

Drainage Replacement & Improvements

for City of Milledgeville

Baldwin County, Georgia

April 17, 2023

SHEET INDEX:

2022-172PRJ

DESCRIPTION	SHEET
1. DRAINAGE PLAN & PROFILE	1
2. DRAINAGE PLAN & PROFILE	2
3. EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN	3
4. EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN	4
5. DETAILS	5
6. DETAILS	6

2022-173PRJ

DESCRIPTION	SHEET
1. DRAINAGE PLAN & PROFILE	7
2. EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN	8
3. DETAILS	9
4. DETAILS	10

2023-05PRJ

DESCRIPTION	SHEET
1. STONERIDGE DR & PEBBLERIDGE RD DRAINAGE PLAN	11
2. ALLISON DR DRAINAGE PLAN	12
3. RIVER RIDGE RD DRAINAGE PLAN	13
4. THOMAS ST & MONTGOMERY ST DRAINAGE PLAN	14
5. DETAILS	15 - 18

GENERAL NOTES

- ALL EXISTING UTILITIES SHOWN ARE LOCATED FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACTUAL FIELD LOCATION AND PROTECTION OF EXISTING UTILITIES. OVERHEAD LINES ARE NOT SHOWN FOR CLARITY.
- ALL DISTURBED AREAS TO BE REVEGETATED IMMEDIATELY AFTER CONSTRUCTION, IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PROPERTY CORNERS, RIGHT OF WAY MONUMENTS, SIGNS OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
- ALL TRAFFIC AND SIGNAGE CONTROL SHALL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL MANUAL GUCC, CURRENT EDITION.
- ALL ROADSIDE DITCHES THAT ARE DISTURBED AS A RESULT OF THIS PROJECT MUST BE RE-ESTABLISHED TO ENSURE POSITIVE DRAINAGE.

24 HOUR CONTACT

CITY OF MILLEDGEVILLE
CONTACT: TIMOTHY THOMAS
(PUBLIC WORKS DIRECTOR)
1280 WEST CHARLTON STREET
MILLEDGEVILLE, GA 31061
TEL: (478) 414-4037
tthomas@milledgevillega.us

PRIMARY PERMITTEE

CITY OF MILLEDGEVILLE
CONTACT: HANK GRIFFETH
(CITY MANAGER)
1280 WEST CHARLTON STREET
MILLEDGEVILLE, GA 31061
TEL: (478) 414-4037
hgriffeth@milledgevillega.us

OWNER/AGENT

CITY OF MILLEDGEVILLE
CONTACT: HANK GRIFFETH
(CITY MANAGER)
1280 WEST CHARLTON STREET
MILLEDGEVILLE, GA 31061
TEL: (478) 414-4037
hgriffeth@milledgevillega.us

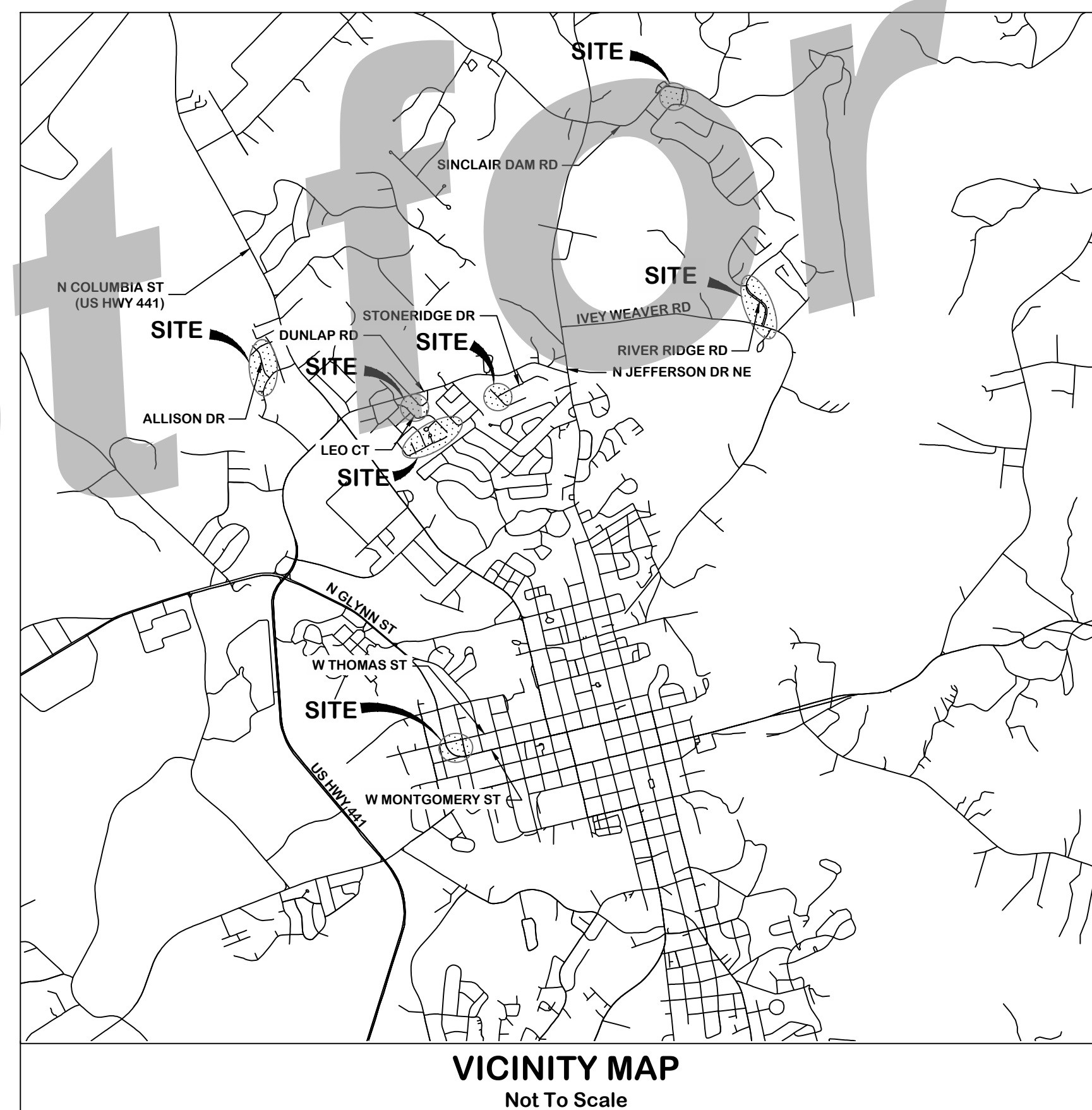


**SIMONTON
ENGINEERING**
1050 PARKSIDE COMMONS SUITE 101
GREENSBORO, GA 30642 • TEL: (706) 454-0870
www.simontonengineering.com

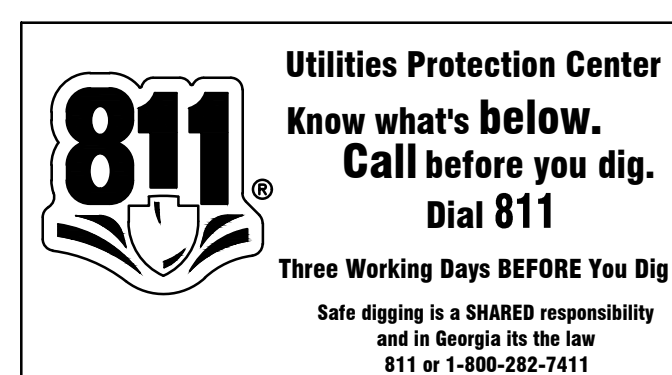


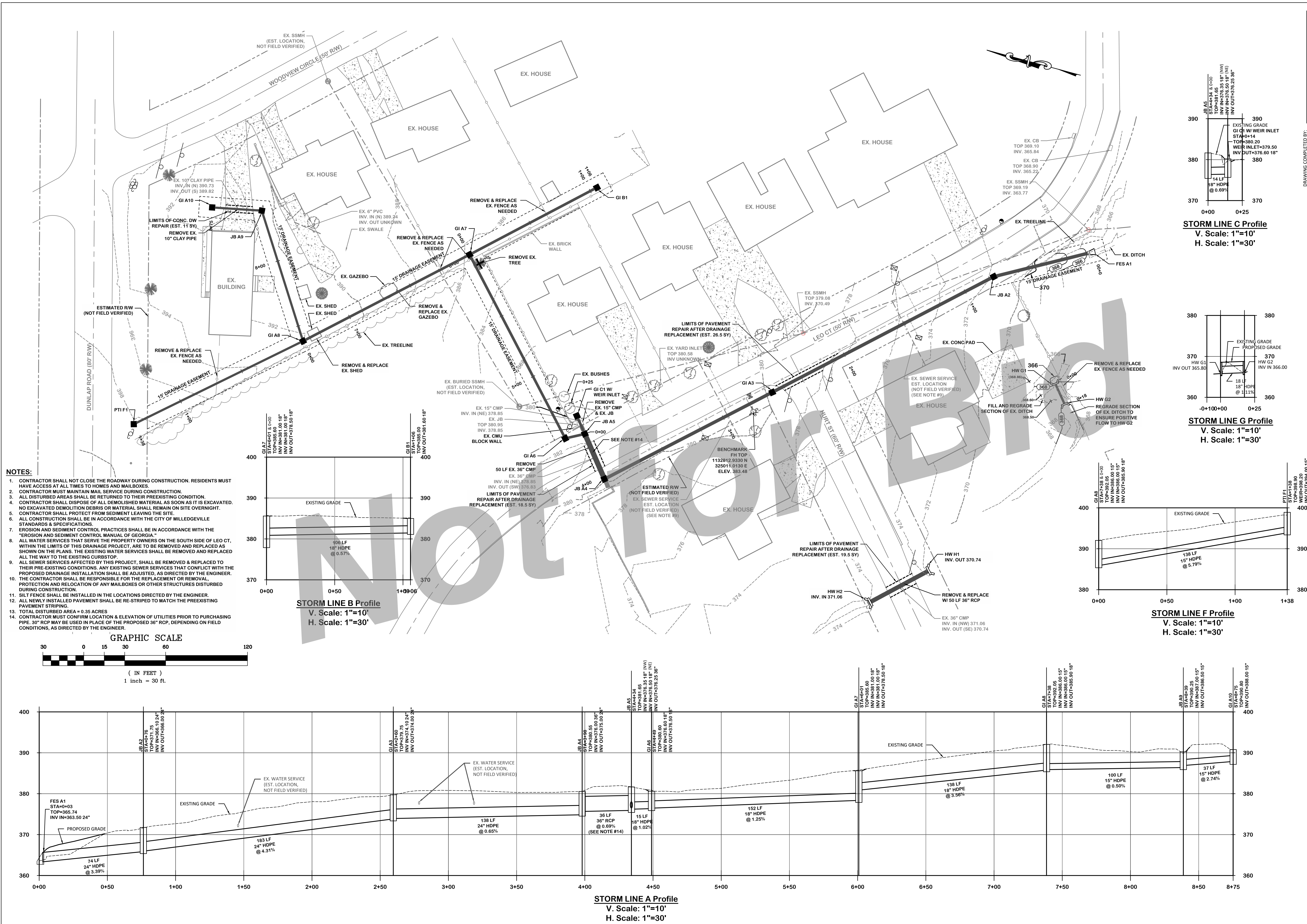
JOB NO. 2022-172PRJ
JOB NO. 2022-173PRJ
JOB NO. 2023-05PRJ

REVISION NO.	DATE	DESCRIPTION



DRAWING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER	—	SS
UNDERGROUND WATER LINE	W	---
FORCE MAIN	FM	FM
STORM DRAINAGE PIPE	—	---
UNDERGROUND TELEPHONE LINE	T	T
UNDERGROUND TELEPHONE CONDUIT	TC	TC
UNDERGROUND GAS LINE	12" G	12" G
DITCH CENTERLINE	---	---
TOP OF CURB & GUTTER ELEVATIONS	TC=90.00 G=89.50	EX TC=90.00 EX G=89.50
SPOT ELEVATION	X=90.00	X=90.00
FIRE HYDRANT	⊗	⊗
SEWER MANHOLE	⊗	⊗
WATER VALVE	⊗	⊗
TELEPHONE MANHOLE	⊗	⊗
LIGHT POLE	⊗	⊗
SIGN	⊗	⊗
WATER METER	⊗	⊗
BENCHMARK	⊗	⊗
CONCRETE MONUMENT FOUND	⊗	⊗
GUY POLE	⊗	⊗
IRON PIN FOUND	⊗	⊗
IRON PIN SET	⊗	⊗
TELEPHONE PEDESTAL	⊗	⊗
POWER POLE	⊗	⊗
HANDICAP SPACE	⊗	⊗
SEDIMENT BASIN MARKER W/NOTCH	⊗	⊗





DRAWING COMPLETED BY: _____
REVISOR: _____

GEORGIA REGISTERED PROFESSIONAL ENGINEER
PAUL C. SIMONTON
5-30-2023

Level II Certification No. 935
Expiration Date: 10-01-25

1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontongenengineering.com

SIMONTON ENGINEERING

**Woodview Cir & Leo Ct
Drainage Improvements**
for
City of Milledgeville
Baldwin County, Georgia

Drainage Plan & Profile

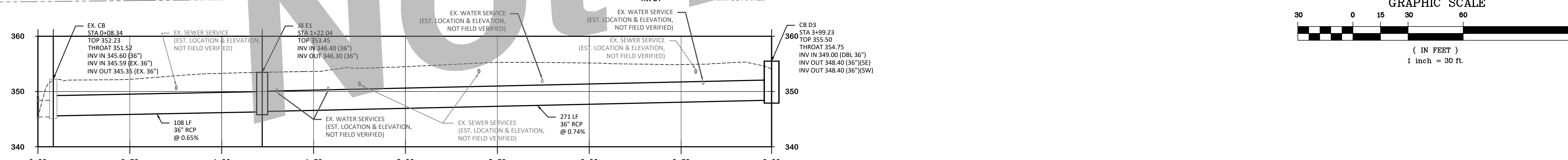
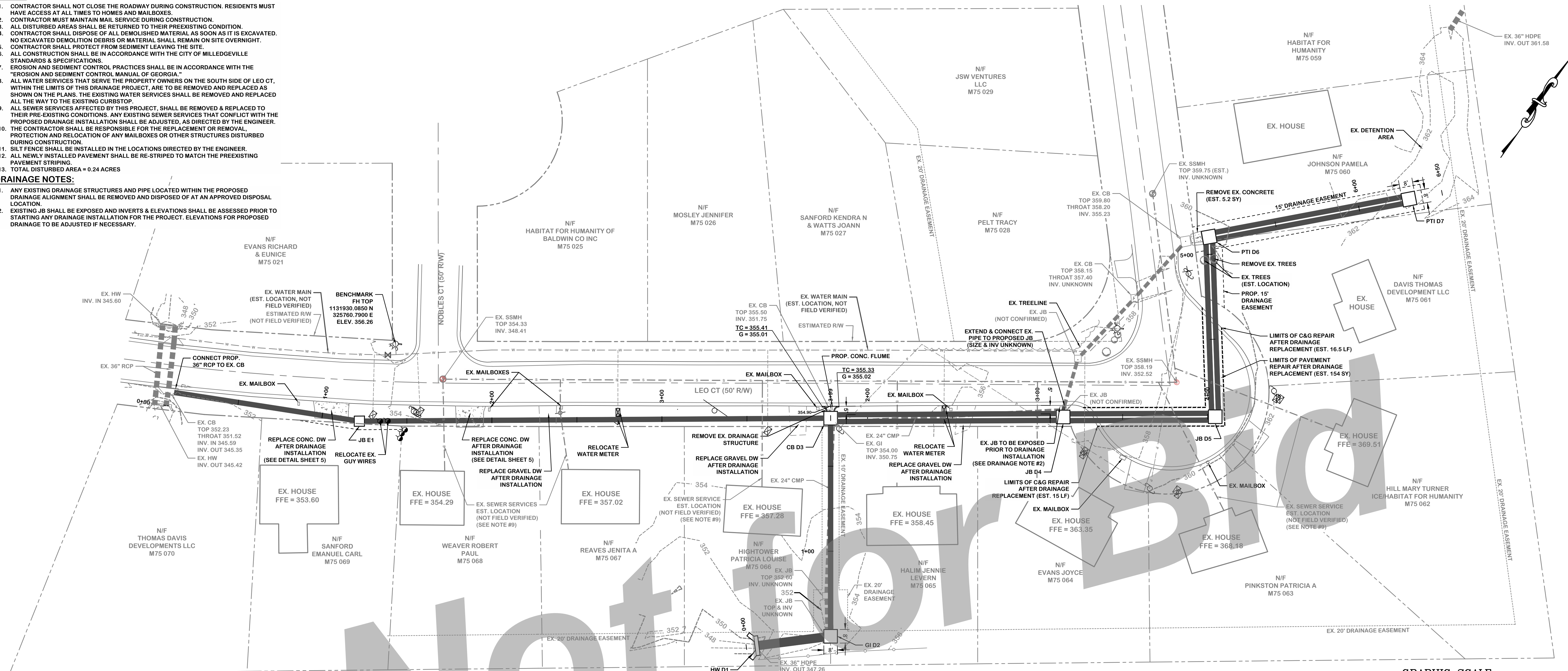
DATE: October 6, 2022
FILE NO: 2022-172PRJ
SHEET: 1

NOTES:

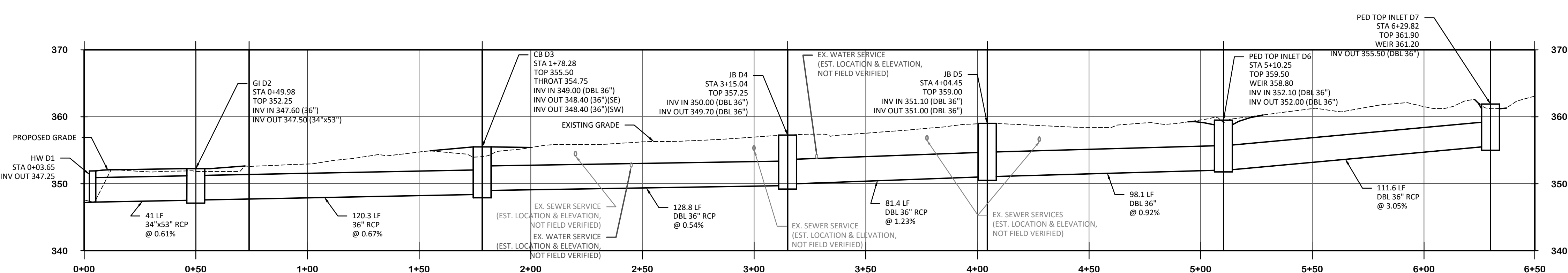
- CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
- CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
- CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
- CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
- ALL WATER SERVICES THAT SERVE THE PROPERTY OWNERS ON THE SOUTH SIDE OF LEO CT. WITHIN THE LIMITS OF THIS DRAINAGE PROJECT, ARE TO BE REMOVED AND REPLACED AS SHOWN ON THE PLANS. THE EXISTING WATER SERVICES SHALL BE REMOVED AND REPLACED ALL THE WAY TO THE EXISTING CURBSTOP.
- ALL SEWER SERVICES AFFECTED BY THIS PROJECT, SHALL BE REMOVED & REPLACED TO THEIR PRE-EXISTING CONDITIONS. ANY EXISTING SEWER SERVICES THAT CONFLICT WITH THE PROPOSED DRAINAGE INSTALLATION SHALL BE ADJUSTED, AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
- SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
- ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
- TOTAL DISTURBED AREA = 0.24 ACRES

DRAINAGE NOTES:

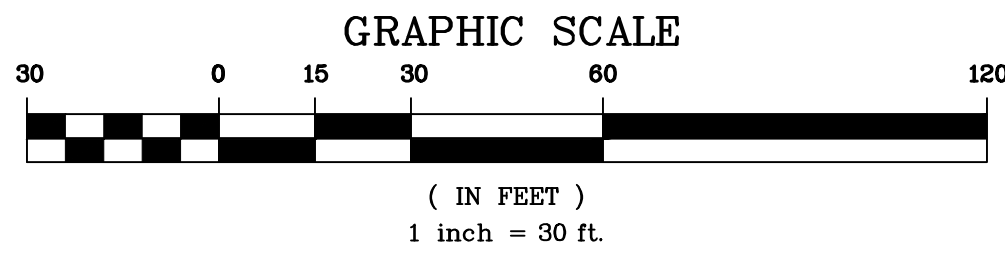
- ANY EXISTING DRAINAGE STRUCTURES AND PIPE LOCATED WITHIN THE PROPOSED DRAINAGE ALIGNMENT SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION.
- EXISTING JB SHALL BE EXPOSED AND INVERTS & ELEVATIONS SHALL BE ASSESSED PRIOR TO STARTING ANY DRAINAGE INSTALLATION FOR THE PROJECT. ELEVATIONS FOR PROPOSED DRAINAGE TO BE ADJUSTED IF NECESSARY.



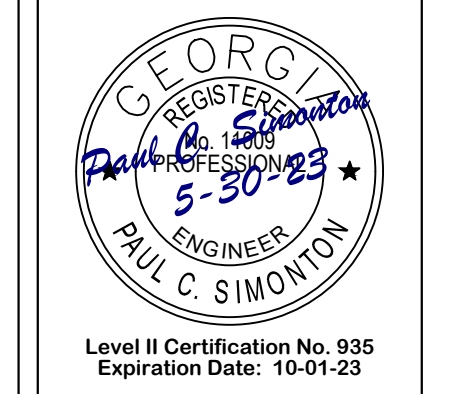
STORM LINE E Profile
V. Scale: 1"=10'
H. Scale: 1"=30'



STORM LINE D Profile
V. Scale: 1"=10'
H. Scale: 1"=30'



DRAWING COMPLETED BY: _____
REVISOR: _____

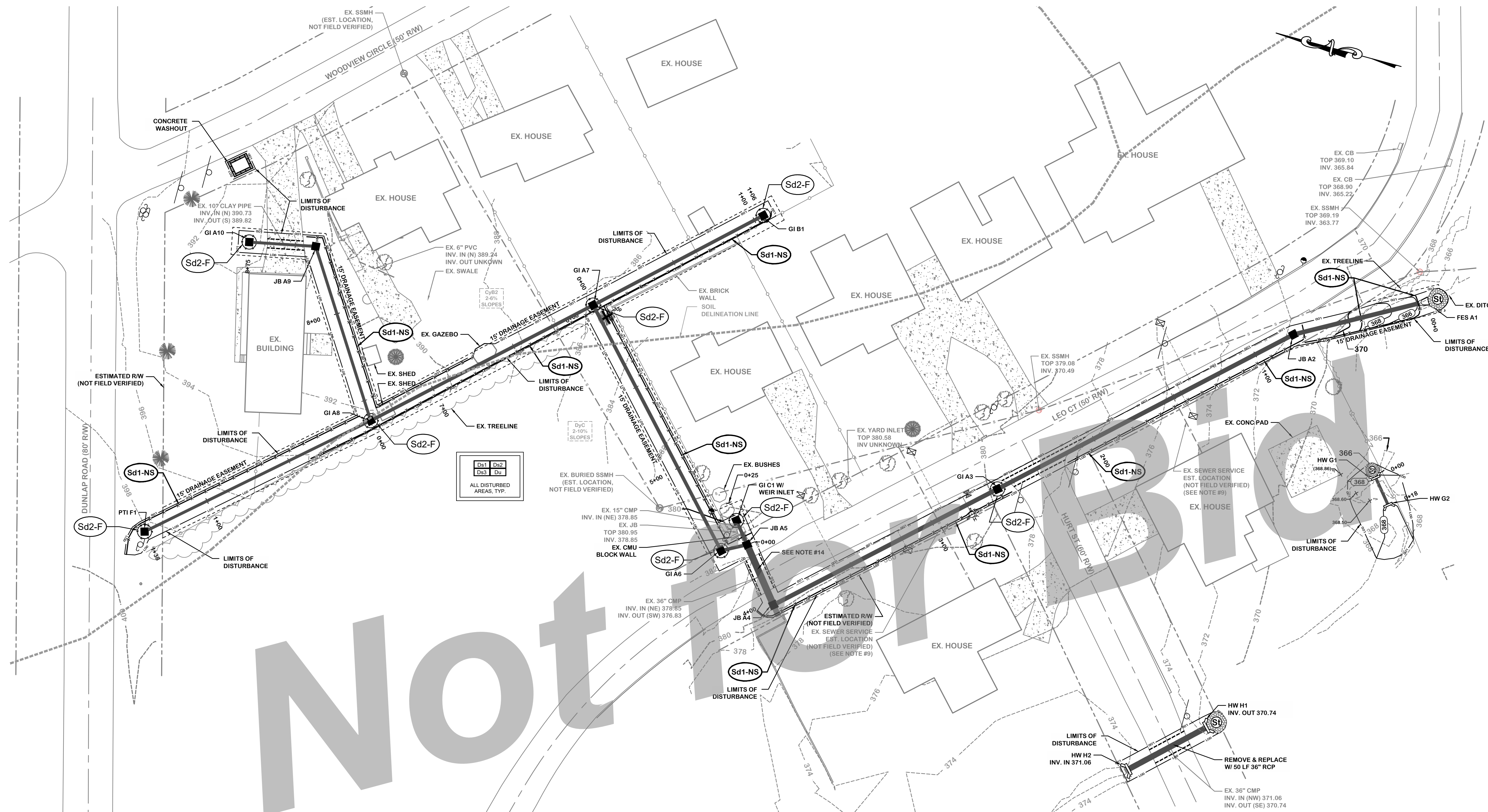


Level II Certification No. 935
Expiration Date: 10-01-25
1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontonengineering.com



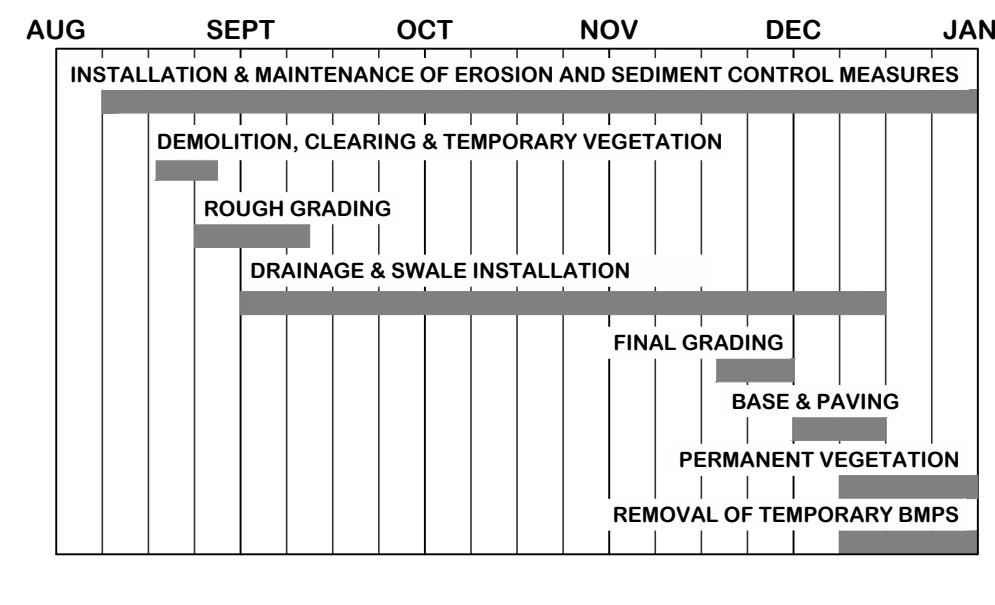
Woodview Cir & Leo Ct
Drainage Improvements
for
City of Milledgeville
Baldwin County, Georgia

Drainage Plan & Profile
DATE: October 6, 2022
FILE NO: 2022-172PRJ
SHEET: 2



SIMONTON ENGINEERING, LLC
 1050 PARKSIDE COMMONS - SUITE 101
 GREENSBORO, GEORGIA 30642
 (706) 454-0870

CONSTRUCTION SCHEDULE
 WOODVIEW CIR & LEO CT DRAINAGE IMPROVEMENTS



SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STABILIZED CONSTRUCTION EXIT.
2. INSTALL SEDIMENT AND EROSION CONTROL STRUCTURES.
3. COMPLETE CLEARING AND GRUBBING.
4. STOCKPILE TOPSOIL.
5. STABILIZED CLEARED AND STOCKPILE AREAS WITHIN 14 DAYS.
6. COMPLETE ROUGH GRADING.
7. INSTALL DRAINAGE & SWALES.
8. COMPLETE GRADING.
9. INSTALL BASE & PAVING.
10. PERMANENT SEEDING AND LANDSCAPING.
11. REMOVE SEDIMENT AND EROSION CONTROL STRUCTURES.
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE REMOVE REMAINING EAS FACILITIES AND SEED DISTURBED AREAS.

SITE DESCRIPTION

THIS SITE IS LOCATED ON WOODVIEW CIRCLE & LEO CT IN BALDWIN COUNTY. THE LOTS HAVE A TOTAL ACREAGE OF +/- ACRES. EXISTING SITE IS RESIDENTIAL AREA COMPOSED OF ASPHALT PAVED ROADS, DRIVEWAYS THAT SERVE SEVERAL RESIDENTS ALONG THE ROADWAY, AS WELL AS WOODED AREAS. THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF DRAINAGE IMPROVEMENTS. THE PLAN PROPOSES A DISTURBED ACREAGE OF 0.59 ACRES.

SEDIMENT STORAGE SUMMARY

DISTURBED AREA = 0.59 AC
 REQUIRED SEDIMENT STORAGE = 39.53 C.Y.
 (67 C.Y./AC X 0.59 AC = 39.53 C.Y.)

SILT FENCE SEDIMENT STORAGE

SILT FENCE REQUIRED = 100' PER 1/4 ACRE
 59 AC X 100'/0.25 AC = 236 LF
 STORAGE IN REQ. SILT FENCE = 236 LF X 0.17 CY/FT = 40.12 CY
 AVAILABLE STORAGE = 1839 LF X 0.17 CY/FT = 312.63 CY
 TOTAL SILT FENCE SHOWN = 1839'
TOTAL SEDIMENT STORAGE ACHIEVED = 312.63 CY

Ds3 MULCHING REQUIREMENTS

SEEDED AREAS SHALL BE MULCHED WITH GOOD QUALITY DRY STRAW FREE OF WEED SEEDS AT A RATE OF 2 TONS PER ACRE.
 HYDROSEEDING AREAS SHALL BE MULCHED WITH WOOD CELLULOSE MULCH OR WOOD PULP FIBER AT A RATE OF 500 LBS. PER ACRE.

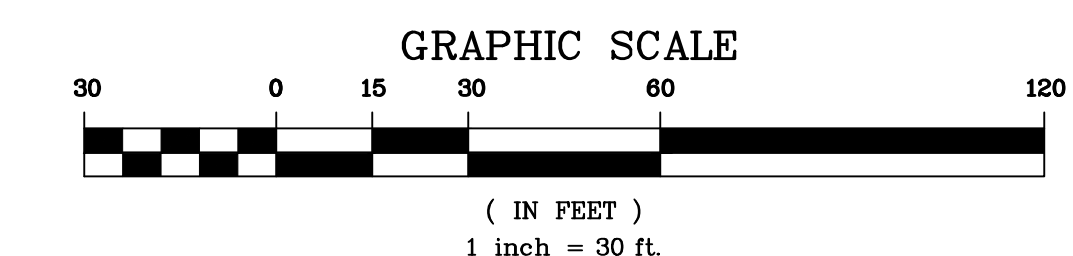
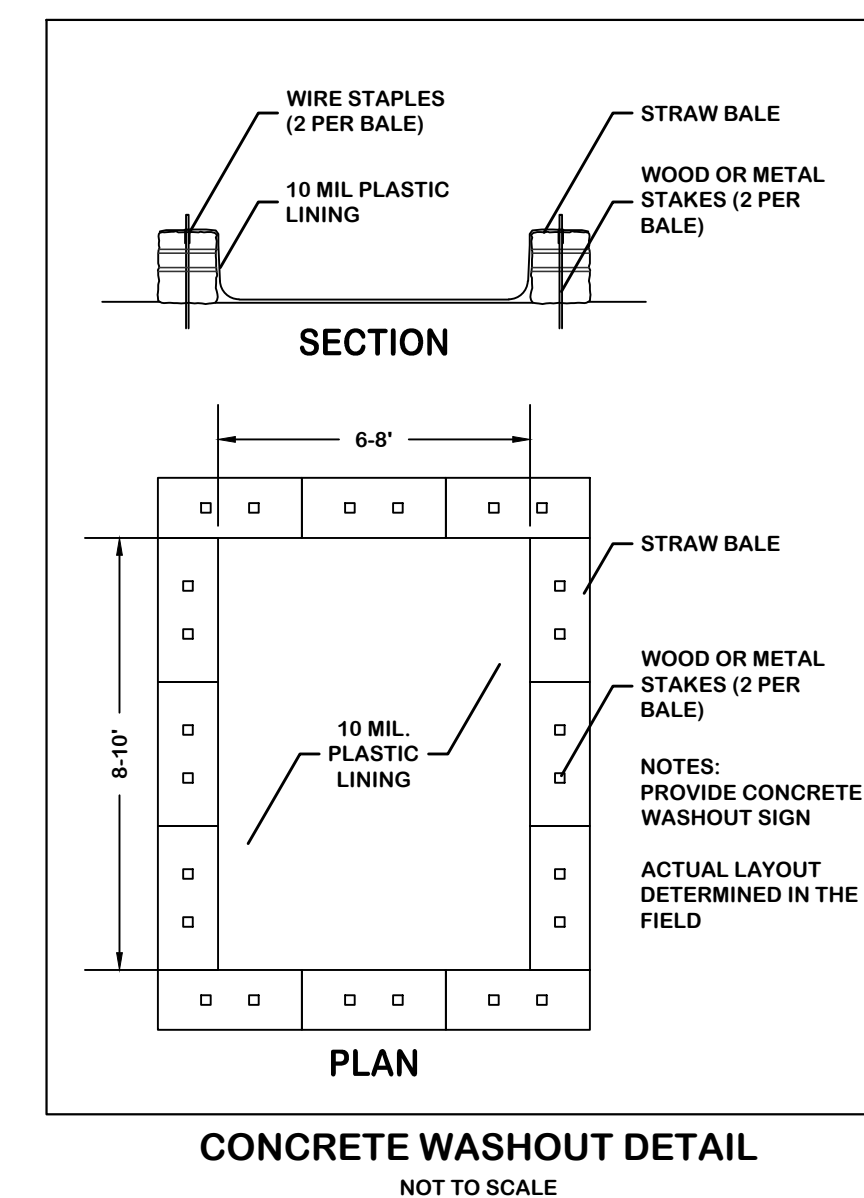
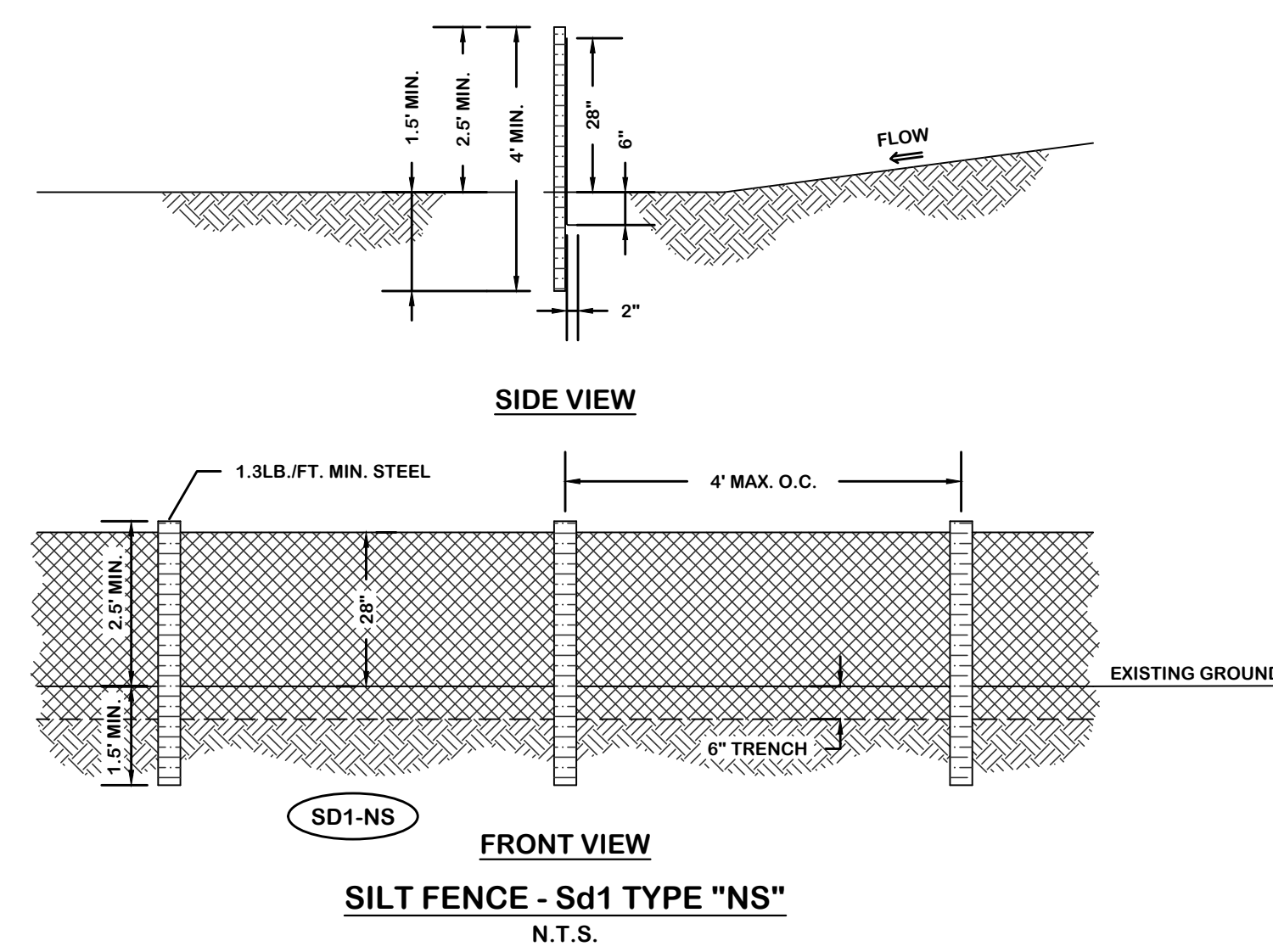
SOIL CONDITIONS

CyB2 - CECIL SANDY LOAM, 2-6% SLOPES, MODERATELY ERODED
 Dyc - DAVIDSON-URBAN LAND COMPLEX, 2-10% SLOPES
 EwD - ENON-URBAN LAND COMPLEX, 5-12% SLOPES

PER WEB SOIL SURVEY FROM NRCS DATED 9/2/2022.

CONSTRUCTION EXIT NOTE:

CONTRACTOR SHALL INSTALL A CONSTRUCTION EXIT AT THE CONTRACTOR'S DESIGNATED LAY-DOWN YARD. SEE DETAIL SHEET C5.0. GPS COORDINATES FOR THE CONSTRUCTION EXIT TO BE DETERMINED.



DRAWING COMPLETED BY:

REVISED:



Level II Certification No. 935
 Expiration Date: 10-01-23

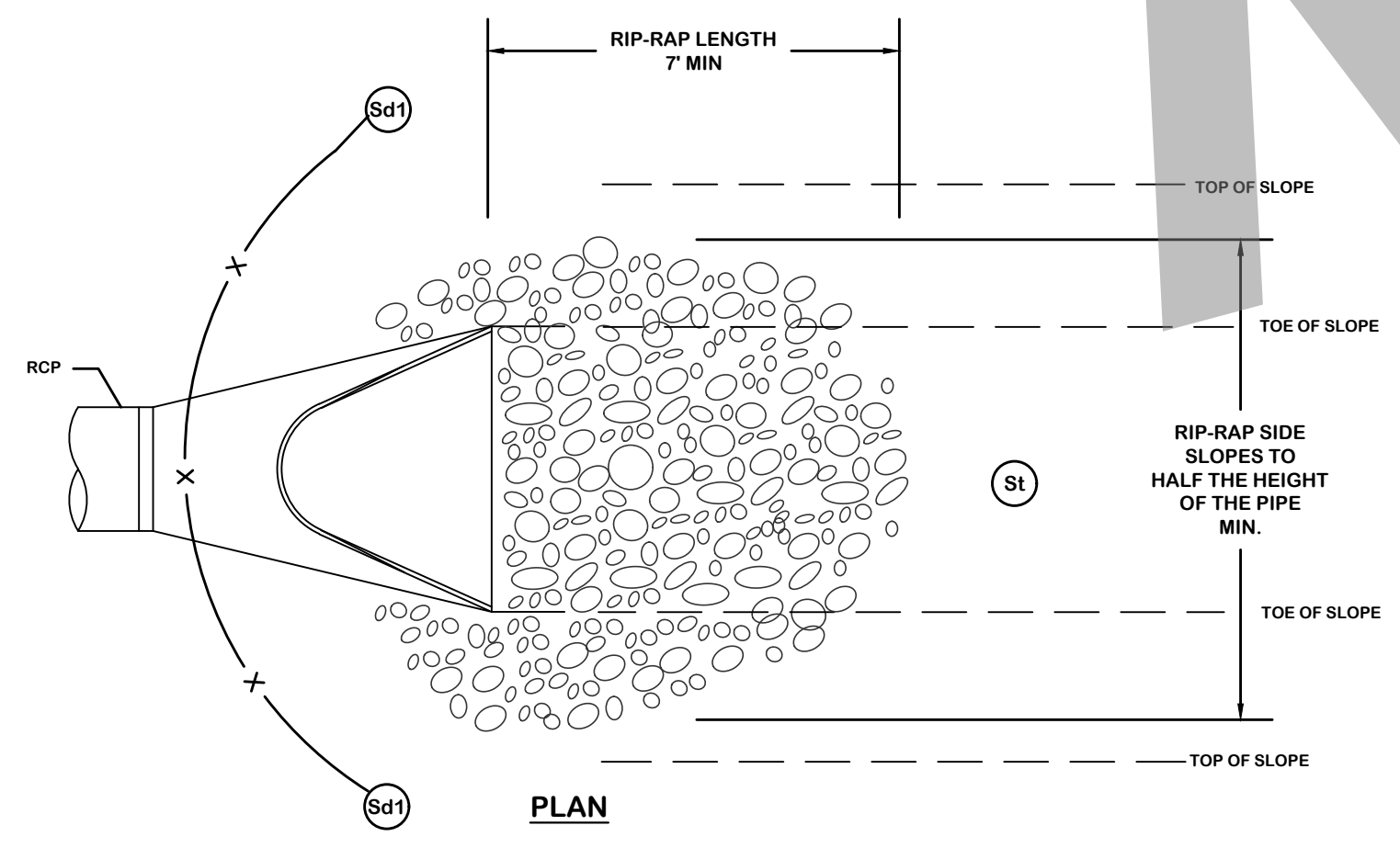
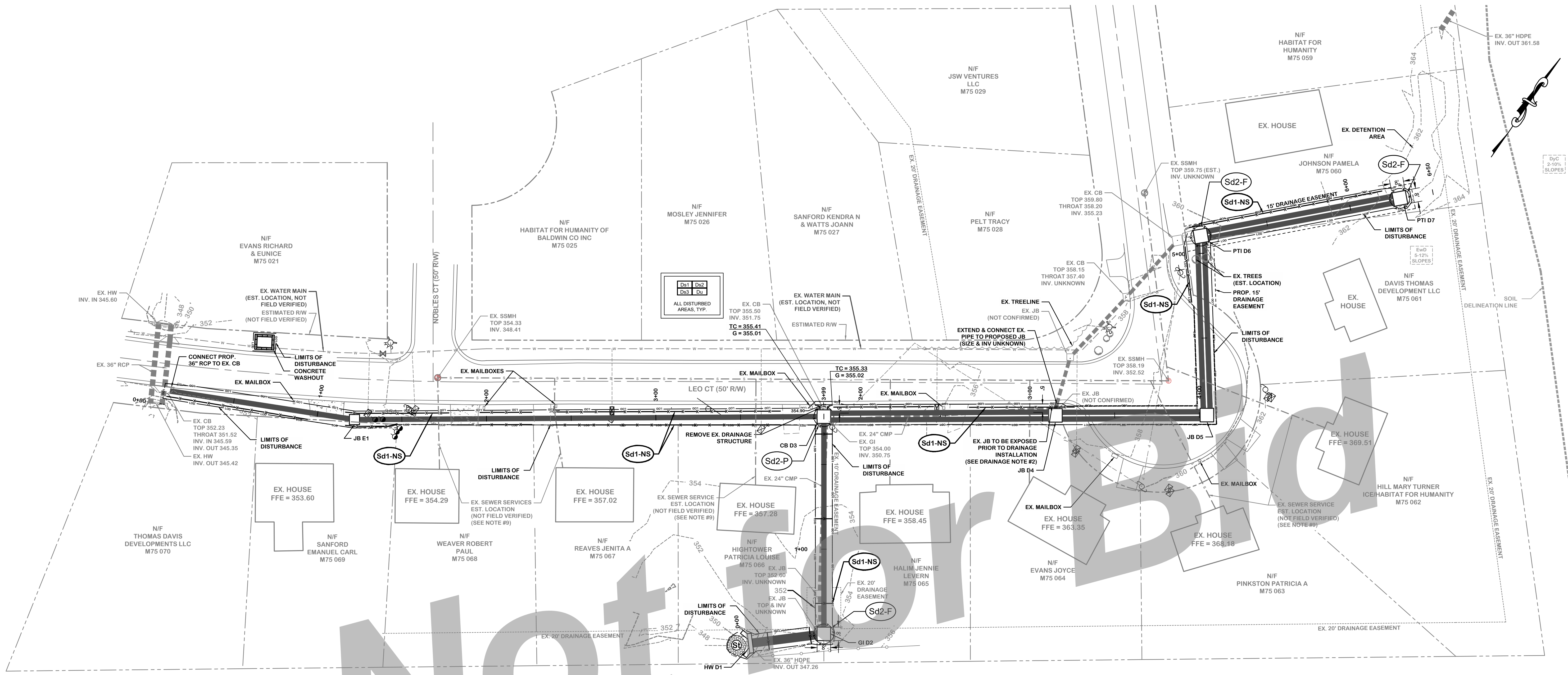
1050 PARKSIDE COMMONS
 GREENSBORO, GA 30642
 TEL: (706) 454-0870
 www.simontonengineering.com

SIMONTON ENGINEERING

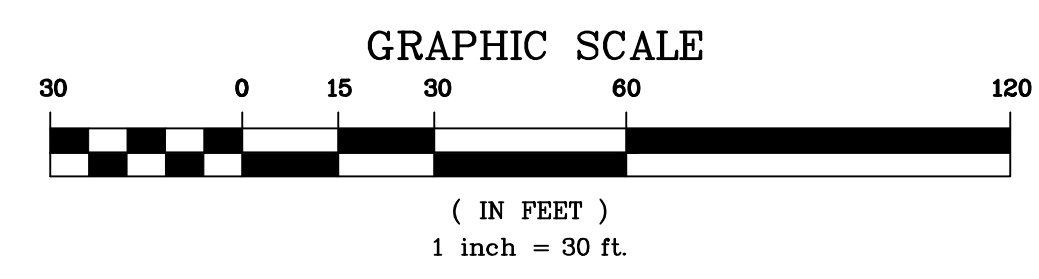


Woodview Cir & Leo Ct
 Drainage Improvements
 for
 City of Milledgeville
 Baldwin County, Georgia

Erosion, Sedimentation & Pollution Control Plan
 DATE: October 6, 2022
 FILE NO: 2022-172PRJ
 SHEET: 3



PRECAST FLARED END SECTION
N.T.S.



Not for Bid

DRAWING COMPLETED BY: _____



Level II Certification No. 935
Expiration Date: 10-01-23

1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontonengineering.com

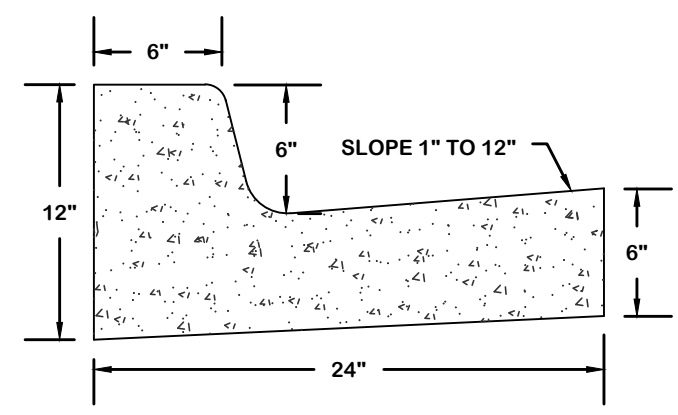
SIMONTON ENGINEERING



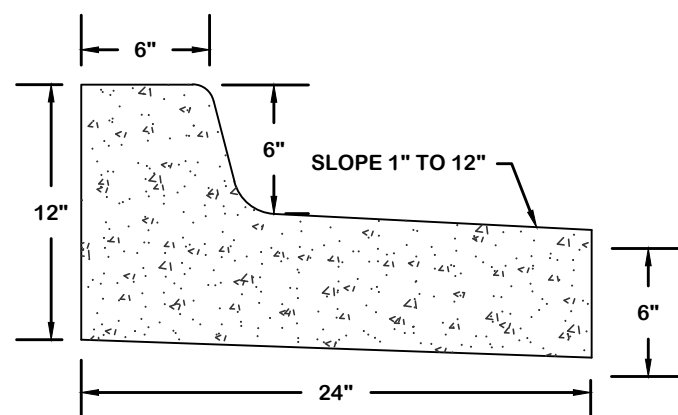
Woodview Cir & Leo Ct
Drainage Improvements
for
City of Milledgeville
Baldwin County, Georgia

Erosion, Sedimentation & Pollution Control Plan
DATE: October 6, 2022
FILE NO: 2022-172PRJ
SHEET: 4

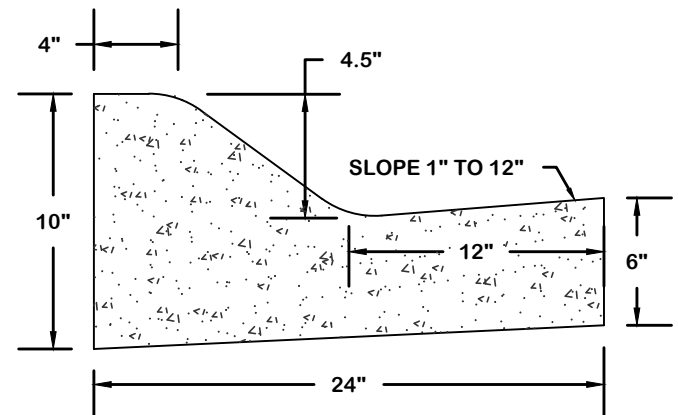
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE INFORMATION CONTAINED HEREIN IS INTENDED FOR THE MARKED CLIENT ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PRINTED AND ELECTRONIC VERSIONS OF THIS DRAWING, THE PRINTED VERSION SHALL CONTROL. THIS DRAWING IS THE PROPERTY OF SIMONTON ENGINEERING, LLC.



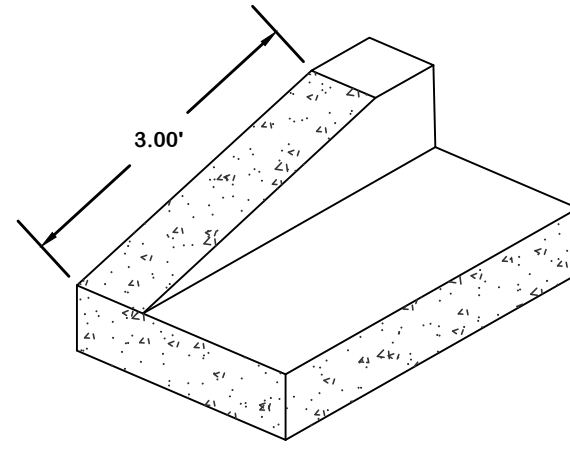
STANDARD TYPE CURB & GUTTER
N.T.S.



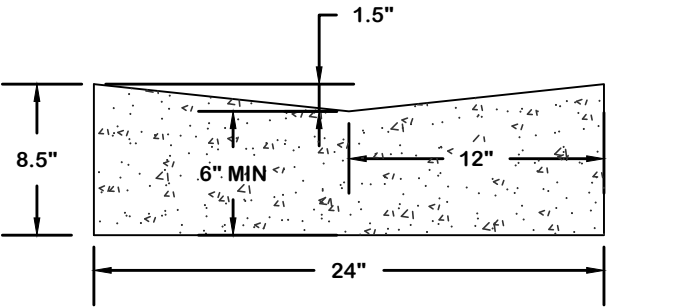
SPILL-OUT TYPE CURB & GUTTER
N.T.S.



ROLLED TYPE CURB & GUTTER
N.T.S.



CURB TERMINATION DETAIL
N.T.S.

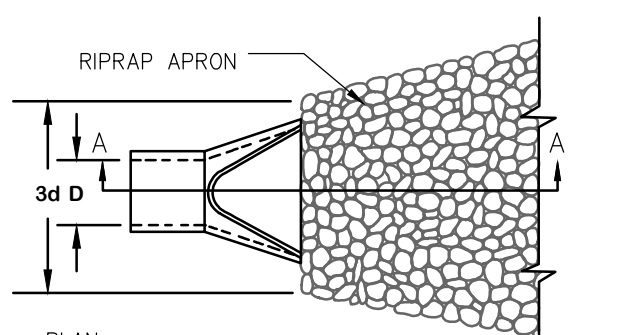


VALLEY TYPE CURB & GUTTER
N.T.S.

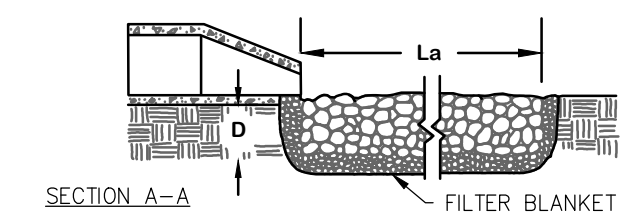
CURB & GUTTER DETAIL
N.T.S.

RIPRAP OUTLET PROTECTION

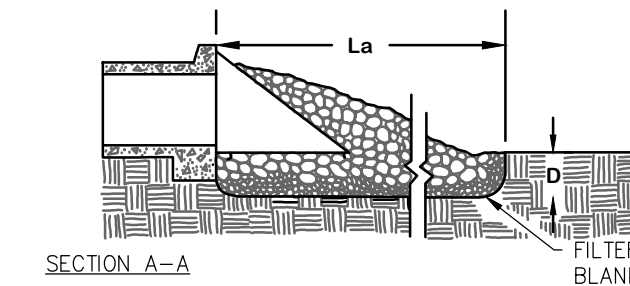
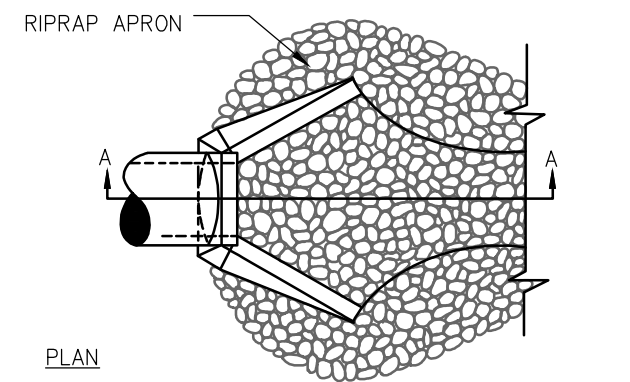
PIPE OUTLET TO FLAT AREA - NO WELL DEFINED CHANNEL



- NOTES:
1. L_a IS THE LENGTH OF THE RIPRAP APRON.
 2. $D = 1.5$ TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
 3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
 4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.



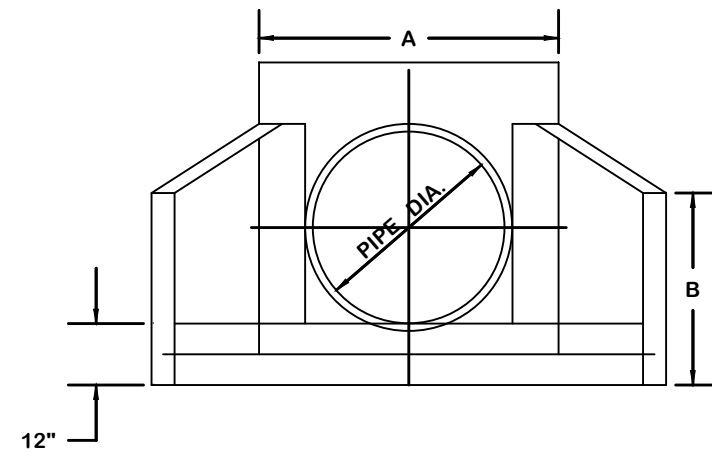
PIPE OUTLET TO WELL DEFINED CHANNEL



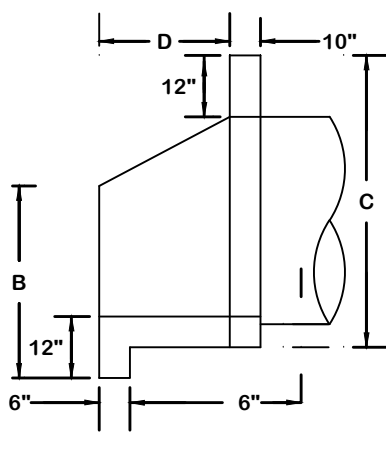
ST SIZE CHART							
OUTLET	PIPE DIA.	L_a	W1	W2	d50	FLOW RATE	VELOCITY
FES A1	24"	14'	6'	16'	6"	21.15 CFS	6.73 FT/S
HW D1	34"x53"	22'	10.5'	25.5'	9"	68.40 CFS	7.24 FT/S

*ALL TAILWATER CONDITIONS ARE MINIMUM.

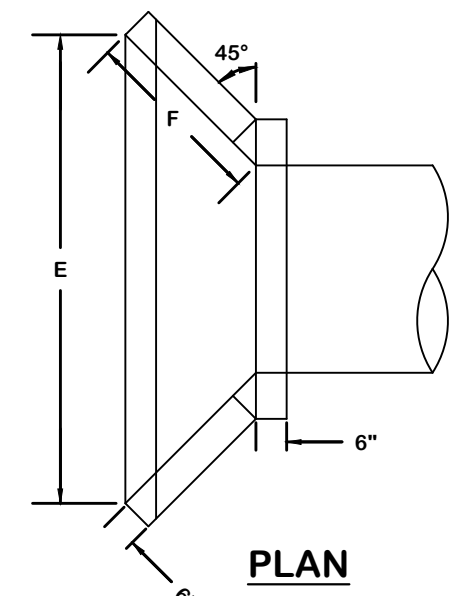
St RIPRAP OUTLET PROTECTION



FRONT ELEVATION



SIDE ELEVATION

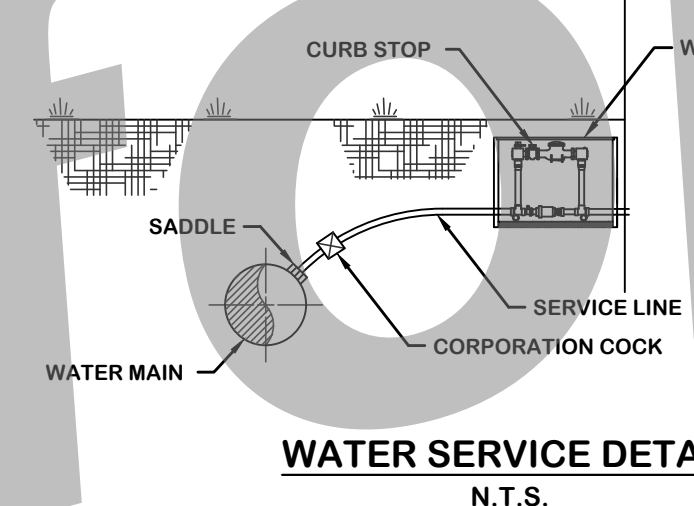


PLAN

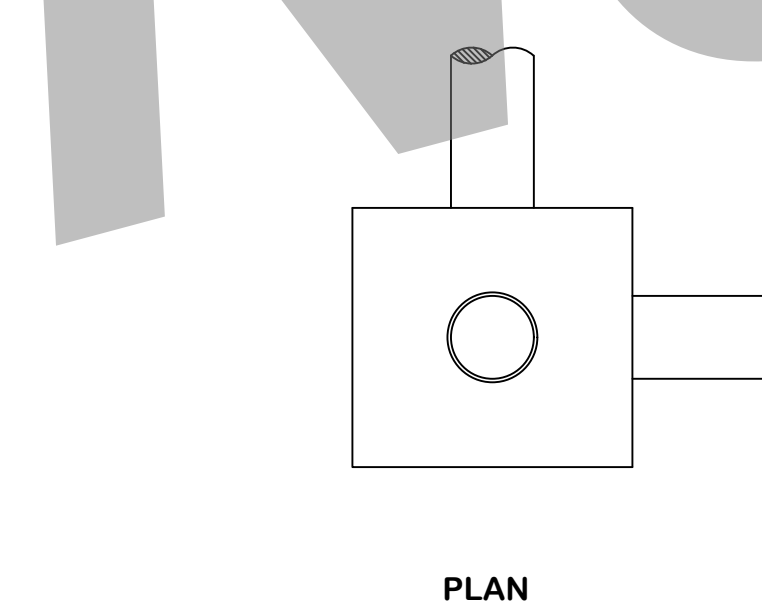
PIPE DIA.	A	B	C	D	E	F
15"	3'3"	2'4"	3'4"	1'5"	4'10"	2'0"
18"	3'5"	2'4"	3'4"	1'5"	4'10"	2'0"
24"	4'0"	2'9"	3'11"	1'8"	5'11"	2'4"
30"	4'6"	3'1"	4'5"	2'0"	7'7"	2'10"
36"	5'1"	3'5"	5'0"	2'4"	8'0"	3'3"
34" x 53"	6'9"	3'6"	5'0"	3'0"	10'5"	4'3"

WING HEADWALL
N.T.S.
2022-172PRJ

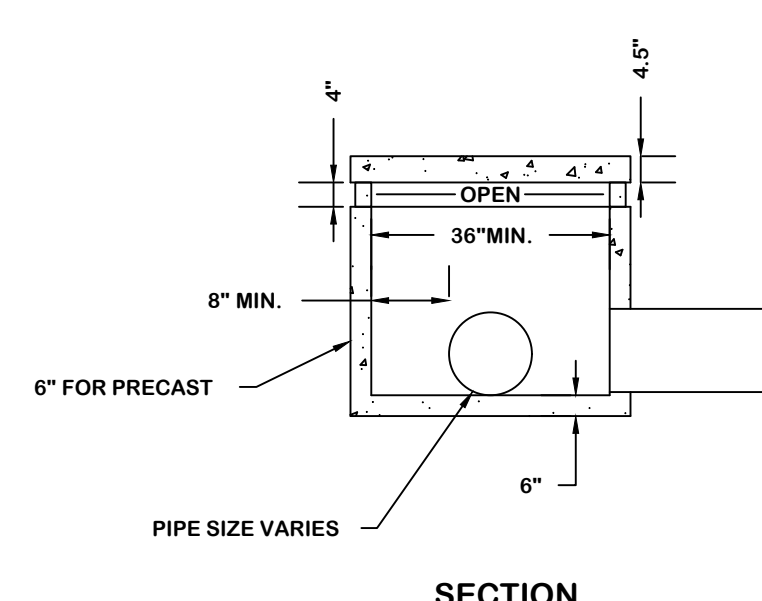
Not for Bid



WATER SERVICE DETAIL
N.T.S.

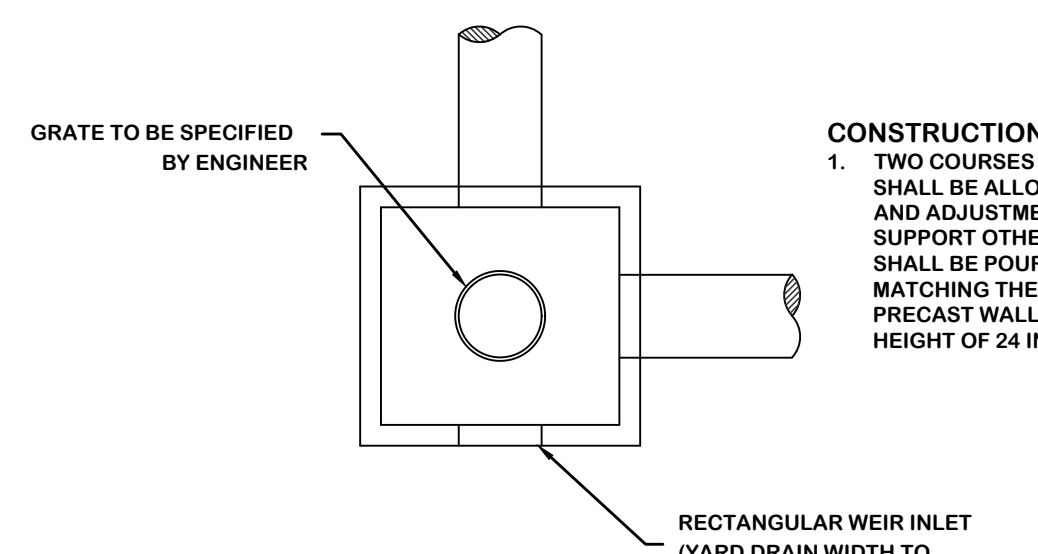


PLAN

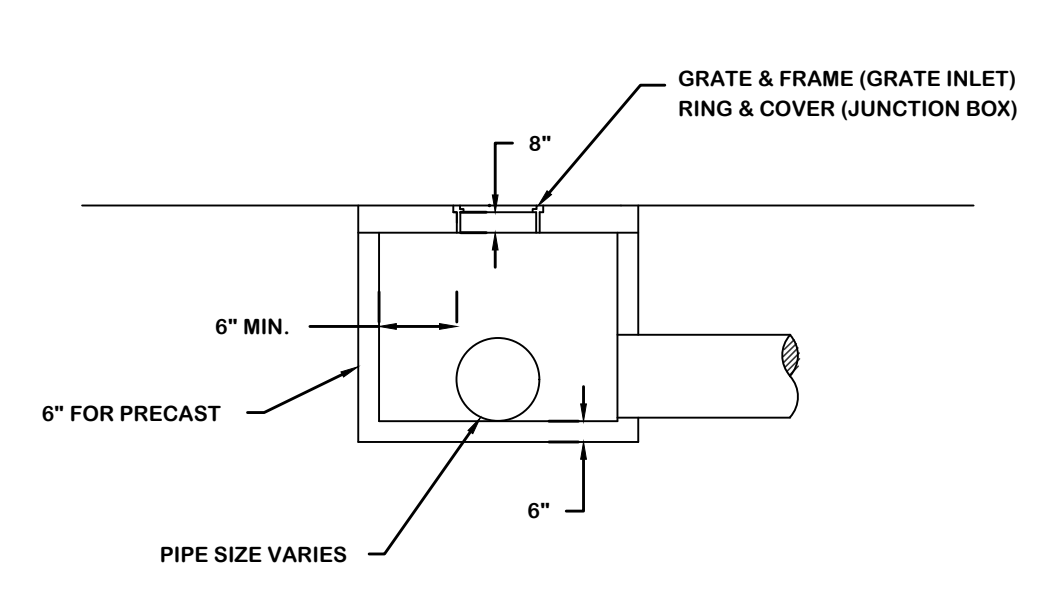


SECTION

PEDESTAL-TOP INLET
N.T.S.



PLAN

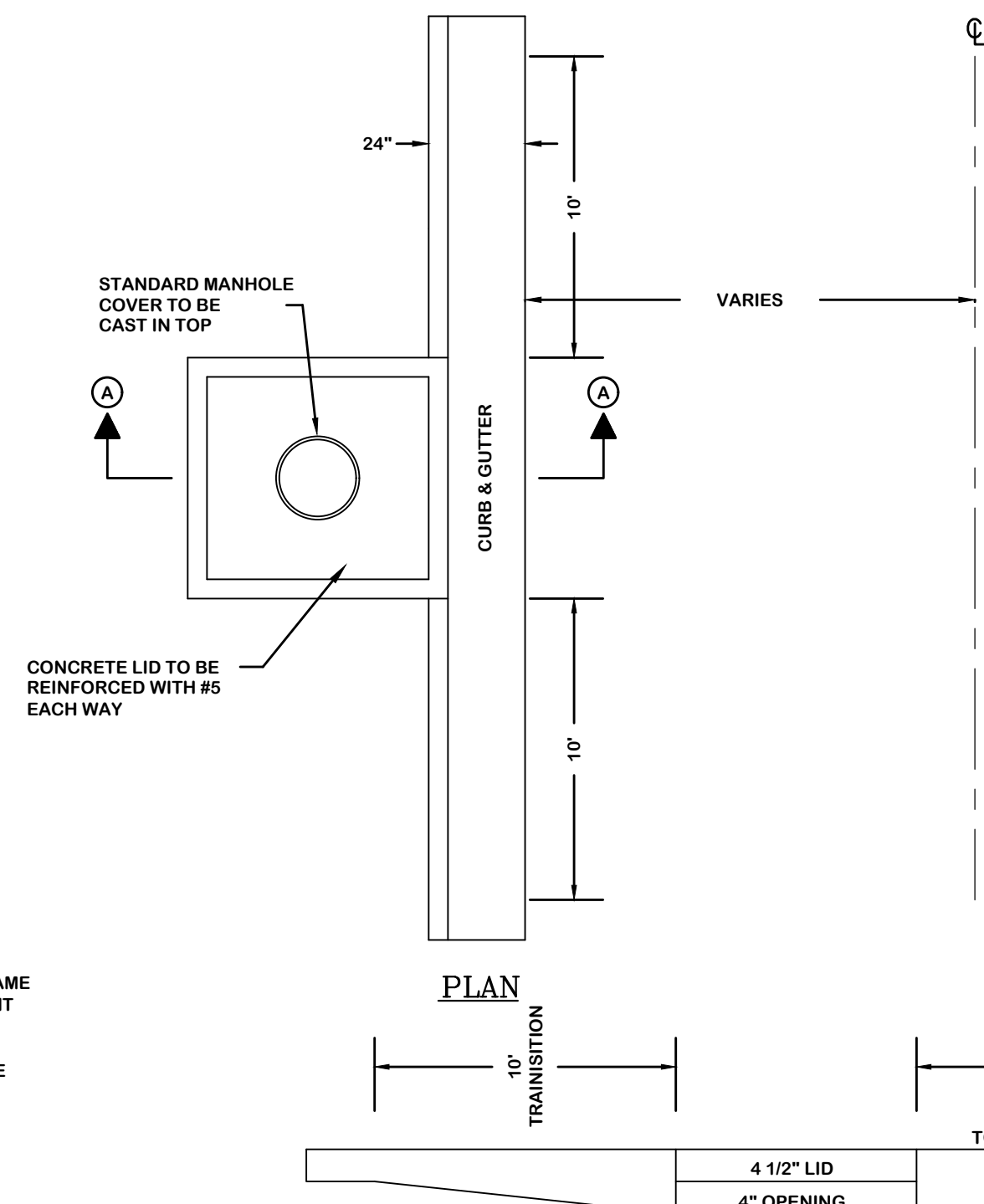


SECTION

JUNCTION BOX / GRATE INLET
N.T.S.

- CONSTRUCTION NOTES:
1. TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES.

- CONSTRUCTION NOTES:
1. TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES.

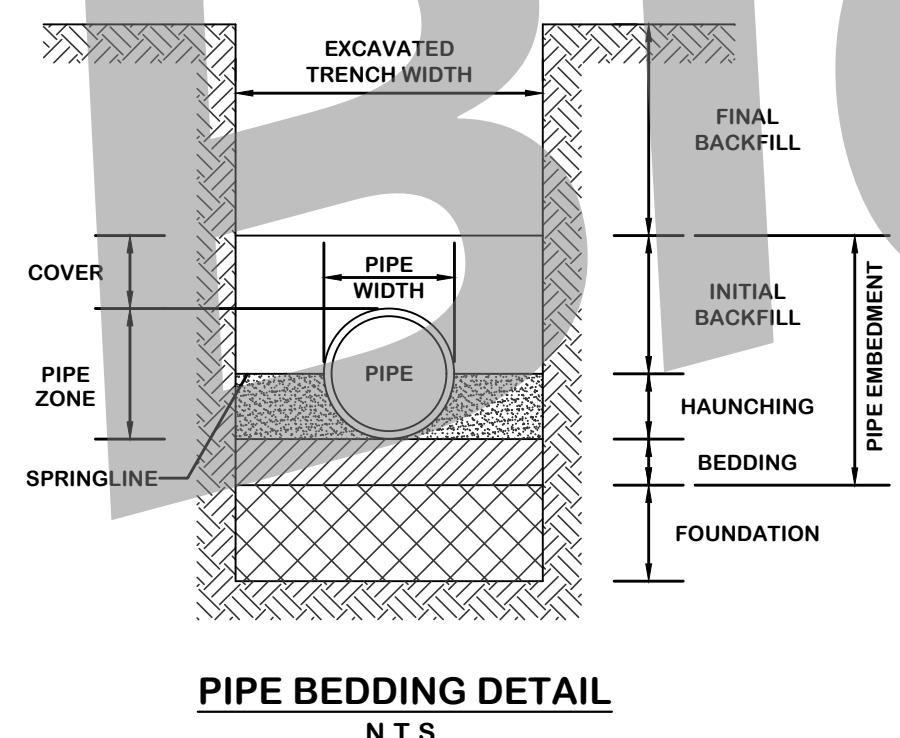


CATCH BASIN
N.T.S.

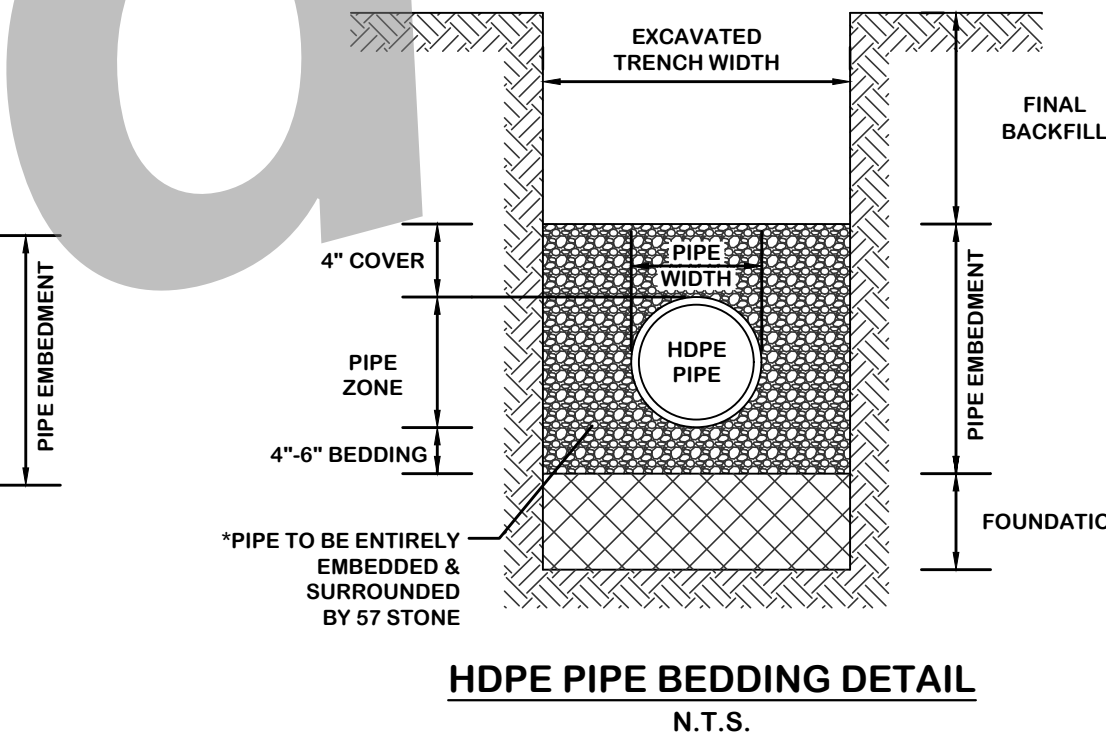
- NOTES:
1. TOP OF HEADWALL SHOULD BE SAME ELEVATION AS EDGE OF PAVEMENT WHEN WITHIN RIGHT OF WAY.
 2. ALL OUTLET HEADWALLS TO HAVE A SPLASH PAD.
 3. CHAMFER ALL EXPOSED EDGES.

- CONSTRUCTION NOTES:
1. TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES. NO BRICK WILL BE ALLOWED ON THE THROAT. THROAT MUST BE MONOLITHIC POUR MINIMUM OF 2" THICK. OPENING TO BE 4" AT THROAT.
 2. ALL POURED COMPONENTS SHALL BE PLACED ON COMPACTED SUBGRADE (98% STANDARD PROCTOR).
 3. CATCH BASIN IS NOT FOR ROADWAY USE. USE ONLY ON PRIVATE ROADS OR PARKING LOTS.

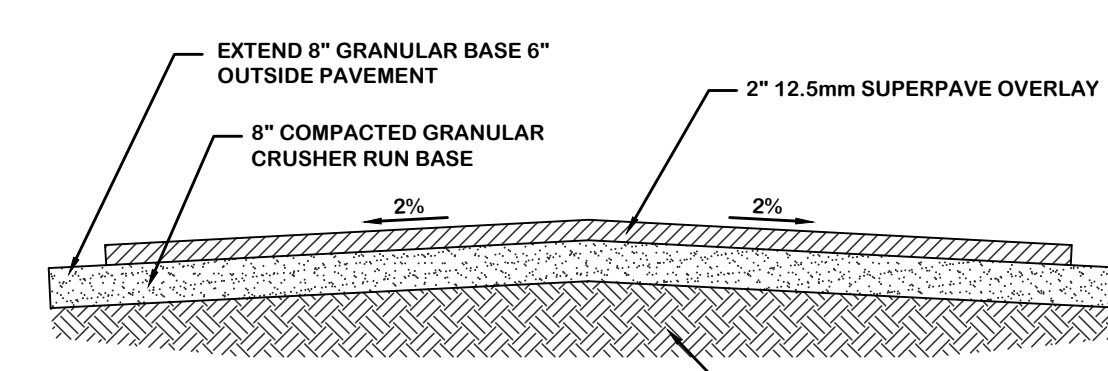
SECTION A-A



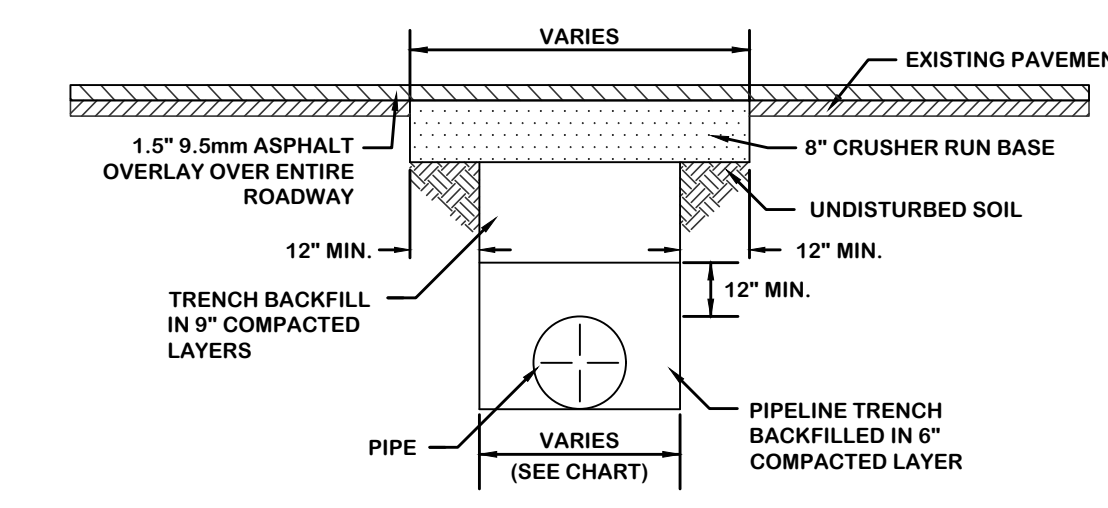
PIPE BEDDING DETAIL
N.T.S.



HDPE PIPE BEDDING DETAIL
N.T.S.
2022-172PRJ

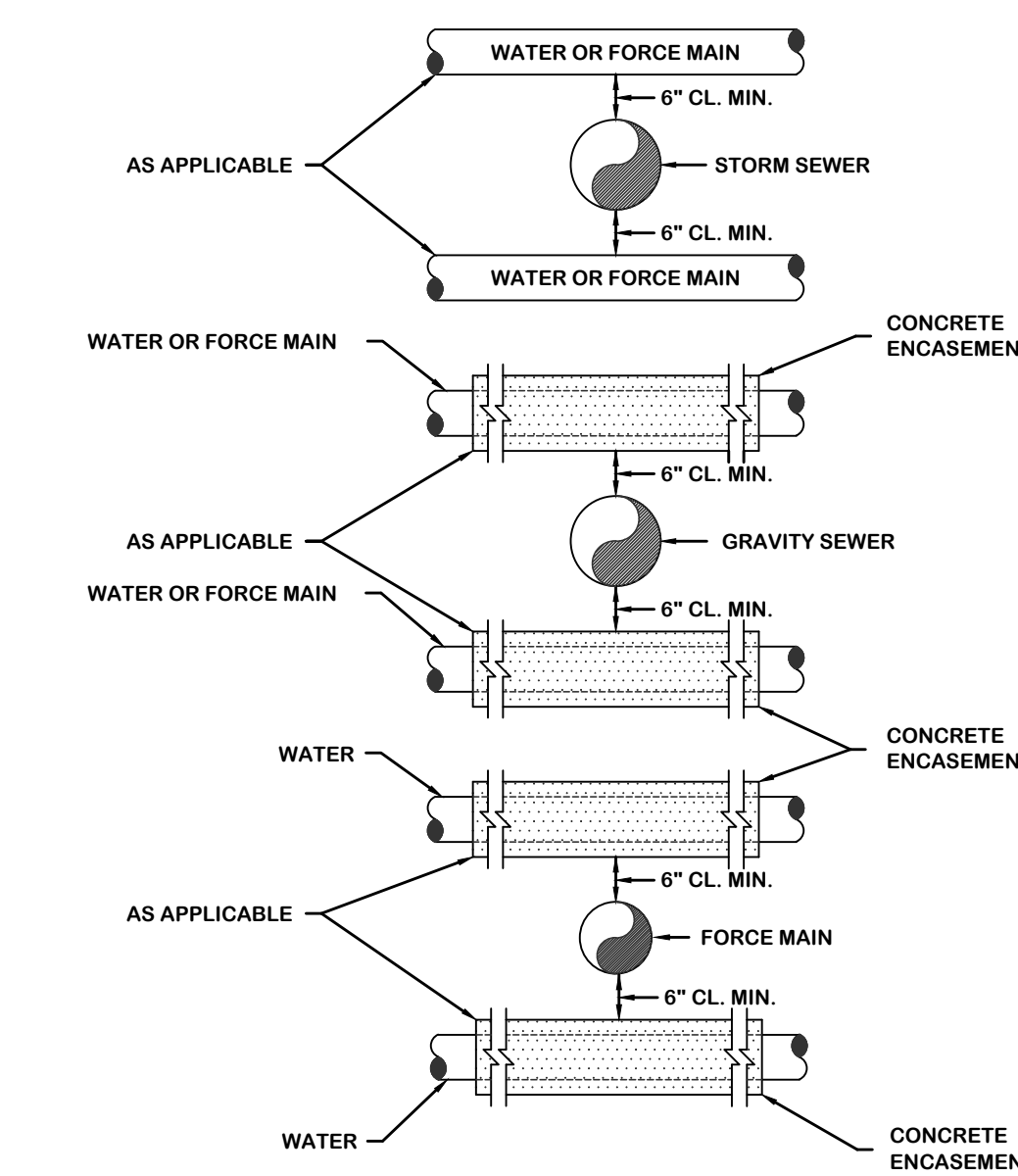


PAVEMENT REPAIR DETAIL
N.T.S.
2022-172PRJ



PAVEMENT REMOVAL & REPLACEMENT
N.T.S.

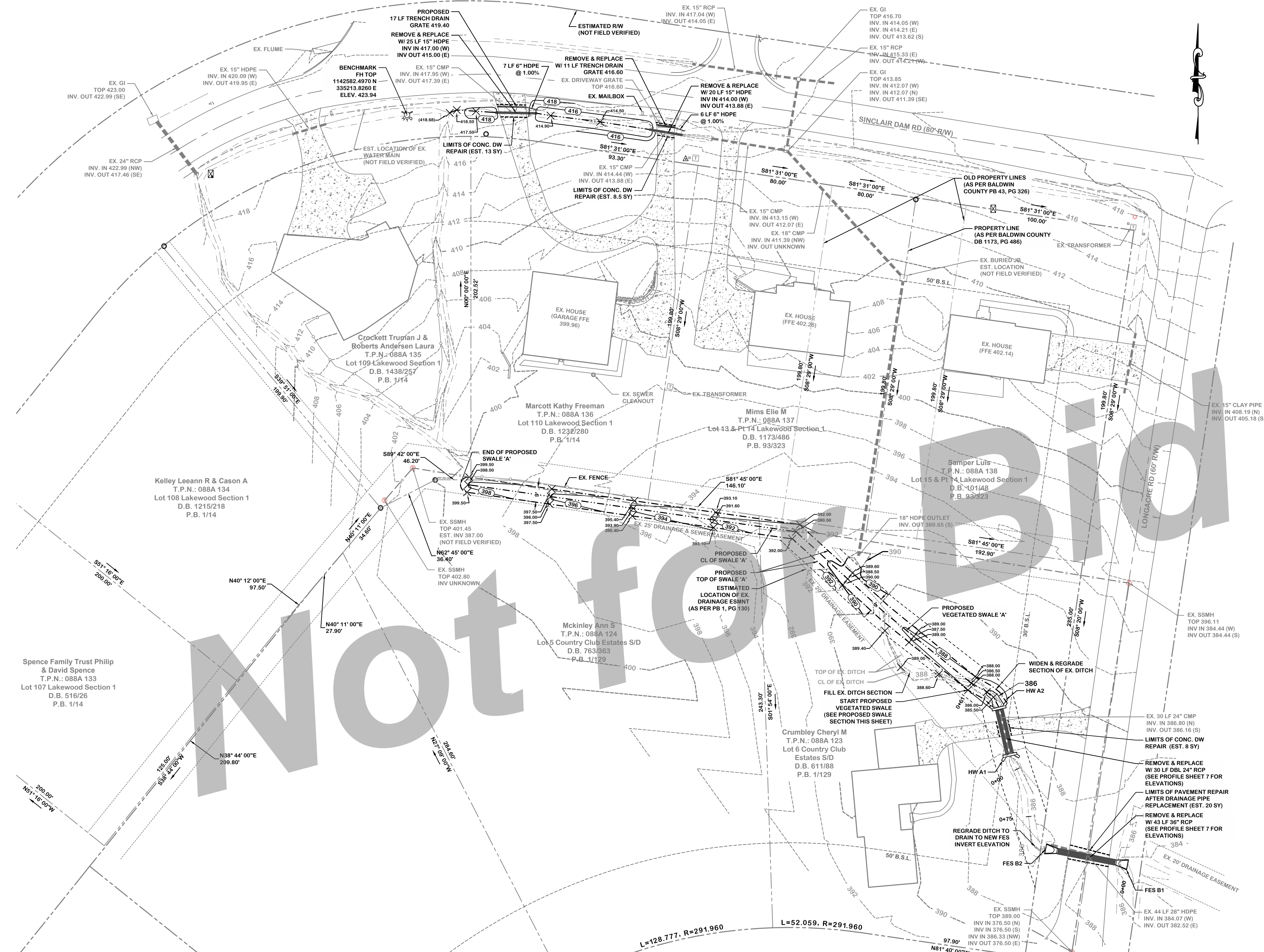
PIPE DIAMETER	MAXIMUM TRENCH WIDTH 0-6' CUT DEPTH	MAXIMUM PAVEMENT WIDTH 0-6' CUT DEPTH
6" TO 15"	16" x DIA.	40" x DIA.
18" TO 21"	20" x DIA.	44" x DIA.
24" TO 30"	24" x DIA.	48" x DIA.
33" TO 42"	36" x DIA.	60" x DIA.
48"+	36" x DIA.	60" x DIA.



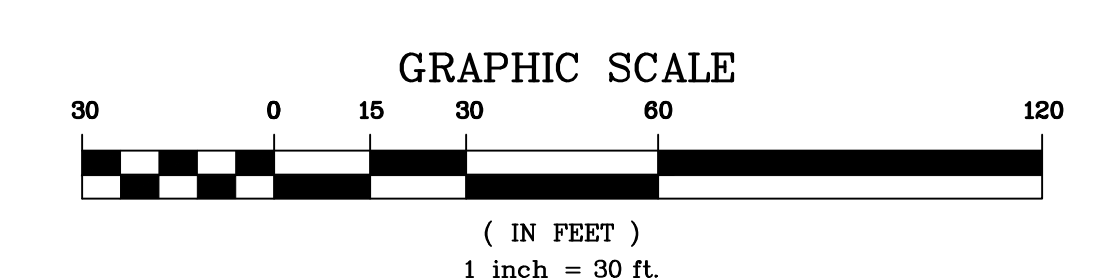
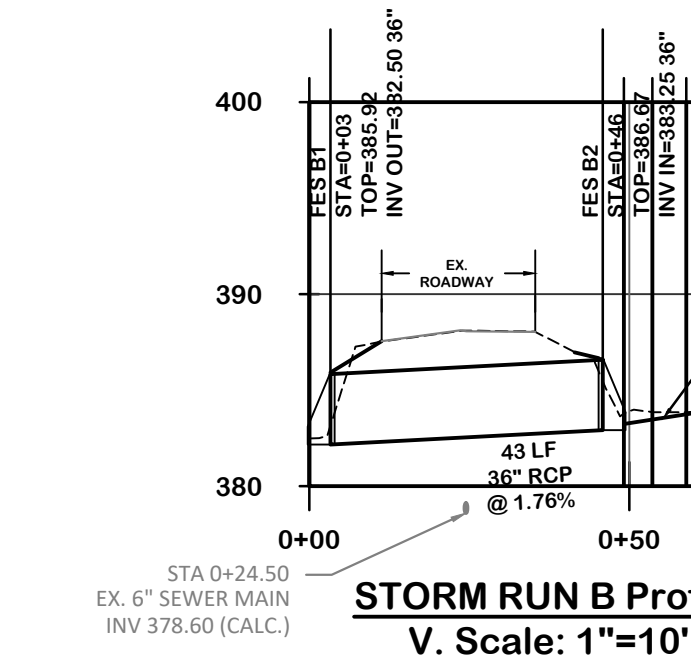
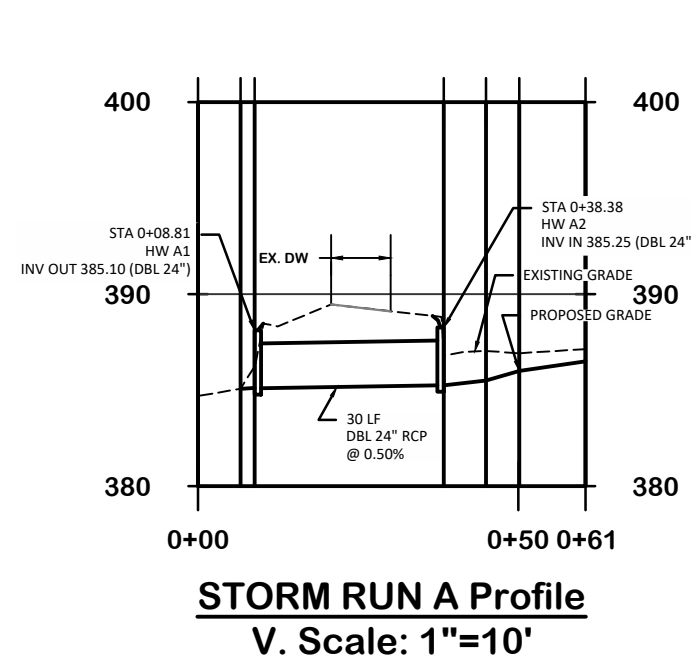
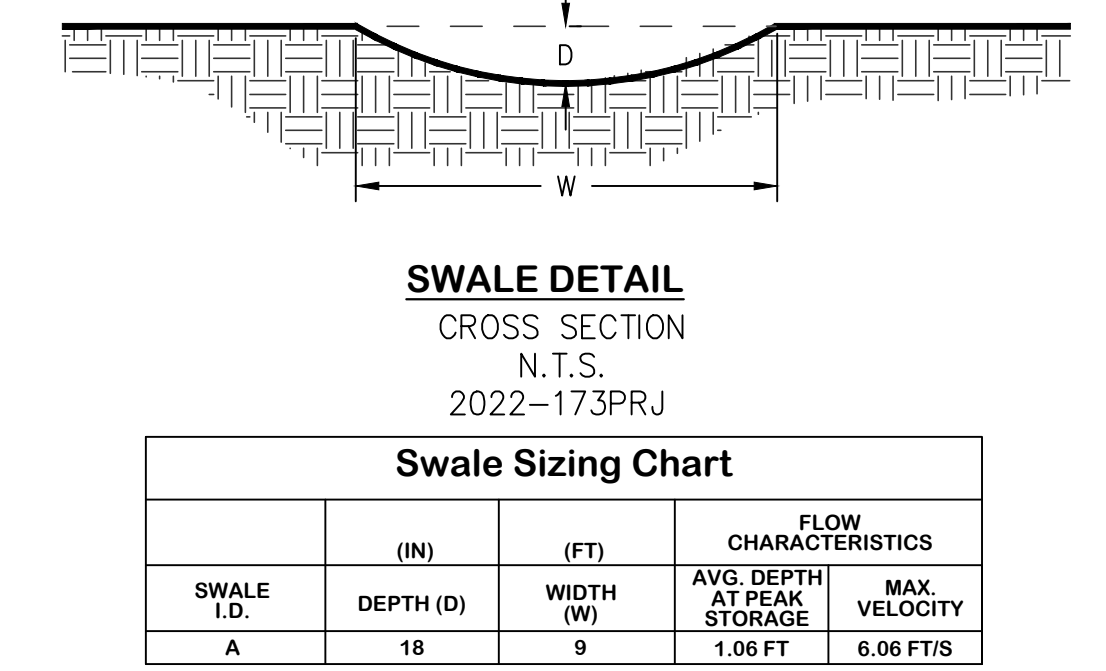
- NOTES:
1. CONCRETE ENCASEMENT TO EXTEND A MINIMUM OF 10" ON BOTH SIDES OF CROSSING.
 2. FOR ELEVATION OF PIPES, SEE PLANS.
 3. CONCRETE ENCASEMENT REQUIRED IF 18" VERTICAL SEPARATION IS NOT MAINTAINED.

SEPARATION DETAIL
N.T.S.

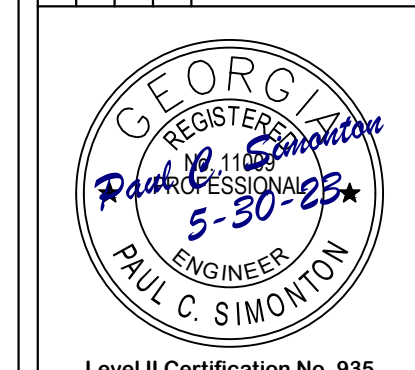
DRAWING COMPLETED BY: _____
 REVISED: _____
 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. IN THE EVENT OF AN ELECTRONIC VERSION, THE INFORMATION CONTAINED HEREIN IS INTENDED FOR THE NAMED CLIENT ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PRINTED AND ELECTRONIC VERSIONS, THE ELECTRONIC VERSION SHALL PREVAIL.
 GEORGIA REGISTERED PROFESSIONAL ENGINEER
 PAUL C. SIMONTON
 License No. 23042
 Exp. 12/31/23
 Level II Certification No. 935
 Expiration Date: 10-01-23
 1050 PARKSIDE COMMONS
 GREENSBORO, NC 27404
 TEL: (703) 454-0870
 www.simontonengineering.com
SIMONTON ENGINEERING
 Woodview Cir & Leo Ct
 Drainage Improvements
 for
 City of Milledgeville
 Baldwin County, Georgia
 Details
 DATE: October 6, 2022
 FILE NO: 2022-172PRJ
 SHEET: 6



- NOTES:**
- CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
 - CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 - ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
 - CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
 - CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
 - EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
 - ALL SEWER SERVICES AFFECTED BY THIS PROJECT, SHALL BE REMOVED & REPLACED TO THEIR PRE-EXISTING CONDITIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
 - SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
 - ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
 - TRENCH DRAINS TO BE 6" DURA SLOPE TRENCH DRAIN SYSTEM OR APPROVED EQUAL, SEE DETAIL SHEET 10.
 - TOTAL DISTURBED AREA = 0.23 ACRES

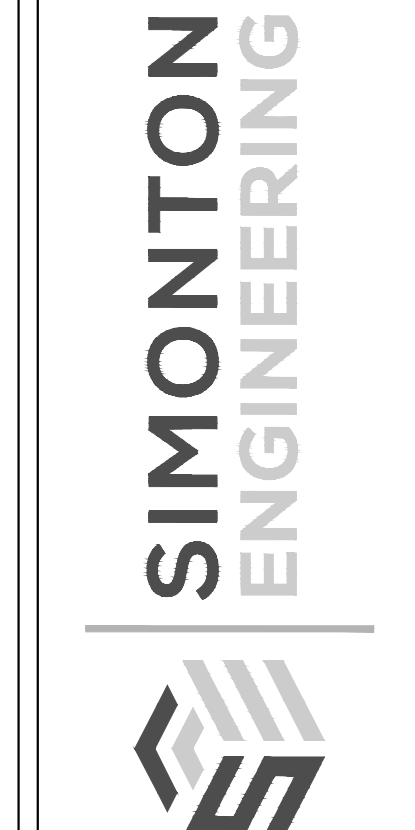


DRAWING COMPLETED BY:
REVISOR:



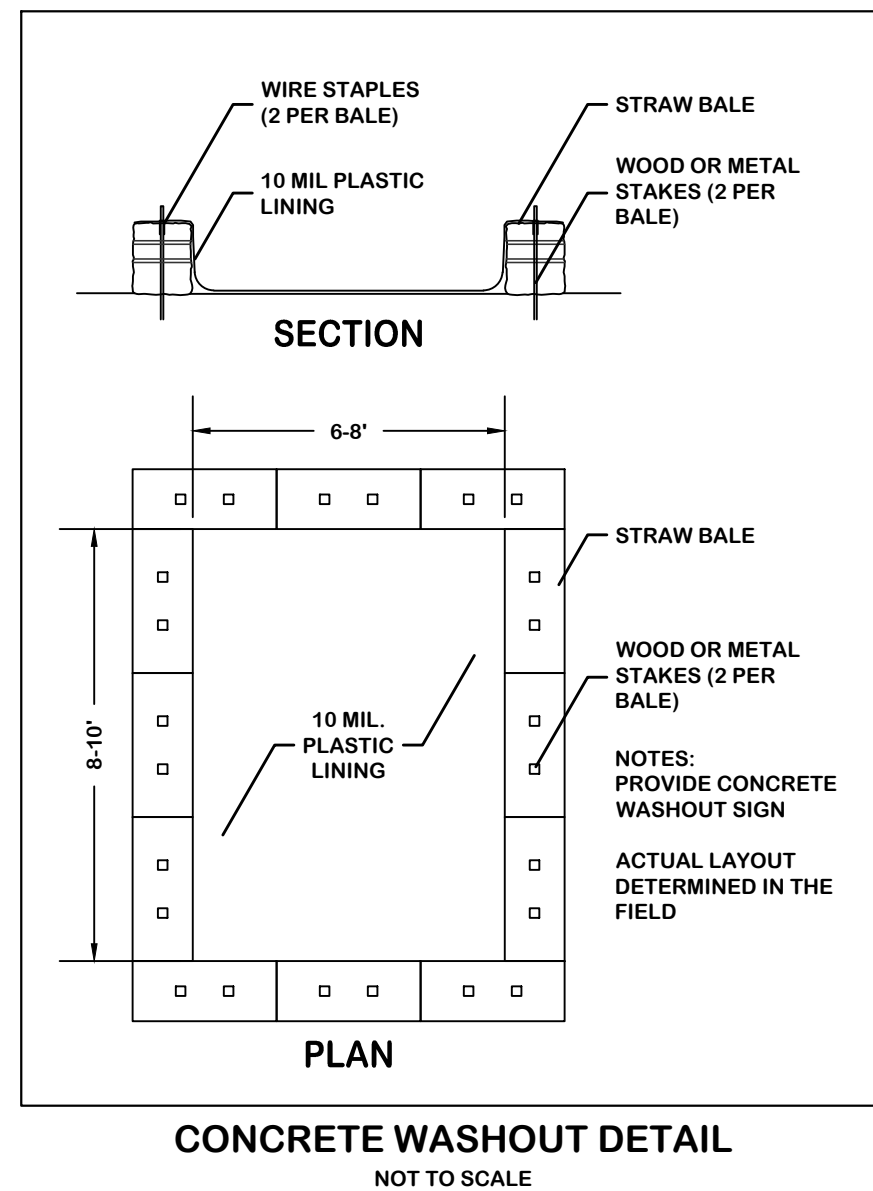
Level II Certification No. 935
Expiration Date: 10-01-25

1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontongen.com



Sinclair Dam Rd
Drainage Improvements
for
City of Milledgeville
Baldwin County, Georgia

Drainage
Plan & Profile
DATE: January 23, 2023
FILE NO: 2022-173PRJ
SHEET: 7



SITE DESCRIPTION

THIS SITE IS LOCATED ON SINCLAIR DAM RD IN BALDWIN COUNTY. THE LOTS HAVE A TOTAL ACREAGE OF 41.46 ACRES. EXISTING VEGETATION IS MATURE HARDWOODS AND PINES. THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF DRAINAGE IMPROVEMENTS INCLUDING VEGETATED SWALES, DRAINAGE PIPES & STRUCTURES. THE PLAN PROPOSES A DISTURBED ACREAGE OF 3.23 ACRES.

Ds3 MULCHING REQUIREMENTS

SEEDED AREAS SHALL BE MULCHED WITH GOOD QUALITY DRY STRAW FREE OF WEED SEEDS AT A RATE OF 2 TONS PER ACRE.

HYDROSEEDED AREAS SHALL BE MULCHED WITH WOOD CELLULOSE MULCH OR WOOD PULP FIBER AT A RATE OF 500 LBS. PER ACRE.

SOIL CONDITIONS

HOC2 - HELENA COMPLEX, 6-10% SLOPES, ERODED
CyB2 - CECIL SANDY LOAM, 2-6% SLOPES, MODERATELY ERODED
PER WEB SOIL SURVEY FROM NRCS DATED 9/22/2022.

CHANNEL STABILIZATION (Ch-1) NOTE

ROLLED EROSION CONTROL BLANKETS (RECP) SHALL BE USED AS VEGETATIVE LINING FOR CHANNEL STABILIZATION SEE DETAIL SHEET 10.

SEDIMENT STORAGE SUMMARY

DISTURBED AREA = 0.23 AC
REQUIRED SEDIMENT STORAGE = 15.41 C.Y.
(67 C.Y./AC X 0.230 AC = 15.41 C.Y.)

SILT FENCE SEDIMENT STORAGE

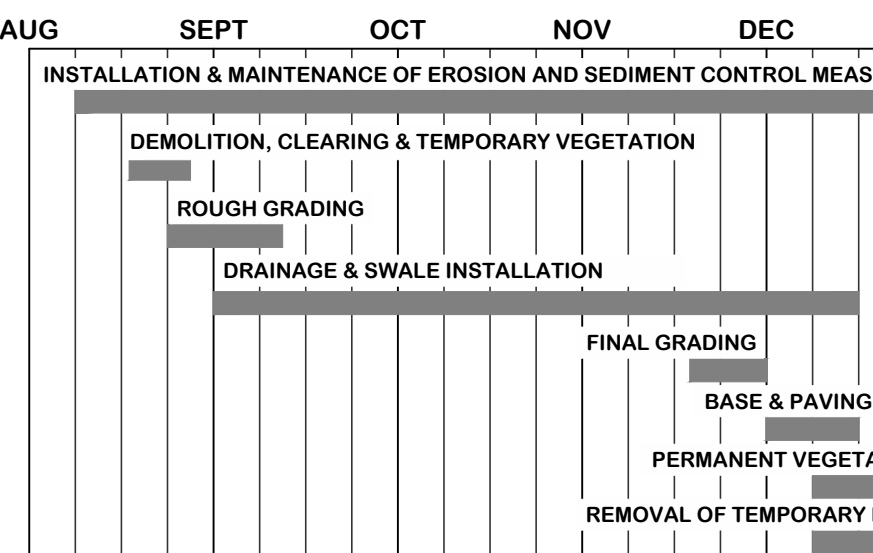
SILT FENCE REQUIRED = 100' PER 1/4 ACRE
23 AC X 100'/0.25 AC = 92 LF
STORAGE IN REQ. SILT FENCE = 92 LF X 0.17 CY/FT = 15.64 CY
AVAILABLE STORAGE = 100 LF X 0.17 CY/FT = 17.00 CY
TOTAL SILT FENCE SHOWN = 100'

Cd-S SEDIMENT STORAGE

STORAGE PROVIDED = 38.85 CY
(SEE DETAIL SHEET 9)
TOTAL SEDIMENT STORAGE ACHIEVED = 55.85 CY

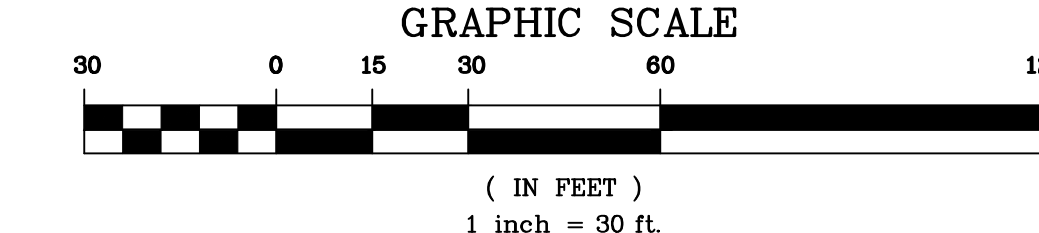
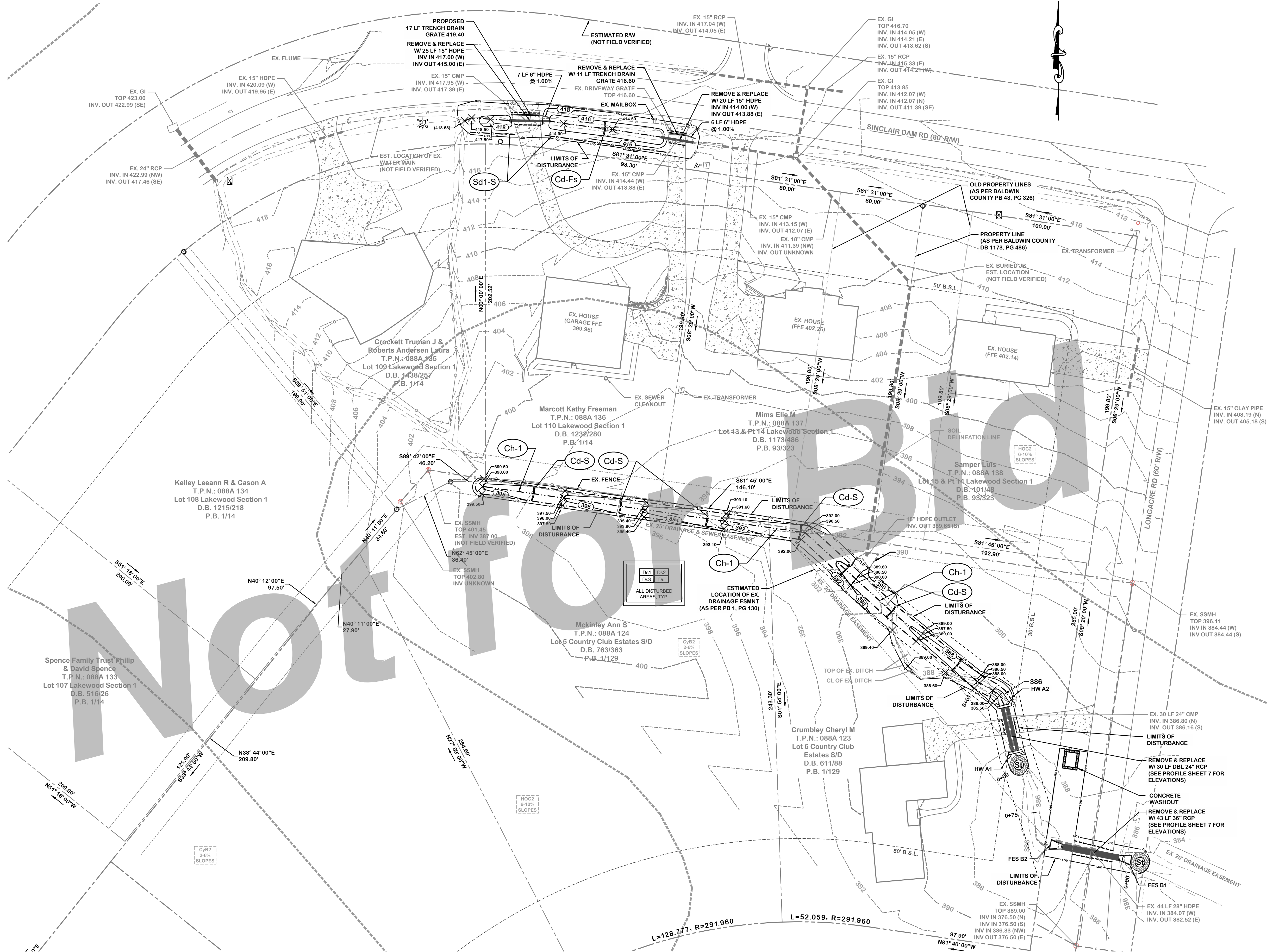
SIMONTON ENGINEERING, LLC
1050 PARKSIDE COMMONS - SUITE 101
GREENSBORO, GEORGIA 30642
(706) 454-0870

CONSTRUCTION SCHEDULE
SINCLAIR DAM RD DRAINAGE IMPROVEMENTS

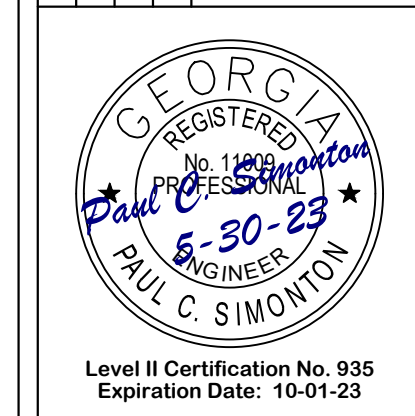


SEQUENCE OF MAJOR ACTIVITIES

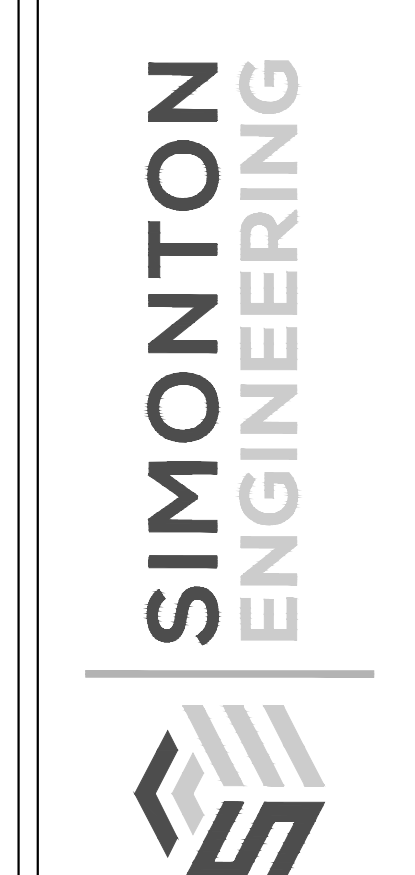
1. INSTALL STABILIZED CONSTRUCTION EXIT.
2. INSTALL SEDIMENT AND EROSION CONTROL STRUCTURES.
3. COMPLETE CLEARING AND GRUBBING.
4. STOCKPILE TOPSOIL.
5. STABILIZED CLEARED AND STOCKPILE AREAS WITHIN 14 DAYS.
6. COMPLETE ROUGH GRADING.
7. INSTALL DRAINAGE & SWALES.
8. COMPLETE GRADING.
9. INSTALL BASE & PAVING.
10. PERMANENT SEEDING AND LANDSCAPING.
11. REMOVE SEDIMENT AND EROSION CONTROL STRUCTURES.
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE REMOVE REMAINING EAS FACILITIES AND SEED DISTURBED AREAS.



DRAWING COMPLETED BY: _____
REVISED: _____



Level II Certification No. 935
Expiration Date: 10-01-23
1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontongen.com



Sinclair Dam Rd
Drainage Improvements
for
City of Milledgeville
Baldwin County, Georgia

Erosion, Sedimentation & Pollution Control Plan
DATE: January 23, 2023
FILE NO.: 2022-1739R
SHEET: 8

GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
 GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be made of burlap, straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel of the outlet of a storm drain system preventing erosion from the concentrated runoff.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SOON)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.
Ss	SLOPE STABILIZATION			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.

SPECIFICATIONS

A. USE THE FOLLOWING METHODS AS NEEDED OR DIRECTED TO MINIMIZE DUST ON THE PROJECT SITE:

MULCH

1. SEE STANDARD DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

IRRIGATION

1. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

CALCIUM CHLORIDE

1. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

Du DUST CONTROL ON DISTURBED AREAS

SPECIES	BROADCAST RATES (1)		PLANTING DATES BY RESOURCE AREAS (3)	REMARKS
	PER ACRE	PER 1000 Sq. Ft.		
LESPEDEZA, ANNUAL ALONE IN MIXTURES	40 lbs.	0.8 lbs.	P J F M A M J J A S O N D	200,000 SEED PER POUND. MAY VOLUNTEER FOR SEVERAL YEARS. USE UNCLAYED EL.
LOVEGRASS, WEEPING ALONE IN MIXTURES	4 lbs.	0.1 lbs.	P J F M A M J J A S O N D	1,500,000 SEED PER POUND. MAY LAST FOR SEVERAL YEARS. MIX WITH SERICHA LESPEDEZA.
MILLET, BROWNTOP ALONE IN MIXTURES	2 lbs.	0.1 lbs.	P J F M A M J J A S O N D	137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDING AT HIGH RATES.
MILLET, PEARL ALONE IN MIXTURES	40 lbs.	0.8 lbs.	P J F M A M J J A S O N D	88,000 SEED PER POUND. QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
RYE ALONE IN MIXTURES	3 bu (168 lbs.) 1/2 bu (28 lbs.)	3.9 lbs. 0.6 lbs.	P J F M A M J J A S O N D	18,000 SEED PER POUND. QUICK COVER. BROUGHT TOLERANT AND WINTERHARDY.
RYEGRASS, ANNUAL ALONE IN MIXTURES	40 lbs.	0.8 lbs.	P J F M A M J J A S O N D	227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.
SUDANGRASS ALONE IN MIXTURES	60 lbs.	1.4 lbs.	P J F M A M J J A S O N D	55,000 SEED PER POUND. GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.

(1) BROADCAST RATES ARE IN PURE LIVE SEED (PLS)
 (2) M= REPRESENTS THE MOUNTAIN BLUE RIDGE, AND RIDGES AND VALLEYS MLRA'S
 P REPRESENTS THE SOUTHERN PIEDMONT MLRA
 C REPRESENTS SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATLANDS MLRA'S
 (3) DARK LINES INDICATE OPTIMUM DATES, GRAY LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)	LIME APPLICATION (TONS/ACRE)
Cool Season Grasses	First Maintenance	6-12-12	1500	50-100	1
Warm Season Grasses and Legumes	First Maintenance	6-12-12	1000	30	-
Warm Season Grasses and Legumes	Second Maintenance	0-10-10	400	-	-
Temporary Cover Crops Seeded Alone	First Maintenance	0-10-10	500	30	1
Warm Season Grasses	First Maintenance	6-12-12	1500	50-100	1
	Second Maintenance	0-10-10	400	30	-

Ds2 DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)

DS1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) SPECIFICATIONS

A. For temporary protection of critical areas without seeding. This standard applies to grades or cleared areas which may be subjected to erosion for 6 months or less, where seeding may not have a suitable growing season to produce an erosion retardant cover, but which can be stabilized with a mulch cover.

Site Preparation

- Grade, as needed and feasible, to permit the use of equipment for applying and anchoring mulch.
- Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
- As needed and feasible, loosen compact soil to a minimum depth of 3 inches.

Mulching Materials

- Dry straw or hay - spread at a rate of 2 1/2 tons per acre
- Wood waste, chips, sawdust or bark - spread 2 to 3 inches deep (about 6 to 9 tons per acre).
- Erosion control matting or netting, such as excelsior, jute, textile and plastic matting and netting - applied in accordance with manufacturers recommendations.
- Cutback asphalt, slow curing - applied at 1200 gallons per acre (or 114 gallon per sq. yd.)
- Polyethylene film - secured over banks or stockpiled soil material for temporary protection.

Applying and Anchoring Mulch

- Apply straw or hay mulch uniformly by hand or mechanically. Anchor as appropriate and feasible. It may be pressed into the soil with a disk harrow with the disk set straight or with a special "pucker disk." The disk may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but press it into the soil leaving much of it in an erect position. Straw hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade AE-5 or SS-1). The asphalt emulsion must be sprayed onto the mulch as it is ejected from the machine. Use 100 gallons of water per acre.
- Spread wood waste uniformly on slopes that are 3:1 and flatter. No anchoring is needed.
- Commercial matting and netting. Follow manufacturer's specification included with the material.
- Apply asphalt so area has uniform appearance. (Note: Use in areas of pedestrian traffic could cause problems or "tracking in" or damage to shoes, clothing, etc.)

B. To conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bar areas on lawns.

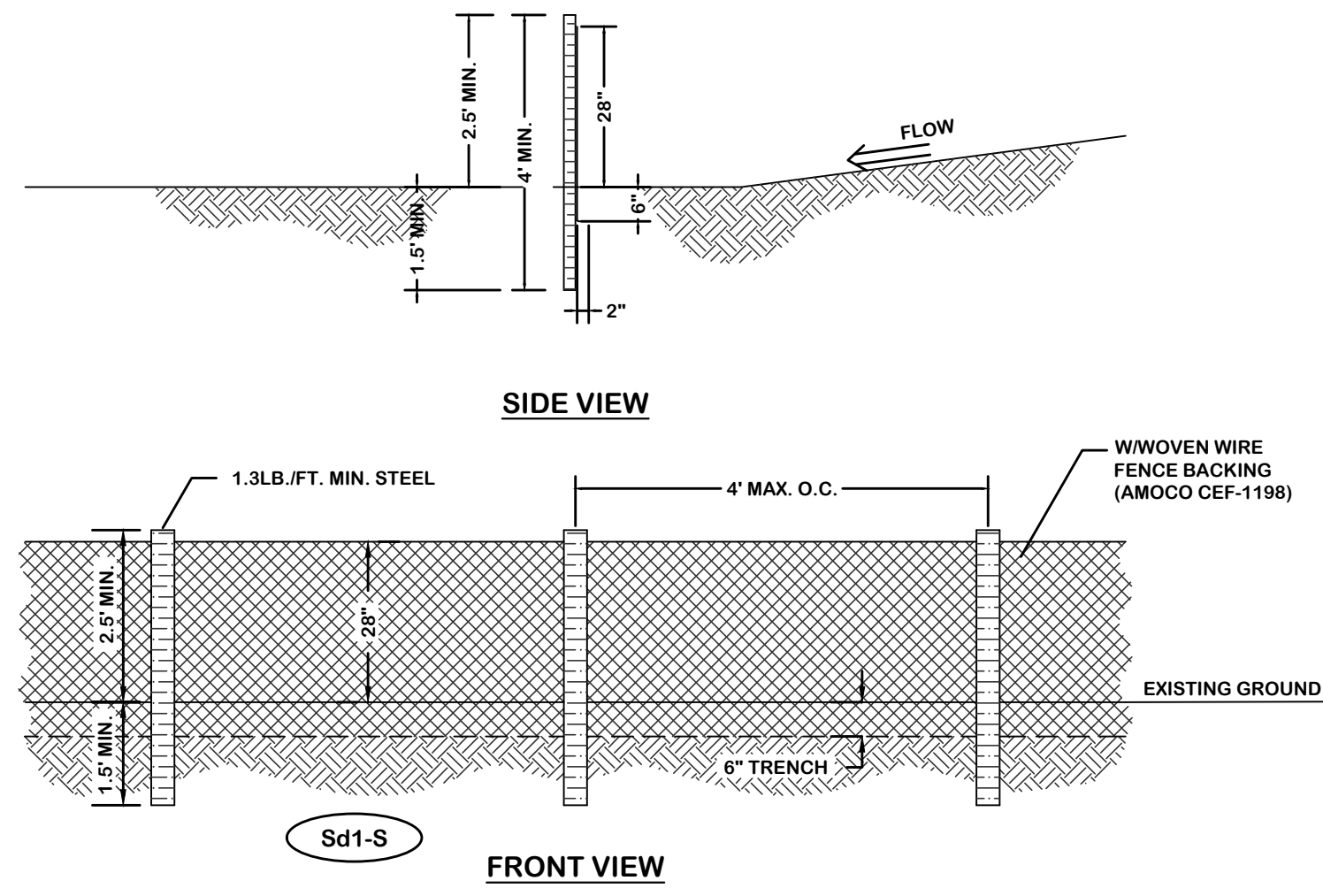
Mulching Materials

Use one of the materials given below and apply at thickness indicated.

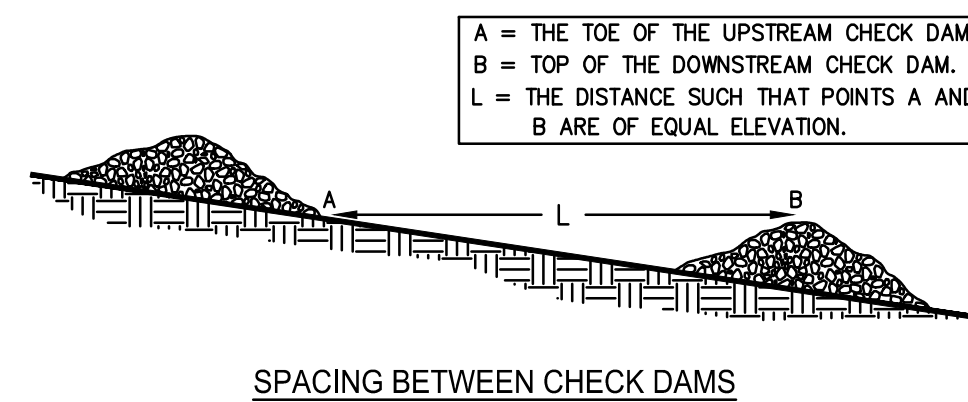
Material

Material	Depth
1. Grain straw or grass hay	6" to 10"
2. Pine needle	4" to 6"
3. Wood waste (sawdust, bark, chips)	4" to 6"
4. Shredded residues (crops, leaves, etc.)	4" to 8"

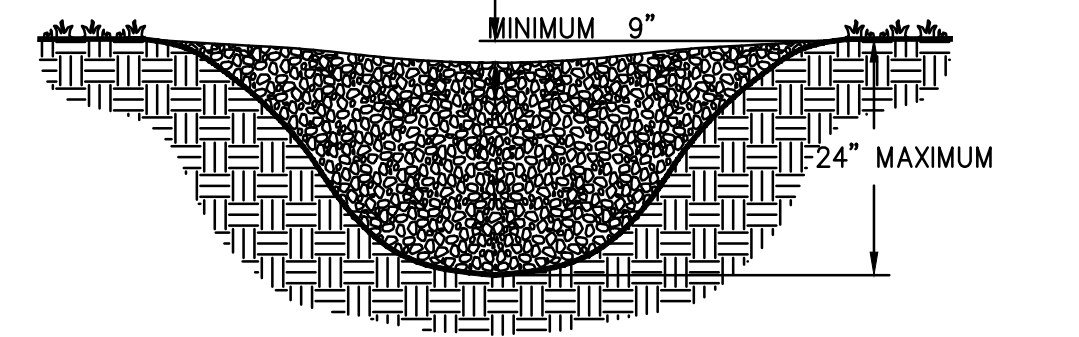
Completely cover area with black polyethylene film and hold in place by placing soil on the outer edge. When using organic mulches, apply 20-30 pounds of nitrogen in addition to the normal amount needed for plant growth to offset the tie up of N by decomposition of mulch



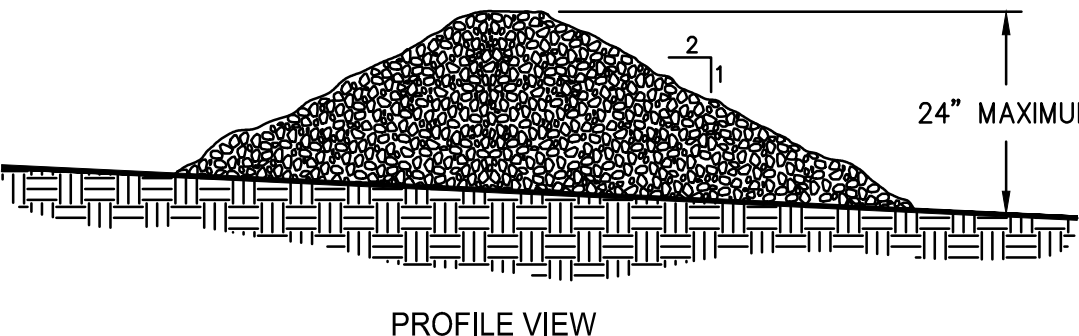
Sd1-S SILT FENCE - TYPE "S"



CROSS SECTION



PROFILE VIEW



- NOTES:
- CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
 - THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
 - THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
 - THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
 - THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
 - GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

Cd-S STONE CHECK DAM

Method to Estimate Sediment Storage Volume for Rock Filter Dams and Stone Check Dams

$$V_1 = \frac{1}{27} \left[\frac{W_1 S_p L_1^2}{2} + \frac{S_p^2}{65x_f} L_1^3 + \frac{S_p^2}{65x_b} L_1^3 \right]$$

Rock filter dams and stone check dams are of like shape, so their storage volume equations are identical. Note from Figure-1 below, the total volume: $V_t = V_1 + V_2$. Note that $V_1 \gg V_2$. Although V_2 is negligible, it can be calculated similarly.

- V_1 - Sediment storage volume above ditch (yd³).
- W_1 - Ditch bottom width (ft).
- S_p - Profile slope of ditch (ft/ft).
- L_1 - Distance sediment can be stored from the toe of dam (ft).
- S_{xf} - Ditch foreslope (ft/ft).
- S_{xb} - Ditch backlope (ft/ft).
- S_{cd} - Check dam face slope (ft/ft).
- d - Sediment storage height of dam (ft) where $S_p L_1 \leq d$.
- a - Horizontal distance of ditch foreslope (ft).
- b - Horizontal distance of ditch backlope (ft).

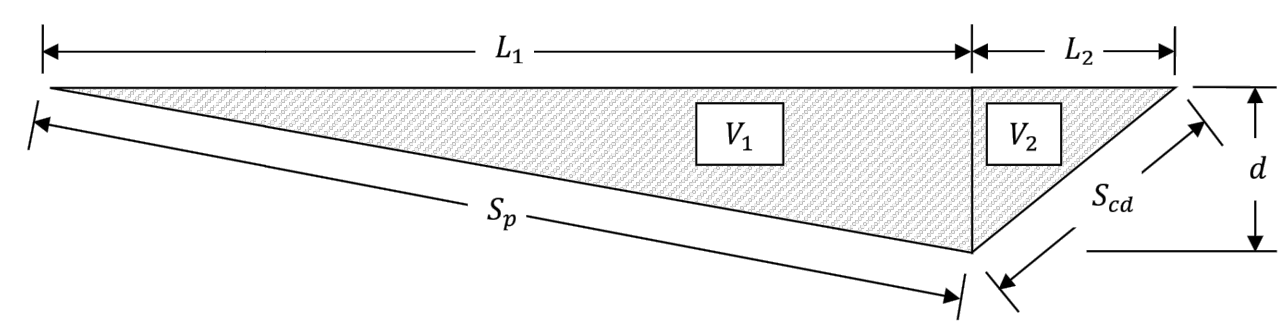
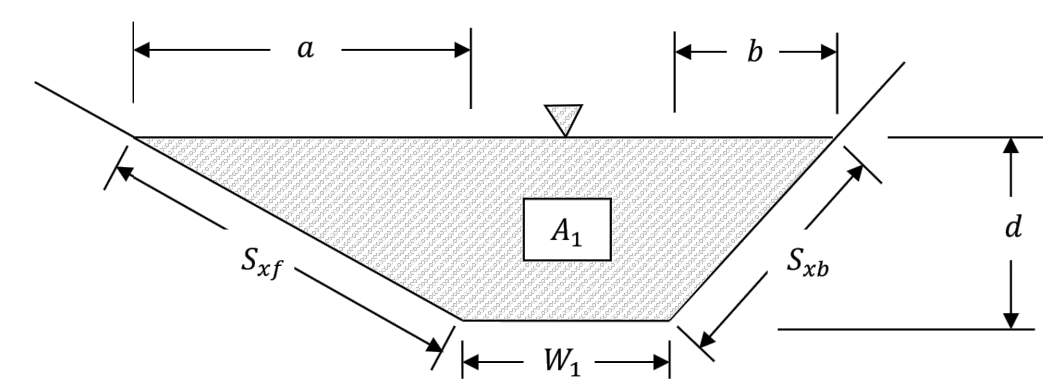


Figure-1: Profile View of the Ditch - (Not to Scale)



Office of Design Policy & Support
 Jon Griffith, P. G., P. E., & Dylan Eagleton

POTENTIAL POLLUTANT MATERIALS INVENTORY

- Concrete
- Detergents
- Paints (Enamel and Latex)
- Metal Studs
- Tar
- Roofing Shingles
- Fertilizers
- Pesticides
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Masonry Block/Brick/Stone

PRODUCT SPECIFIC PRACTICES

Petroleum Based Products - Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on-site vehicles and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and state regulations.

Paints/Finishes/Solvents - All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. In excess product, materials used with these products and product containers will be disposed of according to manufacturer's specifications and recommendations.

Concrete Truck Washing - NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water onsite.

Fertilizer/Herbicides - These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or the CSWOC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

Building materials - No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE.

WASTE MATERIALS

All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No construction waste will be buried onsite. All personnel will be instructed on proper procedures for waste disposal.

HAZARDOUS WASTES

All hazardous waste materials will be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and used and another copy of each MSDS will be maintained in the ESDCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques. The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within the ESDCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

SANITARY WASTES

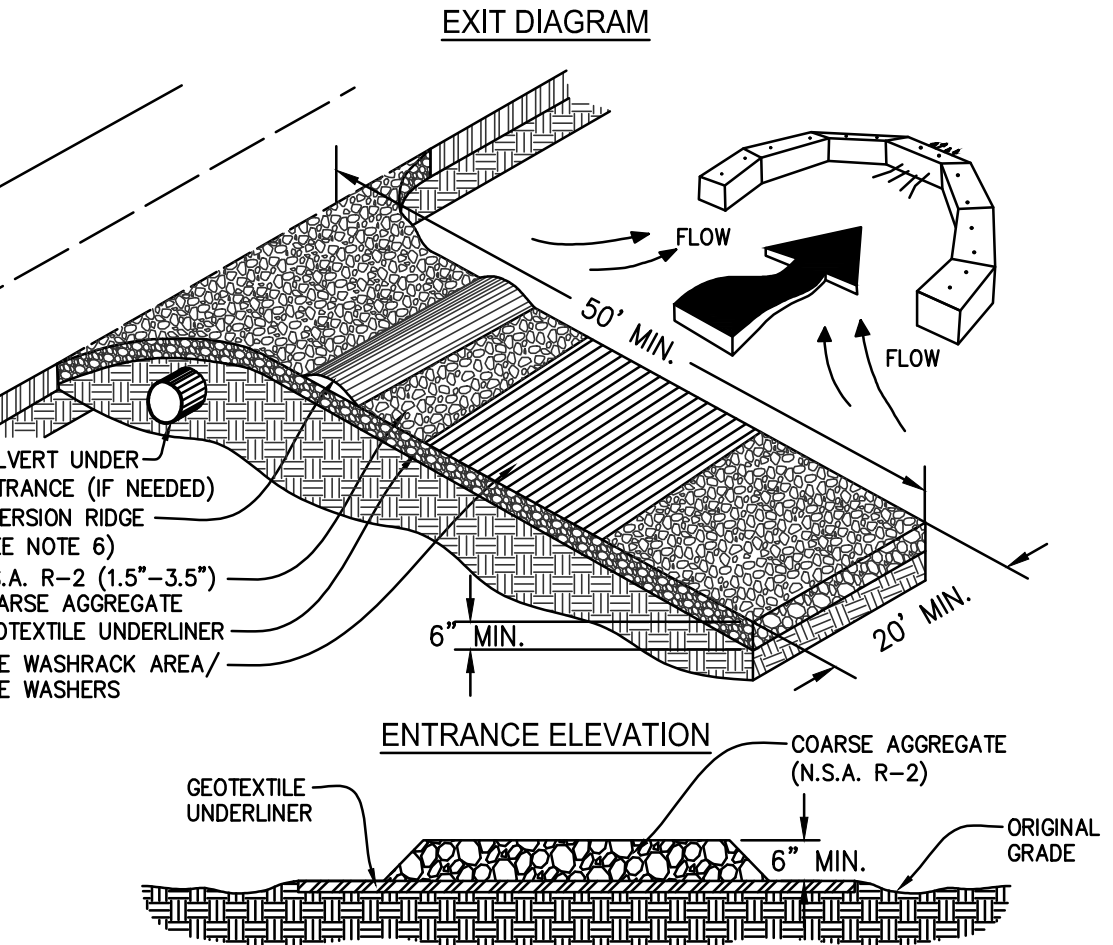
A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the site in a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations. All sanitary waste units will be located in one area where the likelihood of the unit contributing to stormwater discharge is negligible. Additional containment BMP's must be implemented, such as gravel bags or specially designed plastic bag containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Sheet, by the contractor once the locations have been determined. Sanitary Sewer will be provided by Municipal Authority/Septic System at the completion of this project.

SPILL CLEANUP AND CONTROL PRACTICES

- Local, state and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to:
 - greater than 500 gallon brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.
 - Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent further spills.
 - All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, state and federal regulations.
 - * For SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEET ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
 - * For SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
 - * For SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
 - * For SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

The contractor shall notify the licensed professional who prepared this plan if more than 1200 gallons of petroleum is stored onsite (this includes quantities of equipment) or if any one piece of equipment has a capsa. The Contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.

Co CRUSHED STONE CONSTRUCTION EXIT



- NOTES:
- Avoid locating on steep slopes or at curves on public roads.
 - Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
 - Aggregate size shall be in accordance with National Stone Association R-2 (1.5" - 3.5" stone).
 - Gravel pad shall have a minimum thickness of 6".
 - Pad width shall be equal full width at all points of vehicular egress, but no less than 20'.
 - A diversion ridge should be constructed when grade toward paved area is greater than 2%.
 - Install pipe under the entrance, if needed, to maintain drainage ditches.
 - When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin (divert all surface runoff and drainage from the entrance to a sediment control device).
 - Washracks and/or tire washers may be required depending on scale and circumstance. If necessary, washrack design may consist of any material suitable for truck traffic that remove mud and dirt.
 - Maintain area in a way that prevents tracking and/or flow of mud onto public rights-of-way. This may require top dressing, repair and/or cleanout of any measures used to trap sediment.

"THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE NAMED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING. THIS DRAWING, IN THE EVENT OF A DISPUTE, SHALL BE DEEMED TO BE THE FINAL AND AUTHENTIC E-COPY. " SIMONTON ENGINEERING, LLC."

Level II Certification No. 935
 Expiration Date: 10-01-23

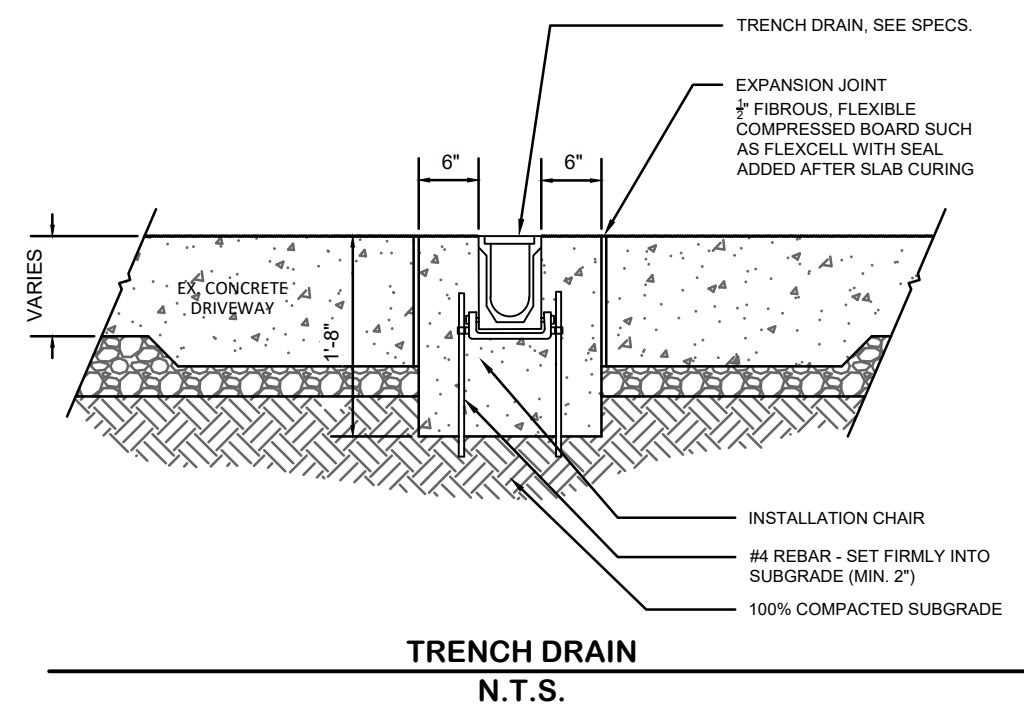
1050 PARKSIDE COMMONS
 GREENSBORO, NC 27406
 TEL: (760) 454-0870
 www.simontonengineering.com

SIMONTON ENGINEERING

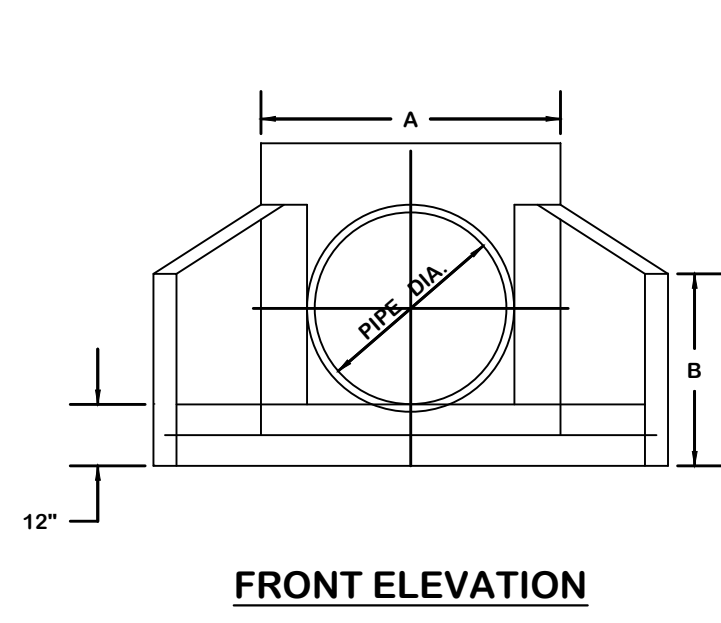
Sinclair Dam Rd
 Drainage Improvements
 for
 City of Milledgeville
 Baldwin County, Georgia

Erosion, Sedimentation & Pollution Control Details

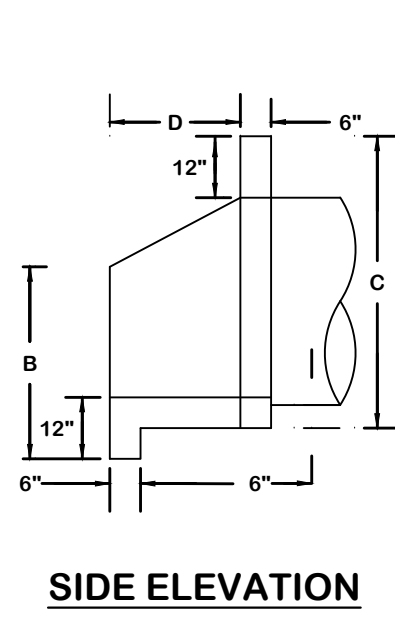
DATE: January 23, 2023
 FILE NO: 2022-1739R
 SHEET: 9



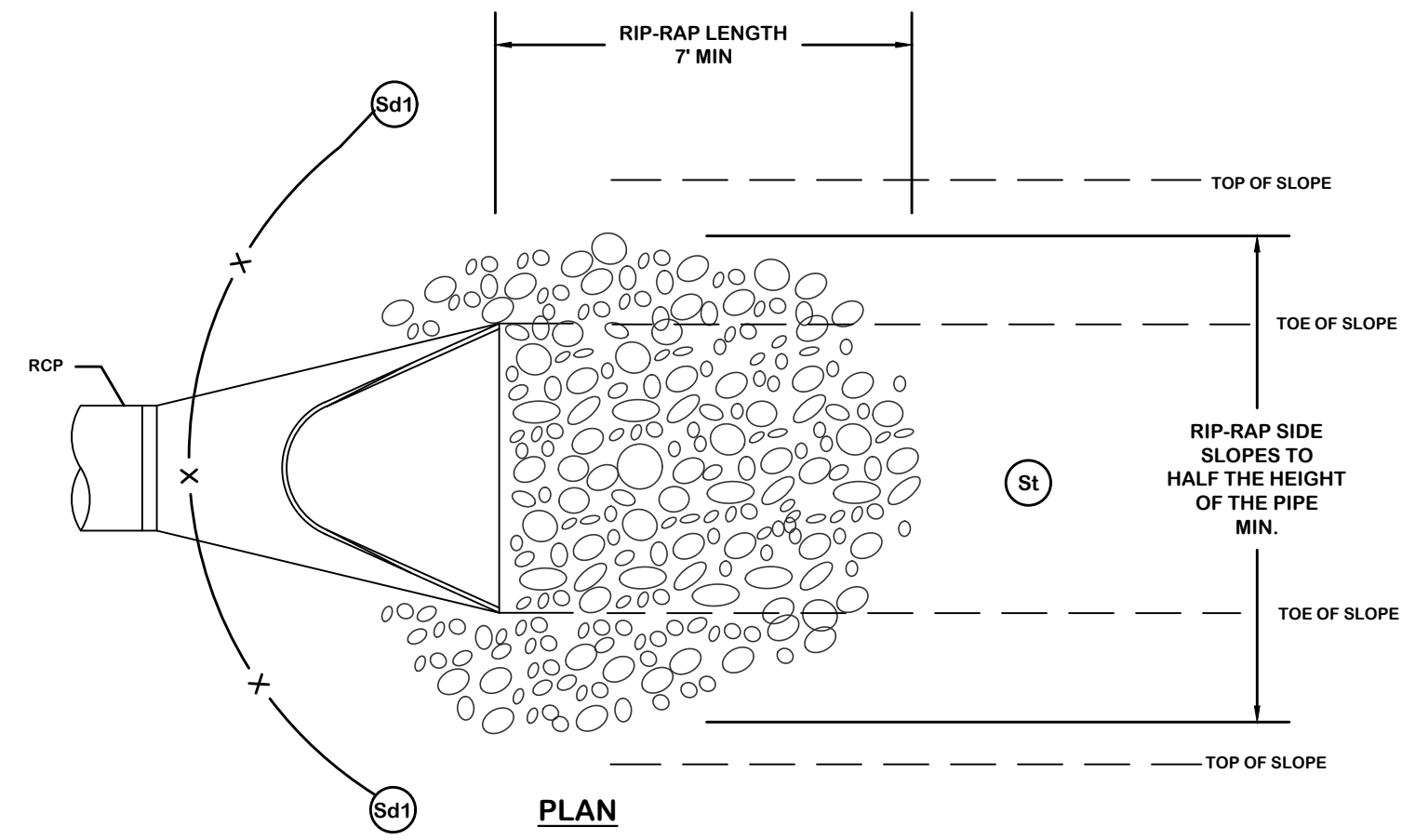
TRENCH DRAIN
N.T.S.



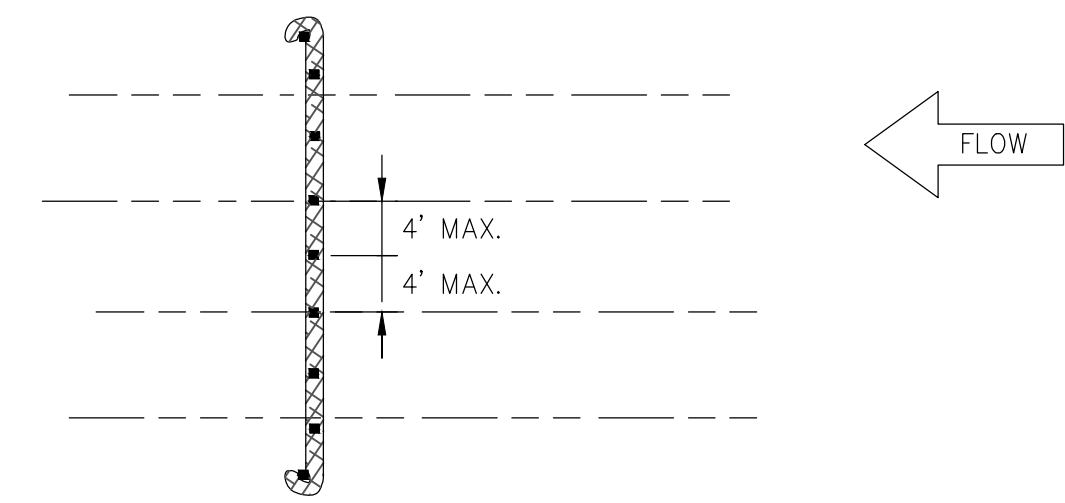
FRONT ELEVATION



SIDE ELEVATION



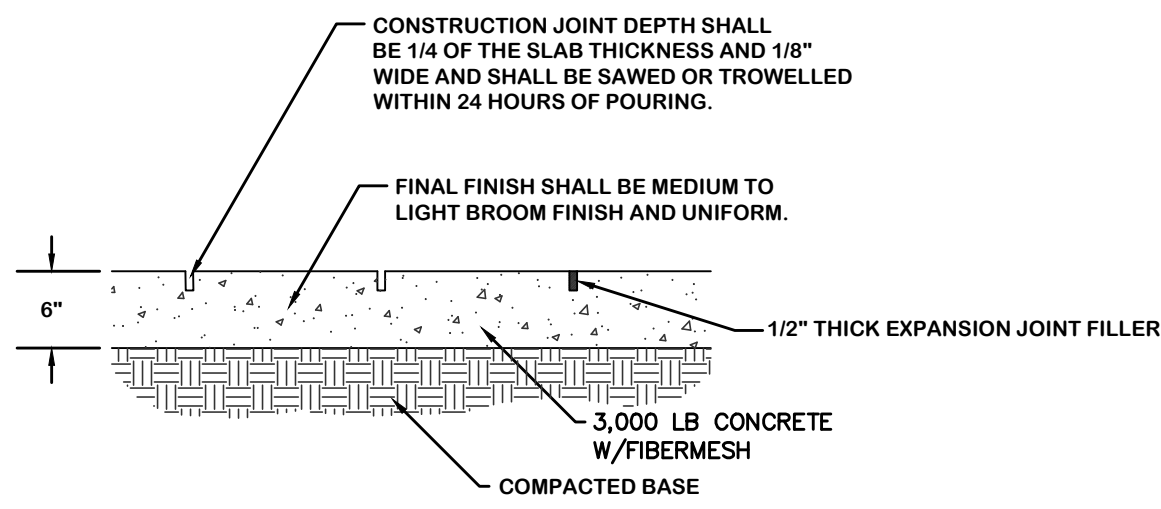
PLAN



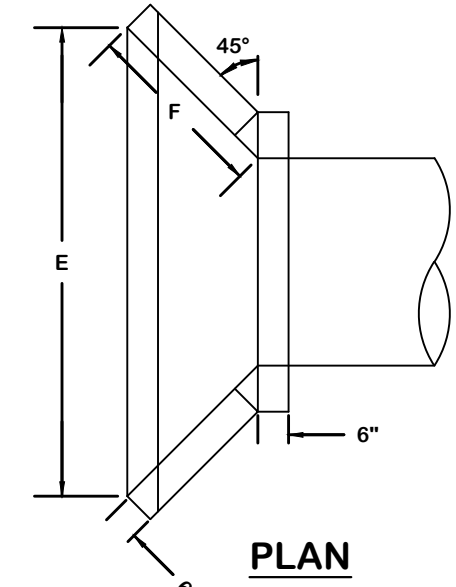
TYPICAL PLAN FOR COMPOSITE SOCK CHECK DAM

- NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS.
 2. PLACE ONE STAKE AT THE CENTER OF THE DITCH/CHANNEL. ALSO PLACE STAKES AT THE BED/BANK JUNCTION AND AT END OF THE DEVICE NOT SPACED MORE THAN 4 FEET APART.
 3. SEDIMENT SHOULD BE REMOVED FROM BEHIND THE CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED 1/2 THE HEIGHT OF THE CHECK DAM.
 4. CHECK DAMS CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
 5. MINIMUM STAKING DEPTH FOR SAND, SILT, AND CLAY SHALL BE 18\".

- NOTES:
1. CONSTRUCTION JOINTS: 12\"/>



CONCRETE PAVING DETAIL
N.T.S.

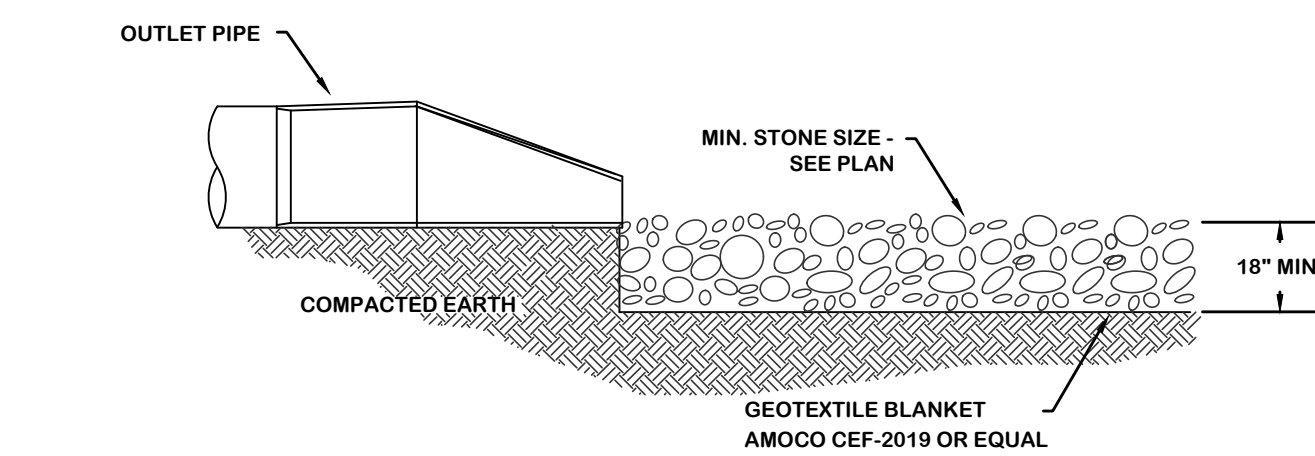


PLAN

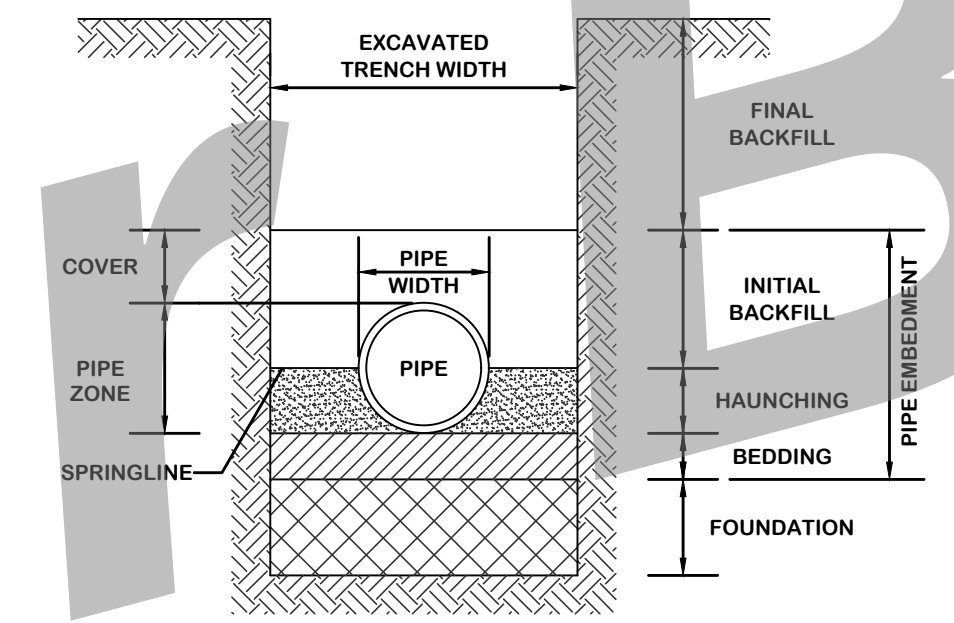
- NOTES:
1. TOP OF HEADWALL SHOULD BE SAME ELEVATION AS EDGE OF PAVEMENT WHEN WITHIN RIGHT OF WAY.
 2. ALL OUTLET HEADWALLS TO HAVE A SPLASH PAD.
 3. CHAMFER ALL EXPOSED EDGES.

PIPE DIA.	A	B	C	D	E	F
15"	3'3"	2'4"	3'4"	1'5"	4'10"	2'0"
18"	3'5"	2'4"	3'4"	1'5"	4'10"	2'0"
24"	4'0"	2'9"	3'11"	1'8"	5'11"	2'4"
30"	4'6"	3'1"	4'5"	2'0"	7'4"	2'10"
36"	5'1"	3'5"	5'0"	2'4"	8'0"	3'3"

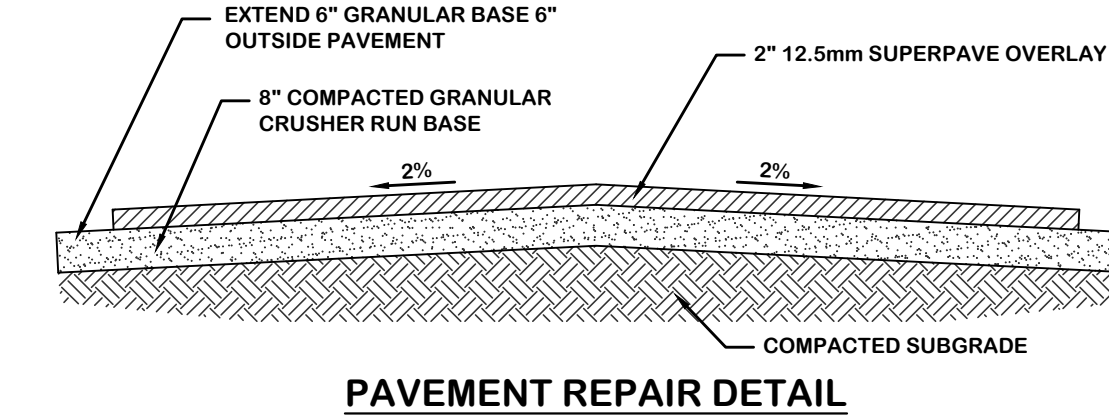
WING HEADWALL
N.T.S.



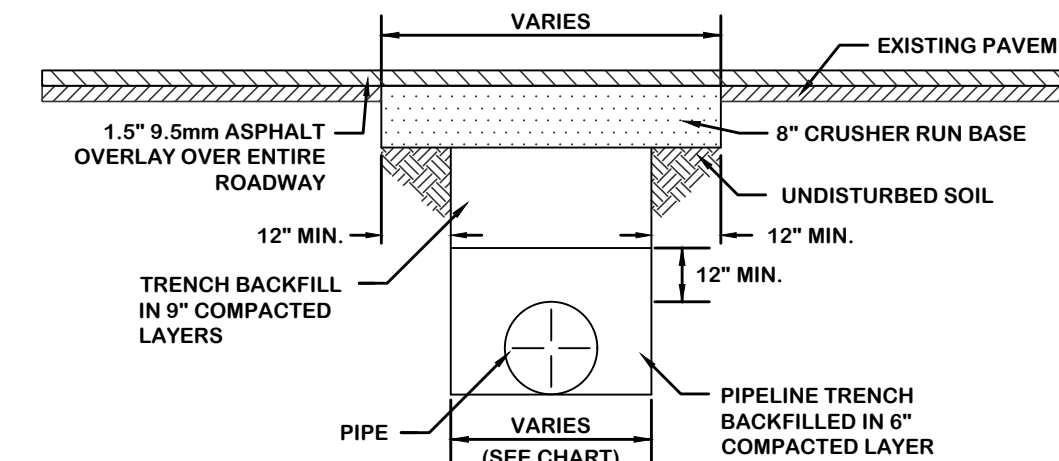
PRECAST FLARED END SECTION
N.T.S.



PIPE BEDDING DETAIL
N.T.S.



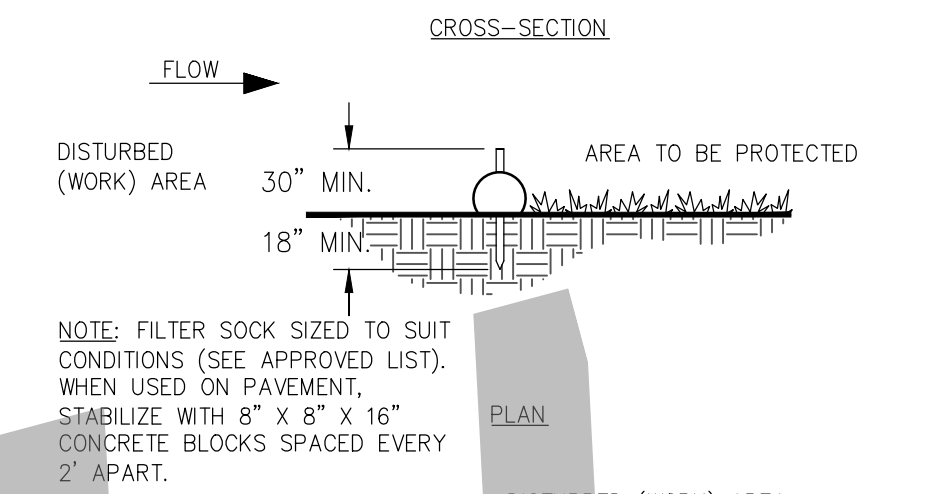
PAVEMENT REPAIR DETAIL
N.T.S.
2022-173PRJ



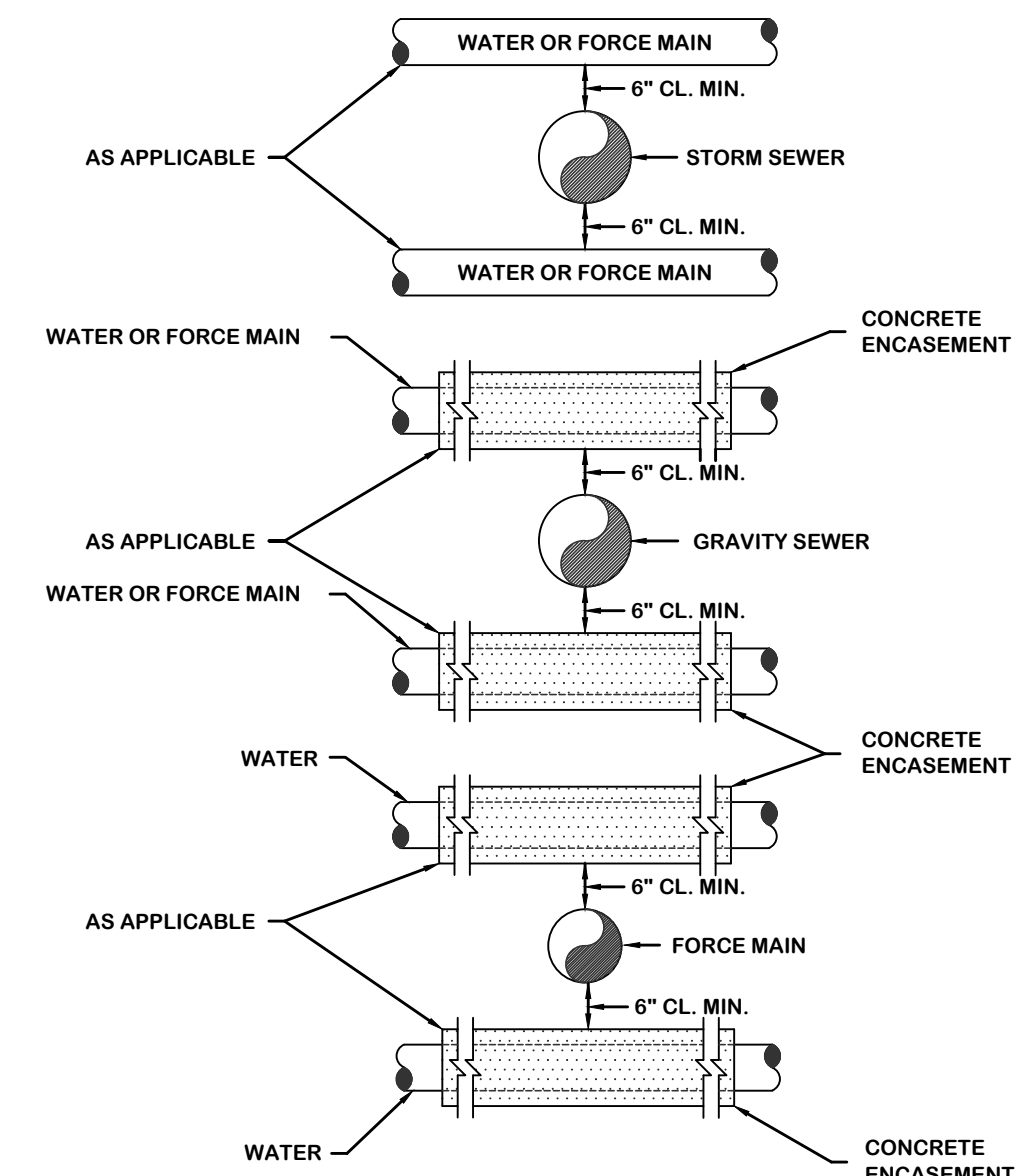
NOTE: MAXIMUM PAVEMENT WIDTH FOR CUT DEPTH OVER 6 FEET SHALL BE 8 FEET UNLESS NOTED OTHERWISE ON PLANS.

PIPE DIAMETER	MAXIMUM TRENCH WIDTH 0'-6\"/>	
6" TO 15"	16" + DIA.	40" + DIA.
18" TO 21"	20" + DIA.	44" + DIA.
24" TO 30"	24" + DIA.	48" + DIA.
33" TO 42"	36" + DIA.	60" + DIA.
48"+	36" + DIA.	60" + DIA.

PAVEMENT REMOVAL & REPLACEMENT
N.T.S.



COMPOST FILTER SOCK CHECK DAM

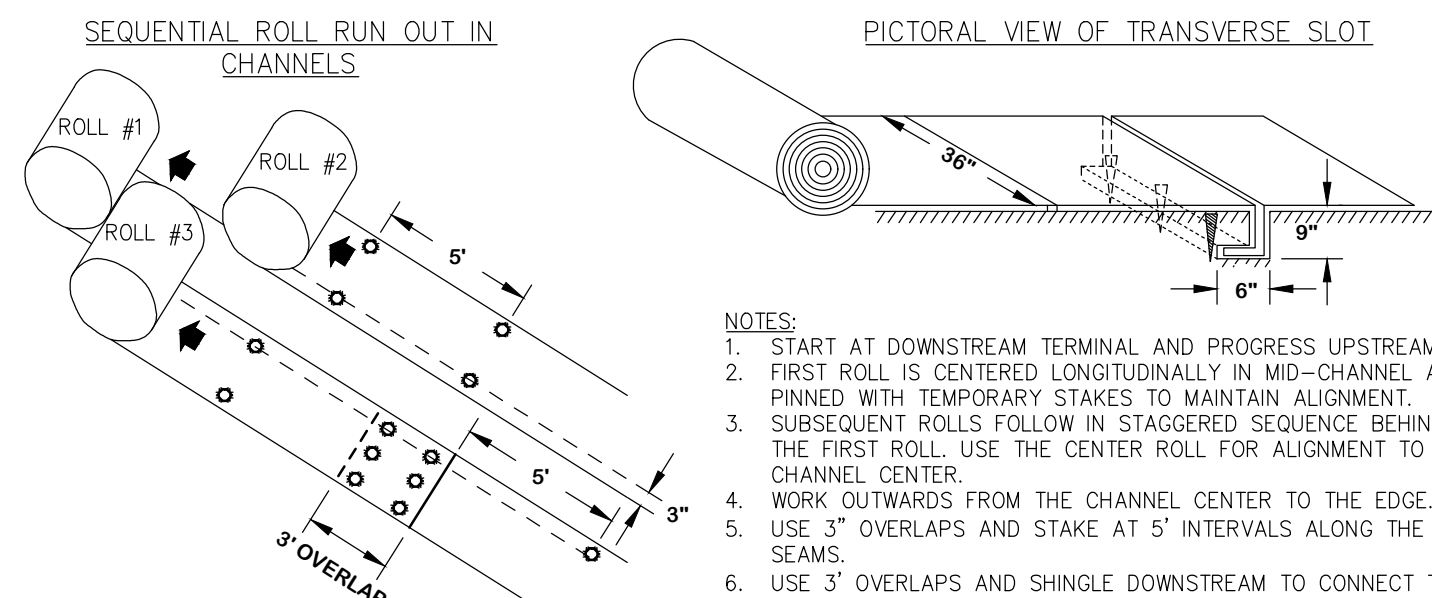
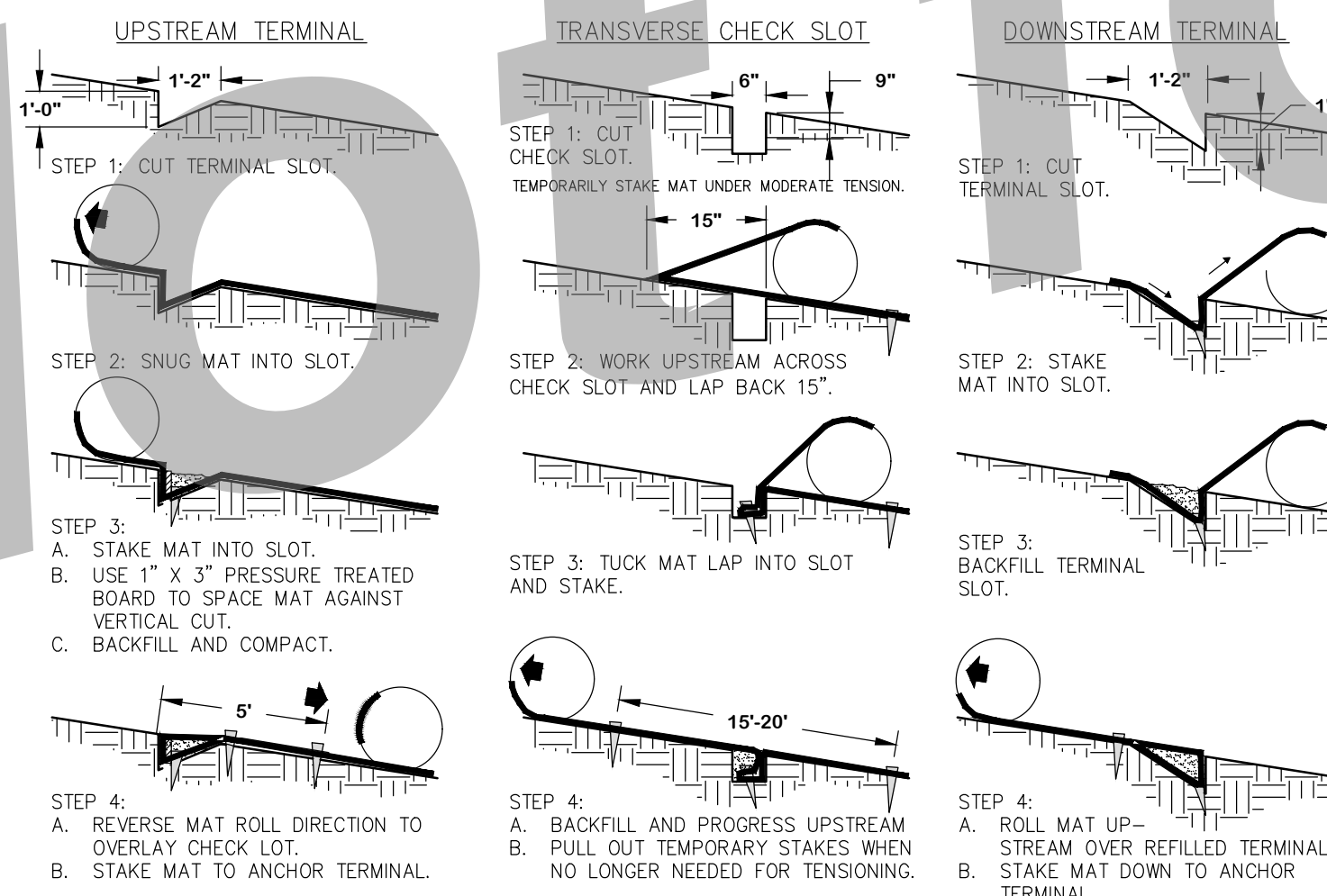


- NOTES:
1. CONCRETE ENCASUREMENT TO EXTEND A MINIMUM OF 10\"/>

SEPARATION DETAIL
N.T.S.

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS

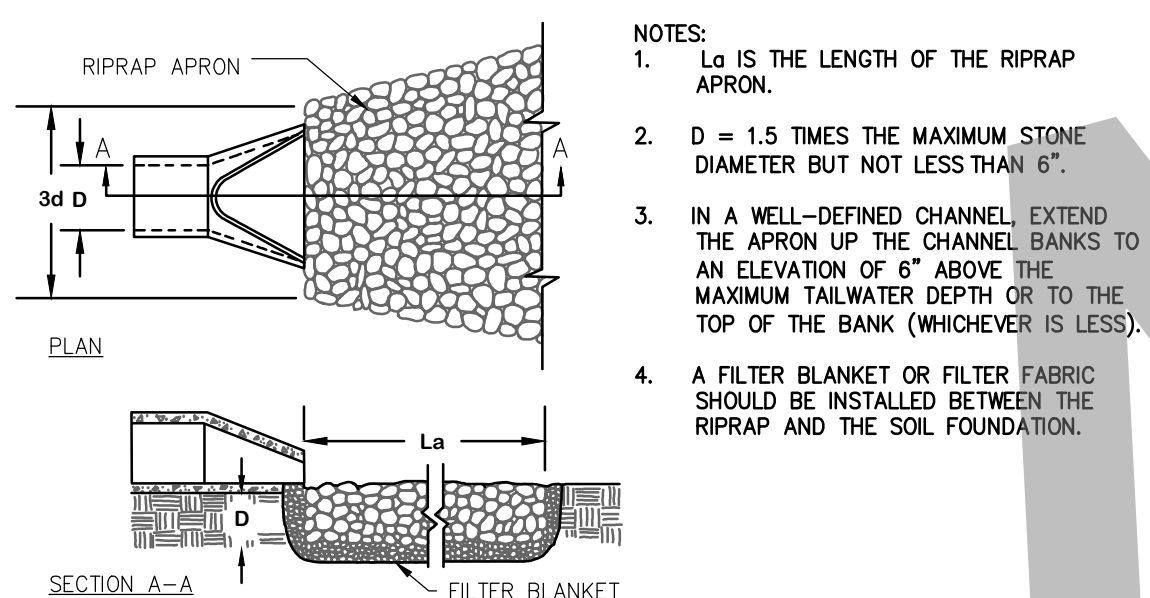


- NOTES:
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
 2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
 3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
 4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
 5. USE 3\"/>

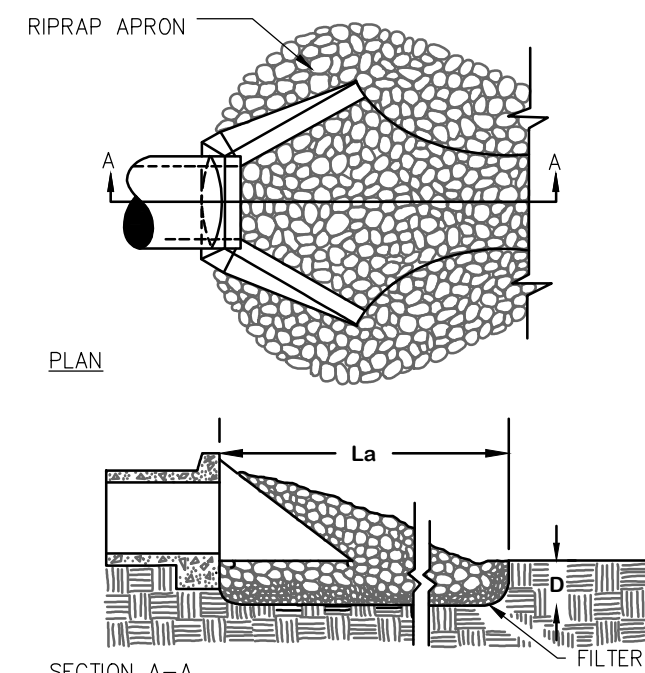
MATERIAL NOTE:
1. THE ROLLED EROSION CONTROL BLANKET SHALL BE "CORLEX II EROSION CONTROL FABRIC DOUBLE NETTING" OR COMPARABLE MATERIAL THAT WILL WITHSTAND VELOCITIES OF MORE THAN 6 FPS.

RIPRAP OUTLET PROTECTION

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



PIPE OUTLET TO WELL DEFINED CHANNEL



St SIZE CHART

La	LENGTH OF APRON	d50	AVERAGE STONE DIAMETER
W1	WIDTH OF APRON UPSTREAM	D	STONE DEPTH
W2	WIDTH OF APRON DOWNSTREAM		

OUTLET	PIPE DIA.	La	W1	W2	d50	FLOW RATE	VELOCITY	D
HW A1	DBL 24"	18'	8'	21'	6"	36.08 CFS	5.74 FT/S	14"
FES B1	36"	20'	9'	23'	7.5"	40.04 CFS	5.76 FT/S	16.5"

*ALL TAILWATER CONDITIONS ARE MINIMUM.

St RIPRAP OUTLET PROTECTION

Ch CHANNEL STABILIZATION W/
ROLLED EROSION CONTROL BLANKETS (RECP)

DRAWING COMPLETED BY:

REVISED:



Level II Certification No. 935
Expiration Date: 10-01-23

1050 PARKSIDE COMMONS
SUITE 100
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontonengineering.com

SIMONTON
ENGINEERING



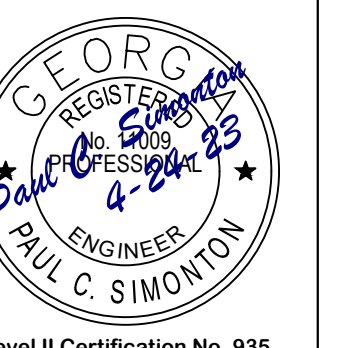
Sinclair Dam Rd
Drainage Improvements
for
City of Milledgeville
Baldwin County, Georgia

Details
DATE: January 23, 2023
FILE NO: 2022-173PRJ
SHEET: 10

DRAWING COMPLETED BY:

REVISED:

"THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS THAT MAY OCCUR IN THIS DRAWING. IN THE EVENT OF A DIGITAL OR PRINT COPY, THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE COPY. SIMONTON ENGINEERING, LLC."



Level II Certification No. 935
Expiration Date: 10-01-25

1550 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontonengineering.com

SIMONTON
ENGINEERING

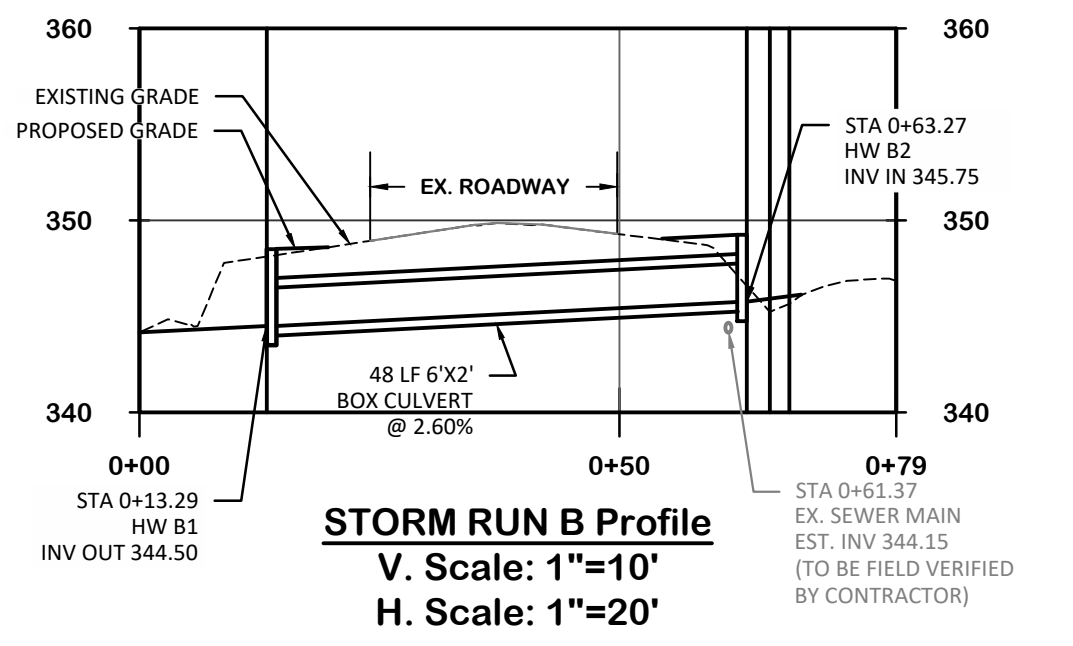
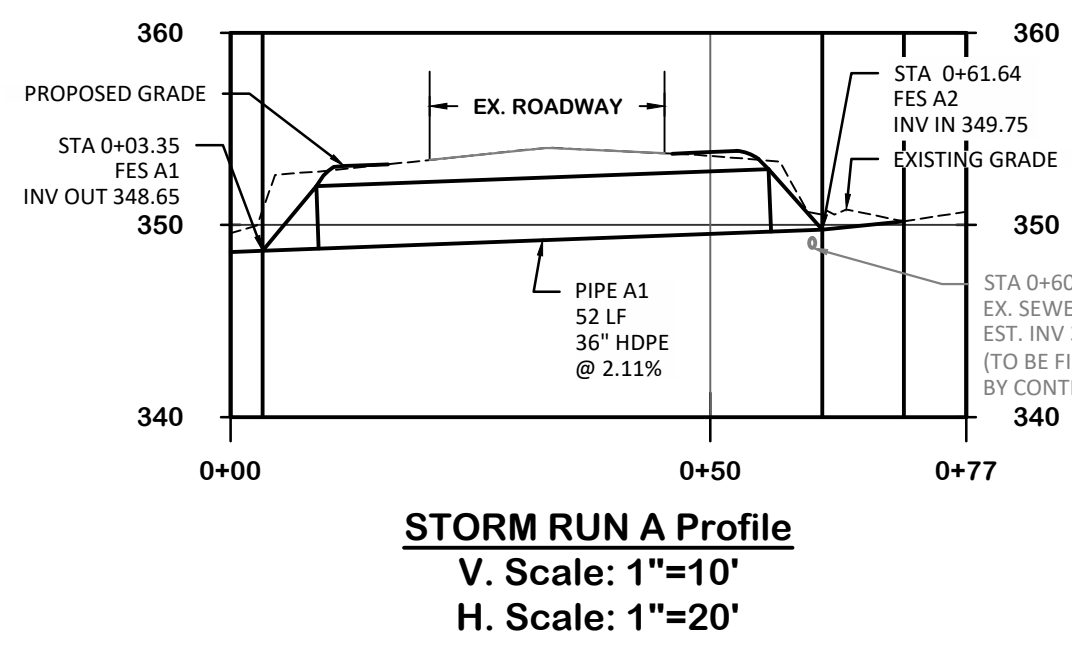
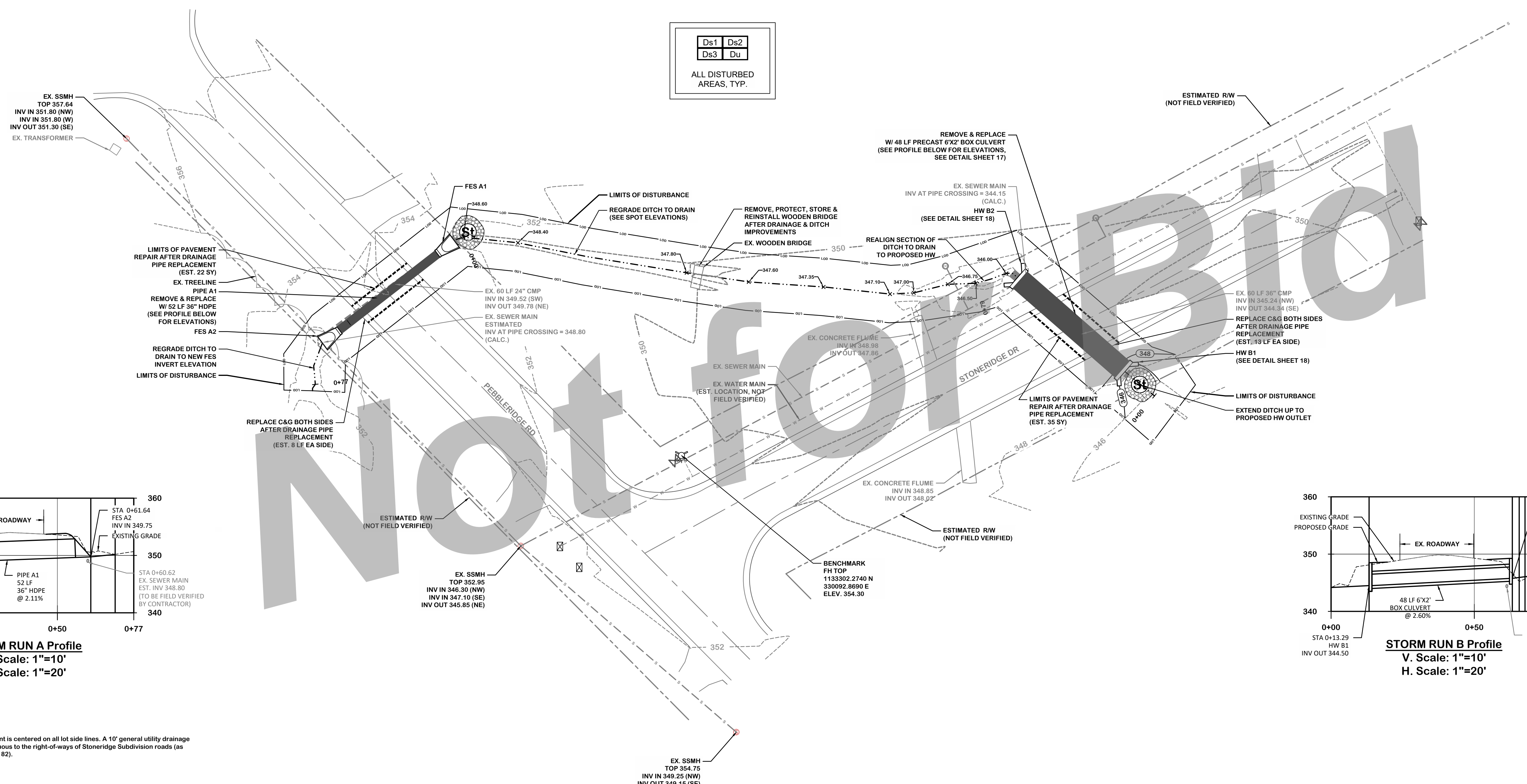


Drainage Replacement & Improvements for City of Milledgeville
Baldwin County, Georgia

Stoneridge Dr & Pebbleridge Rd Drainage Plan
DATE: January 23, 2023
FILE NO: 2023-05PRJ
SHEET: 11

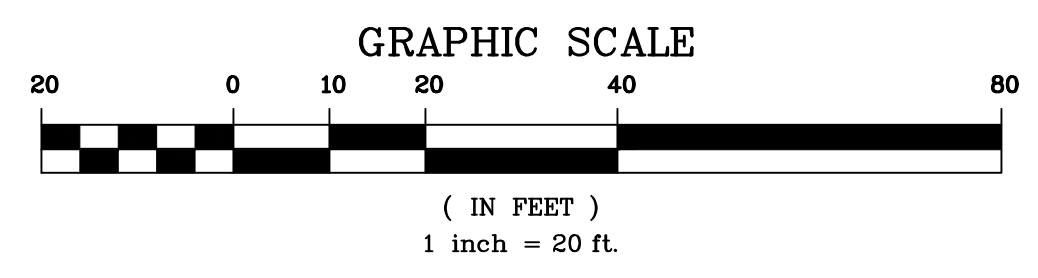


Ds1 Ds2
Ds3 Du
ALL DISTURBED AREAS, TYP.

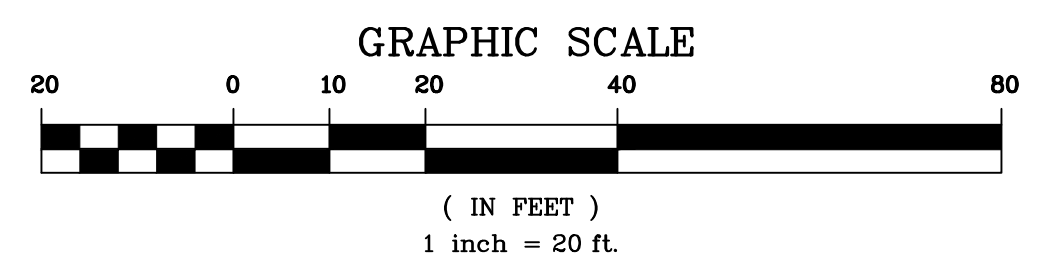
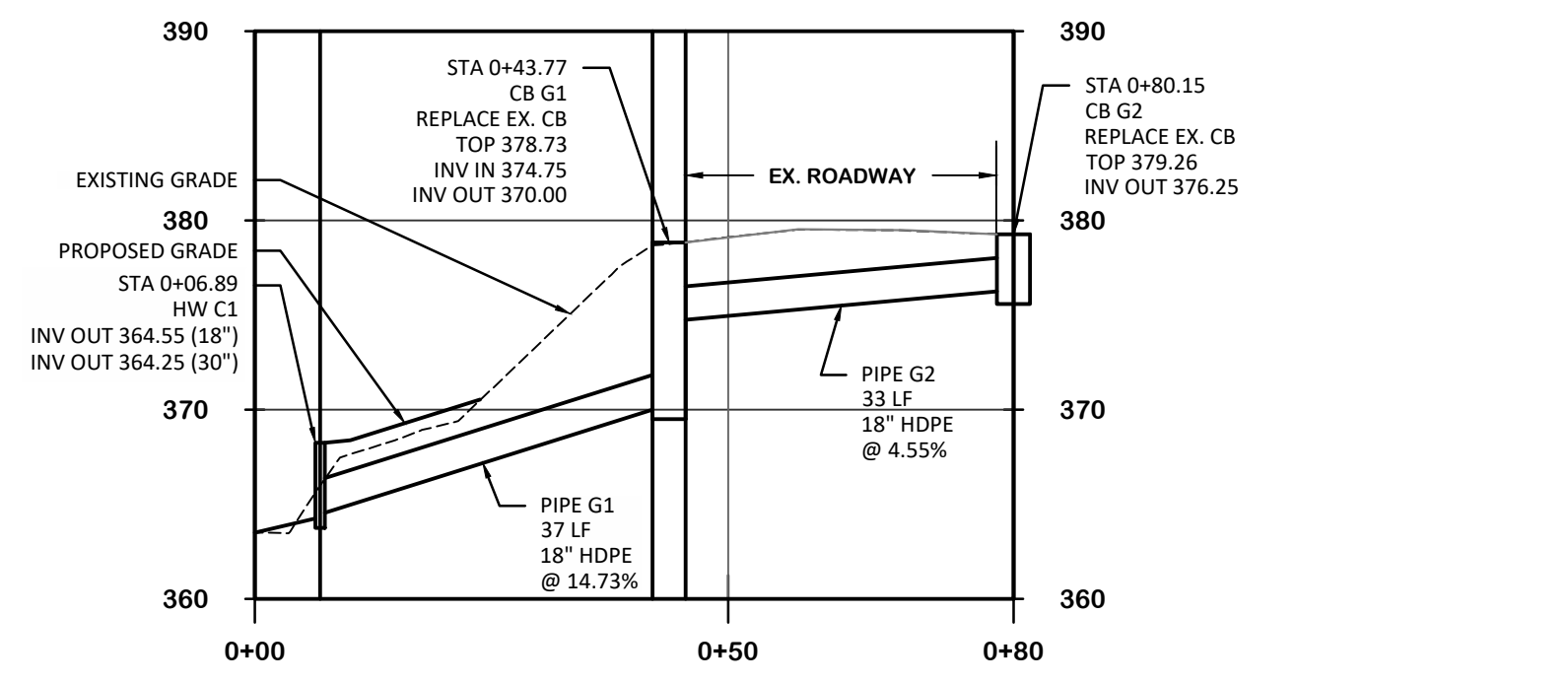
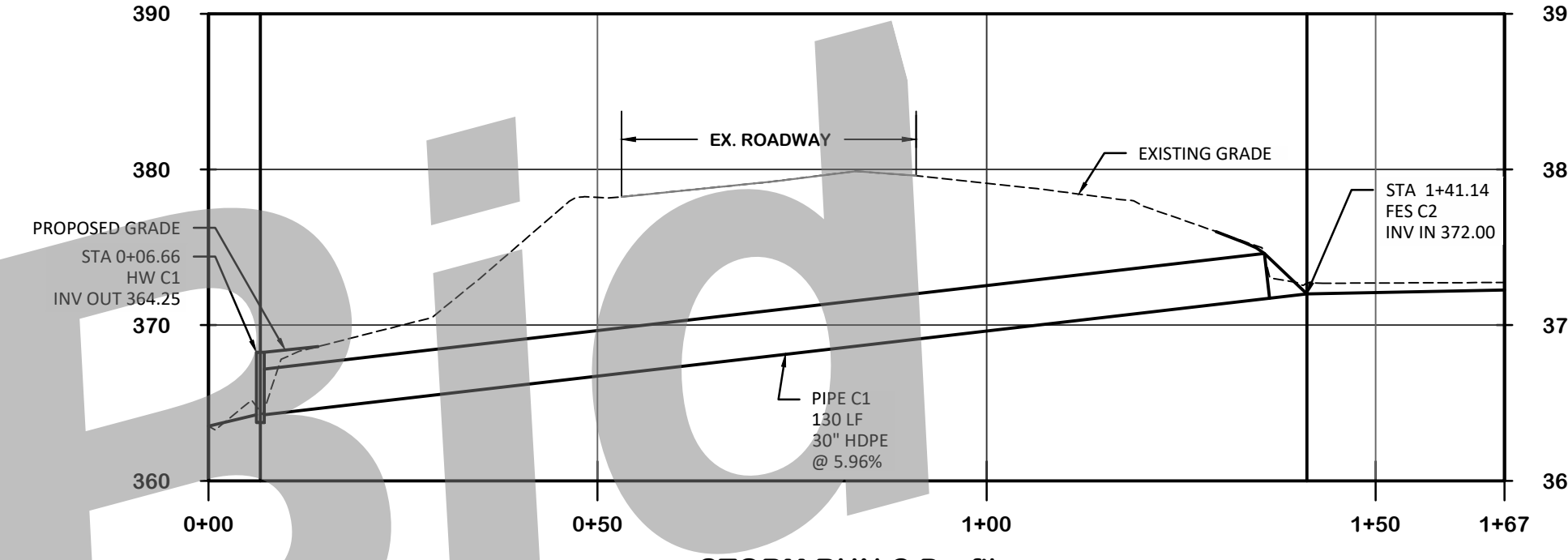
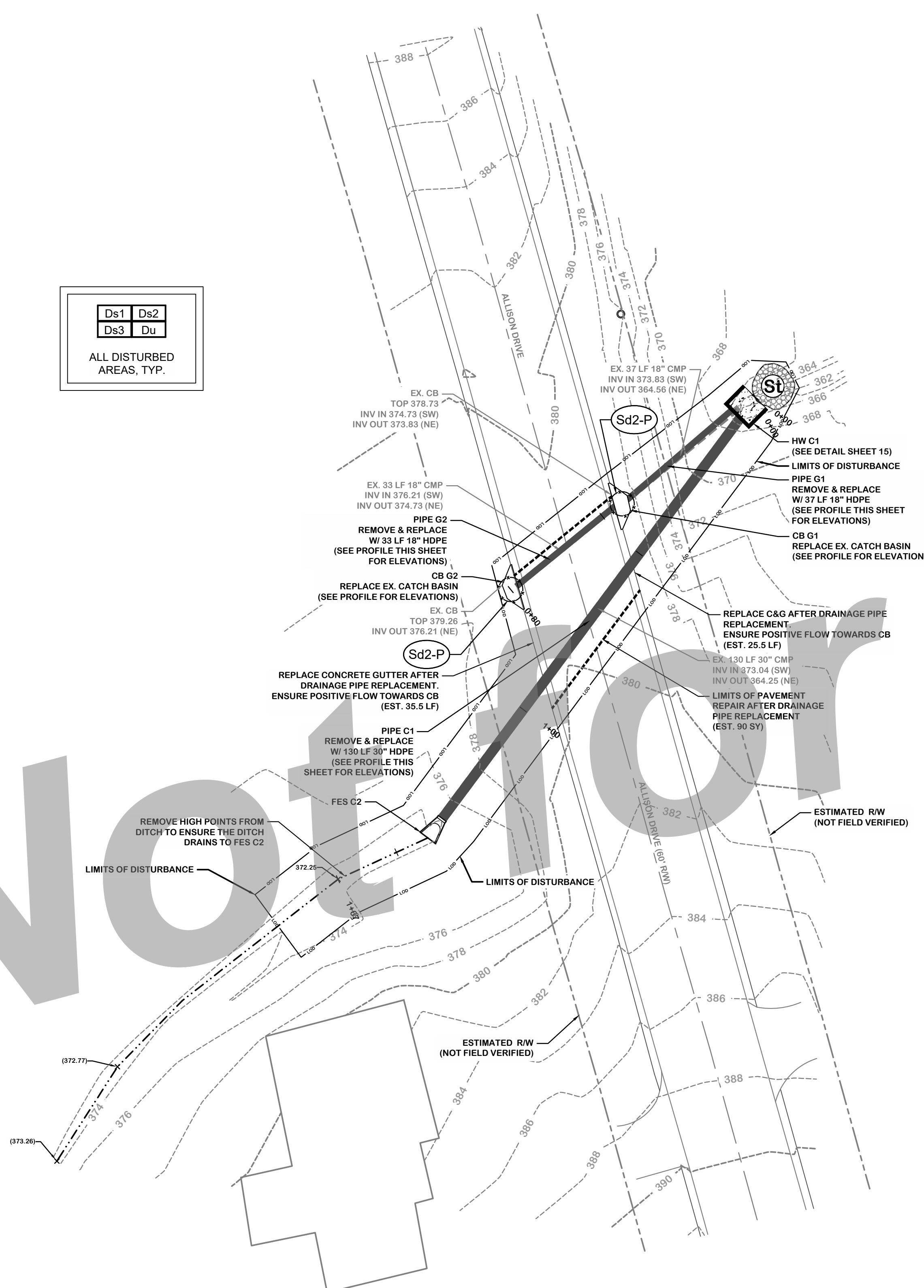


- EASEMENTS:**
1. A 15' general utility/drainage easement is centered on all lot side lines. A 10' general utility drainage easement is placed along and contiguous to the right-of-ways of Stoneridge Subdivision roads (as per Note 4, Baldwin County PB 31/PG 32).

- NOTES:**
1. CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
 2. CONTRACTOR IS PERMITTED TO CLOSE ONE LANE AT A TIME UNDER TRAFFIC CONTROL.
 3. CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 4. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
 5. CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
 6. CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
 7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
 8. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
 10. SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
 11. ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
 12. ALL ASPHALT STREET CUTS SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE PUBLIC WORKS SPECIFICATIONS.
 13. CONTRACTOR MUST CONFIRM THE PIPE MATERIAL TO BE USED PRIOR TO PURCHASING THE PIPE. DIFFERING PIPE MATERIAL MAY BE USED IN PLACE OF THE PROPOSED HDPE, DEPENDING ON THE AVAILABILITY OF THE PIPE MATERIAL, AS DIRECTED BY THE ENGINEER.
 14. TOTAL DISTURBED AREA = 0.17 ACRES



Ds1 Ds2
Ds3 Du
ALL DISTURBED
AREAS, TYP.



- EASEMENTS:**
- A 20' utility & drainage easement exists along all sewer or ditch lines (as per Note 3 (c), Baldwin County PG 1/PG 59).
- NOTES:**
- CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
 - CONTRACTOR IS PERMITTED TO CLOSE ONE LANE AT A TIME UNDER TRAFFIC CONTROL.
 - CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 - ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
 - CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
 - CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
 - EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
 - SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
 - ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
 - ALL ASPHALT STREET CUTS SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE PUBLIC WORKS SPECIFICATIONS.
 - CONTRACTOR MUST CONFIRM THE PIPE MATERIAL TO BE USED PRIOR TO PURCHASING THE PIPE. DIFFERING PIPE MATERIAL MAY BE USED IN PLACE OF THE PROPOSED HDPE, DEPENDING ON THE AVAILABILITY OF THE PIPE MATERIAL, AS DIRECTED BY THE ENGINEER.
 - DRAINAGE PIPE LOCATIONS AND ELEVATIONS MAY BE ADJUSTED AFTER EXCAVATION OF THE EXISTING PIPES, AS DIRECTED BY THE ENGINEER.
 - THIS DRAINAGE ALIGNMENT IS BASED ON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN.
 - TOTAL DISTURBED AREA = 0.11 ACRES

DRAWING COMPLETED BY:

REVISED:



1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (706) 454-0870
www.simontonengineering.com

SIMONTON
ENGINEERING

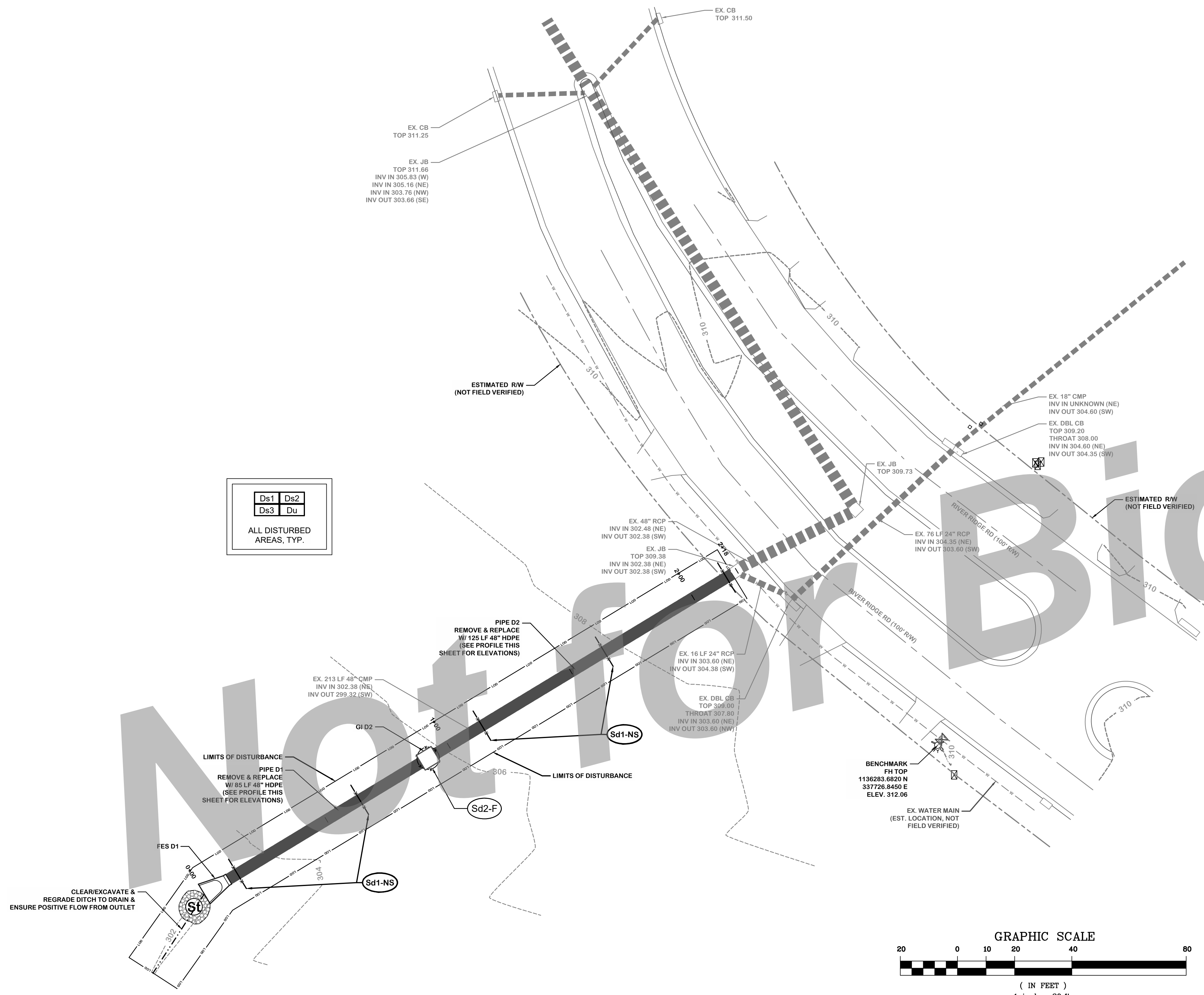


Drainage Replacement & Improvements for
City of Milledgeville
Baldwin County, Georgia

Allison Dr
Drainage Plan

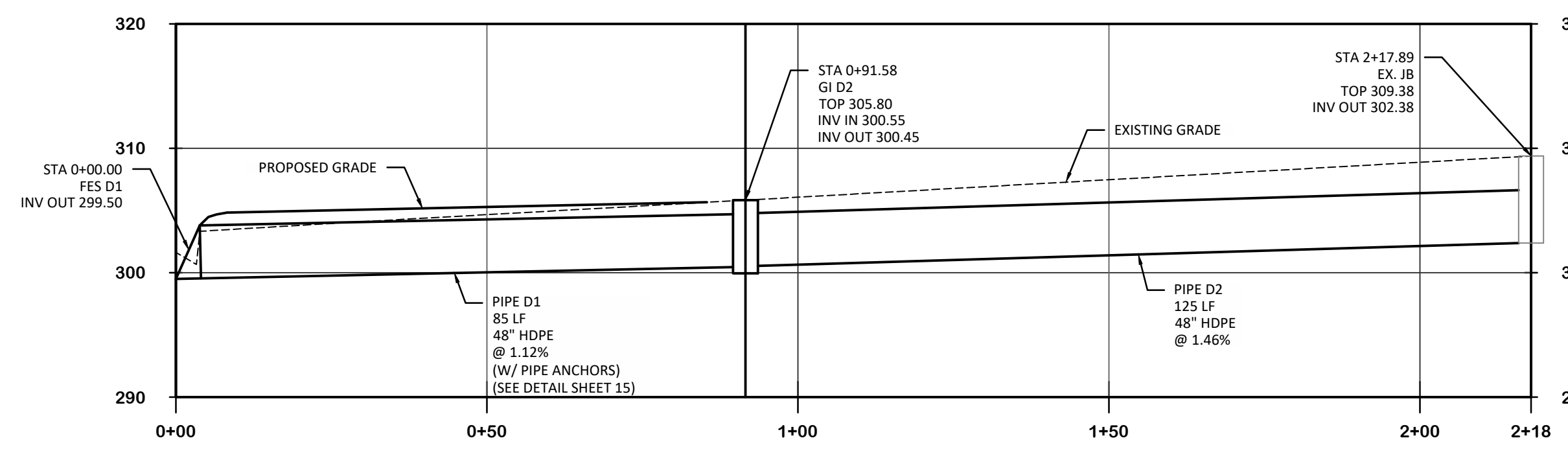
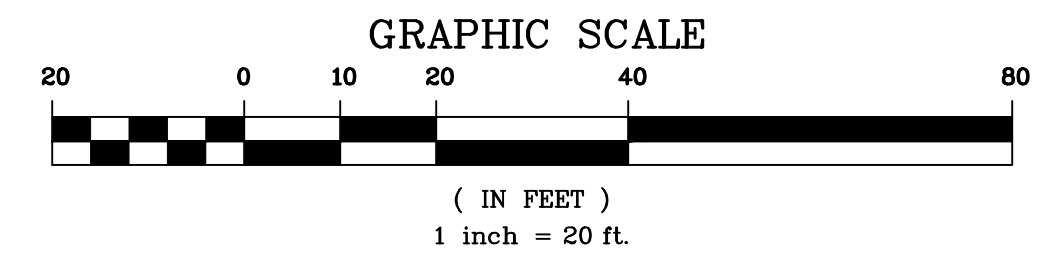
DATE: January 23, 2023
FILE NO: 2023-05PRJ
SHEET: 12

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE MARKED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS THAT MAY OCCUR IN THIS DRAWING. IN THE EVENT OF A DISPUTE, THE APPLICABLE LAW SHALL BE THE PRECEDENCE OF THE ELECTRONIC MEDIA. "SIMONTON ENGINEERING, LLC."



Ds1	Ds2
Ds3	Du

ALL DISTURBED AREAS, TYP.



STORM LINE D Profile
 V. Scale: 1"=10'
 H. Scale: 1"=20'

- EASEMENTS:**
- A 20' drainage easement exists along drainage line (as per Baldwin County PB 2/PG 186).
- NOTES:**
- CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
 - CONTRACTOR IS PERMITTED TO CLOSE ONE LANE AT A TIME UNDER TRAFFIC CONTROL.
 - CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 - ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
 - CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
 - CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
 - EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
 - SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
 - ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
 - CONTRACTOR MUST CONFIRM THE PIPE MATERIAL TO BE USED PRIOR TO PURCHASING THE PIPE. DIFFERING PIPE MATERIAL MAY BE USED IN PLACE OF THE PROPOSED HDPE, DEPENDING ON THE AVAILABILITY OF THE PIPE MATERIAL, AS DIRECTED BY THE ENGINEER.
 - DRAINAGE PIPE LOCATIONS AND ELEVATIONS MAY BE ADJUSTED AFTER EXCAVATION OF THE EXISTING PIPES, AS DIRECTED BY THE ENGINEER.
 - TOTAL DISTURBED AREA = 0.11 ACRES

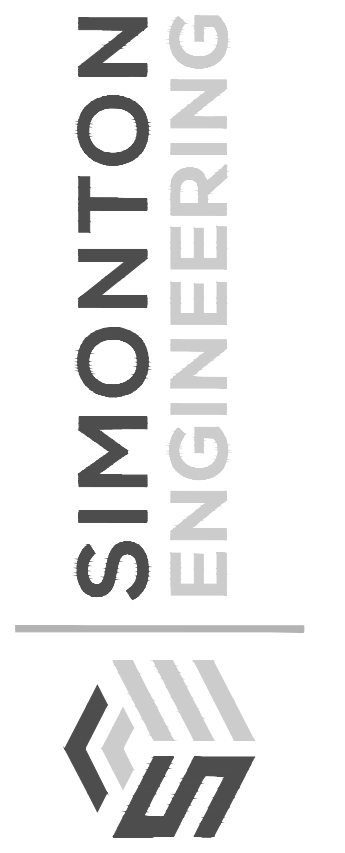
DRAWING COMPLETED BY:

REVISED:



Level II Certification No. 935
 Expiration Date: 10-01-25

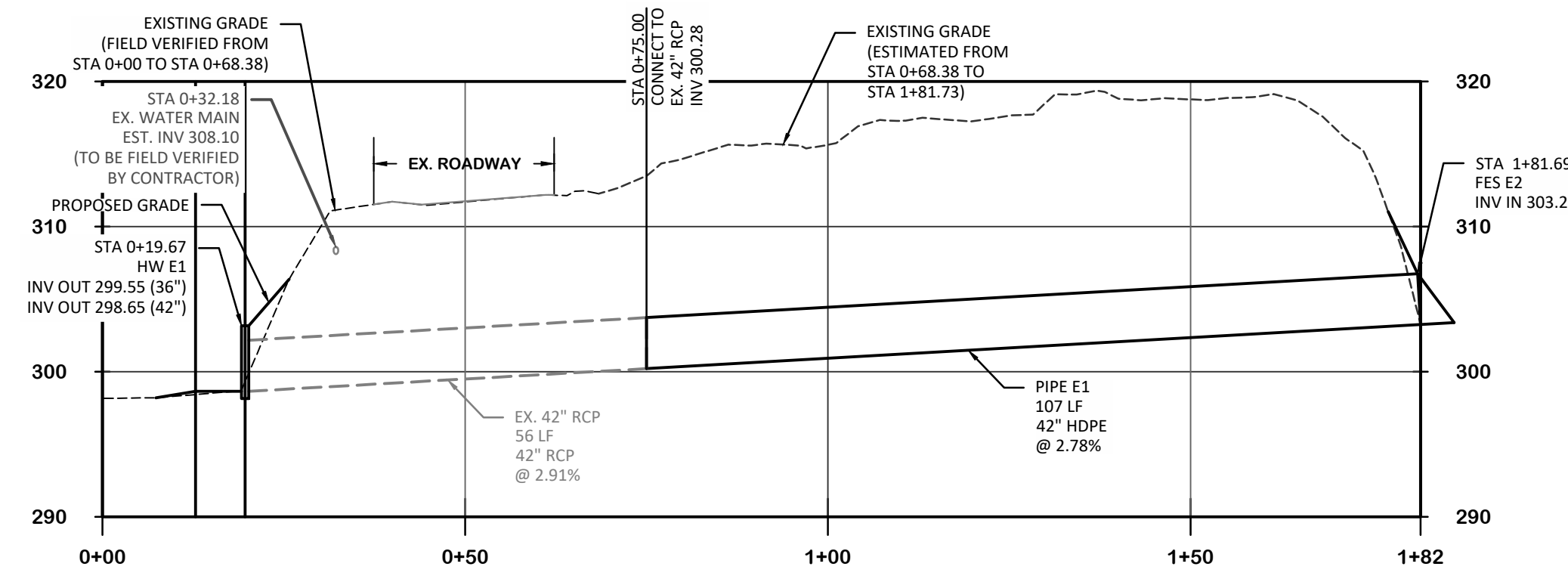
1050 PARKSIDE COMMONS
 GREENSBORO, GA 30642
 TEL: (706) 454-0870
 www.simontonengineering.com



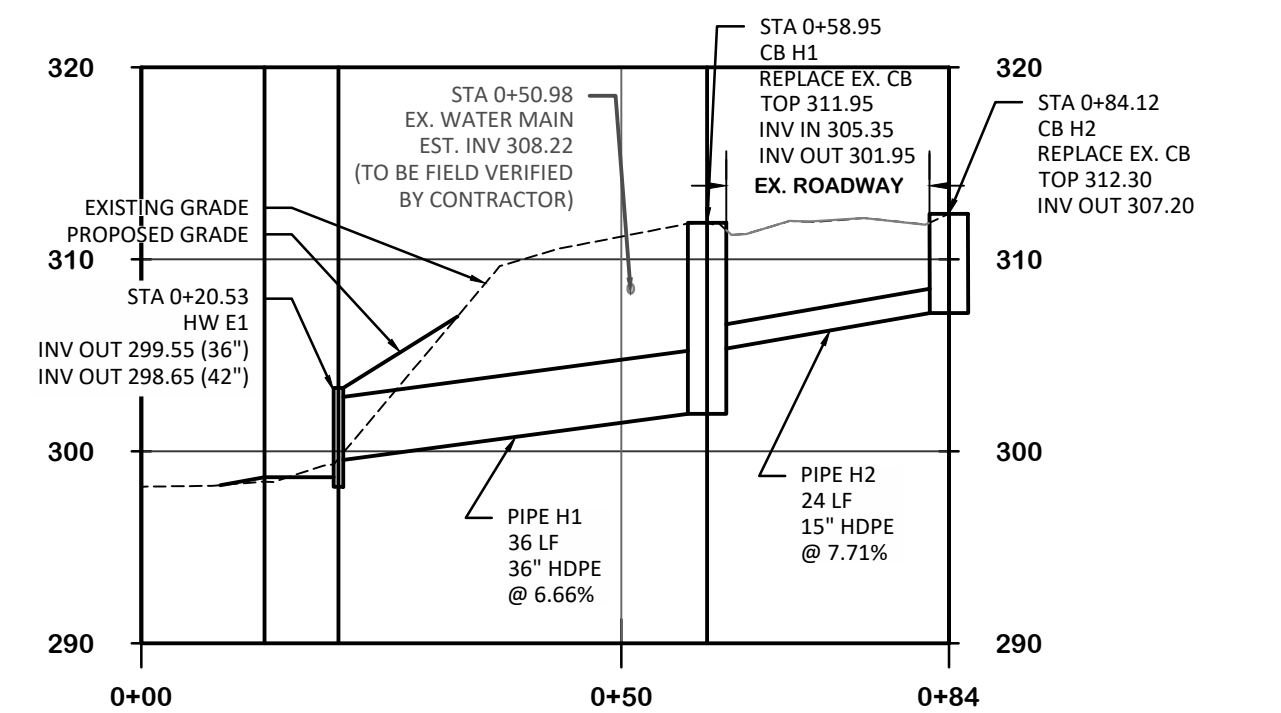
Drainage Replacement & Improvements for City of Milledgeville
 Baldwin County, Georgia

River Ridge Rd
 Drainage Plan
 DATE: January 23, 2023
 FILE NO: 2023-05PRJ
 SHEET: 13

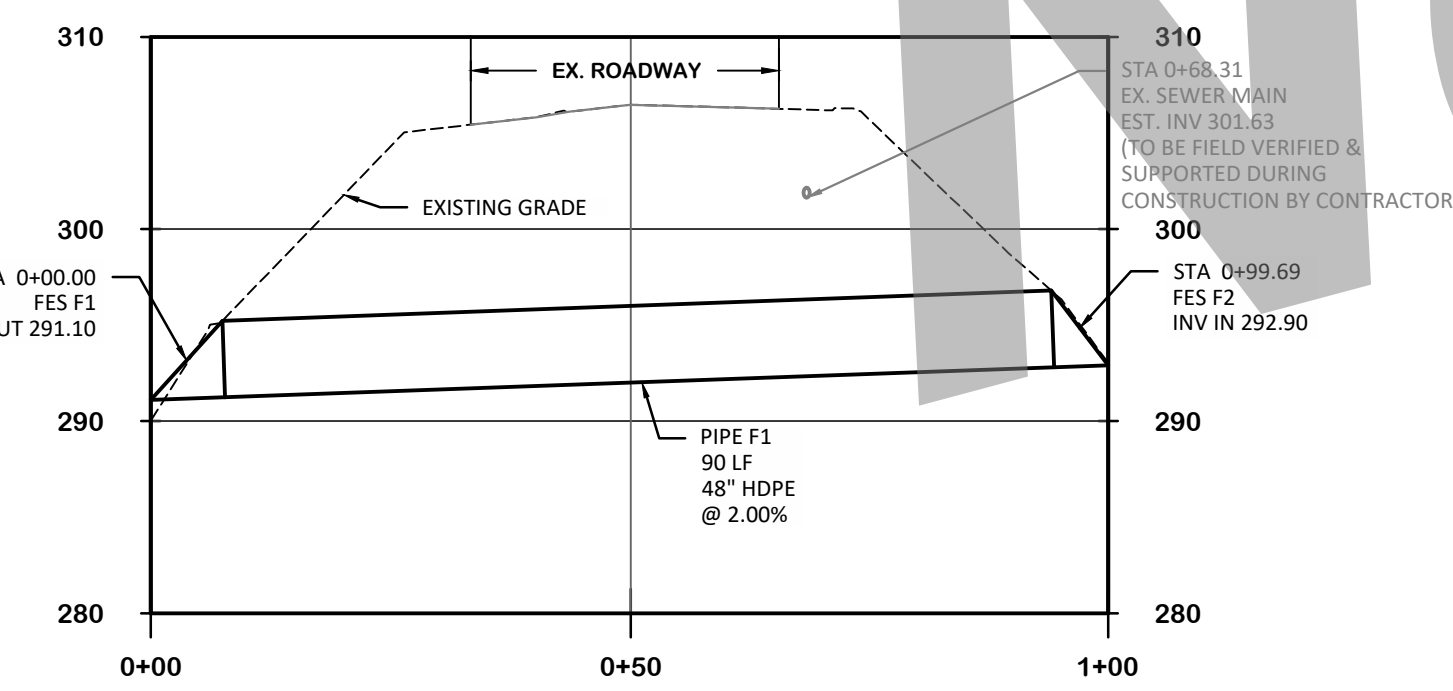
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE INDICATED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS THAT MAY OCCUR IN THIS DRAWING. IN THE EVENT OF A DISPUTE, THE APPLICABLE LAW SHALL BE THE LAW OF THE STATE OF GEORGIA. "SIMONTON ENGINEERING, LLC."



STORM RUN E Profile
V. Scale: 1"=10'
H. Scale: 1"=20'

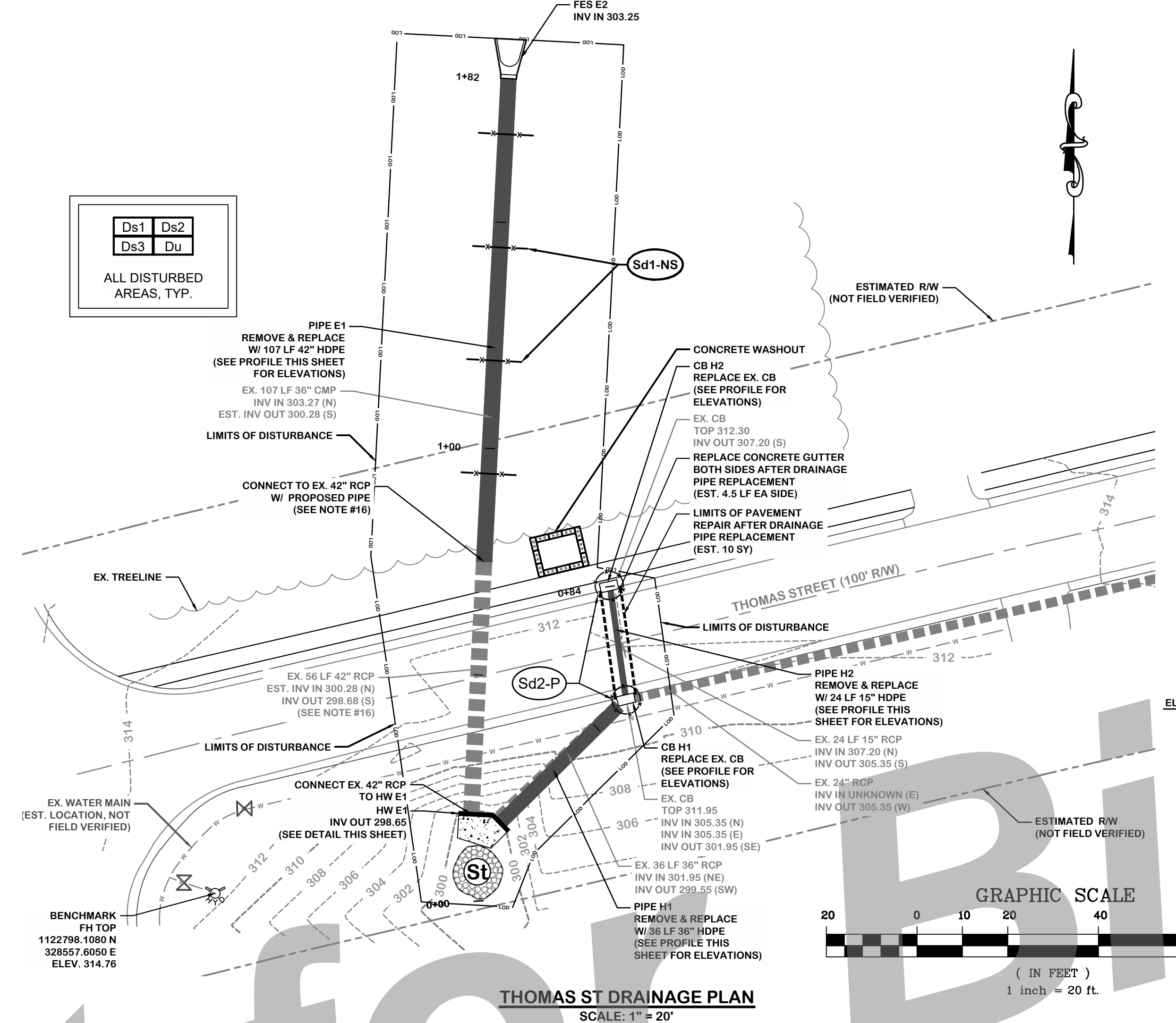
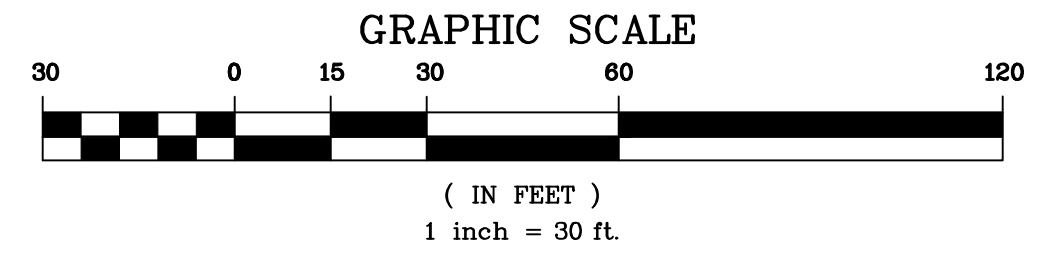
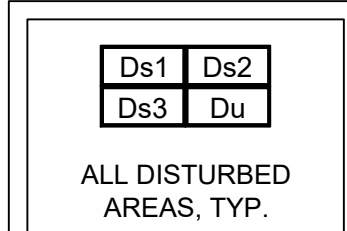


STORM LINE H Profile
V. Scale: 1"=10'
H. Scale: 1"=20'

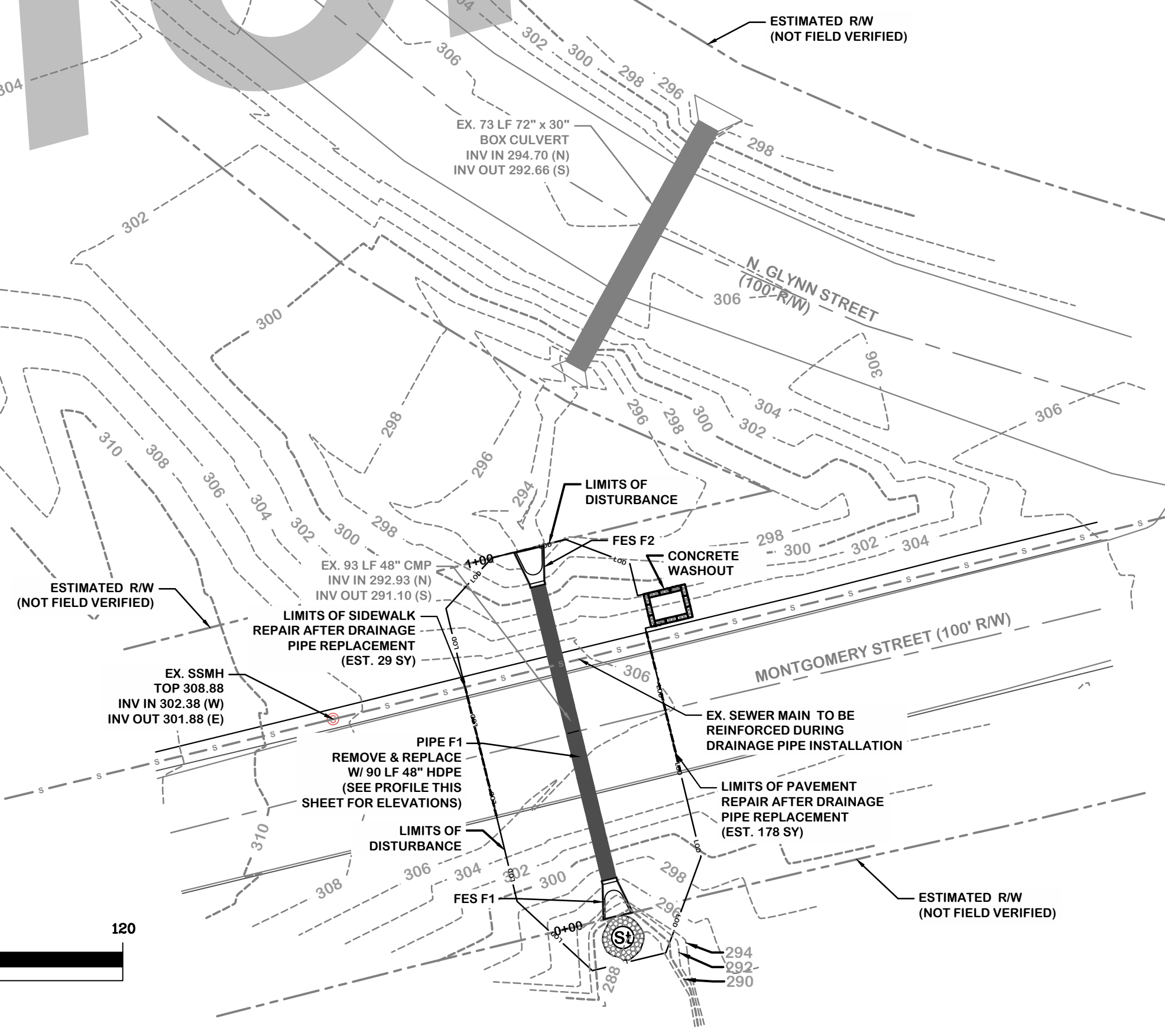
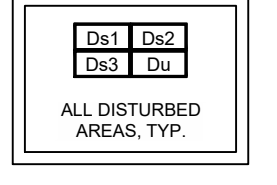


STORM RUN F Profile
V. Scale: 1"=10'
H. Scale: 1"=20'

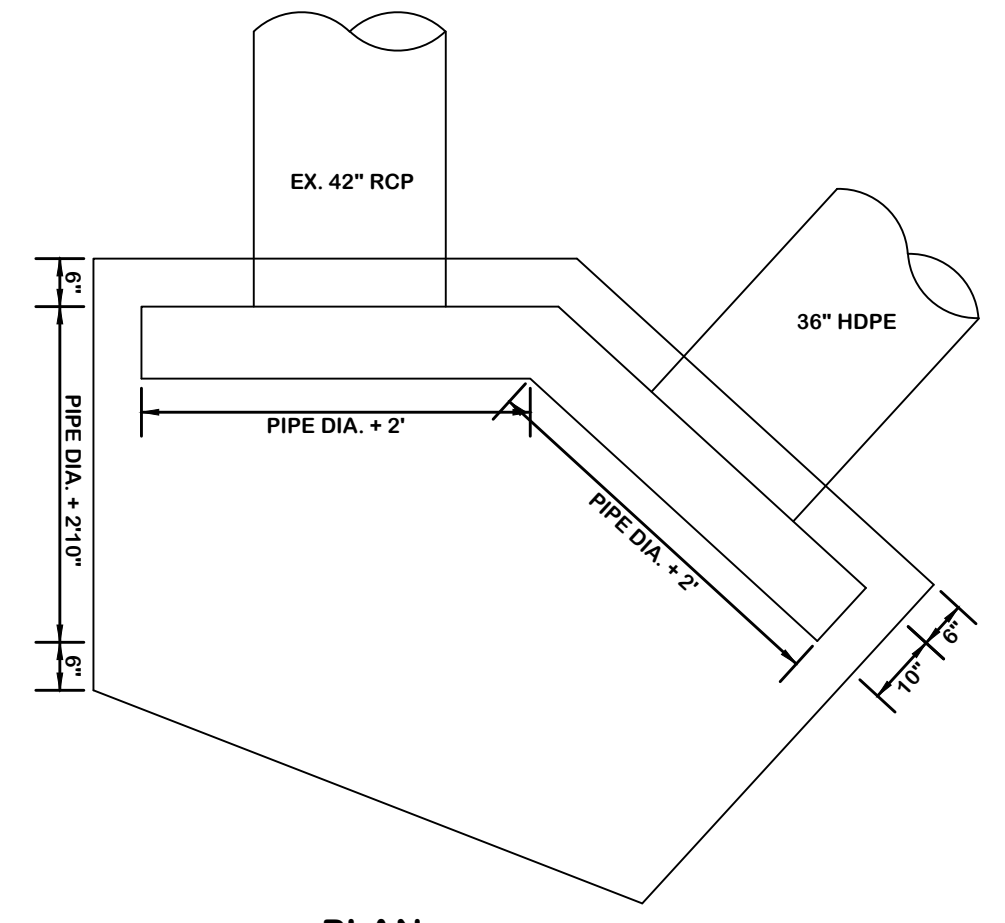
- NOTES:**
- CONTRACTOR SHALL NOT CLOSE THE ROADWAY DURING CONSTRUCTION. RESIDENTS MUST HAVE ACCESS AT ALL TIMES TO HOMES AND MAILBOXES.
 - CONTRACTOR IS PERMITTED TO CLOSE ONE LANE AT A TIME UNDER TRAFFIC CONTROL.
 - CONTRACTOR MUST MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 - ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR PREEXISTING CONDITION.
 - CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL AS SOON AS IT IS EXCAVATED. NO EXCAVATED DEMOLITION DEBRIS OR MATERIAL SHALL REMAIN ON SITE OVERNIGHT.
 - CONTRACTOR SHALL PROTECT FROM SEDIMENT LEAVING THE SITE.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE STANDARDS & SPECIFICATIONS.
 - EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE "EROSION AND SEDIMENT CONTROL MANUAL OF GEORGIA."
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REMOVAL, PROTECTION AND RELOCATION OF ANY MAILBOXES OR OTHER STRUCTURES DISTURBED DURING CONSTRUCTION.
 - SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS DIRECTED BY THE ENGINEER.
 - ALL NEWLY INSTALLED PAVEMENT SHALL BE RE-STRIPED TO MATCH THE PREEXISTING PAVEMENT STRIPING.
 - ALL ASPHALT STREET CUTS SHALL BE IN ACCORDANCE WITH THE CITY OF MILLEDGEVILLE PUBLIC WORKS SPECIFICATIONS.
 - CONTRACTOR MUST CONFIRM THE PIPE MATERIAL TO BE USED PRIOR TO PURCHASING THE PIPE. DIFFERING PIPE MATERIAL MAY BE USED IN PLACE OF THE PROPOSED HDPE, DEPENDING ON THE AVAILABILITY OF THE PIPE MATERIAL, AS DIRECTED BY THE ENGINEER.
 - DRAINAGE PIPE LOCATIONS AND ELEVATIONS MAY BE ADJUSTED AFTER EXCAVATION OF THE EXISTING PIPES, AS DIRECTED BY THE ENGINEER.
 - THIS DRAINAGE ALIGNMENT IS BASED ON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN.
 - CONTRACTOR MUST CONFIRM THE MATERIAL AND SIZE OF THE PIPE THAT RUNS UNDER THE ROAD IN THE LOCATION SHOWN, AND CONFIRM THAT IT IS RCP (THOMAS ST).
 - TOTAL DISTURBED AREA (THOMAS ST) = 0.22 ACRES
 - TOTAL DISTURBED AREA (MONTGOMERY ST) = 0.12 ACRES



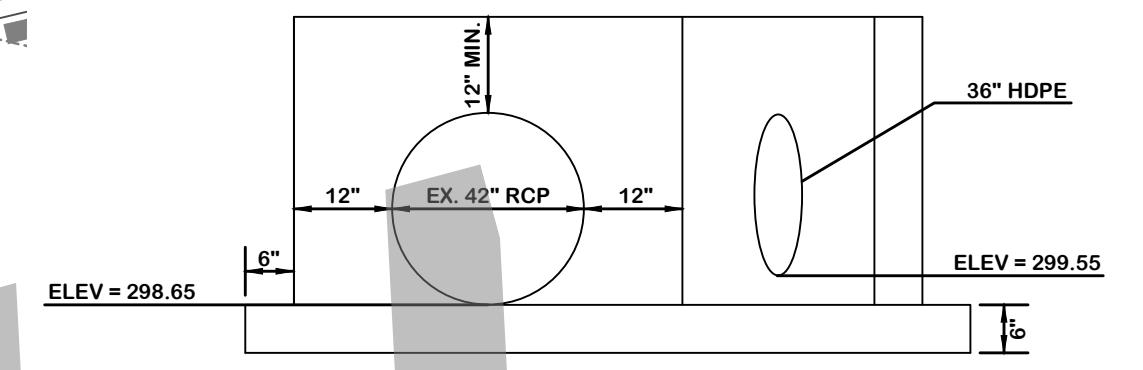
THOMAS ST DRAINAGE PLAN
SCALE: 1" = 20'



N GLYNN ST & MONTGOMERY ST DRAINAGE PLAN
SCALE: 1" = 30'

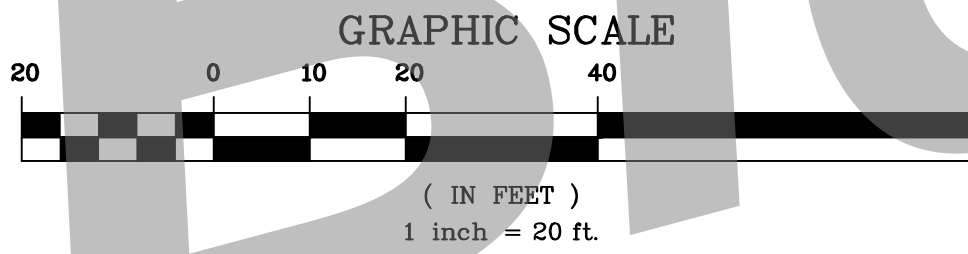


PLAN

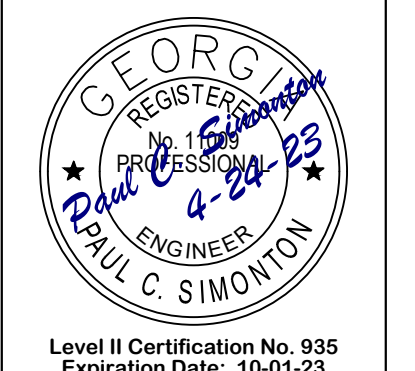


SECTION

HEADWALL E1 DETAIL
N.T.S.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE MARKED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS. THIS DRAWING IS THE PROPERTY OF SIMONTON ENGINEERING, LLC. THE EVENT OF A DIGITAL OR ELECTRONIC COPY, ALL RIGHTS ARE RESERVED TO SIMONTON ENGINEERING, LLC.



Level II Certification No. 935
Expiration Date: 10-01-25

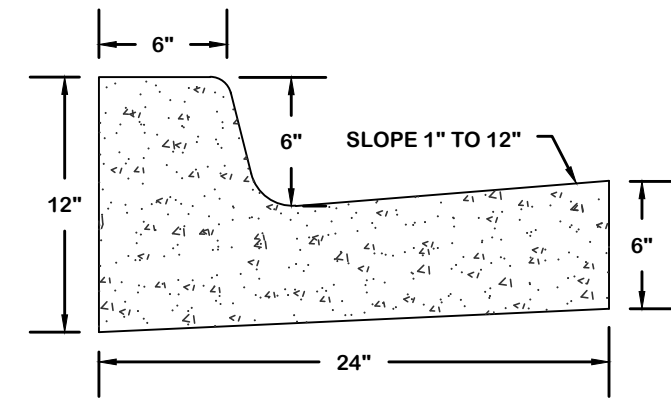
1050 PARKSIDE COMMONS
GREENSBORO, GA 30642
TEL: (769) 454-0870
www.simontonengineering.com

SIMONTON ENGINEERING

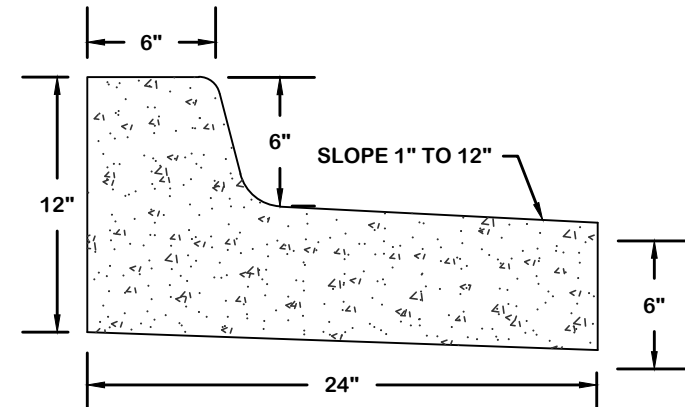


Drainage Replacement & Improvements
for
City of Milledgeville
Baldwin County, Georgia

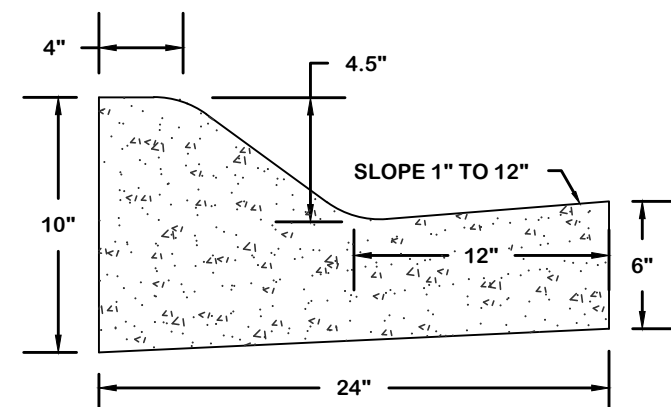
Thomas St & Montgomery St Drainage Plan
DATE: January 23, 2023
FILE NO: 2023-05PJ
SHEET: 14



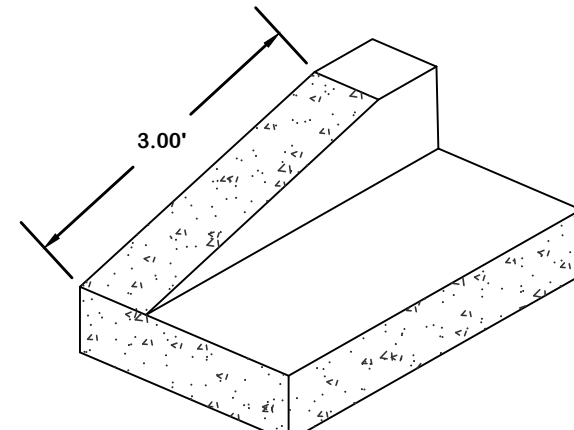
STANDARD TYPE CURB & GUTTER
N.T.S.



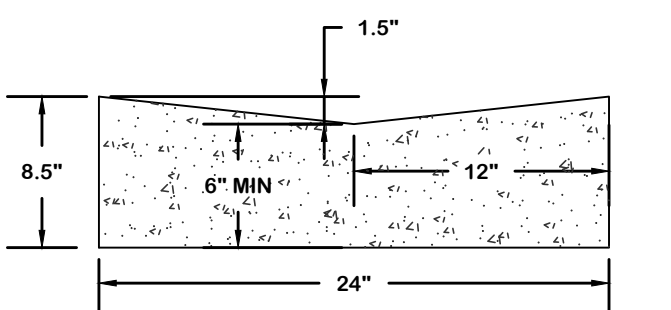
SPILL-OUT TYPE CURB & GUTTER
N.T.S.



ROLLED TYPE CURB & GUTTER
N.T.S.

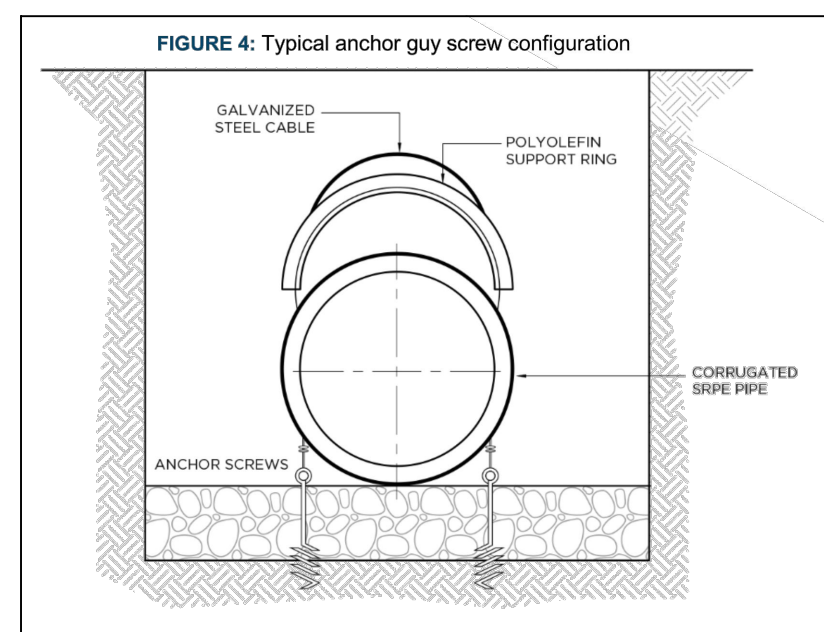


CURB TERMINATION DETAIL
N.T.S.



VALLEY TYPE CURB & GUTTER
N.T.S.

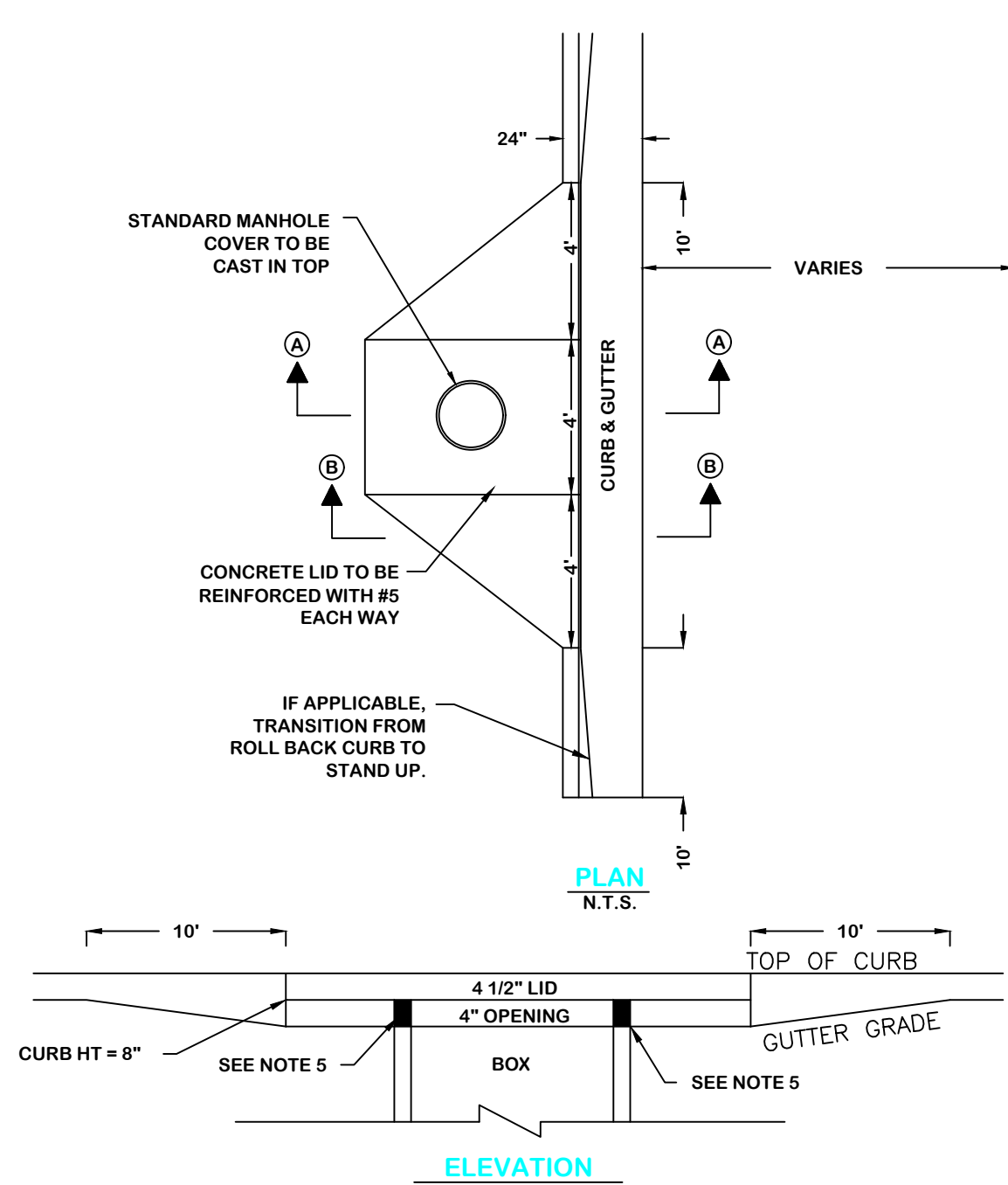
CURB & GUTTER DETAIL
N.T.S.



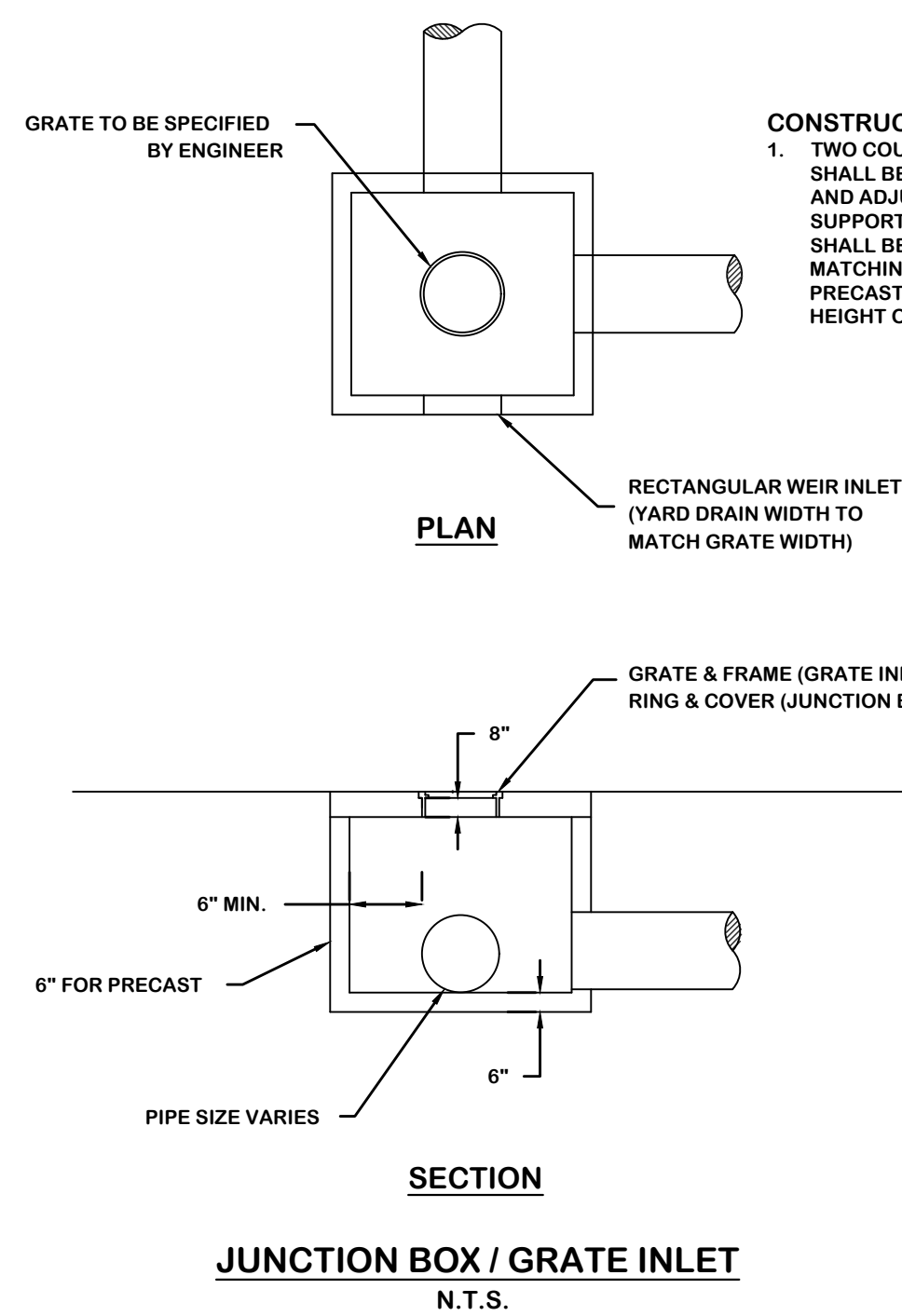
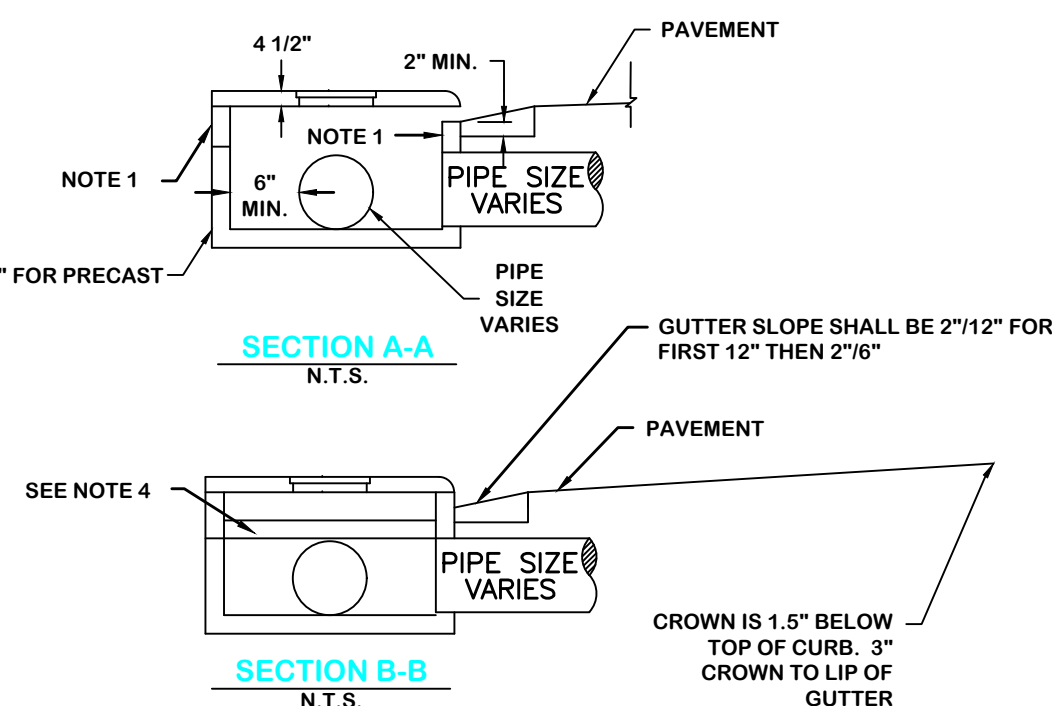
PIPE ANCHOR DETAIL
2023-05PRJ
N.T.S.

NOTES:
Pipe shall be secured to the bedding using screw anchors. Straps or anchors are screwed into the ground as shown in Figure 4. The guy screw and harness ring should be located adjacent to the pipe joints and midway along the pipe length. The foundation bedding should be stable and provide a secure base for the anchoring system. No voids should be left in the haunch area near the anchors during backfill. The guy wire manufacturer should be consulted to ensure sufficient restraint forces for the buoyant conditions. See Armetec Technical Bulletin B2.31.1.

- CONSTRUCTION NOTES:**
- TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES. NO BRICK WILL BE ALLOWED ON THE THROAT. THROAT MUST BE MONOLITHIC POUR MINIMUM OF 2" THICK. OPENING TO BE 4" AT THROAT.
 - PAD UNDER WINGS SHALL BE 4" THICK POURED CONCRETE ON COMPACTED SUBGRADE. PAD TO BE SLOPED 1" PER FOOT MIN. AWAY FROM CURB. SLOPED 1/4" PER FT TOWARD BOX FROM ALL OTHER DIRECTIONS.
 - ALL POURED COMPONENTS SHALL BE PLACED ON COMPACTED SUBGRADE (98% STANDARD PROCTOR).
 - PVC SUPPORTS FILLED WITH CONCRETE SHALL BE PROVIDED AT EACH GUTTER SIDE BOX CORNER.



DOUBLE WING CATCH BASIN
N.T.S.



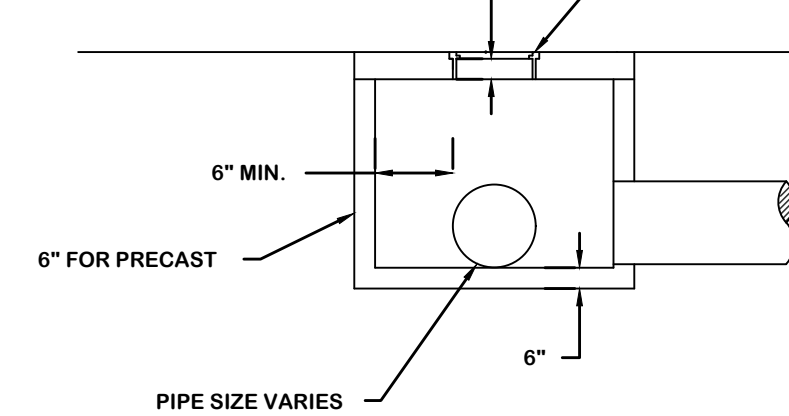
JUNCTION BOX / GRATE INLET
N.T.S.

- CONSTRUCTION NOTES:**
- TWO COURSES OF BRICK MAX SHALL BE ALLOWED FOR LEVELING AND ADJUSTMENT OF LID. ANY SUPPORT OTHER THAN BRICK SHALL BE POURED IN PLACE MATCHING THE THICKNESS OF THE PRECAST WALL TO A MAXIMUM HEIGHT OF 24 INCHES.

GRATE TO BE SPECIFIED BY ENGINEER

PLAN

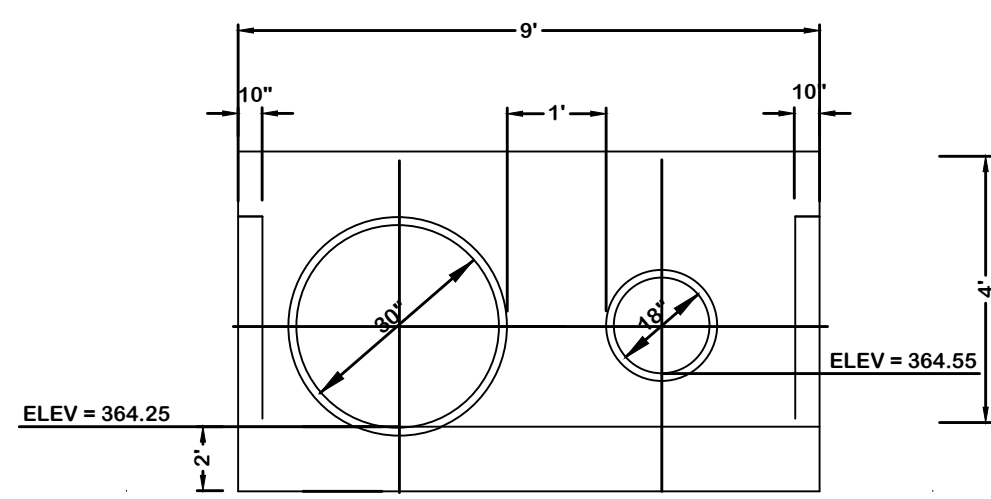
SECTION



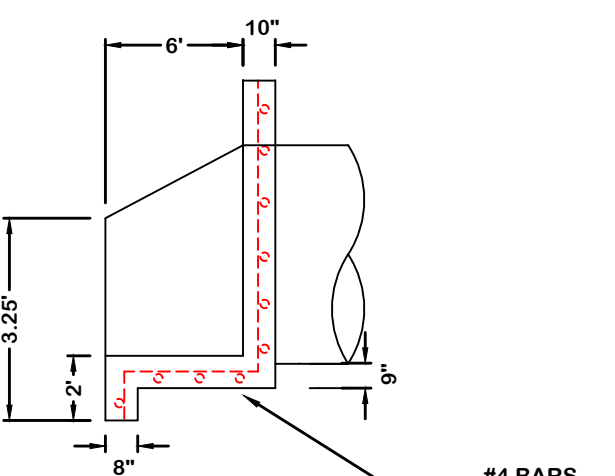
JUNCTION BOX / GRATE INLET
N.T.S.

- NOTES:**
- TOP OF HEADWALL SHOULD BE SAME ELEVATION AS EDGE OF PAVEMENT WHEN WITHIN RIGHT OF WAY.
 - ALL OUTLET HEADWALLS TO HAVE A SPLASH PAD.
 - CHAMFER ALL EXPOSED EDGES.

HEADWALL C1 DETAIL
2023-05PRJ
N.T.S.

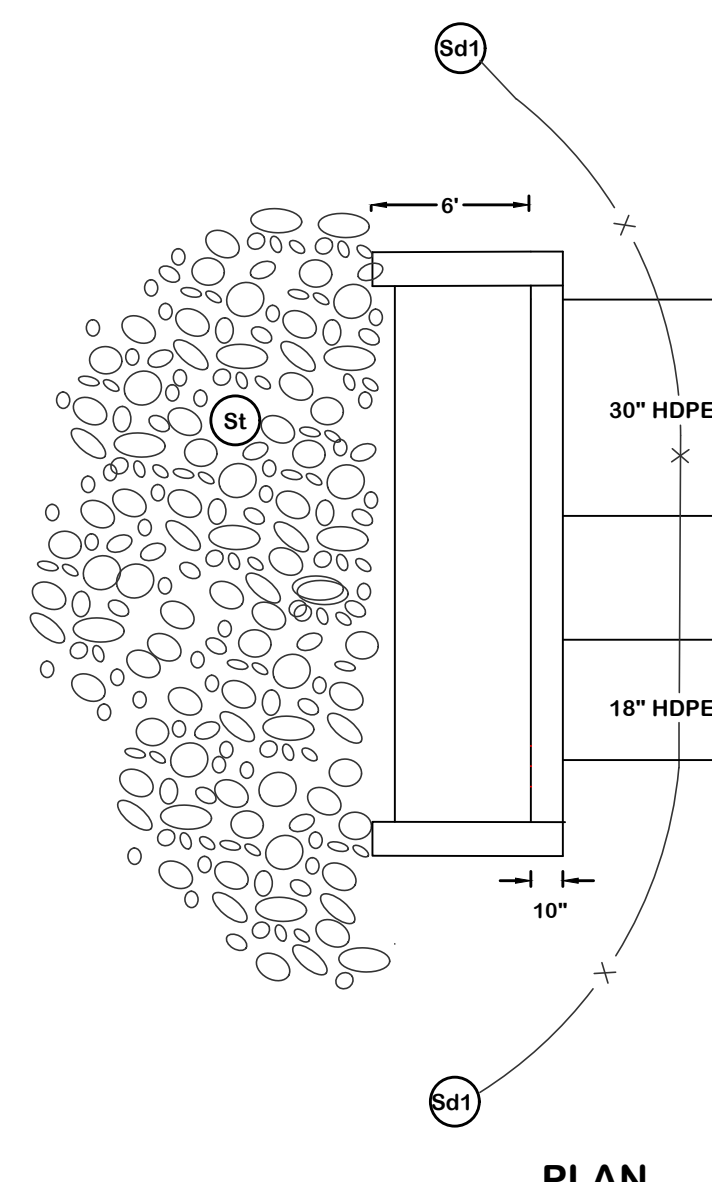


FRONT ELEVATION

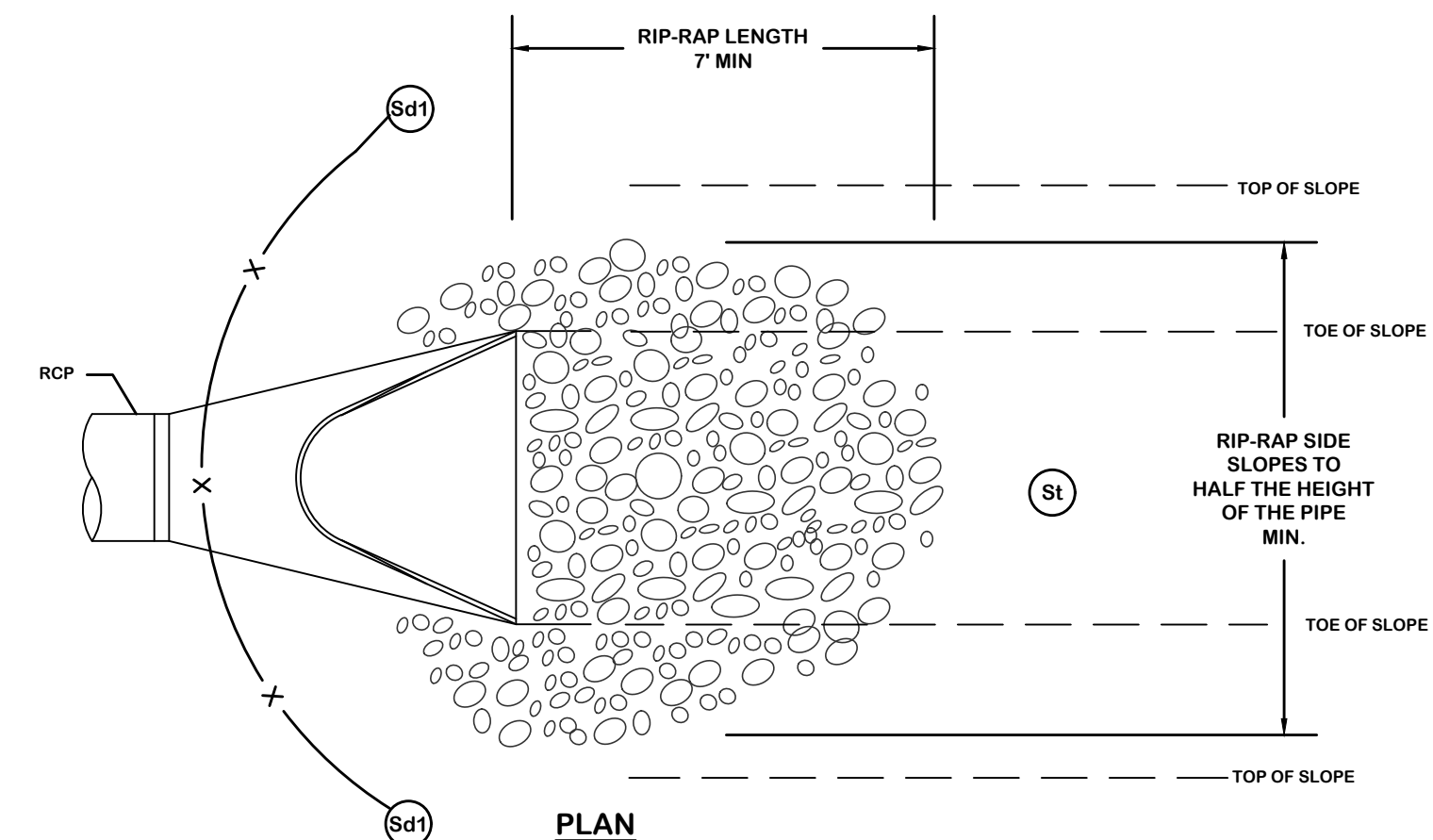


SIDE ELEVATION

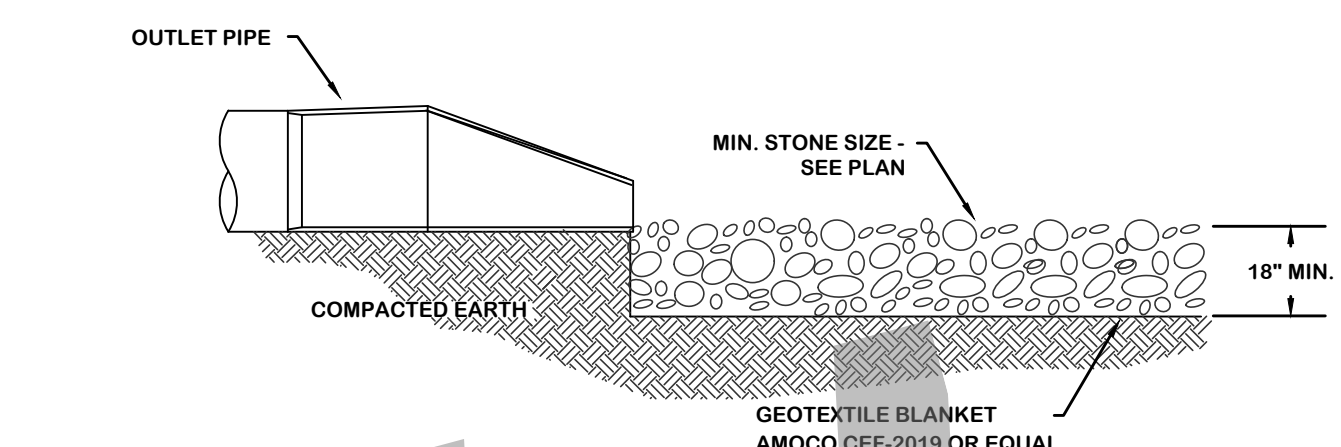
#4 BARS @ 12" OC BOTH WAYS



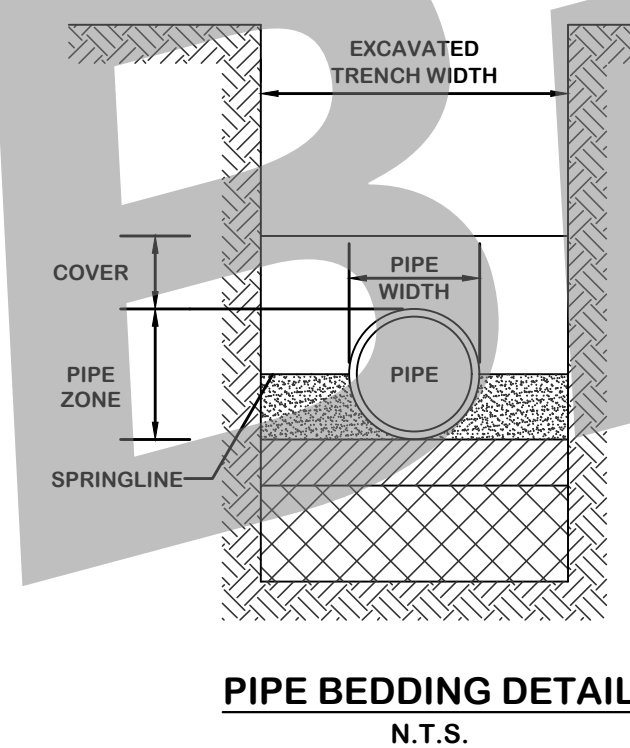
PLAN



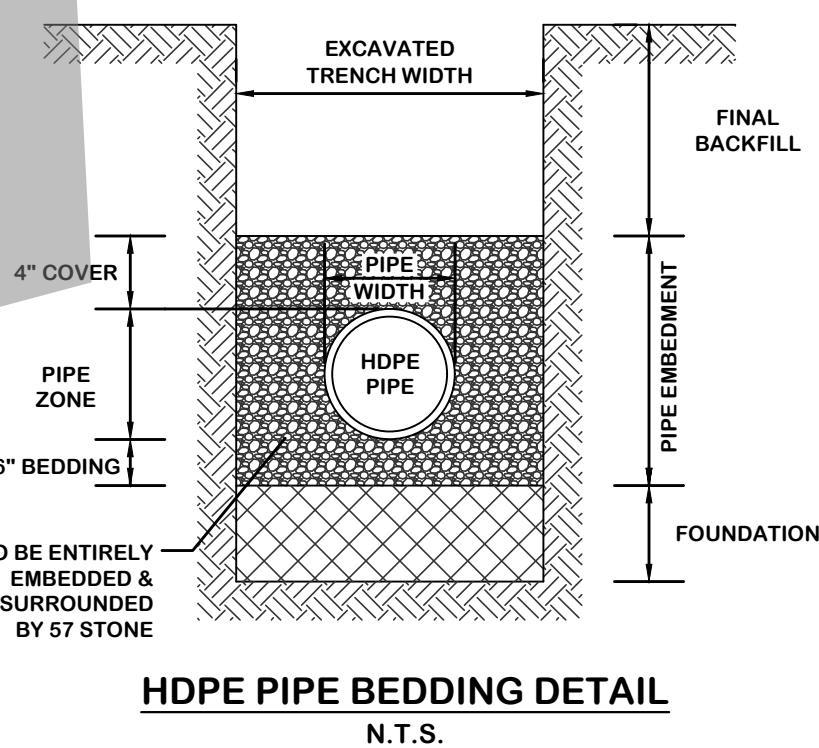
PLAN



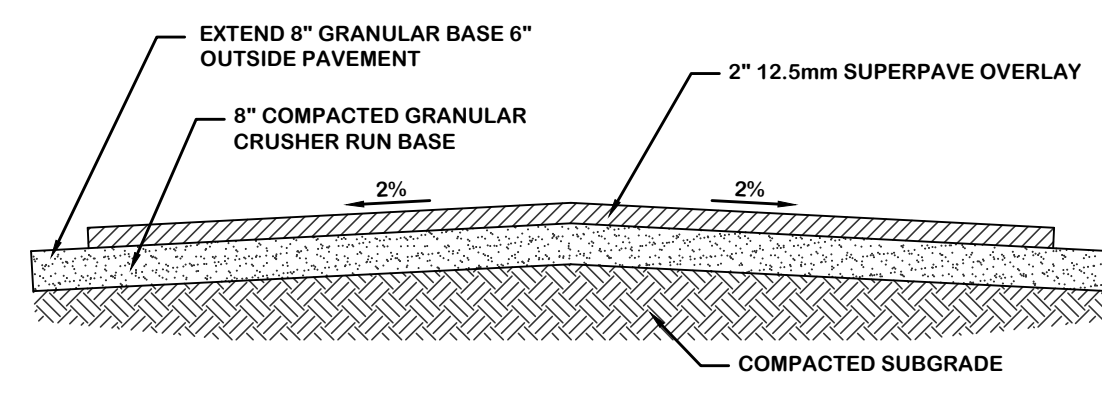
PRECAST FLARED END SECTION
N.T.S.



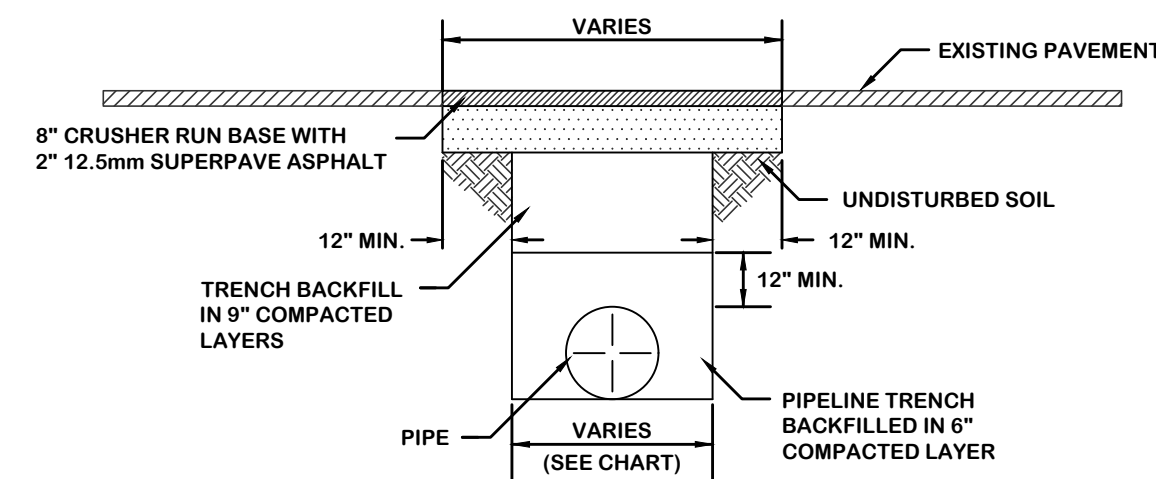
PIPE BEDDING DETAIL
N.T.S.



HDPE PIPE BEDDING DETAIL
N.T.S.
2023-05PRJ



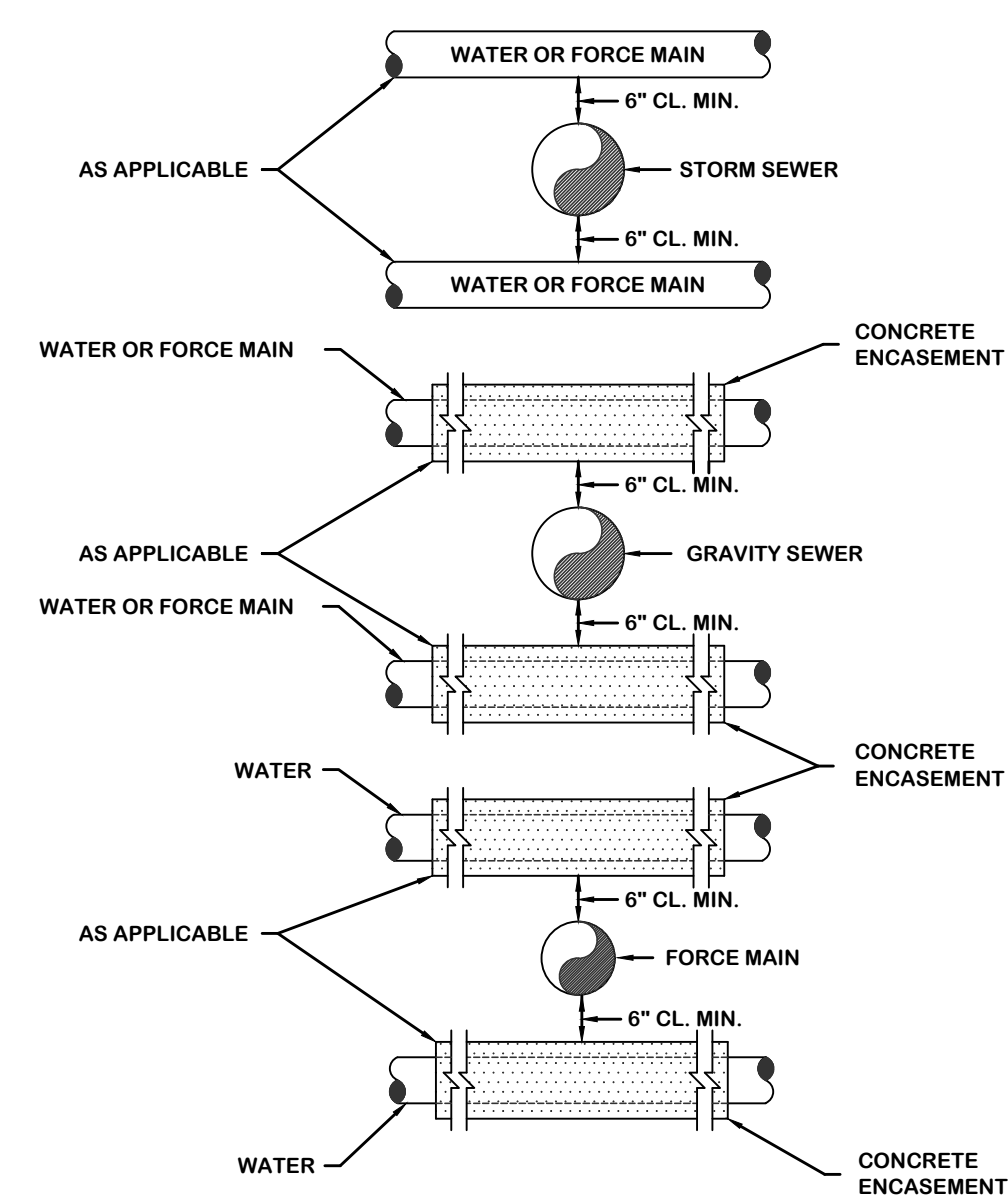
PAVEMENT REPAIR DETAIL
N.T.S.
2023-05PRJ



PAVEMENT REMOVAL & REPLACEMENT
N.T.S.
2023-05PRJ

NOTE: MAXIMUM PAVEMENT WIDTH FOR CUT DEPTH OVER 6 FEET SHALL BE 8 FEET UNLESS NOTED OTHERWISE ON PLANS.

PIPE DIAMETER	MAXIMUM TRENCH WIDTH 0'-6" CUT DEPTH	MAXIMUM PAVEMENT WIDTH 0'-6" CUT DEPTH
6" TO 15"	4' + DIA.	10' + DIA.
18" TO 21"	5' + DIA.	11' + DIA.
24" TO 30"	6' + DIA.	12' + DIA.
33" TO 42"	9' + DIA.	15' + DIA.
48"+	9' + DIA.	15' + DIA.



- NOTES:**
- CONCRETE ENCASUREMENT TO EXTEND A MINIMUM OF 10' ON BOTH SIDES OF CROSSING.
 - FOR ELEVATION OF PIPES, SEE PLANS.
 - CONCRETE ENCASUREMENT REQUIRED IF 18" VERTICAL SEPARATION IS NOT MAINTAINED.

SEPARATION DETAIL
N.T.S.

DRAWING COMPLETED BY:

REVISED:



Level II Certification No. 935
Expiration Date: 10-01-23

1050 PARKSIDE COMMONS
GREENSBORO, NC 27402
TEL: (703) 454-0870
www.simontonengineering.com

SIMONTON ENGINEERING



Drainage Replacement & Improvements
for
City of Milledgeville
Baldwin County, Georgia

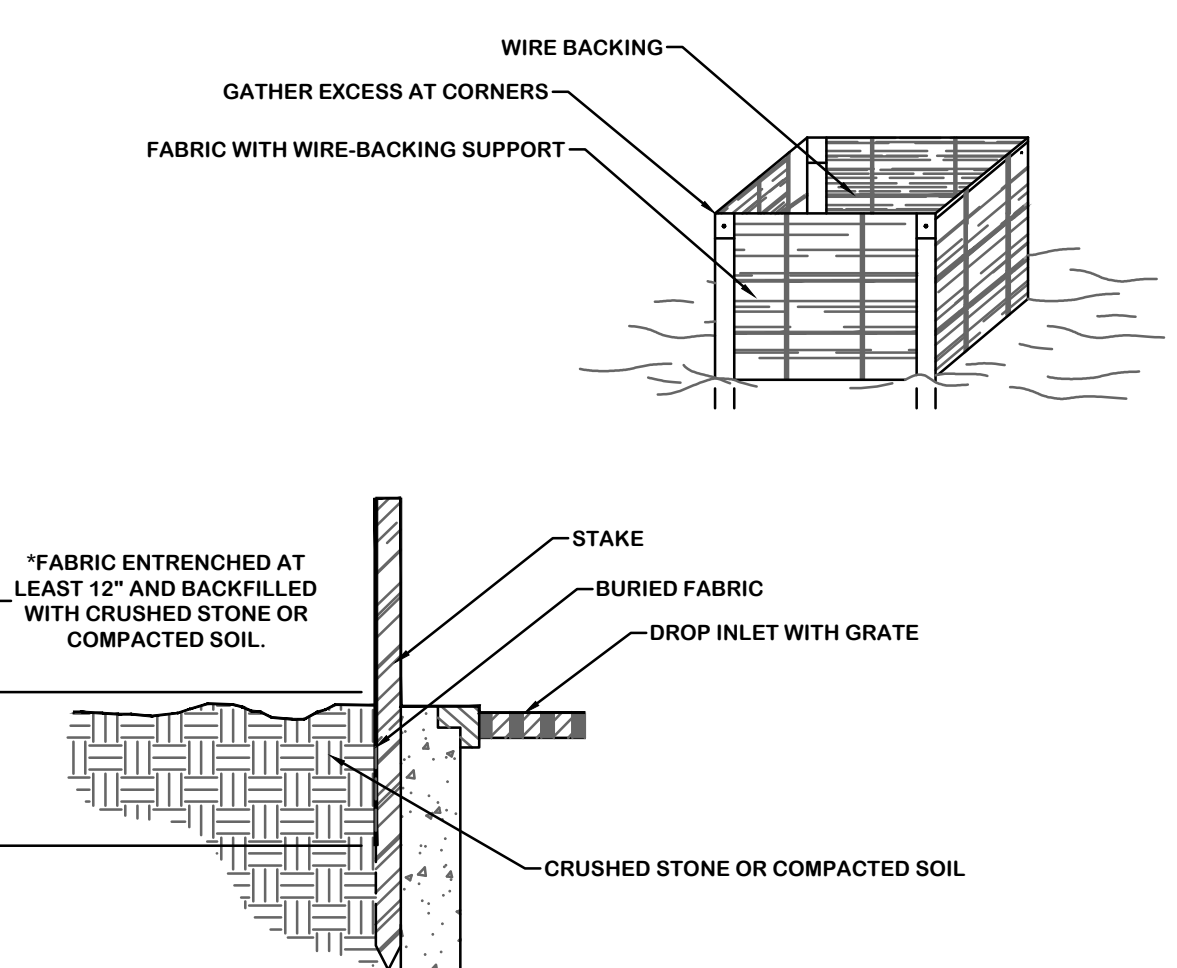
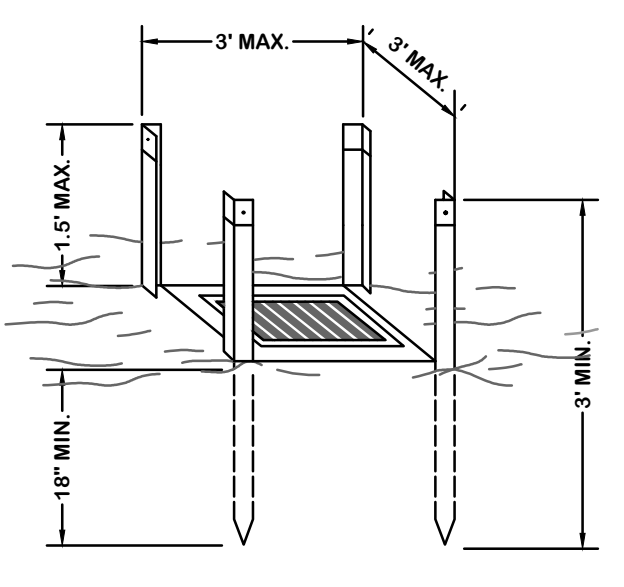
Details
DATE: January 23, 2023
FILE NO: 2023-05PRJ
SHEET: 15

GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES				
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	OUEODAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.

VEGETATIVE PRACTICES				
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (WOODING)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.
Ss	SLOPE STABILIZATION			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.



- NOTES:**
- DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
 - THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
 - THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
 - THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.

Sd2-F INLET SEDIMENT TRAP (FILTER FABRIC)

COORDINATE WITH FINAL LANDSCAPING PLAN

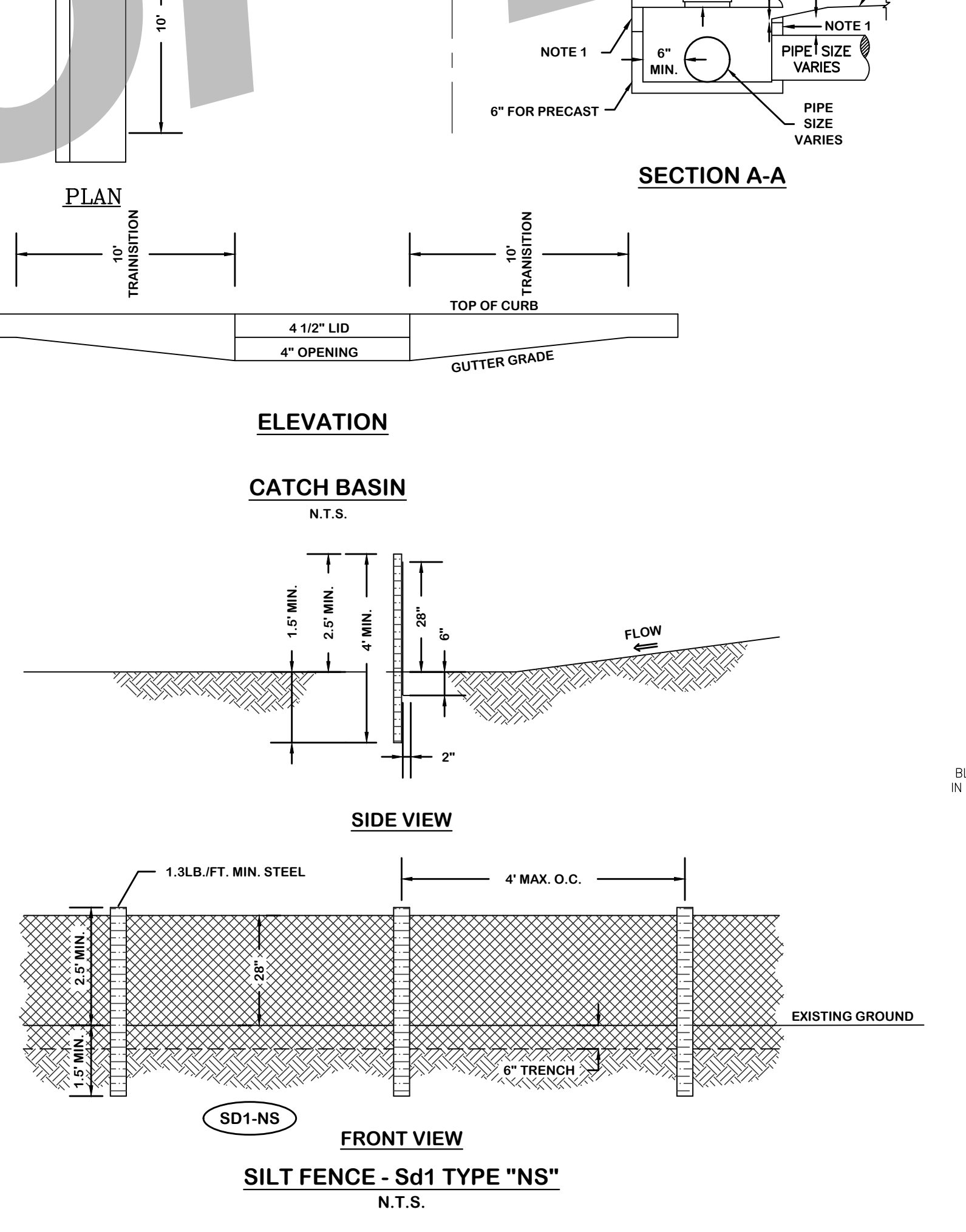
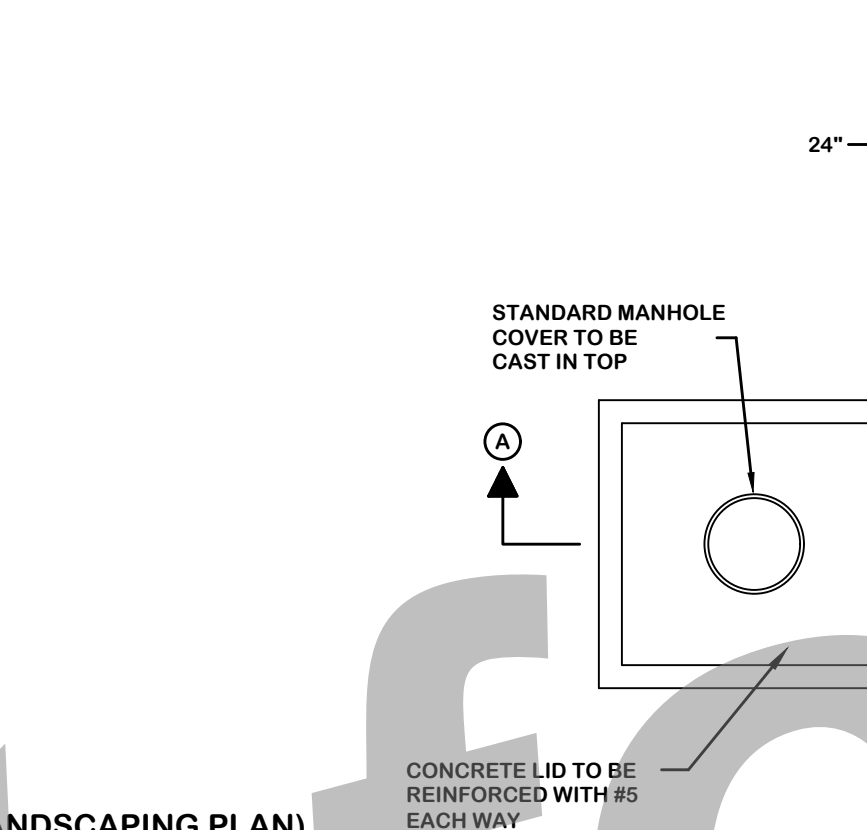
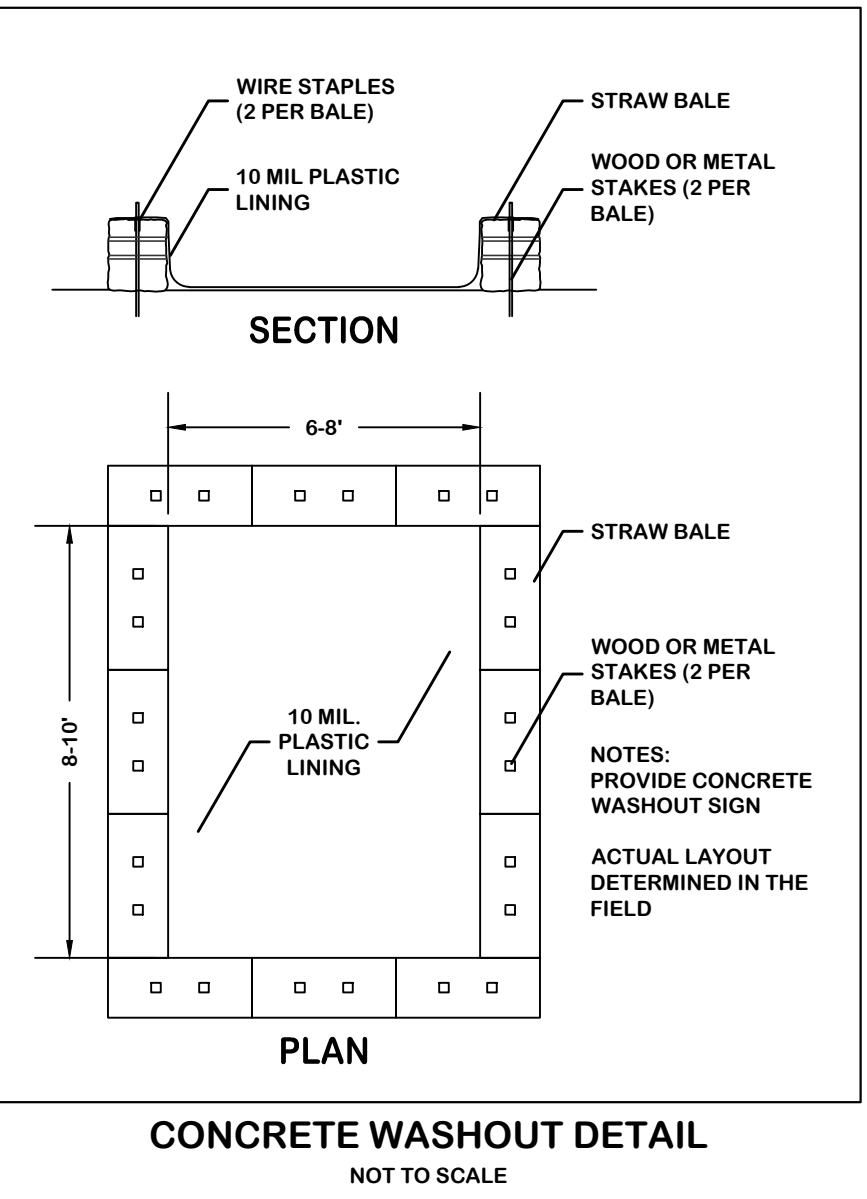
SPECIES	BROADCAST RATES (1) PER ACRE		PLANTING DATES BY RESOURCE AREAS*		SPECIFICATIONS
	PER ACRE	PER 1000 SQ. FT.	PER ACRE	PER 1000 SQ. FT.	
BERMUDA, COMMON (CYTHODON DACTYLON)	10 LBS.	0.2 LB.	J	F M A M J J A S O N D	1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOFT FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS.
BERMUDA, COMMON (CYTHODON DACTYLON)	10 LBS.	0.2 LB.	J	F M A M J J A S O N D	PLANT WITH WINTER ANNUALS. PLANT WITH TALL FESCUE.
BERMUDA SPURGE (CYTHODON DACTYLON)	40 CU. FT.	0.9 CU. FT.	J	F M A M J J A S O N D	A CUBIC FT. CONTAINS APPROXIMATELY 650 SPURGS. A BUSHEL CONTAINS 1.25 CU. FT. OR APPROXIMATELY 800 SPURGS.
CENTRODIA (EREMOCHLOA OPHUROIDES)	BLOCK SOD ONLY		J	F M A M J J A S O N D	DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE. EFFECTIVE ADJACENT TO CONCRETE AND IN CONCENTRATED FLOW AREAS. IRRIGATION IS NEEDED UNTIL FULLY EST. DO NOT PLANT NEAR PARTIES. WINTERBERRY AS FAR NORTH AS ATHENS AND ATLANTA.
FESCUE, TALL (CYTHODON DACTYLON)	50 LBS.	1.1 LB.	J	F M A M J J A S O N D	227,000 SEED PER POUND. USE ALONE ONLY ON BETTER SITES. NOT FOR DROUGHTY SOILS. MIX WITH PERENNIAL LESPEDEZAS OR CROWN-VETCH. APPLY TOPDRESSING IN SPRING FOLLOWING FALL PLANTING. NOT FOR HEAVY USE AREAS OR ATHLETIC FIELDS.

(1) BROADCAST RATES ARE IN PURE LIVE SEED (PLS)
 (2) M-L REPRESENTS THE MOUNTAIN, BLUE RIDGE, AND RIDGES AND VALLEYS MLRA'S
 P REPRESENTS THE SOUTHERN PIEDMONT MLRA
 C REPRESENTS SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATWOODS MLRA'S
 (3) DARK LINES INDICATE OPTIMUM DATES, GRAY LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)	LIME APPLICATION (TONS/ACRE)
Cool Season Grasses	First	6-12-12	1500	50-100	1
	Second	6-12-12	1000	30	
	Maintenance	10-10-10	400	-	
Cool Season Grasses and Legumes	First	6-12-12	1500	0-50	1
	Second	6-12-12	1000	-	
	Maintenance	10-10-10	400	-	
Warm Season Grasses	First	6-12-12	1500	50-100	1
	Second	6-12-12	800	50-100	
	Maintenance	10-10-10	400	30	
Warm Season Grasses and Legumes	First	6-12-12	1500	0-50	1
	Second	6-12-12	1000	-	
	Maintenance	10-10-10	400	-	

Ds3 PERMANENT GRASSING MULCHING RATES	MATERIAL	DEPTH
1.	GRAIN STRAW OR GRASS HAY	4" TO 6"
2.	PINE NEEDLE	3" TO 5"
3.	WOOD WASTE (SAWDUST, BARK, CHIPS)	4" TO 6"

Ds3 DISTURBED AREA STABILIZATION (WITH PERM SEEDING)



Ds1 DISTURBED AREA STABILIZATION (W/MULCHING ONLY) SPECIFICATIONS

- A. For temporary protection of critical areas without seeding. This standard applies to grades or cleared areas which may be subjected to erosion for 6 months or less, where seeding may not have a suitable growing season to produce an erosion retardant cover, but which can be stabilized with a mulch cover.
- Site Preparation**
- Grade, as needed and feasible, to permit the use of equipment for applying and anchoring mulch.
 - Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
 - As needed and feasible, loosen compact soil to a minimum depth of 3 inches.
- Mulching Materials**
- Dry straw or hay - spread at a rate of 2 1/2 tons per acre
 - Wood waste, chips, sawdust or bark - spread 2 to 3 inches deep (about 6 to 9 tons per acre).
 - Erosion control matting or netting, such as excelsior, jute, textile and plastic matting and netting - applied in accordance with manufacturer's recommendations.
 - Cutback asphalt, slow curing - applied at 1200 gallons per acre (for 14 gallon per sq. yd.).
 - Polyethylene film - secured over banks or stockpiled soil material for temporary protection.
- Applying and Anchoring Mulch**
- Apply straw or hay mulch uniformly by hand or mechanically. Anchor as appropriate and feasible. It may be pressed into the soil with a disk harrow with the disk set straight or with a special "pucker disk." The disk should be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but press it into the soil leaving much of it in an erect position. Straw hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade AE-5 or SS-1). The asphalt emulsion must be sprayed onto the mulch as it is ejected from the machine. Use 100 gallons of water per acre.
 - Spread wood waste uniformly on slopes that are 3:1 and flatter. No anchoring is needed.
 - Commercial matting and netting. Follow manufacturer's specification included with the material.
 - Apply asphalt to area has uniform appearance. (Note: Use in areas of pedestrian traffic could cause problems or "tracking in" or damage to shoes, clothing, etc.)
- B. To conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bar areas on lawns.

- Mulching Materials**
- Use one of the materials given below and apply at thickness indicated.
- | Material | Depth |
|--|-----------|
| 1. Grain straw or grass hay | 6" to 10" |
| 2. Pine needle | 4" to 6" |
| 3. Wood waste (sawdust, bark, chips) | 4" to 8" |
| 4. Shredded residues (crops, leaves, etc.) | 4" to 6" |
- Completely cover area with black polyethylene film and hold in place by placing soil on the outer edge. When using organic mulches, apply 20-30 pounds of nitrogen in addition to the normal amount needed for plant growth to offset the tie up of N by decomposition of mulch.

- SPECIFICATIONS**
- A. USE THE FOLLOWING METHODS AS NEEDED OR DIRECTED TO MINIMIZE DUST ON THE PROJECT SITE:
- MULCH**
- SEE STANDARD DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).
- IRRIGATION**
- THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
- CALCIUM CHLORIDE**
- APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

Du DUST CONTROL ON DISTURBED AREAS

SPECIES	BROADCAST RATES (1) PER ACRE		PLANTING DATES BY RESOURCE AREAS*		REMARKS
	PER ACRE	PER 1000 SQ. FT.	PER ACRE	PER 1000 SQ. FT.	
LESPEDEZA, ANNUAL ALONE IN MIXTURES	40 lbs.	0.9 lbs.	J	F M A M J J A S O N D	200,000 SEED PER POUND. MAY VOLUNTARILY FOR SEVERAL YEARS. USE UNCLONANT EL.
LOVEGRASS, WEEPING ALONE IN MIXTURES	4 lbs.	0.1 lbs.	J	F M A M J J A S O N D	1,500,000 SEED PER POUND. MAY LAST FOR SEVERAL YEARS. MIX WITH SERICIDA LESPEDEZA.
MILLET, BROWNTOP ALONE IN MIXTURES	40 lbs.	0.9 lbs.	J	F M A M J J A S O N D	137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE 100% COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.
MILLET, PEARL ALONE IN MIXTURES	50 lbs.	0.9 lbs.	J	F M A M J J A S O N D	80,000 SEED PER POUND. QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
RYE ALONE IN MIXTURES	3 bu (168 lbs.)	3.9 lbs.	J	F M A M J J A S O N D	18,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT AND WINTERHARDY.
RYEGRASS, ANNUAL ALONE IN MIXTURES	40 lbs.	0.9 lbs.	J	F M A M J J A S O N D	227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.
SUDANGRASS ALONE IN MIXTURES	80 lbs.	1.4 lbs.	J	F M A M J J A S O N D	55,000 SEED PER POUND. GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.

(1) BROADCAST RATES ARE IN PURE LIVE SEED (PLS)
 (2) M-L REPRESENTS THE MOUNTAIN, BLUE RIDGE, AND RIDGES AND VALLEYS MLRA'S
 P REPRESENTS THE SOUTHERN PIEDMONT MLRA
 C REPRESENTS SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATWOODS MLRA'S
 (3) DARK LINES INDICATE OPTIMUM DATES, GRAY LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)	LIME APPLICATION (TONS/ACRE)
Cool Season Grasses	First	6-12-12	1500	50-100	1
	Second	6-12-12	1000	30	
	Maintenance	10-10-10	400	-	
Cool Season Grasses and Legumes	First	6-12-12	1500	0-50	1
	Second	6-12-12	1000	-	
	Maintenance	10-10-10	400	-	
Temporary Cover Crops Seeded Alone	First	10-10-10	500	30	1
Warm Season Grasses	First	6-12-12	1500	50-100	1
	Second	6-12-12	800	50-100	
	Maintenance	10-10-10	400	30	

Ds2 DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)

- ### POTENTIAL POLLUTANT MATERIALS INVENTORY
- Concrete
 - Detergents
 - Paints (Enamel and Latex)
 - Metal Studs
 - Tar
 - Roofing Shingles
 - Fertilizers
 - Pesticides
 - Petroleum Based Products
 - Cleaning Solvents
 - Wood
 - Masonry Block/Brick/Stone

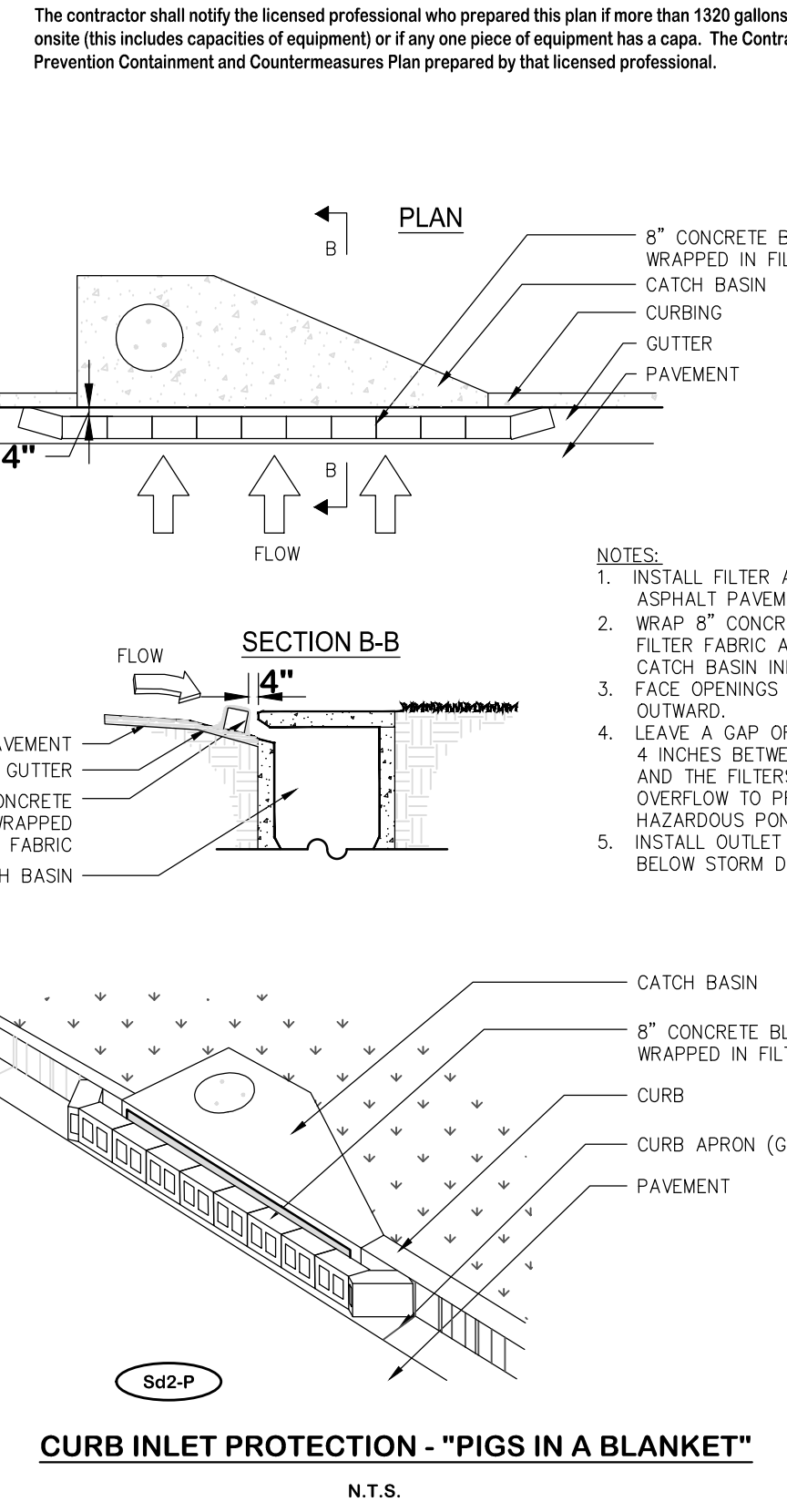
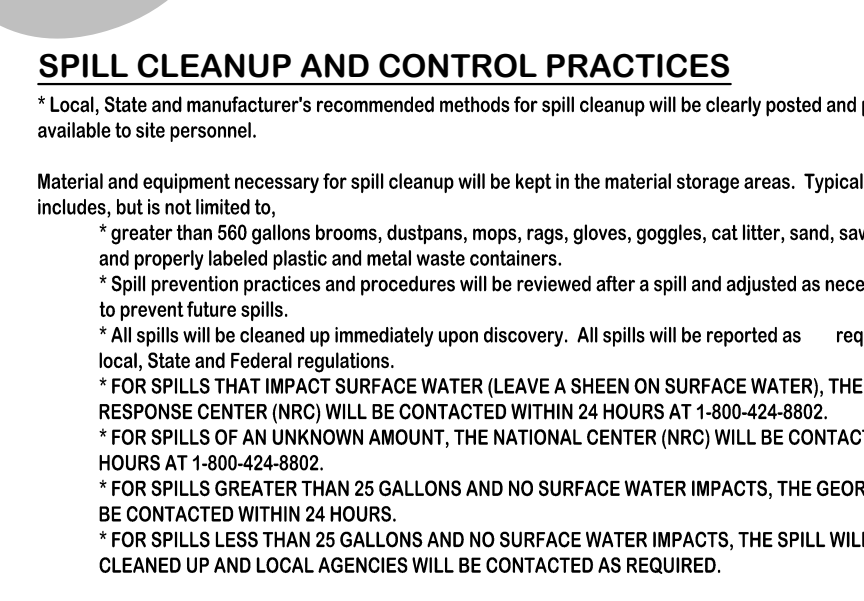
- ### PRODUCT SPECIFIC PRACTICES
- Petroleum Based Products** - Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on-site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Disposal of oils, fuels and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and discharge as required by local and State regulations.
- Paints/Finishes/Solvents** - All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products and product containers will be disposed of according to manufacturer's specifications and recommendations.
- Concrete Truck Washing** - NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on-site.
- Fertilizer/Herbicides** - These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.
- Building materials** - No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.
- NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE.**

- ### WASTE MATERIALS
- All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No construction waste will be buried onsite. All personnel will be instructed on proper procedures for waste disposal.

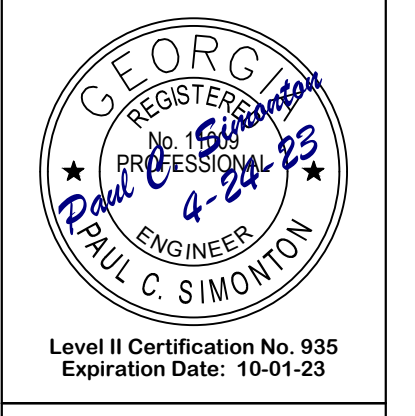
- ### HAZARDOUS WASTES
- All hazardous waste materials will be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct all personnel in these practices. Material Safety Data Sheets (MSDS) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ESPCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques. The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with stormwater discharges. If such contact occurs, the stormwater discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated stormwater. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

- ### SANITARY WASTES
- A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a license portable facility provider in complete compliance with local and state regulations. All sanitary waste units will be located in one area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment BMP's must be implemented, such as gravel bags or specially designed plastic silt containers around the basin, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Plans, by the contractor once the locations have been determined. Sanitary Sewer will be provided by Municipal Authority/Septic System at the completion of this Project.

- ### SPILL CLEANUP AND CONTROL PRACTICES
- * Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to:
- greater than 500 gallons brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, sawdust and properly labeled plastic and metal waste containers.
 - Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary
 - All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State and Federal regulations.
 - FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
 - FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
 - FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
 - FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
- The contractor shall notify the licensed professional who prepared this plan if more than 1320 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a cap. The contractor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licensed professional.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE NAMED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS. THE USER OF THIS DRAWING, IN THE EVENT OF A DISPUTE, AGREES TO WAIVE ANY RIGHTS TO PRACTICE OR INVENTION. ELECTRONIC MEDIA: "SIMONTON ENGINEERING, LLC."



1050 PARKSIDE COMMONS
GREENSBORO, NC 27404
TEL: (703) 454-0870
www.simontonengineering.com

SIMONTON ENGINEERING



Drainage Replacement & Improvements
for
City of Milledgeville
Baldwin County, Georgia

DATE: January 23, 2023
FILE NO.: 2023-05PR
SHEET: 16

SPLIT CULVERT

Split Culvert 2636
2'-0" Wide
Top Weight = 1,500 lbs.
Base Weight = 3,790 lbs.

Split Culvert 4048
3'-0" Wide
Top Weight = 3,000 lbs.
Base Weight = 5,690 lbs.

Split Culvert 4860
4'-0" Wide
Top Weight = 3,200 lbs.
Base Weight = 8,300 lbs.

Split Culvert 5076
5'-0" Wide
Top Weight = 6,200 lbs.
Base Weight = 18,500 lbs.

Two Base Option
Available On All Split Culverts

Inverted Base Option
Available On All Split Culverts

Precast or Cast-in-Place Footings

Notes:
 - Maximum Inside Height as Shown
 - Can be Made to any Height Shorter than Maximum
 - Designed for HS-20 Wheel Loads
 - See Trench Section for additional details

PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 682-2844 Fax: (503) 682-2657
oldcastleprecast.com/wilsonville

SPLIT CULVERT

File Name: 020-SPLITCULVERT1-2
Issue Date: 2018

SPLIT CULVERT

2636 / 4040 / 4860 / 5076

2.0

SPLIT CULVERT

Split Culvert 6070
6'-0" Wide
Top Weight = 8,700 lbs.
Base Weight = 20,500 lbs.

Split Culvert 8056
8'-0" Wide
Top Weight = 9,400 lbs.
Base Weight = 25,200 lbs.

Split Culvert 1050
10'-0" Wide
Top Weight = 13,800 lbs.
Base Weight = 25,100 lbs.

Two Base Option
Available On All Split Culverts

Inverted Base Option
Available On All Split Culverts

Precast or Cast-in-Place Footings

Notes:
 - Maximum Inside Height as Shown
 - Can be Made to any Height Shorter than Maximum
 - Designed for HS-20 Wheel Loads
 - See Trench Section for additional details

PO Box 323, Wilsonville, Oregon 97070-0323
Tel: (503) 682-2844 Fax: (503) 682-2657
oldcastleprecast.com/wilsonville

SPLIT CULVERT

File Name: 020-SPLITCULVERT1-2
Issue Date: 2018

SPLIT CULVERT

6070 / 8056 / 1050

2.1

DRAWING COMPLETED BY: _____
 REVISIONS: _____

Level II Certification No. 935
Expiration Date: 10-01-23

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF SIMONTON ENGINEERING, LLC. IT MAY NOT BE COPIED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF SIMONTON ENGINEERING, LLC. INFORMATION CONTAINED HEREIN IS INTENDED FOR THE MARKED CLIENT ONLY. IN THE EVENT OF AN ELECTRONIC VERSION SIMONTON ENGINEERING, LLC ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS THAT MAY OCCUR IN THIS DRAWING. IN THE EVENT OF A DISPUTE, THE APPLICABLE LAW SHALL BE THE LAW OF THE STATE OF GEORGIA. "SIMONTON ENGINEERING, LLC."

1050 PARKSIDE COMMONS
GREENSBORO, NC 27642
TEL: (703) 454-0870
www.simontonengineering.com

Drainage Replacement & Improvements for City of Milledgeville
Baldwin County, Georgia

Precast Box Culvert Details
DATE: January 23, 2023
FILE NO: 2023-05PRJ
SHEET: 17

2023-05PRJ

17

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

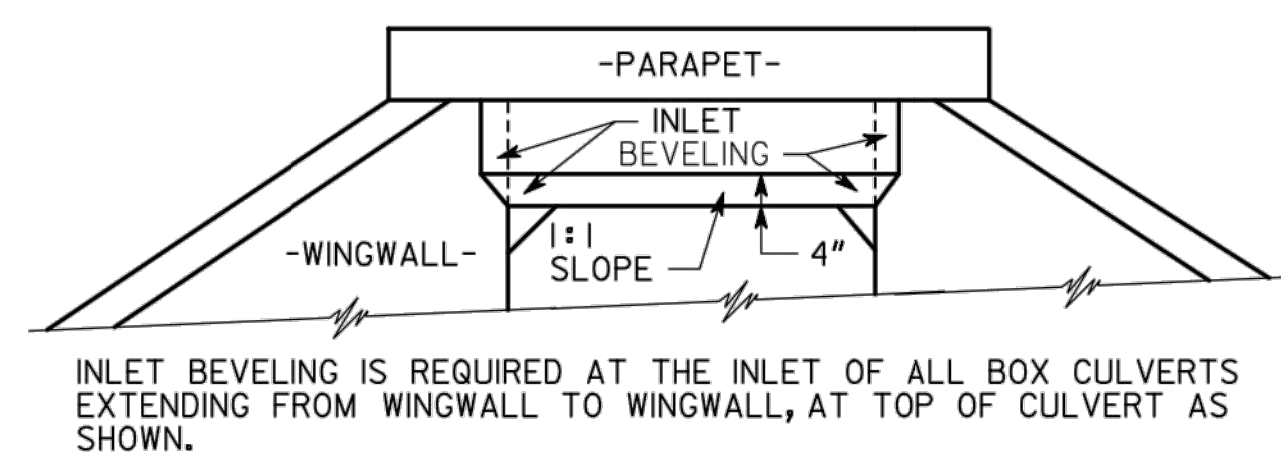
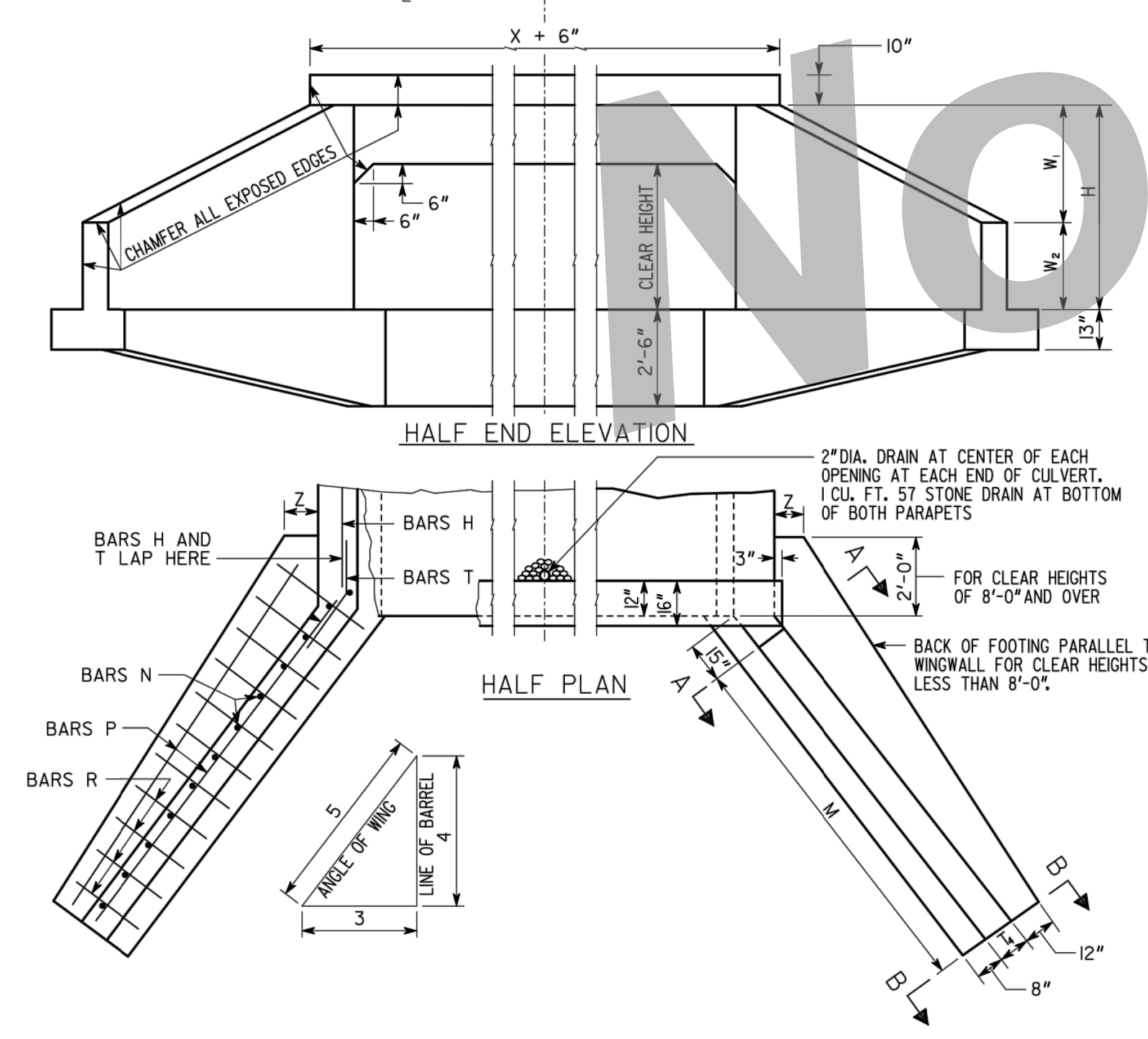
CLEAR HEIGHT	WINGWALLS, TOEWALLS AND PARAPETS																CLEAR HEIGHT			
	N BARS AT 1'-0" C. TO C.						P BARS AT 1'-0" C. TO C.				R BARS AT 1'-0" C. TO C.				M BARS					
	SIZE	NO. (CONSTANT LENGTH)	* LENGTH	NO. (VARIABLE LENGTH)	LENGTH *		SIZE	NO. (CONSTANT LENGTH)	LENGTH	NO. (VARIABLE LENGTH)	LENGTH		SIZE	NO. (CONSTANT LENGTH)	LENGTH	SIZE		NO. (CONSTANT LENGTH)	LENGTH	
2'	#4	4	5'-4"	12	4'-4"	5'-2"	#4	20	3'-5"	4	1'-2"	1'-2"	#6	32	3'-6"	3'-6"	#6	14	X+2"	2'
3'	#4	4	6'-7"	24	4'-4"	6'-5"	#4	20	6'-4"	8	1'-9"	4'-2"	#6	56	3'-6"	3'-6"	#6	14	X+2"	3'
4'	#5	4	8'-2"	40	4'-5"	8'-2"	#4	20	9'-10"	12	2'-11"	7'-9"	#6	88	3'-6"	3'-6"	#6	14	X+2"	4'
5'	#5	4	9'-1"	44	4'-11"	9'-0"	#4	20	11'-3"	16	2'-11"	10'-4"	#6	96	3'-6"	3'-6"	#6	14	X+2"	5'
6'	#5	4	10'-2"	48	5'-5"	9'-11"	#4	24	12'-7"	16	2'-11"	10'-5"	#6	104	3'-6"	3'-6"	#6	14	X+2"	6'
7'	#5	4	11'-2"	56	5'-11"	11'-2"	#4	24	13'-11"	20	3'-0"	13'-0"	#6	120	3'-6"	3'-6"	#6	14	X+2"	7'
8'	#6	4	12'-4"	60	6'-6"	12'-3"	#4	28	15'-2"	24	3'-2"	13'-0"	#6	128	3'-8"	4'-0"	#6	14	X+2"	8'
9'	#6	4	13'-5"	64	7'-0"	13'-2"	#4	28	16'-6"	24	3'-4"	15'-7"	#6	136	3'-8"	4'-6"	#6	14	X+2"	9'
10'	#7	4	14'-7"	72	7'-8"	14'-7"	#4	32	17'-9"	24	3'-4"	15'-7"	#6	152	3'-8"	5'-0"	#6	14	X+2"	10'
11'	#7	4	15'-7"	76	8'-2"	15'-6"	#4	32	19'-1"	28	3'-4"	18'-2"	#6	160	3'-8"	5'-6"	#6	14	X+2"	11'
12'	#8	4	16'-8"	80	8'-9"	16'-6"	#4	36	20'-5"	28	3'-5"	18'-3"	#6	168	3'-8"	6'-0"	#6	14	X+2"	12'

* LENGTH INCLUDES VERTICAL LEG, HORIZONTAL LEG AND 180° STANDARD HOOK.
 ** LENGTH INCLUDES 2 STANDARD 180° HOOKS.

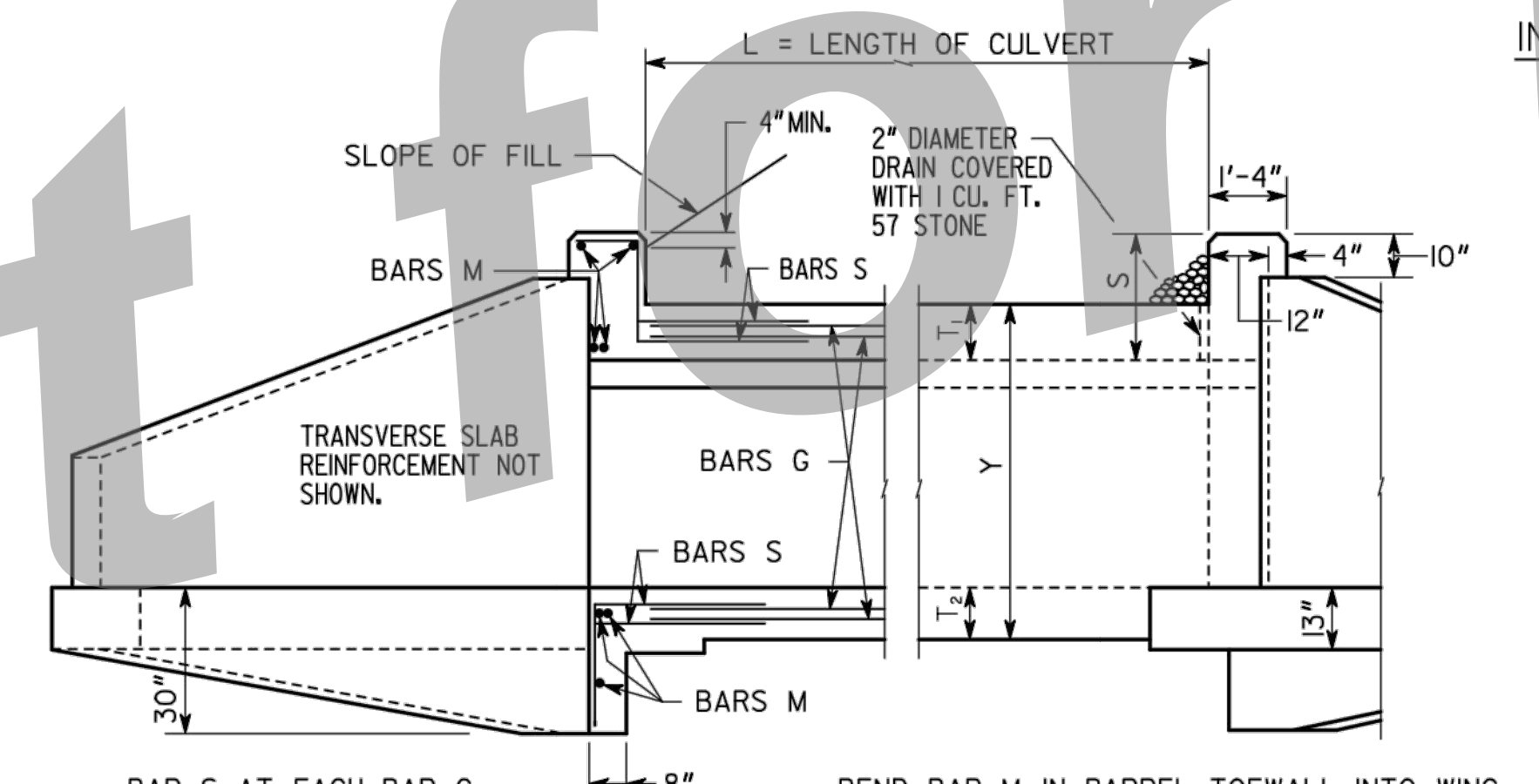
X = TOTAL BARREL WIDTH OUT TO OUT (DIMENSION "X" FROM CULVERT SHEET)
 Y = TOTAL BARREL HEIGHT OUT TO OUT (DIMENSION "Y" FROM CULVERT SHEET)

DIMENSIONS AND QUANTITIES										
CLEAR HEIGHT	H	W ₁	W ₂	S	M	T ₁	Z	CY CLASS AA CONCRETE	LBS. BAR REINF. STEEL	CLEAR HEIGHT
2'	3'-1"	1'-1"	2'-0"	1'-1"	2'-8"	10"	-	3.3	270	2'
3'	4'-3 1/2"	2'-3 1/2"	2'-0"	2'-1 1/2"	5'-7"	10"	-	6.0	499	3'
4'	5'-9"	3'-9"	2'-0"	2'-7"	9'-2"	10"	-	9.2	795	4'
5'	6'-9"	4'-3"	2'-6"	2'-7"	10'-6"	10"	-	12.4	1083	5'
6'	7'-9"	4'-9"	3'-0"	2'-7"	11'-10"	10"	-	15.0	1246	6'
7'	8'-9 1/2"	5'-3 1/2"	3'-6"	2'-7 1/2"	13'-2"	10"	-	17.9	1507	7'
8'	9'-10 1/2"	5'-10 1/2"	4'-0"	2'-8 1/2"	14'-5"	12"	1'-0"	25.3	2070	8'
9'	10'-11"	6'-5"	4'-6"	2'-9"	15'-9"	12"	1'-6"	29.9	2345	9'
10'	11'-11"	6'-11"	5'-0"	2'-9"	17'-0"	12"	2'-0"	34.7	3277	10'
11'	12'-11"	7'-5"	5'-6"	2'-9"	18'-4"	12"	2'-6"	40.0	3676	11'
12'	13'-11 1/2"	7'-11 1/2"	6'-0"	2'-9 1/2"	19'-8"	12"	3'-0"	45.8	4788	12'

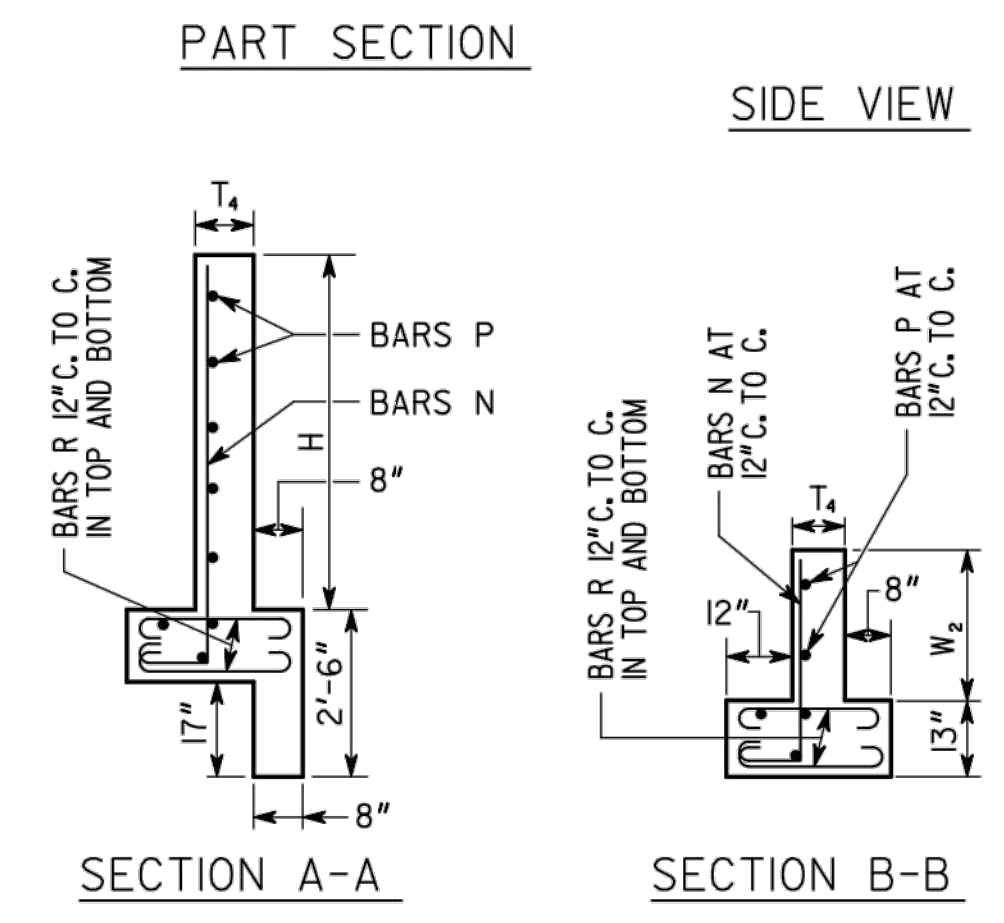
QUANTITIES GIVEN INCLUDE WINGWALL, WINGWALL FOOTING, AND WINGWALL TOEWALL FOR BOTH ENDS.
 SYMMETRICAL ABOUT CULVERT



INLET BEVELING IS REQUIRED AT THE INLET OF ALL BOX CULVERTS EXTENDING FROM WINGWALL TO WINGWALL, AT TOP OF CULVERT AS SHOWN.



BAR S AT EACH BAR G IN TOP AND BOTTOM OF SLAB.
 BEND BAR M IN BARREL TOEWALL INTO WING TOEWALL AS NECESSARY TO PROVIDE 2" CLEARANCE AT EACH END.



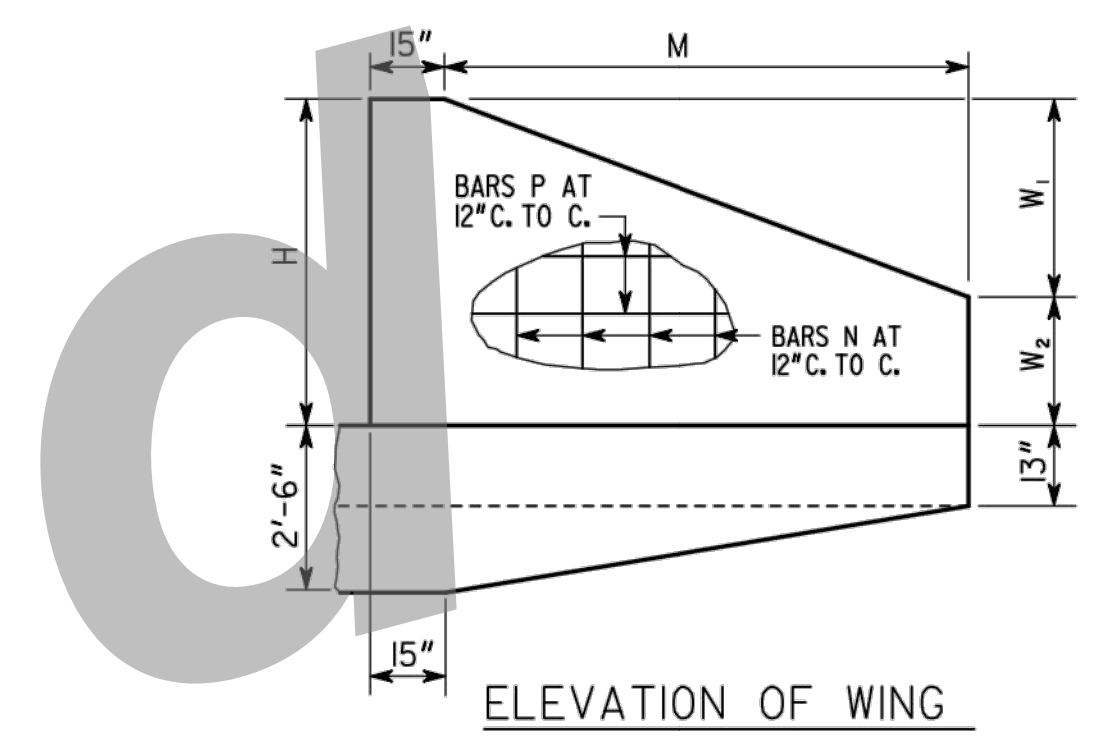
SECTIONS A-A AND B-B
 BARS S AND T ARE LAPPED WITH BARS G AND H, RESPECTIVELY.

GENERAL NOTES

- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION & SUPPLEMENTS THERETO.
- MAINTAIN 3" CLEARANCE ON REINFORCEMENT AT FACE OF CONCRETE CAST AGAINST EARTH. MAINTAIN 2" CLEARANCE ON ALL OTHER REINFORCEMENT.
- CHAMFER ALL EXPOSED EDGES 3/4".
- CONCRETE APRONS (SEPARATE STANDARD SHEETS) ARE REQUIRED AT ALL OUTLETS. THE ENGINEER MAY ALLOW AN EXCEPTION FOR BED ROCK CONDITIONS. TOEWALLS UNDER PARAPETS MAY BE MODIFIED AT OUTLETS AS SHOWN ON STANDARDS FOR CONCRETE APRONS.
- PARAPETS AT INLETS SHALL BE CONSTRUCTED WITH A 4"45° BEVEL.
- CULVERT TO HAVE MINIMUM OF 1'-0" BELOW BOTTOM OF BASE OR CONCRETE PAVEMENT.

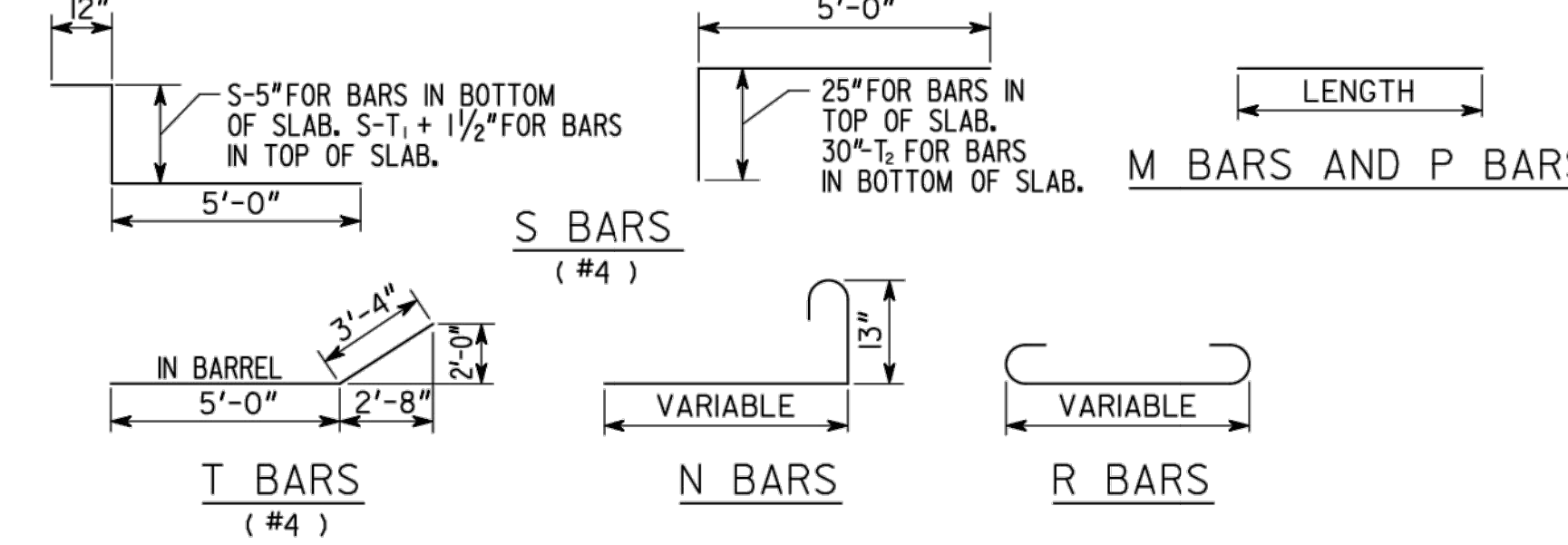
DESIGN DATA

SPECIFICATIONS - AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014
 LOADING - HL-93



INLET BEVELING DETAIL

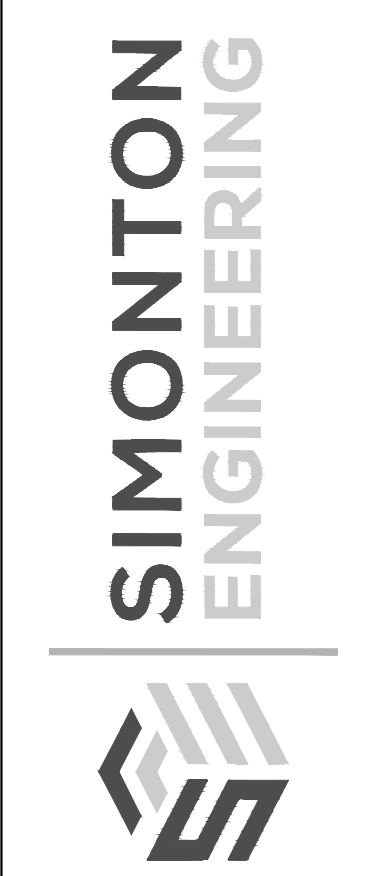
T₁ = TOP SLAB THICKNESS
 T₂ = BOTTOM SLAB THICKNESS
 NOTE: SEE BOX CULVERT STANDARDS FOR DIMENSIONS.



DATE		DEPARTMENT OF TRANSPORTATION	
REVISION		STATE OF GEORGIA	
BY		STANDARD	
DES. WEL		REINFORCED CONCRETE WINGWALLS,	
DRAW. WEL		TOEWALLS AND PARAPETS	
TRA.		FOR CONCRETE BOX CULVERTS	
CHK. YSK		NO SCALE	
		SEPTEMBER 2017	
		NUMBER	
		2404	
		SHEET 1 OF 1	



1050 PARKSIDE COMMONS
 SUITE 100
 GREENSBORO, NC 27402
 TEL: (703) 454-0870
 www.simontonengineering.com



Drainage Replacement & Improvements for City of Milledgeville
 Baldwin County, Georgia

GDOT
 Box Culvert
 Headwall Detail
 DATE: January 23, 2023
 FILE NO.: 2023-05PR
 SHEET: 18