RV sites) but with this expansion, we are thrilled to open the park to all styles of RVer's! If you are long term RVer, you won't find a nicer place to work and relax, you will have access to all the amenities in the park including unlimited Wi-Fi (fiber)

# WINNER

## SMALL PARK OF THE YEAR





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## Parcels 2986 & 61597 Zoning Map Amendment

**Requested Action:** Motion to approve the zoning map amendment to rezone the property listed as parcel numbers 2986 & 61597, currently located at 149 North Main Street, PINs 2505378816 & 2505376849, from R-15 to B-1 and to authorize Chairman Wacaster to send a letter to Council outlining this decision.

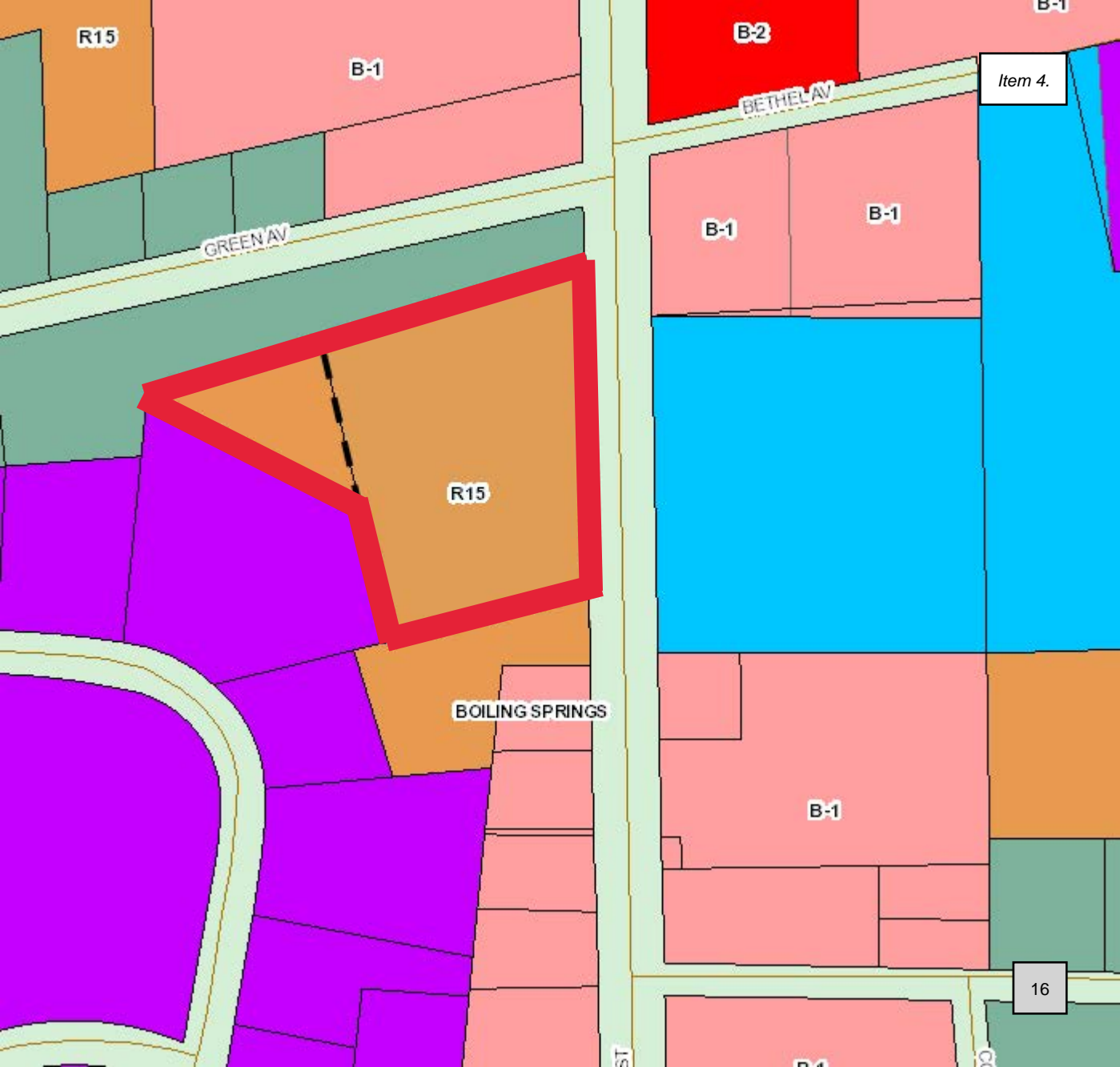
- If recommended, a statement of consistency is needed. For example:  
*"This request is inconsistent with the future land use map which shows this area being Institutional. However, the abutting area is labeled as Central Business on the Future Land Use Map, which is a better representation of both parcels present and intended use. This Zoning Map Amendment is consistent with the property's present land use and reasonable concerning the future use of the property because of its 24-hour use as both a temporary residential facility, a training area, and a hub in which to conduct the corporate business of 'Boiling Springs Rural Fire Department, Inc.'"*

## SUMMARY

"The fire department is planning to tear down the old house and build a new fire station building in its place. It will have offices, a training room, kitchen, day room, bunk room and fitness room. The newer existing truck bays building will remain. The new building will be a more efficient facility and will be two-story. To fit the site, it would be ideal if the front setback was 20 feet or less, A B-1 use seems like the best match to the site's use and the adjacent properties along Main Street. The current R-15 setback is 30 feet. B-1 allows for a 10 foot setback. We would like to request the rezoning to provide more flexibility for siting the building on the property and keeping their existing back driveway." This is the statement that Mr. Smith put on the application. The planning board unanimously recommends approval.

## MATERIALS PROVIDED

- **Current Zoning Map**
- **Aerial Map of the property**
- **Future Land Use Map**
- **Planning board Chairman Letter**



R15

B-1

B-2

B-1

Item 4.

GREEN AV

BETHEL AV

B-1

B-1

R15

BOILING SPRINGS

B-1

16

ST

B-1

CO










# Future Land Use Areas

Land Use Areas help to define the community's vision for specific areas within their town. Descriptions of each area are shown below, with more details on the other boards in this section. These descriptions are intended to be used as guidelines and are aspirational rather than restrictive or regulatory. Each one can serve as a guide for investors, policy makers, and other decision makers through development processes.



## Centers

-  **Central Business** refers to areas located in Boiling Springs' traditional downtown area. Uses include shops, restaurants, and other compatible light commercial activities that are set close to the street to encourage pedestrian activity and serve the core needs of the community.
-  **Neighborhood Nodes** provide spaces for smaller commercial or mixed-use areas at key areas within the community. Most development in these areas include retail and office buildings and may include mixed housing types including townhomes, duplexes, and small apartment buildings. These areas are intentionally connected to nearby residential areas with direct roadway and walkway connections.

## Residential Areas

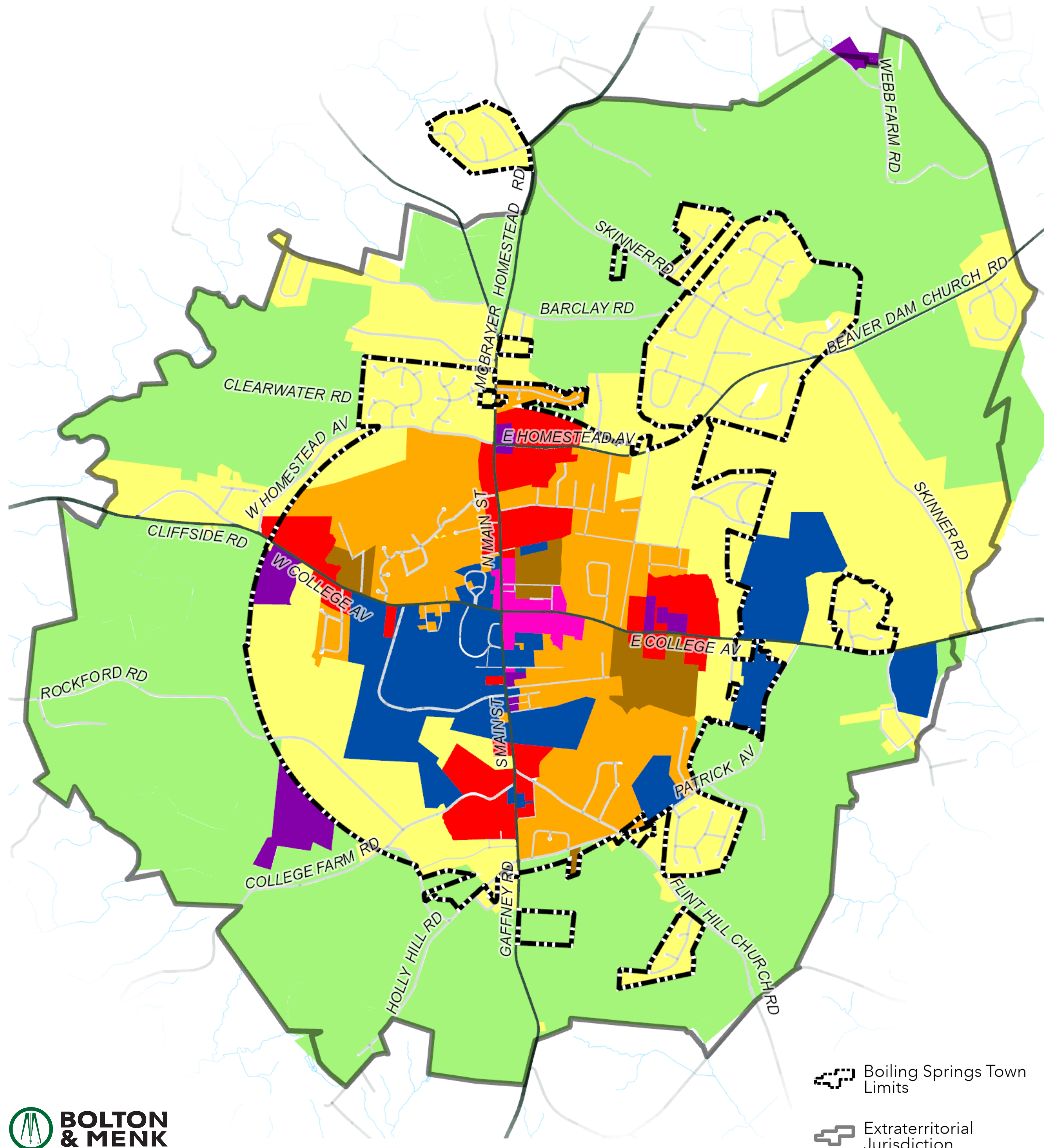
-  **Low-Density Residential** includes single-family detached residential units on individual lots at a density of no more than one to one and a half dwelling units per acre. Local roadways should promote connectivity and access to major roadways.
-  **Medium-Density Residential** covers areas of individual homes that have no more than three dwelling units per acre. These areas are centered on the downtown core, in close proximity to community facilities, and infrastructure. When adjacent to commercial areas, direct connections that support walking and bicycling should be included.
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## Employment Areas


-  **Institutional** areas include town hall and other government facilities, churches, cemeteries, hospitals, educal uses, as well as the Ruby C. Hunt YMCA. This category includes Gardner-Webb University and includes all University-owned land and uses that complement the University's operation.
-  **Industrial** areas include manufacturing and warehousing facilities. These uses should generally be separated from other uses and screened appropriately.

## Environmental Resources

-  **Open Space/Farmland Preservation** includes lands identified for conservation and other undeveloped lands that can serve as passive recreational and future residential areas.



 Boiling Springs Town Limits

 Extraterritorial Jurisdiction





Date: 11/21/2023

To: The Mayor and Town Council of the Town of Boiling Springs

**Re: Zoning Map Amendment for 149 North Main Street**

Dear Mayor and members of the Town Council,

I am writing to inform you of the Planning Board's decision to recommend that 149 North Main Street, Cleveland County parcel numbers 2986 & 61597, identified by the Cleveland County Tax Assessor as PINs 2505378816 & 2505376849, be rezoned from **R-15** to **B-1**. The Planning Board approved this Zoning Map Amendment in compliance with North Carolina General Statutes §160D-201, §160D-202, §160D-301, §160D-302, §160D-310, §160D-601, §160D-602, §160D-603, §160D-604.

The Planning Board found that this would be inconsistent with our future land use map, but we felt like the public benefit of this project outweighed the need for plan conformity. The area in question is identified on the future land use plan as institutional, but there is an adjacent commercial corridor that abuts this property. The property's present use is housing the Boiling Springs Rural Fire Department. This sentiment is encapsulated by the following statement that the Planning Board adopted:

"This request is inconsistent with the future land use map which shows this area being Institutional. However, the abutting area is labeled as Central Business on the Future Land Use Map, which is a better representation of both parcels present and intended use. This Zoning Map Amendment is consistent with the property's present land use and reasonable concerning the future use of the property because of its 24-hour use as both a temporary residential facility, a training area, and a hub in which to conduct the corporate business of 'Boiling Springs Rural Fire Department, Inc.'"

Sincerely,

David Wacaster  
Chairman, Boiling Springs Planning Board



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## AUDIT CONTRACT EXTENSION

Requested Action- motion to approve an audit contract extension with Darrell L. Keller, CPA, PA

## SUMMARY

Staff requests approval of an extension to the 2022-2023 audit contract. GASB Statement 87 – Leases provides guidance for lease contracts. 2022-2023 is the first year the Town contracted with Enterprise for vehicle leases, and the Town had 13 leases. Complying with GASB 87 requirements, as well as other factors including one of the auditors being sick during the week of our field audit, has made it necessary to extend the contract to ensure the most accurate and thorough presentation of our financial statements.





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## COUNCIL COMMITTEES

Appoint members of Council to various boards and committees.

## SUMMARY

Members of Council serve on various boards in the community and Council subcommittees. With the departing of Councilmembers Edwards and Gantt, Council will need to establish new membership for the various boards and committees.

## MATERIALS PROVIDED

- MPO (metropolitan planning organization)- Councilmember Green is the primary member. Councilmember Litton is an alternate.
- YMCA Ruby Board (2 members) – Councilmembers Edwards and Thomas. Council may nominate 1 member to the corporate board for consideration.
- Foothills Regional Commission -Councilmember Greene
- BS Fire Dept. – Councilmembers Litton and Thomas
- Downtown Master Plan / Streetscape - Mayor Thomas, Councilmembers Greene, and Gantt
- Lattimore Agreement Subcommittee- Mayor Thomas and Councilmember Litton
- CIP (capital improvement plan)-Mayor Thomas and Councilmember Litton
- Broad River Board of Directors- Appoint one Councilmember
- Boiling Springs Tourism Development Authority(TDA)- Appoint one Councilmember



## 2024 TOWN COUNCIL MEETING SCHEDULE

The Town Council meets on the 1<sup>st</sup> Tuesday of each month at 6:30 p.m. unless otherwise announced

January 9

February 6

March 12

March 15 or March 16 11:00 AM (Planning retreat)

April 2

May 7

June 4

July 2

August 6

September 3

October 1

November 12

December 3

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**Dollar General Market | 442 Gaffney Road**

**Requested Action:** None—Information Only

**SUMMARY**

Attached are the proposed plans for the Dollar General Market, which will be located at 442 Gaffney Road. There is no action to be taken on this item; it is information only.

**MATERIALS PROVIDED**

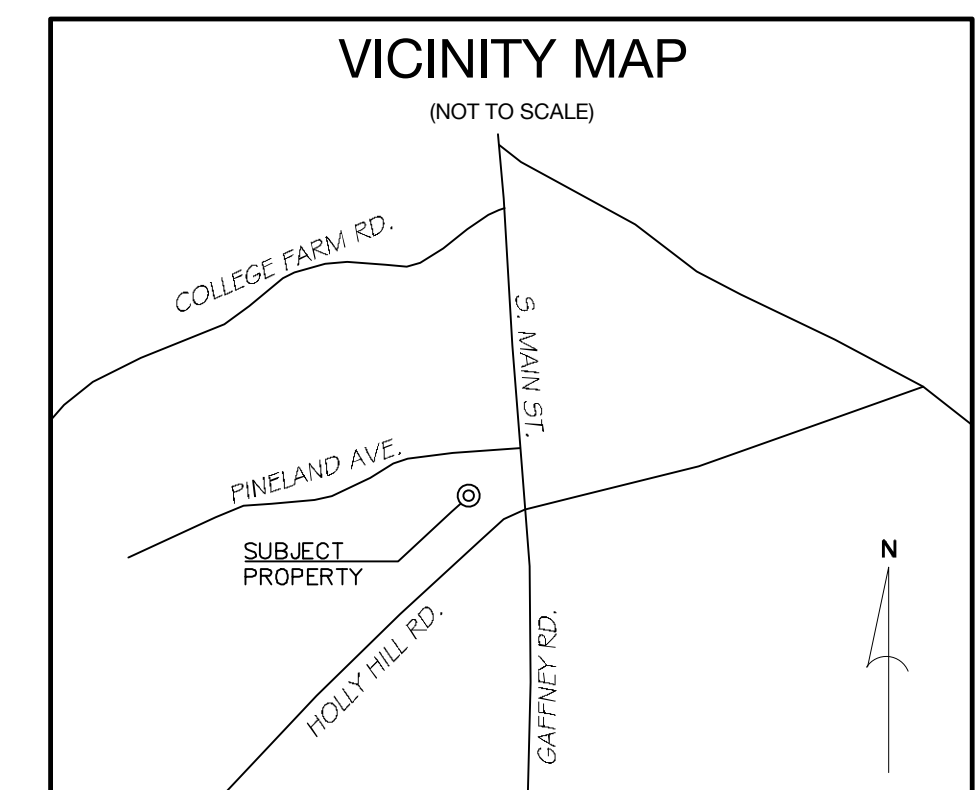
- **Dollar General Market Plans**

# BOILING SPRINGS RETAIL STORE

CLEVELAND COUNTY, NORTH CAROLINA

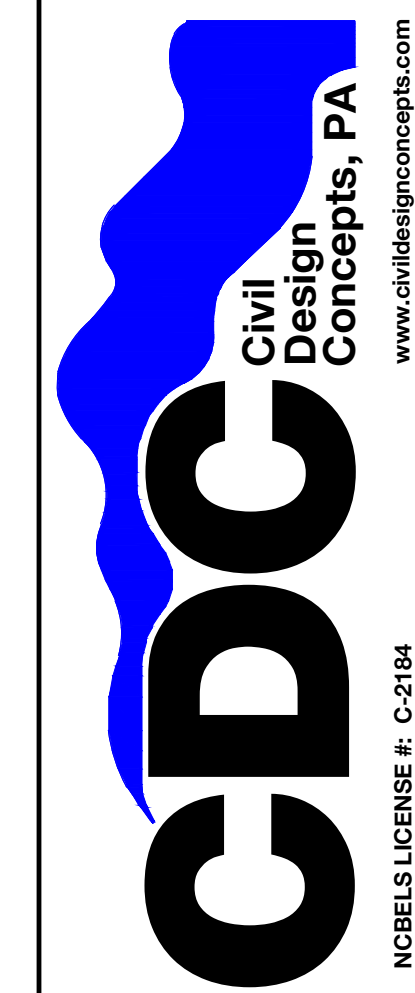
PREPARED FOR:  
**THE BROADWAY GROUP**  
 216 WEST SIDE SQ.  
 HUNTSVILLE, AL 35801  
 BOB BROADWAY  
 (256) 533-7287

INDEX OF SHEETS		
SHEET NO	TITLE	REV.
C000	Cover	
--	SURVEY	
C101	EX COND AND DEMO	
C201	Site Plan	
C301	ROUGH GRADING AND EROSION CONTROL PLAN PH1	
C302	RG-EC Plan PH2	
C501	Storm Plan	
C502	Storm Profiles	
C601	Utility Plan	
C921	Site Details	
C922	Site Details	
C931	Erosion Control Details	
C932	Erosion Control Details	
C951	Storm Details	
C952	SCM Details	
C961	Sewer Details	
C971	Water Details	
C998	NCG01 NOTES	1
L101	LANDSCAPE COMPLIANCE	



Know what's below.  
 Call before you dig.

DEVELOPMENT DATA	
OWNER/DEVELOPER:	THE BROADWAY GROUP 216 WEST SIDE SQ. HUNTSVILLE, AL 35801
CONTACT:	BOB BROADWAY (256) 533-7287
CIVIL ENGINEER:	CIVIL DESIGN CONCEPTS, P.A. 168 PATTON AVENUE ASHEVILLE, NC 28801
CONTACT:	BEN MUNN, P.E. (828) 252-5388

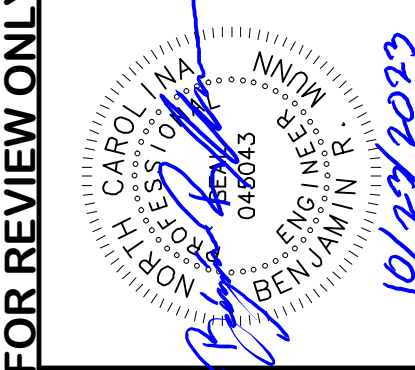


168 PATTON AVENUE  
 ASHEVILLE, NC 28801  
 PHONE (828) 252-5388  
 FAX (828) 252-5388

52 WALNUT STREET - SUITE 9  
 WAYNESVILLE, NC 28798  
 PHONE (828) 252-5388  
 FAX (828) 455-5454

NCELS LICENSE # C-2184  
 www.civildesignconcepts.com

NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS
4	10/23/23	NOTE UPDATES	BRM



FOR REVIEW ONLY

COVER FOR:

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: KWN  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 BS NEEDED EC NO.: TBD

SHEET  
**C000**

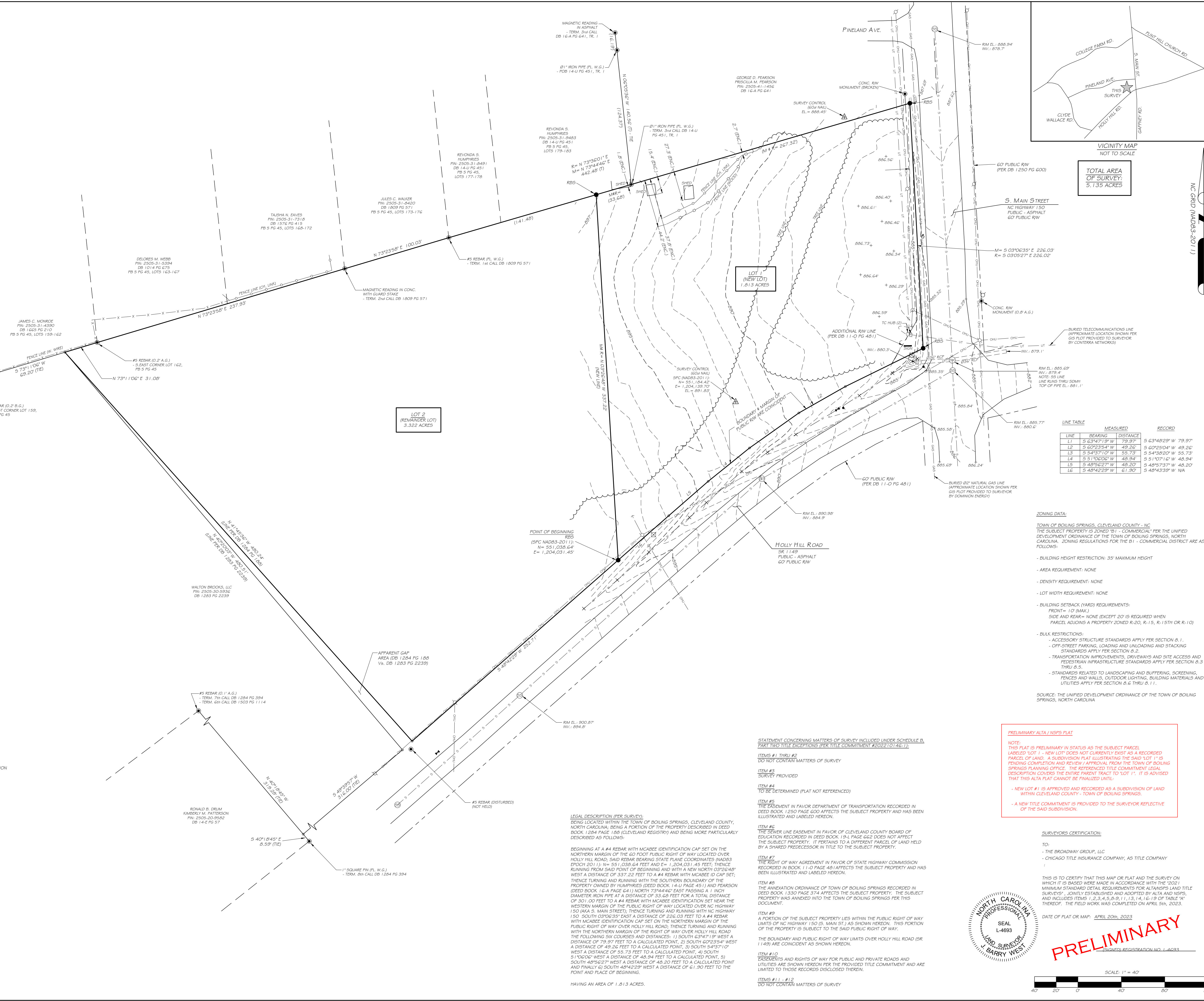


NOTES:  
1) THIS PROPERTY IS ENTIRELY LOCATED WITHIN 'ZONE X - MINIMAL FLOOD RISK' AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY PER F.I.R.M.#37102505000, DATED 2/20/2008.  
2) PROPERTY SUBJECT TO ALL RIGHTS-OF-WAY AND EASEMENTS OF RECORD, INCLUDING, BUT NOT LIMITED TO, THOSE SHOWN HEREON.  
3) BUILDINGS, SURFACE AND SUBSURFACE IMPROVEMENTS ADJACENT TO THE SITE ARE NOT NECESSARILY SHOWN. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT SURVEYED OR CONSIDERED AS PART OF THIS SURVEY. NO EVIDENCE OR STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND CONDITIONS, CONTAINERS, OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.  
4) AREA BY COORDINATE COMPUTATION.  
5) ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ARE US SURVEY FEET MEASUREMENTS. THE COMBINED GRID FACTOR FOR THIS SURVEY IS 0.99983497.  
6) THE VERTICAL DATUM FOR THIS SURVEY IS NAVD83. THE CONTOUR INTERVAL IS ONE FOOT.  
7) IN REGARDS TO THE EXISTENCE / EVIDENCE OF UNDERGROUND UTILITIES THE SURVEYOR PLACED AN NC 011 DESIGN / SURVEY LOCATE TICKET REQUEST ON THE SUBJECT PROPERTY. IT IS ADVISED THAT THE SURVEYOR HAS LOCATED AND SHOWN PERSON-WAY MARKINGS PLACED BY OTHERS AS A PART OF THAT LOCATE REQUEST. THE SURVEYOR HAS ALSO SHOWN, BY SCALING OF PROVIDED GIS MAPS, UTILITY LINES SHOWN ON SAID MAPS. IT IS FURTHER ADVISED THAT NO CLAIM IS MADE OR IMPLIED HEREON THAT THE UTILITIES SHOWN HEREON ARE REPRESENTATIVE OF ALL UTILITIES THAT MAY EXIST ON OR AROUND THE SUBJECT PROPERTY.  
8) THERE WAS NO VISIBLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.  
9) THERE WAS NO OBSERVED EVIDENCE OF PROPOSED CHANGES IN STREET RIGHT OF WAY LINES OR RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.  
10) THERE WERE NO OBSERVED STROPPED / DEDICATED PARKING SPACES ON THE SUBJECT PROPERTY AT THE TIME OF FIELD SURVEY.

REFERENCES:  
- DB 1264 PG 188  
- DB 1250 PG 600  
- DB 1110 PG 481  
- DB 1263 PG 2239  
- PB 5 PG 45  
- TITLE COMMITMENT PREPARED BY HIGHLAND TITLE (ISSUING AGENT FOR CHICAGO TITLE INSURANCE COMPANY) BEARING NUMBER 202303051-1, BEING DATED 9/06/2023.

LEGEND & ABBREVIATIONS:  
PB = PLAT BOOK  
DB = DEED BOOK  
PG = PAGE  
RW = RIGHT OF WAY  
PIN = PARCEL IDENTIFICATION NUMBER  
CALCULATED POINT  
NOT MARKED IN FIELD  
RECOVERED BOUNDARY MONUMENT (SIZE AND TYPE AS NOTED)  
BOUNDARY MONUMENT SET BY MCABEE (RBS) = #4 REBAR W/ MCABEE ID CAP SET  
BOUNDARY LINE - SUBJECT PROPERTY (FIELD SURVEYED)  
BOUNDARY LINE - ADJOINING PROPERTY (FIELD SURVEYED)  
BOUNDARY LINE - ADJOINING PROPERTY (COMPOSITE, PLOTTED FROM RECORD DESCRIPTIONS)  
A.G. = ABOVE ADJACENT GRADE  
B.G. = BELOW ADJACENT GRADE  
CONC. = CONCRETE  
EL. = ELEVATION  
ENC. = APPARENT ENCROACHMENT  
FENCE LINE  
CH LINK = CHAIN LINK  
WOOD BOARD  
W. WIRE  
FIRE HYDRANT  
FL W.G. = FLUSH WITH ADJACENT GRADE  
GAS LINE (BURIED - APPROXIMATE LOCATION SHOWN PER GIS PLOT PROVIDED TO SURVEYOR BY DOMINION ENERGY)  
GUY ANCHOR WIRE  
INV. = INVERT ELEVATION  
M = MEASURED BEARING / DISTANCE  
MAIL BOX  
OVERHEAD UTILITY LINE  
POB = POINT OF BEGINNING  
R = RECORD BEARING / DISTANCE  
RCP = REINFORCED CONCRETE PIPE  
SS LINE = SANITARY SEWER LINE (8" DUCTILE IRON PIPE)  
SMH = SANITARY SEWER MANHOLE (SIGN REGULATORY)  
SDMH = STORM DRAINAGE MANHOLE  
685.64' = SPOT ELEVATION (EXISTING GRADE)  
STORM DRAINAGE PIPE  
T = TOTAL DISTANCE  
TC = TELECOMMUNICATIONS LINE (BURIED - APPROXIMATE LOCATION SHOWN PER GIS PLOT PROVIDED TO SURVEYOR BY CONTERNA NETWORKS)  
TERM. = TERMINUS  
TR = TRACT  
UTILITY PAINT MARKING / FLAG (PLACED BY OTHERS)  
UTILITY POLE  
UTILITY SERVICE PEDESTAL  
WATER LINE ('BURIED')  
WATER VALVE  
NOTE: BURIED UTILITY LINES ILLUSTRATED HEREON ARE SHOWN PER MARKINGS PLACED BY OTHERS AND ARE SUBJECT TO THE ACCURACY THEREOF.

GLOBAL POSITIONING SYSTEM CERTIFICATION  
I, JERRY WEST, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:  
1) CLASS OF SURVEY: CLASS A SURVEY  
2) POSITIONAL ACCURACY (95% CONFIDENCE): 0.011' HORIZONTAL / 0.008' VERTICAL  
3) TYPE OF GPS FIELD PROCEDURE: RTK NETWORK SOLUTIONS USING A SPECTRA PROMARK 700 DUAL FREQUENCY RECEIVER  
4) DATES OF SURVEY: 3/28 - 4/05/2023  
5) DATUM / EPOCH: NAD83 / EPOCH 2011  
6) PUBLISHED / FIXED CONTROL USED: N/A - VRS RTN  
7) GEOID MODEL: 2011B  
8) COMBINED GRID FACTOR: 0.99983497  
9) UNITS: US SURVEY FEET



DATE: 4/20/2023  
PROJECT #: 14089  
DRAWING #: G-23-5049  
DRAWN BY: JWB  
SCALE: 1" = 40'  
VICINITY MAP NOT TO SCALE  
TOTAL AREA OF SURVEY: 5.135 ACRES  
NORTH  
NAD83 (2011)

LINE TABLE

LINE	BEARING	MEASURED DISTANCE	RECORD
L1	S 63°47'19\"	79.97'	S 63°48'29\" W 79.97'
L2	S 60°23'54\"	49.26'	S 60°25'04\" W 49.26'
L3	S 54°37'10\"	55.73'	S 54°38'20\" W 55.73'
L4	S 51°10'00\"	48.84'	S 51°07'14\" W 48.84'
L5	S 48°56'27\"	48.20'	S 48°57'37\" W 48.20'
L6	S 48°42'29\"	61.90'	S 48°43'39\" W NA

ZONING DATA

TOWN OF BOILING SPRINGS, CLEVELAND COUNTY - NC  
THE SUBJECT PROPERTY IS ZONED 'B1 - COMMERCIAL' PER THE UNIFIED DEVELOPMENT ORDINANCE OF THE TOWN OF BOILING SPRINGS, NORTH CAROLINA. ZONING REGULATIONS FOR THE B1 - COMMERCIAL DISTRICT ARE AS FOLLOWS:

- BUILDING HEIGHT RESTRICTION: 35' MAXIMUM HEIGHT
- AREA REQUIREMENT: NONE
- DENSITY REQUIREMENT: NONE
- LOT WIDTH REQUIREMENT: NONE
- BUILDING SETBACK (YARD) REQUIREMENTS:  
FRONT = 10' (MAX.)  
SIDE AND REAR = NONE (EXCEPT 20' IS REQUIRED WHEN PARCEL ADJACENT TO A PROPERTY ZONED R-20, R-15, R-15TH OR R-10)
- BULK RESTRICTIONS:  
- ACCESSORY STRUCTURE STANDARDS APPLY PER SECTION 8.1.  
- OFF-STREET PARKING, LOADING AND UNLOADING AND STACKING STANDARDS APPLY PER SECTION 8.2.  
- TRANSPORTATION IMPROVEMENTS, DRIVEWAYS AND SITE ACCESS AND PEDESTRIAN INFRASTRUCTURE STANDARDS APPLY PER SECTION 8.3 THRU 8.5.  
- STANDARDS RELATED TO LANDSCAPING AND BUILDING, SCREENING, FENCES AND WALLS, OUTDOOR LIGHTING, SIGNAGE MATERIALS AND UTILITIES APPLY PER SECTION 8.6 THRU 8.11.

SOURCE: THE UNIFIED DEVELOPMENT ORDINANCE OF THE TOWN OF BOILING SPRINGS, NORTH CAROLINA

STATEMENT CONCERNING MATTERS OF SURVEY INCLUDED UNDER SCHEDULE B, PART TWO TITLE EXCEPTIONS (PER TITLE COMMITMENT #2022101461):  
ITEM #1 THRU #2 DO NOT CONTAIN MATTERS OF SURVEY  
ITEM #3 SURVEY PROVIDED  
ITEM #4 TO BE DETERMINED (PLAT NOT REFERENCED)  
ITEM #5 THE EASEMENT IN FAVOR DEPARTMENT OF TRANSPORTATION RECORDED IN DEED BOOK 1250 PAGE 600 AFFECTS THE SUBJECT PROPERTY AND HAS BEEN ILLUSTRATED AND LABELED HEREON.  
ITEM #6 THE SEWER LINE EASEMENT IN FAVOR OF CLEVELAND COUNTY BOARD OF EDUCATION RECORDED IN DEED BOOK 1394 PAGE 662 DOES NOT AFFECT THE SUBJECT PROPERTY. IT PERTAINS TO A DIFFERENT PARCEL OF LAND HELD BY A SHARED PREDECESSOR IN TITLE TO THE SUBJECT PROPERTY.  
ITEM #7 THE RIGHT OF WAY AGREEMENT IN FAVOR OF STATE HIGHWAY COMMISSION RECORDED IN DEED BOOK 1110 PAGE 481 AFFECTS THE SUBJECT PROPERTY AND HAS BEEN ILLUSTRATED AND LABELED HEREON.  
ITEM #8 THE ANNEXATION ORDINANCE OF TOWN OF BOILING SPRINGS RECORDED IN DEED BOOK 1330 PAGE 374 AFFECTS THE SUBJECT PROPERTY. THE SUBJECT PROPERTY WAS ANNEXED INTO THE TOWN OF BOILING SPRINGS PER THIS DOCUMENT.  
ITEM #9 A PORTION OF THE SUBJECT PROPERTY LIES WITHIN THE PUBLIC RIGHT OF WAY LIMITS OF NC HIGHWAY 150 (S. MAIN ST.) AS SHOWN HEREON. THIS PORTION OF THE PROPERTY IS SUBJECT TO THE SAID PUBLIC RIGHT OF WAY.  
ITEM #10 THE BOUNDARY AND PUBLIC RIGHT OF WAY LIMITS OVER HOLLY HILL ROAD (SR 1149) ARE COINCIDENT AS SHOWN HEREON.  
ITEM #11 EASEMENTS AND RIGHTS OF WAY FOR PUBLIC AND PRIVATE ROADS AND UTILITIES ARE SHOWN HEREON PER THE PROVIDED TITLE COMMITMENT AND ARE LIMITED TO THOSE RECORDS DISCLOSED THEREIN.  
ITEMS #11 - #12 DO NOT CONTAIN MATTERS OF SURVEY

PRELIMINARY ALTA / NSPS PLAT  
NOTE: THIS PLAT IS PRELIMINARY IN STATUS AS THE SUBJECT PARCEL LABELED 'LOT 1' - NEW LOT DOES NOT CURRENTLY EXIST AS A RECORDED PARCEL OF LAND. A SUBDIVISION PLAT ILLUSTRATING THE SAID 'LOT 1' IS PENDING COMPLETION AND REVIEW / APPROVAL FROM THE TOWN OF BOILING SPRINGS PLANNING OFFICE. THE REFERENCED TITLE COMMITMENT DESCRIPTION COVERS THE ENTIRE PARENT TRACT TO 'LOT 1'. IT IS ADVISED THAT THIS ALTA PLAT CANNOT BE FINALIZED UNTIL:  
- NEW LOT #1 IS APPROVED AND RECORDED AS A SUBDIVISION OF LAND WITHIN CLEVELAND COUNTY - TOWN OF BOILING SPRINGS.  
- A NEW TITLE COMMITMENT IS PROVIDED TO THE SURVEYOR REFLECTIVE OF THE SAID SUBDIVISION.

SURVEYOR'S CERTIFICATION:  
TO:  
THE BROADWAY GROUP, LLC  
- CHICAGO TITLE INSURANCE COMPANY, AS TITLE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2023 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTAS/NSPS (LAND TITLE SURVEYS), JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 8, 9, 11, 13, 14, 16, 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON APRIL 5th, 2023.

DATE OF PLAT OR MAP: APRIL 20th, 2023  
REGISTRATION NO. LA-693



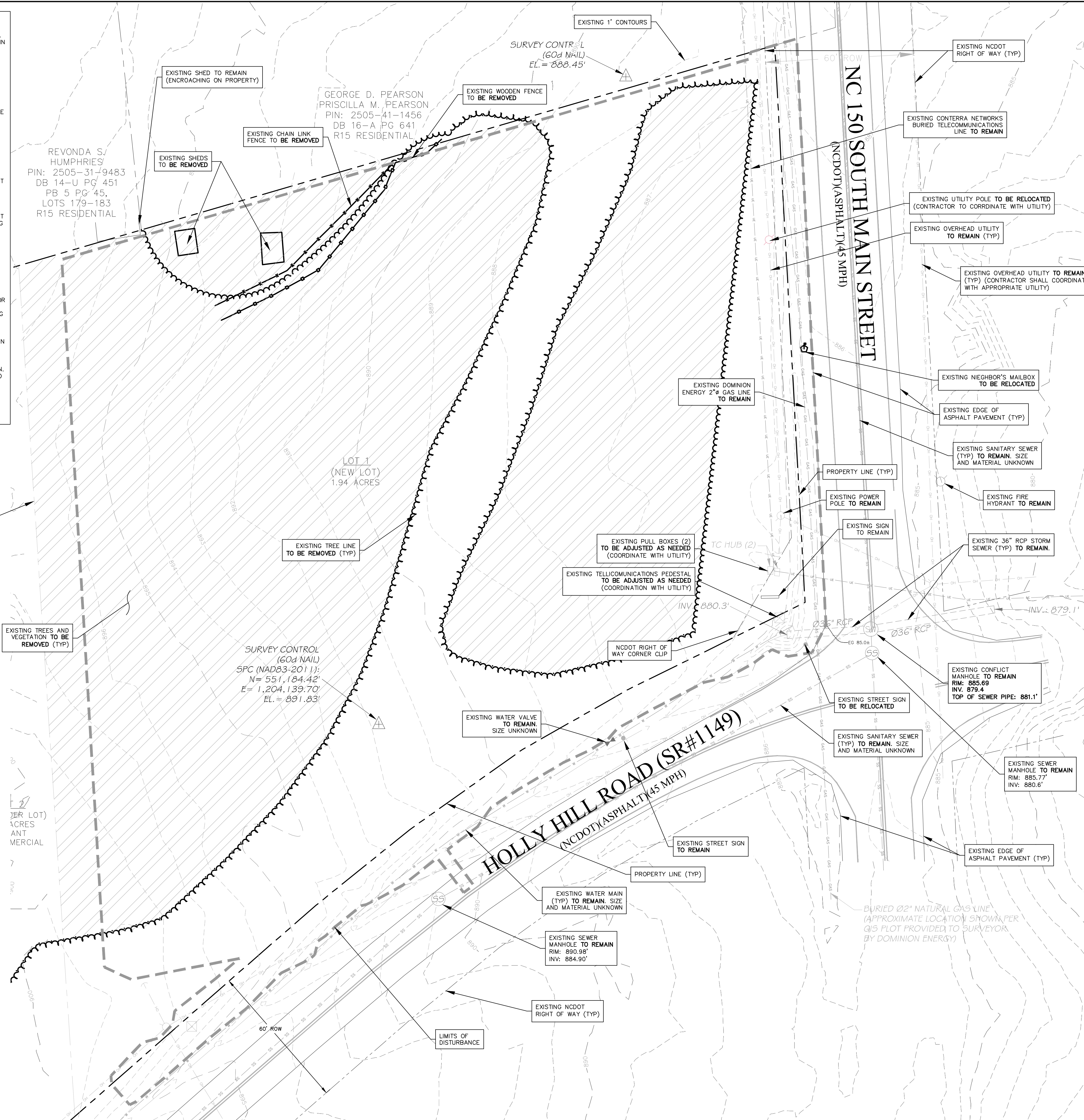
PRELIMINARY  
SCALE: 1" = 40'

Item 1.  
THE BROADWAY GROUP, LLC  
ALTA NSPS SURVEY FOR:  
BY:  
NO. DATE  
REVISION HISTORY:  
DESCRIPTION  
Eric S. McAbee, PLS (828) 628-1294  
J. Barry West, PLS (828) 628-1295  
P.O. Box 1768, Fairview North Carolina, 28730  
www.mcabeesurvey.com Firm License Number: C-694



- DEMO NOTES**
- ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
  - CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED GRADING/LAND DISTURBANCE AND DRIVEWAY PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
  - ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
  - TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.
  - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES CALLED OUT TO REMAIN DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
  - THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULCO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
  - EROSION CONTROL IS FIELD PERFORMANCE BASED AND CONTRACTOR SHALL INSTALL AND MAINTAIN ANY EROSION CONTROL MEASURES NECESSARY TO ASSURE MAXIMUM PROTECTION OF THE SITE DURING DEMOLITION AND CLEARING.
  - CONTRACTOR TO COORDINATE TIMING OF DEMOLITION AND CONSTRUCTION WITH OWNER TO ENSURE EXISTING FACILITIES REMAIN ACCESSIBLE.
  - ALL DEBRIS, STRUCTURES AND UTILITIES TO BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE ARE NOT SHOWN ON THIS PLAN. ANY ADDITIONAL DEBRIS, STRUCTURES AND UTILITIES ENCOUNTERED DURING CONSTRUCTION, WHICH IN THE OPINION OF THE ENGINEER SHOULD BE DEMOLISHED AND REMOVED, SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS.

PROPOSED DEVELOPMENT PROPERTY IS **NOT** WITHIN A WATERSHED



**VICINITY MAP**  
(NOT TO SCALE)

**DEVELOPMENT DATA**

OWNER/DEVELOPER: THE BROADWAY GROUP  
216 WEST SIDE SQ.  
HUNTSVILLE, AL 35801  
808 BROADWAY  
(256) 533-7287

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.  
168 PATTON AVENUE  
ASHEVILLE, NC 28801  
BEN MUNN, P.E.  
(828) 252-5388

CONTACT:

SURVEYOR: MCABEE & ASSOCIATES, PA.  
PO BOX 1768  
FAIRVIEW, NC 28730  
J. BARRY WEST, PLS  
(828) 628-1295

CONTACT:

**PROJECT DATA**

PIN: 2505319148  
ADDRESS: 442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57  
PROJECT ACREAGE: 1.92± ACRES  
CURRENT ZONING: B-1 COMMERCIAL  
PROPOSED ZONING: B-2 COMMERCIAL

SETBACKS:  
FRONT: 20'  
SIDES: 20'  
REAR: 30'  
CORNER: CORNER CLIP INCLUDED IN R/W

DISTURBED AREA: 1.92 AC

IMPERVIOUS AREA: PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)  
PERVIOUS AREA: 1.81 ACRES (99.8%) 0.78 ACRES (43%)

**FOR REVIEW ONLY**

NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	09/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS

**CDC INSPECTIONS HOTLINE:**  
828-771-4755 OR INSPECTION@CDCGO.COM

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

**NORTH**

**EXISTING CONDITIONS AND DEMO PLANS**  
GRAPHIC SCALE

( IN FEET )  
1 inch = 20 ft.

EX COND AND DEMO FOR: BOILING SPRINGS RETAIL STORE

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
NCEDED EC NO.: TBD

SHEET  
**C101**

168 PATTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5388  
FAX (828) 252-5388

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 28798  
PHONE (828) 252-5388  
FAX (828) 456-546

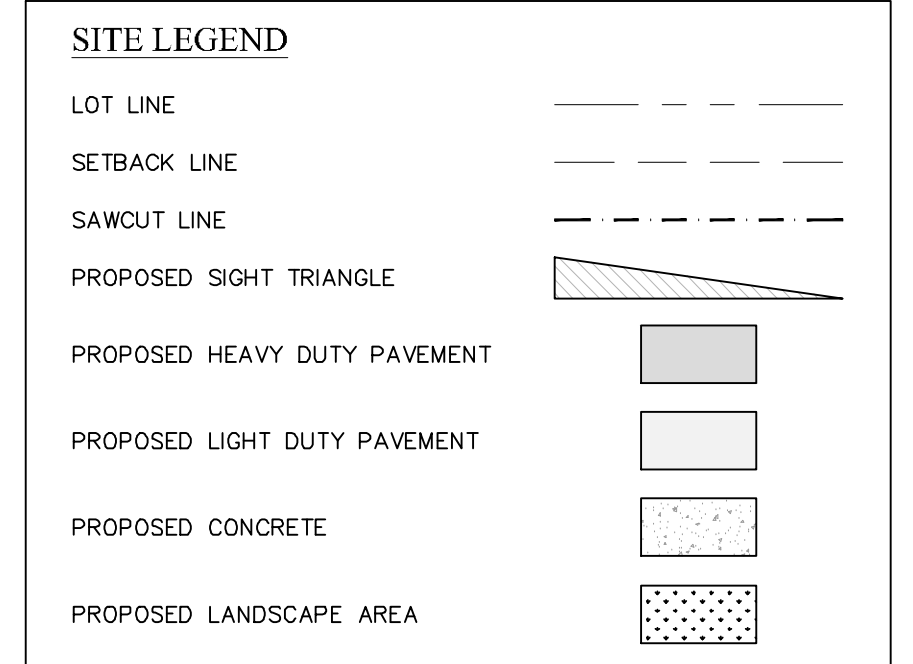
**CDC** Civil Design Concepts, PA  
www.civildesignconcepts.com

NCELS LICENSE # C-2184

10/18/2023



- SITE NOTES**
- ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
  - SINGLE-PHASE CONSTRUCTION.
  - ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
  - TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.
  - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
  - CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES (SHOWN TO REMAIN) AND NEWLY COMPLETED WORK DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
  - THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULOCO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
  - SIDEWALKS SHALL BE CONSTRUCTED IN ORDER TO PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES. A MAXIMUM OF 5% SIDEWALK/CROSSWALK LONGITUDINAL SLOPE IS PERMITTED. A MAXIMUM OF 1/4" PER FOOT SIDEWALK/CROSSWALK CROSS SLOPE IS PERMITTED. ANY SIDEWALK/CROSSWALK INSTALLED WITH A STEEPER SLOPE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
  - ALL RADII LISTED ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED. ALL PARKING LOT RADII ARE 3' UNLESS OTHERWISE NOTED.
  - ALL ROAD/PARKING LOT IMPROVEMENTS, STRIPING AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE (MUTCD). CONTRACTOR MAY USE A PAINT SUITABLE FOR ASPHALT APPLICATION IN LIEU OF THERMOPLASTIC WITH PRIOR APPROVAL FROM THE ENGINEER.
  - CURB AND GUTTER ON THE HIGH SIDE OF PAVED AREAS AND ROADS SHALL BE CONSTRUCTED WITH SPILLOUT CURB AND GUTTER. CURB AND GUTTER ON THE LOW SIDE SHALL BE CONSTRUCTED WITH STANDARD CURB AND GUTTER; REFER TO SPILLOUT CURB AND GUTTER DETAILS. CURB END TREATMENT SHALL BE APPLIED AT ALL CURB ENDS; REFER TO CURB END TREATMENT DETAIL.
  - PROPOSED STRIPING DETAILS FOR SITE ARE DETAILED AS D2.12

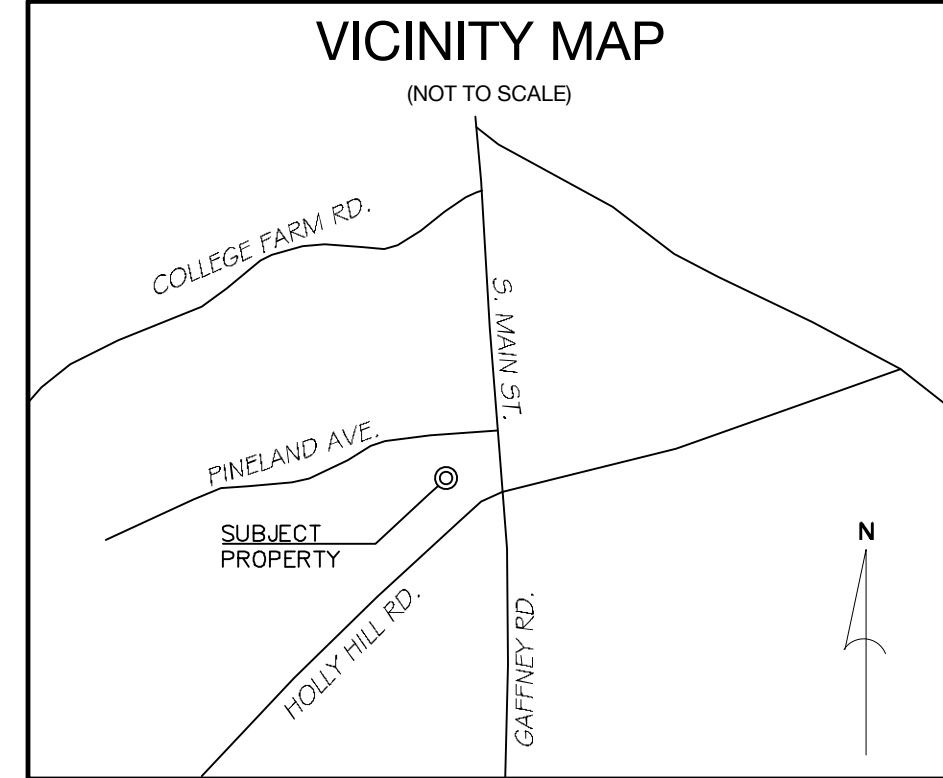
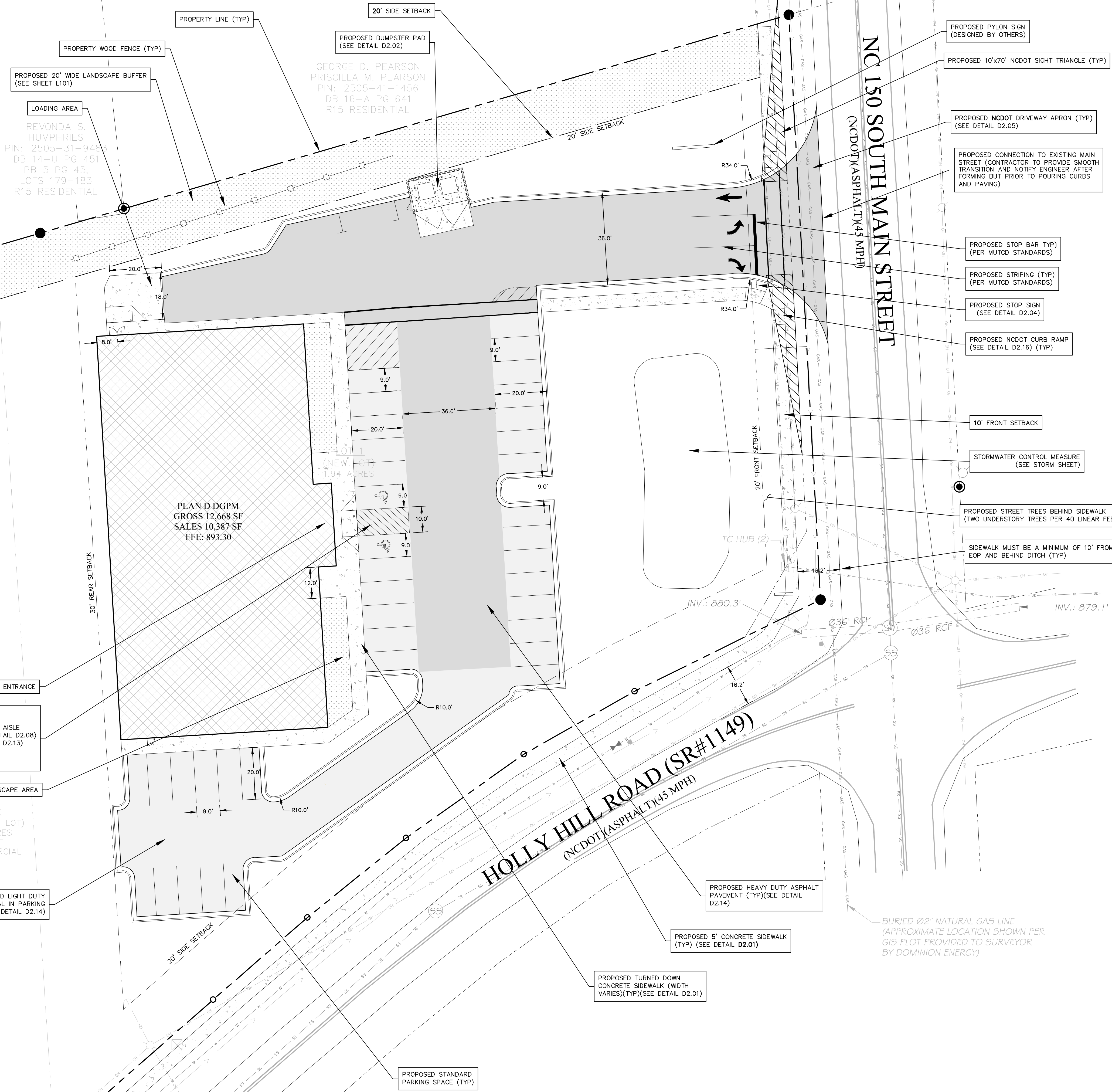


- PROPOSED**
- 2 - 9'x20' ADA PARKING SPACES (TYP)
  - 1 - 10' WIDE VAN ACCESSIBLE LOADING AISLE
  - 2 - HANDICAP PARKING SIGNS (SEE DETAIL D2.08)
  - 4 - STEEL BOLLARDS (TYP)(SEE DETAIL D2.13)
  - 1 WHEELCHAIR RAMP (SEE DETAIL 2.11)
- NOTE:**
- HC SYMBOLS NOT TO BE STRIPED

FOUNDATION PLANTING LANDSCAPE AREA

2 (PER LOT) ACRES ANT Mercial

PROPOSED LIGHT DUTY PAVEMENT (TYPICAL IN PARKING AREAS)(SEE DETAIL D2.14)



**DEVELOPMENT DATA**

OWNER/DEVELOPER:	THE BROADWAY GROUP 216 WEST SIDE SQ. HUNTSVILLE, AL 35801 808 BROADWAY (256) 533-7287
CONTACT:	
CIVIL ENGINEER:	CIVIL DESIGN CONCEPTS, P.A. 168 PATTON AVENUE ASHEVILLE, NC 28801 BEN MUNN, P.E. (828) 252-5388
CONTACT:	
SURVEYOR:	MCABEE & ASSOCIATES, P.A. PO BOX 1768 FAIRVIEW, NC 28730 J. BARRY WEST, PLS (828) 628-1295
CONTACT:	

**PROJECT DATA**

PIN:	2505319148
ADDRESS:	442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57
DEED BOOK/PAGE:	1.92± ACRES
PROJECT ACREAGE:	B-1 COMMERCIAL
CURRENT ZONING:	B-2 COMMERCIAL
PROPOSED ZONING:	
SETBACKS:	20'
FRONT:	20'
SIDES:	30'
REAR:	30'
CORNER:	CORNER CLIP INCLUDED IN R/W
DISTURBED AREA:	1.92 AC
IMPERVIOUS AREA:	PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)
PERVIOUS AREA:	1.81 ACRES (99.8%) 0.78 ACRES (43%)

**ZONING DATA**

**PARKING CALCULATIONS:**

VEHICULAR:	REQUIRED SPACES: (MIN. 1/400 SF - 150% THE MIN.)	MINIMUM	MAXIMUM
	SALES AREA:	10,387	38 PLUS ADA
	SPACES PROVIDED:	26	
HANDICAPPED SPACES:	SPACES REQUIRED: 2	SPACES PROVIDED: 2	
BICYCLE:	MINIMUM REQUIRED: 0	AMOUNT PROVIDED: 0	

**BUILDING DATA:**

BUILDING TYPE	DESCRIPTION	HEIGHT	GFA
C PLUS	SINGLE STORY STEEL	18'	12,668 SF

168 PATTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5388  
FAX (828) 252-5385

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 28786  
PHONE (828) 252-5388  
FAX (828) 252-5385

**CDC** Civil Design Concepts, PA  
www.civildesignconcepts.com  
NCELES LICENSE # C-2184

NO.	DATE	DESCRIPTION	BY
1	08/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS
4	10/23/23	NOTE UPDATES	BRM

**FOR REVIEW ONLY**

Professional Engineer Seal for Ben Munn, P.E., License No. 045043, State of North Carolina, expires 10/27/2027.

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

**NORTH**

**SITE PLAN**

GRAPHIC SCALE

0 10 20 40 60  
IN FEET  
1 inch = 20 ft.

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

**SHEET C201**

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
NCEDES EC NO.: TBD

SHEET C201

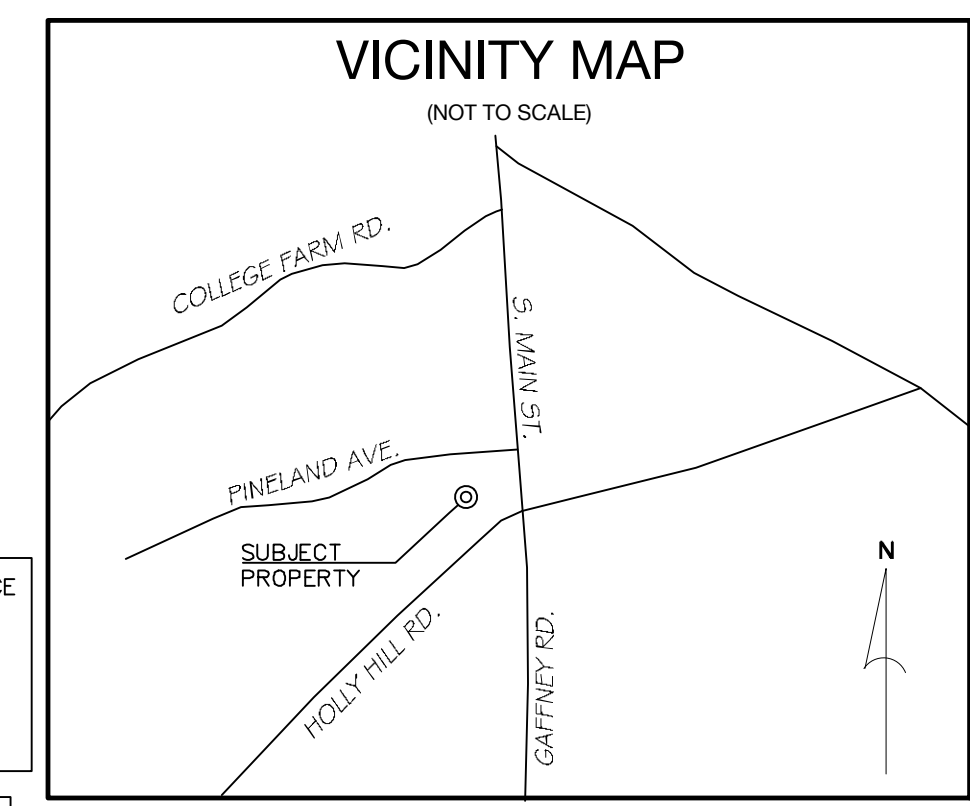
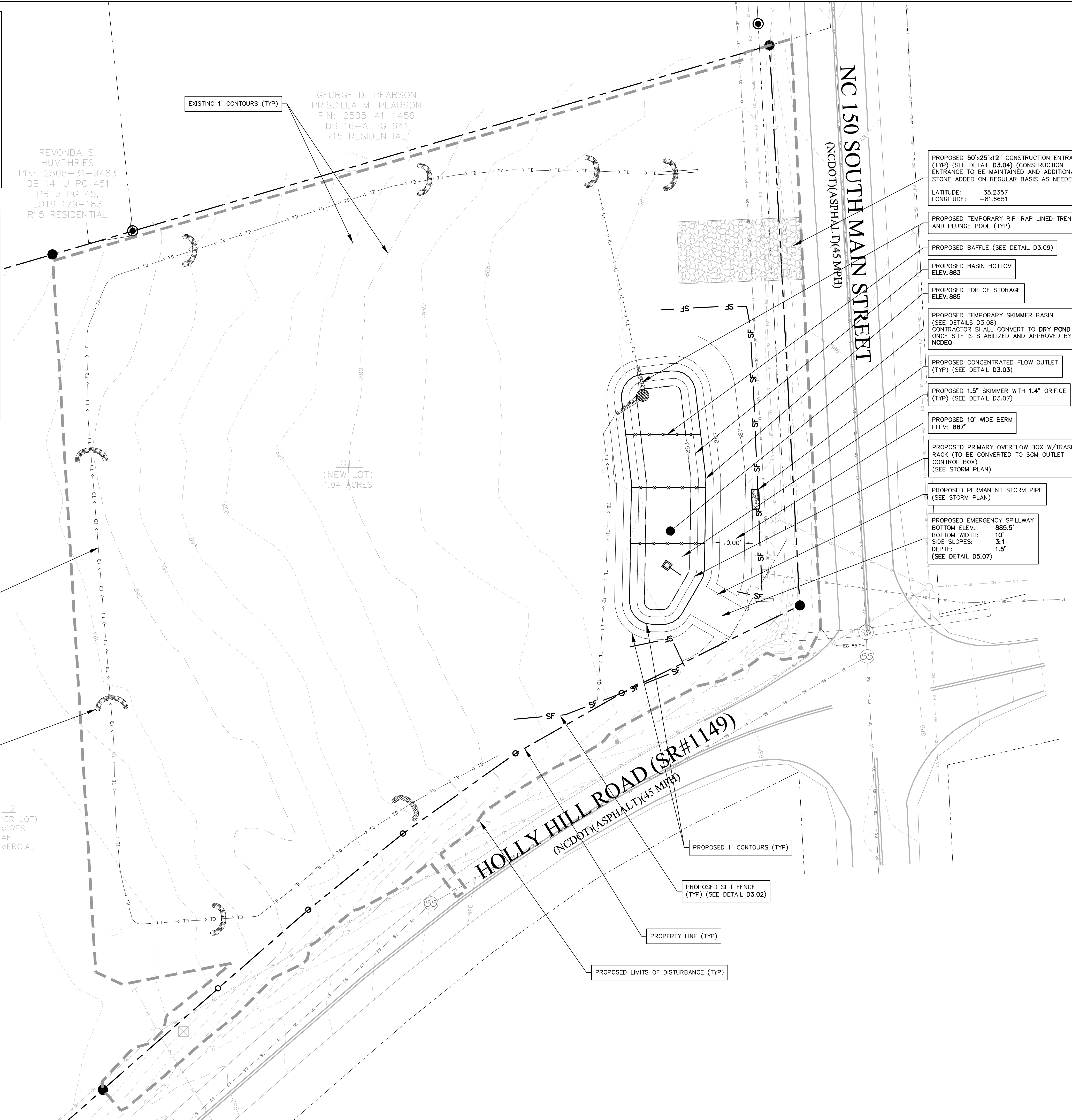


**GR-EC-SW NOTES**

- SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES. CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
- NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
- SOIL TYPE: **PbB2/CaB2**  
SOIL GROUP: **B**
- STREAM INFORMATION:  
INDEX: **9-50-33**  
NAME: **YANCEY BRANCH**  
CLASSIFICATION: **C**  
RIVER BASIN: **BROAD**
- TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM.  
FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDGING WORK

**ROUGH GRADING & EROSION CONTROL LEGEND**

- LIMITS OF DISTURBANCE:
- SILT FENCE:
- SKIMMER & CONTROL STRUCTURE:
- TEMPORARY PIPE:
- EXISTING CONTOURS:
- PROPOSED CONTOURS:
- TEMPORARY DIVERSION DITCH:
- PERMANENT DIVERSION DITCH:
- PLUNGE POOL:
- STRAW WATTLE:
- STONE INLET PROTECTION:



**DEVELOPMENT DATA**

OWNER/DEVELOPER: THE BROADWAY GROUP  
216 WEST SIDE SQ.  
HUNTSVILLE, AL 35801  
808 BROADWAY  
(256) 533-7287

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.  
168 PATTON AVENUE  
ASHEVILLE, NC 28801  
BEN MUNN, P.E.  
(828) 252-5388

CONTACT:

SURVEYOR: MCABEE & ASSOCIATES, P.A.  
PO BOX 1768  
FAIRVIEW, NC 28730  
J. BARRY WEST, PLS  
(828) 628-1295

CONTACT:

**PROJECT DATA**

PIN: 2505319148  
ADDRESS: 442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57  
PROJECT ACREAGE: 1.92± ACRES  
CURRENT ZONING: B-1 COMMERCIAL  
PROPOSED ZONING: B-2 COMMERCIAL

SETBACKS:  
FRONT: 20'  
SIDES: 20'  
REAR: 30'  
CORNER: CORNER CLIP INCLUDED IN R/W

DISTURBED AREA: 1.92 AC

IMPERVIOUS AREA: PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)  
PERVIOUS AREA: 1.81 ACRES (99.8%) 0.78 ACRES (43%)

**ZONING DATA**

PARKING CALCULATIONS:

VEHICULAR:  
REQUIRED SPACES: (MIN. 1/400 SF - 150% THE MIN) MINIMUM 10,387 MAXIMUM 38 PLUS ADA  
SALES AREA: 26  
SPACES PROVIDED: 38 PLUS ADA

HANDICAPPED SPACES:  
SPACES REQUIRED: 2 SPACES PROVIDED: 2  
BICYCLE: MINIMUM REQUIRED: 0 AMOUNT PROVIDED: 0

**BUILDING DATA:**

BUILDING TYPE	DESCRIPTION	HEIGHT	GFA
TYPE C PLUS	SINGLE STORY STEEL	18'	12,668 SF

168 PATTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5388  
FAX (828) 252-5385

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 28786  
PHONE (828) 252-5388  
FAX (828) 456-546

**CDC** Civil Design Concepts, PA  
www.civildesignconcepts.com

NICHELS LICENSE # C-2184

NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS

**FOR REVIEW ONLY**

SEAL: CIVIL ENGINEER, STATE OF NORTH CAROLINA, LICENSE NO. 045043, BEN MUNN, P.E., 10/18/2023

ROUGH GRADING AND EROSION CONTROL PLAN PH1 FOR:

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

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

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

**ROUGH GRADING AND EROSION CONTROL PLAN PH1**

GRAPHIC SCALE

( IN FEET )  
1 inch = 20 ft.

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
NCEDE EC NO.: TBD

SHEET  
**C301**



**GR-EC-SW NOTES**

- SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES. CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
- NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
- SOIL TYPE: **PbB2/CaB2**  
SOIL GROUP: **B**
- STREAM INFORMATION:  
INDEX: **9-50-33**  
NAME: **YANCEY BRANCH**  
CLASSIFICATION: **C**  
RIVER BASIN: **BROAD**
- TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM.  
FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK

**ROUGH GRADING & EROSION CONTROL LEGEND**

- LIMITS OF DISTURBANCE:
- SILT FENCE:
- SKIMMER & CONTROL STRUCTURE:
- TEMPORARY PIPE:
- EXISTING CONTOURS:
- PROPOSED CONTOURS:
- TEMPORARY DIVERSION DITCH:
- PERMANENT DIVERSION DITCH:
- PLUNGE POOL:
- STRAW WATTLE:
- STONE INLET PROTECTION:

PROPOSED PERMANENT RIP RAP APRON 'DITCH N'  
LENGTH: 10'  
WIDTH AT START: 6'  
WIDTH AT END: 12'  
DEPTH: 18"  
STONE CLASS: B  
(SEE DETAIL D3.06)

GEORGE D. PEARSON  
PRISCILLA M. PEARSON  
PIN: 2505-41-1456  
DB 16-A PG 641  
R15 RESIDENTIAL

REVONDA S. HUMPHRIES  
PIN: 2505-31-9483  
DB 14-U PG 451  
PB 5 PG 45,  
LOTS 179-183  
R15 RESIDENTIAL

EXISTING 1' CONTOURS (TYP)

PROPOSED 1' CONTOURS (TYP)

PROPOSED CONCENTRATED FLOW OUTLET (TYP) (SEE DETAIL D3.03)

PROPOSED DRIVEWAY CULVERT (SEE STORM PLAN)

PROPOSED STORM SYSTEM (TYP)

PROPOSED TEMPORARY SKIMMER BASIN (SEE SHEET C301)  
CONTRACTOR SHALL CONVERT TO DRY POND ONCE SITE IS STABILIZED AND APPROVED BY NCEQ

PROPOSED PERMANENT DRAINAGE DITCH (TYP) (SEE STORM PLAN)

PROPOSED STRAW WATTLE (TYP) (SEE DETAIL D3.01)

PLAN D.D. & P.M.  
GROSS 12,668 SF  
SALES 10,387 SF  
FE: 893.30

LOT 1 (NEW LOT)  
1.94 ACRES

PROPOSED PERMANENT RIP RAP APRON IN STORM POND (SEE SHEET C952)

ALL SLOPES GREATER THAN 4:1 SHALL BE SEEDED WITH KENTUCKY 31. SLOPES 4:1 OR LESS SHALL BE SEEDED WITH VELVA TURF (TYP)

ALL 2:1 SLOPES AND GREATER TO BE STABILIZED WITH ROLLED EROSION CONTROL PRODUCT (NORTH AMERICAN GREEN S150 OR APPROVED EQUAL)

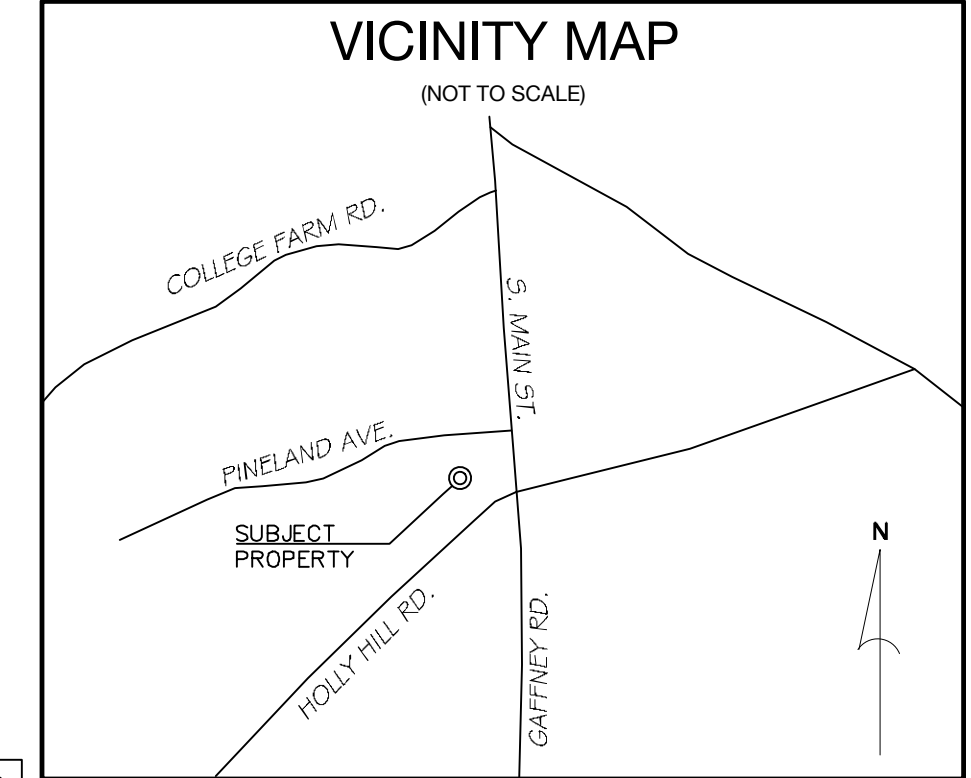
ALL SLOPES GREATER THAN 3:1 BE HYDROSEEDED WITHIN 7 DAYS OF ESTABLISHED FINISH GRADE FOR STABILIZATION. PERMANENT VEGETATION SEED TO CONFORM WITH SEEDING REQUIREMENTS SHOWN ON DETAIL SHEET.

PROPOSED STORM SYSTEM (TYP)

PROPOSED SILT FENCE (TYP) (SEE DETAIL D3.02)

PROPERTY LINE (TYP)

PROPOSED LIMITS OF DISTURBANCE (TYP)



**DEVELOPMENT DATA**

OWNER/DEVELOPER:	THE BROADWAY GROUP 216 WEST SIDE SQ. HUNTSVILLE, AL 35801 808 BROADWAY (256) 533-7287
CONTACT:	
CIVIL ENGINEER:	CIVIL DESIGN CONCEPTS, P.A. 168 PATTON AVENUE ASHEVILLE, NC 28801 BEN MUNN, P.E. (828) 252-5388
CONTACT:	
SURVEYOR:	MCABEE & ASSOCIATES, P.A. PO BOX 1768 FAIRVIEW, NC 28730 J. BARRY WEST, PLS (828) 628-1295
CONTACT:	

**PROJECT DATA**

PIN:	2505319148
ADDRESS:	442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57
DEED BOOK/PAGE:	1.92± ACRES
PROJECT ACREAGE:	B-1 COMMERCIAL
CURRENT ZONING:	B-2 COMMERCIAL
PROPOSED ZONING:	
SETBACKS:	
FRONT:	20'
SIDES:	20'
REAR:	30'
CORNER:	CORNER CLIP INCLUDED IN R/W
DISTURBED AREA:	1.92 AC
IMPERVIOUS AREA:	PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)
PERVIOUS AREA:	1.81 ACRES (99.8%) 0.78 ACRES (43%)

**ZONING DATA**

PARKING CALCULATIONS:

VEHICULAR:	
REQUIRED SPACES:	(MIN. 1/400 SF - 150% THE MIN) MINIMUM 10,387 MAXIMUM 38 PLUS ADA
SALES AREA:	26
SPACES PROVIDED:	38 PLUS ADA
HANDICAPPED SPACES:	SPACES REQUIRED: 2 SPACES PROVIDED: 2
BICYCLE:	MINIMUM REQUIRED: 0 AMOUNT PROVIDED: 0
BUILDING DATA:	
BUILDING TYPE:	C PLUS
DESCRIPTION:	SINGLE STORY STEEL
HEIGHT:	18'
GFA:	12,668 SF

**FOR REVIEW ONLY**

1 06/29/23 PERMIT SUBMITTAL  
2 08/17/23 DOT & EC RE-SUBMITTAL  
3 10/18/23 ZONING & STORM RE-SUBMITTAL

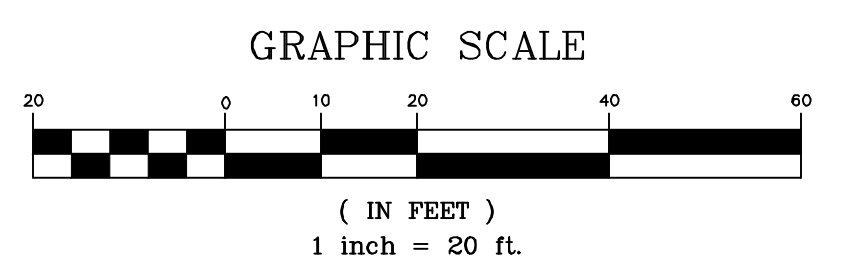
NO. DATE DESCRIPTION

10/18/2023

CDC INSPECTIONS HOTLINE:  
828-771-4755 OR INSPECTION@CDCGO.COM

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

NORTH



168 PATTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5388  
FAX (828) 252-5385

52 WALNUT STREET - SUITE 9  
WAYNEVILLE, NC 28794  
PHONE (828) 252-5388  
FAX (828) 252-5385

**CDC** Civil Design Concepts, PA  
www.civildesignconcepts.com  
NCELS LICENSE # C-2184

NO.	DATE	DESCRIPTION
1	06/29/23	PERMIT SUBMITTAL
2	08/17/23	DOT & EC RE-SUBMITTAL
3	10/18/23	ZONING & STORM RE-SUBMITTAL

FOR REVIEW ONLY

BOILING SPRINGS RETAIL STORE

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

RG-EC PLAN PH2 FOR:

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
NCEQ EC NO.: TBD

SHEET  
**C302**



**GR-EC-SW NOTES**

- SEE GRADING, EROSION CONTROL, AND STORM DRAINAGE DETAIL SHEETS FOR ALL GENERAL NOTES. CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL PLANS.
- NO PORTION OF THIS PROJECT LIES WITHIN THE 100-YR FEMA FLOODPLAIN.
- SOIL TYPE: **PbB2/CaB2**  
SOIL GROUP: **B**
- STREAM INFORMATION:  
INDEX: **9-50-33**  
NAME: **YANCEY BRANCH**  
CLASSIFICATION: **C**  
RIVER BASIN: **BROAD**
- TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDCGO.COM.  
FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK

REVONDA S. HUMPHRIES  
PIN: 2505-31-9483  
DB 14-U PG 451  
PB 5 PG 45,  
LOTS 179-183  
R15 RESIDENTIAL

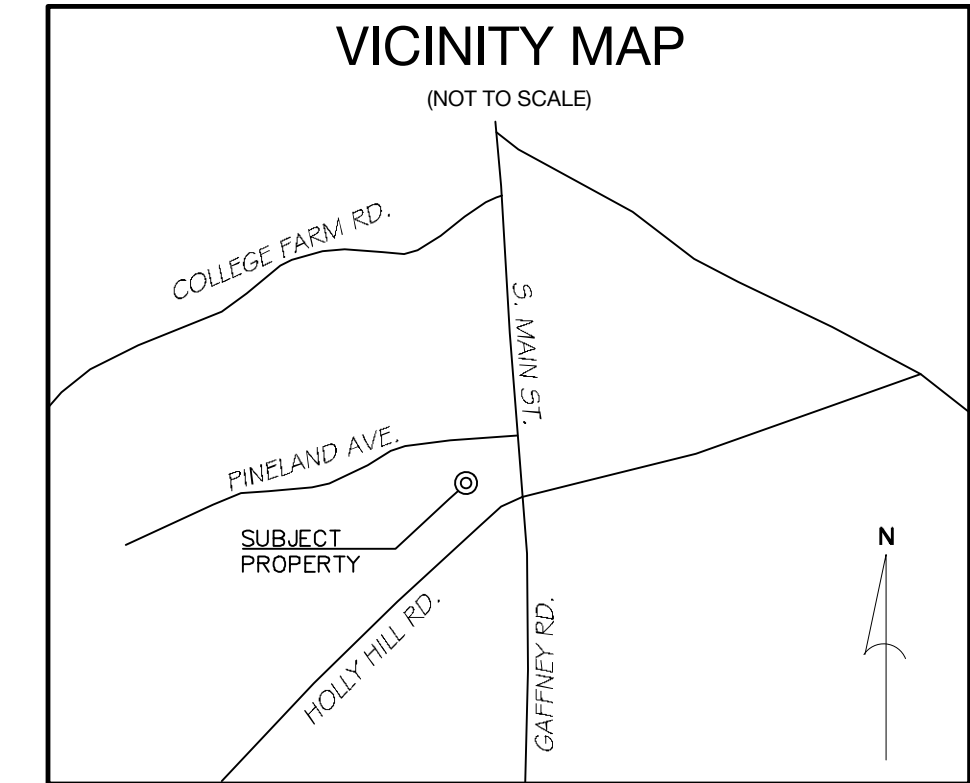
PROPOSED PERMANENT DRAINAGE DITCH "N"  
BOTTOM WIDTH: **1'**  
SIDE SLOPE: **2:1**  
DEPTH: **1' MIN.**  
SLOPE: **1.5% MIN.**  
CHANNEL LINER: **SC 250**  
(SEE DETAIL D5.04)

PROPOSED STORM STRUCTURE (TYP)  
(SEE TABLE & DETAIL D5.02)

PROPERTY LINE (TYP)

GEORGE D. PEARSON  
PRISCILLA M. PEARSON  
PIN: 2505-41-1456  
DB 16-A PG 641  
R15 RESIDENTIAL

PROPOSED RIP RAP APRON  
(TYP) (SEE SHEET C301)



**DEVELOPMENT DATA**

OWNER/DEVELOPER: THE BROADWAY GROUP  
216 WEST SIDE SQ.  
HUNTSVILLE, AL 35801  
808 BROADWAY  
(256) 533-7287

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.  
168 PATTON AVENUE  
ASHEVILLE, NC 28801  
BEN MUNN, P.E.  
(828) 252-5388

CONTACT:

SURVEYOR: MCABEE & ASSOCIATES, P.A.  
PO BOX 1768  
FAIRVIEW, NC 28730  
J. BARRY WEST, PLS  
(828) 628-1295

CONTACT:

**PROJECT DATA**

PIN: 2505319148  
ADDRESS: 442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57  
PROJECT ACREAGE: 1.92± ACRES  
CURRENT ZONING: B-1 COMMERCIAL  
PROPOSED ZONING: B-2 COMMERCIAL

SETBACKS:  
FRONT: 20'  
SIDES: 20'  
REAR: 30'  
CORNER: CORNER CLIP INCLUDED IN R/W

DISTURBED AREA: 1.92 AC

IMPERVIOUS AREA: PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)  
PERVIOUS AREA: 1.81 ACRES (99.8%) 0.78 ACRES (43%)

**ZONING DATA**

PARKING CALCULATIONS:  
VEHICULAR:  
REQUIRED SPACES: (MIN. 1/400 SF - 150% THE MIN) 10,387  
SALES AREA: 26 38 PLUS ADA  
SPACES PROVIDED: 26 38 PLUS ADA

HANDICAPPED SPACES:  
SPACES REQUIRED: 2 SPACES PROVIDED: 2

BICYCLE:  
MINIMUM REQUIRED: 0 AMOUNT PROVIDED: 0

**BUILDING DATA:**

BUILDING TYPE	DESCRIPTION	HEIGHT	GFA
C PLUS	SINGLE STORY STEEL	18'	12,668 SF

**STRUCTURE TABLE**  
(INVERTS BASED ON 2D LENGTH TO INSIDE EDGES)

STRUCTURE	STATION	STRUCTURE DETAILS	DEPTH	DESCRIPTION
A1	10+50	RIM 890.5 INV. IN 884.9 (A2-A1) INV. OUT 884.840 (A1-A0)	7.8±	CURB INLET
A2	11+15	RIM 890.8 INV. IN 887.4 (A3-A2) INV. OUT 887.272 (A2-A1)	3.5±	CURB INLET
A3	12+00	RIM 891.2 INV. OUT 887.800 (A3-A2)	3.4±	CURB INLET
B1	10+40	RIM 887.1 INV. IN 883.2 (B2-B1) INV. OUT 883.133 (B1-B0)	4.0±	CURB INLET
B2	10+74	RIM 887.1 INV. IN 883.5 (B3-B2) INV. OUT 883.400 (B2-B1)	3.7±	CURB INLET
B3	11+51	RIM 890.7 INV. IN 886.3 (B3X-B3) INV. IN 886.3 (B4-B3) INV. OUT 886.205 (B3-B2)	4.5±	CURB INLET
B3X	10+46	RIM 890.7 INV. OUT 887.361 (B3X-B3)	3.3±	CURB INLET
B4	12+03	RIM 891.5 INV. OUT 887.000 (B4-B3)	4.5±	DROP INLET
C2	10+00	RIM 883.6 INV. IN 880.3 (C1-C2)	3.2±	OPEN THROAT

**INLET/OUTLET TABLE**  
(INVERTS BASED ON 2D LENGTH TO INSIDE EDGES)

STRUCTURE	STATION	STRUCTURE DETAILS	DESCRIPTION
A0	10+03	INV. IN 883.0 (A1-A0)	FES
B0	10+03	INV. IN 883.0 (B1-B0)	FES
D0	10+00	INV. IN 882.9 (D1-D0)	PIPE PROJECTION
D1	10+94	INV. OUT 884.400 (D1-D0)	PIPE PROJECTION

**PIPE TABLE**  
(SLOPES BASED ON 2D LENGTH TO INSIDE EDGES)

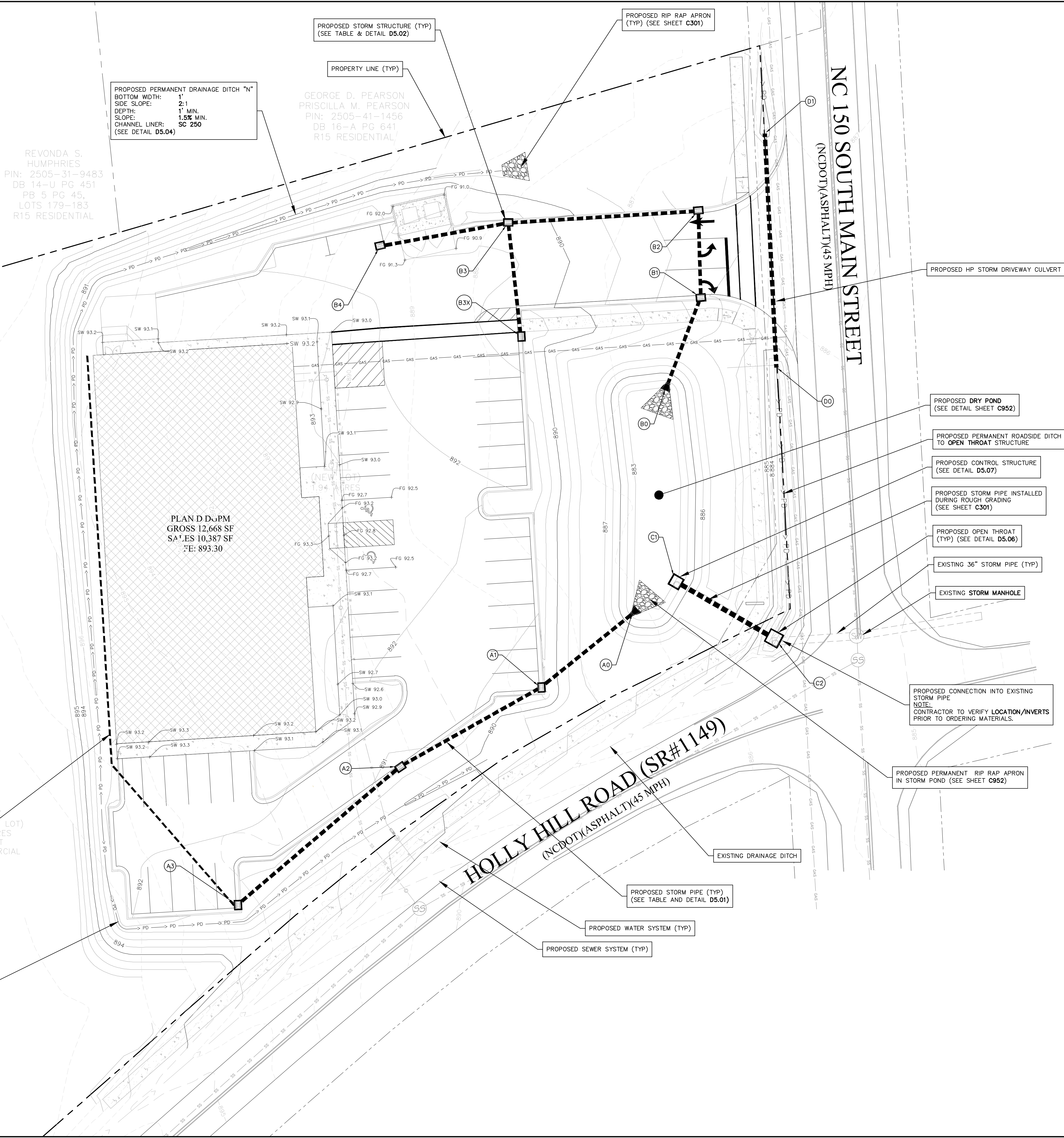
PIPE NAME	SIZE	LENGTH	SLOPE	MATERIAL
A1-A0	15"	46'	3.9%	HDPE
A2-A1	15"	62'	3.6%	HDPE
A3-A2	15"	82'	0.5%	HDPE
B1-B0	15"	36'	0.5%	HDPE
B2-B1	15"	32'	0.5%	HDPE
B3-B2	15"	73'	3.7%	HDPE
B3X-B3	15"	43'	2.5%	HDPE
B4-B3	15"	48'	1.4%	HDPE
C1-C2	18"	41'	4.6%	RCP
D1-D0	18"	94'	1.6%	HDPE

PLAN D.D. & P.M.  
GROSS 12,668 SF  
SALES 10,387 SF  
FE: 893.30

PROPOSED 8" HDPE DOWNSPOUT COLLECTOR PIPE (TYP) (1.0% MIN. SLOPE)

ALL DOWNSPOUT COLLECTOR PIPES SHALL BE HDPE WITH PUSH-ON WATERTIGHT JOINTS, WYES, FITTINGS AND COUPLINGS AS REQUIRED TO TIE-IN ALL DOWNSPOUT LEADERS AND ROOF DRAINS FROM THE BUILDINGS. COLLECTOR PIPES SHALL HAVE 18" MIN. COVER AND BE AT 1.0% MIN. SLOPE (TYP). CONTRACTOR TO COORDINATE CONNECTION LOCATIONS WITH ARCHITECTURAL PLANS. (SEE DETAIL DX.XX)

PROPOSED PERMANENT DRAINAGE DITCH "S"  
BOTTOM WIDTH: **0.75'**  
SIDE SLOPE: **2:1**  
DEPTH: **0.5' MIN.**  
SLOPE: **1% MIN.**  
CHANNEL LINER: **SC 250**  
(SEE DETAIL D5.04)



PROPOSED HP STORM DRIVEWAY CULVERT

PROPOSED DRY POND (SEE DETAIL SHEET C952)

PROPOSED PERMANENT ROADSIDE DITCH TO OPEN THROAT STRUCTURE

PROPOSED CONTROL STRUCTURE (SEE DETAIL D5.07)

PROPOSED STORM PIPE INSTALLED DURING ROUGH GRADING (SEE SHEET C301)

PROPOSED OPEN THROAT (TYP) (SEE DETAIL D5.06)

EXISTING 36" STORM PIPE (TYP)

EXISTING STORM MANHOLE

PROPOSED CONNECTION INTO EXISTING STORM PIPE  
NOTE:  
CONTRACTOR TO VERIFY LOCATION/INVERTS PRIOR TO ORDERING MATERIALS.

PROPOSED PERMANENT RIP RAP APRON IN STORM POND (SEE SHEET C952)

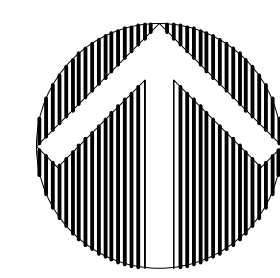
EXISTING DRAINAGE DITCH

PROPOSED STORM PIPE (TYP) (SEE TABLE AND DETAIL D5.01)

PROPOSED WATER SYSTEM (TYP)

PROPOSED SEWER SYSTEM (TYP)

CDC INSPECTIONS HOTLINE:  
828-771-4755 OR INSPECTION@CDCGO.COM

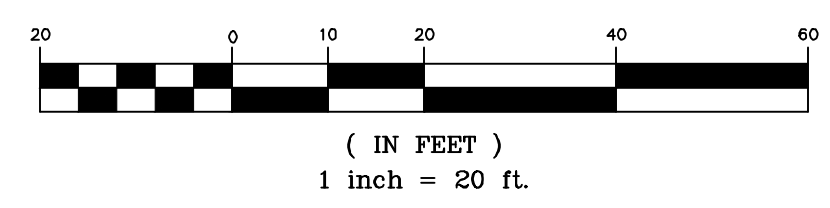


Know what's below.  
Call before you dig.

NORTH

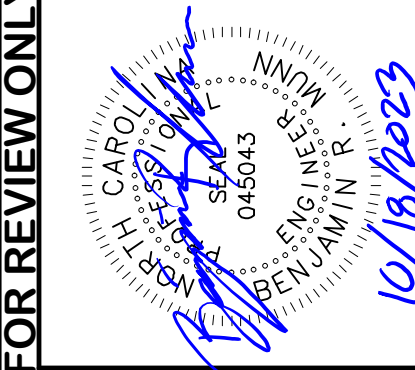
**STORM PLAN**

GRAPHIC SCALE



FOR REVIEW ONLY

NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS



STORM PLAN FOR:  
**BOILING SPRINGS RETAIL STORE**  
THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
CHECKED BY: TBD

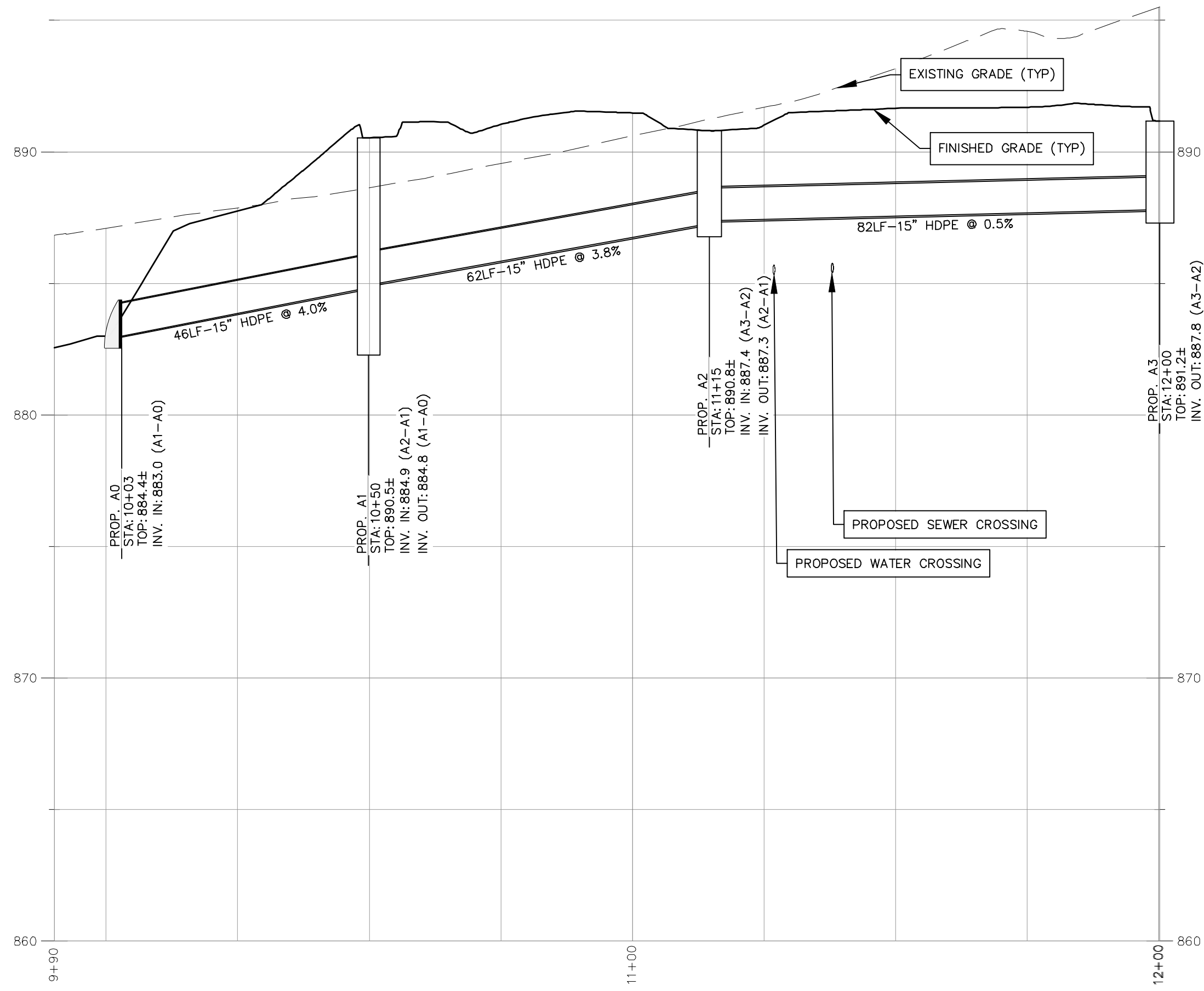
SHEET  
**C501**

**CDC** Civil Design Concepts, PA  
www.civildesignconcepts.com  
NCELES LICENSE # C-2184

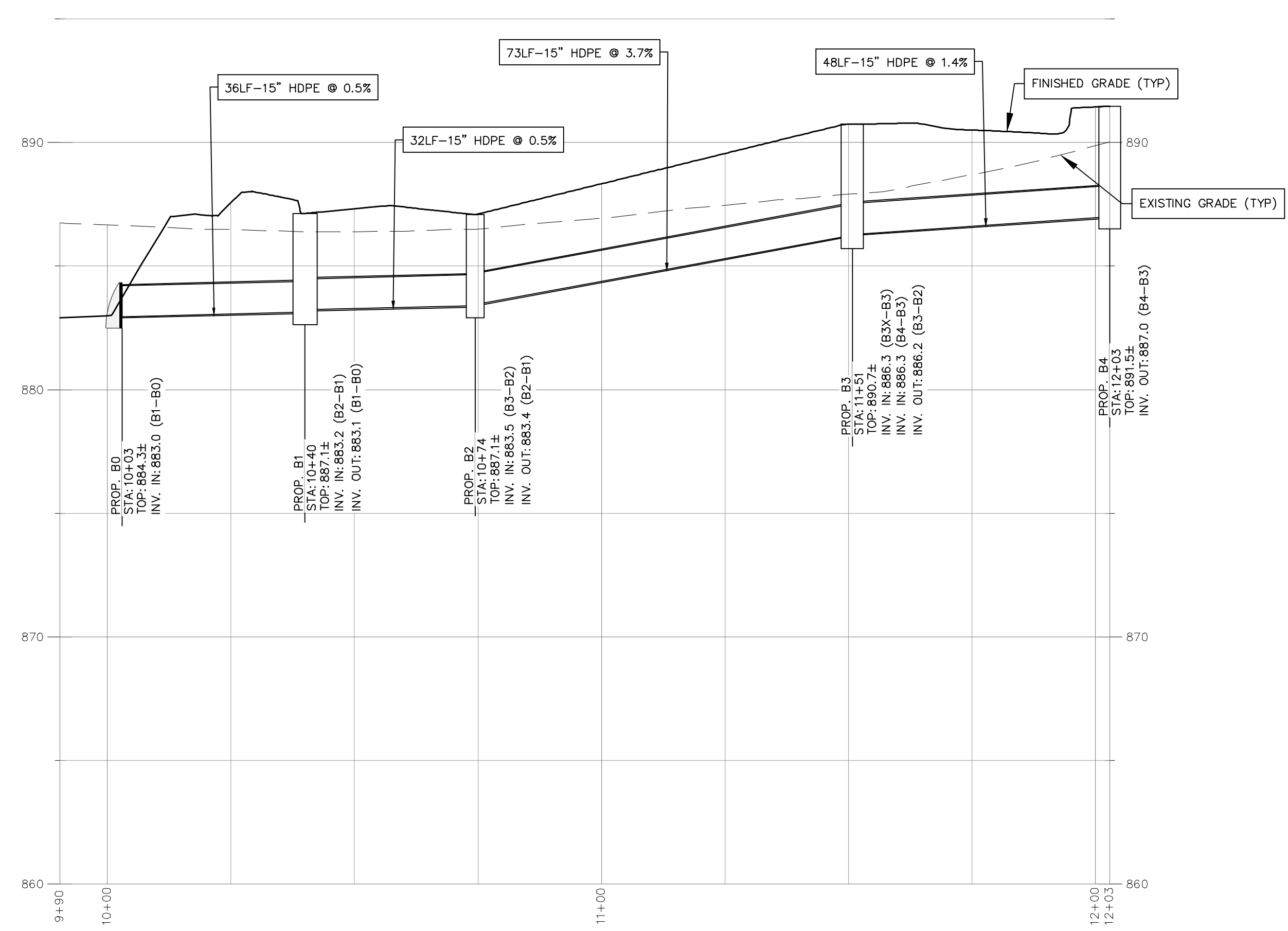
168 PATTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5388  
FAX (828) 252-5385

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 28786  
PHONE (828) 252-5388  
FAX (828) 252-5385

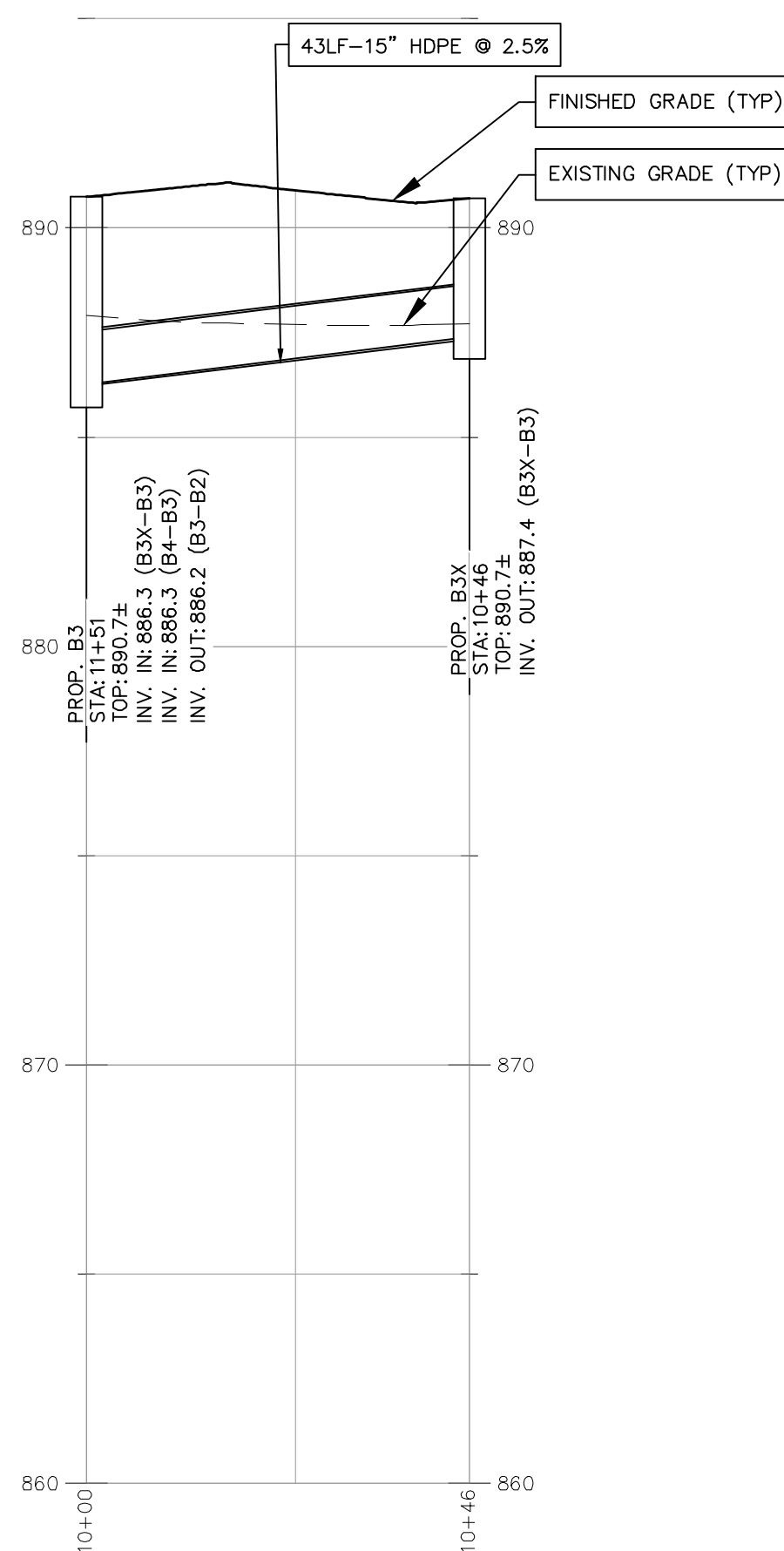




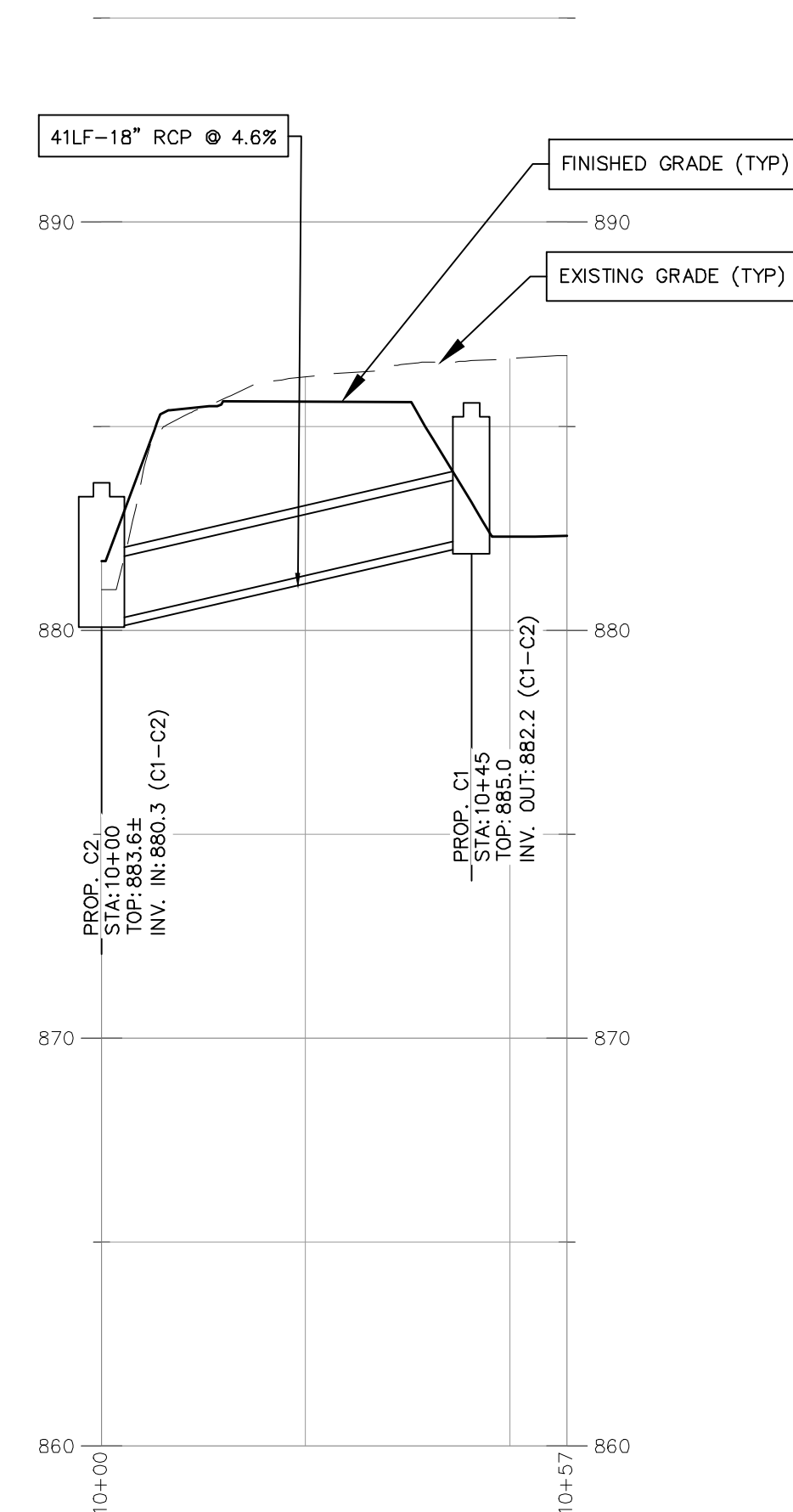
STORM A PROFILE



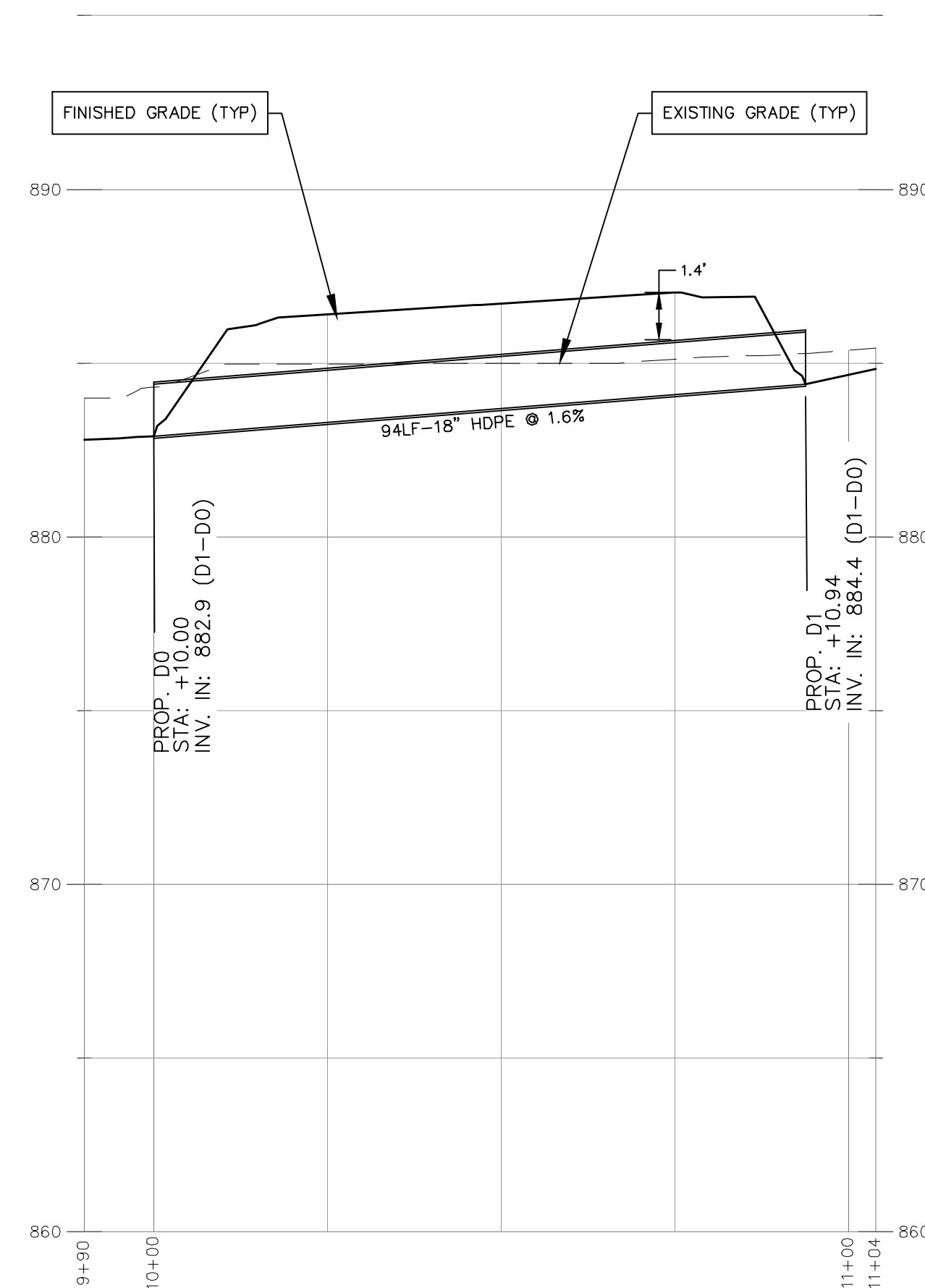
STORM B PROFILE



STORM B CROSS PROFILE



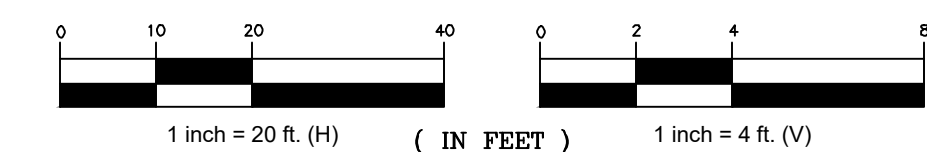
STORM OUTLET PROFILE



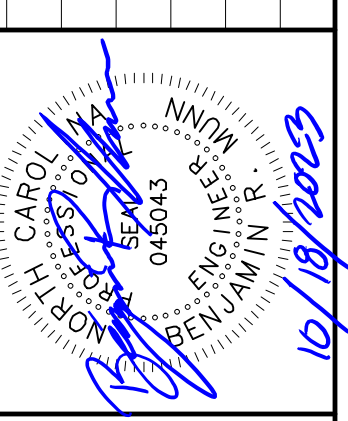
CULVERT ALIGNMENT PROFILE

STORM PROFILES

PROFILE SCALE



FOR REVIEW ONLY



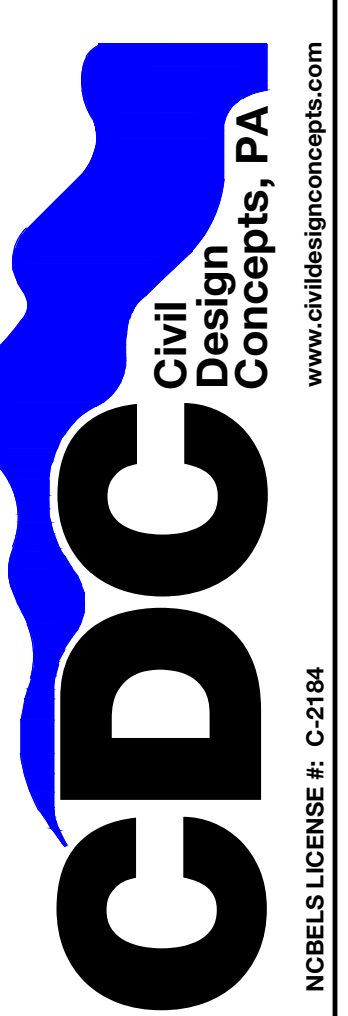
STORM PROFILES FOR:  
 DRAWN BY: KWN  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 BS: TBD  
 NCDE EC NO.: TBD

**BOILING SPRINGS RETAIL STORE**  
 THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

NO. DATE DESCRIPTION

1	06/29/23	PERMIT SUBMITTAL
2	09/17/23	DOT & EC RE-SUBMITTAL
3	10/18/23	ZONING & STORM RE-SUBMITTAL

SHEET  
**C502**



165 DARTON AVENUE  
 ASHVILLE, NC 28801  
 PHONE (828) 252-5589  
 FAX (828) 252-5585

52 WALNUT STREET - SUITE 9  
 WAYNEVILLE, NC 28787  
 PHONE (828) 252-5589  
 FAX (828) 455-5454

www.civildesignconcepts.com  
 NCELS LICENSE # C-2184

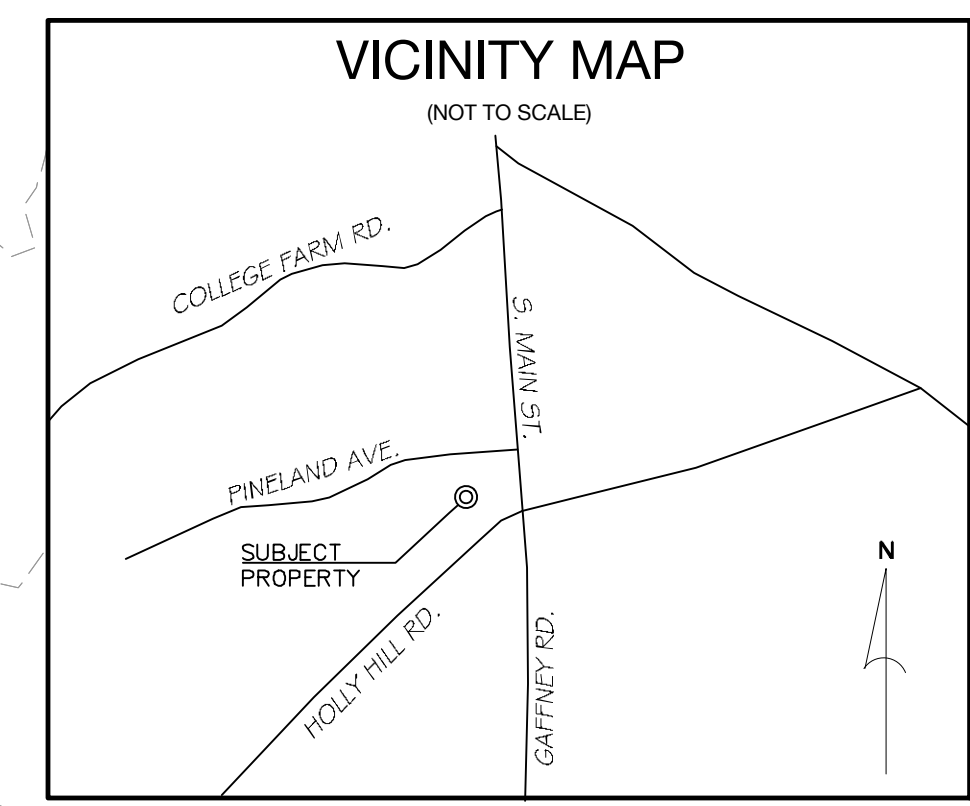


**WATER NOTES**

1. SEE WATER DETAIL SHEETS FOR ALL GENERAL WATER NOTES. CONTRACTOR RESPONSIBLE FOR INCLUSION OF DETAILS SHEETS WITH ALL WATER PLANS.
2. WATER METERS ARE TO BE PLACED MAXIMUM OF 5' OFF EDGE OF PAVEMENT/SIDEWALK. WHEN A UTILITY STRIP IS PRESENT, METERS SHALL BE INSTALLED WITHIN STRIP. WHEN SIDEWALK IS CONSTRUCTED AND NO STRIP IS AVAILABLE, SERVICE LINES CROSSING SIDEWALK SHALL BE CONSTRUCTED WITH PVC SLEEVE EXTENDING 6" ON EITHER SIDE OF SIDEWALK PER CITY OF ASHEVILLE STANDARDS AND SPECIFICATIONS.
3. TYPICAL EASEMENTS FOR WATER LINES LOCATED OUTSIDE ESTABLISHED UTILITY EASEMENTS OR ROAD RIGHT-OF-WAYS SHALL BE A 20 FEET. THE ENTIRE WATER EASEMENT MUST BE CLEAR AND REMAINED CLEARED OF TREE PLANTINGS, EXISTING TREES, AND ANY PERMANENT STRUCTURES.
4. TO SCHEDULE THE REQUIRED INSPECTIONS ON ALL WORK, CALL THE CIVIL DESIGN CONCEPTS INSPECTIONS HOTLINE AT 828-771-4755, OR EMAIL AT INSPECTIONS@CDGGO.COM. FAILURE TO SCHEDULE INSPECTIONS MAY RESULT IN UNCOVERING OR REDOING WORK.

REVONDA S. HUMPHRIES  
 PIN: 2505-3149483  
 DB 14-U PG 451  
 PB 5 PG 45,  
 LOTS 179-183  
 R15 RESIDENTIAL

GEORGE D. PEARSON  
 PRISCILLA M. PEARSON  
 PIN: 2505-41-1456  
 DB 16-A PG 641  
 R15 RESIDENTIAL



**DEVELOPMENT DATA**

OWNER/DEVELOPER: THE BROADWAY GROUP  
 216 WEST SIDE SQ.  
 HUNTSVILLE, AL 35801  
 808 BROADWAY  
 (256) 533-7287

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.  
 168 PATTON AVENUE  
 ASHEVILLE, NC 28801  
 BEN MUNN, P.E.  
 (828) 252-5388

CONTACT:

SURVEYOR: MCABEE & ASSOCIATES, PA.  
 PO BOX 1768  
 FAIRVIEW, NC 28730  
 J. BARRY WEST, PLS  
 (828) 628-1295

CONTACT:

**PROJECT DATA**

PIN: 2505319148  
 ADDRESS: 442 GAFFNEY RD, BOILING SPRINGS, NC  
 14E/57  
 PROJECT ACREAGE: 1.92± ACRES  
 CURRENT ZONING: B-1 COMMERCIAL  
 PROPOSED ZONING: B-2 COMMERCIAL

SETBACKS:  
 FRONT: 20'  
 SIDES: 20'  
 REAR: 30'  
 CORNER: CORNER CLIP INCLUDED IN R/W

DISTURBED AREA: 1.92 AC

IMPERVIOUS AREA: PRE 0.004 ACRES (0.2%), POST 1.03 ACRES (57%)  
 PERVIOUS AREA: 1.81 ACRES (99.8%), 0.78 ACRES (43%)

**ZONING DATA**

PARKING CALCULATIONS:

VEHICULAR:  
 REQUIRED SPACES: (MIN. 1/400 SF - 150% THE MIN.)  
 SALES AREA: 10,387  
 SPACES PROVIDED: 26 38 PLUS ADA

HANDICAPPED SPACES: SPACES REQUIRED: 2 SPACES PROVIDED: 2  
 BICYCLE: MINIMUM REQUIRED: 0 AMOUNT PROVIDED: 0

**BUILDING DATA:**

BUILDING TYPE	DESCRIPTION	HEIGHT	GFA
C PLUS	SINGLE STORY STEEL	18'	12,668 SF

168 PATTON AVENUE  
 ASHEVILLE, NC 28801  
 PHONE (828) 252-5388  
 FAX (828) 252-5385

52 WALNUT STREET - SUITE 9  
 WAYNESVILLE, NC 28786  
 PHONE (828) 252-5388  
 FAX (828) 252-5385

**CDC** Civil Design Concepts, PA  
 www.civildesignconcepts.com  
 NCBELS LICENSE # C-2184

NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS

**FOR REVIEW ONLY**

SEAL: CIVIL ENGINEER BEN MUNN, P.E. NO. 045043  
 DATE: 10/18/2023

PROPOSED BUILDING UTILITY CONNECTION  
 (SEE PLUMBING DRAWINGS FOR CONTINUATION)

PLAN D D.G.P.M.  
 GROSS 12,668 SF  
 SALES 10,387 SF  
 FE: 893.30

PROPOSED GAS LINE  
 (COORDINATE WITH UTILITY)

EXISTING FIRE HYDRANT (TYP)

PROPOSED STORM SYSTEM (TYP)

PROPOSED 1-1" RP2 BACKFLOW PREVENTER IN ABOVE GROUND HEATED ENCLOSURE (ENCLOSURE TO MEET ASSE 1060 STANDARD REQUIREMENTS)(SEE DETAIL D7.01)  
 1-1" UL/FM APPROVED SWING CHECK VALVE LOCATED WITHIN RPA ENCLOSURE (SEE DETAIL D7.01)  
 (ELECTRIC SERVICE REQUIRED FOR HEATED ENCLOSURE)

PROPOSED 5/8" WATER METER BOX (TYP) (SEE DETAIL D7.02)

PROPOSED X"-X"/X" TAPPING SADDLE (SEE DETAIL DX.XX)

PROPOSED SEWER CROSSING (18" MIN. VERTICAL SEPARATION)

PROPOSED CONNECTION TO EXISTING SEWER MANHOLE (CONTRACTOR TO INSTALL SERVICE LINE BY DIRECTIONAL DRILL)

PROPERTY LINE (TYP)

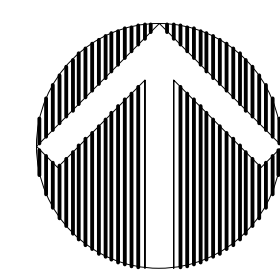
APPROXIMATE LOCATION OF EXISTING WATER LINE (CONTRACTOR TO VERIFY LOCATION/ SIZE/ MATERIAL PRIOR TO ORDERING MATERIALS)

PROPOSED 4" SCH 40 PVC SEWER SERVICE (TYP) (2% MIN. SLOPE) (SEE DETAIL D6.01)

PROPOSED 1" SDR 21 PVC WATER LINE (TYP) (3" MIN. COVER) (SEE DETAIL D7.06)

PROPOSED SEWER CLEANOUT (TYP) (100' MAX SPACING) (SEE DETAIL 6.04)

CDC INSPECTIONS HOTLINE:  
 828-771-4755 OR INSPECTION@CDGGO.COM

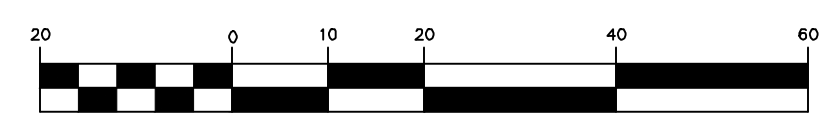


Know what's below.  
 Call before you dig.

NORTH

**UTILITY PLAN**

GRAPHIC SCALE



( IN FEET )  
 1 inch = 20 ft.

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

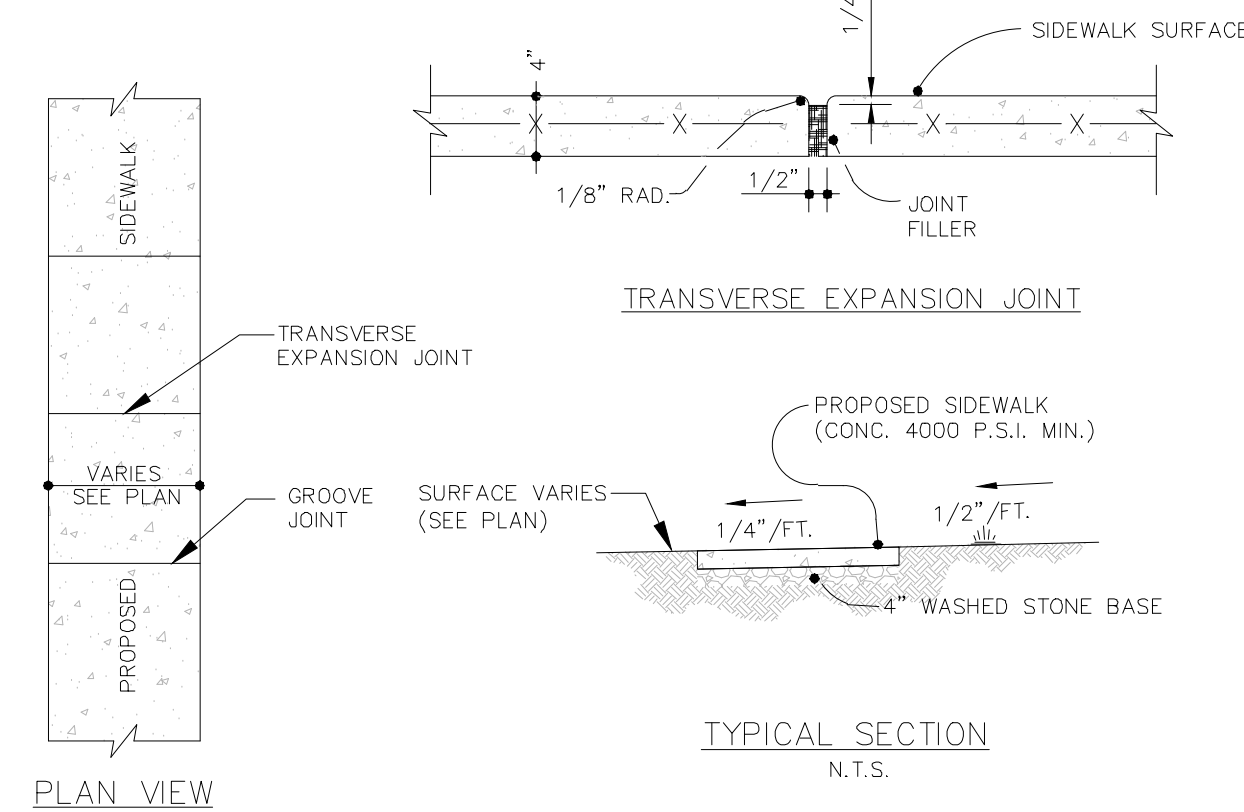
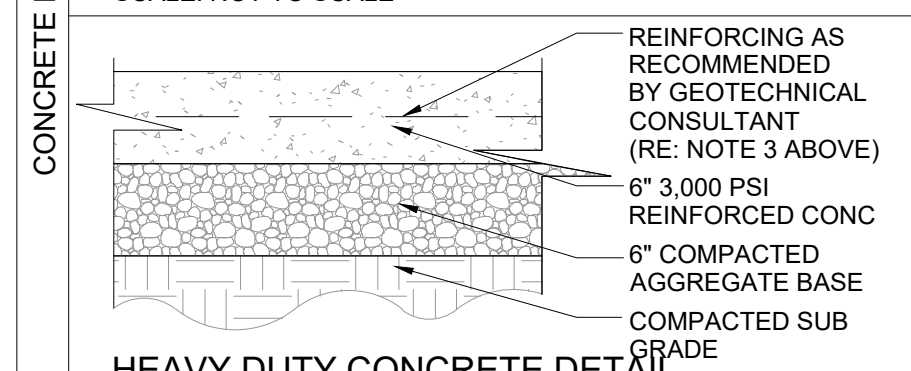
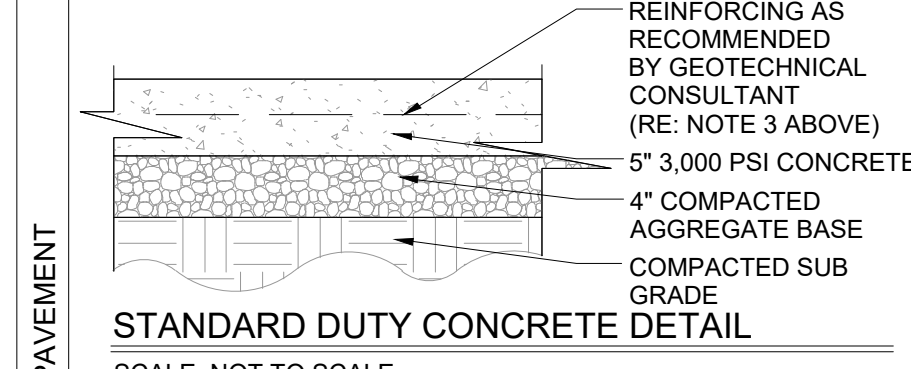
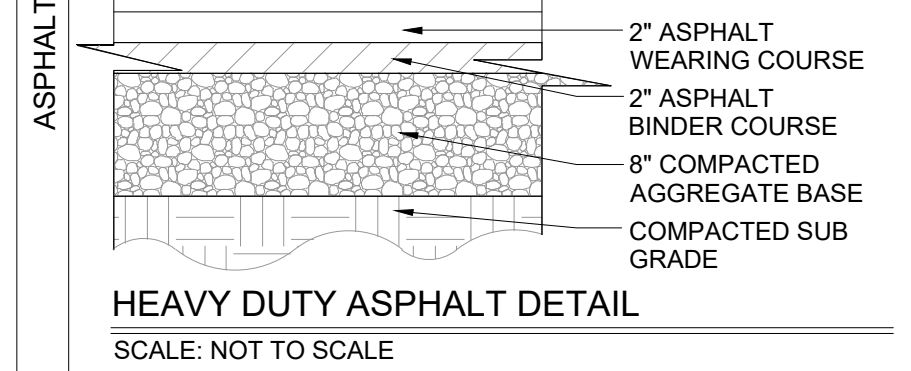
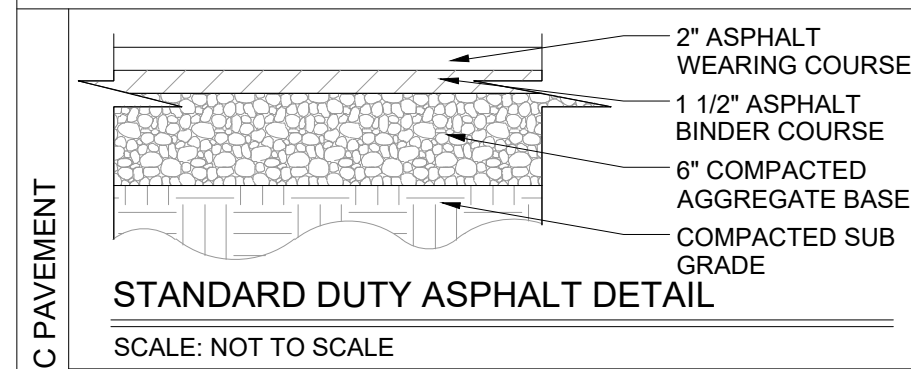
UTILITY PLAN FOR:  
 DRAWN BY: KWN  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 BS NCDEE EC NO.: TBD

SHEET  
**C601**



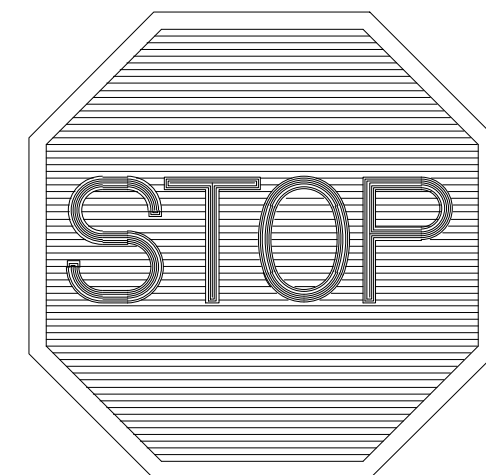
**PAVEMENT DETAILS**

- DETAILS ARE STANDARD REQUIREMENTS AND MAY INCREASE OR DECREASE WITH VARIOUS SOIL CONDITIONS. A GEOTECHNICAL INVESTIGATION WITH PAVEMENT DESIGN RECOMMENDATIONS SHALL BE COMPLETED FOR EACH DEVELOPMENT. THE FOLLOWING DETAILS ARE MINIMUM PAVEMENT REQUIREMENTS, INCREASED RECOMMENDATIONS ARE TO BE USED.
- THE SUBGRADE MATERIALS SHALL BE PROOF ROLLED AND/OR SCARIFIED AND COMPACTED PRIOR TO PLACEMENT OF BASE MATERIAL. WHERE EXISTING SUBGRADE MATERIALS ARE UNSUITABLE, THEY SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT MATERIAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
- HEAVY DUTY CONCRETE PAVEMENT AND STANDARD DUTY CONCRETE PAVEMENT (AS RECOMMENDED BY THE GEOTECHNICAL REPORT OR MINIMUMS) SHALL BE STEEL REINFORCED. REINFORCEMENT TYPE SHALL BE PRIOR APPROVED BY OWNER.
- CONCRETE PAVEMENT PLAN SHALL BE PROVIDED TO OWNER FOR PRIOR APPROVAL. ALL JOINTS MUST BE SEALED WITH AN APPROVED SEALANT. STEEL REINFORCING SHALL BE USED AT JOINTS. REFER TO ACI 330R (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS) FOR JOINT DESIGN AND LAYOUT.



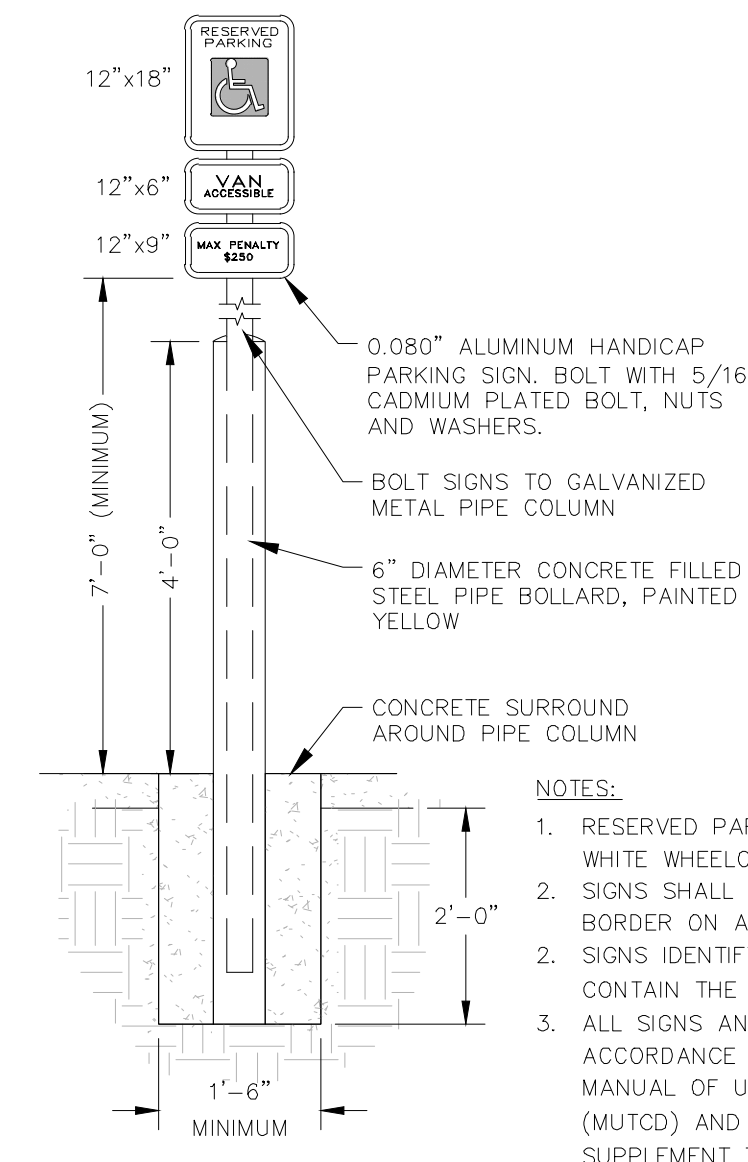
- NOTES:**
- TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 40 FEET.
  - ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
  - A GROOVE JOINT 1" DEEP WITH 1/3" RADIUS SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
  - 6"x6" @ 1.4x1.4 W.W.F. REQUIRED IN ALL SIDEWALKS.

**D2.01 SIDEWALK DETAIL**  
NOT TO SCALE



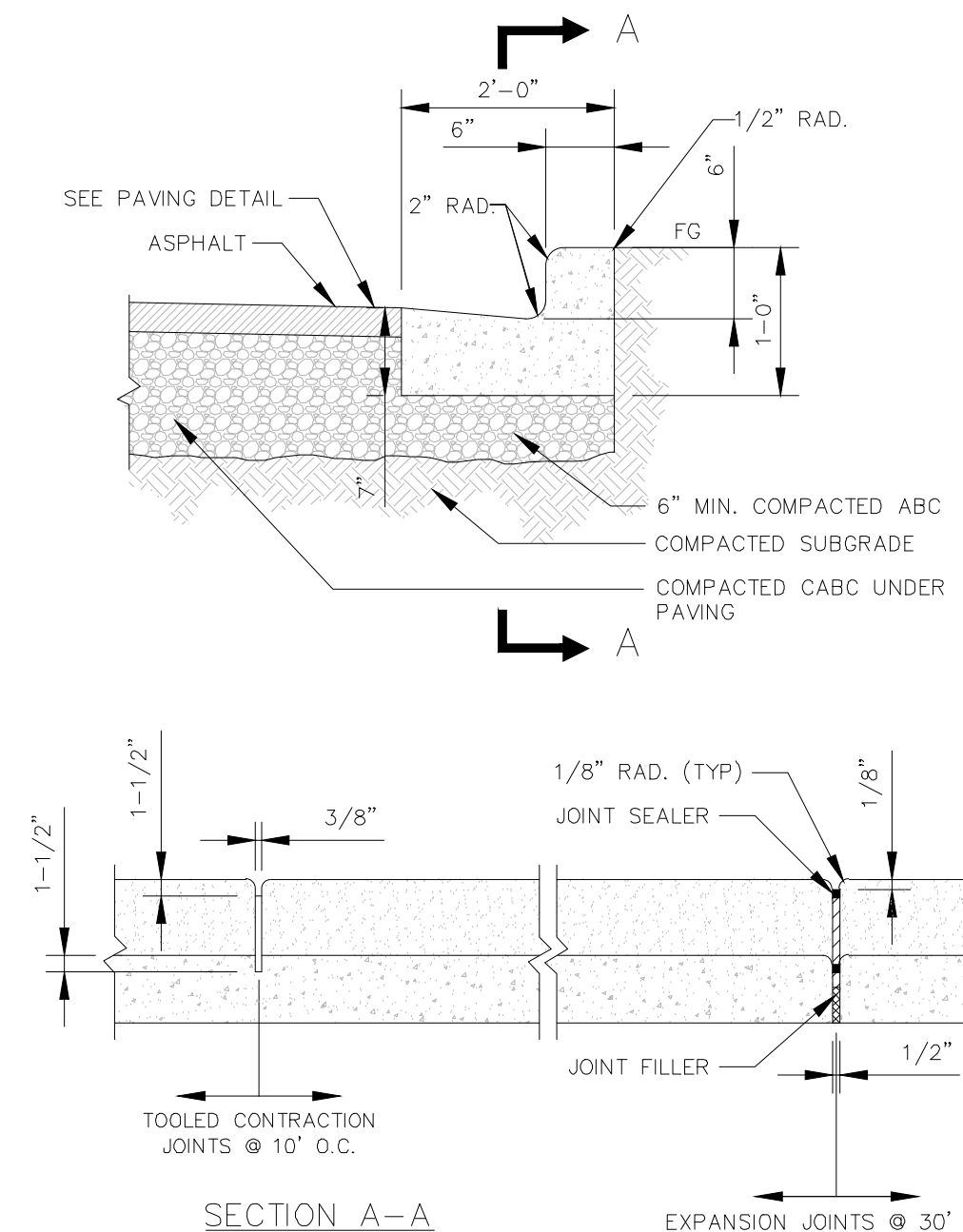
- NOTES:**
- SIGN SHALL HAVE WHITE LETTERS ON A RED REFLECTIVE BACKGROUND.
  - ALL SIGNS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

**D2.04 STOP SIGN DETAIL**  
NOT TO SCALE



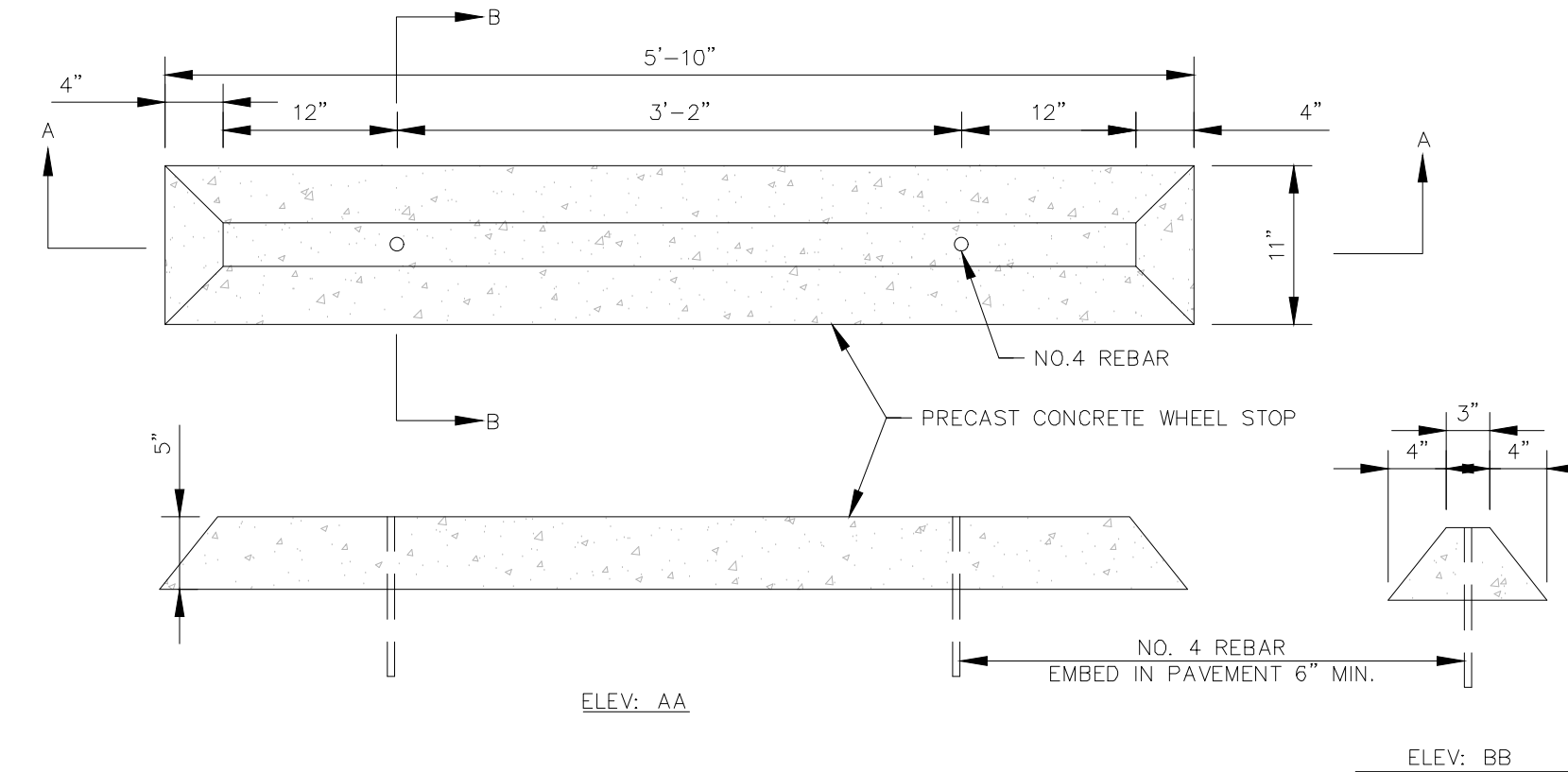
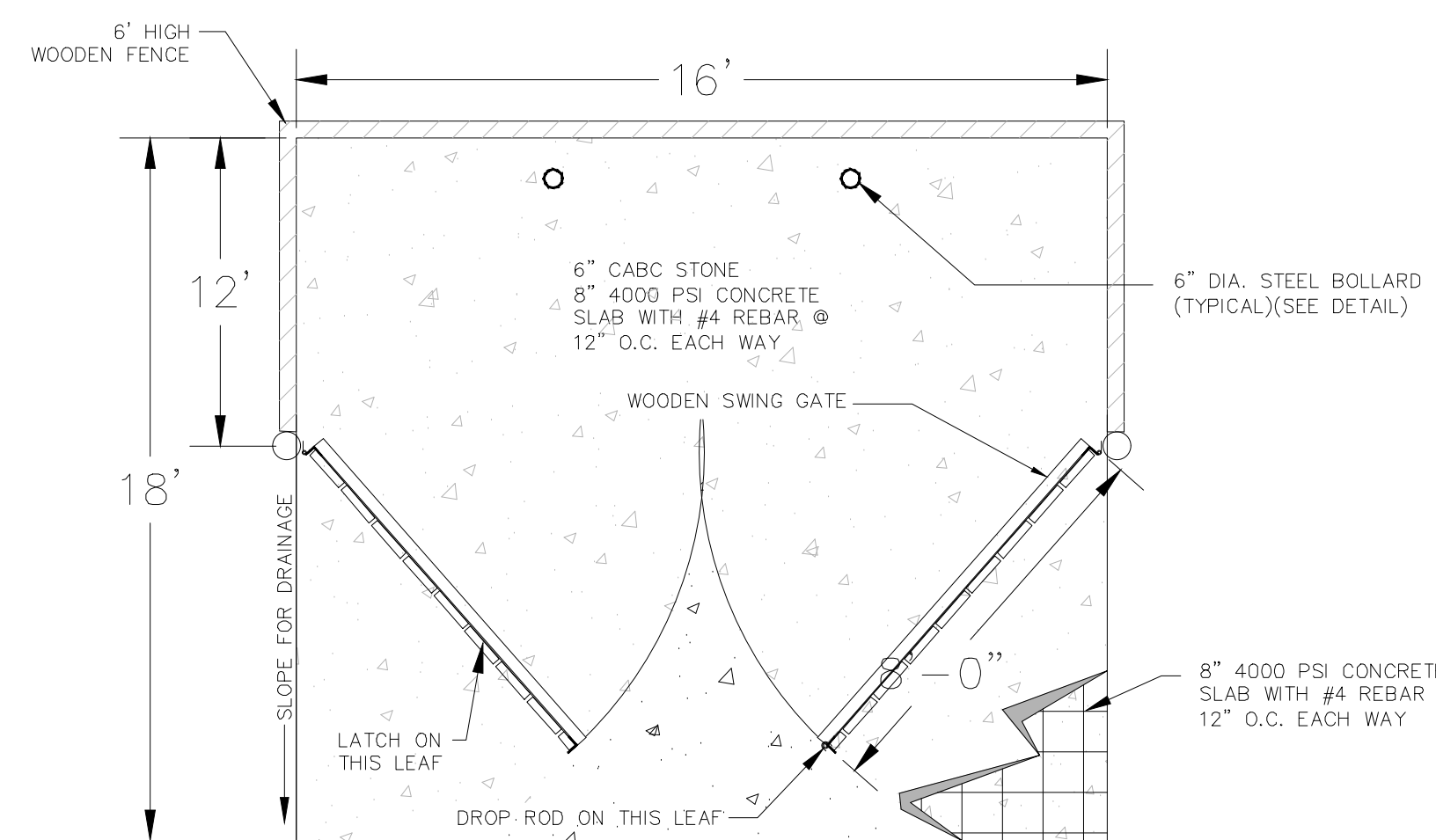
- NOTES:**
- RESERVED PARKING SIGN SHALL INCLUDE A WHITE WHEELCHAIR SYMBOL ON A BLUE SQUARE.
  - SIGNS SHALL HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.
  - SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
  - ALL SIGNS AND STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

**D2.13 ACCESSIBLE PARKING SPACE SIGN**  
NOT TO SCALE

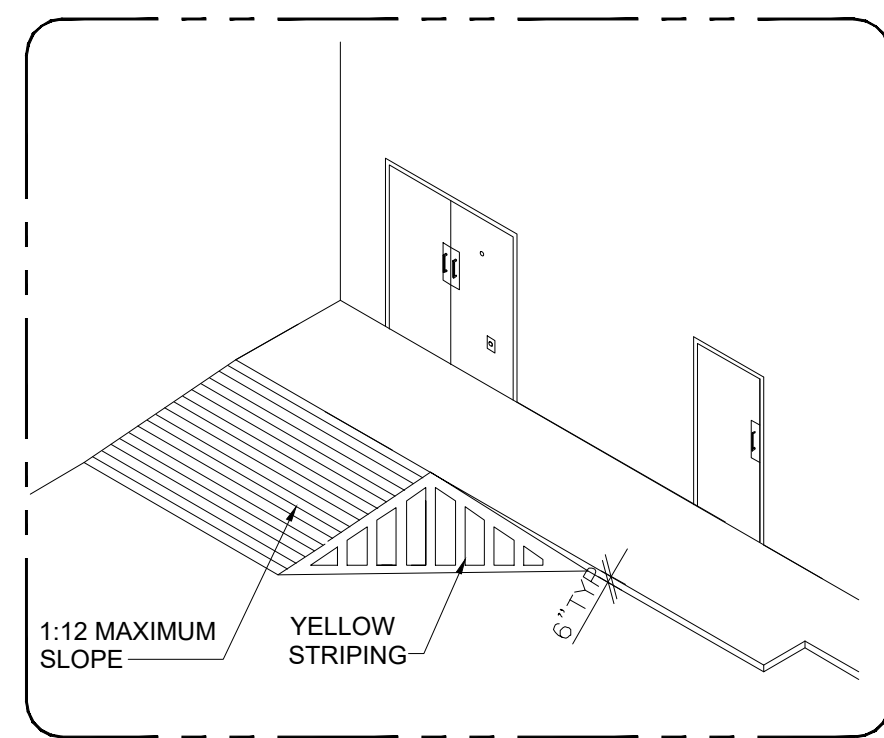


- CONSTRUCTION NOTES:**
- CURB SHALL BE CONSTRUCTED WITH 4000 PSI CONCRETE
  - SURFACE SHALL BE GIVEN A LIGHT BROOM FINISH WITH THE BRUSH MARKS PARALLEL TO THE CURB.
  - SUB-GRADE SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR TEST
  - CABC SHALL BE COMPACTED TO 100% OF MODIFIED PROCTOR TEST

**D2.07 CONCRETE CURB & GUTTER (24") DETAIL**  
NOT TO SCALE



**D2.10 WHEEL STOP DETAIL**  
NOT TO SCALE

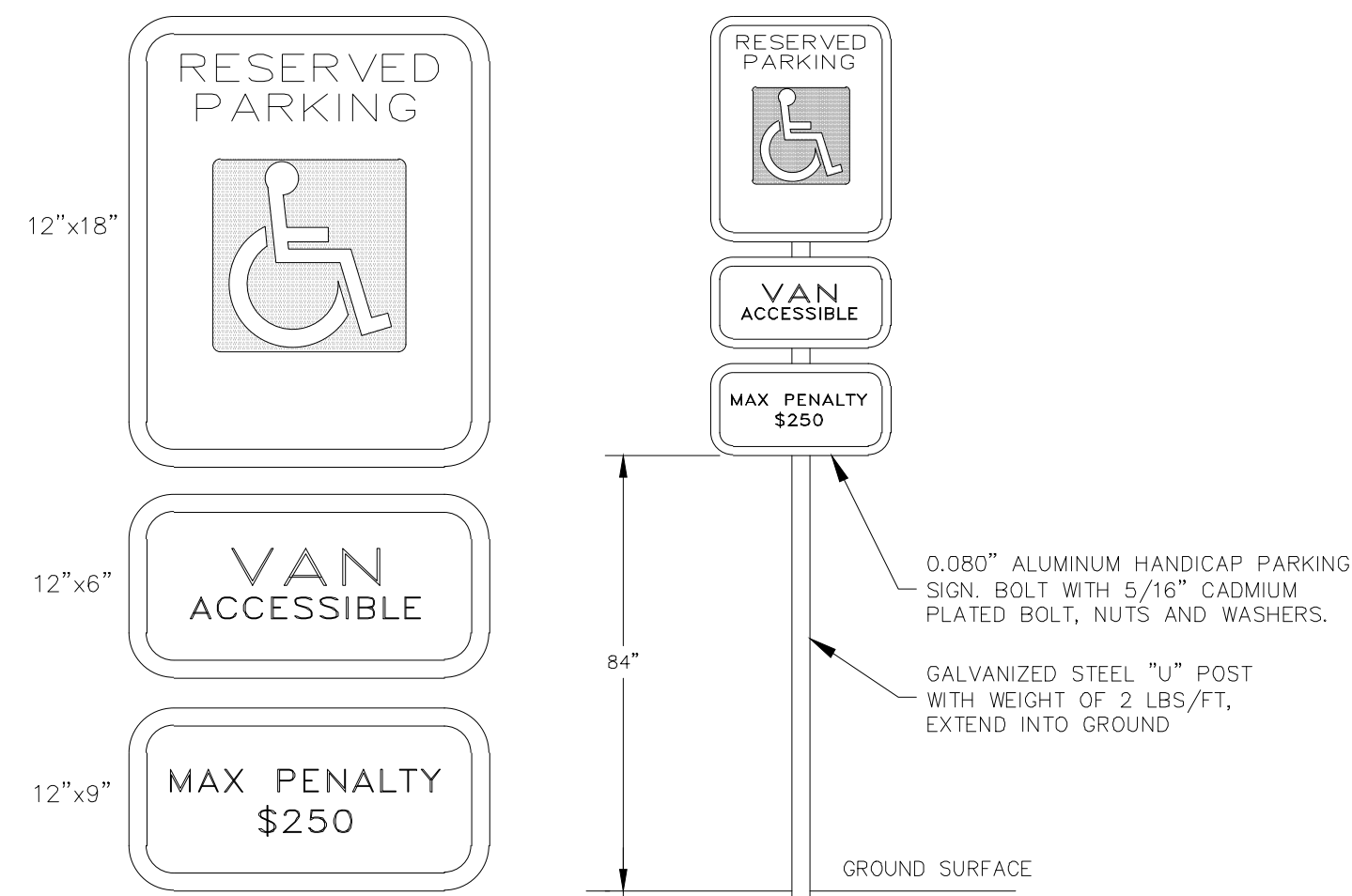


**STRIPING LEGEND**

YELLOW CURBING AND BOLLARDS - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST. 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300
STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT YELLOW TMS495
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT "H.C." BLUE

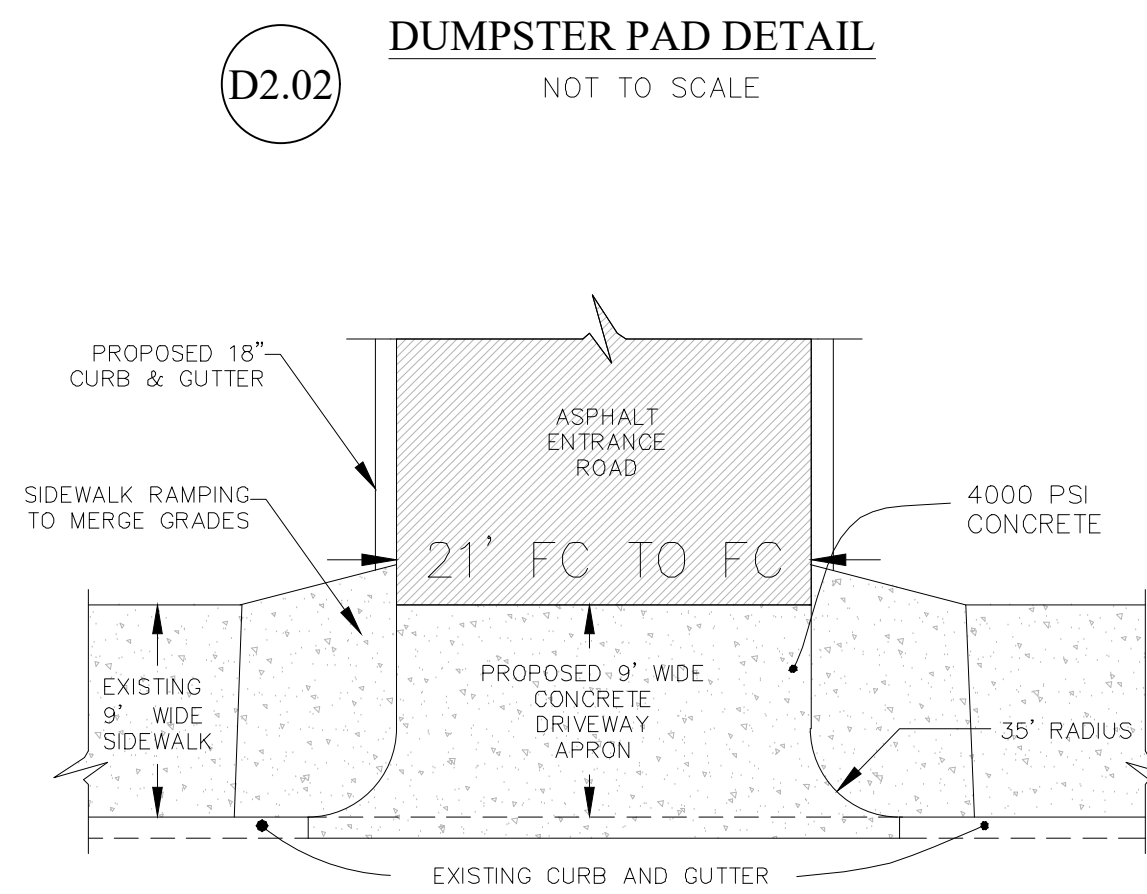
CONTRACTOR IS RESPONSIBLE FOR ALL PUBLIC UTILITY CONNECTIONS (ELECTRIC, WATER, GAS, SEPTIC, SEWER) AS WELL AS PROVIDING ALL INFRASTRUCTURES REQUIRED BY UTILITY COMPANY

**D2.12**



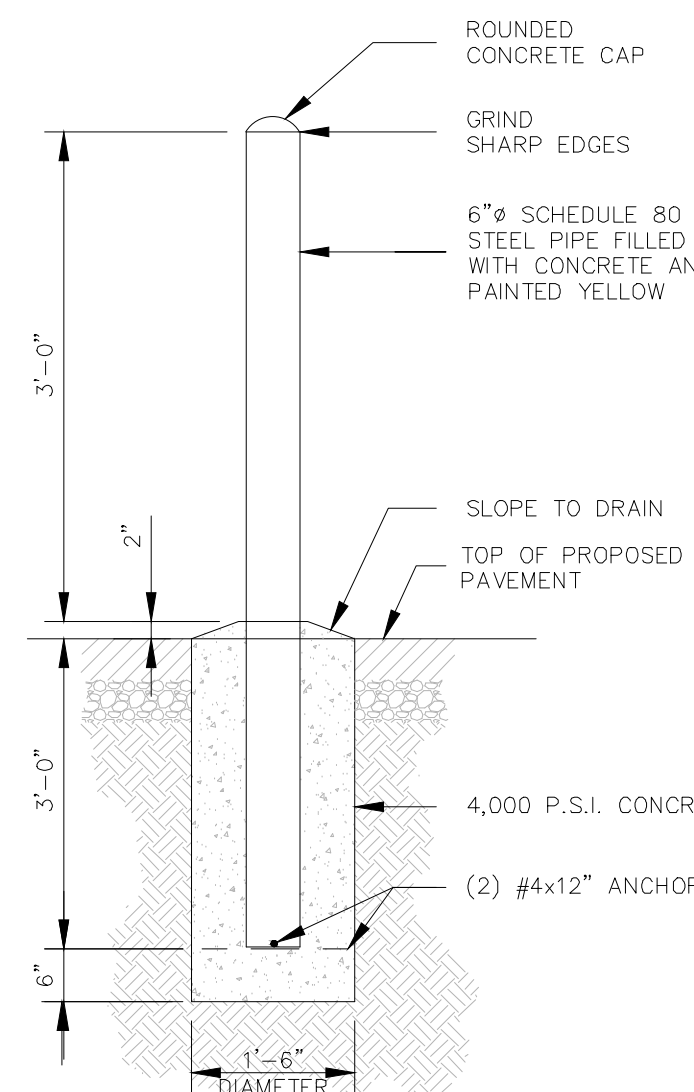
- NOTES:**
- RESERVED PARKING SIGN SHALL INCLUDE A WHITE WHEELCHAIR SYMBOL ON A BLUE SQUARE.
  - SIGNS SHALL HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.
  - SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
  - ALL SIGNS AND STRIPING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

**D2.08 ACCESSIBLE PARKING SPACE SIGN**  
NOT TO SCALE

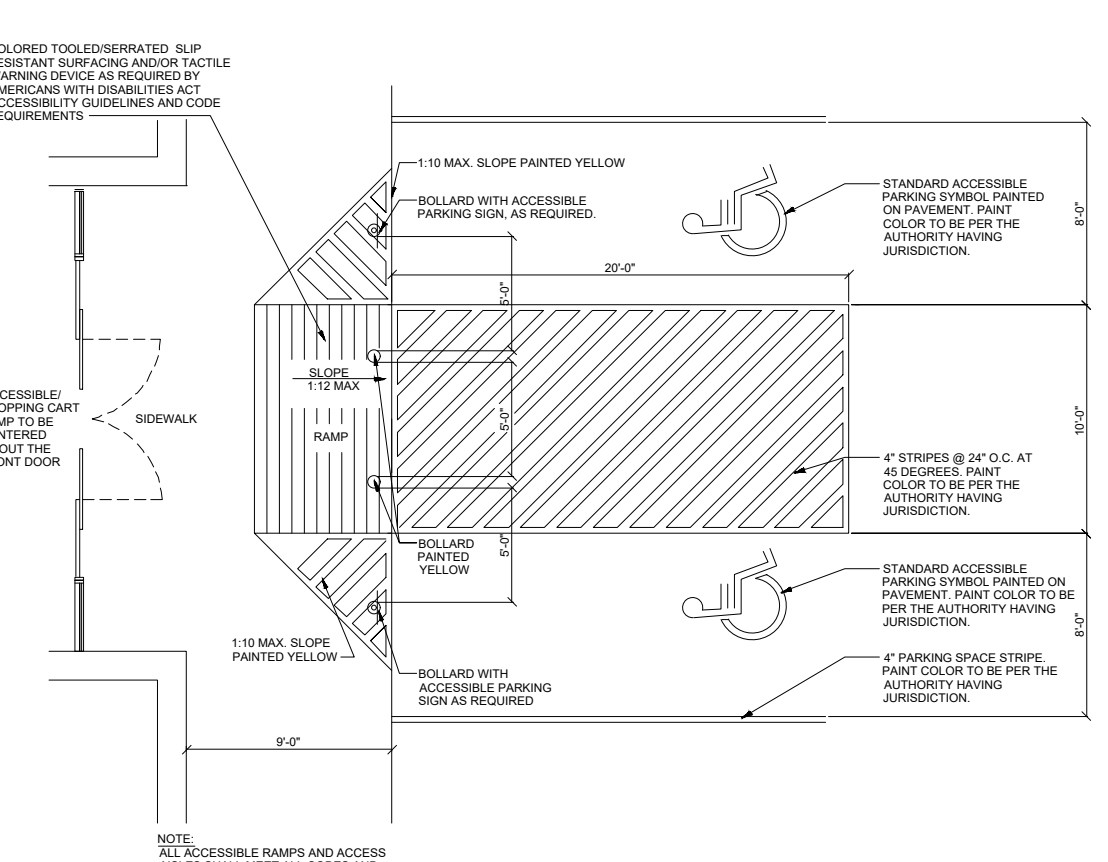


- NOTE:**
- CURB SHALL BE TAPERED TO FINISH FLUSH WITH SIDEWALK.
  - BEGINNING RADIUS SHALL NOT ENCR OACH ON ADJACENT PROPERTIES BASED ON A PROJECTION OF THE PROPERTY LINE FROM THE RIGHT OF WAY TO THE CURB LINE.
  - ALL CONCRETE SHALL BE A MINIMUM OF 4,000 PSI.

**D2.05 ENTRANCE ROAD CONNECTION TO SOUTH MAIN STREET**  
NOT TO SCALE



**D2.09 STEEL BOLLARD DETAIL**  
NOT TO SCALE



**D2.11 ACCESSIBLE PARKING SPACE DETAIL**  
NOT TO SCALE

**SITE DETAILS**

**FOR REVIEW ONLY**

DATE: 06/29/23  
NO. 1  
DESCRIPTION: PERMIT SUBMITTAL  
BY: KWN

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
NCEDEC NO.: TBD

**SHEET**

**C921**

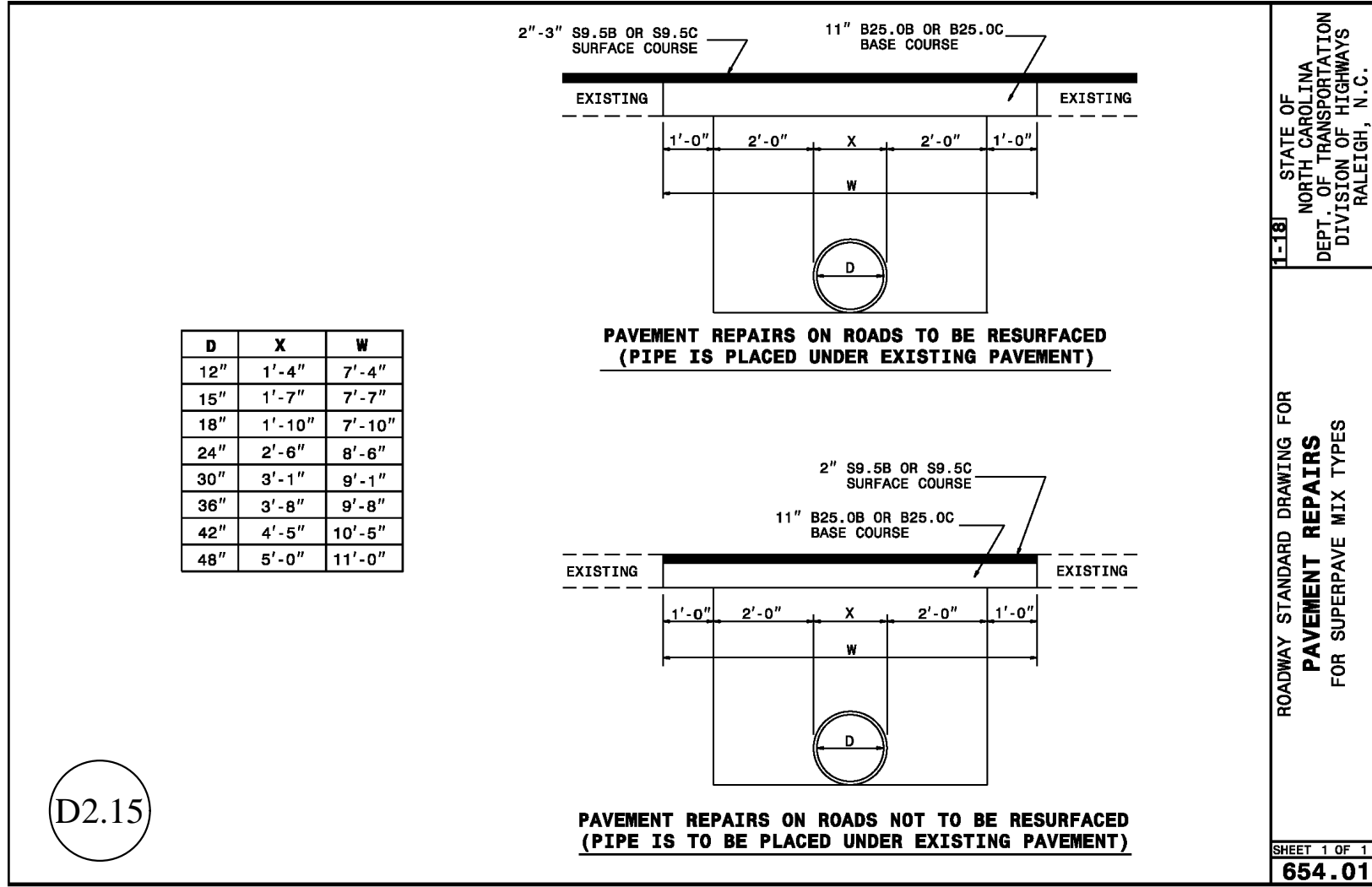
**CDC** Civil Design Concepts, PA

168 DARTON AVENUE  
ASHVILLE, NC 28801  
PHONE (828) 252-5589  
FAX (828) 252-5585

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 27884  
PHONE (828) 252-5589  
FAX (828) 252-5585

NCBELS LICENSE # C-2184  
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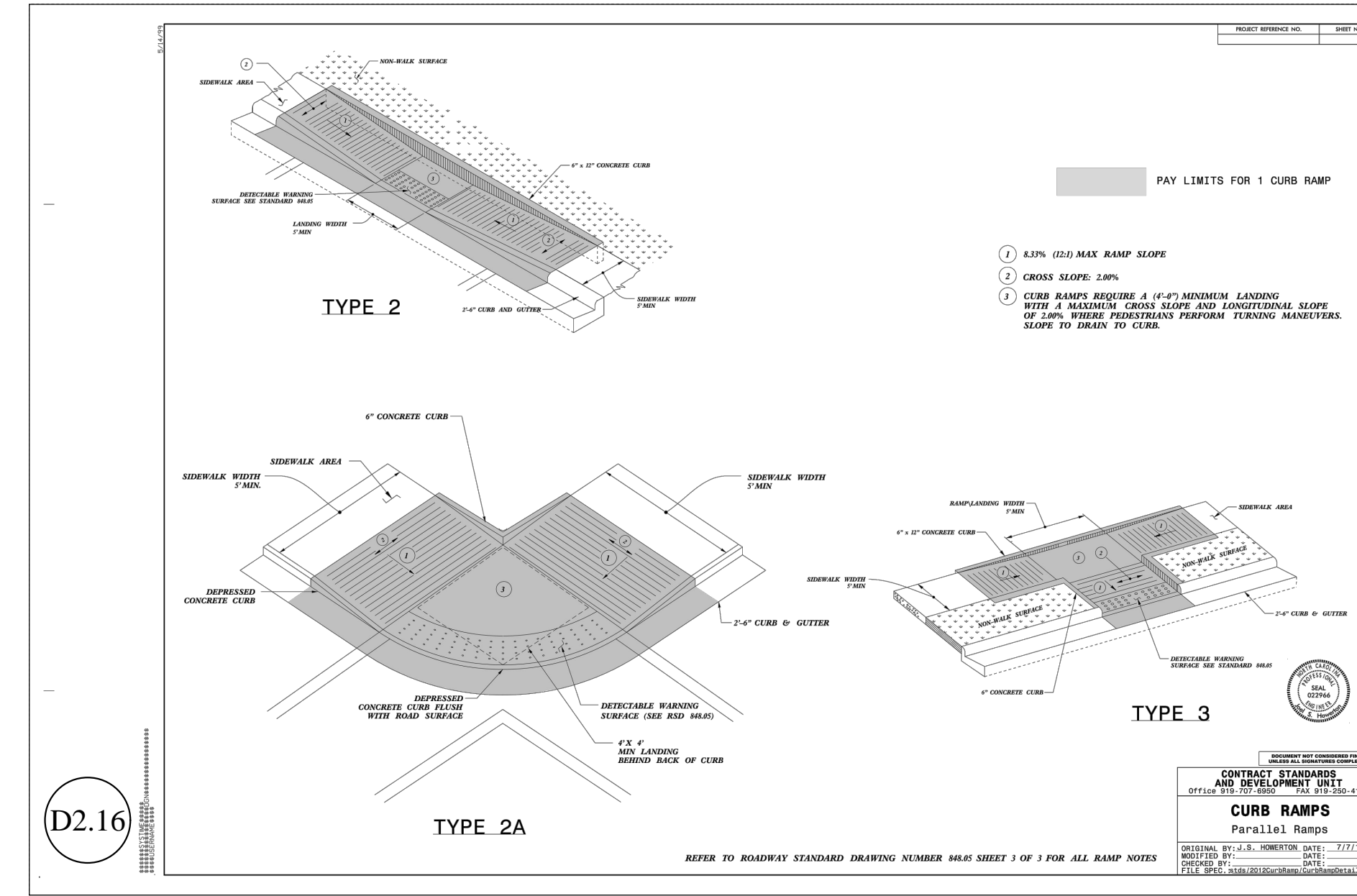


D2.15

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**PAVEMENT REPAIRS**  
FOR SUPERPAVE MIX TYPES

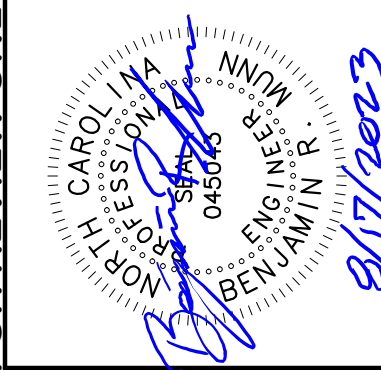
SHEET 1 OF 1  
**654.01**



D2.16

SITE DETAILS

FOR REVIEW ONLY



SITE DETAILS FOR:

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: BS  
NCDEQ EC NO.: TBD

NO. DATE DESCRIPTION

1	06/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL

SHEET  
**C922**

**CDC** Civil Design Concepts, PA

160 DARTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5989  
FAX (828) 252-5985

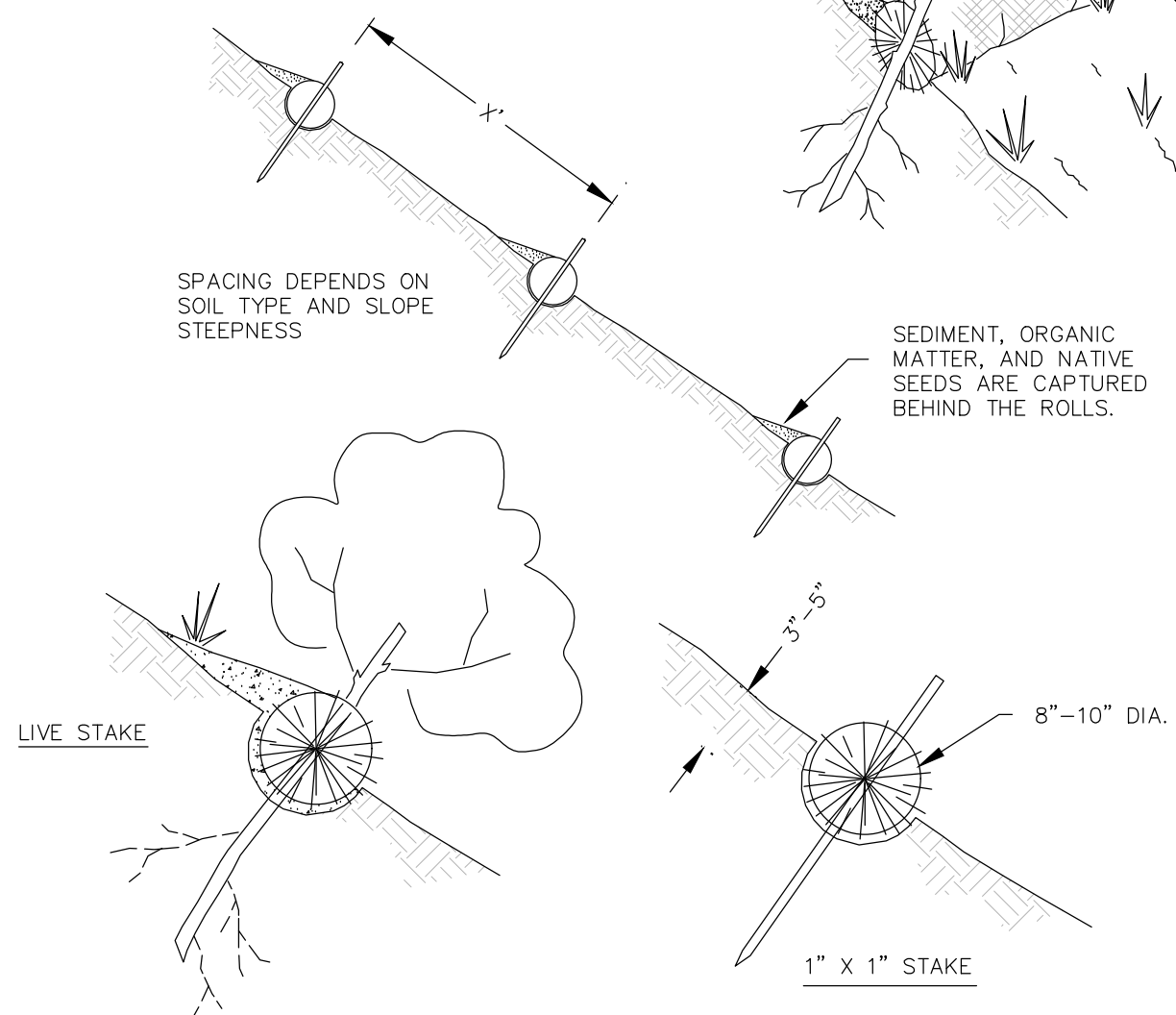
52 WALNUT STREET - SUITE 9  
WAYNEVILLE, NC 28794  
PHONE (828) 456-5441  
FAX (828) 456-5441

www.childdesignconcepts.com

NCIELS LICENSE # C-2184

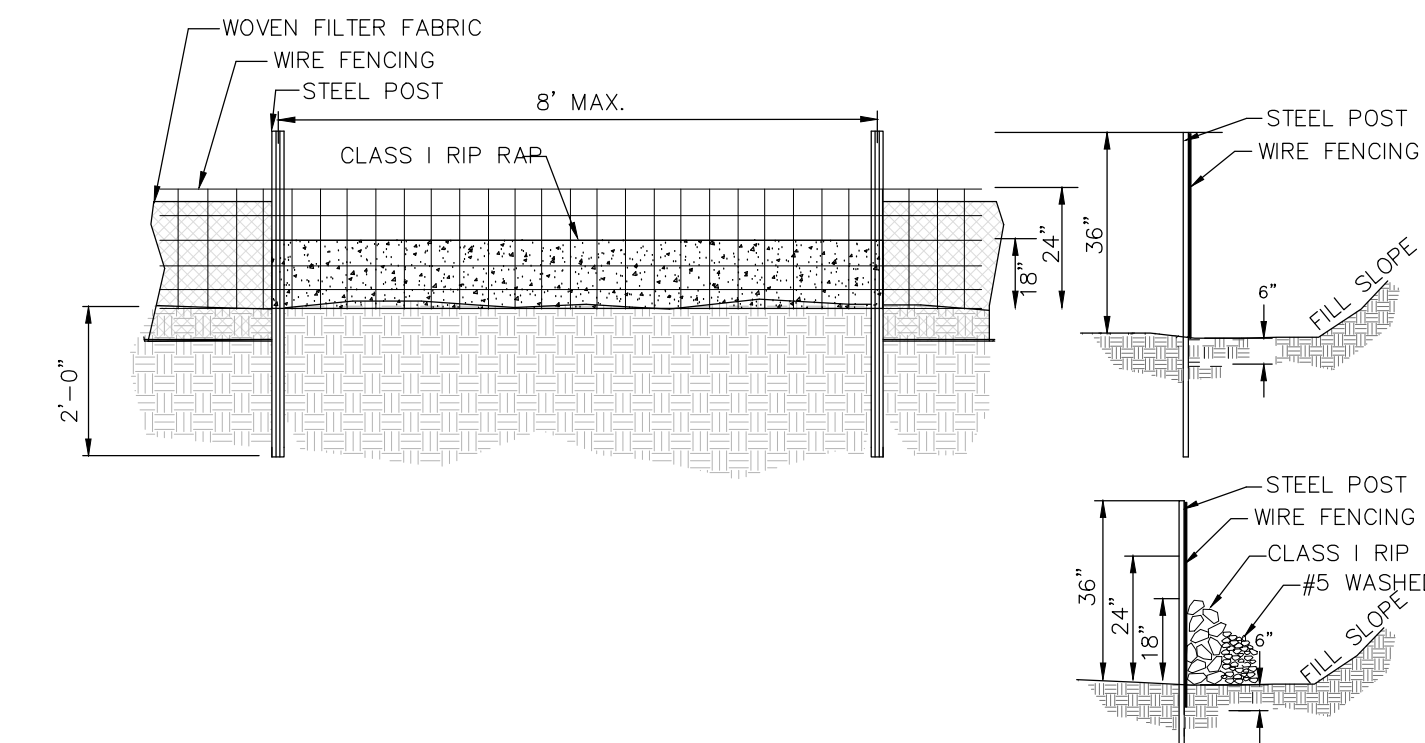


% SLOPE	X
5% >	60
5% - 10%	30
10% <	20

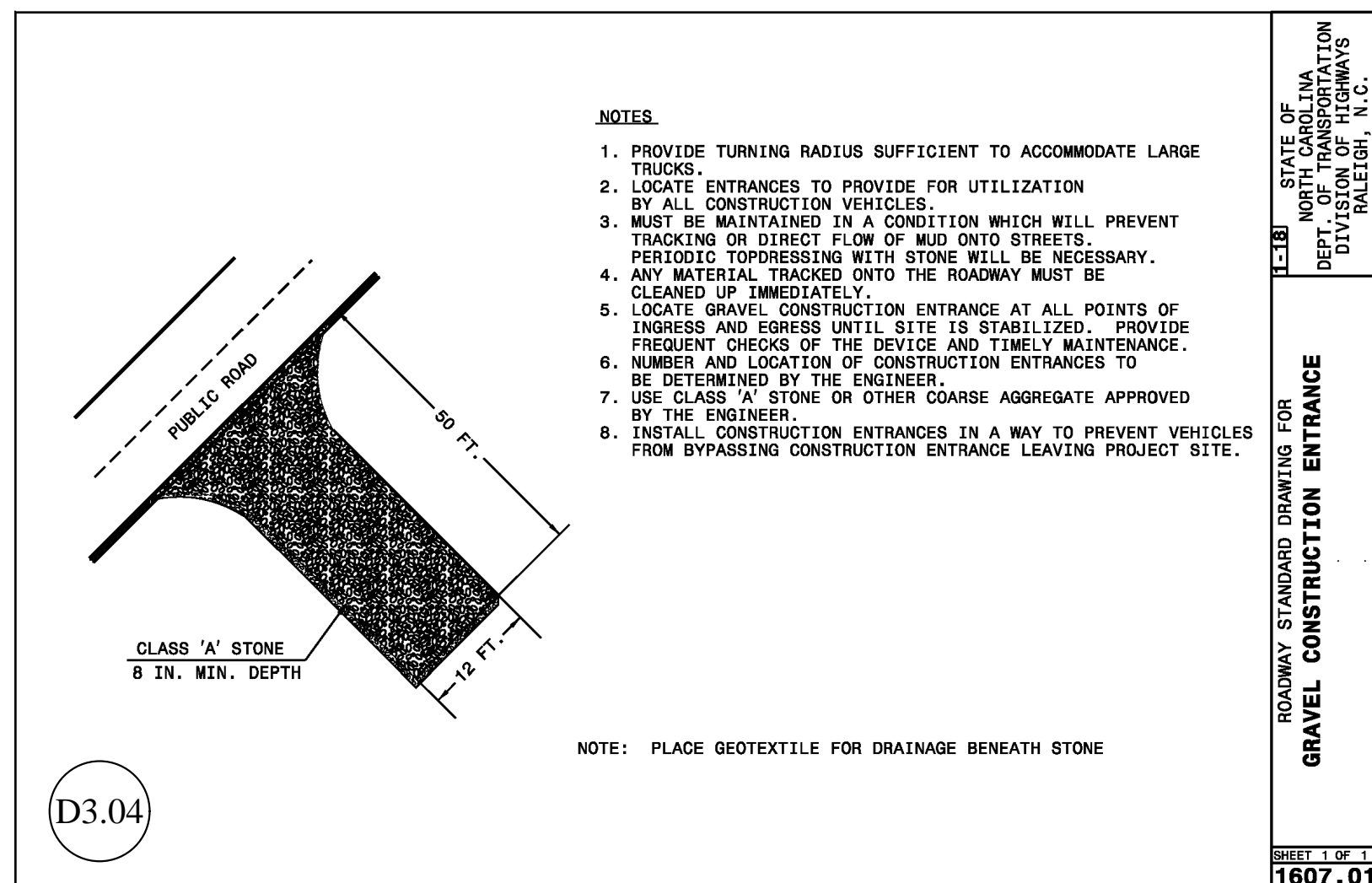


- NOTES:
- STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
  - STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS.

**D3.01 STRAW WATTLES**  
NOT TO SCALE



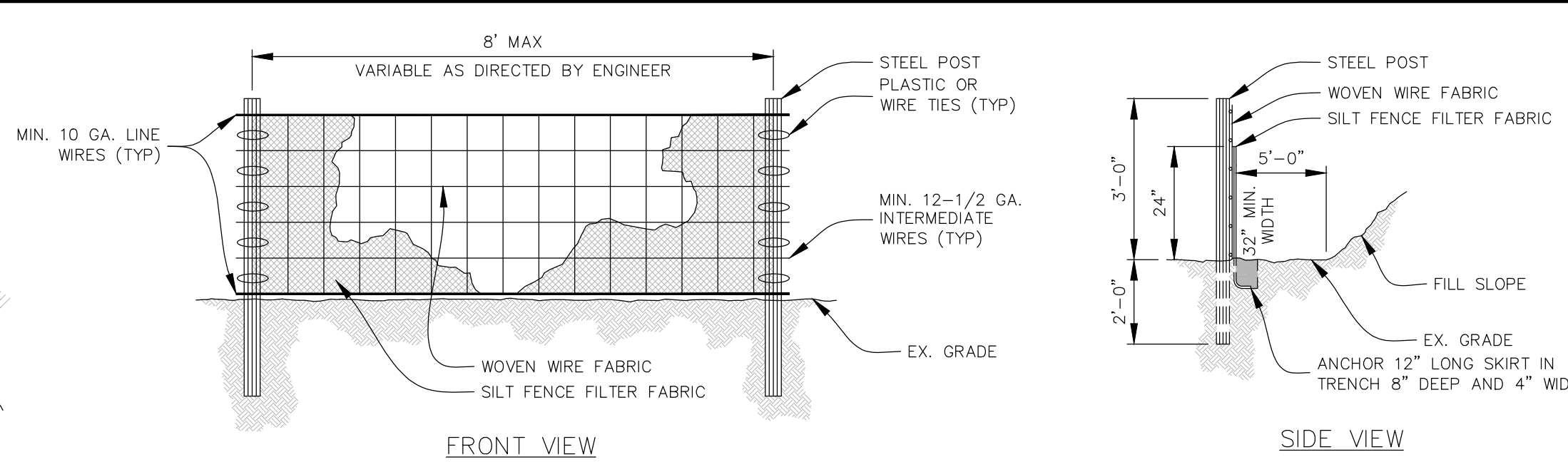
**D3.03 CONCENTRATED FLOW OUTLETS - SILT FENCE**  
NOT TO SCALE



- NOTES:
- PROVIDE TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS.
  - LOCATE ENTRANCES TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
  - MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
  - ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
  - LOCATE GRAVEL CONSTRUCTION ENTRANCE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. PROVIDE FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE.
  - NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER.
  - USE CLASS 'A' STONE OR OTHER COARSE AGGREGATE APPROVED BY THE ENGINEER.
  - INSTALL CONSTRUCTION ENTRANCES IN A WAY TO PREVENT VEHICLES FROM BYPASSING CONSTRUCTION ENTRANCE LEAVING PROJECT SITE.

NOTE: PLACE GEOTEXTILE FOR DRAINAGE BENEATH STONE

**D3.04**



**CONSTRUCTION NOTES:**

- CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
- ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24" ABOVE THE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.)
- CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4" MIN. OVERLAP TO THE NEXT POST.
- SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN THE FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC TIES SHOULD HAVE A MIN. 50 lb TENSILE STRENGTH.
- EXCAVATE A TRENCH APPROXIMATELY 4" WIDE AND 8" DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
- PLACE 12" OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
- DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

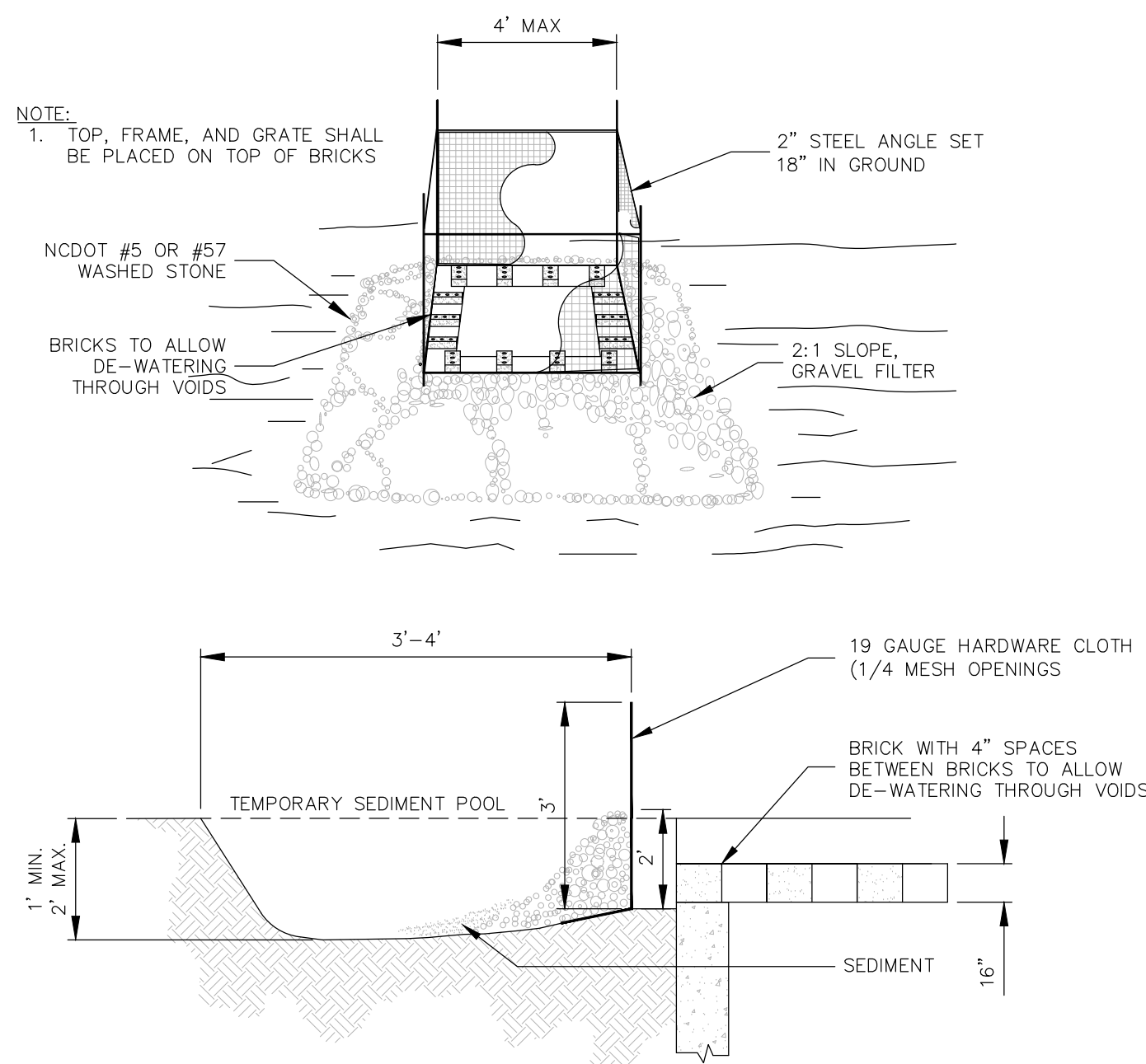
**MATERIALS NOTES:**

- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.02B OF THE NC DENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120°F.
- ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
- FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

**NOTES:**

- USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW
- FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED STONE. AS AN ANCHOR WHEN SILT FENCE IS PROTECTING CATCH BASIN.

**D3.02 SILT FENCE**  
NOT TO SCALE



**CONSTRUCTION NOTES:**

- LAY BRICK ALONG TOP OF CATCH BASIN WITH 4" SPACES BETWEEN BRICKS. SET FRAME AND GRATE ON BRICKS.
- CAREFULLY FIT HARDWARE WIRE OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS AROUND CATCH BASIN TO HOLD GRAVEL IN PLACE.
- USE CLEAN GRAVEL, 3/4- TO 1 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE GRATE ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.
- SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
- REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- THE STRUCTURE SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT AFTER EACH STORM EVENT AND REPAIRS MADE AS NECESSARY.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
- THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE BASIN HAS BEEN PROPERLY STABILIZED.
- ON LARGER DRAINAGE AREAS RIP RAP MAY BE REQUIRED UNDER THE WASHED STONE

**D3.05 STONE INLET PROTECTION**  
NOT TO SCALE

**CONSTRUCTION SEQUENCE**

- CALL NDEQ ASHEVILLE REGIONAL OFFICE AT 828-296-4500 TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE
- INSTALL SITE CONSTRUCTION ENTRANCE, STONE STAGING, AND MOBILIZATION AREA.
- INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED BY NDEQ, INCLUDING SEDIMENT BASIN, SILT FENCES, WATTLES, BARRIERS AND DIVERSION DITCHES AS NEEDED.
- STABILIZE BANKS AS EARLY AS POSSIBLE.
- PROCEED WITH GRADING, CLEARING AND GRUBBING.
- CONSTRUCT PROPOSED STORM DRAINAGE SYSTEM AND INSTALL INLET PROTECTION.
- APPLY TEMPORARY AND PERMANENT SEEDING, RIP RAP AND STABILIZATION MEASURES.
- ONCE ALL DISTURBED AREAS ARE STABILIZED, CONTACT THE INSPECTOR TO VERIFY SEDIMENT BASIN CAN BE REMOVED.
- CALL NDEQ ASHEVILLE REGIONAL OFFICE AT 828-296-4500 TO SCHEDULE FINAL INSPECTION PRIOR TO FILING NOTICE OF TERMINATION.

MAINTENANCE INSPECTIONS SHALL BE PERFORMED WEEKLY AND AFTER EACH RAINFALL. ALL REPAIRS NECESSARY SHOULD BE MADE IMMEDIATELY AND IN STRICT ACCORDANCE WITH NDEQ STANDARDS AND NPDES PERMIT.

**NCDEQ EROSION CONTROL NOTES**

GENERAL: ALL EROSION CONTROL MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF NDEQ. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH FOR ALL WORK.

- OBTAIN PROVISIONAL PERMIT.
- INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED.
- OBTAIN GRADING PERMIT THROUGH ON-SITE INSPECTION BY A REPRESENTATIVE OF NDEQ.
- PROCEED WITH GRADING, CLEARING, AND GRUBBING.
- SEED AND MULCH DENUDE AREA WITHIN EITHER 7 CALENDAR DAYS (SLOPES GREATER THAN 3:1) OR 14 CALENDAR DAYS (3:1 OR FLATTER). AFTER FINISHED GRADE ARE ESTABLISHED, TEMPORARY SEEDING AND SOIL AMENDMENTS SHALL BE PLACED ON A PREPARED SEEDBED AT THE FOLLOWING RATES PER ACRE.
  - LIME 2,000 LBS
  - FERTILIZER (10-10-10) 1,000 LBS
  - STRAW MULCH 4,000 LBS

FOR LATE WINTER/EARLY SPRING SEEDING ADD TO THE ABOVE:  
RYE GRASS 120 LBS  
SWITCHGRASS 50 LBS (OMIT IF COVER IS NOT TO EXTEND BEYOND JUNE)

FOR SUMMER SEEDING ADD:  
GERMAN MILLET 40 LBS

FOR FALL ADD:  
RYE GRASS 120 LBS

IF HYDROSEEDING IS USED, WOOD CELLULOSE MAY BE SUBSTITUTED FOR STRAW MULCH AT THE RATE OF 1,000 LBS PER ACRE.

- MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREA.
- REQUEST FINAL APPROVAL BY NDEQ.

**PERMANENT SEEDING MEASURES**

ALL PERMANENT MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF NDEQ. THE FOLLOWING APPLY TO AREAS WITHIN NDEQ PERMANENT SEEDING MIXTURE AREA #1M:

**SEEDING MIXTURE:**

SPECIES	RATE (LB/ACRE)
TALL FESCUE	100
PANICUM VIRGATUM	10
REDTOP	5
KENTUCKY BLUEGRASS	5

NURSE PLANTS:  
BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 40 LB/ACRE RYE (GRAIN). IT MAY BE BENEFICIAL TO PLANT THE GRASSES IN LATE SUMMER AND OVERSEED THE SWITCHGRASS IN MARCH.

**SEEDING DATES:**

	BEST	POSSIBLE
BELOW 2500 FT:	AUG. 15 - SEPT. 1 MAR. 1 - APR. 1	JULY 25 - SEPT 15 MAR. 1 - MAY 10
ABOVE 2500 FT:	JULY 25 - AUG. 15 MAR. 20 - APR. 20	JULY 15 - AUG. 30 MAR. 5 - MAY 15

COMPLETE SEEDING EARLIER IN FALL, AND START LATER IN SPRING ON NORTH- AND EAST-FACING SLOPES.

**SOIL AMENDMENTS:**

APPLY LIME AND FERTILIZER ACCORDING TO THE RESULTS OF A NC DEPARTMENT OF AGRICULTURE SOIL TEST

**MULCH:**

APPLY 4,000-5,000 LB/ACRE GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING, OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

**MAINTENANCE:**

MOW NO MORE THAN ONCE A YEAR. RESEED, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

**1) GROUND STABILIZATION**

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES GREATER 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 5' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

\*EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE. (SECTION II.B(2)(B))

**2) BUILDING WASTE HANDLING**

- NO PAINT OR LIQUID WASTE IN STREAM OR STORM DRAINS.
- DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- EARTHEN-MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.

**3) DISCHARGES TO FEDERALLY-LISTED WATERS**

- REQUIREMENTS ARE THE SAME AS IN PREVIOUS PERMIT.
- THE PERMIT ALLOWS REDUCTION FROM THE 20 ACRE MINIMUM IF THE DIRECTOR OF DWO DETERMINES THAT OTHER BMPs PROVIDE EQUIVALENT PROTECTION.

**GENERAL EROSION CONTROL NOTES**

- ALL GRADING AND SOIL EROSION CONTROL MEASURES ON THIS SITE MUST BE AUTHORIZED BY PERMITS ISSUED BY NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NDEQ). ALL STEWAGE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
- CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED GRADING, EROSION CONTROL, LAND DISTURBANCE, AND ASSOCIATED NON-GRADING PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE UNDER THE INSPECTION OF THE ENGINEER, THE OWNER, NDEQ. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO BEGINNING WORK. ANY WORK COVERED PRIOR TO ENGINEER'S INSPECTION IS SUBJECT TO UNCOVERING AND BACKFILLING AT THE CONTRACTOR'S EXPENSE.
- ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
- PROTECT EXISTING SITE FEATURES (SHOWN TO REMAIN) AND NEWLY COMPLETED WORK DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES, AS WELL AS THE PROJECT PLANS AND SPECIFICATIONS, AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY NC ONE CALL AT 811, 48 HOURS BEFORE CONSTRUCTION BEGINS. NOTIFY THE ENGINEER AT LEAST 72 HOURS BEFORE STARTING CONSTRUCTION ACTIVITIES.
- EROSION CONTROL IS A FIELD PERFORMANCE BASED ACTIVITY; AND ADDITIONAL SILT FENCES, TEMPORARY SEDIMENT BASINS, AND ALL OTHER MEASURES MAY NEED TO BE ADDED IN ADDITION TO THE APPROVED PLAN AS NECESSARY. MEASURES SHOWN CAN AND SHOULD BE ADDED TO ASSURE MAXIMUM PROTECTION ON SITE. CONTRACTOR SHALL ADD ADDITIONAL MEASURES AS NEEDED IN ENVIRONMENTALLY SENSITIVE AREAS.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MAINTAINING, AND REMOVING ALL NECESSARY EROSION AND SEDIMENTATION CONTROL MEASURES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ADJUSTMENT OF ALL UTILITY SURFACE ACCESSES WHETHER THE CONTRACTOR PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK.
- ALL AREAS WHERE THERE IS EXPOSED DIRT SHALL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO SPECIFICATIONS NOTES IN THE PLANS. SITE STABILIZATION IS A PERFORMANCE BASED REQUIREMENT, AND THE SITE WILL NOT BE ACCEPTED UNTIL PERMANENT VEGETATION IS ESTABLISHED TO THE SATISFACTION OF THE ENGINEER.
- CONTRACTOR RESPONSIBLE FOR KEEPING ACCURATE LOG OF SITE CONDITIONS IN ACCORDANCE WITH NPDES PERMIT. MAINTENANCE INSPECTIONS SHALL BE PERFORMED WEEKLY AND AFTER EACH RAINFALL. ALL REPAIRS NECESSARY SHOULD BE MADE IMMEDIATELY AND IN STRICT ACCORDANCE WITH NDEQ AND NPDES PERMIT. CONTRACTOR SHALL SUPPLY THE ENGINEER WITH RECORD OF DEVIATIONS FROM PLANS FOR PREPARATION OF FINAL RECORD DRAWINGS.
- ALL SLOPES GREATER THAN 2:1 SLOPE AND OVER 5' IN HEIGHT SHALL BE CERTIFIED BY A LICENSED PROFESSIONAL AS REQUIRED BY NDEQ.
- CONTRACTOR IS REQUIRED TO OBTAIN AND PROVIDE A COPY OF THE EROSION CONTROL PERMIT FOR ANY OFFSITE BORROW/ SPOIL AREA. CONTRACTOR MUST PROVIDE COPY OF PERMIT TO NDEQ INSPECTOR PRIOR TO CONSTRUCTION.
- IF BORROWED OR WASTE FILL MATERIAL IS GENERATED, AN APPROVED GRADING PERMIT MUST BE SECURED FOR THE BORROW OR WASTE MATERIAL SITE PRIOR TO INITIATION OF ANY LAND DISTURBING ACTIVITY.
- ALL FILL SLOPES SHALL BE COMPACTED FULL DEPTH TO NOT LESS THAN 95% MAXIMUM DENSITY (STANDARD PROCTOR), SHALL BE PLACED ON A SURFACE CLEARED OF GROUND AND DEBRIS, AND BE PROPERLY BENCHED AND DRAINED.
- ALL FILL MATERIAL, UNLESS A PERMIT FROM NDEQ DIVISION OF WASTE MANAGEMENT TO OPERATE A LANDFILL IS ON FILE FOR THE OFFICIAL SITE, SHALL BE FREE OF ORGANIC OR OTHER DEGRADABLE MATERIALS. MASONRY, CONCRETE AND BRICK SIZES EXCEEDING 12 INCHES, AND ANY MATERIALS WHICH COULD CAUSE THE SITE TO BE REGULATED AS A LANDFILL BY THE STATE OF NORTH CAROLINA.

**EROSION CONTROL MAINTENANCE NOTES:**

- INSPECT EROSION CONTROL MEASURES ONCE A WEEK AND AFTER EVERY SIGNIFICANT RAINFALL. CONTRACTOR TO INSPECT MEASURES FOR COMPLIANCE WITH PLANS AND DETAILS, INCLUDING SEDIMENT ACCUMULATION BEYOND DETAIL ALLOWANCE, AND ALSO DAMAGE OR FAILURE OF MEASURES.
- WHEN SEDIMENT ACCUMULATION EXCEEDS DETAIL ALLOWANCE, CONTRACTOR TO REMOVE SEDIMENT AND/OR DEBRIS, AND RELOCATE TO ANOTHER AREA WITH SEDIMENT CONTROLS.
- WHEN MEASURES ARE FOUND TO BE DAMAGED, CONTRACTOR TO REPAIR IMMEDIATELY TO BRING MEASURE BACK INTO COMPLIANCE WITH PLANS AND DETAILS.
- IF MEASURES ARE FOUND TO BE INSUFFICIENT, CONTRACTOR TO INSTALL ADDITIONAL MEASURES AS NEEDED TO ENSURE SEDIMENT REMAINS CONTROLLED ONSITE AS REQUIRED.
- CONTRACTOR TO REMOVE MEASURES AND BRING AREA TO GRADE ONCE CONFORMANCE OF SITE STABILIZATION HAS BEEN REQUESTED AND RECEIVED FROM PROJECT ENGINEER.

**4) SELF-INSPECTION REQUIREMENTS**

- SAME WEEKLY INSPECTION REQUIREMENTS.
- SAME RAIN GAUGE & INSPECTIONS AFTER 0.5" RAIN EVENT.
- INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS".
- RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
- RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.
- ELECTRONICALLY-AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.
- ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND CONDITIONS RECORDED ON NDEQ SELF-INSPECTION AND SELF-MONITORING COMBINED FORM LOCATED AT [HTTPS://DEQ.NC.GOV/ABOUT/DIVISIONS/ENERGY-MINERAL-LAND-RESOURCES/EROSION-SEDIMENT-CONTROL/FORMS](https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms)

**5) IMPLEMENTATION OF NEW PERMIT CONDITIONS**

- PROJECTS PERMITTED UNDER THE PREVIOUS PERMIT CAN CONTINUE TO FOLLOW THE PREVIOUSLY-PERMITTED CONDITIONS.
- COMPLETE APPLICATIONS RECEIVED PRIOR TO AUGUST 3, 2011 CAN FOLLOW CONDITIONS OF APPROVED APPLICATION.
- APPLICATIONS RECEIVED AFTER AUGUST 2, 2011 MUST COMPLY WITH NEW PERMIT CONDITIONS.

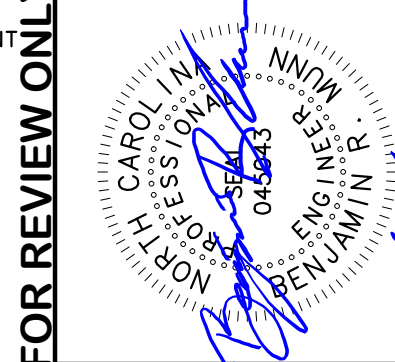
**6) CONDITIONS IN EROSION & SEDIMENTATION CONTROL PLANS**

- DESIGNATION ON THE PLANS WHERE 7 AND 14-DAY GROUND STABILIZATION REQUIREMENTS ON THE NPDES PERMIT APPLY.
- DESIGNATION ON THE PLANS WHERE BASINS THAT COMPLY WITH THE SURFACE-WITHDRAWAL REQUIREMENTS OF THE NPDES PERMIT ARE LOCATED.

**7) SEDIMENT BASINS**

- OUTLET STRUCTURES MUST WITHDRAW FROM BASIN SURFACE UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.
- USE ONLY DWO-APPROVED FLOCCULANTS.

FOR REVIEW ONLY



**BOILING SPRINGS RETAIL STORE**  
THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY:	KWN
PROJECT NO.:	22313
PERMIT NO.:	TBD
NDEQ EC NO.:	TBD

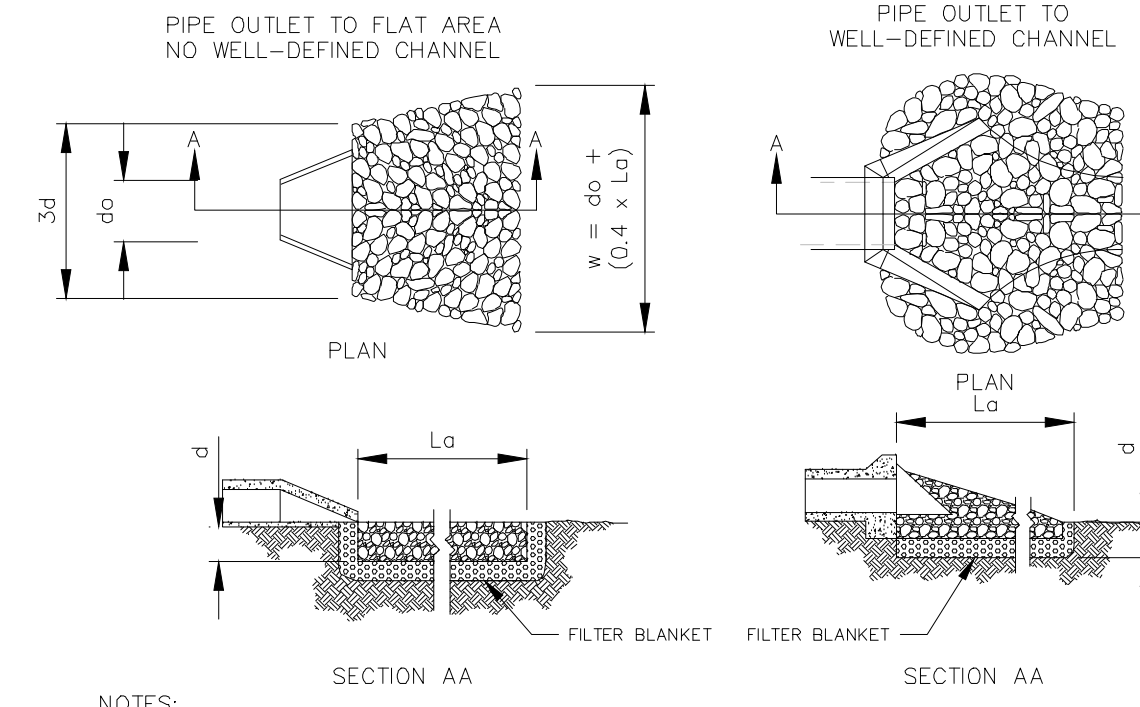
SHEET  
**C931**

160 DARTON AVENUE  
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**CDC** Civil Design Concepts, PA  
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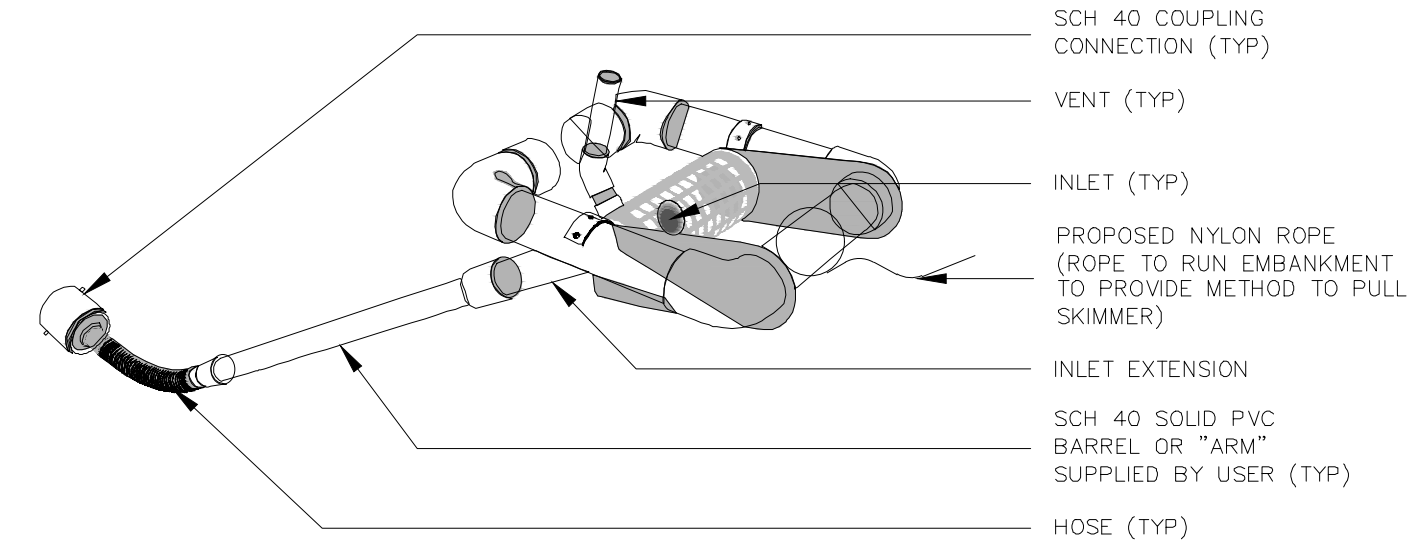
DATE	NO.	DESCRIPTION	BY
06/29/23	1	PERMIT SUBMITTAL	
08/17/23	2	DOT & EC RE-SUBMITTAL	





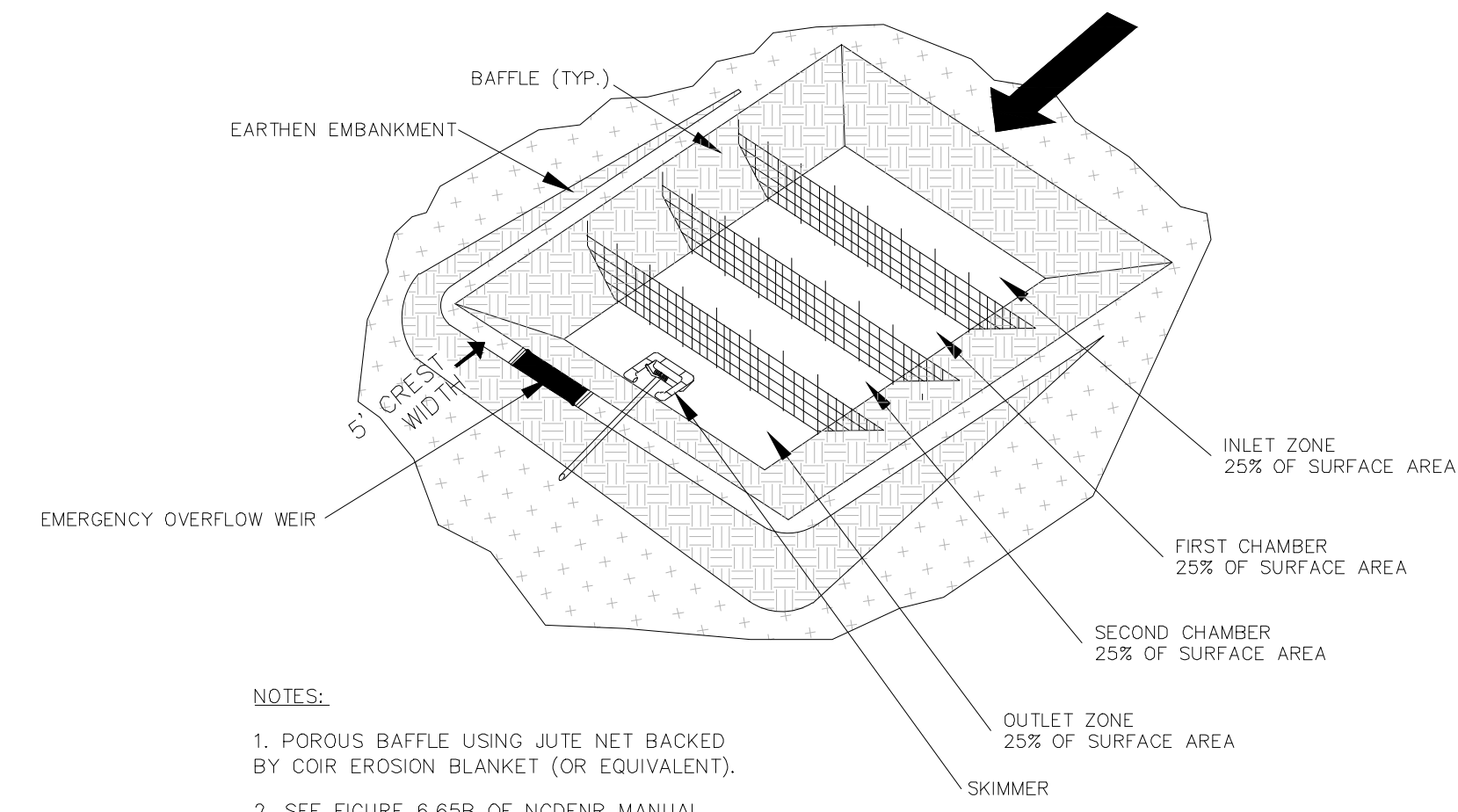
- NOTES:**
1.  $L_a$  IS THE LENGTH OF THE RIP RAP APRON.
  2.  $d = 1.5$  TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (MINIMUM IS 24" DEEP IF STONE IS CLASS II)
  3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
  4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
  5. COMPACT ANY REQUIRED FILL TO DENSITY OF SURROUNDING UNDISTURBED MATERIAL.
  6. RIP RAP MAY BE FIELDSTONE OR ROUGH QUARRY STONE AND SHALL BE HARD, ANGULAR AND WELL-GRADED.
  7. CONSTRUCT APRON AT ZERO GRADE. TOP OF RIP RAP SHALL BE LEVEL WITH THE RECEIVING CHANNEL OR SLIGHTLY LOWER.
  8. ALIGN APRON WITH RECEIVING CHANNEL OR STREAM. ASSURE APRON IS STRAIGHT THROUGHOUT ITS LENGTH.
  9. END WIDTH OF APRON TO BE EQUAL TO WIDTH OF RECEIVING CHANNEL.

**D3.06** **RIP-RAP APRON**  
NOT TO SCALE



- NOTES:**
1. SKIMMER SHOWN IN FLOATING POSITION
  2. FAIRCLOTH SKIMMER OR APPROVED EQUIVALENT
  3. SKIMMER TO BE REMOVED UPON REMOVAL OF SEDIMENT TRAP
  4. COUPLING CONNECTION INTO PROPOSED OUTLET STRUCTURES MUST BE SEALED UPON REMOVAL OF SKIMMER

**D3.07** **POND SKIMMER DETAIL**  
NOT TO SCALE

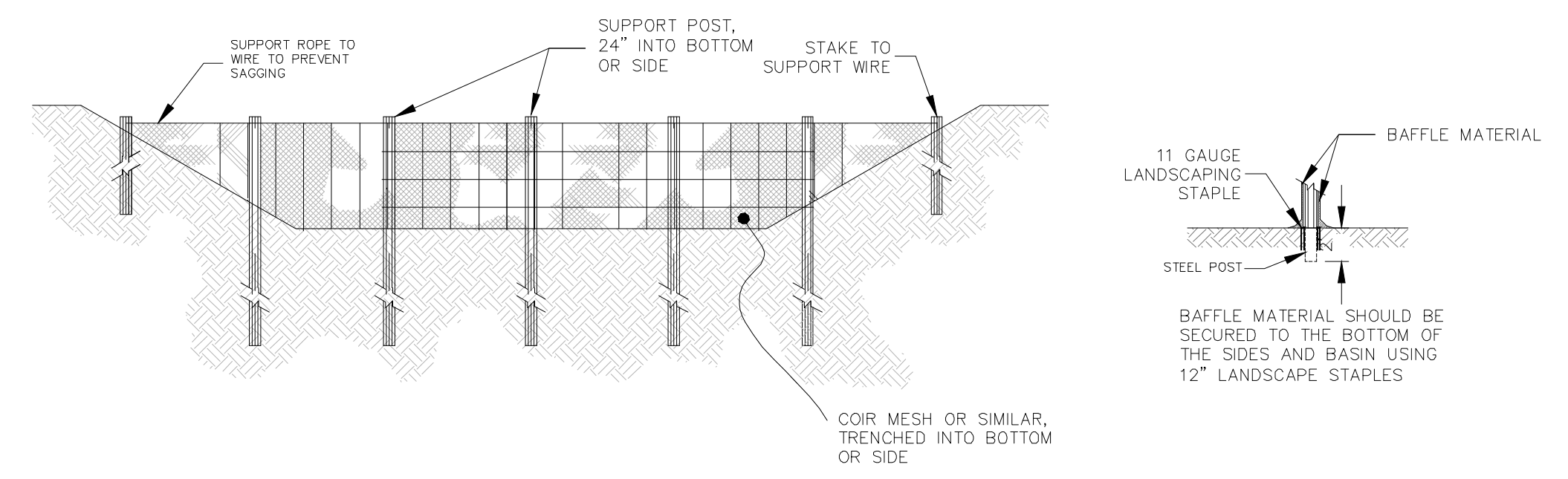


- NOTES:**
1. POROUS BAFFLE USING JUTE NET BACKED BY COIR EROSION BLANKET (OR EQUIVALENT).
  2. SEE FIGURE 6.65B OF NCDENR MANUAL FOR CROSS SECTION OF POROUS BAFFLE.

**D3.08** **SKIMMER BASIN DETAIL**  
NOT TO SCALE

**MAINTENANCE NOTES:**

INSPECT TEMPORARY SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT 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 SKIMMER AND POOL AREA.



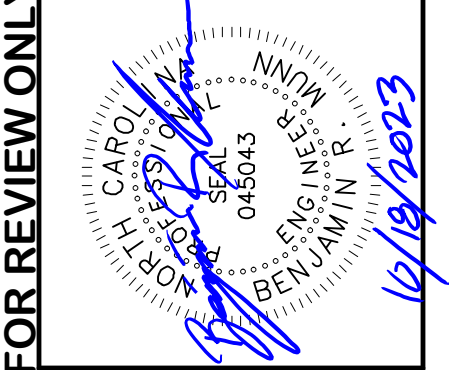
**D3.09** **BAFFLE DETAIL**  
NOT TO SCALE

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NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS



**FOR REVIEW ONLY**

EROSION CONTROL DETAILS FOR:  
**BOILING SPRINGS RETAIL STORE**  
THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

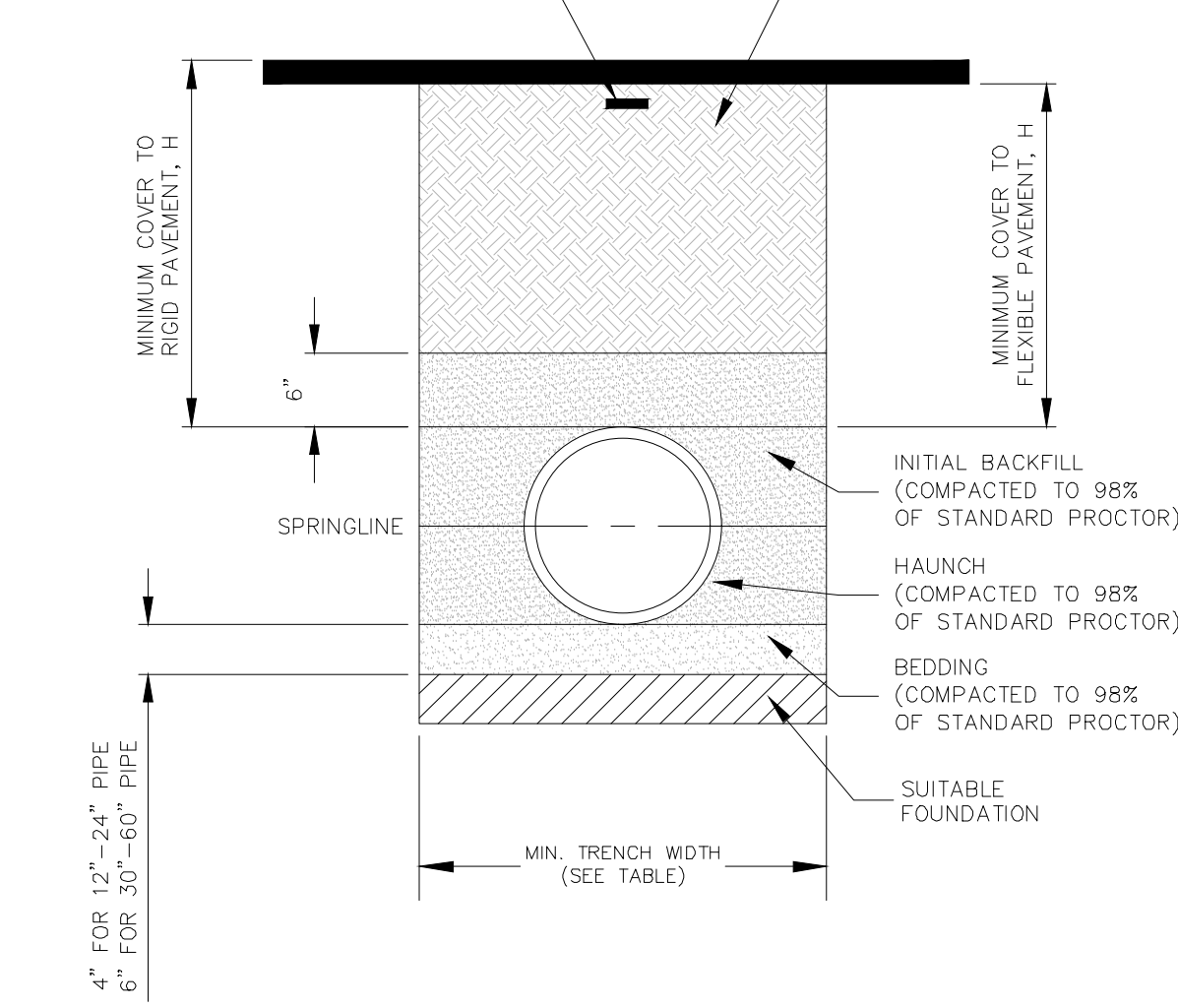
DRAWN BY: KWN  
CDC PROJECT NO.: 22313  
PERMIT NO.: TBD  
BS: TBD  
NCDENR EC NO.: TBD

**EROSION CONTROL DETAILS**

SHEET  
**C932**



ALL NON-FERROUS UNDERGROUND LINES OUTSIDE BUILDING FOOTPRINT SHALL BE REQUIRED TO HAVE A MAGNETIC-TYPE WARNING TAPE INSTALLED IN THE BACKFILL AT LEAST 6" BELOW GRADE.



MINIMUM TRENCH WIDTHS	
PIPE DIAMETER	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

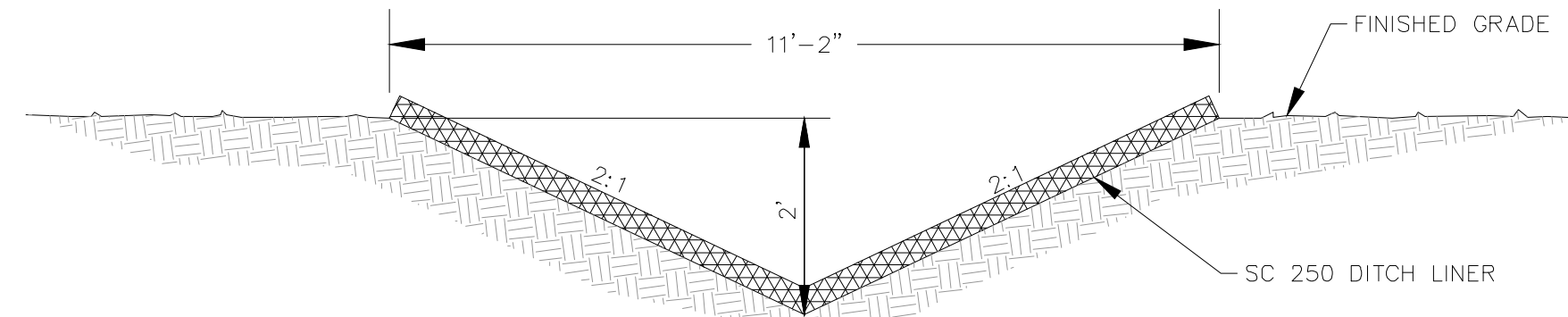
MAXIMUM COVER			
PIPE DIAMETER	CLASS I	CLASS II	CLASS III
12"	43'	28'	20'
15"	43'	28'	20'
18"	43'	28'	20'
24"	34'	23'	17'
30"	34'	23'	17'
36"	34'	23'	16'
42"	34'	23'	16'
48"	31'	21'	15'
54"	31'	21'	15'
60"	31'	21'	15'

\*ASSUMED PIPE BACKFILL IS PLACED AND COMPACTED TO THE REQUIRED 98% OF THE STANDARD PROCTOR

**NOTES:**

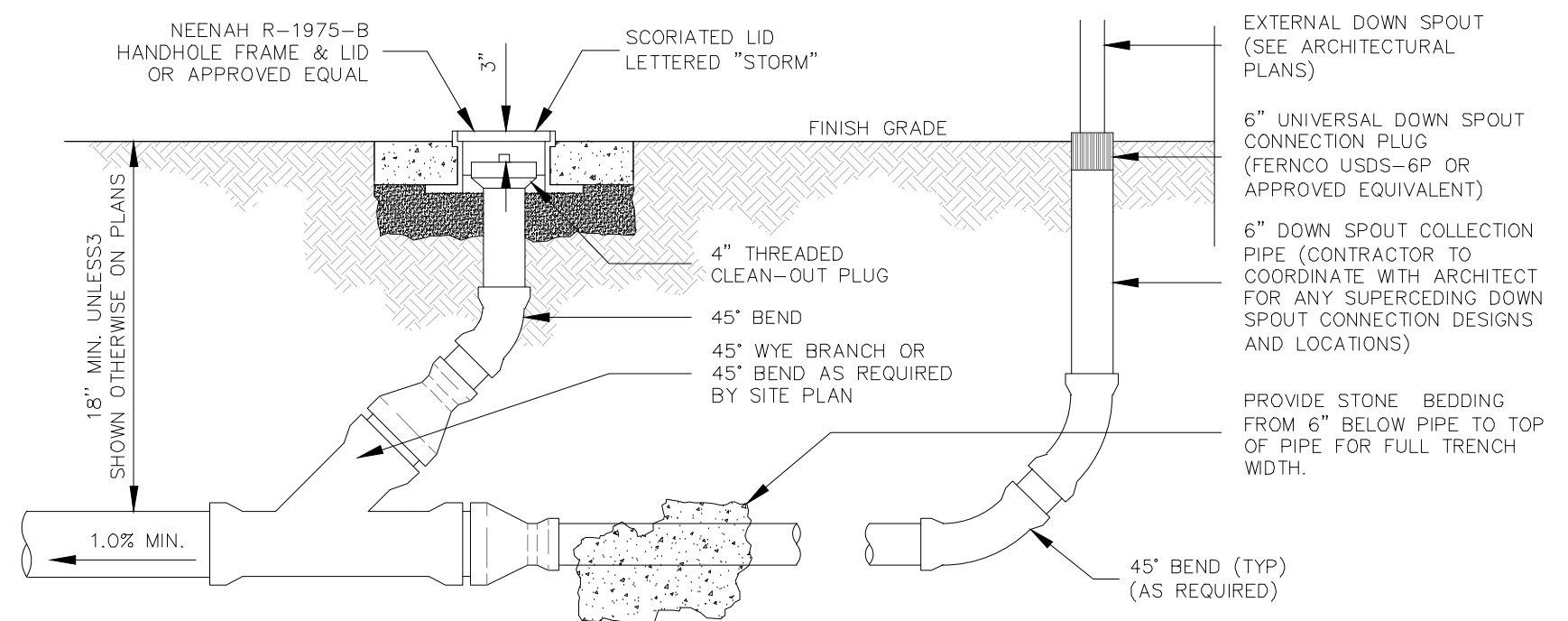
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", AND THE PROJECT SPECIFICATIONS.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES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

**D5.01 HDPE TRENCH INSTALLATION DETAIL**  
NOT TO SCALE



NOTE:  
DITCH SLOPE TO BE AT A 2% MIN SLOPE FROM INLET TO OUTLET

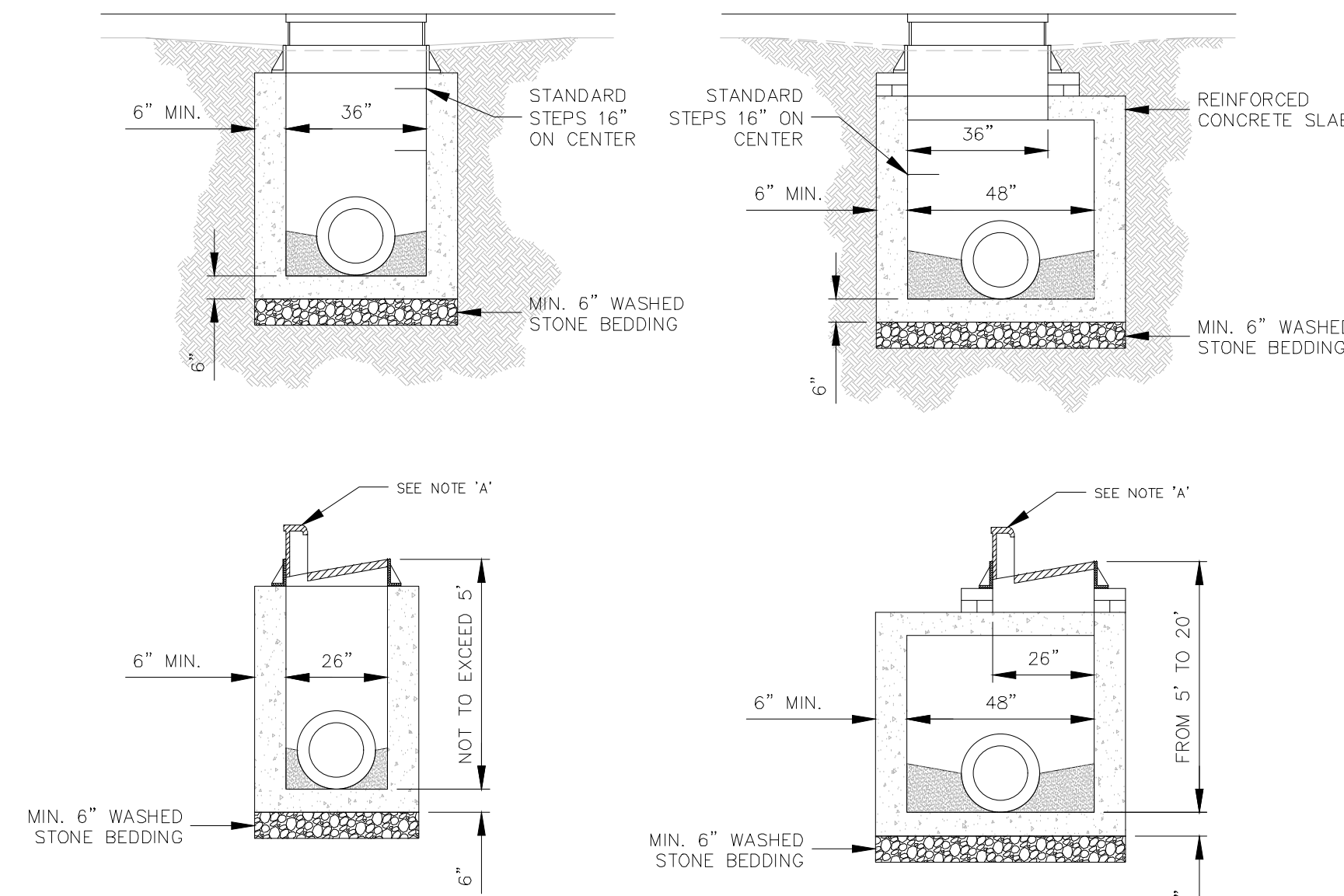
**D5.04 PERMANENT DRAINAGE DITCH**  
NOT TO SCALE



- NOTES:**
- CLEAN-OUT PIPE AND FITTINGS SHALL BE SAME MATERIAL AS THE DOWNSPOUT COLLECTION PIPE. SEE PLAN FOR PIPE SIZES. CLEAN-OUT WYE TO BE SAME DIAMETER AS LATERAL, RISER, PIPE AND THREADED PLUG TO BE 4".
  - WHERE CLEAN-OUTS ARE LOCATED IN SIDEWALKS OR PAVEMENT, CAST HANDHOLE LID IN PLACE AND FLUSH WITH FINISH GRADE.
  - CONTRACTOR TO COORDINATE WITH ARCHITECT FOR ANY SUPERSEDING EXTERNAL DOWN SPOUT COLLECTION SYSTEM CONNECTION DESIGNS AND LOCATIONS

**D5.05 DOWN SPOUT COLLECTION PIPE AND CLEANOUT**  
NOT TO SCALE

**SHALLOW TYPE (5 FEET OR LESS IN DEPTH)**  
**INTERMEDIATE TYPE (4'x4' INTERIOR) (5 FEET TO 20 FEET IN DEPTH)**

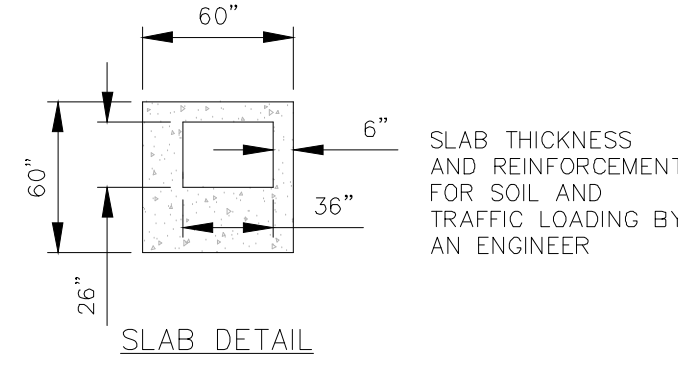


**NOTE 'A'**

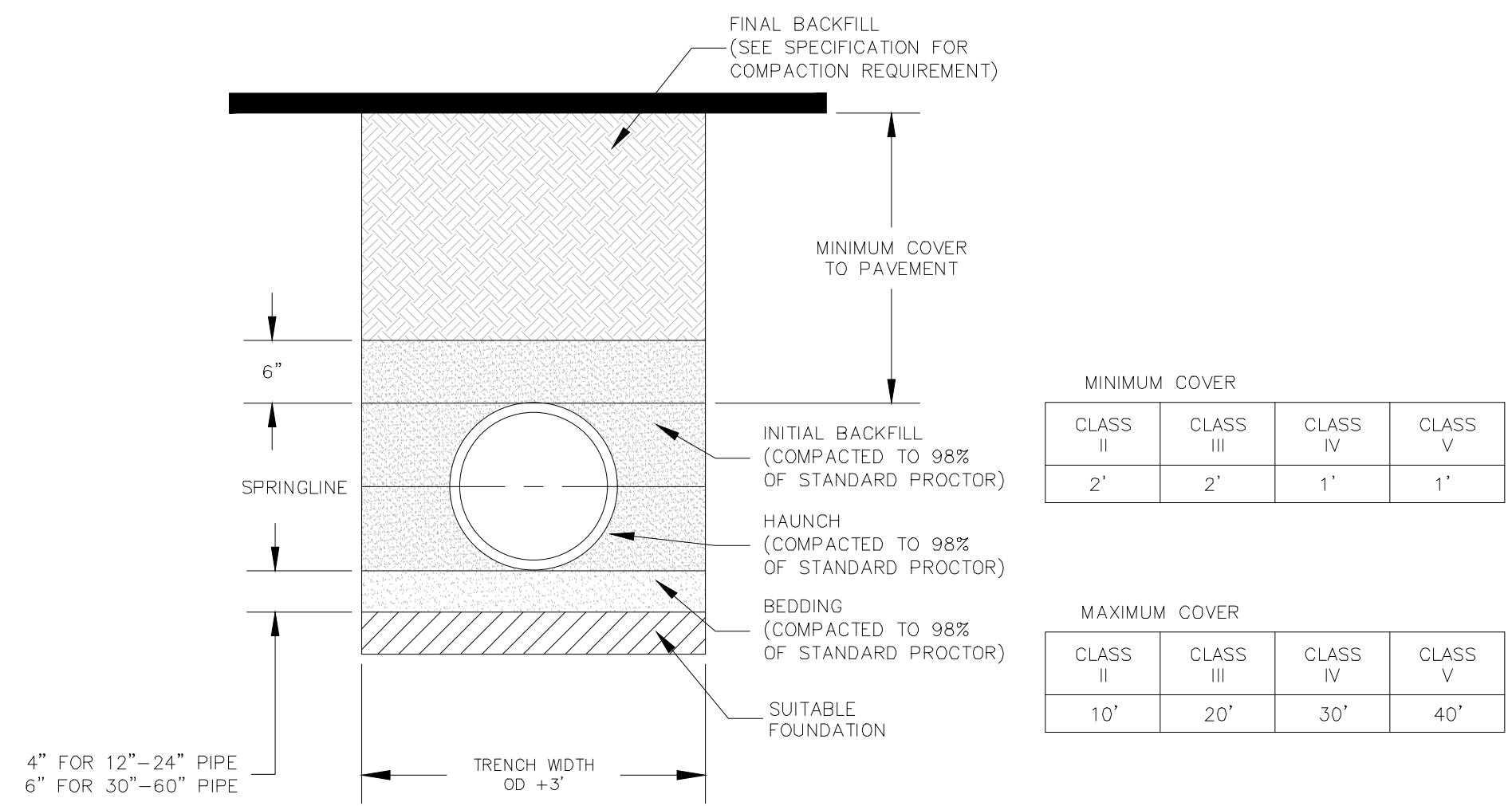
FOR CURB INLET: FRAME, GRATE & HOOD PER D.O.T. STD. 840.03E  
FOR GRATE INLET: FRAME, GRATE & HOOD PER D.O.T. STD. 840.16  
FOR JUNCTION BOX: FRAME & COVER PER D.O.T. STD. 840.54  
FOR CONVEX INLET: FRAME, GRATE & HOOD PER NEENAH CONVEX INLET GRATE R-2577

**NOTES:**

- CONCRETE SHALL BE 4000 PSI MIN. FOR ALL PRECAST CONCRETE CATCH BASINS.
- PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
- "WAFFLE" BOXES ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS UP TO 10' DEEP PER D.O.T.
- PRECAST CONCRETE CATCH BASINS SHALL CONFORM TO NCDOT STD. 840.02.



**D5.02 PRECAST CONCRETE CATCH BASIN DETAILS FOR GRATE INLETS, CURB INLETS, AND JUNCTION BOXES**  
NOT TO SCALE



**NOTES:**

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", AND THE PROJECT SPECIFICATIONS.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION:** WHERE THE TRENCH IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II, OR, III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4"(100 mm) FOR 12"-24" (100 mm - 600 mm); 6"(150 mm) FOR 30"-60" (750 mm - 900 mm).
- HAUNCHING/INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MAXIMUM COVER:** MAXIMUM COVER SHALL BE MEASURED FROM THE FINISHED SURFACE OF THE GROUND TO THE TOP OF THE PIPE, AND SHALL BE LESS THAN THE MAXIMUM VALUES SHOWN IN THE CHART WITHIN THIS DETAIL.

**D5.03 RCP TRENCH INSTALLATION DETAIL**  
NOT TO SCALE

**GENERAL NOTES FOR STORM**

- ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
- CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED STORMWATER, AND ASSOCIATED NON-GRADING PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE UNDER THE INSPECTION OF THE ENGINEER, THE OWNER, AND NCEQ. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO BEGINNING WORK. ANY WORK COVERED PRIOR TO ENGINEER'S INSPECTION IS SUBJECT TO UNCOVERING AND BACKFILLING AT THE CONTRACTOR'S EXPENSE.
- ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
- PROTECT EXISTING SITE FEATURES (SHOWN TO REMAIN) AND NEWLY COMPLETED WORK DURING CONSTRUCTION. ANY DAMAGE INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES, AS WELL AS THE PROJECT PLANS AND SPECIFICATIONS, AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY NC ONE CALL AT 811, 48 HOURS BEFORE CONSTRUCTION BEGINS. NOTIFY THE ENGINEER AT LEAST 72 HOURS BEFORE STARTING CONSTRUCTION ACTIVITIES.
- EROSION CONTROL IS FIELD PERFORMANCE BASED AND CONTRACTOR SHALL INSTALL AND MAINTAIN ANY EROSION CONTROL MEASURES NECESSARY TO ASSURE MAXIMUM PROTECTION OF THE SITE. CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL MEASURES REQUIRED TO CONTROL SEDIMENT DURING INSTALLATION ALL STORM PIPES AND APPURTENANCES..
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MAINTAINING, AND REMOVING ALL NECESSARY EROSION AND SEDIMENTATION CONTROL MEASURES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ADJUSTMENT OF ALL UTILITY SURFACE ACCESSES WHETHER THE CONTRACTOR PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK.
- ALL HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED STORM SEWER DETENTION PIPE SHALL BE TYPE "S" HANCOR SURELOK ADSN12 OR APPROVED EQUIVALENT WITH WATER TIGHT JOINTS MEETING AASHTO M252, M294 OR MP7. ALL HDPE PIPE IS TO BE INSTALLED ACCORDINGLY TO MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH ASTM D2321 WITH THE EXCEPTION THAT MINIMUM COVER IN TRAFFIC LOAD AREA SHALL BE 24" FOR 4"-48" AND 18" FOR 60". PIPE MATERIAL SHALL MEET THE PRODUCT SPECIFICATIONS OF ASTM F667 AND SHALL HAVE A SMOOTH WALL INTERIOR. FOR ALL STORM SYSTEMS, WORK MUST BEGIN AT THE LOW POINT OF THE SYSTEMS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY VARIANCES FROM EXPECTED CONDITIONS.
- CURB INLET FRAME, GRATE AND HOOD SHALL CONFORM TO NCDOT 840.03E. DROP INLET FRAME AND GRATE SHALL CONFORM TO NCDOT 840.16. FIELD INLET COVER SHALL CONFORM TO NCDOT STANDARD DETAIL 840.03. OPENING FACING UPSTREAM. MANHOLE RING AND LID TO CONFORM TO NCDOT 840.54. OPEN THROAT INLETS TO CONFORM TO NCDOT 840.04 WITH A MANHOLE RING AND LID INSTALLED IN THE TOP FOR ACCESS TO THE STRUCTURE. SET ACCESS POINT ADJACENT TO A STRUCTURE WALL AS TO ALLOW ACCESS TO STEPS.
- CONCRETE AND MASONRY SHALL MEET THE REQUIREMENTS OF APPROPRIATE SECTION OF NCDOT STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURES (LATEST EDITION). CONCRETE SHALL BE CLASS A OR B, 4000 PSI MINIMUM, MEETING THE REQUIREMENTS OF SECTION 900, CONSTRUCTED IN ACCORDANCE WITH SECTION 825. MASONRY SHALL MEET THE REQUIREMENTS OF SECTION 940, CONSTRUCTED IN ACCORDANCE WITH SECTION 830 AND/OR 834.
- TRENCH BACKFILL AND COMPACTION TESTING SHALL BE PERFORMED BY A CERTIFIED SOILS LABORATORY UNDER ALL PAVED AREAS.
- COMPACTION REPORTS MUST BE PROVIDED TO ENGINEER INDICATING THAT FILL HAS BEEN COMPACTED TO NOT LESS THAN 95% MAXIMUM DENSITY (STANDARD PROCTOR).

**STORM DETAILS**

160 DARTON AVENUE  
ASHEVILLE, NC 28801  
PHONE (828) 252-5588  
FAX (828) 252-5585

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 27884  
PHONE (828) 456-5444  
FAX (828) 456-5444

**CDC** Civil Design Concepts, PA  
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NCELS LICENSE # C-2184

NO.	DATE	DESCRIPTION
1	06/29/23	PERMIT SUBMITTAL
3	10/19/23	ZONING & STORM RE-SUBMITTAL
4	10/23/23	NOTE UPDATES

FOR REVIEW ONLY

STATE OF NORTH CAROLINA  
SEAL  
045043  
ENGINEER  
BENJAMIN R. BOYD

10/23/2023

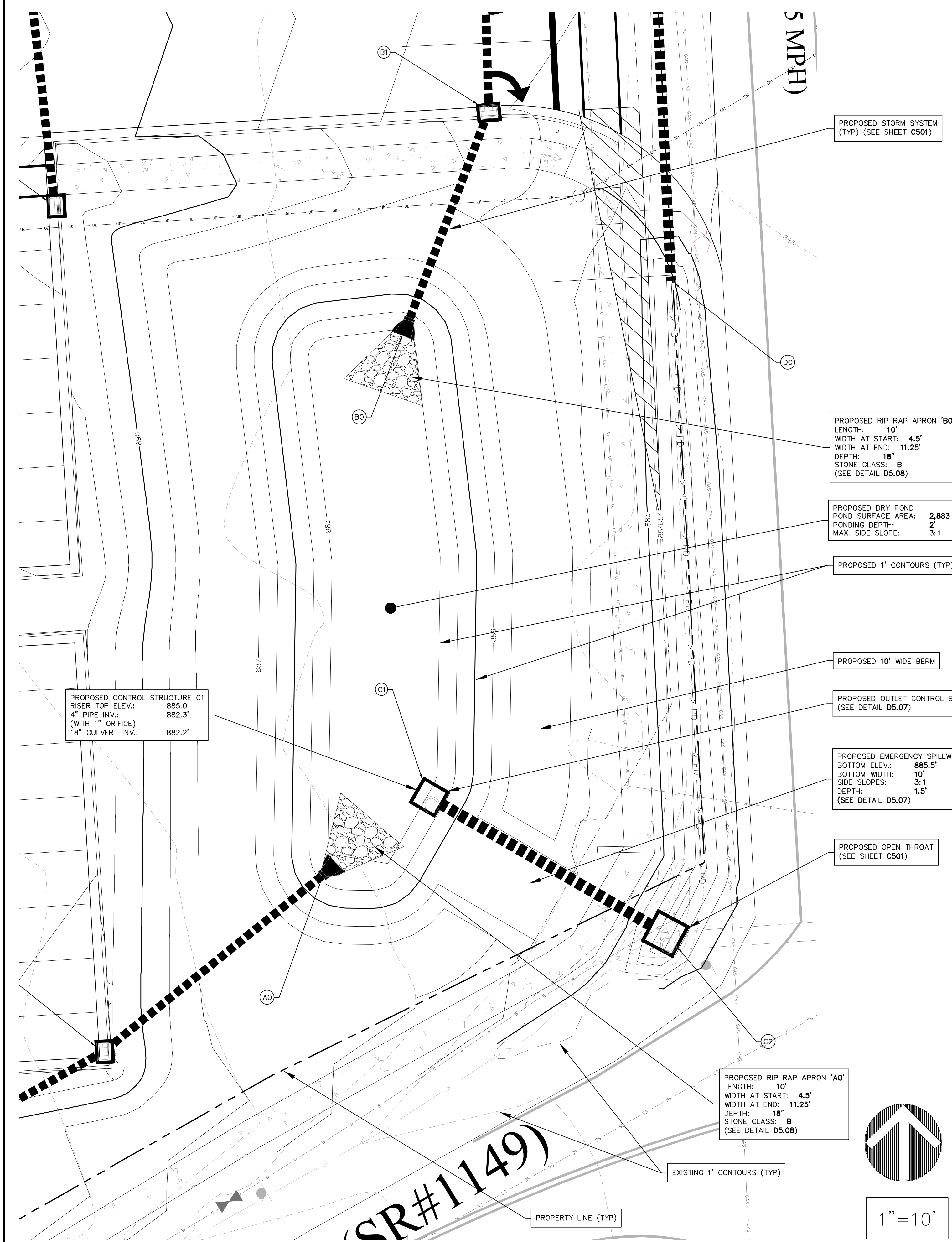
**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY:	KWN
CDG PROJECT NO.:	22313
PERMIT NO.:	TBD
BS NCEQ EC NO.:	TBD

SHEET  
**C951**





PROPOSED STORM SYSTEM (TYP) (SEE SHEET C501)

PROPOSED RIP RAP APRON 'B0'  
 LENGTH: 10'  
 WIDTH AT START: 4.5'  
 WIDTH AT END: 11.25'  
 DEPTH: 18"  
 STONE CLASS: B  
 (SEE DETAIL D5.08)

PROPOSED DRY POND  
 POND SURFACE AREA: 2,883 SF  
 PONDING DEPTH: 2'  
 MAX. SIDE SLOPE: 3:1

PROPOSED 1' CONTOURS (TYP)

PROPOSED 10' WIDE BERM

PROPOSED OUTLET CONTROL STRUCTURE (SEE DETAIL D5.07)

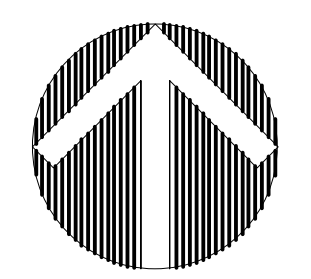
PROPOSED EMERGENCY SPILLWAY  
 BOTTOM ELEV.: 885.5'  
 BOTTOM WIDTH: 10'  
 SIDE SLOPES: 3:1  
 DEPTH: 1.5'  
 (SEE DETAIL D5.07)

PROPOSED OPEN THROAT (SEE SHEET C501)

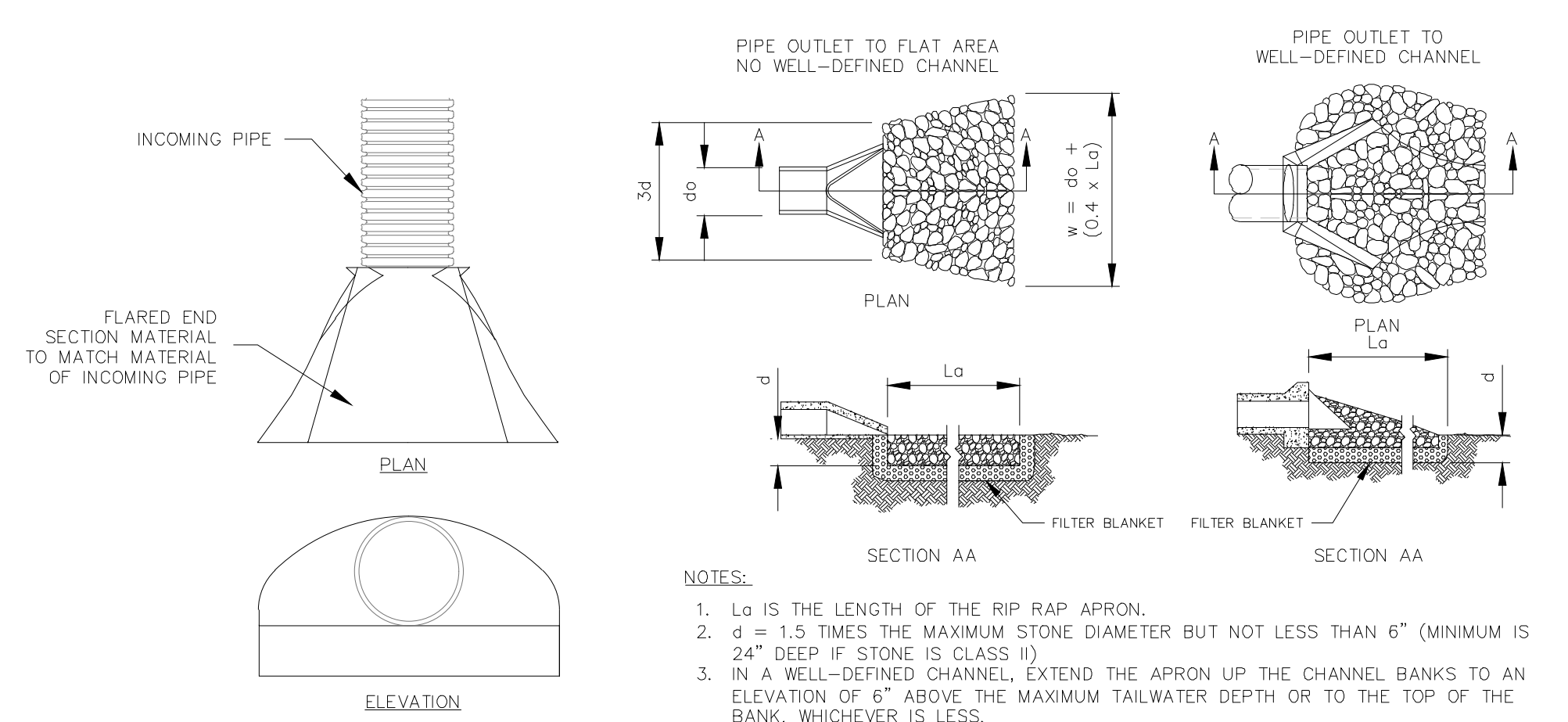
PROPOSED RIP RAP APRON 'A0'  
 LENGTH: 10'  
 WIDTH AT START: 4.5'  
 WIDTH AT END: 11.25'  
 DEPTH: 18"  
 STONE CLASS: B  
 (SEE DETAIL D5.08)

EXISTING 1' CONTOURS (TYP)

PROPERTY LINE (TYP)



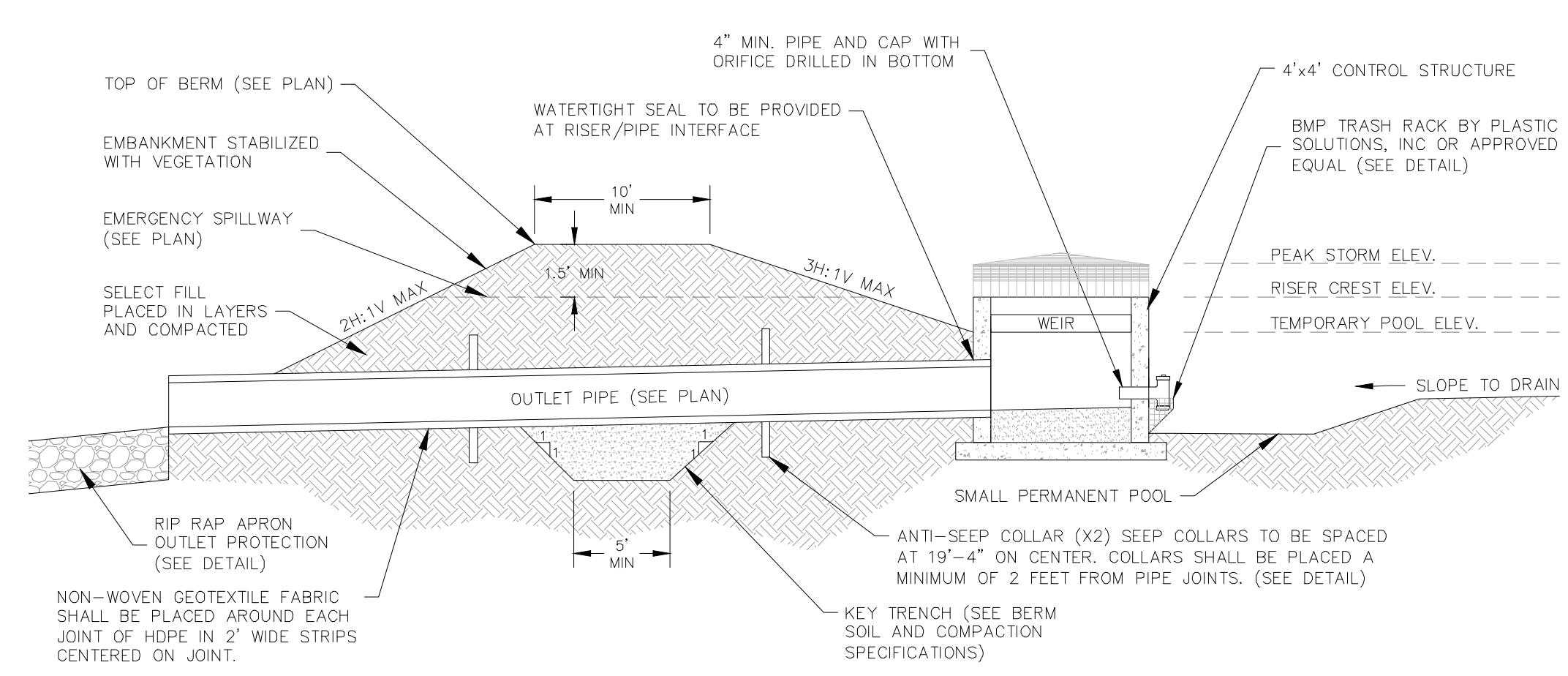
1" = 10'



- NOTES:
1. THE DIMENSION OF THE THE FLARED END SECTION SHALL BE PER MANUFACTURER'S SPECIFICATIONS.
  2. THE SKIRT SECTION OF THE FLARED END SECTION SHOULD BE JOINED TO THE INCOMING PIPE PER MANUFACTURER'S SPECIFICATIONS.

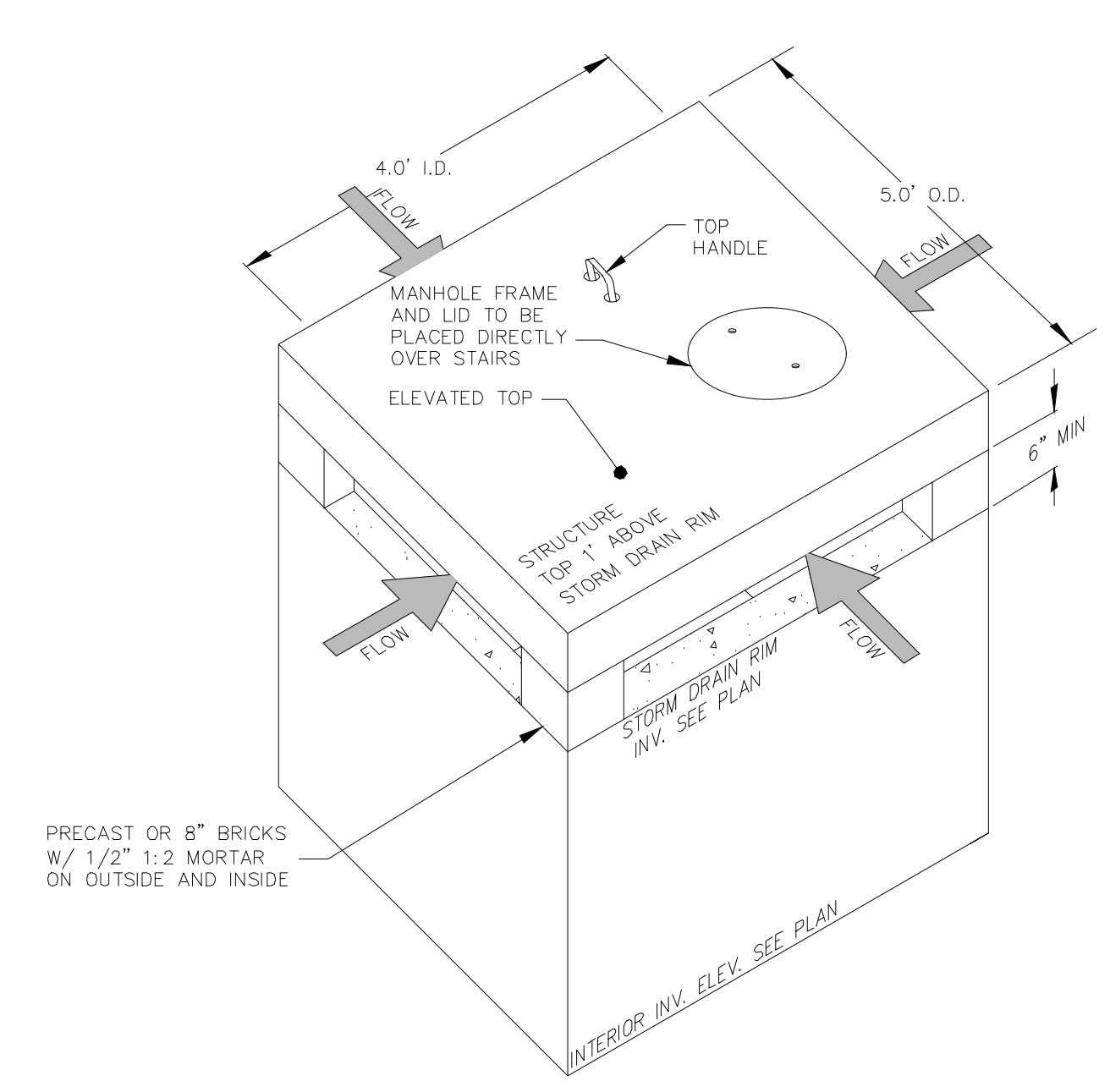
- NOTES:
1.  $L_o$  IS THE LENGTH OF THE RIP RAP APRON.
  2.  $d = 1.5$  TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (MINIMUM IS 24" DEEP IF STONE IS GLASS.)
  3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
  4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
  5. COMPACT ANY REQUIRED FILL TO DENSITY OF SURROUNDING UNDISTURBED MATERIAL.
  6. RIP RAP MAY BE FIELDSTONE OR ROUGH QUARRY STONE AND SHALL BE HARD, ANGULAR AND WELL-GRADED.
  7. CONSTRUCT APRON AT ZERO GRADE. TOP OF RIP RAP SHALL BE LEVEL WITH THE RECEIVING CHANNEL OR SLIGHTLY LOWER.
  8. ALIGN APRON WITH RECEIVING CHANNEL OR STREAM. ASSURE APRON IS STRAIGHT THROUGHOUT ITS LENGTH.
  9. END WIDTH OF APRON TO BE EQUAL TO WIDTH OF RECEIVING CHANNEL.

**D5.08 FLARED END SECTION WITH RIP-RAP APRON**  
 NOT TO SCALE



**D5.07 DRY POND SECTION**  
 NOT TO SCALE

- NOTES:
1. THE SIDE SLOPES OF DRY PONDS SHALL BE CONSTRUCTED AND MAINTAINED AS FLAT A SLOPE AS POSSIBLE, WITH APPROVAL FROM THE ENGINEER, SLOPES UP TO THREE (3) HORIZONTAL TO ONE (1) VERTICAL, ARE ACCEPTABLE, PROVIDED SOIL CONDITIONS ARE SUITABLE TO SUSTAIN ADEQUATE PLANT GROWTH AND TO CONTROL EROSION, AS CERTIFIED BY THE ENGINEER OF RECORD.



NOTE:  
 CORE OPENINGS TO ACCOMMODATE PROPOSED PIPES. (REFER TO PLAN SHEET FOR SIZE AND LOCATION OF PIPE)

**D5.06 TYPICAL OPEN THROAT DETAIL**  
 NOT TO SCALE

FOR REVIEW ONLY

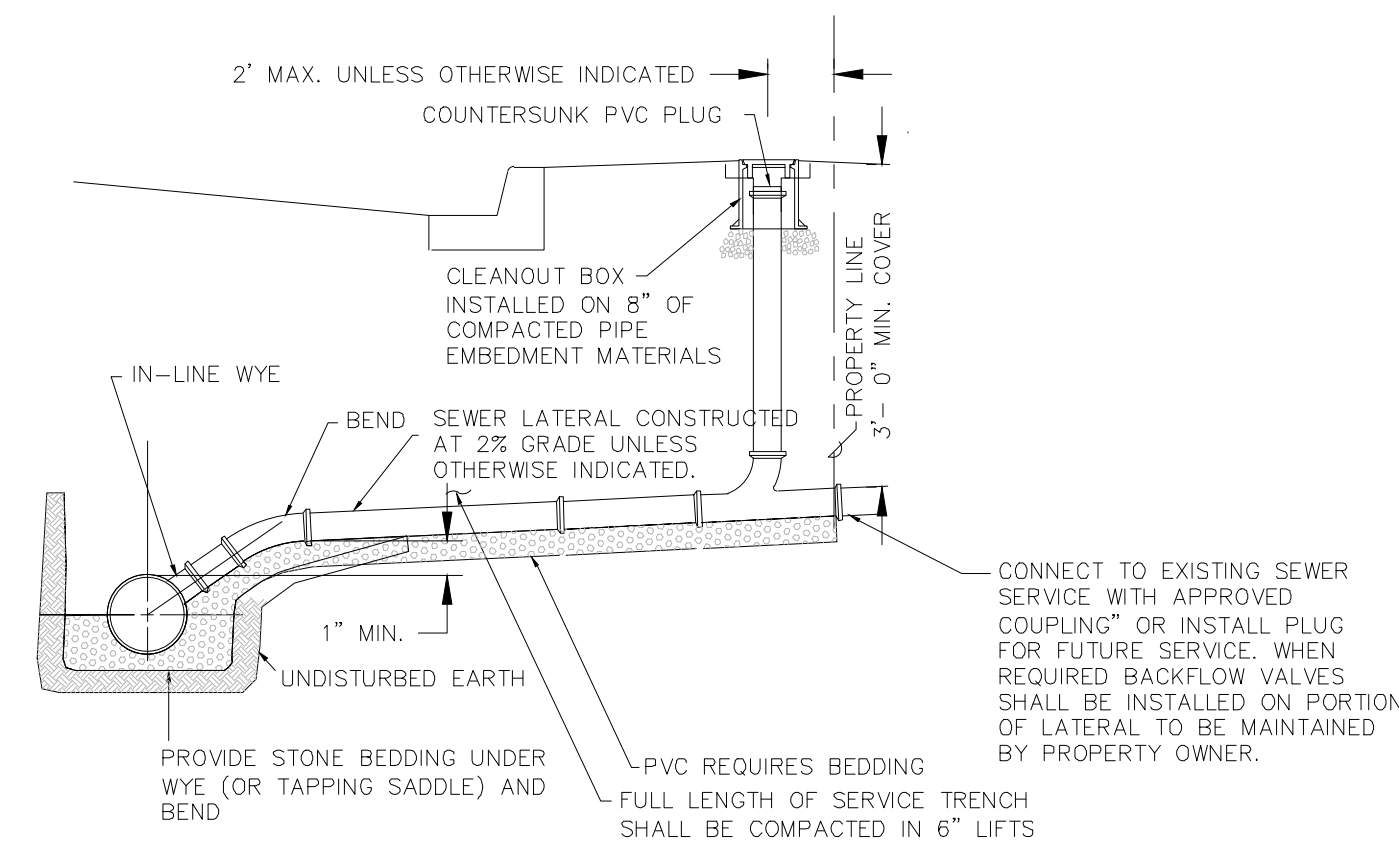


NO.	DATE	DESCRIPTION	BY
1	06/29/23	PERMIT SUBMITTAL	KWN
2	09/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS

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 168 DARTON AVENUE  
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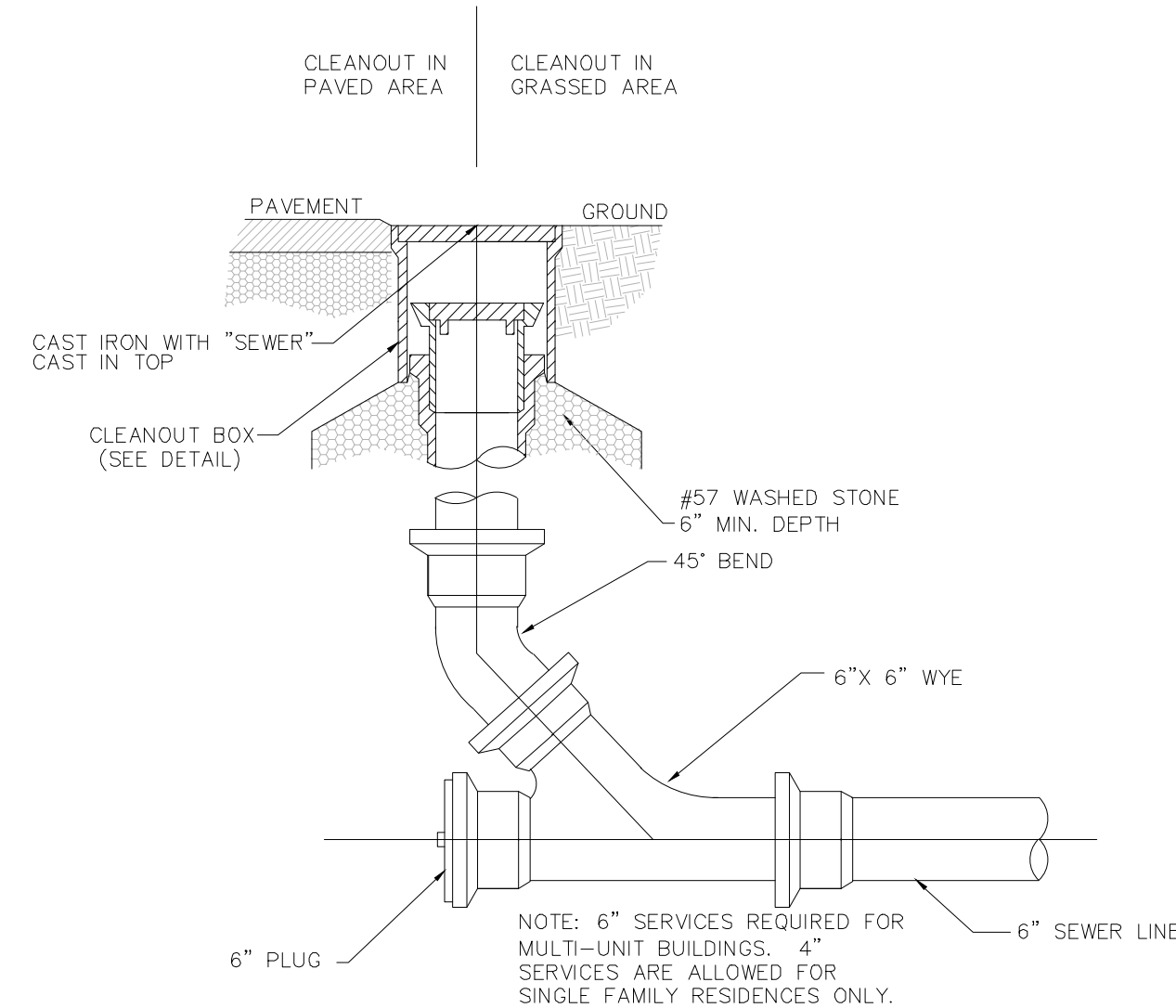
SCM DETAILS FOR:  
**BOILING SPRINGS RETAIL STORE**  
 THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA  
 DRAWN BY: KWN 22313  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 BS NCEDES EC NO.: TBD  
 SHEET  
**C952**



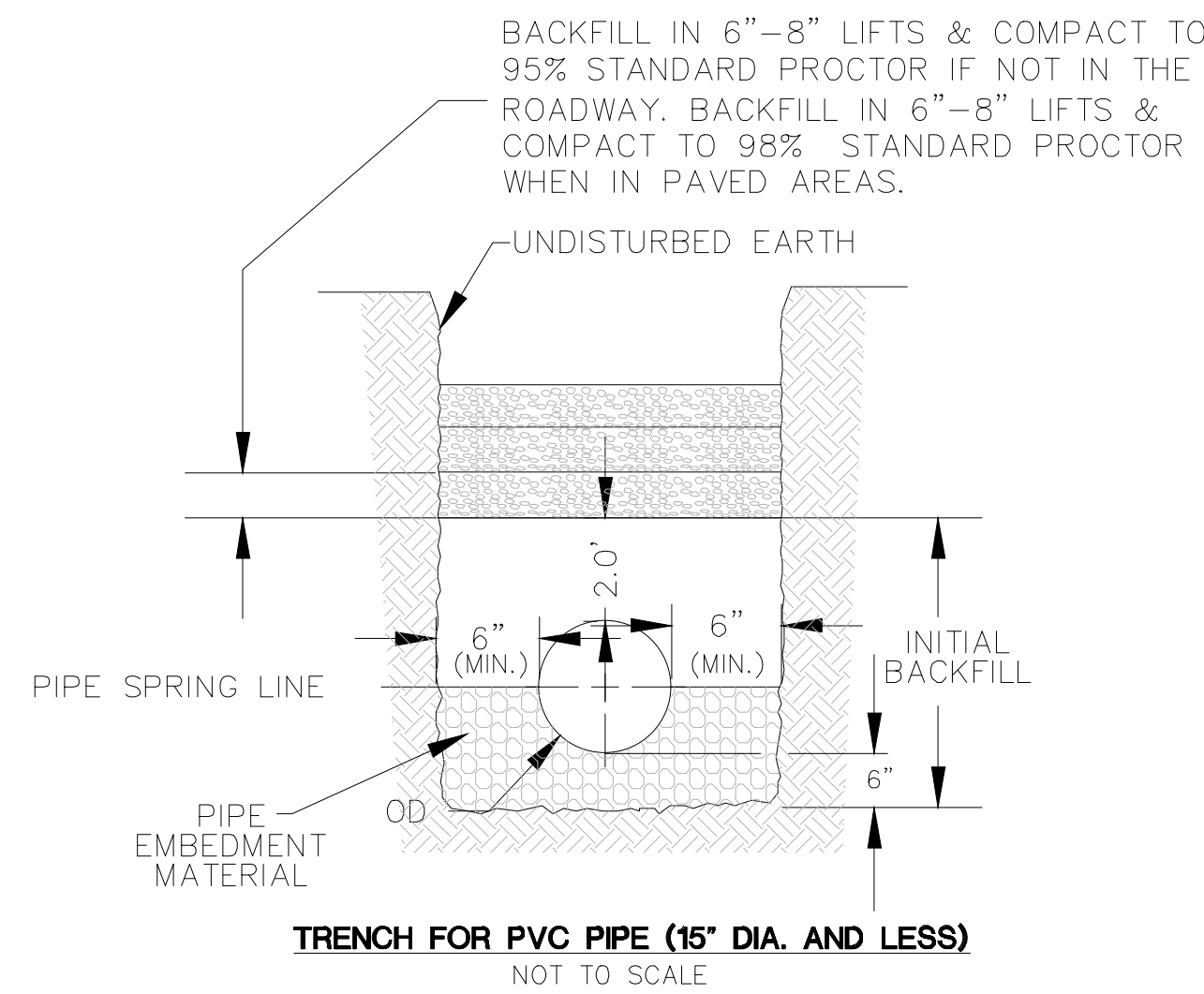


- NOTES:
1. WYE CONNECTIONS ARE STANDARD FOR NEW SEWER MAIN CONSTRUCTION.
  2. FOR EXISTING MAINS (12" OR SMALLER) WHERE WYES ARE NOT AVAILABLE A SEWER TAP SHALL BE INSTALLED BY MSD PERSONNEL.
  3. FORCE MAINS CARRYING DOMESTIC WASTEWATER FROM SANITARY CONVENIENCES WITHIN A SINGLE BUILDING, MAY BE CONNECTED TO A 4" MSD GRAVITY SERVICE LINE PROVIDED THAT GRAVITY FLOW WILL BE MAINTAINED DURING PROPOSED MAXIMUM DISCHARGE RATE FOR THE GRINDER OR EFFLUENT PUMP(S).
  4. 6" SERVICES REQUIRED FOR MULTI-UNIT BUILDINGS. 4" SERVICES ARE ALLOWED FOR SINGLE FAMILY RESIDENCES ONLY.
  5. SCHEDULE 40 REQUIRED FOR ALL 4" SERVICES.

**D6.01** **SANITARY SEWER SERVICE**  
NOT TO SCALE



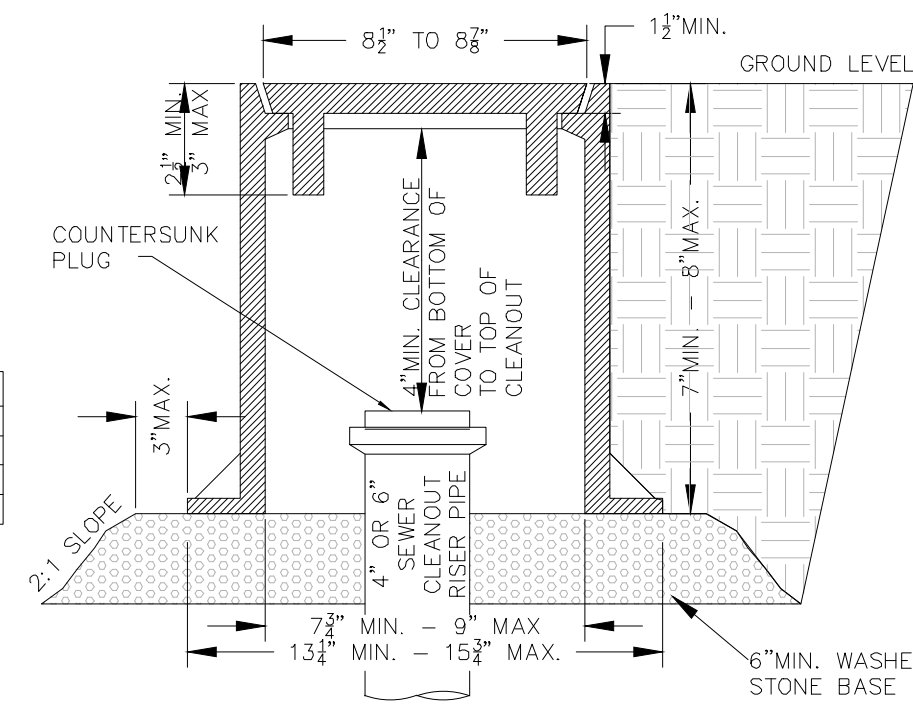
**D6.03** **CLEANOUT DETAIL**  
NOT TO SCALE



- NOTES:
1. PVC PIPES REQUIRE CLASS I PIPE EMBEDMENT MATERIALS.
  2. WHEN TRENCH IS SUBJECT TO INUNDATION, EMBEDMENT MATERIALS MUST EXTEND TO TOP OF PIPE.
  3. NO BOULDERS OR STONES IN EXCESS OF 4" WILL BE USED IN INITIAL BACKFILL.
  4. THIS DETAIL IS VALID FOR PVC SEWER PIPE INSTALLED AT DEPTHS OF UP TO 20 FEET.
  5. PVC PIPE NOT ALLOWED WITH LESS THAN 3'-0" COVER.

**D6.02** **TRENCH FOR PVC PIPE**  
NOT TO SCALE

MINIMUM WEIGHT CHART	
COVER	MIN. WEIGHT-LBS.
COVER	25
BASE	40
TOTAL UNIT	65



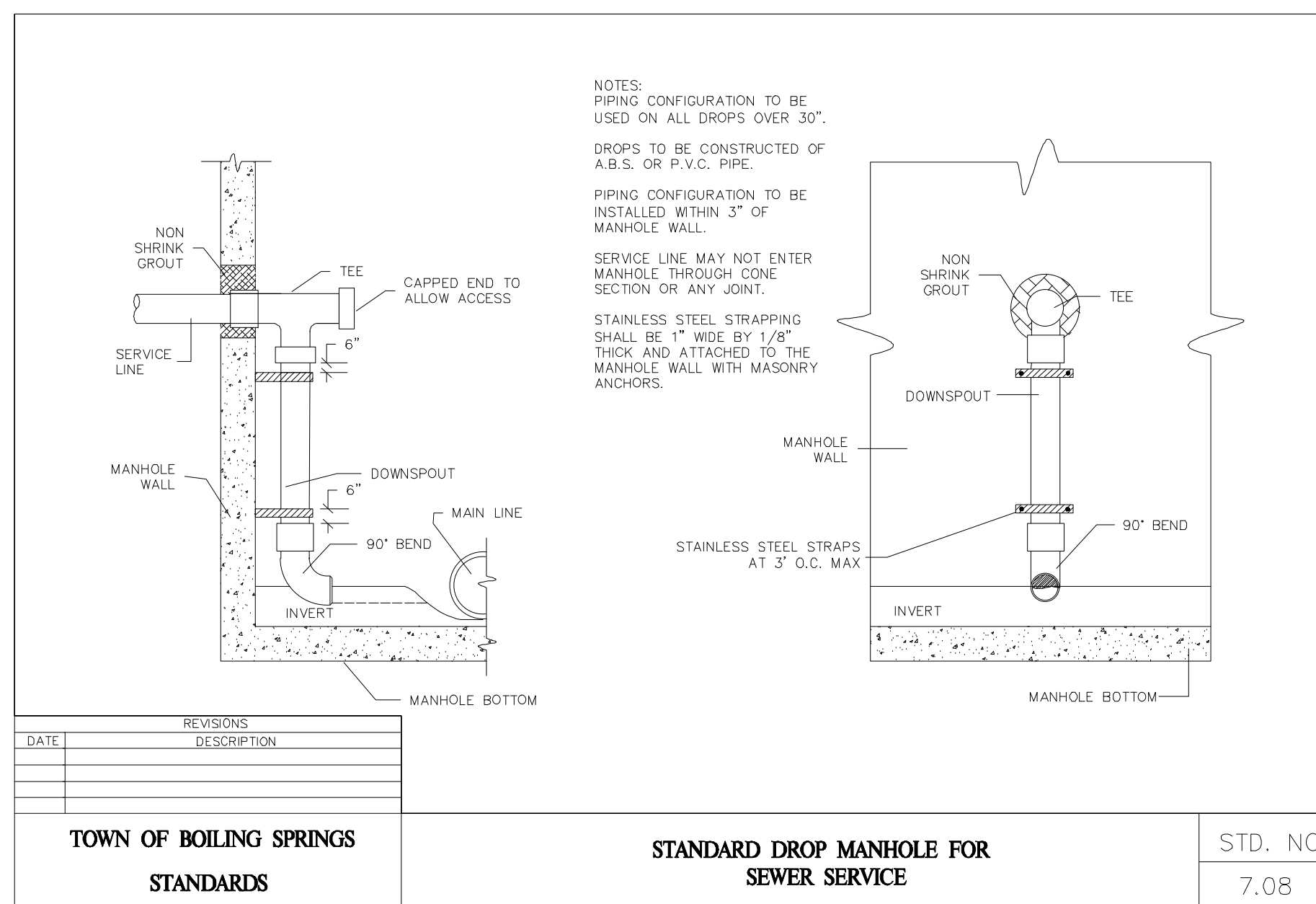
- NOTE:
1. ALL SANITARY SEWER CLEAN OUT BOXES AND COVERS SHALL BE MANUFACTURED FROM GRAY IRON (CAST IRON) MEETING THE REQUIREMENTS OF AWWA C110 AND ASTM A536.
  2. ALL SANITARY SEWER CLEAN OUT BOXES AND COVERS SHALL CONFORM TO PARAGRAPH 2.01(d) OF ITEM II, SECTION VI OF MSD'S TECHNICAL SPECIFICATIONS (MADE IN THE U.S.A.).
  3. SANITARY SEWER CLEAN OUT BOXES AND COVERS MANUFACTURED BY U.S. FOUNDRY (HAND HOLE RING & FC COVER, MODEL #7610), EAST JORDAN IRON WORKS (HEAVY DUTY MONUMENT BOX, MODEL #1574) OR APPROVED EQUAL: U.S. FOUNDRY (HAND HOLE RING & FC COVER, MODEL #7630) MAY BE USED WHERE CLEAN OUT IS WITHIN AN ASPHALT OR CONCRETE PAVED AREA.

**D6.04** **CLEANOUT BOX**  
NOT TO SCALE

## GENERAL NOTES FOR SEWER

1. SEWER CONSTRUCTION ON THIS SITE MUST BE AUTHORIZED BY PERMITS ISSUED BY THE TOWN OF BOILING SPRINGS (TBS). ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS; AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS, REQUIREMENTS AND SPECIFICATIONS OF TBS STANDARDS SUPERSEDE ALL OTHERS IN THE INSTALLATION OF THE PROPOSED SEWER EXTENSION.
2. CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED SEWER PERMITS AND ASSOCIATED NON-SEWER PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR TO PROVIDE COPY OF STREET CUT PERMIT TO TBS PRIOR TO CONSTRUCTION.
3. ALL CONSTRUCTION SHALL BE UNDER THE OBSERVATION OF THE ENGINEER, THE OWNER, THE TOWN OF BOILING SPRINGS. THE ENGINEER SHALL PERIODICALLY OBSERVE THE PROGRESS OF INSTALLATION AND SHALL COMPLETE A FINAL WATER AND SEWER INSPECTION. THE CONTRACTOR SHALL FURNISH, SECURE, AND PROVIDE ALL NECESSARY TESTING MATERIALS, EQUIPMENT, PROCEDURES, AND CERTIFIED LABORATORY TEST RESULTS FOR USE WITH ENGINEERS FINAL CERTIFICATION OF COMPLETION. ANY WORK COVERED PRIOR TO ENGINEER'S INSPECTION IS SUBJECT TO UNCOVERING AND BACKFILLING AT THE CONTRACTOR'S EXPENSE.
4. ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR.
5. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL PROTECT EXISTING AND NEWLY BUILT UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY ULCOO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS. NOTIFY THE ENGINEER AT LEAST 72 HOURS BEFORE STARTING CONSTRUCTION ACTIVITIES.
8. CONTRACTOR SHALL PROVIDE TBS FIELD DENSITY REPORTS VERIFYING SEWER BUILT IN FILL AREAS ARE COMPACTED TO 95% STANDARD PROCTOR.
9. EROSION CONTROL IS FIELD PERFORMANCE BASED AND CONTRACTOR SHALL INSTALL AND MAINTAIN ANY EROSION CONTROL MEASURES NECESSARY TO ASSURE MAXIMUM PROTECTION OF THE SITE. CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL MEASURES REQUIRED TO CONTROL SEDIMENT DURING INSTALLATION ALL SEWER PIPES AND APPURTENANCES.
10. SAFETY AND TRAFFIC ROUTING TO BE COORDINATED WITH TBS & NCDOT AND IN STRICT ACCORDANCE WITH NCDOT GUIDELINES FOR CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS.
11. ALL SEWER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH NC PLUMBING CODES AND ANY REQUIREMENTS PER LOCAL AUTHORITIES. COORDINATE EXACT LOCATIONS OF SERVICE LINES WITH THE ARCHITECTURAL, PLUMBING, AND LANDSCAPING PLANS. SEWER CLEANOUT ASSEMBLY LOCATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO FINAL VERIFICATION.
12. ALL NON-FERROUS UNDERGROUND SERVICE LINES OUTSIDE BUILDING FOOTPRINT SHALL BE REQUIRED TO HAVE A MAGNETIC- TYPE WARNING TAPE INSTALLED IN THE BACKFILL AT LEAST 6" BELOW GRADE.
13. CONTRACTOR TO INSTALL D.I.P. WHERE THE MINIMUM OF 3' COVER OR AT UTILITY CROSSINGS WHERE MINIMUM VERTICAL SEPARATION REQUIREMENTS CANNOT BE MET. PIPE MATERIAL MUST TRANSITION TO D.I.P. 10' PRIOR TO CROSSING VIA A SOLID SLEEVE COUPLING AND EXTEND TO THE NEXT MANHOLE.
14. INSTALL FERROUS PIPING FOR BOTH WATER AND SEWER WITHIN 10' OF A CROSSING IF:
  - A. SEWER LINE CROSSES OVER WATER, OR
  - B. VERTICAL CLEARANCE BETWEEN WATER AND SEWER IS LESS THAN 18".
 MAINTAIN 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER MAINS UNLESS LAID IN SEPARATE TRENCHES WITH THE BOTTOM OF THE WATER LINE AT LEAST 18" ABOVE THE TOP OF SEWER OR USE FERROUS MATERIAL FOR BOTH WATER AND SANITARY SEWER.
14. MAINTAIN 18" VERTICAL SEPARATION BETWEEN STORM DRAIN AND SANITARY SEWER, OR INSTALL FERROUS MATERIAL ON THE SANITARY SEWER WITHIN 10' EACH SIDE OF THE CROSSING.
15. CONTRACTOR RESPONSIBLE FOR ADJUSTING EXISTING WATER APPURTENANCES AS NECESSARY DUE TO ANY SITE CONSTRUCTION OR INSTALLATION.
16. TRENCH BACKFILL AND COMPACTION TESTING SHALL BE PERFORMED BY A CERTIFIED SOILS LABORATORY UNDER ALL PAVED AREAS.
17. THE ENTIRE SEWER EASEMENT MUST BE CLEAR AND REMAINED CLEARED OF TREE PLANTINGS, EXISTING TREES, AND ANY PERMANENT STRUCTURES.
18. CONTRACTOR SHALL SUPPLY THE ENGINEER WITH RECORD OF DEVIATIONS FROM PLANS FOR PREPARATION OF FINAL RECORD DRAWINGS.
19. THE PERMITS REQUIRE CERTIFICATION OF COMPLETION BY THE ENGINEER OF THE SEWER SYSTEMS PRIOR TO ISSUANCE OF FINAL OPERATIONAL APPROVAL BY THE TOWN OF BOILING SPRINGS. SECURE FINAL OPERATIONAL APPROVAL FROM TBS PRIOR TO ACTIVATION OF THE SYSTEM.

## SEWER DETAILS



- NOTES:
- 1. PIPING CONFIGURATION TO BE USED ON ALL DROPS OVER 30".
  - 2. DROPS TO BE CONSTRUCTED OF A.B.S. OR P.V.C. PIPE.
  - 3. PIPING CONFIGURATION TO BE INSTALLED WITHIN 3" OF MANHOLE WALL.
  - 4. SERVICE LINE MAY NOT ENTER MANHOLE THROUGH CONE SECTION OR ANY JOINT.
  - 5. STAINLESS STEEL STRAPPING SHALL BE 1" WIDE BY 1/8" THICK AND ATTACHED TO THE MANHOLE WALL WITH MASONRY ANCHORS.

DATE	REVISIONS	DESCRIPTION

**D6.05**

TOWN OF BOILING SPRINGS STANDARDS	STANDARD DROP MANHOLE FOR SEWER SERVICE	STD. NO. 7.08
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165 DARTON AVENUE  
ASHVILLE, NC 28801  
PHONE (828) 252-5588  
FAX (828) 252-5585

52 WALNUT STREET - SUITE 9  
WAYNESVILLE, NC 28786  
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**CDC** Civil Design Concepts, PA  
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NCBELS LICENSE # C-2184

NO.	DATE	DESCRIPTION
1	06/29/23	PERMIT SUBMITTAL
3	10/19/23	ZONING & STORM RE-SUBMITTAL
4	10/23/23	NOTE UPDATES

FOR REVIEW ONLY

SEWER DETAILS FOR:

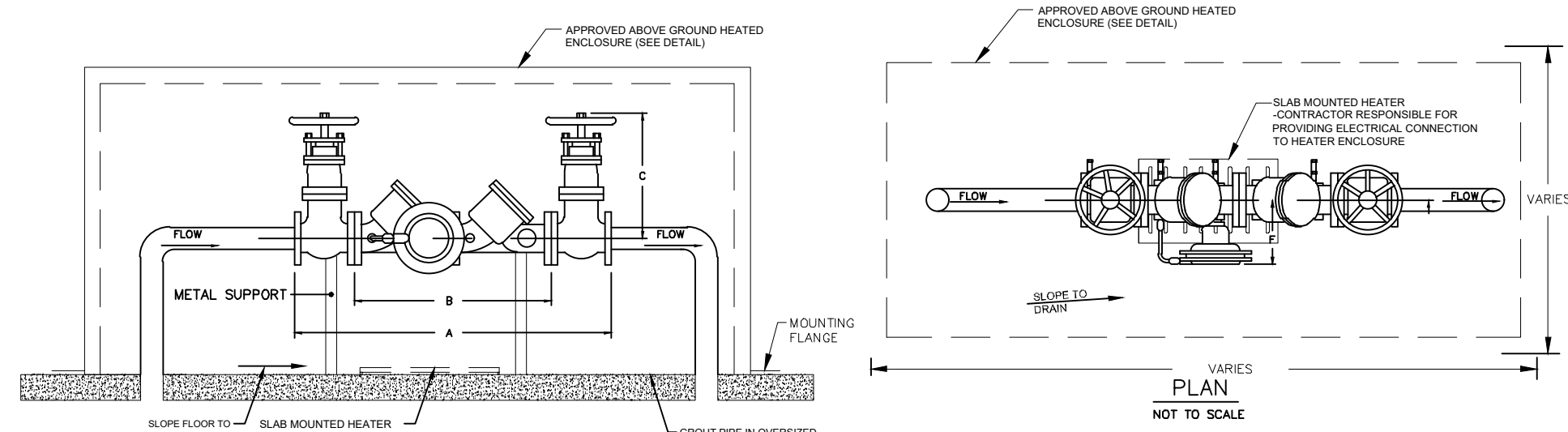
DRAWN BY: CDC PROJECT NO.: 22313  
KWN  
PERMIT NO. TBS  
BS  
NCEDED EC NO.: TBD  
TBD

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

**BOILING SPRINGS RETAIL STORE**

SHEET  
**C961**





SIZE	A	B	C	NET WT. (LBS.)	PAD SIZE (INCH)	PAD SIZE (INCH)	PAD SIZE (INCH)
1	33	13	8	35	45	25	6"
1 1/2	35	19	10	70	58	29	6"
2	37 3/16	22 1/16	12 1/2	270	58	29	6"
3	41 11/16	25 9/16	14	305	89	39	6"
4	50 7/16	32 5/16	17 3/8	490	103	43	6"
6	59 11/16	38 9/16	21 1/4	860	117	53	6"
8	69 3/16	46 1/16	26	1250	135	53	6"
10	84 3/16	58 1/16	30	1720	157	55	6"

NOTES:  
 1. ENCLOSURE SHALL BE COMPLIANT WITH ASSE 1980 STANDARDS FOR CLASS I ENCLOSURES, INCLUDING HEAT SOURCE AND INSULATION. ENCLOSURE SHALL BE BFPRODUCTS, INC. MODEL #P70-400, GAC ENCLOSURES, INC. MODEL WATERMETER-15, OR APPROVED EQUIVALENT. MOUNT ENCLOSURE TO PAD/FOOTER USING SUPPLIED ANCHOR BRACKETS.  
 2. CONTRACTOR RESPONSIBLE FOR ENSURING THAT ENCLOSURE PROVIDES A MINIMUM OF 12" FREE CLEARANCE BETWEEN SIDES AND BOTTOM OF THE ENCLOSURE AND THE BACKFLOW DETECTOR ASSEMBLY.

**D7.01 BACKFLOW DEVICE INSTALLATION IN ABOVE GROUND HEATED ENCLOSURE**  
NOT TO SCALE

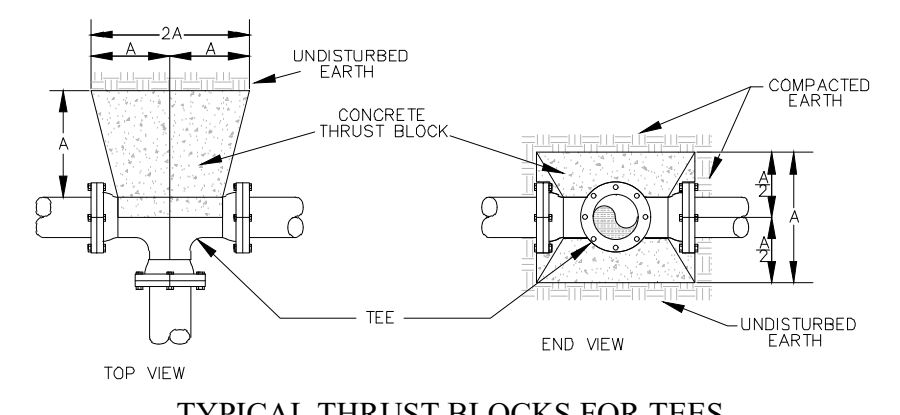
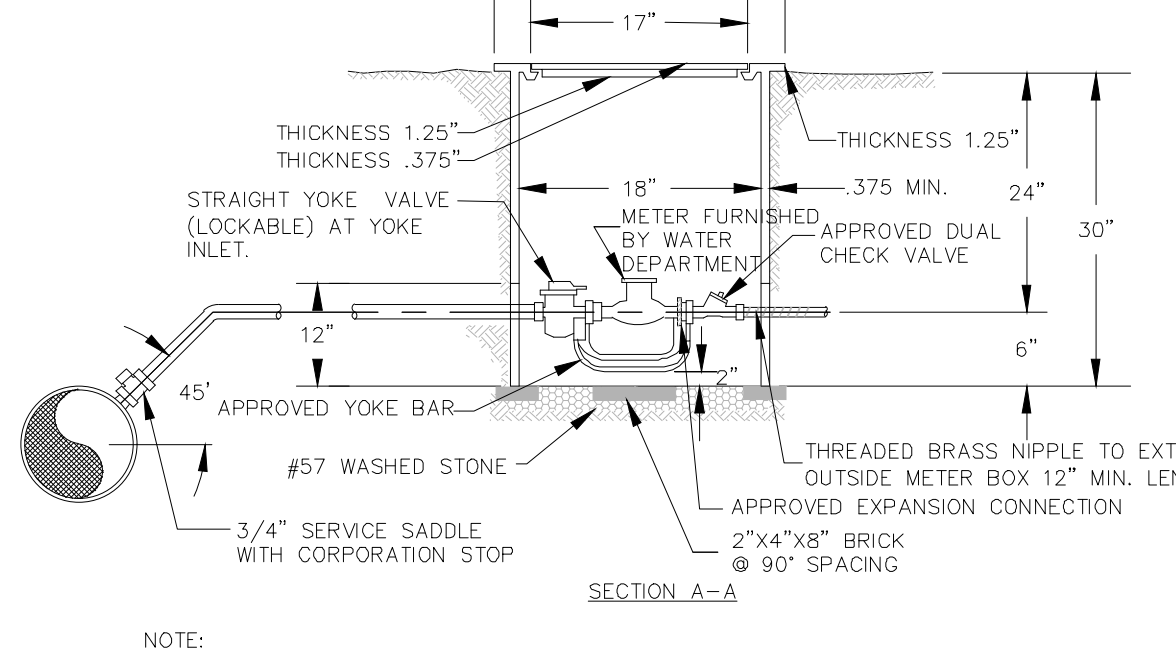
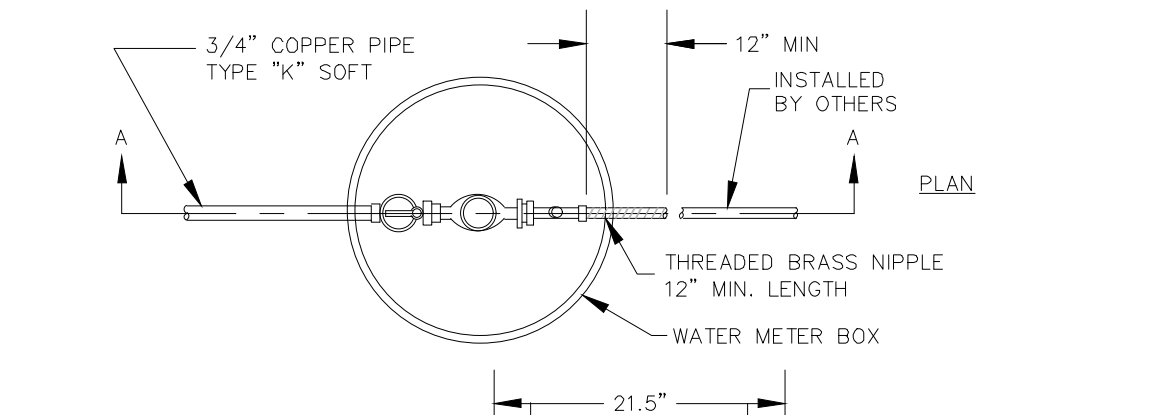


TABLE OF "A" DIMENSIONS (IN FEET)

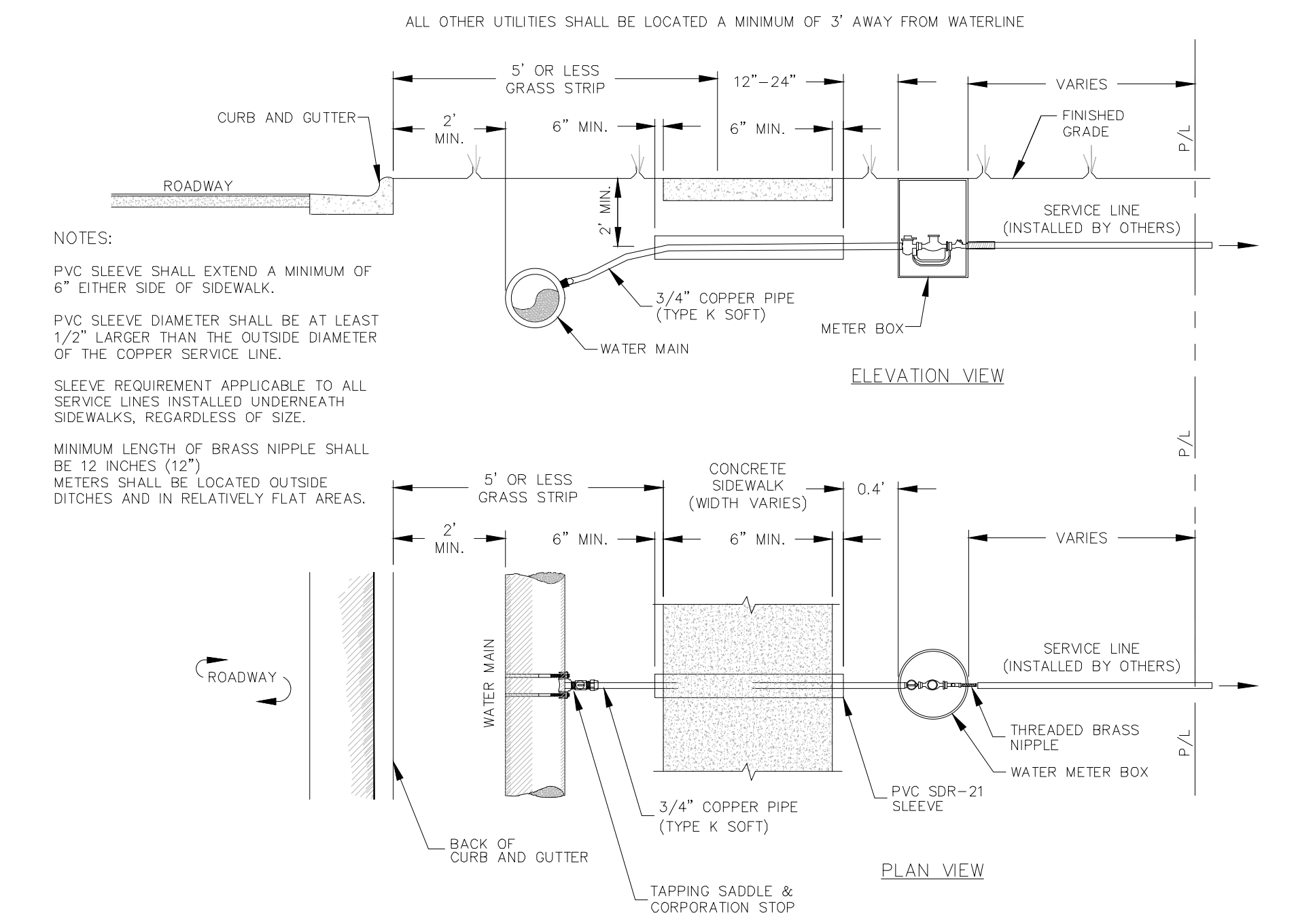
BEND	90	45	22 1/2	11 1/4	TEE
PIPE SIZE (NOMINAL DIAMETER IN INCHES)	6	1.4	1.1	1.0	1.0
	8	1.9	1.5	1.5	1.5
	10	2.4	1.8	1.8	1.8
	12	2.8	2.1	2.0	2.0
	16	3.8	2.8	2.5	2.5
	24	5.6	4.2	3.0	3.0

NOTES:  
 1. ALL FITTINGS MUST BE RESTRAINED AS SPECIFIED IN SECTION 6.05 OF THE STANDARD SPECIFICATIONS AND DETAILS MANUAL.  
 2. DIMENSION TABLE GIVEN IS A GUIDE ONLY. ENGINEER SHALL BE RESPONSIBLE TO CALCULATE THRUST BLOCK DIMENSIONS BASED ON ACTUAL SOIL AND OPERATING PRESSURE CONDITIONS.  
 3. FITTING JOINTS SHALL BE KEPT FREE OF CONCRETE. A LAYER OF POLYETHYLENE PLASTIC SHALL BE PLACED BETWEEN THE FITTING AND THE CONCRETE.  
 4. PRE-CAST THRUST BLOCKS ARE NOT ACCEPTABLE.  
 5. CONCRETE SHALL HAVE 4000 P.S.I. COMPRESSIVE STRENGTH.

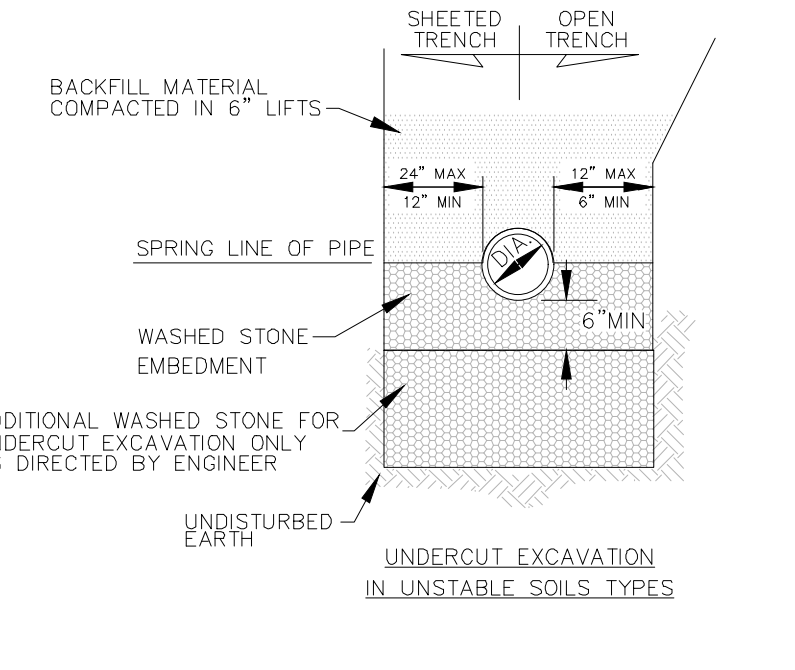
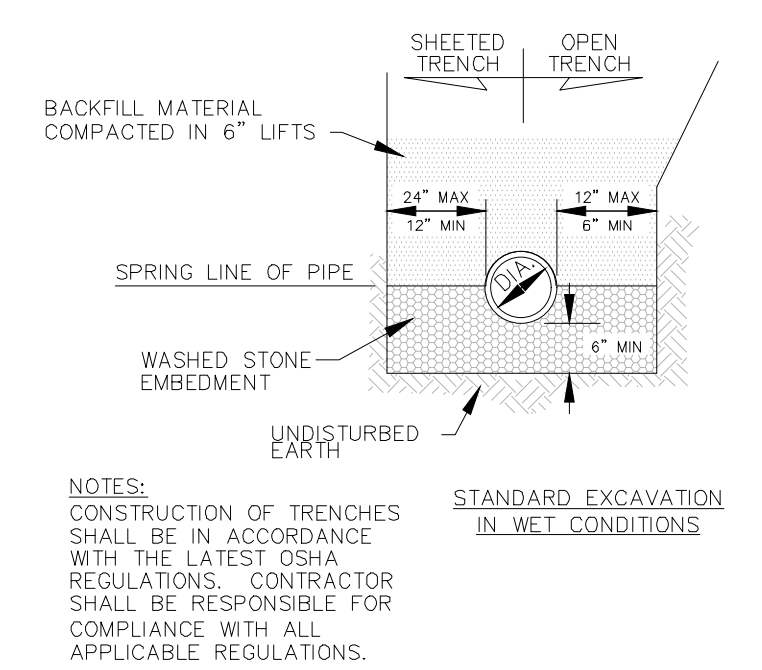
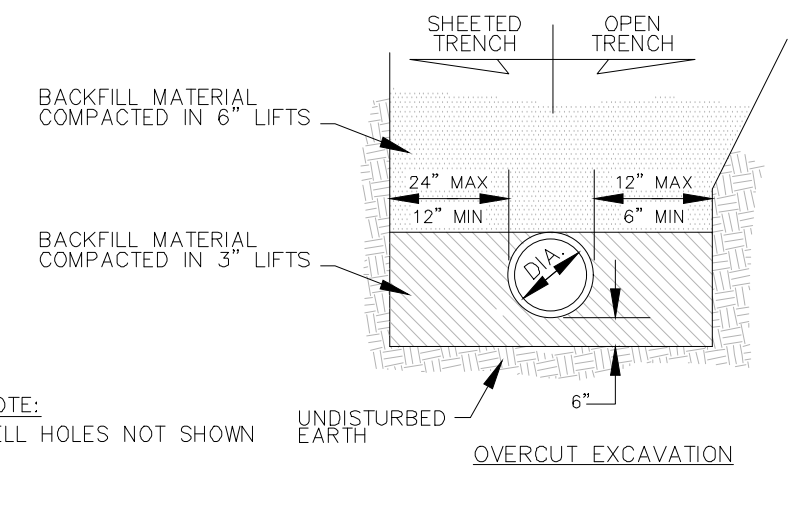
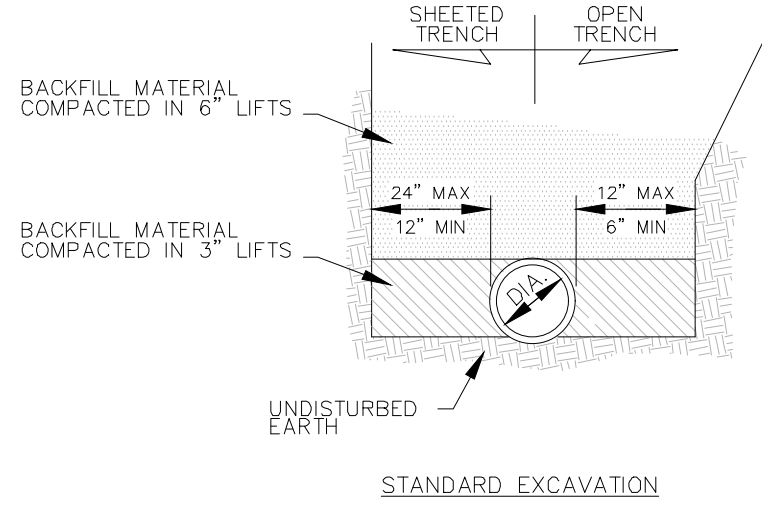
**D7.02 5/8" WATER METER BOX**  
NOT TO SCALE

**D7.03**  
NOT TO SCALE

**D7.04**  
NOT TO SCALE



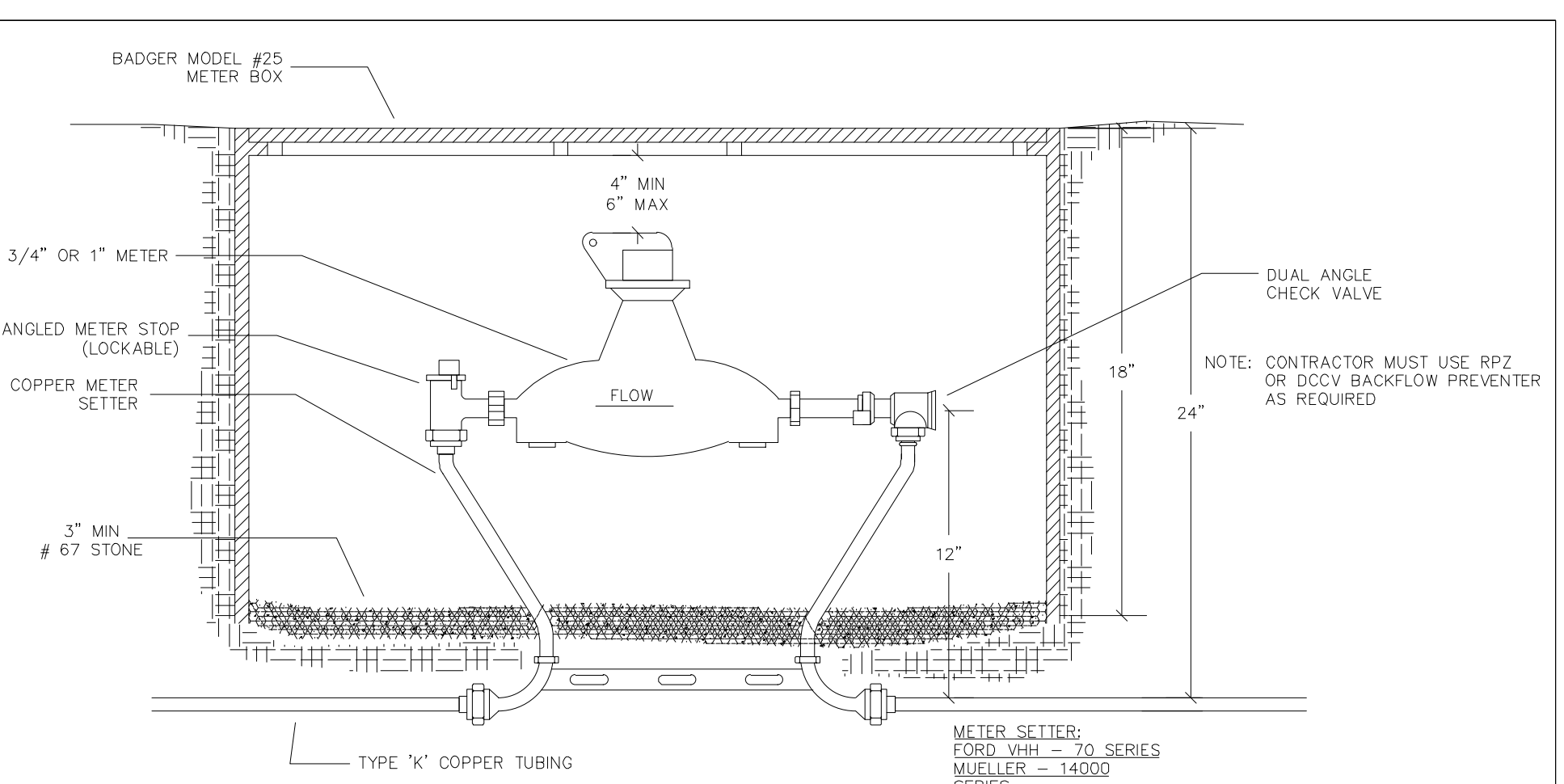
**D7.05 TYPICAL WATER METER INSTALLATION**  
NOT TO SCALE



NOTES:  
 CONSTRUCTION OF TRENCHES SHALL BE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE REGULATIONS.  
 NO BOULDERS OR STONES IN EXCESS OF 4" IN SIZE SHALL BE USED AS PART OF THE INITIAL BACKFILL.  
 PIPE BEDDING MATERIAL SHALL BE # 57 WASHED STONE.

NOTE:  
 BELL HOLES NOT SHOWN.

**D7.06 TYPICAL TRENCH DETAIL**  
NOT TO SCALE



DATE	REVISIONS	DESCRIPTION

TOWN OF BOILING SPRINGS STANDARDS  
 STANDARD 3/4 AND 1" BACKFLOW/METER ASSEMBLY  
 STD. NO. 6.03

**GENERAL NOTES FOR WATER**

- WATER CONSTRUCTION ON THIS SITE MUST BE AUTHORIZED BY PERMITS ISSUED BY THE TOWN OF BOILING SPRINGS (TBS). ALL SITEWORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL REGULATORY STANDARDS, AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS.
- CONTRACTOR TO VERIFY WITH ENGINEER THAT THE REQUIRED WATER PERMITS AND ASSOCIATED NON-WATER PERMITS HAVE BEEN OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE UNDER THE OBSERVATION OF THE ENGINEER, THE OWNER, AND THE TOWN OF BOILING SPRINGS. THE ENGINEER SHALL PERIODICALLY OBSERVE THE PROGRESS OF INSTALLATION AND SHALL COMPLETE A FINAL WATER AND SEWER INSPECTION. THE CONTRACTOR SHALL FURNISH, SECURE, AND PROVIDE ALL NECESSARY TESTING MATERIALS, EQUIPMENT, PROCEDURES, AND CERTIFIED LABORATORY TEST RESULTS FOR USE WITH ENGINEERS FINAL CERTIFICATION OF COMPLETION. ANY WORK COVERED PRIOR TO ENGINEER'S INSPECTION IS SUBJECT TO UNCOVERING AND BACKFILLING AT THE CONTRACTOR'S EXPENSE.
- ALL WORK MUST BE PERFORMED BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE EXACT LOCATION AND ELEVATION FOR ALL UTILITIES PRIOR TO CONSTRUCTION; AND TO NOTIFY ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE LOCATION OF SOME UTILITIES SHOWN ON THE PLANS HAVE BEEN APPROXIMATED. ALL BURIED UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROTECT EXISTING AND NEWLY BUILT UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES INCURRED DURING OR RESULTING FROM CONSTRUCTION ACTIVITY IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE REPAIRED IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY UOOCO AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS. NOTIFY THE ENGINEER AT LEAST 72 HOURS BEFORE STARTING CONSTRUCTION ACTIVITIES.
- EROSION CONTROL IS FIELD PERFORMANCE BASED AND CONTRACTOR SHALL INSTALL AND MAINTAIN ANY EROSION CONTROL MEASURES NECESSARY TO ASSURE MAXIMUM PROTECTION OF THE SITE. CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL MEASURES REQUIRED TO CONTROL SEDIMENT DURING INSTALLATION ALL WATER PIPES AND APPURTENANCES.
- ALL WATER LINES AND SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH NC PLUMBING CODES AND THE TOWN OF BOILING SPRINGS REQUIREMENTS. COORDINATE EXACT LOCATIONS OF SERVICE LINES AND APPURTENANCES WITH THE ARCHITECTURAL, PLUMBING, AND LANDSCAPING PLANS.
- ALL UNDERGROUND UTILITIES. SEE DETAILS FOR GENERAL NOTES CONCERNING WATER MAIN INSTALLATION REQUIREMENTS.
- A 3" COVER DEPTH SHALL BE MAINTAINED FOR ALL PROPOSED WATER LINES, ANY NECESSARY FIELD ADJUSTMENTS MUST BE APPROVED BY THE ENGINEER AND THE CITY INSPECTOR.
- INSTALL FERROUS PIPING FOR BOTH WATER AND SEWER WITHIN 10' OF A CROSSING IF:
  - SEWER LINE CROSSES OVER WATER, OR
  - VERTICAL CLEARANCE BETWEEN WATER AND SEWER IS LESS THAN 18".
 MAINTAIN 10" HORIZONTAL SEPARATION BETWEEN SEWER AND WATER MAINS UNLESS LAID IN SEPARATE TRENCHES WITH THE BOTTOM OF THE WATER LINE AT LEAST 18" ABOVE THE TOP OF SEWER OR USE FERROUS MATERIAL FOR BOTH WATER AND SANITARY SEWER.
- MAINTAIN 18" VERTICAL SEPARATION BETWEEN STORM DRAIN AND WATER OR THE WATER MAIN MUST BE CONSTRUCTED OF FERROUS MATERIALS FOR A DISTANCE OF AT LEAST 10- FEET TO EITHER SIDE OF THE CROSSING.
- MAINTAIN 5' HORIZONTAL DISTANCE BETWEEN WATER LINES AND THE DRIP LINE, AT MATURITY, OF TREES AND OTHER SHRUBS.
- TOWN OF BOILING SPRINGS OWNERSHIP AND MAINTENANCE ENDS AT WATER METER AND/OR THE FIRE LINE ISOLATION VALVE. WATER SYSTEM BEYOND IS TO BE PRIVATELY OWNED AND MAINTAINED.
- METERS, VAULTS, AND FIRE HYDRANTS ARE TO BE PLACED IN RELATIVELY FLAT AREAS.
- BRASS FITTINGS MUST BE LEAD FREE PER TOWN OF BOILING SPRINGS REQUIREMENTS.
- CONTRACTOR RESPONSIBLE FOR ADJUSTING EXISTING WATER APPURTENANCES AS NECESSARY DUE TO ANY SITE CONSTRUCTION OR INSTALLATION.
- TRENCH BACKFILL AND COMPACTION TESTING SHALL BE PERFORMED BY A CERTIFIED SOILS LABORATORY UNDER ALL PAVED AREAS.
- CONTRACTOR SHALL SUPPLY THE ENGINEER WITH RECORD OF DEVIATIONS FROM PLANS FOR PREPARATION OF FINAL RECORD DRAWINGS.
- PRESSURE TEST WATER MAINS TO 200 PSI MIN. AND 250 PSI MAX. AS PER TOWN OF BOILING SPRINGS REQUIREMENTS. DISINFECT WATER LINES AND PROVIDE ACCEPTABLE BACTERIOLOGICAL TEST FROM A CERTIFIED TESTING LABORATORY FOR USE WITH THE ENGINEERS CERTIFICATION OF COMPLETION.
- THE PERMITS REQUIRE CERTIFICATION OF COMPLETION BY THE ENGINEER OF THE WATER SYSTEM PRIOR TO ISSUANCE OF FINAL OPERATION APPROVAL BY THE TOWN OF BOILING SPRINGS. SERVICE WILL BE PROVIDED ONCE FINAL CLOSOUT SUBMITTALS HAVE BEEN APPROVED BY THE TOWN OF BOILING SPRINGS.
- 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 BE LISTED ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVED ASSEMBLIES. THEY 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.
- RESTRAINED JOINTS BY AN APPROVED PIPE MANUFACTURER ARE TO BE USED FOR ALL PUBLIC LINES WHERE THRUST RESTRAINING IS REQUIRED; HOWEVER, THRUST BLOCKS ARE PERMITTED WHERE CONNECTIONS ARE MADE TO EXISTING WATER LINES OR WHERE THE USE OF MECHANICAL RESTRAINT IS NOT FEASIBLE.

**WATER DETAILS**

**CDC** Civil Design Concepts, PA  
 52 WALNUT STREET - SUITE 9  
 WAYNESVILLE, NC 27687  
 PHONE (828) 252-5588  
 FAX (828) 455-5454

NO.	DATE	DESCRIPTION
1	06/29/23	PERMIT SUBMITTAL
3	10/19/23	ZONING & STORM RC-SUBMITTAL
4	10/23/23	NOTE UPDATES

FOR REVIEW ONLY  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 045043  
 10/23/2023

**BOILING SPRINGS RETAIL STORE**  
 THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

WATER DETAILS FOR:  
 DRAWN BY: CDC PROJECT NO.: KWN 22313  
 PERMIT NO. BS  
 NCDEED EC NO.: TBD

SHEET  
**C971**



**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.

**SECTION E: GROUND STABILIZATION**

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**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
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rolled erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rolled erosion control products with grass seed</li> </ul>

**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 and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- 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 or provide secondary containment. 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. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

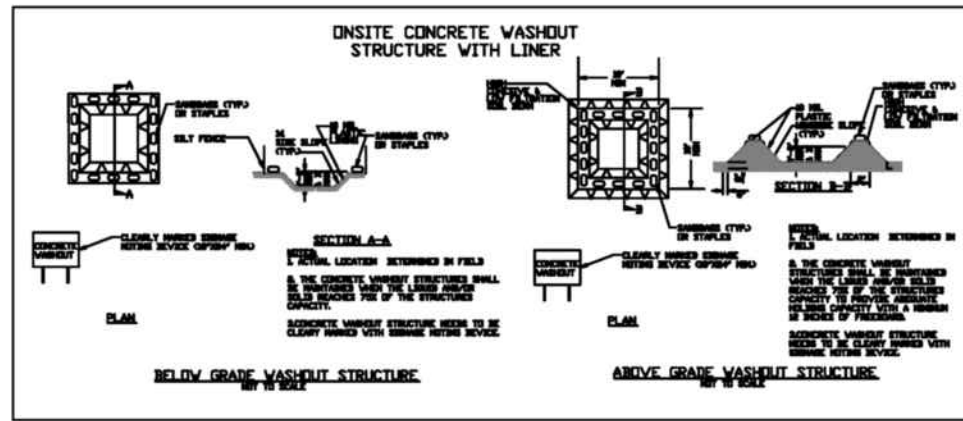
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, 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: 04/01/19**

**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 equal to or 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:
(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 (are 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 measure inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measure was operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective 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. Description, evidence, and date of corrective 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	1. Indication of visible sediment leaving the site, 2. Indication of visible sediment in or outside site limits, then a record of the following shall be made: a. Actions taken to clean up or stabilize the sediment that has left the site limits, b. Description, evidence, and date of corrective actions taken, and c. 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. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframes or an assurance that they will be provided as soon as possible.

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

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**

**1. E&SC Plan Documentation**

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 kept on site and available for inspection at all times during normal business hours.

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 to be Kept on Site**

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for 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 twelve months. 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.

**3. Documentation to be Retained for Three Years**

All data used to complete the e-NOI and all 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. 143-215.85.
- 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 Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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.</li> <li>If the stream is named on the <i>NC 303(d) list</i> 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.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> <li>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.</li> </ul>
(c) Anticipated bypasses (40 CFR 122.41(i)(1))	<ul style="list-style-type: none"> <li>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.</li> </ul>
(d) Unanticipated bypasses (40 CFR 122.41(i)(2))	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(i)(7))	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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 reoccurrences of the noncompliance. (40 CFR 122.41(i)(6)).</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>

**PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT**

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19**



FOR REVIEW ONLY



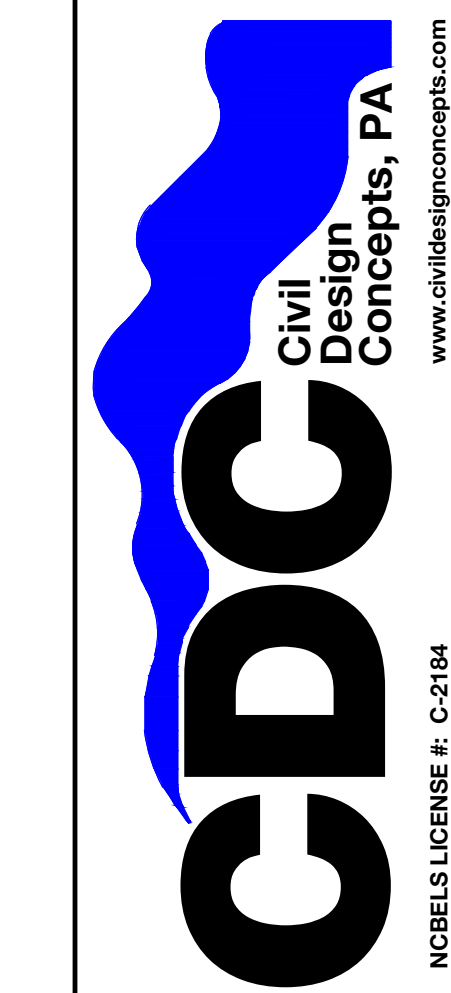
**BOILING SPRINGS RETAIL STORE**  
 THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

DRAWN BY: KNN  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 NCEDED EC NO.: TBD

SHEET  
**C998**

160 DARTON AVENUE  
 ASHVILLE, NC 28801  
 PHONE (828) 252-5588  
 FAX (828) 252-5585

52 WALNUT STREET - SUITE 9  
 WAYNESVILLE, NC 27686  
 PHONE (828) 252-5588  
 FAX (828) 455-5454



NO.	DATE	DESCRIPTION	BY



**LANDSCAPE NOTES**

- ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH ALL TOWN OF BOILING SPRINGS REGULATORY STANDARDS AND ALL REQUIREMENTS IN THE PROJECT TECHNICAL SPECIFICATIONS. CONSULT ENGINEER TO FIELD ADJUST LANDSCAPING AS NECESSARY.
- THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE CONSTRUCTION ACTIVITY IS TO BEGIN. THE CONTRACTOR SHALL NOTIFY NC ONE CALL AT 1-800-632-4949 OR 811, 72 HOURS BEFORE CONSTRUCTION BEGINS.
- STREET TREE SPECIES WITHIN RIGHT-OF-WAY TO BE COORDINATED WITH TOWN OF BOILING SPRINGS ARBORIST.
- ALL GROUND COVER TO BE MULCH PER TOWN OF BOILING SPRINGS PERMANENT SEEDING REQUIREMENTS.
- TREES AND SHRUBS TO COMPLY WITH CITY OF BOILING SPRINGS UDO AS FOLLOWS:  
**TREES:**  
 ALL TREES PLANTED TO SATISFY THE REQUIREMENTS OF THIS SECTION SHALL HAVE A MINIMUM CALIPER OF 1 1/2 INCHES AND BE A MINIMUM OF 8 FEET IN HEIGHT AT THE TIME OF PLANTING. WHERE MULTI-STEM TREES ARE PROPOSED, SUCH TREES SHALL HAVE A MINIMUM OF 3 STEMS AND BE A MINIMUM OF 8 FEET IN HEIGHT AT THE TIME OF PLANTING. CANOPY TREES SHALL HAVE A MINIMUM MATURE HEIGHT OF 30 FEET. UNDERSTORY TREES SHALL HAVE A MATURE HEIGHT OF 30 FEET. ONLY UNDERSTORY TREES MAY BE UTILIZED WHEN TREE PLANTING IS REQUIRED WITHIN 20 LINEAR FEET OF OVERHEAD UTILITY LINES. EXCLUDING STREET TREES, NO MORE THAN 40% OF THE TREES INSTALLED ON A PARTICULAR DEVELOPMENT SITE SHALL BE OF THE SAME SPECIES.  
**SHRUBS:**  
 ALL SHRUBS PLANTED TO SATISFY THE FOUNDATION PLANTING REQUIREMENTS SHALL HAVE A MINIMUM HEIGHT OF 18 INCHES AT THE TIME OF INSTALLATION AND A MINIMUM MATURE HEIGHT OF 3 FEET. ALL REQUIRED SHRUBS WITHIN BUFFER PLANTING AREAS SHALL BE EVERGREEN AND SHALL HAVE A MINIMUM HEIGHT OF 3 FEET AT THE TIME OF INSTALLATION AND A MINIMUM MATURE HEIGHT OF 6 FEET. NO MORE THAN 25% OF THE SHRUBS INSTALLED ON A PARTICULAR DEVELOPMENT SITE SHALL BE OF THE SAME SPECIES.
- DUE TO EXISTING TREES WITHIN THE REQUIRED LANDSCAPE BUFFER AREAS AND THROUGHOUT THE SITE, THE FINAL NUMBER OF TREES AND SHRUBS REQUIRED AND PROVIDED WILL BE BY AGREEMENT WITH THE TOWN OF BOILING SPRINGS PLANNING DEPARTMENT BASED UPON AN ON-SITE INVENTORY.
- LANDSCAPE CONTRACTOR MUST COORDINATE THE LOCATION OF THE TREES TO AVOID EXISTING AND PROPOSED SEWER/WATER LINES AND SEWER/WATER LINE EASEMENTS. NO TREES ARE ALLOWED TO BE PLANTED IN SUCH EASEMENTS.
- THE OWNER / CONTRACTOR SHALL SELECT ALL PROPOSED PLANTINGS FROM THE RECOMMENDED SPECIES LIST IN THE CITY OF KING MOUNTAIN'S CURRENT UNIFIED DEVELOPMENT ORDINANCE (UDO). IT IS RECOMMENDED THE OWNER / CONTRACTOR VERIFY SELECTIONS FOR SUITABILITY WITH A QUALIFIED LANDSCAPE ARCHITECT PRIOR TO PLANTING.

**PLANTING SUMMARY (COA):**

**STREET TREES (ST)**

REQUIREMENTS: 1 CANOPY OR 2 UNDERSTORY TREE PER 40 LF OF FRONTAGE.

FRONTAGE:	589 LF
TREES REQUIRED:	15
TREES PROVIDED:	19

**PARKING LOT LANDSCAPE AREA (PLA)**

REQUIREMENTS: 1 OVERSTORY TREE PER 10 PARKING SPACES AT LEAST 50% IN LANDSCAPE ISLANDS EACH PARKING SPACE WITHIN 60 FEET OF TREE

TOTAL SPACE:	40
TREES REQUIRED:	4
TREES PROVIDED:	4

**FOUNDATION PLANTING (FP)**

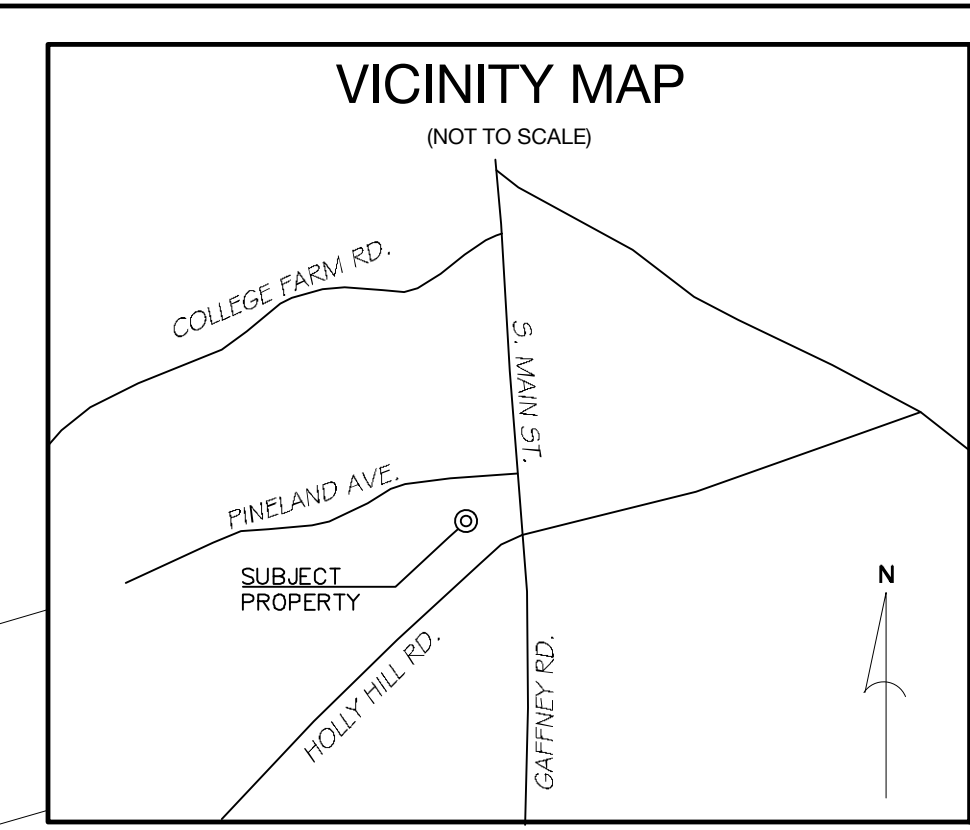
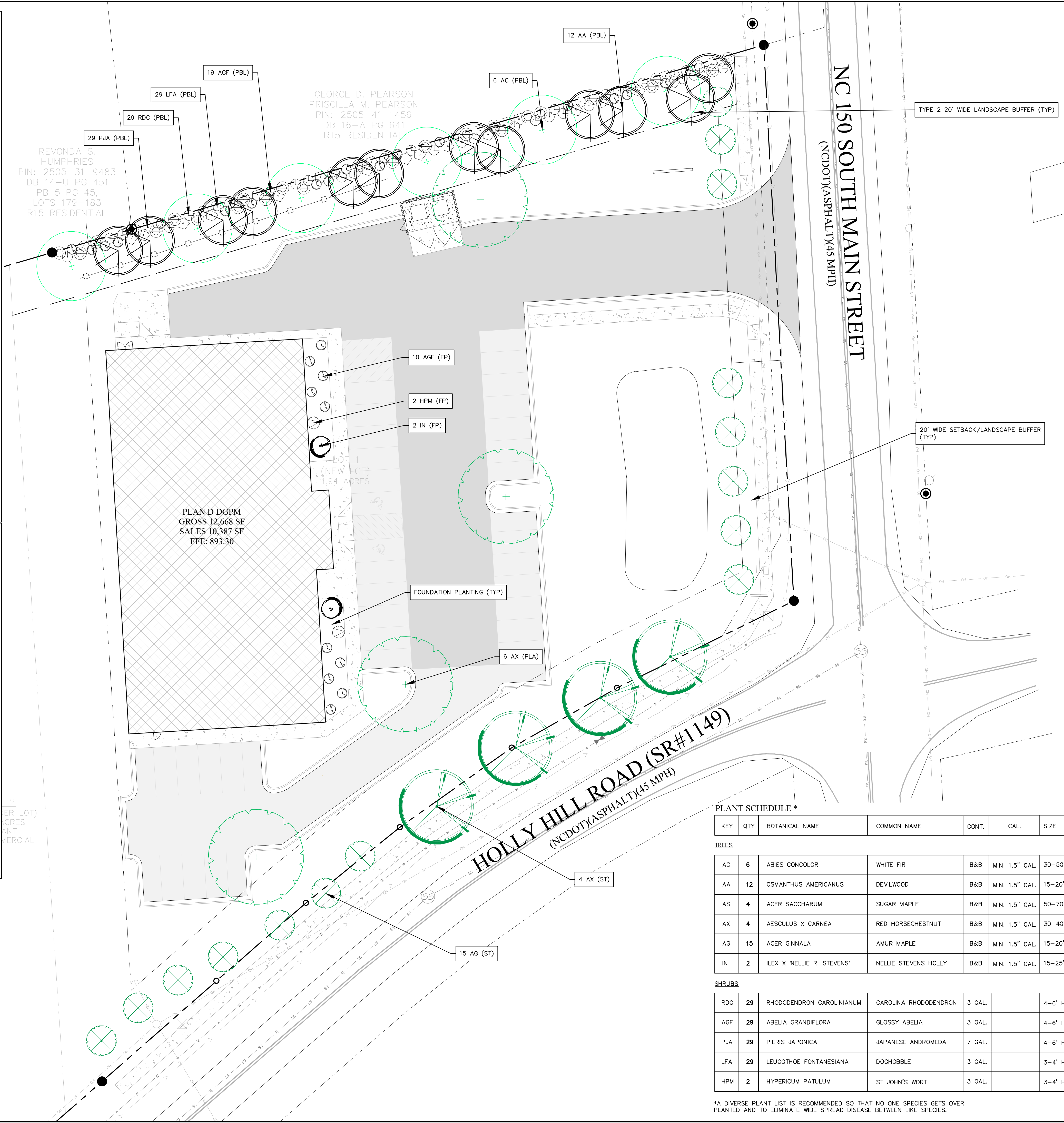
REQUIREMENTS: MINIMUM OF ONE UNDERSTORY TREE AND 6 SHRUBS PER 50 LF OF FRONT BUILDING WALL

BUILDING FRONTAGE:	156 LF
TREES REQUIRED:	2
TREES PROVIDED:	2
SHRUBS REQUIRED:	6
SHRUBS PROVIDED:	6

**PROPERTY LINE BUFFER (PBL)**

REQUIREMENTS: 2 CANOPY TREE, 4 UNDERSTORY TREES AND 35 EVERGREEN SHRUBS PER 100 LF

PROPERTY LINE:	301 LF
LARGE DECIDUOUS TREES REQUIRED:	5
LARGE DECIDUOUS TREES PROVIDED:	5
SMALL DECIDUOUS TREES REQUIRED:	12
SMALL DECIDUOUS TREES PROVIDED:	12
SHRUBS REQUIRED:	105
SHRUBS PROVIDED:	118



**DEVELOPMENT DATA**

OWNER/DEVELOPER: THE BROADWAY GROUP  
 216 WEST SIDE SQ.  
 HUNTSVILLE, AL 35801  
 BOB BROADWAY  
 (256) 533-7287

CONTACT:

CIVIL ENGINEER: CIVIL DESIGN CONCEPTS, P.A.  
 168 PATTON AVENUE  
 ASHEVILLE, NC 28801  
 BEN MUNN, P.E.  
 (828) 252-5388

CONTACT:

SURVEYOR: MCABEE & ASSOCIATES, PA.  
 PO BOX 1768  
 FAIRVIEW, NC 28730  
 J. BARRY WEST, PLS  
 (828) 628-1295

CONTACT:

**PROJECT DATA**

PIN: 2505319148  
 ADDRESS: 442 GAFFNEY RD, BOILING SPRINGS, NC 14E/57  
 DEED BOOK/PAGE: 1.92± ACRES  
 PROJECT ACREAGE: B-1 COMMERCIAL  
 CURRENT ZONING: B-1 COMMERCIAL  
 PROPOSED ZONING: B-2 COMMERCIAL

SETBACKS:  
 FRONT: 20'  
 SIDES: 20'  
 REAR: 30'  
 CORNER: CORNER CLIP INCLUDED IN R/W

DISTURBED AREA: 1.92 AC

IMPERVIOUS AREA: PRE 0.004 ACRES (0.2%) POST 1.03 ACRES (57%)  
 PERVIOUS AREA: 1.81 ACRES (99.8%) 0.78 ACRES (43%)

**ZONING DATA**

**PARKING CALCULATIONS:**

VEHICULAR:  
 REQUIRED SPACES: (MIN. 1/400 SF - 150% THE MIN) MINIMUM MAXIMUM  
 SALES AREA: 10,387 38 PLUS ADA  
 SPACES PROVIDED: 26

HANDICAPPED SPACES:  
 SPACES REQUIRED: 2 SPACES PROVIDED: 2  
 BICYCLE: MINIMUM REQUIRED: 0 AMOUNT PROVIDED: 0

**BUILDING DATA:**

BUILDING TYPE	DESCRIPTION	HEIGHT	GFA
C PLUS	SINGLE STORY STEEL	18'	12,668 SF

**PLANT SCHEDULE \***

KEY	QTY	BOTANICAL NAME	COMMON NAME	CONT.	CAL.	SIZE
<b>TREES</b>						
AC	6	ABIES CONCOLOR	WHITE FIR	B&B	MIN. 1.5" CAL.	30-50' HT.
AA	12	OSMANTHUS AMERICANUS	DEVILWOOD	B&B	MIN. 1.5" CAL.	15-20' HT.
AS	4	ACER SACCHARUM	SUGAR MAPLE	B&B	MIN. 1.5" CAL.	50-70' HT.
AX	4	AESCULUS X CARNEA	RED HORSECHESTNUT	B&B	MIN. 1.5" CAL.	30-40' HT.
AG	15	ACER GINNALA	AMUR MAPLE	B&B	MIN. 1.5" CAL.	15-20' HT.
IN	2	ILEX X NELLIE R. STEVENS'	NELLIE STEVENS HOLLY	B&B	MIN. 1.5" CAL.	15-25' HT.
<b>SHRUBS</b>						
RDC	29	RHODODENDRON CAROLINIANUM	CAROLINA RHODODENDRON	3 GAL.		4-6' HT.
AGF	29	ABELIA GRANDIFLORA	GLOSSY ABELIA	3 GAL.		4-6' HT.
PJA	29	PIERIS JAPONICA	JAPANESE ANDROMEDA	7 GAL.		4-6' HT.
LFA	29	LEUCOTHOE FONTANESIANA	DOGHOBBLE	3 GAL.		3-4' HT.
HPM	2	HYPERICUM PATULUM	ST JOHN'S WORT	3 GAL.		3-4' HT.

\*A DIVERSE PLANT LIST IS RECOMMENDED SO THAT NO ONE SPECIES GETS OVER PLANTED AND TO ELIMINATE WIDE SPREAD DISEASE BETWEEN LIKE SPECIES.

**CDC INSPECTIONS HOTLINE:**  
 828-771-4753 OR INSPECTION@CDCGO.COM

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

**NORTH**

**LANDSCAPE COMPLIANCE**

GRAPHIC SCALE  
 0 10 20 40 60  
 ( IN FEET )  
 1 inch = 20 ft.

Item 1.

168 PATTON AVENUE  
 ASHEVILLE, NC 28801  
 PHONE (828) 252-5388  
 FAX (828) 252-5388

52 WALNUT STREET - SUITE 9  
 WAYNESVILLE, NC 28794  
 PHONE (828) 252-5388  
 FAX (828) 456-546

**CDC** Civil Design Concepts, PA  
 www.civildesignconcepts.com  
 NCIBELS LICENSE # C-2184

NO.	DATE	DESCRIPTION	BY
1	08/29/23	PERMIT SUBMITTAL	KWN
2	08/17/23	DOT & EC RE-SUBMITTAL	ACL
3	10/18/23	ZONING & STORM RE-SUBMITTAL	CS

**FOR REVIEW ONLY**

10/19/2023

**BOILING SPRINGS RETAIL STORE**

THE BROADWAY GROUP - CLEVELAND COUNTY, NORTH CAROLINA

LANDSCAPE COMPLIANCE FOR:

DRAWN BY: KWN  
 CDC PROJECT NO.: 22313  
 PERMIT NO.: TBD  
 BS NCDEED EC NO.: TBD

SHEET  
**L101**





THE TOWN OF  
**BOILING SPRINGS**  
ONE TOWN • ONE UNIVERSITY • ONE COMMUNITY

**REPORTS**

**TOWN MANAGER ZACHARY PARKER**

**COUNCILMEMBER MARTY THOMAS**

**COUNCILMEMBER TOMMY GREENE**

**COUNCILMEMBER PATRICK LITTON**

**COUNCILMEMBER BILL ELLIS**

**COUNCILMEMBER RON WOOD**

**MAYOR DANIEL THOMAS**