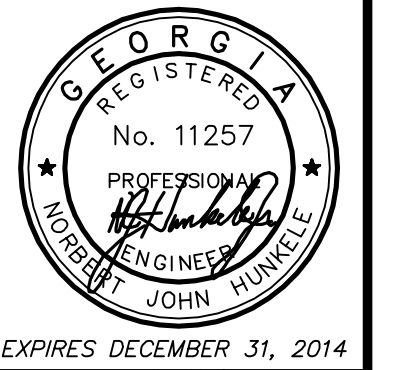
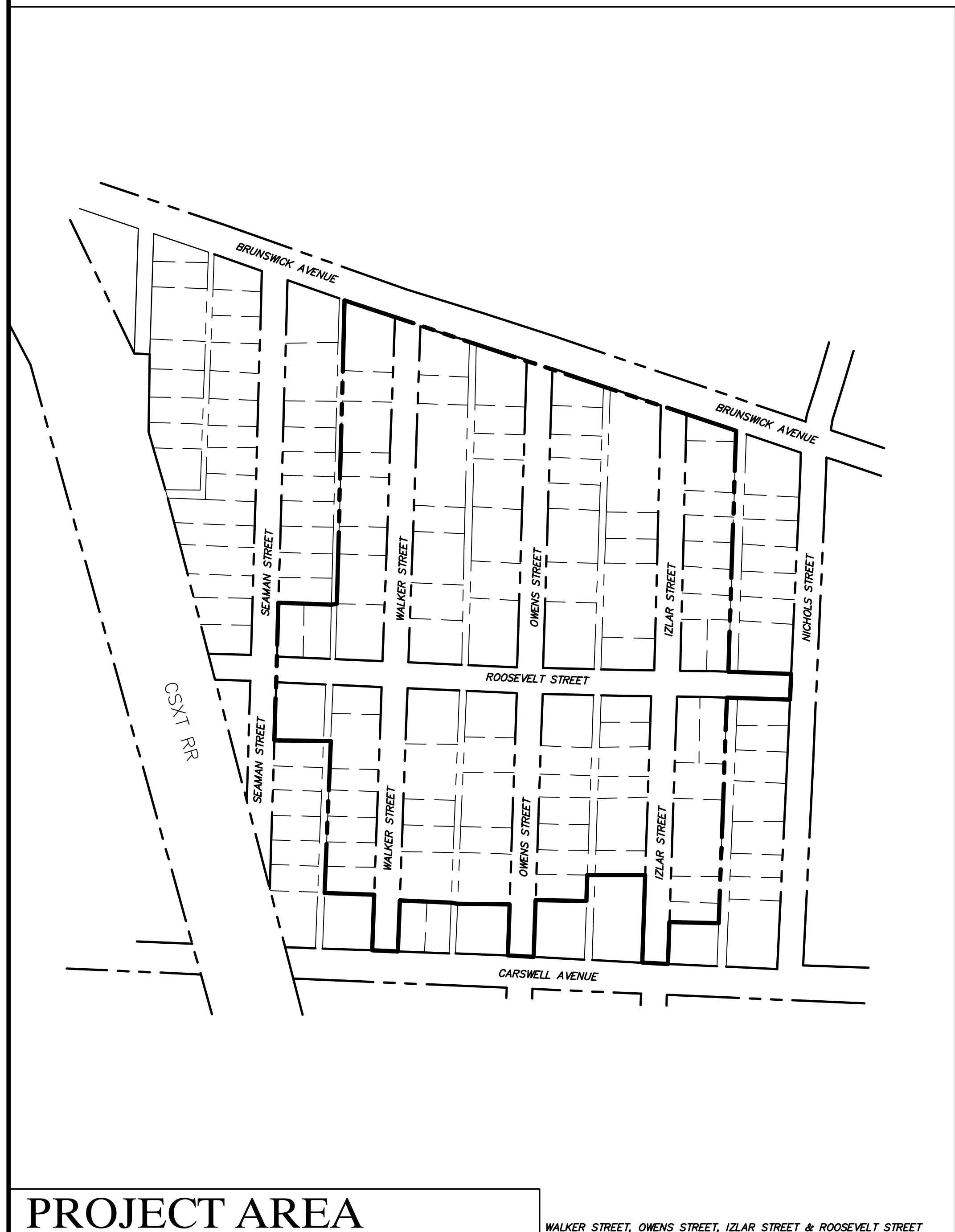


2015 STREETS DRAINAGE & UTILITY PROJECT CITY OF WAYCROSS, GEORGIA

MARCH 27, 2015



Coastal Engineering Consultants, Inc.
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
JohnH@cec-ga.com



PROJECT AREA
WALKER STREET, OWENS STREET, IZLAR STREET & ROOSEVELT STREET

CITY OF WAYCROSS
417 PENDLETON STREET
WAYCROSS, GEORGIA 31502
(912) 287-2900

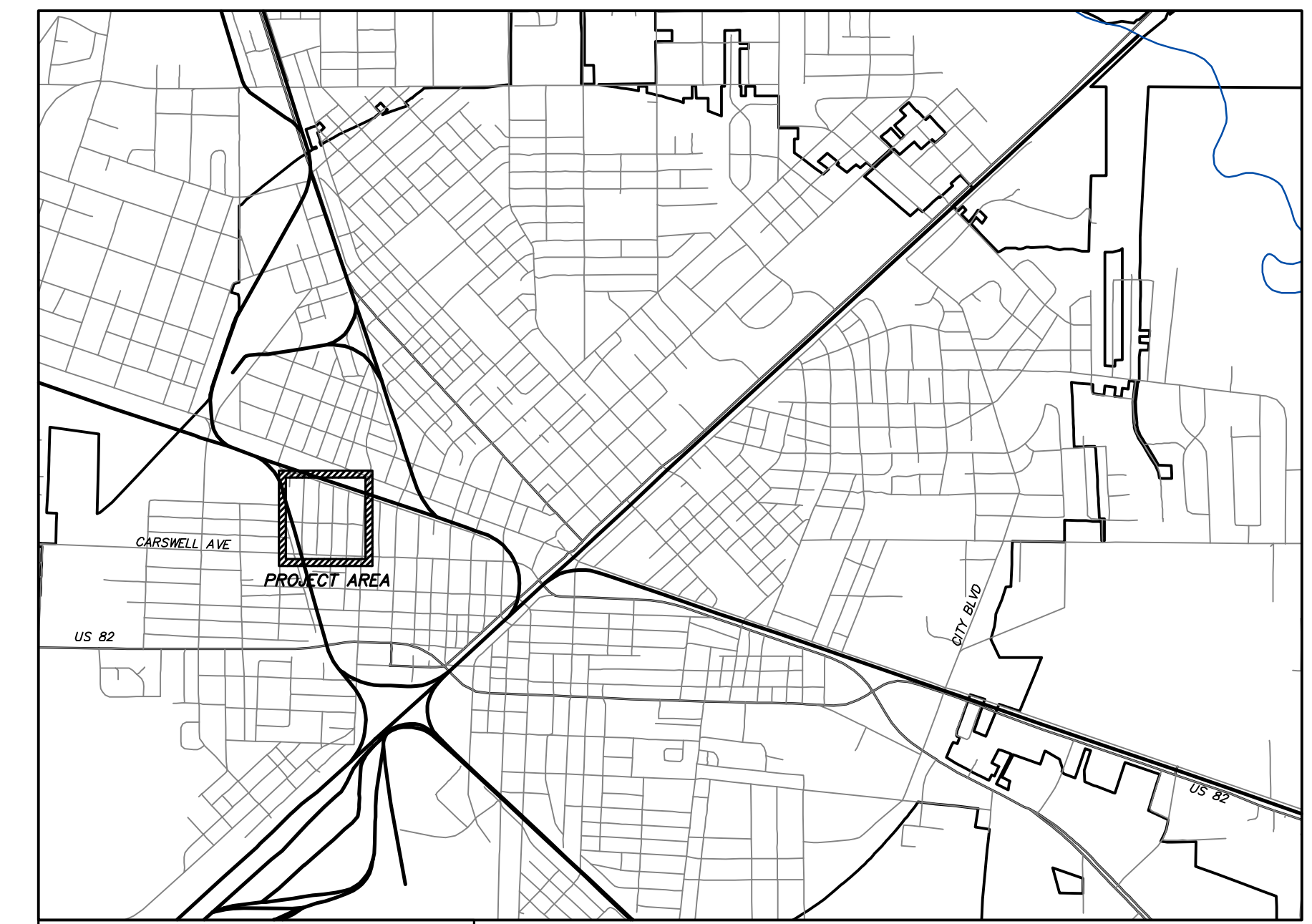
MAYOR
CLARENCE E. BILLUPS

COMMISSION

NORMAN E. DAVIS, SR. - DISTRICT I
LARRY ETHRIDGE - DISTRICT II
MARIAN C. SOLOMON-GAINES - DISTRICT III
DIANE L. HOPKINS - DISTRICT IV
ALVIN D. NELSON - DISTRICT V

ENGINEERING DIVISION

JESSICA KING DEAL, P.E. - City Engineer
GENE THOMAS - Engineering Superintendent



LOCATION MAP

INDEX OF DRAWINGS	
SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
G-1	GENERAL NOTES AND LEGEND
X-1	EXISTING CONDITIONS SURVEY
X-2	DEMOLITION PLAN - STREETS
X-3	DEMOLITION PLAN - DRAINAGE
X-4	EXISTING STREET PROFILES - WALKER AND OWENS STREETS
X-5	EXISTING STREET PROFILES - IZLAR AND ROOSEVELT STREETS
X-6	DEMOLITION PLAN - WATER DISTRIBUTION SYSTEM
X-7	DEMOLITION PLAN - SANITARY SEWER SYSTEM
P-1	PROPOSED STREET PLAN
P-2	PROPOSED STREET PROFILES - WALKER AND OWENS STREETS
P-3	PROPOSED STREET PROFILES - IZLAR AND ROOSEVELT STREETS
P-4	PROPOSED DRAINAGE PLAN
P-5	STORM PIPE PROFILES - WALKER AND OWENS STREETS
P-6	STORM PIPE PROFILES - IZLAR AND ROOSEVELT STREETS
P-7	INTERSECTION DETAILS
P-8	PROPOSED WATER DISTRIBUTION PLAN
P-9	PROPOSED SANITARY SEWER PLAN
P-10	SANITARY SEWER PROFILES - WALKER AND OWENS STREETS
P-11	SANITARY SEWER PROFILES - IZLAR AND ROOSEVELT STREETS
MD-1	MISCELLANEOUS DETAILS - STREETS AND DRAINAGE
MD-2	MISCELLANEOUS DETAILS - STREETS AND DRAINAGE
MD-3	MISCELLANEOUS DETAILS - WATER
MD-4	MISCELLANEOUS DETAILS - WATER & SEWER
MD-5	MISCELLANEOUS DETAILS - SEWER
ES-1	EROSION CONTROL GENERAL NOTES
ES-2	EROSION CONTROL PLAN
ES-3	VEGETATIVE PLAN & UNIFORM CODING SYSTEM
ES-4	DETAILS OF STRUCTURAL BMP'S

CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.

DATE	ACTION
MARCH 27, 2015	RELEASED FOR CLIENT AND EPD PLAN REVIEW (NOT FOR CONSTRUCTION)

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
TITLE SHEET

FILE NO.: 2015-003-71	SHEET NO.: T-1
DATE: MARCH 27, 2015	OF 1
SCALE: AS SHOWN	
DRAWN BY/CHECKED BY: CLM/MJR	

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

USER: MAXX REVDATE: FNAME:

REVISION NO.	DESCRIPTION OF REVISION	DATE

PROJECT LEGEND

	EXISTING SPOT ELEVATION
	EXISTING BENCHMARK
	EXISTING CONTOUR - ODD
	EXISTING CONTOUR - EVEN
	EXISTING RIGHT OF WAY
	EXISTING WATER MAIN TO REMAIN IN SERVICE
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING WATER MAIN TO BE ABANDONED
	PROPOSED WATER MAIN AND VALVE
	PROPOSED FIRE HYDRANT ASSEMBLY
	PROPOSED/RELOCATED WATER SERVICE & METER
	EXISTING FORCE MAIN
	EXISTING GRAVITY SEWER
	EXISTING SANITARY SEWER MANHOLE
	EXISTING SEWER CLEANOUT
	EXISTING GRAVITY SEWER TO BE ABANDONED/REMOVED
	PROPOSED GRAVITY SEWER AND MANHOLE
	PROPOSED SEWER SERVICE AND LOWER CLEANOUT
	EXISTING POWER POLE
	EXISTING POWER POLE WITH GUY WIRES
	EXISTING OVERHEAD UTILITY LINES
	EXISTING ELECTRICAL BOX
	EXISTING TELEPHONE PEDESTAL
	EXISTING MAILBOX
	EXISTING STREET SIGN
	EXISTING STORM CULVERT
	EXISTING GAS LINE
	PROPOSED STORM CULVERT
	PROPOSED CURB INLET TYPE 1
	PROPOSED CURB INLET TYPE 2R
	PROPOSED CURB INLET TYPE 2L
	PROPOSED JUNCTION BOX TYPE 3
	PROPOSED JUNCTION BOX TYPE 4
	EXISTING CONCRETE SW OR DW TO REMAIN
	PROPOSED CONCRETE SW OR DW
	INDICATES LIMITS OF ASPHALT MILLING
	COMPLETE REMOVAL OF EXISTING ASPHALT AND BASE MATERIAL
	REMOVAL OF CONCRETE SIDEWALKS AND DRIVEWAYS

ABBREVIATIONS

ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BLDG	BUILDING
BLV	BALL VALVE
BOC	BACK OF CURB
CF	CUBIC FEET
CI	CURB INLET
CKV	CHECK VALVE
CL	CENTERLINE
CONC	CONCRETE
CO	SANITARY SEWER CLEAN OUT
CY	CUBIC YARDS
DIP	DUCTILE IRON PIPE
DW	DRIVEWAY
EP	EDGE OF PAVEMENT
EL	ELEVATION
EPD	ENVIRONMENTAL PROTECTION DIVISION
ESPC	EROSION, SEDIMENTATION AND POLLUTION CONTROL
FL	FLOW LINE
FH	FIRE HYDRANT ASSEMBLY
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
IPF	IRON PIN FOUND
JB	JUNCTION BOX
LDA	LAND DISTURBING ACTIVITY
MB	MAILBOX
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
PW	POTABLE WATER
PL	PROPERTY LINE
RCP	REINFORCED CONCRETE PIPE
RW	RIGHT OF WAY
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SW	SIDEWALK
SY	SQUARE YARDS
TC	TOP OF CURB
TYP	TYPICAL
WTR	WATER
WM	WATER METER

GENERAL NOTES:

EXISTING CONDITIONS SHOWN ON THESE PLANS WERE COMPILED FROM DRAWINGS AND OTHER INFORMATION FURNISHED BY THE CITY OF WAYCROSS AND FROM FIELD SURVEY DATA. SUCH INFORMATION IS BELIEVED TO ACCURATE, HOWEVER PIPE ROUTING MAY BE SCHEMATIC IN SOME AREAS AND SHALL BE VERIFIED BY THE CONTRACTOR IN CRITICAL AREAS SUCH AS CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES.

FIELD SURVEY INFORMATION TAKEN FROM TOPOGRAPHIC AND UTILITY SURVEY OF IZLAR, OWENS, WALKER AND ROOSEVELT STREETS PREPARED BY CHARLES H. TOMBERLIN AND ASSOCIATES AND DATED MAY 14, 2012.

THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND MAY NOT BE COMPLETE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT ACTUAL LOCATIONS WILL NOT VARY FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF SAME. CONTRACTOR SHALL NOTIFY THE UTILITIES PROTECTION CENTER (UPC) AT 1-800-282-7411 AT LEAST 72 HOURS IN ADVANCE OF ANY TRENCHING OR EXCAVATION.

SHOULD ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND BEFORE PROCEEDING WITH OR CONTINUING WITH CONSTRUCTION.

CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION.

IN THE EVENT OF A DISCREPANCY BETWEEN THESE CONSTRUCTION PLANS AND THE PROJECT TECHNICAL SPECIFICATIONS, THE TECHNICAL SPECIFICATIONS SHALL TAKE PRECEDENCE.

ALL DISTURBED AREAS SHALL BE RE-VEGETATED IMMEDIATELY AFTER CONSTRUCTION IN A MANNER CONSISTENT WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND STAKING INCLUDING SETTING OF GRADES, LINES AND LEVELS AND THE LOCATION OF EXISTING OR PROPOSED EASEMENTS AND/OR RIGHTS-OF-WAY. THE CONTRACTOR'S SURVEYOR SHALL PROVIDE CENTERLINE ALIGNMENT FOR CONSTRUCTION PURPOSES AND ESTABLISH AND MAINTAIN BENCHMARKS AND HORIZONTAL CONTROL POINTS. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR THE CORRECTNESS OF THE GRADE AND ALIGNMENT STAKES.

THE CONTRACTOR SHALL ALSO ENGAGE THE SERVICES OF A REGISTERED LAND SURVEYOR TO PREPARE AND SUBMIT RECORD DRAWINGS OF THE COMPLETED WATER, SANITARY SEWER, AND STORM DRAINAGE INFRASTRUCTURE.

DEMOLITION NOTES:

FIELD VERIFY EXISTING CONDITIONS WHERE THEY AFFECT DEMOLITION AND NEW CONSTRUCTION TO DETERMINE EXACT LOCATION, ROUTING AND ELEVATIONS OF EXISTING PIPES WHICH ARE SCHEDULED FOR DEMOLITION. CONFIRM FUNCTION AND STATUS OF EACH PIPE (WHETHER ACTIVELY IN SERVICE OR NOT) PRIOR TO DISCONNECTION OR INTERRUPTING SERVICE FOR DEMOLITION. COORDINATE ALL DEMOLITION ACTIVITIES THAT MAY AFFECT WATER AND SEWER SERVICE OR ACCESS TO PRIVATE PROPERTIES WITH THE OWNER. CONTACT JESSICA KING DEAL AT (912) 506-0150 AT LEAST 48 HOURS IN ADVANCE OF ANY DEMOLITION AND UTILITY RELOCATION WORK.

CAP OR PLUG PIPING WHERE ABANDONED IN PLACE USING APPROVED MATERIALS AND METHODS AS DELINEATED IN THE PROJECT SPECIFICATIONS.

AREAS SHOWN FOR COMPLETE PAVEMENT RESTORATION REQUIRE THE COMPLETE REMOVAL OF EXISTING ASPHALT AND BASE MATERIAL. SUBGRADE TO BE REMOVED AS NECESSARY AND REPLACED WITH SUITABLE MATERIALS. PROVIDE 6" OF COMPACTED STONE BASE. SEE SPECIFICATIONS FOR ADDITIONAL DETAILS.

WHERE EXISTING CONCRETE SIDEWALKS AND DRIVEWAYS ARE SHOWN TO BE REMOVED, NEATLY SAW CUT EXISTING PAVEMENTS TO CLEAN STRAIGHT LINES TO THE LIMITS SHOWN OR AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.

LIMITS SHOWN ON THE DRAWINGS FOR EXISTING CONCRETE AND SIDEWALK REMOVAL, AS WELL AS AREAS SHOWN FOR COMPLETE PAVEMENT RESTORATION, ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. AREAS NOT SHOWN BUT REQUIRING REMOVAL AT THE DIRECTION OF THE ENGINEER SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT THE UNIT PRICES STATED IN THE BID FORM.

EXISTING ASPHALT SHALL BE MILLED TO AN AVERAGE DEPTH OF 1.5 INCHES OR TO THE DEPTHS SHOWN ON THE EXISTING STREET PROFILES (PLAN SHEETS X-4 AND X-5).

EXISTING SANITARY SEWER MANHOLES SHOWN TO BE ABANDONED SHALL BE REMOVED AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION. IN GENERAL SUCH STRUCTURES TO REMAIN SHALL BE REMOVED TO A DEPTH AT LEAST THREE (3) FEET BELOW EXISTING GRADE. PUNCH HOLES IN MANHOLE BOTTOMS AND FILL STRUCTURES WITH SAND OR OTHER SUITABLE MATERIALS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

MATERIALS REMOVED DURING THE DEMOLITION OPERATIONS SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR. DISPOSAL SITE SHALL BE AN APPROVED LANDFILL OR OTHER APPROVED RECYCLING OR WASTE DISPOSAL AREA.

ANY REFERENCE POINTS, RIGHT-OF-WAY MONUMENTS, BENCHMARKS OR OTHER MONUMENTS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE RESTORED BY A REGISTERED LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF GEORGIA, WITH ALL ASSOCIATED COSTS BORNE BY THE CONTRACTOR. LIKEWISE ALL LANDSCAPING, STREET SIGNS, MAILBOXES, TRAFFIC SIGNS AND OTHER STREET FURNITURE DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION WITHOUT ADDITIONAL COMPENSATION.

WATER AND SEWER NOTES:

THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES AND STORM DRAIN LINES SHALL CONFORM THE LATEST GEORGIA ENVIRONMENTAL PROTECTION GUIDELINES UNLESS NOTED OR OTHERWISE APPROVED BY THE ENGINEER.

PRESSURE AND LEAKAGE TESTING AND DISINFECTION OF NEW POTABLE WATER MAINS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH PROCEDURES DELINEATED IN THE PROJECT TECHNICAL SPECIFICATIONS.

WATER MAINS SHALL BE LAID WITH A MINIMUM COVER OF 42-INCHES IN PAVED AREAS AND 36-INCHES IN UNPAVED AREAS WITH AN ALLOWABLE MAXIMUM OF 60-INCHES. COVER IN ALL AREAS SHALL BE MEASURED FROM CROWN OF PIPE TO FINISH GRADE. A REDUCTION IN PIPE COVER REQUIREMENTS REQUIRES APPROVAL OF THE ENGINEER.

ALL NON-FLANGED FITTINGS AND VALVES SHALL BE RESTRAINED. THIS SHALL BE ACCOMPLISHED USING MECHANICAL RESTRAINTS AT FITTINGS, AND MECHANICAL RESTRAINT ALONG ADJACENT JOINTS OF PIPE IN ACCORDANCE WITH DETAILS INCLUDED HEREIN.

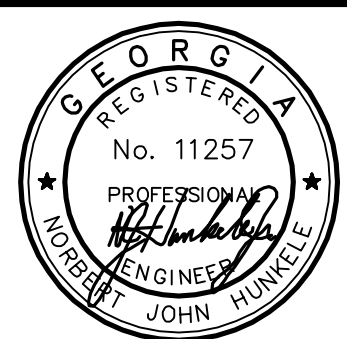
THE CONTRACTOR SHALL FURNISH POTABLE WATER PIPING SYSTEMS AND APPURTENANCES, AND SANITARY SEWER PIPING AND APPURTENANCES IN ACCORDANCE WITH THE MATERIAL REQUIREMENTS CONTAINED IN THE PROJECT TECHNICAL SPECIFICATIONS. ALL MATERIALS SHALL BE NEW. ALL REFERENCES TO INDUSTRY STANDARDS (ASTM, ANSI, AWWA, ETC.) SHALL BE TO THE LATEST REVISION UNLESS STATED OTHERWISE.

ALL MATERIAL SHALL BE FREE FROM DEFECTS IMPAIRING STRENGTH AND DURABILITY AND SHALL BE OF THE BEST COMMERCIAL QUALITY FOR THE PURPOSE SPECIFIED.

THE CONTRACTOR SHALL INSPECT ALL MATERIALS DELIVERED TO THE JOBSITE FOR DAMAGE. MATERIALS SHALL BE UNLOADED AND STORED WITH A MINIMUM OF HANDLING. MATERIALS SHALL BE STORED ABOVE GROUND AND THE INTERIOR OF PIPE AND FITTINGS SHALL BE KEPT FREE OF DIRT AND DEBRIS. STORE NON-METALLIC PIPING AND RUBBER GASKETS UNDER COVER AND PROTECT FROM EXPOSURE TO SUNLIGHT.

PRECAST CONCRETE MANHOLES AND OTHER APPURTENANCES SHALL BE HANDLED TO ENSURE DELIVERY AT THE POINT OF INSTALLATION IN SOUND, UNDATED CONDITION. IF COATINGS OR LININGS OF PIPE OR FITTINGS ARE DAMAGED, SUCH PIPE AND FITTINGS SHALL BE REMOVED FROM THE SITE AND NEW MATERIALS FURNISHED.

ALL GRAVITY SEWER MAINS SHALL BE TESTED FOR LEAKAGE BY LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS. SUCH TESTING SHALL BE PERFORMED AS SOON AS POSSIBLE AFTER COMPLETING A REASONABLE LENGTH OF GRAVITY SEWER INSTALLATION.



Coastal Engineering Consultants, Inc.
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 923-0874 PHONE
 john@cec-ge.com

DATE	
DESCRIPTION OF REVISION	
REVISION NO.	

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
 GENERAL NOTES & LEGEND

FILE NO.: 2015-003-01	SHEET NO.: G-1
DATE: MARCH 27, 2015	
SCALE: AS SHOWN	
DRAWN BY/CHECKED BY: GJM/MJR	

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNNAME

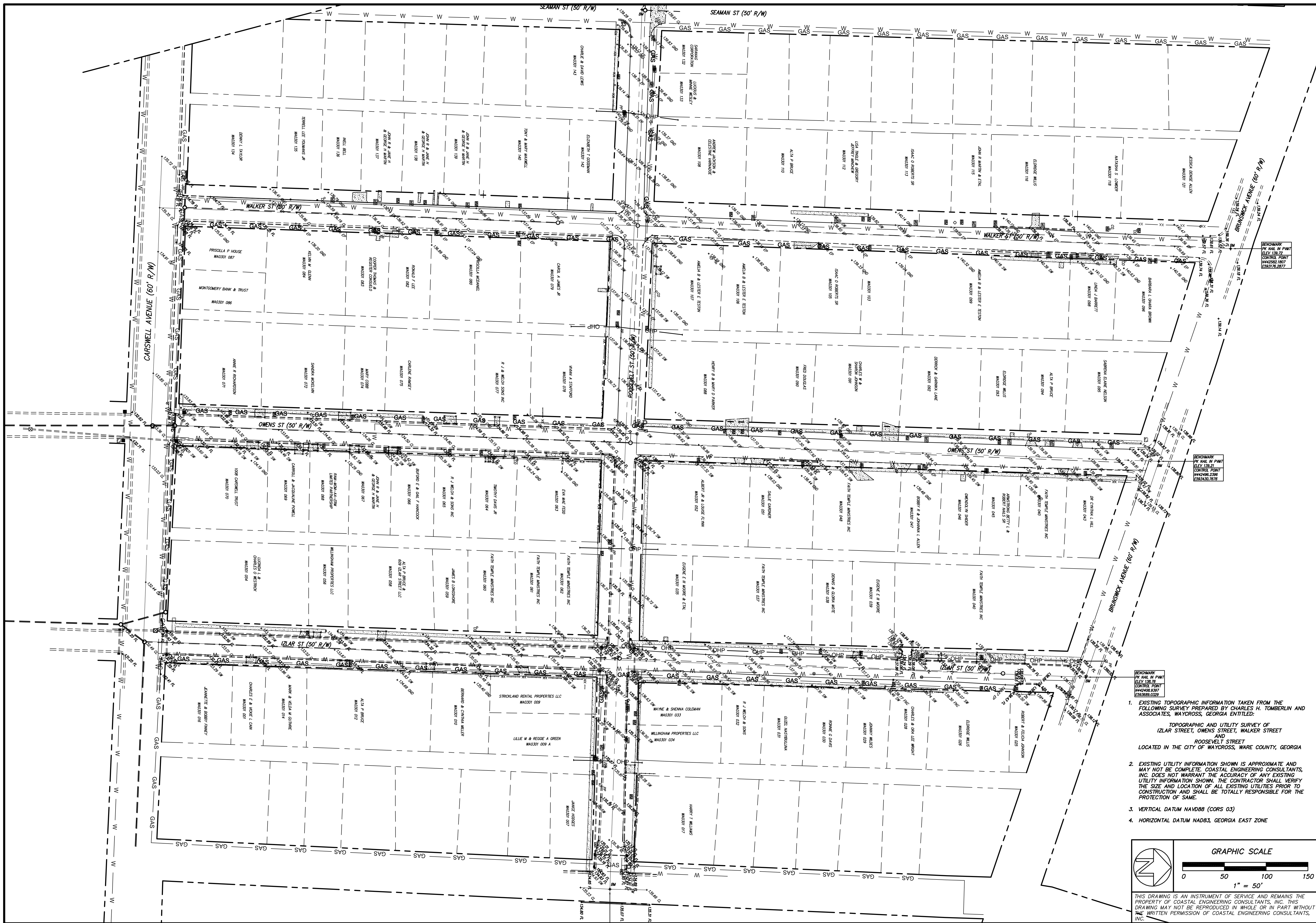
REVDATE

USER MARK

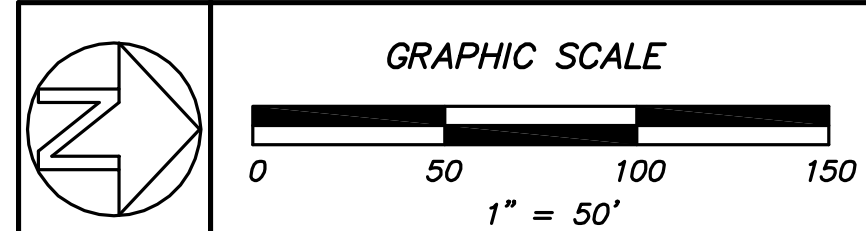
FNNAME

REVDATE

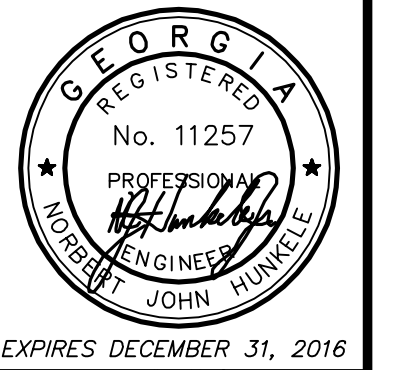
USER



1. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM THE FOLLOWING SURVEY PREPARED BY CHARLES H. TOMBERLIN AND ASSOCIATES, WAYCROSS, GEORGIA ENTITLED:
- TOPOGRAPHIC AND UTILITY SURVEY OF IZLAR STREET, OWENS STREET, WALKER STREET AND ROOSEVELT STREET LOCATED IN THE CITY OF WAYCROSS, WARE COUNTY, GEORGIA
2. EXISTING UTILITY INFORMATION SHOWN IS APPROXIMATE AND MAY NOT BE COMPLETE. COASTAL ENGINEERING CONSULTANTS, INC. DOES NOT WARRANT THE ACCURACY OF ANY EXISTING UTILITY INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE TOTALLY RESPONSIBLE FOR THE PROTECTION OF SAME.
3. VERTICAL DATUM NAVD88 (CORS 03)
4. HORIZONTAL DATUM NAD83, GEORGIA EAST ZONE



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



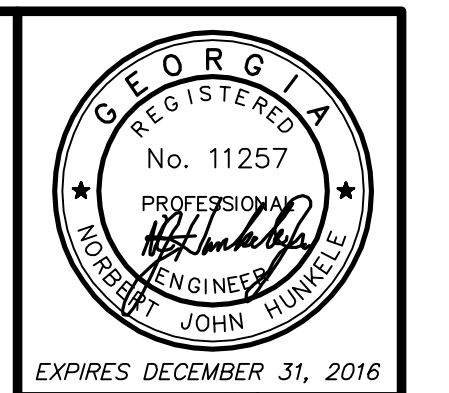
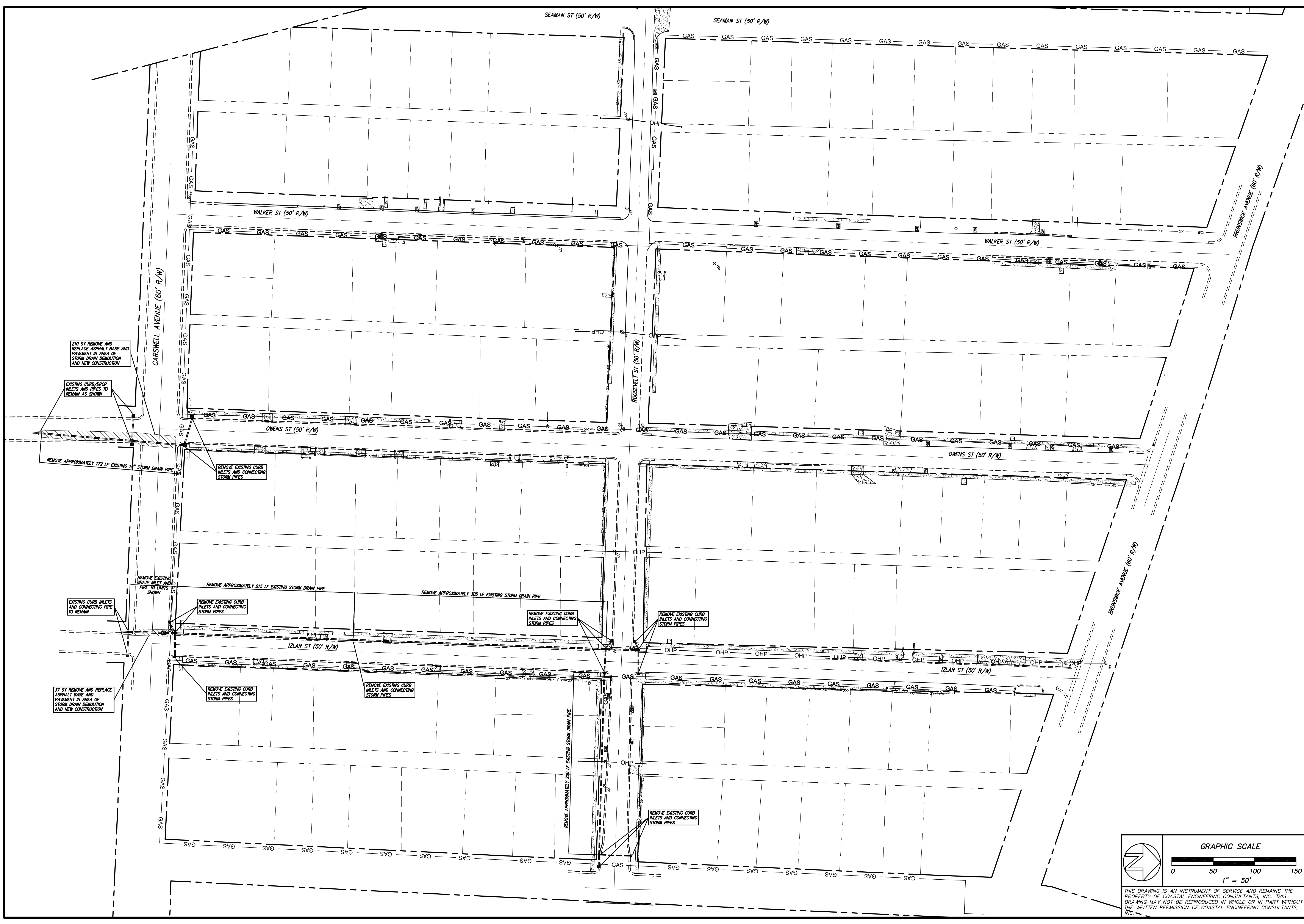
Coastal Engineering Consultants, Inc.
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0877 PHONE
 john@cec-inc.com

DATE	DESCRIPTION OF REVISION	REVISION NO.

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
EXISTING CONDITIONS SURVEY

FILE NO.: 2015-003-XT	DATE: MARCH 27, 2015	SCALE: AS SHOWN	DRAWN BY/CHECKED BY: CLM/MJR
SHEET NO.: X-1			OF 7

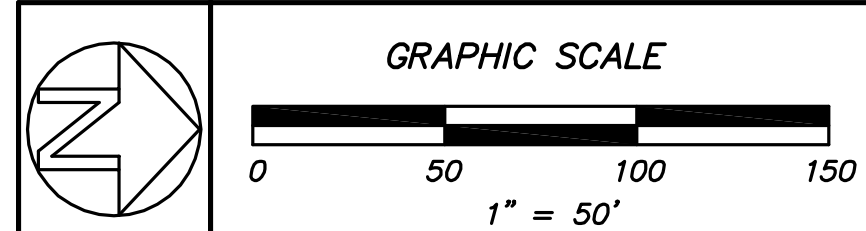
USER: MAXX REVDATE: FNAME:



Coastal Engineering Consultants, Inc.
 PROFESSIONAL ENGINEER
 JOHN H. HARRIS
 No. 11257
 STATE OF GEORGIA
 EXPIRES DECEMBER 31, 2016
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0877 PHONE
 john@cec-ga.com

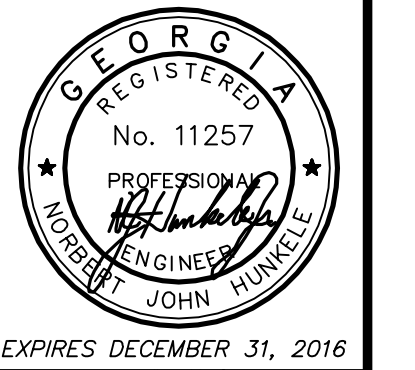
REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
DEMOLITION PLAN - DRAINAGE



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FILE NO.: 2015-003-X3	SHEET NO.: X-3
DATE: MARCH 27, 2015	OF
SCALE: AS SHOWN	
DRAWN BY/CHECKED BY: CLM/MHR	



Coastal Engineering Consultants, Inc.
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0874 PHONE
john@cec-inc.com

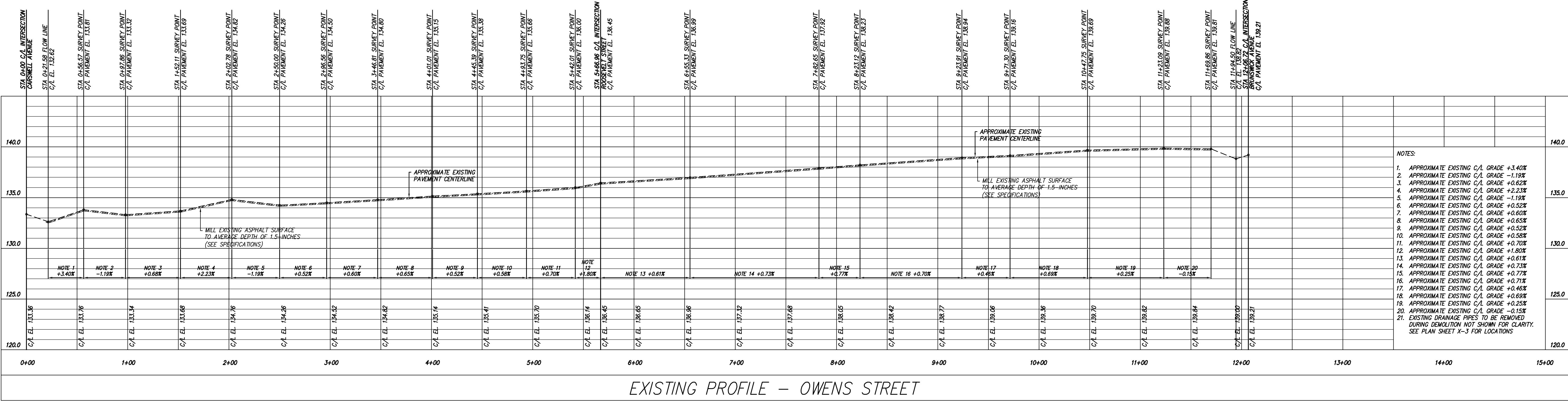
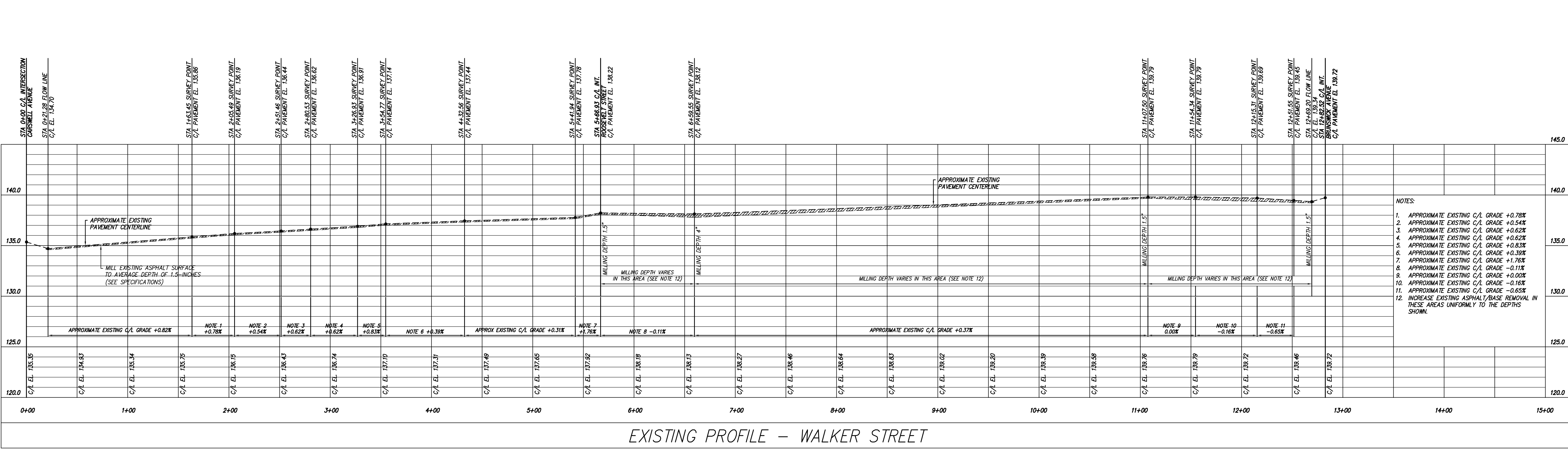
DATE

DESCRIPTION OF REVISION

REVISION NO.

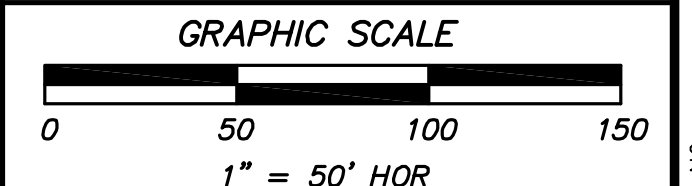
2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
EXISTING STREET PROFILES - WALKER AND OWENS STREETS

FILE NO.: 2015-003-XX
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/MLR
SHEET NO.: X-4



- NOTES:
1. APPROXIMATE EXISTING C/L GRADE +0.78%
 2. APPROXIMATE EXISTING C/L GRADE +0.54%
 3. APPROXIMATE EXISTING C/L GRADE +0.62%
 4. APPROXIMATE EXISTING C/L GRADE +0.62%
 5. APPROXIMATE EXISTING C/L GRADE +0.83%
 6. APPROXIMATE EXISTING C/L GRADE +0.39%
 7. APPROXIMATE EXISTING C/L GRADE +1.76%
 8. APPROXIMATE EXISTING C/L GRADE -0.11%
 9. APPROXIMATE EXISTING C/L GRADE +0.00%
 10. APPROXIMATE EXISTING C/L GRADE -0.16%
 11. APPROXIMATE EXISTING C/L GRADE -0.65%
 12. INCREASE EXISTING ASPHALT/BASE REMOVAL IN THESE AREAS UNIFORMLY TO THE DEPTHS SHOWN.

- NOTES:
1. APPROXIMATE EXISTING C/L GRADE +3.40%
 2. APPROXIMATE EXISTING C/L GRADE -1.19%
 3. APPROXIMATE EXISTING C/L GRADE +0.62%
 4. APPROXIMATE EXISTING C/L GRADE +2.23%
 5. APPROXIMATE EXISTING C/L GRADE -1.19%
 6. APPROXIMATE EXISTING C/L GRADE +0.52%
 7. APPROXIMATE EXISTING C/L GRADE +0.60%
 8. APPROXIMATE EXISTING C/L GRADE +0.65%
 9. APPROXIMATE EXISTING C/L GRADE +0.52%
 10. APPROXIMATE EXISTING C/L GRADE +0.58%
 11. APPROXIMATE EXISTING C/L GRADE +0.70%
 12. APPROXIMATE EXISTING C/L GRADE +1.80%
 13. APPROXIMATE EXISTING C/L GRADE +0.61%
 14. APPROXIMATE EXISTING C/L GRADE +0.73%
 15. APPROXIMATE EXISTING C/L GRADE +0.77%
 16. APPROXIMATE EXISTING C/L GRADE +0.71%
 17. APPROXIMATE EXISTING C/L GRADE +0.46%
 18. APPROXIMATE EXISTING C/L GRADE +0.69%
 19. APPROXIMATE EXISTING C/L GRADE +0.25%
 20. APPROXIMATE EXISTING C/L GRADE -0.15%
 21. EXISTING DRAINAGE PIPES TO BE REMOVED DURING DEMOLITION NOT SHOWN FOR CLARITY. SEE PLAN SHEET X-3 FOR LOCATIONS



CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.

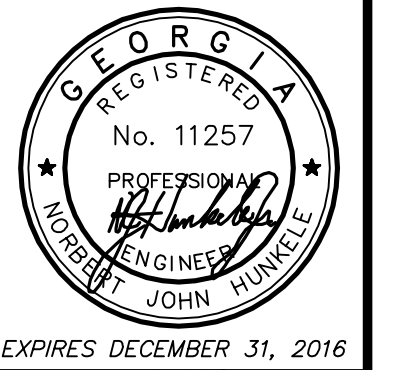
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

USER: MAXX REVDATE: FNAME:

FILENAME

REVDATE

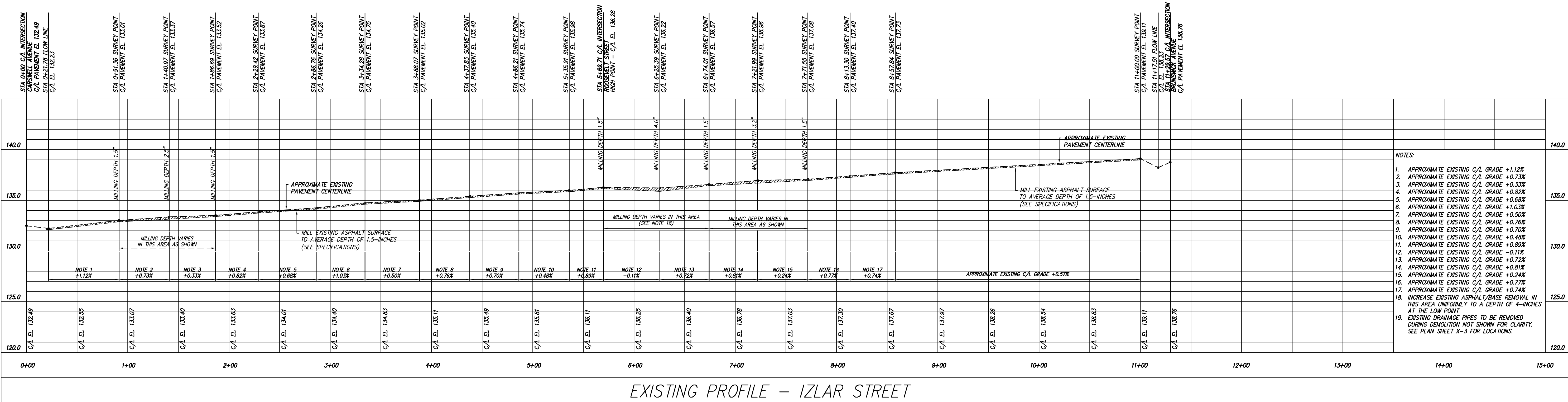
USER



Coastal Engineering Consultants, Inc.

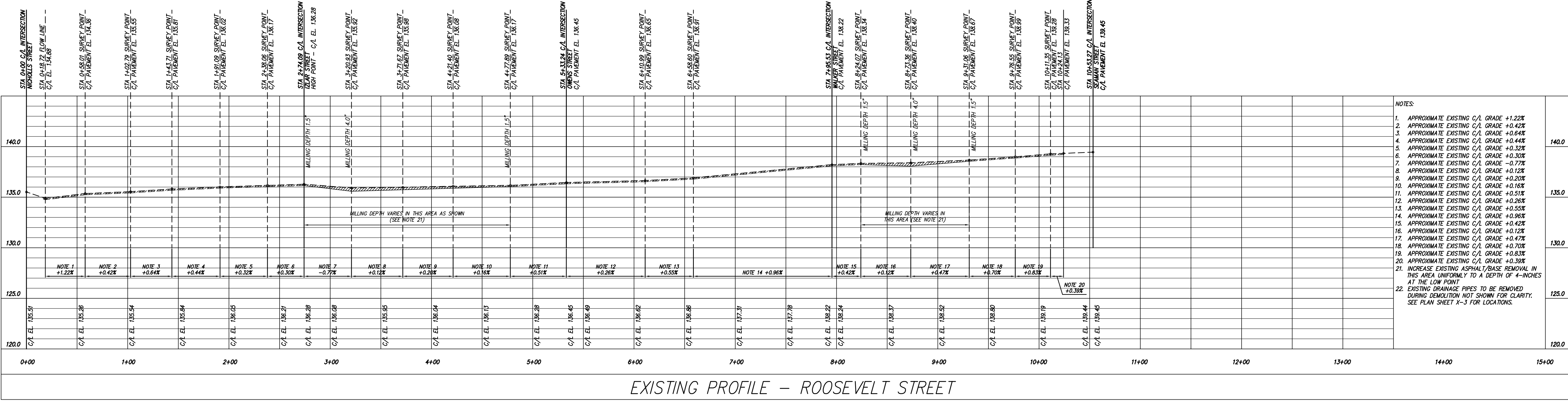
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0874 PHONE
john@cec-inc.com

DATE
REVISION NO.
DESCRIPTION OF REVISION



EXISTING PROFILE - IZLAR STREET

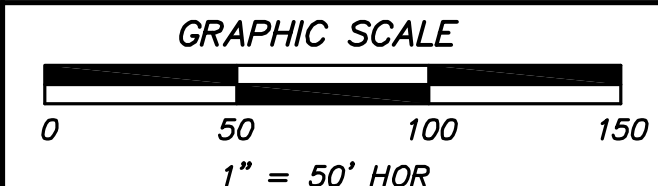
- NOTES:
- APPROXIMATE EXISTING C/L GRADE +1.12%
 - APPROXIMATE EXISTING C/L GRADE +0.73%
 - APPROXIMATE EXISTING C/L GRADE +0.33%
 - APPROXIMATE EXISTING C/L GRADE +0.82%
 - APPROXIMATE EXISTING C/L GRADE +0.68%
 - APPROXIMATE EXISTING C/L GRADE +1.03%
 - APPROXIMATE EXISTING C/L GRADE +0.50%
 - APPROXIMATE EXISTING C/L GRADE +0.76%
 - APPROXIMATE EXISTING C/L GRADE +0.70%
 - APPROXIMATE EXISTING C/L GRADE +0.48%
 - APPROXIMATE EXISTING C/L GRADE +0.89%
 - APPROXIMATE EXISTING C/L GRADE -0.11%
 - APPROXIMATE EXISTING C/L GRADE +0.72%
 - APPROXIMATE EXISTING C/L GRADE +0.81%
 - APPROXIMATE EXISTING C/L GRADE +0.24%
 - APPROXIMATE EXISTING C/L GRADE +0.77%
 - APPROXIMATE EXISTING C/L GRADE +0.74%
 - INCREASE EXISTING ASPHALT/BASE REMOVAL IN THIS AREA UNIFORMLY TO A DEPTH OF 4-INCHES AT THE LOW POINT
 - EXISTING DRAINAGE PIPES TO BE REMOVED DURING DEMOLITION NOT SHOWN FOR CLARITY. SEE PLAN SHEET X-3 FOR LOCATIONS.



EXISTING PROFILE - ROOSEVELT STREET

- NOTES:
- APPROXIMATE EXISTING C/L GRADE +1.22%
 - APPROXIMATE EXISTING C/L GRADE +0.42%
 - APPROXIMATE EXISTING C/L GRADE +0.64%
 - APPROXIMATE EXISTING C/L GRADE +0.44%
 - APPROXIMATE EXISTING C/L GRADE +0.32%
 - APPROXIMATE EXISTING C/L GRADE +0.30%
 - APPROXIMATE EXISTING C/L GRADE -0.77%
 - APPROXIMATE EXISTING C/L GRADE +0.12%
 - APPROXIMATE EXISTING C/L GRADE +0.20%
 - APPROXIMATE EXISTING C/L GRADE +0.16%
 - APPROXIMATE EXISTING C/L GRADE +0.51%
 - APPROXIMATE EXISTING C/L GRADE +0.26%
 - APPROXIMATE EXISTING C/L GRADE +0.55%
 - APPROXIMATE EXISTING C/L GRADE +0.96%
 - APPROXIMATE EXISTING C/L GRADE +0.42%
 - APPROXIMATE EXISTING C/L GRADE +0.12%
 - APPROXIMATE EXISTING C/L GRADE +0.47%
 - APPROXIMATE EXISTING C/L GRADE +0.70%
 - APPROXIMATE EXISTING C/L GRADE +0.83%
 - APPROXIMATE EXISTING C/L GRADE +0.39%
 - INCREASE EXISTING ASPHALT/BASE REMOVAL IN THIS AREA UNIFORMLY TO A DEPTH OF 4-INCHES AT THE LOW POINT
 - EXISTING DRAINAGE PIPES TO BE REMOVED DURING DEMOLITION NOT SHOWN FOR CLARITY. SEE PLAN SHEET X-3 FOR LOCATIONS.

CALL BEFORE YOU DIG!
 At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

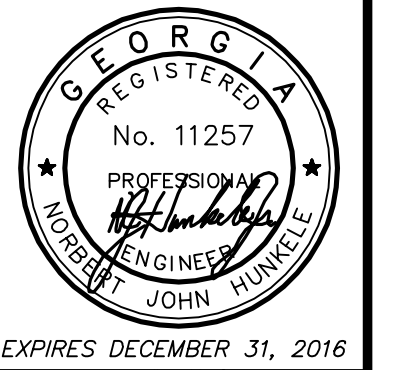
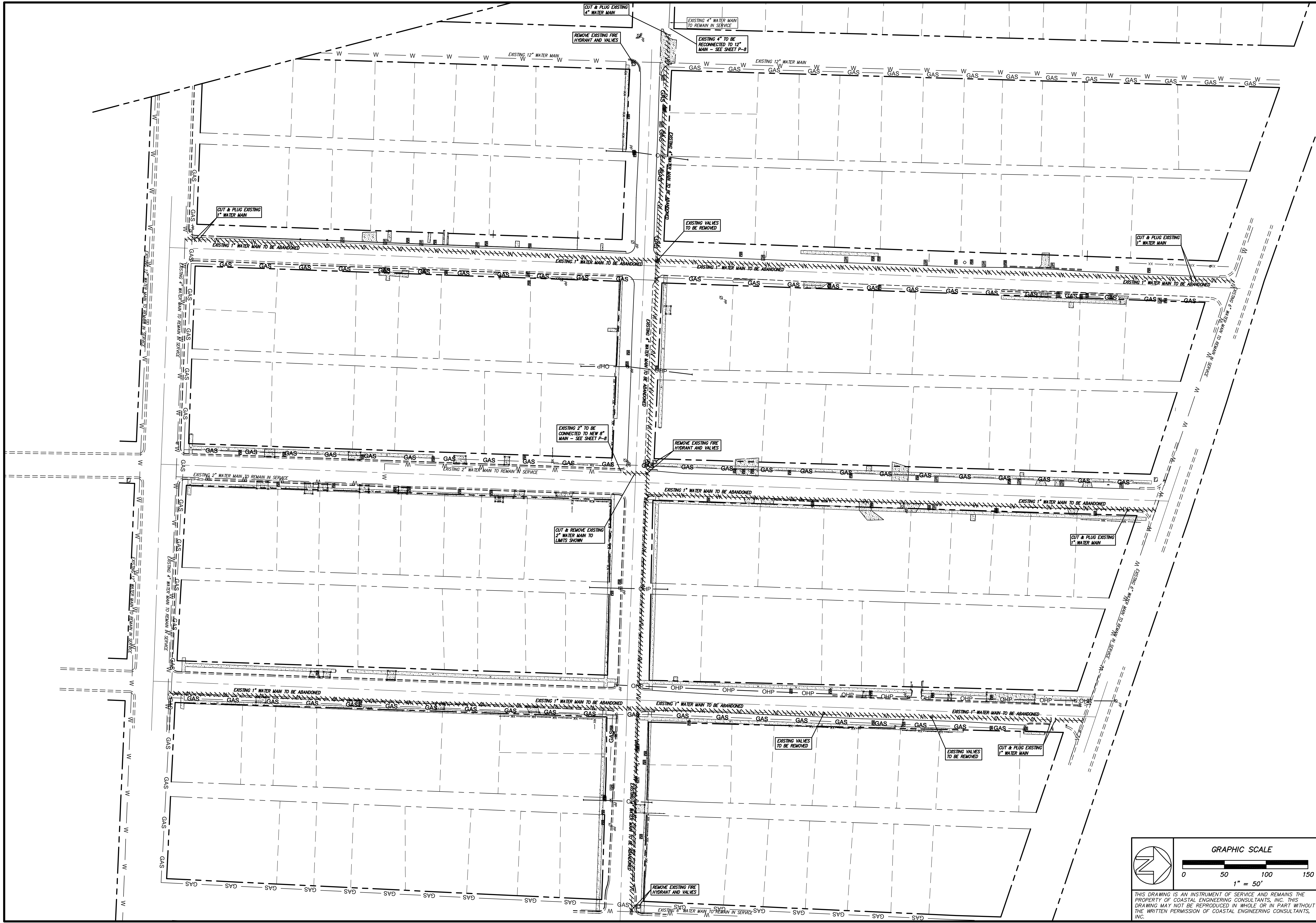
FILE NO.:	2015-003-X5
DATE:	MARCH 27, 2015
SCALE:	AS SHOWN
DRAWN BY/CHECKED BY:	GM/MJR
SHEET NO.:	X-5
OF	7

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
 EXISTING STREET PROFILES - IZLAR AND ROOSEVELT STREETS

USER

REVDATE

MAXX



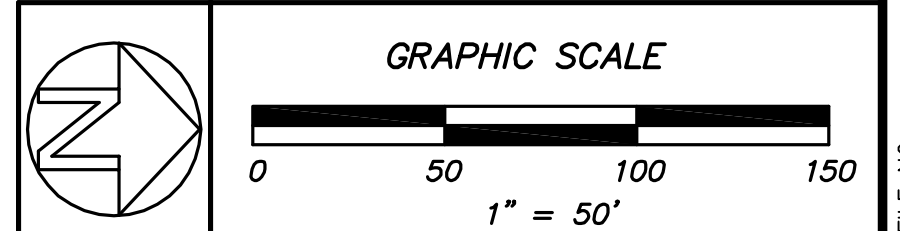
Coastal Engineering Consultants, Inc.

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0874 PHONE
john@cec-ga.com

DATE	DESCRIPTION OF REVISION	REVISION NO.

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA

DEMOLITION PLAN - WATER DISTRIBUTION SYSTEM



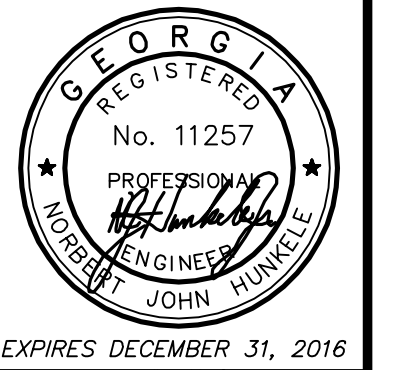
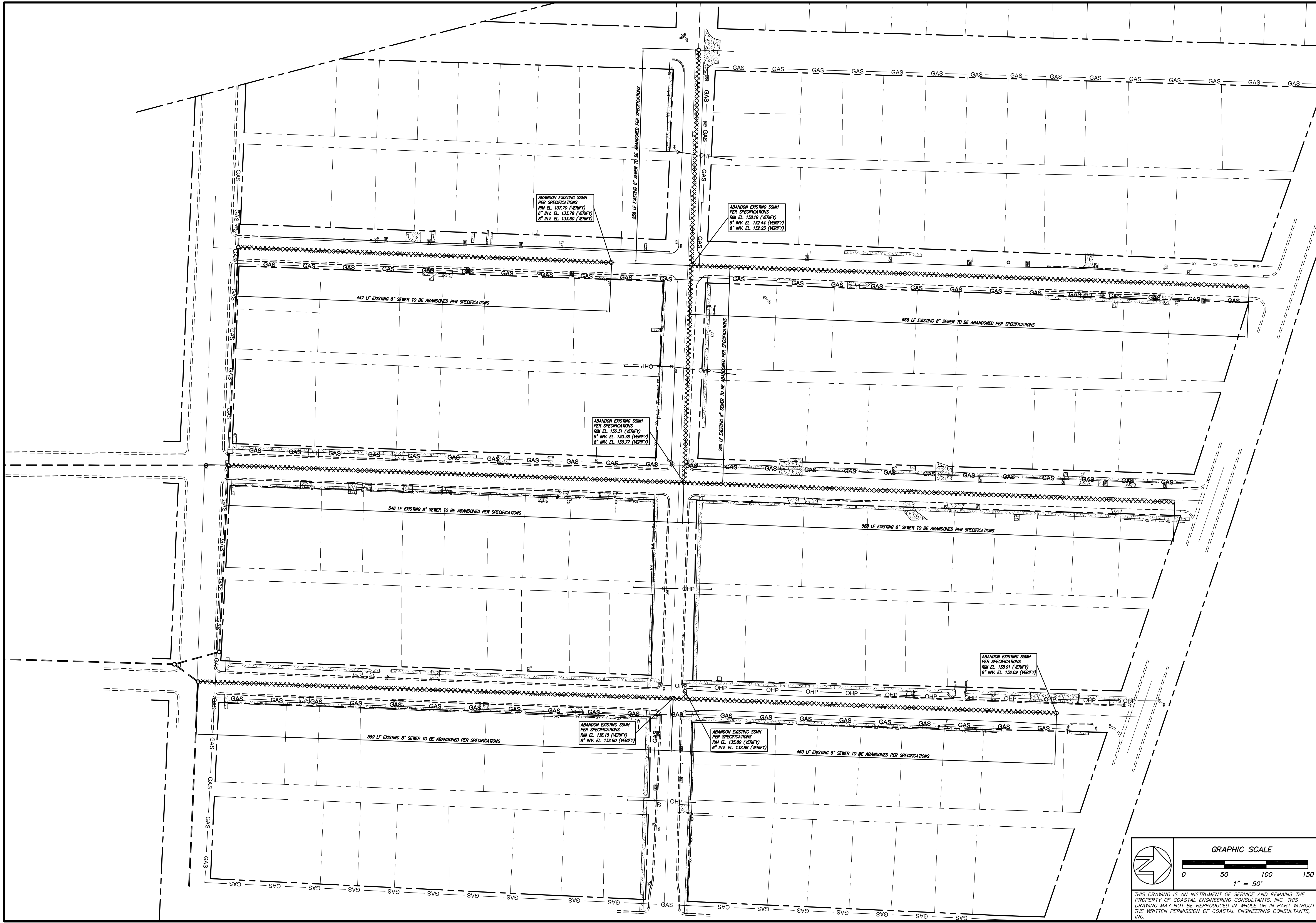
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FILE NO.: 2015-003-18	SHEET NO.: X-6
DATE: MARCH 27, 2015	OF 7
SCALE: AS SHOWN	
DRAWN BY/CHECKED BY: CLM/MLP	

USER

REVDATE

MAXX



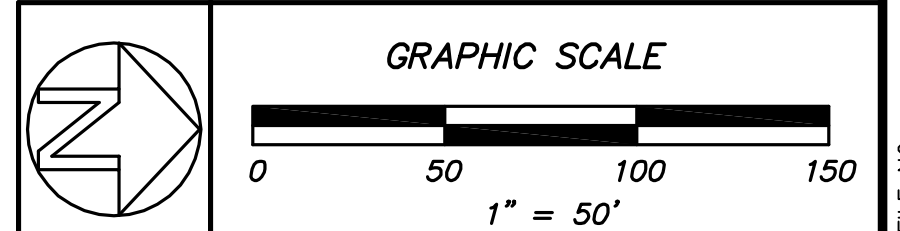
Coastal Engineering Consultants, Inc.

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
john@cec-ga.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
DEMOLITION PLAN - SANITARY SEWER SYSTEM

FILE NO.: 2015-003-X7	SHEET NO.: X-7
DATE: MARCH 27, 2015	OF 7
SCALE: AS SHOWN	
DRAWN BY/CHECKED BY: CJM/MLR	

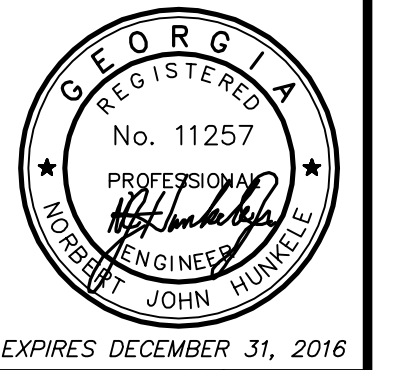
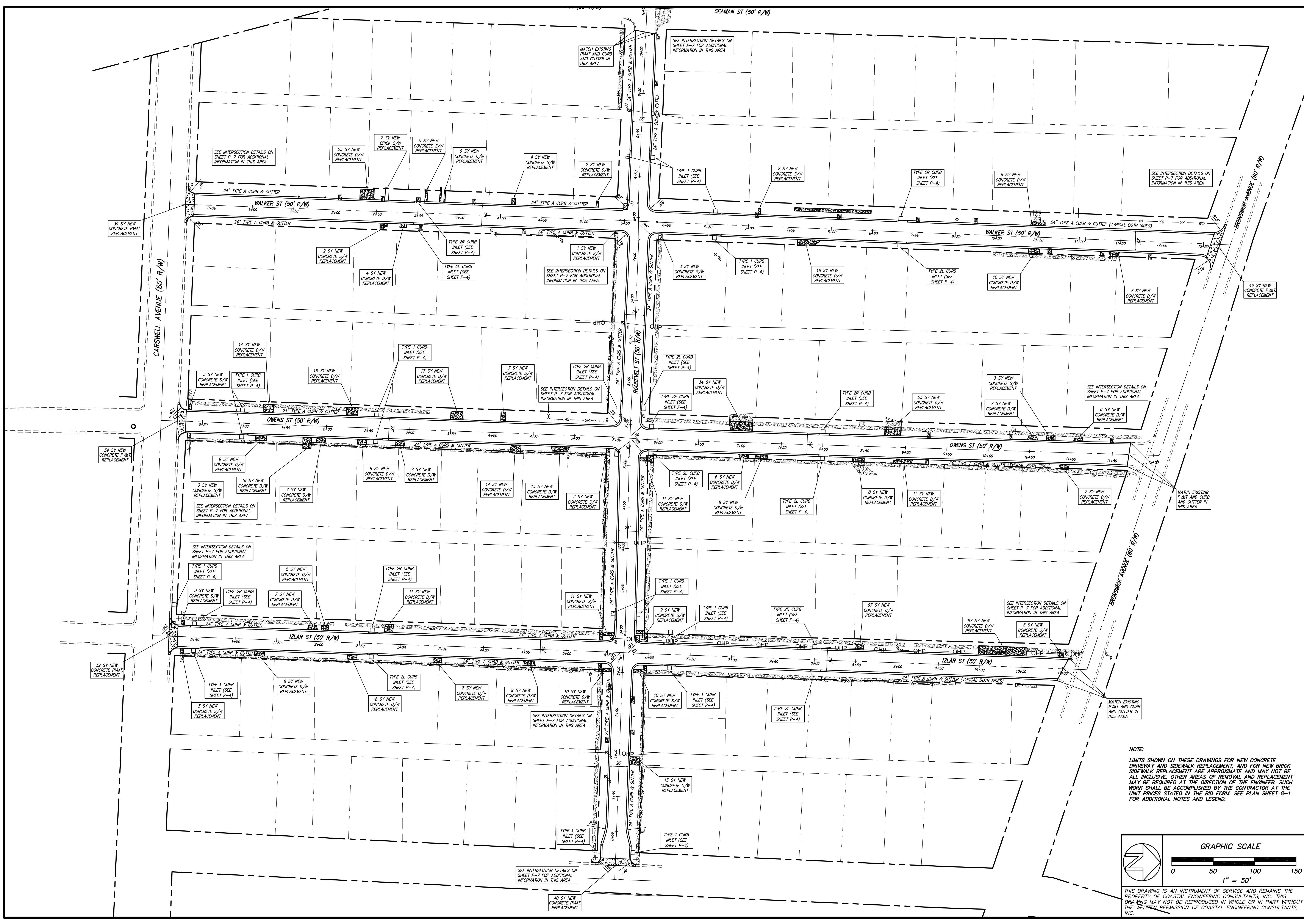


THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNAM

REVDATE

USER

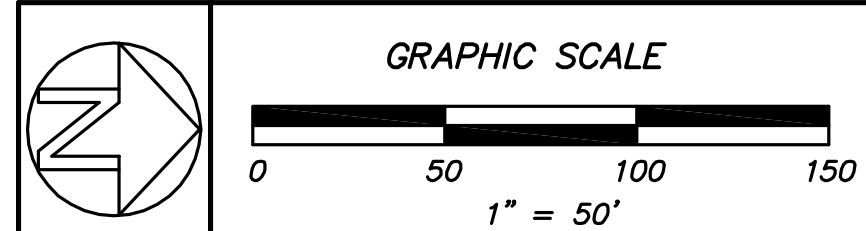


Coastal Engineering Consultants, Inc.
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0274 PHONE
 john@cec-inc.com

NO.	DATE	DESCRIPTION OF REVISION	REVISION NO.

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
PROPOSED STREET PLAN

NOTE:
 LIMITS SHOWN ON THESE DRAWINGS FOR NEW CONCRETE DRIVEWAY AND SIDEWALK REPLACEMENT, AND FOR NEW BRICK SIDEWALK REPLACEMENT ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. OTHER AREAS OF REMOVAL AND REPLACEMENT MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER. SUCH WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT THE UNIT PRICES STATED IN THE BID FORM. SEE PLAN SHEET G-1 FOR ADDITIONAL NOTES AND LEGEND.



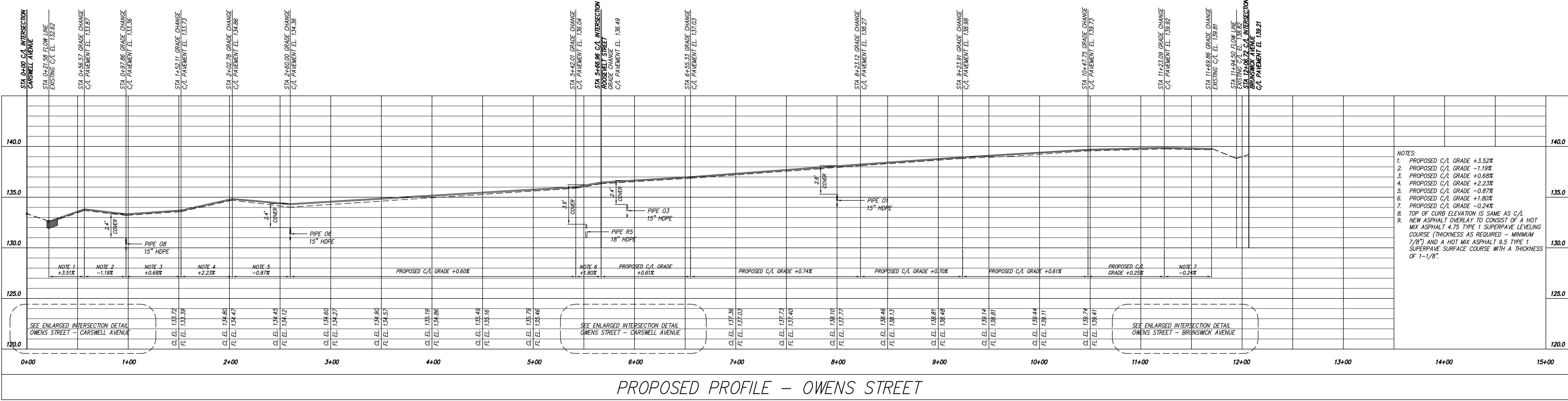
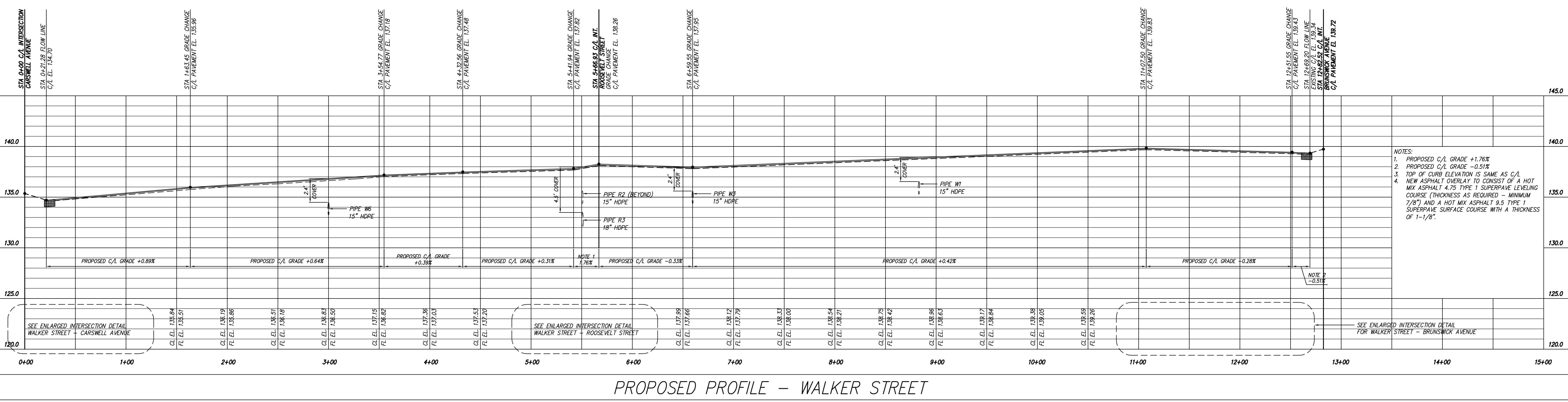
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FILE NO.: 2015-003-F1
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/MLP
 SHEET NO.: **P-1**

FNAM

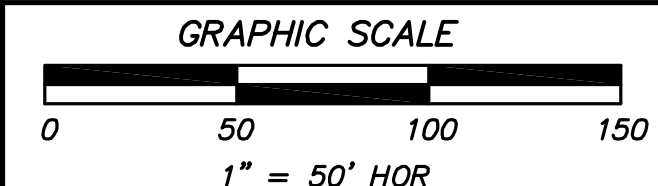
REVDATE

USER

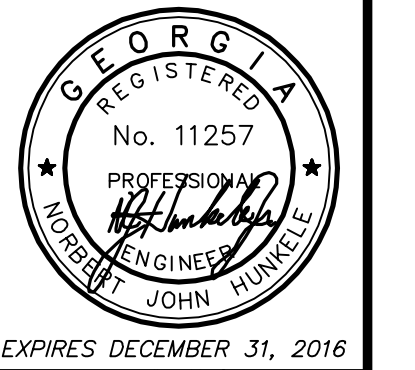


CALL BEFORE YOU DIG!

At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER
No. 11257
JOHN MUNCIE

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0874 PHONE
john@cec-ga.com

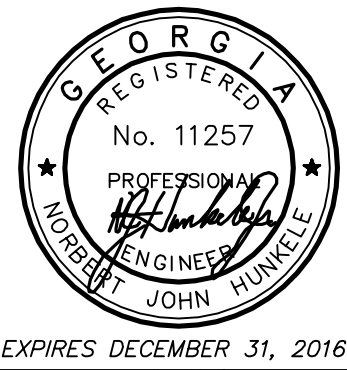
REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA

PROPOSED STREET PROFILES - WALKER & OWENS STREETS

FILE NO.: 2015-00-P2
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/MJR

SHEET NO.: **P-2**



Coastal Engineering Consultants, Inc.

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0979 PHONE
john@cec-ga.com

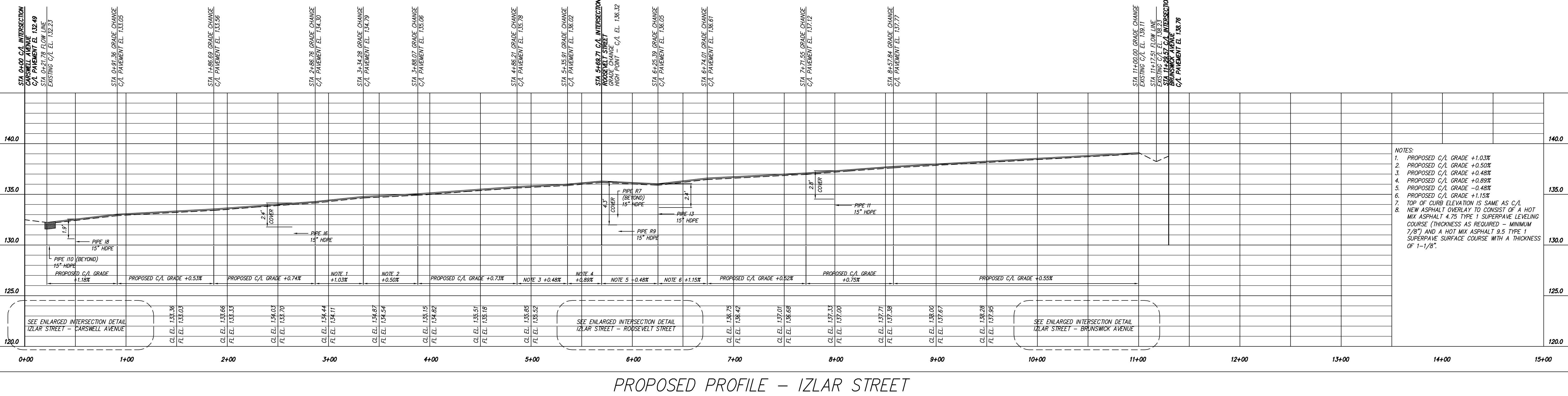
NO.	DATE	DESCRIPTION OF REVISION

REVISION NO.

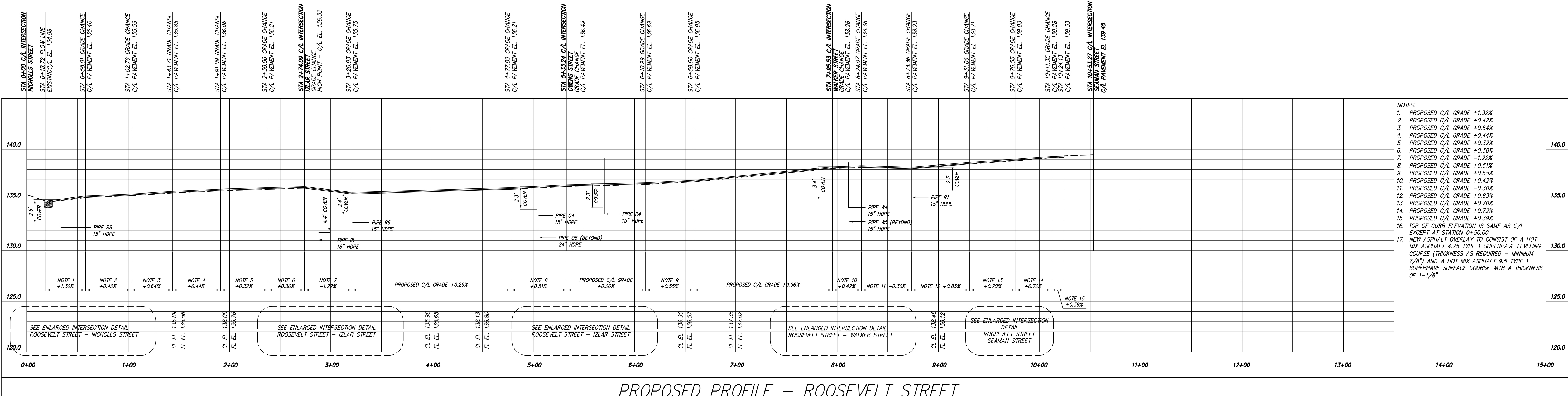
2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA

FILE NO.: 2015-00-P3
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/MJR

SHEET NO.: P-3

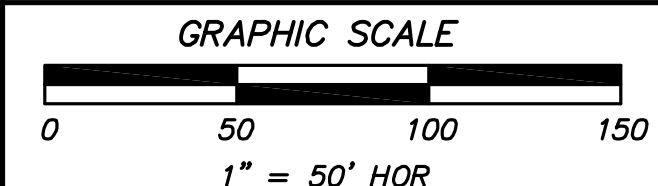


PROPOSED PROFILE - IZLAR STREET



PROPOSED PROFILE - ROOSEVELT STREET

CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.

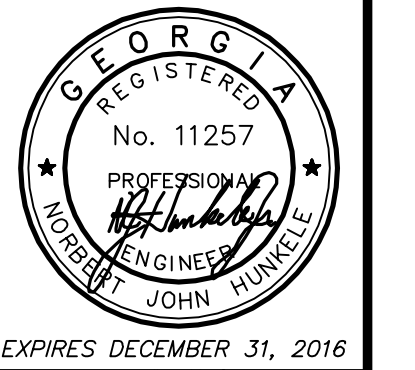


THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FILENAME

REVDATE

USER



Coastal Engineering Consultants, Inc.

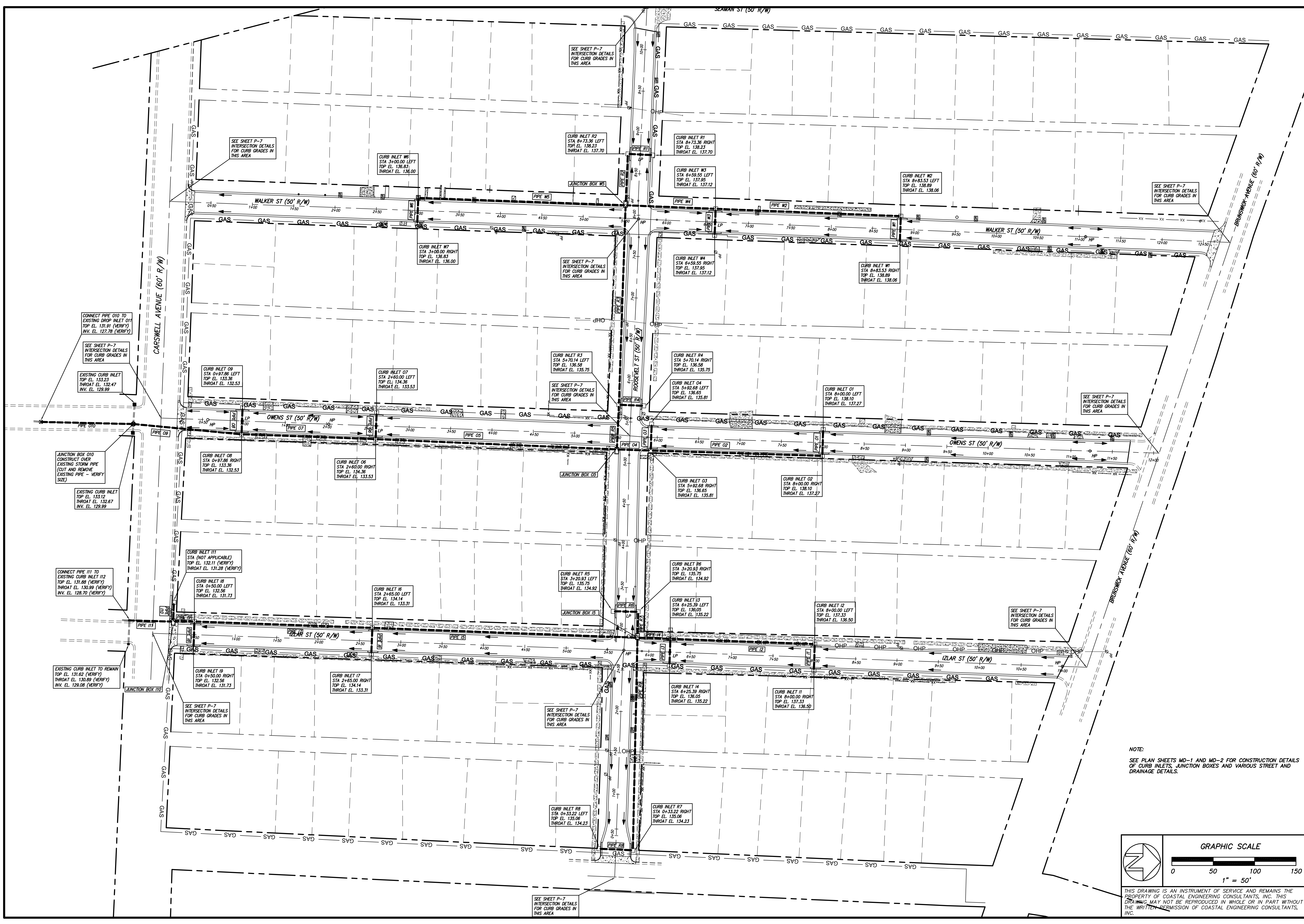
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0274 PHONE
john@cec-ga.com

DATE	
DESCRIPTION OF REVISION	
REVISION NO.	

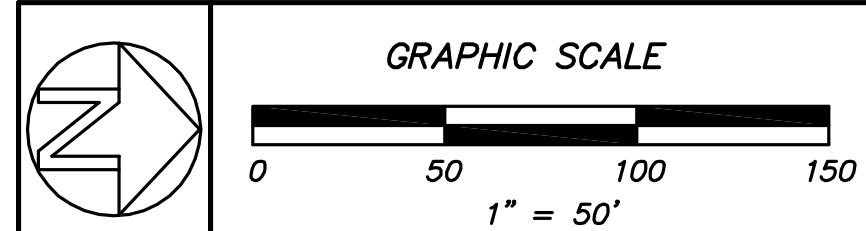
2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
PROPOSED DRAINAGE PLAN

FILE NO.: 2015-003-P4
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/MLR

SHEET NO.: P-4



NOTE:
SEE PLAN SHEETS MD-1 AND MD-2 FOR CONSTRUCTION DETAILS OF CURB INLETS, JUNCTION BOXES AND VARIOUS STREET AND DRAINAGE DETAILS.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNNAME

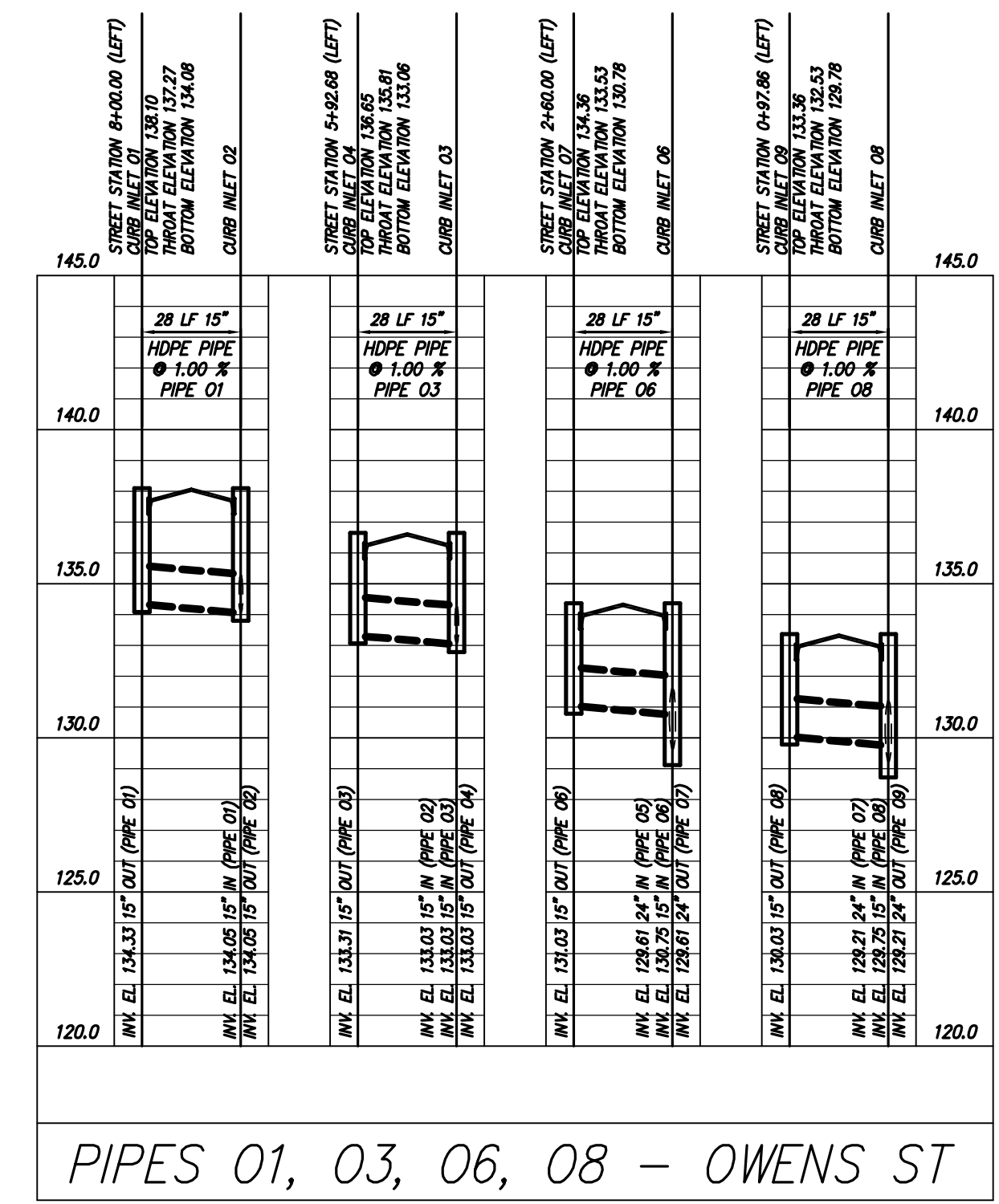
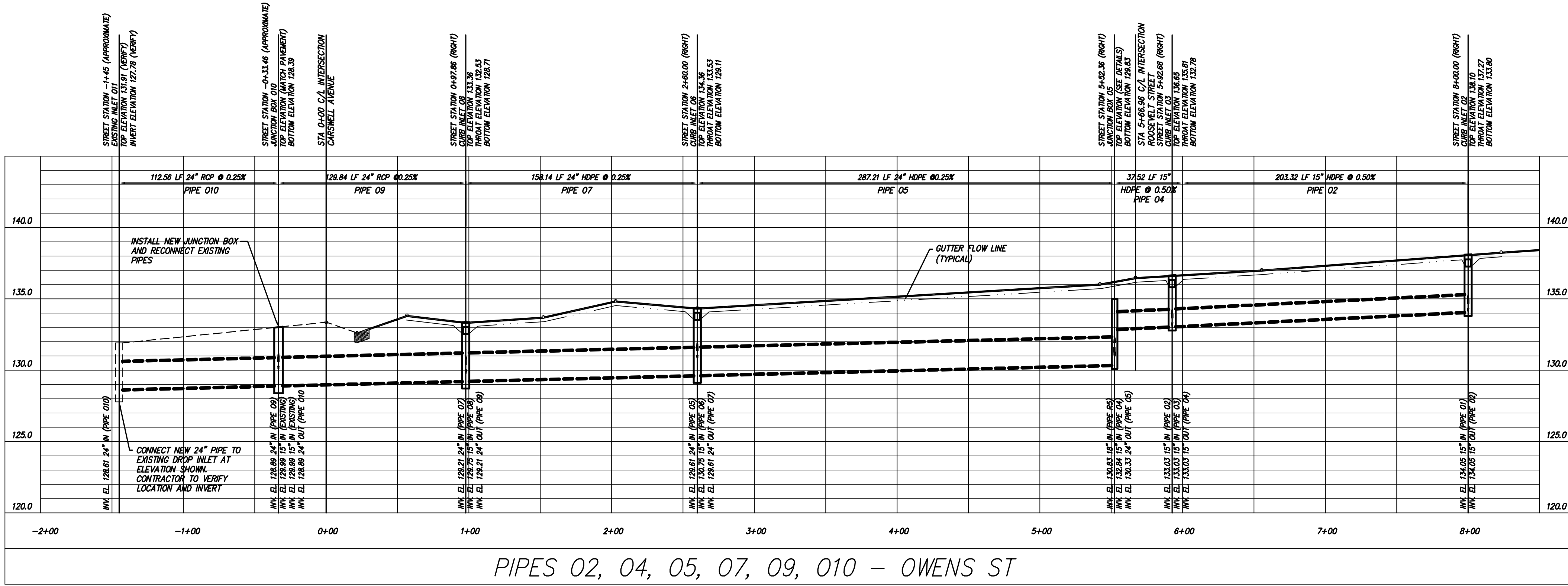
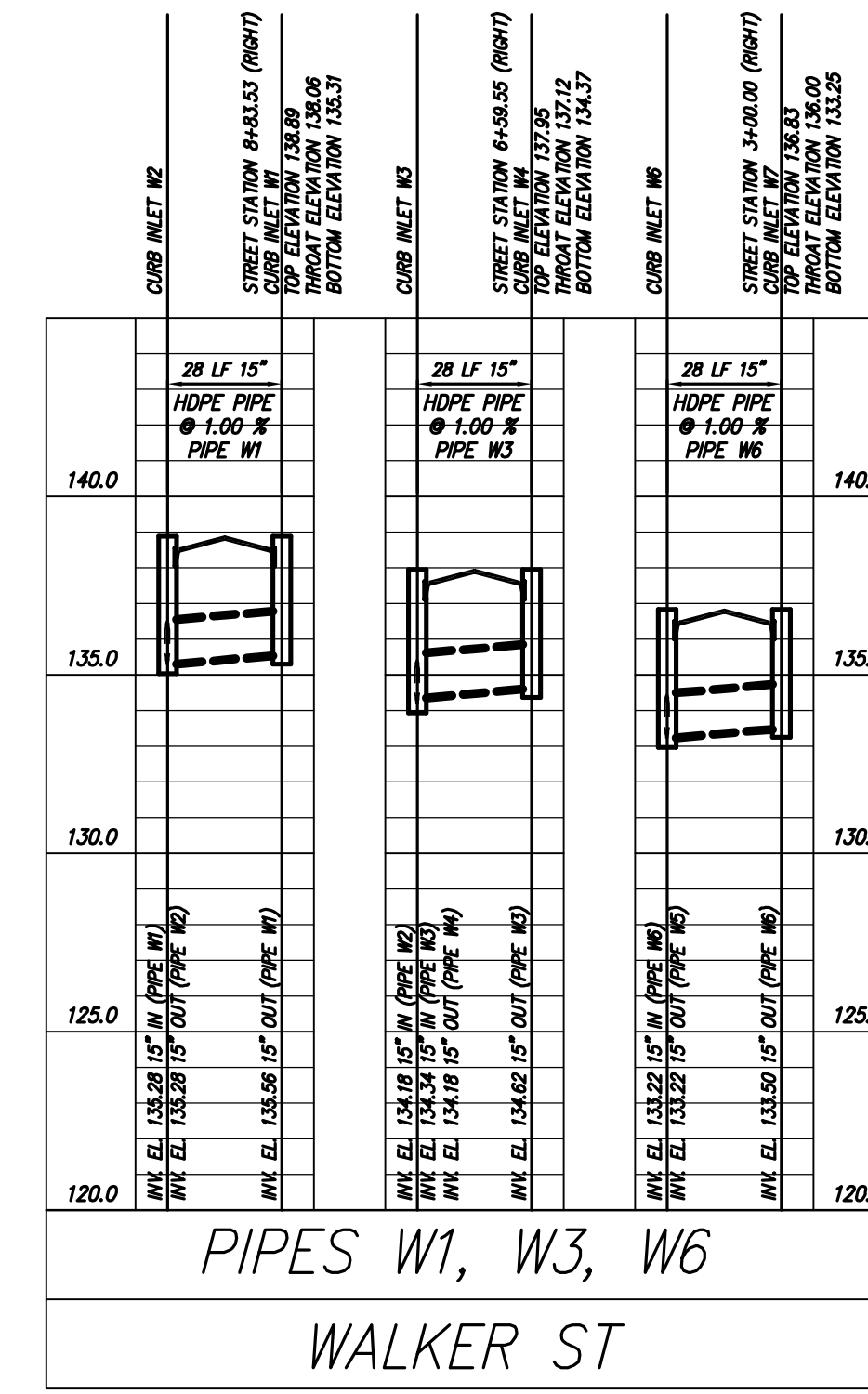
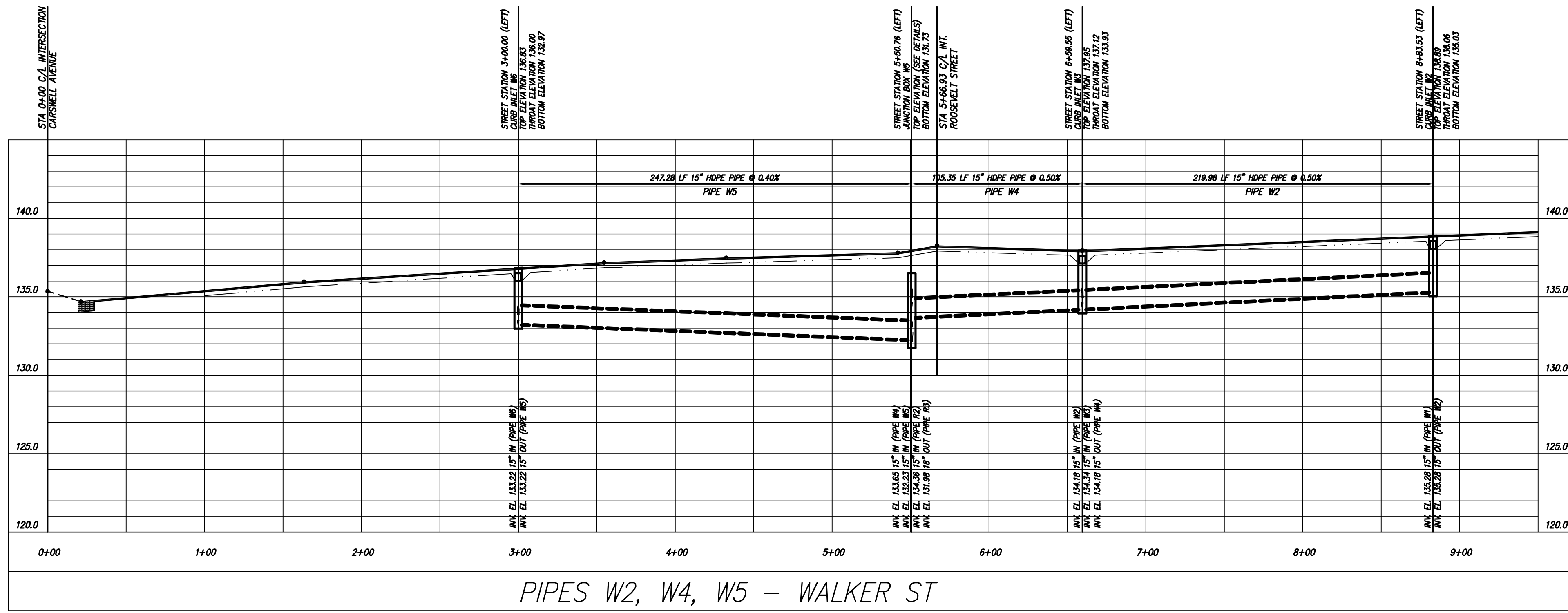
REVDATE

USER

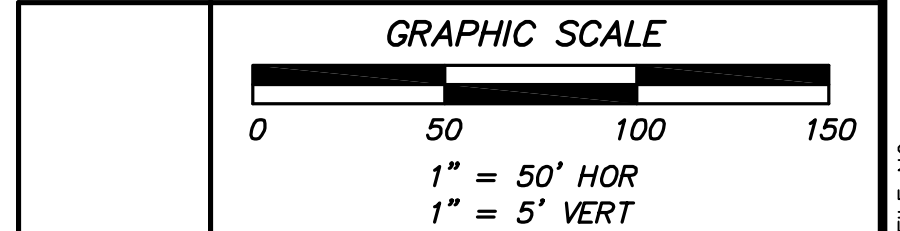
FNAM

REVDATE

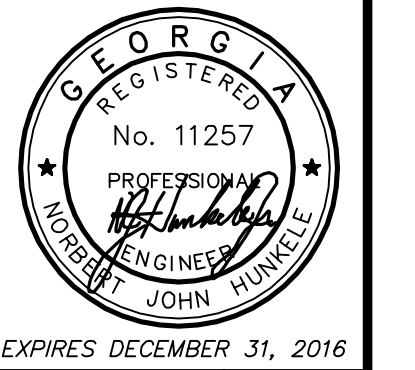
USER



CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.
REGISTERED PROFESSIONAL ENGINEER
No. 11257
JOHN MUNCIE
EXPIRES DECEMBER 31, 2016

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
John@cec-ge.com

NO.	DATE	DESCRIPTION OF REVISION	REVISION NO.

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
STORM PIPE PROFILES – WALKER & OWENS STREETS

FILE NO.: 2015-00-PS
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/MJR

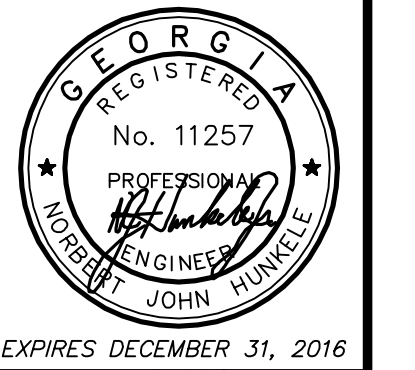
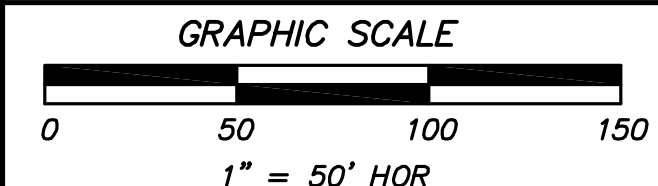
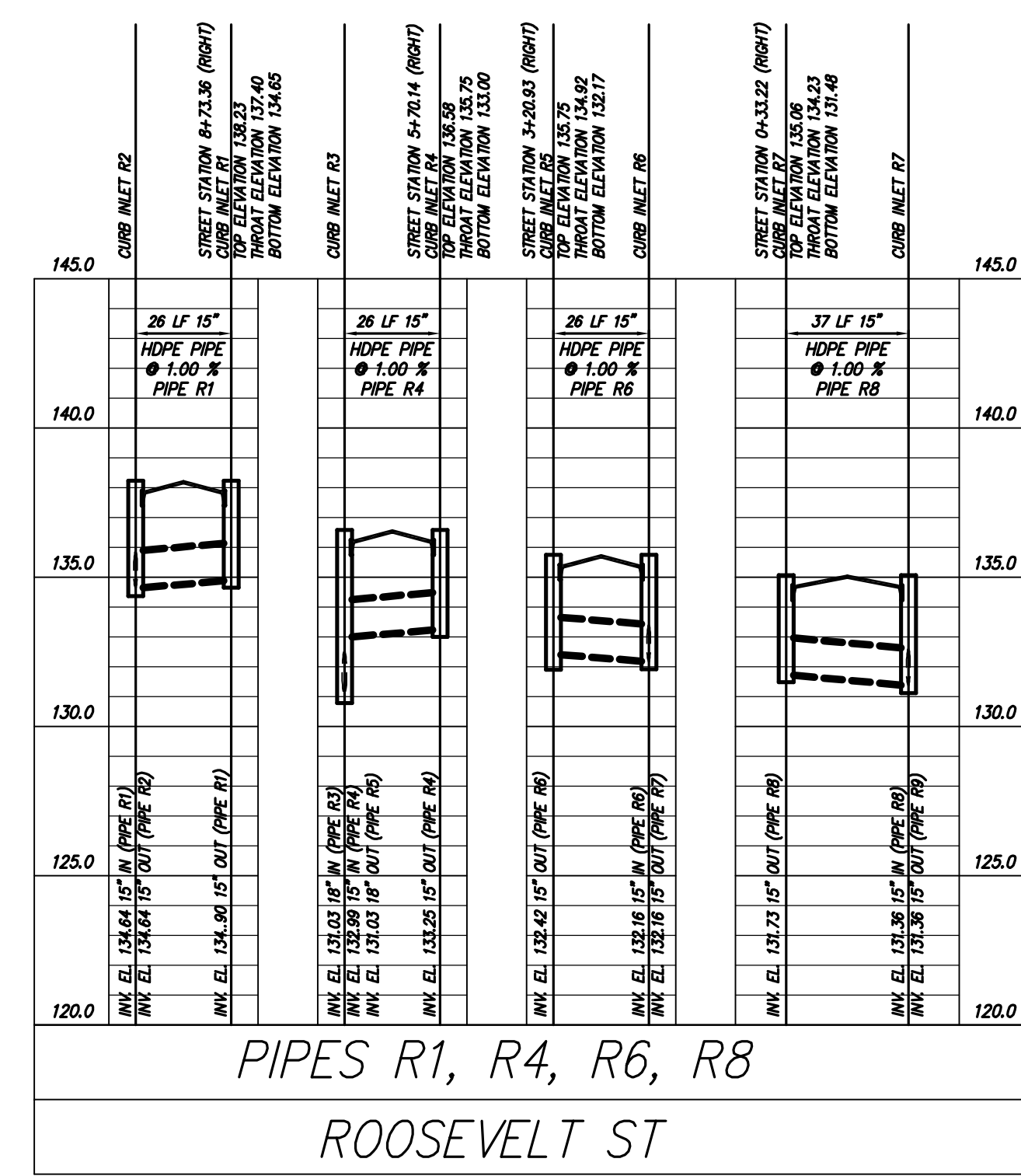
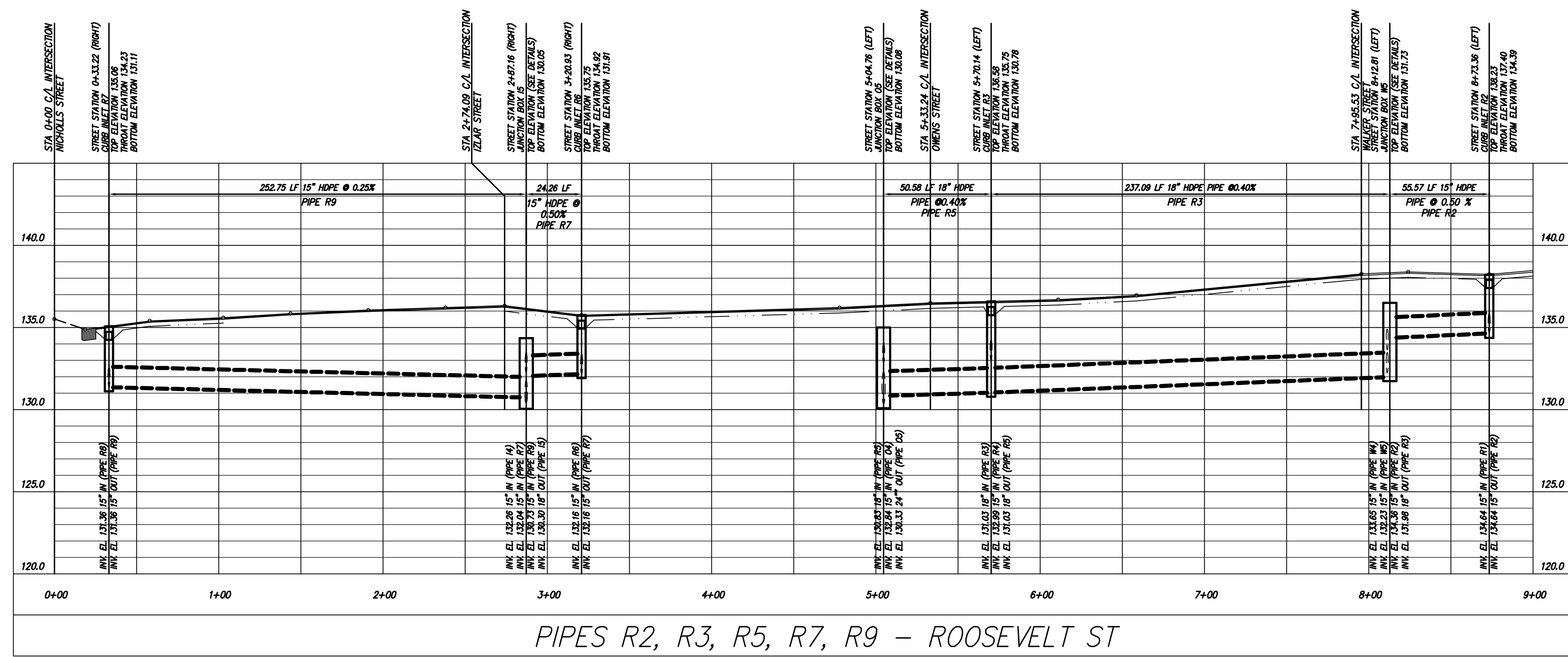
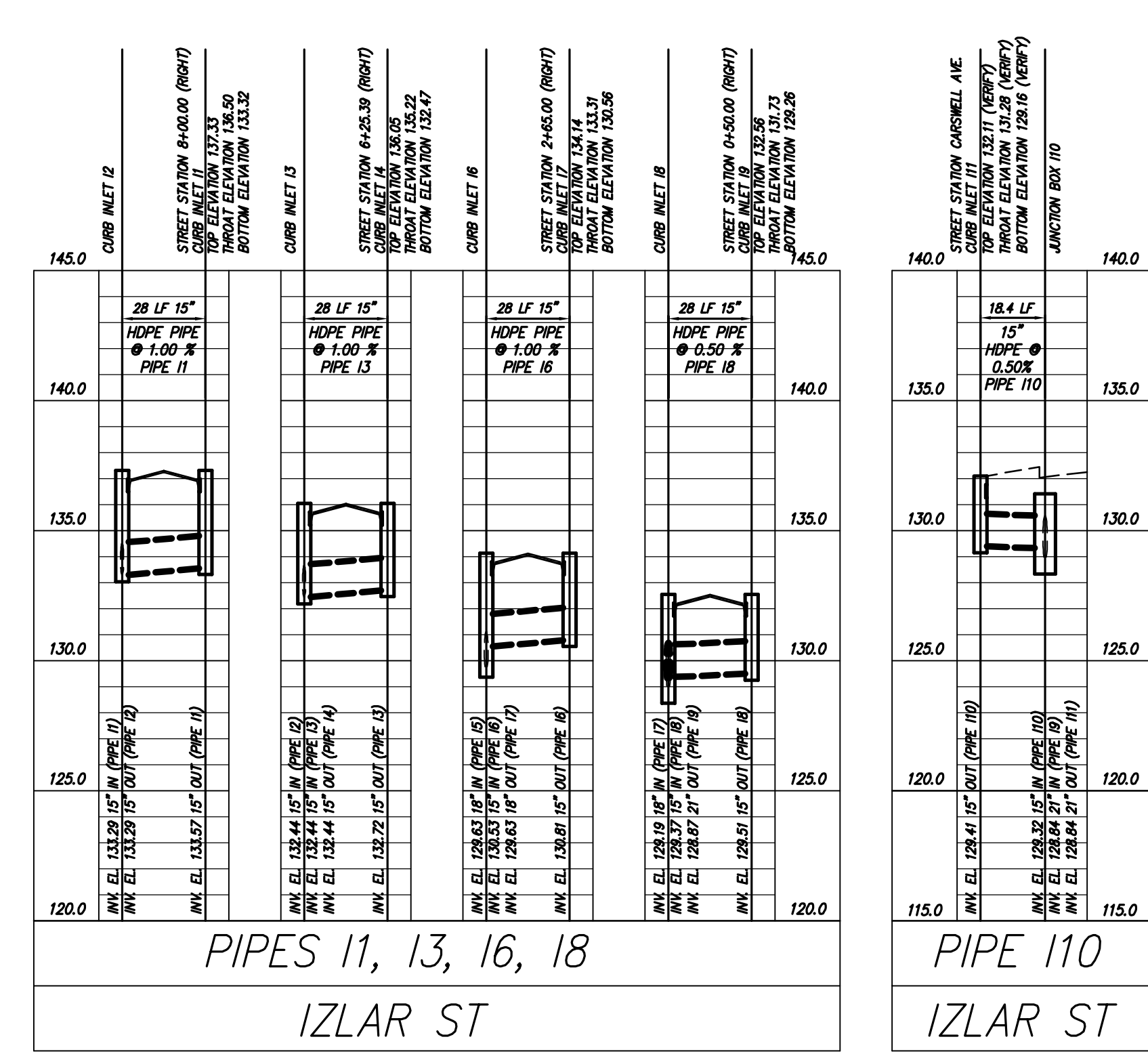
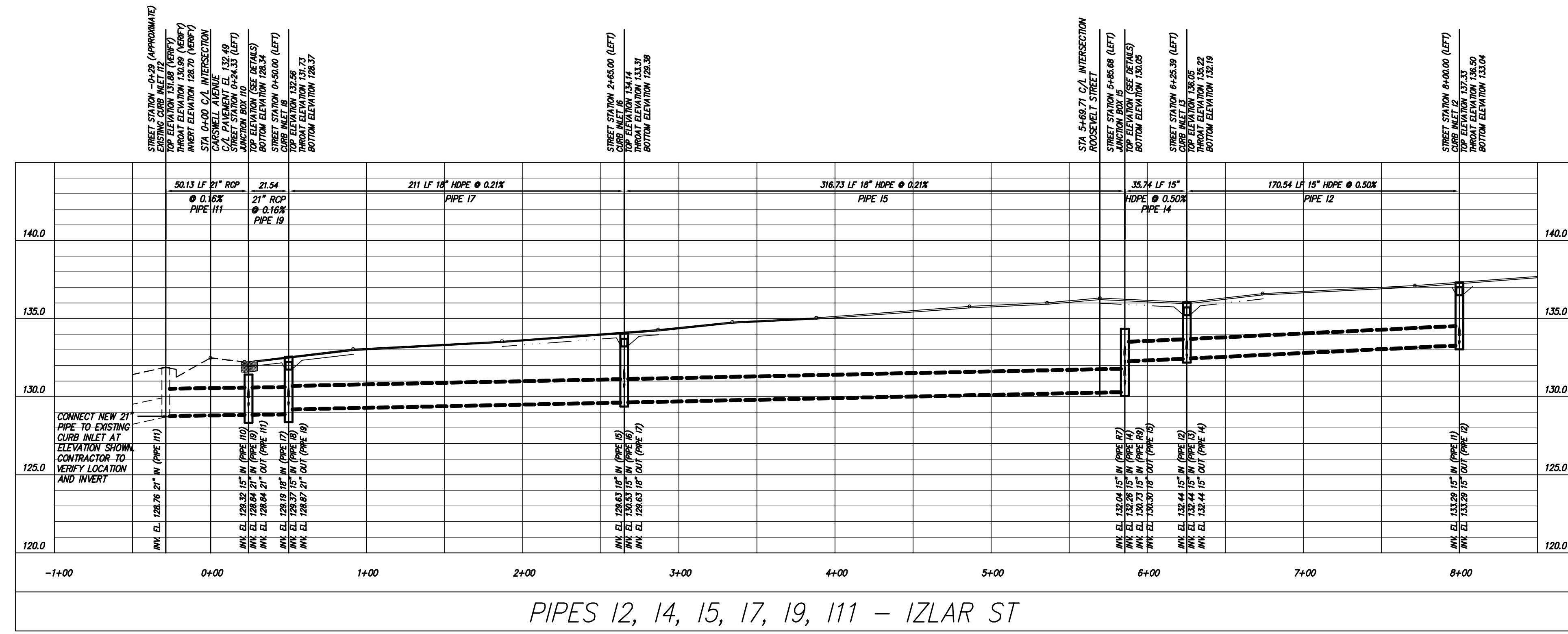
SHEET NO.: **P-5**

FNAM

REVDATE

USER

CALL BEFORE YOU DIG!
 At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



Coastal Engineering Consultants, Inc.
 PROFESSIONAL ENGINEER
 JOHN H. HESTER
 No. 11257
 STATE OF GEORGIA
 EXPIRES DECEMBER 31, 2016

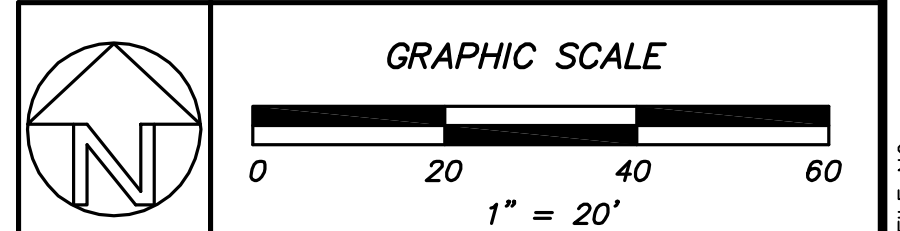
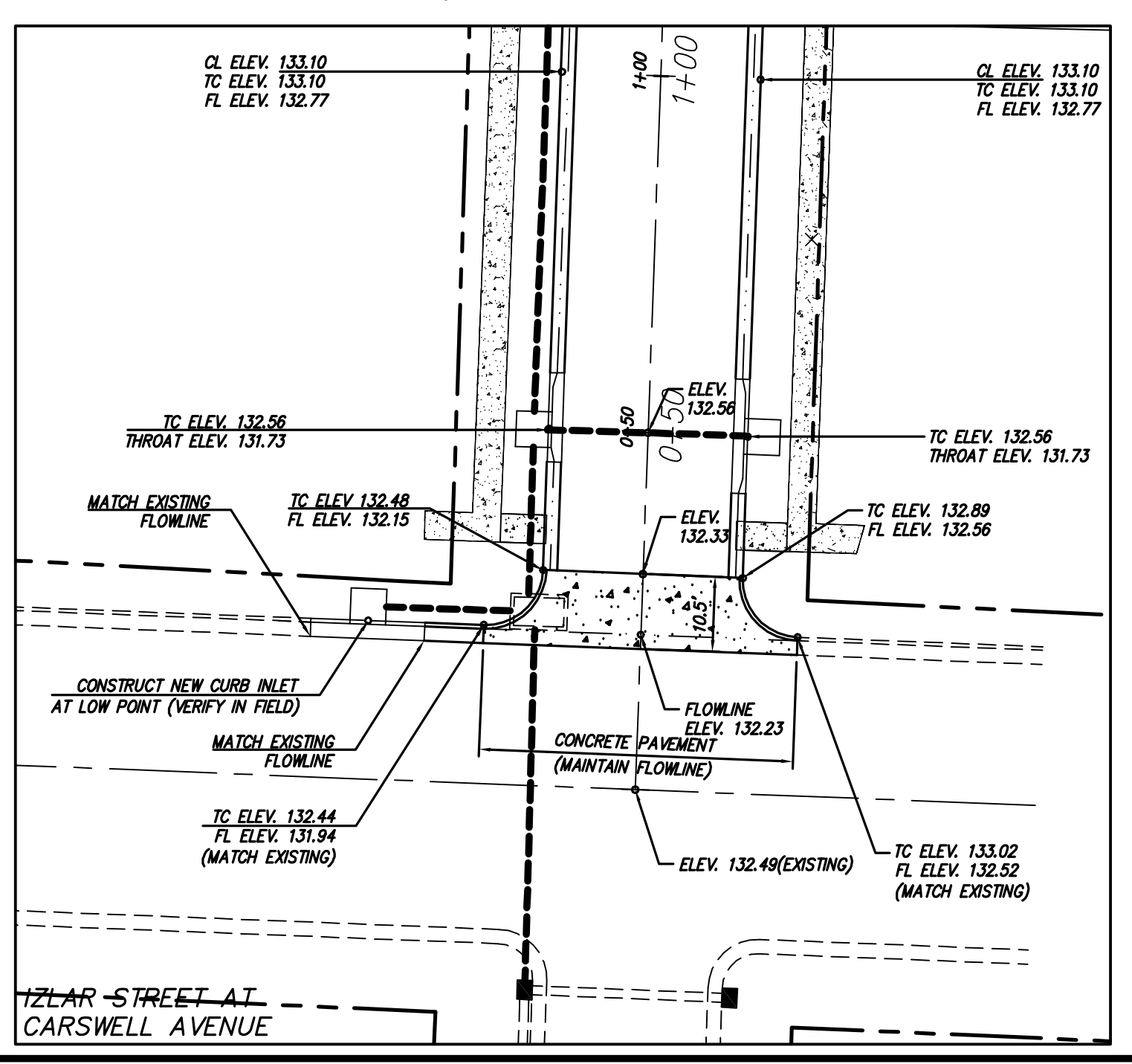
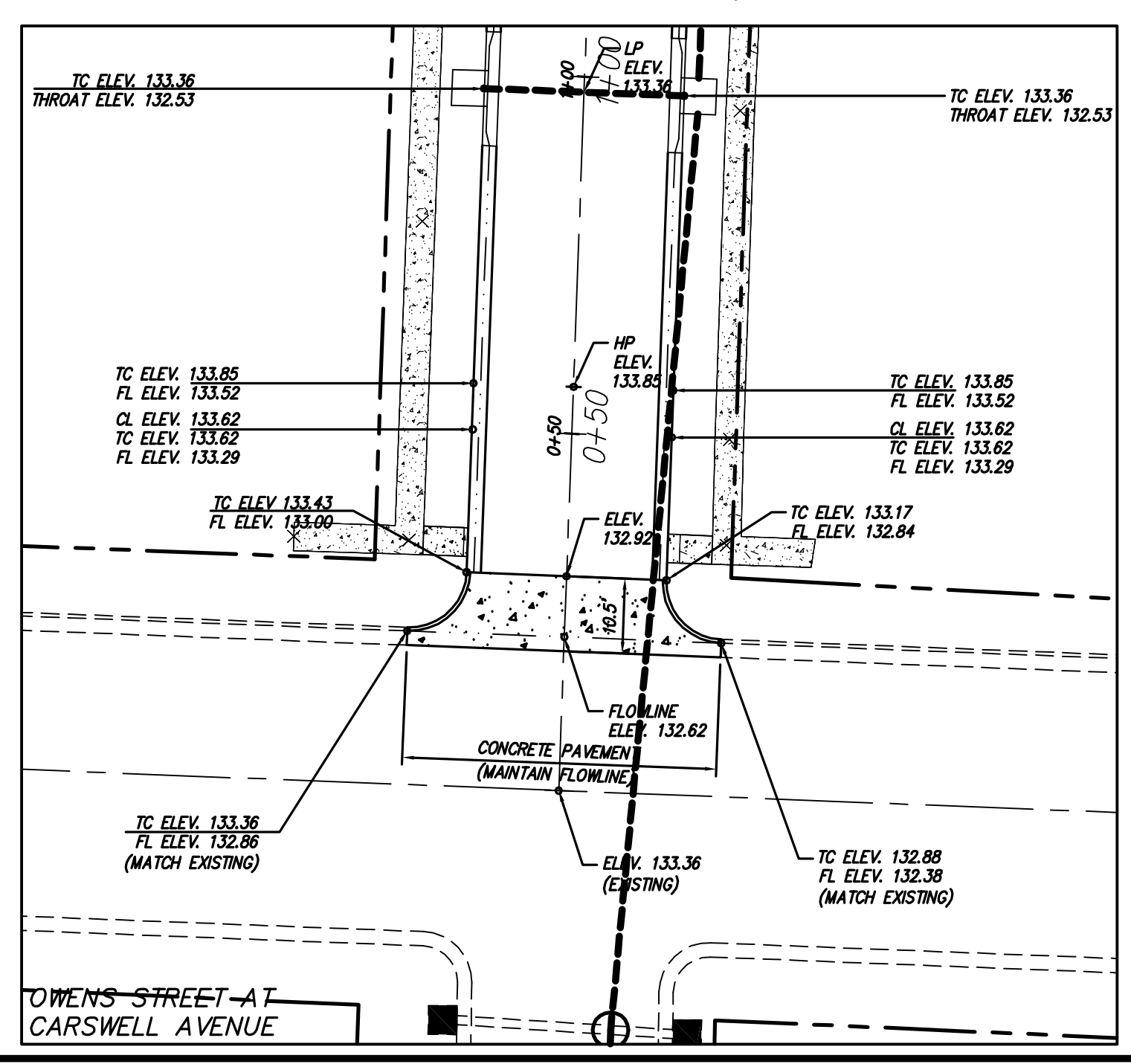
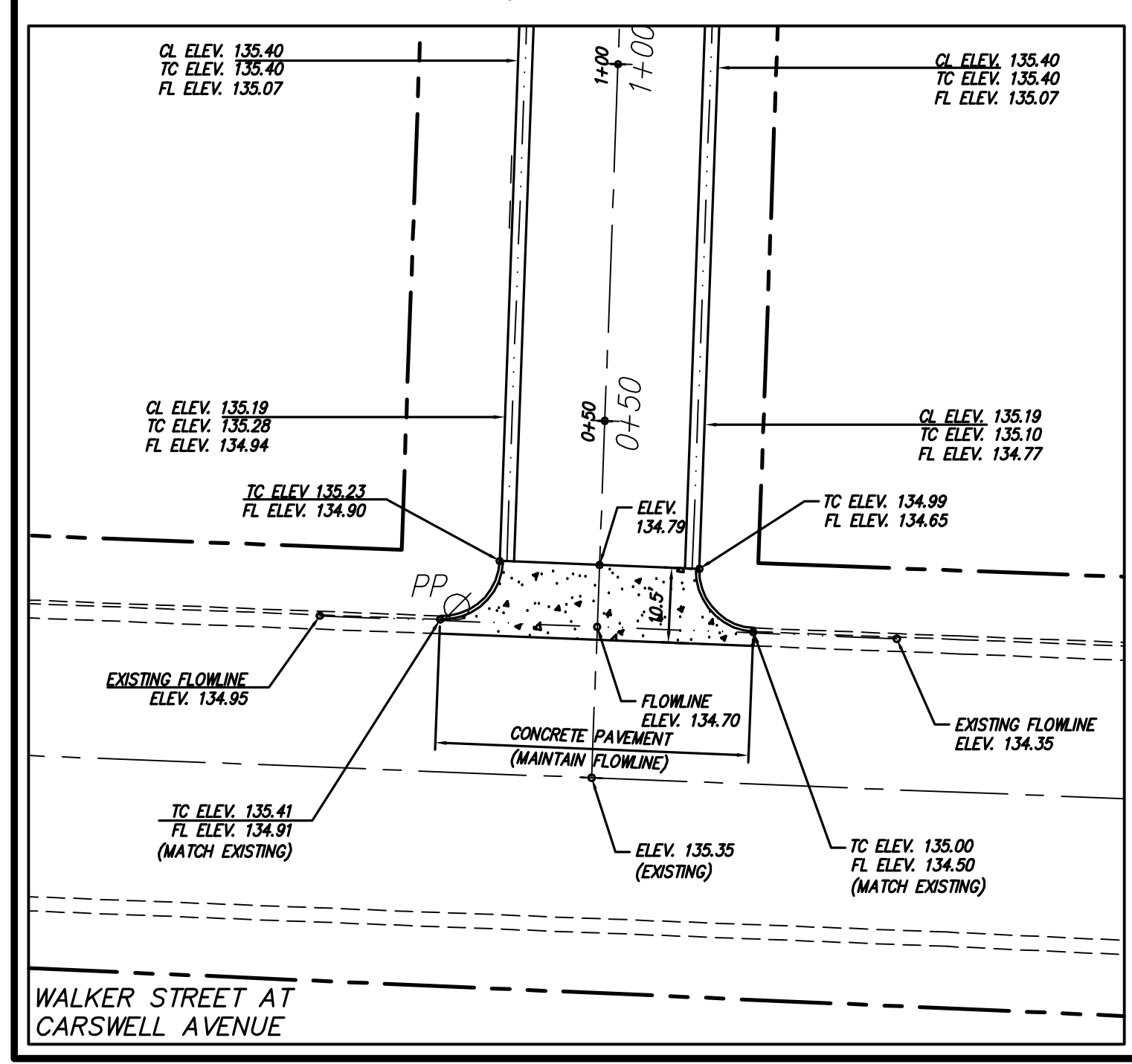
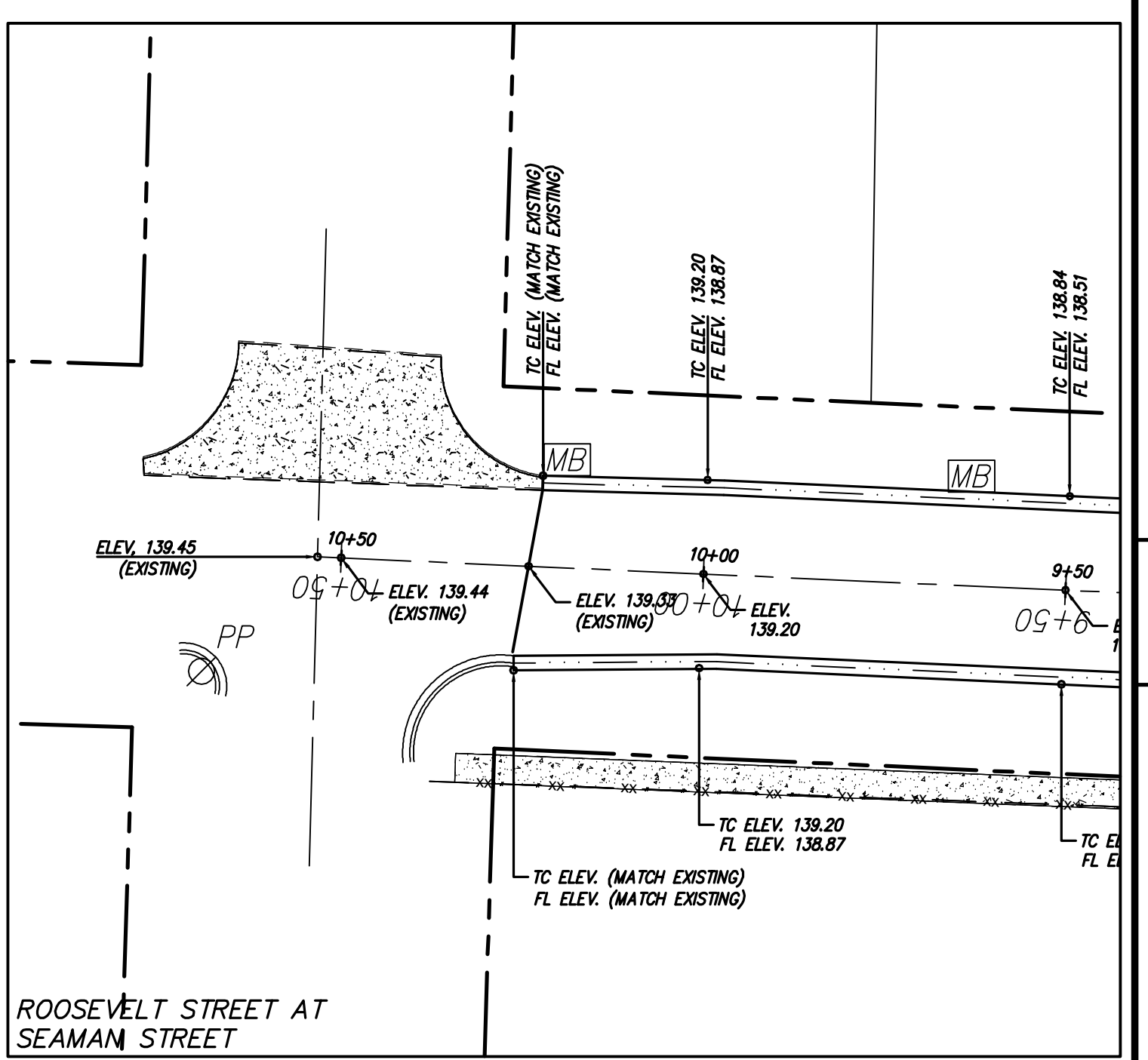
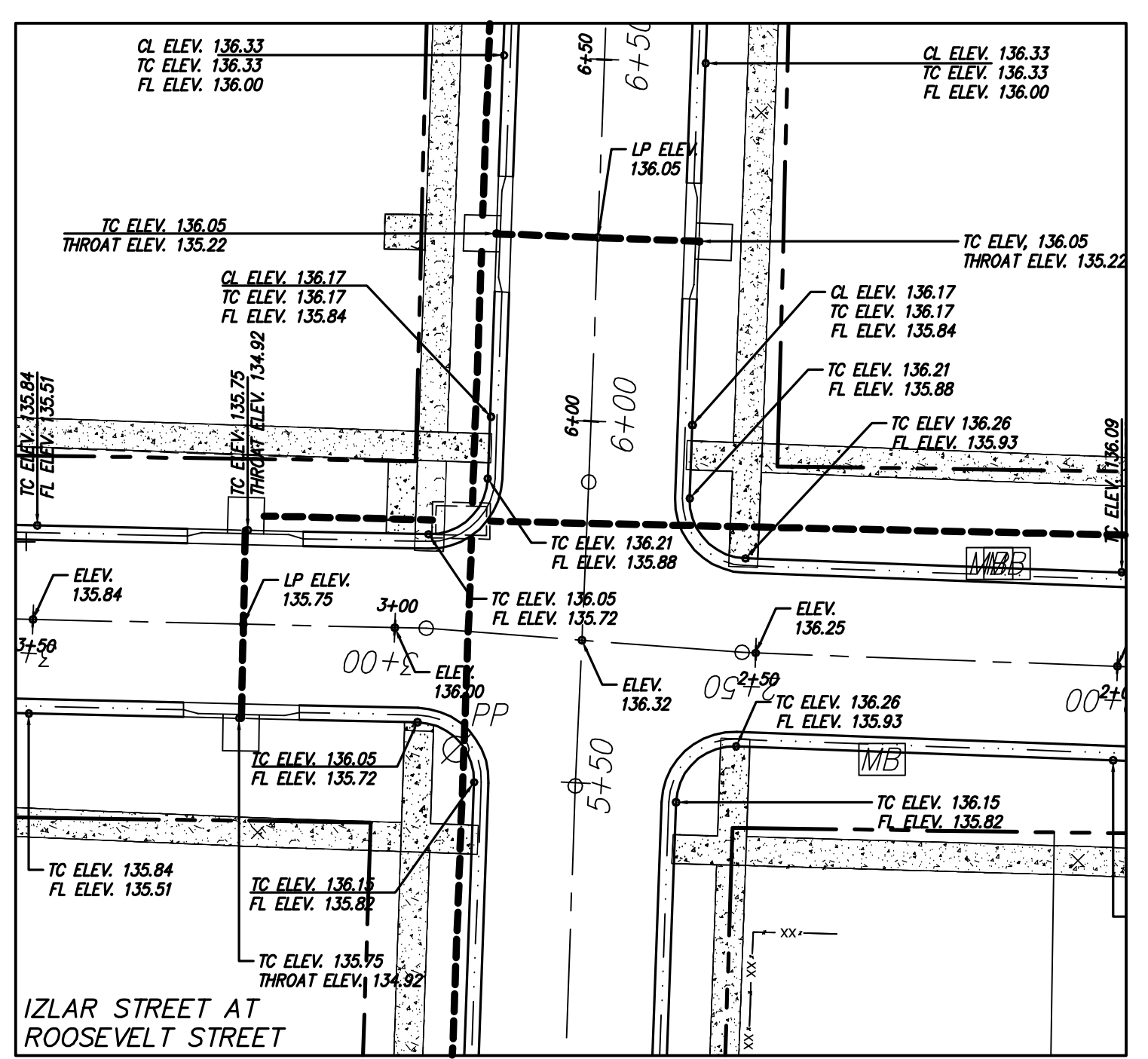
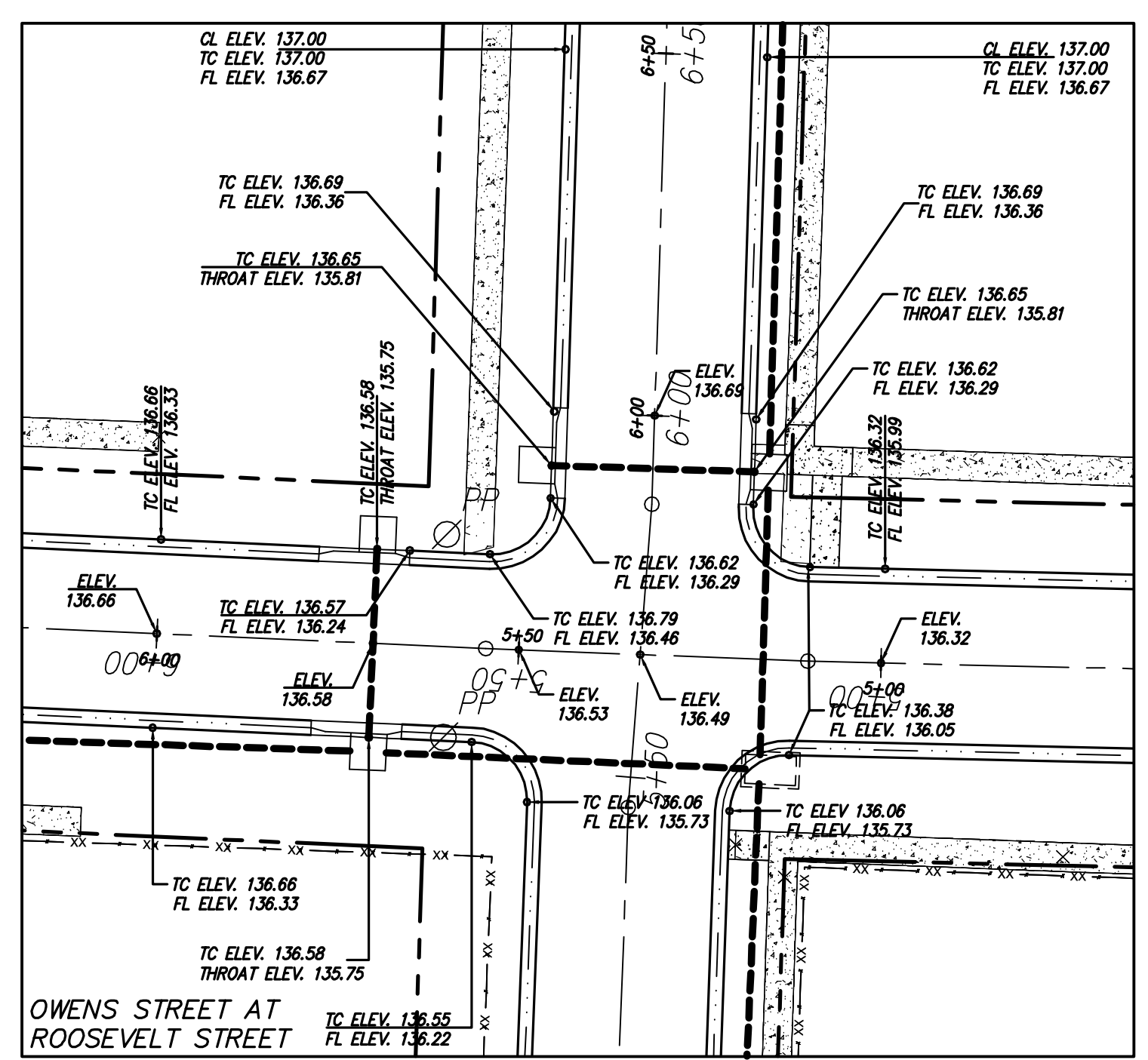
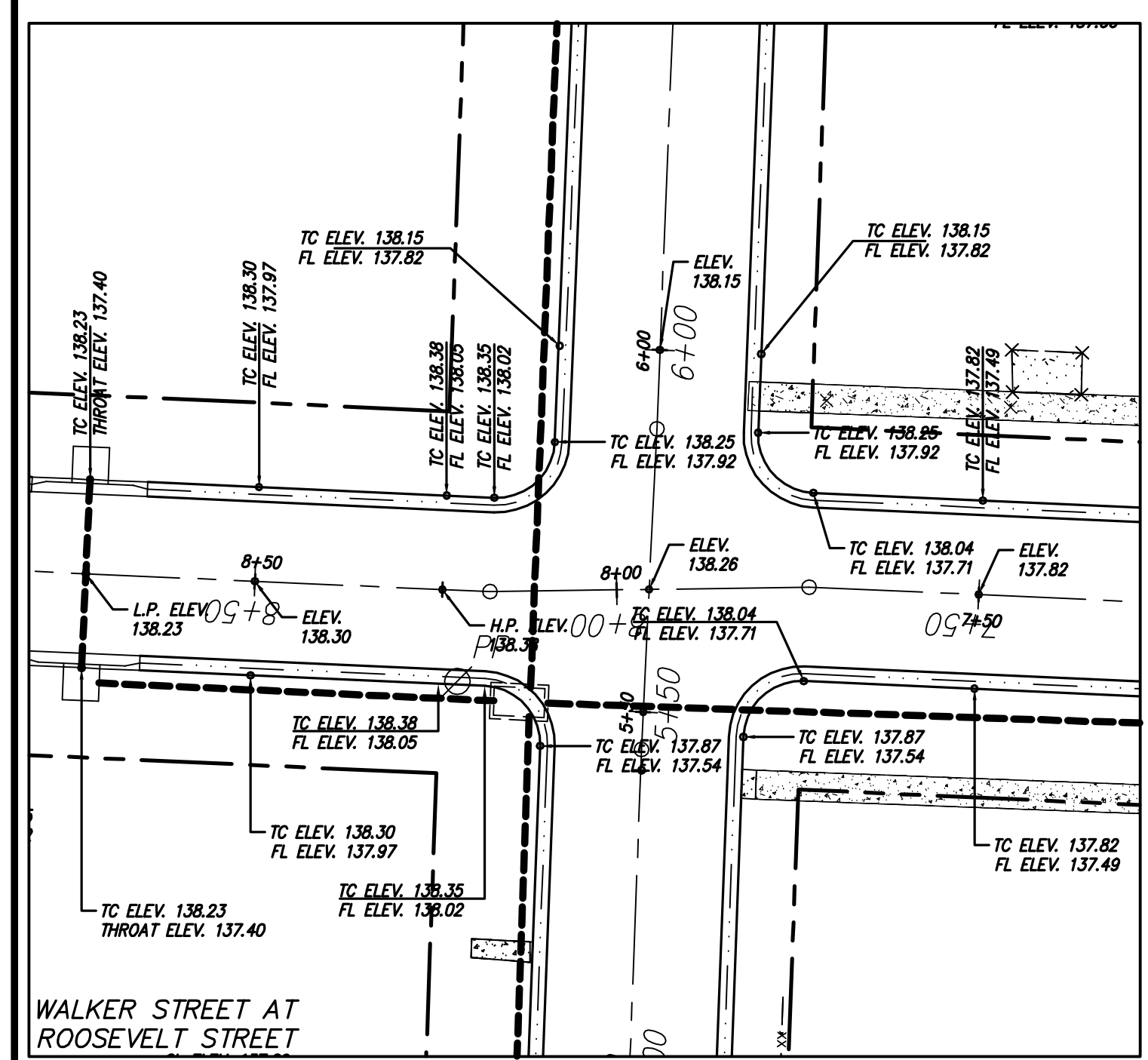
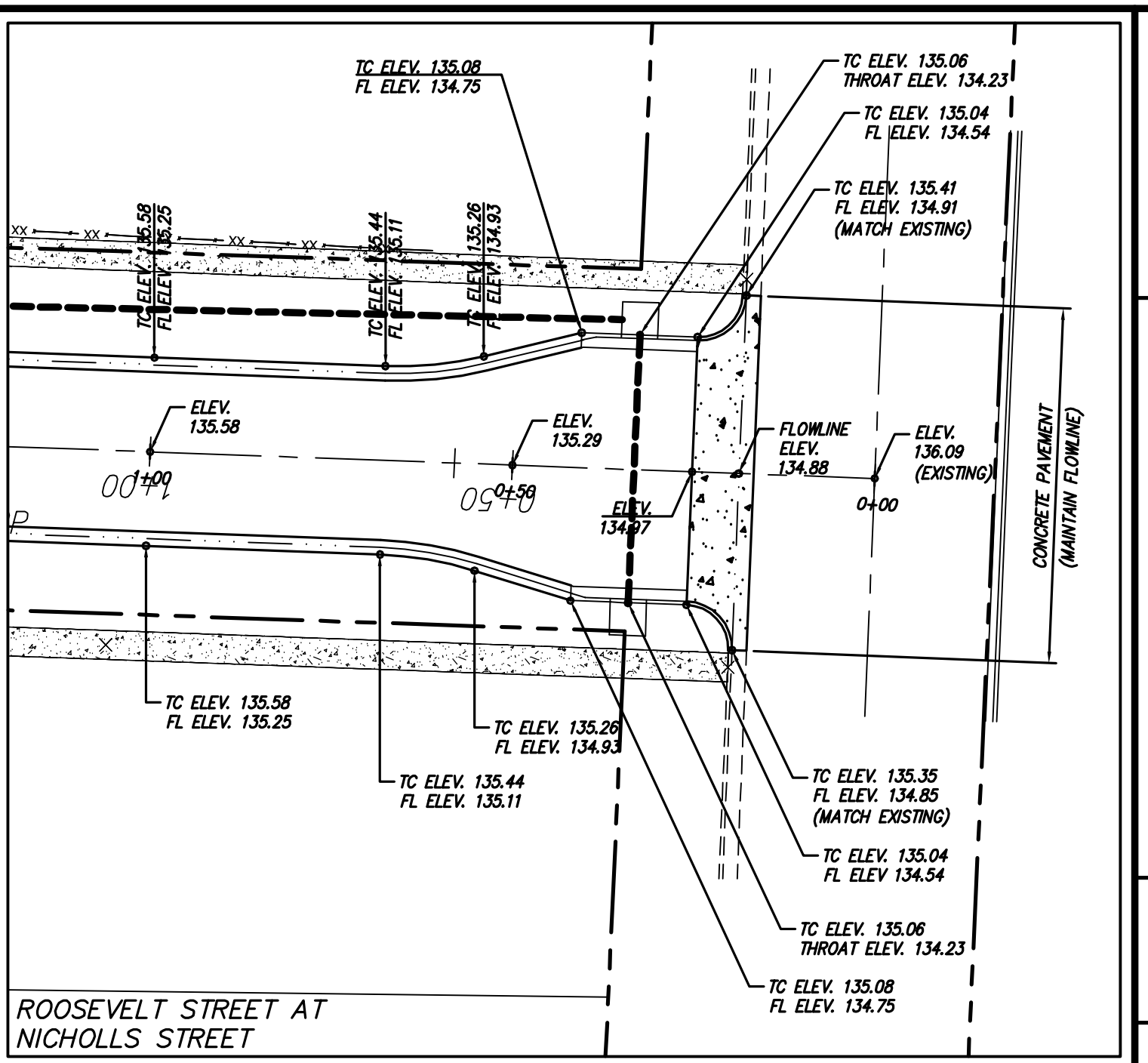
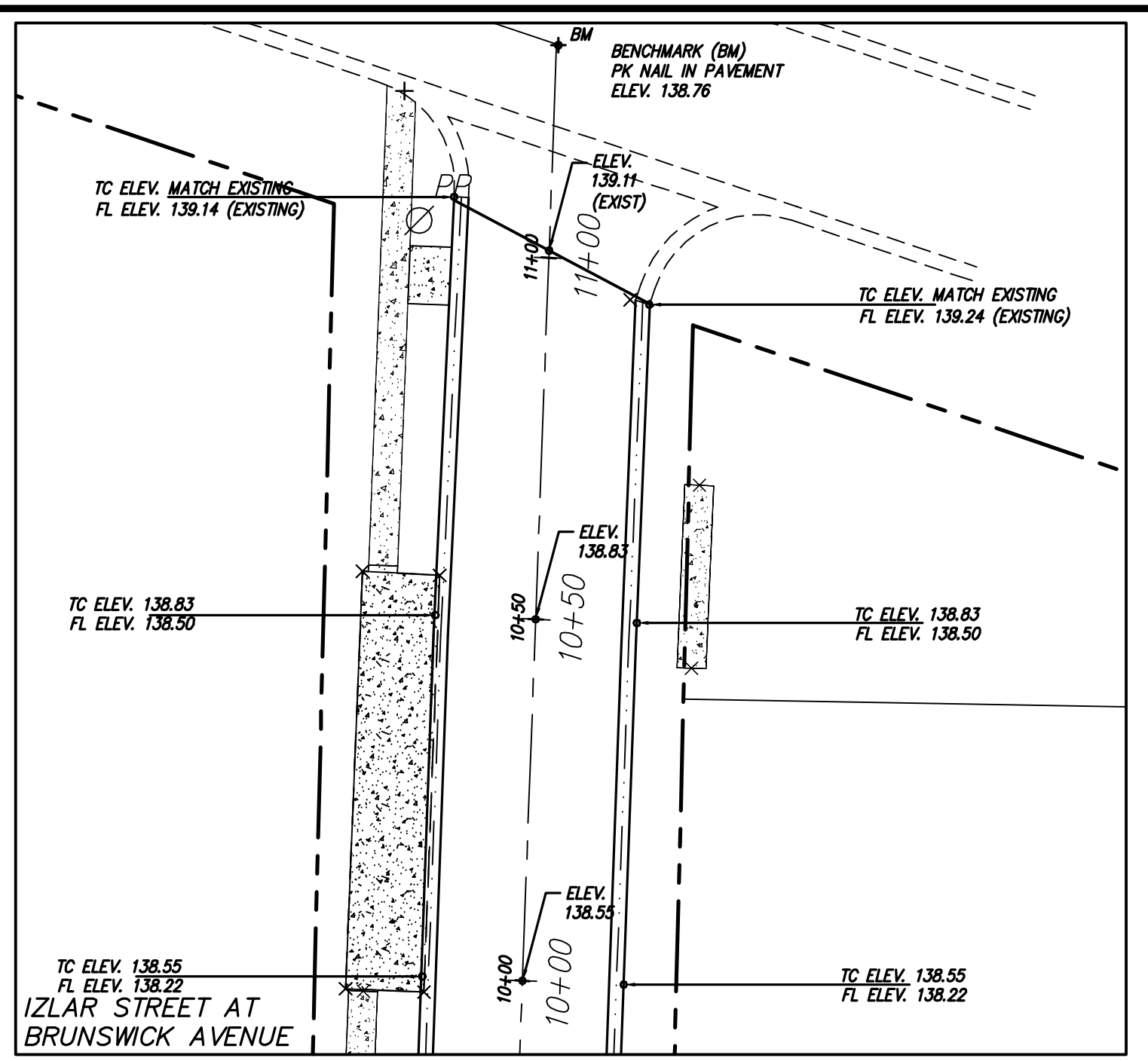
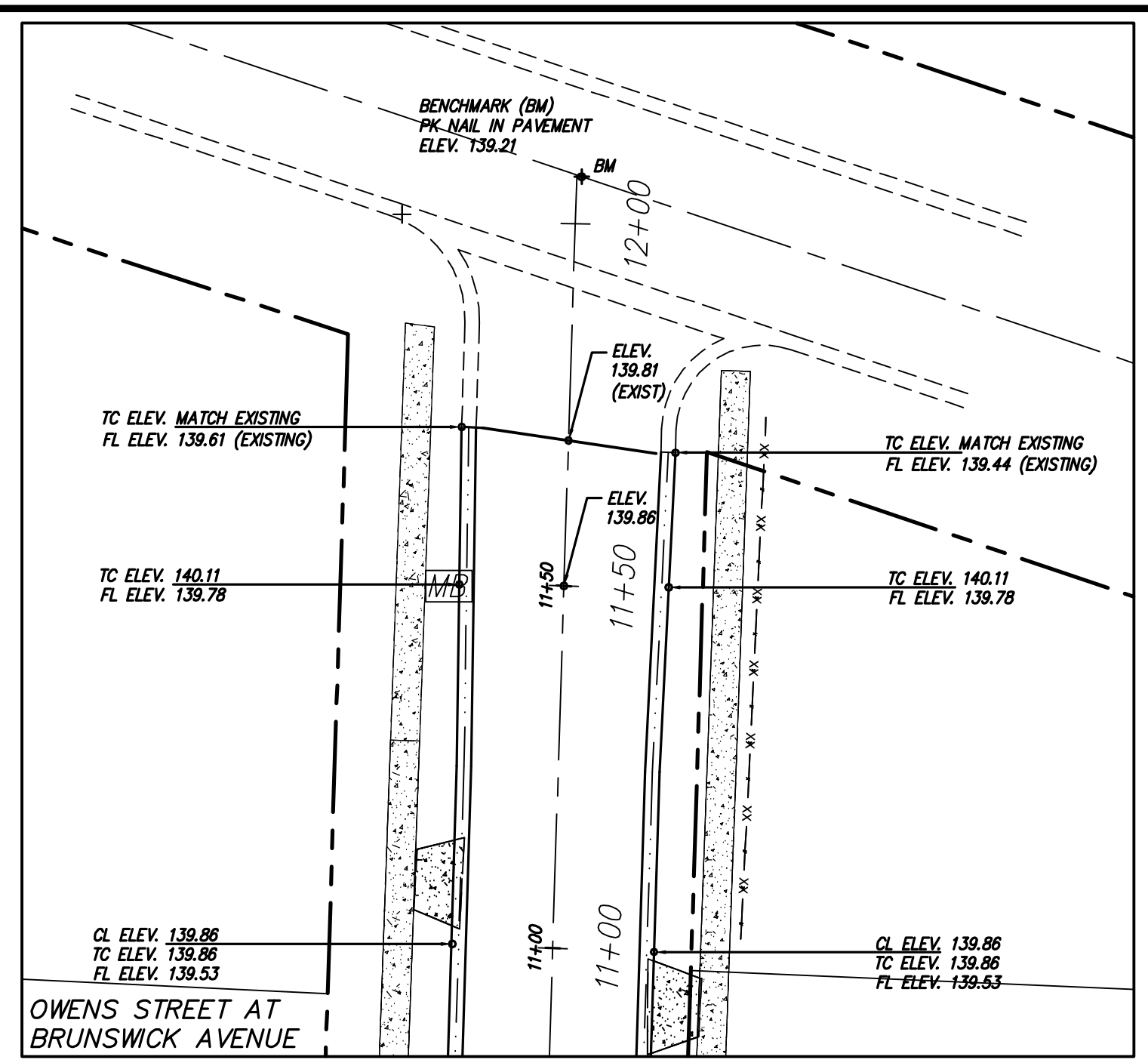
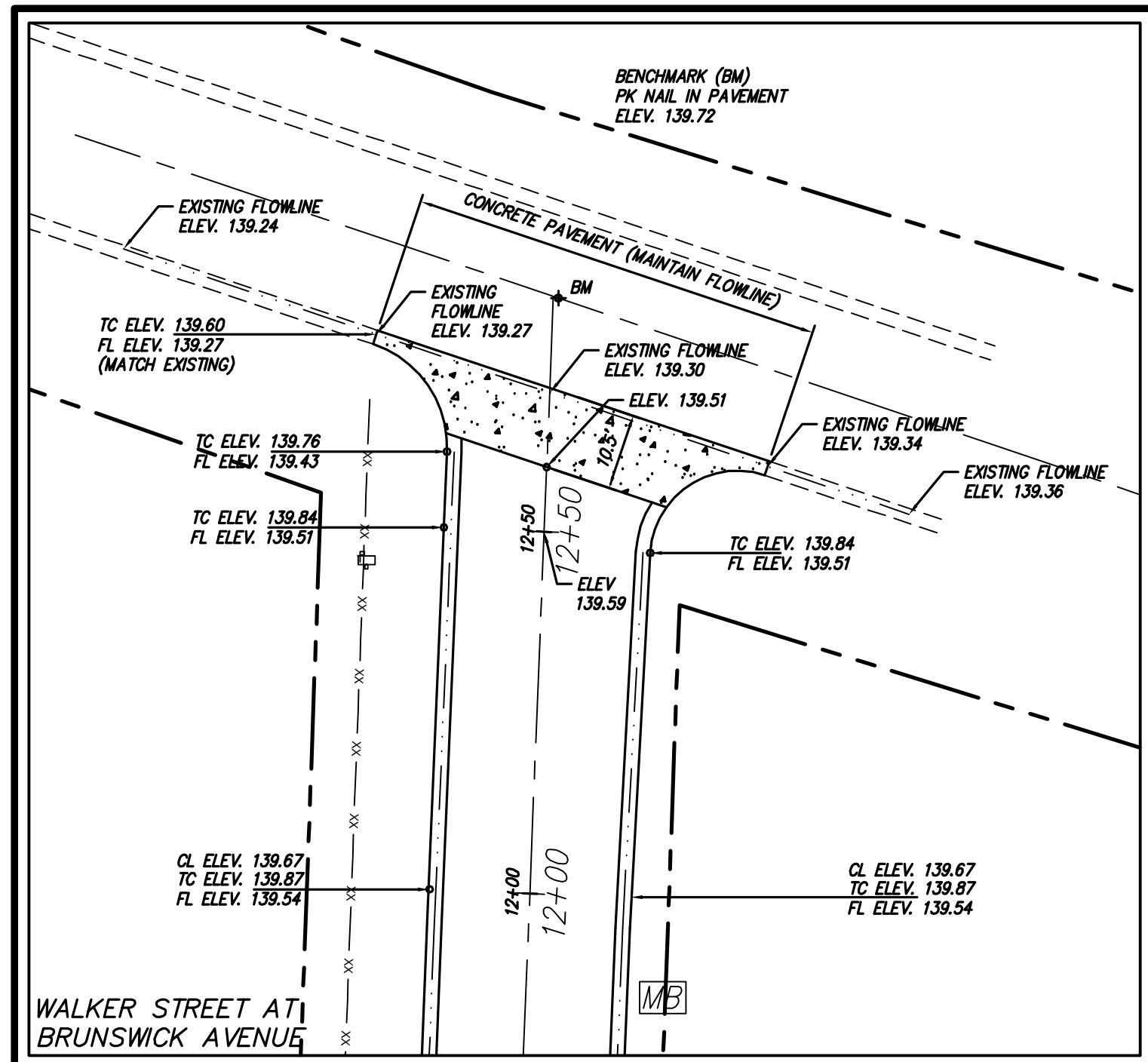
REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
STORM PIPE PROFILES – IZLAR & ROOSEVELT STREETS

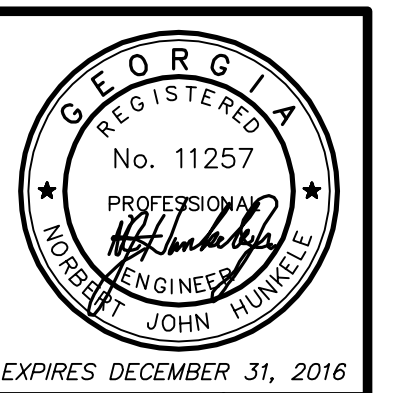
FILE NO.: 2015-00-P6
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/MJR
 SHEET NO.: P-6

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

USER: MAXX REVDATE: FNAME:



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.
 PROFESSIONAL ENGINEER
 JOHN MURPHY
 No. 11257
 EXPIRES DECEMBER 31, 2016
 P. O. BOX 1895
 GEORGIA 31521
 (815) 623-0876 PHONE
 john@cec-inc.com

DATE	DESCRIPTION OF REVISION

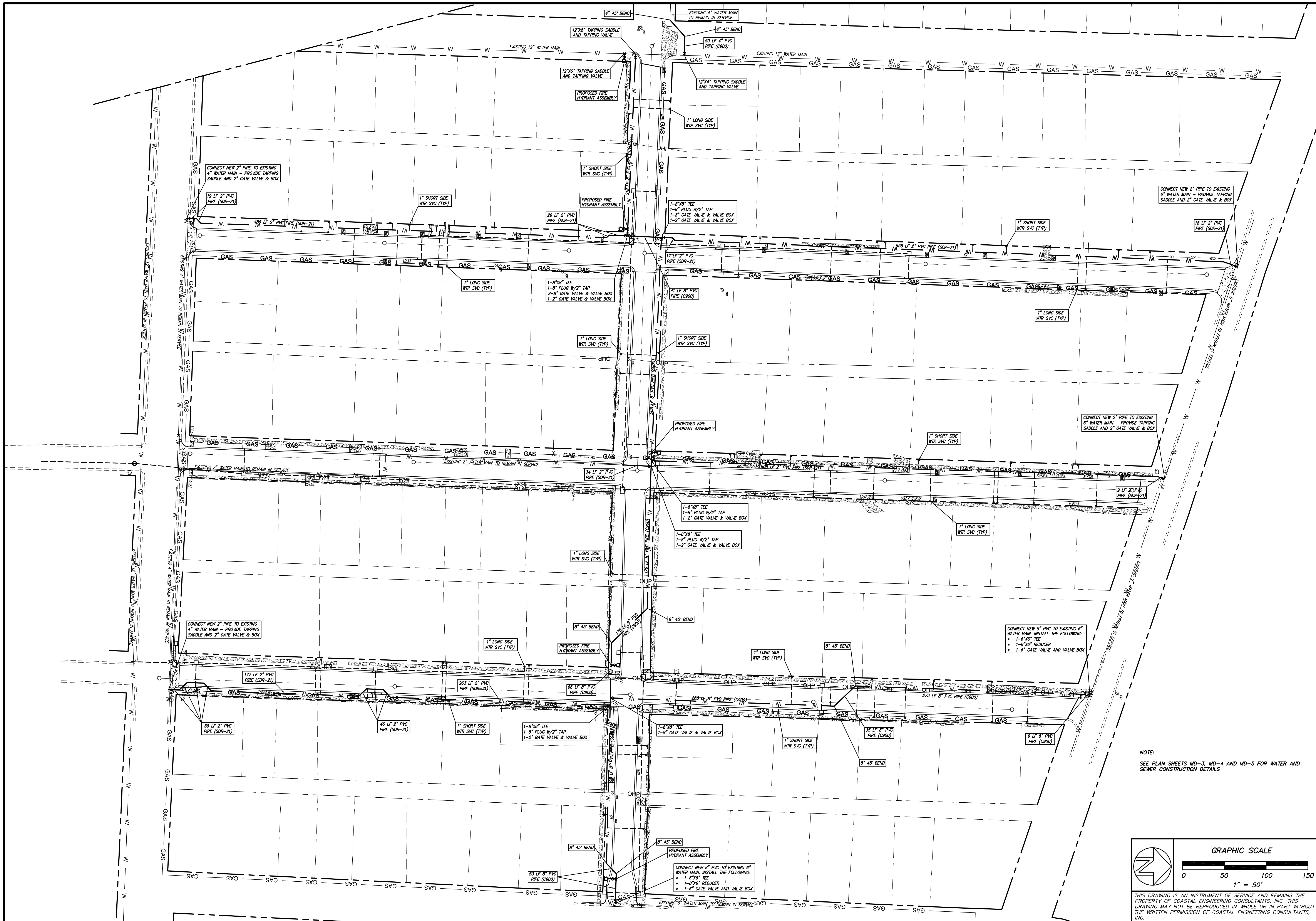
2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
 INTERSECTION DETAILS

FILE NO.: 2015-003-P7
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/JMP
 SHEET NO.: P-7

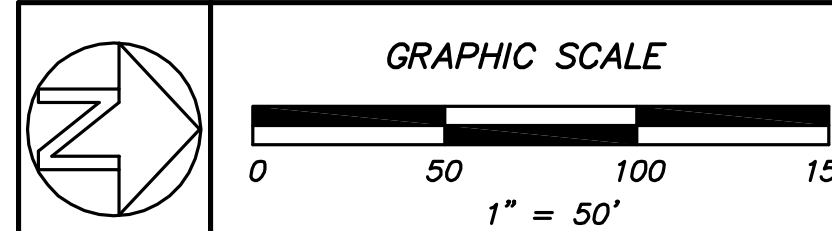
USER

REVDATE

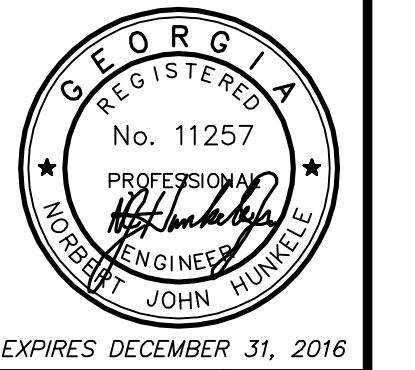
MAXX



NOTE:
SEE PLAN SHEETS MD-3, MD-4 AND MD-5 FOR WATER AND SEWER CONSTRUCTION DETAILS



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.
 PROFESSIONAL ENGINEER
 JOHN HUNTER
 No. 11257
 STATE OF GEORGIA
 EXPIRES DECEMBER 31, 2016
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0874 PHONE
 john@cec-inc.com

DATE	DESCRIPTION OF REVISION	REVISION NO.

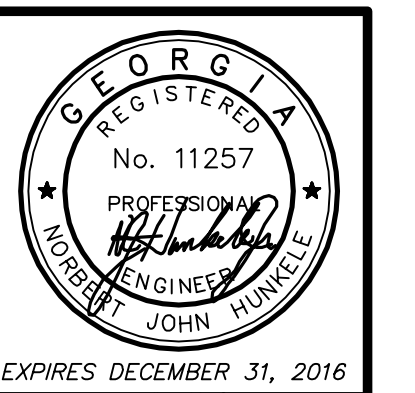
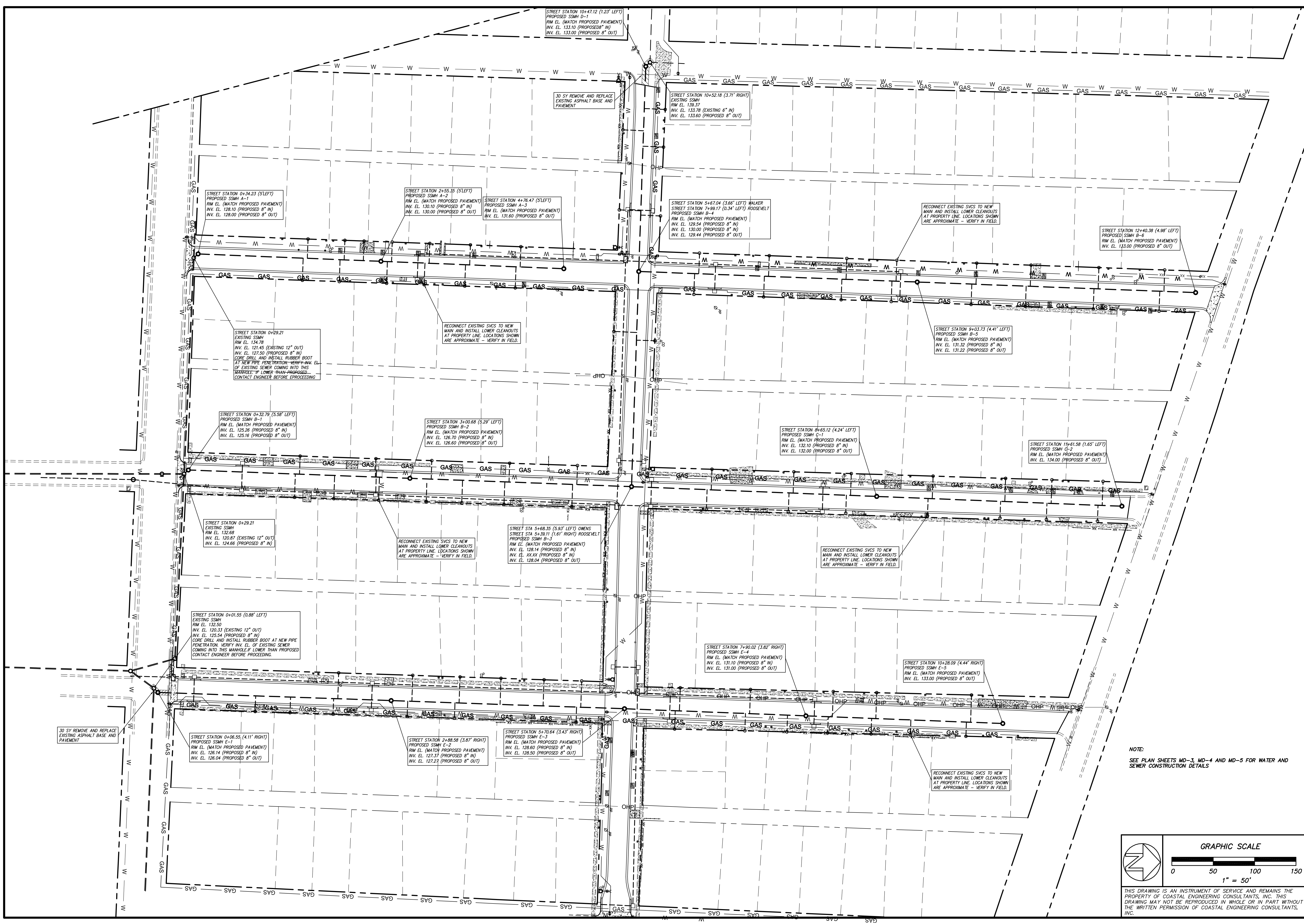
2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
PROPOSED WATER DISTRIBUTION SYSTEM

FILE NO.: 2015-003-P8
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: GJM/MLP
 SHEET NO.: **P-8**
 OF 11

FNAM

REVDATE

USER



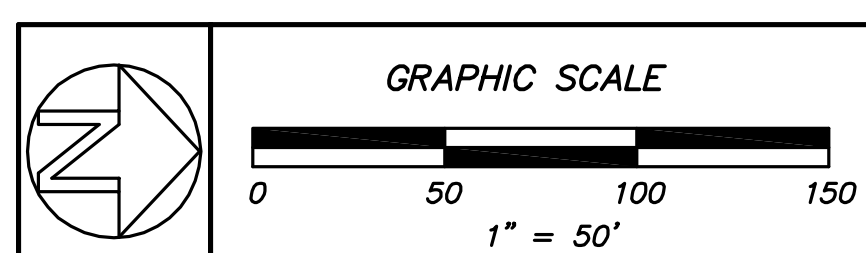
Coastal Engineering Consultants, Inc.
 PROFESSIONAL ENGINEER
 JOHN MUNCIE
 No. 11257
 EXPIRES DECEMBER 31, 2016
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0874 PHONE
 john@cec-inc.com

DATE	DESCRIPTION OF REVISION

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
PROPOSED SANITARY SEWER PLAN

FILE NO.: 2015-00-P9	DATE: MARCH 27, 2015	SCALE: AS SHOWN	DRAWN BY/CHECKED BY: CLM/MJR
SHEET NO.: P-9			OF 11

NOTE:
 SEE PLAN SHEETS MD-3, MD-4 AND MD-5 FOR WATER AND SEWER CONSTRUCTION DETAILS

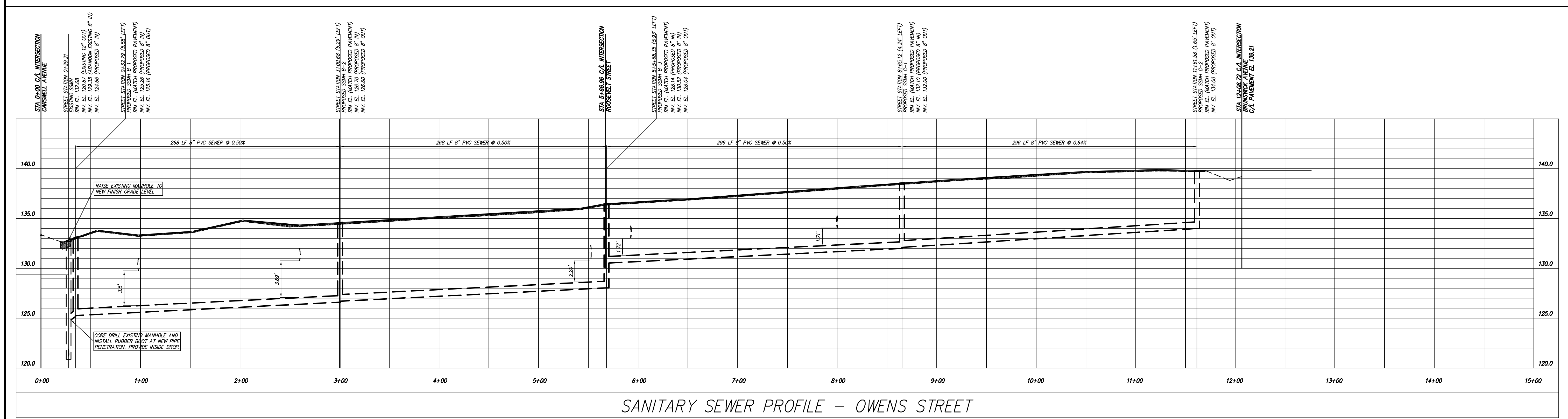
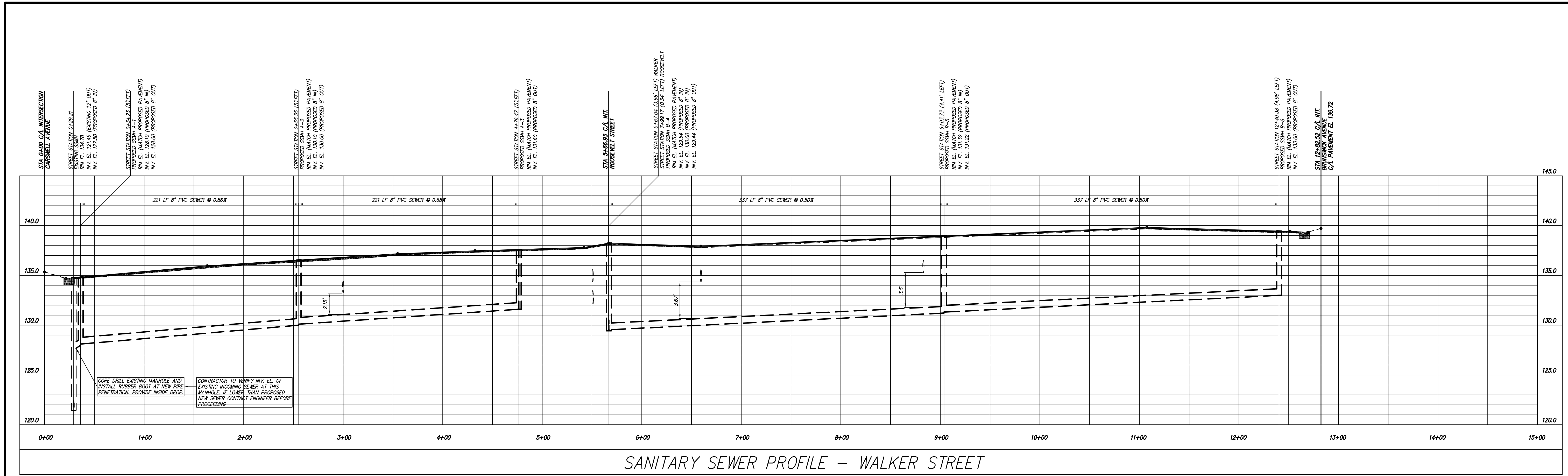


THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNAM

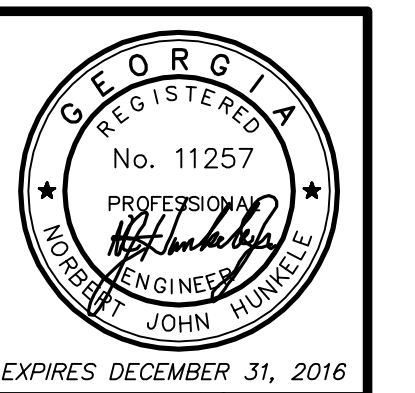
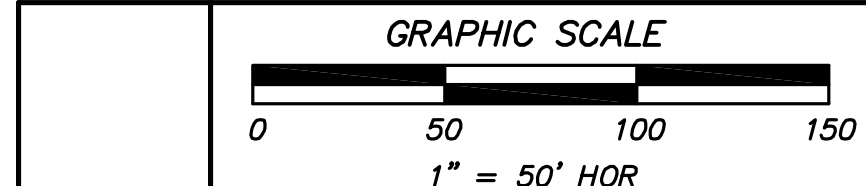
REVDATE

USER



CALL BEFORE YOU DIG!

At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



Coastal Engineering Consultants, Inc.

No. 11257

REGISTERED PROFESSIONAL ENGINEER

JOHN MURKLE

EXPIRES DECEMBER 31, 2016

P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0874 PHONE
 john@cec-ga.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT

CITY OF WAYCROSS, GEORGIA

SANITARY SEWER PROFILES - WALKER & OWENS STREETS

FILE NO.: 2015-003-P10

DATE: MARCH 27, 2015

SCALE: AS SHOWN

DRAWN BY/CHECKED BY: GJM/AMF

SHEET NO.: **P-10**

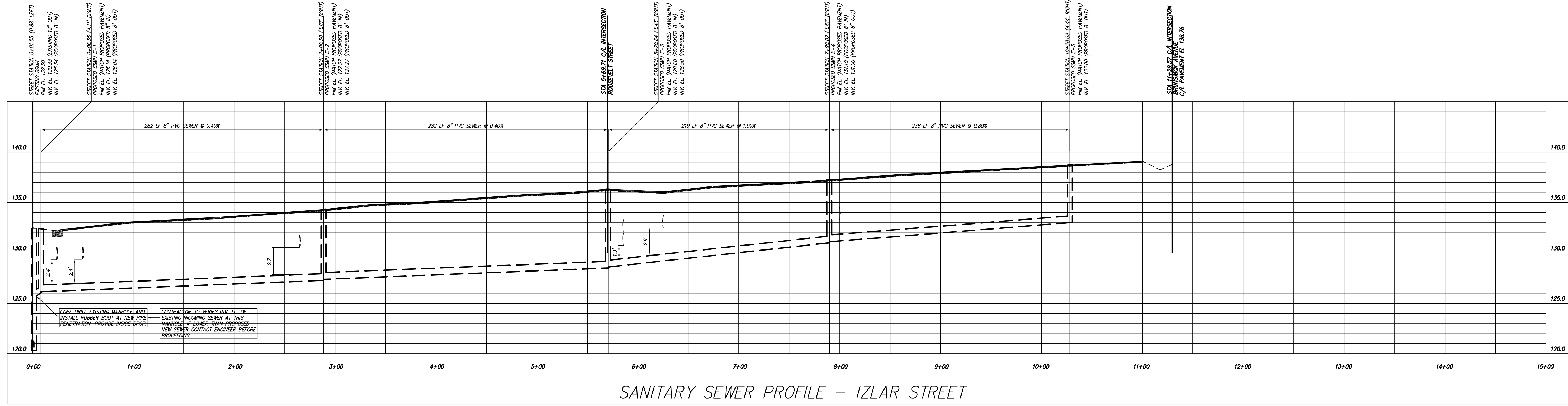
OF 11

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

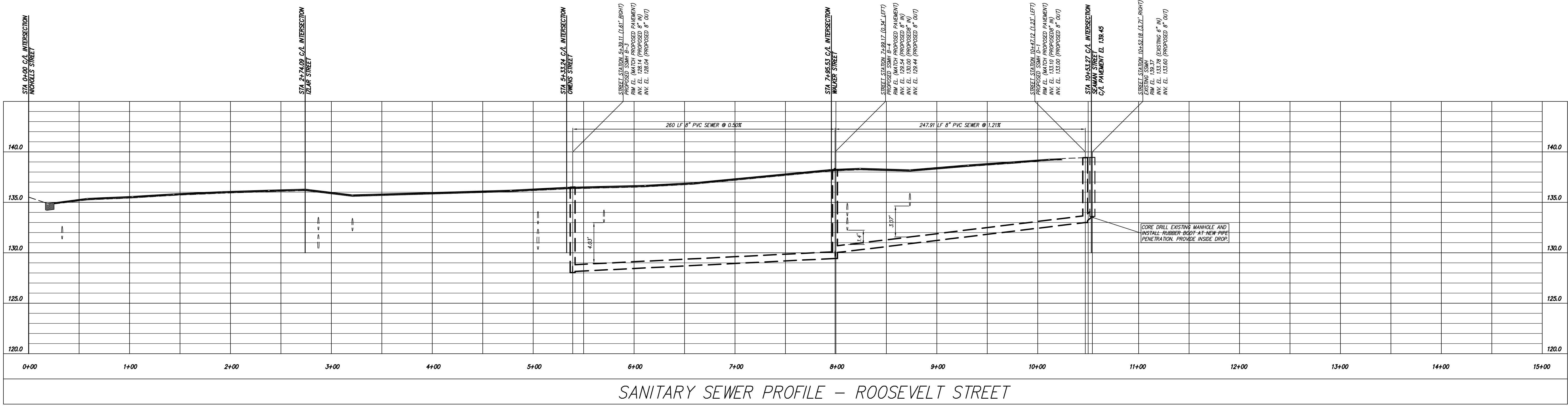
FILENAME

REVDATE

USER



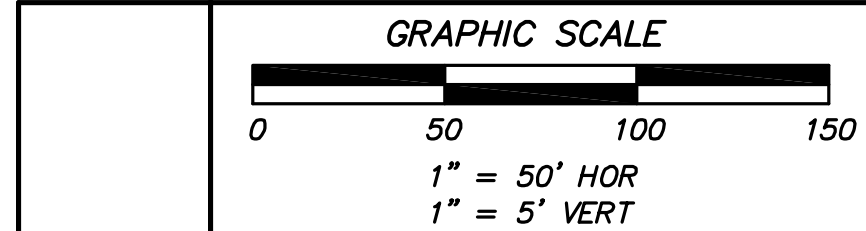
SANITARY SEWER PROFILE - IZLAR STREET



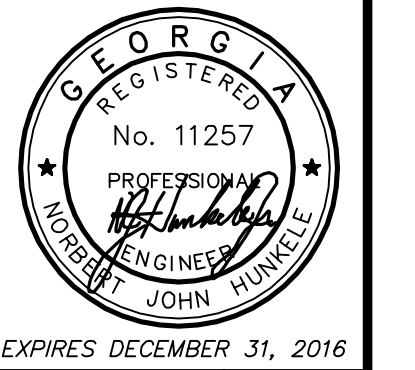
SANITARY SEWER PROFILE - ROOSEVELT STREET

CALL BEFORE YOU DIG!

At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
john@cec-ga.com

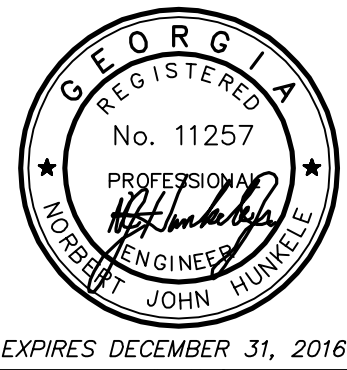
REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA

SANITARY SEWER PROFILES - IZLAR & ROOSEVELT STREETS

FILE NO.: 2015-00-P11
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: GJM/AMR

SHEET NO.: P-11



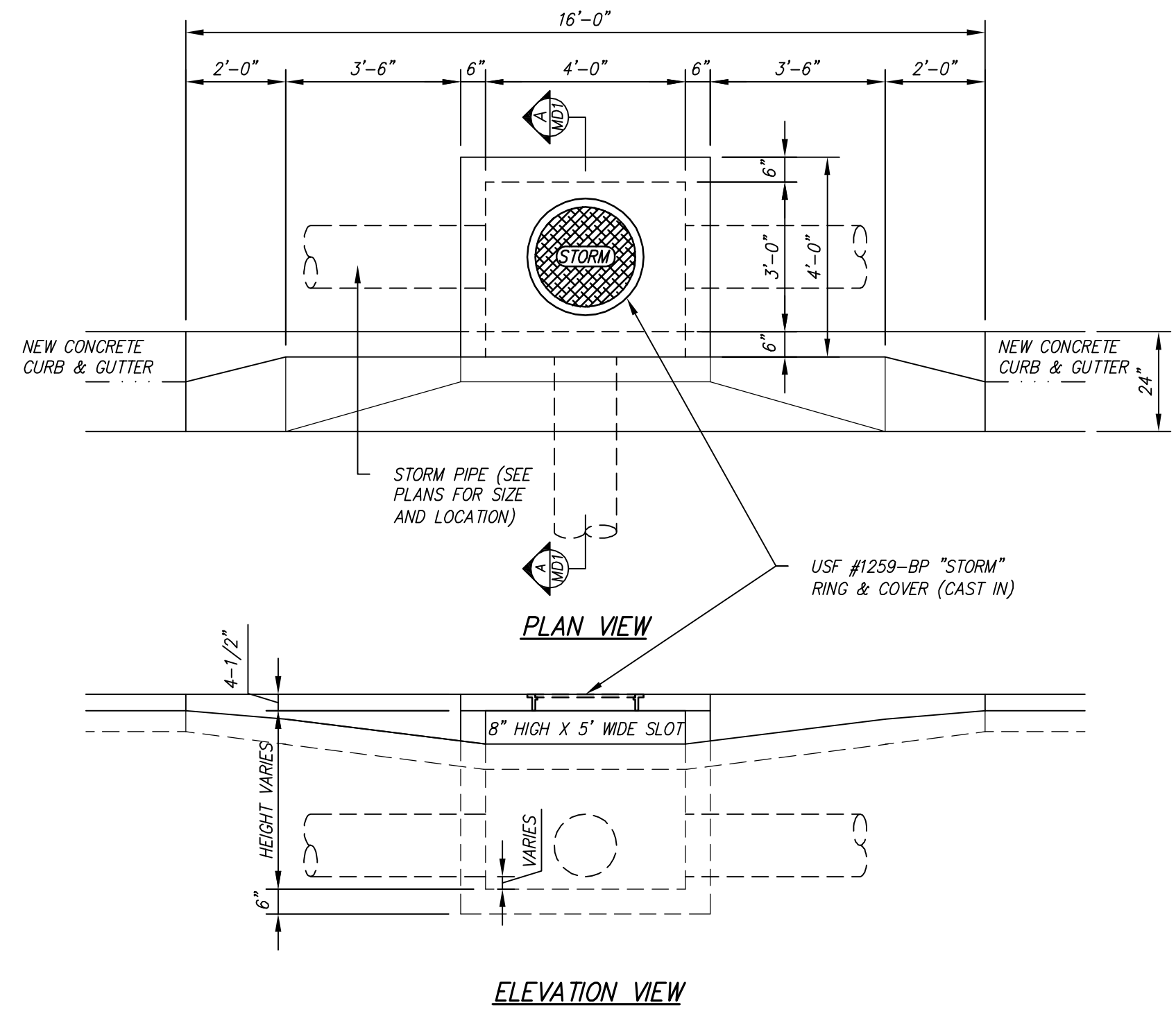
Coastal Engineering Consultants, Inc.

P. O. BOX 1895
 WOODBRIDGE, GEORGIA 31521
 (912) 223-0877 PHONE
 john@cec-ga.com

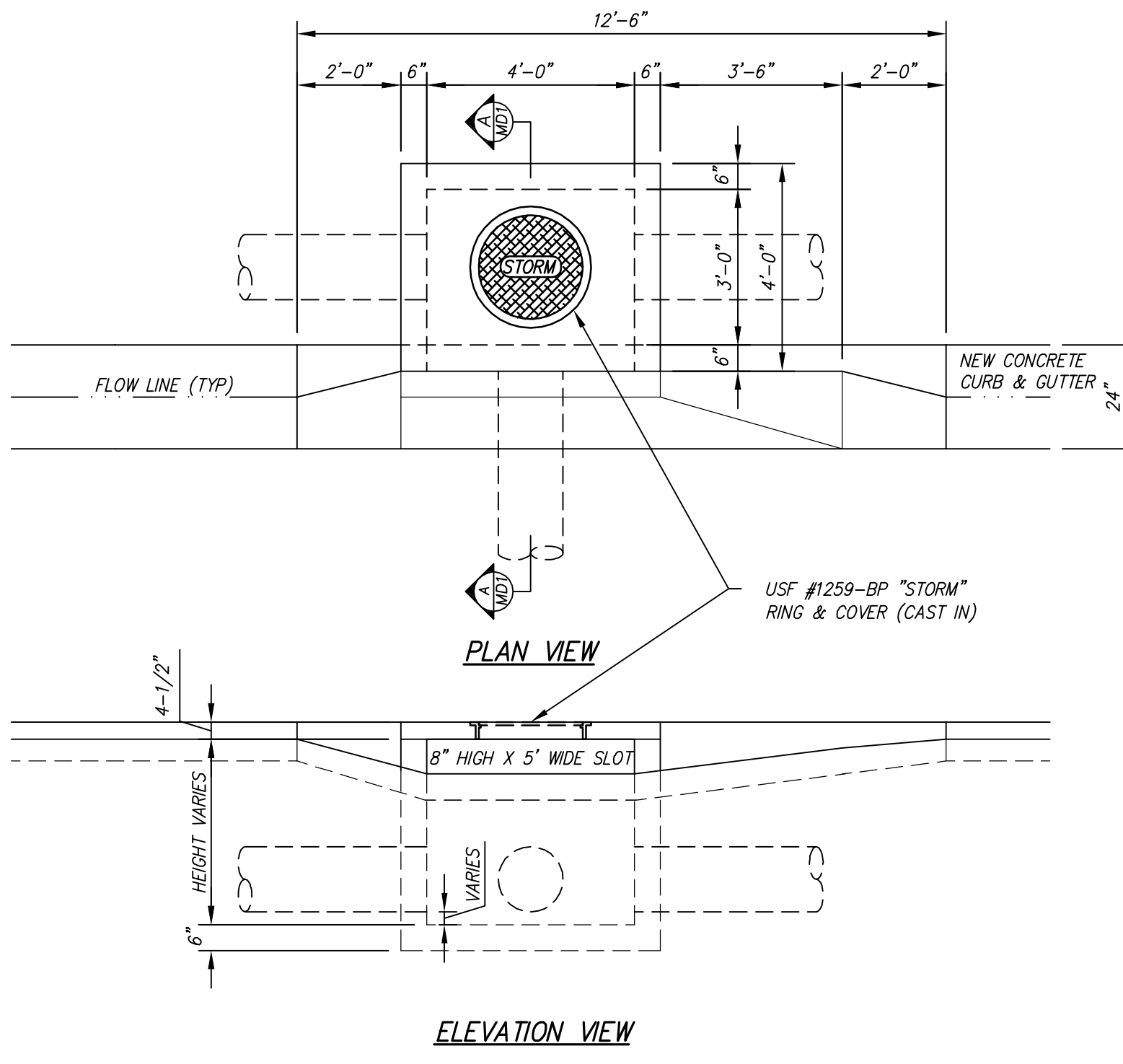
DATE	
DESCRIPTION OF REVISION	
REVISION NO.	

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
MISCELLANEOUS DETAILS - STREETS AND DRAINAGE

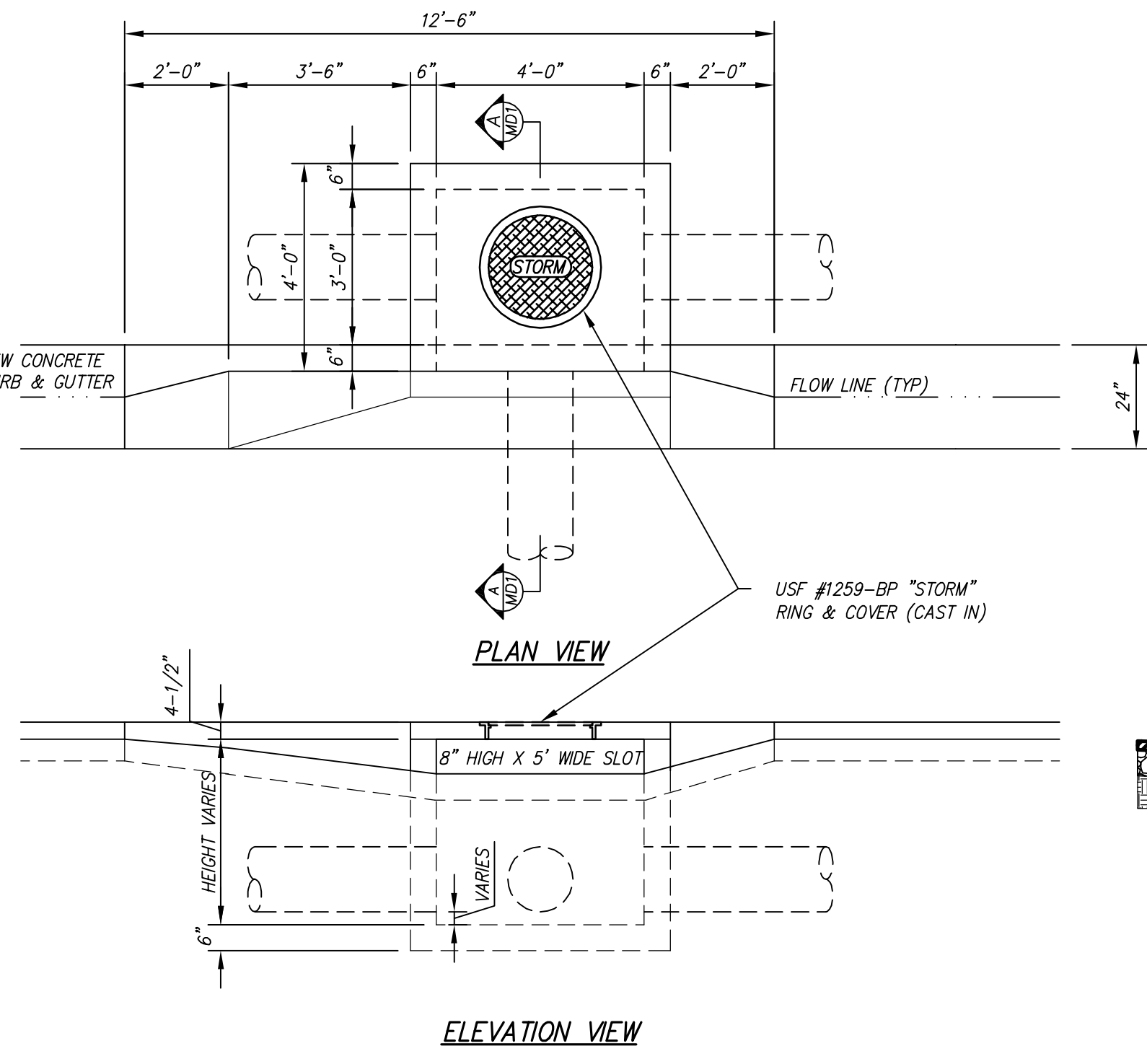
FILE NO:	2015-003-MD1
DATE:	MARCH 27, 2015
SCALE:	AS SHOWN
DRAWN BY/CHECKED BY:	GM/AMR
SHEET NO. OF	MD-1 5



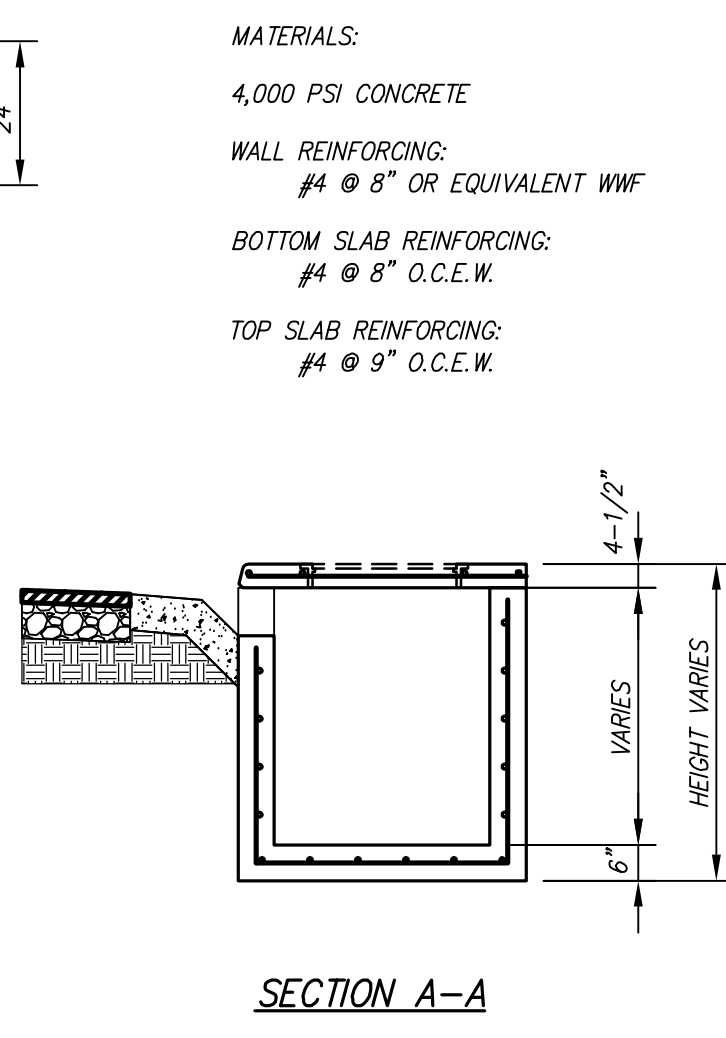
TYPE 1 CURB INLET
 TYPICAL FOR THE FOLLOWING:
 • CURB INLETS W3 & W4
 • CURB INLETS R1, R2, R5, R6, R7 & R8
 • CURB INLETS O6, O7, O8 & O9
 • CURB INLETS 13, 14, 19 & 111
 DETAIL IS TYPICAL. SEE PLANS FOR INLET AND OUTLET PIPE REQUIREMENTS.



TYPE 2R CURB INLET
 TYPICAL FOR THE FOLLOWING:
 • CURB INLETS W2 & W6
 • CURB INLETS R3
 • CURB INLETS O1 & O4
 • CURB INLETS 12, 16 & 18
 DETAIL IS TYPICAL. SEE PLANS FOR INLET AND OUTLET PIPE REQUIREMENTS.

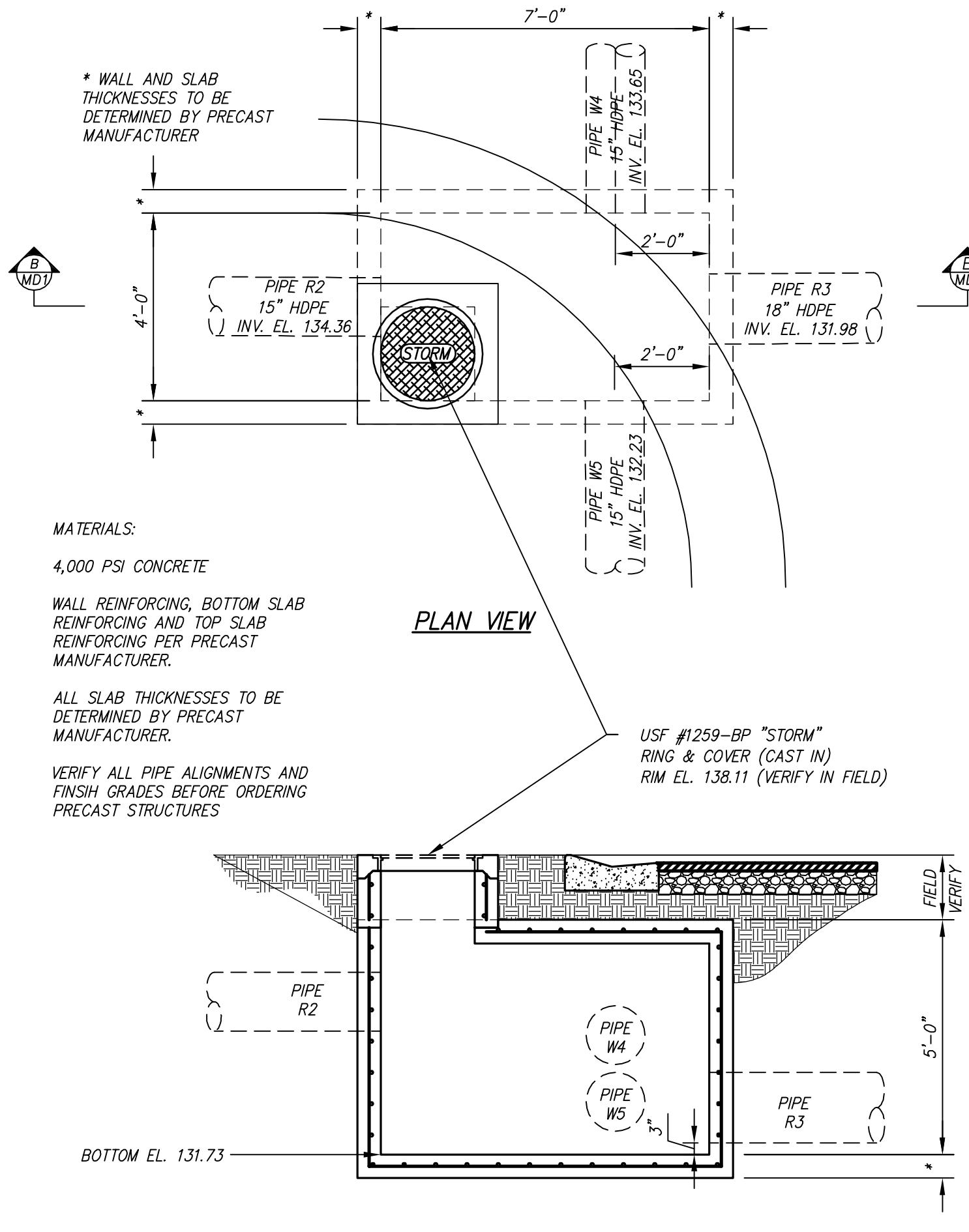


TYPE 2L CURB INLET
 TYPICAL FOR THE FOLLOWING:
 • CURB INLETS W1 & W7
 • CURB INLETS R4
 • CURB INLETS O2 & O3
 • CURB INLETS 11 & 17
 DETAIL IS TYPICAL. SEE PLANS FOR INLET AND OUTLET PIPE REQUIREMENTS.



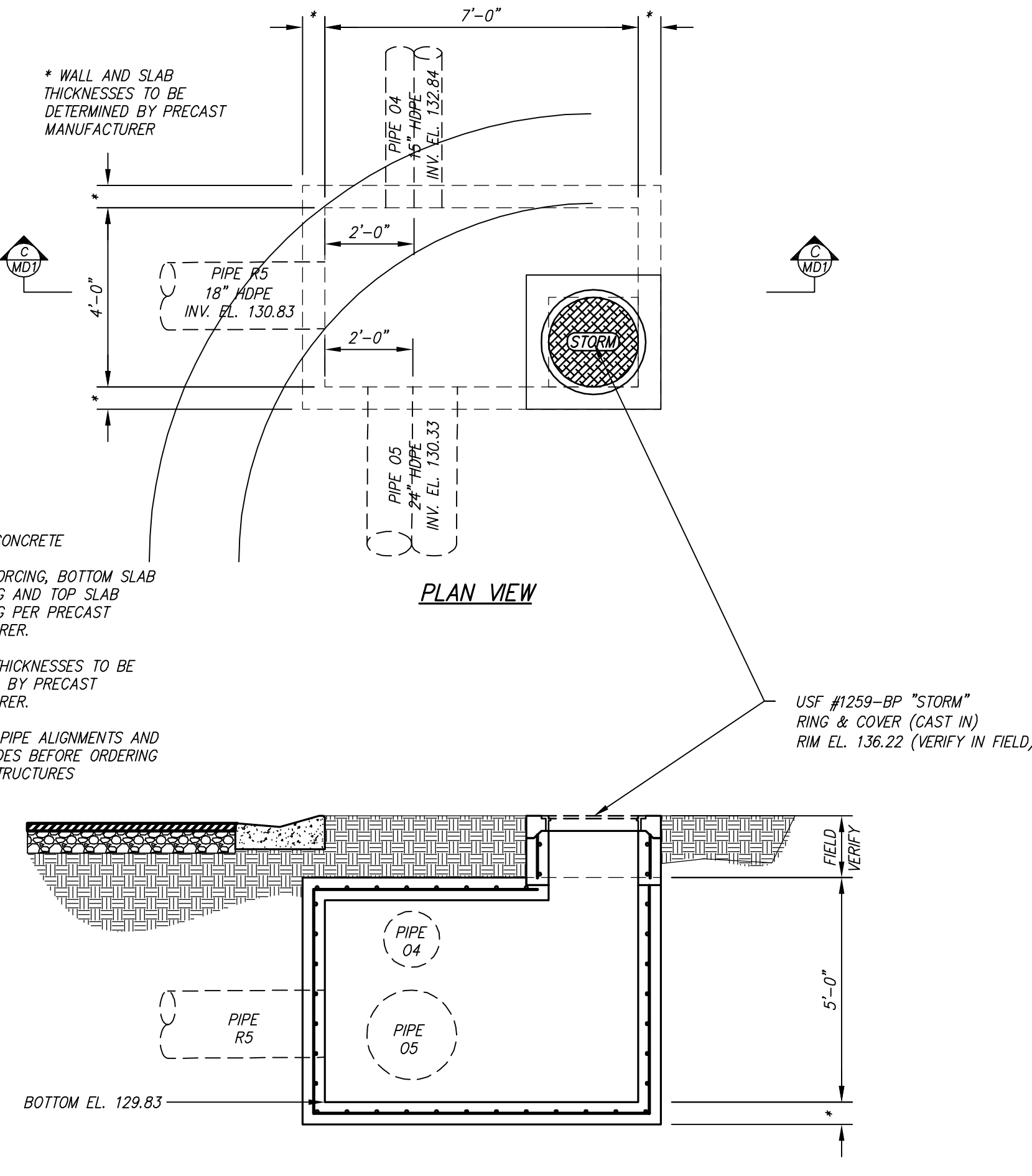
SECTION A-A
 TYPE 1, 2R & 2L CURB INLETS

MATERIALS:
 4,000 PSI CONCRETE
WALL REINFORCING:
 #4 @ 8" OR EQUIVALENT WMF
BOTTOM SLAB REINFORCING:
 #4 @ 8" O.C.E.W.
TOP SLAB REINFORCING:
 #4 @ 9" O.C.E.W.



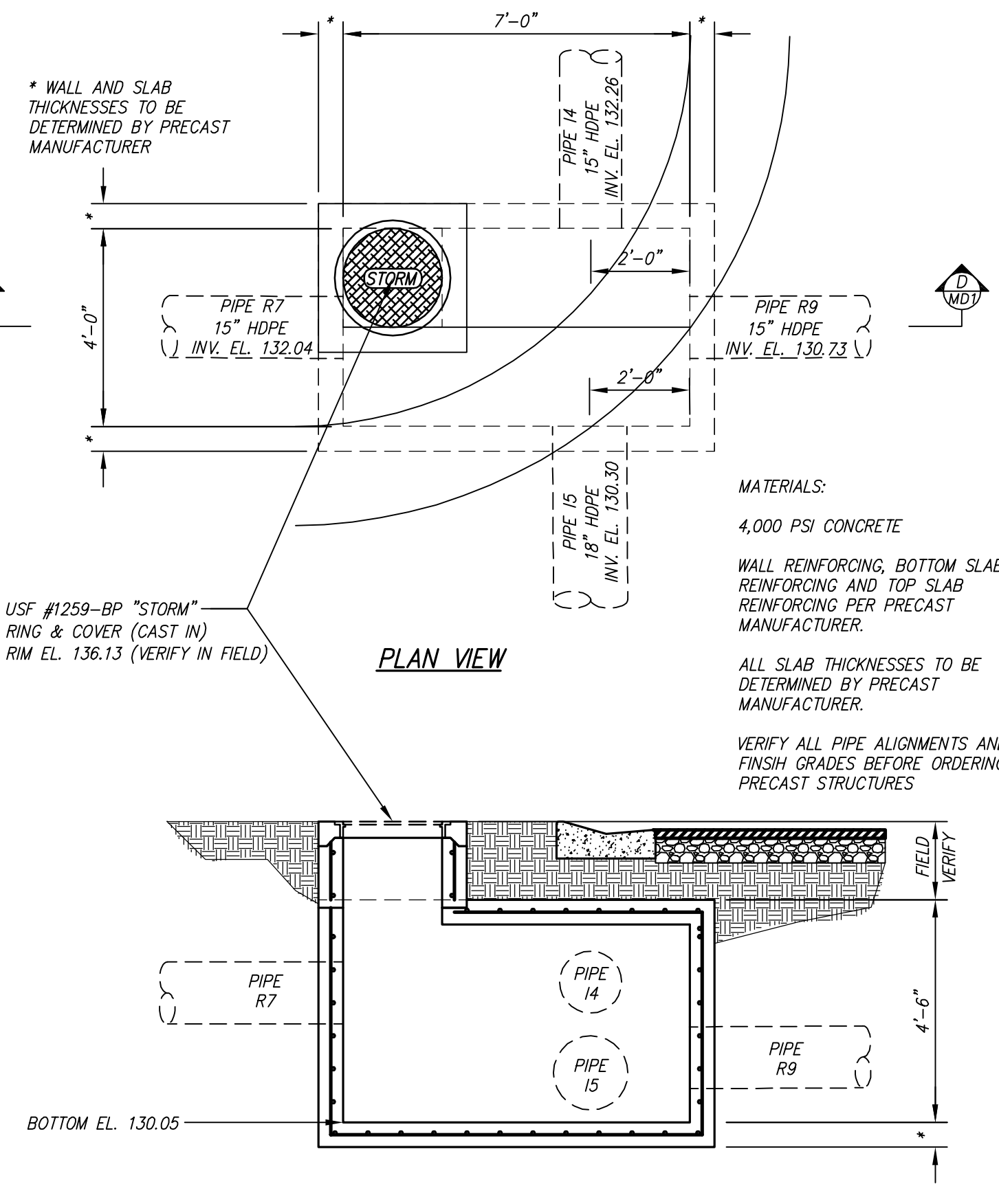
SECTION B-B
JUNCTION BOX W5

MATERIALS:
 4,000 PSI CONCRETE
 WALL REINFORCING, BOTTOM SLAB REINFORCING AND TOP SLAB REINFORCING PER PRECAST MANUFACTURER.
 ALL SLAB THICKNESSES TO BE DETERMINED BY PRECAST MANUFACTURER.
 VERIFY ALL PIPE ALIGNMENTS AND FINISH GRADES BEFORE ORDERING PRECAST STRUCTURES



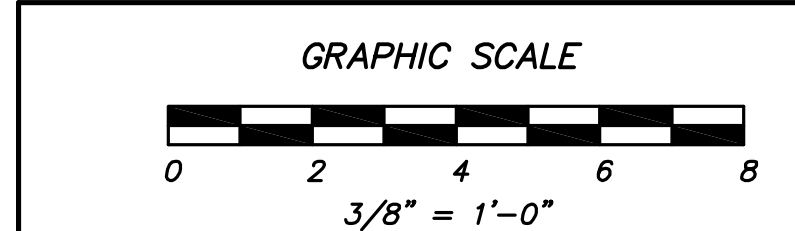
SECTION C-C
JUNCTION BOX O5

MATERIALS:
 4,000 PSI CONCRETE
 WALL REINFORCING, BOTTOM SLAB REINFORCING AND TOP SLAB REINFORCING PER PRECAST MANUFACTURER.
 ALL SLAB THICKNESSES TO BE DETERMINED BY PRECAST MANUFACTURER.
 VERIFY ALL PIPE ALIGNMENTS AND FINISH GRADES BEFORE ORDERING PRECAST STRUCTURES



SECTION D-D
JUNCTION BOX I5

MATERIALS:
 4,000 PSI CONCRETE
 WALL REINFORCING, BOTTOM SLAB REINFORCING AND TOP SLAB REINFORCING PER PRECAST MANUFACTURER.
 ALL SLAB THICKNESSES TO BE DETERMINED BY PRECAST MANUFACTURER.
 VERIFY ALL PIPE ALIGNMENTS AND FINISH GRADES BEFORE ORDERING PRECAST STRUCTURES



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNNAME

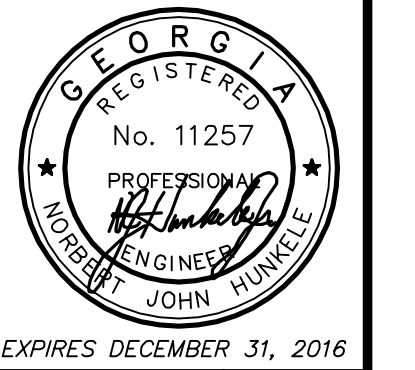
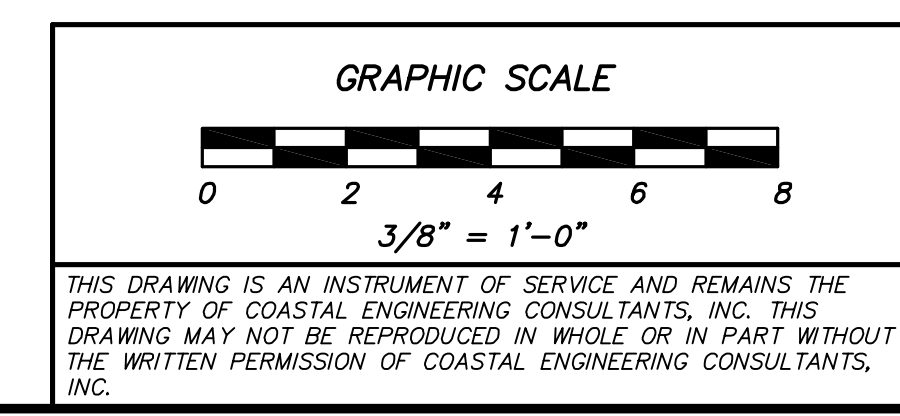
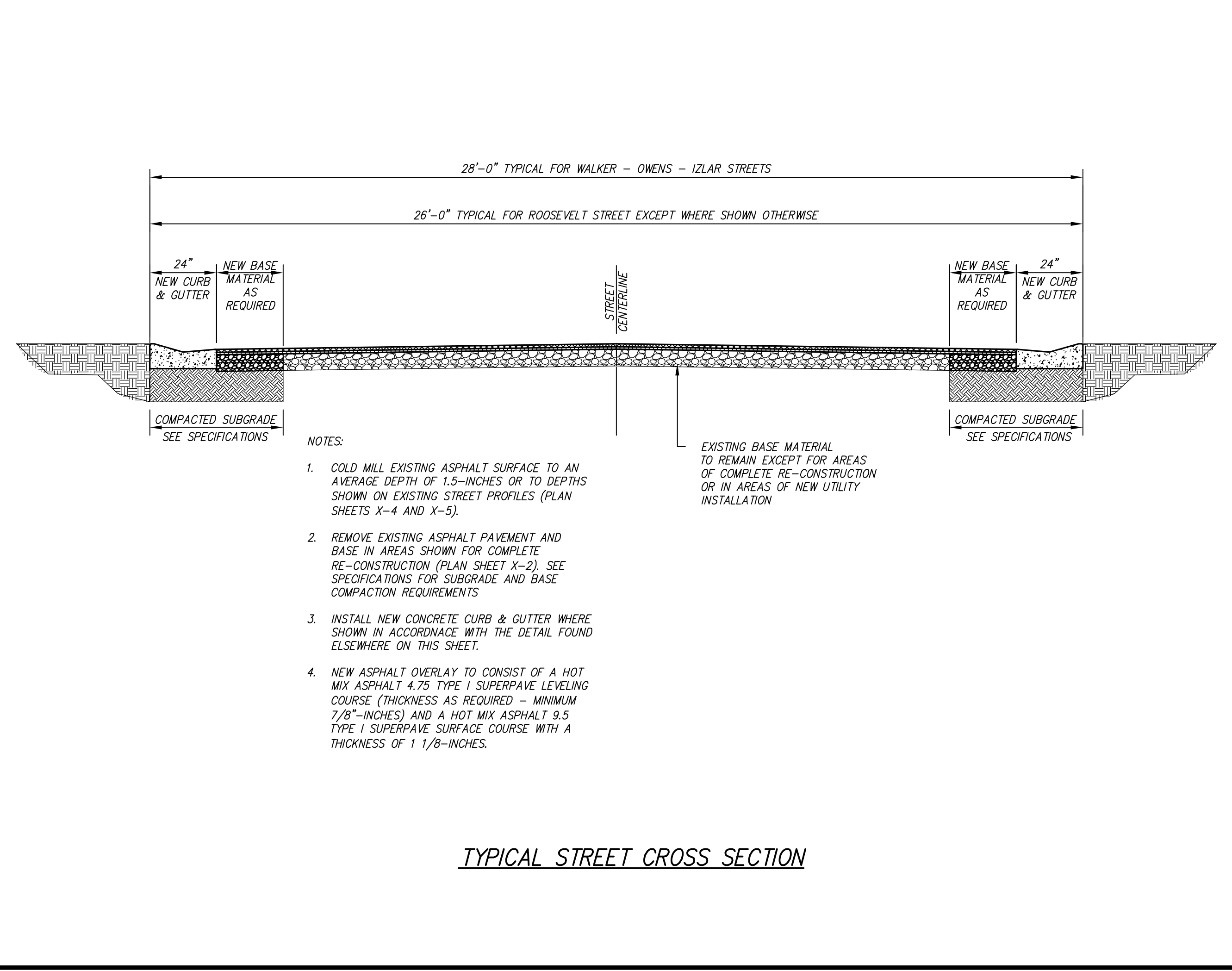
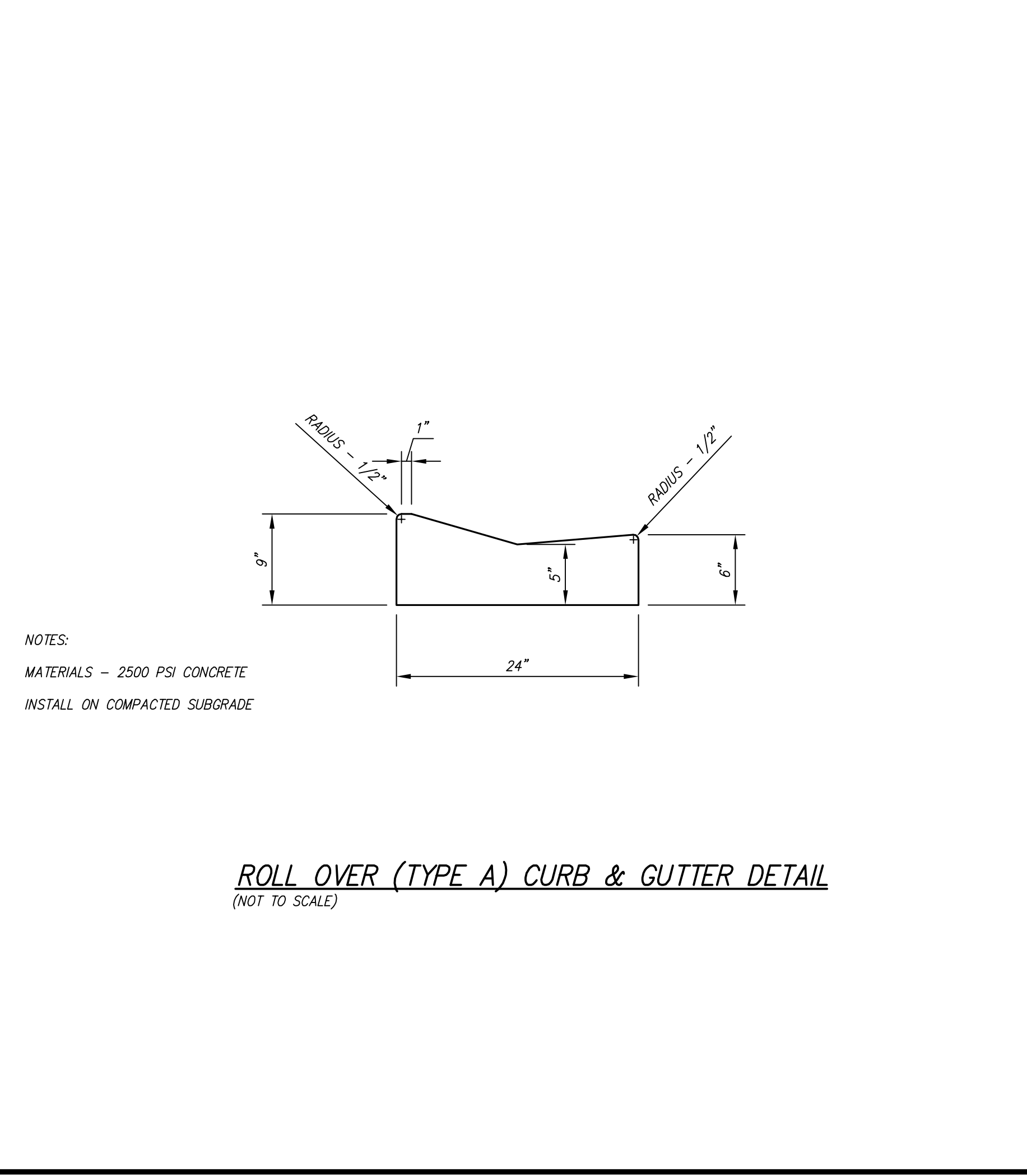
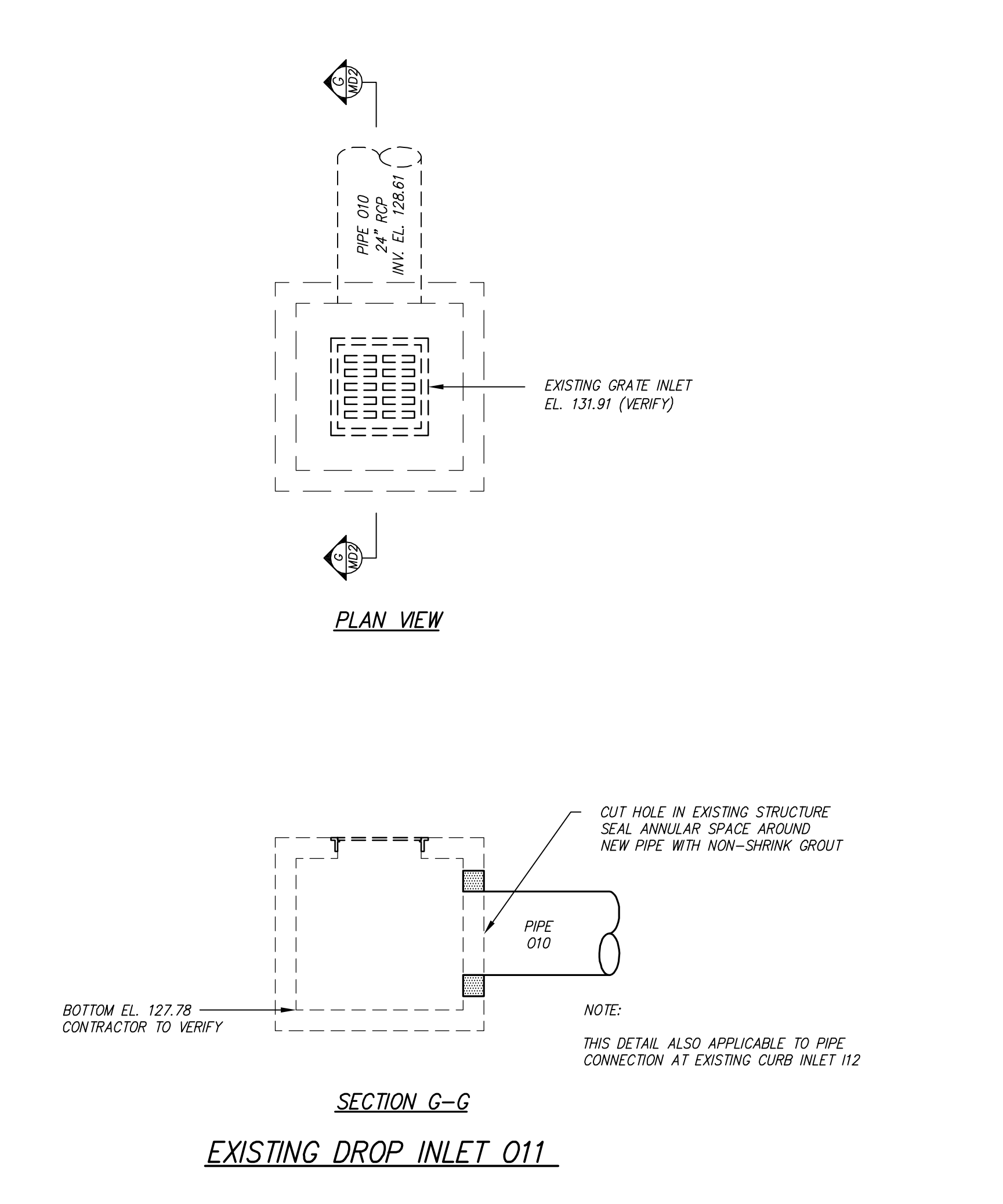
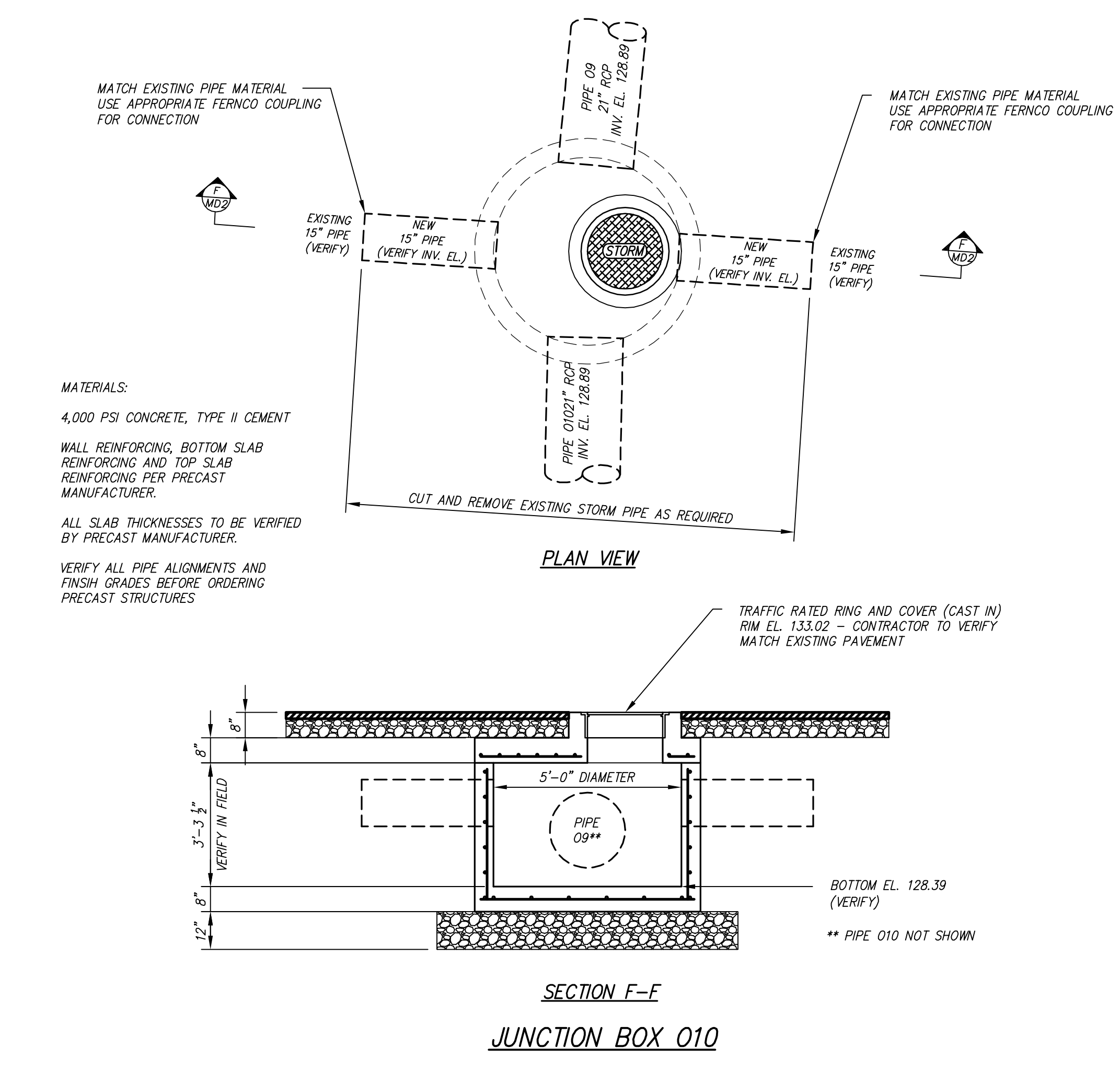
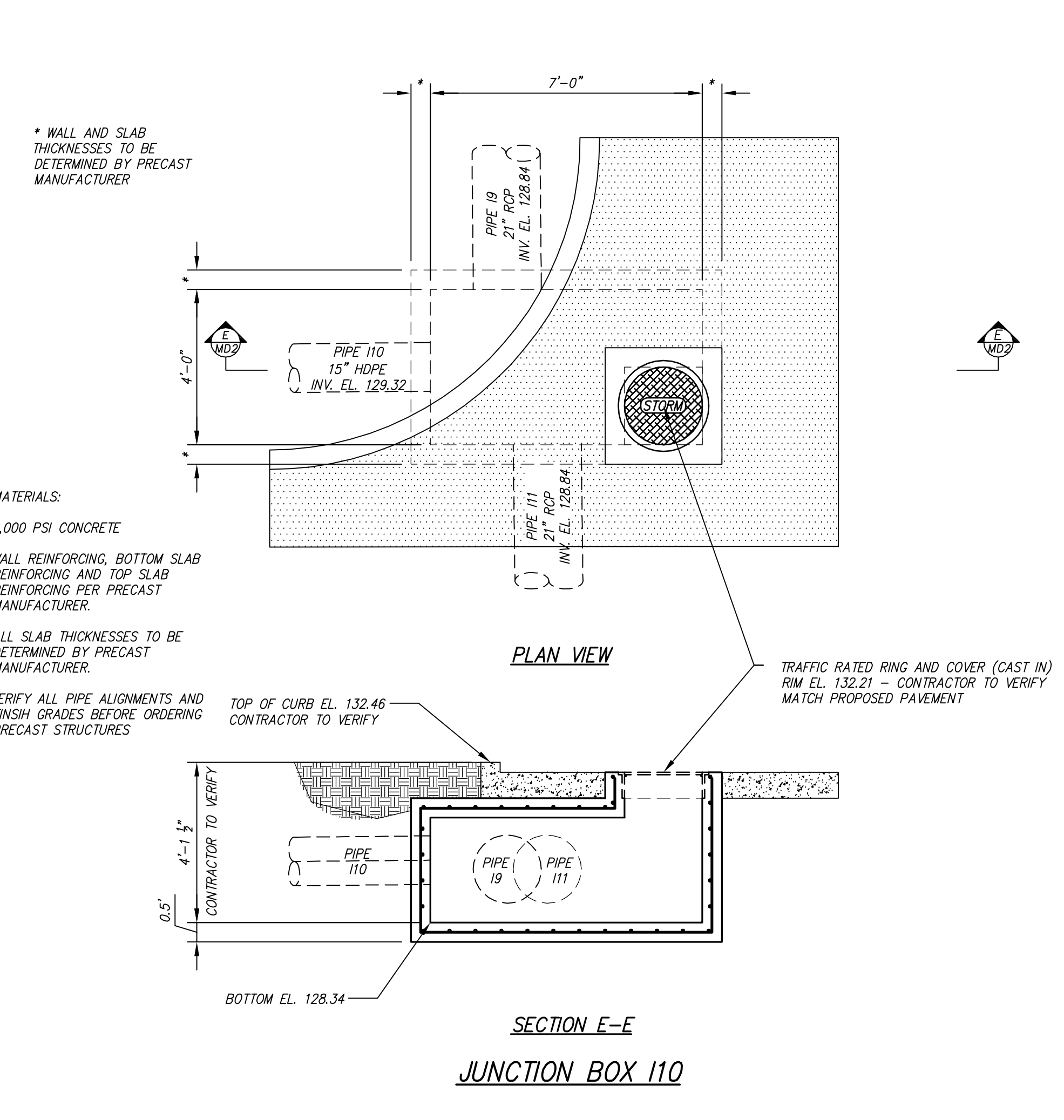
REVDATE

USER

FNNAME

REVDATE

USER



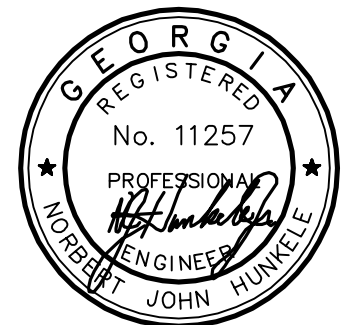
Coastal Engineering Consultants, Inc.
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
john@cec-ge.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
MISCELLANEOUS DETAILS - STREETS AND DRAINAGE

FILE NO.: 2015-003-MD2
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/AMR

SHEET NO.: **MD-2**
OF 5



Coastal Engineering Consultants, Inc.

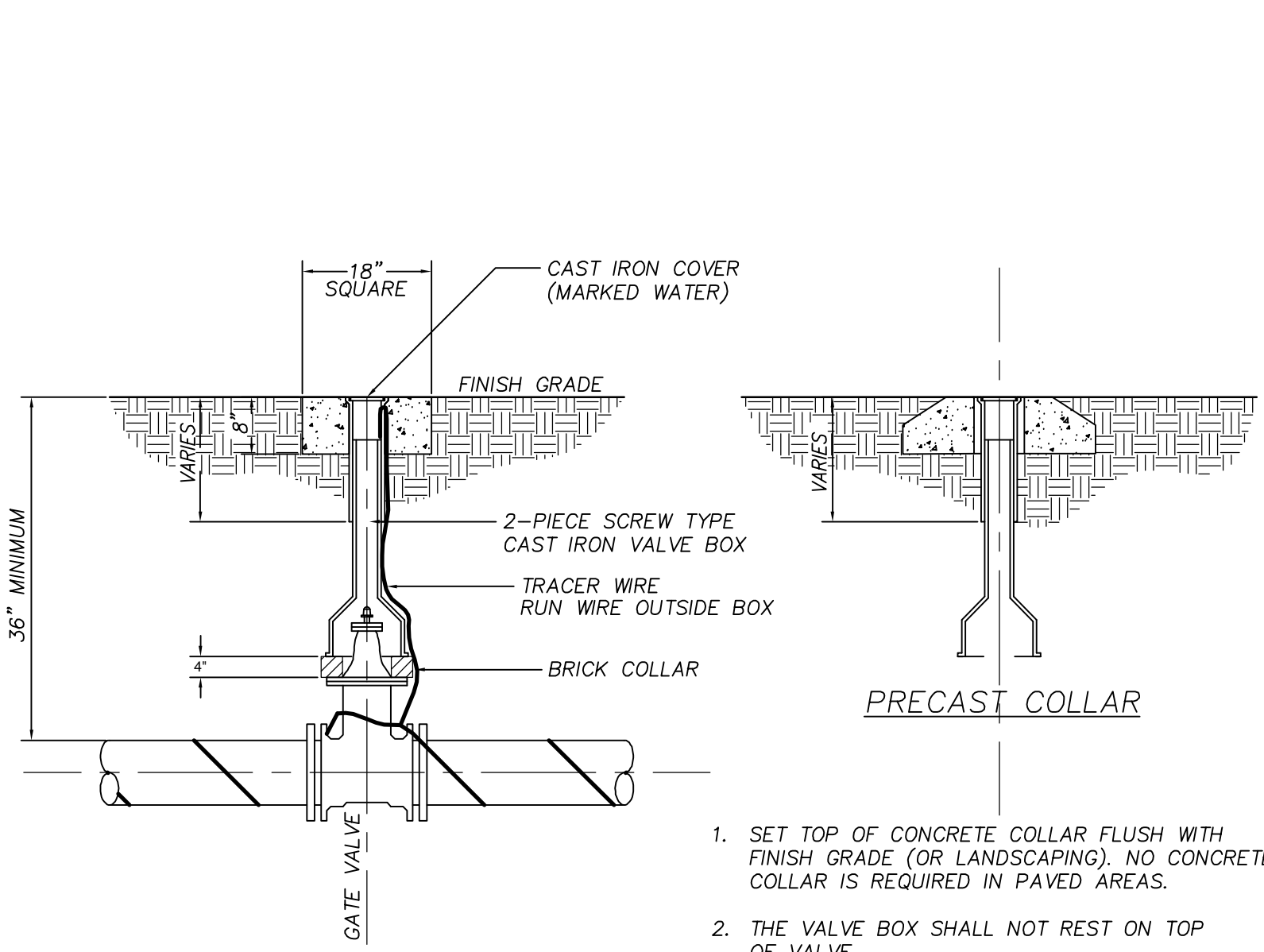
P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0874 PHONE
 john@cec-ge.com

DATE	DESCRIPTION OF REVISION	REVISION NO.

2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
MISCELLANEOUS DETAILS - WATER

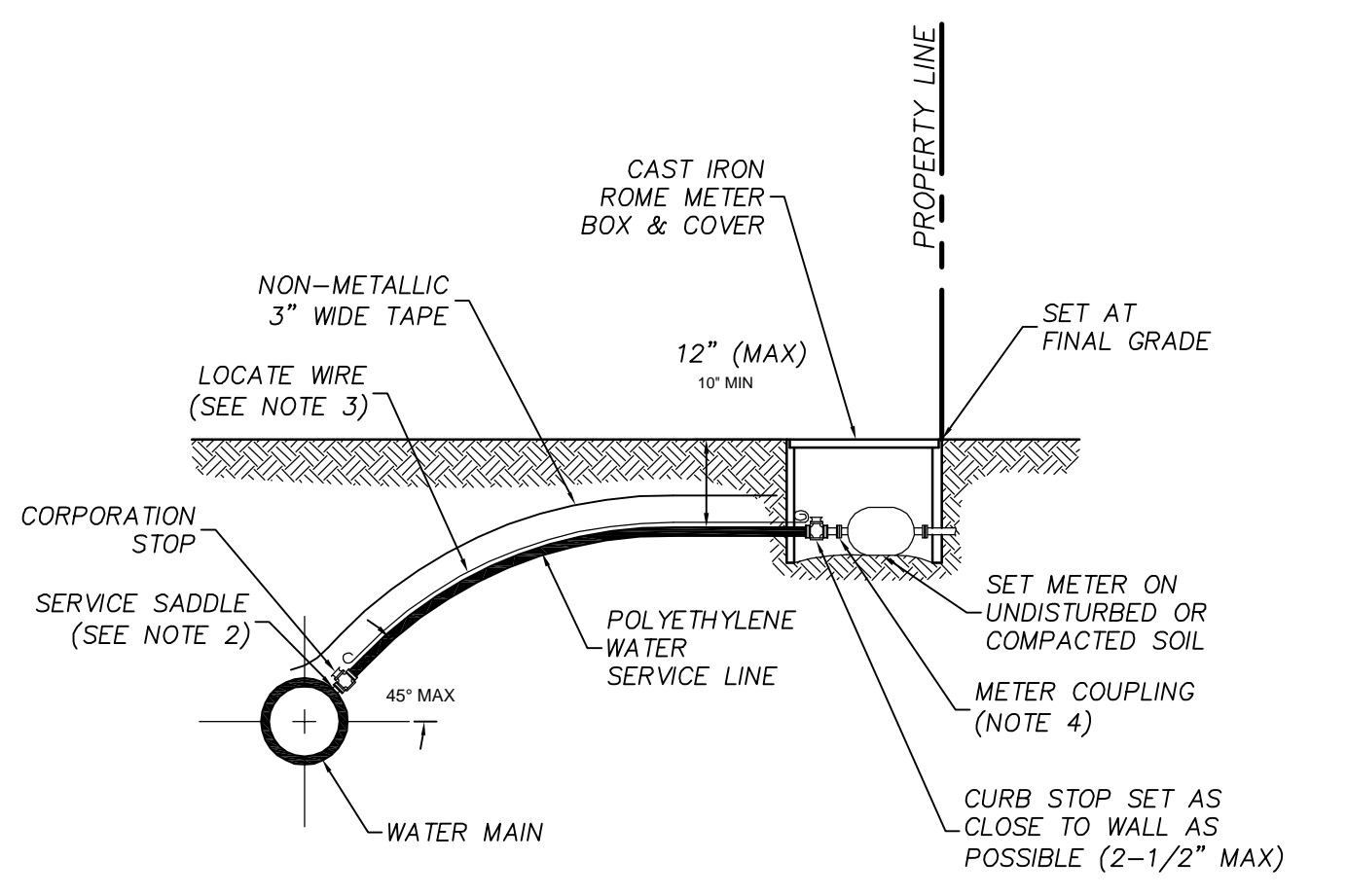
FILE NO.: 2015-003-MD3
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/MLR

SHEET NO.: **MD-3**
 OF 5



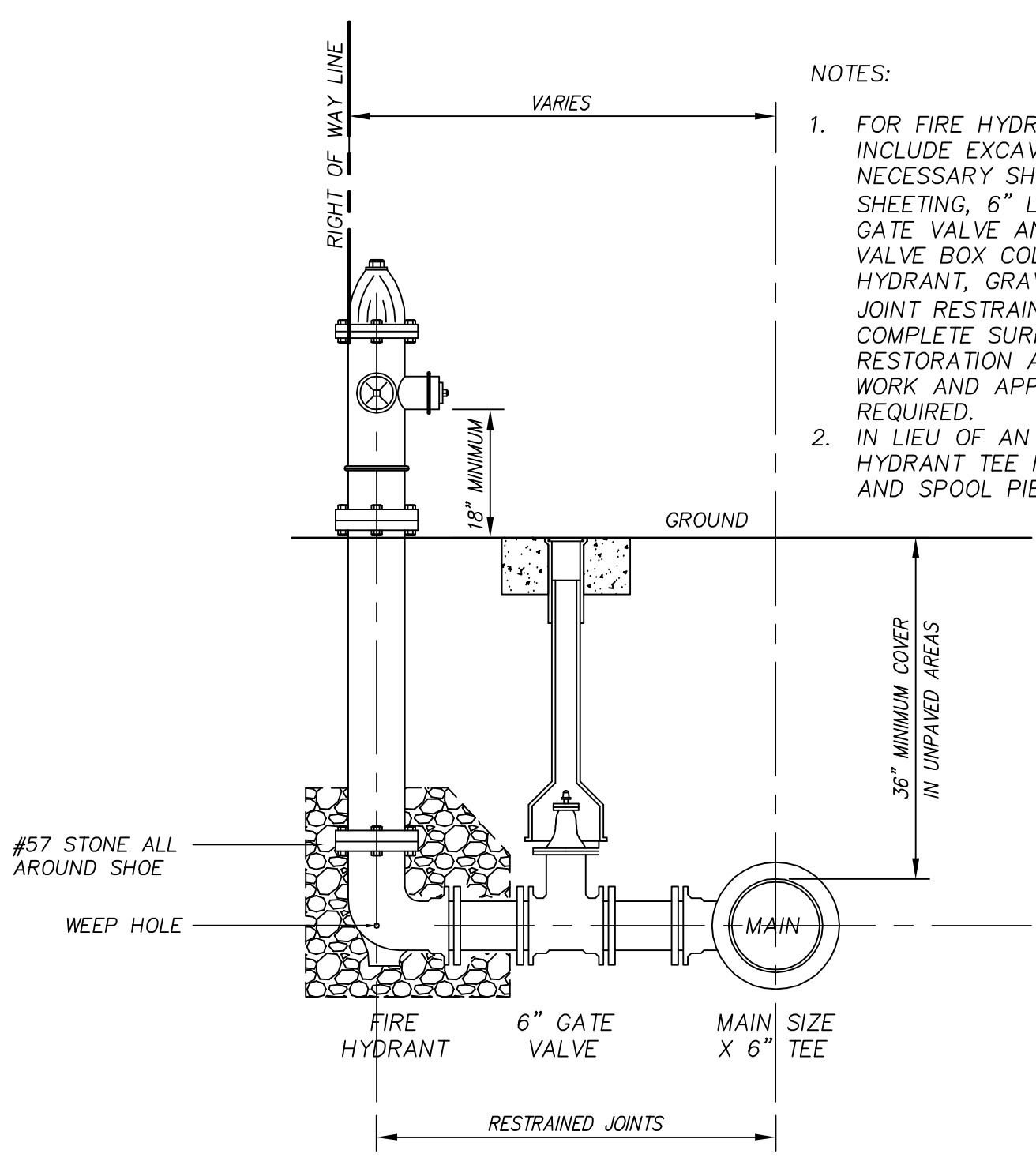
1. SET TOP OF CONCRETE COLLAR FLUSH WITH FINISH GRADE (OR LANDSCAPING). NO CONCRETE COLLAR IS REQUIRED IN PAVED AREAS.
2. THE VALVE BOX SHALL NOT REST ON TOP OF VALVE.
3. PRECAST CONCRETE COLLARS MAY BE USED UPON APPROVAL OF THE CITY OF WAYCROSS. SEE ALTERNATE DETAIL ABOVE.

TYPICAL WATER VALVE INSTALLATION



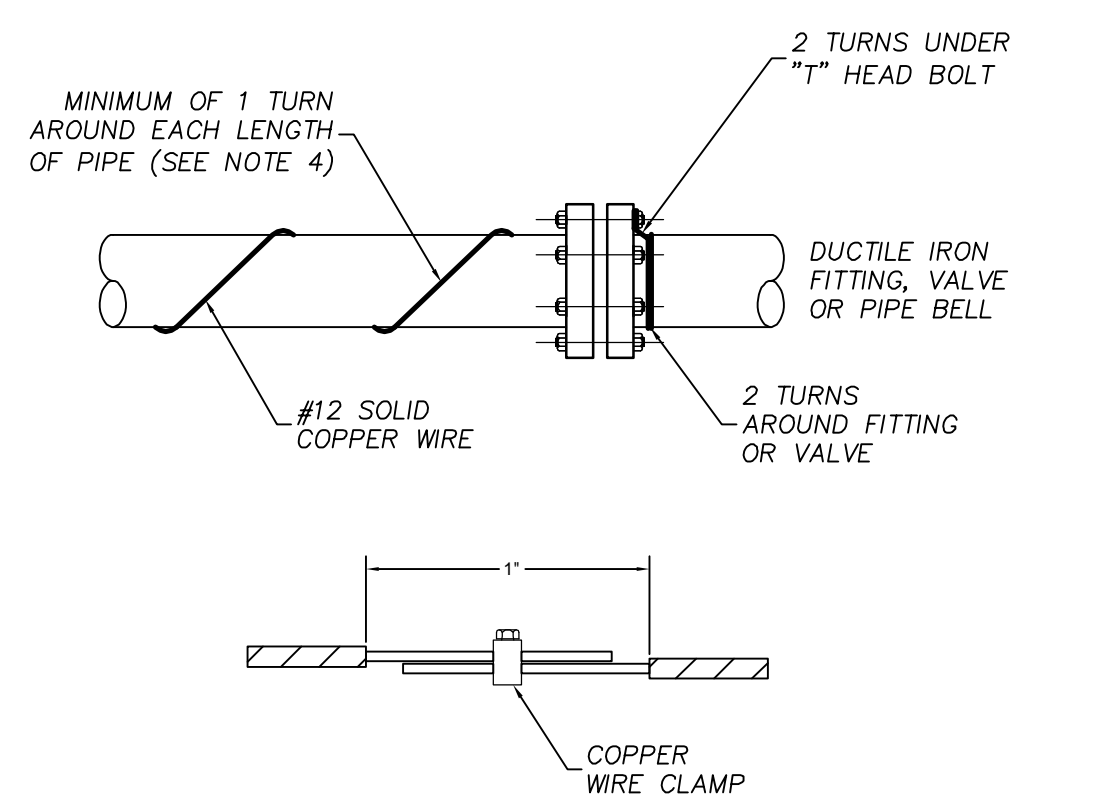
- NOTE:
1. CONTRACTOR SHALL INSTALL METER AND METER BOX. METER IS TO BE FURNISHED THROUGH THE CITY OF WAYCROSS.
 2. ALL FITTINGS IN LATERAL SHALL BE COMPRESSION TYPE.
 3. A MINIMUM OF TWO FULL THREADS ARE REQUIRED FOR TAPPING SLEEVE TO GO INTO THE PIPE WALL.
 4. INSULATED SINGLE STRAND COPPER WIRE SHALL BE STRAPPED TO THE PIPE AND ATTACHED TO THE CORPORATION AND CURB STOPS.
 5. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (NO METER IS INSTALLED).
 6. WATER SERVICES SERVING VACANT LOTS (SERVICE NOT IN USE), SHALL INCLUDE A "W" CUT INTO THE CURB.
 7. POLYETHYLENE WATER SERVICE LINE SHALL BE PERPENDICULAR TO THE MAIN UNLESS APPROVED OTHERWISE BY THE ENGINEER.

TYPICAL DOMESTIC WATER SERVICE



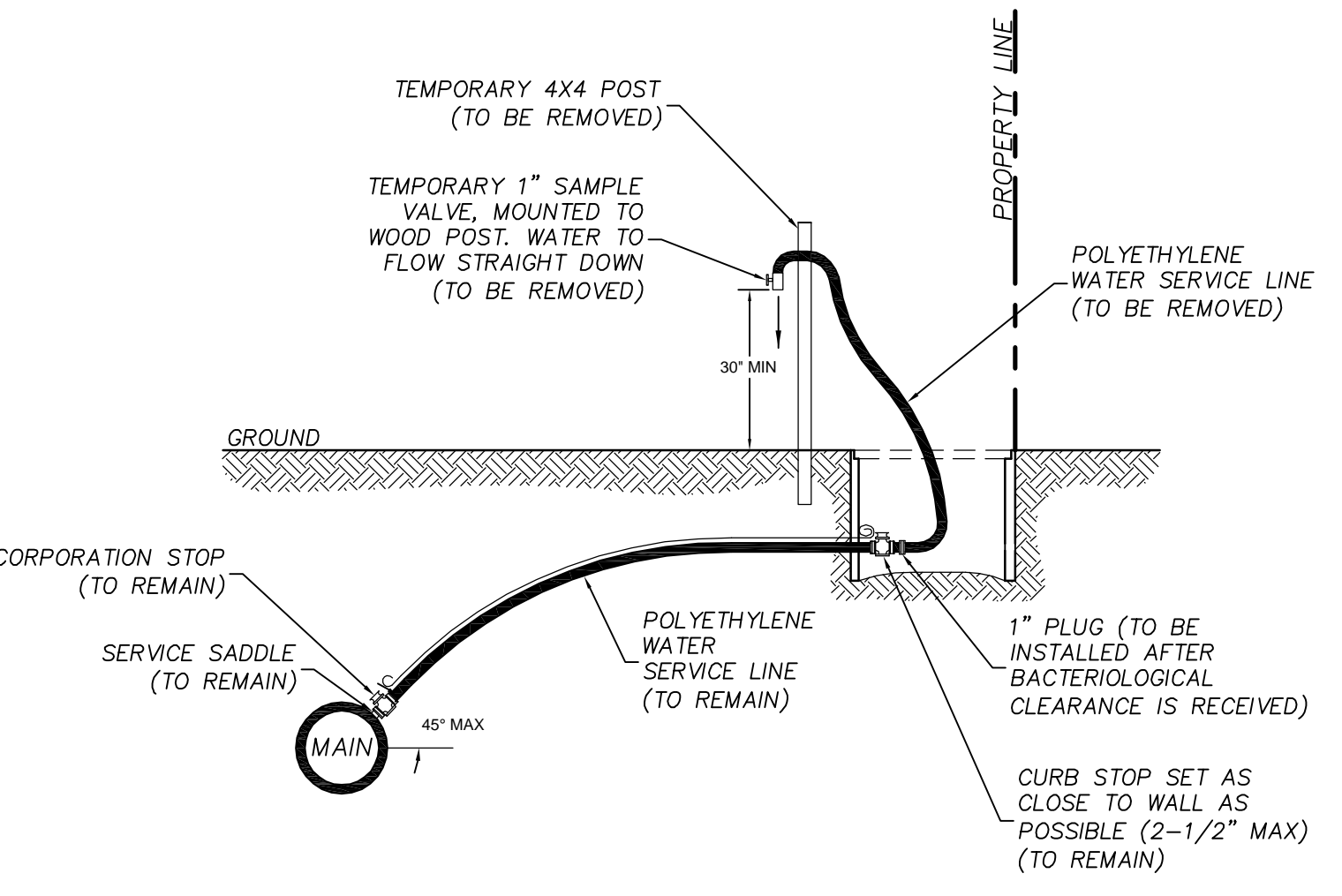
- NOTES:
1. FOR FIRE HYDRANT ASSEMBLIES INCLUDE EXCAVATION, BACKFILL, NECESSARY SHORING AND SHEETING, 6" LEAD PIPE, 6" GATE VALVE AND VALVE BOX, VALVE BOX COLLAR, FIRE HYDRANT, GRAVEL, TIE ROD JOINT RESTRAINTS (NOT SHOWN), COMPLETE SURFACE RESTORATION AND ALL OTHER WORK AND APPURTENANCES REQUIRED.
 2. IN LIEU OF AN ALL MJ TEE, A HYDRANT TEE MAY BE USED AND SPOOL PIECE ELIMINATED.

FIRE HYDRANT ASSEMBLY DETAIL



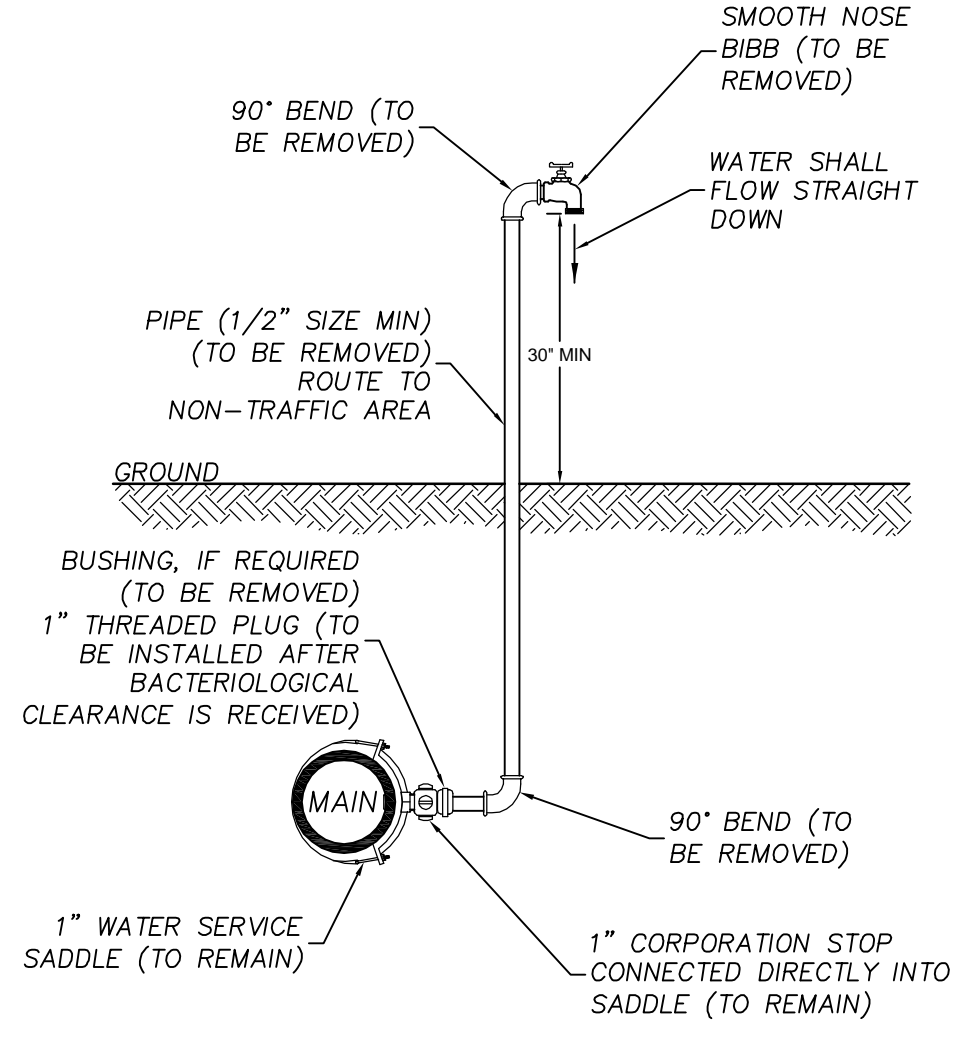
- NOTE:
1. USE #12 AWG SOLID PLASTIC COATED COPPER WIRE.
 2. STRIP 2" OF COATING & WRAP WIRE 2 TURNS UNDER "T" HEAD BOLT ON TOP OF DUCTILE IRON FITTING (VALVE). NEXT WRAP WIRE 2 TURNS AROUND BELL OF FITTING (VALVE) AND WIND WITH A CONTINUOUS LENGTH OF AT LEAST 4 WRAPS PER LENGTH OF PVC PIPE TO THE NEXT DUCTILE IRON FITTING. TERMINATE AT FITTING IN A SIMILAR MANNER AS NOTED ABOVE.
 3. ALL SPLICES MUST BE MADE BY USING COPPER WIRE SPLICE, "U" BOLT ASSEMBLIES AND THEN WRAPPING WITH ELECTRICAL TAPE.
 4. IN LIEU OF "WRAPPING" TRACER WIRE AROUND PVC PIPE, WIRE MAY BE STRUNG ALONG THE TOP OF PIPE, PROVIDED IT IS TAPED TO THE PIPE EVERY 5'-0" TO ENSURE THAT ACCURATE POSITION IS MAINTAINED DURING BACKFILL.

TRACER WIRE INSTALLATION



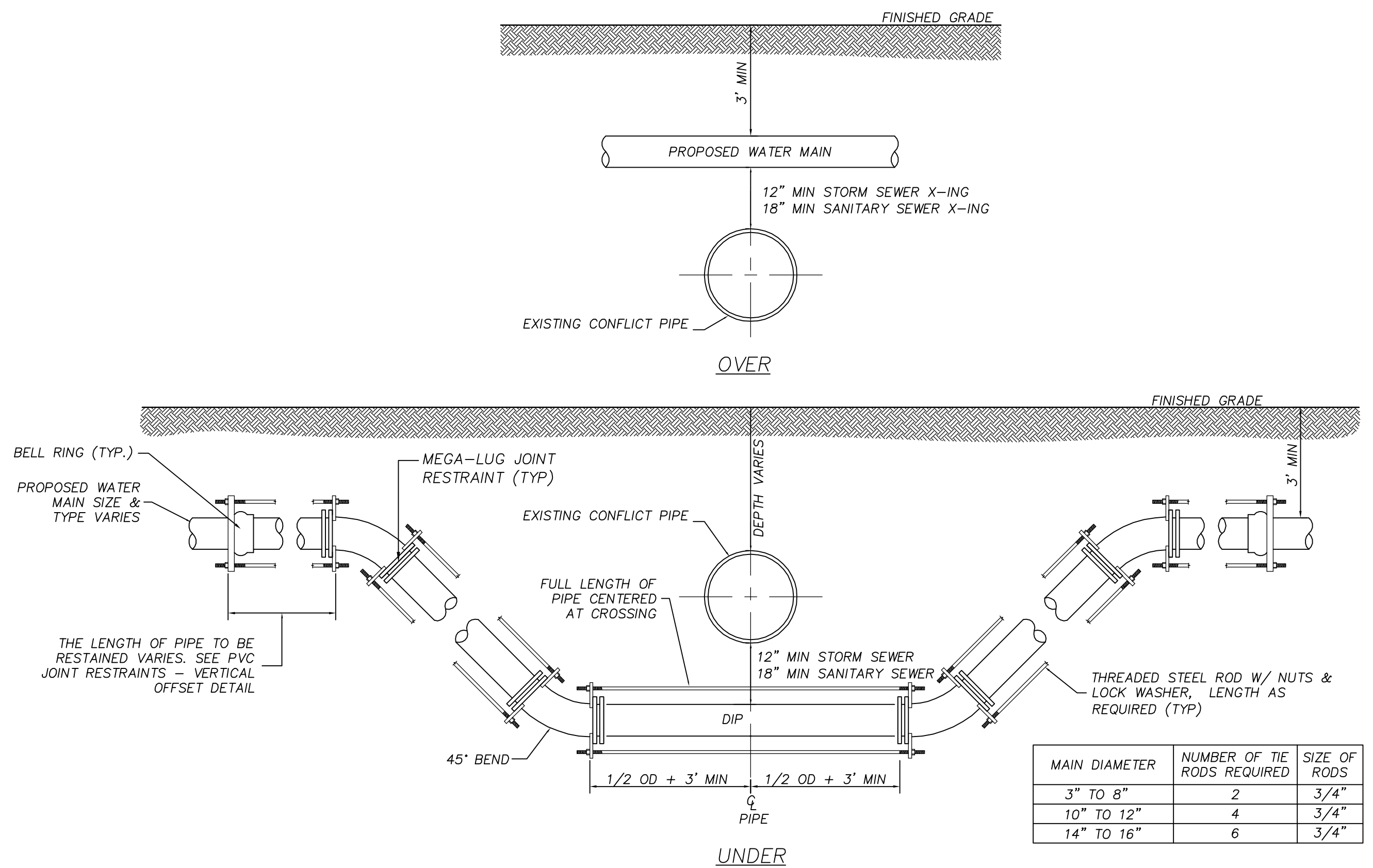
- NOTE:
1. WATER SERVICE CONNECTION MAY BE USED FOR TEMPORARY SAMPLE TAP IF LOCATED NEAR REQUIRED SAMPLING POINT.
 2. WATER SERVICE TO BE INSTALLED PER "WATER SERVICE DETAIL"
 3. LOCATION OF SAMPLE POINT HOSE BIBB SHALL BE ROUTED TO NON-TRAFFIC AREAS IF REQUIRED.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS, AS NOTED, AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.

TEMPORARY SAMPLE TAP USING WATER SERVICE LATERAL



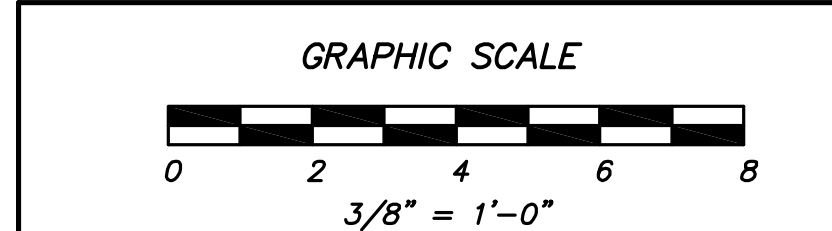
- NOTE:
1. LOCATION OF SAMPLE POINT HOSE BIBB SHALL BE ROUTED TO NON-TRAFFIC AREAS, IF REQUIRED.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS, AS NOTED, AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
 3. PIPE AND FITTINGS SHALL BE PVC (SCH 40) OR GALVANIZED.

TEMPORARY SAMPLE TAP



MAIN DIAMETER	NUMBER OF TIE RODS REQUIRED	SIZE OF RODS
3" TO 8"	2	3/4"
10" TO 12"	4	3/4"
14" TO 16"	6	3/4"

UTILITY CONFLICT DETAIL

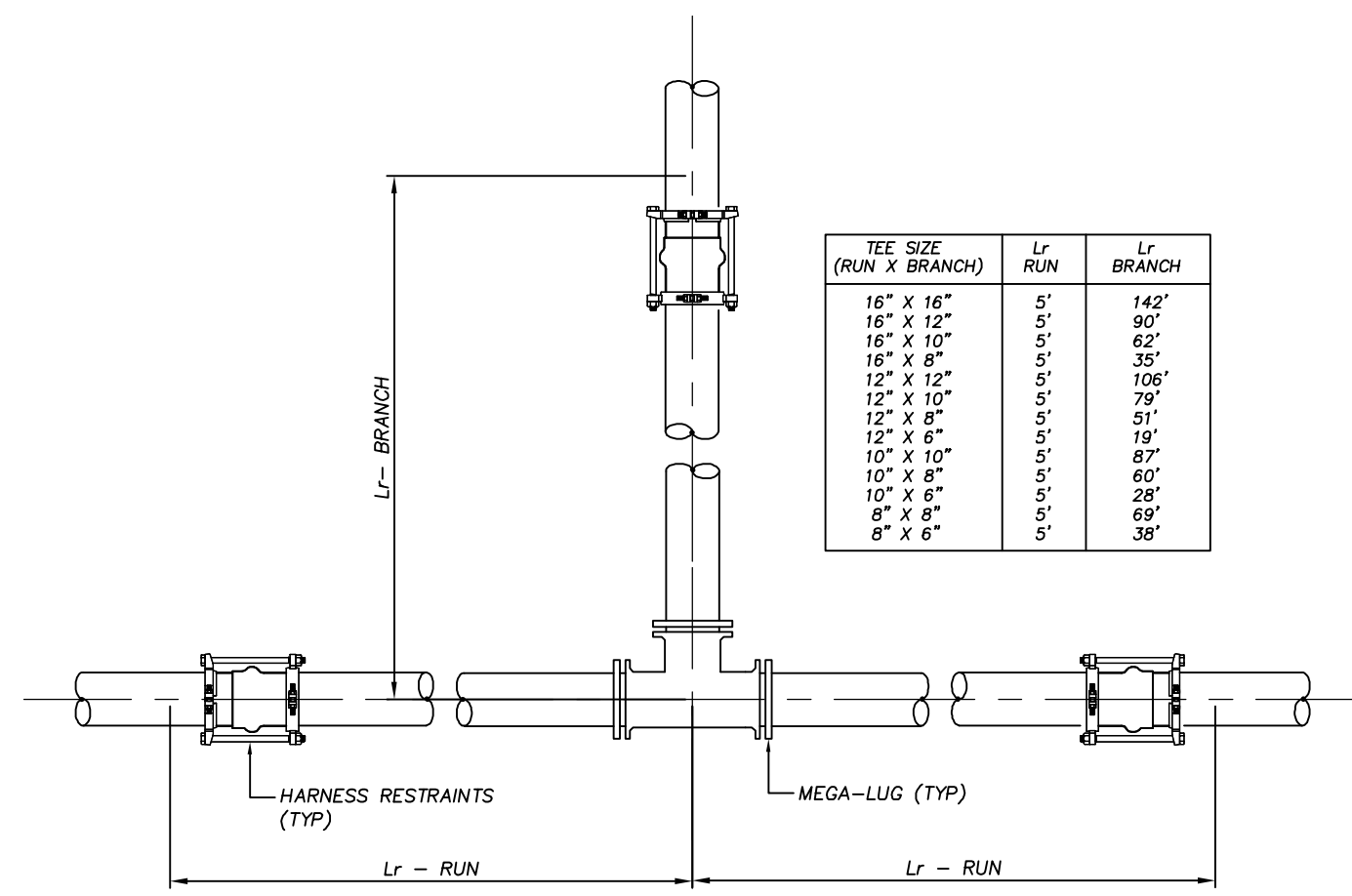


THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

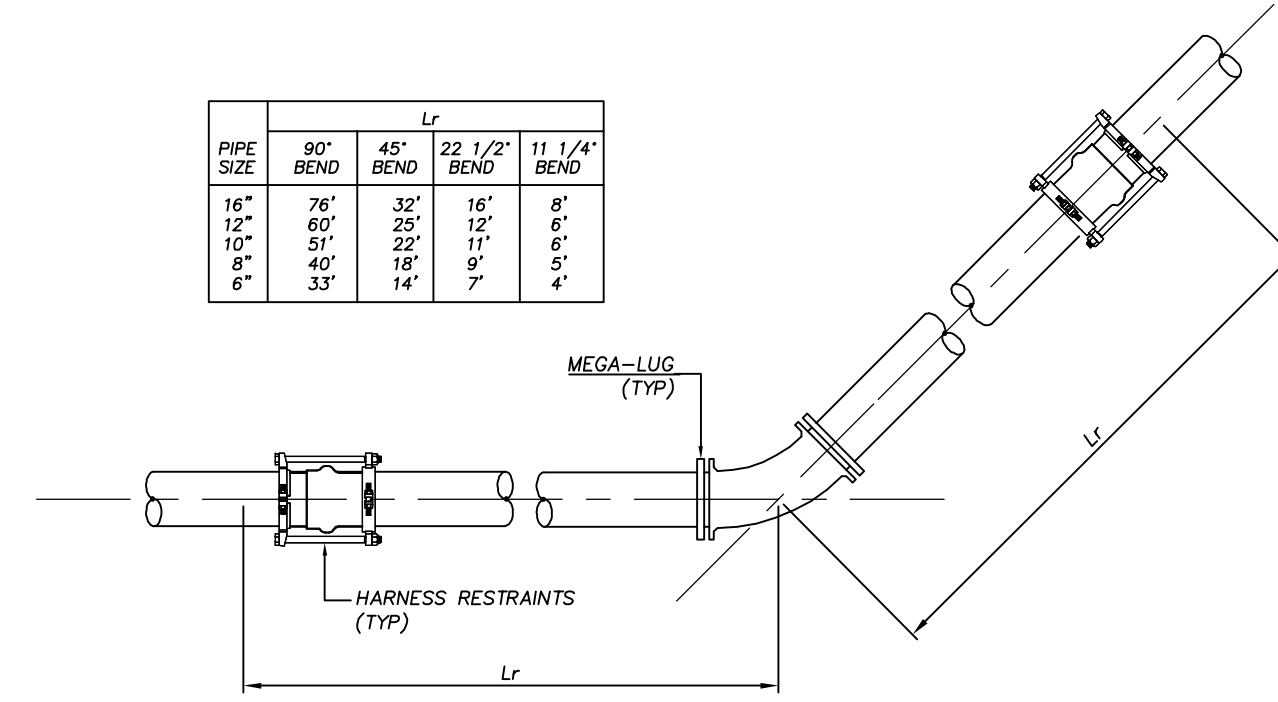
FNNAME

REVDATE

USER



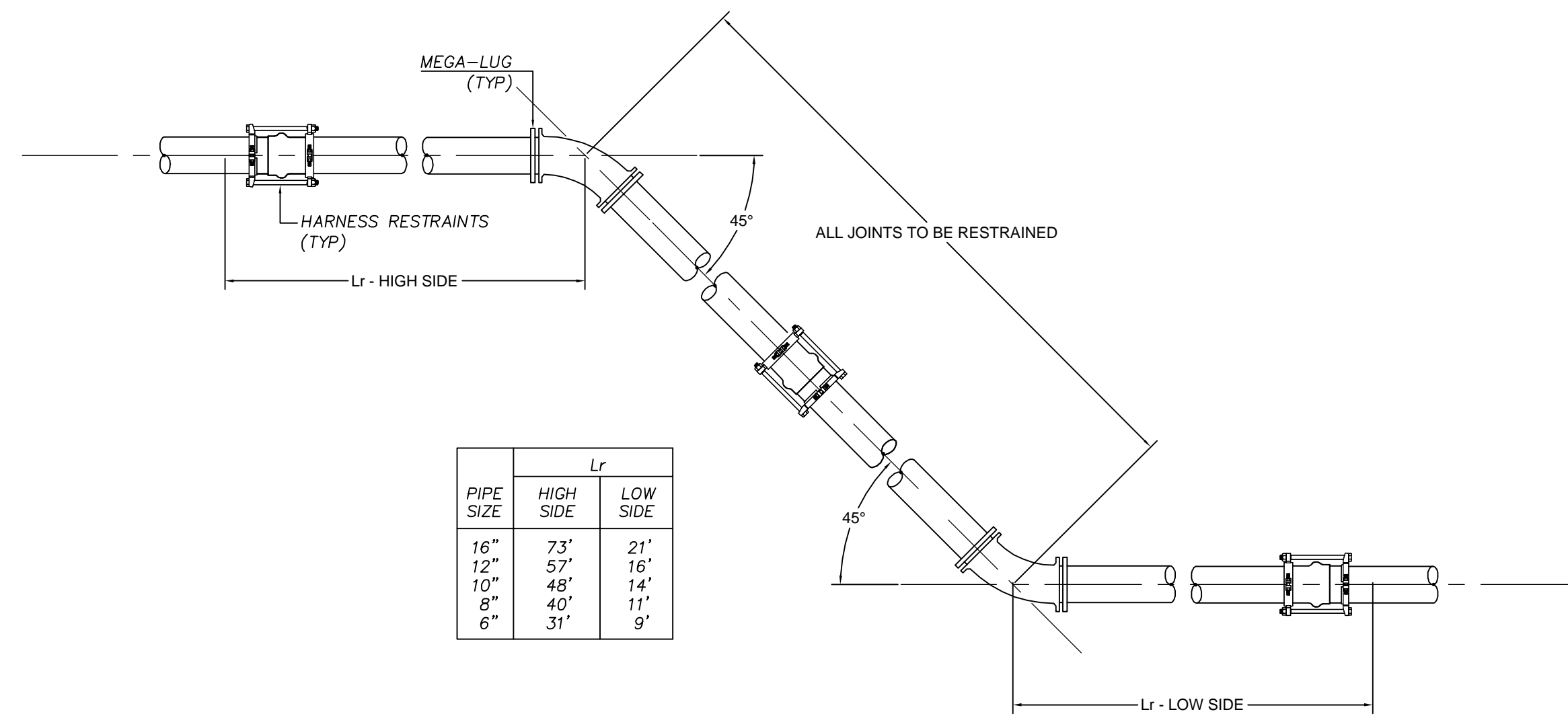
TEE SIZE (RUN X BRANCH)	Lr RUN	Lr BRANCH
16" x 16"	142"	142"
16" x 12"	104"	104"
16" x 10"	82"	82"
16" x 8"	62"	62"
12" x 12"	106"	106"
12" x 10"	81"	81"
12" x 8"	63"	63"
10" x 10"	60"	60"
10" x 8"	48"	48"
8" x 8"	38"	38"
8" x 6"	30"	30"



PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
16"	76"	32"	16"	8"
12"	60"	25"	12"	6"
10"	51"	22"	11"	5"
8"	40"	18"	9"	5"
6"	33"	14"	7"	4"

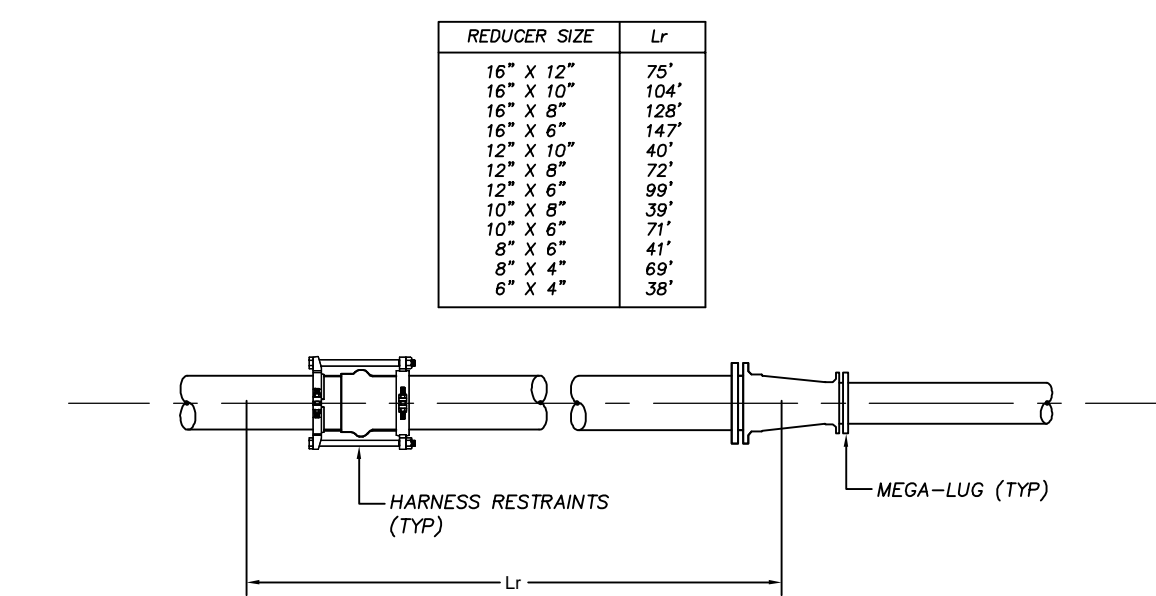
PVC JOINT RESTRAINTS - TEE

PVC JOINT RESTRAINTS - BENDS



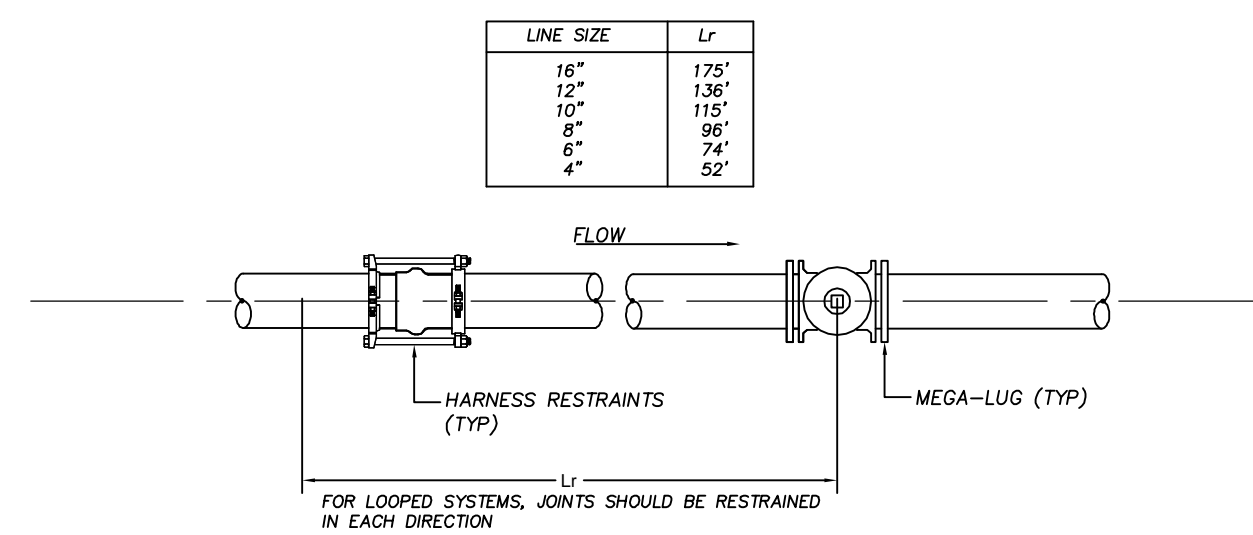
PIPE SIZE	HIGH SIDE	LOW SIDE
16"	73"	21"
12"	57"	16"
10"	48"	14"
8"	40"	11"
6"	31"	9"

PVC JOINT RESTRAINTS - VERTICAL OFFSET



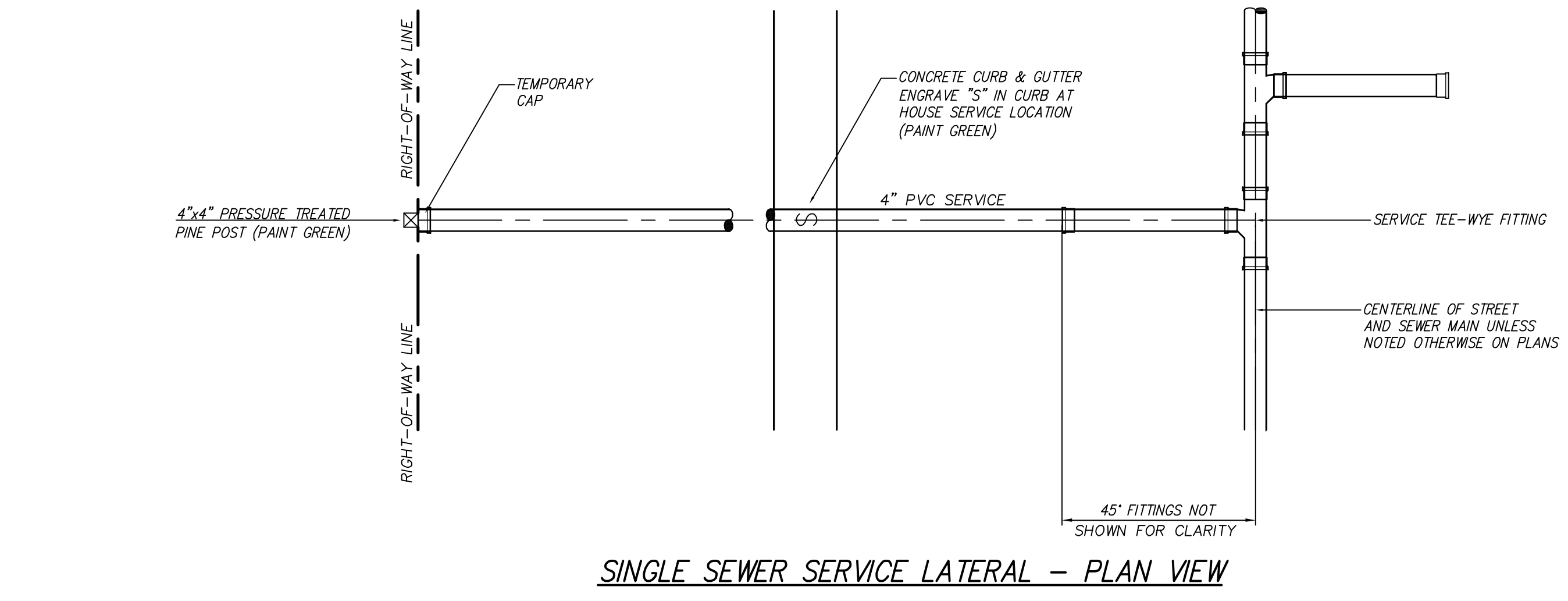
REDUCER SIZE	Lr
16" x 12"	73"
16" x 10"	104"
16" x 8"	128"
12" x 8"	147"
12" x 10"	40"
10" x 8"	73"
12" x 6"	99"
10" x 6"	39"
8" x 6"	71"
8" x 4"	41"
6" x 4"	69"
4" x 4"	38"

PVC JOINT RESTRAINTS - REDUCER

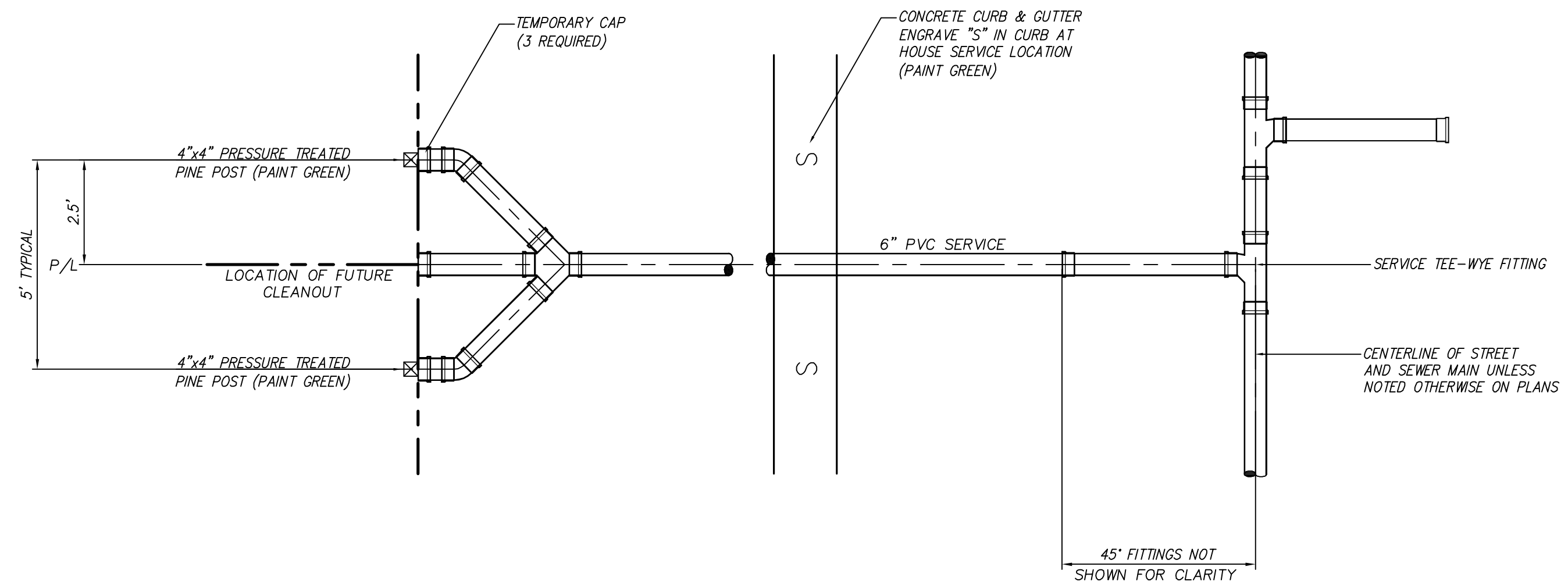


LINE SIZE	Lr
16"	175"
12"	136"
10"	115"
8"	95"
6"	74"
4"	52"

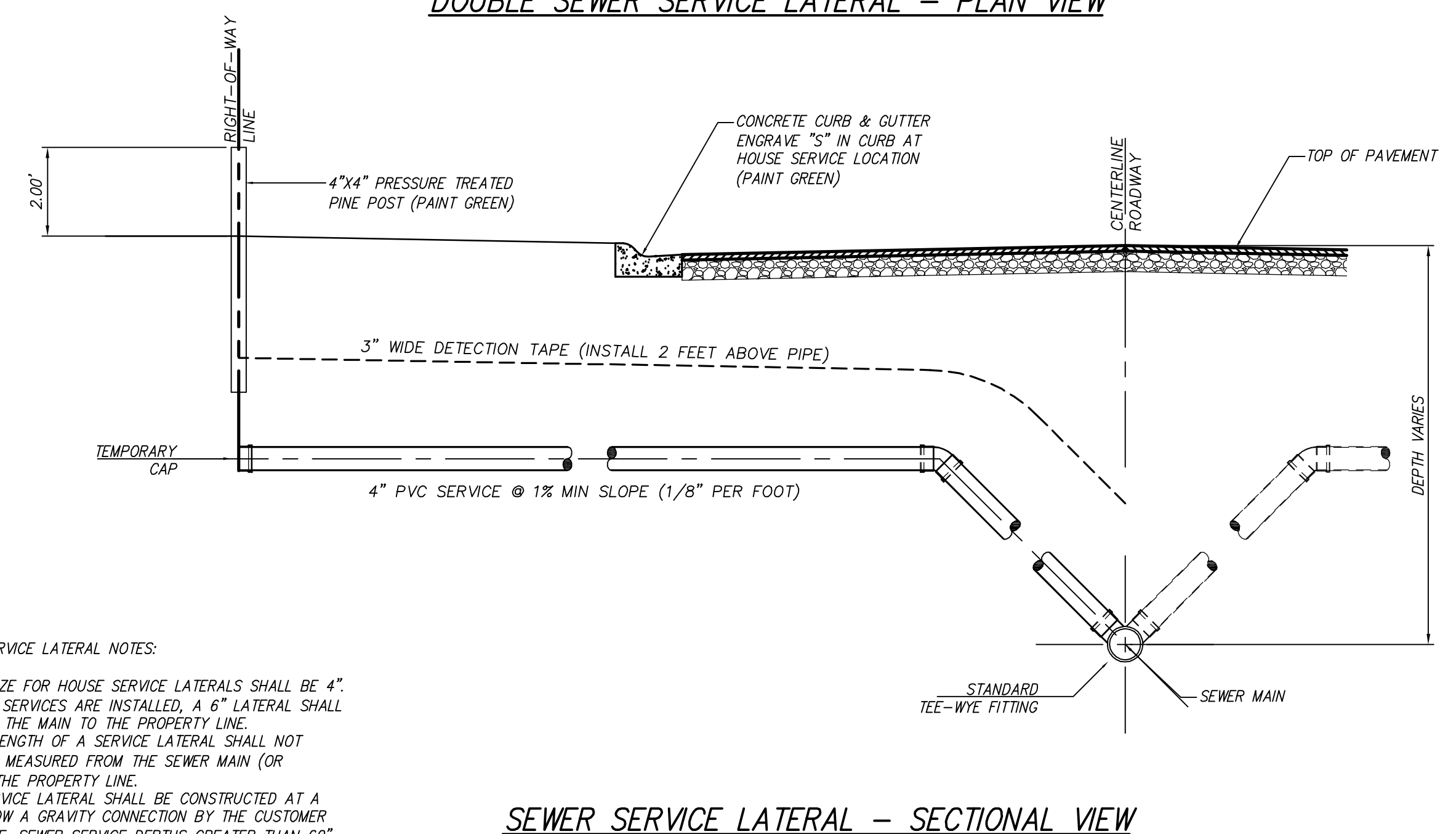
PVC JOINT RESTRAINTS - INLINE VALVE



SINGLE SEWER SERVICE LATERAL - PLAN VIEW



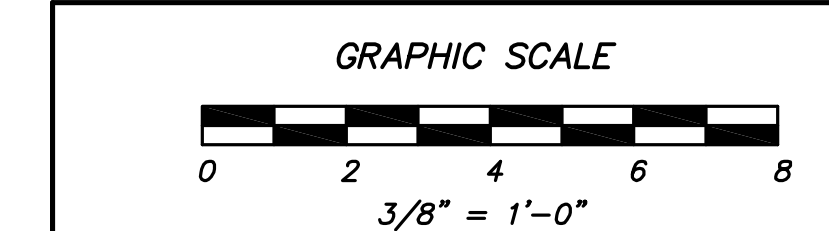
DOUBLE SEWER SERVICE LATERAL - PLAN VIEW



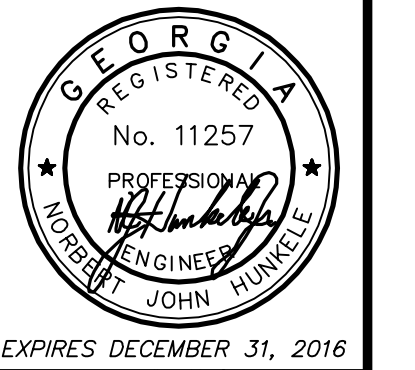
SEWER SERVICE LATERAL - SECTIONAL VIEW

GENERAL SEWER SERVICE LATERAL NOTES:

1. THE MINIMUM SIZE FOR HOUSE SERVICE LATERALS SHALL BE 4". WHERE DOUBLE SERVICES ARE INSTALLED, A 6" LATERAL SHALL BE USED FROM THE MAIN TO THE PROPERTY LINE.
2. THE MAXIMUM LENGTH OF A SERVICE LATERAL SHALL NOT EXCEED 60' AS MEASURED FROM THE SEWER MAIN (OR MANHOLE) TO THE PROPERTY LINE.
3. THE SEWER SERVICE LATERAL SHALL BE CONSTRUCTED AT A DEPTH TO ALLOW A GRAVITY CONNECTION BY THE CUSTOMER WHERE POSSIBLE. SEWER SERVICE DEPTHS GREATER THAN 60" REQUIRE APPROVAL OF THE ENGINEER.
4. ALL SERVICES SHALL BE RUN PERPENDICULAR TO THE RIGHT OF WAY LINE.
5. SERVICE CONNECTIONS ARE NOT PERMITTED ON SEWER MAINS OR TRUNK LINES LARGER THAN 15-INCHES IN DIAMETER.
6. ALL GRAVITY MAINS AND SEWER SERVICE LATERALS (INCLUDING THE TEE-WYE FITTING) WITH A DEPTH OF CUT GREATER THAN 12 FEET SHALL BE PVC SDR-26.
7. CLEANOUT SHALL BE INSTALLED AT RIGHT OF WAY LINE UPON CONNECTION OF THE CUSTOMER TO PUBLIC SEWER. SEE CLEANOUT DETAIL FOR ADDITIONAL INFORMATION.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



Coastal Engineering Consultants, Inc.
 P. O. BOX 1895
 WAYCROSS, GEORGIA 31521
 (912) 223-0874 PHONE
 johnh@cec-ga.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

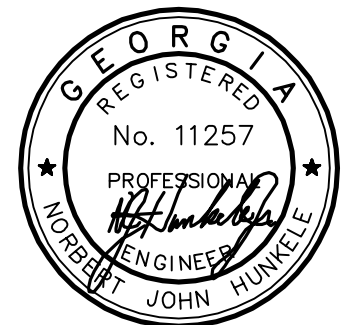
2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
 MISCELLANEOUS DETAILS - WATER & SEWER

FILE NO.: 2015-003-MD4
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/MLR
 SHEET NO.: MD-4
 OF 5

FNNAME

REVDATE

USER



Coastal Engineering Consultants, Inc.

P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0874 PHONE
john@cec-ga.com

DATE

DESCRIPTION OF REVISION

REVISION NO.

MISCELLANEOUS DETAILS - SEWER

UTILITY PROJECT

CITY OF WAYCROSS, GEORGIA

2015 STREETS, DRAINAGE &

FILE NO.: 2015-003-MD5

DATE: MARCH 27, 2015

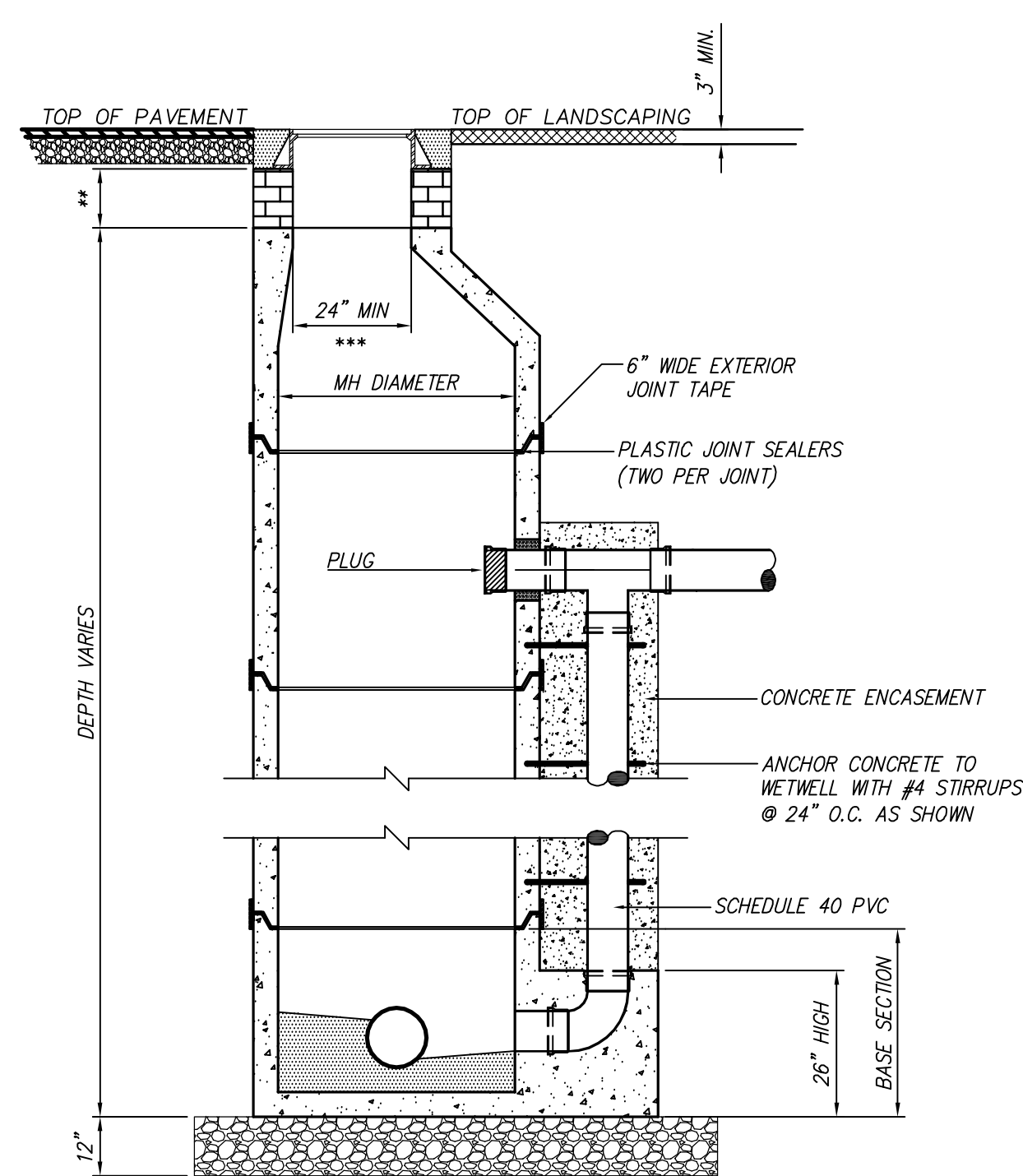
SCALE: AS SHOWN

DRAWN BY/CHECKED BY: CLM/MLR

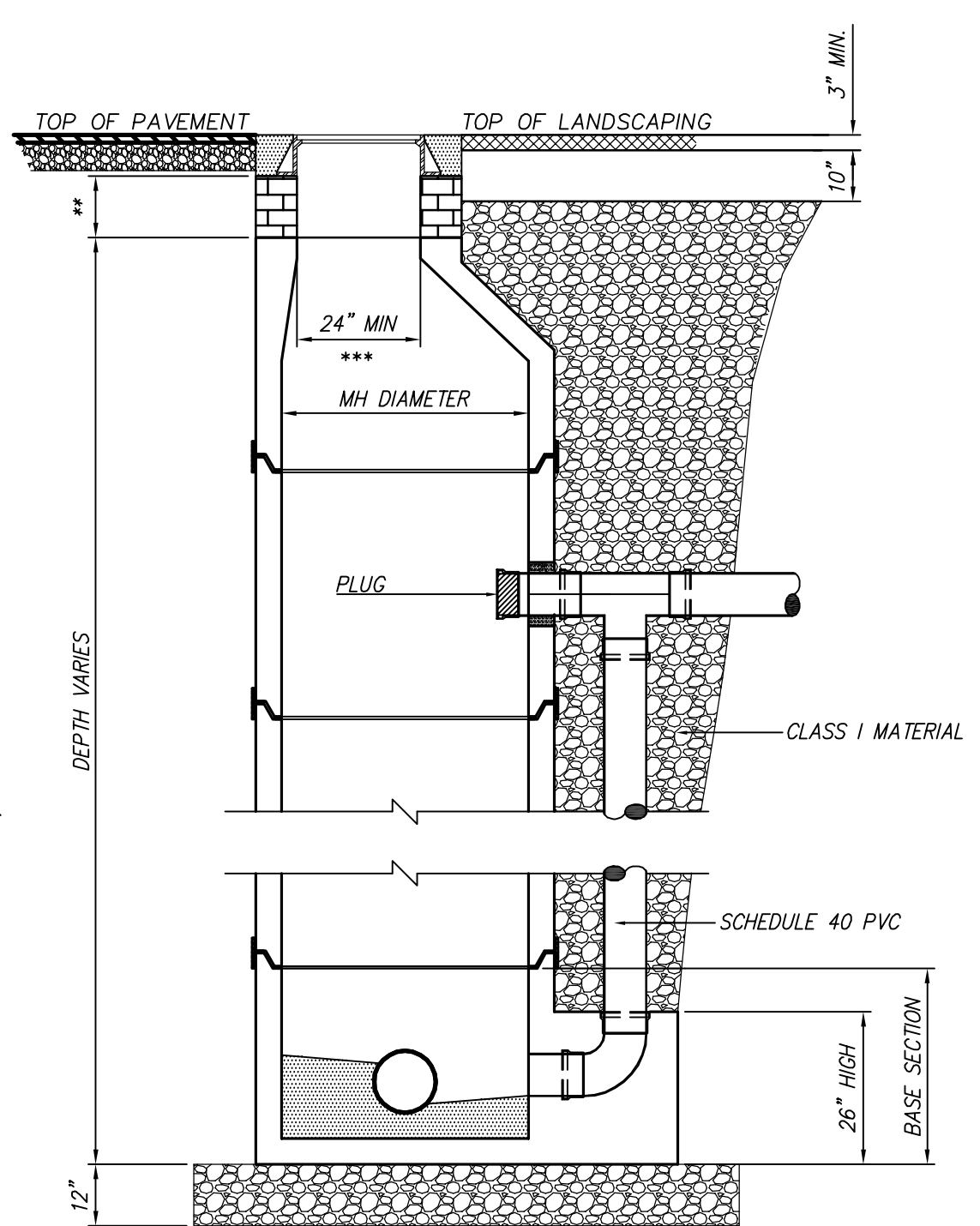
SHEET NO.:

MD-5

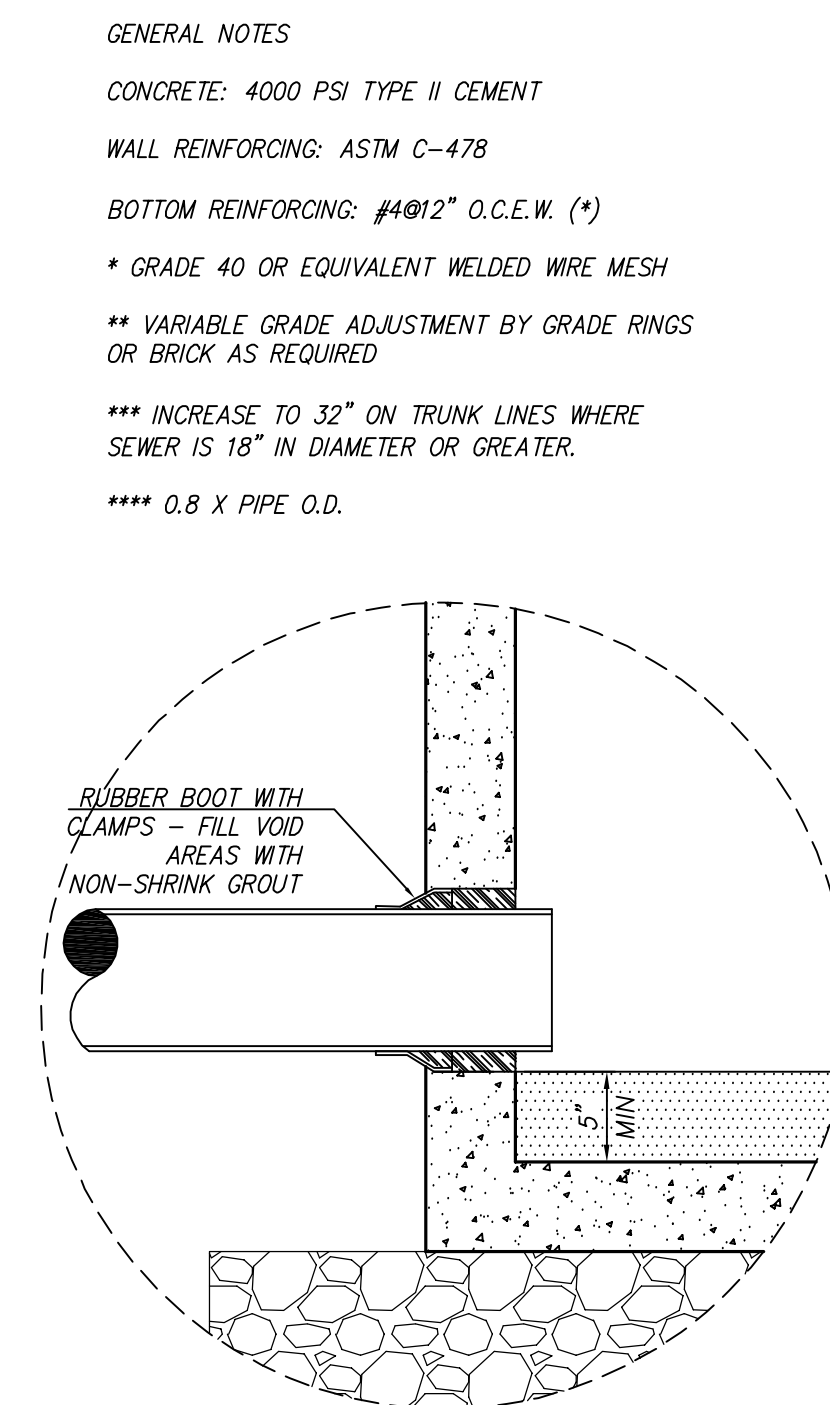
OF



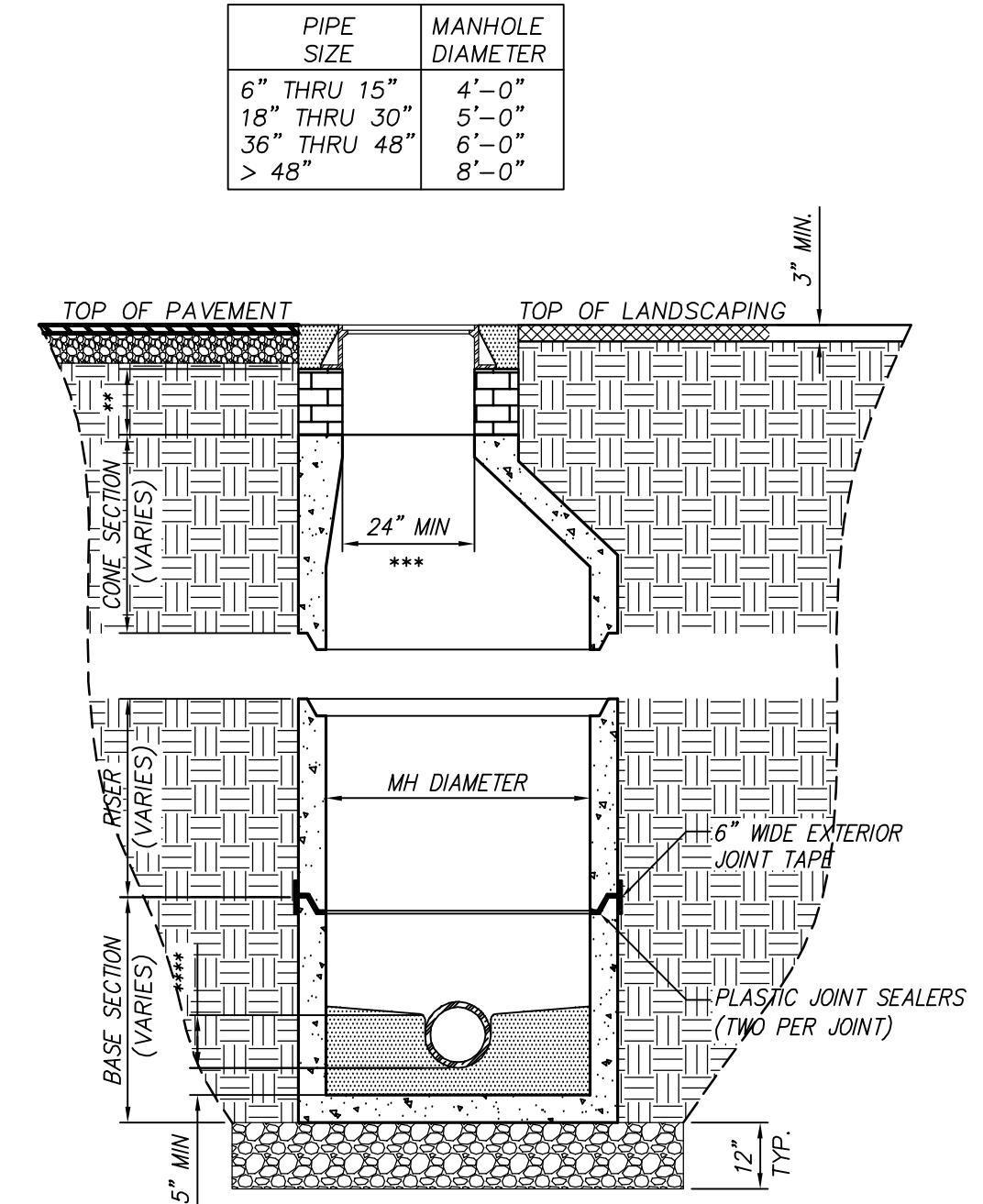
OUTSIDE DROP MANHOLE (> 10 FEET)



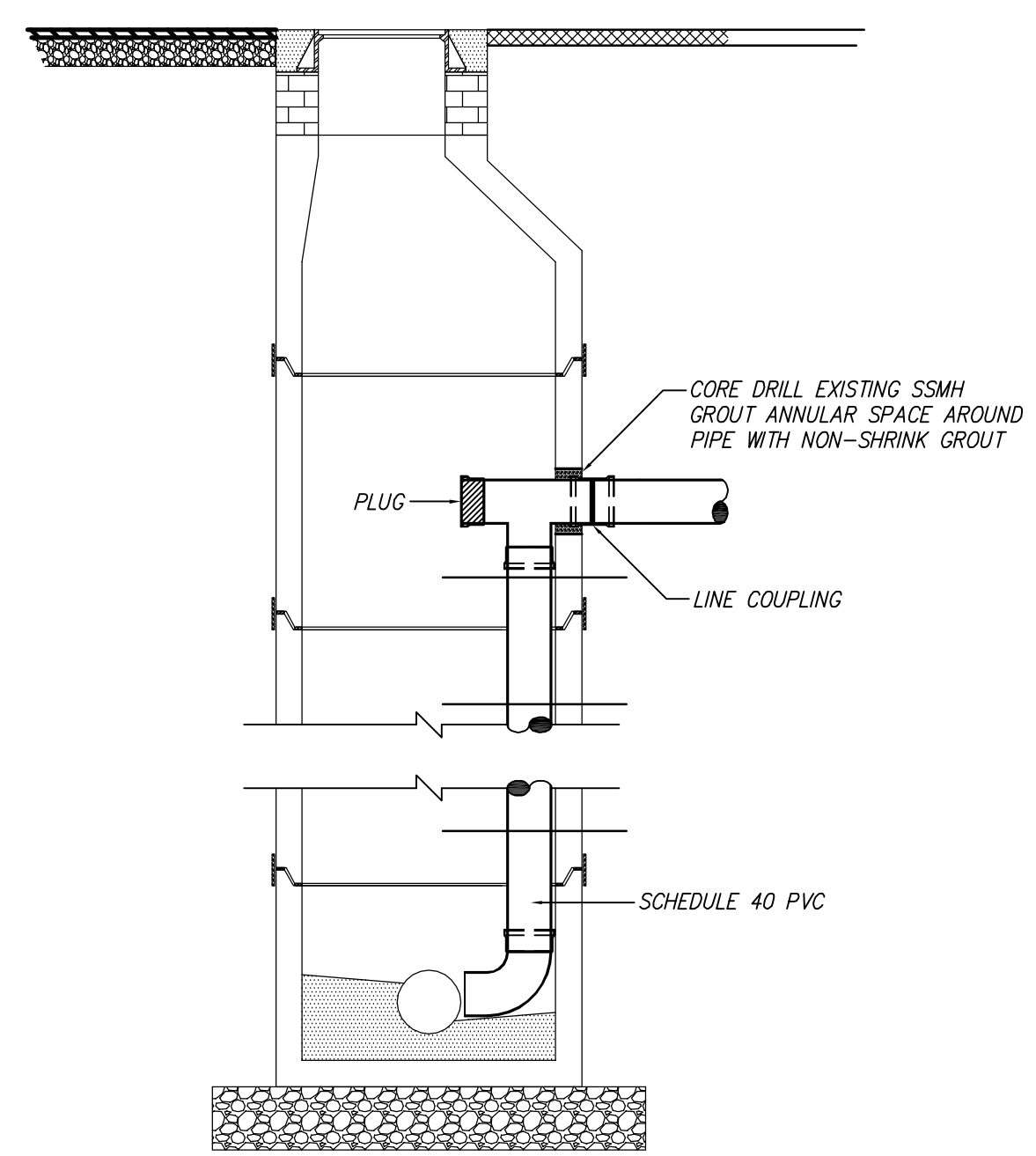
OUTSIDE DROP MANHOLE (< 10 FEET)



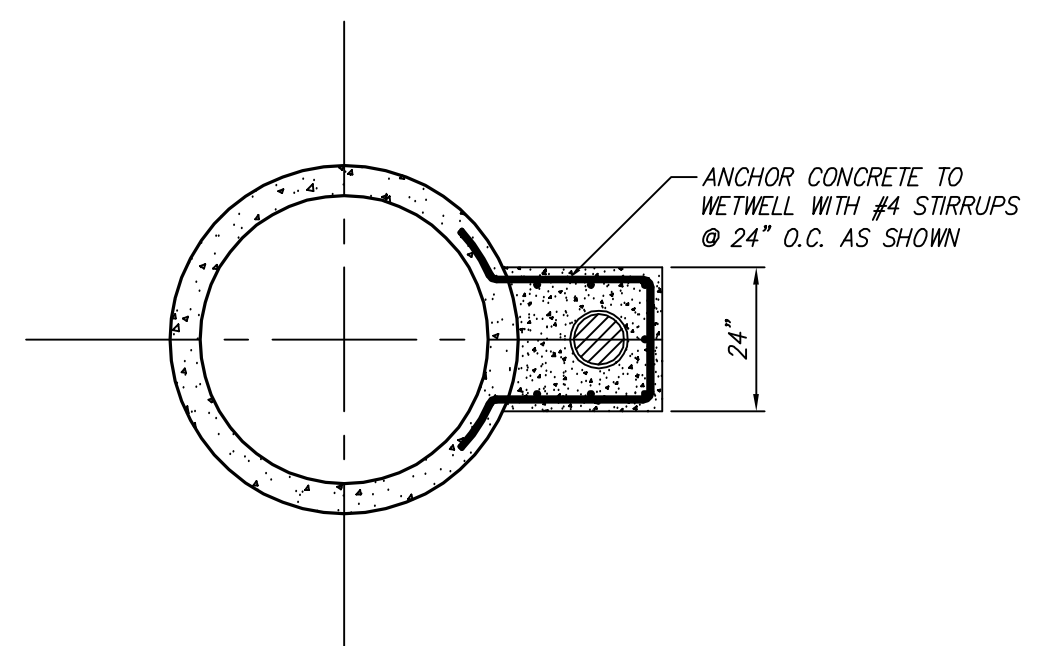
STANDARD PIPE PENETRATION



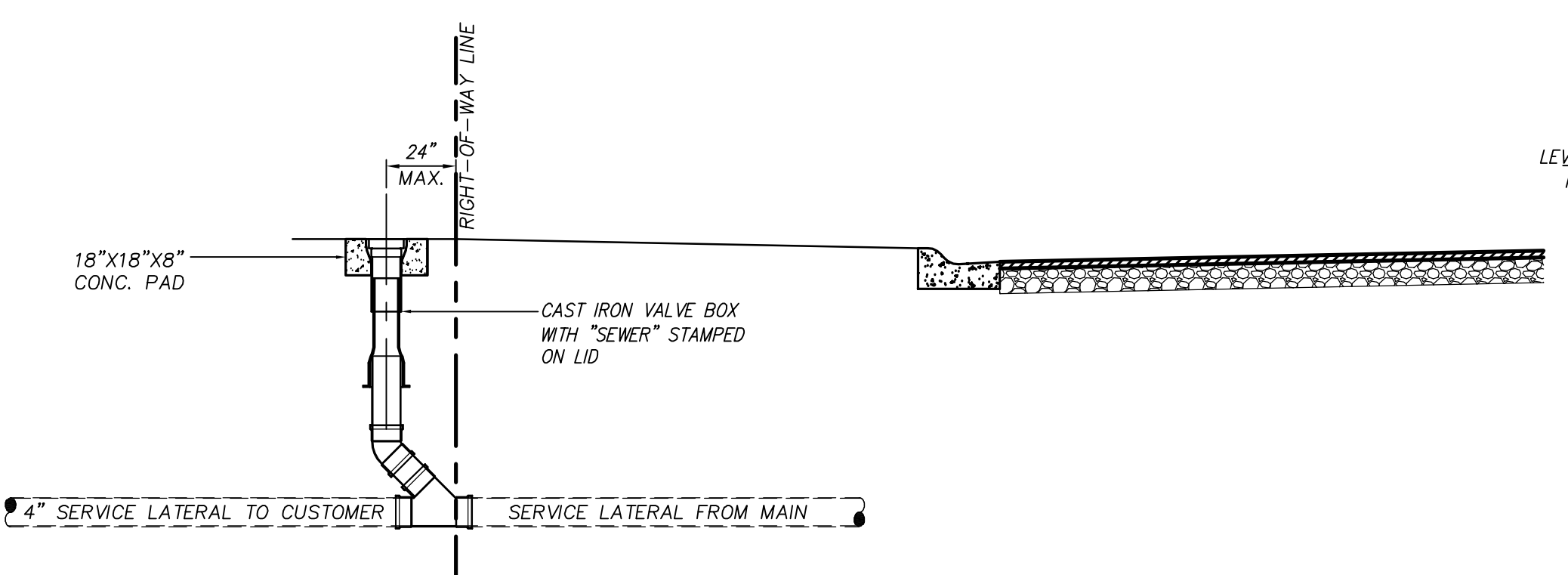
STANDARD MANHOLE



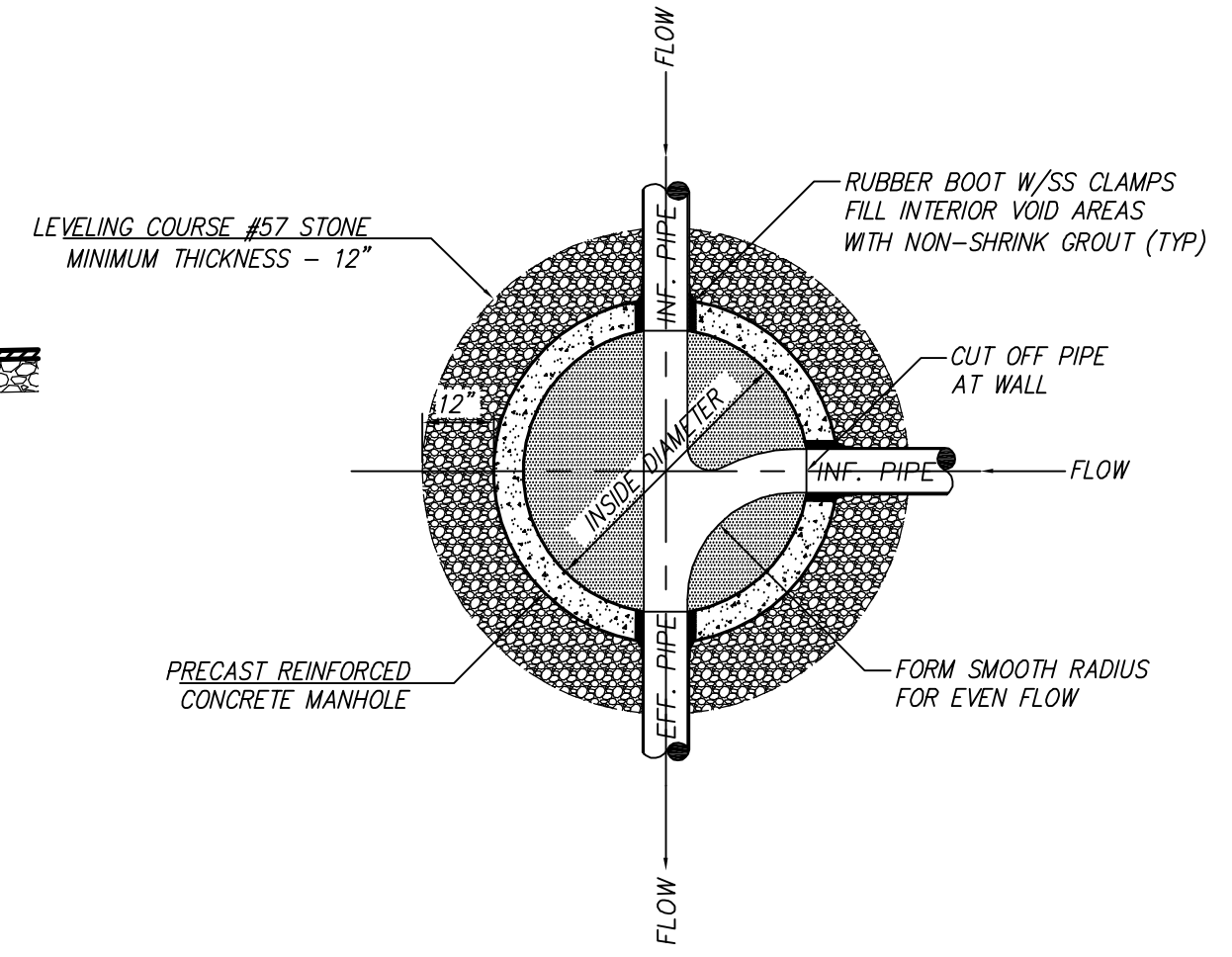
INSIDE DROP CONNECTION TO EXISTING MANHOLE



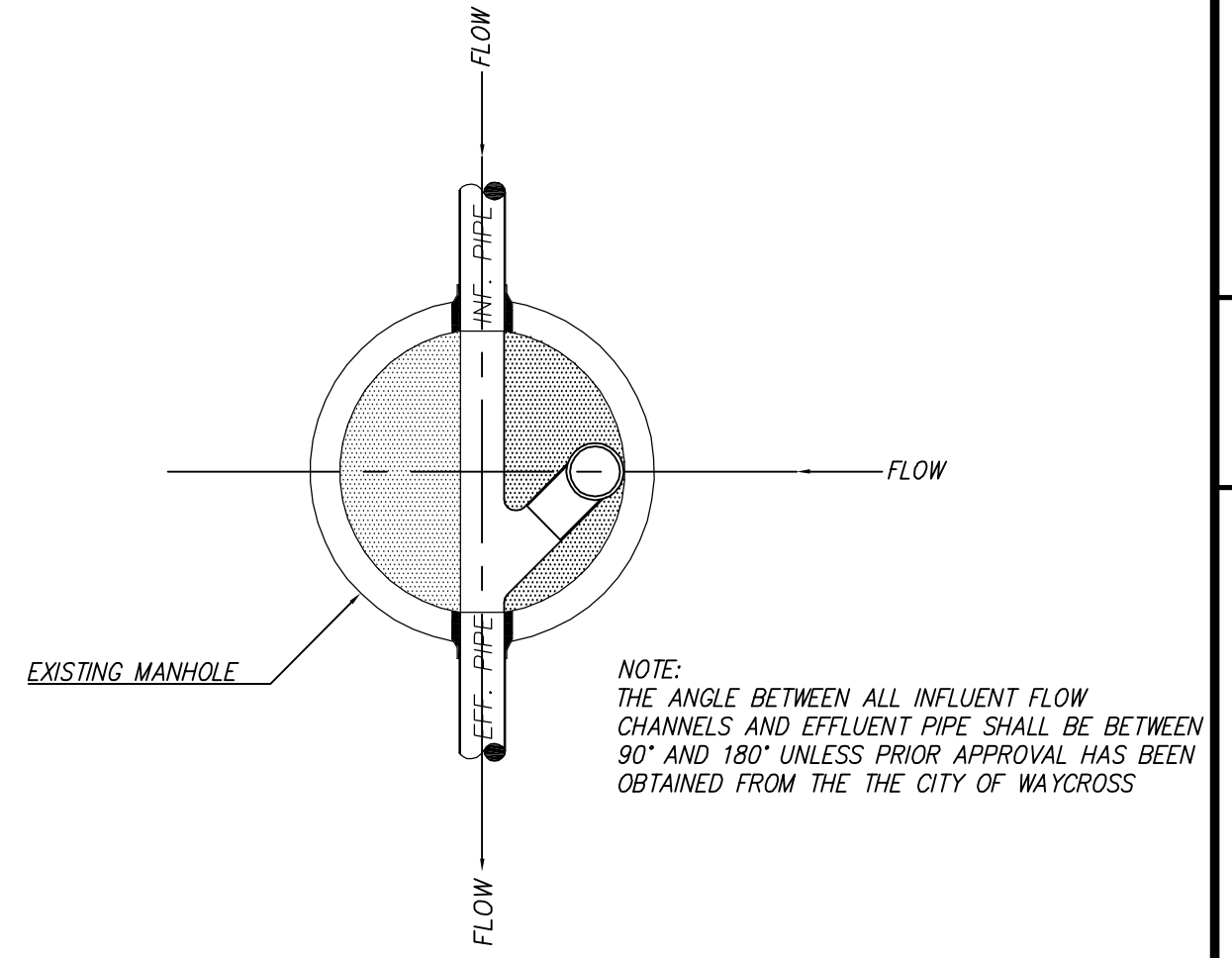
OUTSIDE DROP MANHOLE WALL PLAN



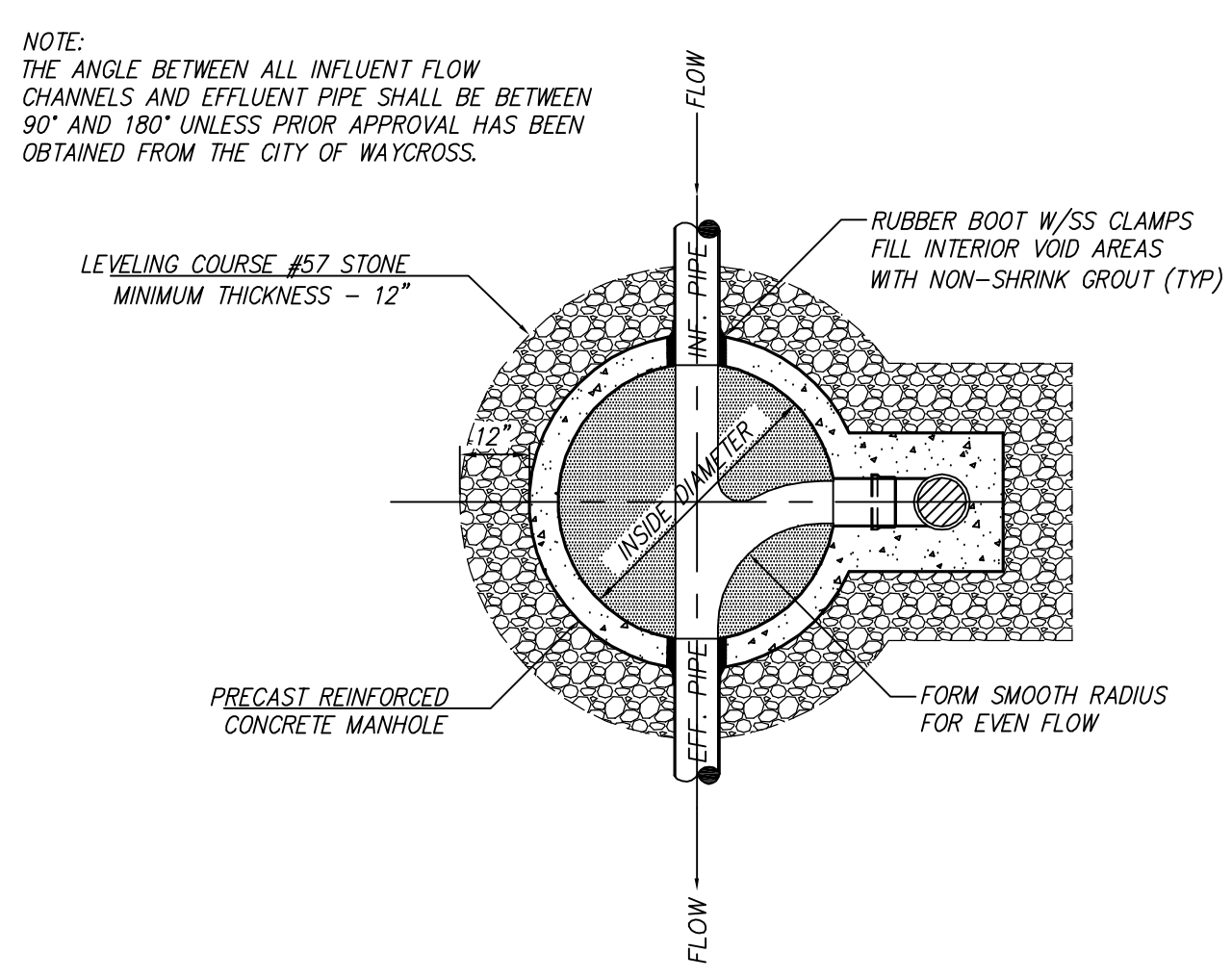
SEWER SERVICE LATERAL - LOWER CLEANOUT DETAIL



STANDARD MANHOLE BASE PLAN



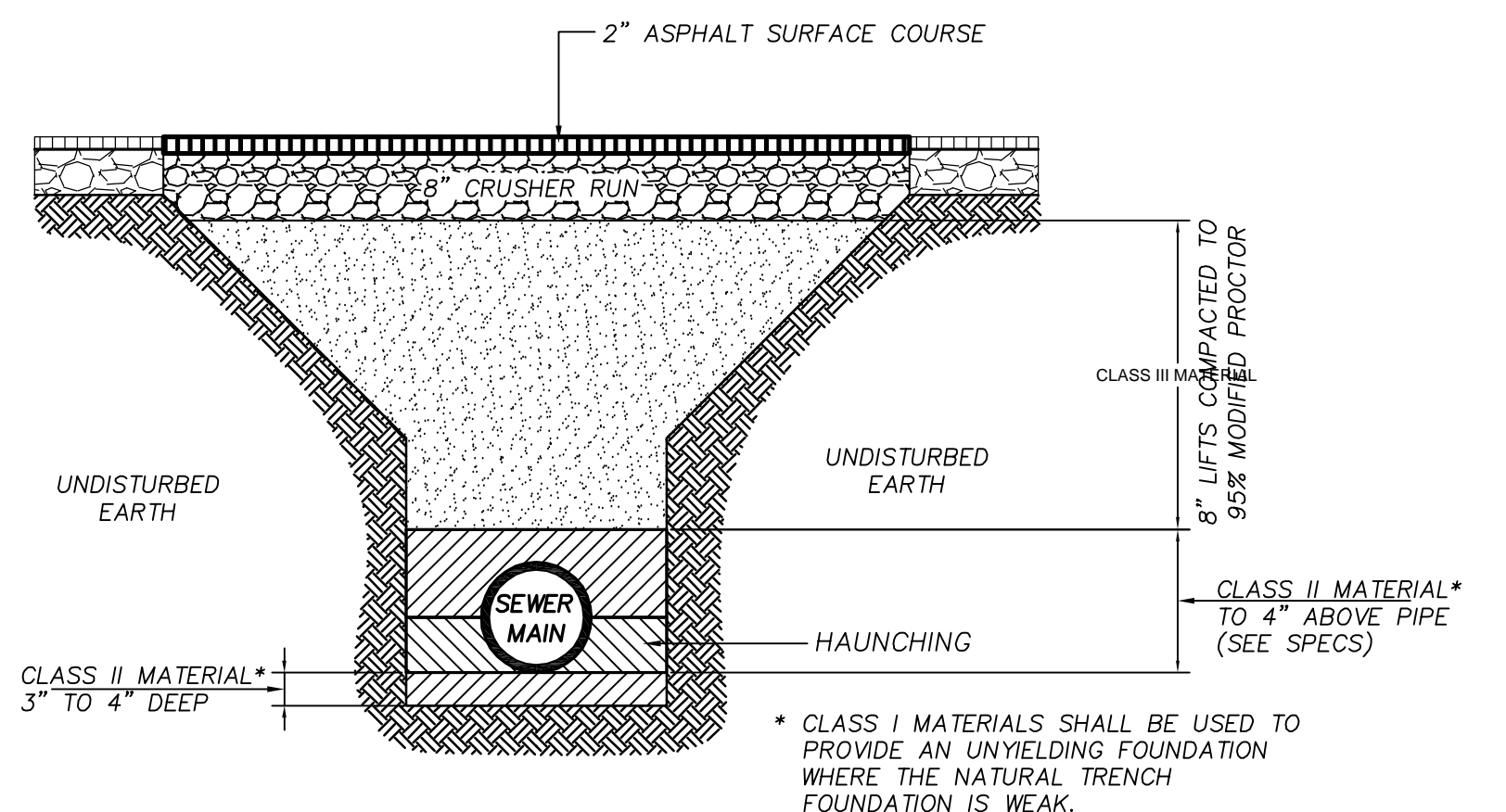
INSIDE DROP CONNECTION TO EXISTING MANHOLE WALL PLAN



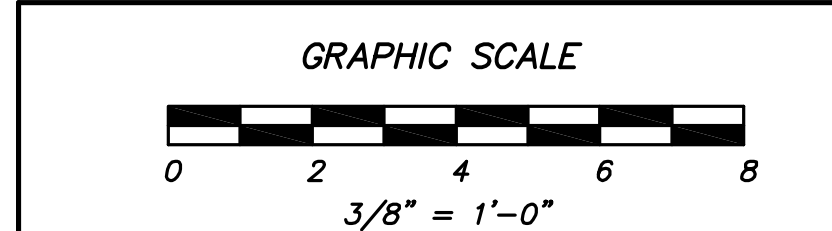
OUTSIDE DROP MANHOLE BASE PLAN

PIPE BEDDING MATERIALS		
CLASS	TYPE	DESCRIPTION
I		MANUFACTURED ANGULAR, GRANULAR MATERIAL, 1/4" TO 1 1/2" SIZE, INCLUDING MATERIALS HAVING REGIONAL SIGNIFICANCE SUCH AS CRUSHED STONE OR ROCK
II	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 95% RETAINED ON NO. 200 SIEVE, CLEAN.
	GP	POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 95% RETAINED ON NO. 200 SIEVE, CLEAN.
	SW	WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES NO. 4 SIEVE, MORE THAN 95% RETAINED ON NO. 200 SIEVE, CLEAN.
	SP	POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES, MORE THAN 50% OF COARSE FRACTION PASSES NO. 4 SIEVE, MORE THAN 95% RETAINED ON NO. 200 SIEVE, CLEAN.
III	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE.
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES, 50% OR MORE OF COARSE FRACTION RETAINED ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE.
	SM	SILTY SANDS, SAND-SILT MIXTURES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE.
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES, MORE THAN 50% OF COARSE FRACTION PASSES ON NO. 4 SIEVE, MORE THAN 50% RETAINED ON NO. 200 SIEVE.
IV	ML	INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES NO. 200 SIEVE.
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS, LIQUID LIMIT 50% OR LESS, 50% OR MORE PASSES NO. 200 SIEVE.
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS, LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES NO. 200 SIEVE.
CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS, LIQUID LIMIT GREATER THAN 50%, 50% OR MORE PASSES NO. 200 SIEVE.	

FLEXIBLE PIPE IN TRAFFIC AREAS



* CLASS I MATERIALS SHALL BE USED TO PROVIDE AN UNYIELDING FOUNDATION WHERE THE NATURAL TRENCH FOUNDATION IS WEAK.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FNNAME

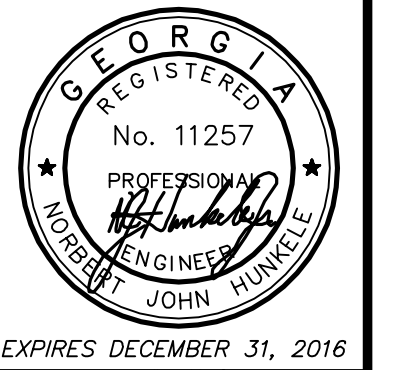
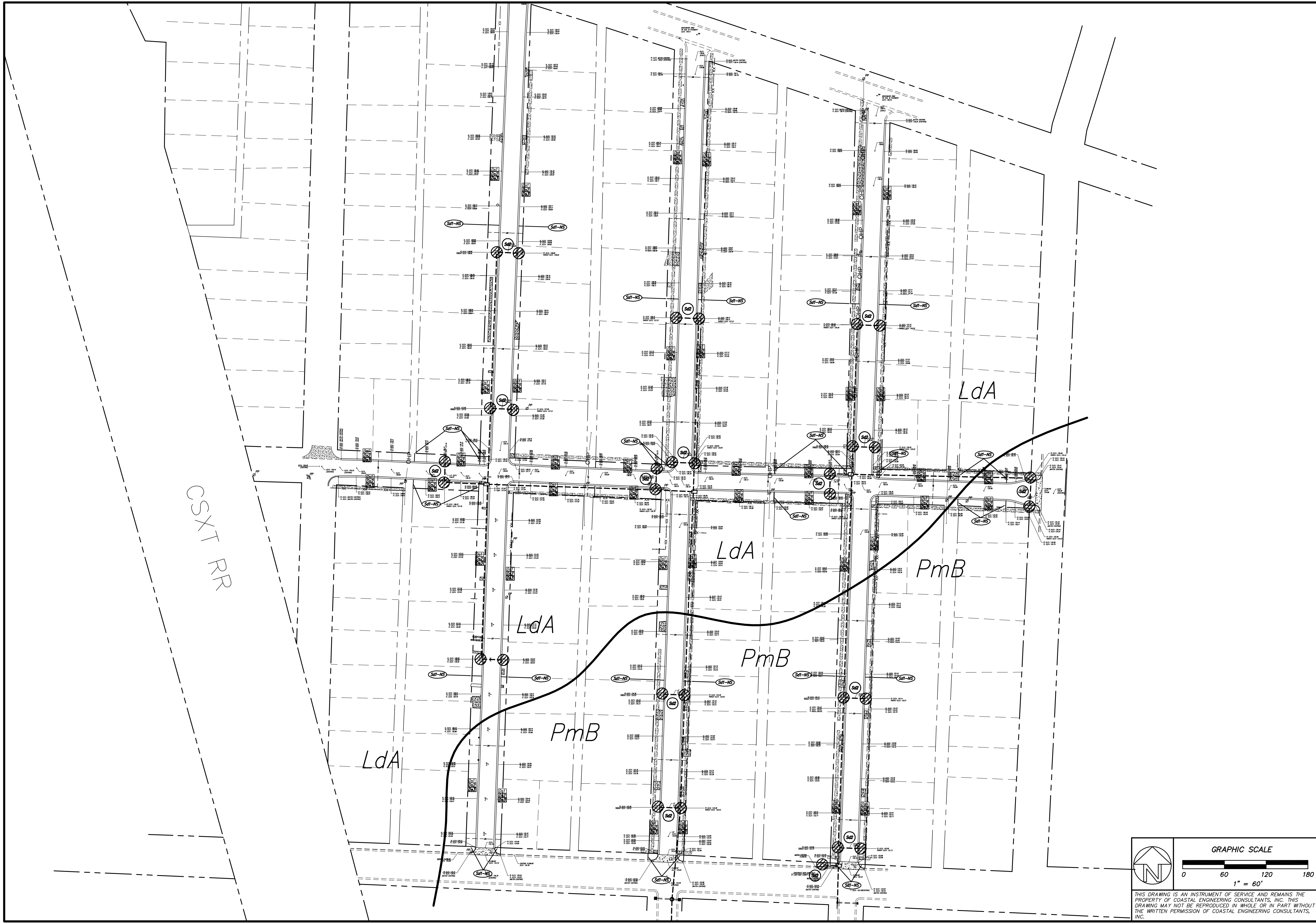
REVDATE

USER

USER

REVDATE

MAXX



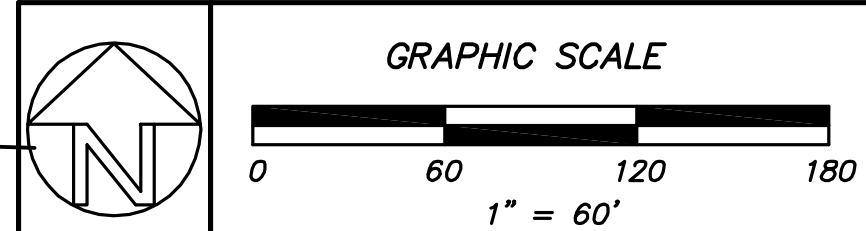
Coastal Engineering Consultants, Inc.
 P. O. BOX 1895
 WASHINGTON, GEORGIA 31521
 (912) 223-0977 PHONE
 john@cec-ga.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

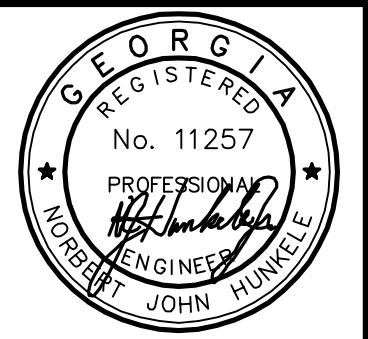
2015 STREETS, DRAINAGE & UTILITY PROJECT
 CITY OF WAYCROSS, GEORGIA
EROSION CONTROL PLAN

FILE NO.: 2015-00-ES2
 DATE: MARCH 27, 2015
 SCALE: AS SHOWN
 DRAWN BY/CHECKED BY: CLM/MHR

SHEET NO.: **ES-2**
 OF 4



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.



REGISTERED PROFESSIONAL ENGINEER
No. 11257
JOHN HUNKELER
P.O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0276 PHONE
john@cec-ge.com

FILE NO.: 2015-003-ESS
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/JHR

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA

VEGETATIVE PLAN & UNIFORM CODING SYSTEM

REVISION NO. 1

DESCRIPTION OF REVISION

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

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.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
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.
Cr	CONSTRUCTION ROAD STABILIZATION			A gravelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
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 inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SEEP BERM			Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
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.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
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.
Tr	TREE PROTECTION			To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE			Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)			Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
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 (SUDDING)			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.
Fl-Cd	FLOCCULANTS AND COAGULANTS			Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)			The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS			Substance used to anchor straw or hay mulch by causing the organic material to bind together.

CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

FILE NO.: 2015-003-ESS
DATE: MARCH 27, 2015
SCALE: AS SHOWN
DRAWN BY/CHECKED BY: CLM/JHR

SHEET NO.: ES-3

OF 4

TABLE 4 - FERTILIZER REQUIREMENTS FOR TEMPORARY VEGETATION

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)
COOL SEASON GRASSES	FIRST MAINTENANCE	6-12-12	1500	50-100
	SECOND MAINTENANCE	6-12-12	1000	30
COOL SEASON GRASSES & LEGUMES	FIRST MAINTENANCE	6-12-12	1500	0-50
	SECOND MAINTENANCE	6-12-12	1000	-
TEMPORARY COVER CROPS SEEDING ALONE	FIRST	10-10-10	500	30
WARM SEASON GRASSES	FIRST MAINTENANCE	6-12-12	1500	50-100
	SECOND MAINTENANCE	6-12-12	1000	30

TABLE 5 - FERTILIZER REQUIREMENTS FOR PERMANENT VEGETATION

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)
COOL SEASON GRASSES	FIRST MAINTENANCE	6-12-12	1500	50-100
	SECOND MAINTENANCE	6-12-12	1000	30
COOL SEASON GRASSES & LEGUMES	FIRST MAINTENANCE	6-12-12	1500	0-50
	SECOND MAINTENANCE	6-12-12	1000	-
WARM SEASON GRASSES	FIRST MAINTENANCE	6-12-12	1500	50-100
	SECOND MAINTENANCE	6-12-12	1000	30
WARM SEASON GRASSES AND LEGUMES	FIRST MAINTENANCE	6-12-12	800	50
	SECOND MAINTENANCE	6-12-12	400	-

TABLE 6 - SUGGESTED SEEDBED DEPTHS

SLOPES 3:1 OR FLATTER	LESS THAN 4-INCHES DEPTH
SLOPES 2:1 TO 3:1	1 TO 4 INCHES DEPTH
SLOPES 2:1 OR STEEPER	DEPRESSIONS EVERY 6 TO 8 INCHES HAND DUG IF NECESSARY

TABLE 3 - VEGETATIVE PLAN

SPECIES	RATES PER ACRE	RATES PER 1000 SF	PLANTING DATES BY REGION			REMARKS
			M-L	P	C	
DISTURBED AREA STABILIZATION WITH PERMANENT VEGETATION - Ds3						
BAHIA, PENSACOLA						
ALONE OR WITH TEMPORARY COVER	60 LBS	1.4 LBS		APR 1 TO MAY 31	MAR 1 TO MAY 31	LOW GROWING; SOD PRODUCING; WILL SPREAD INTO BERMUDA LAWSNS
WITH OTHER PERENNIALS	30 LBS	0.7 LBS				
BAHIA, WILMINGTON						
ALONE OR WITH TEMPORARY COVER	60 LBS	1.4 LBS		MAR 15 TO MAY 31	MAR 1 TO MAY 31	LOW GROWING; SOD PRODUCING; WILL SPREAD INTO BERMUDA LAWSNS
WITH OTHER PERENNIALS	30 LBS	0.7 LBS				
BERMUDA COMMON (HULLED SEED)						
ALONE	10 LBS	0.2 LBS		APR 1 TO MAY 31	MAR 15 TO MAY 31	QUICK COVER; LOW GROWING; SOD FORMING; NEEDS FULL SUN
WITH OTHER PERENNIALS	6 LBS	0.1 LBS				
BERMUDA COMMON (UNHULLED SEED)						
WITH TEMPORARY COVER	10 LBS	0.2 LBS				PLANT WITH WINTER ANNUALS
WITH OTHER PERENNIALS	6 LBS	0.1 LBS				PLANT WITH TALL FESCUE
CROWN VETCH						
WITH WINTER ANNUALS OR COOL SEASON GRASSES	15 LBS	0.3 LBS	SEPT 1 TO OCT 15	SEPT 1 TO OCT 15		
FESCUE, TALL						
ALONE	50 LBS	1.1 LBS	MAR 1 TO APR 1	AUG 15 TO OCT 15		
WITH OTHER PERENNIALS	30 LBS	0.7 LBS	AUG 15 TO SEPT 30	FEB 15 TO APR 15		
LESPEDEZA, SERICEA						
SCARIFIED	60 LBS	1.4 LBS	APR 1 TO MAY 31	MAR 15 TO MAY 31	MAR 1 TO MAY 15	
UNSCARIFIED	75 LBS	1.7 LBS	SEPT 1 TO FEB 28	SEPT 1 TO FEB 28	SEPT 1 TO FEB 28	MIX WITH TALL FESCUE OR WINTER ANNUALS
SEED-BEARING HAY	3 TONS	138 LBS	OCT 1 TO FEB 1	OCT 1 TO FEB 1	SEPT 15 TO JAN 15	CUT WHEN SEED IS MATURE BUT BEFORE IT SHATTERS. ADD TALL FESCUE OR WINTER ANNUALS
LESPEDEZA, AMBRO VIRGATO OR APPALOW						
SCARIFIED	60 LBS	1.4 LBS	APR 1 TO MAY 31	MAR 15 TO MAY 31	MAR 1 TO MAY 15	
UNSCARIFIED	75 LBS	1.7 LBS	SEPT 1 TO FEB 28	SEPT 1 TO FEB 28	SEPT 1 TO FEB 28	SPREADING GROWTH WITH HEIGHT OF 18" TO 24". GOOD IN URBAN AREAS; SLOW TO DEVELOP GOOD STANDS; MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, TALL FESCUE OR WINTER ANNUALS; DO NOT MIX WITH SERICEA LESPEDEZA; INOCULATE SEED WITH EL INOCULANT
LOVEGRASS, WEEPING						
ALONE	4 LBS	0.1 LBS	APR 1 TO MAY 31	MAR 15 TO MAY 31	MAR 1 TO MAY 31	QUICK COVER; DROUGHT TOLERANT; GROWS WELL WITH SERICEA LESPEDEZA ON ROAD BANKS AND OTHER STEEP SLOPES; SHORT LIVED
WITH OTHER PERENNIALS	2 LBS	0.05 LBS	APR 1 TO MAY 31	MAR 15 TO MAY 31	MAR 1 TO MAY 31	
MAIDENCANE SPRIGS						
		2' BY 3' SPACING	FEB 1 TO MAR 31	FEB 1 TO MAR 31	FEB 1 TO MAR 31	FOR VERY WET SITES SUCH AS RIVER BANKS AND SHORELINES; DIG SPRIGS LOCALLY
PANICGRASS, ATLANTIC COASTAL						
	20 LBS	50 LBS		MAR 1 TO APR 30	MAR 1 TO APR 30	GROWS WELL ON COASTAL SAND DUNES; MIX WITH SERICEA LESPEDEZA BUT NOT ON SAND DUNES
REED CANARY GRASS						
ALONE	50 LBS	1.1 LBS	AUG 15 TO OCT 15	SEPT 1 TO OCT 15		GROWS SIMILAR TO TALL FESCUE; FOR WET SITES
WITH OTHER PERENNIALS	30 LBS	0.7 LBS	AUG 15 TO OCT 15	SEPT 1 TO OCT 15		
SUNFLOWER, AZTEC MAXIMILIAN						
	10 LBS	0.2 LBS	APR 15 TO MAY 31	APR 15 TO MAY 31	APR 1 TO MAY 31	MIX WITH WEEPING LOVEGRASS OR OTHER LOW GROWING GRASSES OR LEGUMES
SWITCHGRASS						
	20 LBS	0.4 LBS	APR 1 TO MAY 31	APR 1 TO MAY 31	APR 1 TO MAY 31	FOR STREAM BANK PLANTINGS, DRAINAGE DITCHES AND WET AREAS

DEFINITION: A PERMANENT VEGETATIVE COVER USING GRASSES, TREES, SHRUBS OR LEGUMES ON HIGHLY ERODIBLE OR CRITICALLY ERODED LANDS.

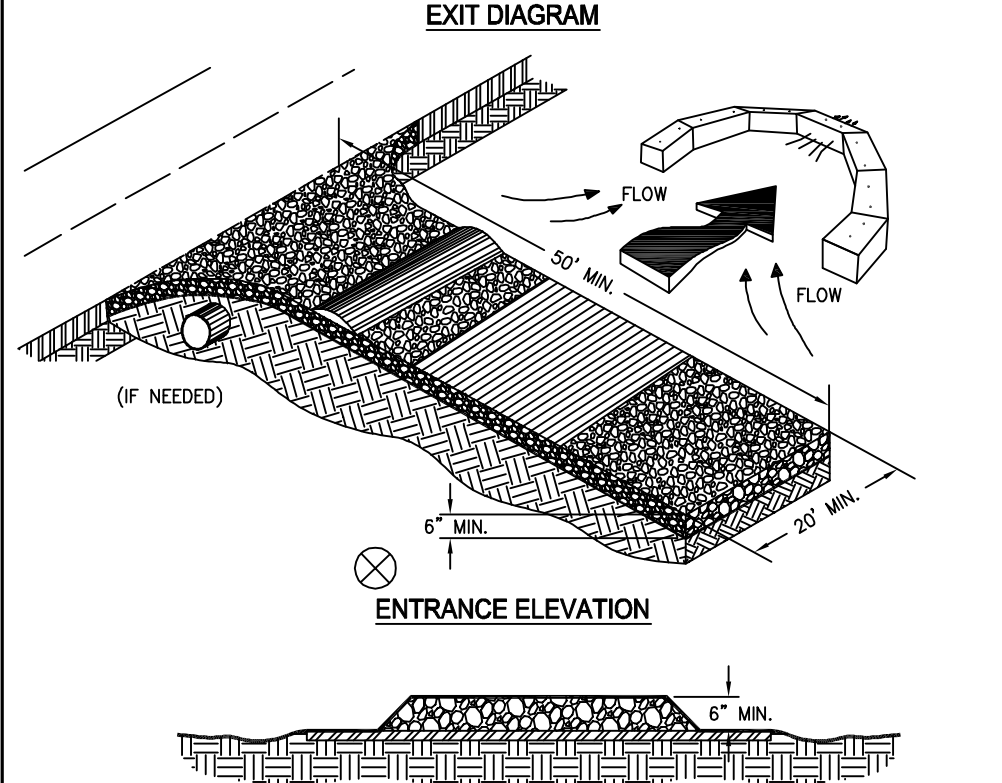
DISTURBED AREA STABILIZATION WITH MULCHING ONLY - Ds1
A TEMPORARY COVER OF PLANT RESIDUES APPLIED TO THE SOIL SURFACE FOR A PERIOD OF SIX (6) MONTHS OR LESS WHEN SEEDING IS NOT PRACTICAL.
PURPOSE:
• REDUCE RUNOFF, EROSION AND SEDIMENTATION
• REDUCE DUST
• CONSERVE MOISTURE
• PREVENT SURFACE COMPACTION AND CRUSTING
• CONTROL UNDESIRABLE VEGETATION
INSTALLATION:
• INSTALL ALL OTHER REQUIRED BMP'S FIRST
• GRADE SITE, IF POSSIBLE, TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH
• LOOSEN COMPACTED SOIL, IF POSSIBLE, TO A DEPTH OF 3-INCHES
• APPLY STRAW OR HAY UNIFORMLY, AS SHOWN IN TABLE ABOVE, BY HAND, AND ANCHOR BY PRESSING INTO SOIL
• MULCH ON SLOPES GREATER THAN 3:1 SHOULD BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1) OR OTHER SUITABLE TACKIFIER
• WOOD WASTE ON SLOPES FLATTER THAN 3:1 DO NOT NEED ANCHORING
MAINTENANCE:
• ADD MULCH AS NEEDED TO MAINTAIN THE SUGGESTED DEPTH
• IF ORGANIC MULCH IS TO BE LEFT AND INCORPORATED INTO THE SOIL, APPLY 20 TO 30 POUNDS OF NITROGEN IN ADDITION TO THE FERTILIZER REQUIRED FOR VEGETATION

DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING - Ds2
A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR UP TO A 12 MONTH PERIOD OR UNTIL PERMANENT VEGETATION IS ESTABLISHED.
PURPOSE:
• REDUCE RUNOFF, EROSION AND SEDIMENTATION
• IMPROVE WILDLIFE HABITAT
• IMPROVE AESTHETICS
• IMPROVE TILTH AND ORGANIC MATTER
INSTALLATION:
• INSTALL ALL EROSION CONTROL MEASURES PRIOR TO APPLYING TEMPORARY VEGETATION
• GRADING OR SHARPING IS NOT REQUIRED IF SLOPES CAN BE PLANTED WITH A HYDROSEEDER OR BY HAND-SEEDING
• SEEDBED PREPARATION IS NOT REQUIRED IF SOIL IS LOOSE AND NOT SEALED BY RAIN
• WHEN SOIL IS SEALED OR CRUSTED, IT SHOULD BE PITTED, TRENCHED OR SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE OR GERMINATE
• AGRICULTURAL LIME IS NOT REQUIRED
• FERTILIZER IS NOT REQUIRED ON FAIRLY FERTILE SOILS
• FERTILIZE LOW FERTILITY SOILS BY ADDING AND MIXING INTO SOIL PRIOR TO PLANTING AT THE RATE OF 500 - 700 POUNDS PER ACRE OF 10-10-10 FERTILIZER OR EQUIVALENT (12-16 POUNDS PER 1000 SQUARE FEET)
• APPLY SEED BY HAND, CYCLONE SEEDER, DRILL OR HYDROSEEDER. SEED PLANTED WITH A DRILL SHOULD BE PLANTED 0.5 TO 1 INCH DEEP
• IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL, BUT NOT TO THE EXTENT TO CAUSE EROSION
MAINTENANCE:
RE-SEED AREAS WHERE AN ADEQUATE STAND OF TEMPORARY VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.

A PERMANENT VEGETATIVE COVER USING GRASSES, TREES, SHRUBS OR LEGUMES ON HIGHLY ERODIBLE OR CRITICALLY ERODED LANDS.
PURPOSE:
• REDUCE RUNOFF AND EROSION
• IMPROVE WILDLIFE HABITAT
• IMPROVE AESTHETICS
• IMPROVE TILTH AND ORGANIC MATTER
• REDUCE DOWNSTREAM COMPLAINTS
• REDUCE LIKELIHOOD OF LEGAL ACTION
• REDUCE LIKELIHOOD OF WORK STOPPAGE DUE TO LEGAL ACTION
• INCREASE "GOOD NEIGHBOR" BENEFITS
INSTALLATION:
• USE CONVENTIONAL PLANTING METHODS WHEN POSSIBLE
• REFER TO TABLE 3 ABOVE FOR SPECIES APPROPRIATE TO THIS REGION
• SCARIFY, PIT OR TRENCH SEALED OR CRUSTED SOIL
• FERTILIZE BASED ON SOIL TESTS OR AS SHOWN IN TABLE 5 ABOVE
• APPLY AGRICULTURAL LIME AS PRESCRIBED BY SOIL TESTS OR AT A RATE OF 1 TO 2 TONS PER ACRE
• APPLY SEED BY HAND, CYCLONE SEEDER, DRILL OR HYDROSEEDER. SEED PLANTED WITH A DRILL SHOULD BE PLANTED 0.5 TO 1 INCH DEEP
• IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL, BUT NOT TO THE EXTENT TO CAUSE EROSION

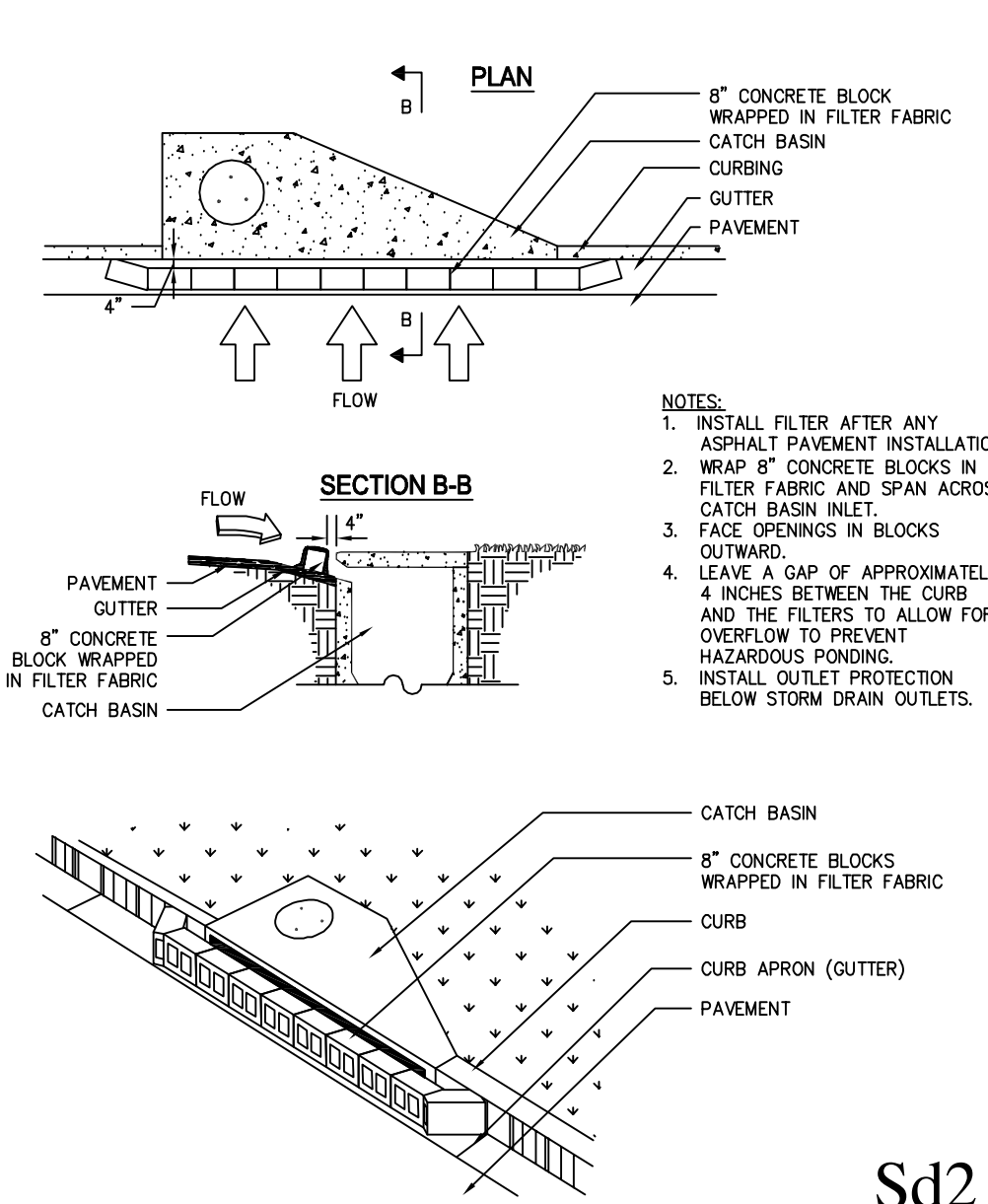
USER: MAXX
REVDATE: FNAME

CRUSHED STONE CONSTRUCTION EXIT Co



- NOTES:**
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
 7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
 8. 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 (INVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
 9. 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.
 10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

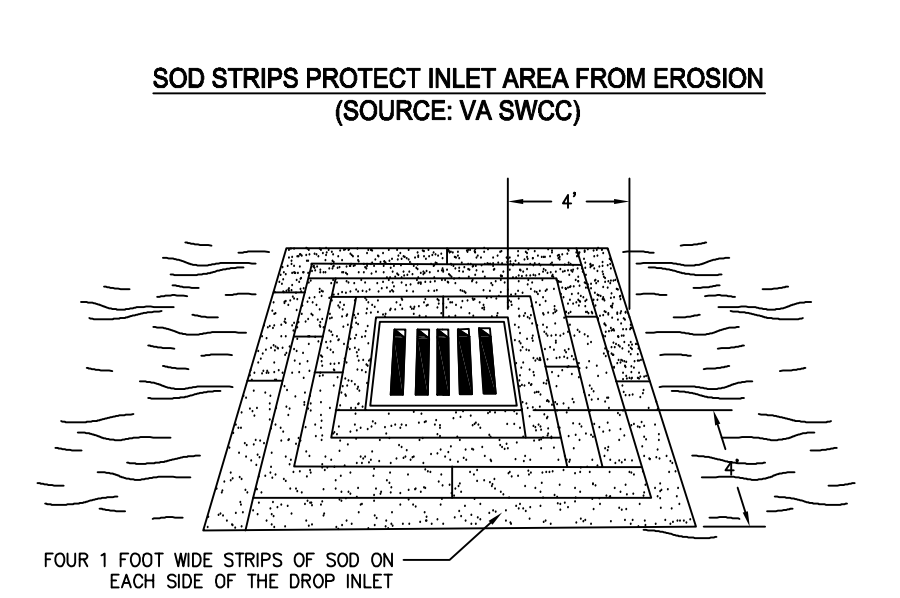
CURB INLET FILTER "PIGS IN BLANKET"



- NOTES:**
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
 2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
 3. FACE OPENINGS IN BLOCKS OUTWARD.
 4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
 5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.

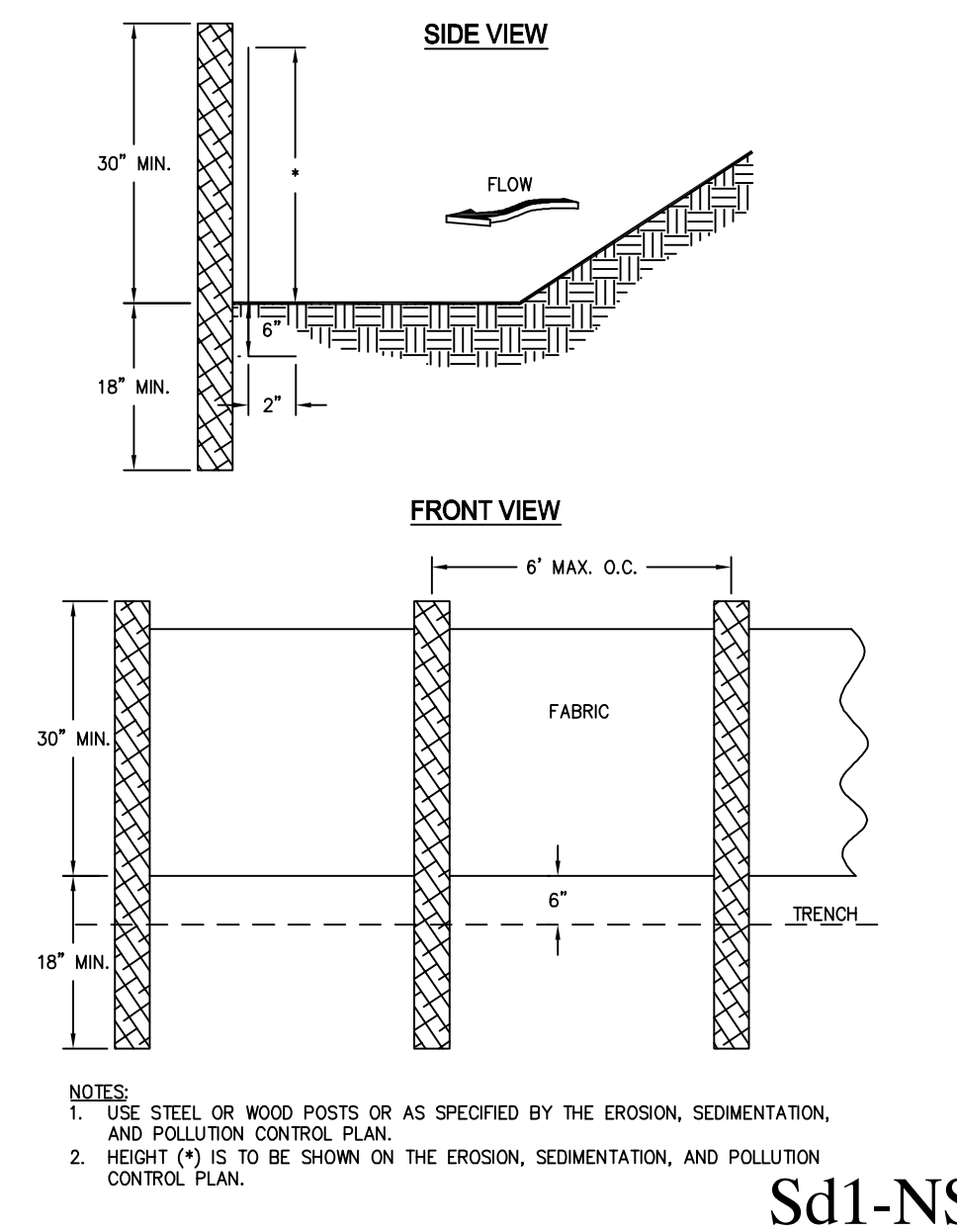
Sd2

INLET SEDIMENT TRAP



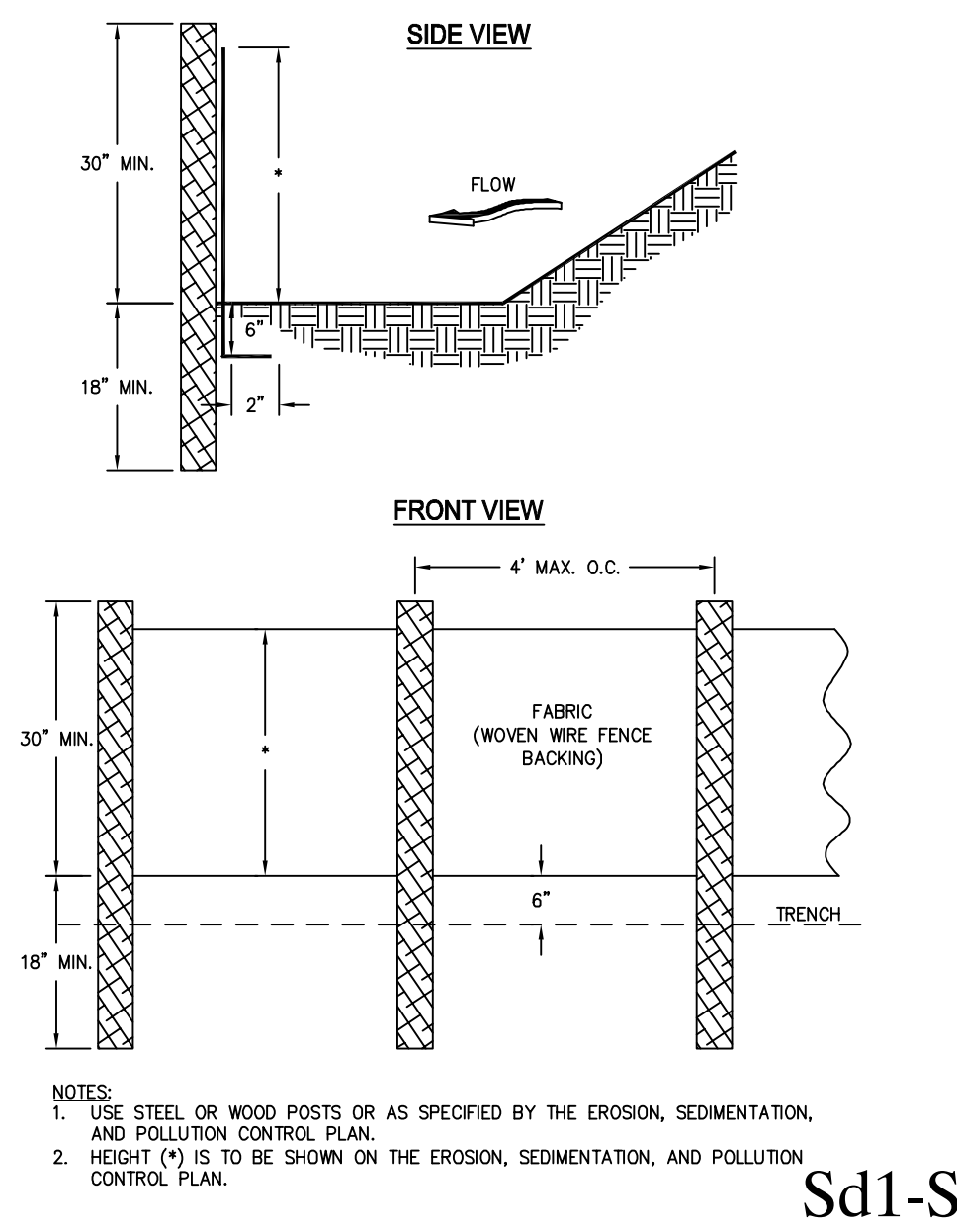
Sd2

SILT FENCE - TYPE NON-SENSITIVE



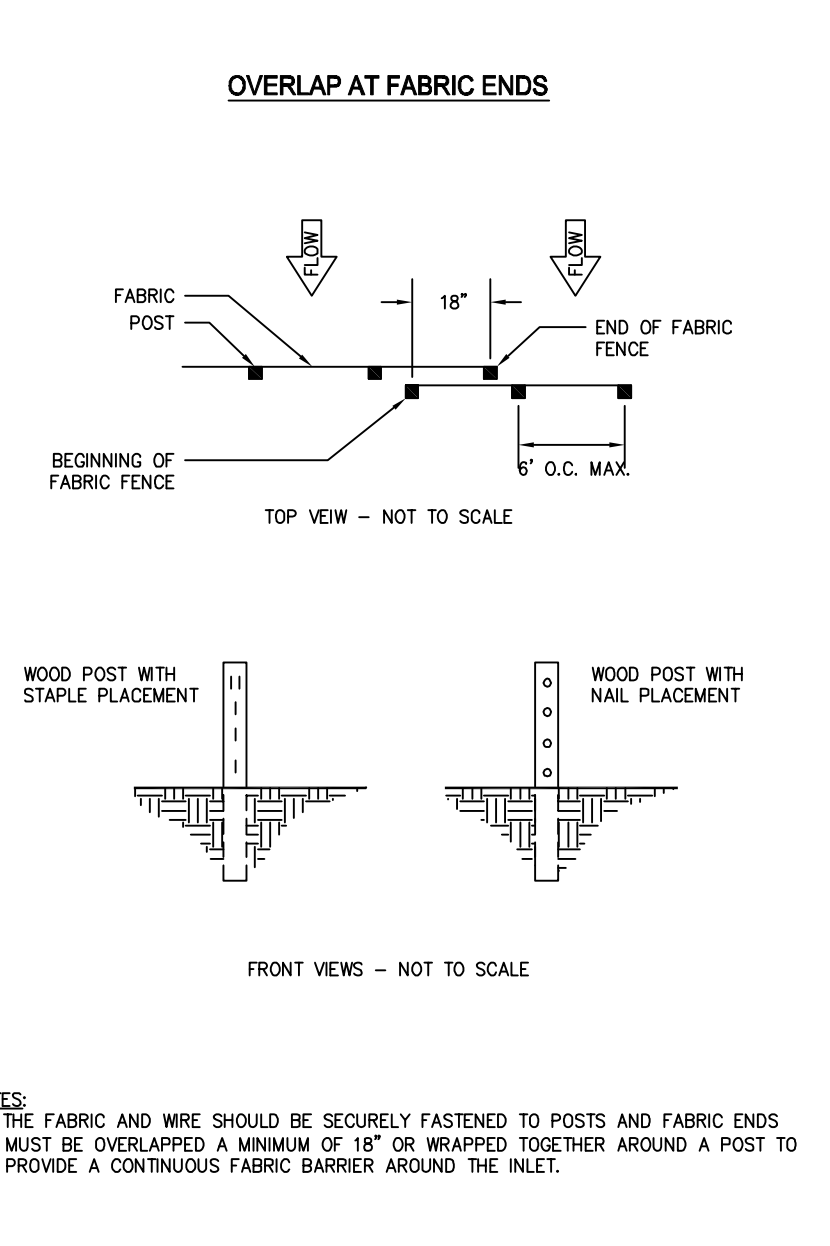
Sd1-NS

SILT FENCE - TYPE SENSITIVE



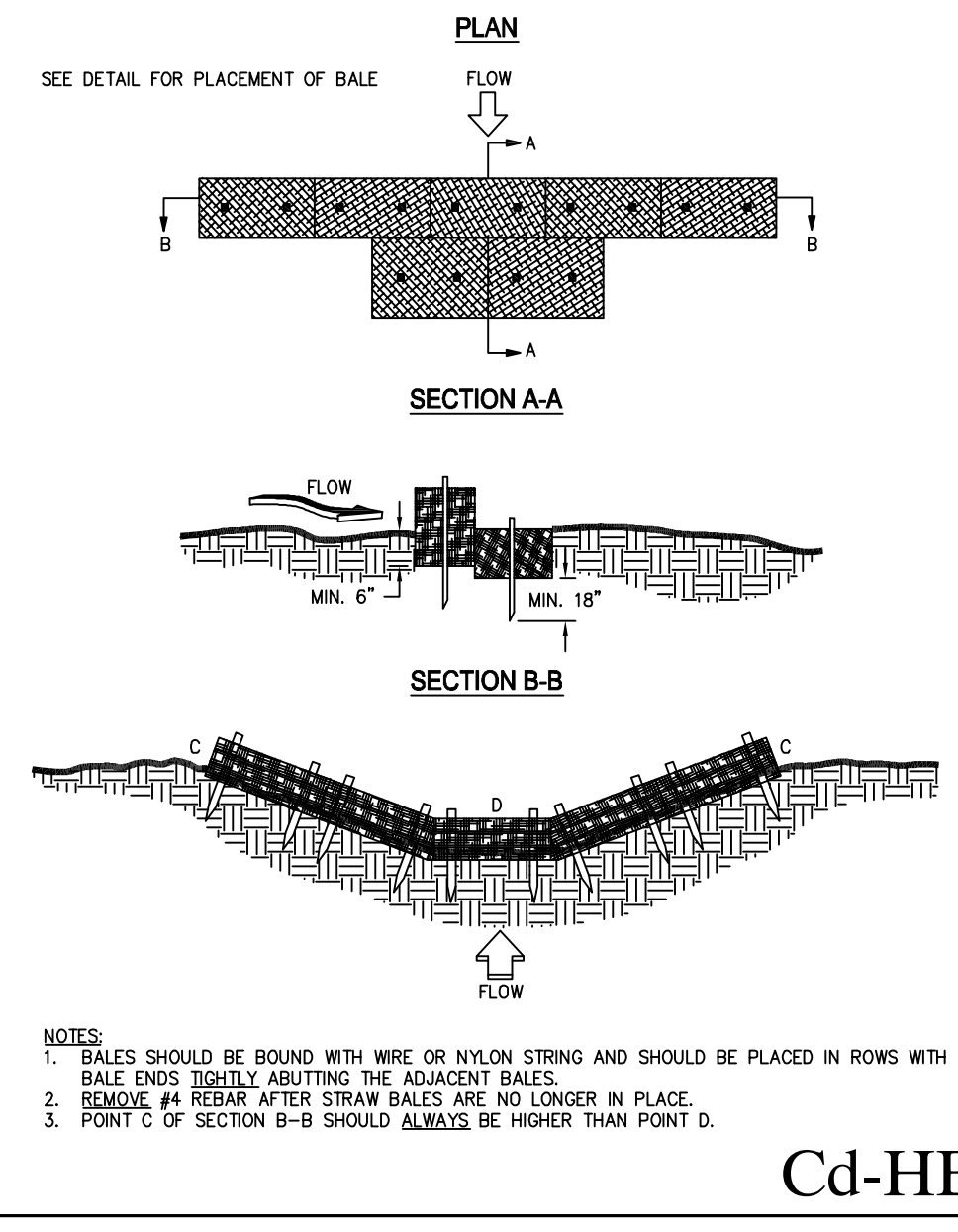
Sd1-S

FASTENERS FOR SILT FENCES



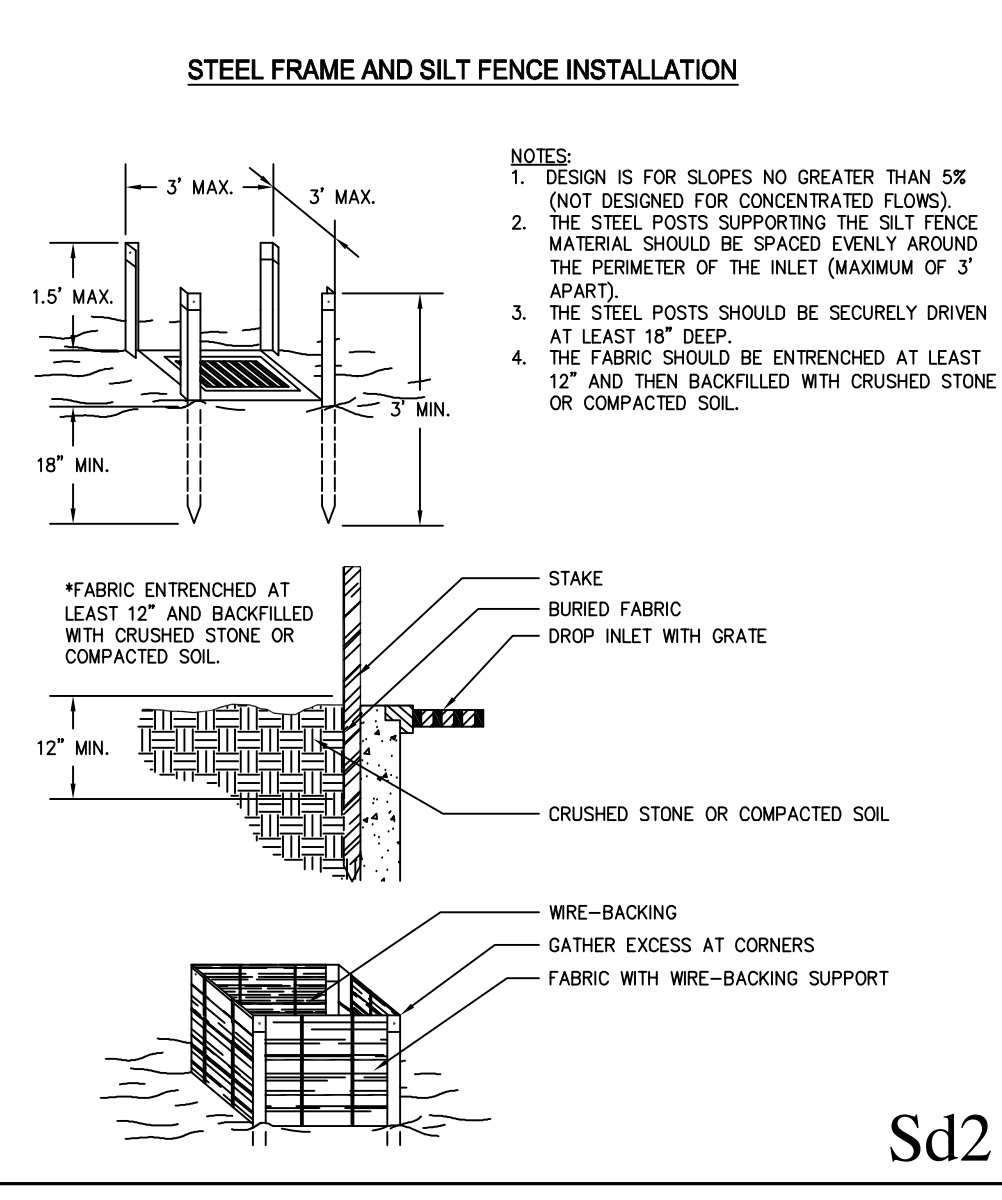
- NOTES:**
1. THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

TYPICAL STRAW BALE CHECK DAM



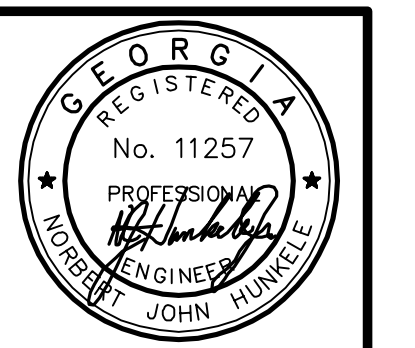
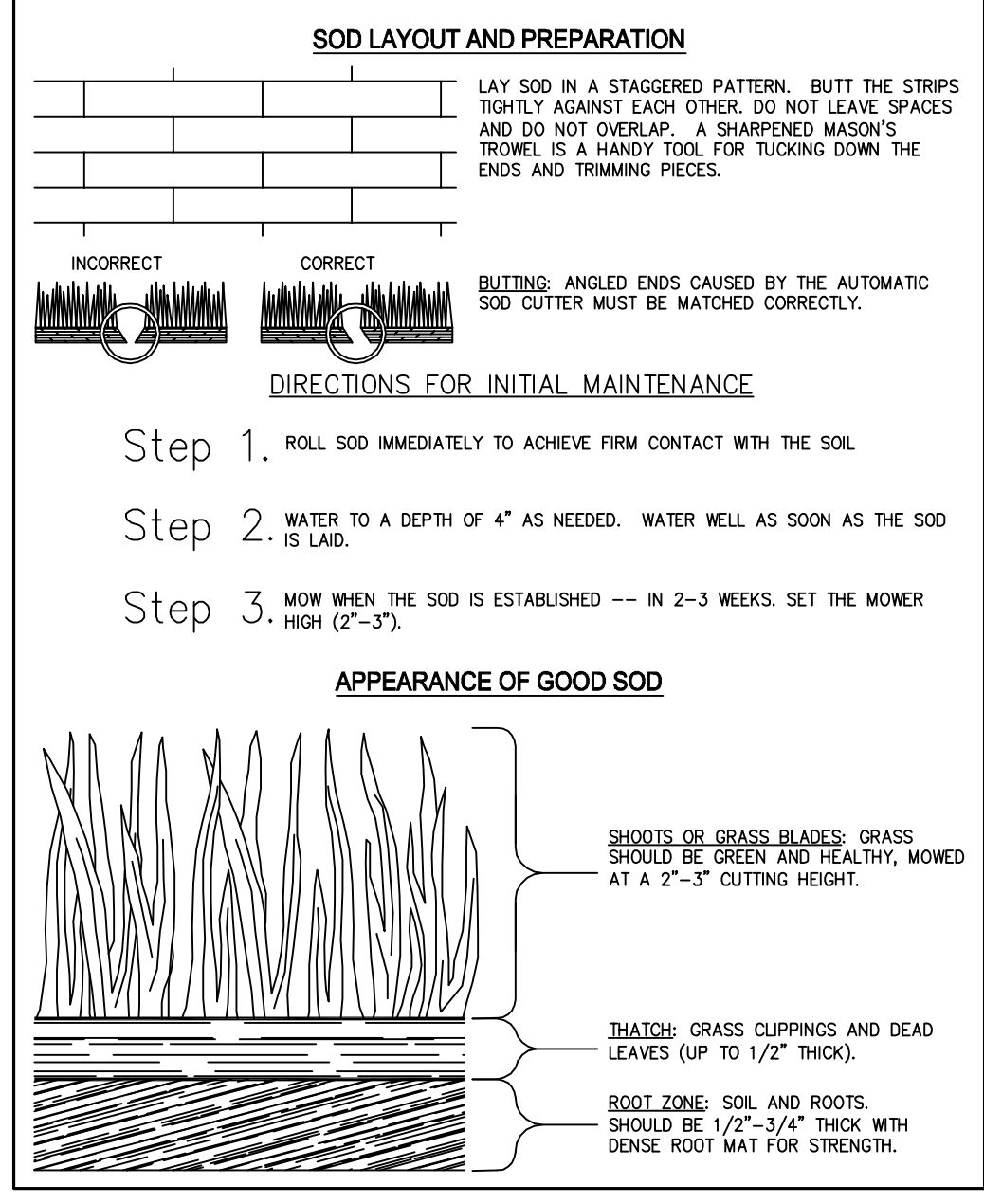
Cd-HB

FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION



Sd2

SOD MAINTENANCE AND INSTALLATION



LEVEL II CERTIFIED DESIGN PROFESSIONAL
GSWCC CERTIFICATION NO. 000026209

Coastal Engineering Consultants, Inc.
P. O. BOX 1895
WAYCROSS, GEORGIA 31521
(912) 223-0877 PHONE
JohnH@cec-inc.com

REVISION NO.	DESCRIPTION OF REVISION	DATE

2015 STREETS, DRAINAGE & UTILITY PROJECT
CITY OF WAYCROSS, GEORGIA
DETAILS OF STRUCTURAL BMP'S

FILE NO.:	2015-00-ES4
DATE:	MARCH 27, 2015
SCALE:	AS SHOWN
DRAWN BY/CHECKED BY:	GM/MLP
SHEET NO.:	ES-4

CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411, to request underground utility locate service.
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND REMAINS THE PROPERTY OF COASTAL ENGINEERING CONSULTANTS, INC. THIS DRAWING MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF COASTAL ENGINEERING CONSULTANTS, INC.

USER: MAXX REVDATE: FNAME: