

# JOE TAMPLIN INDUSTRIAL BOULEVARD 18" SANITARY SEWER REPLACEMENT FOR THE MACON WATER AUTHORITY



Macon Water Authority

537 HEMLOCK STREET  
Macon, GA 31202-0108  
(478) 464-5635 \* Fax (478) 738-3864

OCTOBER 31, 2024



PROJECT LOCATION

PROJECT LOCATION

## NOTIFICATION CONTACTS

**Owner and 24-Hour Contact**  
Joel Herndon, Chief Inspector  
Macon Water Authority  
537 Hemlock Street  
Macon, GA 31202  
Phone: 478-464-5639  
Email: jherndon@maconwater.org

**Engineer**  
Don L. Carter, P.E.  
Carter Engineering Group  
6310 Peake Road, Suite 200  
Macon, GA 31210  
Office: 478-219-2600  
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## UTILITY CONTACTS

**Gas**  
Cheryl Treadway, Account Executive, New Business Development  
AGI Resources (Local Office)  
5472 New Forsyth Rd, Macon, GA 31210  
Local Office: (478) 476-2230  
Cell: 404-391-3142  
Email: Cheryl.treadway@agiresources.com

**Electricity**  
Georgia Power  
960 Key Street  
Macon, GA 31204  
Office: 888-655-5888

**Telephone/Cable**  
OSP-Planning & Design Engineering  
AT&T  
1630 Eisenhower Parkway-Room 260  
Macon, GA 31206  
Phone: 478-788-1040  
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**Water and Sewer**  
Joel Herndon, Chief Inspector  
Macon Water Authority  
537 Hemlock Street  
Macon, GA 31202  
Phone: 478-464-5639  
Email: jherndon@maconwater.org

## PROJECT NARRATIVE

THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING APPROXIMATELY 3,040 L.F. OF 18" SANITARY SEWER ON JOE TAMPLIN BOULEVARD.

## CONSTRUCTION NOTES

- CONTRACTOR WILL BE WORKING IN TEMPORARY CONSTRUCTION EASEMENTS, PERMANENT EASEMENTS, AND COUNTY RIGHT-OF-WAYS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OF EASEMENTS AND REMOVAL OF ALL DEBRIS INCLUDING STUMPS, BLAST ROCK, ETC. NO BURIAL OF CLEARED MATERIALS WILL BE ALLOWED.
- CONTRACTOR SHALL REMOVE ALL DEBRIS AND HAVE SOIL EROSION CONTROL MEASURES IN PLACE BEFORE CONSTRUCTIONS BEGINS.
- CONTRACTOR TO NOTIFY UTILITY PROTECTION AGENCY 72 HOURS PRIOR TO START OF WORK. PHONE 811. ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DISRUPTIONS OF UTILITY SERVICE. ANY UTILITIES DAMAGED MUST BE REPAIRED THE SAME DAY, UNLESS WRITTEN PERMISSION FROM UTILITY OWNER IS GIVEN.
- EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATION SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO THEIR ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE CLIENT AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. SHOULD THE DAMAGED UTILITY LINE REQUIRE REPAIR BY THE RESPECTIVE UTILITY COMPANY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL COSTS ASSOCIATED WITH THE REPAIR INCLUDING FINES AND ASSESSMENTS IMPOSED BY UTILITY COMPANY. CONTRACTOR SHALL NOTIFY ELECTRIC POWER PROVIDER 5 BUSINESS DAYS IN ADVANCE OF WORK ADJACENT TO POWER POLES. COORDINATE WITH UTILITY PROVIDER TO REMOVE OR RELOCATE UTILITY MAINS AND POLES AND PAY ALL ASSOCIATED COSTS.
- WHEN CONSTRUCTION INVOLVES THE REMOVAL OF FENCE, POLES, MAILBOXES, SIGNS, SIDEWALKS, DRIVEWAYS, DRIVEWAY CULVERTS, TEMPORARY OR FIXED STRUCTURES, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FOR TEMPORARY ACCESS SERVICE OR CONTAINMENT TO THE AFFECTED PROPERTY. HE SHALL REPLACE SUCH ITEMS WITH SIMILAR OR BETTER MATERIALS AS SOON AS PRACTICAL, OR AS DIRECTED BY THE ENGINEER AND ALL SIGNAGE, ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.
- PEDESTRIAN AND LOCAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. SAFETY DEVICES AND FLAGMEN SHALL BE PROVIDED BY THE CONTRACTOR, AT HIS EXPENSE, IF IT SHOULD BE NECESSARY. WRITTEN PERMISSION TO CLOSE THE CONSTRUCTION AREA TO TRAFFIC MUST BE OBTAINED FROM THE APPROPRIATE GOVERNMENT AGENCY PRIOR TO ANY STREET CLOSING. ALL CONSTRUCTION SIGNAGE, LIGHTED BARRIERS, ETC. SHALL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION STAKING SHALL BE BY THE CONTRACTOR, AT HIS EXPENSE. STAKING OF EASEMENT AND CLEARING LIMITS AND NEW CONSTRUCTION SHALL BE PERFORMED BY PROFESSIONAL SURVEYOR LICENSED IN GEORGIA.
- ALL PROPERTY LINES ARE BASED ON DATA PROVIDED BY FIELD SURVEY DATA.
- CONTRACTOR SHALL MAINTAIN FIELD "AS-BUILT" DRAWINGS AND SHALL MEASURE AND SHOW LOCATION OF ALL MANHOLES, GRAVITY MAINS, RIM/INVERT ELEVATIONS, ETC.
- CONTRACTOR SHALL MATCH EXISTING LAWN AND GRASS TYPES WHEN REPAIRING DISTURBED AREAS.
- ALL CROSS DRAINS AND DRIVEWAY CULVERTS MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINS AND CULVERTS.
- CONTRACTOR SHALL PERFORM CONSTRUCTION IN A MANNER THAT WILL ALLOW VEHICULAR ACCESS TO EACH HOME OR BUSINESS DURING CONSTRUCTION.
- ALL EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
- A MINIMUM OF 10' OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER & SEWER MAINS. A MINIMUM OF 18" VERTICAL SEPARATION SHALL BE MAINTAINED AT ALL CROSSINGS OF WATER & SEWER MAINS.
- THE CONTRACTOR SHALL FURNISH MATERIALS AND MAKE THE CONNECTION TO ALL EXISTING PIPE LINES.
- THE CONTRACTOR SHALL BEAR ALL COST OF WATER USED FOR FLUSHING AND TESTING REQUIRED BY THE SPECIFICATIONS. PROVISIONS TO PURCHASE SAID WATER FROM A SUPPLIER APPROVED OF BY THE ENGINEER.
- ALL REQUIRED FITTINGS ARE NOT NECESSARILY SHOWN ON THESE DRAWINGS. CONTRACTOR SHALL FURNISH AND SUPPLY ALL FITTINGS NECESSARY TO CONSTRUCT GRAVITY SEWER MAIN.
- BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER THE CONTACT INFORMATION OF A PERSON WHO WILL BE AVAILABLE 24 HOURS A DAY TO CONTACT IN CASE OF EMERGENCY.
- CONTRACTOR TO SAW-CUT EXISTING ASPHALT TO PROVIDE NEAT EDGE FOR PATCHING ON ALL STREETS (SEE DETAIL CLASS 'A' UTILITY PATCH DETAIL).
- ALL CONSTRUCTION MATERIALS, METHODS AND INSTALLATION SHALL BE IN ACCORDANCE WITH MACON WATER AUTHORITY STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY MWA CHIEF INSPECTOR, JOEL HERNDON, 478-464-5639, A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- MEANS AND METHODS FOR CONSTRUCTION ARE UP TO THE BIDDING CONTRACTOR AND HE/SHE WILL BE FULLY RESPONSIBLE FOR ALL MATERIALS, EQUIPMENT, LABOR, TEMPORARY POWER, TIE-INS WHERE BYPASS PIPING AND BYPASS PUMPING (INCLUDING FUEL COSTS) IS REQUIRED TO MAINTAIN OPERATION OF THE SANITARY SEWER SYSTEM. BYPASS PUMPING SHALL INCLUDE NOISE ATTENUATION AS SUCH TO AVOID EXCESS SOUND DURING OPERATION AS WELL AS AN AUTO-DIALER TO ALERT THE CONTRACTOR AND MWA IN THE EVENT OF BYPASS PUMP FAILURE.

## LEGEND

DESCRIPTION	EXISTING	NEW
PROPERTY LINE	---	---
CONTOUR LINE	---450---	---
POWER POLE	⊗	⊗
LIGHT POLE	◇	◇
OVERHEAD POWER	—HP—	—HP—
HIGH VOLTAGE LINE	—HVL—	—HVL—
UNDERGROUND ELECTRICAL	—E—	—E—
UNDERGROUND TELEPHONE	—T—	—T—
UNDERGROUND TELEPHONE	—FOC—	—FOC—
UNDERGROUND FIBER OPTIC	—G—	—G—
GAS LINE	—W—	—W—
WATER LINE	—W—	—W—
FIRE PROTECTION MAIN	—FP—	—FP—
DOMESTIC WATER	—DW—	—DW—
IRRIGATION MAIN	—IR—	—IR—
FIRE HYDRANT	⊙	⊙
WATER VALVE	⊙	⊙
SAN. SEWER W/ MANHOLE	—SAN—	—SAN—
CLEANOUT	⊙	⊙
DRAIN INLET	⊙	⊙
CATCH BASIN	⊙	⊙
D.O.T. STD. 1033D	⊙	⊙
STORM DRAIN	—SD—	—SD—
SILT FENCE & TYPE	+	+
SPOT ELEVATION	⊕	⊕
CONCRETE PAVING	▨	▨
CONCRETE SIDEWALKS	▨	▨
PVC IRRIGATION SLEEVE	—PVC—	—PVC—
SOIL BOUNDARY LINE	—S—	—S—
SOIL TYPE	⊕	⊕
FENCE	—X—X—X—	—X—X—X—
FENCE W/ 3 STRANDS OF BARBED WIRE	—X—X—X—	—X—X—X—
NOT IN CONTRACT	⊗	⊗
TREES TO BE REMOVED	⊗	⊗

## INDEX TO DRAWINGS

SHEET NO.	TITLE
-	COVER SHEET
C1	OVERALL PLAN
C2-C5	SANITARY SEWER PLAN AND PROFILE
C6	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C7	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C8	SANITARY SEWER EROSION AND SEDIMENT CONTROL PLAN
C9	NPDES COMPREHENSIVE MONITORING PROGRAM NOTES
C10	STORMWATER POLLUTION PREVENTION NOTES
C11	STORMWATER POLLUTION PREVENTION DETAILS
C12	SANITARY SEWER DETAILS

## PROJECT QUANTITIES

18" SDR 26 PVC SANITARY SEWER 3040 L.F.

## BENCHMARK INFORMATION

N/A



Contact 811 before you dig.



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RELEASE DATES:

REV #	DATE	DESCRIPTION



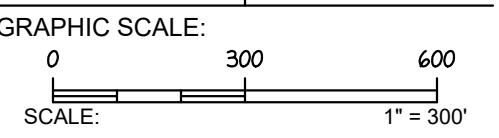
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**MACON  
WATER AUTHORITY  
MACON, GA**

PROJECT:  
**JOE TAMPLIN BLVD  
SANITARY SEWER  
REPLACEMENT**

MACON, GA 31216

DRAWN BY: CADD      CHECKED BY: DLC

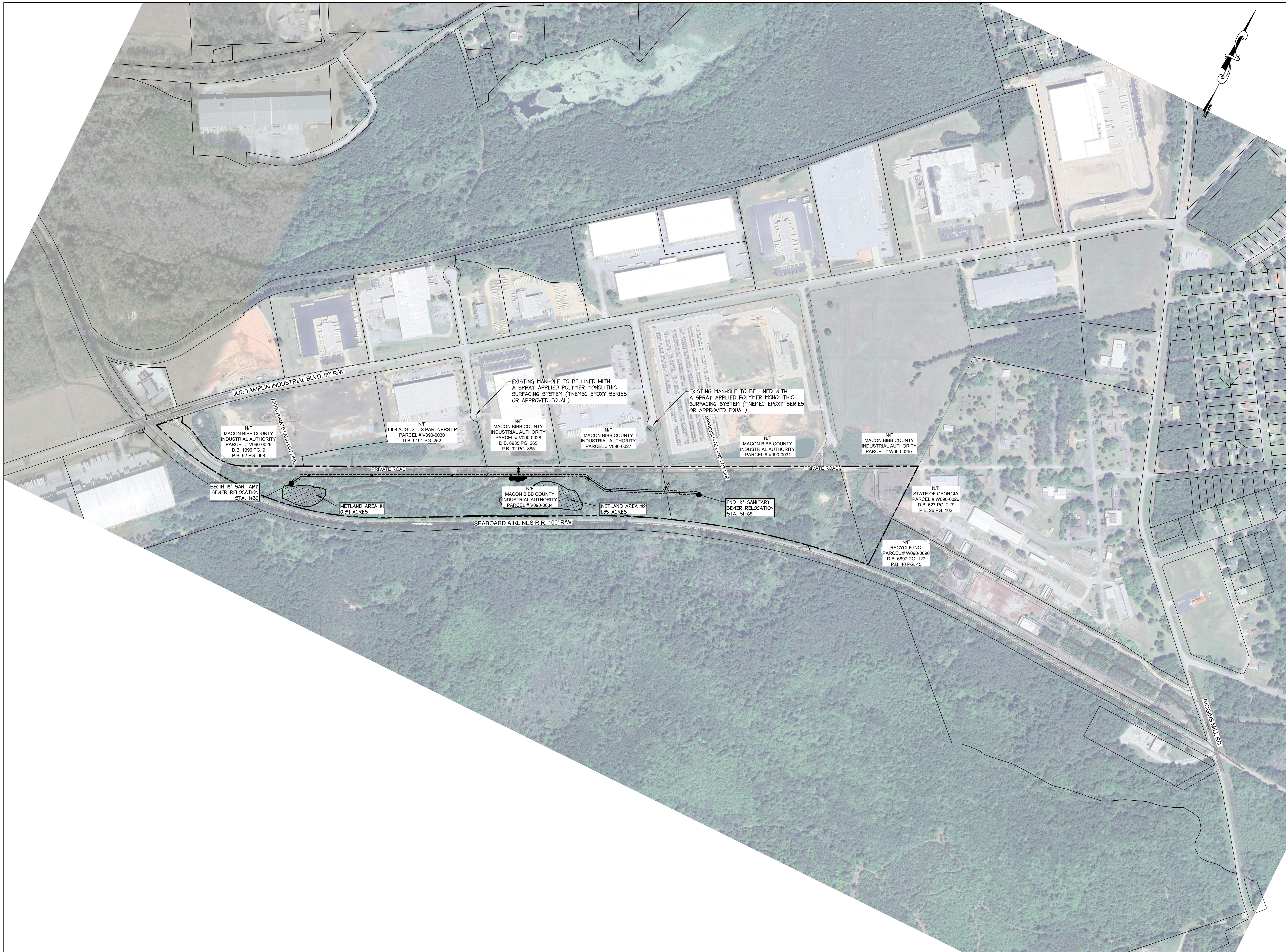
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DRAWING TITLE:  
**OVERALL PLAN**

DRAWING NUMBER:  
**C1**

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MACON, GA

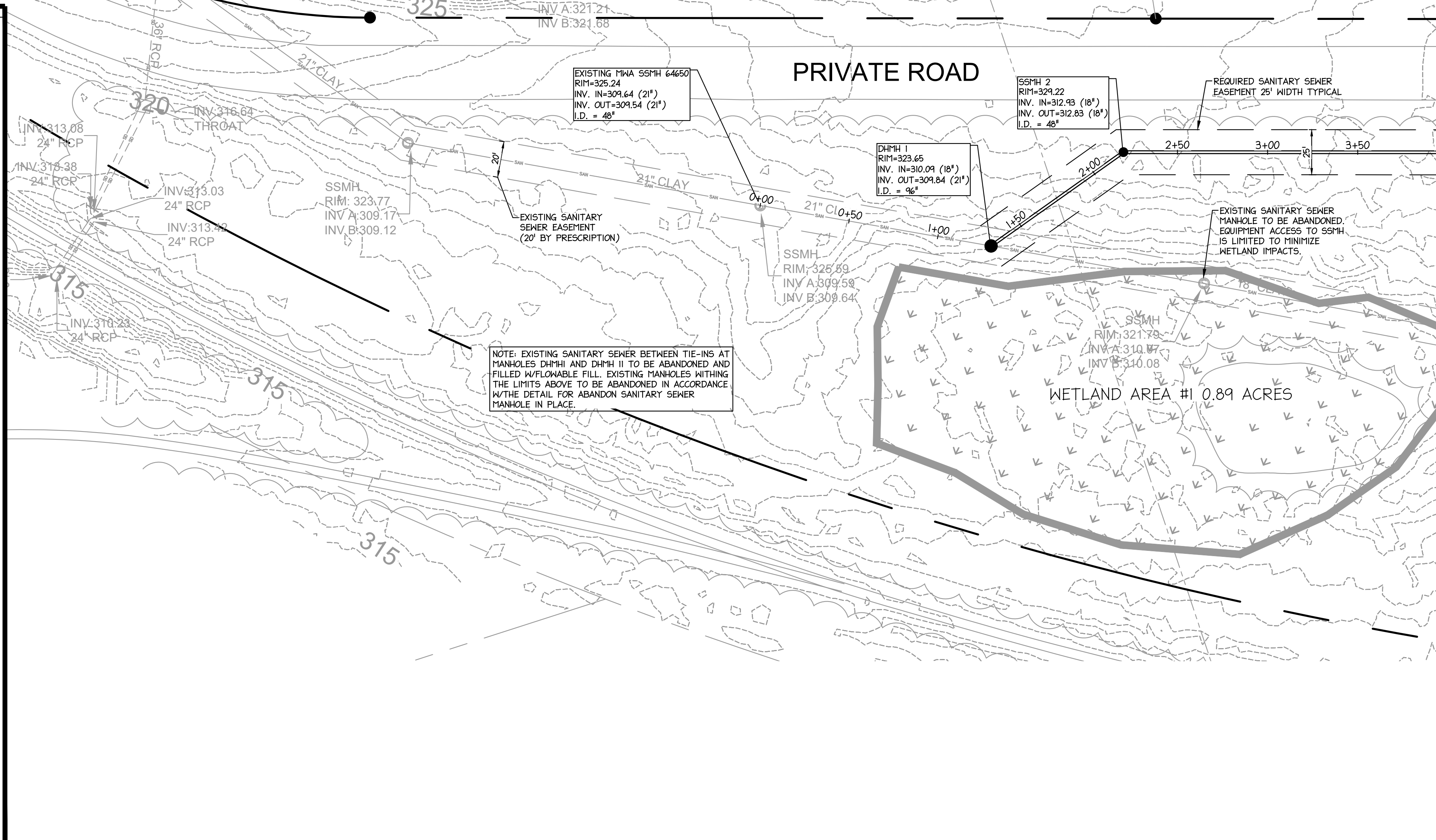
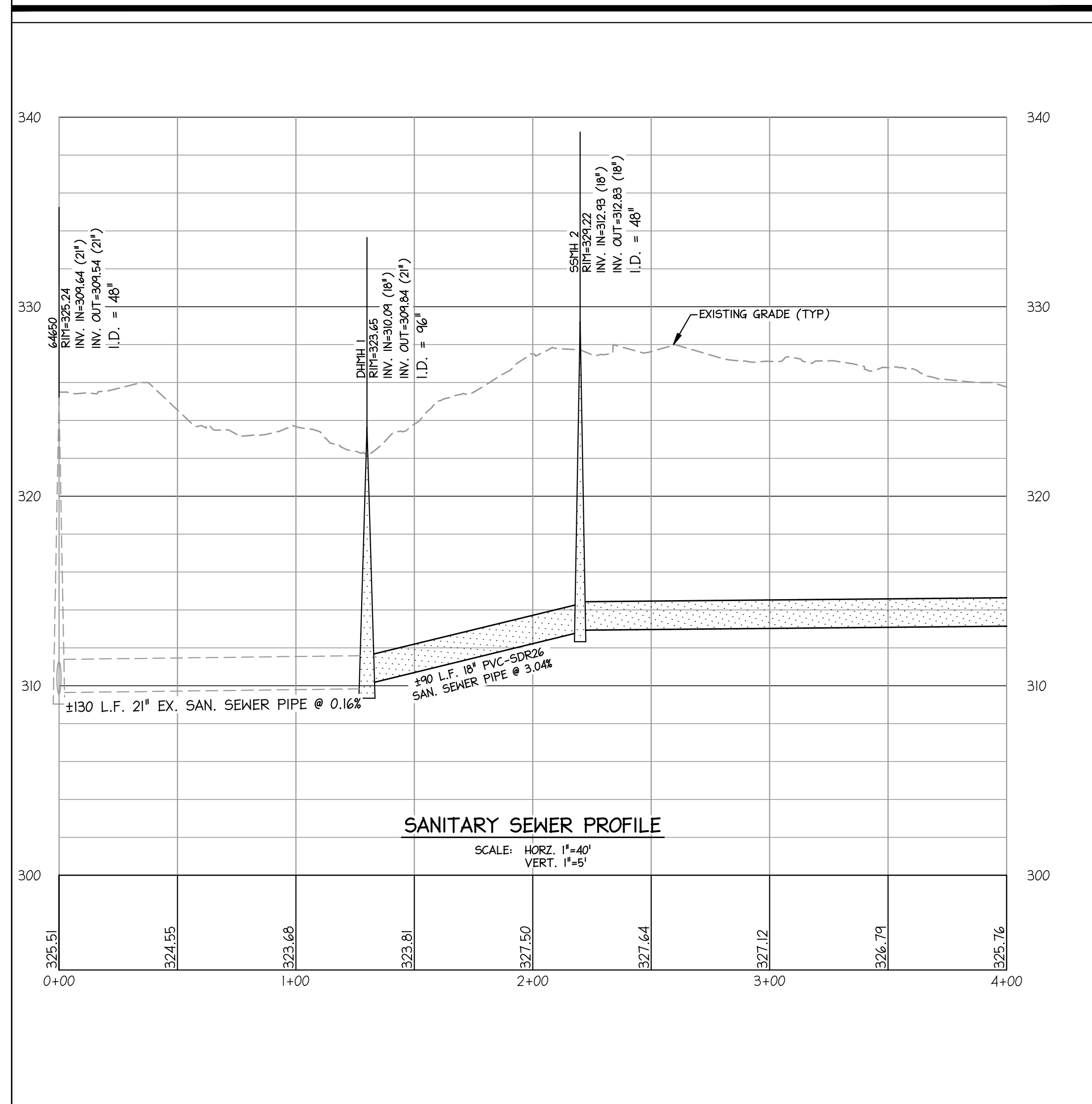
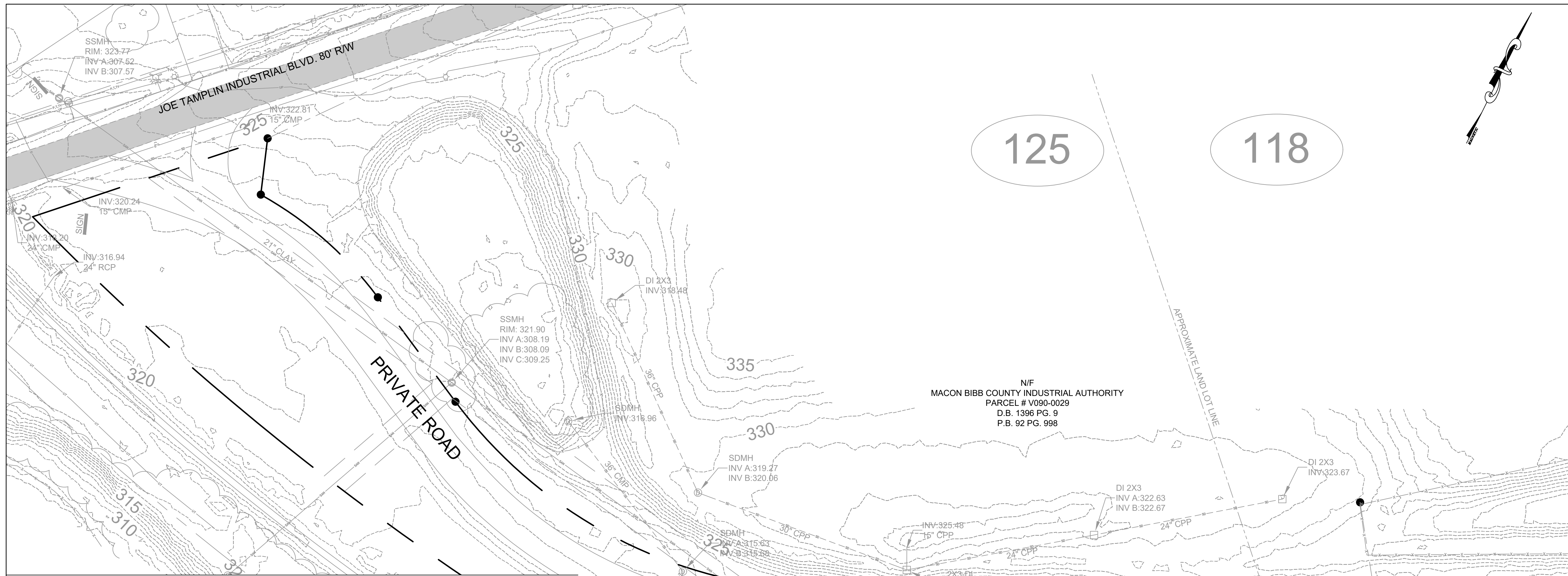
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MACON, GA 31216  
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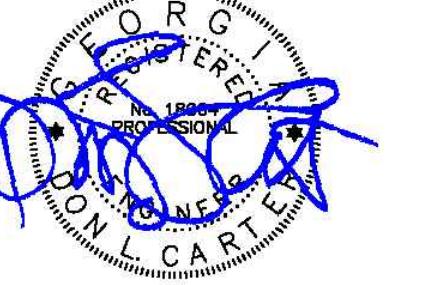
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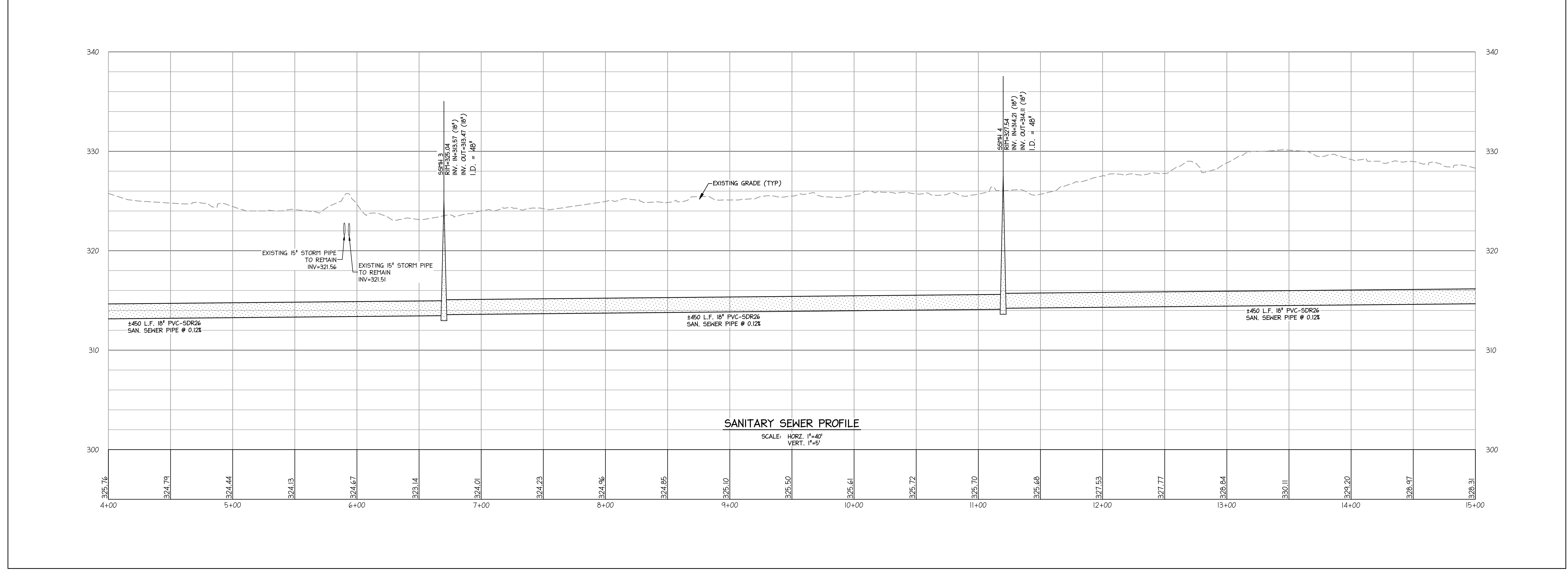
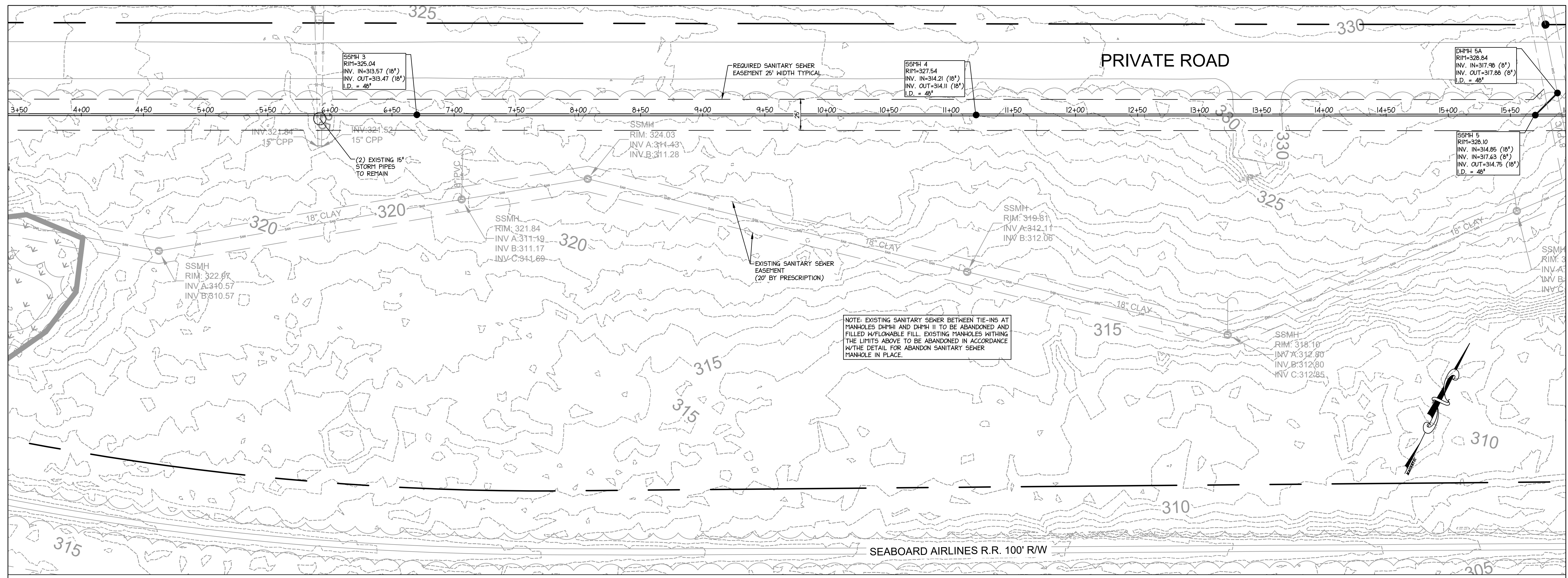
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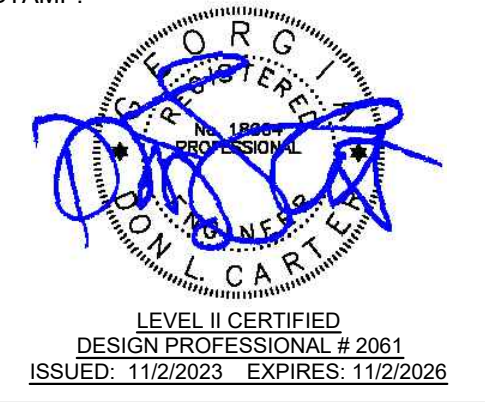
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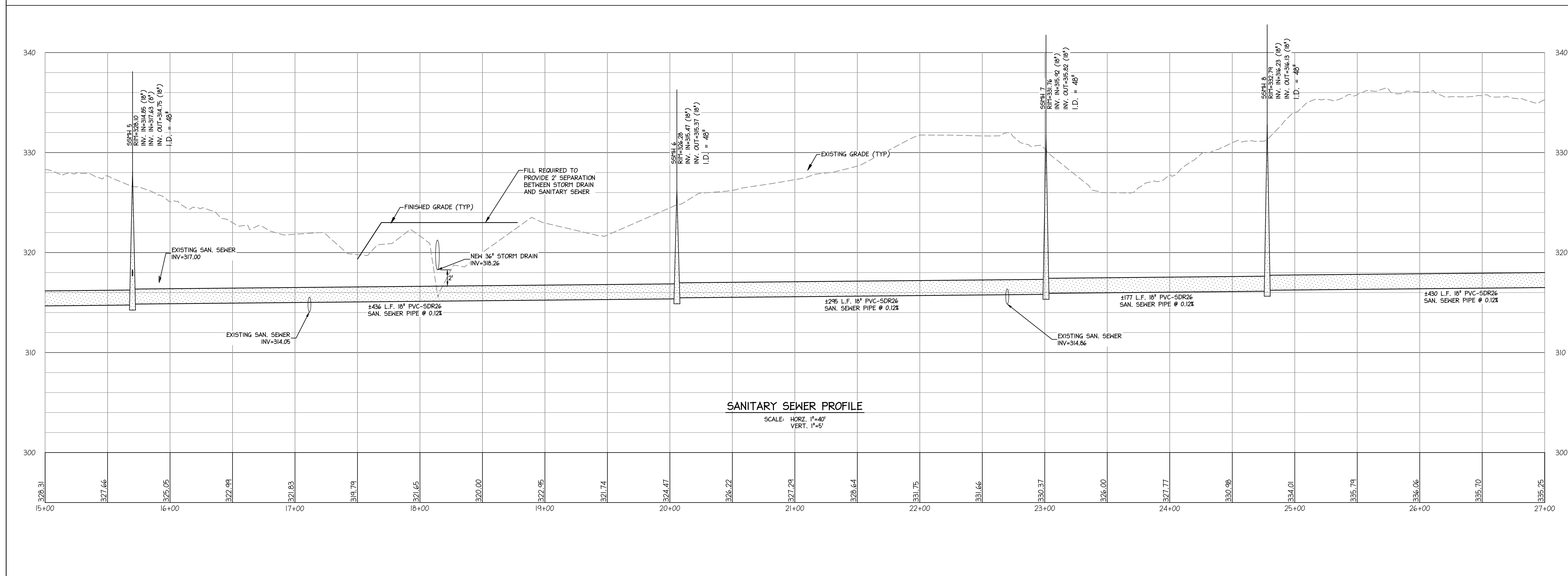
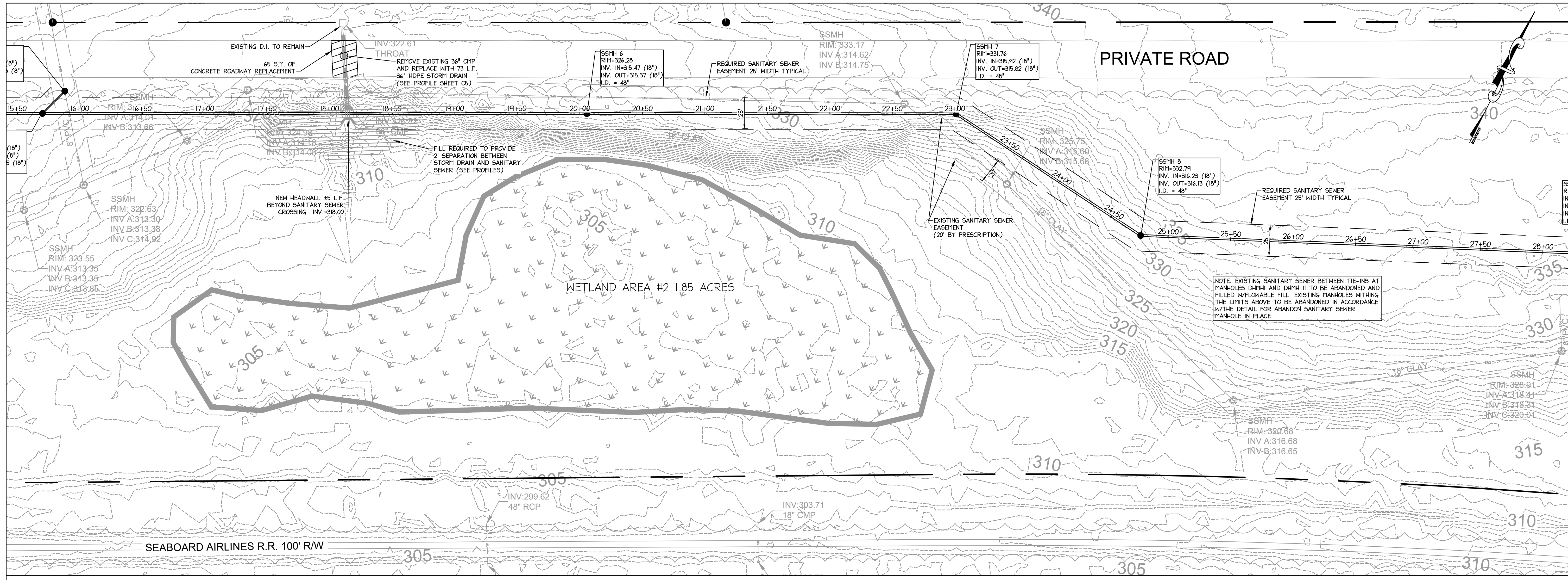
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MACON  
WATER AUTHORITY  
MACON, GA

PROJECT:  
JOE TAMPLIN BLVD  
SANITARY SEWER  
REPLACEMENT

MACON, GA 31216

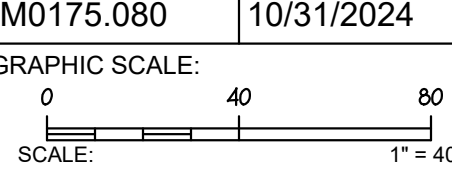
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DATE: 10/31/2024

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PLAN AND PROFILE

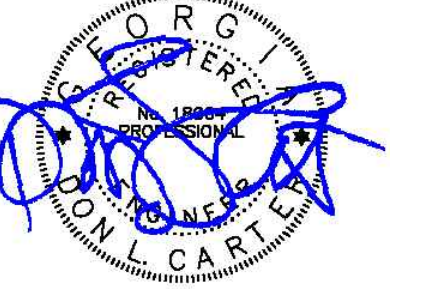
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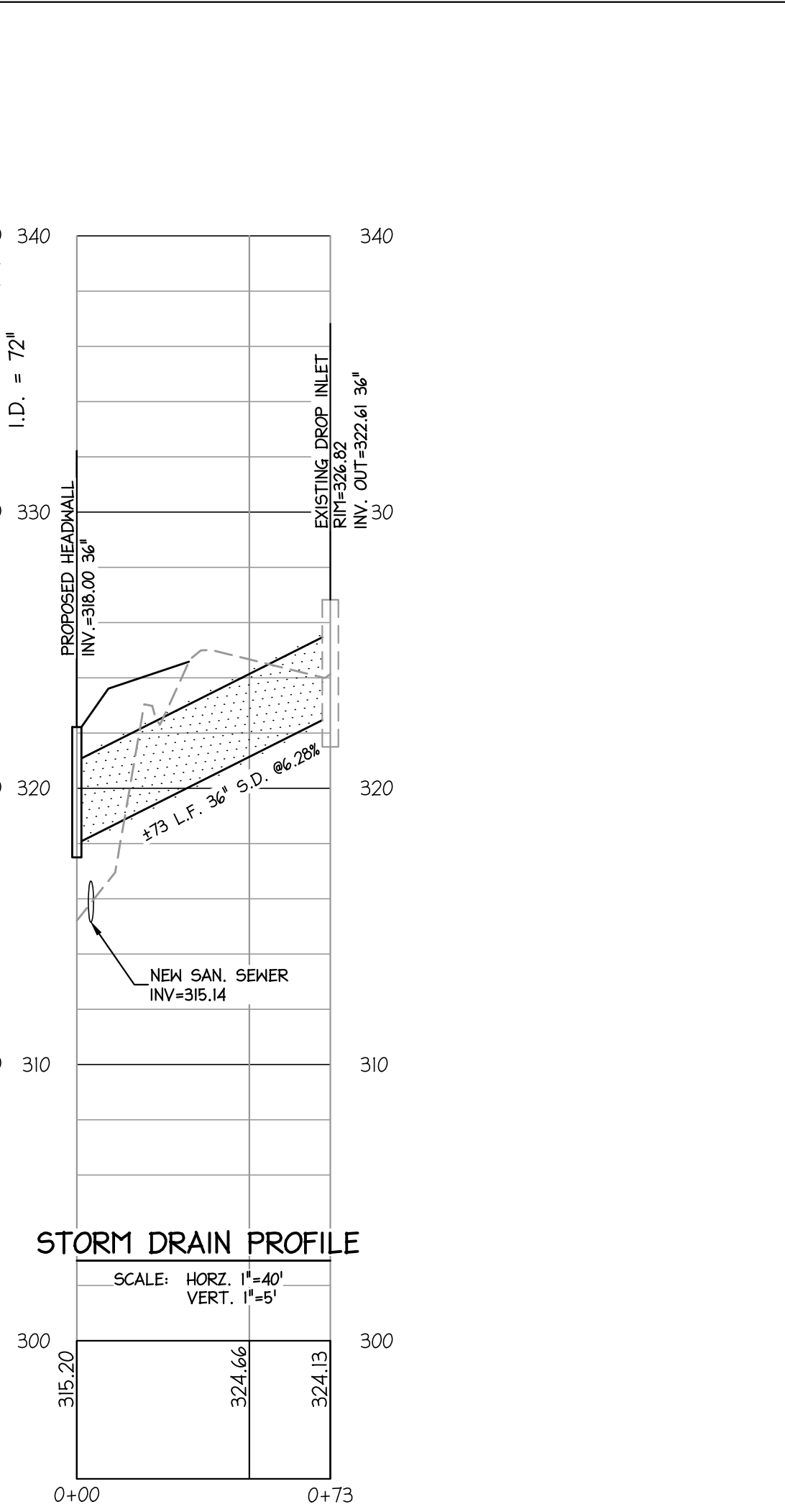
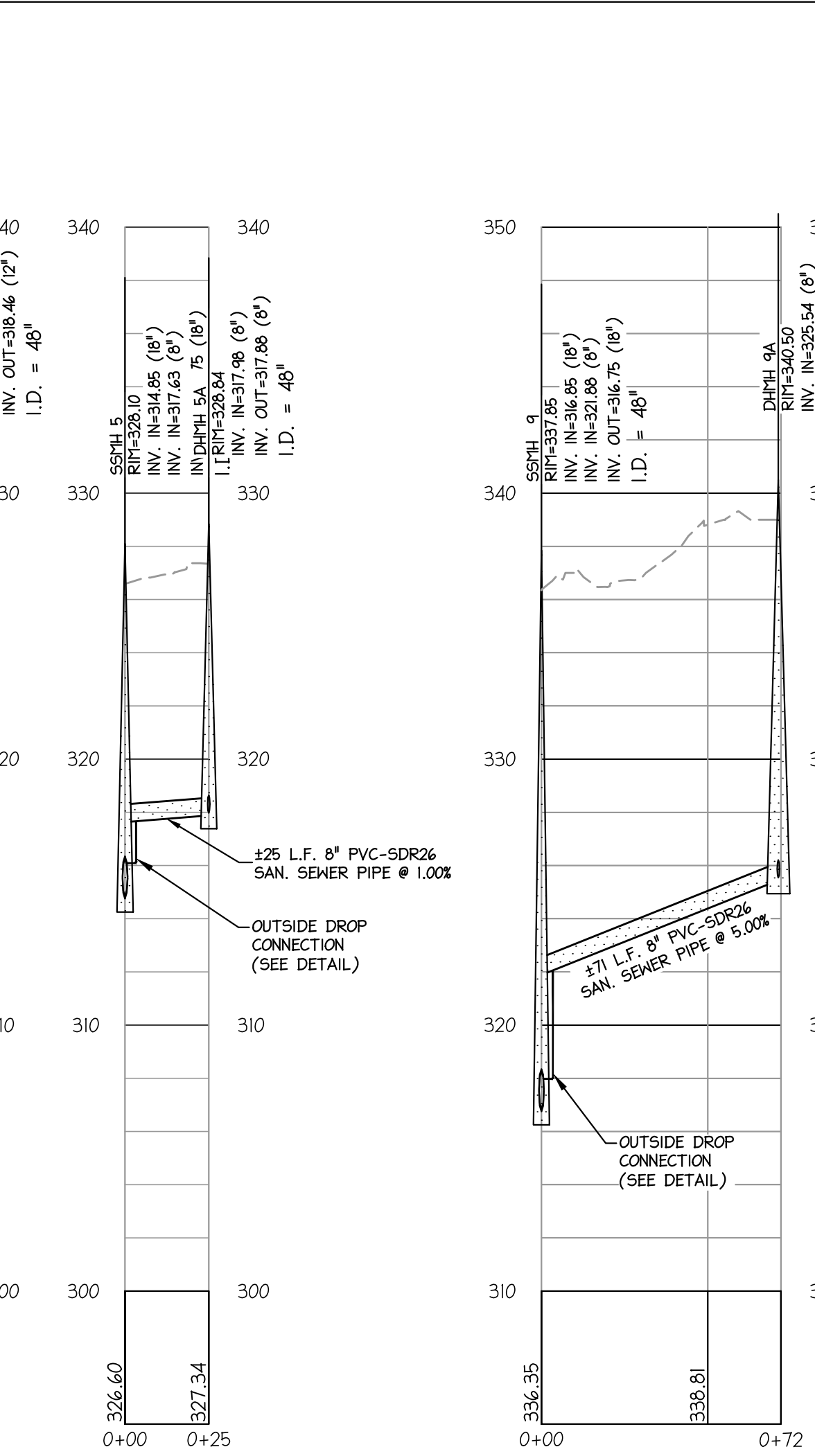
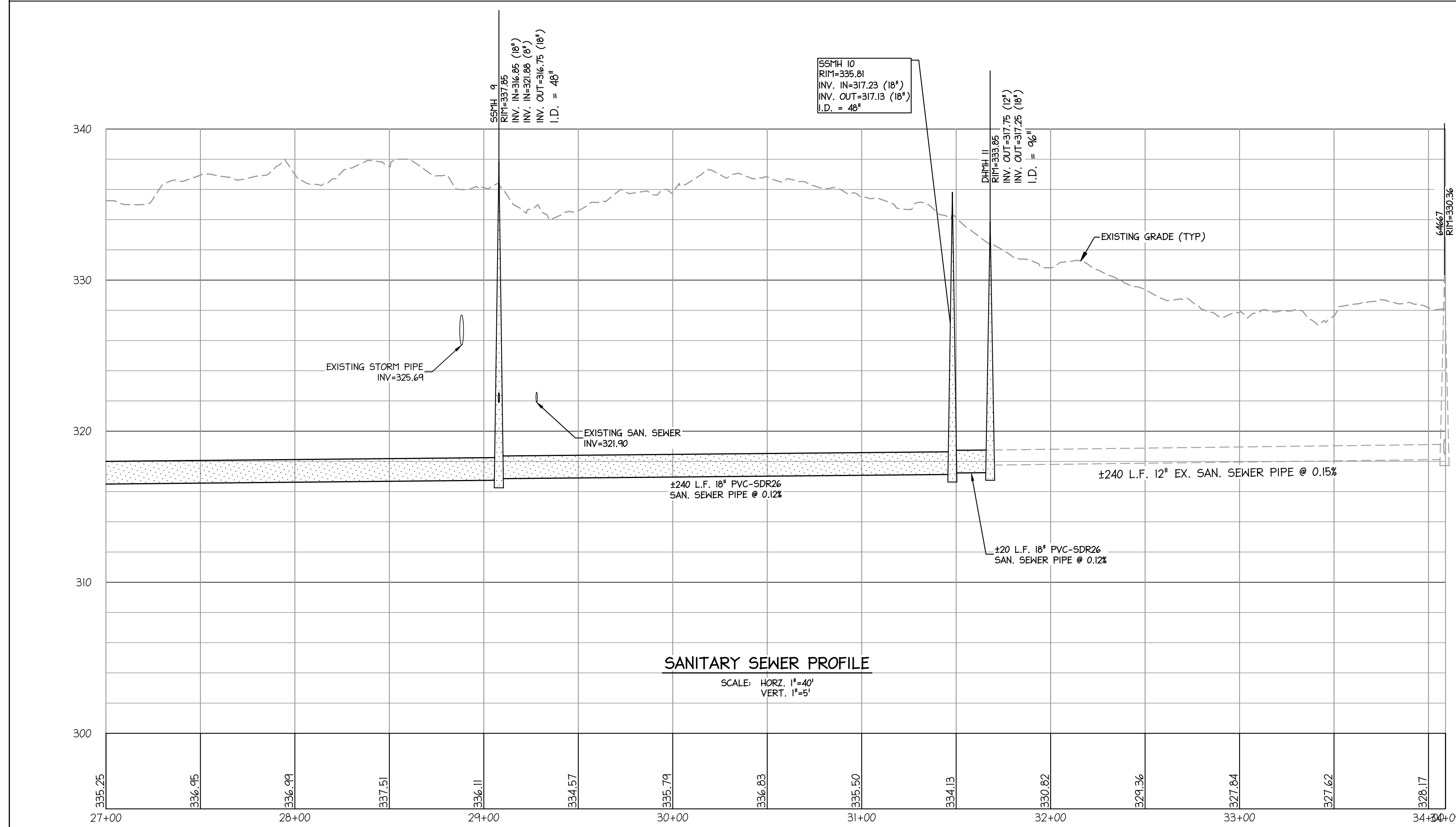
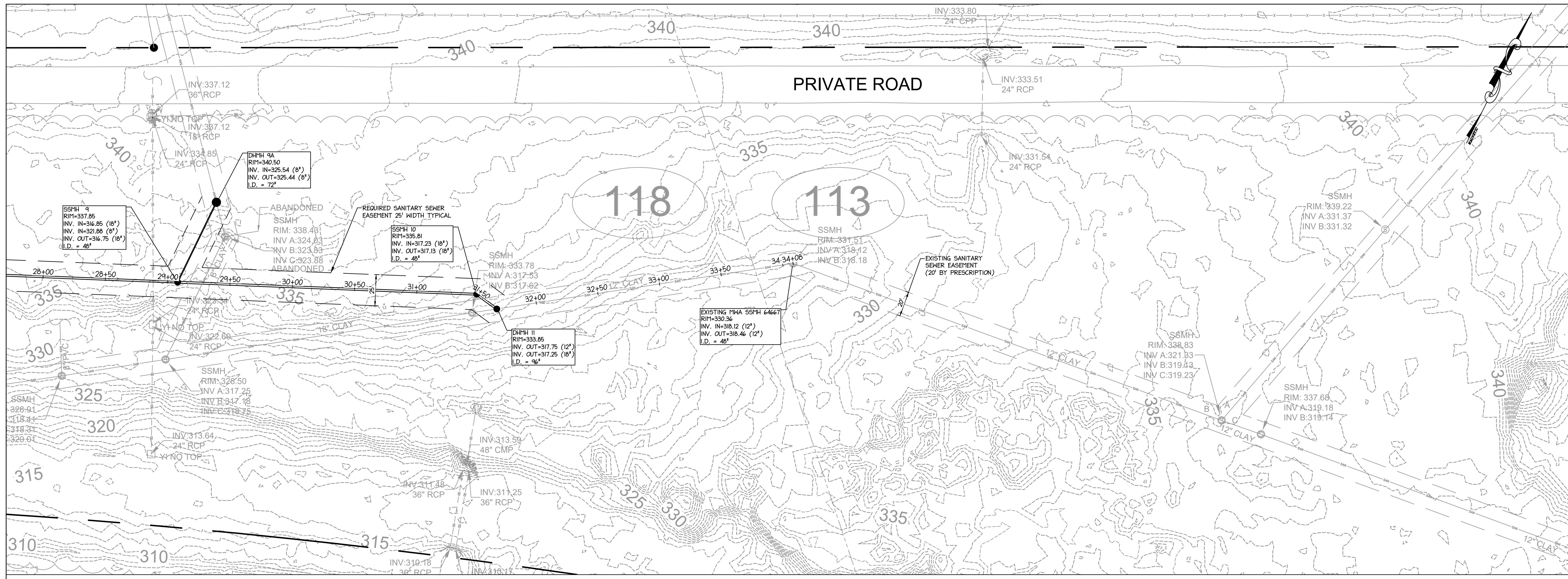
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ISSUED: 11/2/2023 EXPIRES: 11/2/2026

RELEASE DATES:

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CLIENT:  
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MACON, GA

PROJECT:  
JOE TAMPLIN BLVD  
SANITARY SEWER  
REPLACEMENT

MACON, GA 31216

DRAWN BY: CADD CHECKED BY: DLC

PROJECT NUMBER: M0175.080 DATE: 10/31/2024

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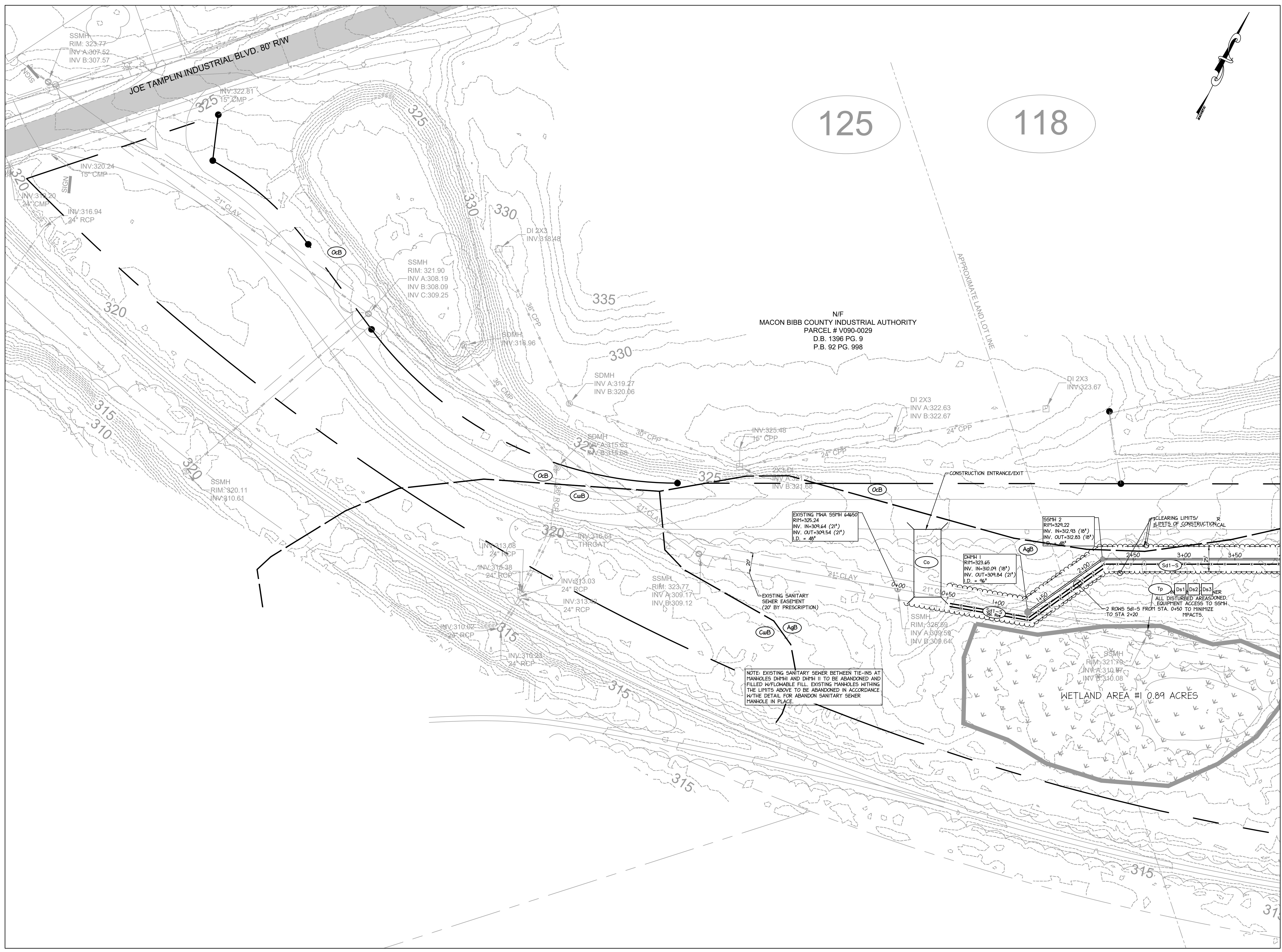
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PLAN AND PROFILE

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**MACON WATER AUTHORITY  
MACON, GA**

PROJECT:  
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SANITARY SEWER  
REPLACEMENT**

MACON, GA 31216

DRAWN BY: CADD	CHECKED BY: DLC
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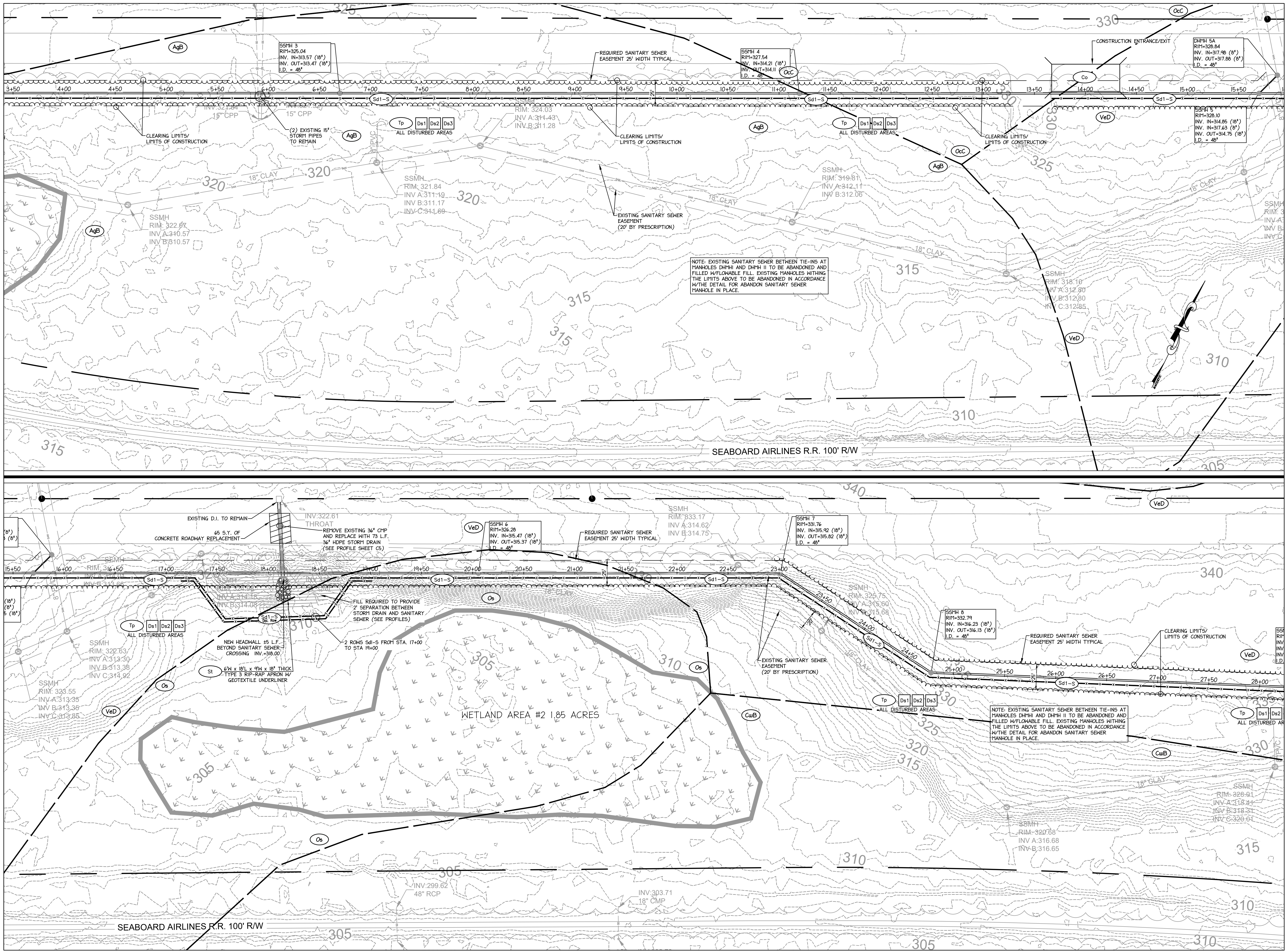
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SEDIMENT  
CONTROL PLAN**

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MACON, GA 31216  
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 EROSION AND  
 SEDIMENT CONTROL  
 PLAN**

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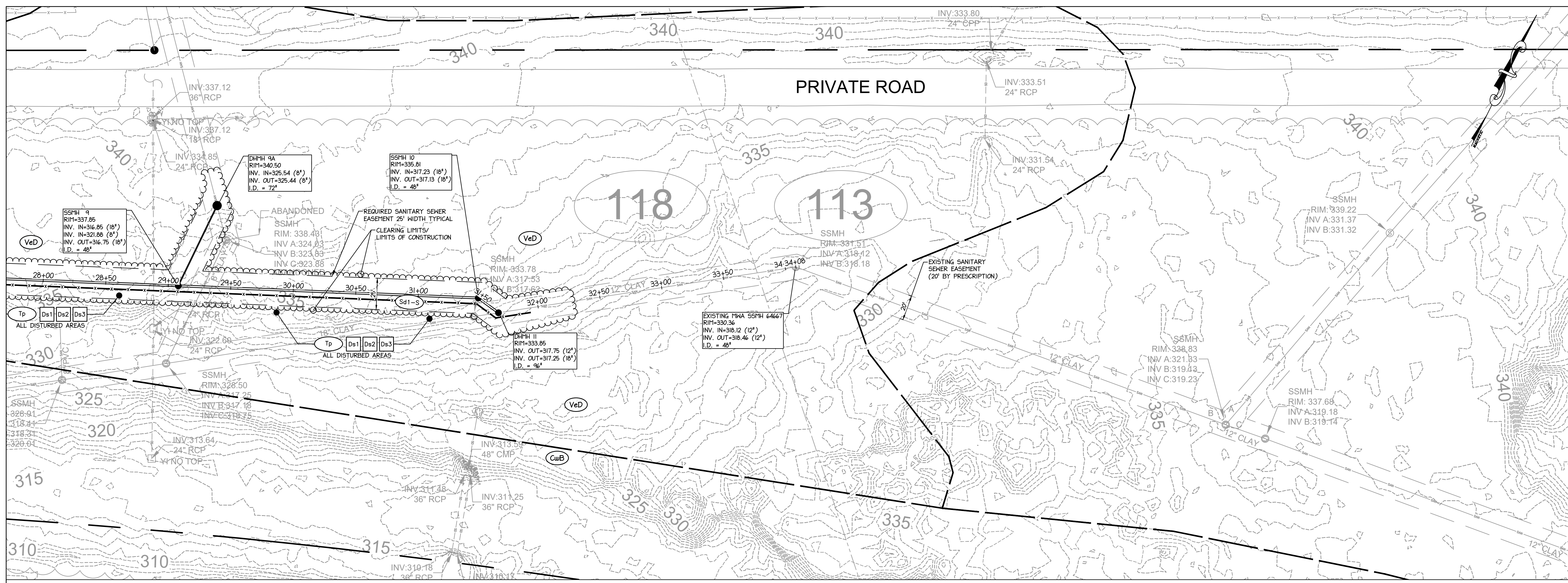
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SANITARY SEWER  
REPLACEMENT

MACON, GA 31216

DRAWN BY: CADD	CHECKED BY: DLC
PROJECT NUMBER: M0175.080	DATE: 10/31/2024

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**SANITARY SEWER  
EROSION AND  
SEDIMENT CONTROL  
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NOT RELEASED FOR CONSTRUCTION





### SOUTHERN PIEDMONT VEGETATIVE COVERS

MONTH	TEMPORARY SEED	TEMP RATE/ACRE	PERMANENT SEED (LANDSCAPES/SHOULDERS)	PERM. RATE/ACRE	PERMANENT SEED (SLOPES 2:1 AND STEEPER)	PERM RATE/ACRE
JANUARY	ANNUAL RYEGRASS	40 LB.	UNHULLED BEREMUDA	40 LB.		
FEBRUARY	BROWN TOP MILLET	40 LB.	UNHULLED BEREMUDA	40 LB.		
MARCH	BROWN TOP MILLET	40 LB. 4-6 LB.	HULLED BEREMUDA	40 LB.	SERICEA LESPEDEZA & WEEPING LOVEGRASS	75 LB. 4 LB.
APRIL	BROWN TOP MILLET	40 LB.	HULLED BEREMUDA	40 LB.	SERICEA LESPEDEZA & WEEPING LOVEGRASS	75 LB. 4 LB.
MAY	BROWN TOP MILLET	40 LB.	HULLED BEREMUDA	40 LB.	SERICEA LESPEDEZA & WEEPING LOVEGRASS	75 LB. 4 LB.
JUNE	BROWN TOP MILLET	40 LB.	HULLED BEREMUDA	40 LB.	SERICEA LESPEDEZA & WEEPING LOVEGRASS	75 LB. 4 LB.
JULY	BROWN TOP MILLET	40 LB.	HULLED BEREMUDA	40 LB.	SERICEA LESPEDEZA & WEEPING LOVEGRASS	75 LB. 4 LB.
AUGUST	BROWN TOP MILLET	40 LB.	HULLED BEREMUDA	40 LB.		
SEPTEMBER	ANNUAL RYEGRASS	40 LB.	UNHULLED BEREMUDA	20 LB.		
OCTOBER	ANNUAL RYEGRASS	40 LB.	UNHULLED BEREMUDA	20 LB.		
NOVEMBER	ANNUAL RYEGRASS	40 LB.	UNHULLED BEREMUDA	20 LB.		
DECEMBER	ANNUAL RYEGRASS	40 LB.	UNHULLED BEREMUDA	20 LB.		

### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
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.
TP	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.

### VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	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)		Ds2	Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Tac	TACKERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

**Du**  
THIS PRACTICE SHALL BE EMPLOYED TO CONTROL SURFACE AND AIR MOVEMENT OF DUST ON SITE. METHOD SHALL INCLUDE SPRAYING OF DISTURBED AREAS WITH WATER ON A PERIODIC BASIS WHEN EXPOSED SOIL BECOMES DRY. CONTRACTOR SHALL MONITOR THESE AREAS AND APPLY DUST CONTROL BEFORE SOIL BECOMES EXCESSIVELY DRY.

#### CHECKLIST ITEM 49 WRITTEN JUSTIFICATION REGARDING TEMPORARY SEDIMENT STORAGE

FOR THIS PROJECT, THE USE OF TEMPORARY SEDIMENT BASINS, SEDIMENT BARRIERS OR EQUIVALENT CONTROLS TO PROVIDE 67 CUBIC YARDS OF TEMPORARY SEDIMENT STORAGE PER ACRE DRAINED, IS NOT ATTAINABLE. THIS IS DUE TO THE WORK BEING PERFORMED INSIDE UTILITY EASEMENTS TO AVOID ENCROACHMENT ON TO PRIVATE PROPERTY.

THE LONG, NARROW SHAPE OF THE DISTURBED AREA IS A COMMON TRAIT OF LONGITUDINAL INFRASTRUCTURE PROJECTS. THE GEOMETRIC AND TOPOGRAPHIC CONSTRAINTS DO NOT FACILITATE SEDIMENT COLLECTION AREAS SUFFICIENT TO CONTAIN THE REQUIRED SEDIMENT STORAGE VOLUME. SILT FENCE WILL BE UTILIZED TO PREVENT RUNOFF OF SEDIMENT AND WILL PROVIDE LIMITED TEMPORARY SEDIMENT STORAGE. SEDIMENT WILL BE REMOVED FROM THIS BMP ON A REGULAR BASIS AND IN ACCORDANCE WITH THE DETAILS AND NOTES ON THE DRAWINGS.

DA = REQUIRED SEDIMENT STORAGE = 114 AC x 67 CT/AC = 7638 C.Y.  
 REQUIRED Sd1 = 7638 CT / 0.0259 CT/LF = 86,916 L.F.  
 Sd1 PROVIDED = 4200 LF, SEDIMENT STORAGE PROVIDED = 348 C.Y.

SEDIMENT STORAGE PER L.F. OF Sd1 CALCULATION:  
 4'L X 1.6' H X 1' W X 0.5 = 2.32 C.F. = 0.0259 C.Y./L.F.

#### CHECKLIST ITEM 49 SEDIMENT STORAGE BEHIND SILT FENCE

N.T.S.

- #### CONSTRUCTION SPECIFICATIONS
- STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
  - IF pH VALUE IS LESS THAN 6.0, LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE pH TO 6.5 OR HIGHER. TOPSOILS CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
  - THE LOCATION OF TOPSOIL STOCKPILES SHOULD NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
  - STOCKPILES SHALL BE CONTAINED BY SEDIMENT BARRIERS TO PREVENT SEDIMENTATION ON ADJACENT AREAS. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH SPECIFICATIONS FOR DS1, DS2, P11 OR TB.

- #### SITE PREPARATION
- TOPSOILING: WHEN TOPSOILING, MAINTAIN NEEDED EROSION CONTROL PRACTICE SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, LEVEL SPREADERS, WATERWAYS, SEDIMENT BASINS, ETC.
  - GRADING: GRADES ON THE AREAS TO BE TOP SOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.
  - LIMING: SOIL TESTS SHOULD BE USED TO DETERMINE THE pH OF THE SOIL, WHERE THE pH OF THE SUBSOIL IS 5.0 OR LESS OR COMPPOSED OF HEAVY CLAYS. AGRICULTURAL LIMESTONE SHALL BE SPREAD AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND HORDED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
  - BONDING: USE ONE OF THE FOLLOWING METHODS TO INSURE BONDING OF TOPSOIL:
    - TILLING: AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUB GRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL.
    - TRACKING: PASSING A BULLDOZER OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS.
  - APPLYING TOPSOIL:
    - TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITH WITHOUT DAMAGING SOIL STRUCTURE.
    - A UNIFORM APPLICATION OF 6 INCHES (UNSETTLED) IS RECOMMENDED, BUT MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER OR LANDSCAPE ARCHITECT.

- #### MULCHING MATERIALS:
- SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
- DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE.
  - OUTBACK ASPHALT (SLASH CURLING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE.
- #### APPLYING MULCH:
- WHEN MULCH IS USED WITH OUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
- DRY STRAW OR HAY MULCH SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
  - OUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OR DAMAGE TO SHOES, CLOTHING, ETC.
- #### ANCHORING MULCH:
- STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARRON WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK". DISKS MAY BE SMOOTH OR SERIATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 9 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MULCH IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.
  - STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH ENLISHED ASPHALT (GRADE AS-5 OR S-1). THE ASPHALT DILUTION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF ENLISHED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFIERS ON BINDERS CAN BE SUBSTITUTED FOR ENLISHED ASPHALT.
- #### DISTURBED AREA STABILIZATION (W/ MULCH ONLY)
- Ds1

- #### TOPSOILING
- Tp

#### TEMPORARY VEGETATION/ MULCHING - DS2

LIME: APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE.

FERTILIZER: APPLY 10-10-10 FERTILIZER AT A RATE OF 500 LBS PER ACRE.

MULCHING RATES: FOR TEMPORARY VEGETATION

- DRY STRAW: 2 TONS PER ACRE
- DRY HAY: 2.5 TONS PER ACRE
- WOOD CELLULOSE MULCH OR WOOD PULP FIBER: 500 LBS PER ACRE

#### PERMANENT VEGETATION/ MULCHING - DS3

LIME: APPLY AGRICULTURAL LIME AT A RATE OF ONE TO TWO TONS PER ACRE AS RECOMMENDED BY SOIL TESTS.

FERTILIZER: APPLY 6-12-12 FERTILIZER AT A RATE OF 1500 LBS PER ACRE.

MULCHING RATES: FOR PERMANENT VEGETATION

- DRY STRAW: 2 TONS PER ACRE
- DRY HAY: 2.5 TONS PER ACRE
- WOOD CELLULOSE MULCH OR WOOD PULP FIBER: 500 LBS PER ACRE

NOTE: PERMANENT VEGETATION INDICATED ABOVE IS REQUIRED FOR ALL DISTURBED AREAS OF THE SITE EXCEPT:

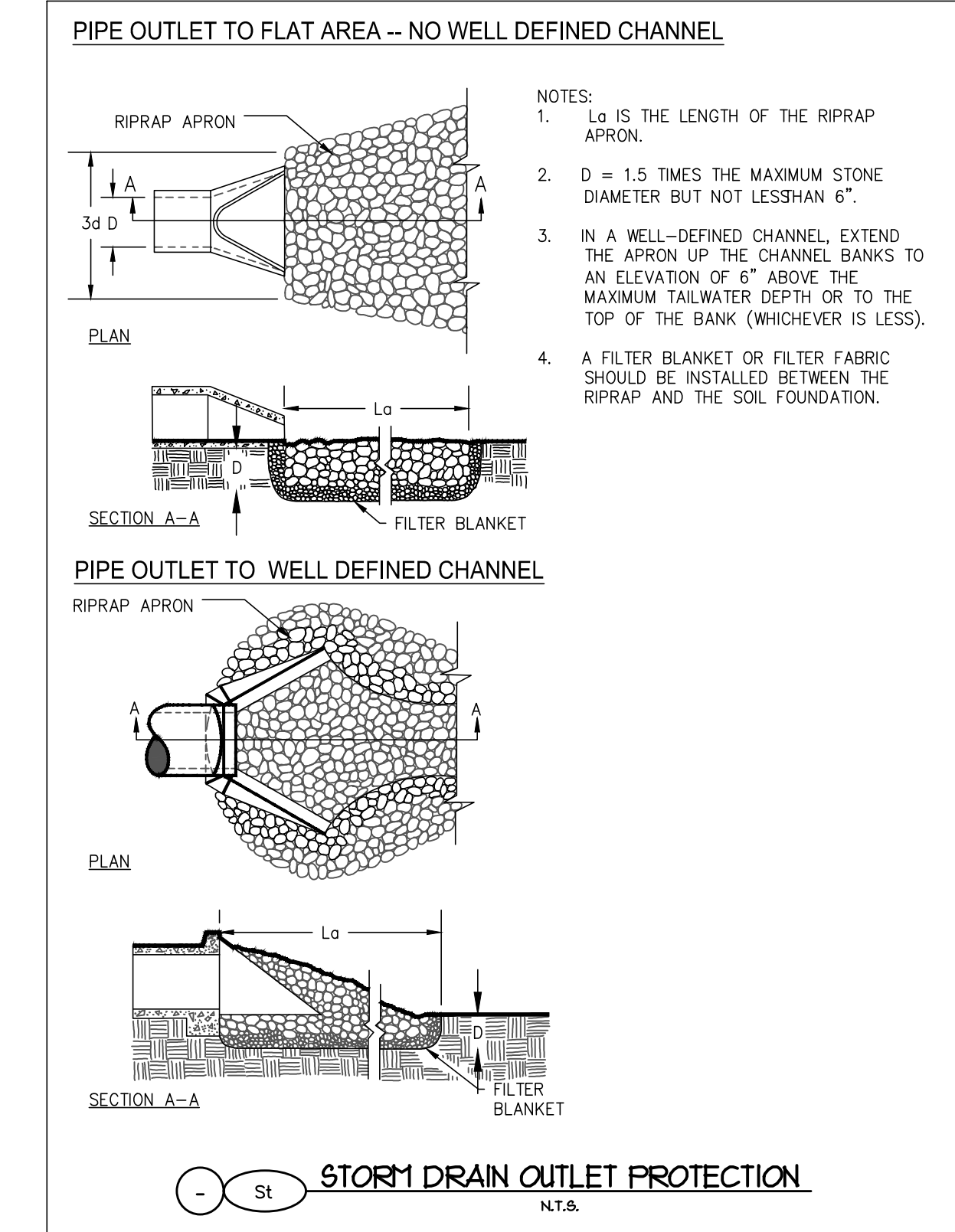
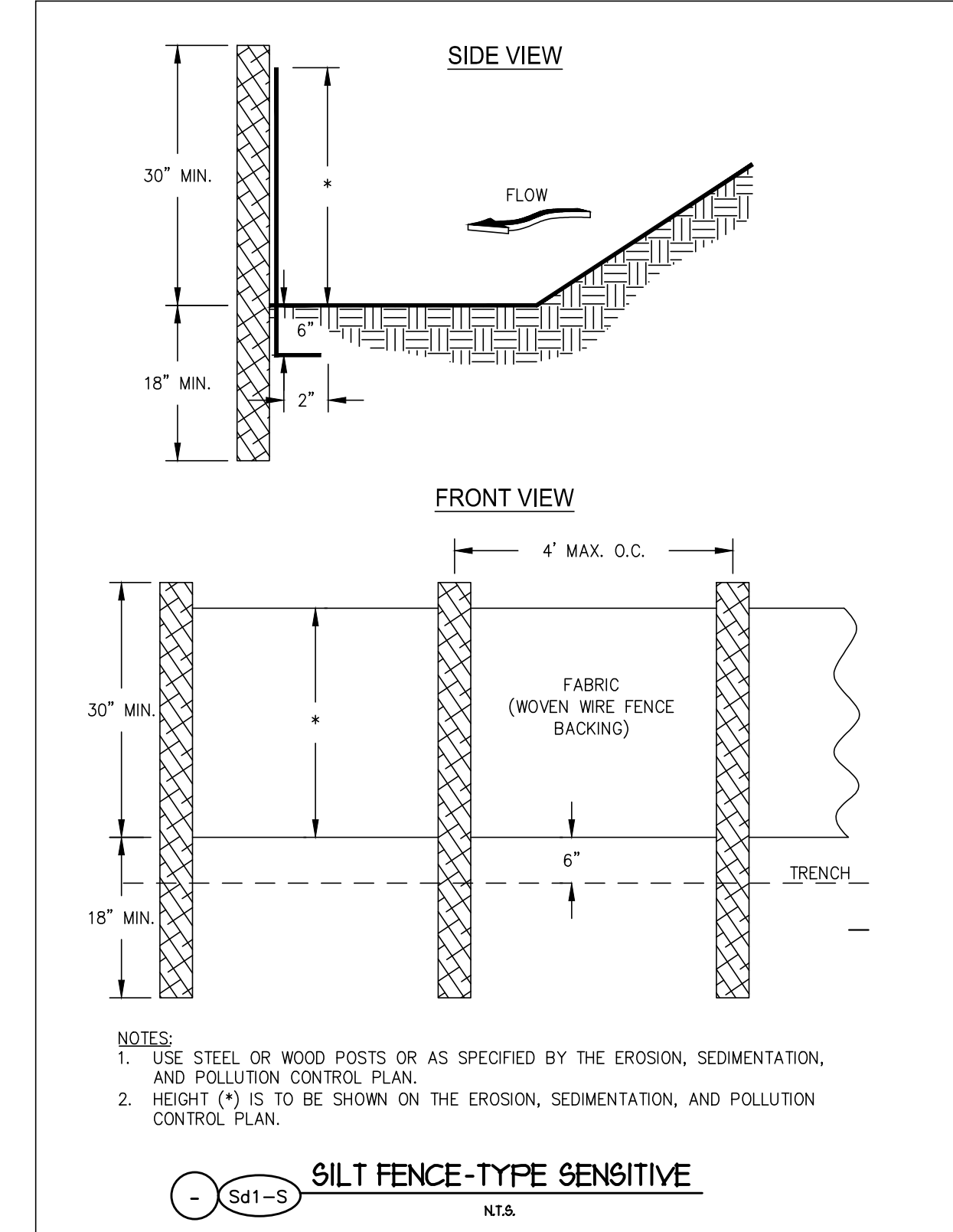
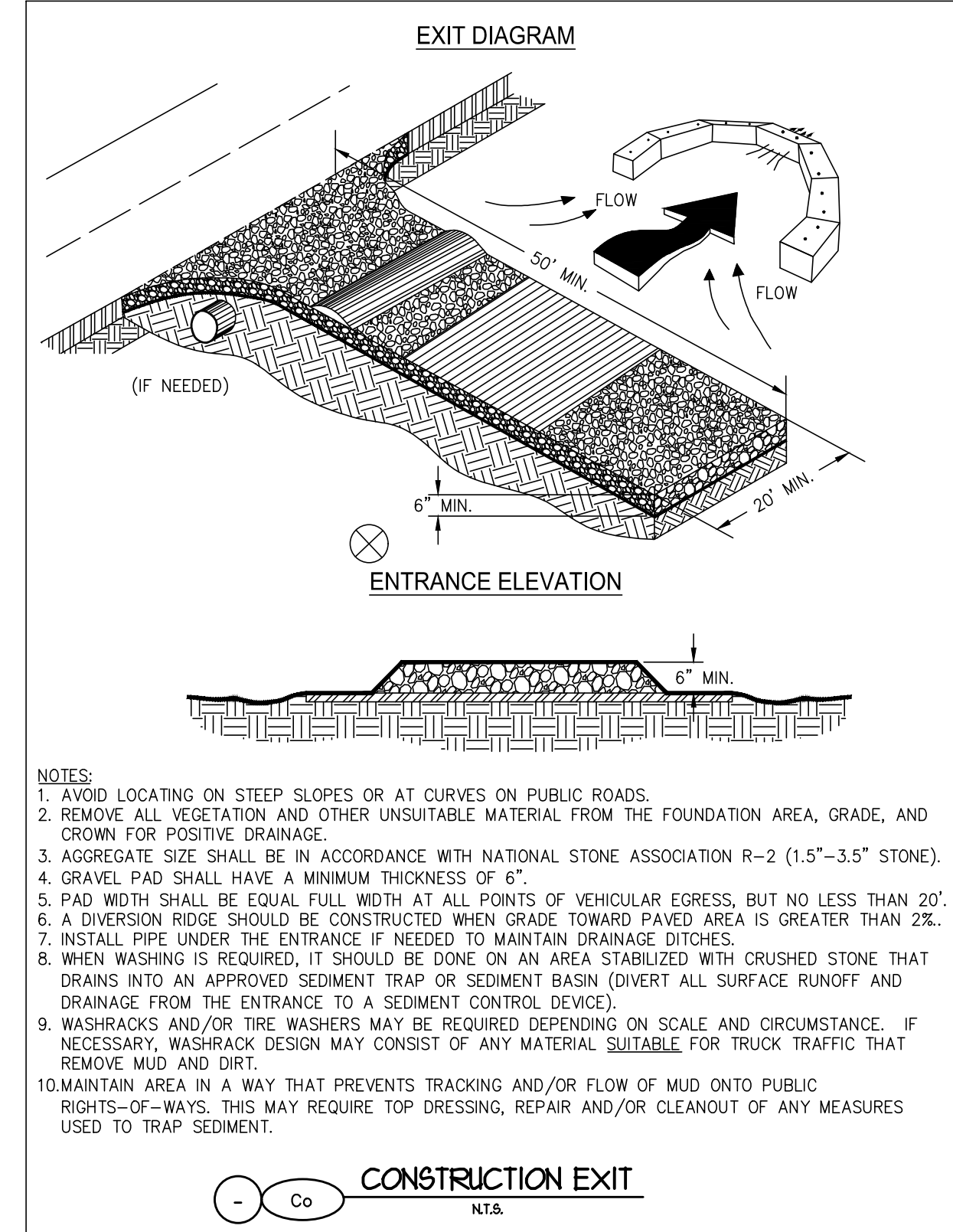
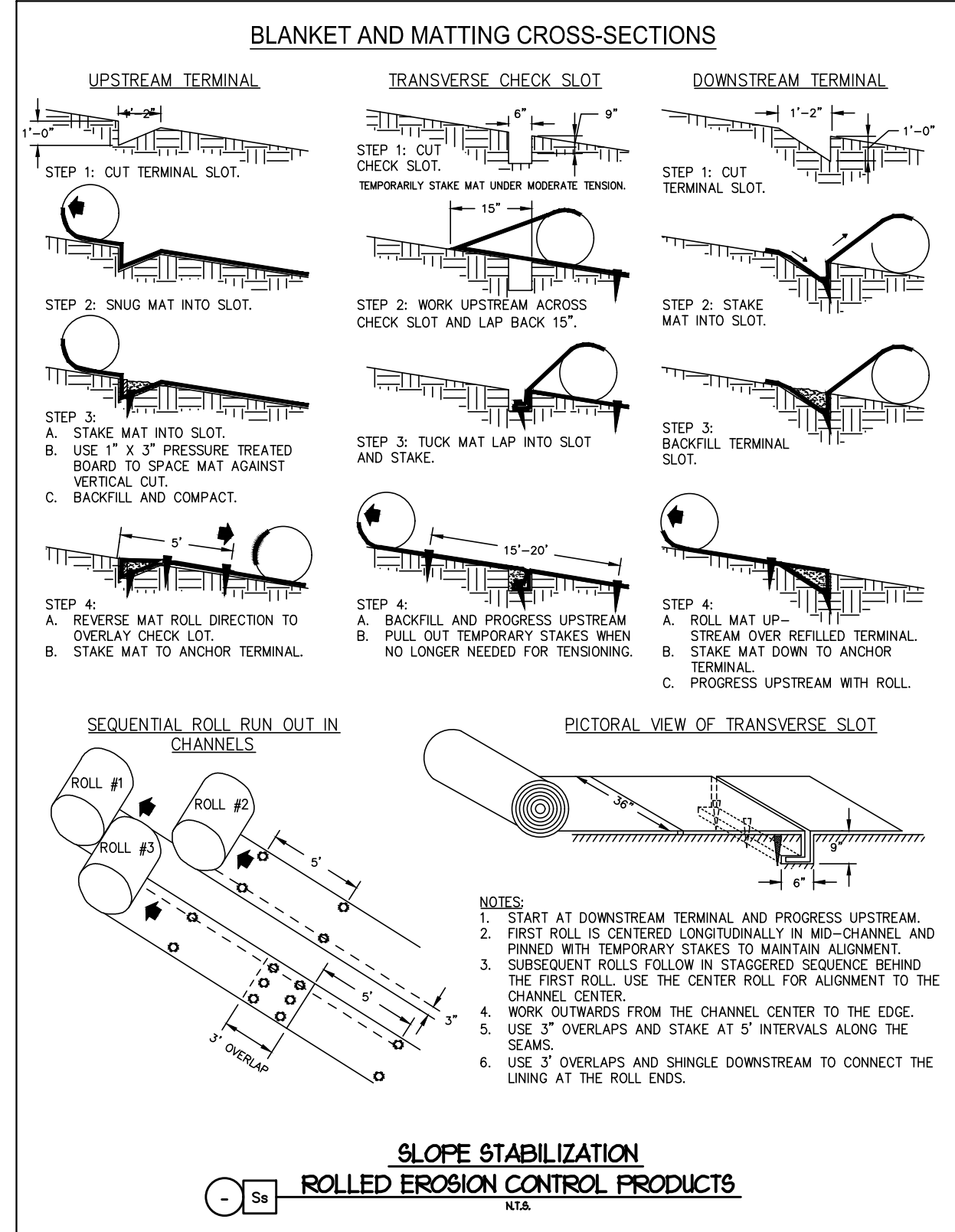
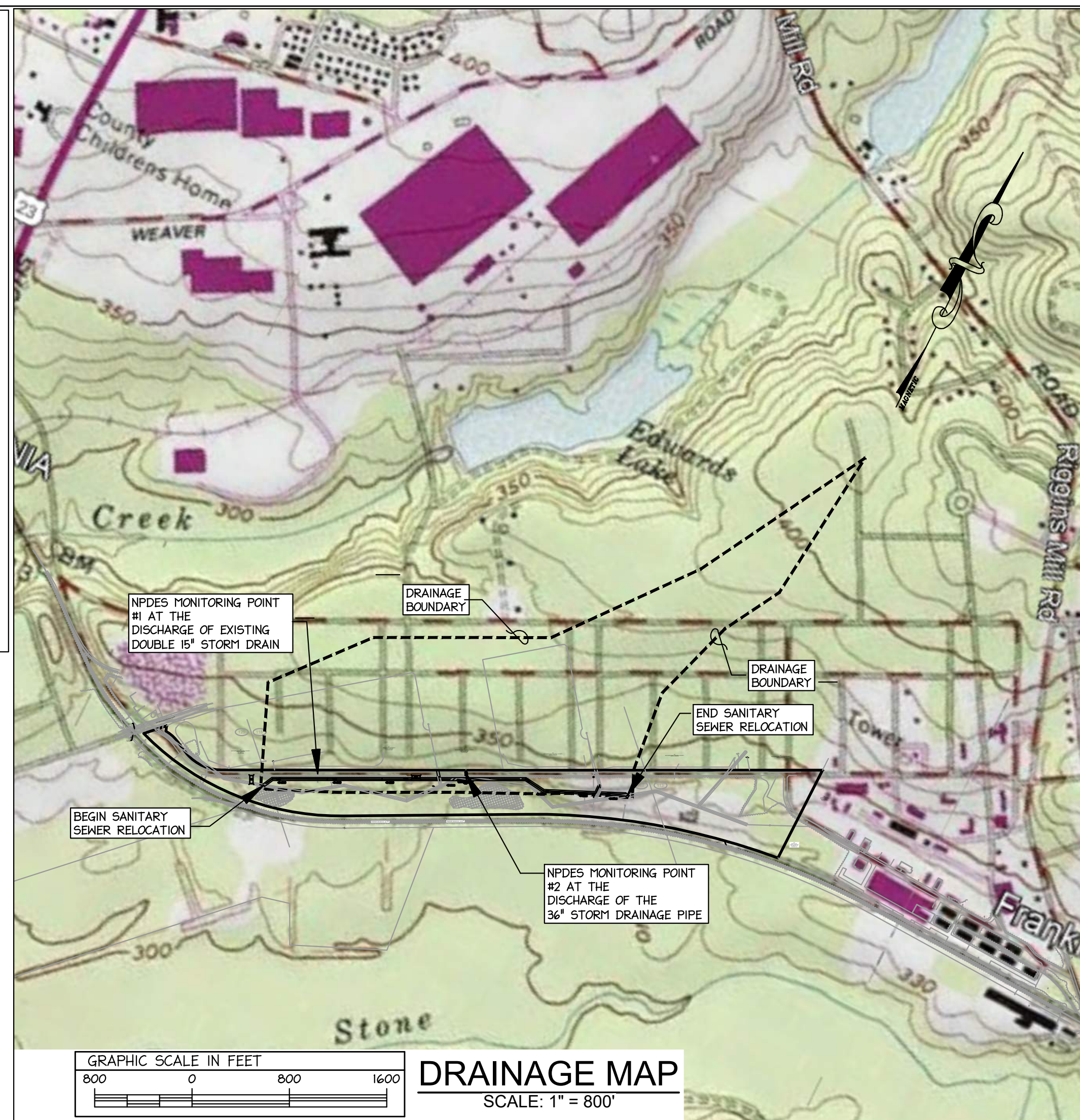
- AREAS TO BE SODDED
- SPORTS FIELDS WHICH ARE TO BE PERMANENTLY SEEDING WITH PRINCESS-77 BEREMUDA 80 LBS/ACRE (SEE SPECS.)

#### POLYACRYLAMIDE - PM

CONTRACTOR SHALL INCORPORATE USE OF POLYACRYLAMIDE WITH ALL TEMPORARY AND PERMANENT GRASSING FOR AREAS THAT HAVE NOT BEEN STABILIZED WITH TEMPORARY OR PERMANENT COVER WITHIN 7 DAYS OF INITIAL DISTURBANCE.

ANIONIC PAM APPLICATION SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, RULES, OR REGULATIONS GOVERNING ANIONIC PAM. THE OPERATOR IS RESPONSIBLE FOR SECURING REQUIRED PERMITS.

USERS OF ANIONIC PAM SHALL OBTAIN AND FOLLOW ALL MATERIAL SAFETY DATA SHEET REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.



## CARTER

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STAMP:

LEVEL CERTIFIED  
 DESIGN PROFESSIONAL # 2061  
 ISSUED: 11/2/2023 EXPIRES: 11/2/2026

RELEASE DATES:

REV #	DATE	DESCRIPTION

**MWA**  
 Macon Water Authority

CLIENT:  
**MACON WATER AUTHORITY  
 MACON, GA**

PROJECT:  
**JOE TAMPLIN BLVD  
 SANITARY SEWER  
 REPLACEMENT**

MACON, GA 31216  
 DRAWN BY: CADD  
 CHECKED BY: DLC  
 PROJECT NUMBER: M0175.080  
 DATE: 10/31/2024  
 GRAPHIC SCALE:

SCALE:

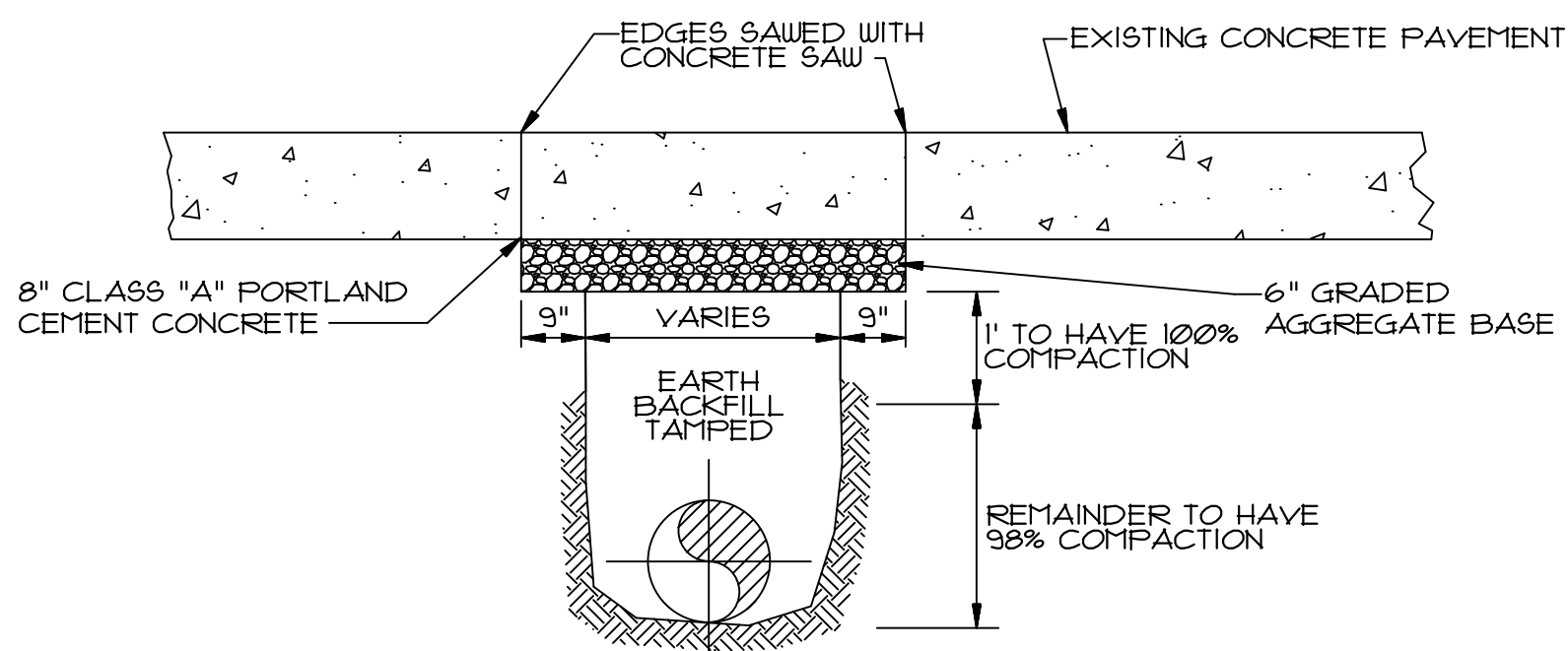
DRAWING TITLE:  
**STORMWATER POLLUTION PREVENTION DETAILS**

DRAWING NUMBER:  
**C11**

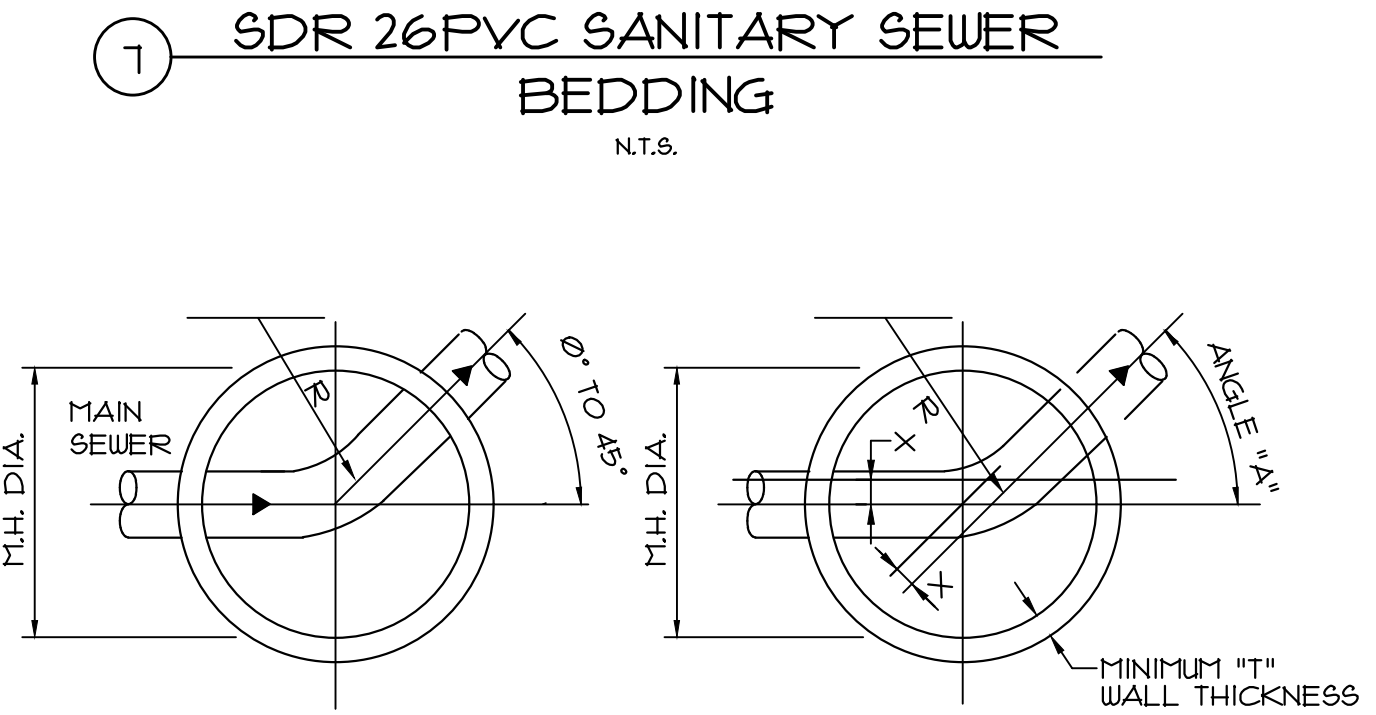
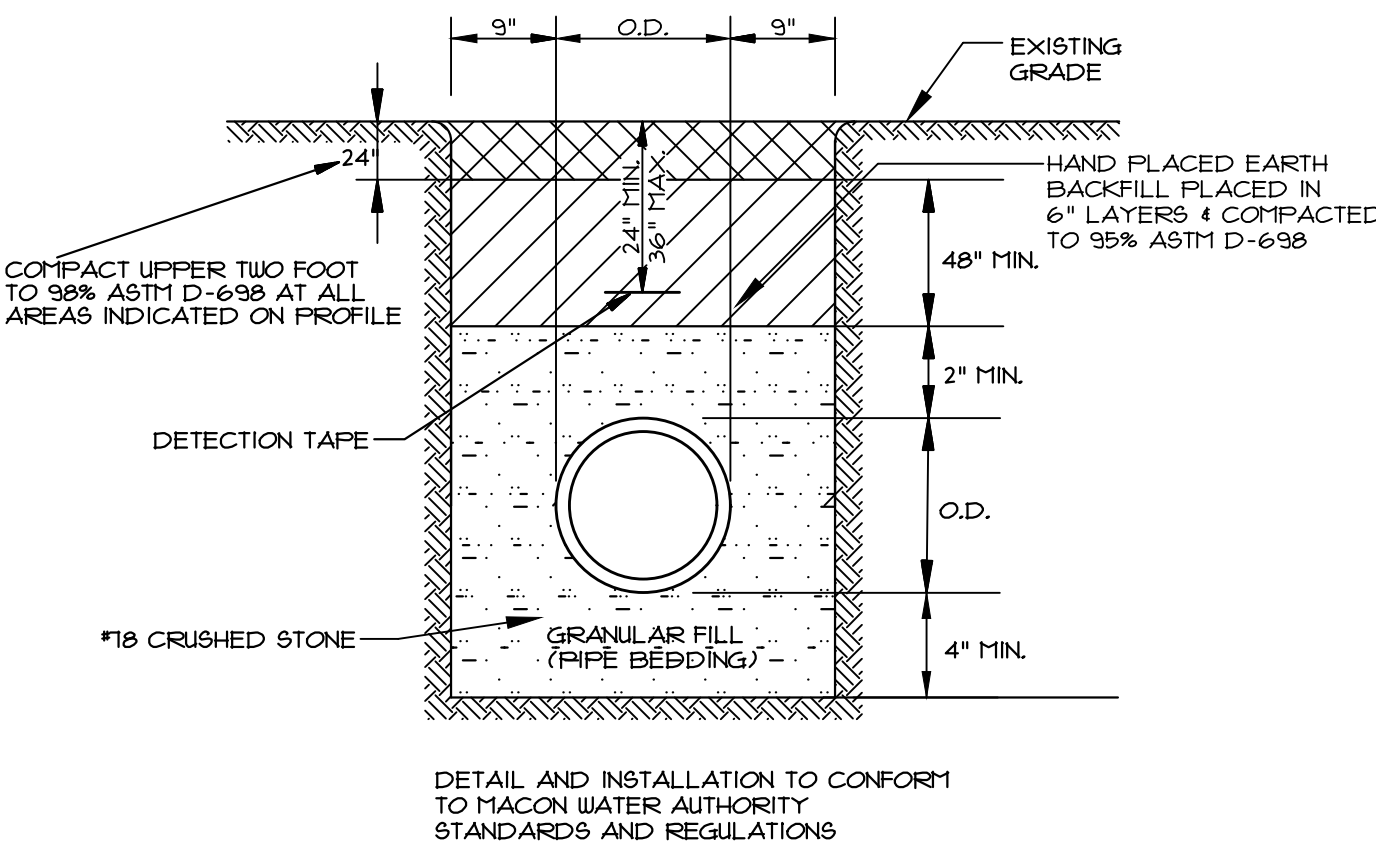
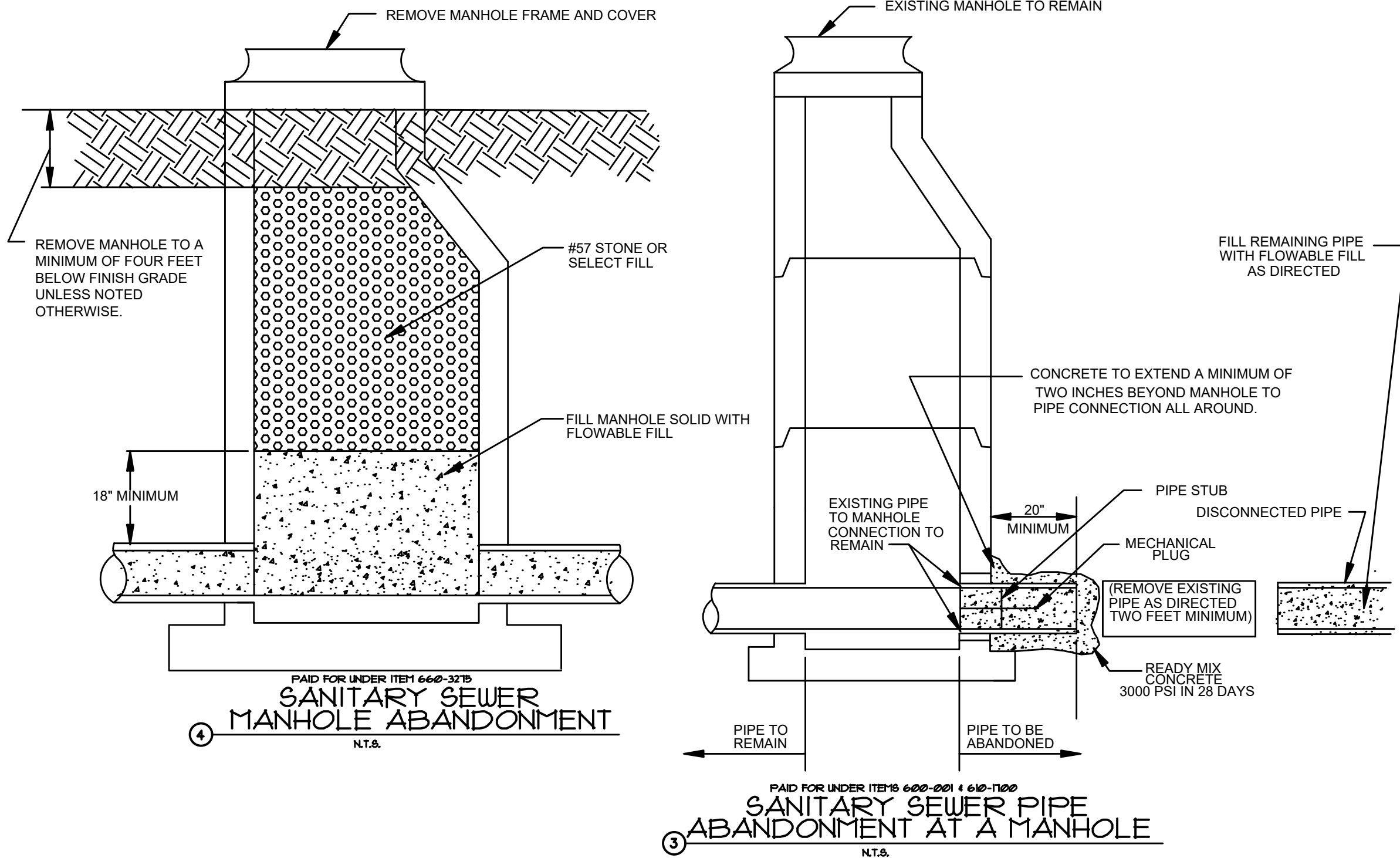
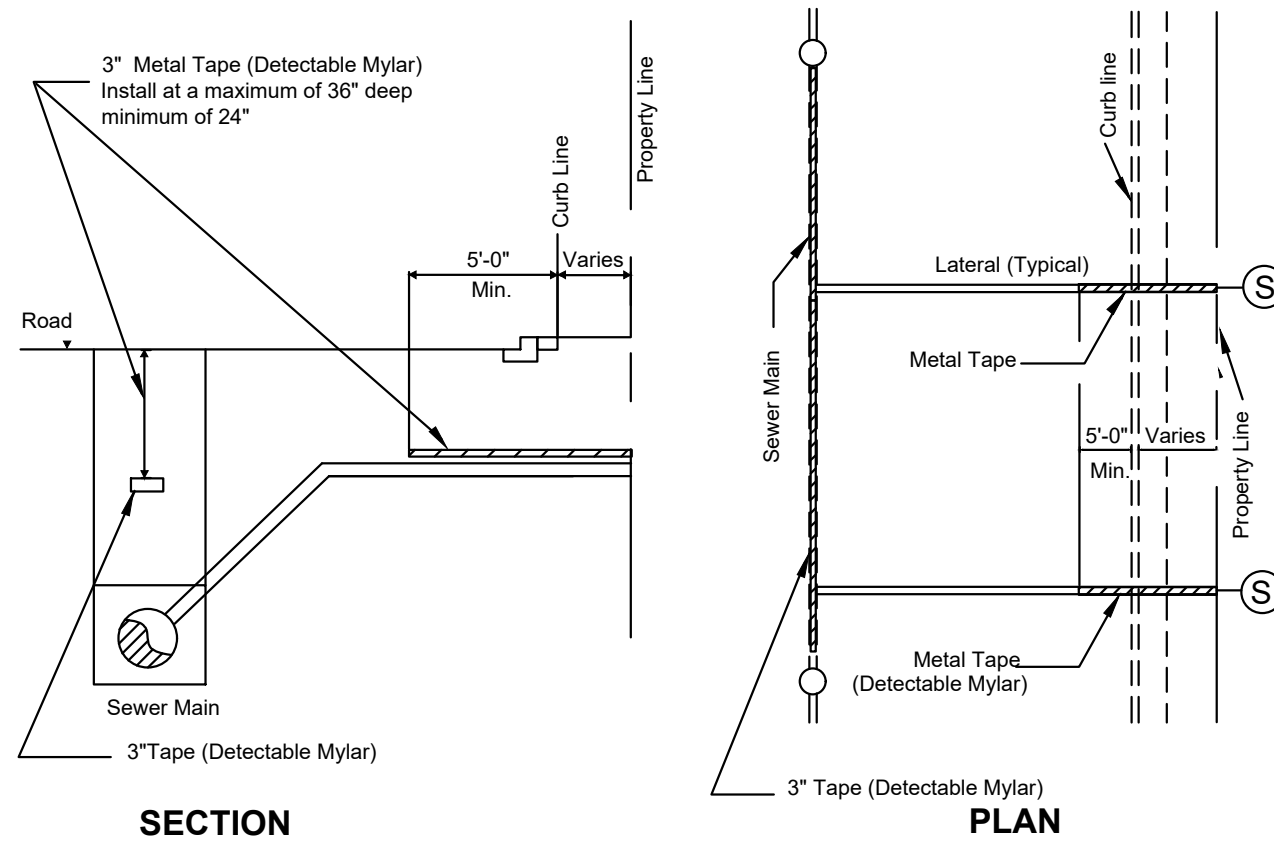
NOT RELEASED FOR CONSTRUCTION

RELEASE DATES:

REV #	DATE	DESCRIPTION



5 **DETAIL - CONCRETE ROADWAY REPLACEMENT**  
N.T.S.



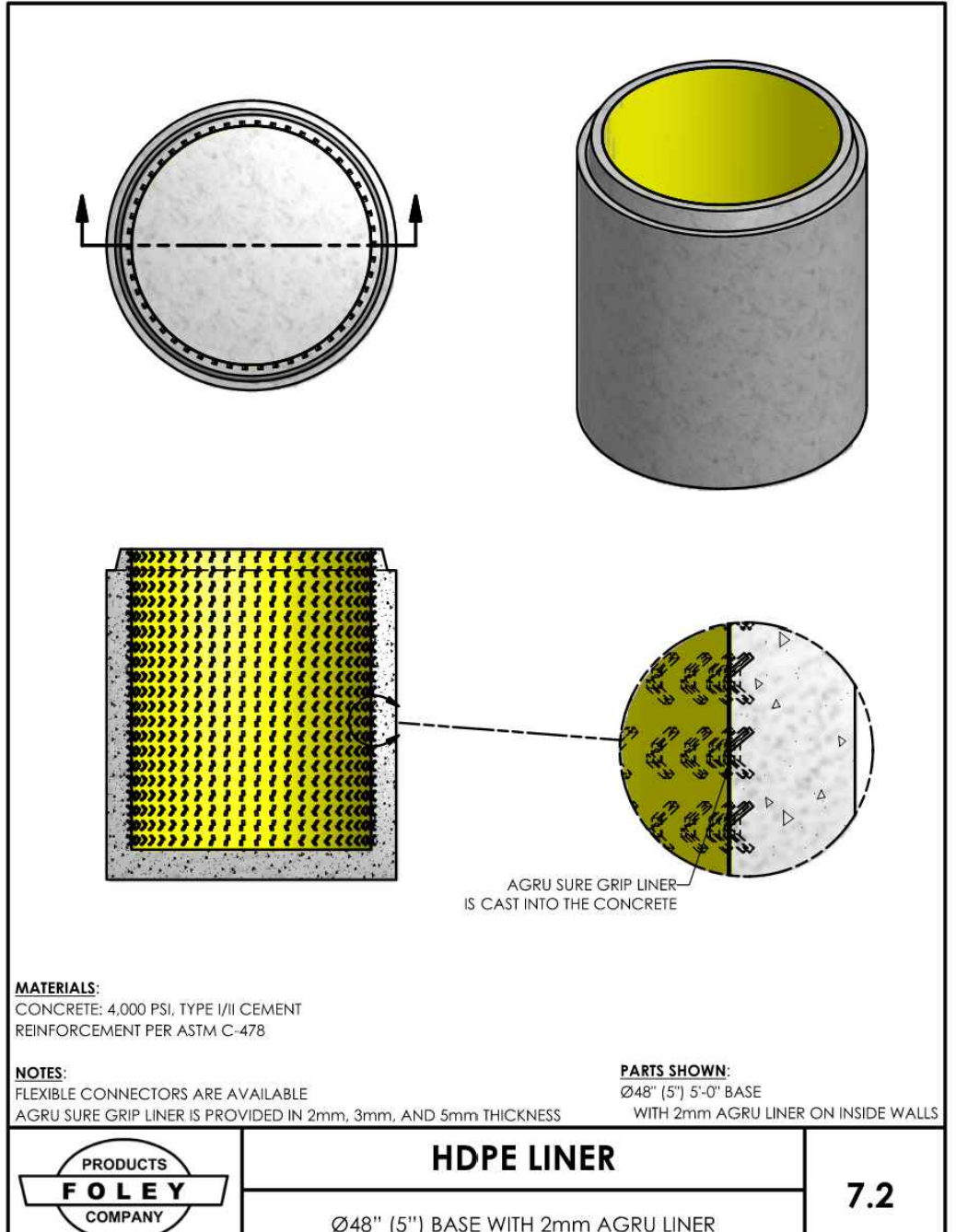
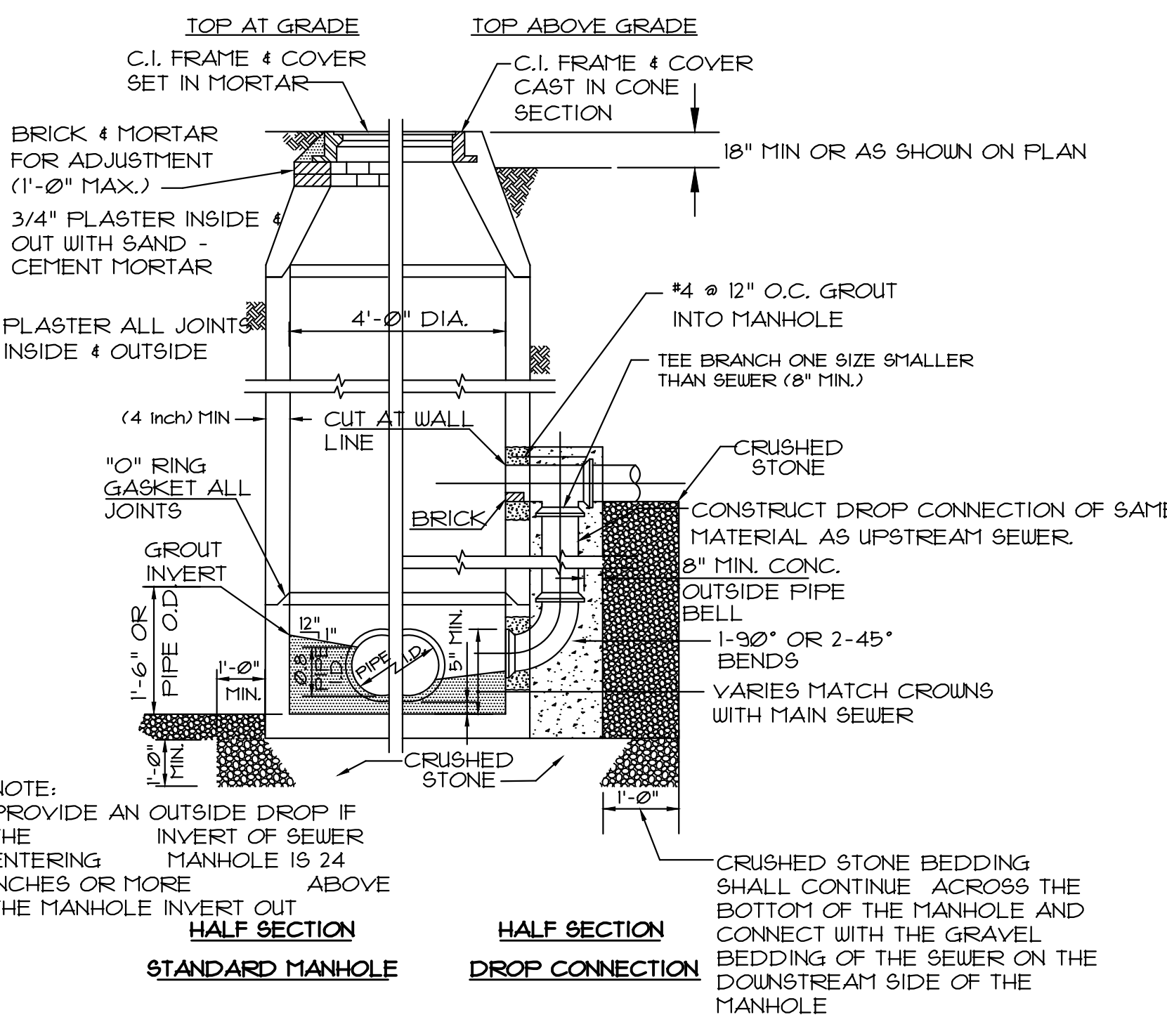
STANDARD MANHOLE SCHEDULE OF GOVERNING DIMENSIONS

PIPE SIZE	ANGLE "A"	M.H. DIA.	"T"	"X"
8" TO 16"	0° TO 90°	4'-0"	5"	0"
18" TO 24"	0° TO 60°	4'-0"	5"	0"
18" TO 24"	60° TO 90°	5'-0"	6"	6"

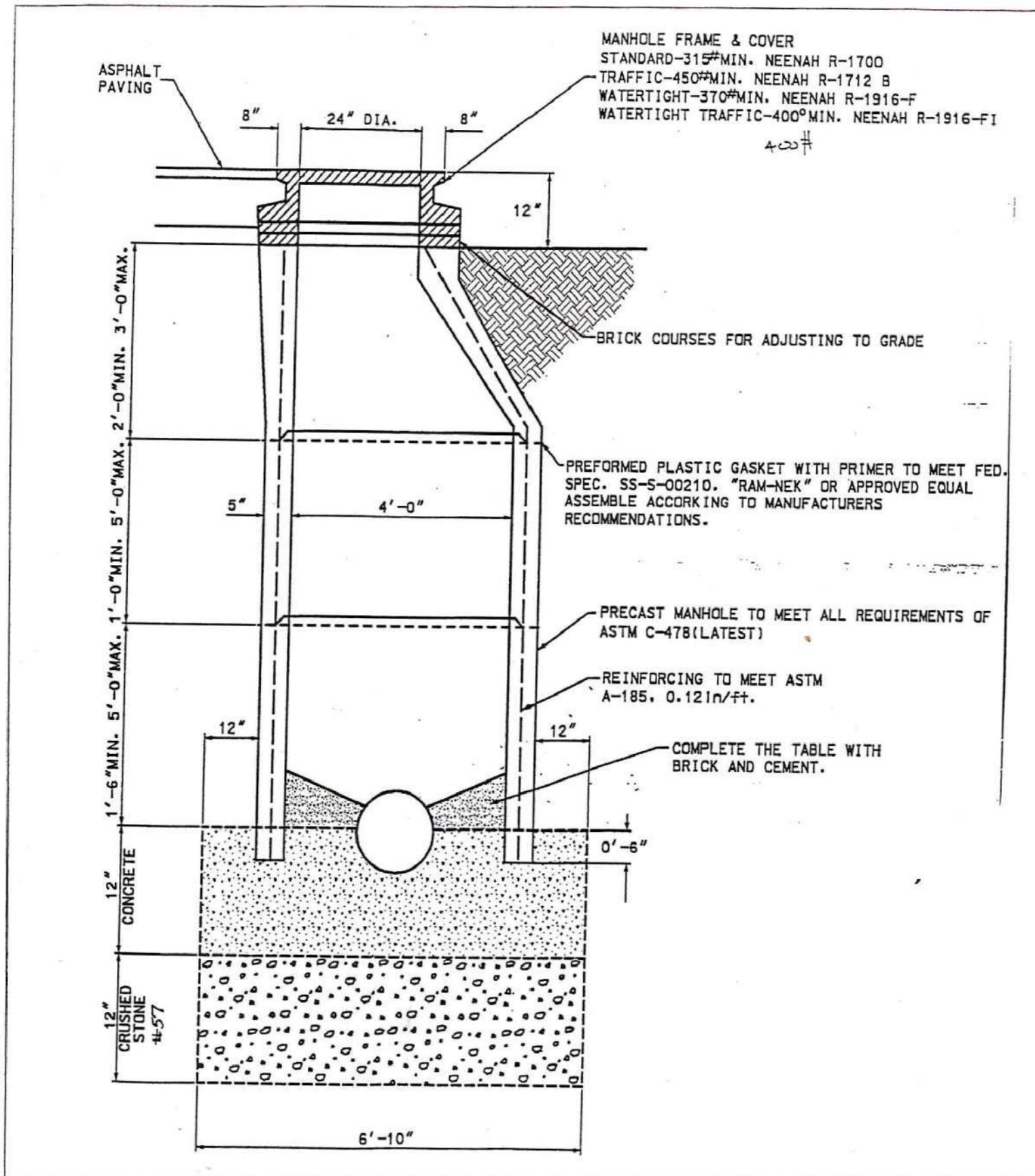
NOTE:  
MINIMUM RADIUS (R) OF M.H. INVERT = 1.5 x PIPE DIAMETER

TYPICAL PLANS

8 **DIRECTION OF FLOW IN A MANHOLE**  
N.T.S.



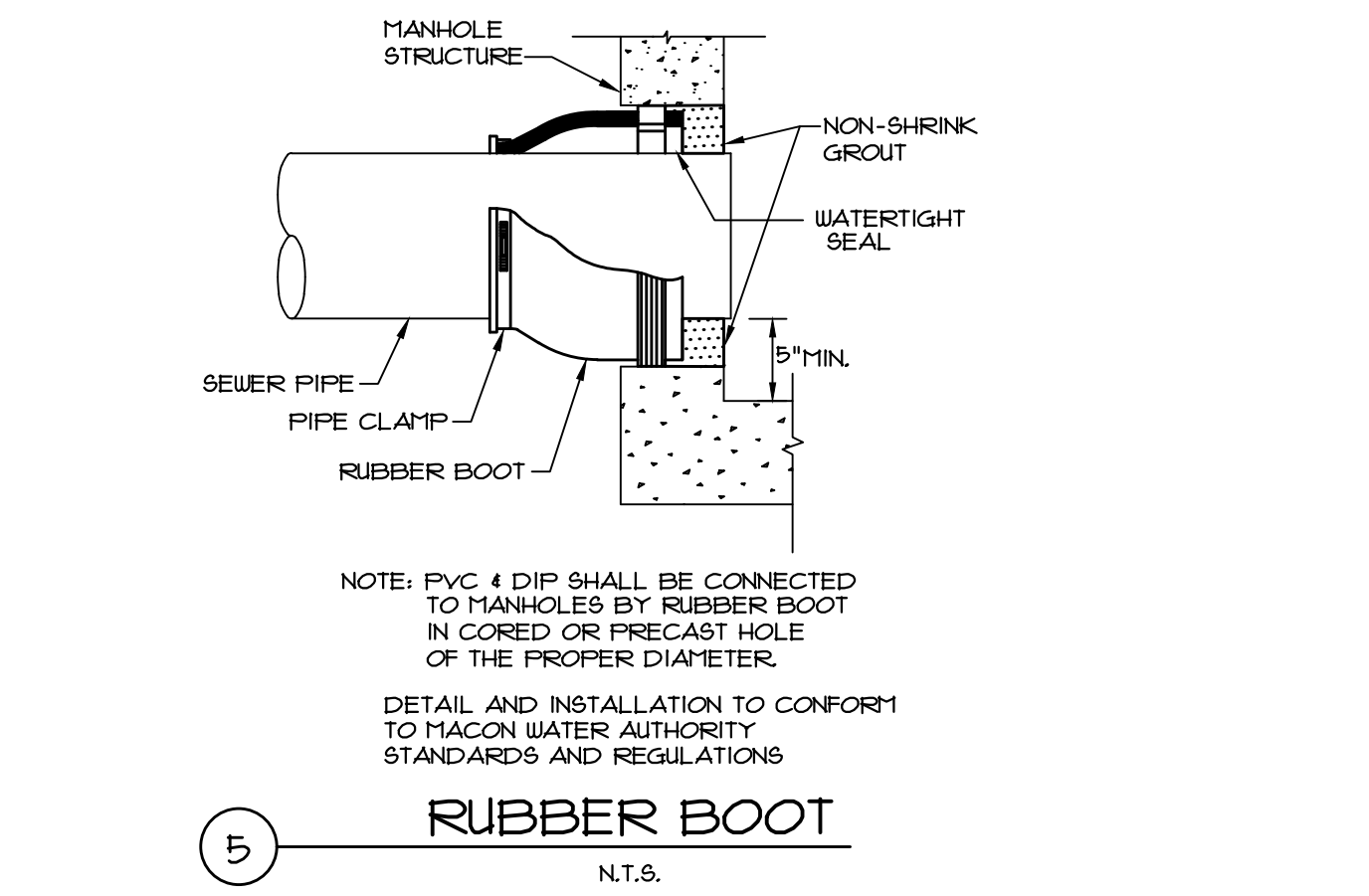
NOTE:  
ALL NEW SANITARY SEWER MANHOLES TO BE FULLY LINED (FLOOR, WALLS AND CEILING) WITH 2mm HDPE LINER.  
PRICE FOR LINER INCLUDED IN SANITARY SEWER MANHOLE ITEM (FOLEY STRUCTURES OR APPROVED EQUAL)  
INVERTS (BUILT IN PLACE OR PREFABRICATED) TO BE INSTALLED ON TOP OF FULLY LINED FLOOR AND COATED WITH AN EPOXY COATING (SERIES 436 PERMASHELD BY TNEMEC OR APPROVED EQUAL).  
A PROTECTIVE COATING SHALL BE APPLIED TO EXISTING MANHOLES IDENTIFIED FOR REPAIR, RECONSTRUCTION, OR ADJUST TO GRADE. COATING SHALL BE SEWPERCOAT OR APPROVED EQUAL.  
PROTECTIVE LININGS AND COATINGS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST FOR THE APPLICABLE MANHOLE PAY ITEM.



STATUS	BY	APPROVED	DATE
ORIGINAL			
REVISION			

MACON WATER AUTHORITY STANDARD DETAILS  
BUILT-IN-PLACE MANHOLE (DOGHOUSE MANHOLE)  
N.T.S.

RECOMMENDED BY THE MACON WATER AUTHORITY ENGINEERING DEPT.  
DRAWING NUMBER S-13



11 **RUBBER BOOT**  
N.T.S.