



I-77 DB PANTHER INTERCHANGE PROJECT

YORK COUNTY, SC

PRELIMINARY UTILITY REPORT

PROJECT ID: P038652

Prepared for
South Carolina Department of Transportation

Prepared by
OLH, Inc.

Date: February 13, 2020



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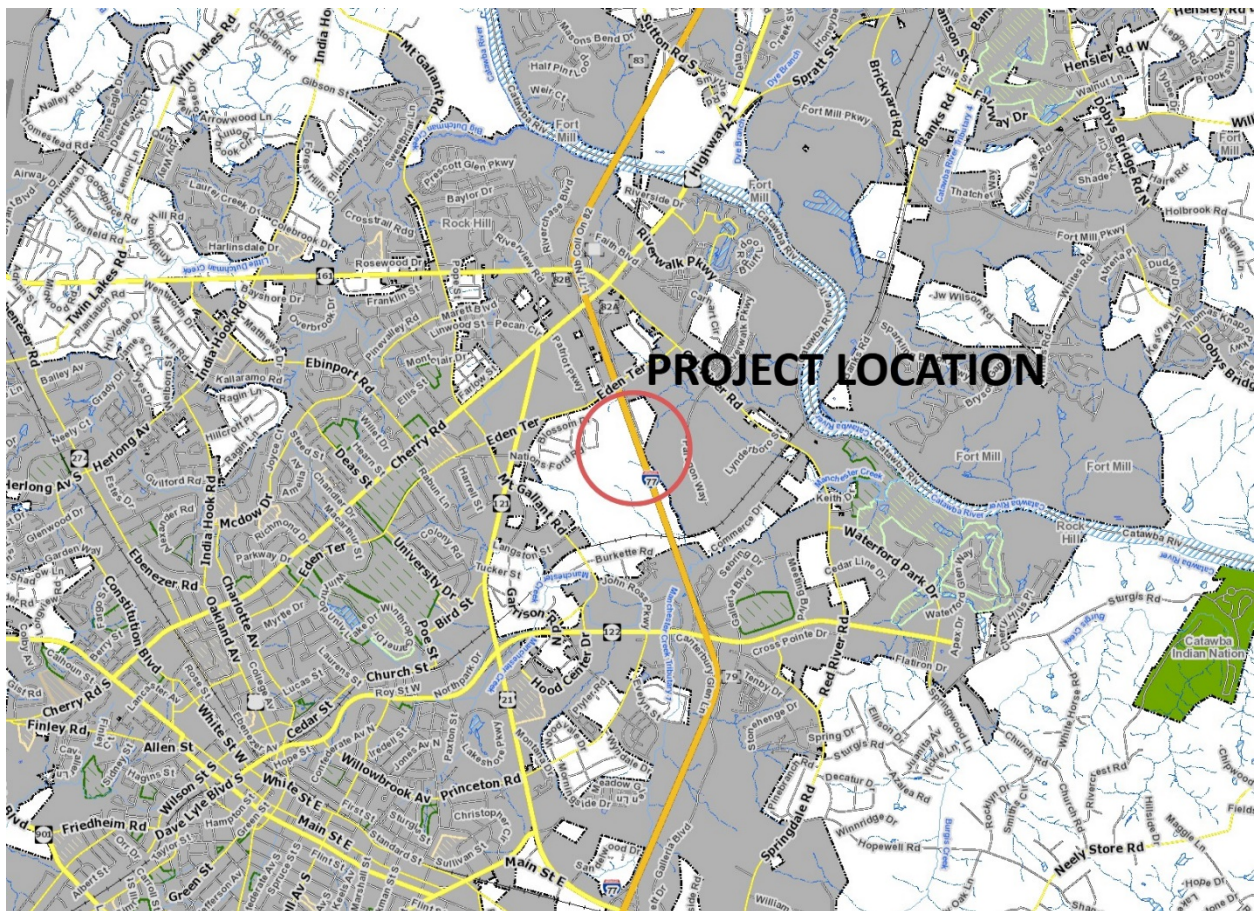
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- YORK ELECTRIC CO-OP
- CITY OF ROCK HILL
- ROCK HILL TELEPHONE(COMPORIUM)
- LEVEL 3 COMMUNICAIONS/CENTURY LINK
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- SCDOT

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PROJECT DESCRIPTION & LOCATION

The South Carolina Department of Transportation (SCDOT) proposes the design and construction of a new full access interstate interchange on I-77 near the city of Rock Hill within York County, South Carolina providing access to the adjacent proposed Carolina Panther development and neighboring areas. The proposed interchange will be located approximately 1 mile south of US 21 Bypass/Cherry Rd (Exit 82) and approximately 1.5 miles north of SC 122/Dave Lyle Blvd (Exit 79). This project is situated within a portion of the I-77 right-of-way maintained by the SCDOT; as well as a portion of Paragon Way right-of-way maintained by the City of Rock Hill and near the Corporate Blvd. right-of-way maintained by York County. See below for a project vicinity map.



GENERAL

The purpose of this preliminary utility report is to evaluate the locations of existing utilities and identify any possible conflicts within the construction limits of the I-77 Interstate Interchange project according to preliminary design. Additionally, this report provides a list of all utility owners with contact information (**Appendix A**). Project layout and limits where defined by preliminary design files provided by RS&H Engineers attached in (**Appendix B**). Currently there are no proposed preliminary construction drawings available. Utility owner’s documentation and other utility facility information are located in (**Appendix C**). A Potential Utility Conflicts Location Map corresponding with the Potential Conflict of Utilities Section in this report is attached in (**Appendix D**). Area utilities where determined by SC811, a SUE survey performed by CECS in April of 2019, correspondence with area utility owners and a site investigation performed by OLH, Inc. on December 19, 2019.

LIST OF UTILITIES WITHIN THE PROJECT LIMITS

Utility Type	Owner	SC811 Code
Electric	Duke Energy	DPCZ72F
	York Electric Co-op	YECZ42
	City of Rock Hill	CRH55
Telecom	Rock Hill Telephone (Comporium)	RHT33
	Level 3 Communications/Century Link	LC393
Water	City of Rock Hill	CRH55
Sewer	City of Rock Hill	CRH55
Gas	York County Natural Gas	YOR56
Gas Transmission	York County Natural Gas	YOR57
Traffic	SCDOT	SCTD04

DATA OBTAINED FROM SC811

PRELIMINARY SUMMARY OF UTILITIES

-Duke Energy-

Duke currently owns and maintains major aerial electric transmission lines arranged on existing steel towers as well as wooden power poles with supporting guy wires traversing north & south to the west of I-77 within Duke's existing right-of-way, as recorded in PB 176 Pg. 5. An additional portion of the aerial electric powerlines arranged on wooden poles split perpendicular from this major powerline line and traverse west to east spanning across I-77, approximately 2500 LF south of the Eden Terrace (SR-284) overpass within Duke's existing right-of-way, as recorded in PB 176 Pg. 5 & PB 152 Pg. 271. This powerline then turns to the northeast out of the project area as depicted in maps received from Duke attached in **(Appendix C)**.

The proposed construction will be in conflict with Duke's existing powerline infrastructure and will need to be relocated. Relocation efforts to move Duke's powerline infrastructure to the southwest out of the proposed project area are currently being implemented among the SCDOT, the South Carolina Department of Commerce and Duke Energy. If the contractor requests aerial power lines to be sleeved/shielded during construction, the request should be made at least five (5) working days to Duke Energy prior to any activity being performed and should adhere to the OSHA guidelines for buffer distance in relation to the power lines.

- York Electric Co-op -

York Electric Co-op currently owns and maintains aerial electric distribution lines arranged on existing wooden power poles with supporting guy wires traversing north & south to the east of I-77 paralleling Corporate Blvd within the existing right-of-way designated for Corporate Blvd. These aerial powerlines distribute overhead service lines supplying numerous businesses along Corporate Blvd and buried service power to the SCDOT traffic system infrastructure as shown in maps received from York Electric Co-op attached in **(Appendix C)**. This aerial electric line then

transforms underground on a wooden pole structure located near the cul-de-sac at the end of Corporate Blvd traveling underground below the Duke's aerial electric powerline that crosses I-77 resurfacing returning to aerial lines on a wooden pole structure to the south out of Duke's power line right-of-way. The aerial electric line then continues north & south along the eastern boundary of I-77 towards the NS railroad to the south within the existing right-of-way designated for the frontage road adjacent to I-77, as recorded in PB E216 Pg. 8 & PB 77 Pg. 105. This electric power line continues to supply power via overhead and buried electrical service lines to multiple billboards as well as the SCDOT traffic system adjacent to the interstate to the south out of the proposed project area.

The proposed construction will be in conflict with York Electric Co-op's existing infrastructure and will need to be relocated. See **Table 1** for estimated relocation costs and separation values. If the contractor requests the aerial power lines to be sleeved/shielded during construction, the request should be made at least five (5) working days to York Electric Co-op prior to any activity being performed and should adhere to the OSHA guidelines for buffer distance in relation to the power lines.

- City of Rock Hill –

Electric

City of Rock Hill currently owns and maintains buried electric distribution lines with supporting transformers along with non-wooden poles for area lighting traversing north & south laterally on both sides of Paragon Way within the existing right-of-way designated for Paragon Way maintained by the City of Rock Hill as shown in maps received from the City of Rock Hill attached in (**Appendix C**).

The proposed construction will be in conflict with the City of Rock Hill's existing infrastructure and will need to be relocated. See **Table 1** for estimated relocation costs and separation values. If the contractor requests the power lines to be sleeved/shielded during construction, the

request should be made at least five (5) working days to City of Rock Hill prior to any activity being performed and should adhere to the OSHA guidelines for buffer distance in relation to the power lines.

Water

City of Rock Hill currently owns and maintains water utility infrastructure to include a buried 12" DI water main travelling the eastern portion of Paragon Way with perpendicular buried water service lines to service businesses in the Riverwalk Business Park. This includes associated fire hydrants, meters and valves located within the project's construction area as shown in maps received from the City of Rock Hill attached in **(Appendix C)**.

The proposed construction could be in conflict with the City of Rock Hill's existing buried water infrastructure and will possibly need to be relocated. See **Table 1** for estimated relocation costs and separation values.

City of Rock Hill also currently owns and maintains a newly constructed buried 24" DI Water Transmission Main crossing under I-77 approximately 250' south of the Eden Terrace overpass beneath the project's construction as shown in drawings obtained from the City of Rock Hill attached in **(Appendix C)**.

Sewer

City of Rock Hill currently owns and maintains buried sewer line infrastructure to include a 12" DI gravity main travelling the western portion of Paragon Way with perpendicular buried sewer service lines to service businesses in the Riverwalk Business Park along with associated manholes located within the project's construction area as shown in maps received from the City of Rock Hill attached in **(Appendix C)**.

The proposed construction could be in conflict with the City of Rock Hill's existing buried sewer infrastructure and will possibly need to be relocated. See **Table 1** for estimated relocation costs and separation values.

-Rock Hill Telephone (Comporium)-

Rock Hill Telephone (Comporium) currently owns and maintains an aerial telecom cable attached to the existing York Electric Co-op's wooden power poles traversing north & south to the east of I-77 paralleling Corporate Blvd within the existing right-of-way designated for Corporate Blvd. The aerial telecom line then continues north & south along the eastern boundary of I-77 towards the NS railroad to the south attached to the existing York Electric Co-op's wooden power poles. Rock Hill Telephone (Comporium) also currently owns and maintains buried copper cables, fiber optic cables, buried enclosures and pedestals along Paragon Way servicing businesses in the Riverwalk Business Park located within the project's construction area as shown in maps received from Rock Hill Telephone(Comporium) attached in (**Appendix C**).

The proposed construction will be in conflict with the Rock Hill Telephone (Comporium)'s existing infrastructure and will need to be relocated. Mr. Joey Adams from Rock Hill Telephone (Comporium) stated that the relocation of the aerial telecom cable attached to York Electric Coop's wooden power poles will be at No Cost via a letter sent January 8, 2020 as shown in (**Appendix C**). The buried cables, pedestals & enclosures along Paragon Way could pose a possible conflict within the project's construction area as shown in (**Appendix C**). See **Table 1** for estimated relocation costs and separation values.

-Level 3 Communications/Century Link-

Level 3 Communications/Century Link currently owns and maintains buried fiber optic cables located outside of the project's construction area to the north and south as shown in (**Appendix C**).

-York County Natural Gas -

York County Natural Gas currently owns and maintains a buried 4" plastic natural gas main along the western portion of Paragon Way with perpendicular buried 2" gas service lines with associated valves to service businesses in the Riverwalk Business Park. York County Natural Gas also currently owns and maintains a buried 4" plastic natural gas main crossing under I-77 approximately 365' south of the Eden Terrace overpass located within the project's construction area as shown in maps received from the York County Natural Gas attached in **(Appendix C)**.

The proposed construction could be in conflict with the York County Natural Gas' existing natural gas infrastructure and will possibly need to be relocated. See **Table 1** for estimated relocation costs and separation values.

-SCDOT -

SCDOT currently owns and maintains a large Digital Message Signage(DMS) structure that spans I-77 approximately 2100 LF south of the Eden Terrace (SR-284) overpass Also, pole(concrete) mounted traffic cameras, road signage, buried fiber optic cables traversing north & south with related signal junction boxes, cabinets and buried enclosures located to the east of I-77 paralleling Corporate Blvd within the existing SCDOT right-of-way designated for I-77 as shown in an aerial map received from SCDOT-ITS attached in **(Appendix C)**. SCDOT also currently owns abandoned Traffic Sensing Systems to include radar traffic detectors on cement poles with associated buried cables located within the project's construction area that not located or marked.

The proposed construction will be in conflict with the existing SCDOT ITS infrastructure and will need to be relocated. See **Table 1** for estimated relocation costs.

PRELIMINARY PRIOR RIGHTS & RELOCATION COST ASSESMENT

After reviewing the SCDOT’s Archived Plans online it was discovered that the SCDOT has owned the Right of Way of I-77 since 1968 before most area utilities as per SCDOT File # 46.626, Project No. I-77-1(2), sheets 16 through 20; see plan sheets in **(Appendix C)**. Determination of the prior rights have been established based on utility owners’ feedback and documentation, county/city geographical & parcel information systems as well as design files from the design engineer. Prior rights documentation provided by the utility owners are located in **(Appendix C)**. See below for a preliminary summary of prior rights, relocation costs, and each utility’s separation value.

Preliminary Summary of Prior Rights, Separation Values, and Relocation Estimates

Utility	Owner	Prior Rights	Separation Value	Estimated Relocation Cost
Electric	Duke Energy	by ROW Easement	23’ Min.	TBD by SCDOC
	York Electric Co-op	Prior rights claimed, no documentation	Aerial: 18.5 ft. Min.	\$46,000
	City of Rock Hill	by Easement*	Underground: 4 ft. Min.	\$150,000
Telecom	Comporium	by Easement*	NESC standards	\$14,000
Fiber Optic	CenturyLink	Not present within project limits	N/A	N/A
Water	City of Rock Hill	by Easement*	10 ft.	\$151,000 (Water & Sewer combined)
Sewer	City of Rock Hill	by Easement*	10 ft.	\$151,000 (Water & Sewer combined)
Gas	York County Natural Gas	by Easement along I-77* No prior rights claimed along Paragon Way (where potential conflict is)	5 ft. from other utilities	\$22,000
Traffic	SCDOT-ITS	by ROW Easement	N/A	\$650,000
	City of Rock Hill	Not present within project limits	N/A	N/A

TABLE 1

* Refer to Appendix C for documentation

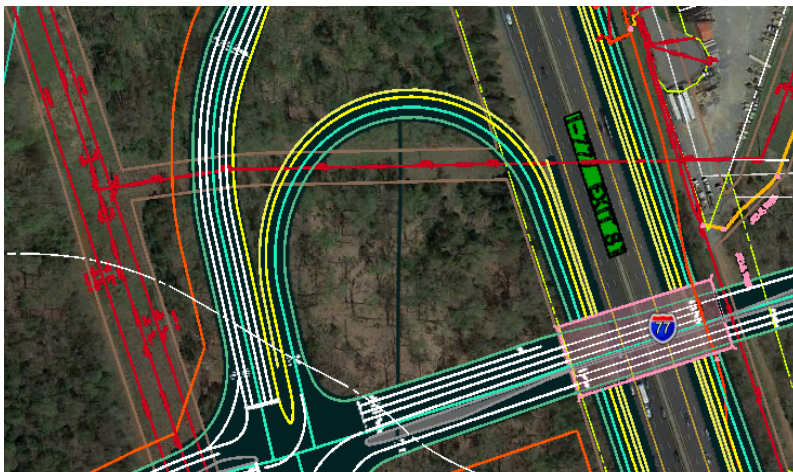
POTENTIAL CONFLICT OF UTILITIES

Electric (in red):

***A (DUKE - overhead)** Multiple major aerial transmission powerlines and steel towers/wooden poles will be in conflict with the proposed interchange as shown below. To be relocated to the southwest around the proposed Panthers facility by SC Dept of Commerce.



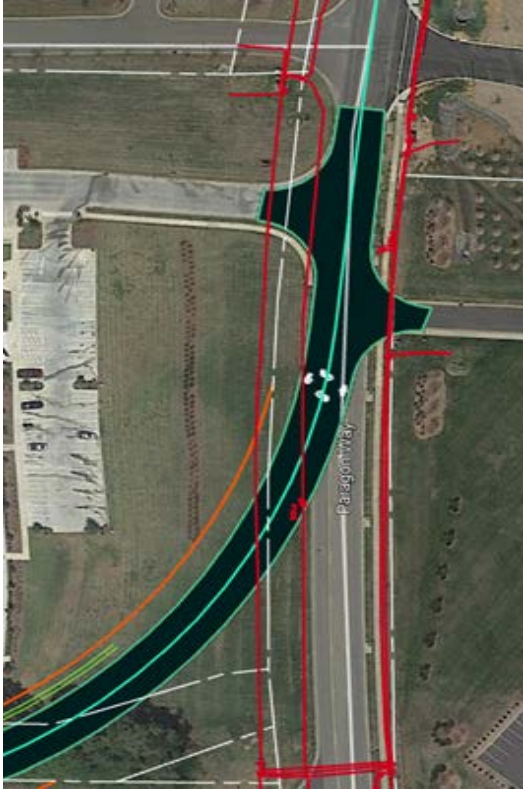
***B (DUKE - overhead)** Transmission line branches to the east crossing over I-77 to the south of Corporate Blvd in conflict with the proposed south bound on and off ramps as shown below.



***C (YORK, COMPORIUM – overhead, small section underground)** York Electric Co-op aerial electric line arranged on wooden poles with attached Comporium telecom lines parallel to the eastern edge of I-77 will be in conflict with the proposed interchange overpass along with the north bound on and off ramps as shown below.



***D (CITY OF ROCK HILL - underground)** Two buried electrical lines running north-south along both sides of Paragon Way, could be in conflict with the proposed road as shown below.



***E (CITY OF ROCK HILL)** Non-wood area light pole between proposed road and existing sidewalk could be in conflict as shown below.



***F (CITY OF ROCK HILL)** Non-wood area light pole where proposed road intersect Paragon Way will be in conflict as shown below.



***G Water - City of Rock Hill** (in blue):

Buried 12" ductile iron (DI) water main on east side of Paragon Way where proposed road intersects near a fire hydrant and water valve could be in conflict as shown below.



Buried 10" (DI) service main with valves crossing existing Paragon Way where proposed road intersects could be in conflict as shown below.



***H Sewer – City of Rock Hill** (in red aerial; green in photos):

Buried 12" ductile iron (DI) gravity main parallel to the western side of Paragon Way where proposed road intersects near existing manholes could be in conflict as shown below.



***I Gas – York County Natural Gas** (in yellow):

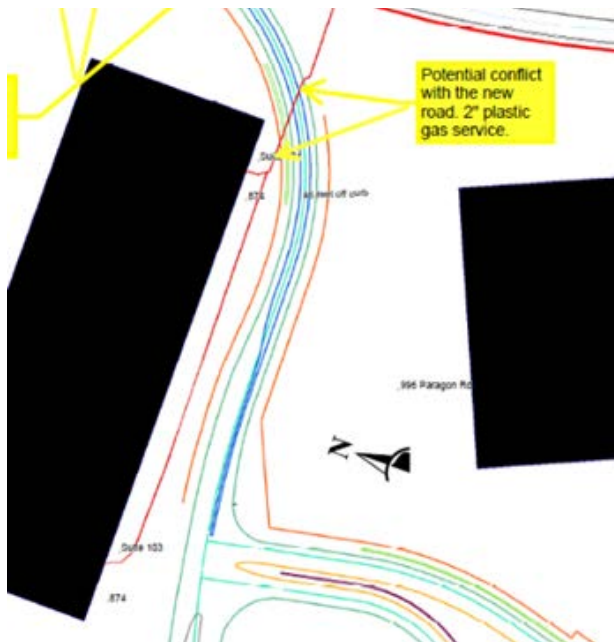
Buried 4" steel gas main crosses under I-77 where proposed exit ramps parallel I-77 to the north of the project area could be in conflict as shown below.



Buried 4" plastic gas main parallel to the west side of Paragon Way and buried 2" plastic gas service line where proposed road intersects could be in conflict as shown below.



Buried 2" plastic gas service line servicing the DHL building that runs parallel with the southern edge of their building, north of proposed road where proposed road intersects could be in conflict as shown below (map in red).



***J Telecom/Fiber Optic – Rock Hill Telephone/Comporium (in red/orange):**

Aerial telecom line arranged on York Electric Co-op’s wooden power poles parallel to the eastern edge of I-77 will be in conflict with the proposed interchange overpass, north bound on and off ramps as shown below.

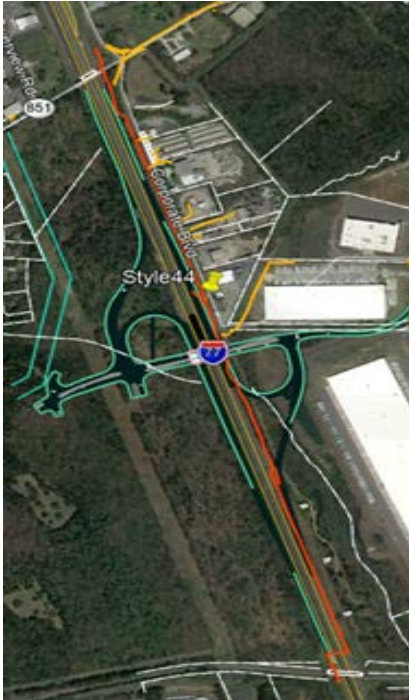


Buried Cable TV/C telephone/FO and C telephone/FO lines split off main line to the east under Paragon Way then run parallel north along the western side of Paragon Way to another telephone FO hand hole and pedestal, could be in conflict where proposed road intersects Paragon Way as shown below in orange.



***K Traffic Control – SCDOT (in orange):**

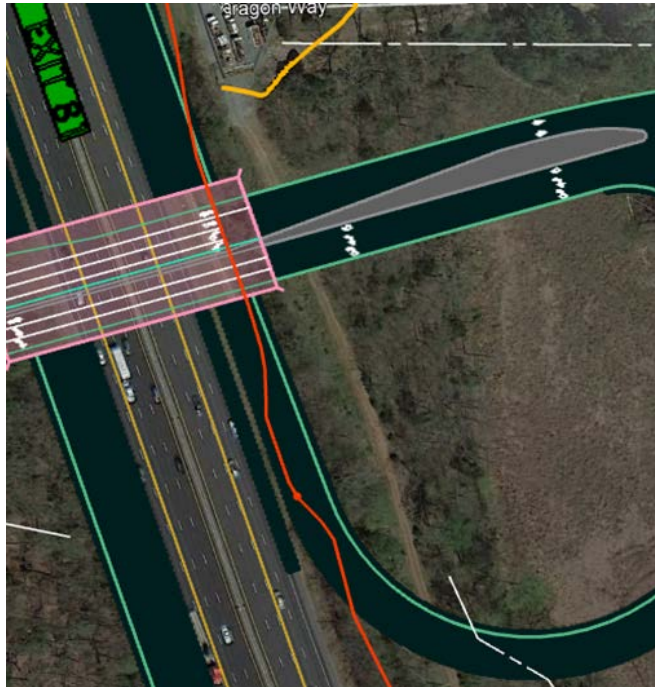
Buried fiber optic parallel to the eastern side of I-77 will be in conflict with the proposed north bound on/off ramps as shown below.



Two buried fiber optic lines split off from main FO line, leading to traffic signal junction boxes, a traffic camera pole, and DMS sign crossing I-77 will be in conflict as shown below.



Buried FO line running parallel to the eastern edge of I-77 will be in conflict with the proposed north bound on ramp as shown below.



Two buried FO hand holes where FO line splits to a spur leading to an “other use pole” associated with an electric meter on a concrete post and two buried FO hand holes will be in possible conflict with the proposed north bound off ramp as shown below.



Buried FO line crosses under I-77 could be in conflict with the proposed south bound on ramp as shown below.



SPECIAL PROVISIONS

It is the responsibility of the contractor to inspect the site for potential conflicts of existing utilities and to coordinate utility relocations prior to construction and during construction. It shall be the responsibility of the contractor to contact SC 811 and the non-SC 811 member utilities at least three (3) working days prior to work (not including weekends, or holidays) so the existing utilities can be properly marked on site. Also, it shall be the responsibility of the contractor to contact each of these utility providers promptly prior to construction to identify any potential conflicts and to coordinate work with the owner of the utility.

APPENDIX A
UTILITY OWNERS AND INFORMATION



I-77 Panthers DB Interchange Area Utility Owners Information

Utility Type	Owner	SC811 Code	Contact	Email	Phone
Electric	Duke Energy	DPCZ72F	Whitney Yaniero	Whitney.Yaniero@duke-energy.com	980.373.0676
	York Electric Co-op	YECZ42	Tim Scism	Tim.Scism@yorkelectric.net	803.684.4247
	City of Rock Hill	CRH55	Ashley Costner	Ashley.Costner@cityofrockhill.com	803.329.5525
Telecom	Rock Hill Telephone (Comporium)	RHT33	Joey Adams	Joseph.Adams@comporium.com	803.326.6129
Fiber Optic	Level 3 Communications/CenturyLink	LC393	Thomas Renoy	Renoy.Thomas@centurylink.com	803.206.9563
Water	City of Rock Hill	CRH55	Ashley Costner	Ashley.Costner@cityofrockhill.com	803.329.5525
Sewer	City of Rock Hill	CRH55	Ashley Costner	Ashley.Costner@cityofrockhill.com	803.329.5525
Gas	York County Natural Gas	YOR56	Michael Carruth	Michael.Carruth@ycnga.com	803.323.5381
Gas Transmission	York County Natural Gas	YOR57	Michael Carruth	Michael.Carruth@ycnga.com	803.323.5381
Traffic	SCDOT	SCTD04	Steve Littlejohn	LittlejoSL@scdot.org	803.737.0256
	City of Rock Hill		Ashley Costner	Ashley.Costner@cityofrockhill.com	803.329.5525

APPENDIX B
PRELIMINARY DESIGN PLAN

PROJECT INSPECTOR MULTI-LANE LOOP INTERCHANGE PARCLO A



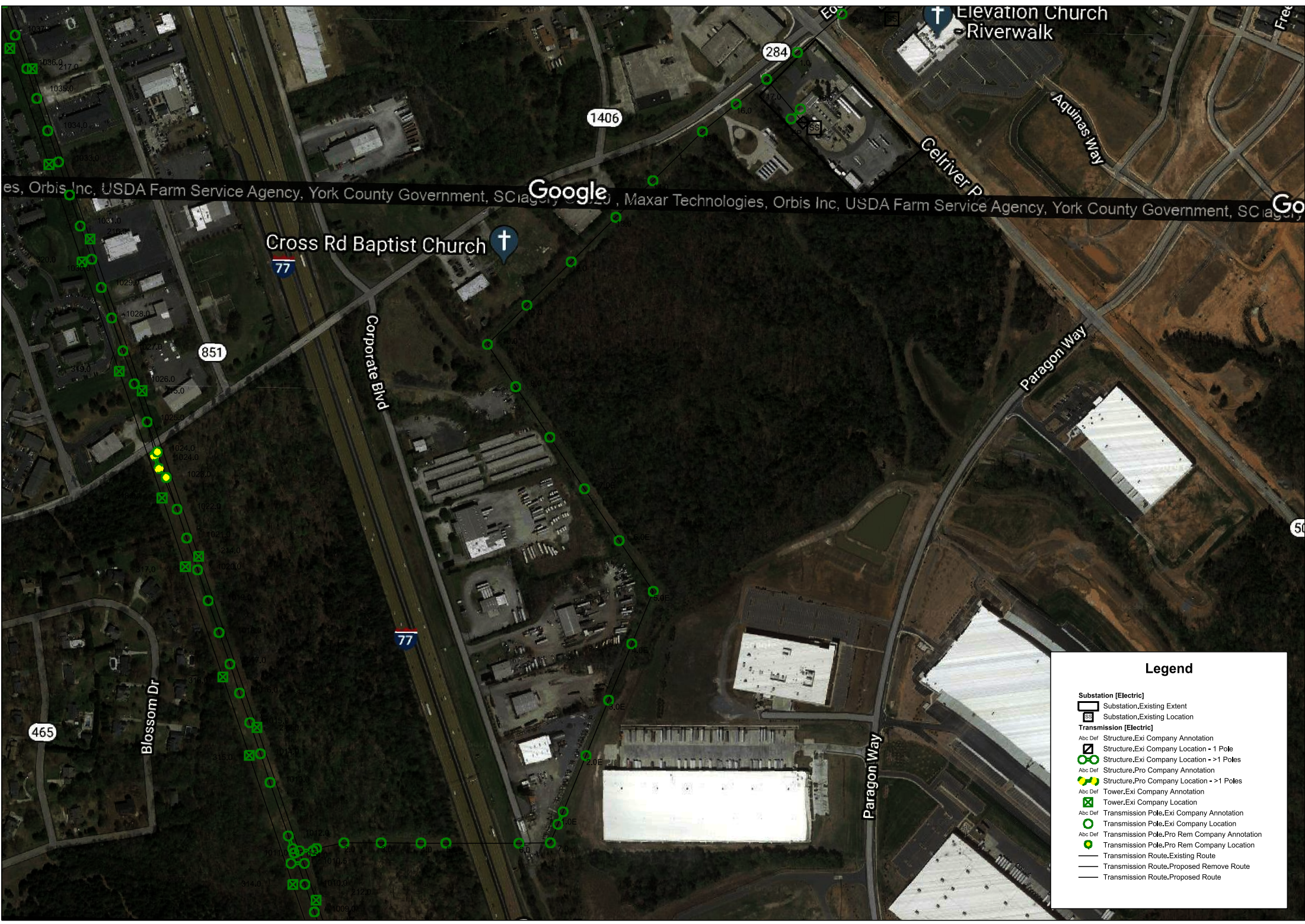
LEGEND

- CONTROLLED ACCESS
- PRESENT RIGHT-OF-WAY
- ASPHALT PAVEMENT
- PROPOSED BRIDGE

1" = 200'

APPENDIX C
UTILITY OWNERS DOCUMENTATION

DUKE ENERGY



Google, Maxar Technologies, Orbis Inc, USDA Farm Service Agency, York County Government, SCIAg, es, Orbis Inc, USDA Farm Service Agency, York County Government, SCIAg, Go

Legend

- Substation [Electric]**
- Substation.Existing Extent
- Substation.Existing Location
- Transmission [Electric]**
- Structure.Exi Company Annotation
- Structure.Exi Company Location - 1 Pole
- Structure.Exi Company Location - >1 Poles
- Structure.Pro Company Annotation
- Structure.Pro Company Location - >1 Poles
- Tower.Exi Company Annotation
- Tower.Exi Company Location
- Transmission Pole.Exi Company Annotation
- Transmission Pole.Exi Company Location
- Transmission Pole.Pro Rem Company Annotation
- Transmission Pole.Pro Rem Company Location
- Transmission Route.Existing Route
- Transmission Route.Proposed Remove Route
- Transmission Route.Proposed Route

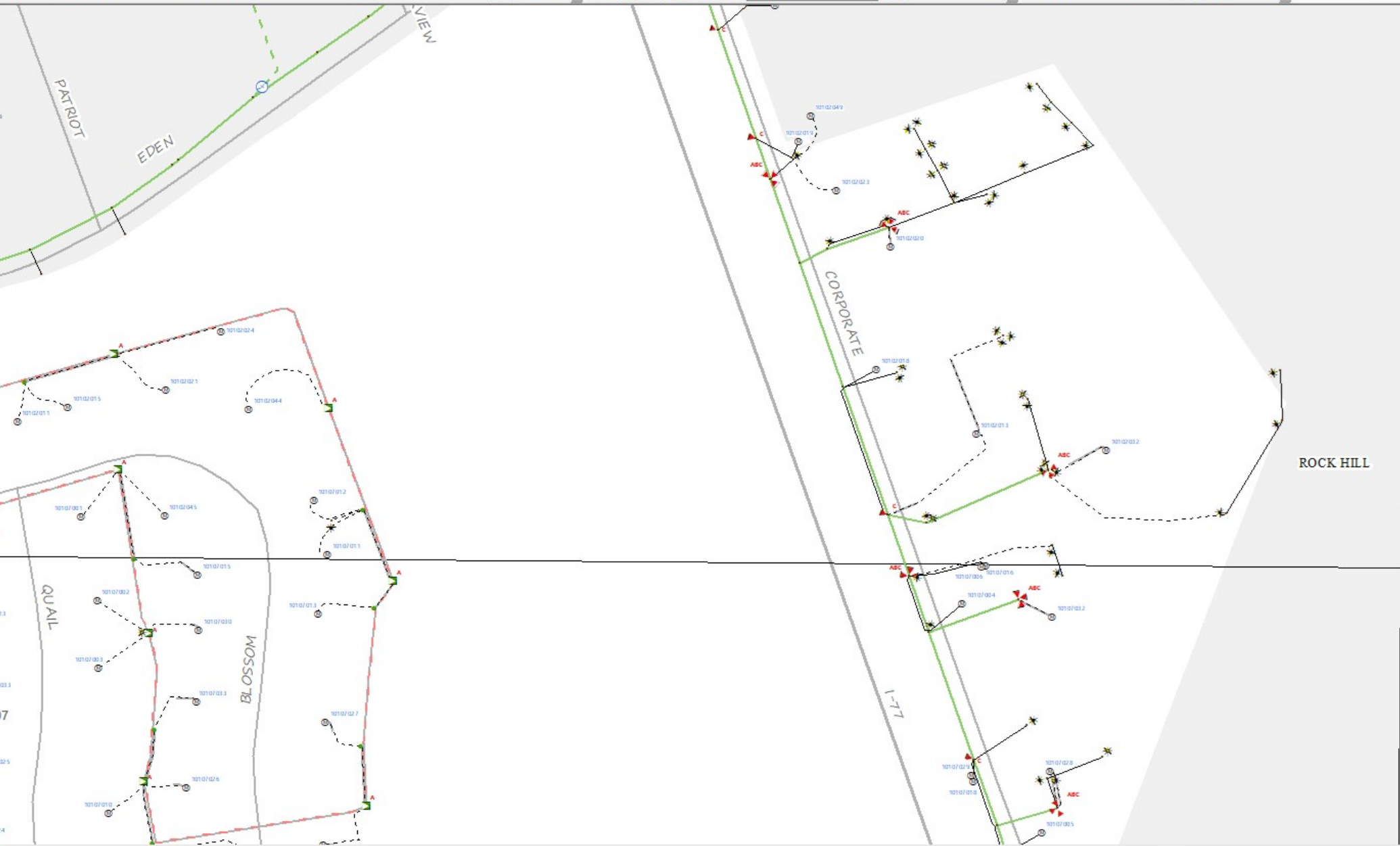


Legend

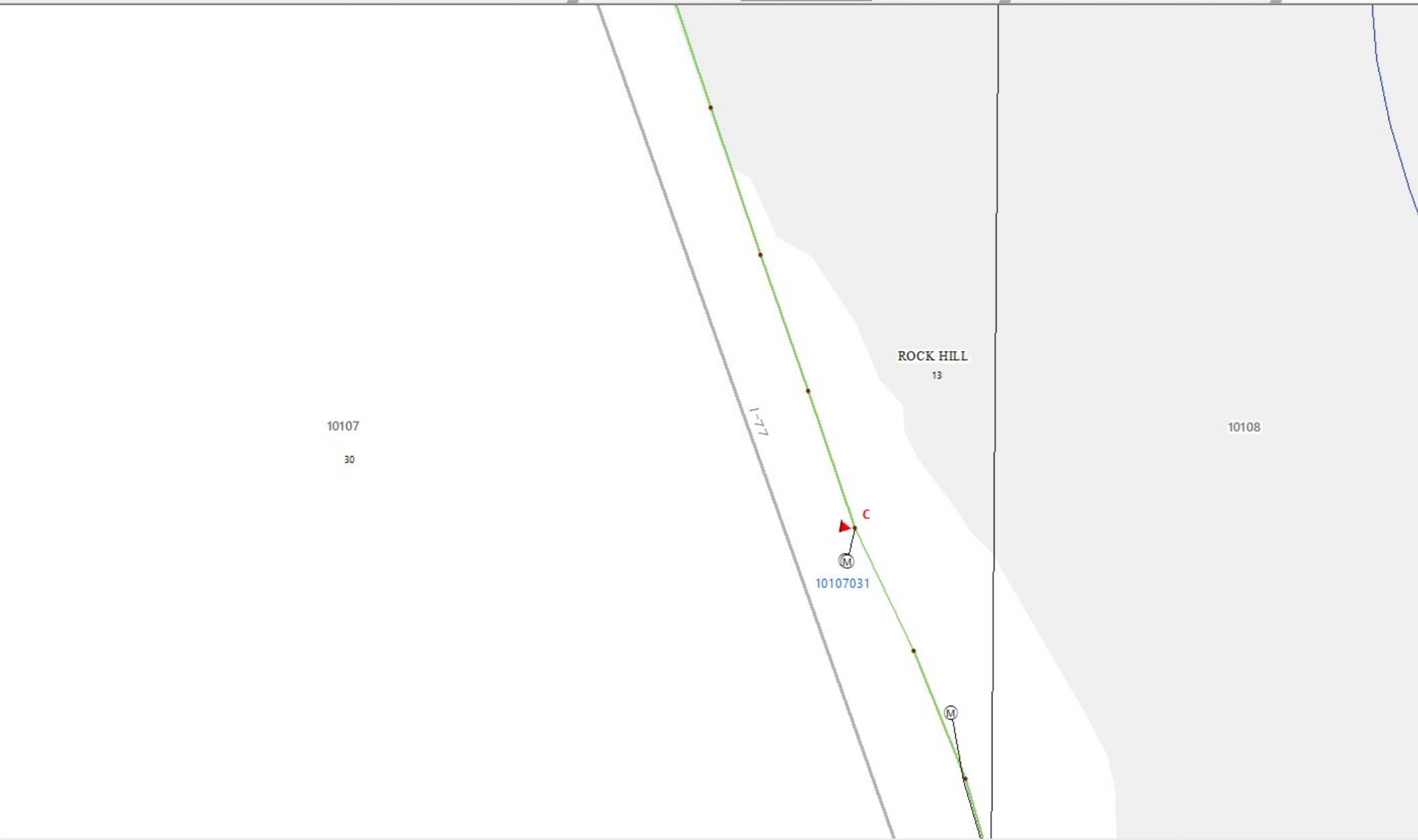
Substation [Electric]		Substation.Existing Location
Transmission [Electric]		
Abc Def		Structure.Exi Company Annotation
		Structure.Exi Company Location - 1 Pole
		Structure.Exi Company Location - >1 Poles
Abc Def		Tower.Exi Company Annotation
		Tower.Exi Company Location
Abc Def		Transmission Pole.Exi Company Annotation
		Transmission Pole.Exi Company Location
		Transmission Route.Existing Route

YORK ELECTRIC COOPERATIVE









10107

10108

PARAGON

ROCK HILL

13

30

10112

10113

1-7

10112017

A 10113001

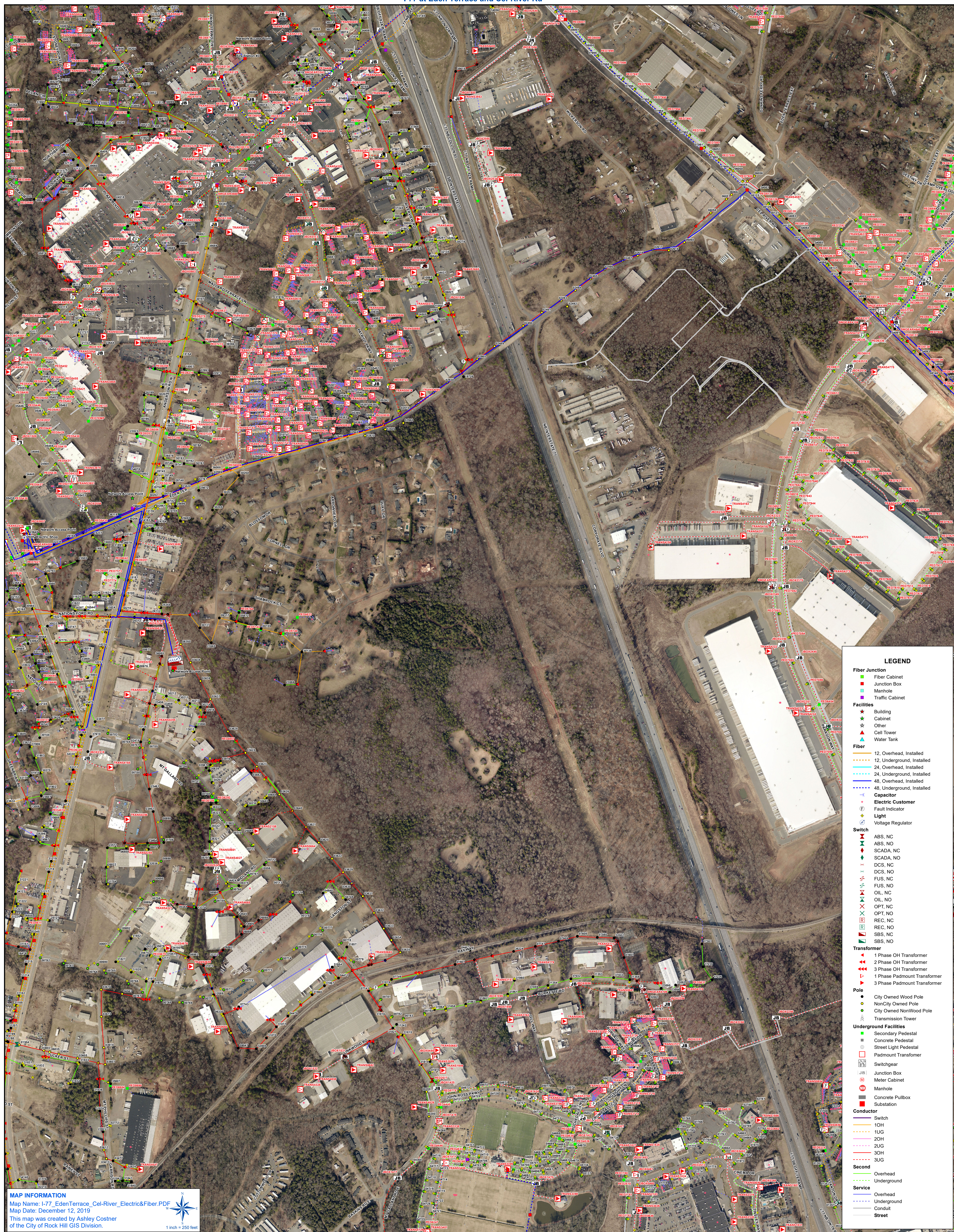
10113002

RAILWAY

RAILWAY

26

CITY OF ROCK HILL





LEGEND

- Water Meters**
 - Water
 - Irrigation
 - Sewer
- Fire Hydrant**
 - City of Rock Hill
 - Owned by Other
 - Unknown/Not Specified
- Water Valve**
 - City of Rock Hill
 - Owned by others
 - Unknown/Not Specified
 - York County
- Water Manhole**
 - Water Pump Station
- Water Mains**
 - Abandoned
 - City of Rock Hill, Active, Potable
 - City of Rock Hill, Active, Process
 - City of Rock Hill, Active, Raw Water
 - City of Rock Hill, Active, Reuse
 - Private, Active, Potable
 - York County, Active, Potable
- Water Service**
 - City of Rock Hill
 - Owned by Others
- Water Casing**
- Sewer Manhole**
 - City of Rock Hill, Abandoned
 - City of Rock Hill, Active
 - Private Owner, Abandoned
 - Private Owner, Active
- Sewer Lift Station**
- Sewer Mains**
 - City of Rock Hill, Abandoned
 - City of Rock Hill, Active
 - Private Owner, Abandoned
 - Private Owner, Active
 - York County Owned, Active
- Sewer Lateral**
 - City of Rock Hill
 - Private Owner
- Sewer Casing**
- Street**

MAP INFORMATION

Map Name: I-77_EdenTerrace_Cel-River_Water&Sewer.PDF
Map Date: December 16, 2019
This map was created by Ashley Costner of the City of Rock Hill GIS Division.

1 inch = 250 feet

STATE OF SOUTH CAROLINA)
COUNTY OF YORK)
CITY OF ROCK HILL)

PARCEL NO. 662-07-01-095 Vol 12966 Page 251 - 253
GRANT OF RIGHTS-OF-WAY AND EASEMENTS
(WITH LIEN SUBORDINATION)

Grantees: City of Rock Hill, S. C.

Purposes: Storm Water Management, Sanitary Sewer, Water, Electricity and Communications

The undersigned Grantor(s), in consideration of payment to the Grantor(s) of the sum of one dollar(s), (\$1.00), the receipt and sufficiency of which is hereby acknowledged, does (do) hereby grant, bargain, sell and release unto the City of Rock Hill, S. C. ("Grantee"), its successors, assigns and licensees, the right, privilege and easement to enter and re-enter at any time and to install, dig, build, erect, maintain, repair, rebuild, operate, and patrol one or more line(s) of pipe, and other appurtenances for proper transmission of water, the proper conduct of storm water or sanitary sewerage effluent overground or underground; the right, privilege and easement to enter and re-enter at any time and to install, dig, build, erect, maintain, repair, rebuild, operate, and patrol one or more electric power transmission lines, overground or underground, including the right to erect poles and other transmission line structures, wires, cable and any necessary appurtenances for the proper conduct of electricity, electronic information, data, and communications; the right to clear the rights-of-way area and keep it clear of brushes, trees, buildings, and fire hazards; and the right to remove trees, if any, located beyond the limits of the rights-of-way; area, but which interfere with the rights-of-way; the above described rights being incident to performance by the Grantee of its functions as a municipality or as the operator of any public utilities system, or the performance by any licensee of the Grantee of any public utilities functions, the premises to be affected hereby being as follows:

DESCRIPTION OF RIGHT OF WAY

All of those certain strip (s) of land situated in York County, South Carolina located in the vicinity of Cel-River Road & Eden Terrace Ext. same being 109 ft. in width and extending for a total length of +/- 4.872 ft. as shown on attached Exhibit "A" entitled "Utility Right of Way" Parcel No. 662-07-01-095 Property of Greens of Rock Hill LLC, Rock Hill, S.C.
Dated: September 26, 2012 Plat Book _____ Page No. _____

To have and to hold the same unto the Grantee, its successors and assigns forever, together with any and all rights normally incident thereto, and particularly the right of ingress and egress thereto from time to time as necessary for construction, reconstruction, enlargement and/or maintenance. The premises shall be leveled and graded and restored to substantially the same condition after any construction or subsequent maintenance or repair as at commencement of use insofar as possible, all at the expense of the Grantee.

And the Grantor(s) hereby represent(s) that said premises are owned by the undersigned in fee and are not subject to any mortgage or lien whatsoever, except as follows: _____ the holder of such encumbrance(s), by joining in the execution hereof, hereby waive(s) in favor of and subordinates to the rights hereby granted.

Grantor(s) covenants and warrants that he is the sole owner in fee simple absolute of the subject property, subject to any lien(s) set forth above. Further, Grantor(s) covenants and warrants that Grantor(s) will not transfer, alienate, devise, encumber, or otherwise affect title to the subject property above for a period of 7 days from the date of this Right-of-Way, which will allow the Grantee time to have this Right-of-Way and plat recorded in the Office of the Clerk of Court for York County, South Carolina.

The Grantor (s) shall have the right to use the above- described premises for any and all purposes that are not inconsistent with Grantee's full enjoyment of the rights hereby granted, provided that the Grantor (s) shall not maintain or permit any above- ground structure, improvements or systems; or maintain or permit any underground system of piping, poles or wiring within such that materially interferes with Grantee's use thereof. Grantor shall contact Grantee's utility department prior to Grantor's placement of any underground system. Grantor shall provide Grantee's utility department with at least three business days' notice that contains reasonable details regarding such activity. Grantee will notify Grantor of any known interference issues within such three day time period.

The Grantor(s) and Grantees, as evidenced by their execution and acceptance hereof, have made the following special agreement in connection herewith: _____

Grantor hereby acknowledges and agrees that if Grantee City of Rock Hill provides tap(s) and/or water/sewer service to Grantor at a future date at the location described hereinabove, then Grantor shall enter into an agreement with Grantee City of Rock Hill, as a condition precedent to any such service to this location, and which presently includes Grantor's execution of the standard City Water and/or Sewer Service Agreement, or the standard City Annexation Petition.

The Grantor(s) and Grantees, as evidenced by their execution and acceptance hereof, hereby agree that the rights herein granted shall be subject to any and all rights, easements and privileges established by the dedication of a public road or street to the City of Rock Hill or the acceptance of a public road or street by the City of Rock Hill.

All rights and privileges, obligations and liabilities created by this instrument shall inure to the benefit of, and be binding upon the heirs, designees, administrators, executors, successors and assigns of the parties hereto.

IN WITNESS WHEREOF these presents have been duly executed under seal by the Grantor(s) on this the 5th day of October, 20 12.

GREENS OF ROCK HILL LLC

IN THE PRESENCE OF:

#1(Sign) Clefford Poppe
(Print) CLEFFORD POPPEL
#2(Sign) Christopher Tucker
(Print) Christopher Tucker

By:(Sign) [Signature] (SEAL)
(Print) MARK MATHER (SEAL)
Title: MANAGER (SEAL)

Witnesses(2)

Grantor(s)

#1 (Sign) [Signature]
 (Print) Bobbi Laakso
 #2 (Sign) [Signature]
 (Print) Lisa Hefflinger
 Witnesses(2)

_____(SEAL)
 By: (Sign) [Signature] (SEAL)
 (Print) THOMAS D. OPIE (SEAL)
 Title: SVP (SEAL)
 Lienholder(s)

For a Lienholder:

STATE OF Ohio)
 COUNTY OF Franklin)

ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this October 10, 2012 (date) by Thomas D Opie (name of officer or agent, title of officer or agent) of Ohio (state or place of incorporation) Huntington National Bank Corporation, on behalf of the corporation.
 Deborah D Smithers
 Notary Public, State of Ohio
 My Commission Expires 03-16-2014



(Sign) [Signature]
 (Print) Deborah D Smithers
 Notary Public for State of Ohio

For a Partnership Grantor:

STATE OF Ohio)
 COUNTY OF Hamilton)

ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this 5-16 Oct 2012 (date) by MARK MATHER (name of acknowledging person) on behalf of GREENS of ROCK HILL, LLC (name of partnership), a partnership.



Jeffrey A. Heltman
 Notary Public, State of Ohio
 My Commission Expires 06-28-2015

(Sign) [Signature]
 (Print) JEFFREY A. HELTMAN
 Notary Public for State of Ohio

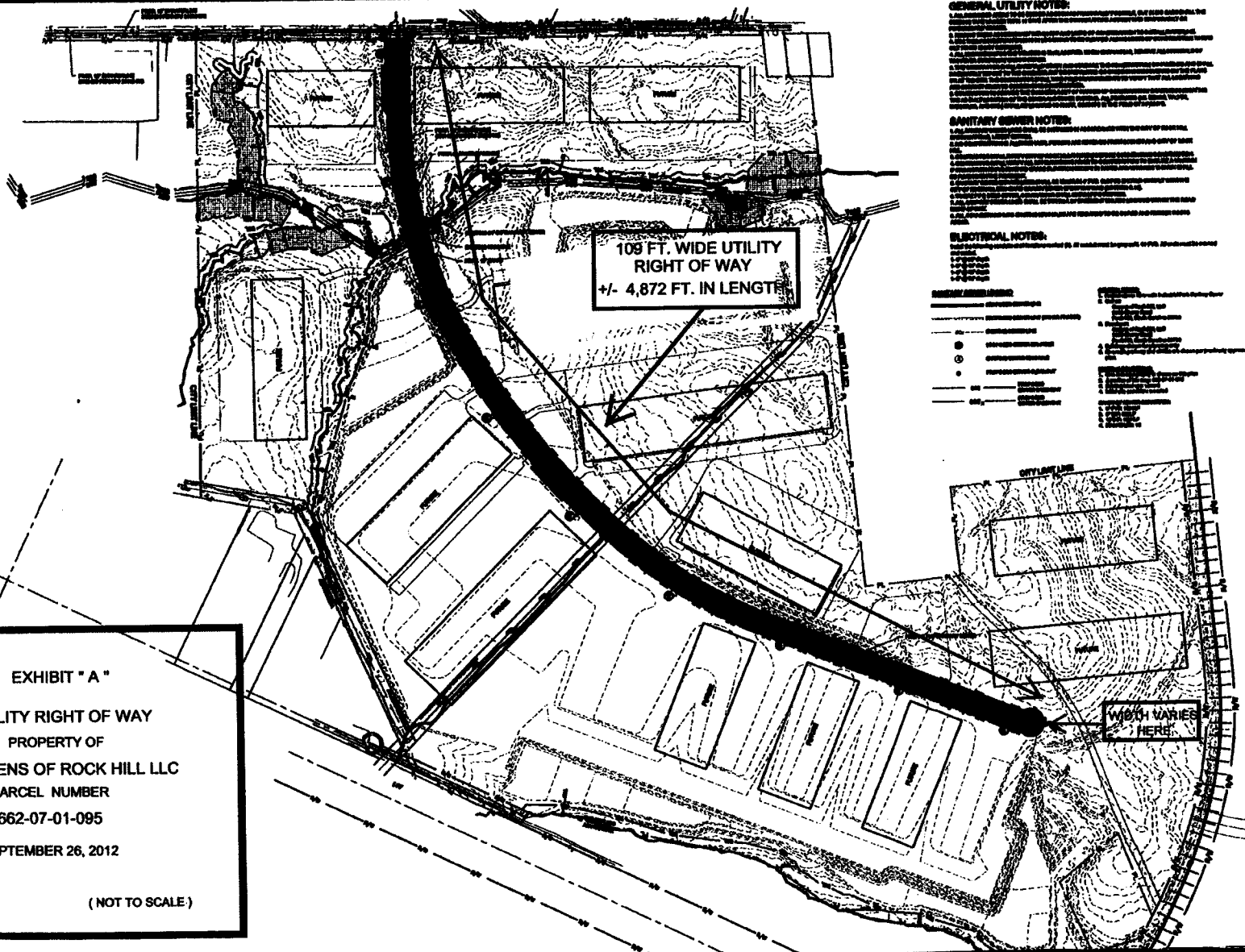
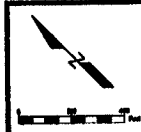
For a Corporate Grantor:

STATE OF _____)
 COUNTY OF _____)

ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this _____ (date) by _____ (name of officer or agent, title of officer or agent) of _____ (state or place of incorporation) Corporation, on behalf of the corporation

(Sign) _____
 (Print) _____
 Notary Public for _____
 My Commission Expires: _____



109 FT. WIDE UTILITY
RIGHT OF WAY
+/- 4,872 FT. IN LENGTH

WIDTH VARIES
HERE

GENERAL UTILITY NOTES:

1. ALL UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE RECORD DRAWINGS AND FIELD SURVEY DATA.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER LINES SHALL BE 18" DIA. UNLESS OTHERWISE NOTED.

ELECTRICAL NOTES:

1. ALL ELECTRICAL LINES SHALL BE 2" DIA. UNLESS OTHERWISE NOTED.

EXHIBIT "A"
UTILITY RIGHT OF WAY
PROPERTY OF
GREENS OF ROCK HILL LLC
PARCEL NUMBER
662-07-01-095
SEPTEMBER 26, 2012

(NOT TO SCALE)

GREENS OF ROCK HILL
ROCK HILL, SOUTH CAROLINA
200 CHERRY ROAD
ROCK HILL, SC 29733

Table with 2 columns: NO., DATE. Contains project schedule information.

RIVERWALK INDUSTRIAL PARK
SANITARY SEWER
CONSTRUCTION PLANS

OVERALL SANITARY SEWER PLAN

3.1

BK 12966PG0253

EDEN TERRACE 24-INCH WATER TRANSMISSION MAIN ANDERSON TO CELRIVER



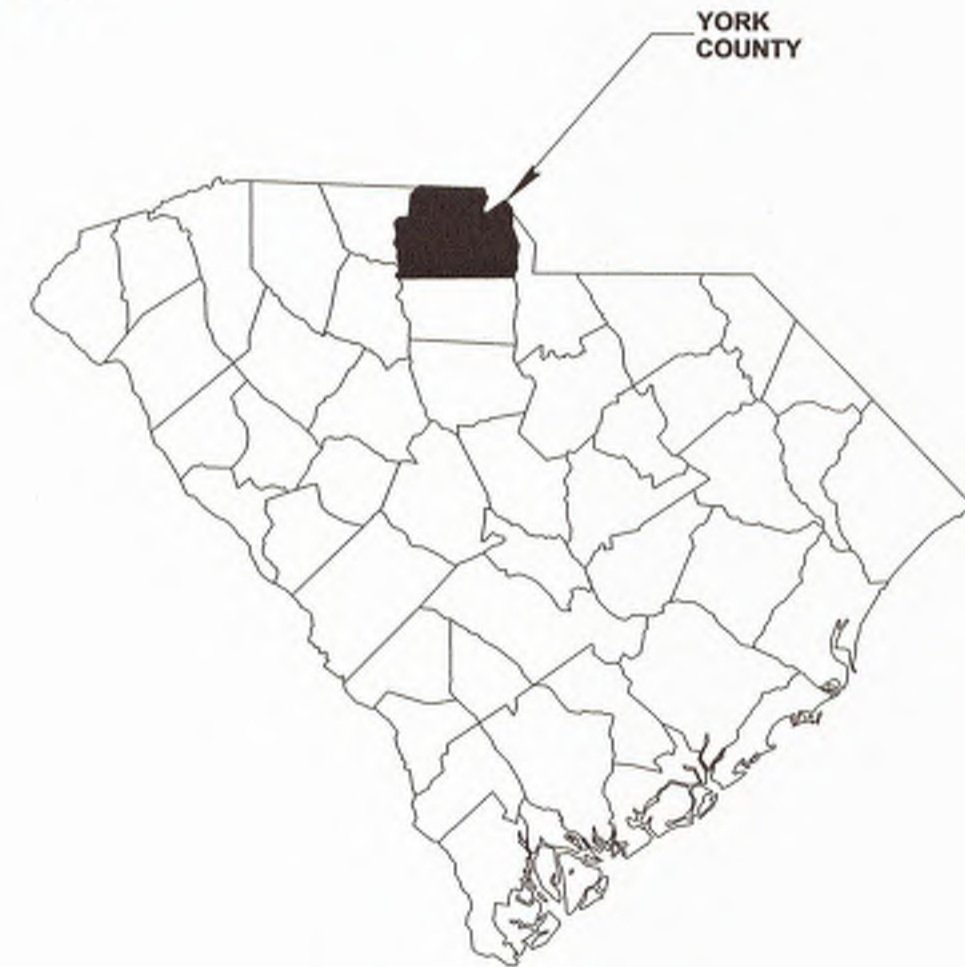
CITY OF ROCK HILL ROCK HILL, SOUTH CAROLINA

MARCH 2019

MAYOR
JOHN GETTYS

CITY COUNCIL
SANDRA OBOROKUMO, WARD 1
KATHY PENDER, WARD 2
KEVIN SUTTON, WARD 3
JOHN A. BLACK III, WARD 4
NIKITA JACKSON, WARD 5
JIM RENO, WARD 6

CITY MANAGER
DAVID VEHAUN



LOCATION MAP
NOT TO SCALE

EDEN TERRACE 24-INCH WATER TRANSMISSION MAIN ANDERSON TO CELRIVER

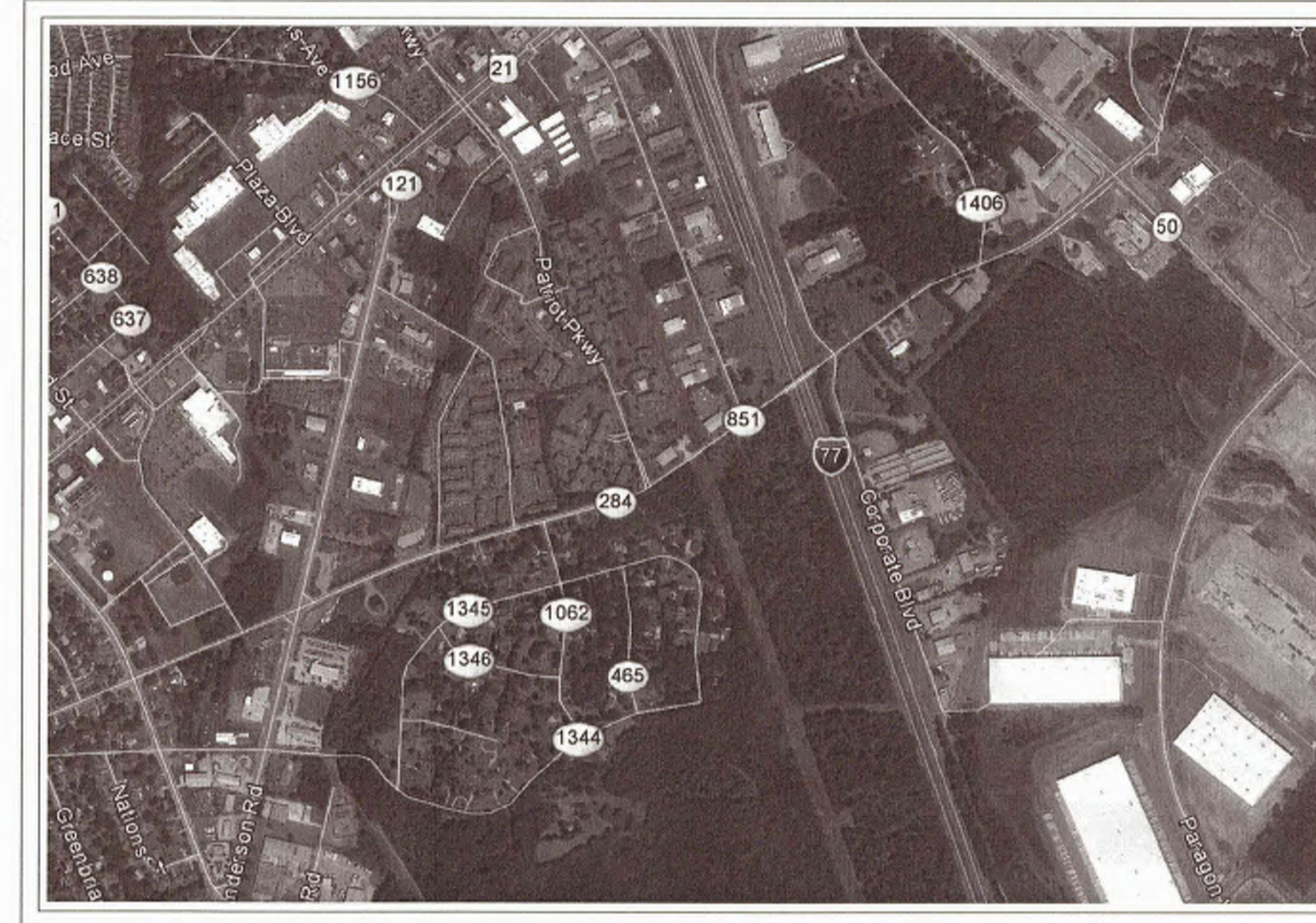


IMAGE OBTAINED FROM GOOGLE EARTH PRO JANUARY 2018

CITY OF ROCK HILL CONTACT:
RICK CARTER
757 SOUTH ANDERSON ROAD
ROCK HILL, SC 29730
803-329-5500

UTILITY PROVIDERS:

WATER/SEWER/ELECTRIC

CITY OF ROCK HILL
150 JOHNSON STREET
ROCK HILL, SC 29730
803-329-5500
UTILITY.DISPATCH@CITYOFROCKHILL.COM
CONTACT: SCOTT TURNER (WATER/SEWER)
ROGER ROBINSON (ELECTRIC)

YORK ELECTRIC COOPERATIVE, INC.
1385 ALEXANDER LOVE HIGHWAY
YORK, SC 29745
800-582-8810
CONTACT: TIM SCISM 803-984-2020

CABLE/INTERNET/TELEPHONE

COMPORIUM COMMUNICATIONS
PO BOX 470
ROCK HILL, SC 29730
CONTACT: PAUL LINDSEY 803-326-6006
STEVE DICKSON 803-326-6027
AT&T
CONTACT: RON DUKES 803-606-6700

NATURAL GAS

YORK COUNTY NATURAL GAS AUTHORITY
979 WEST MAIN STREET
ROCK HILL, SC 29730
CONTACT: AMANDA GALLAGHER 803-323-5363

INVENTORY LIST

PIPE	ADDED	REMOVED	ABANDONED IN PLACE	NET	UNIT
12" DUCTILE IRON WATER MAIN	225	555	0	(330)	LF
24" DUCTILE IRON WATER MAIN	5166	0	0	5166	LF
TOTAL PIPE	5391	555	0	4836	LF
VALVES	ADDED	REMOVED	ABANDONED IN PLACE	NET	UNIT
12" GATE VALVE	9	3	0	6	EA
24" BUTTERFLY VALVE	9	0	0	9	EA
TOTAL VALVES	18	3	0	15	EA
HYDRANTS	ADDED	REMOVED	ABANDONED IN PLACE	NET	UNIT
FIRE HYDRANT ASSEMBLY	12	2	0	10	EA



1441 Main Street Suite 1000
Columbia, SC 29201
Tel: 803-758-4500
PROJECT NO. 258111-221823



NO.	DATE	REVISION

EDEN TERRACE 24-INCH
WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER
COVER SHEET

PERMIT SET

Project Manager:
Richard E. Culler, PE

Drawn By: Checked By:
AJK EEO

DATE: 3-27-2019

SCALE: 1"=30'

ROCK HILL PROJECT No.
14317

DRAWING No.
G-0

EDEN TERRACE 24-INCH WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER

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GENERAL NOTES

- GROUND SURVEY PERFORMED BY
 - CDM SMITH, INC.
 - 1441 MAIN STREET SUITE 1000
 - COLUMBIA, SC 29201
 - (803) 758-4500
 - CONTACT: JOHN HUDSON SC PLS 6957
- EXISTING UTILITY FACILITIES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC., WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION, THE LOCATION, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING THE WORK.
- THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. CONTRACTORS SHOULD, PRIOR TO BIDDING, CONDUCT INVESTIGATIONS AS NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE MAY BE SOME UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. THE CONTRACTOR IS ALSO EXPECTED TO COORDINATE WITH VARIOUS UTILITIES FOR ANY REQUIRED RELOCATIONS. ALL RELOCATIONS ARE TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND MARKING EXISTING UTILITIES INCLUDING LINES, VALVES, BOXES, DRAINAGE STRUCTURES, AND IRRIGATION LINES AND HEADS, WITHIN THE CONSTRUCTION LIMITS BEFORE ANY CONSTRUCTION ACTIVITY. ALL LINES AND STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. IF ANY UTILITIES ARE IMPACTED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AUTHORITY HAVING JURISDICTION AND SHALL CARRY OUT THE REPAIRS IN ACCORDANCE WITH THE METHODS AND STANDARDS OF THE AUTHORITY. ALL REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RECONNECTING ALL UTILITY SERVICES ENCOUNTERED DURING CONSTRUCTION. WATER AND SEWER SERVICE TO CUSTOMERS ALONG THE ALIGNMENT SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE THE METHOD FOR MAINTAINING SERVICE TO THE CITY FOR APPROVAL PRIOR TO THE START OF ANY CONSTRUCTION. THE PAYMENT FOR MAINTAINING WATER AND SEWER SERVICE SHALL BE INCLUDED IN THE PRICE FOR WATER AND SEWER PIPE. NO SEPARATE PAYMENT SHALL BE MADE.
- THE CONTRACTOR SHALL BE AWARE THAT THE WORK IS IN CLOSE PROXIMITY TO EXISTING UTILITY POLES. CONTRACTOR SHALL PROTECT TO THE UTILITY'S REQUIREMENTS OR ALLOW FOR THE UTILITY TO RELOCATE THE POLE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PROVIDE CONTINUOUS SUPPORT OF EXISTING UTILITIES WHEN EXPOSED AS PART OF THE CONSTRUCTION EFFORTS TO INSTALL PROPOSED TRANSMISSION MAIN UNDER EXISTING LINES.
- FIELD CONDITIONS MAY NECESSITATE SLIGHT ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED TRANSMISSION MAIN TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AT LEAST 72 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT THE LOCATION AND MARKING OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT PUPS (SC811) AT 811 OR (888) 721-7877. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST TWO (2) WORKING DAYS PRIOR TO WORK IN THE VICINITY OF THEIR FACILITIES.
- THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, IRRIGATION LINES, SIGNS AND OTHER IMPROVEMENTS TO THE SATISFACTION OF THE CITY AND ENGINEER AT NO ADDITIONAL COST TO OWNER WITH THE SAME TYPE OF MATERIAL THAT WAS DISTURBED DURING CONSTRUCTION OR AS DIRECTED BY THE DRAWINGS HEREIN OR AS REQUIRED BY CITY OF ROCK HILL, YORK COUNTY AND SCOTD.
- ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOODPLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE PERMANENTLY STABILIZED. THE ACQUISITION OF THE SITE IS THE CONTRACTOR'S RESPONSIBILITY. NO SEPARATE PAYMENT WILL BE MADE.
- CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION.
- TRAFFIC MAINTENANCE IS THE RESPONSIBILITY OF THE CONTRACTOR. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF EXISTING PAVEMENT, EXCEPT WHEN WORK IS ACTIVELY IN PROGRESS AND REQUIRES THE TEMPORARY CLOSURE OF A SINGLE LANE. DURING TIMES OF LANE CLOSURE, TWO WAY TRAFFIC WILL BE MAINTAINED BY USE OF FLAG PERSONS, TEMPORARY TRAFFIC SIGNALS, OR OTHER TEMPORARY TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, LIGHTS AND FLAGMEN AS REQUIRED BY SCOTD IN THE LATEST VERSION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL KEEP STREETS OPEN (UNLESS OTHERWISE SHOWN ON THE DRAWINGS) AT ALL TIMES AND SHALL MAINTAIN CONTINUOUS ACCESS TO ALL BUSINESS OR RESIDENTIAL PROPERTIES FOR OWNERS, DELIVERY PERSONNEL, AND MAINTENANCE STAFF ADJACENT TO THE WORK.
- STATIONING FOR ALL BLOWOFFS AND AIR RELEASE VALVES IS APPROXIMATE. THE CONTRACTOR SHALL LOCATE AIR RELEASE VALVES IN THE FIELD AT THE HIGHEST POINT BEFORE THE DOWNWARD BREAK IN THE VICINITY OF THE STATION INDICATED. ALL LOCATIONS FOR BLOWOFFS AND AIR RELEASE VALVES MUST BE APPROVED BY THE ENGINEER.

- ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE AREA WITHIN THE RIGHTS-OF-WAY AND PERMANENT AND TEMPORARY EASEMENTS AS SHOWN ON THE CONTRACT DRAWINGS.
- THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY, AND CONTRACTOR IS RESPONSIBLE FOR ALL DISTURBANCES TO PRIVATE PROPERTY. REPAIRS AND RESTORATION SHALL BE DONE TO THE SATISFACTION OF THE CITY AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR IS PERMITTED TO USE THE AREA BETWEEN THE EDGE OF PAVEMENT AND THE RIGHT-OF-WAY LINE AS A TEMPORARY CONSTRUCTION EASEMENT. CONTRACTOR SHALL ESTABLISH TRAFFIC CONTROL IN ACCORDANCE WITH SCOTD REQUIREMENTS AND AS SHOWN ON TRAFFIC CONTROL PLAN SHEETS.
- IF TREE TRIMMING AND/ OR REMOVAL IS REQUIRED, ALL TREE WORK MUST BE DONE BY A SOUTH CAROLINA CERTIFIED LICENSED ARBORIST, WITH A MINIMUM OF 5 YEARS OF CURRENT ACTIVE EXPERIENCE. WHEN TREE LIMBS ARE TRIMMED THEY SHALL BE EVENED UP ON ALL SIDES OF THE TREES.
- GENERAL CLEARING AND GRUBBING SHALL INCLUDE REMOVAL OF ALL VEGETATION AND TREES LESS THAN 18" DBH. SEPARATE PAYMENT SHALL BE MADE FOR TREES REMOVED GREATER THAN OR EQUAL TO 18" DBH IN ACCORDANCE WITH THE BID FORM, SPECIFICATION SECTION 00300.
- ANY DAMAGE TO STATE, COUNTY OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE JURISDICTION. PAYMENT SHALL NOT BE MADE FOR THIS WORK.
- SOIL EXPLORATION WORK WAS PERFORMED BY TERRACON CONSULTANTS, INC. SOILS EXPLORATION WORK IS SOLELY TO ASSIST BIDDING CONTRACTORS IN ASSESSING THE NATURE AND EXTENT OF SOIL CONDITIONS ON SITE. CONTRACTORS ARE REQUIRED TO MAKE THEIR OWN DETERMINATION OF ACTUAL SUBSURFACE CONDITIONS THAT WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. NO REPRESENTATION IS MADE OR WILL BE GIVEN BY THE CITY OR THE ENGINEER CONCERNING ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. ANY DEVIATION FROM THE CONSTRUCTION PLANS SHALL NEED TO BE APPROVED IN ADVANCE IN WRITING BY THE ENGINEER AND THE CITY.
- CONTRACTOR SHALL MAINTAIN A SET OF PLANS WITH CURRENT FIELD CHANGES MARKED THEREON AND SHALL DELIVER THESE PLANS TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION. FINAL PAYMENT SHALL NOT BE MADE UNTIL THIS REQUIREMENT IS SATISFIED.
- IF CONSTRUCTION, RECONSTRUCTION, REPAIR OR MAINTENANCE ACTIVITY NECESSITATES THE CLOSING OF ONE OR MORE TRAVEL LANES OF ANY ROAD ON THE STATE PRIMARY, COUNTY ROAD OR CITY STREET SYSTEM, FOR A PERIOD OF TIME EXCEEDING TWO HOURS, THE CONTRACTOR SHALL BE RESPONSIBLE TO GIVE NOTICE TO THE CITY AND APPROPRIATE LAW ENFORCEMENT AGENCY WHICH HAS JURISDICTION WHERE SUCH ROAD IS LOCATED PRIOR TO COMMENCING WORK ON THIS PROJECT.
- OPEN CUTTING OF ROADWAY FOR INSTALLATION OF UTILITY FACILITIES SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM YORK COUNTY AND/OR SCOTD.
- TRAFFIC SIGNALS SHALL REMAIN IN ACTUATION DURING CONSTRUCTION.
- THE CONTRACTOR SHALL INCLUDE IN HIS BID THE FOLLOWING WHEN OPEN CUTTING DRIVEWAYS. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE USER AT LEAST SEVEN (7) DAYS PRIOR TO MAKING THE CUT. THE USER'S ACCESS TO THE PROPERTY SHALL BE MAINTAINED WHEN OPEN CUTTING DRIVEWAYS. THE CONTRACTOR SHALL RESTORE THE DRIVEWAYS TO AT LEAST AN EQUIVALENT CONDITION AND TYPES OF MATERIAL TO WHAT EXISTED PRIOR TO CUTTING.
- CONTRACTOR SHALL ADHERE TO ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS THAT HAVE BEEN OBTAINED.
- CONTRACTOR IS RESPONSIBLE FOR PROCURING ALL MOBILIZATION, STORAGE, AND STAGING AREAS AS WELL AS ACCESS TO THE CONSTRUCTION SITES WITHIN THE TEMPORARY AND PERMANENT EASEMENTS. EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED AT ALL WORK SITES AND STAGING AREAS. CONTRACTOR SHALL FOLLOW ALL LOCAL REGULATIONS REGARDING THE WORK, INCLUDING REHABILITATING STAGING, STORAGE, OR STOCKPILING AREAS TO EQUAL OR BETTER THAN EXISTING CONDITION.
- ANY PUBLIC OR PRIVATE LAND CORNER, PROPERTY MONUMENTATION OR PIN, OR BENCHMARK WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. ANY CORNER MONUMENT OR PROPERTY PIN DISTURBED OR DESTROYED SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF SC, AT THE CONTRACTOR'S EXPENSE.
- FOR ALL TIE-IN PIPING AND CROSSINGS, CONTRACTOR SHALL VERIFY ALL EXISTING PIPELINE ELEVATIONS, LOCATIONS, DIAMETERS, AND MATERIALS PRIOR TO CONSTRUCTION, NOTIFYING THE ENGINEER OF ANY CONFLICTS. NO SEPARATE PAYMENT WILL BE MADE.
- THE VERTICAL ALIGNMENT FOR THE TRANSMISSION MAIN SHOWN ON THE DRAWINGS PROVIDES GENERAL INFORMATION REGARDING PIPE DEPTH OF COVER. ADJUSTMENTS IN THE VERTICAL ALIGNMENT TO MAINTAIN A 4 FOOT MINIMUM SOIL COVER SHALL BE ACCOMPLISHED UTILIZING ALLOWABLE DEFLECTION IN THE PIPE JOINTS AND FITTINGS. ALL CHANGES IN ALIGNMENT AND/OR GRADE SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PIPE INSTALLATION.
- THE DITCHES AND/OR SHOULDERS DISTURBED DURING THE INSTALLATION SHALL BE RE-ESTABLISHED TO PROPER GRADE, ORIGINAL CROSS SECTION, STABILIZED, AND ALL DRAIN PIPES CLEARED.
- ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE SIDE OF THE TRENCH AWAY FROM THE TRAVELED ROADWAY, AND SHALL BE NO CLOSER THAN FIFTEEN (15) FEET TO THE EDGE OF PAVEMENT. ALL WORK SHALL CONFORM TO THE SCOTD "A POLICY FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHT-OF-WAY", LATEST EDITION.
- OPEN TRENCHES ADJACENT TO ROADWAYS MAY NOT EXCEED 100 FEET IN LENGTH BEFORE BACKFILLING OPERATIONS MUST BEGIN. CHANNELIZATION DEVICES SUCH AS CONES, DRUMS, OR BARRICADES SHALL BE PROVIDED ADJACENT TO THE TRAVEL LANE NEXT TO ALL OPEN TRENCHES OR STOCKPILES.
- ALL TRENCHES WITHIN THE LIMITS OF ANY ROADWAY SHALL BE BACKFILLED

OR SECURELY PLATED DURING NON-WORKING HOURS.

- CONTRACTOR SHALL PROVIDE TREE PROTECTION FOR TREES LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON CONSTRUCTION PLANS. LIMITS OF CONSTRUCTION VARY ALONG ALIGNMENT AS SHOWN ON EACH PLAN SHEET, BUT IN MOST CASES ARE DEFINED AS THE AREA BETWEEN THE EDGE OF PAVEMENT AND THE TEMPORARY CONSTRUCTION EASEMENT LINE.
- RESTRAINED JOINT CALCULATIONS PROVIDED ON PLANS ARE CALCULATED MINIMUMS PER DIPRA STANDARDS AND ACCORDING TO AWWA M41. CALCULATIONS ASSUME SILT 1 TYPE SOIL, TYPE 4 BEDDING CONDITION, DESIGN PRESSURE OF 135 PSI, AND SAFETY FACTOR OF 1.5.
- REQUIRED RESTRAINED JOINT LENGTHS SHALL BE ROUNDED UP TO THE NEAREST WHOLE JOINT OF PIPE AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY AND THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ENCRoACHMENT INTO OR DAMAGE TO DESIGNATED WETLANDS OR WATERS OF THE U.S. OR STATE. THE CONTRACTOR SHALL ESTABLISH TEMPORARY CONSTRUCTION FENCES AND EROSION CONTROL MEASURES TO PROTECT THESE AREAS. IF ANY WETLAND IS DETERMINED TO HAVE BEEN DAMAGED DURING THE CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OR MITIGATION OR ANY OTHER REMEDIAL ACTION. COST, FIN, ETC., REQUIRED OR ASSIGNED BY THE CORPS OF ENGINEERS, SCOHEC, OR OTHER U.S., STATE, OR LOCAL JURISDICTION.
- THE CONTRACTOR IS RESPONSIBLE FOR UTILITY COORDINATION. UNLESS NOTED OTHERWISE, THE ELEVATIONS OF EXISTING UTILITIES SHOWN IN THE PROFILES ARE NOT KNOWN. THE MAJORITY OF EXISTING UTILITIES SHOWN ARE FROM SUE DATA OR FROM PUPS LOCATED FACILITIES. SOME CITY UTILITY INFORMATION IS FROM CITY RECORD DRAWINGS. ALL UTILITIES MAY NOT BE SHOWN OR MAY BE LOCATED OTHER THAN WHERE SHOWN ON PLANS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE UTILITY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING WORK, FOR ALL UTILITY COORDINATION, AND ALL TEMPORARY UTILITY RELOCATION COSTS.

SEDIMENT & EROSION CONTROL NOTES

- IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
 - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INSTALLED INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 8 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCR100000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.
- EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO PERFORMING EXCAVATION IN ANY AREA, MAINTAINED DURING WORK, AND REMOVED WHEN WORK IS COMPLETED. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE SCOHEC STORMWATER BMP HANDBOOK AND THE APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR THIS PROJECT.
- AFTER CONSTRUCTION AREA IS STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES. DISPOSE OF ALL ACCUMULATED SEDIMENT.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT OR SEDIMENT LADEN WATER FROM ENTERING CATCH BASINS, DRAINAGE SYSTEMS, OR WATER BODIES.

CONSTRUCTION SEQUENCE NOTES

- RECEIVE NPDES COVERAGE FROM DHEC.
- HOLD PRE-CONSTRUCTION MEETING AT LEAST 1 WEEK PRIOR TO STARTING CONSTRUCTION.
- NOTIFY CITY OF ROCK HILL MIN. 48 HOURS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES.
- INSTALLATION OF CONSTRUCTION ENTRANCES.
- CLEAR AND GRUB ONLY AS NECESSARY TO INSTALL SEDIMENT AND EROSION CONTROL MEASURES SHOWN AND NOTED ON DRAWINGS.
- INSTALL SEDIMENT AND EROSION CONTROL MEASURES (E.G., SILT FENCE AND SEDIMENT TUBES) IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
- NOTIFY CITY OF ROCK HILL THAT EROSION CONTROL MEASURES ARE IN PLACE. WORK WILL NOT PROGRESS UNTIL CONTROLS HAVE BEEN INSTALLED, INSPECTED AND APPROVED BY THE CITY OF ROCK HILL.
- CLEAR AND GRUB SITE (SEDIMENT AND EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
- BEGIN WATER TRANSMISSION MAIN LAYING OPERATIONS. EXCAVATE TRENCH FOR THE PIPE THAT WILL BE INSTALLED AS PART OF THE WORK AREA, INSTALL BEDDING IF NEEDED, INSTALL PIPE, AND BACKFILL TRENCH IN THE WORK AREA.
- COMPLETE FINE GRADING, DRIVEWAY REPAIR, AND GRASSING IN THE WORK AREA IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
- INSTALL SEDIMENT TUBES IN DITCHES TO AID IN SEDIMENT REMOVAL WHILE STABILIZATION OCCURS.
- INSPECT ALL EROSION AND SEDIMENT CONTROL PRACTICES WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAN OUT SEDIMENT FROM EROSION AND SEDIMENT CONTROL DEVICES AS REQUIRED ON DRAWINGS. MAKE NEEDED REPAIRS IMMEDIATELY.
- PERFORM PERMANENT/FINAL STABILIZATION MEASURES.
- WITHIN 30 DAYS AFTER SITE IS STABILIZED (AS APPROVED BY OWNER OR ENGINEER), REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AND PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM DEVICE REMOVAL.
- MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.
- SUBMIT NOTICE OF TERMINATION (NOT) TO CITY OF ROCK HILL AS APPROPRIATE.

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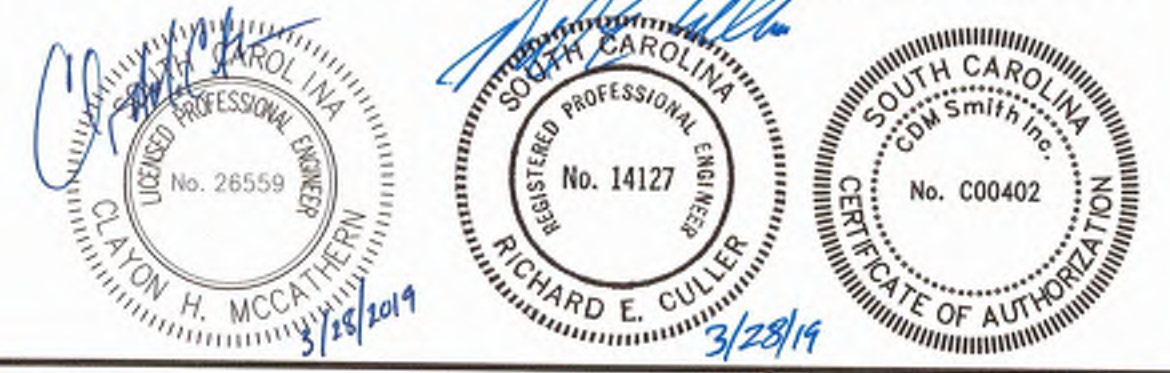
DESIGNED BY: RC
 DRAWN BY: AK
 SHEET CHK'D BY: EQ
 CROSS CHK'D BY:
 APPROVED BY:
 DATE: MARCH 2019



CITY OF ROCK HILL
 EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN
 PROJECT NOTES

PROJECT NO. 258111-221823
 FILE NAME: G01INDX.DWG
 SHEET NO.



LEGEND AND ABBREVIATIONS

	NEW MAIN THIS PROJECT
	TEMPORARY CONSTRUCTION EASEMENT
	PERMANENT UTILITY EASEMENT
	R/W - RIGHT OF WAY
	SILT FENCE
	LIMITS OF DISTURBANCE
	PROPOSED FENCE
	VEGETATION LIMITS
	EXISTING TEMP. CONSTRUCTION EASEMENT
	EXISTING PERMANENT UTILITY EASEMENT
	PROPERTY LINE
	EXISTING WATER MAIN
	EXISTING SANITARY SEWER
	EXISTING GAS MAIN
	EXISTING STORM DRAIN
	EXISTING UNDERGROUND CABLE TV
	EXISTING BURIED TELEPHONE
	EXISTING OVERHEAD ELECTRIC
	EXISTING OVERHEAD TELEPHONE
	EDGE OF PAVEMENT
	EXISTING CHAIN LINK FENCE
	EXISTING UTILITY TO BE ABANDONED
	MONITORING WELL
	PROPOSED FITTING
	PROPOSED GATE VALVE
	PROPOSED BUTTERFLY VALVE
	PROPOSED FIRE HYDRANT
	BORING LOCATION
	SURVEY CONTROL POINT
	SEDIMENT TUBE
	SILT FENCE STONE OUTLET
	EXISTING WATER VALVE
	EXISTING GAS VALVE
	EXISTING WATER METER
	EXISTING CLEANOUT
	INVERT ELEVATION
	EXISTING FIRE HYDRANT
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM DRAIN MANHOLE
	EXISTING SIGN
	EXISTING LIGHT POLE
	EXISTING POWER POLE
	EXISTING GUY WIRE
	EXISTING MAILBOX
	EXISTING ELECTRIC METER
	EXISTING SOIL BORING
	EXISTING GUY POLE
	EXISTING CAMERA POLE
	EXISTING HAND HOLE
	EXISTING WITNESS POST
	EXISTING TELECOM PEDESTAL
	EXISTING TELECOM REPEATER
	EXISTING TV HANDHOLE
	INDIVIDUAL TREE PROTECTION
	DRIVEWAY/ PAVEMENT REPLACEMENT

EASEMENT INDEX

EASEMENT NO.	TMS No.	OWNER ADDRESS	OWNER	DB	PG	NOTES
1	664-01-01-001	2272 EDEN TERRACE, ROCK HILL SC 29730	GRIMES GREGORY M & JULIE M RUNGE			NOT ACQUIRED
2	664-01-01-002	2278 EDEN TERRACE, ROCK HILL SC 29730	HUGHES JENNIE M			NOT ACQUIRED
3	664-01-01-003	2284 EDEN TERRACE, ROCK HILL SC 29730	PHAM HOA VAN & TAM PHI PHAN			NOT ACQUIRED
4	664-01-01-004	2296 EDEN TERRACE, ROCK HILL SC 29730	POWELL PETE H & MILDRED S			NOT ACQUIRED
5	664-01-01-005	2296 EDEN TERRACE, ROCK HILL SC 29730	POWELL PETE H & MILDRED S			NOT ACQUIRED
6	664-01-02-001	2308 EDEN TERRACE, ROCK HILL SC 29730	SIFORAVES LAWRENCE W & SUSAN			NOT ACQUIRED
7	664-01-02-002	2304 EDEN TERRACE, ROCK HILL SC 29730	MATHIS KATHY B INDIVIDUALLY & AS TRUSTEE			NOT ACQUIRED
8	664-01-02-003	303 FAIRWAY DRIVE, FORT MILL SC 29715	JANE P ARNOLD			
9	664-00-00-022	2258 NATIONS FORD DRIVE, ROCK HILL SC 29730	HUTCHISON T W FAMILY LIMITED			
10	662-07-01-170	2959 HARLINDALE DRIVE, ROCK HILL SC 29732	AMTEL INC% SHAH			
11	664-00-00-061	1850 WILLIAMS ROAD, FORT MILL SC 29715	JOYCE ATKINS LLC			
12	664-00-00-035	1850 WILLIAMS ROAD, FORT MILL SC 29715	JOYCE ATKINS LLC			
13	662-00-00-033	PO BOX 10521, ROCK HILL SC 29730	CHURCH TRUSTEE CROSSROADS BAPTIST CHURCH			
14	662-00-00-035	NOT LISTED	CROSS RD BAPTIST CHURCH			
15	662-00-00-036	PO BOX 128, FORT MILL SC 29715	JOANNE A MACK			
16	662-00-00-037	PO BOX 128, FORT MILL SC 29715	JOANNE A MACK			

TEST HOLE DATA

TEST HOLE NO.	STATION / OFFSET	NORTHING	EASTING	TOP ELEVATION	DESCRIPTION	OWNER
1	9+61.41 17.31'R	1138397.416	2002514.470	653.09	FIBER OPTIC TELECOM	AT&T
2		1139411.541	2004688.983	626.19	12" DUCTILE IRON WATER	CITY OF ROCK HILL
3	36+92.30 6.36'R	1139375.994	2004964.733	602.36	4" CAST IRON GAS	YORK COUNTY NATURAL GAS
4	39+52.60 5.63'R	1139462.141	2005210.368	599.15	FIBER OPTIC TELECOM	SCDOT ITS
5	40+44.18 3.94'L	1139501.254	2005293.728	596.52	4" CAST IRON GAS	YORK COUNTY NATURAL GAS
6	50+60.88 1.84'L	1140219.685	2005866.002	580.05	4" CAST IRON GAS	YORK COUNTY NATURAL GAS
7	60+72.69 1.52'L	1140654.653	2006705.423	554.25	24" DUCTILE IRON WATER	CITY OF ROCK HILL

SHEET INDEX

SHEET NO.	TITLE
GENERAL	
G-0	COVER SHEET
G-1	PROJECT NOTES
G-2	LEGEND, SHEET INDEX AND SUPPLEMENTARY INFORMATION
G-3	KEY MAP AND PROJECT CONTROL
CIVIL	
C-1	STA. 9+26 TO STA. 16+00 PLAN AND PROFILE
C-2	STA. 16+00 TO STA. 25+00 PLAN AND PROFILE
C-3	STA. 25+00 TO STA. 33+50 PLAN AND PROFILE
C-4	STA. 33+50 TO STA. 42+50 PLAN AND PROFILE
C-4A	STA. 33+50 TO STA. 42+50 PLAN AND PROFILE - ALTERNATIVE 1
C-5	STA. 42+50 TO STA. 52+00 PLAN AND PROFILE
C-6	STA. 52+00 TO STA. 60+72 PLAN AND PROFILE
DETAILS	
CD-1	CIVIL DETAILS
CD-2	CIVIL DETAILS
CD-3	CIVIL DETAILS
CD-4	CIVIL DETAILS
CD-5	CIVIL DETAILS
CD-6	EROSION AND SEDIMENT CONTROL DETAILS
CD-7	TRAFFIC CONTROL DETAILS
CD-8	TRAFFIC CONTROL DETAILS

BORE HOLE DATA

TEST HOLE NO.	STATION / OFFSET	NORTHING	EASTING	DESCRIPTION	NOTES
B-1	11+76.21 7.53'R	1138464.760	2002701.713	OPEN CUT	
B-2	14+94.04 6.47'R	1138551.413	2003007.475	OPEN CUT	
B-3	18+74.31 5.58'R	1138654.747	2003373.448	OPEN CUT	
B-4	24+39.51 16.68'L	1138813.310	2003904.672	OPEN CUT	
B-5	34+41.14 14.60'L	1139358.094	2004731.093	TRENCHLESS	
B-6	37+37.42 142.23'R	1139262.513	2005052.079	TRENCHLESS	
B-7	40+64.95 3.95'R	1139500.703	2005315.983	TRENCHLESS	MONITORING WELL INSTALLED
B-8	44+79.75 20.48'L	1139878.040	2005436.070	OPEN CUT	
B-9	49+91.85 11.17'L	1140182.827	2005846.077	TRENCHLESS	
B-10	49+96.20 84.88'L	1140246.404	2005808.537	TRENCHLESS	
B-11	55+51.26 1.48'L	1140454.295	2006230.191	OPEN CUT	
B-12	58+12.12 1.89'R	1140535.112	2006477.999	TRENCHLESS	MONITORING WELL INSTALLED
B-13	59+45.63 4.21'R	1140596.401	2006596.927	TRENCHLESS	
B-14	211+33.36 25.73'R	1139448.576	2004695.074	TRENCHLESS	

TYPE OF IMPERVIOUS AREA	NEW (SF)	EXISTING (SF)
ROOF	0	1610
ASPHALT	0	3740
CONCRETE	0	5650
OTHER HARD SURFACE (GRAVEL, ETC)	0	0
WATER SURFACE (WET POND)	0	0

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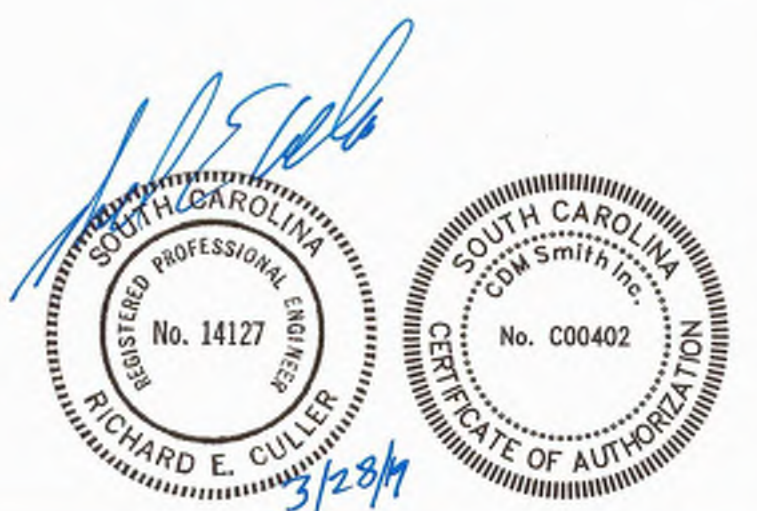
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 DRAWN BY: AK
 SHEET CHK'D BY: EO
 CROSS CHK'D BY:
 APPROVED BY:
 DATE: MARCH 2019



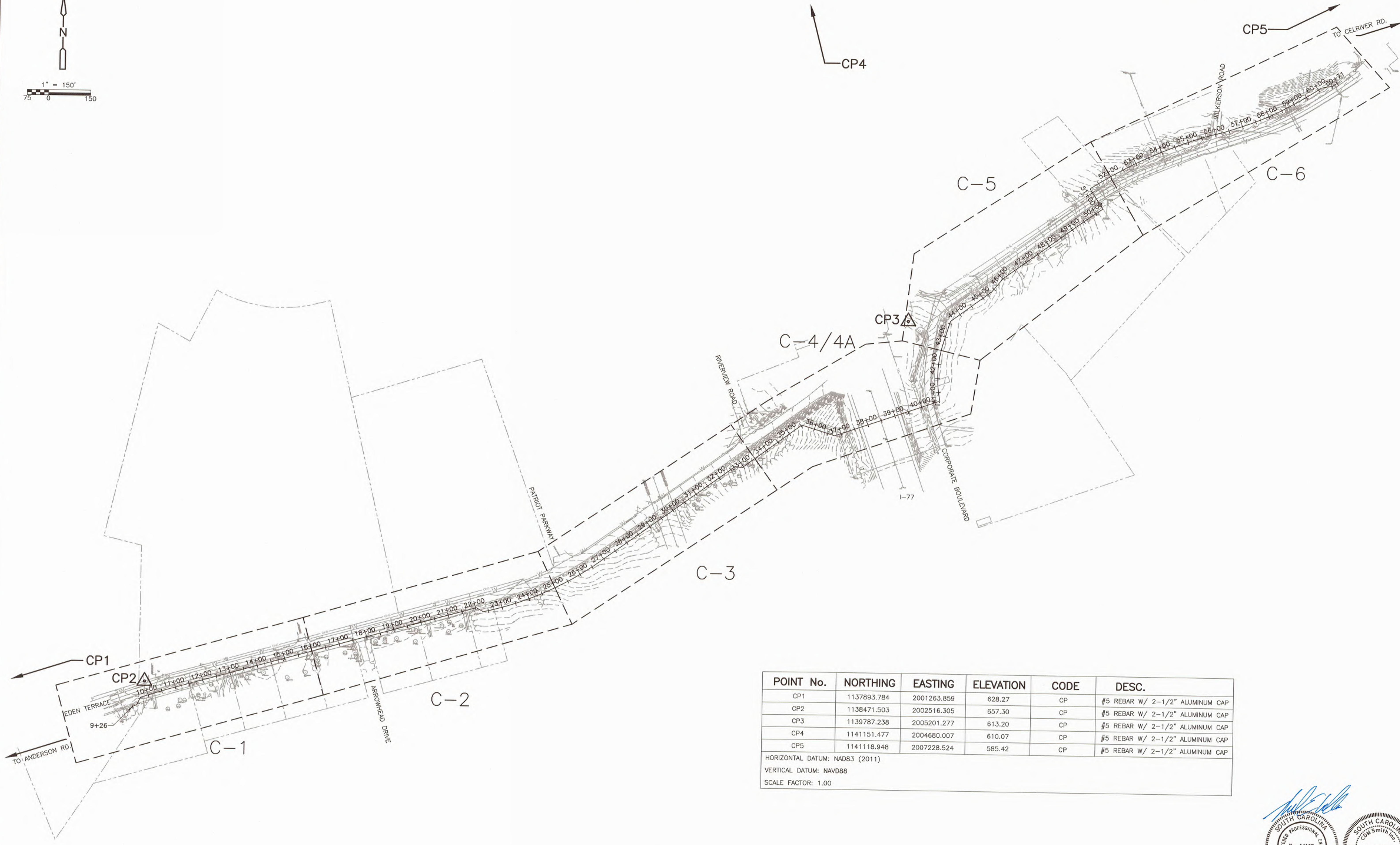
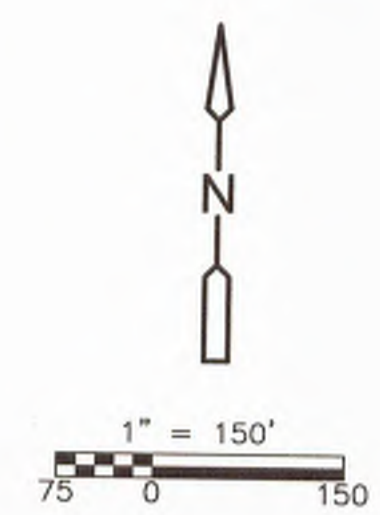
CITY OF ROCK HILL
 EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN
 LEGEND, SHEET INDEX AND
 SUPPLEMENTARY INFORMATION

PROJECT NO. 258111-221823
 FILE NAME: G02LEGD.DWG
 SHEET NO.
 G-2

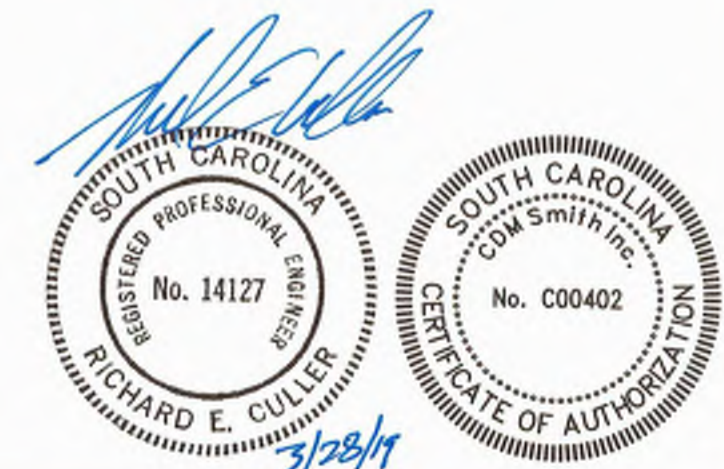


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POINT No.	NORTHING	EASTING	ELEVATION	CODE	DESC.
CP1	1137893.784	2001263.859	628.27	CP	#5 REBAR W/ 2-1/2" ALUMINUM CAP
CP2	1138471.503	2002516.305	657.30	CP	#5 REBAR W/ 2-1/2" ALUMINUM CAP
CP3	1139787.238	2005201.277	613.20	CP	#5 REBAR W/ 2-1/2" ALUMINUM CAP
CP4	1141151.477	2004680.007	610.07	CP	#5 REBAR W/ 2-1/2" ALUMINUM CAP
CP5	1141118.948	2007228.524	585.42	CP	#5 REBAR W/ 2-1/2" ALUMINUM CAP

HORIZONTAL DATUM: NAD83 (2011)
 VERTICAL DATUM: NAVD88
 SCALE FACTOR: 1.00



DESIGNED BY:	RC
DRAWN BY:	AK
SHEET CHK'D BY:	EQ
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	MARCH 2019

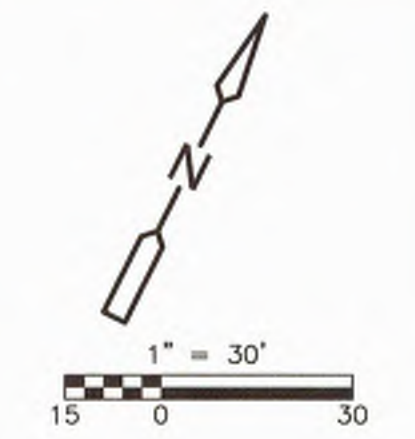
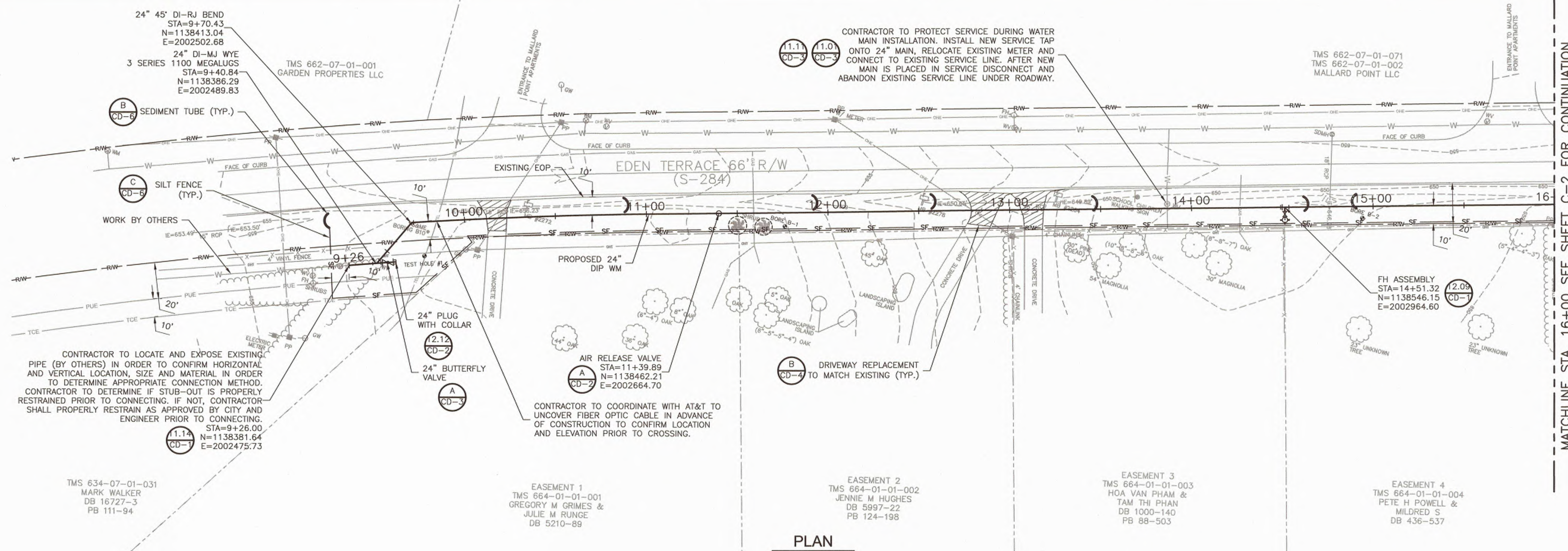
CDM Smith
 1441 Main Street, Suite 1000
 Columbia, South Carolina 29201
 Tel: (803) 758-4500

CITY OF ROCK HILL
 EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

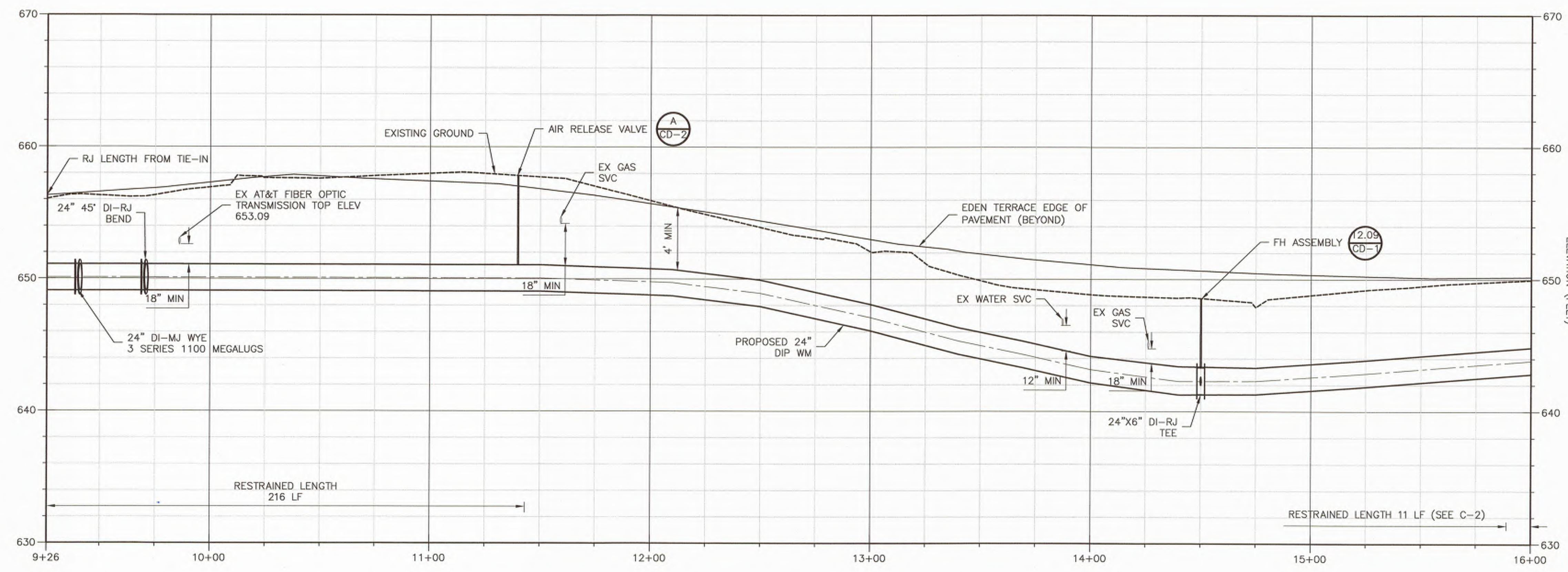
WATER TRANSMISSION MAIN
 KEY MAP AND PROJECT CONTROL

PROJECT NO. 258111-221823
 FILE NAME: G03KMPD.DWG
 SHEET NO.
 G-3

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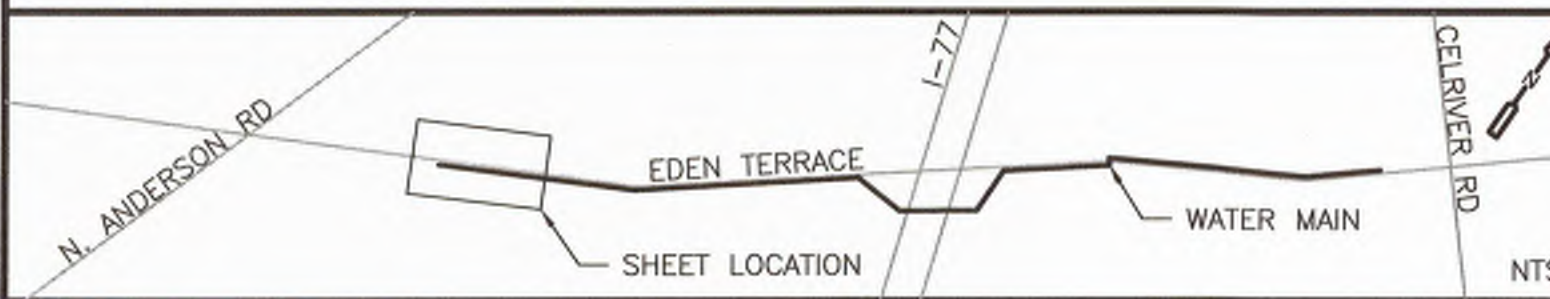
PLAN



1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.
3. IF TREE TRIMMING AND / OR REMOVAL IS REQUIRED, ALL TREE WORK MUST BE DONE BY A SOUTH CAROLINA LICENSED ARBORIST, WITH A MINIMUM OF 5 YEARS OF CURRENT, ACTIVE EXPERIENCE. WHEN TREE LIMBS ARE TRIMMED THEY SHALL BE EVENED UP ON ALL SIDES OF THE TREES.
4. CONTRACTOR SHALL PROVIDE TREE PROTECTION FOR TREES LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON CONSTRUCTION PLANS. LIMITS OF CONSTRUCTION VARY ALONG ALIGNMENT AS SHOWN ON EACH PLAN SHEET, BUT IN MOST CASES ARE DEFINED AS THE AREA BETWEEN THE EDGE OF PAVEMENT AND THE TEMPORARY CONSTRUCTION EASEMENT LINE.

PROFILE
HORIZ. 1" = 30'
VERT. 1" = 5'

Professional Engineer seals for Richard E. Culler (No. 14127) and Clayton H. MCCAthen (No. 26559), both licensed in South Carolina. The seal for Clayton H. MCCAthen is dated 3/15/2019.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
DRAWN BY: AK
SHEET CHK'D BY: EQ
CROSS CHK'D BY:
APPROVED BY:
DATE: MARCH 2019

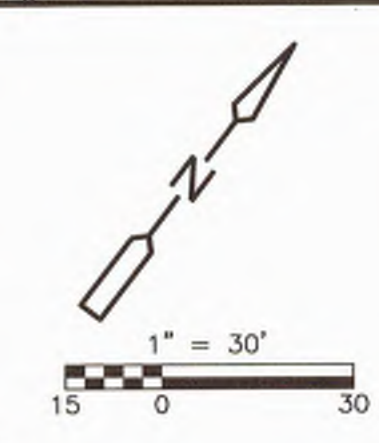
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1441 Main Street, Suite 1000
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CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER**

**WATER TRANSMISSION MAIN
PLAN AND PROFILE
STATION 9+26 TO 16+00**

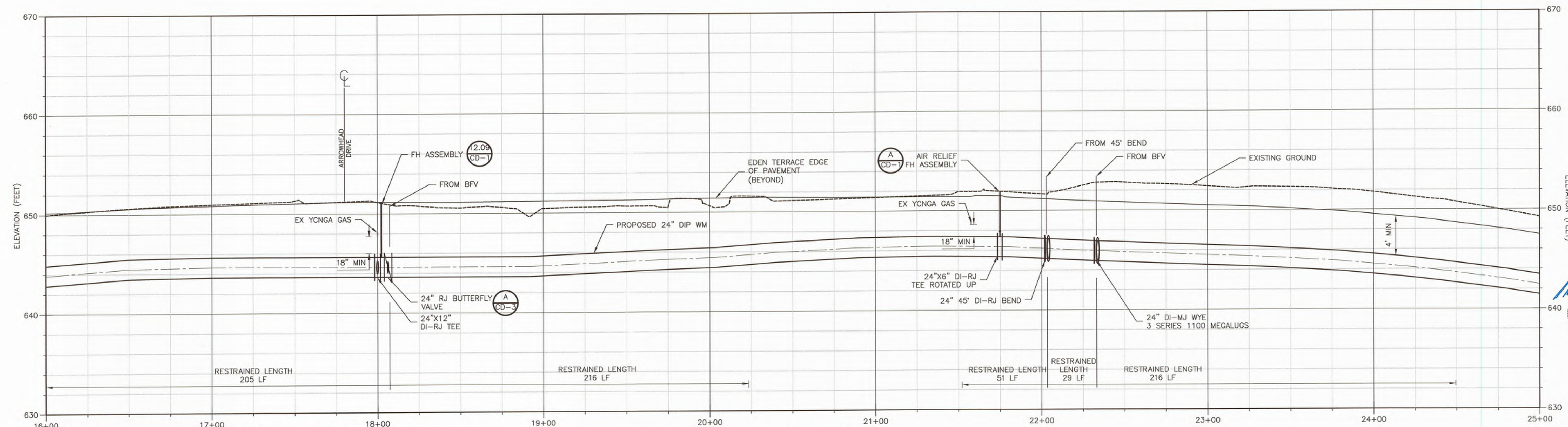
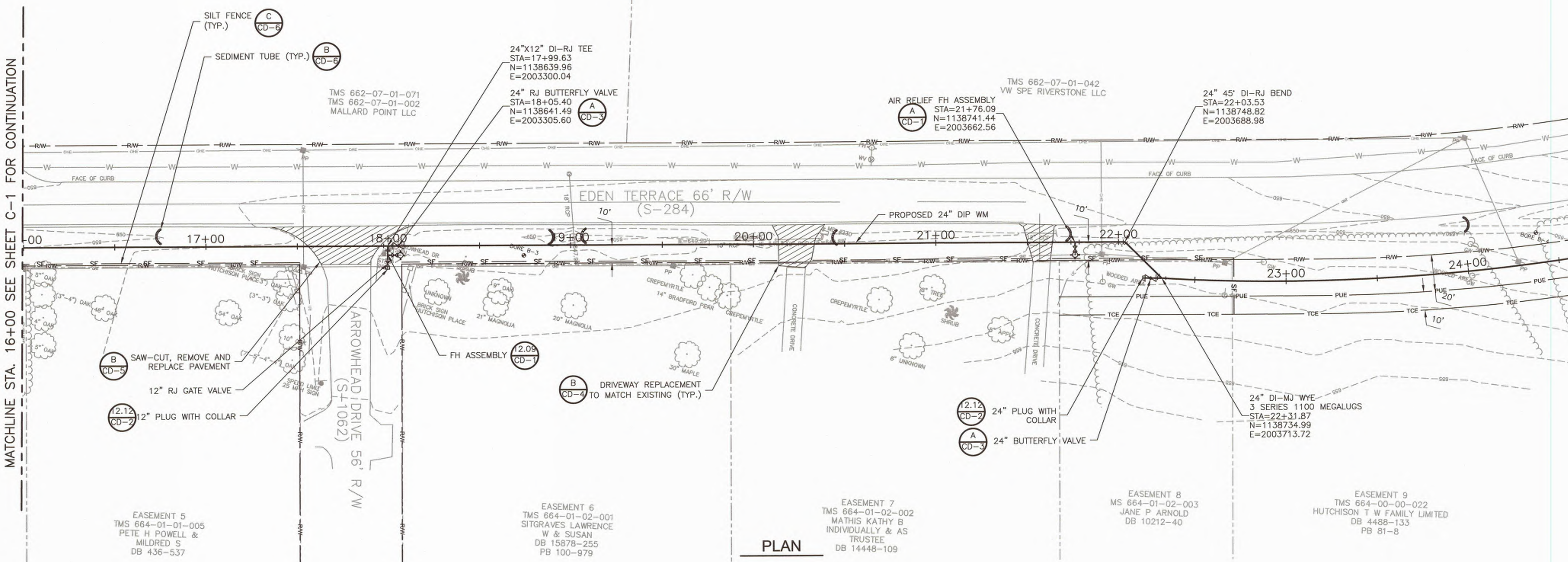
PROJECT NO. 258111-221B23
FILE NAME: C001PLPR.DWG
SHEET NO.
C-1

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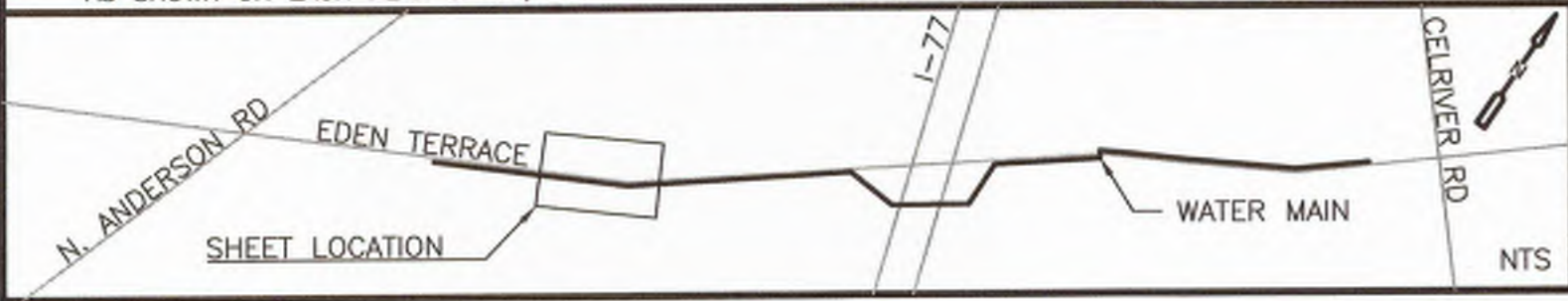


MATCHLINE STA. 16+00 SEE SHEET C-1 FOR CONTINUATION

MATCHLINE STA. 25+00 SEE SHEET C-3 FOR CONTINUATION



1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.
3. IF TREE TRIMMING AND / OR REMOVAL IS REQUIRED, ALL TREE WORK MUST BE DONE BY A SOUTH CAROLINA LICENSED ARBORIST, WITH A MINIMUM OF 5 YEARS OF CURRENT, ACTIVE EXPERIENCE. WHEN TREE LIMBS ARE TRIMMED THEY SHALL BE EVENED UP ON ALL SIDES OF THE TREES.
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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
 DRAWN BY: AK
 SHEET CHK'D BY: EO
 CROSS CHK'D BY:
 APPROVED BY:
 DATE: MARCH 2019

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CITY OF ROCK HILL

**EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER**

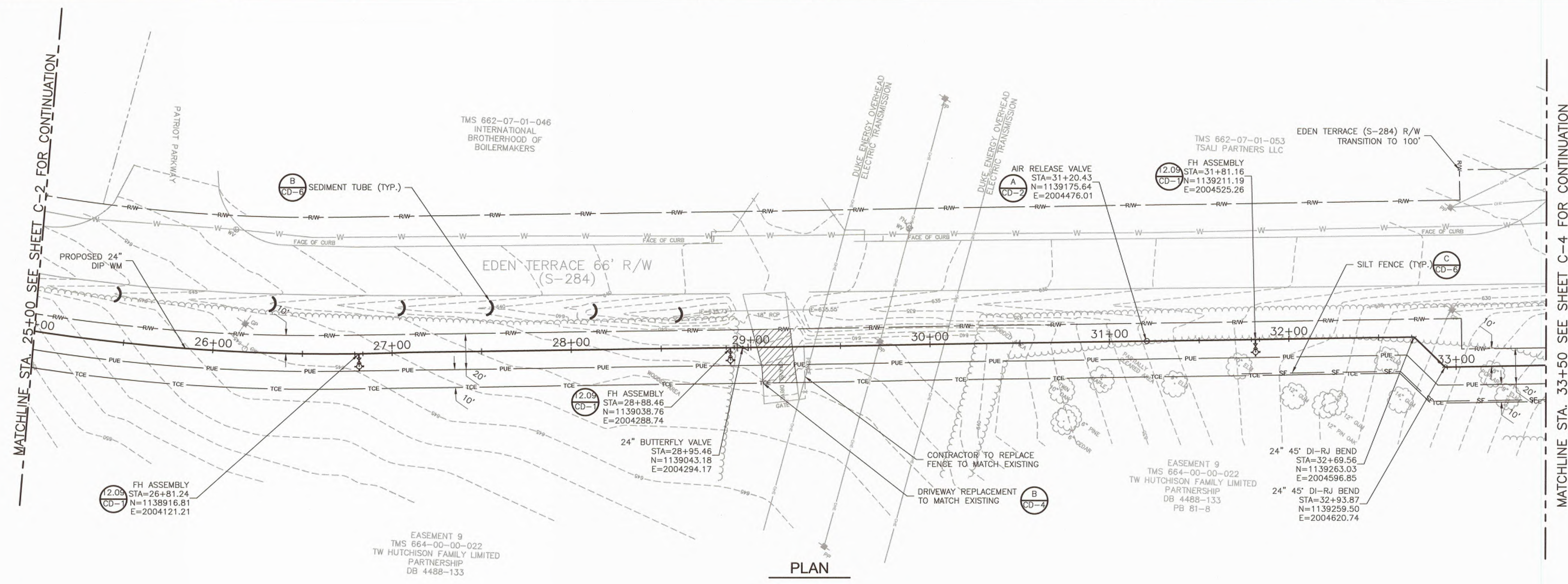
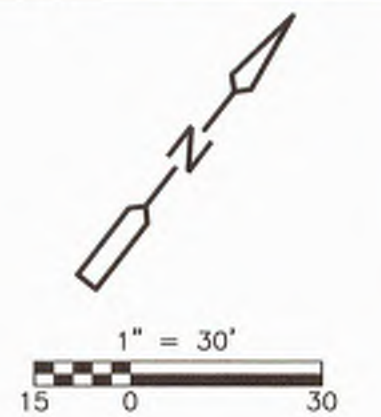
**WATER TRANSMISSION MAIN
 PLAN AND PROFILE
 STATION 16+00 TO 25+00**

SHEET NO. **C-2**

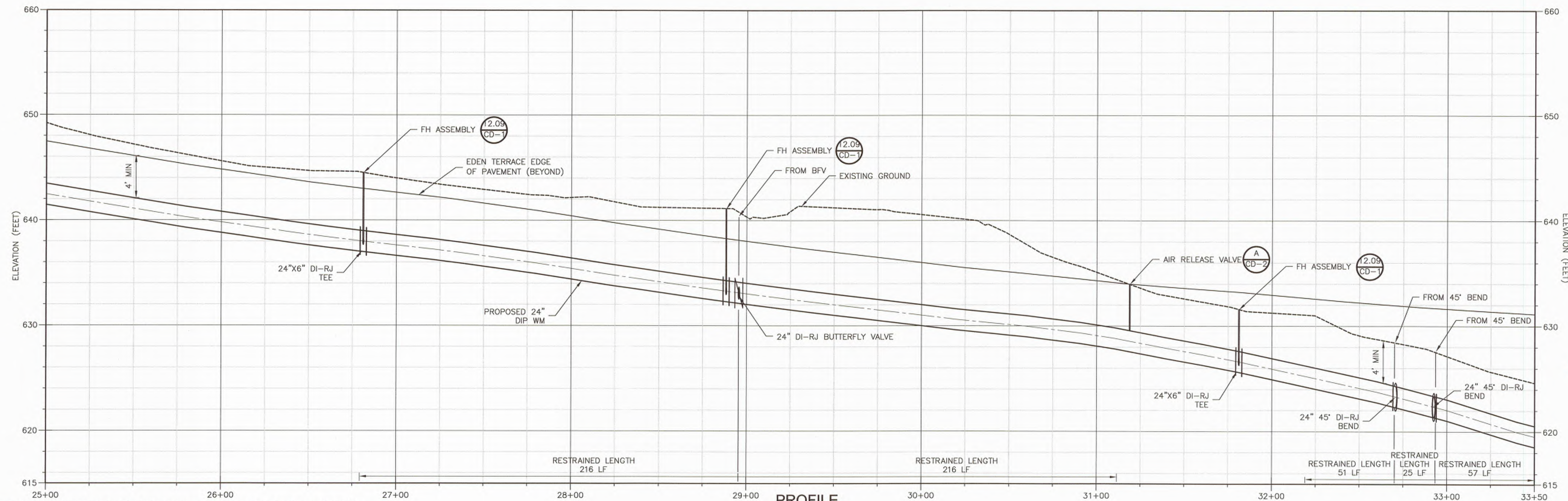
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 FILE NAME: C002PLPR.DWG
 SHEET NO. **C-2**



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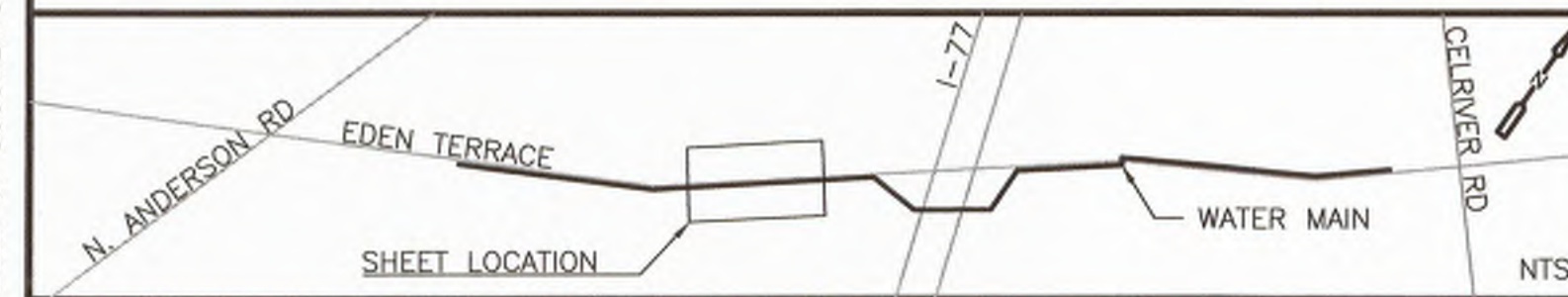
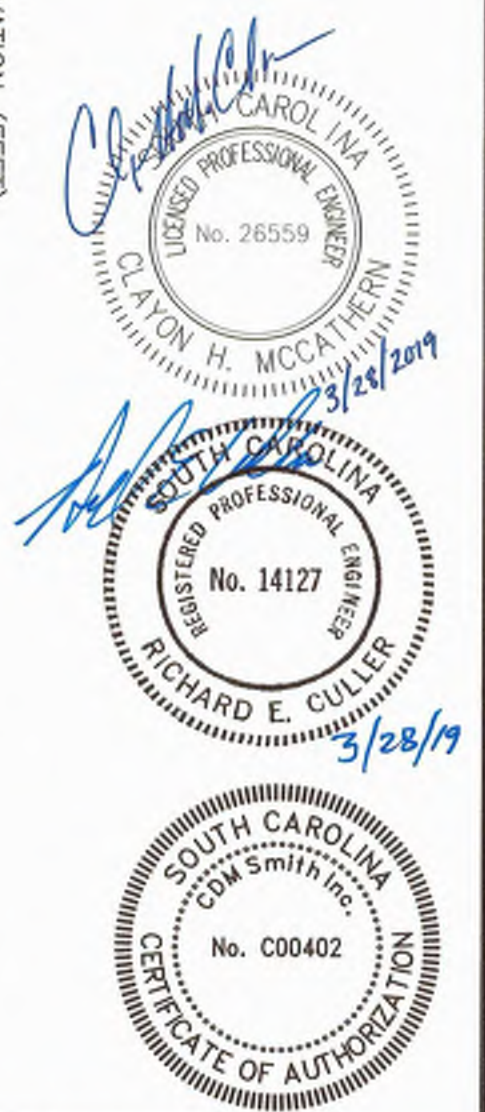


PLAN



PROFILE
HORIZ. 1" = 30'
VERT. 1" = 5'

1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
 DRAWN BY: AK
 SHEET CHK'D BY: EO
 CROSS CHK'D BY:
 APPROVED BY:
 DATE: MARCH 2019

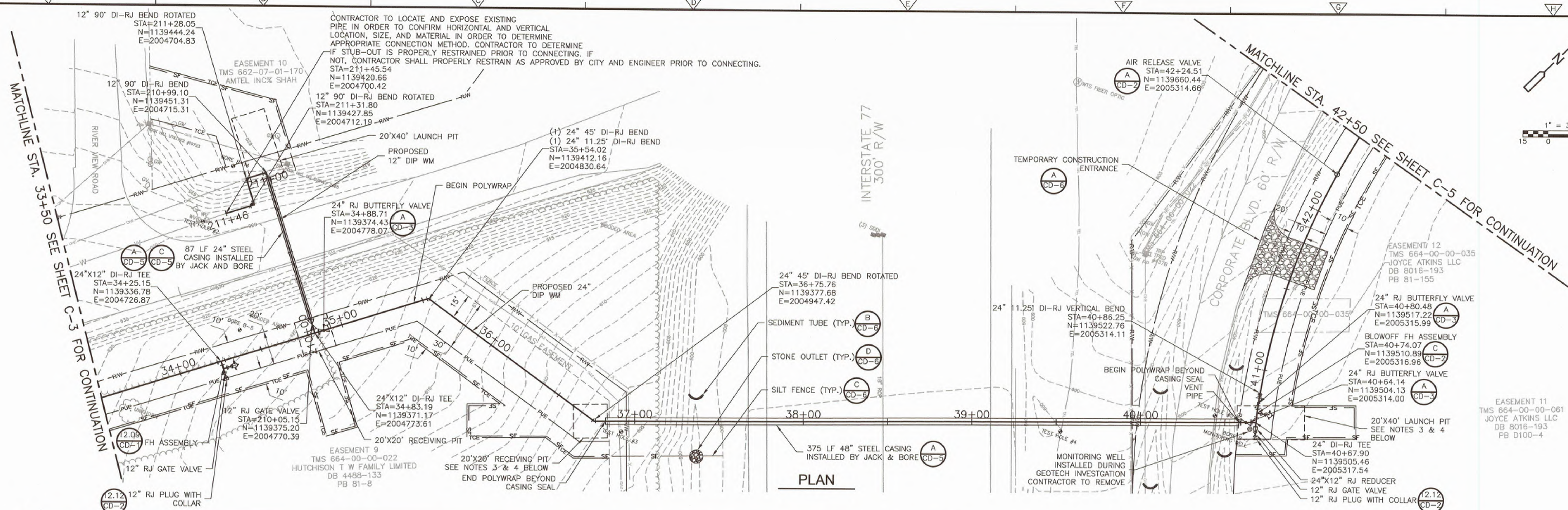


CITY OF ROCK HILL
EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

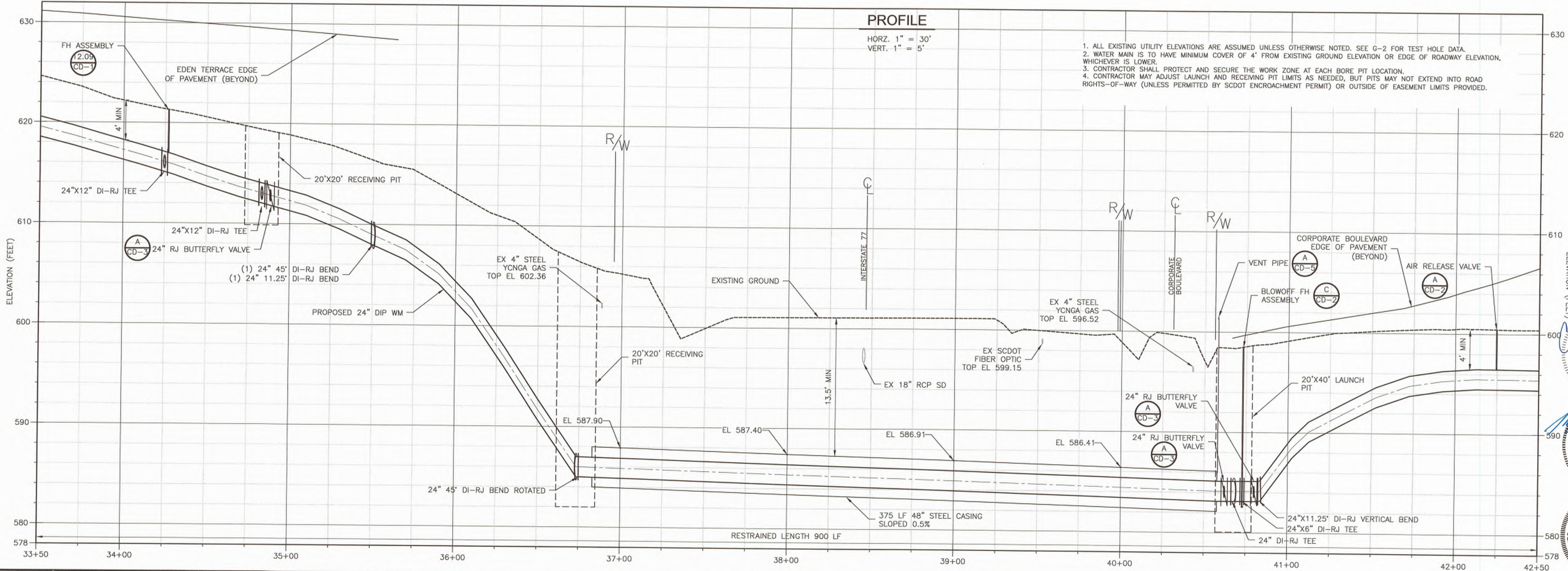
WATER TRANSMISSION MAIN
 PLAN AND PROFILE
 STATION 25+00 TO 33+50

PROJECT NO. 258111-221823
 FILE NAME: C003PLPR.DWG
 SHEET NO.
C-3

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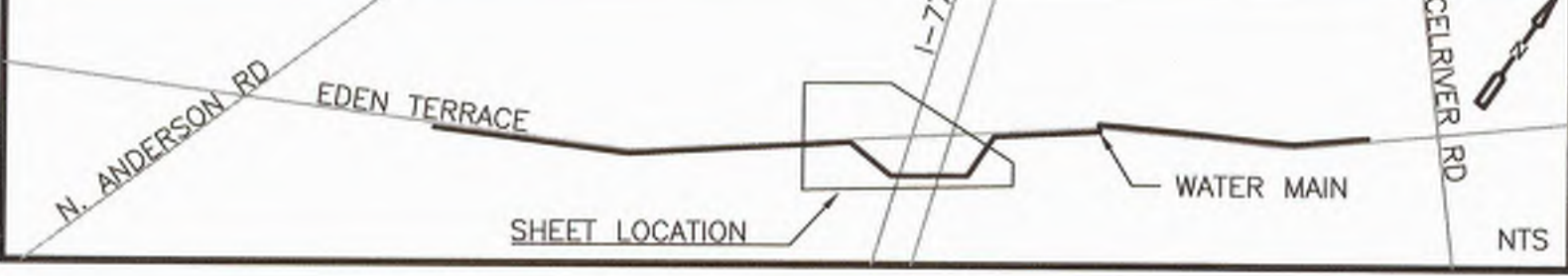


PLAN



PROFILE

1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.
3. CONTRACTOR SHALL PROTECT AND SECURE THE WORK ZONE AT EACH BORE PIT LOCATION.
4. CONTRACTOR MAY ADJUST LAUNCH AND RECEIVING PIT LIMITS AS NEEDED, BUT PITS MAY NOT EXTEND INTO ROAD RIGHTS-OF-WAY (UNLESS PERMITTED BY SCDOT ENCROACHMENT PERMIT) OR OUTSIDE OF EASEMENT LIMITS PROVIDED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
 DRAWN BY: AK
 SHEET CHK'D BY: EO
 CROSS CHK'D BY: _____
 APPROVED BY: _____
 DATE: MARCH 2019

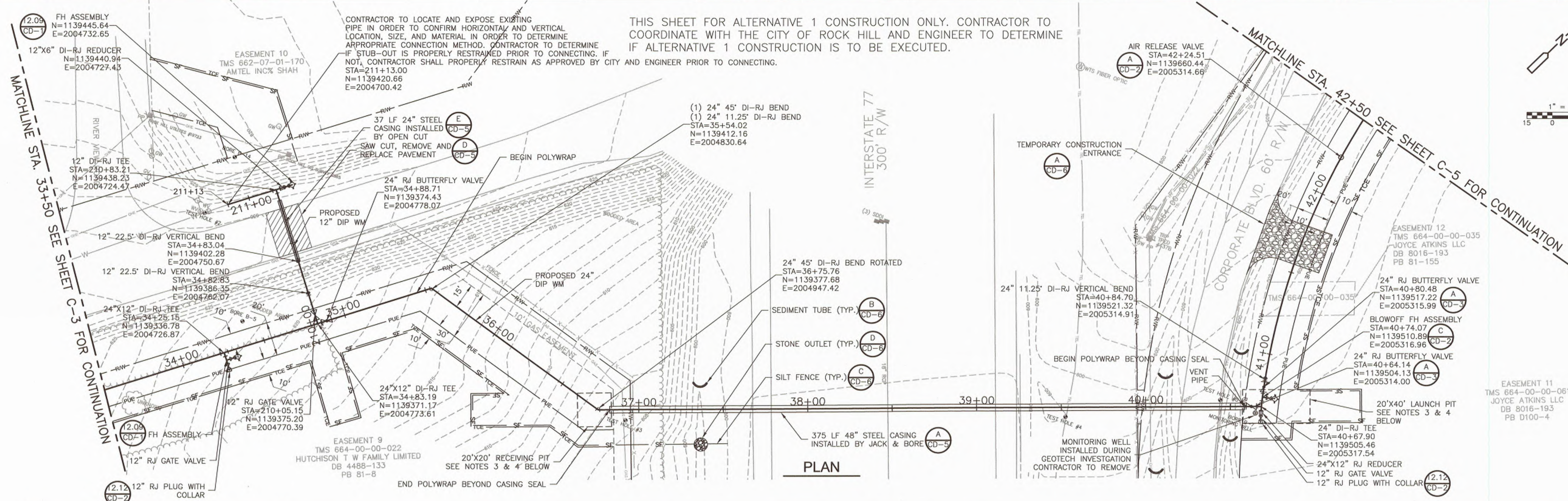


CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER**

**WATER TRANSMISSION MAIN
 PLAN AND PROFILE
 STATION 33+50 TO 42+50**

PROJECT NO. 258111-221823
 FILE NAME: CD04PLPR.DWG
 SHEET NO.
C-4

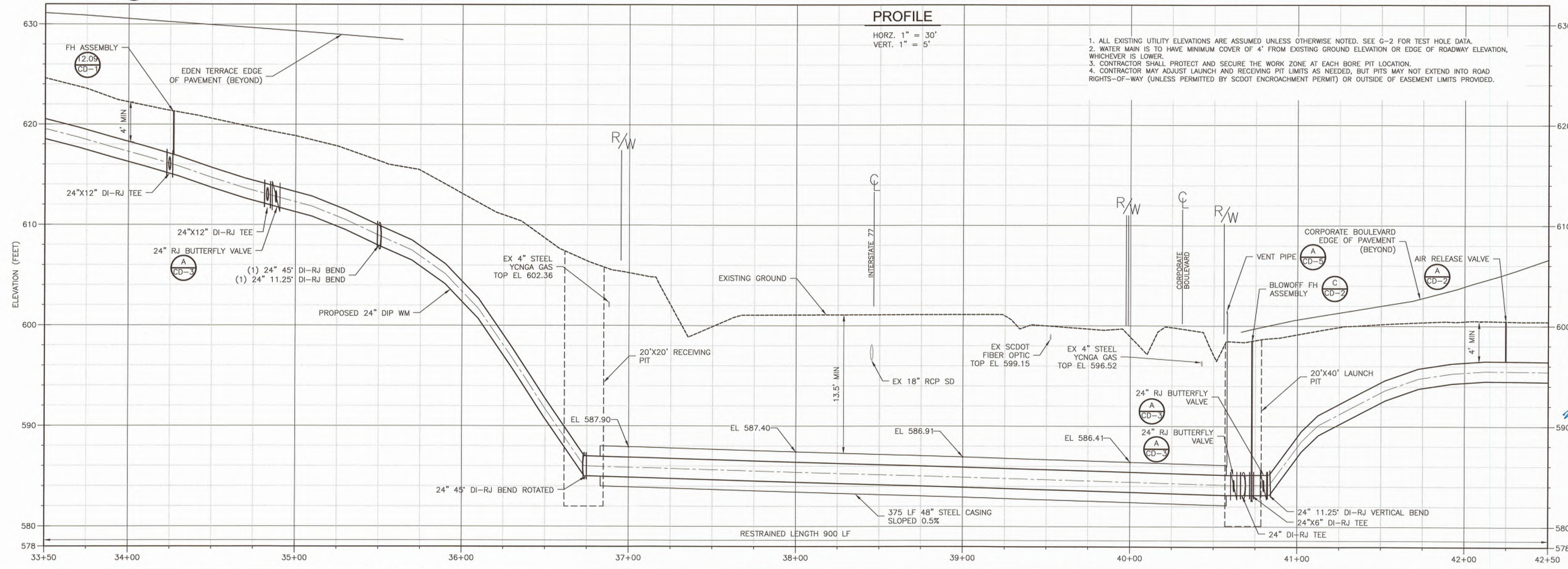
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THIS SHEET FOR ALTERNATIVE 1 CONSTRUCTION ONLY. CONTRACTOR TO COORDINATE WITH THE CITY OF ROCK HILL AND ENGINEER TO DETERMINE IF ALTERNATIVE 1 CONSTRUCTION IS TO BE EXECUTED.

CONTRACTOR TO LOCATE AND EXPOSE EXISTING PIPE IN ORDER TO CONFIRM HORIZONTAL AND VERTICAL LOCATION, SIZE, AND MATERIAL IN ORDER TO DETERMINE APPROPRIATE CONNECTION METHOD. CONTRACTOR TO DETERMINE IF STUB-OUT IS PROPERLY RESTRAINED PRIOR TO CONNECTING. IF NOT, CONTRACTOR SHALL PROPERLY RESTRAIN AS APPROVED BY CITY AND ENGINEER PRIOR TO CONNECTING.

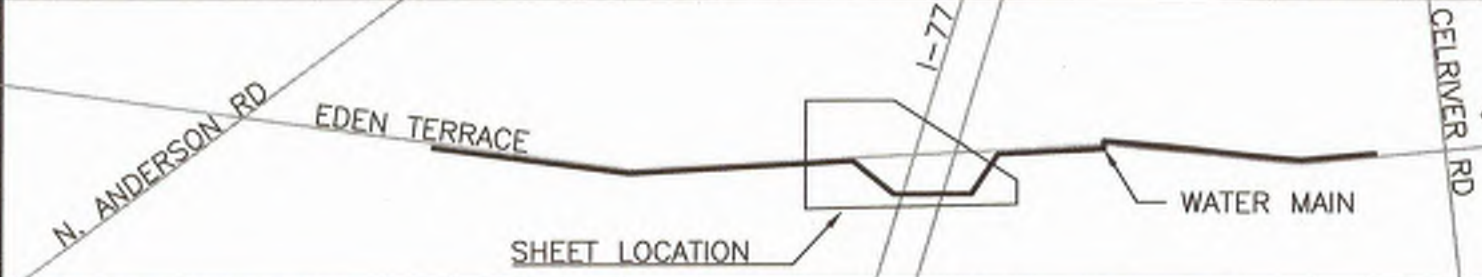
PLAN



PROFILE

HORZ. 1" = 30'
VERT. 1" = 5'

1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.
3. CONTRACTOR SHALL PROTECT AND SECURE THE WORK ZONE AT EACH BORE PIT LOCATION.
4. CONTRACTOR MAY ADJUST LAUNCH AND RECEIVING PIT LIMITS AS NEEDED, BUT PITS MAY NOT EXTEND INTO ROAD RIGHTS-OF-WAY (UNLESS PERMITTED BY SCDOT ENCROACHMENT PERMIT) OR OUTSIDE OF EASEMENT LIMITS PROVIDED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
DRAWN BY: AK
SHEET CHK'D BY: EQ
CROSS CHK'D BY: _____
APPROVED BY: _____
DATE: MARCH 2019



CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER**

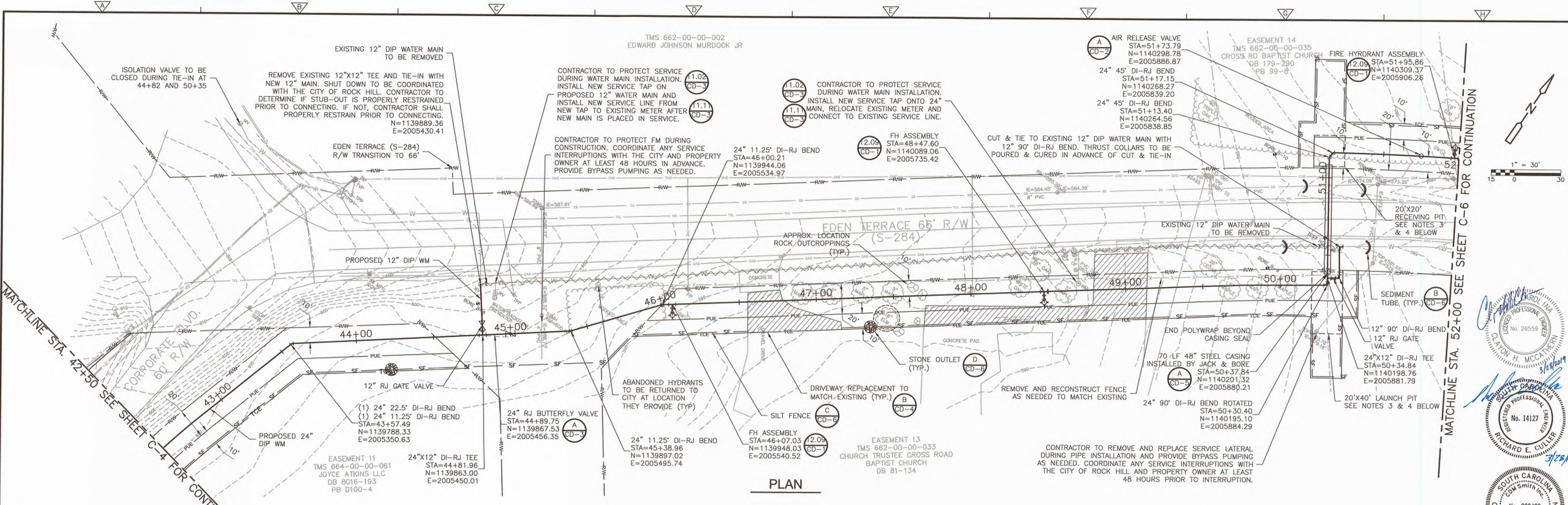
**WATER TRANSMISSION MAIN
PLAN AND PROFILE
STATION 33+50 TO 42+50
ALTERNATIVE 1**

PROJECT NO. 258111-221823
FILE NAME: C004APLPR.DWG
SHEET NO. **C-4A**

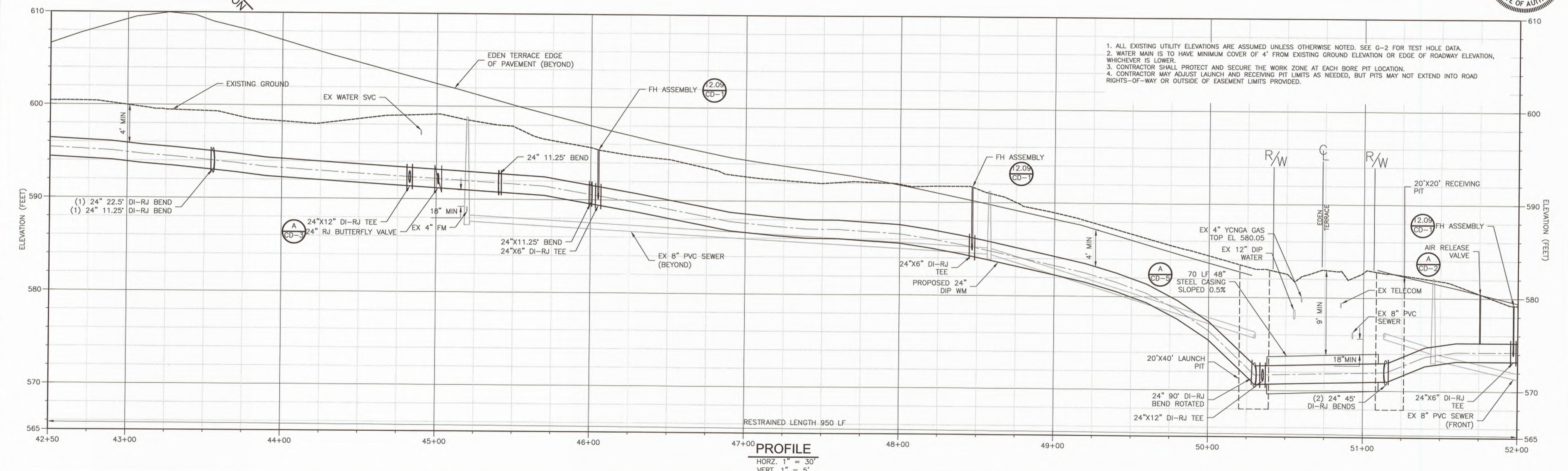


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TMS 662-00-00-002
EDWARD JOHNSON MURDOCK JR

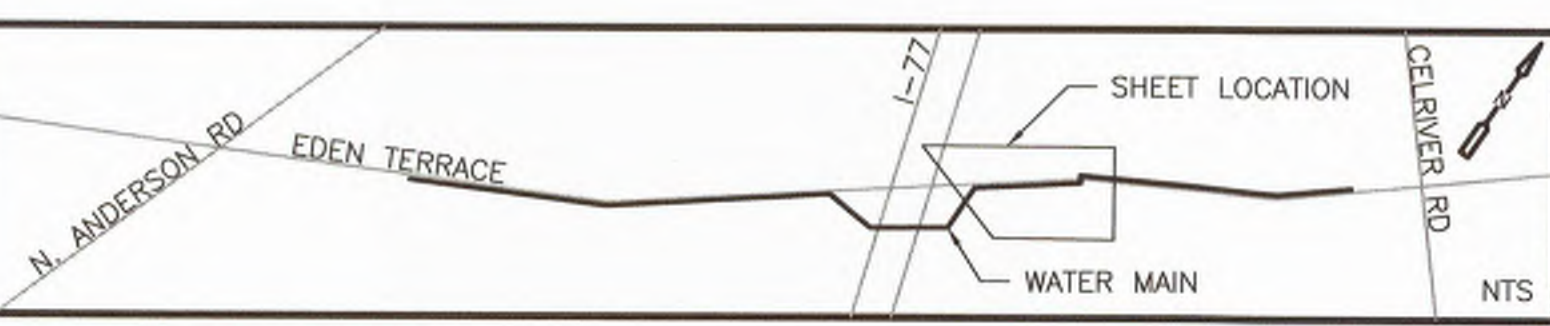
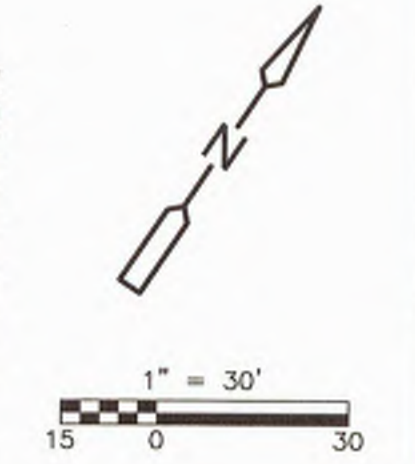


PLAN



PROFILE
HORZ. 1" = 30'
VERT. 1" = 5'

1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.
3. CONTRACTOR SHALL PROTECT AND SECURE THE WORK ZONE AT EACH BORE PIT LOCATION.
4. CONTRACTOR MAY ADJUST LAUNCH AND RECEIVING PIT LIMITS AS NEEDED, BUT PITS MAY NOT EXTEND INTO ROAD RIGHTS-OF-WAY OR OUTSIDE OF EASEMENT LIMITS PROVIDED.



REV. NO.	DATE	DRWN	CHKD	REMARKS

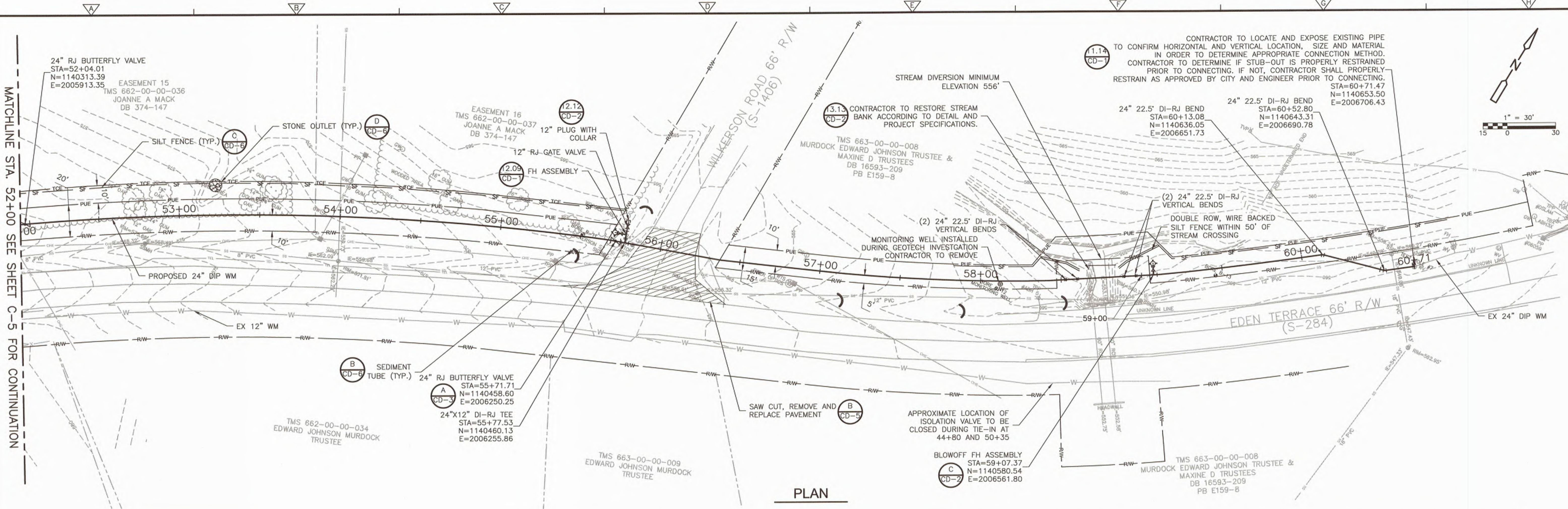
DESIGNED BY: RC
DRAWN BY: AK
SHEET CHK'D BY: EQ
CROSS CHK'D BY:
APPROVED BY:
DATE: MARCH 2019

CDM Smith
1441 Main Street, Suite 1000
Columbia, South Carolina 29201
Tel: (803) 758-4500

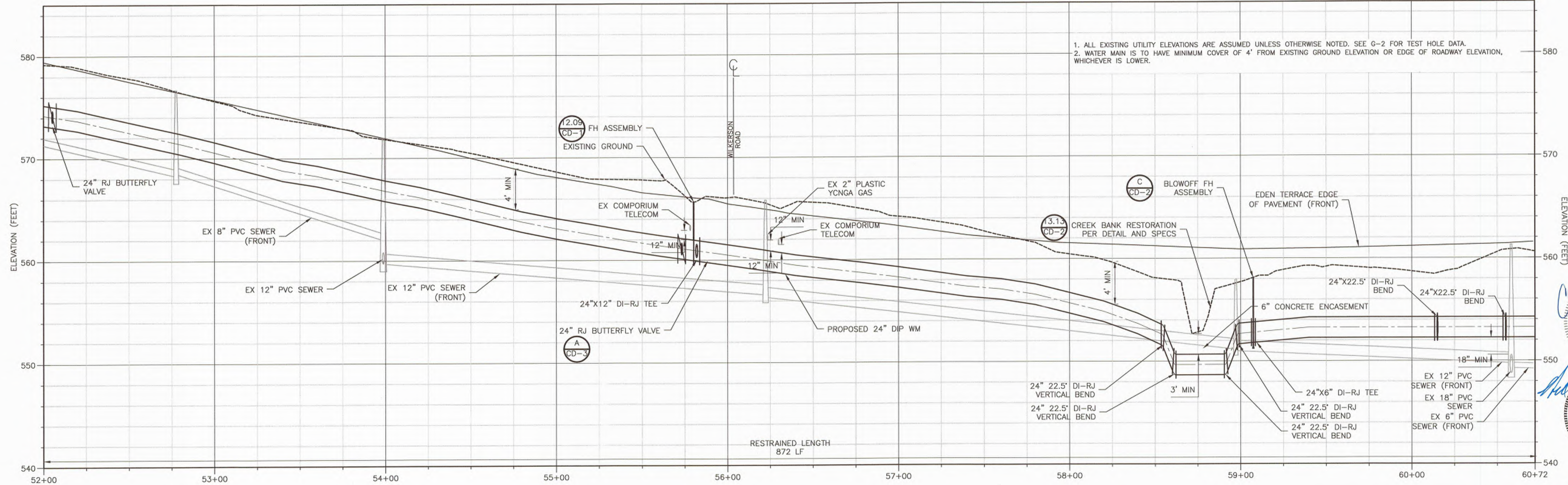
CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER**

**WATER TRANSMISSION MAIN
PLAN AND PROFILE
STATION 42+50 TO 52+00**

PROJECT NO. 258111-221823
FILE NAME: C005PLPR.DWG
SHEET NO.
C-5



PLAN



PROFILE
 HORZ. 1" = 30'
 VERT. 1" = 5'

1. ALL EXISTING UTILITY ELEVATIONS ARE ASSUMED UNLESS OTHERWISE NOTED. SEE G-2 FOR TEST HOLE DATA.
2. WATER MAIN IS TO HAVE MINIMUM COVER OF 4' FROM EXISTING GROUND ELEVATION OR EDGE OF ROADWAY ELEVATION, WHICHEVER IS LOWER.

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MATCHLINE STA. 52+00 SEE SHEET C-5 FOR CONTINUATION



REV. NO.	DATE	DRWN	CHKD	REMARKS

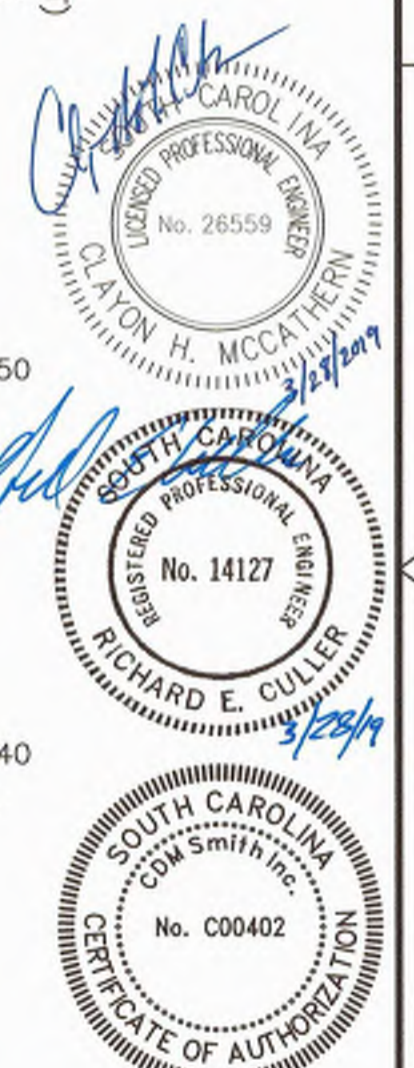
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 DRAWN BY: AK
 SHEET CHK'D BY: EQ
 CROSS CHK'D BY:
 APPROVED BY:
 DATE: MARCH 2019



CITY OF ROCK HILL
EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN
PLAN AND PROFILE
STATION 52+00 TO 60+72

PROJECT NO. 258111-221823
 FILE NAME: C006PLPR.DWG
 SHEET NO. **C-6**



GENERAL WATER/SEWER NOTES

1. WATER AND SEWER SYSTEMS ARE TO BE CONSTRUCTED IN GENERAL ACCORDANCE WITH ALL CITY OF ROCK HILL AND SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDEC) REGULATIONS, REFERENCED WATER AND SEWER STANDARDS AND SPECIFICATIONS.
2. WATER AND SEWER CONSTRUCTION ON THIS SITE IS AUTHORIZED BY PERMITS ISSUED BY SCDEC. THE WORK IS SUBJECT TO INSPECTION AT ALL TIMES BY REPRESENTATIVES OF SCDEC, CITY OF ROCK HILL, AND THE ENGINEER OF RECORD. THE PERMITS REQUIRE CERTIFICATION OF COMPLETION BY THE ENGINEER OF THE WATER AND SEWER SYSTEMS PRIOR TO CITY ACCEPTANCE AND ISSUANCE OF FINAL OPERATIONAL APPROVAL BY SCDEC.
3. CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION AND ELEVATION FOR ALL UTILITIES, DRAINAGE, AND OTHER UNDERGROUND FACILITIES, AND SHALL NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCY OR CONFLICTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF LOCATING AND MARKING ALL EXISTING UNDERGROUND UTILITIES. CONTACT SC811 AT 811 (INSIDE SC) OR 888-721-7877 (OUTSIDE SC), A MINIMUM OF 72 HOURS BEFORE DIGGING.
4. CONNECTION TO ANY EXISTING LINES SHALL BE BY THE CONTRACTOR IN THE PRESENCE OF CITY OF ROCK HILL INSPECTION PERSONNEL. PLUG NEW CONNECTION UNTIL CONSTRUCTION AND TESTING HAS BEEN COMPLETED, INSPECTED BY THE ENGINEER OF RECORD AND CITY OF ROCK HILL, AND FINAL CONNECTION IS AUTHORIZED.
5. UTILITY SERVICE PIPING SHALL BE ROUTED THROUGH SOFT AREAS AND NOT BE LOCATED UNDER PAVED DRIVEWAYS AND SIDEWALKS.
6. CITY OF ROCK HILL SHALL OWN AND MAINTAIN THE PROPOSED WATER AND SANITARY SEWER LINES UPON COMPLETION, INSPECTION, APPROVAL, AND ACCEPTANCE OF THE WORK.
7. TEMPORARY EROSION CONTROL MEASURES (I.E. SILT FENCE, INLET PROTECTION, CHECK DAMS, ETC.) SHALL BE REMOVED AT THE END OF THE PROJECT.

WATER NOTES

1. ALL MAINS 4 INCH TO 12 INCH SHALL BE AWWA C900, PRESSURE CLASS 150 PVC GDR 18-FITTINGS 4 INCH SHALL BE 150-PISTON PVC PER SPECIFICATIONS. PVC PIPING SHALL BE INSTALLED WITH APPROVED COPPER LOCATING WIRE - NO NEW MAINS SHALL BE SMALLER THAN 4 INCHES.
2. ALL PLASTIC WATER PIPING IS TO HAVE A 12 GAUGE INSULATED SOLID COPPER WIRE INSTALLED ITS ENTIRE LENGTH PER CITY OF ROCK HILL SPECIFICATIONS TO AID IN LOCATING THE PIPE FOR FUTURE MAINTENANCE PURPOSES.
3. DIP SHALL BE IN ACCORDANCE WITH AWWA/ANSI C150/A21.50 AND C151/A21.51.
4. ASBESTOS CEMENT PIPE SHALL NOT BE USED IN POTABLE WATER SYSTEMS EXCEPT IN THE REPAIR OF AN EXISTING ASBESTOS CEMENT LINES WITH THE APPROVAL OF THE CITY ENGINEER.
5. FIRE HYDRANTS SHALL BE CITY OF ROCK HILL STANDARD.
6. CITY TO BE NOTIFIED OF ALL PRIVATE HYDRANT TESTING. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR FLOW TESTING PRIVATE FIRE HYDRANTS. FLOW TEST RESULTS FOR PRIVATE HYDRANTS MUST BE SHOWN IN "AS-BUILT" PLANS.
7. ALL WATER MAIN VALVES MUST OPEN COUNTERCLOCKWISE IN CONFORMANCE WITH CITY OF ROCK HILL STANDARDS.
8. COORDINATE WITH CITY PERSONNEL IF EXISTING VALVES NEED TO BE OPERATED. ONLY CITY STAFF TO OPERATE EXISTING VALVES ON CITY'S WATER SYSTEM.
9. BLOCKING SHALL BE INSTALLED AT ALL BENDS, TEES, VALVES, REDUCERS, BLOW-OFFS, AND HYDRANT LOCATIONS, UNLESS ALTERNATIVES ARE SHOWN ON DETAILS.
10. NO FLUSHING DEVICE SHALL DIRECTLY BE CONNECTED TO ANY SEWER SYSTEM.
11. VAULTS OR MANHOLES CONTAINING VALVES, BLOW-OFFS, AND HYDRANT LOCATIONS, METERS, AIR RELIEF VALVES, OR OTHER SUCH APPURTENANCES TO A DISTRIBUTION SYSTEM, SHALL NOT BE CONNECTED DIRECTLY TO ANY STORM DRAIN OR SANITARY SEWER.
12. WATER MAIN PIPE CROSSING STORM DRAINAGE PIPE SHALL BE LAID SUCH THAT WATER MAIN PIPE IS CENTERED OVER THE STORM DRAINAGE PIPE AND NOT AT A JOINT.
13. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED IN THE TRENCH FOR ALL BURIED PIPE. BACK-FILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE PIPE AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE. STONES, OTHER THAN CRUSHED BEDDING, SHALL NOT COME INTO CONTACT WITH THE PIPE AND SHALL NOT BE WITHIN 6 (SIX) INCHES OF THE PIPE.
14. A "W" SHALL BE ETCHED INTO THE CURBING SHOWING THE LOCATION OF WATER METERS.
15. A "V" SHALL BE ETCHED INTO THE CURBING SHOWING THE LOCATION OF WATER VALVES.
16. VALVES SHALL NOT BE LOCATED IN SIDEWALKS, CURBING, DRIVEWAYS, OR ASPHALT AREAS UNLESS APPROVED.
17. VALVES SHALL BE ADJUSTED IN NEW CONSTRUCTION TO BE LOCATED OUTSIDE THE INTERSECTION OF INTERSECTING STREETS.
18. REFER TO CITY OF ROCK HILL STANDARD SPECIFICATIONS AND DETAILS REGARDING SERVICE LINE AND PIPE MATERIAL.
19. WATER SERVICE PIPING LOCATED BEYOND THE METER SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
20. WATER MAINS LOCATED WITHIN OR RUNNING PARALLEL TO ROAD RIGHTS-OF-WAY, MUST HAVE A MINIMUM OF 36 INCHES OF COVER AS MEASURED FROM THE ROADWAY EDGE OF PAVEMENT ELEVATION OR EXISTING GROUND, WHICHEVER IS LOWER.

CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
NOTES-GENERAL WATER/SEWER

REVISIONS:	DATE:	FILE NAME:
	FEB. 2018	10.01
	SCALE:	N.T.S.

CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
NOTES-WATER

REVISIONS:	DATE:	FILE NAME:
	FEB. 2018	10.02
	SCALE:	N.T.S.

CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

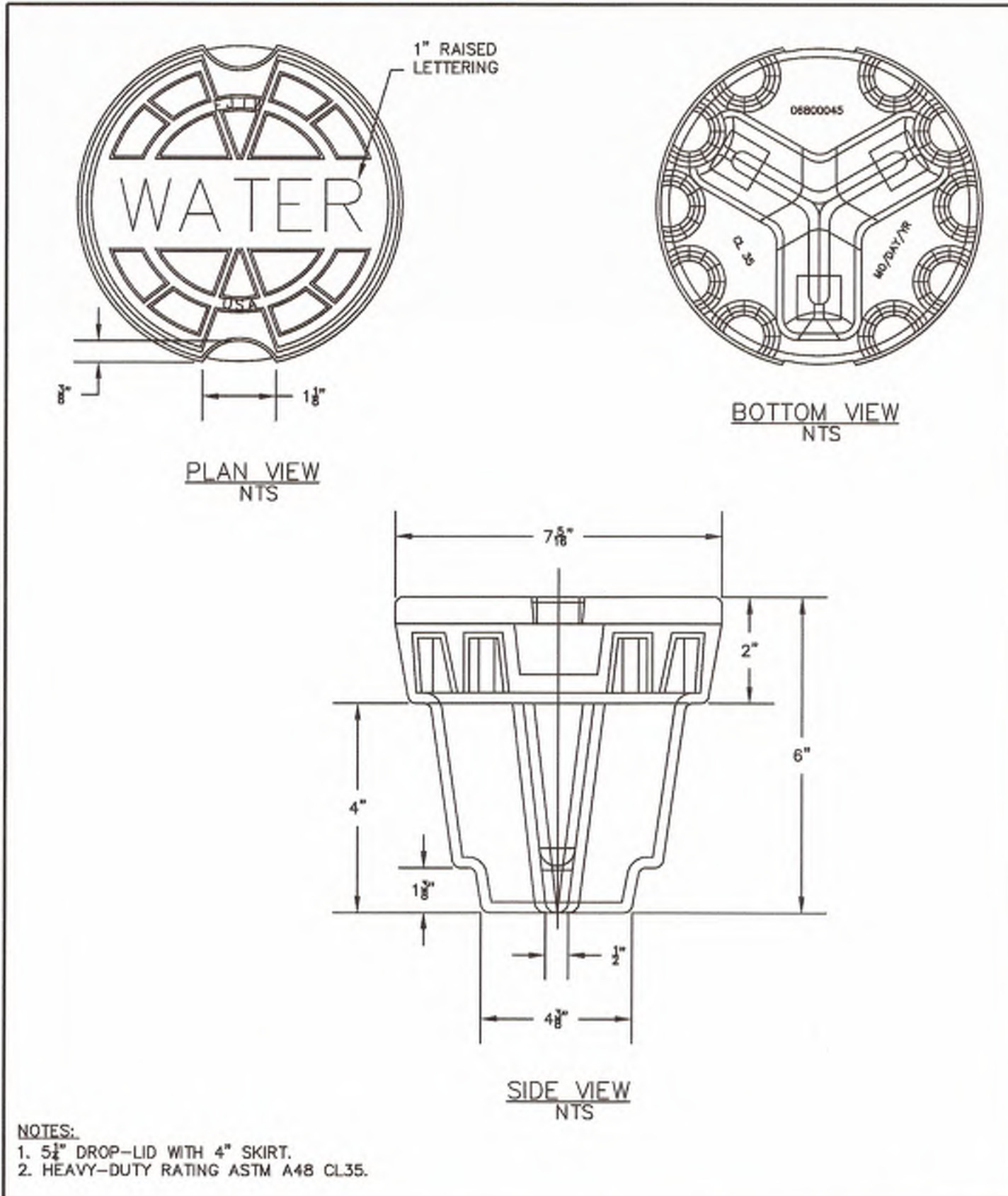
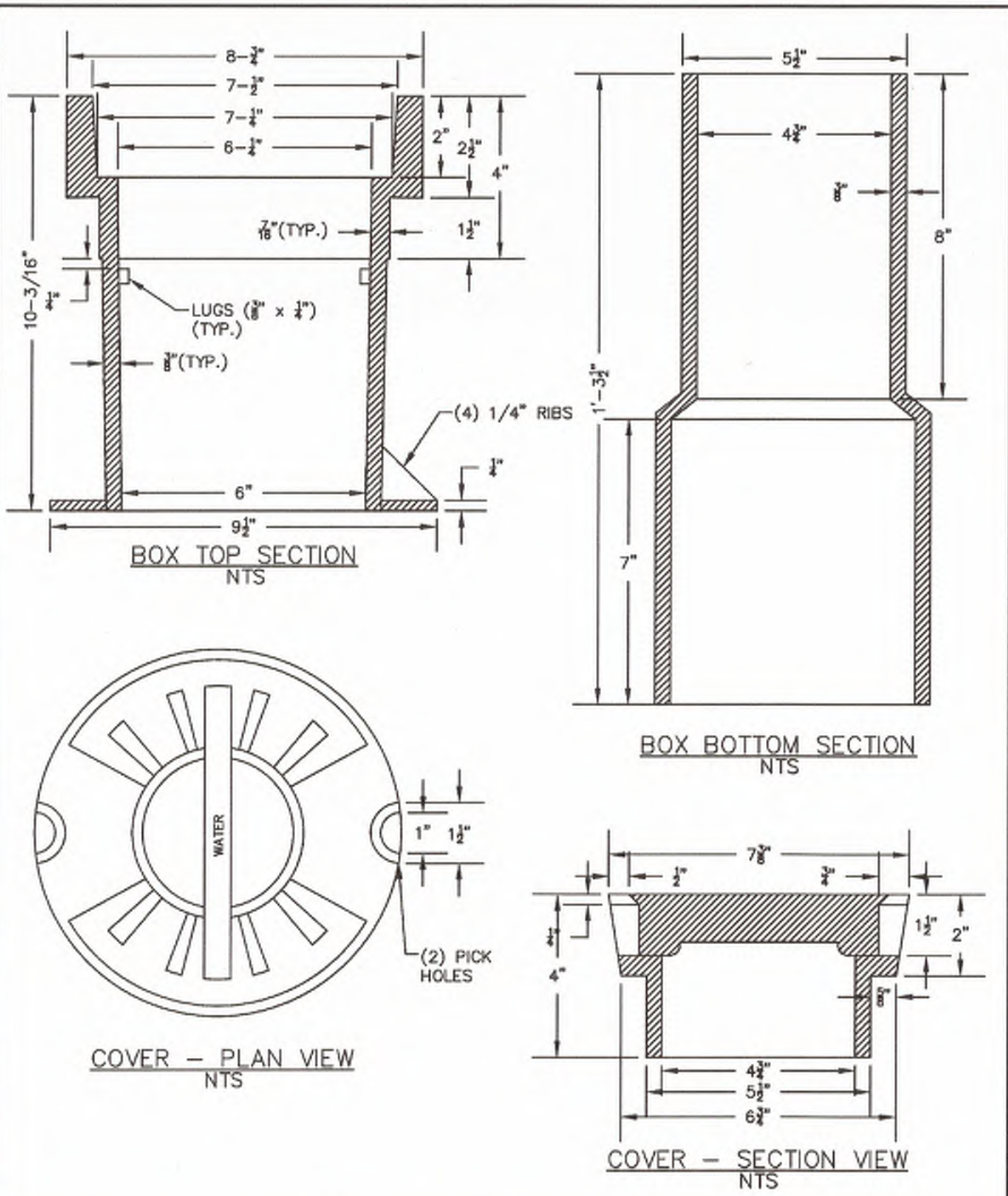
STANDARD DETAIL
JUMPER FOR WATER MAIN EXTENSION

REVISIONS:	DATE:	FILE NAME:
	FEB. 2018	11.14
	SCALE:	N.T.S.

CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
WATER VALVE BOX AND PAD

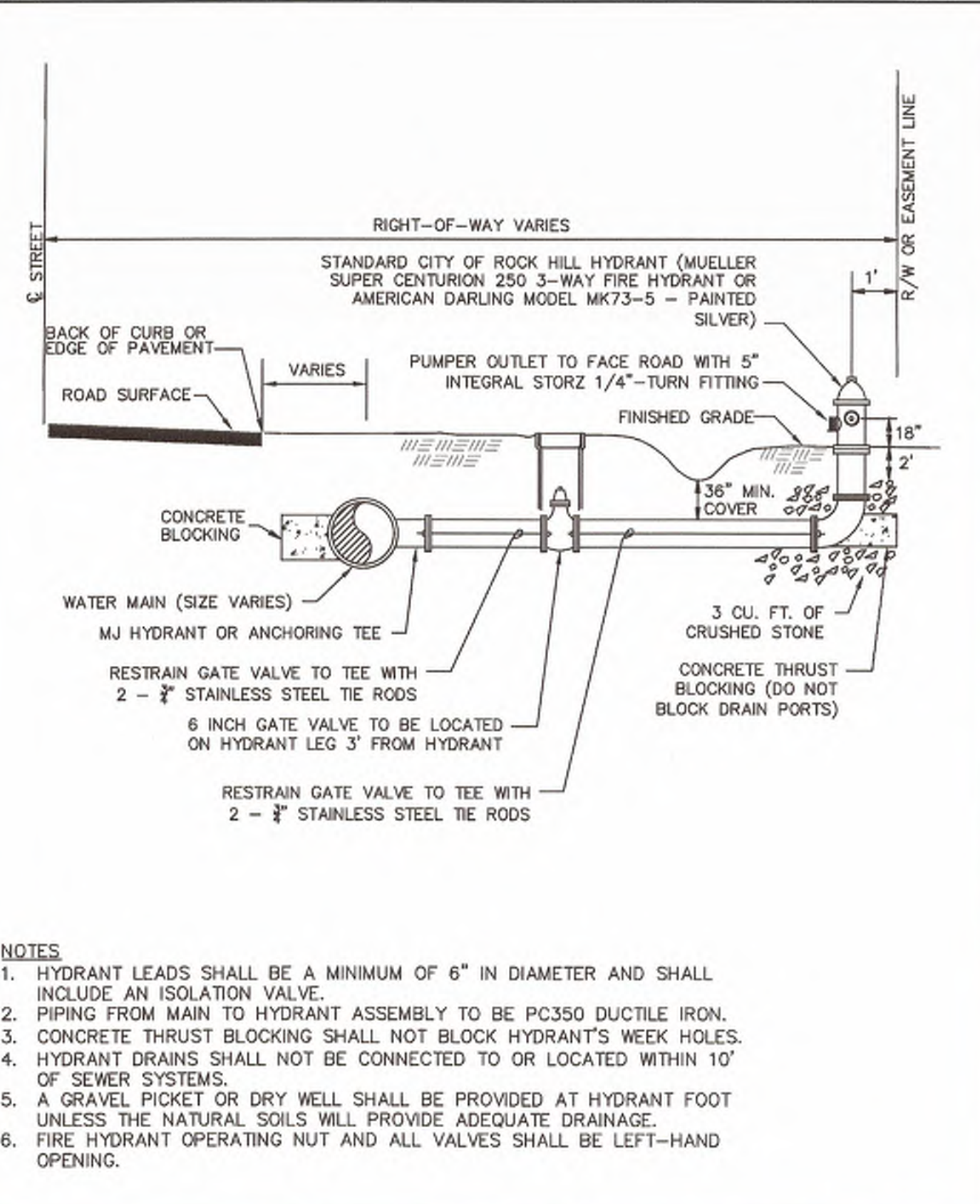
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	FEB. 2018	12.01
	SCALE:	N.T.S.



CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
WATER VALVE HEAVY DUTY LID

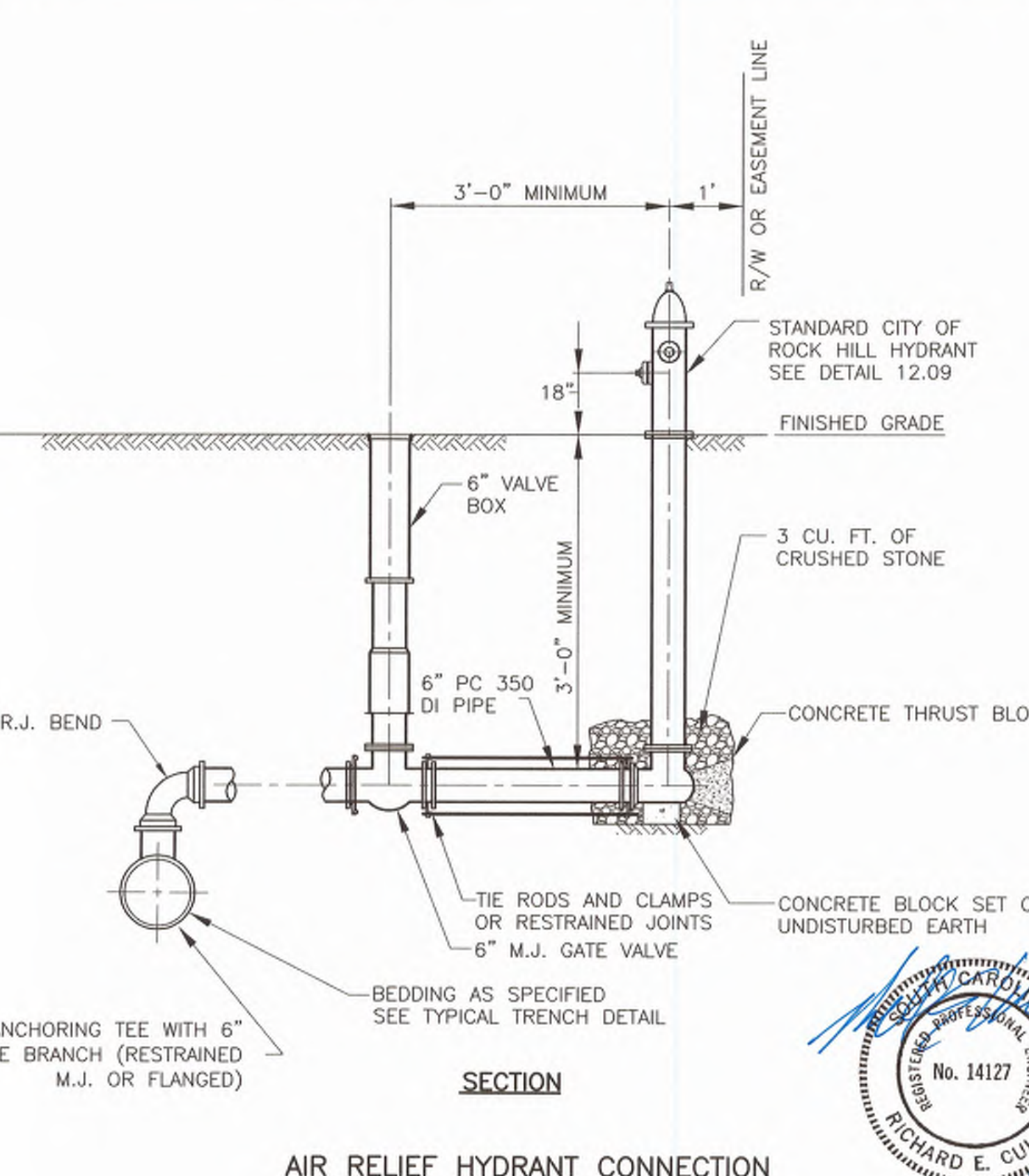
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	FEB. 2018	12.03
	SCALE:	N.T.S.



CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
FIRE HYDRANT ASSEMBLY

REVISIONS:	DATE:	FILE NAME:
	JUN. 2018	12.09
	SCALE:	N.T.S.



CITY OF ROCK HILL
UTILITIES DEPARTMENT
757 S. ANDERSON ROAD
ROCK HILL, SC 29730

STANDARD DETAIL
WATER VALVE BOX AND PAD

REVISIONS:	DATE:	FILE NAME:
	FEB. 2018	12.01
	SCALE:	N.T.S.

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DESIGNED BY:	RC
DRAWN BY:	AK
SHEET CHK'D BY:	EQ
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	MARCH 2019

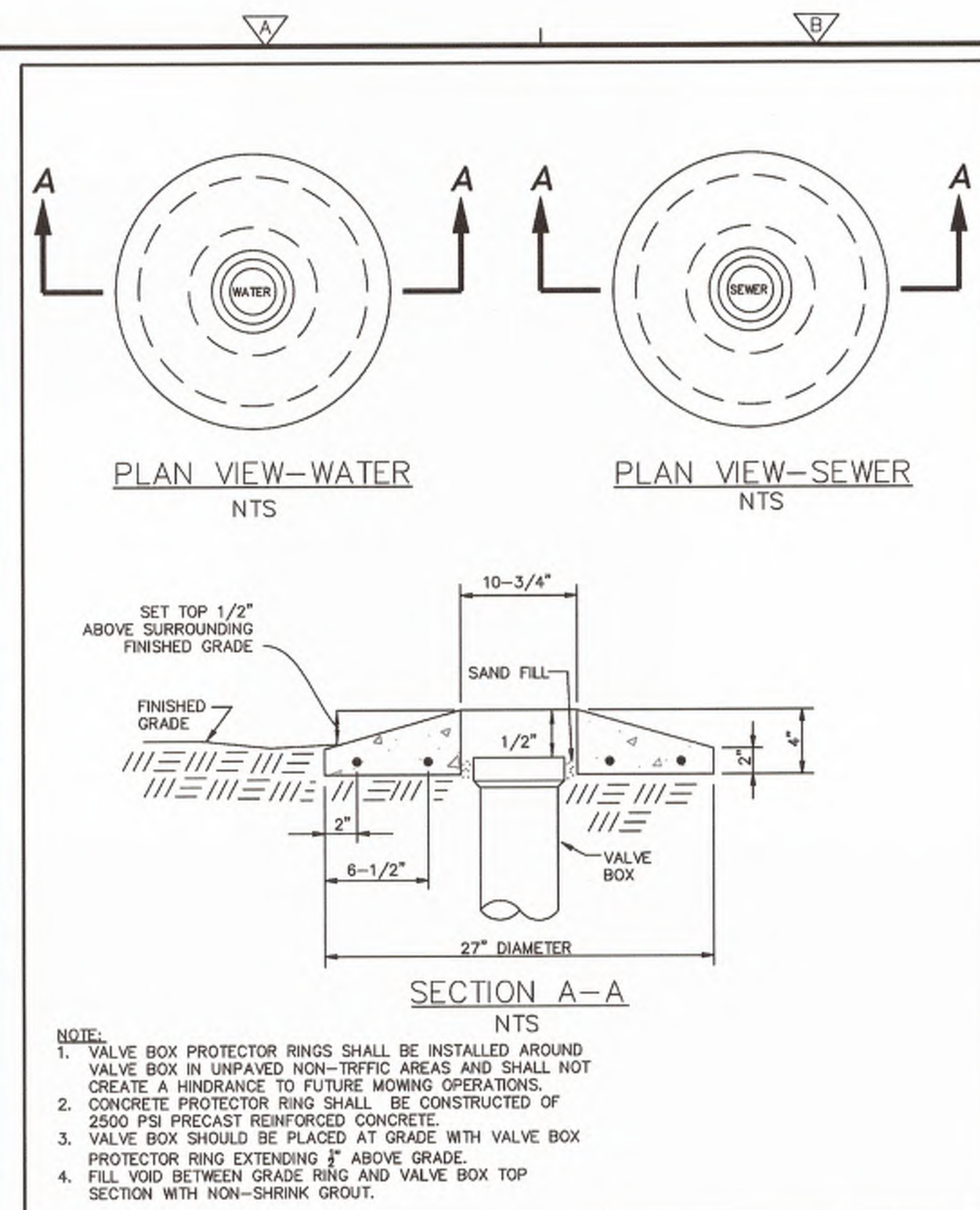
CDM Smith
1441 Main Street, Suite 1000
Columbia, South Carolina 29201
Tel: (803) 758-4500

CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER**

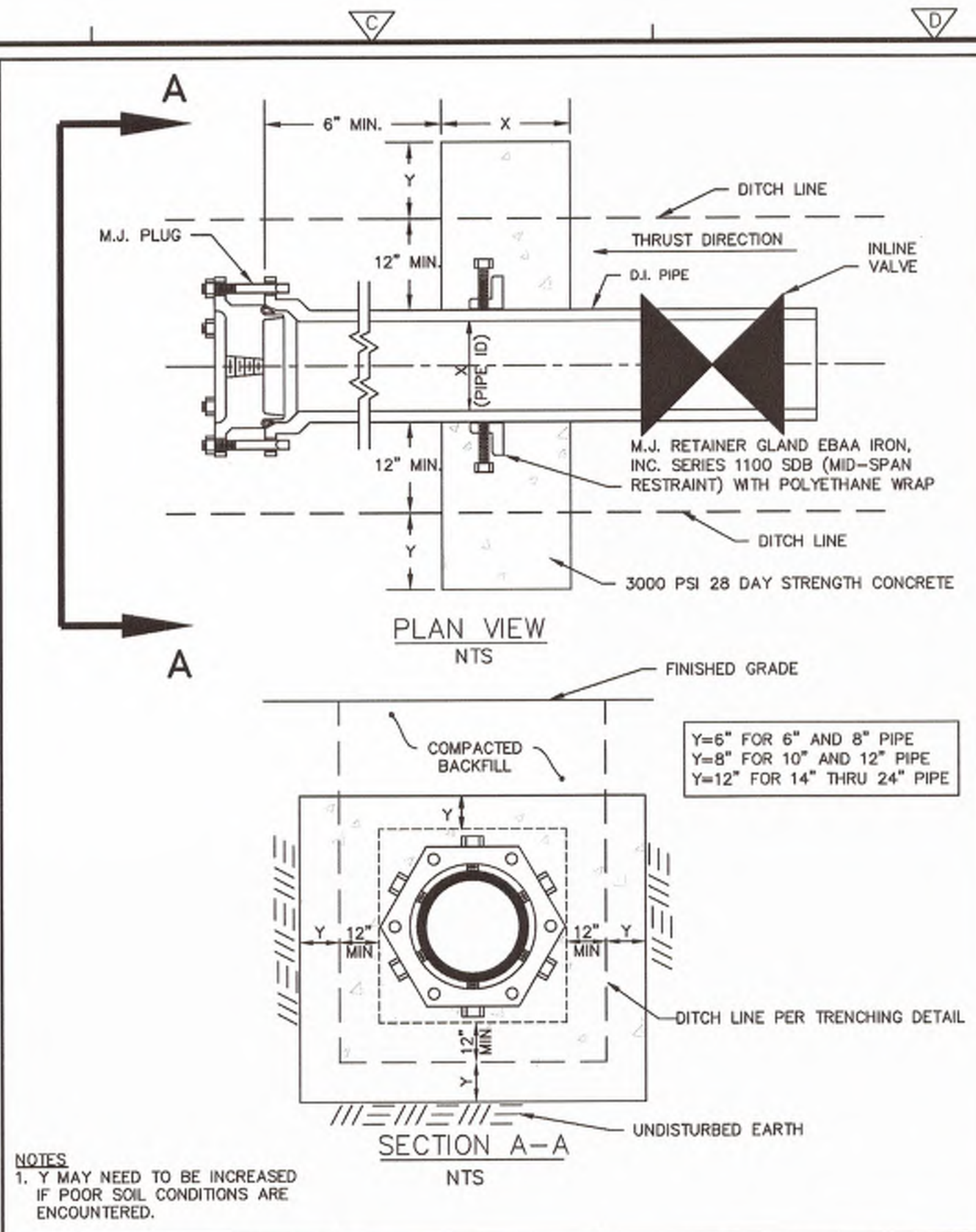
**WATER TRANSMISSION MAIN
CIVIL DETAILS**

PROJECT NO. 258111-221823
FILE NAME: CD01DLS.DWG
SHEET NO.
CD-1

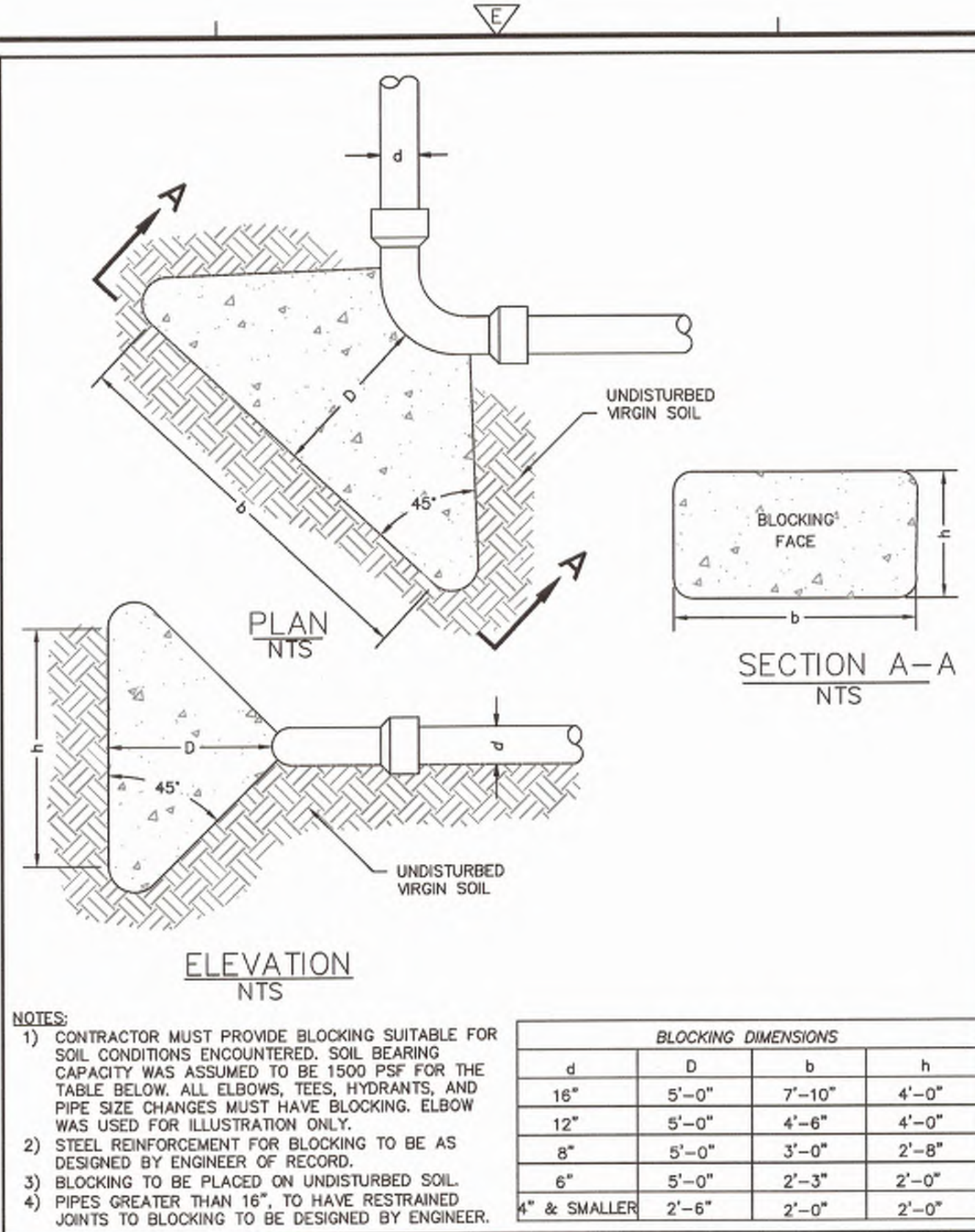
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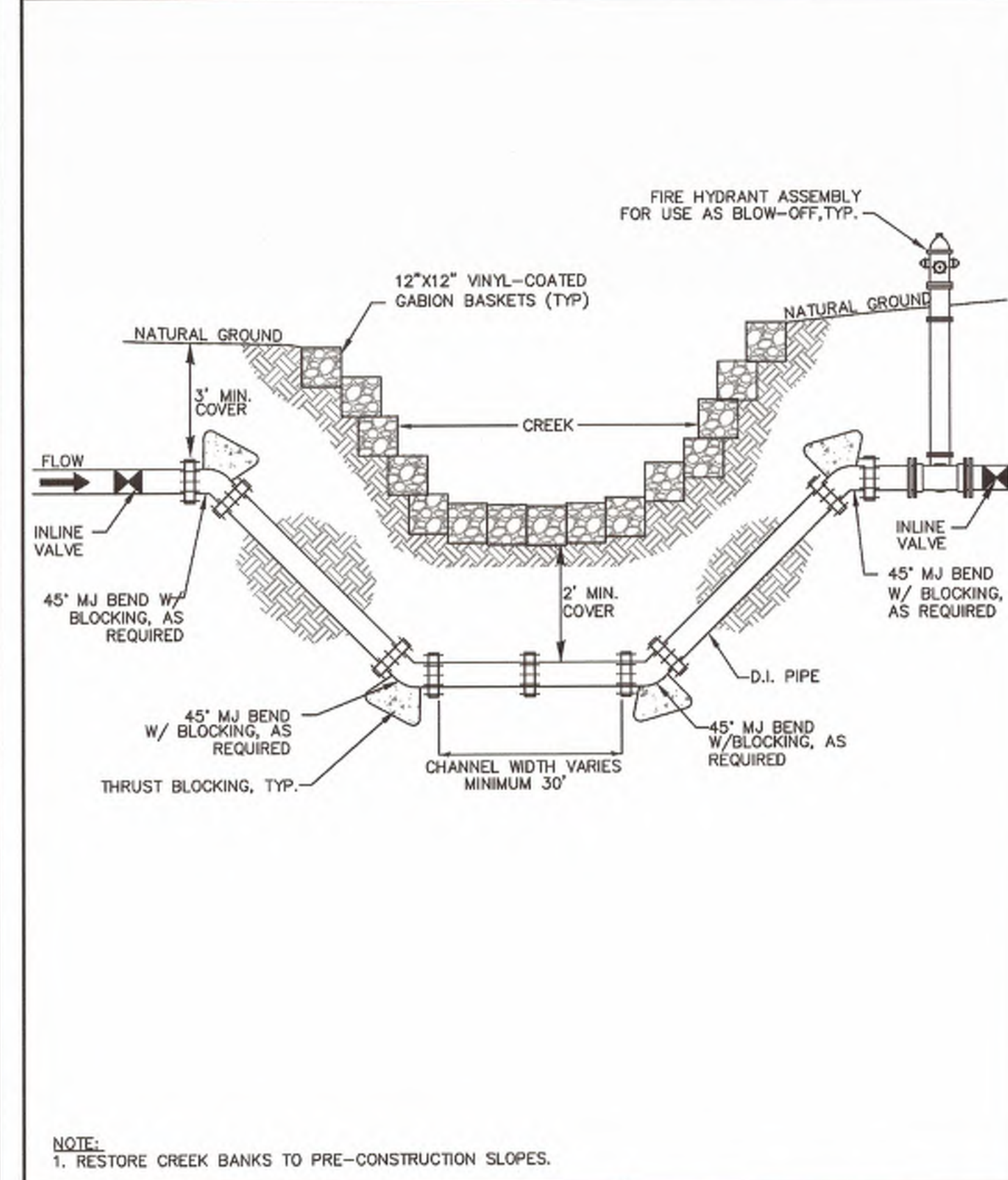
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REVISIONS:	DATE:	FILE NAME:		
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	N.T.S.			



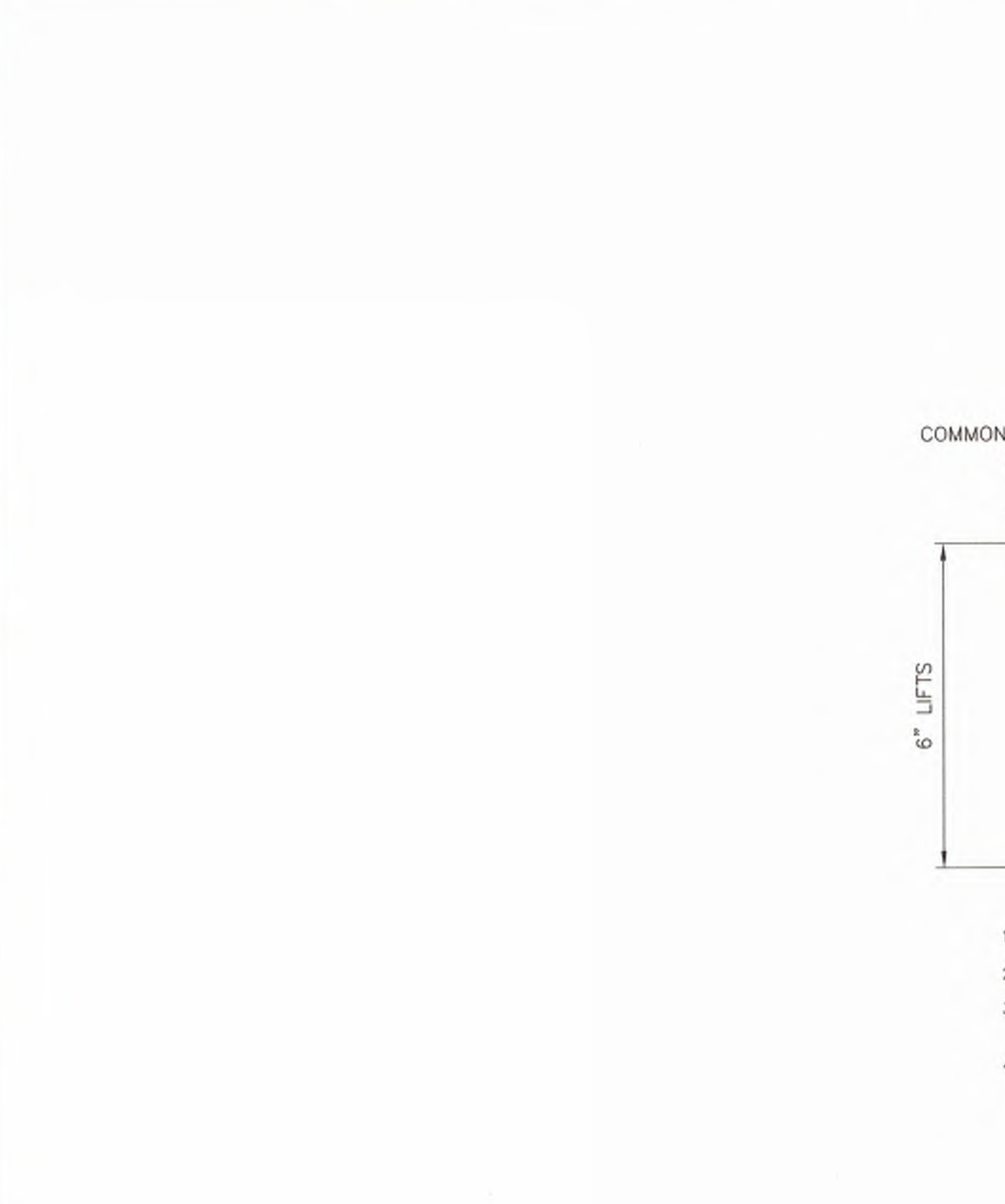
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REVISIONS:	DATE:	FILE NAME:		
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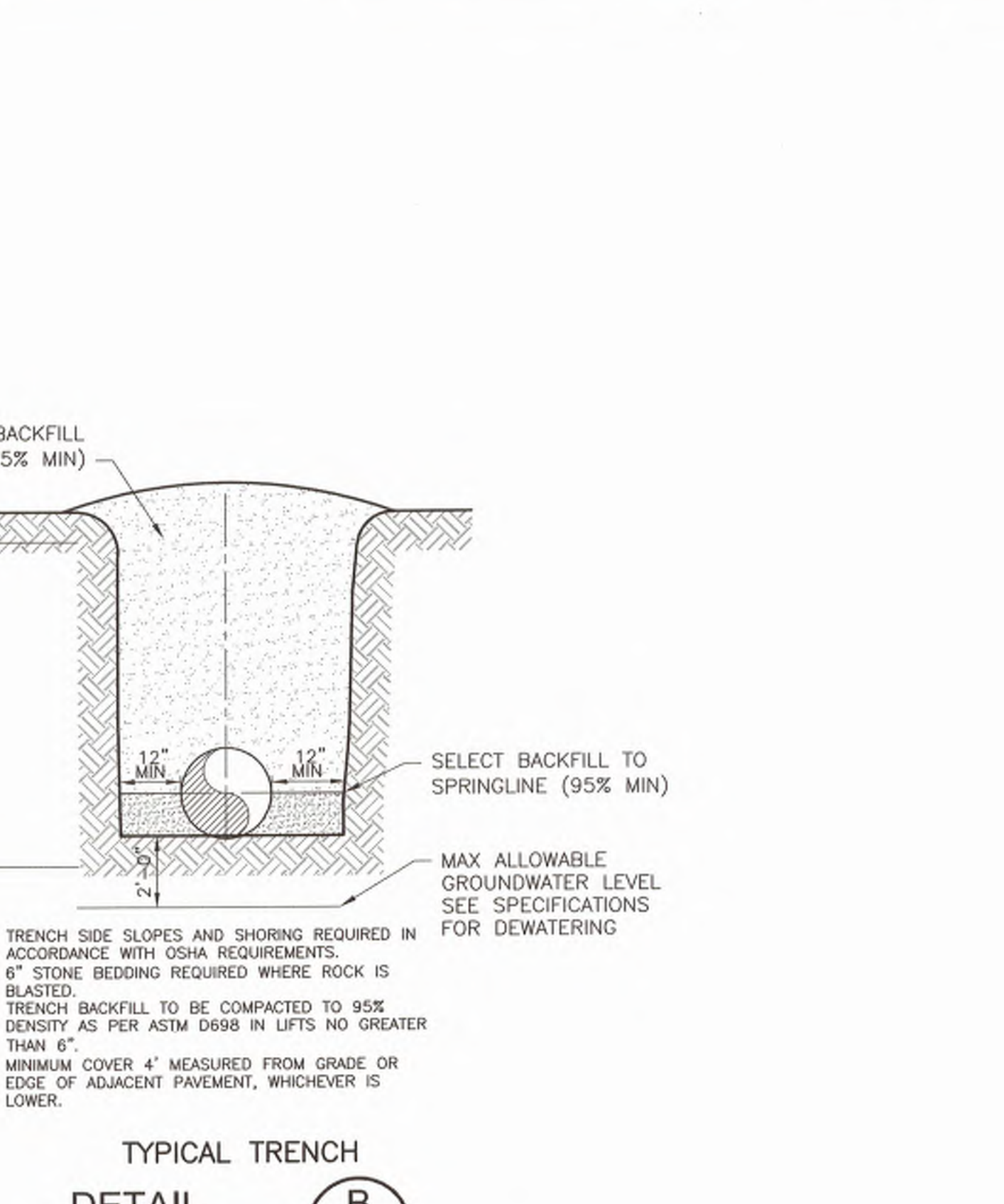
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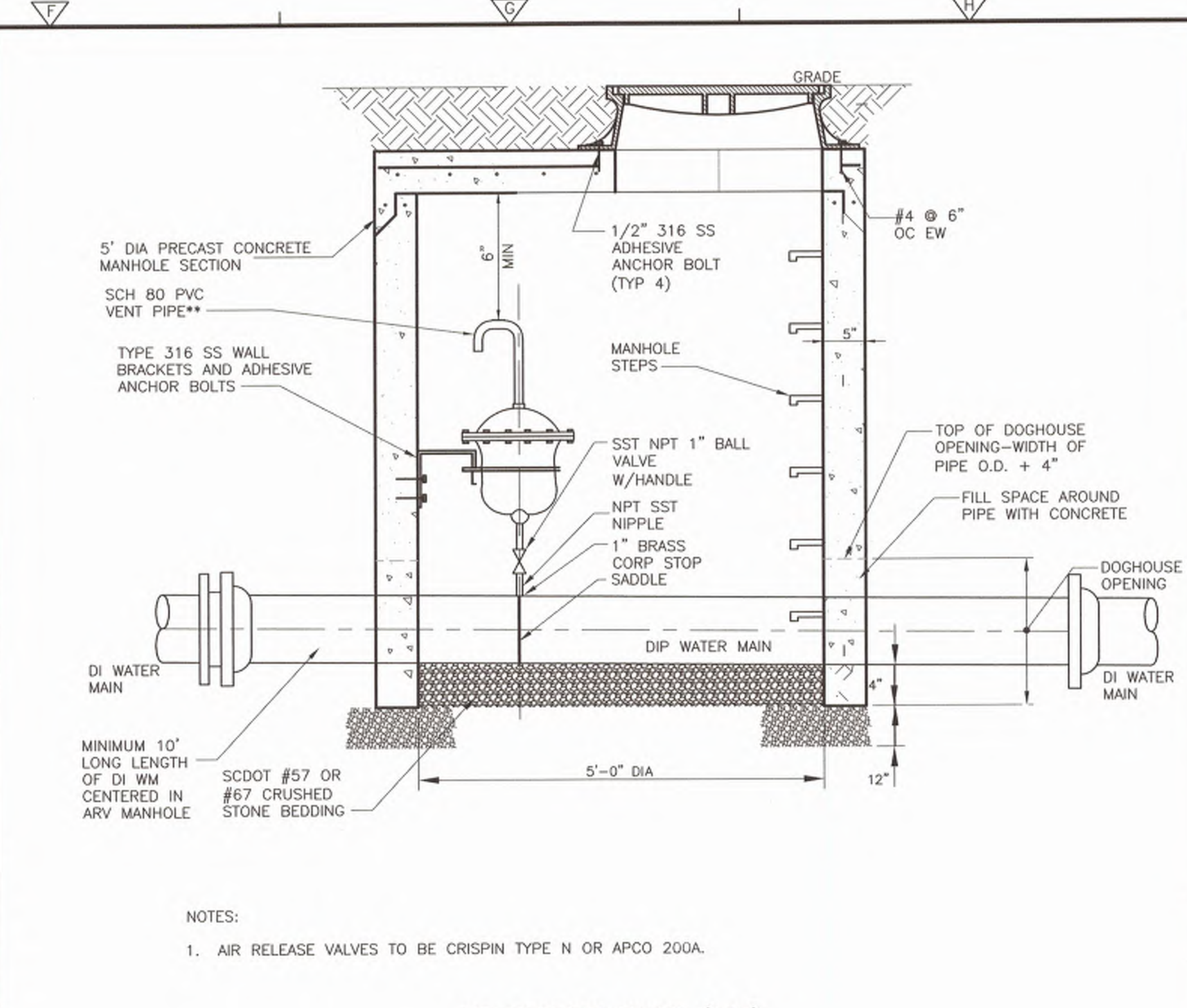
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REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
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	N.T.S.			



CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		THRUST BLOCKING		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:		13.11	
	N.T.S.			



CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		THRUST BLOCKING		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:		13.11	
	N.T.S.			



CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		THRUST BLOCKING		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:		13.11	
	N.T.S.			

DESIGNED BY: _____ RC
DRAWN BY: _____ AK
SHEET CHK'D BY: _____ EO
CROSS CHK'D BY: _____
APPROVED BY: _____
DATE: _____ MARCH 2019

REV. NO.	DATE	DRWN	CHKD	REMARKS

CDM Smith
1441 Main Street, Suite 1000
Columbia, South Carolina 29201
Tel: (803) 758-4500

CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER**

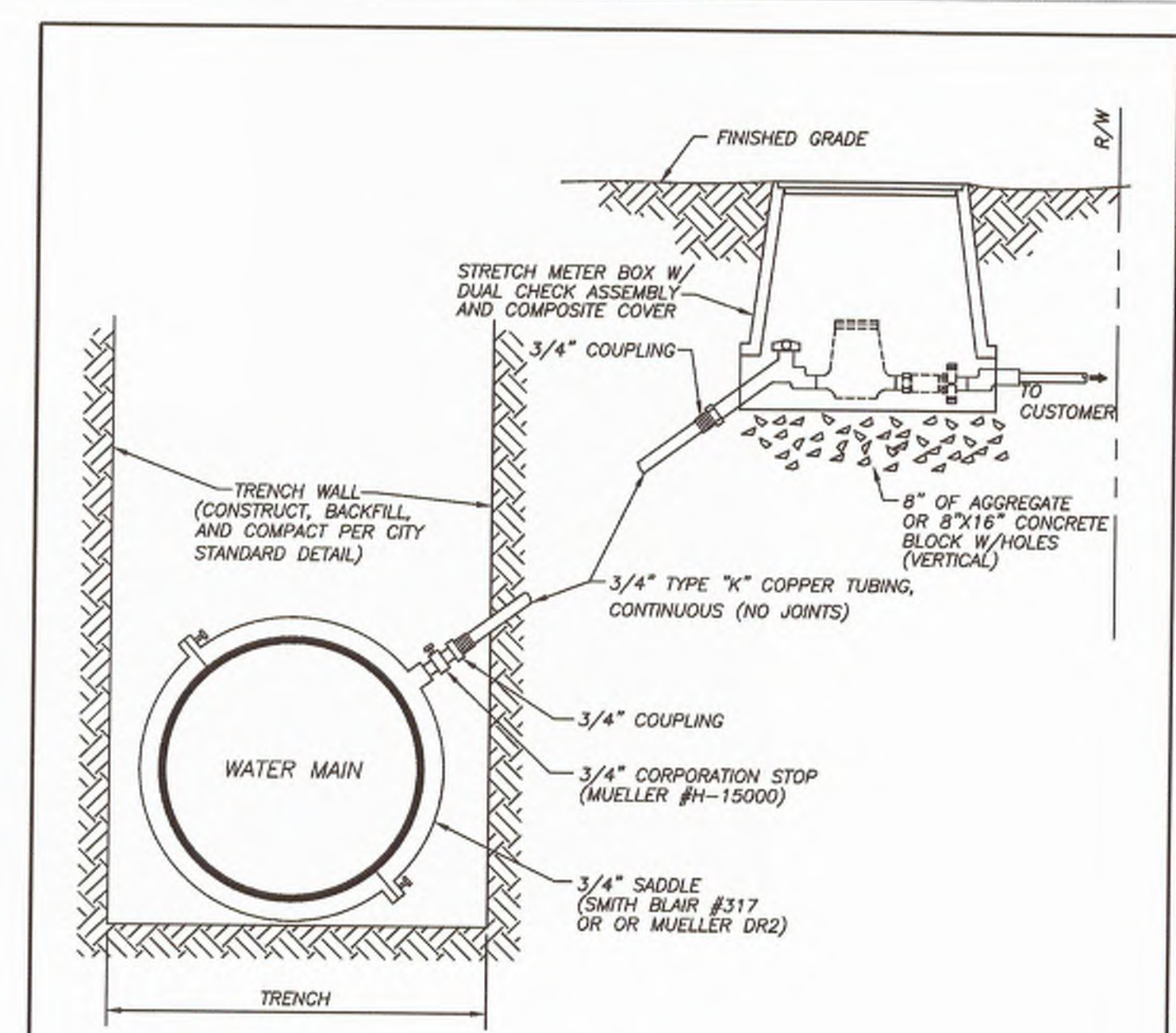
**WATER TRANSMISSION MAIN
CIVIL DETAILS**

PROJECT NO. 258111-221823
FILE NAME: CD02DTLS.DWG
SHEET NO. **CD-2**

RICHARD E. CULLER
REGISTERED PROFESSIONAL ENGINEER
SOUTH CAROLINA
No. 14127

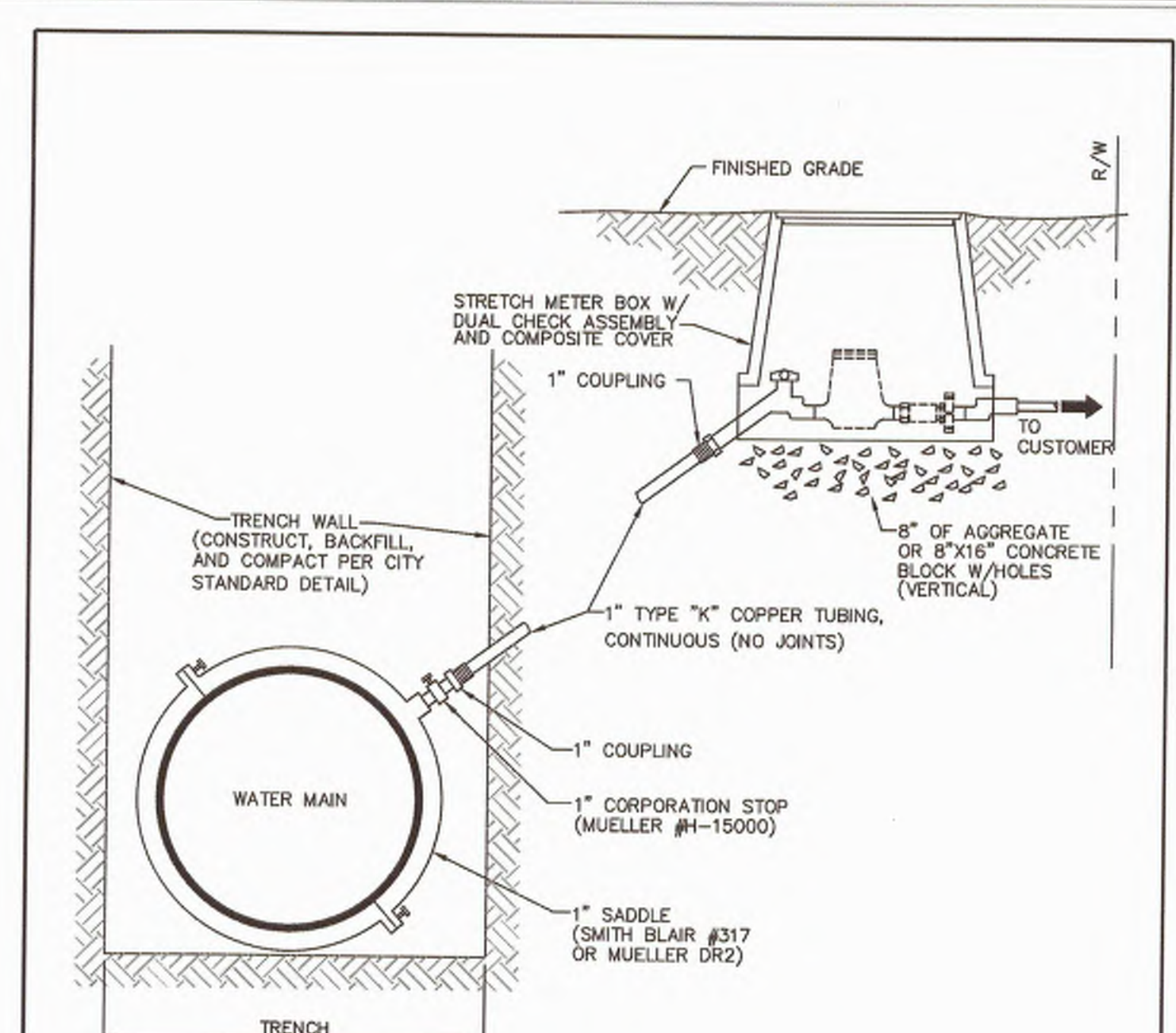
CDM Smith Inc.
REGISTERED PROFESSIONAL ENGINEER
SOUTH CAROLINA
No. C00402

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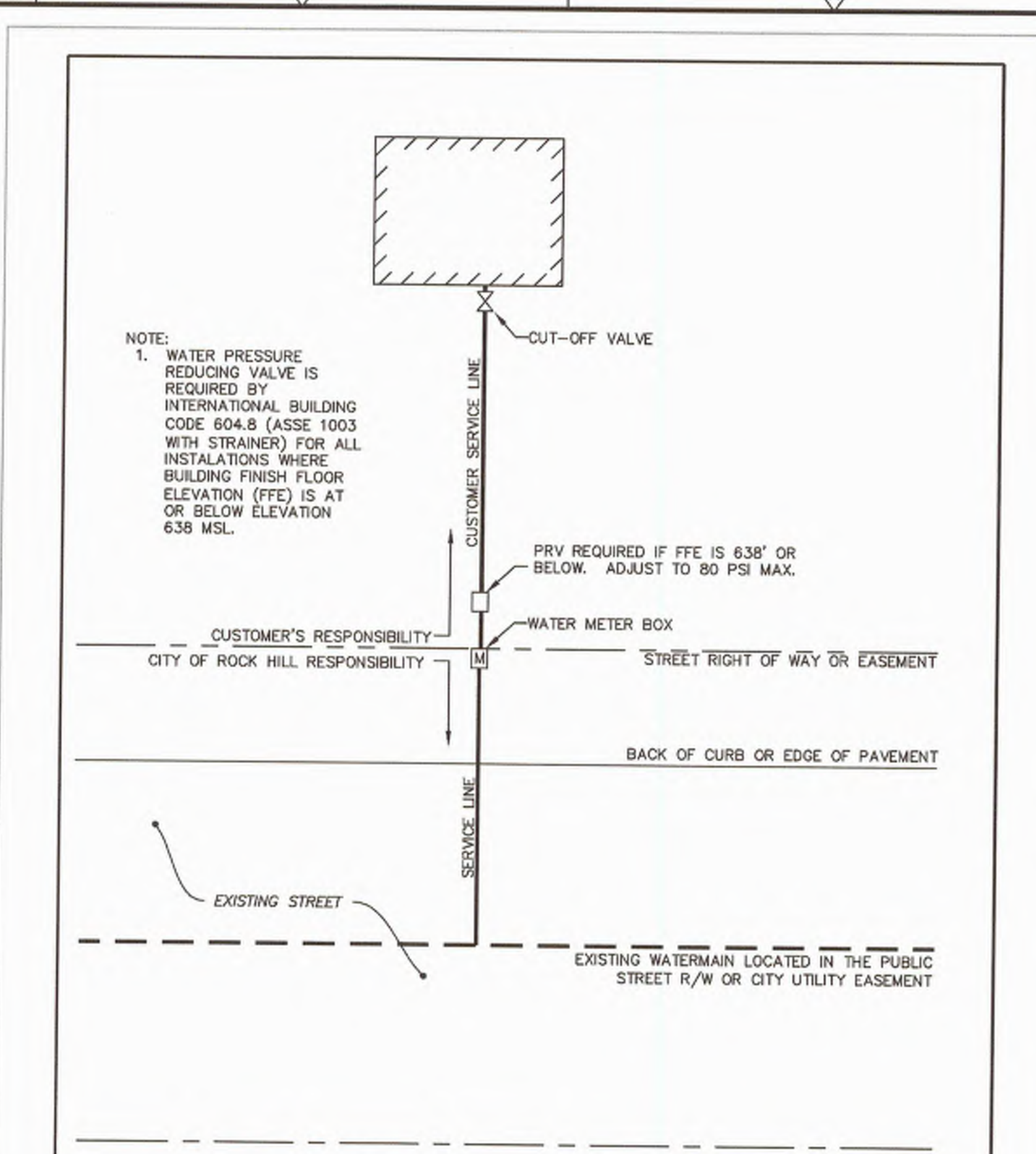
- NOTES**
1. CONTRACTOR TO INSTALL MUELLER 110 (CTS) 3/4" INLET - 7" HEIGHT H-1462-3N STRETCH METER BOX OR APPROVED EQUAL.
 2. METER AND DUAL CHECK ASSEMBLY TO BE INSTALLED BY CITY.
 3. CONTRACTOR SHALL INSTALL A MINIMUM OF 18" OF PIPING FROM ANY HARD SURFACE (I.E. CURB, SIDEWALK, ETC.) TO BOX INLET.
 4. SEPARATE BACKFLOW PREVENTION DEVICE MAY BE REQUIRED BY BUILDING CODE.
 5. FOR SERVICE PIPING CROSSING UNDER ROADWAY PAVEMENT (I.E. LONG SIDE SERVICE), PIPING IS TO BE PLACED WITH A MINIMUM OF 24" COVER FROM LIP OF GUTTER TO LIP OF GUTTER.

CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		SERVICE CONNECTION 3/4"		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:	11.01		
	N.T.S.			



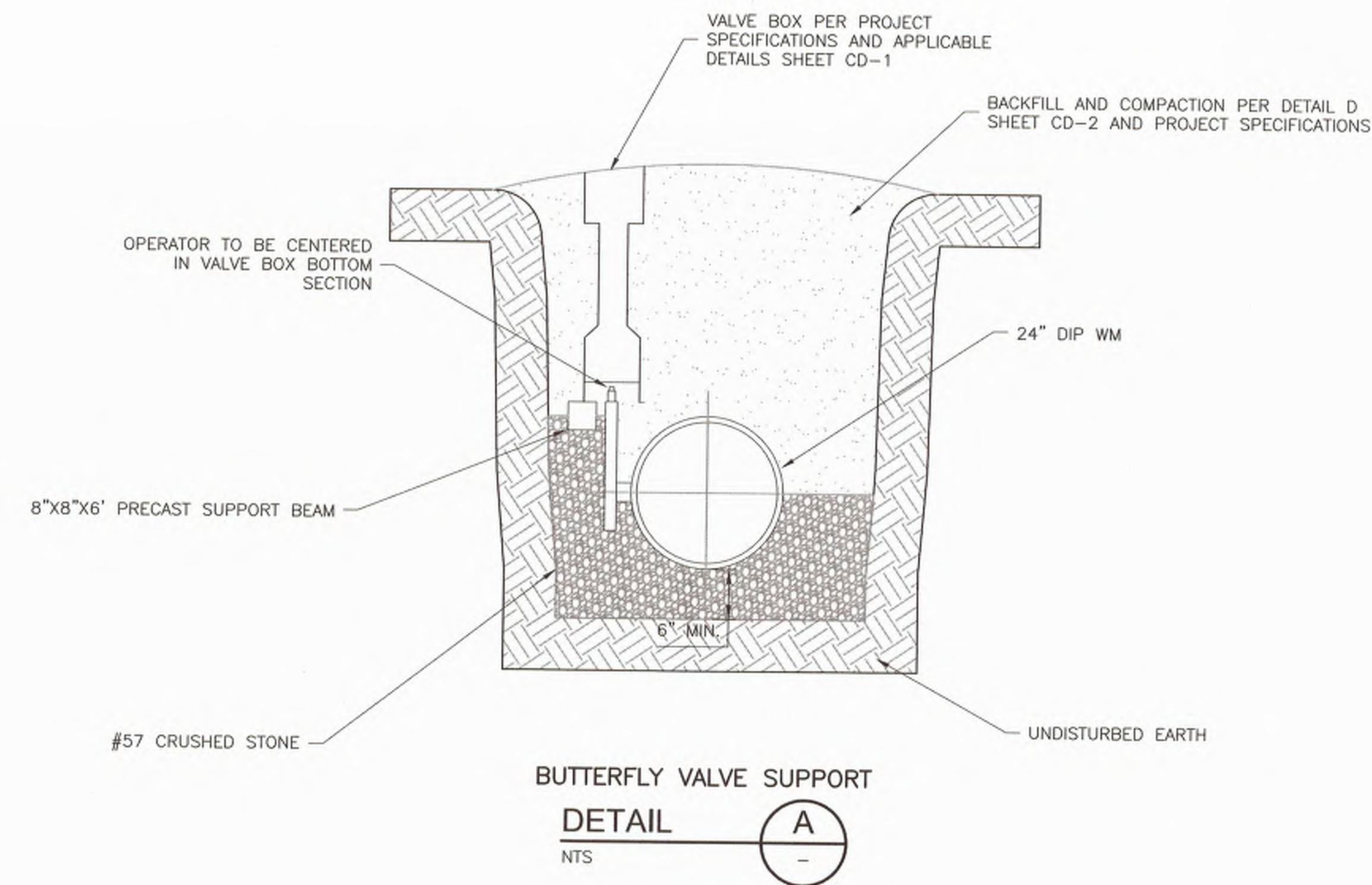
- NOTES**
1. CONTRACTOR TO INSTALL MUELLER 110 (CTS) 1" INLET - 7" HEIGHT H-1462-3N STRETCH METER BOX OR APPROVED EQUAL.
 2. METER AND DUAL CHECK ASSEMBLY TO BE INSTALLED BY CITY.
 3. CONTRACTOR SHALL INSTALL A MINIMUM OF 18" OF PIPING FROM ANY HARD SURFACE (I.E. CURB, SIDEWALK, ETC.) TO BOX INLET.
 4. SEPARATE BACKFLOW PREVENTION DEVICE MAY BE REQUIRED BY BUILDING CODE.
 5. FOR SERVICE PIPING CROSSING UNDER ROADWAY PAVEMENT (I.E. LONG SIDE SERVICE), PIPING IS TO BE PLACED WITH A MINIMUM OF 24" OF COVER FROM LIP OF GUTTER TO LIP OF GUTTER.

CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		SERVICE CONNECTION 1"		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:	11.02		
	N.T.S.			

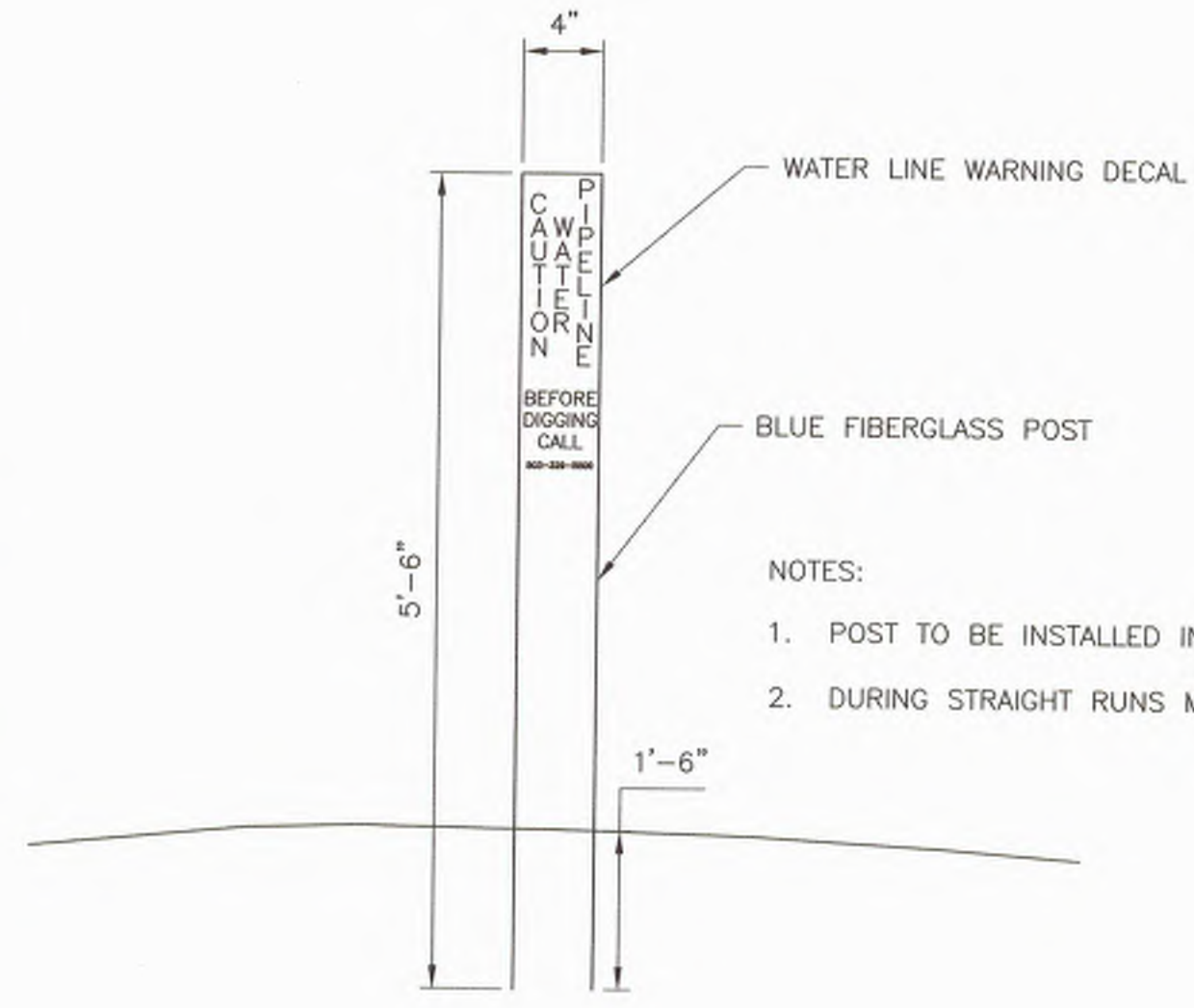


- NOTE:**
1. WATER PRESSURE REDUCING VALVE IS REQUIRED BY INTERNATIONAL BUILDING CODE 604.8 (ASSE 1003 WITH STRAINER) FOR ALL INSTALLATIONS WHERE BUILDING FINISH FLOOR ELEVATION (FFE) IS AT OR BELOW ELEVATION 636 MSL.

CITY OF ROCK HILL UTILITIES DEPARTMENT 757 S. ANDERSON ROAD ROCK HILL, SC 29730		STANDARD DETAIL		
		SERVICE CONNECTION LOCATION		
REVISIONS:	DATE:	FILE NAME:		
	FEB. 2018			
	SCALE:	11.11		
	N.T.S.			

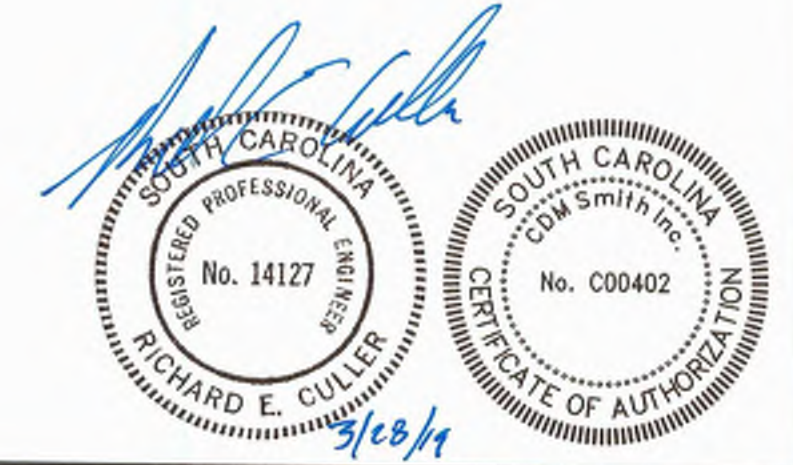


BUTTERFLY VALVE SUPPORT
 DETAIL A
 NTS



FIBERGLASS UTILITY MARKER POST
 DETAIL B
 NTS

- NOTES:**
1. POST TO BE INSTALLED IN NON-LANDSCAPED AREAS AT ALL PIPE BENDS
 2. DURING STRAIGHT RUNS MARKER POSTS TO BE INSTALLED AT 500' INTERVALS



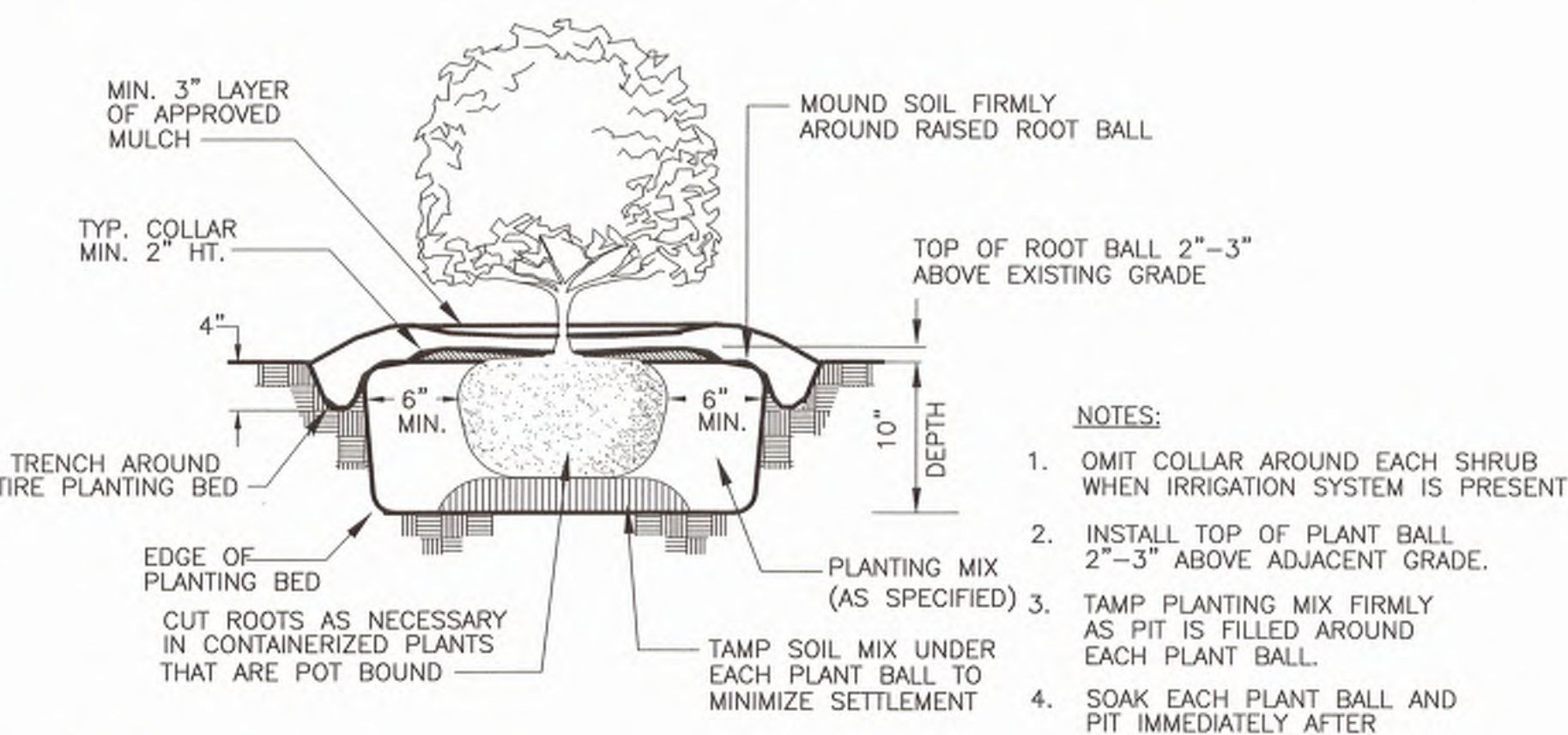
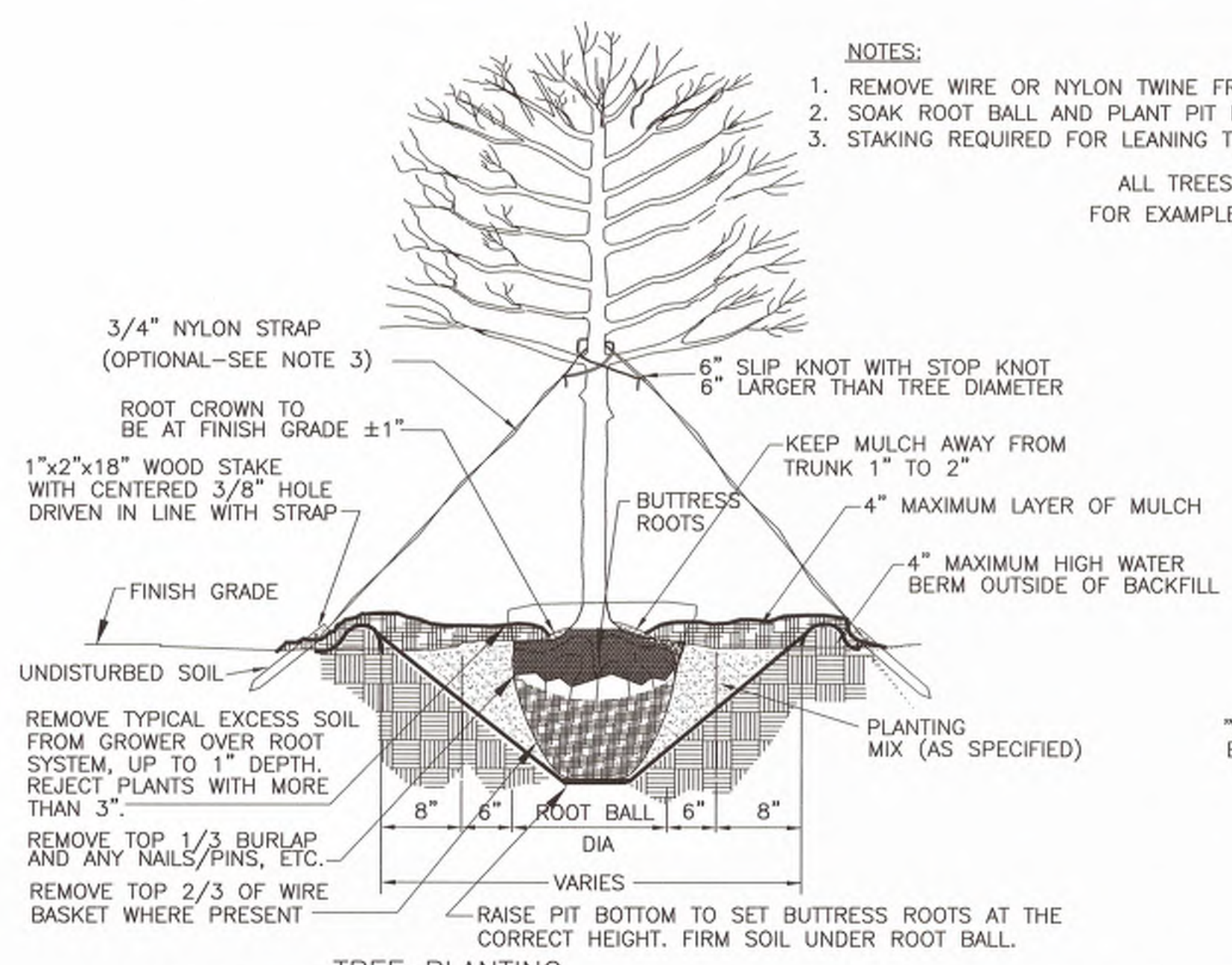
DESIGNED BY:	RC
DRAWN BY:	AK
SHEET CHK'D BY:	EQ
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	MARCH 2019



CITY OF ROCK HILL
EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN CIVIL DETAILS	PROJECT NO. 258111-221823
	FILE NAME: C003DLS.DWG
SHEET NO. CD-3	WATER TRANSMISSION MAIN CIVIL DETAILS

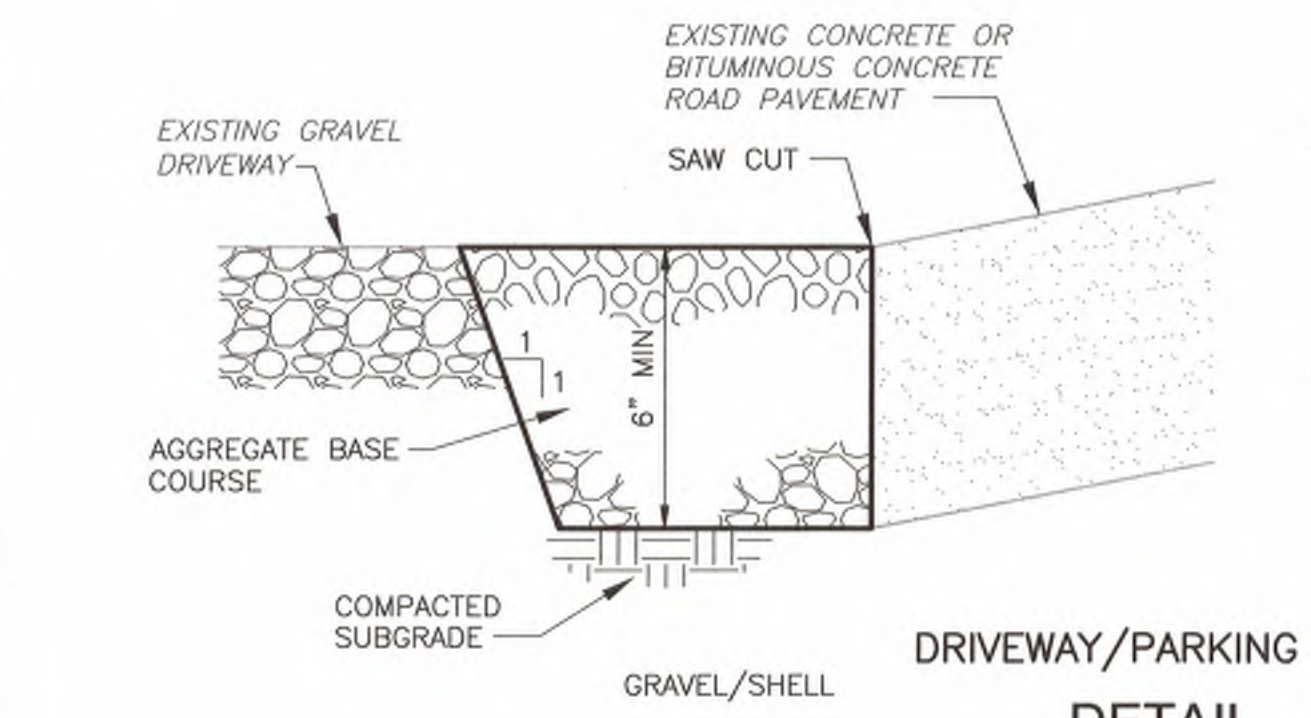
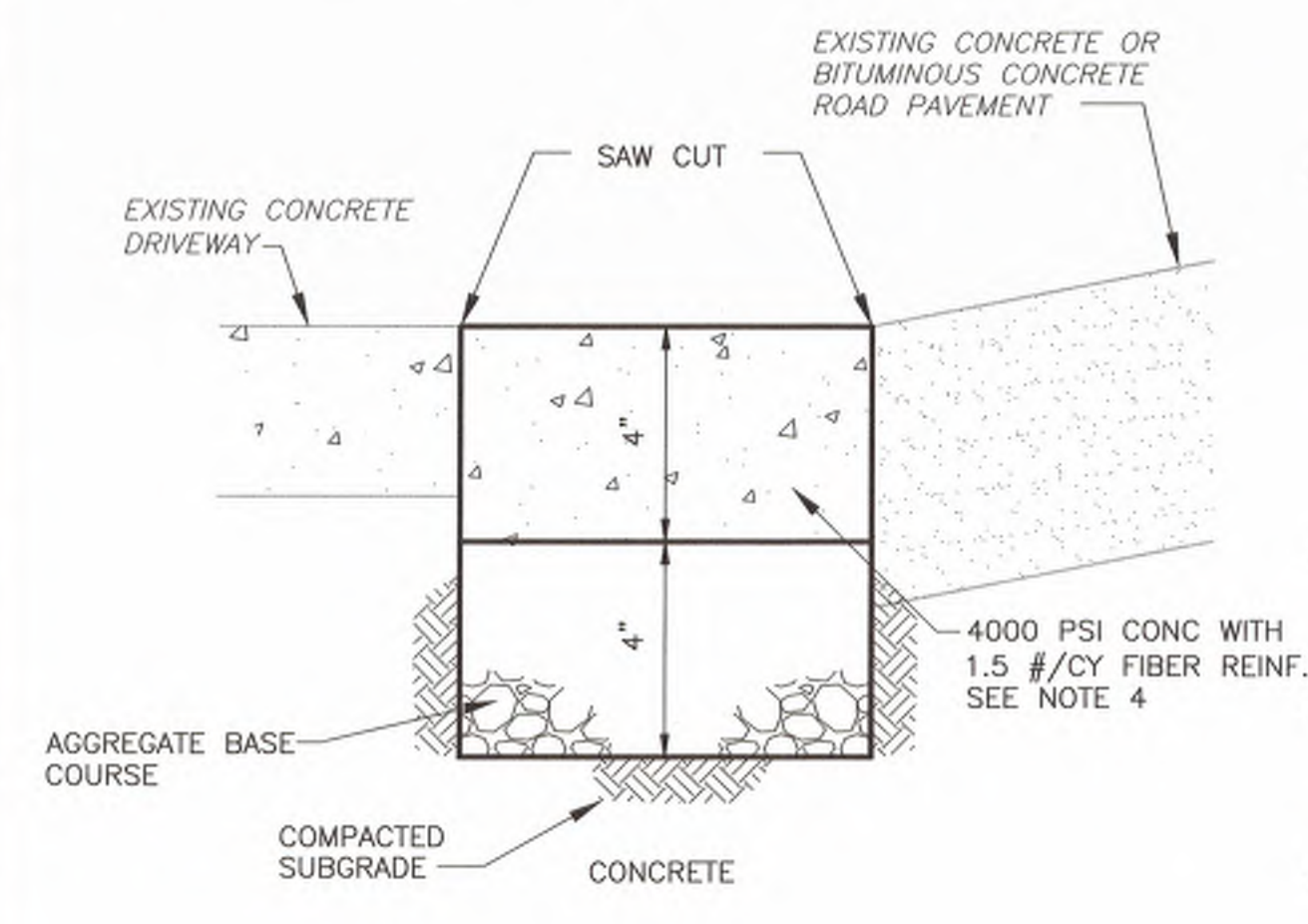
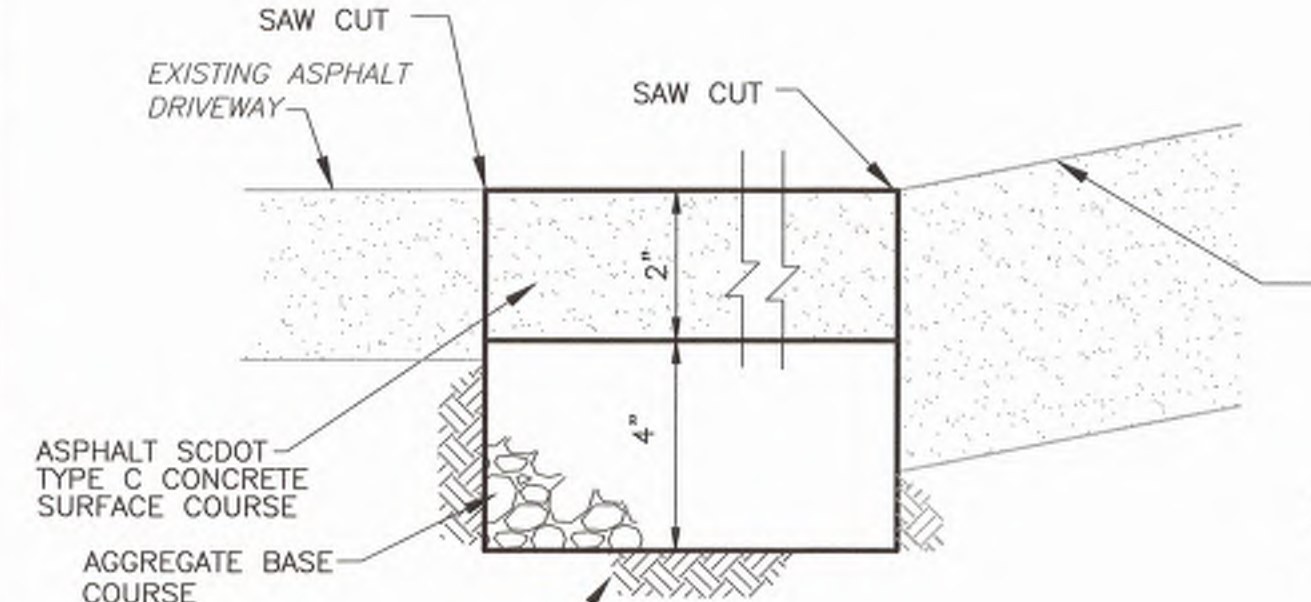
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TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)

TREE & SHRUB PLANTING DETAIL A
NOT TO SCALE

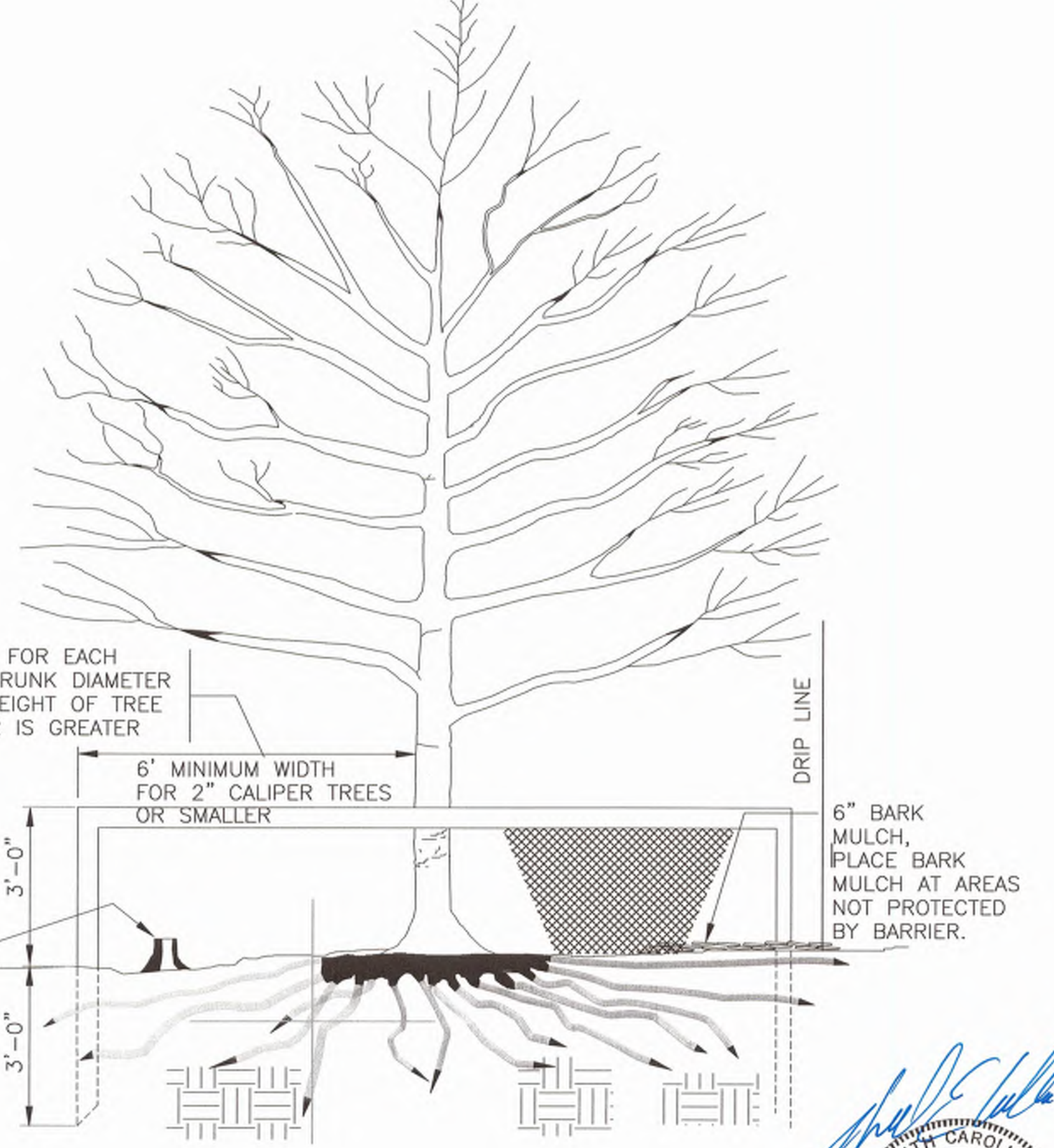
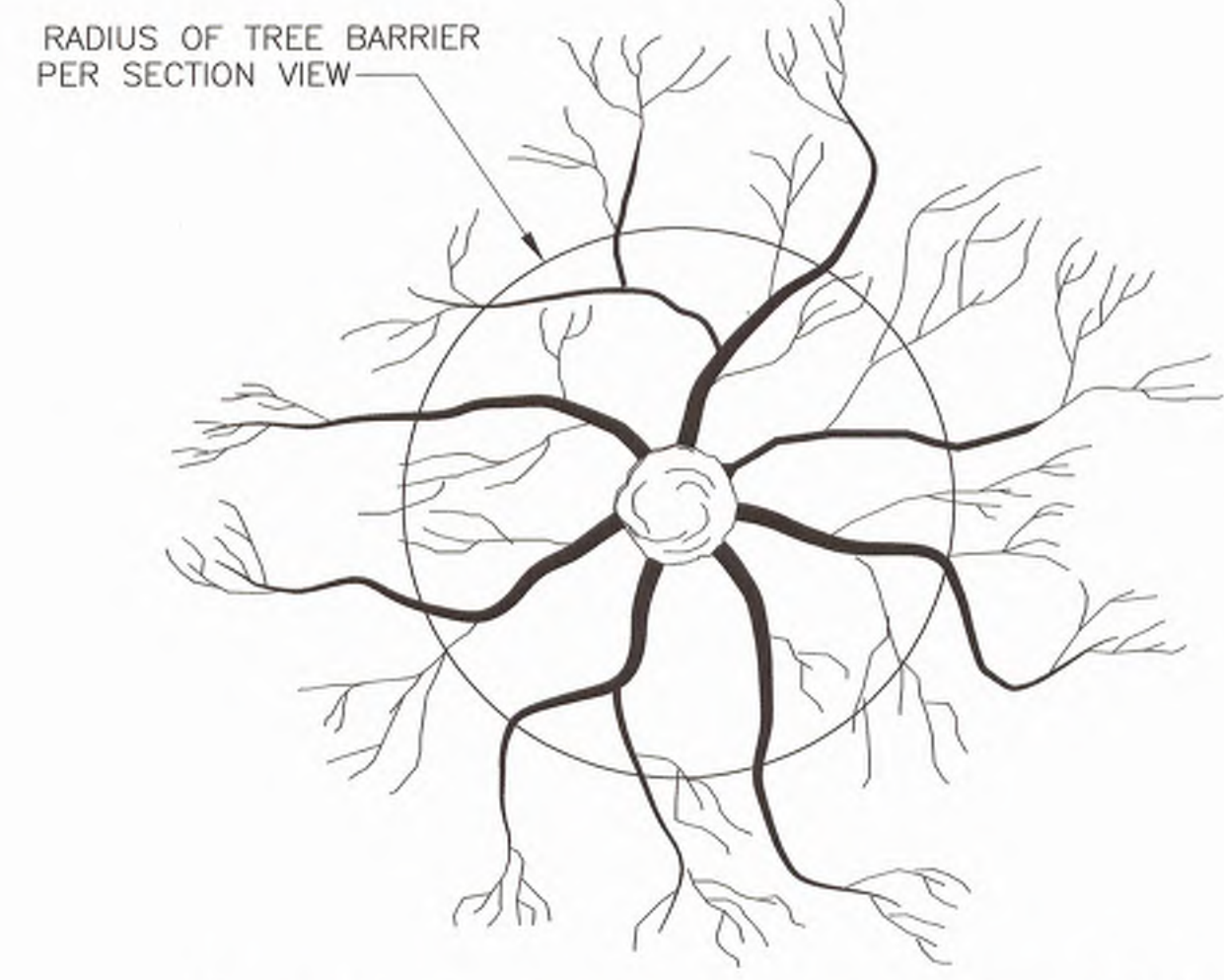
TYPICAL PLANTING BED DETAIL



DRIVEWAY/PARKING LOT REPLACEMENT

DETAIL B
NOT TO SCALE

- NOTES:**
1. FOR REPLACEMENTS, REMOVE AND DISPOSE OF EXISTING PAVEMENT, CRUSHED STONE BASE, AND EARTH SUBGRADE TO FINAL GRADE ELEVATION MINUS THE REQUIRED DEPTH OF CRUSHED STONE AND PAVEMENT. NO CREDIT SHALL BE GIVEN FOR EXISTING CRUSHED STONE ABOVE THIS TOTAL REMOVAL DEPTH. THEN PLACE, COMPACT, AND FINISH THE SPECIFIED CRUSHED STONE AND CONCRETE OR BITUMINOUS PAVEMENT.
 2. ALL PAVEMENT SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF MAXIMUM DRY DENSITY PRIOR TO CRUSHED STONE PLACEMENT. ALL CRUSHED STONE SHALL BE AGGREGATE BASE COMPACTED TO 98% OF MAXIMUM DRY DENSITY. THE SPECIFIED DEPTHS SHALL BE COMPACTED. ALL SOFT OR WET SUBGRADE SHALL BE REMOVED AND BACKFILLED WITH DRY COMMON FILL OR ABC STONE AND RECOMPACTED.
 3. ALL EDGES OF EXISTING PAVEMENT TO REMAIN SHALL BE SAW CUT IN A STRAIGHT LINE PERPENDICULAR TO THE PAVEMENT EDGES.
 4. CONCRETE TO HAVE LIGHT BROOM FINISH. PROVIDE FULL-DEPTH JOINTS AT 20-FT MAX EACH WAY WITH BITUMINOUS SEAL. ROUND ALL EDGES AND AT JOINTS.
 5. DRIVEWAY REPLACEMENT WIDTH SHALL BE 12-INCHES MINIMUM BEYOND THE OUTSIDE OF THE TRENCH WALL ON EITHER SIDE OF THE TRENCH. THE FINAL LIMITS OF REPAIR/REPLACEMENT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 6. WHERE MATERIALS OTHER THAN SHOWN ABOVE EXIST THE DRIVEWAY SHALL BE REPLACED TO MATCH EXISTING. REMOVE, STORE, AND REPLACE BRICK PAVEMENT, TURF STONE OR OTHER MATERIALS AS NECESSARY.
 7. FOR SOIL/DIRT DRIVEWAYS REPLACE TRENCH EXCAVATION WITH NATIVE SOILS AND COMPACT TO 98% MAX DRY DENSITY. MOUND BACKFILL TO ENSURE DRAINAGE AND PREVENT PONDING.



TREE PROTECTION DETAIL C
NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

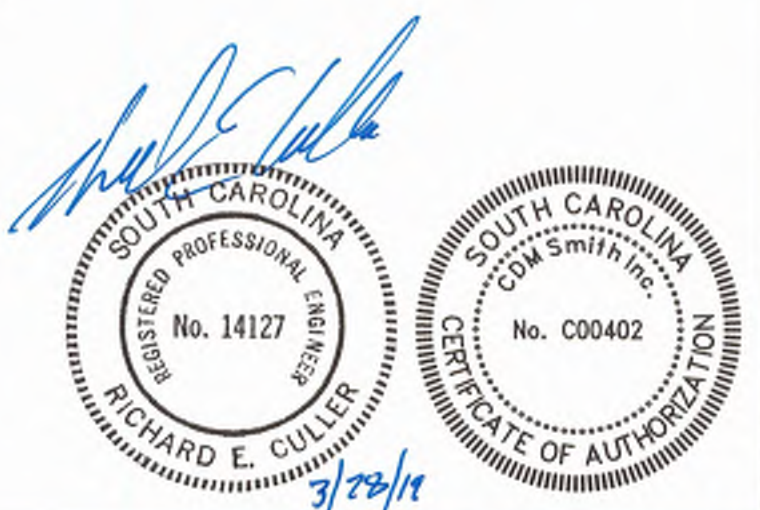
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 DRAWN BY: _____ AK
 SHEET CHK'D BY: _____ EQ
 CROSS CHK'D BY: _____
 APPROVED BY: _____
 DATE: _____ MARCH 2019

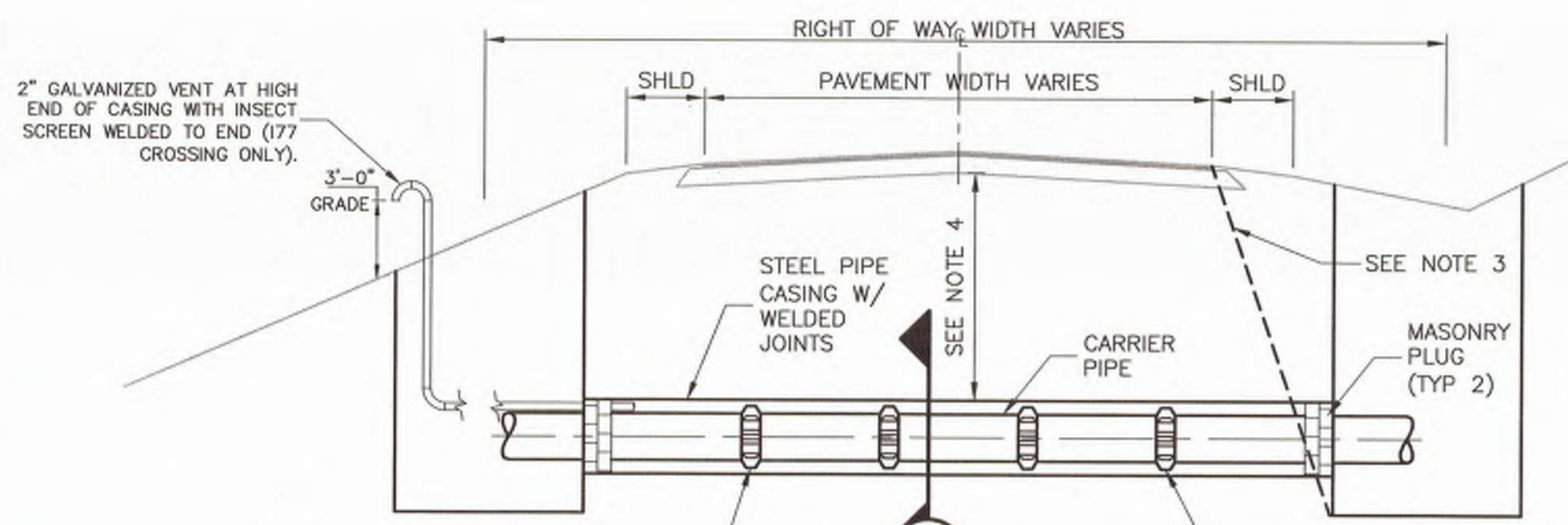


CITY OF ROCK HILL
EDEN TERRACE 24" WATER TRANSMISSION MAIN ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN CIVIL DETAILS

PROJECT NO. 258111-221823
 FILE NAME: C004DTLS.DWG
 SHEET NO. **CD-4**

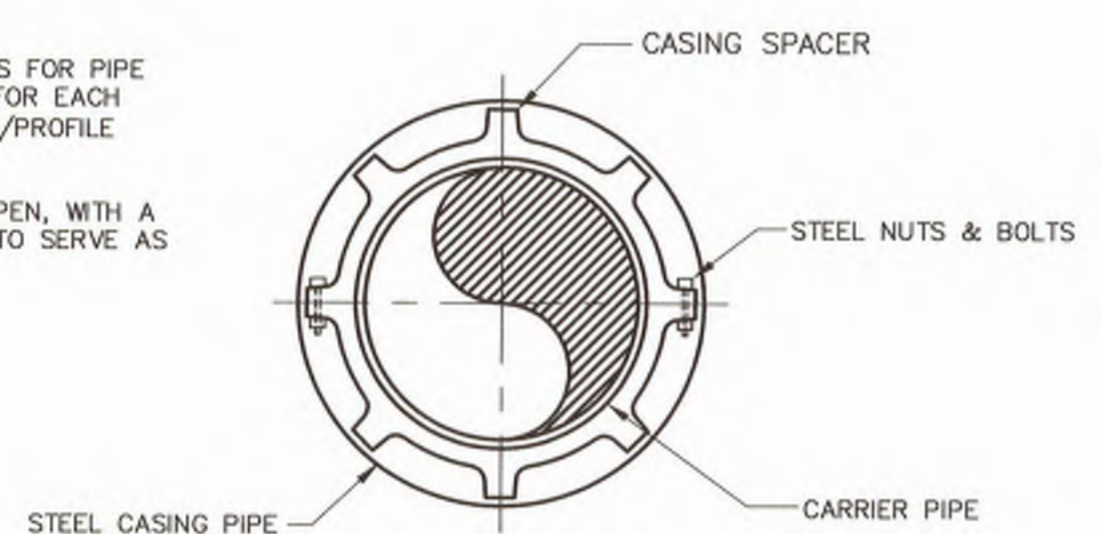




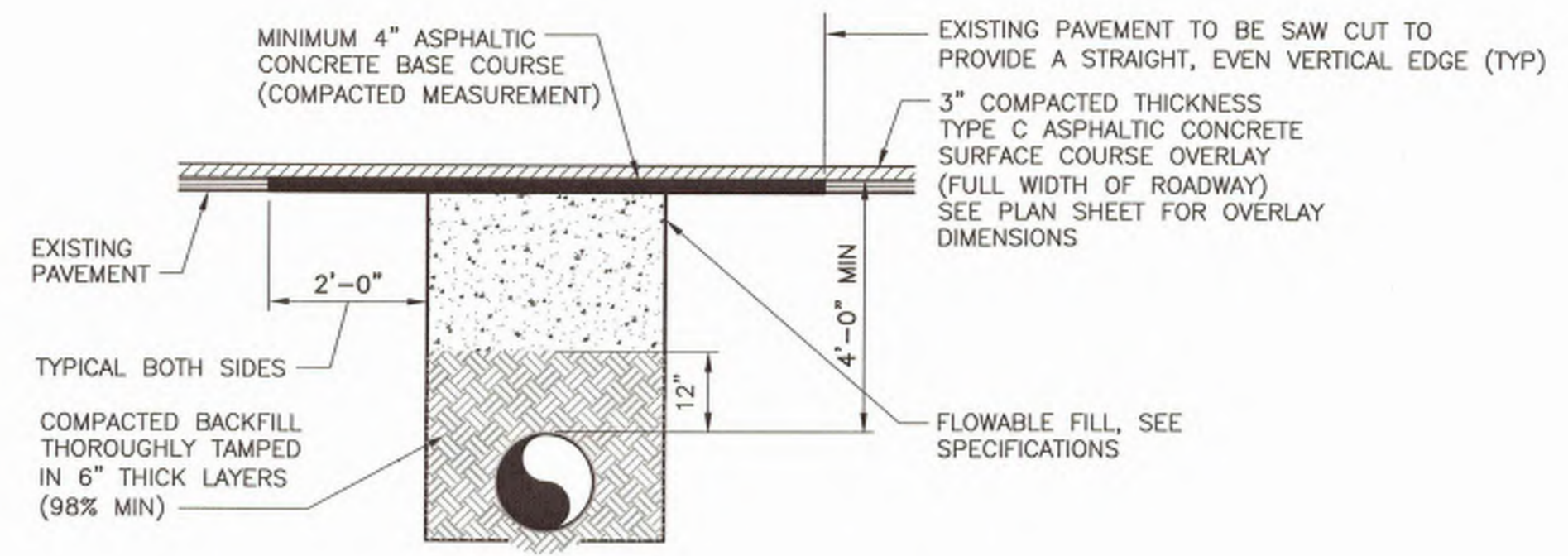
NOTES:

- NO PIPE SHALL BE SUPPORTED BY BELL.
- CASING PIPE WALL THICKNESS SHALL BE AS SPECIFIED IN SECTION 02290.
- SENDING AND RECEIVING PITS/SHAFTS FOR TRENCHLESS CROSSINGS SHALL BE A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT AND OUTSIDE THE 1:1 SLOPE FROM THE EDGE OF PAVEMENT TO THE BOTTOM OF PIT/SHAFT ON ALL ROADWAYS IN ACCORDANCE WITH SCDOT REQUIREMENTS.
- MINIMUM COVER REQUIREMENTS FOR PIPE JACKED CASING ARE SHOWN FOR EACH CROSSING ON THE CIVIL PLAN/PROFILE DRAWINGS.
- ANNULAR AREA TO REMAIN OPEN, WITH A CLEAR PATH THROUGH VENT TO SERVE AS A LEAK INDICATOR.

PIPE JACKING DETAIL A
NTS



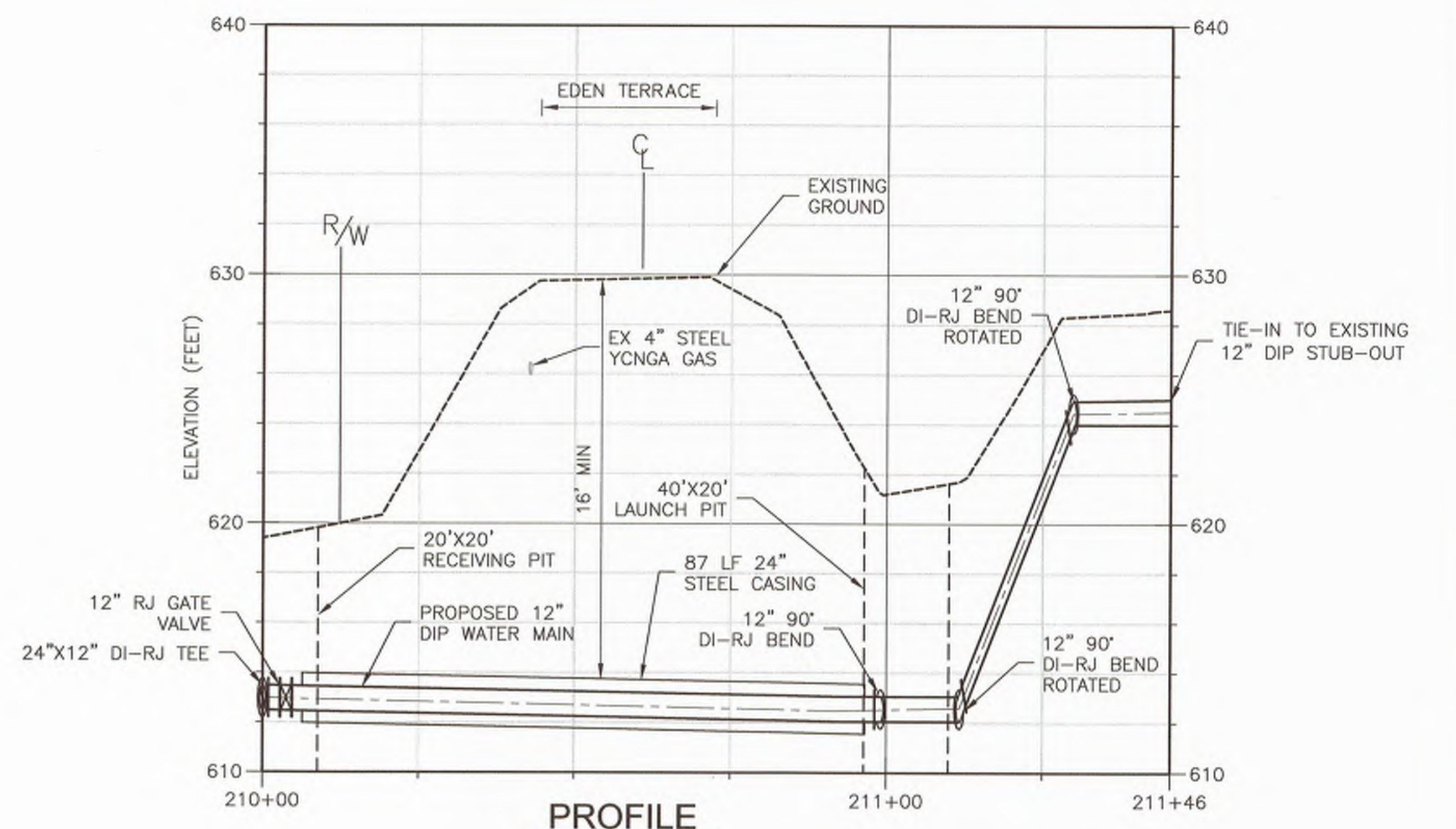
SECTION 1
NTS



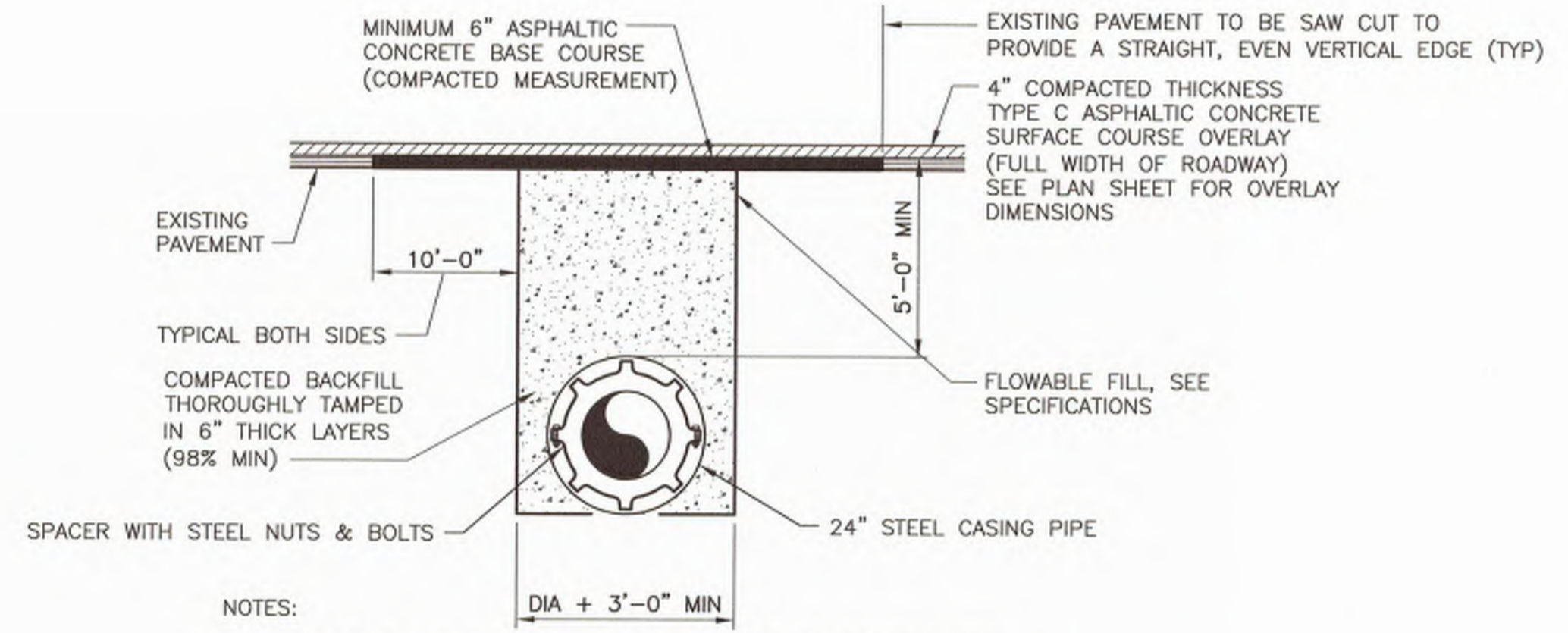
NOTES:

- COMPACTIONS ARE AS DETERMINED BY STANDARD PROCTOR TEST.
- PIPE BEDDING FOR WATER MAIN SHALL BE IN ACCORDANCE WITH DETAIL D ON SHEET CD-2.
- PAVEMENT REPAIR TO BE IN ACCORDANCE WITH SCDOT SPECIFICATIONS.

SCDOT ROADWAY REPLACEMENT DETAIL B
NTS



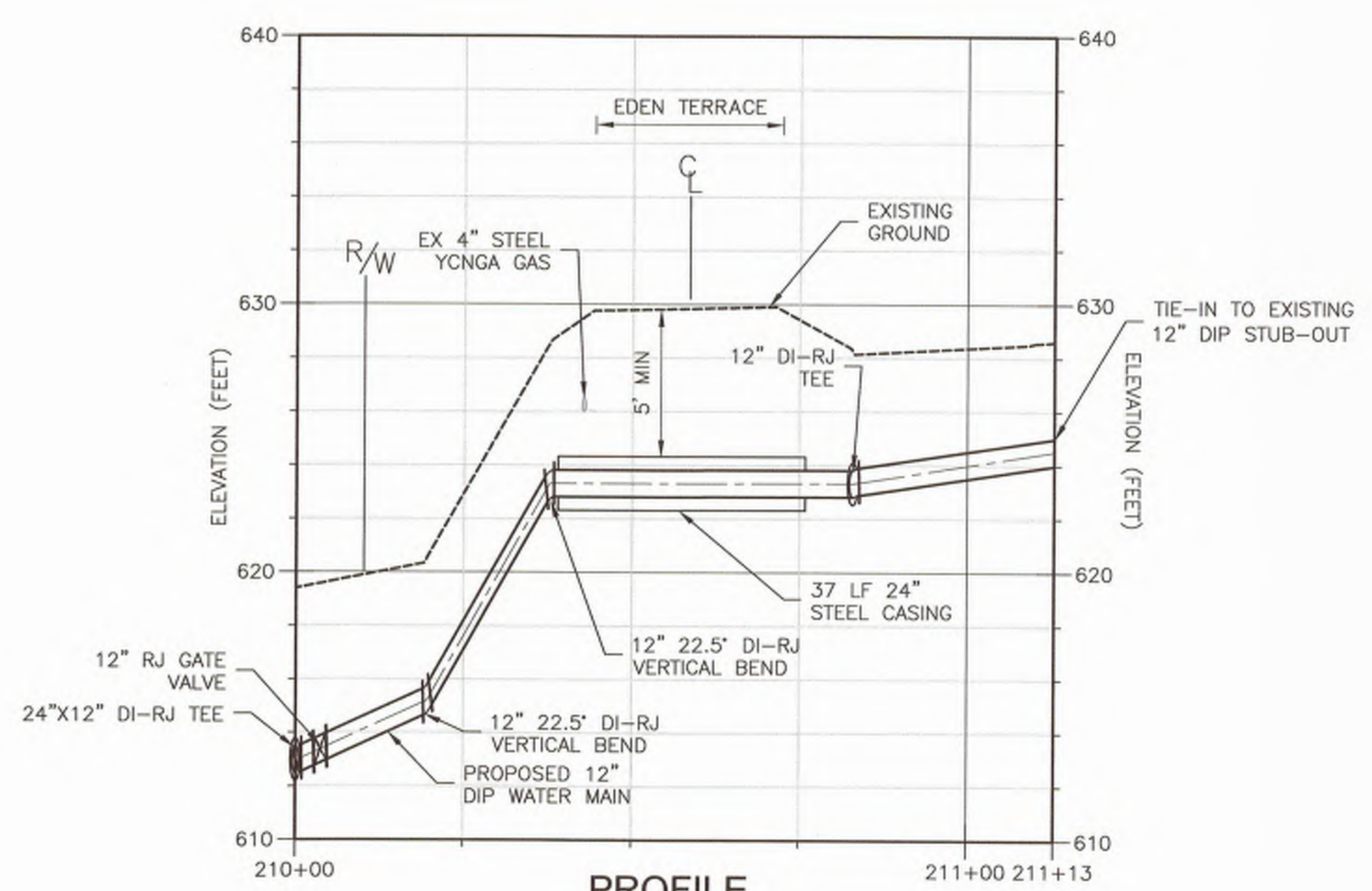
RIVERVIEW RD TIE-IN DETAIL C
NTS



NOTES:

- COMPACTIONS ARE AS DETERMINED BY STANDARD PROCTOR TEST.
- PIPE BEDDING FOR WATER MAIN SHALL BE IN ACCORDANCE WITH DETAIL D ON SHEET CD-2.
- PAVEMENT REPAIR TO BE IN ACCORDANCE WITH SCDOT SPECIFICATIONS.

EDEN TERRACE ROADWAY REPLACEMENT DETAIL D
NTS



RIVERVIEW RD ALTERNATIVE 1 TIE-IN DETAIL E
NTS

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REV. NO.	DATE	DRWN	CHKD	REMARKS

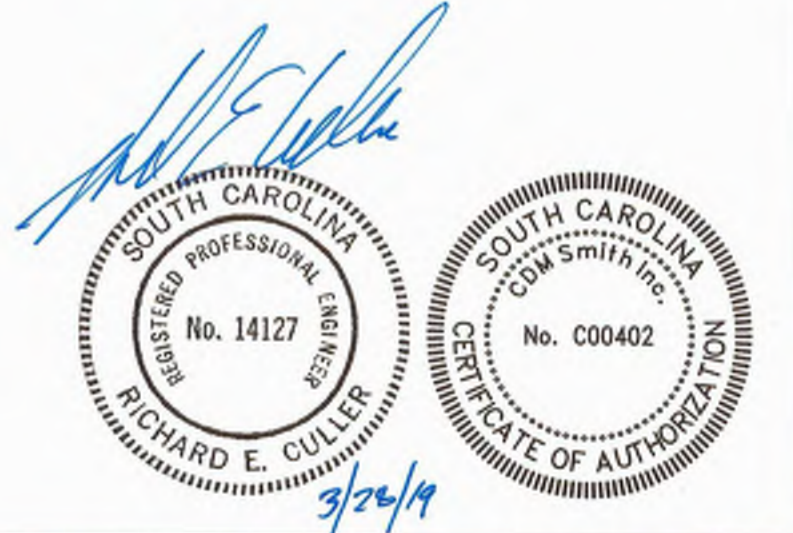
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 DATE: _____ MARCH 2019



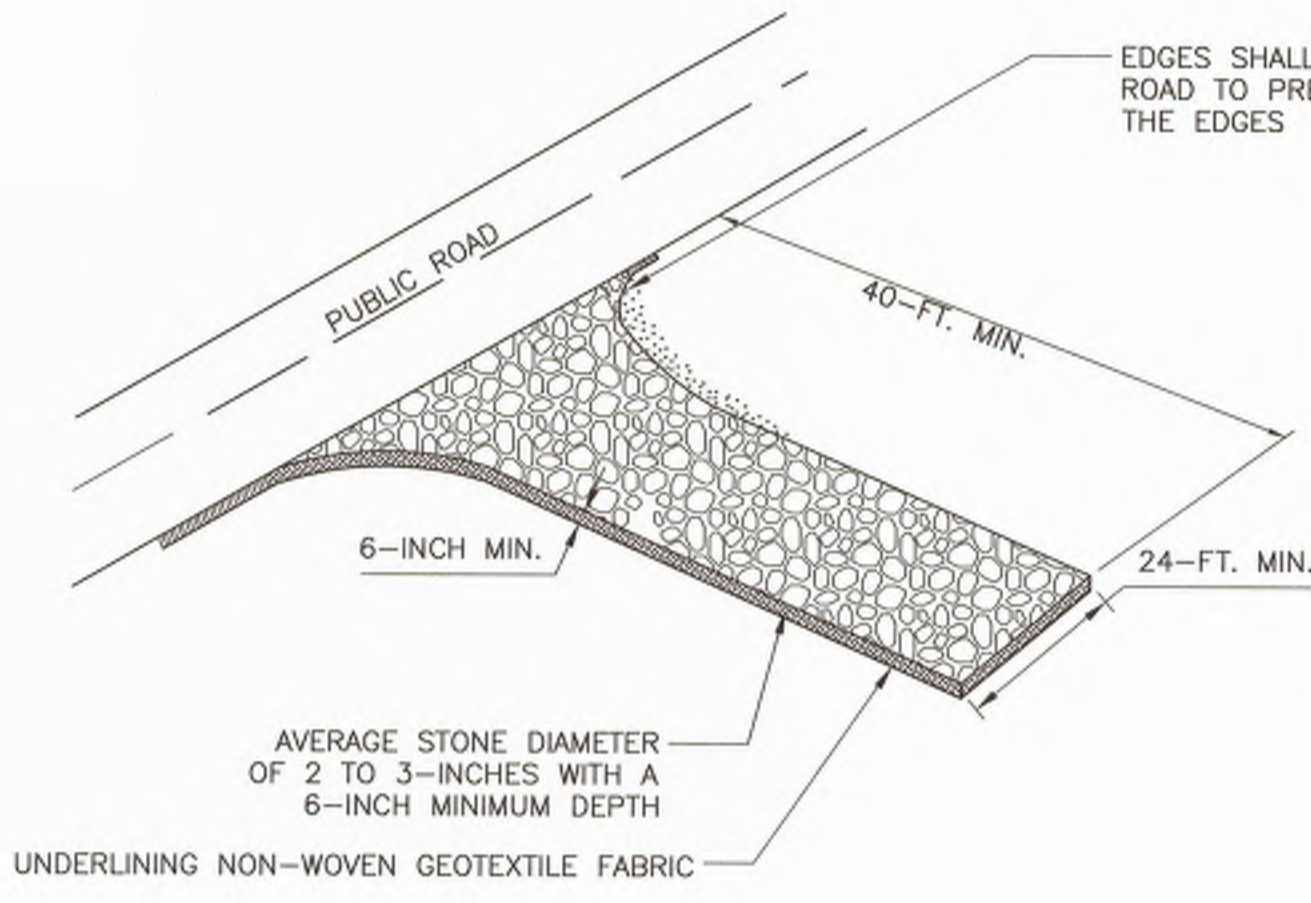
CITY OF ROCK HILL
**EDEN TERRACE 24" WATER TRANSMISSION MAIN
 ANDERSON TO CELRIVER**

**WATER TRANSMISSION MAIN
 CIVIL DETAILS**
 SHEET NO. **CD-5**

PROJECT NO. 258111-221823
 FILE NAME: C005DTLS.DWG
 SHEET NO. **CD-5**



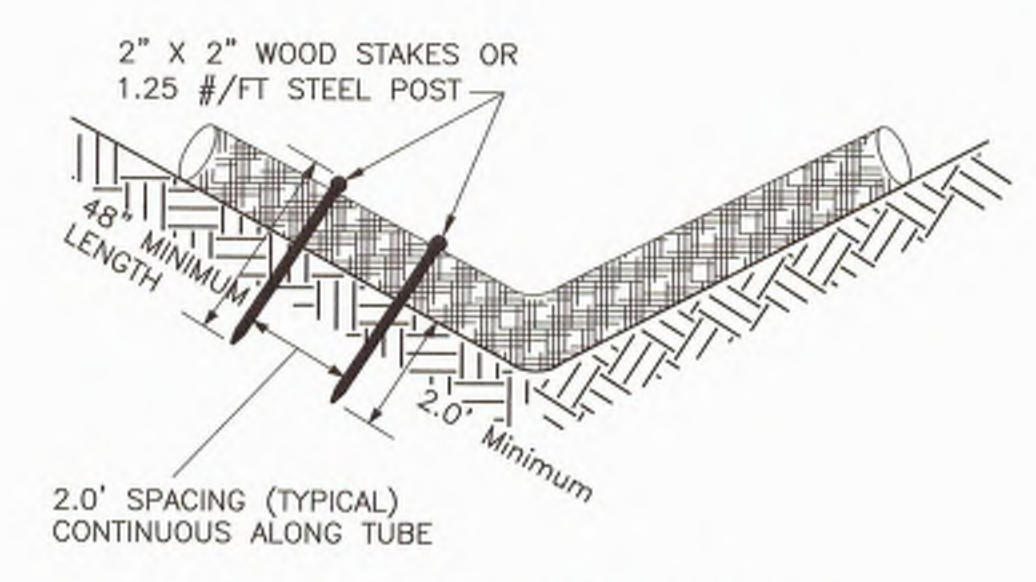
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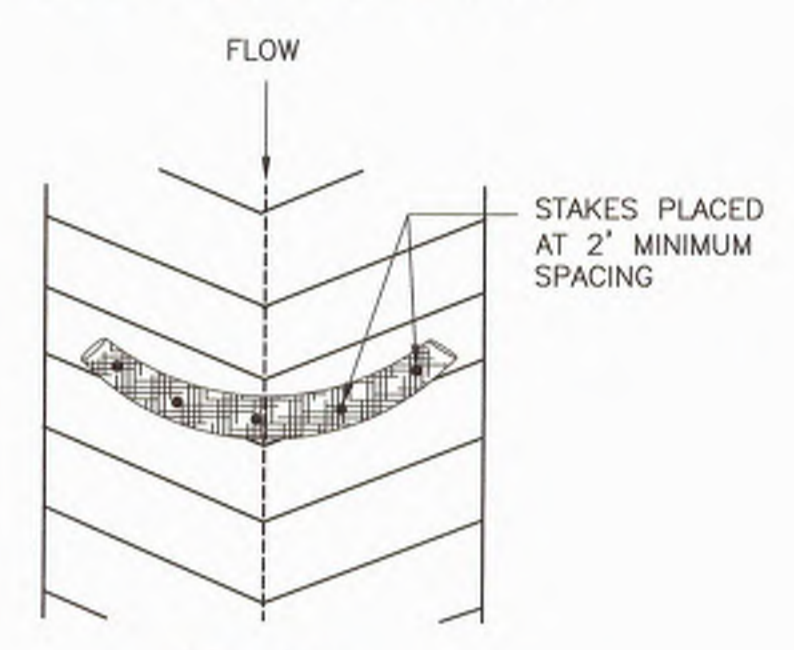
STABILIZED CONSTRUCTION ENTRANCE

DETAIL A
NOT TO SCALE

- NOTES:
1. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.
 2. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
 3. WASH OR REPLACE STONE WHENEVER ENTRANCE FAILS TO PREVENT MUD FROM BEING CARRIED OFFSITE BY VEHICLES.



END VIEW OF DITCH

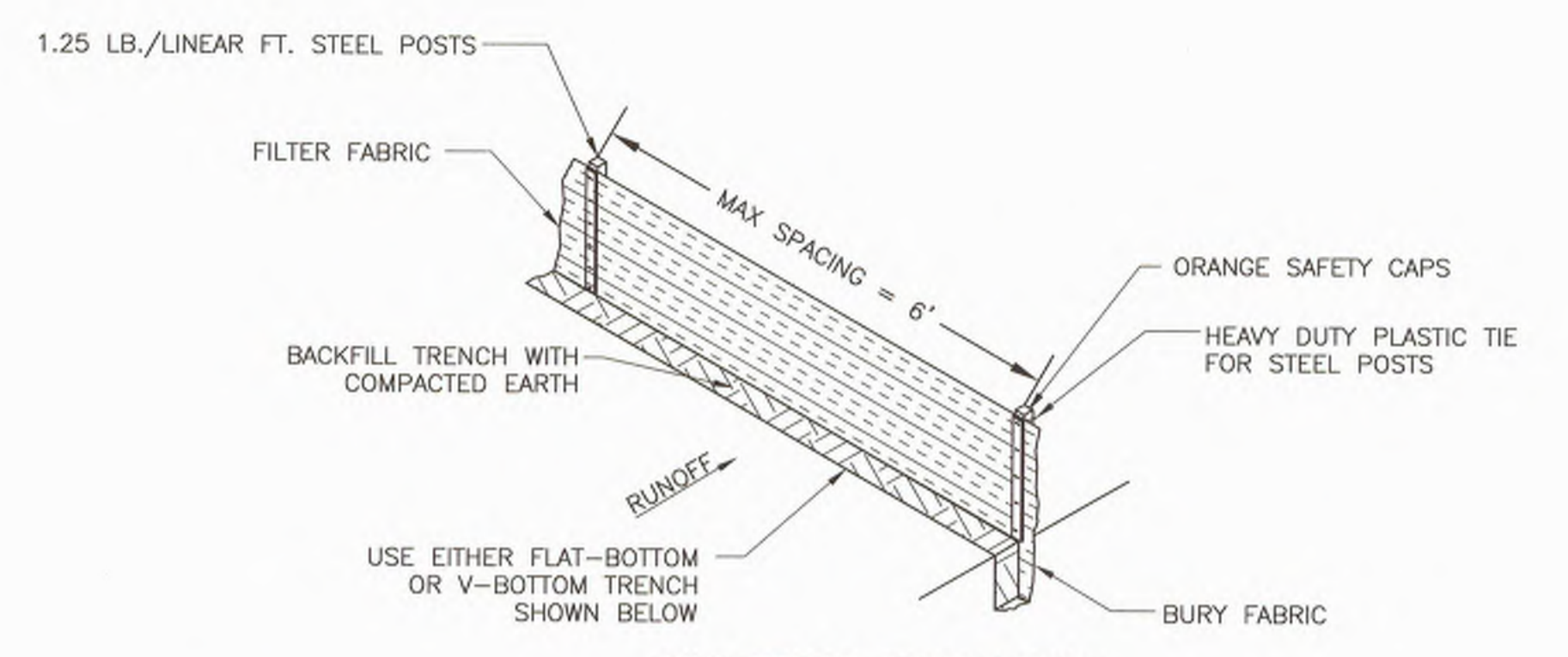


TOP VIEW OF DITCH

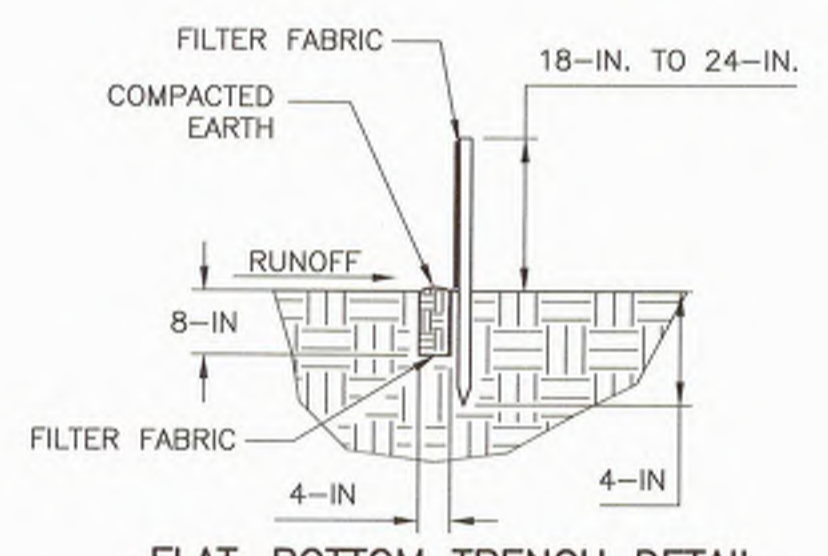
NOTES:

1. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE EXPOSED SEDIMENT TUBE.

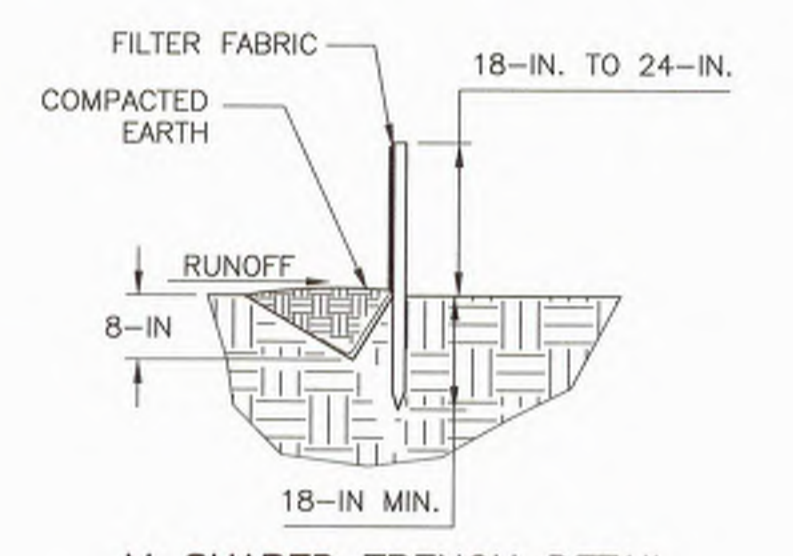
SEDIMENT TUBES
DETAIL B
NOT TO SCALE



SILT FENCE INSTALLATION



FLAT-BOTTOM TRENCH DETAIL

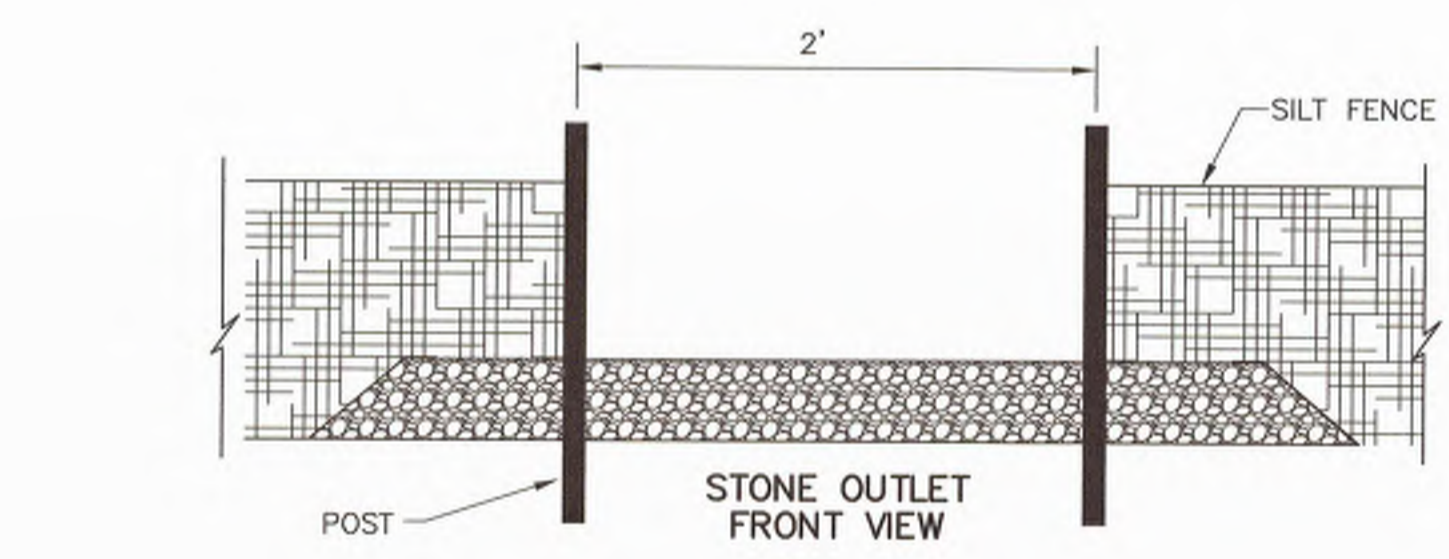


V-SHAPED TRENCH DETAIL

SILT FENCE
DETAIL C
NOT TO SCALE

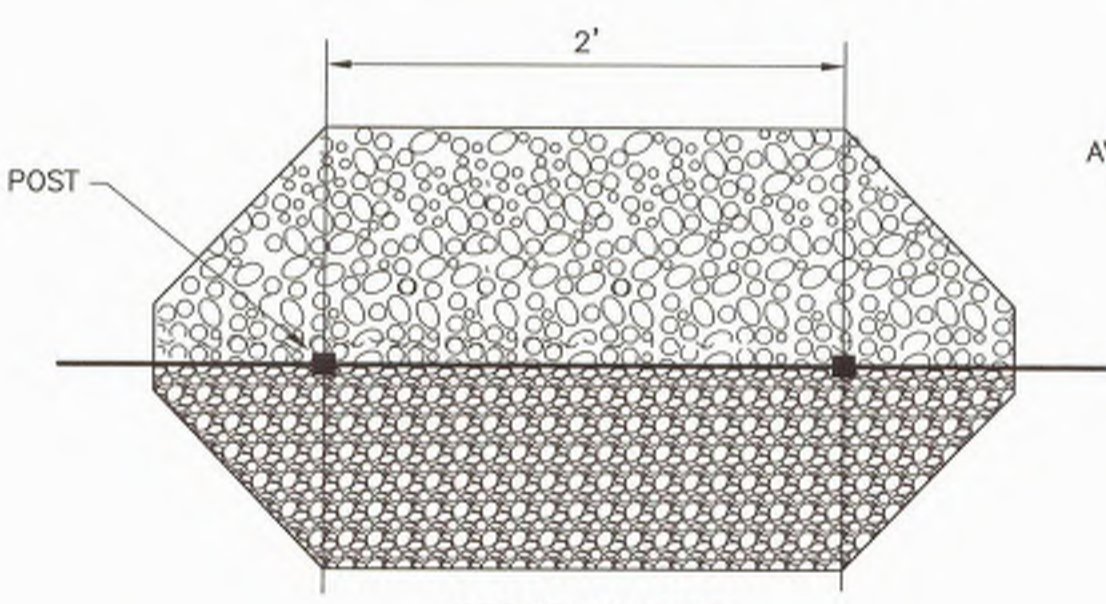
NOTES:

1. PROVIDE SILT FENCE TIE BACKS IN LOCATIONS WHERE SILT FENCE CUTS ACROSS GRADE LINES.
2. REMOVE SEDIMENT FROM BEHIND THE SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE.
3. WIRE-BACKED SILT FENCE TO BE USED WITHIN 50' OF CREEK CROSSING. WIRE BACKING TO BE MINIMUM 14 GAUGE WIRE WITH SPACING OF 4"x4"

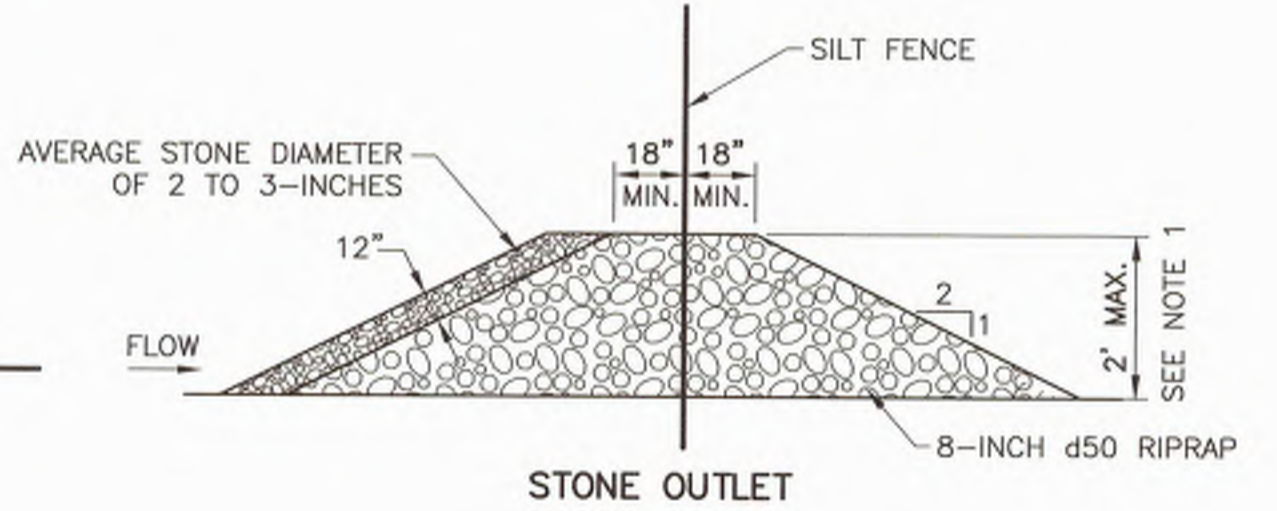


STONE OUTLET FRONT VIEW

- NOTES:
1. MATCH OUTLET HEIGHT TO HEIGHT OF SILT FENCE.
 2. REMOVE SEDIMENT WHEN 1/3 OF OUTLET IS COVERED.

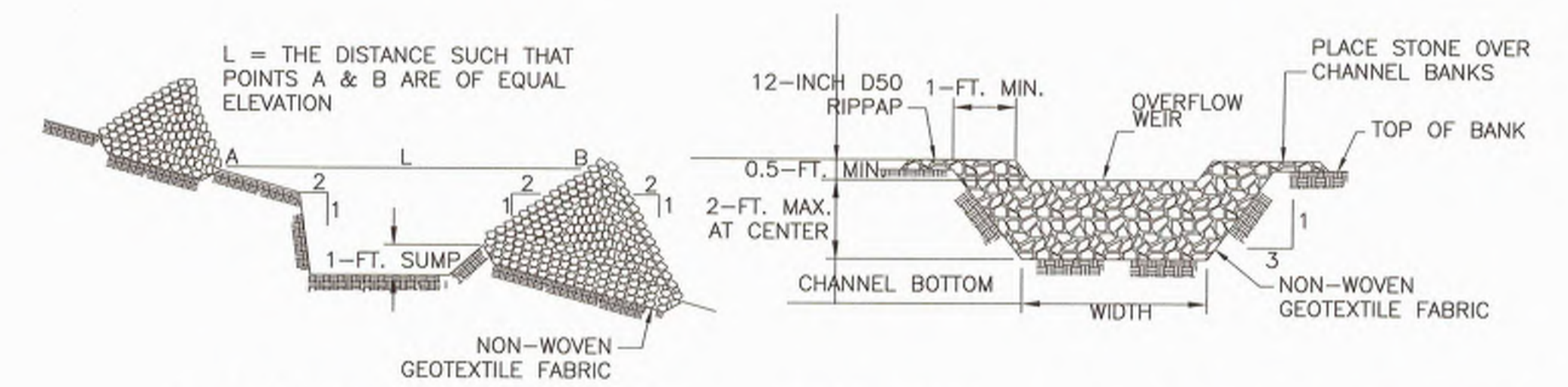


STONE OUTLET PLAN VIEW



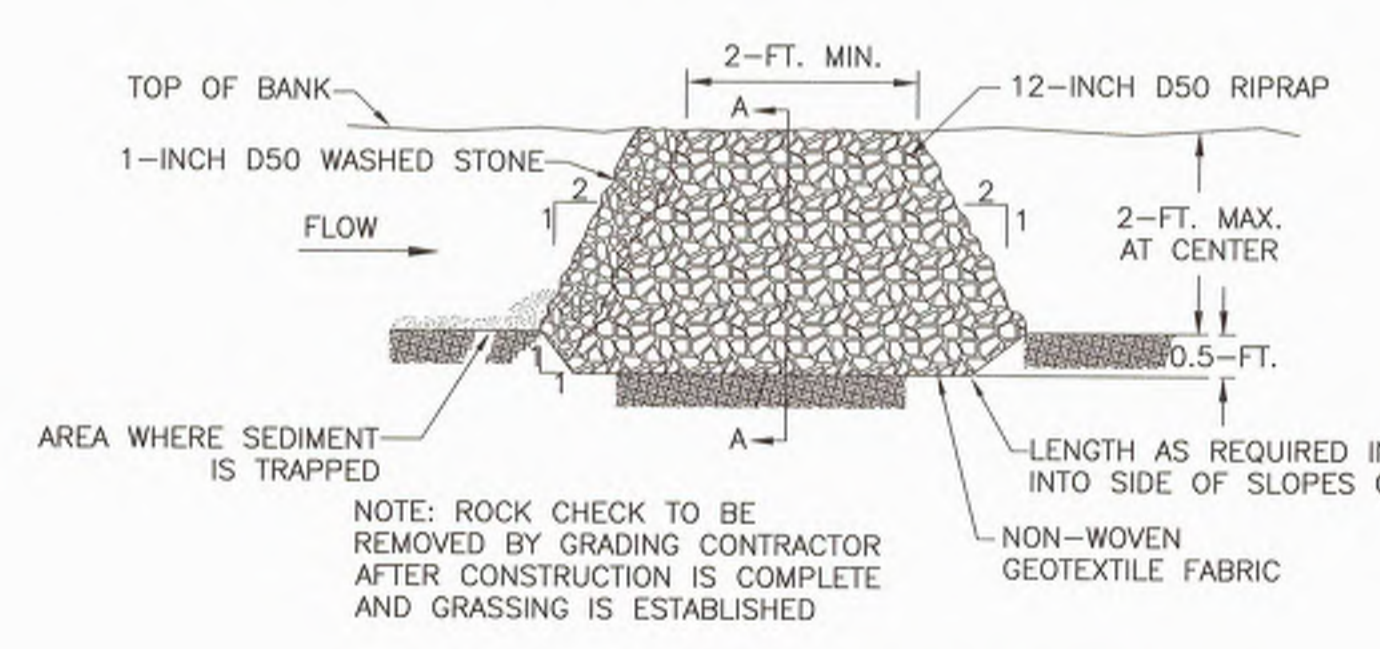
STONE OUTLET CROSS SECTION

SILT FENCE OUTLET
DETAIL D
NOT TO SCALE



SPACING BETWEEN DITCH CHECK

CROSS SECTION A-A THRU STONE DITCH CHECK



TYPICAL DITCH CHECK SECTION
DITCH CHECKS

DETAIL E
NOT TO SCALE

- NOTES:
1. REMOVE SEDIMENT FROM DITCH WHEN IT REACHES 1/3 OF THE ORIGINAL CHECK HEIGHT.
 2. ROCK CHECK TO BE REMOVED BY GRADING CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND GRASSING IS ESTABLISHED.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: RC
DRAWN BY: AK
SHEET CHK'D BY: EQ
CROSS CHK'D BY:
APPROVED BY:
DATE: MARCH 2019



CITY OF ROCK HILL
EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN
EROSION AND SEDIMENT CONTROL
DETAILS

PROJECT NO. 258111-221823
FILE NAME: CD06DTLS.DWG
SHEET NO.
CD-6



PERMIT SET - NOT FOR CONSTRUCTION

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REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 24242
WILLIE E. McCONNELL, JR.

Signature: *Willie E. McConnell, Jr.*
DATE: 1-30-2008

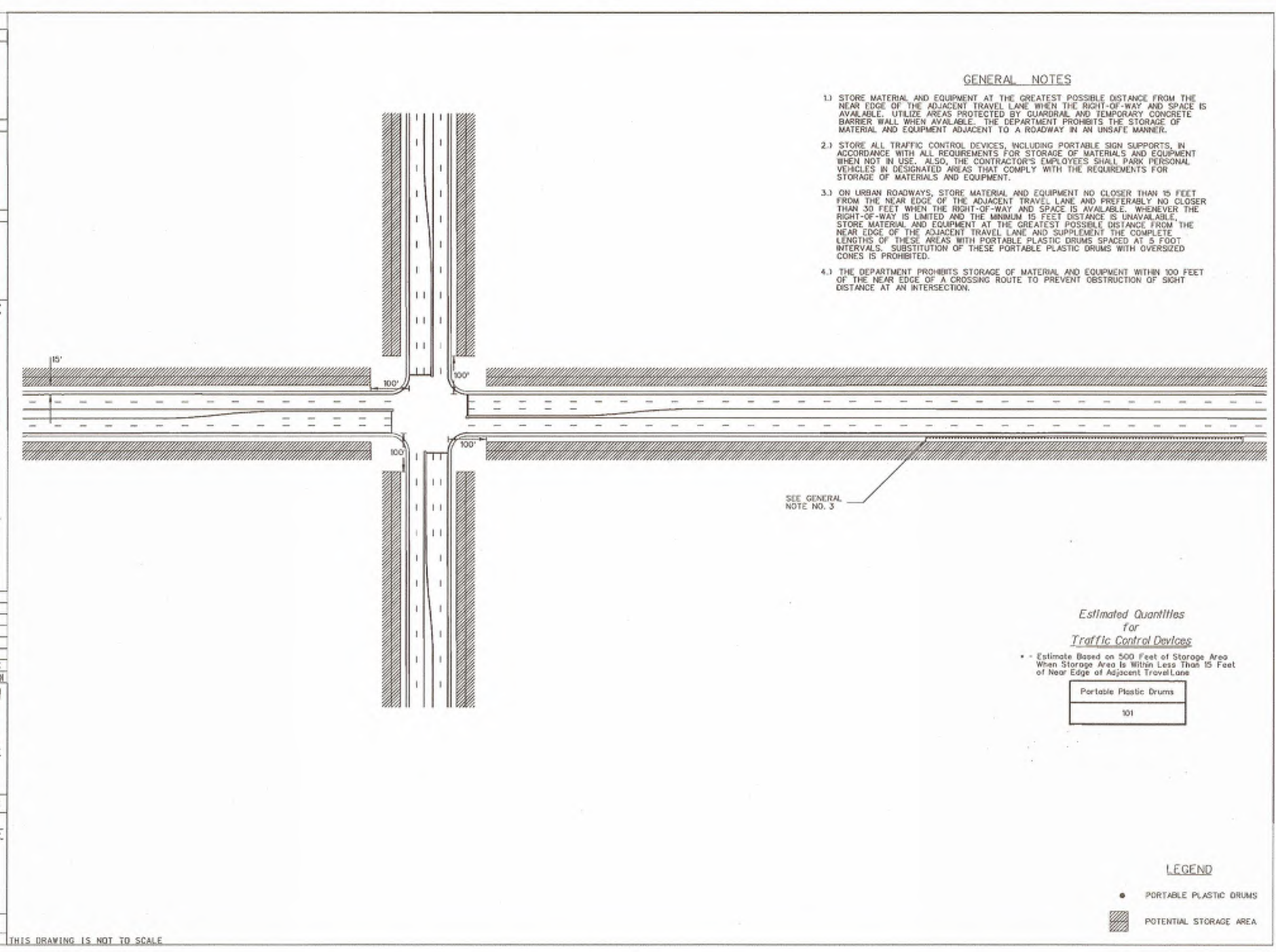
1 8-10-07 JCS DRAWING NO. UPDATE
2 8-23-07 JCS DRAWING NO. UPDATE
3
4
5
6
7
8
9
10

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

MATERIALS STORAGE
&
SECONDARY
URBAN ROADWAYS

601-115-00
EFFECTIVE LETTERING DATE: MAY 2006 THIS DRAWING IS NOT TO SCALE



REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 24242
WILLIE E. McCONNELL, JR.

Signature: *Willie E. McConnell, Jr.*
DATE: 8/2/12

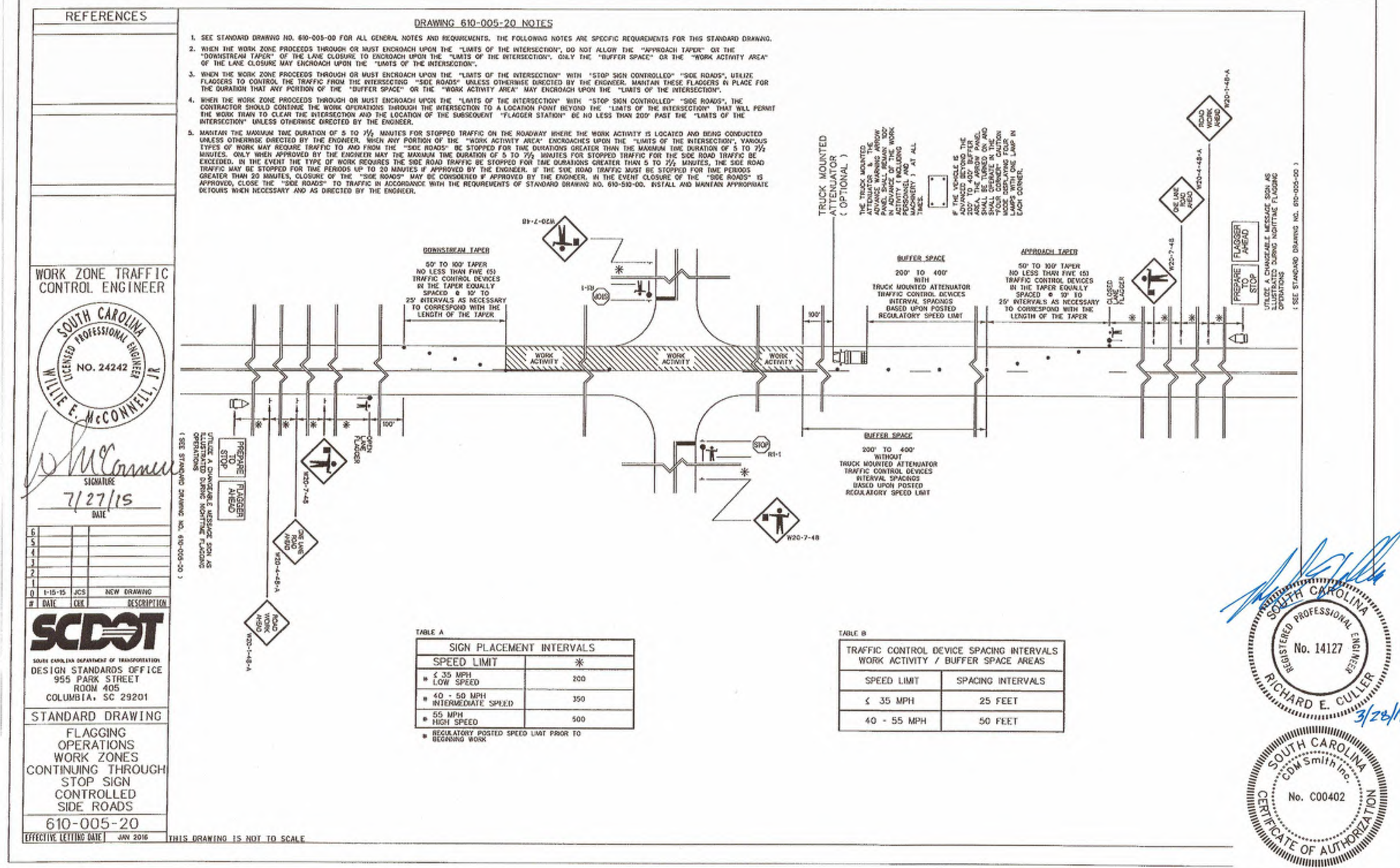
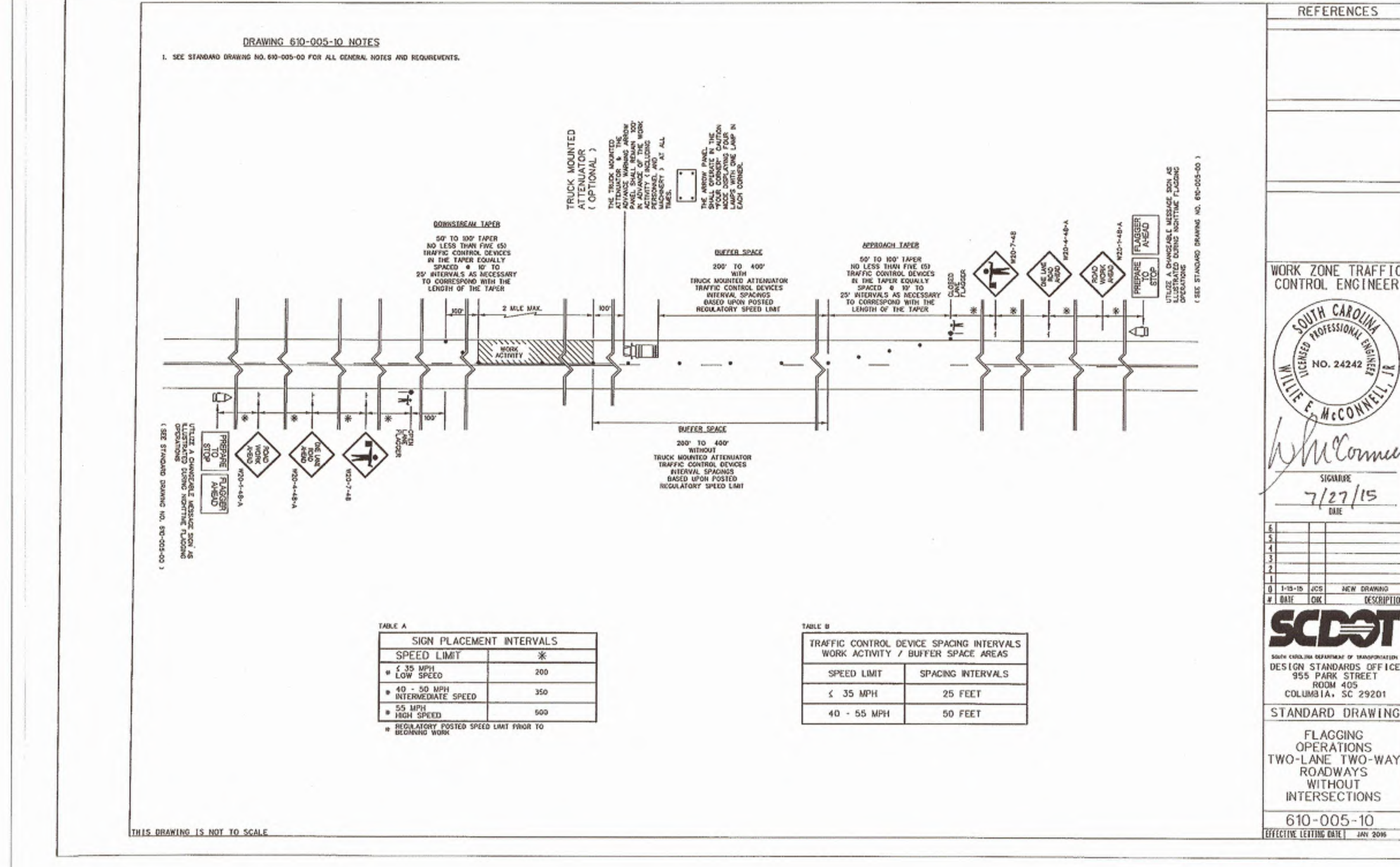
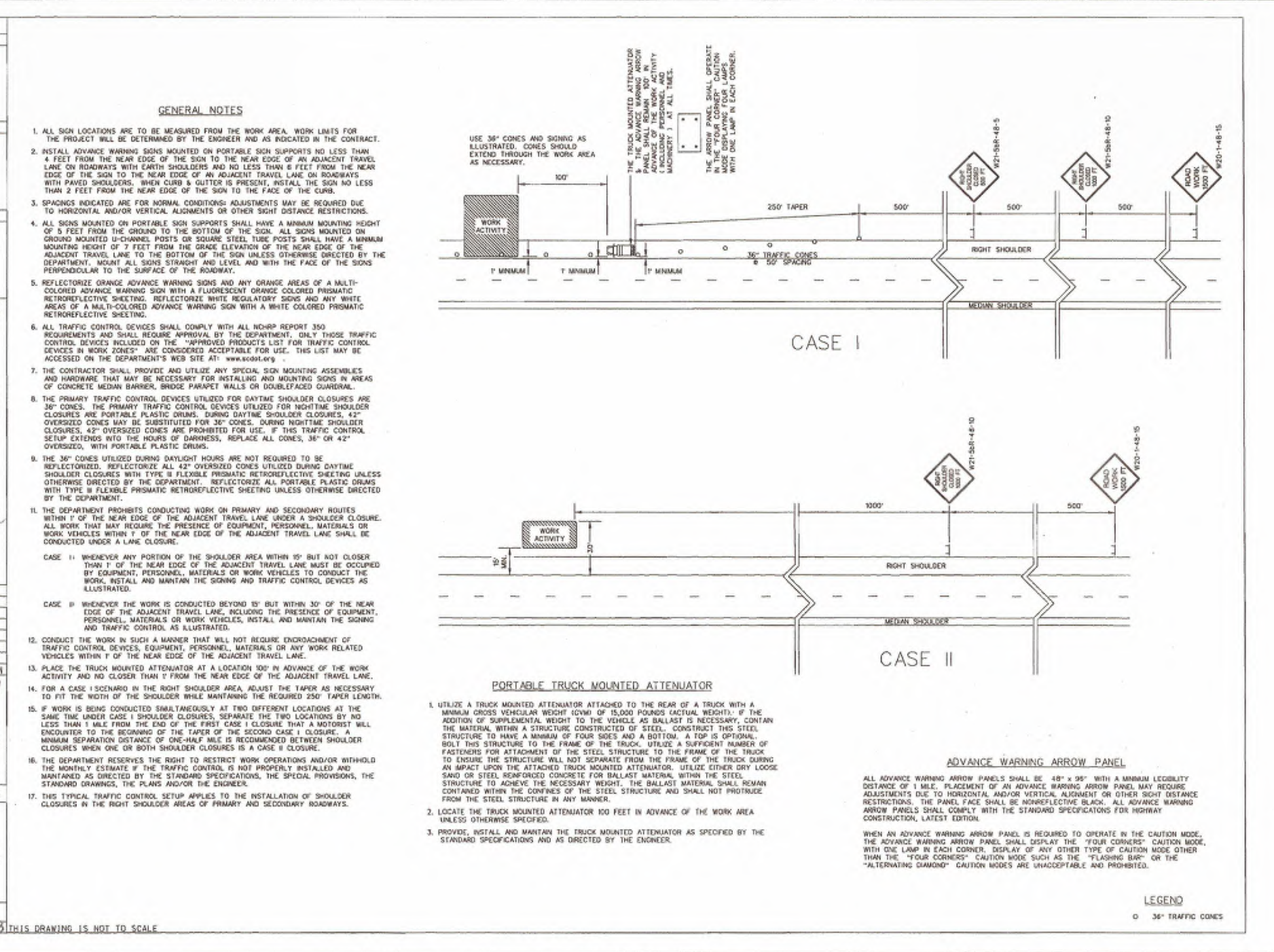
1 8-10-07 JCS DRAWING NO. UPDATE
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SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

RIGHT SHOULDER CLOSURE (CASE I / CASE II) PRIMARY ROUTES

610-205-00
EFFECTIVE LETTERING DATE: 5/20/13 THIS DRAWING IS NOT TO SCALE



DESIGNED BY:	RC
DRAWN BY:	AK
SHEET CHK'D BY:	EQ
CROSS CHK'D BY:	
APPROVED BY:	
DATE:	MARCH 2019

REV. NO.	DATE	DRWN	CHKD	REMARKS

CDM Smith
1441 Main Street, Suite 1000
Columbia, South Carolina 29201
Tel: (803) 759-4500

CITY OF ROCK HILL

EDEN TERRACE 24" WATER TRANSMISSION MAIN
ANDERSON TO CELRIVER

WATER TRANSMISSION MAIN
TRAFFIC CONTROL DETAILS

PROJECT NO. 258111-221823
FILE NAME: CD07DLS.DWG
SHEET NO. CD-7

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GENERAL NOTES

- ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT.
- IN AREAS WITH PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL DETOUR SIGN ASSEMBLIES 2' FROM EITHER THE PAVEMENT EDGE OF A PAVED SHOULDER OR THE FACE OF A CURB. IN AREAS WITH NO PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL DETOUR SIGN ASSEMBLIES 6'-0" FEET FROM THE NEAR EDGE OF AN ADJACENT TRAVEL LANE TO THE NEAREST EDGE OF THE SIGN ASSEMBLY. MOUNT LANTERN SIGN ASSEMBLIES TO THE NEAREST EDGE OF THE ADJACENT TRAVEL LANE. A MINIMUM MOUNTING HEIGHT OF NO LESS THAN 5 FEET ABOVE THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.
- SPACINGS INDICATED ARE FOR NORMAL CONDITIONS ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.
- MONITOR ALL SIGNS SUCH THAT THEY ARE STRAIGHT AND LEVEL AND THE FACE OF THE SIGNS ARE PERPENDICULAR TO THE SURFACE OF THE ROADWAY.
- REFLECTORIZED ALL DETOUR WARNING SIGNS AND DETOUR ARROW SIGNS WITH A FLUORESCENT ORANGE COLORED PRISMATIC REFLECTIVE SHEETING.
- ALL TRAFFIC CONTROL DEVICES, INCLUDING TYPE B BARRICADES, PORTABLE SIGN SUPPORTS, SIGN SUBSTRATES, BREAKAWAY SYSTEMS FOR GROUND MOUNTED SIGN SUPPORTS, WARNING LIGHTS, ETC., SHALL COMPLY WITH ALL CITY REPORT SIGN REQUIREMENTS AND SHALL BE APPROVED BY THE DEPARTMENT. ALL APPROVED TRAFFIC CONTROL DEVICES ARE INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" THIS LIST MAY BE ACCESSIBLE ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org.
- SPECIAL SIGN MOUNTING ASSEMBLIES MAY BE NECESSARY IN AREAS OF CONCRETE MEDIAN BARRIERS, BRIDGE PARAPETS WALLS, OR DOUBLED FENCED GUARDRAIL AND SHALL BE PROVIDED BY THE CONTRACTOR.
- REFLECTORIZED ALL BARRICADES WITH A TYPE B HIGH INTENSITY REFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
- ALL SUPPLEMENTAL SIGNS ATTACHED TO TYPE B BARRICADES SHALL BE CONSTRUCTED OF AN APPROVED REFLECTIVE ROLL-UP MATERIAL OR AN APPROVED ALUMINUM COMPOSITE MATERIAL. ONLY THOSE ALUMINUM COMPOSITE MATERIALS INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" SUCH AS "ALPOLC", "CORON", OR "REINQUITE" ARE APPROVED. ALL OTHER ROAD SIGN SUBSTRATES, INCLUDING 60 AND 30 ALUMINUM SIGN BLANKS, ARE PROHIBITED FOR ATTACHMENT TO A TYPE B BARRICADE.
- THE TRAFFIC CONTROL SETUP SHOWN IN A TYPICAL INSTALLATION FOR A SECONDARY ROADWAY. SPECIAL SIGNS WILL BE BASED ON SITE CONDITIONS AND SHALL REQUIRE THE ENGINEER'S APPROVAL PRIOR TO INSTALLATION. ROAD AND STREET NAMES MAY BE ADDED.
- THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT CONSTRUCTION OPERATIONS AND/OR WITHHOLD THE MONITOR'S ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS, AND/OR THE ENGINEER.
- THE TRAFFIC CONTROL SETUP ILLUSTRATED ON THIS STANDARD DRAWING INCLUDING INSTALLATION AND MAINTENANCE OF THE DETOUR SIGNING AND ALL TRAFFIC CONTROL DEVICES PERTAINING TO THE DETOUR SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID ITEM FOR TRAFFIC CONTROL.
- COORDINATE THE SIGNS IN EACH SIGN ASSEMBLY ACCORDING TO LOCATION, ROUTE, DIRECTION, SIZE, AND COLOR.

TYPICAL SIGNS

SIGN PLACEMENT AND SPACING INTERVALS

SPEED LIMIT	a	b	c	d
35 mph OR LESS	50'	100'	200'	200'
40 mph TO 50 mph	75'	150'	350'	350'
55 mph OR GREATER	100'	200'	500'	500'

LEGEND

- TYPE B BARRICADE (8 FEET)
- WORK AREA
- TYPE "H" HIGH INTENSITY FLASHING WARNING LIGHT
- 48" X 96" ORANGE FLASHS ON EACH ADVANCE WARNING SIGN WHERE SHOWN

LEGEND

- TYPE B BARRICADE (8 FEET)
- SINGLE POST SIGN ASSEMBLY
- DUAL POST SIGN ASSEMBLY

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

WILLIE E. MCCONNELL, P.E.
 LICENSE NO. 24242
 SIGNATURE: *Willie McConnell*
 DATE: 1-30-2008

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DESIGN STANDARDS OFFICE
 955 PARK STREET
 ROOM 405
 COLUMBIA, SC 29201
 STANDARD DRAWING
 DETOUR SIGNING FOR SECONDARY ROUTES
 610-610-00
 EFFECTIVE SETTING DATE: JULY 2006

GENERAL NOTES

- ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT.
- IN AREAS WITH PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL ADVANCE SIGN ASSEMBLIES 2' FROM EITHER THE PAVEMENT EDGE OF A PAVED SHOULDER OR THE FACE OF A CURB. IN AREAS WITH NO PAVED SHOULDERS OR CURB & GUTTER, GROUND MOUNT ALL ADVANCE SIGNS 6'-0" FEET FROM THE NEAR EDGE OF AN ADJACENT TRAVEL LANE TO THE NEAREST EDGE OF THE SIGN ASSEMBLY. MOUNT LANTERN SIGN ASSEMBLIES TO THE NEAREST EDGE OF THE ADJACENT TRAVEL LANE. A MINIMUM MOUNTING HEIGHT OF NO LESS THAN 5 FEET ABOVE THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.
- SPACINGS INDICATED ARE FOR NORMAL CONDITIONS ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.
- ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. MOUNTING HEIGHTS SHALL BE MEASURED FROM THE NEAREST EDGE OF THE ADJACENT TRAVEL LANE.
- REFLECTORIZED ALL ORANGE ADVANCE SIGNS AND ALL ORANGE AREAS OF A MATH-COLORED ADVANCE SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC REFLECTIVE SHEETING. REFLECTORIZED ALL ORANGE ADVANCE SIGNS AND ALL WHITE ADVANCE SIGNS WITH A WHITE COLORED PRISMATIC REFLECTIVE SHEETING WHERE THE SIGNS ARE TO BE WHITE.
- ALL TRAFFIC CONTROL DEVICES, INCLUDING TYPE B BARRICADES, PORTABLE SIGN SUPPORTS, SIGN SUBSTRATES, BREAKAWAY SYSTEMS FOR GROUND MOUNTED SIGN SUPPORTS, WARNING LIGHTS, ETC., SHALL COMPLY WITH ALL CITY REPORT SIGN REQUIREMENTS AND SHALL BE APPROVED BY THE DEPARTMENT. ALL APPROVED TRAFFIC CONTROL DEVICES ARE INCLUDED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" THIS LIST MAY BE ACCESSIBLE ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org.
- SPECIAL SIGN MOUNTING ASSEMBLIES MAY BE NECESSARY IN AREAS OF CONCRETE MEDIAN BARRIERS, BRIDGE PARAPETS WALLS, OR DOUBLED FENCED GUARDRAIL AND SHALL BE PROVIDED BY THE CONTRACTOR.
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- THE TRAFFIC CONTROL SETUP SHOWN IN A TYPICAL INSTALLATION FOR AN OPEN ROADWAY. SPECIAL SIGNS WILL BE BASED ON SITE CONDITIONS AND SHALL REQUIRE THE ENGINEER'S APPROVAL PRIOR TO INSTALLATION. ROAD AND STREET NAMES MAY BE ADDED.
- THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT CONSTRUCTION OPERATIONS AND/OR WITHHOLD THE MONITOR'S ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS, AND/OR THE ENGINEER.
- THE TRAFFIC CONTROL SETUP ILLUSTRATED ON THIS STANDARD DRAWING INCLUDING INSTALLATION AND MAINTENANCE OF THE DETOUR SIGNING AND ALL TRAFFIC CONTROL DEVICES PERTAINING TO THE DETOUR SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID ITEM FOR TRAFFIC CONTROL.
- COORDINATE THE SIGNS IN EACH SIGN ASSEMBLY ACCORDING TO LOCATION, ROUTE, DIRECTION, SIZE, AND COLOR.

LEGEND

- TYPE B BARRICADE (8 FEET)
- WORK AREA
- TYPE "H" HIGH INTENSITY FLASHING WARNING LIGHT
- 48" X 96" ORANGE FLASHS ON EACH ADVANCE WARNING SIGN WHERE SHOWN

LEGEND

- TYPE B BARRICADES
- PERMANENT CONSTRUCTION SIGNS (BARRICADE MOUNTED)
- TYPE "H" HIGH INTENSITY FLASHING WARNING LIGHTS
- SIGN SUBSTRATES MAY BE ALUMINUM OR 2 mm ALUMINUM COMPOSITE SIGN BLANKS
- SIGN SUBSTRATES MAY BE AN APPROVED REFLECTIVE ROLL-UP MATERIAL OR 2 mm ALUMINUM COMPOSITE SIGN BLANKS

REFERENCES

WORK ZONE TRAFFIC CONTROL ENGINEER

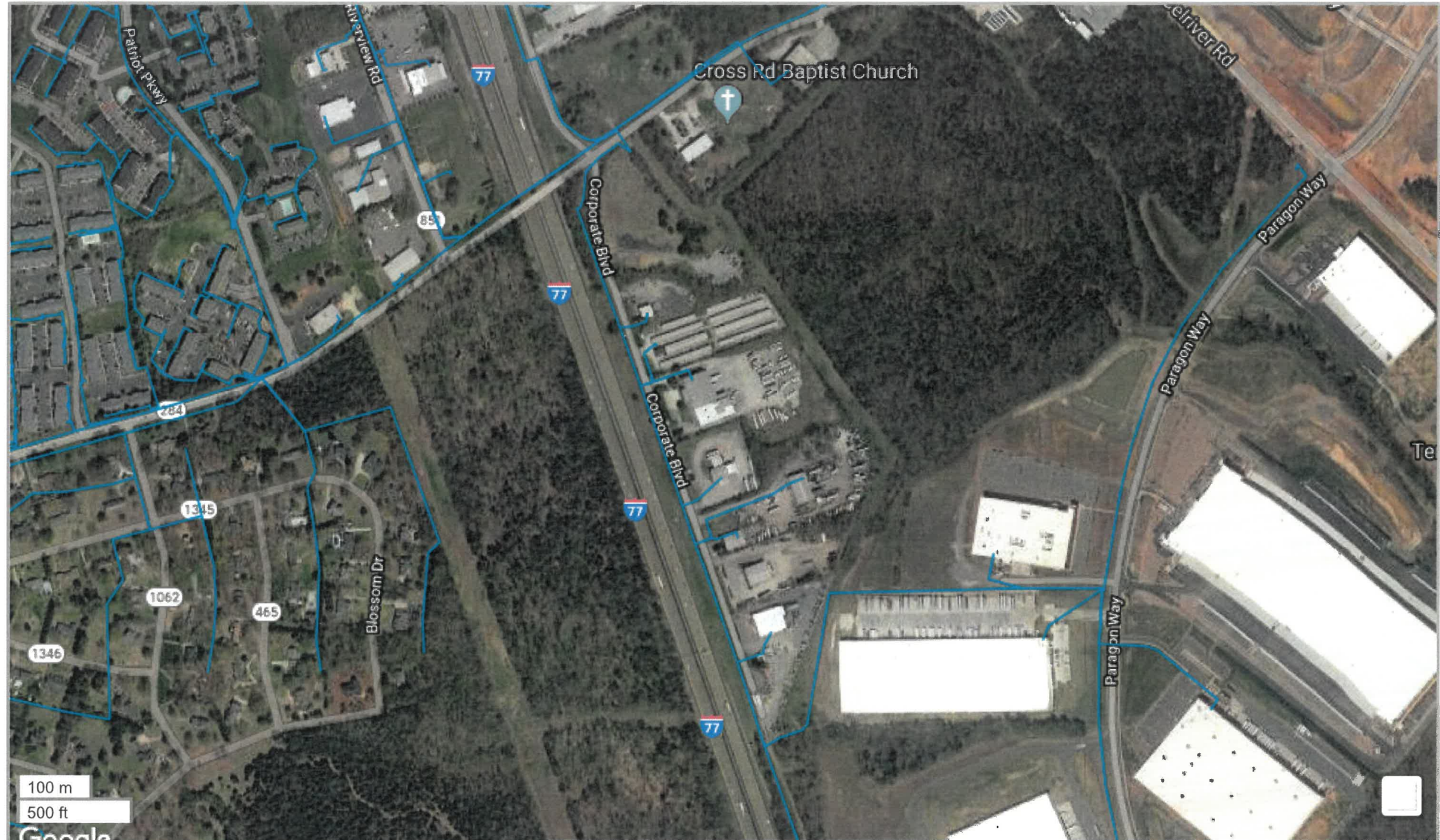
WILLIE E. MCCONNELL, P.E.
 LICENSE NO. 24242
 SIGNATURE: *Willie McConnell*
 DATE: 6/12/2013

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DESIGN STANDARDS OFFICE
 955 PARK STREET
 ROOM 405
 COLUMBIA, SC 29201
 STANDARD DRAWING
 EXTENDED ROAD CLOSURE OF EXISTING ROADWAY ALIGNMENT
 610-510-00
 EFFECTIVE SETTING DATE: FEB. 2005

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV. NO.</th> <th>DATE</th> <th>DRWN</th> <th>CHKD</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV. NO.	DATE	DRWN	CHKD	REMARKS						DESIGNED BY: _____ RC DRAWN BY: _____ AK SHEET CHK'D BY: _____ EQ CROSS CHK'D BY: _____ APPROVED BY: _____ DATE: _____ MARCH 2019	 1441 Main Street, Suite 1000 Columbia, South Carolina 29201 Tel: (803) 758-4500	CITY OF ROCK HILL EDEN TERRACE 24" WATER TRANSMISSION MAIN ANDERSON TO CELRIVER	WATER TRANSMISSION MAIN TRAFFIC CONTROL DETAILS	PROJECT NO. 258111-221823 FILE NAME: C008Dtls.DWG SHEET NO. CD-8
REV. NO.	DATE	DRWN	CHKD	REMARKS											

PERMIT SET - NOT FOR CONSTRUCTION

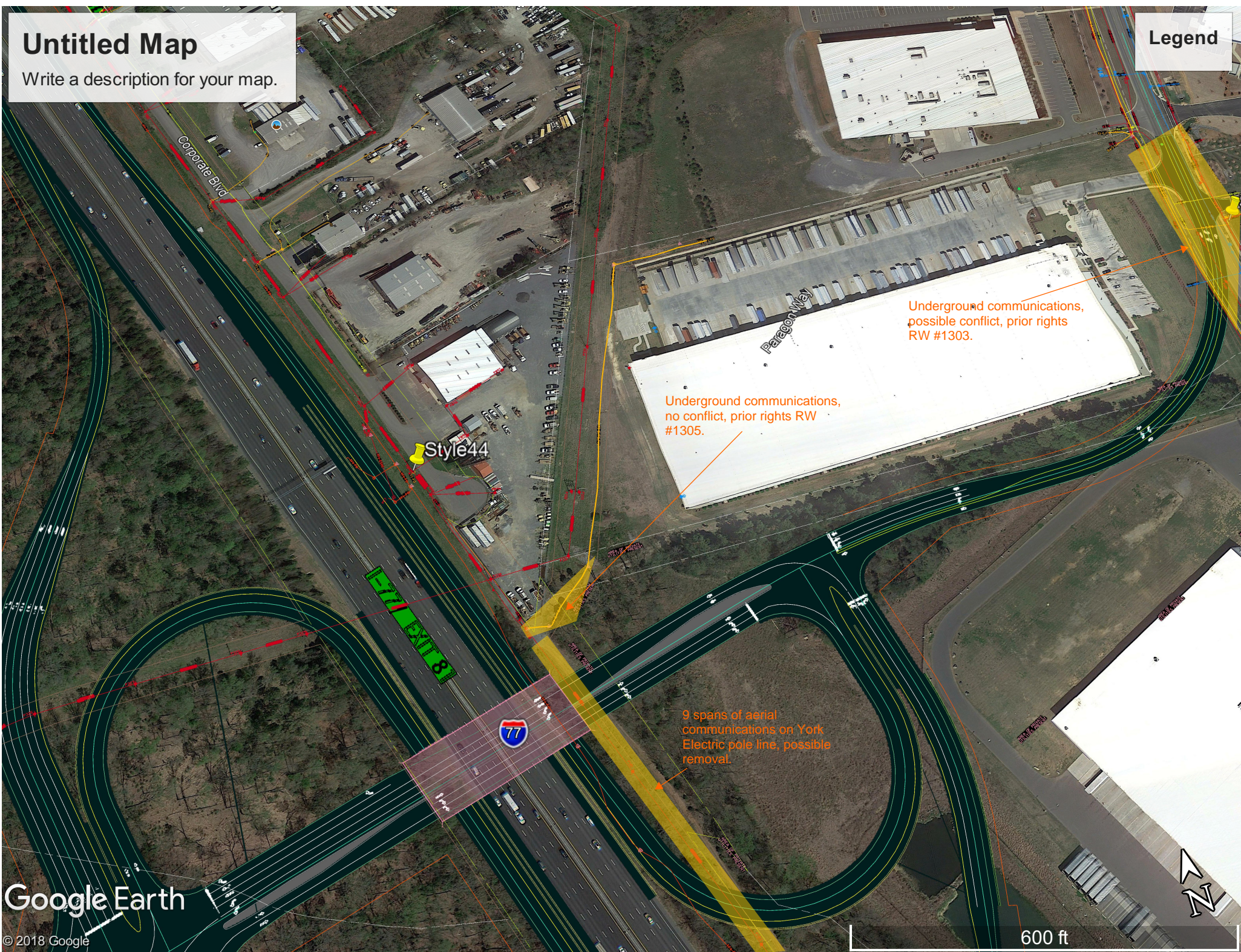
ROCK HILL TELEPHONE (COMPORIUM)



Untitled Map

Write a description for your map.

Legend



Underground communications, possible conflict, prior rights RW #1303.

Underground communications, no conflict, prior rights RW #1305.

9 spans of aerial communications on York Electric pole line, possible removal.

Google Earth

© 2018 Google

600 ft





January 8, 2020

Pope Jordan
Project Administrator/CADD Technician
OLH Inc.
601 Taylor Street Suite B
Columbia, SC 29201

Subject: New I-77 Interchange Exit 81

Mr. Jordan:

This letter is to inform you that Comporium will remove 9 spans of aerial communications cable running parallel to Interstate I-77 attached to York Electric Cooperative poles from approximate coordinates 34.95897, -80.97990 to approximate coordinates 34.95193, -80.97683 at "No Cost".

However, any conflicts extending beyond the limits above, Comporium has the right to issue a Utility Agreement for additional facilities affected in areas with prior rights.

If you have any questions, please feel free to call me.

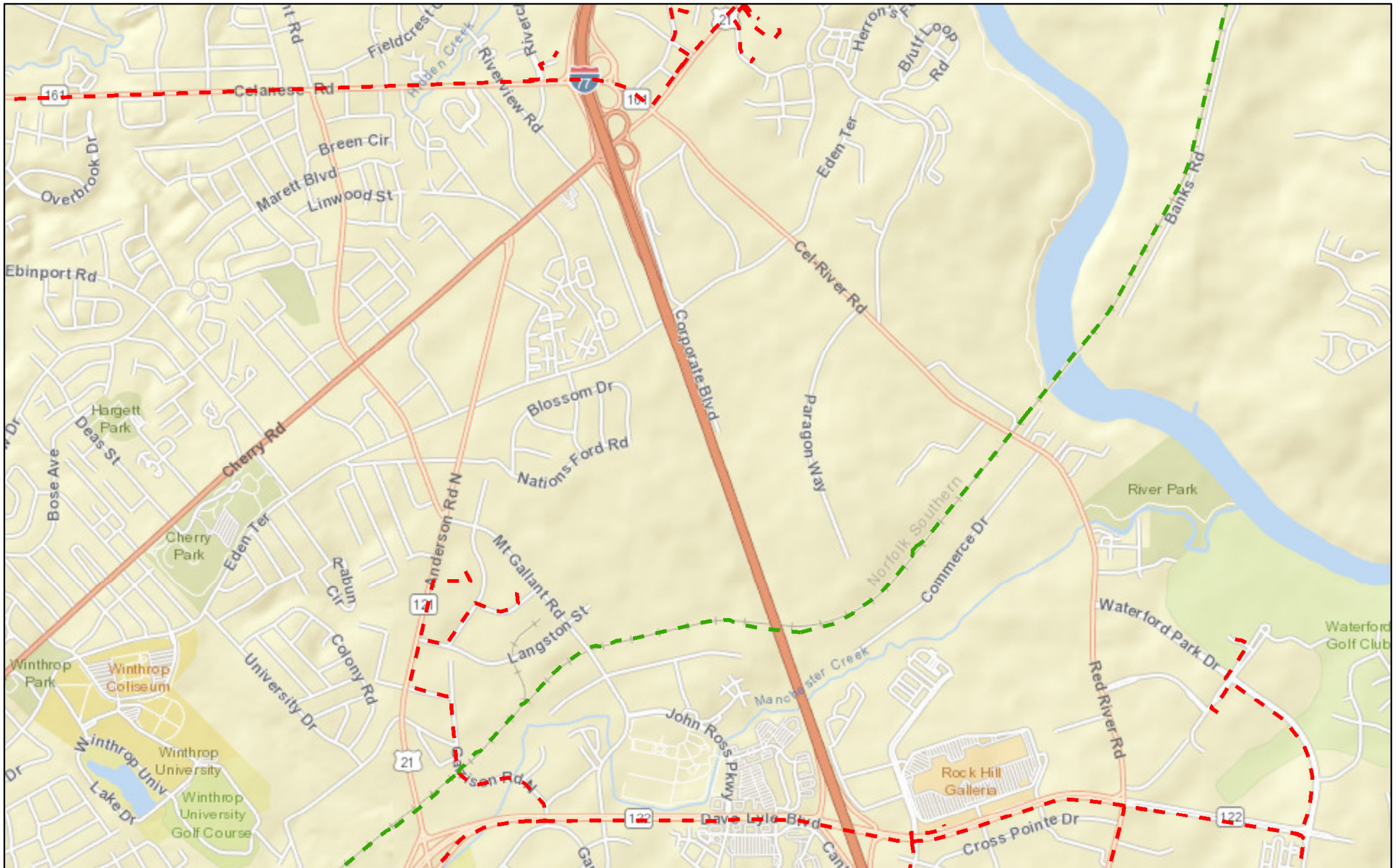
Sincerely,

A handwritten signature in black ink that reads 'Joey Adams'.

Joey Adams
Engineering Associate II
Comporium
803-326-6129
471-A Lakeshore Parkway
Rock Hill, SC 29730

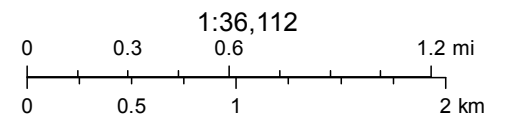
CENTURYLINK/LEVEL 3 COMMUNICATIONS

CenturyLink and Level 3 Network



December 11, 2019

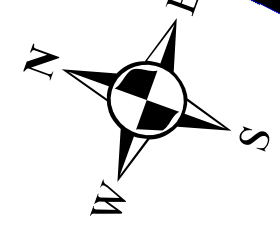
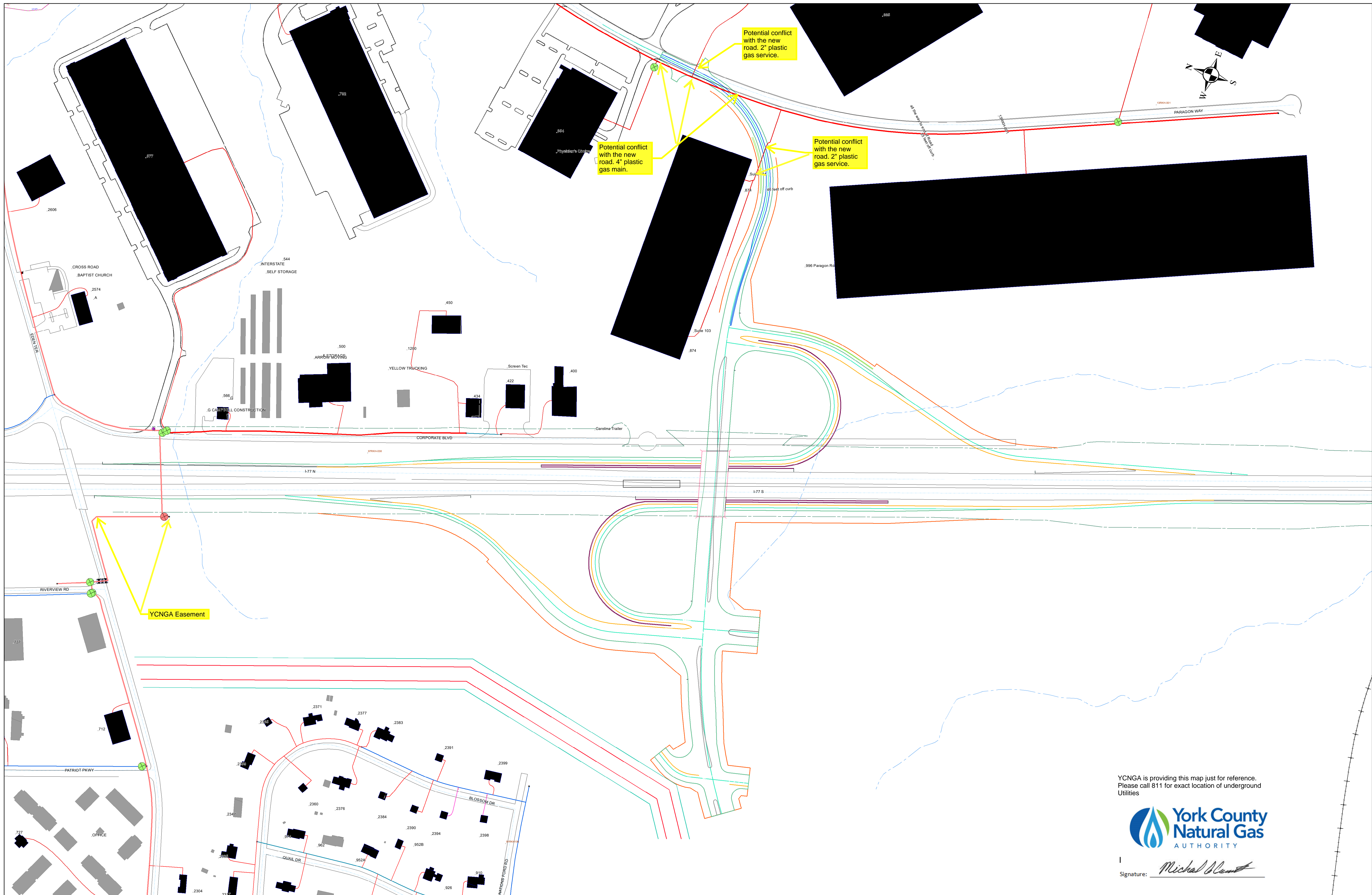
CTL Facilities	Non CTL Facilities	Level 3 Facilities	Non Level 3 Facilities	CLA
Aerial	Aerial	Aerial	Aerial	Aerial
Underground	Underground	Underground	Underground	Underground



Centurylink Data is Highly Confidential and Proprietary.
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCAN,

Persons working in the area covered by this data must contact the statewide Call-Before-You-Dig System to ascertain the location of underground facilities prior to performing any excavation. CenturyLink and Level 3 Data is Highly Confidential and Proprietary
 CenturyLink and Level 3 Communications Data is Confidential

YORK COUNTY NATURAL GAS AUTHORITY



YCNGA is providing this map just for reference.
Please call 811 for exact location of underground
Utilities



Signature: *Michael J. Cant*



ark County
atural Gas
THORITY

Handwritten signature

...st for reference.
...on of underground

FILED-RECEIVED

BOOK PAGE

STATE OF SOUTH CAROLINA
COUNTY OF YORK

Nov 14 12 32 PM '88

GRANT OF EASEMENT

(WITH LIEN SUBORDINATION)

M.H. GARDNER, JR.
C.C.P. & G.S.

For full value received hereof is hereby acknowledged, the undersigned hereby grants, bargains and sells unto York County Natural Gas Authority, its successors and assigns, the full right, privilege and easement to go into, upon, over, under and/or across the below described property and install, reinstall, maintain, repair, replace and otherwise handle as necessary a line or lines of pipe for the transmission of gas or liquid fuels or other like products, it being understood that the grantee shall properly refill any excavation and thereafter see that same is properly maintained and protected against undue settling, and that the grantee shall protect the grantor(s) against any special damage of any sort to any property of the grantor(s) located within the right of way area, and it being further understood that the grantor(s) shall have the right to use the right of way for agrarian or other purposes not inconsistent with the rights hereby transferred to the grantee, except that the grantor(s) shall not construct any building within the right of way area without specific written authorization from the grantee herein, the right of way area affected by this Grant being specifically described and/or delineated by plat or map as hereinafter set forth below.

DESCRIPTION

A right of way ten (10) feet in width and approximately four hundred forty (440) feet in length lying southwest of and adjacent to right-of-way for U. S. Highway I-77 at its southwestern intersection with Eden Terrace Rd., all as more specifically shown and delineated upon a plat entitled "Const. Project Sketch, Hutchison Property," dated November 3, 1988, which is attached hereto and made a part hereof.

SPENCER & SPENCER, P. A.
ATTORNEYS AT LAW
245 E. MAIN STREET
P. O. BOX 790
ROCK HILL, S. C. 29731
TEL. 803 / 227-7191

42

RECORDED
DEED VOL 1061 PG 42
YORK COUNTY, S.C.

In addition to the 10 foot permanent easement, there is hereby granted a temporary easement during construction, for construction purposes only, lying 10 feet on the southern and the western side of the permanent easement.

Said premises are subject to the following lien(s):

None

Any lienholder named above by joining in execution of this instrument hereby waives such lien in favor of and subordinates same to the easement rights granted hereby.

WITNESS the hand and seal of the undersigned on this the 8 day of November, 1988.

T. W. Hutchison (SEAL)
T. W. Hutchison

Signed, sealed and delivered in the presence of:

Nolen L. Brunson
Deborah K. Smith

STATE OF SOUTH CAROLINA)
COUNTY OF YORK) PROBATE

Before me personally appeared Deborah K. Smith, who on oath says that he saw the within named T. W. Hutchison sign, seal and as his, her, their act and deed deliver the within written Grant of Pipeline Easement, and that she with Nolen L. BRUNSON witnessed the due execution thereof.

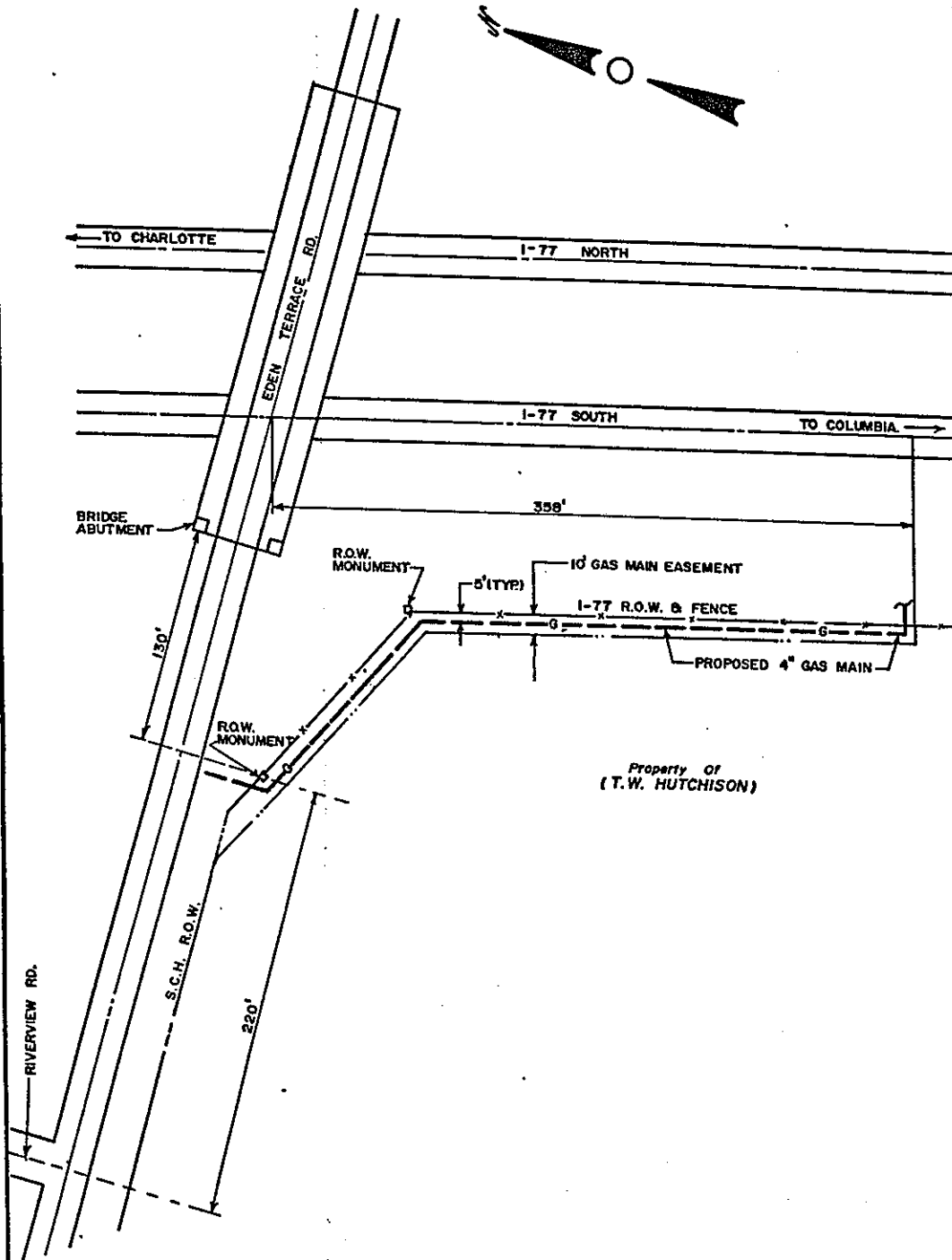
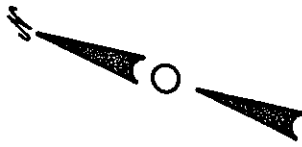
Sworn to and subscribed before me this 8 day of November, 1988.

Nolen L. Brunson
Notary Public for South Carolina
My Commission expires: 11-4-89

Deborah K. Smith

SPENCER & SPENCER, P. A.
ATTORNEYS AT LAW
248 E. MAIN STREET
P. O. BOX 790
ROCK HILL, S. C. 29731
TEL. 803 / 227-7181

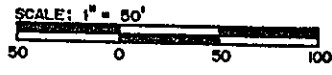
04112



Property of
(T.W. HUTCHISON)

Y.C.N.G.A. CONST. PROJECT SKETCH
 TITLE: HUTCHISON PROPERTY
 (EASEMENT)

CONTRACTOR:	ISSUE DATE: 11-3-88	SHEET 1 of 1
		SCALE, GRAPHIC



SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

Untitled Map

Write a description for your map.

Legend

- 34.951939,-80.97887
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- Feature 5
- Feature 6
- Style13



Google Earth

©2018 Google

1000 ft

Pope Jordan

From: Littlejohn, Steven L. <LittlejoSL@scdot.org>
Sent: Monday, January 13, 2020 1:30 PM
To: Pope Jordan
Cc: Bowman, Michael C.; Littlejohn, Steven L.
Subject: RE: Utility Coordination for I-77 interchange (mile marker 81 in York County, SC)

Pope,

We have done a takeoff on this job and what will be required in the worst case scenario which is if we need to replace the fiber that runs through and extends past either side of the project limits, replace the camera and remove and relocate the overhead message board the estimated cost will be +/- \$650,000.00. please call or email with any questions.

Best regards,

Steve Littlejohn
State ITS Manager
803-737-0256

From: Pope Jordan [mailto:pjordan@olhinc.com]
Sent: Wednesday, January 08, 2020 2:35 PM
To: Littlejohn, Steven L.
Subject: Utility Coordination for I-77 interchange (mile marker 81 in York County, SC)

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Steve,

Following up on this e-mail below from December. I just spoke to Matthew Pelton and he directed me to you. The main thing we need to know is if you think SCDOT's fiber optic etc utilities in the area will conflict with the project, and if so how much it might cost to resolve the conflict. A rough estimate would be fine; this is still in the early stages. I'm attaching both a PDF and a Google Earth file with the design of the project.

Also, here is the SCDOT fiber optic line (in orange) superimposed onto the proposed plans, according to the SUE survey:

DATE: 9/24/69
 SURVEYED: []
 PLANNED: []
 CHECKED: []
 BY: []
 NO. OF WAYS CHECKED: []

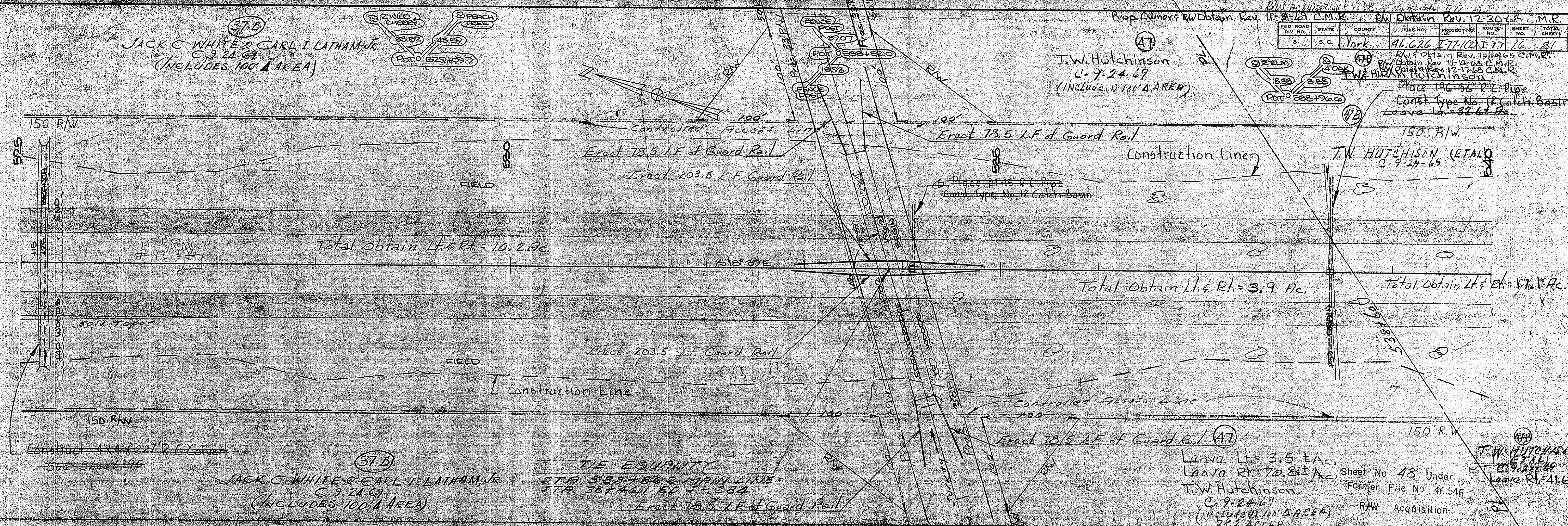
DATE: 9/24/69
 SURVEYED: []
 GRADES CHECKED: []
 BY: []
 NO. OF STRUCTURE NOTING CHECKED: []

FILE NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
46.626	N.Y.	W. Co.	11-17-12	11-17	16	31	

(37-B)
 JACK C. WHITE & CARL I. LATHAM, JR.
 C. 9.24.69
 (INCLUDES 100' AREA)

(47)
 T.W. Hutchinson
 C. 9.24.69
 (INCLUDES 100' AREA)

T.W. HUTCHINSON (ET AL)
 C. 9.24.69



Total Obtain Lt & Rt = 10.2 Ac.

Total Obtain Lt & Rt = 3.9 Ac.

Total Obtain Lt & Rt = 17.1 Ac.

Construct 4x4x22' R.C. Culvert
 See Sheet 95

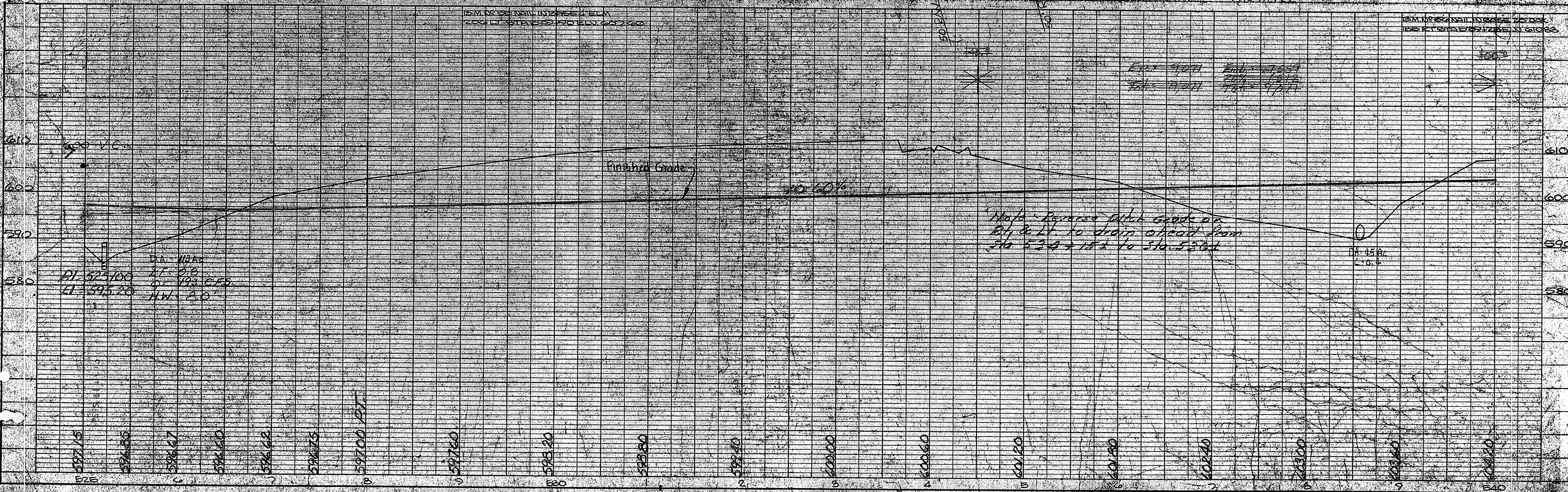
(37-B)
 JACK C. WHITE & CARL I. LATHAM, JR.
 C. 9.24.69
 (INCLUDES 100' AREA)

TIE EQUANTITY
 STA. 533+86.2 MAIN LINE
 STA. 38+46.1 ED. 1-384
 Erect 18.5 LF of Guard Rail

(47)
 Leave Lt = 3.5 ± Ac.
 Leave Rt = 70.8 ± Ac.
 T.W. Hutchinson
 C. 9.24.69
 (INCLUDES 100' AREA)
 782 ACER

Sheet No 48 Under
 Former File No 46.546
 RAW Acquisition

(47)
 T.W. HUTCHINSON
 C. 9.24.69
 Leave Rt = 41.6 Ac



PI 597.100
 LI 595.20
 HA 113.00
 AI 0.8
 DI 193.00
 HW 8.0

Sta 534+15 to Sta 536+1
 Make Proposed ditch grade on Lt & Rt to drain ahead from Sta 534+15 to Sta 536+1

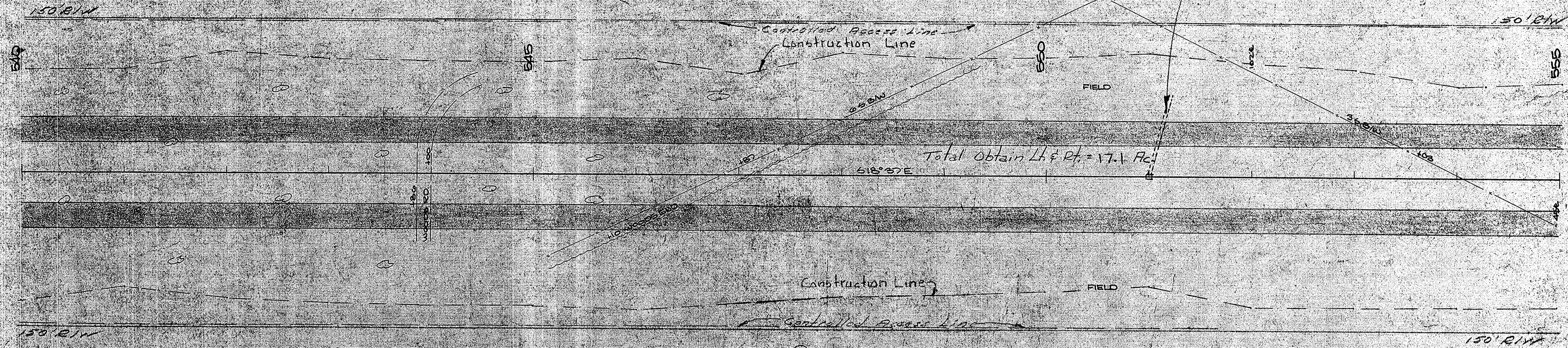
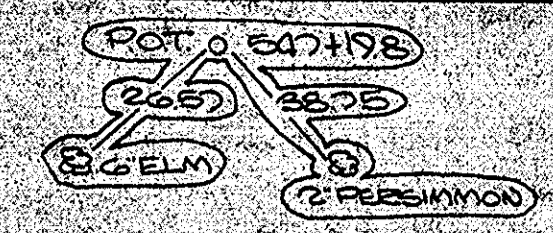
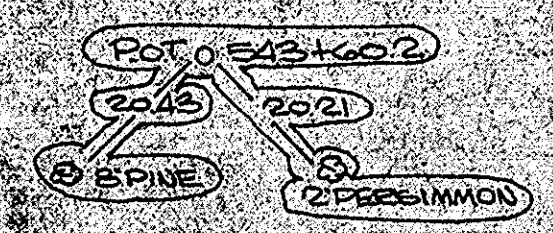
DATE	
BY	
CHECKED	
APPROVED	
NO.	

DATE	
BY	
CHECKED	
APPROVED	
NO.	

Sheet No 49 Under
Former File No 46,516

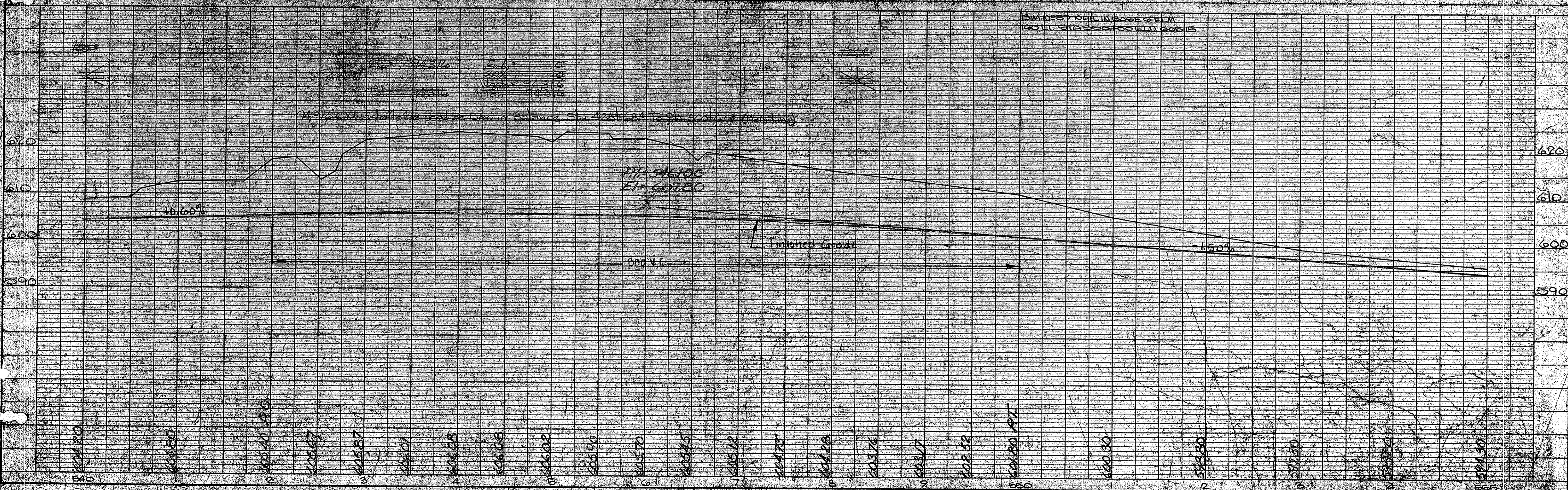
FED. ROAD DIV. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	York	46,626	77-10	77-17	21	

-R/W Acquisition
Place 8" 15' R.C. Pipe on 15" skew Canal type No. 12 Catch Basin
Prop. Owner & RW Obtain Rev. 11-3-69 C.M.E.



T.W. HUTCHISON, ETAL
8-9-24-69

T.W. HUTCHISON, ETAL
8-9-24-69



R/W 11-875 C.M.R.

FED. ROAD DIST. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	Park	11-626	11-77-101-77	18	31	

Prop. Obtain & R/W Obtain Rev. 11-875 C.M.R.
 R/W Obtain Rev. 10-10-68 C.M.R.
 R/W Obtain Rev. 11-14-68 C.M.R.
 R/W Obtain Rev. 12-17-68 C.M.R.
 R/W Obtain Rev. 12-30-68 C.M.R.

(47B)
 T.W. HUTCHISON
 C-9-24-69

Place 88-15 R.C. Pipe
 on 15" 6" Const. Type
 No. 12 Catch Basin

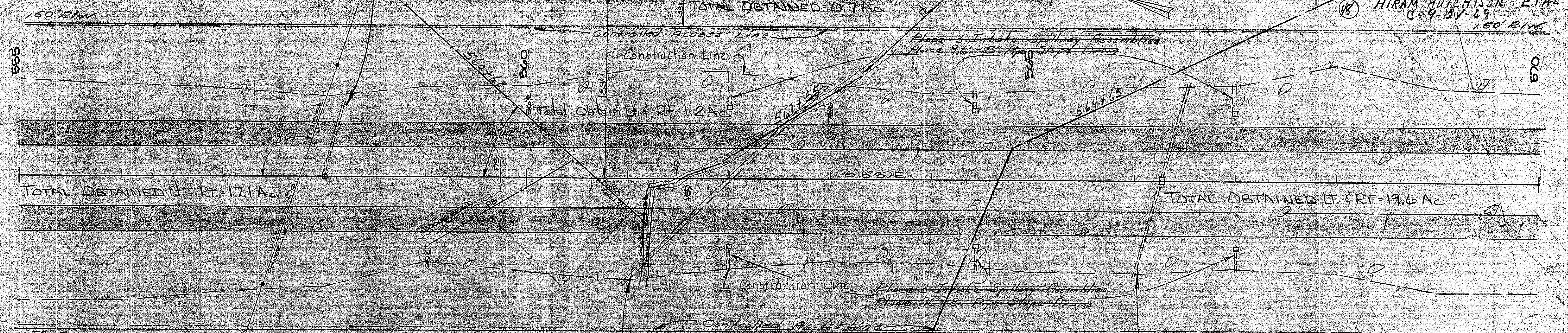
CELANESE CORPORATION
 D. 2-6-69

Leave 633+Ac.

(47B)
 T.W. HUTCHISON (ETAL)
 C-9-24-69

Leave Lt. = 11.7 Ac.

(48) HIRAM HUTCHISON ETAL
 C-9-24-69



(47B)
 T.W. HUTCHISON (ETAL)
 C-9-24-69

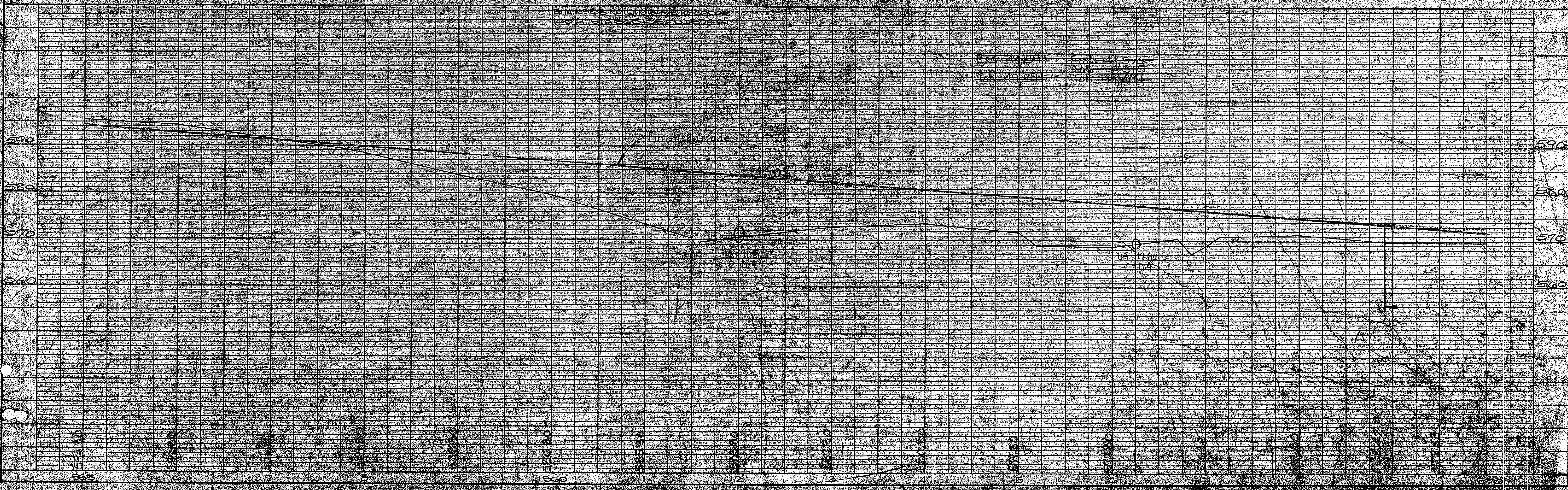
Place 282-12 R.C. Pipe
 on 15" 6" Const. Type

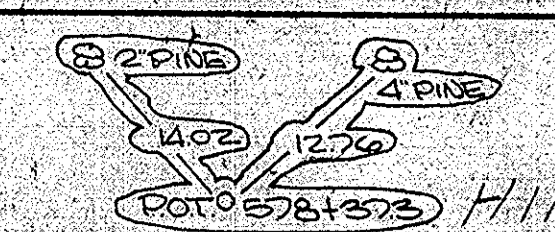
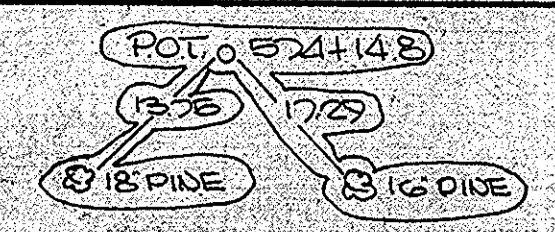
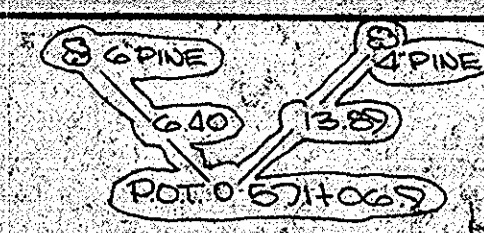
Place 228-24 R.C. Pipe
 on 15" 6" Const. Type
 No. 12 Catch Basin

(48) HIRAM HUTCHISON ETAL
 C-9-24-69
 Leave Lt. = 18.3 Ac.
 Leave Rt. = 12.1 Ac.
 Sheet No 50 Under
 Former File No. 18.575
 R/W Acquisition

PLAN
 SURVEYED BY T.W. HUTCHISON
 ALIGNMENT CHECKED BY T.W. HUTCHISON
 DATE OF PLAN CHECKED 9-24-69

PROFILE
 GRADES BY T.W. HUTCHISON
 DATE OF PROFILE 9-24-69
 STRUCTURE COUNTY 11-875





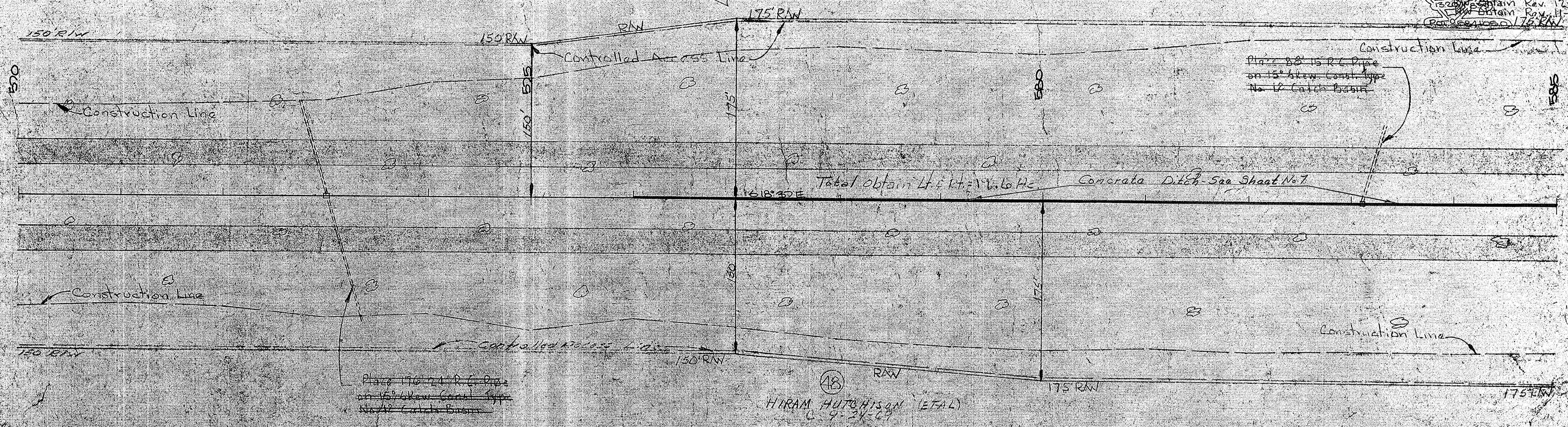
FED. ROAD DIV. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
3	S.C.	York	46,626	77(10)	E-77	19	81

Sheet 51
 Plan No. 46,516
 RAW Acquisition

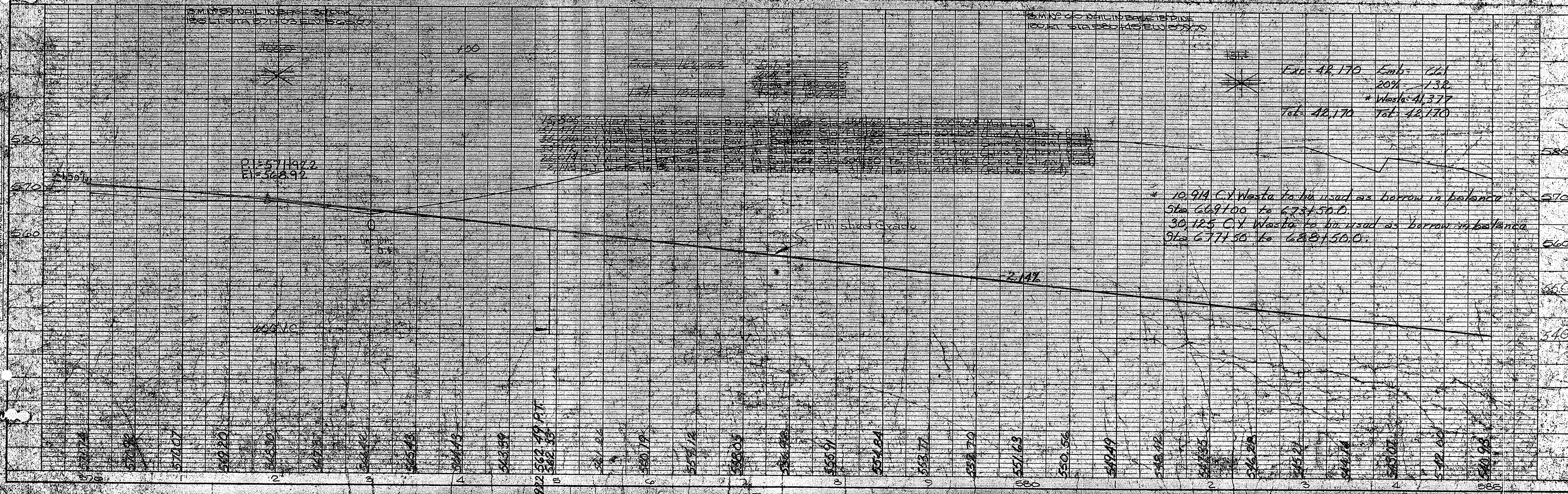
HIRAM HUTCHISON (ETAL)
 9-24-69

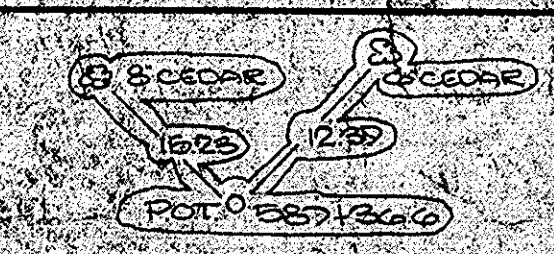
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 R/W Obtain Rev. 11-14-68 C.M.P.
 R/W Obtain Rev. 12-17-68 C.M.P.
 R/W Obtain Rev. 12-30-68 C.M.P.
 R/W Obtain Rev. 11-3-69 C.M.P.

DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____

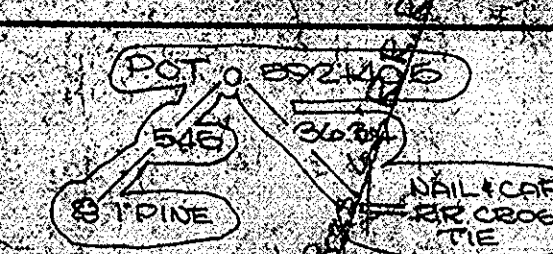


DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____



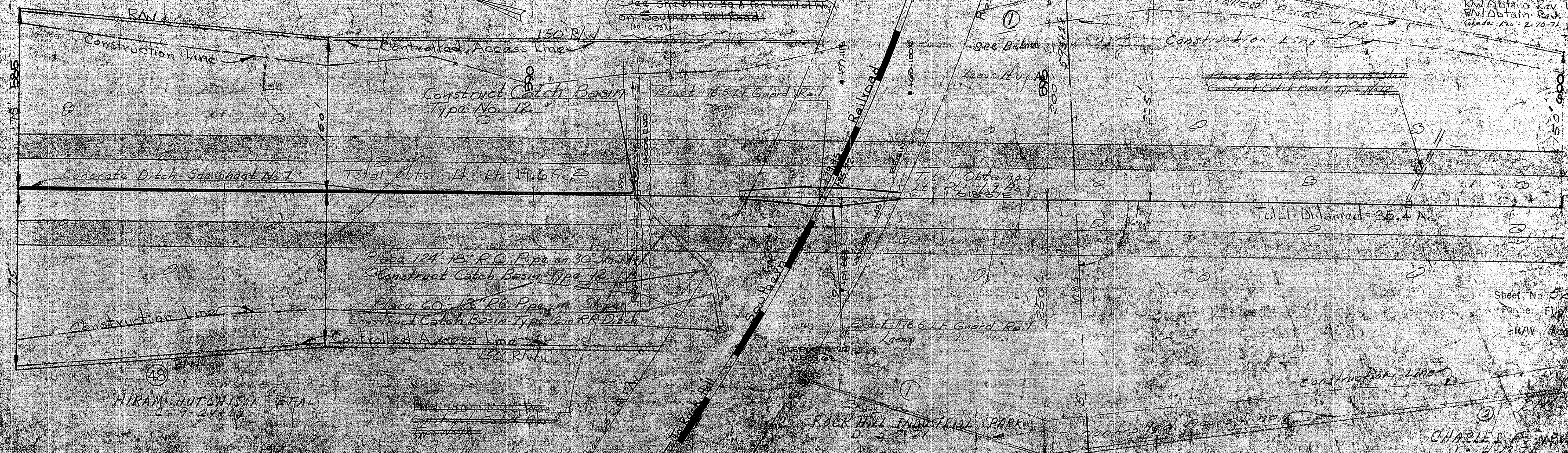


HIRAM HUTCHINSON (ETAL)
C. 9-24-49



FED. ROAD DIV. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
5	S. C.	Rock	14,626	ETH/CT-17	20	31	

CHARLES A. NEW
C. 4-13-71
RW Obtain Rev. 10-14-68 C.M.P.
RW Obtain Rev. 11-14-68 C.M.P.
RW Obtain Rev. 12-14-68 C.M.P.
RW Obtain Rev. 12-30-68 C.M.P.
RW Obtain Rev. 11-3-67 C.M.P.
Grade Plan - 2-10-71



HIRAM HUTCHINSON (ETAL)
C. 9-24-49

CHARLES A. NEW
C. 4-13-71



BM 5901.02
Elev. 529.34

APPENDIX D

POTENTIAL UTILITY CONFLICTS LOCATION MAP

POTENTIAL UTILITY CONFLICTS LOCATION MAP



LEGEND

- A POTENTIAL CONFLICT LOCATION
- CONTROLLED ACCESS
- PRESENT RIGHT-OF-WAY
- ASPHALT PAVEMENT
- PROPOSED BRIDGE

NOTE
POTENTIAL CONFLICT LOCATION LETTER (IN RED) CORRESPONDS WITH THE POTENTIAL CONFLICT OF UTILITIES SECTION IN THIS REPORT.

