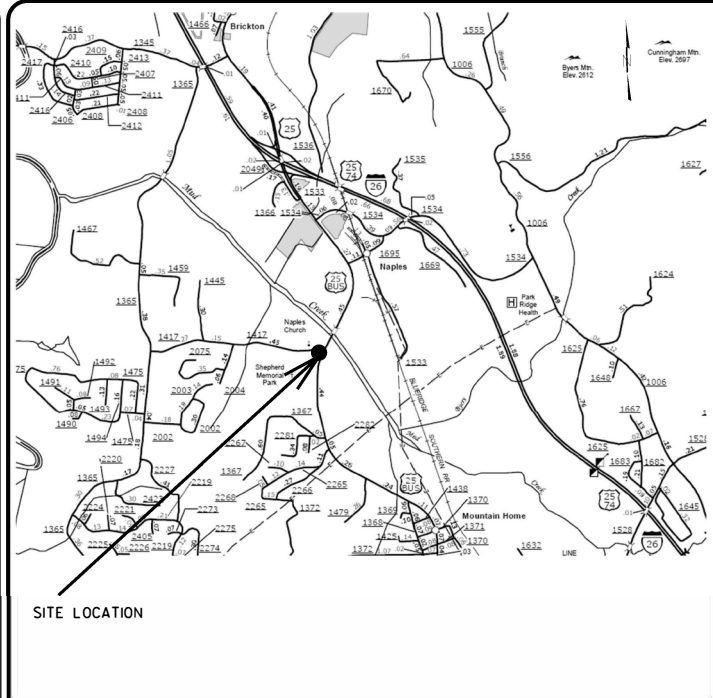


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WBS: 15314.1045010



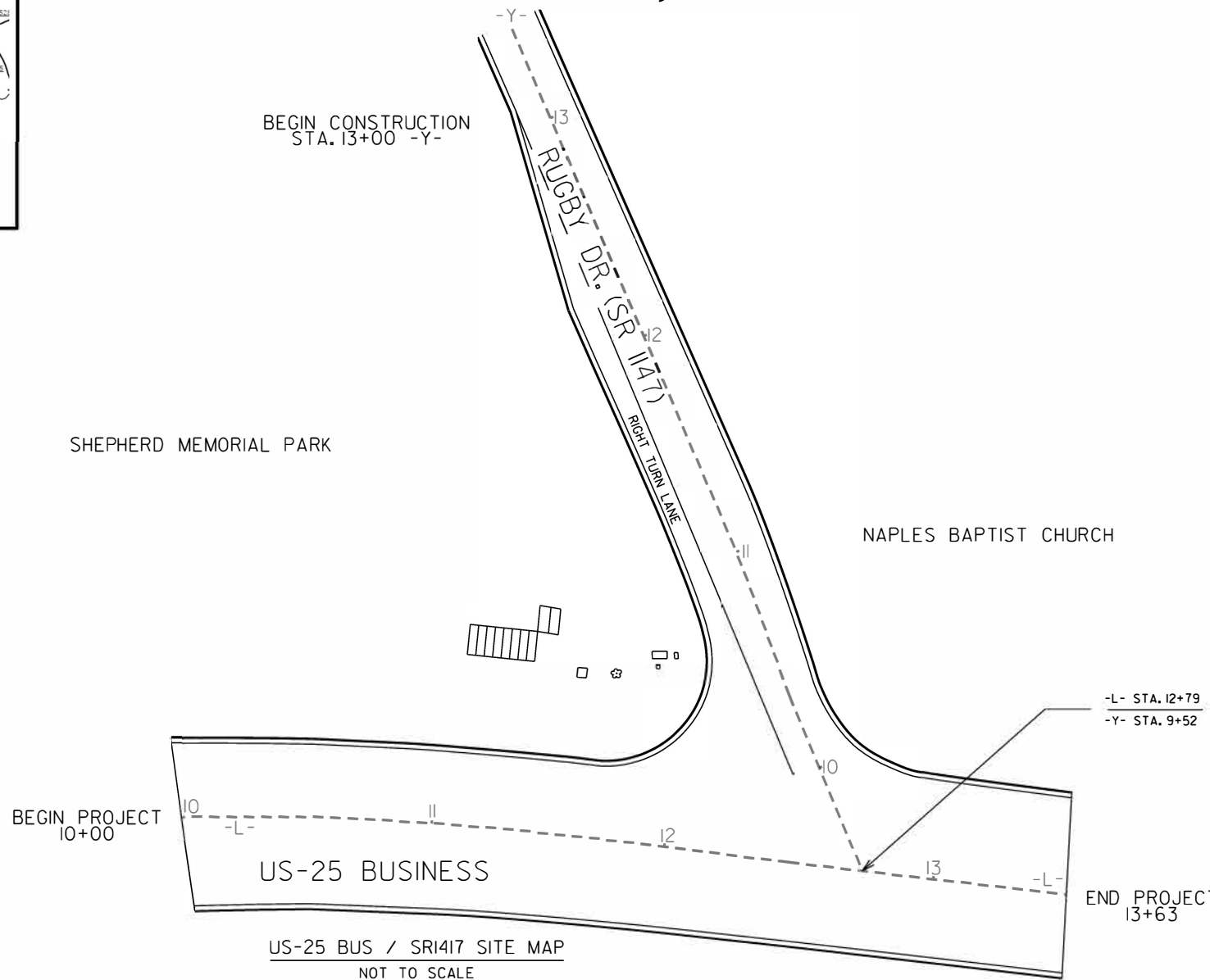
US-25 BUS / SRI417 SITE MAP  
NOT TO SCALE

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**HENDERSON COUNTY**

**LOCATION: US-25 BUS / SRI417 (RUGBY DR)**

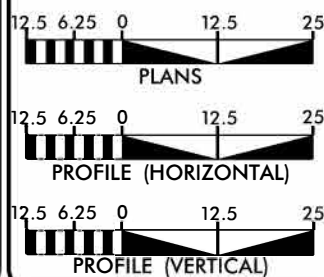
**TYPE OF WORK: DRAINAGE, EROSION CONTROL & TRAFFIC CONTROL**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DN00726	1	6
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
WBS: 15314.1045010	-		



US-25 BUS / SRI417 SITE MAP  
NOT TO SCALE

**GRAPHIC SCALES**



**DESIGN DATA**

ADT =  
ADT =  
K = %  
D = %  
T = % \*  
V = MPH  
\* TTST = DUAL  
FUNC CLASS =  
TIER

**PROJECT LENGTH**

APPROXIMATELY 0.069 MILES

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

L.R. Watkins, PE  
PROJECT ENGINEER

LETTING DATE:  
SEPTEMBER 22, 2020

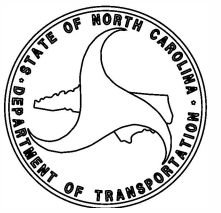
R.H. Darnell  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.



09/08/2020

CONTRACT: DN00726

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**INDEX OF SHEETS**

<u>SHEET NUMBER:</u>	<u>SHEET:</u>
1	TITLE SHEET
1A	INDEX OF SHEETS
1B	CONVENTIONAL SYMBOLS
3	DRAINAGE SUMMARIES
4	PLAN SHEET
EC1	EROSION CONTROL PLANS

**GENERAL NOTES**

GENERAL NOTES:      2018 SPECIFICATIONS  
EFFECTIVE: 01-16-2018

- 1 ALL OPERATIONS SHALL BE ACCOMPLISHED WITHIN EXISTING NCDOT RIGHT OF WAY.
- 2 CARE SHALL BE TAKEN TO PREVENT DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THESE UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 3 THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY.
- 4 THE CONTRACTOR SHALL USE EXTREME CAUTION NOT TO DISTURB GRAVESITES DURING OPERATIONS. IF DAMAGE DOES OCCUR CONTACT ENGINEER IMMEDIATELY.
- 5 THE CONTRACTOR SHALL MAKE AN ATTEMPT WITHIN REASON TO STOP OPERATIONS DURING A SCHEDULED FUNERAL SERVICE AT SHEPHERD MEMORIAL PARK.
- 6 SHORING TYPE AND INSTALLATION METHOD SHALL BE UP TO THE CONTRACTORS DISCRETION AS LONG AS THE CEMETERY/UTILITIES ARE ADEQUATELY STABILIZED. METHOD DETERMINED SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL SHORING OPERATIONS SHALL TAKE PLACE WITHIN THE CONSTRUCTION FENCE. DO NOT EXCEED RIGHT OF WAY.
- 7 BE ADVISED THAT OVERHEAD UTILITIES ARE PRESENT ON SITE. IF DAMAGE OCCURS CONTACT THE ENGINEER IMMEDIATELY.
- 8 AT NO TIME SHALL THE CONTRACTOR STORE MATERIALS OR PARK EQUIPMENT AND VEHICLES ON THE PROPERTY BELONGING TO NAPLES BAPTIST CHURCH OR THE PROPERTY OF SHEPHERD MEMORIAL PARK.
- 9 CLEARING SHALL TAKE PLACE IN ACCORDANCE WITH METHOD II STANDARDS.

**LIST OF ROADWAY STANDARDS**

2018 ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" - Highway Design Branch - N.C. Department of Transportation - Raleigh, N.C., dated January 16, 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	METHOD OF CLEARING - METHOD II
DIVISION 8 - INCIDENTALS	
840.17	CONCRETE GRATED DROP INLET TYPE "A"
840.26	BRICK GRATED DROP INLET TYPE "A"
DIVISION II - WORK ZONE TRAFFIC CONTROL	
II01.01	WORK ZONE ADVANCE WARNING SIGNS
II01.02	TEMPORARY LANE CLOSURES
II0.01	STATIONARY WORK ZONE SIGNS
II0.02	PORTABLE WORK ZONE SIGNS
II35.01	CONES
DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPEMENT	
1607.01	GRAVEL CONSTRUCTION ENTRANCE
1630.06	SPECIAL STILLING BASIN
1632.03	ROCK INLET SEDIMENT TRAP TYPE "C"
DIVISION 18 - GEOTECHNICAL ENGINEERING	
1801.01	STANDARD TEMPORARY SHORING

UTILITY OWNERS ON THIS PROJECT ARE:

AT&T TELEPHONE COMPANY (COMPORIUM) (828-553-9599),  
PSNC ENERGY (877-776-2427),  
DUKE ENERGY (800-769-3766),  
HENDERSONVILLE WATER AND SEWER (828-697-3073)  
MORRIS BROADBAND CABLE (828-692-3278)

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

12/2/2015

# STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

## BOUNDARIES AND PROPERTY:

State Line	
County Line	
Township Line	
City Line	
Reservation Line	
Property Line	
Existing Iron Pin	
Computed Property Corner	
Property Monument	
Parcel/Sequence Number	
Existing Fence Line	
Proposed Woven Wire Fence	
Proposed Chain Link Fence	
Proposed Barbed Wire Fence	
Existing Wetland Boundary	
Proposed Wetland Boundary	
Existing Endangered Animal Boundary	
Existing Endangered Plant Boundary	
Existing Historic Property Boundary	
Known Contamination Area: Soil	
Potential Contamination Area: Soil	
Known Contamination Area: Water	
Potential Contamination Area: Water	
Contaminated Site: Known or Potential	

## BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	
Sign	
Well	
Small Mine	
Foundation	
Area Outline	
Cemetery	
Building	
School	
Church	
Dam	

## HYDROLOGY:

Stream or Body of Water	
Hydro, Pool or Reservoir	
Jurisdictional Stream	
Buffer Zone 1	
Buffer Zone 2	
Flow Arrow	
Disappearing Stream	
Spring	
Wetland	
Proposed Lateral, Tail, Head Ditch	
False Sump	

## RAILROADS:

Standard Gauge	
RR Signal Milepost	
Switch	
RR Abandoned	
RR Dismantled	

## RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	
Primary Horiz Control Point	
Primary Horiz and Vert Control Point	
Exist Permanent Easement Pin and Cap	
New Permanent Easement Pin and Cap	
Vertical Benchmark	
Existing Right of Way Marker	
Existing Right of Way Line	
New Right of Way Line	
New Right of Way Line with Pin and Cap	
New Right of Way Line with Concrete or Granite RW Marker	
New Control of Access Line with Concrete CA Marker	
Existing Control of Access	
New Control of Access	
Existing Easement Line	
New Temporary Construction Easement	
New Temporary Drainage Easement	
New Permanent Drainage Easement	
New Permanent Drainage / Utility Easement	
New Permanent Utility Easement	
New Temporary Utility Easement	
New Aerial Utility Easement	

## ROADS AND RELATED FEATURES:

Existing Edge of Pavement	
Existing Curb	
Proposed Slope Stakes Cut	
Proposed Slope Stakes Fill	
Proposed Curb Ramp	
Existing Metal Guardrail	
Proposed Guardrail	
Existing Cable Guiderail	
Proposed Cable Guiderail	
Equality Symbol	
Pavement Removal	

## VEGETATION:

Single Tree	
Single Shrub	

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

Hedge	
Woods Line	
Orchard	
Vineyard	

## EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	
Bridge Wing Wall, Head Wall and End Wall	
MINOR:	
Head and End Wall	
Pipe Culvert	
Footbridge	
Drainage Box: Catch Basin, DI or JB	
Paved Ditch Gutter	
Storm Sewer Manhole	
Storm Sewer	

## UTILITIES:

POWER:	
Existing Power Pole	
Proposed Power Pole	
Existing Joint Use Pole	
Proposed Joint Use Pole	
Power Manhole	
Power Line Tower	
Power Transformer	
U/G Power Cable Hand Hole	
H-Frame Pole	
U/G Power Line LOS B (S.U.E.*)	
U/G Power Line LOS C (S.U.E.*)	
U/G Power Line LOS D (S.U.E.*)	

## TELEPHONE:

Existing Telephone Pole	
Proposed Telephone Pole	
Telephone Manhole	
Telephone Pedestal	
Telephone Cell Tower	
U/G Telephone Cable Hand Hole	
U/G Telephone Cable LOS B (S.U.E.*)	
U/G Telephone Cable LOS C (S.U.E.*)	
U/G Telephone Cable LOS D (S.U.E.*)	
U/G Telephone Conduit LOS B (S.U.E.*)	
U/G Telephone Conduit LOS C (S.U.E.*)	
U/G Telephone Conduit LOS D (S.U.E.*)	
U/G Fiber Optics Cable LOS B (S.U.E.*)	
U/G Fiber Optics Cable LOS C (S.U.E.*)	
U/G Fiber Optics Cable LOS D (S.U.E.*)	

## WATER:

Water Manhole	
Water Meter	
Water Valve	
Water Hydrant	
U/G Water Line LOS B (S.U.E.*)	
U/G Water Line LOS C (S.U.E.*)	
U/G Water Line LOS D (S.U.E.*)	
Above Ground Water Line	

## TV:

TV Pedestal	
TV Tower	
U/G TV Cable Hand Hole	
U/G TV Cable LOS B (S.U.E.*)	
U/G TV Cable LOS C (S.U.E.*)	
U/G TV Cable LOS D (S.U.E.*)	
U/G Fiber Optic Cable LOS B (S.U.E.*)	
U/G Fiber Optic Cable LOS C (S.U.E.*)	
U/G Fiber Optic Cable LOS D (S.U.E.*)	

## GAS:

Gas Valve	
Gas Meter	
U/G Gas Line LOS B (S.U.E.*)	
U/G Gas Line LOS C (S.U.E.*)	
U/G Gas Line LOS D (S.U.E.*)	
Above Ground Gas Line	

## SANITARY SEWER:

Sanitary Sewer Manhole	
Sanitary Sewer Cleanout	
U/G Sanitary Sewer Line	
Above Ground Sanitary Sewer	
SS Forced Main Line LOS B (S.U.E.*)	
SS Forced Main Line LOS C (S.U.E.*)	
SS Forced Main Line LOS D (S.U.E.*)	

## MISCELLANEOUS:

Utility Pole	
Utility Pole with Base	
Utility Located Object	
Utility Traffic Signal Box	
Utility Unknown U/G Line LOS B (S.U.E.*)	
U/G Tank; Water, Gas, Oil	
Underground Storage Tank, Approx. Loc.	
A/G Tank; Water, Gas, Oil	
Geoenvironmental Boring	
U/G Test Hole LOS A (S.U.E.*)	
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
 STATEWIDE

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout.  
 See "Standard Specifications For Roads and Structures, Section 300-5".

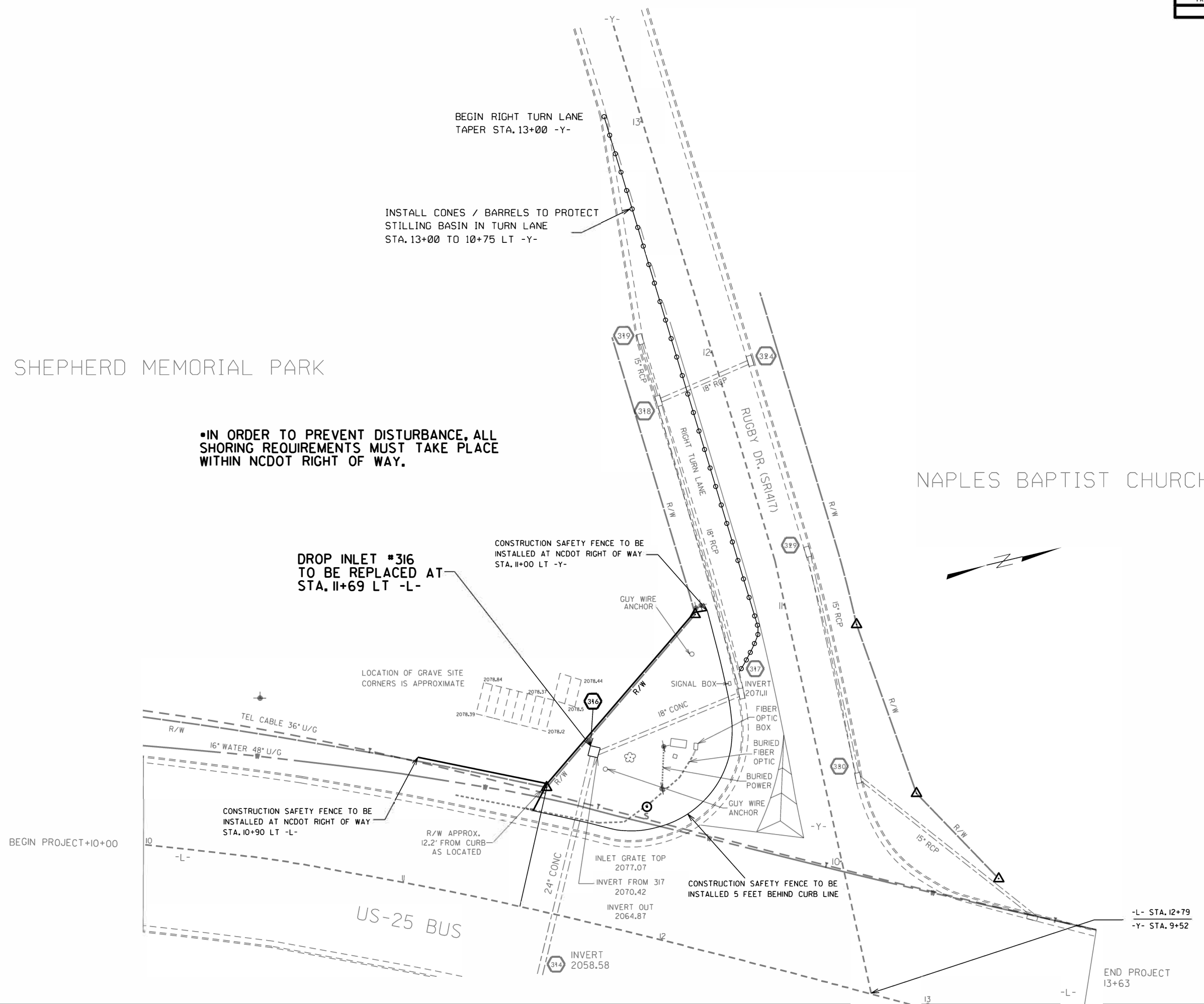
**LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)**

STATION	SIZE	THICKNESS OR GAUGE	LOCATION (L.R.T. OR C.U.)	STRUCTURE NO. FROM TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC)							C.S. PIPE							R.C. PIPE (CLASS III)							R.C. PIPE (CLASS IV)							ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE)	QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B')	PER EACH (0' THRU 5.0') 5.0' THRU 10.0' 10.0' AND ABOVE	TYPE OF GRATE F G	FRAME, GRATES AND HOOD STANDARD 840.03	CONCRETE TRANSITIONAL SECTION CATCH BASIN DROP INLET	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. 'B' C.Y. STD. 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS	ABBREVIATIONS							
									12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"	30"	36"	42"	48"	12"	15"	18"	24"												30"	36"	42"	48"	A	B	C.B.	N.D.I.
									DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	.064	.064	.064	.079	.109	.109																																					
11+69	LT		316		2077.07	2070.42	2064.87																																REPLACEMENT OF FAILED EXISTING 5' X 5' D.I.																
11+69	LT		316	317																10																		PIPE LISTED AS A CONTINGENCY																	
11+69	LT		316	314																10																	PIPE LISTED AS A CONTINGENCY																		

SHEPHERD MEMORIAL PARK

•IN ORDER TO PREVENT DISTURBANCE, ALL SHORING REQUIREMENTS MUST TAKE PLACE WITHIN NCDOT RIGHT OF WAY.

NAPLES BAPTIST CHURCH

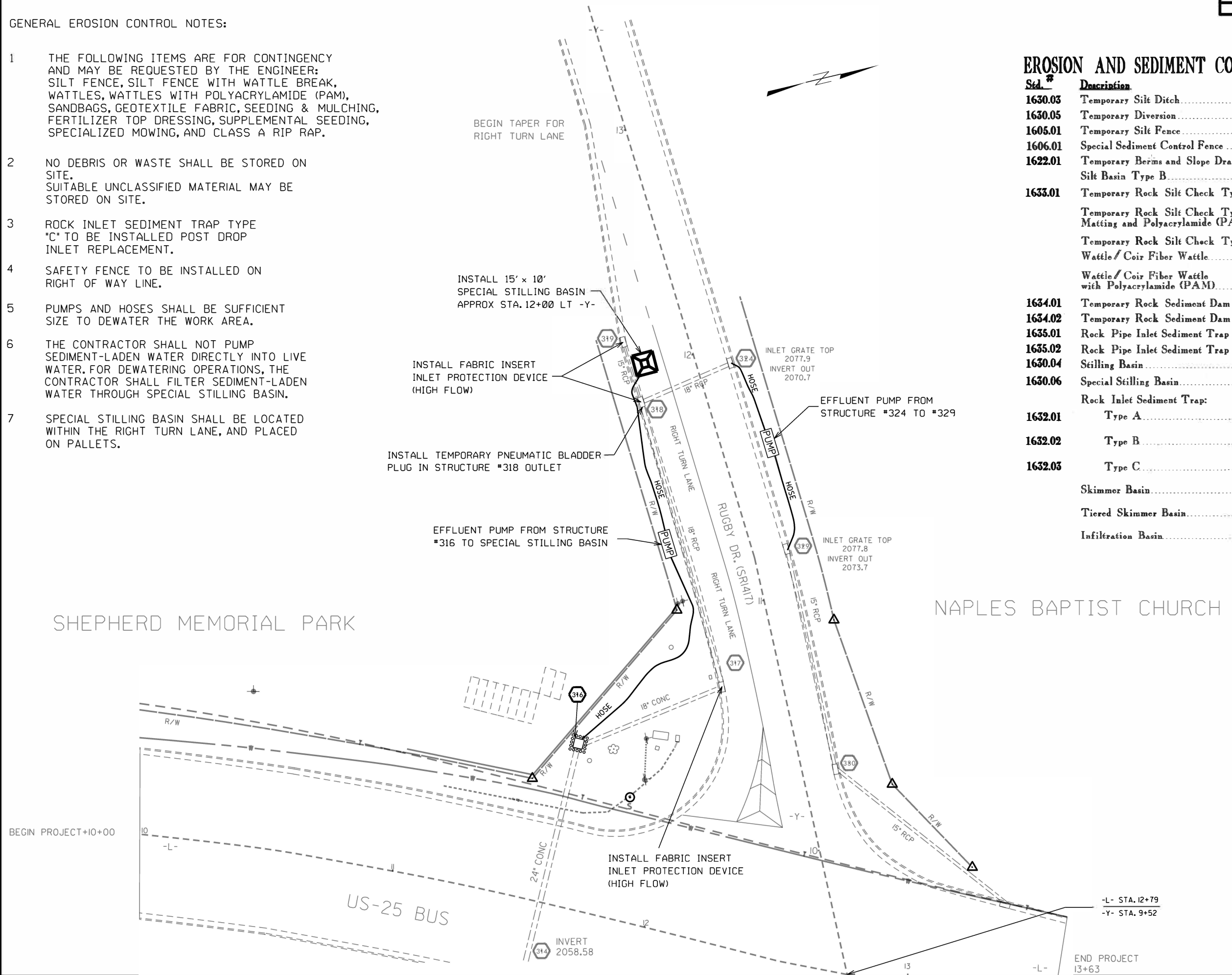


GENERAL EROSION CONTROL NOTES:

- 1 THE FOLLOWING ITEMS ARE FOR CONTINGENCY AND MAY BE REQUESTED BY THE ENGINEER: SILT FENCE, SILT FENCE WITH WATTLE BREAK, WATTLES, WATTLES WITH POLYACRYLAMIDE (PAM), SANDBAGS, GEOTEXTILE FABRIC, SEEDING & MULCHING, FERTILIZER TOP DRESSING, SUPPLEMENTAL SEEDING, SPECIALIZED MOWING, AND CLASS A RIP RAP.
- 2 NO DEBRIS OR WASTE SHALL BE STORED ON SITE. SUITABLE UNCLASSIFIED MATERIAL MAY BE STORED ON SITE.
- 3 ROCK INLET SEDIMENT TRAP TYPE "C" TO BE INSTALLED POST DROP INLET REPLACEMENT.
- 4 SAFETY FENCE TO BE INSTALLED ON RIGHT OF WAY LINE.
- 5 PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
- 6 THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO LIVE WATER. FOR DEWATERING OPERATIONS, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH SPECIAL STILLING BASIN.
- 7 SPECIAL STILLING BASIN SHALL BE LOCATED WITHIN THE RIGHT TURN LANE, AND PLACED ON PALLETS.

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	



-L- STA. 12+79  
-Y- STA. 9+52

END PROJECT  
13+63