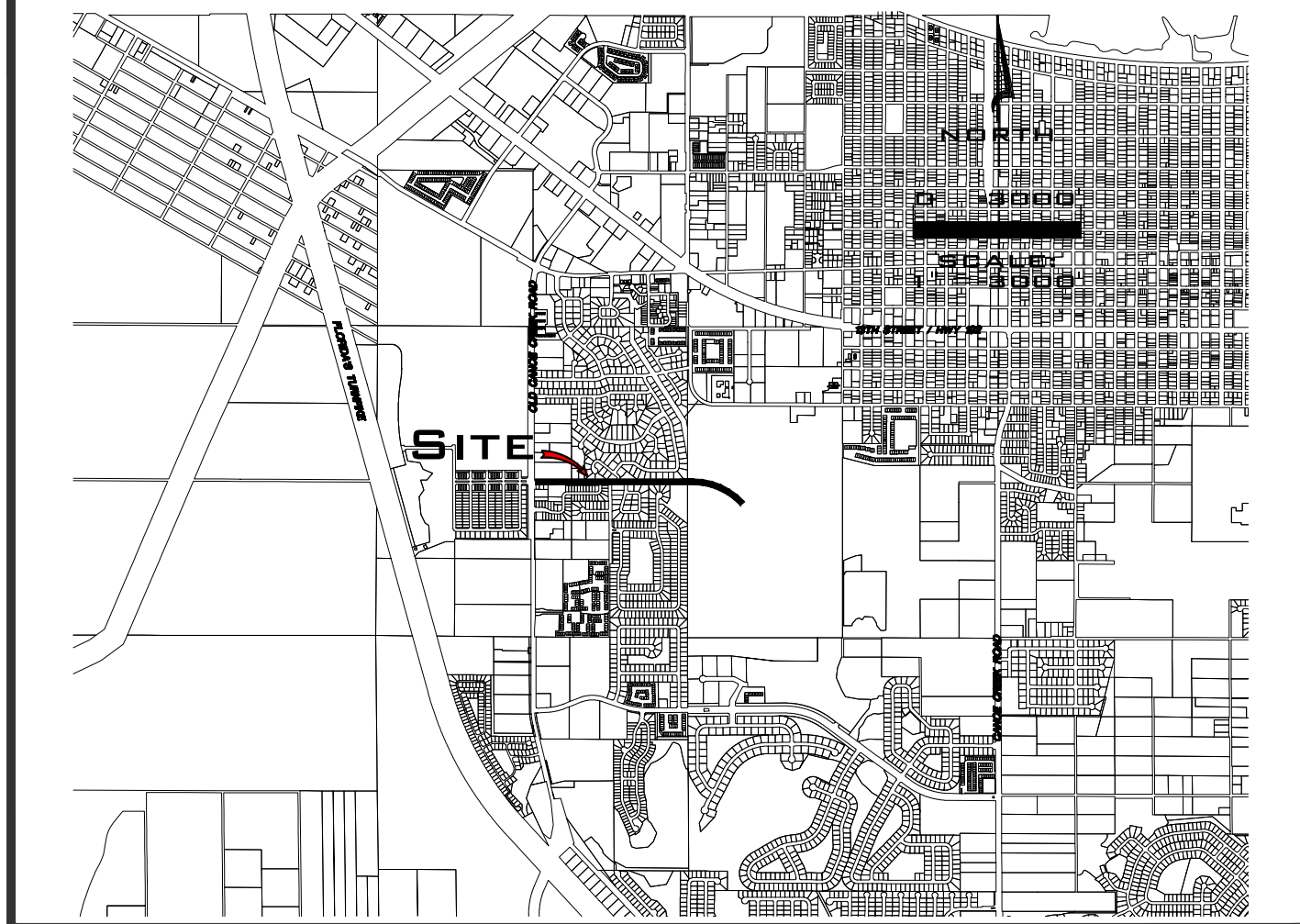


City Council Workshop
Thursday, February 19, 2026
City Hall - Council Chambers
1300 9th Street
2:30 PM
Agenda

- I.** Call to Order
- II.** Pledge of Allegiance
- III.** Roll Call
 - Mayor Chris Robertson
 - Deputy Mayor Ken Gilbert
 - Council Member Jennifer A. Paul
 - Council Member Kolby Urban
 - Council Member Shawn Fletcher
- IV.** Discussion Item
 - 1. Discussion regarding Marina Repairs
 - 2. Discussion regarding Fire Special Assessment
 - 3. Discussion regarding Mutter Road
 - 4. Discussion regarding Lakefront Parking
 - 5. Discussion regarding Legislative Items
 - 6. Discussion regarding Economic Development RFQ evaluation process
- V.** Adjournment

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, such person will need a record of the proceedings and that, for such purpose, such person may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based, and which record is not provided by the City of St. Cloud. (FS 286.0105) In accordance with the Americans With Disabilities Act, persons needing assistance to participate in any of these proceedings should contact the Secretary/Clerk of the Committee/Board (listed below), with a written request at least 48 hours prior to the meeting. (FS 286.26) Ivy Llauro, 1300 9th Street, St. Cloud, FL. Phone 407-957-7300

SECT. 6, TWP. 26 S., RNG. 31 E.



PERMITS REQUIRED

1. ST. CLOUD CONSTRUCTION PLAN APPROVAL
2. SFWMD SWERP
3. FLORIDA GAS TRANSMISSION COMPANY ENCROACHMENT AGREEMENT
4. FDEP WATER PERMIT

CONSTRUCTION PLANS

FOR THE

MUTTER ROAD EXTENSION

THE CITY OF ST. CLOUD
1300 9TH STREET
ST. CLOUD, FL 34769
PHONE: (407) 957-7344
FAX: (407) 957-7170



GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS

DATED JULY 1, 2017, AND STANDARD SPECIFICATIONS FOR ROAD

AND BRIDGE CONSTRUCTION DATED JULY 2017, AS AMENDED BY

CONTRACT DOCUMENTS.

PROJECT TEAM

CIVIL ENGINEERS/PLANNERS:



GEOTECHNICAL:



SURVEYORS:



900 Shady Lane, Kissimmee, Florida 34744-8695
(407) 847-2179 Fax (407) 847-6140

ENVIRONMENTALIST:



Austin Environmental Consultants, Inc.
616 Church Street
Kissimmee, Florida 34741
Ph: (407) 935-0535
email: Randy@AustinEC.com



MUTTER ROAD EXTENSION
DESIGN SPEED = 25 MPH
POSTED SPEED = 25 MPH

100% SUBMITTAL
10/10/2018

DRAWING INDEX

[illegible]

UTILITY PROVIDERS

WATER & SEWER SERVICES

CITY OF ST. CLOUD
1300 9TH STREET
ST. CLOUD, FL 34769
Phone: (407) 957-7170

TELEPHONE

CENTURY LINK
33 N. Main Street, Room 144
Winter Garden, FL 34787
(407) 504-8386

GAS

FLORIDA GAS TRANSMISSION COMPANY
2405 Lucien Way, Suite 200
Maitland, FL 32751
Phone: (407) 838-7171

ELECTRICITY

OUC
1300 9th Street,
St. Cloud, FL 34769
Phone: (407) 892-2161

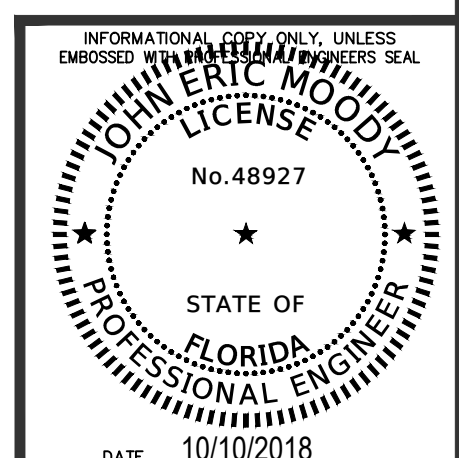
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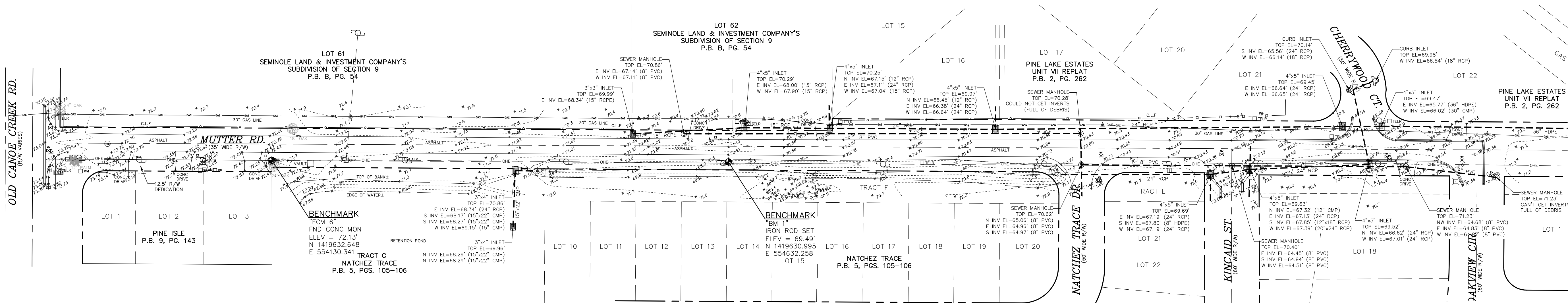
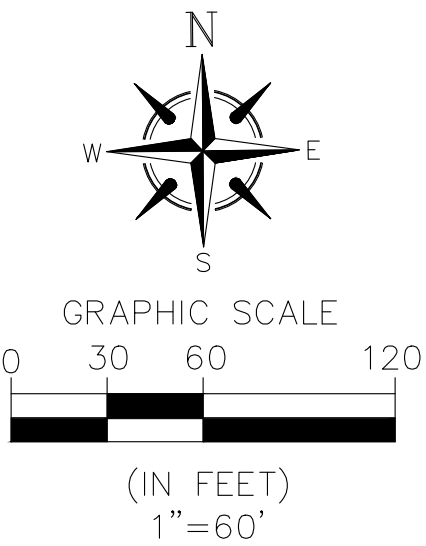
SFWMD
Orlando Service Center
1707 Orlando Central Parkway
Suite 200,
Orlando, FL 32809
Phone: (407) 858-6100

CABLE

SPECTRUM COMMUNICATIONS
1670 E. Highland, Suite 50
Clermont, FL 34711
Phone: (352) 394-5541

UTILITY COORDINATION





SEE SHEET 2 OF 3

SURVEYOR'S NOTES:

ELEVATIONS SHOWN HEREON ARE BASED ON N.A.V.D. 1929 DATUM. REFERENCE BENCHMARK IS OSCEOLA COUNTY BENCHMARK OC-43, ELEVATION = 94.005.

NO UNDERGROUND INSTALLATIONS, IMPROVEMENTS OR ROOF OVERHANGS HAVE BEEN LOCATED EXCEPTS AS NOTED HEREON.

THE SURVEYOR HAS NOT MADE A SEARCH OF THE PUBLIC RECORDS FOR EASEMENTS, RESTRICTIONS, RESERVATIONS AND/OR RIGHTS-OF-WAY OF RECORD.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 12097C 0252G DATED JUNE 18, 2013, THE LAND AND THE IMPROVEMENTS AS SHOWN HEREON ARE NOT WITHIN A 100-YEAR FLOOD HAZARD ZONE. THE LAND IS IN ZONE "X".

POINT ELEVATIONS WITH TWO DECIMAL PRECISION DENOTE PAVEMENT, CONCRETE AND TOP OF WATER SHOTS. ONE DECIMAL PRECISION DENOTES NATURAL GROUND OR A SOFT SHOT, ALL OTHERS ARE AS NOTED.

HORIZONTAL DATUM IS STATE PLANE COORDINATE, FLORIDA EAST ZONE.

CERTIFICATION:

I HEREBY CERTIFY TO:
OSCEOLA ENGINEERING, INC.

W. TURNER WALLIS, IV, P.S.M.
STATE OF FLORIDA
REGISTRATION NO. 3967
(NOT VALID WITHOUT EMBOSSED SEAL)

DATE _____

ABBREVIATIONS

P.B. PLAT BOOK
D.B. DEED BOOK
B.K. BOOK
P.C. PAGE
SECT. SECTION
TWP. TOWNSHIP
RGE. RANGE
COR. CORNER
AC. ACRES
P.S.M. PROFESSIONAL SURVEYOR
B.M. BENCHMARK
C.B.S. CONCRETE BLOCK & STUCCO
BE UNDERGROUND POWER LINE
OHE OVERHEAD POWER LINE

(C) CALCULATED
(P) PLAT
(D) DESCRIBED
(M) MEASURED
C.B. CHORD BEARING
CH. CHORD
R. RADIUS
L. LENGTH
D. DELTA
T. TANGENT
C/A. CENTERLINE
O/S. OFFSET

DEGREES
MINUTES
SECONDS
MORE OR LESS
LICENSED BUSINESS
LICENSED SURVEYOR
P.C.P. PERMANENT CONTROL POINT
P.O.B. POINT OF BEGINNING
P.O.C. POINT OF COMMENCEMENT
F.F. FINISH FLOOR ELEVATION
L.F.E. LOWEST FLOOR ELEVATION
G.F.E. GARAGE FLOOR ELEVATION
R/W RIGHT OF WAY
E.P. EDGE OF PAVEMENT
FRM. FRAME
O/S. OFFSET

ALL PROPERTY CORNERS AS NOTED.
D.U.E. DRAINAGE AND UTILITY EASEMENT
ID. IDENTIFICATION
P.C.P. PERMANENT CONTROL POINT
P.O.B. POINT OF BEGINNING
P.O.C. POINT OF COMMENCEMENT
F.F. FINISH FLOOR ELEVATION
L.F.E. LOWEST FLOOR ELEVATION
G.F.E. GARAGE FLOOR ELEVATION
R/W RIGHT OF WAY
E.P. EDGE OF PAVEMENT
STY. STORY
CONC. CONCRETE
O/S. OFFSET

EL. ELEVATION
P.T. POINT OF TANGENCY
P.C. POINT OF CURVE
P.R.C. POINT OF REVERSE CURVE
P.I. POINT OF INTERSECTION
N.A.T. NAIL AND TAB
C.M.P. CORRUGATED METAL PIPE
R.C.P. REINFORCED CONCRETE PIPE
INV. INVERT
FOUND
P.R.M. PERMANENT REFERENCE MONUMENT
TX. TRANSFORMER
MON. MONUMENT
W. BURIED WATER LINE
S.W. BURIED SANITARY SEWER LINE

BENCHMARK
WOOD POWER POLE
CONCRETE POWER POLE
GUY WIRE ANCHOR
LIGHT POLE
SIGN
FIRE HYDRANT
SANITARY SEWER M.HOLE
STORM SEWER M.HOLE
GAS VALVE
TELEPHONE RISER BOX
M.L.P. METAL LIGHT POLE

CO. CLEAN OUT (SEWER)
GAS METER
UNDERGROUND GAS MARKER
FIBER OPTIC MARKER
WATER VALVE
WATER METER
CABLE TELEVISION RISER BOX
WOOD LIGHT POLE
WELL
ELECTRIC CONTROL BOX
ELECTRIC TRANSFORMER
FIBERGLASS LIGHT POLE

ROUTE SURVEY

MUTTER ROAD

REVISIONS	REVISIONS
F.B. 1135 PGS. 42-54	
CAD FILE# 16-267-MUTTER.DWG	
DATE OF SURVEY 11/29/16	JOB #16-267

NGVD 1929
VERTICAL DATUM

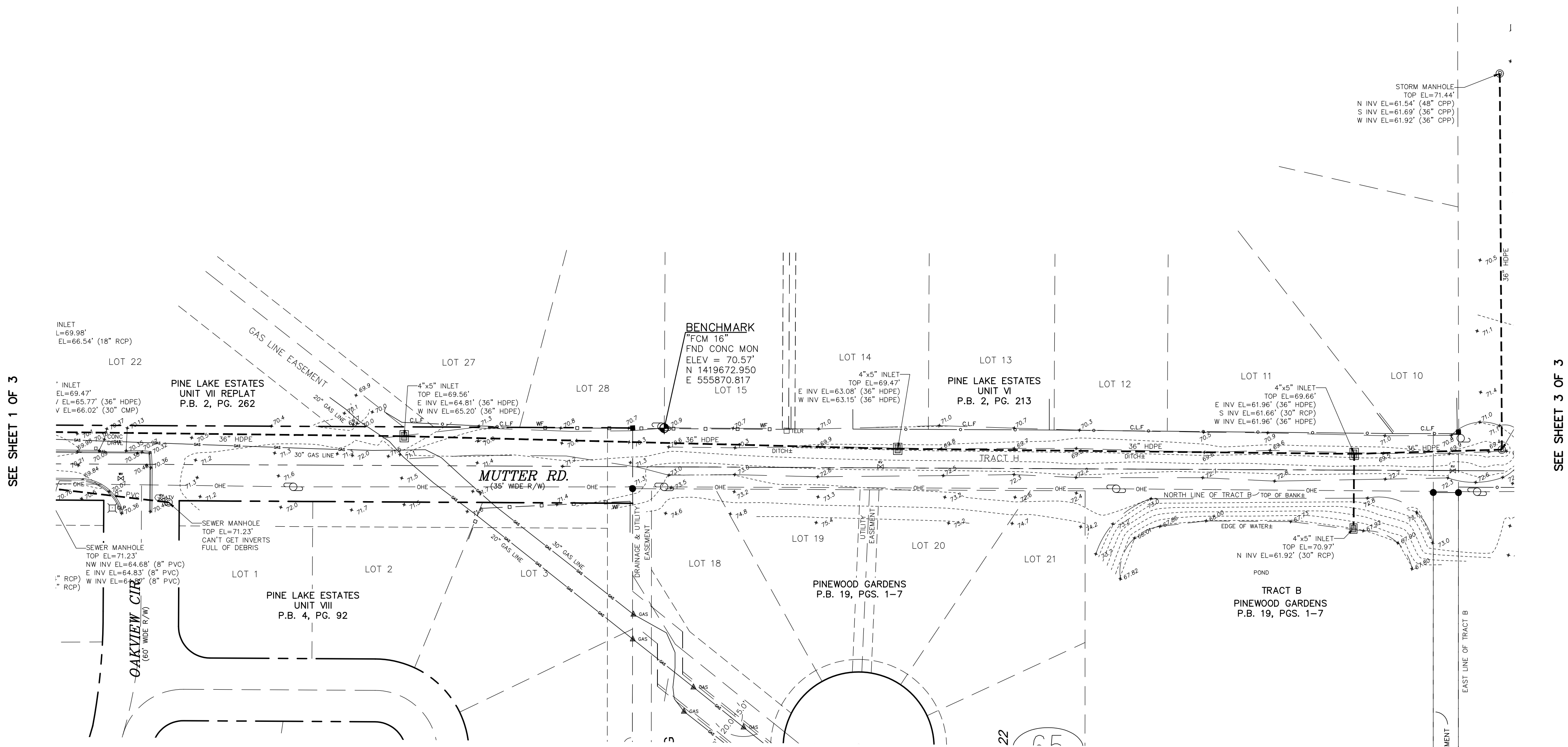
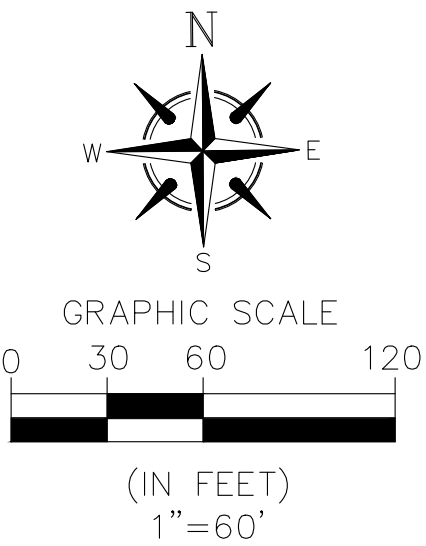
SECT. 9&10 TWP. 26 S. RGE. 30 E.

SCALE: 1"=60' DRAWN BY: KGB CHECKED BY: WTW

JOHNSTON'S SURVEYING INC.

900 Shady Lane, Kissimmee, Florida 34744-8695
(407) 847-2179 • Fax (407) 847-6140

SHEET 1 OF 3



SEE SHEET 1 OF 3

SEE SHEET 3 OF 3

ABBREVIATIONS		LEGEND	
P.B. PLAT BOOK D.B. DEED BOOK B.K. BOOK P.C. PAGE SECT. SECTION TWP. TOWNSHIP RGE. RANGE COR. CORNER AC. ACRES P.S.M. PROFESSIONAL SURVEYOR AND MAPPER B.M. BENCHMARK C.B.S. CONCRETE BLOCK & STUCCO BE UNDERGROUND POWER LINE OHE OVERHEAD POWER LINE	(C) CALCULATED (P) PLAT (D) DESCRIBED (M) MEASURED C.B. CHORD BEARING CH. CHORD L. LENGTH AC. ACRES P.S.M. PROFESSIONAL SURVEYOR AND MAPPER B.M. BENCHMARK C.B.S. CONCRETE BLOCK & STUCCO BE UNDERGROUND POWER LINE OHE OVERHEAD POWER LINE	(M) MEASURED (P) PLAT (D) DESCRIBED (M) MEASURED C.B. CHORD BEARING CH. CHORD L. LENGTH AC. ACRES P.S.M. PROFESSIONAL SURVEYOR AND MAPPER B.M. BENCHMARK C.B.S. CONCRETE BLOCK & STUCCO BE UNDERGROUND POWER LINE OHE OVERHEAD POWER LINE	(M) MEASURED (P) PLAT (D) DESCRIBED (M) MEASURED C.B. CHORD BEARING CH. CHORD L. LENGTH AC. ACRES P.S.M. PROFESSIONAL SURVEYOR AND MAPPER B.M. BENCHMARK C.B.S. CONCRETE BLOCK & STUCCO BE UNDERGROUND POWER LINE OHE OVERHEAD POWER LINE

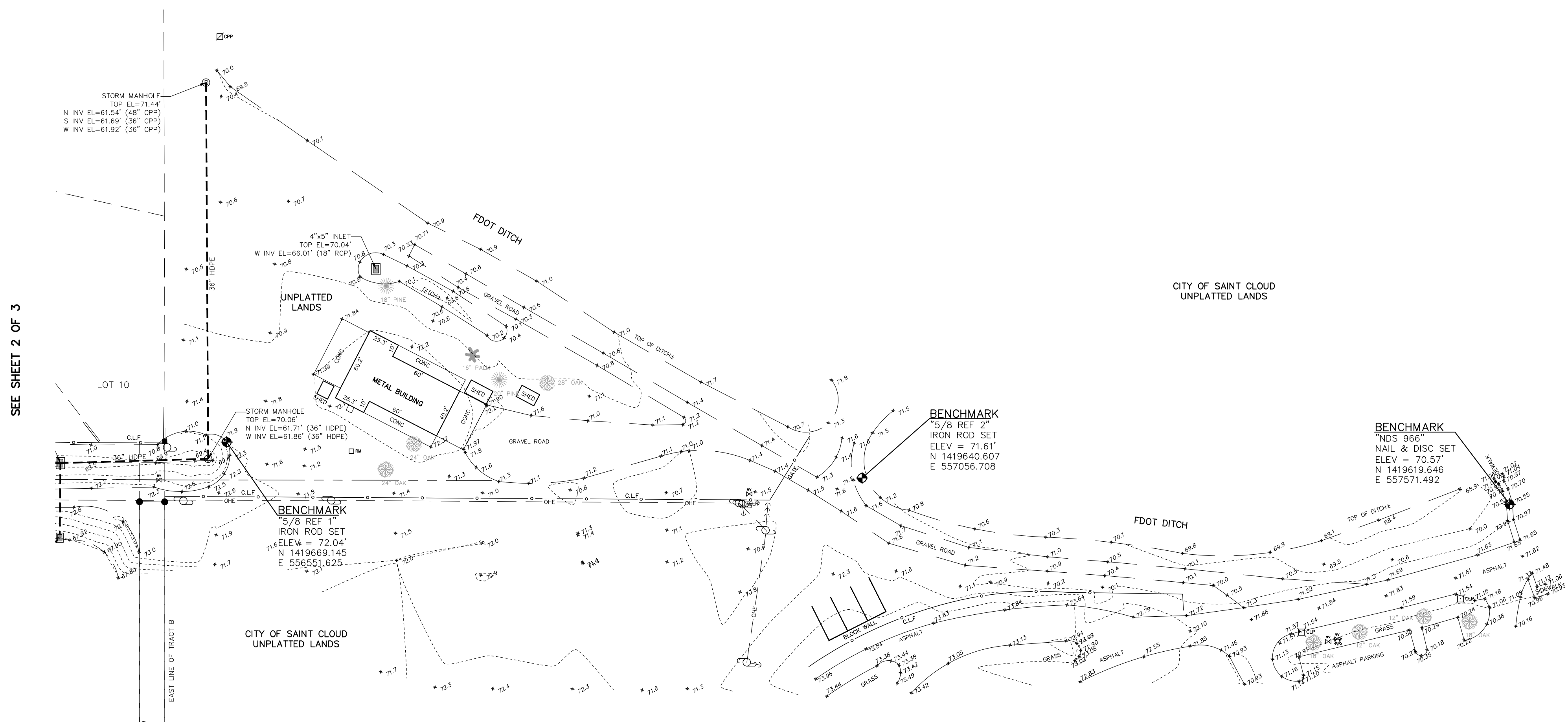
ROUTE SURVEY	
MUTTER ROAD	
NGVD 1929 VERTICAL DATUM	
F.B. 1135 PGS. 42-54 CAD FILE# 16-267-MUTTER.DWG DATE OF SURVEY 11/29/16 JOB #16-267 SCALE: 1"=60' DRAWN BY: KGB CHECKED BY: WTV	

REVISIONS	
REVISIONS	REVISIONS

LEGEND	
BENCHMARK WOOD POWER POLE CONCRETE POWER POLE GUY WIRE ANCHOR LIGHT POLE SIGN FIRE HYDRANT SANITARY SEWER M.HOLE STORM SEWER M.HOLE GAS VALVE TELEPHONE RISER BOX METAL LIGHT POLE	CO CLEAN OUT (SEWER) GAS METER UNDERGROUND GAS MARKER FIBER OPTIC MARKER WATER VALVE WATER METER CABLE TELEVISION RISER BOX WELL ELECTRIC CONTROL BOX ELECTRIC TRANSFORMER FIBERGLASS LIGHT POLE

JOHNSTON'S SURVEYING INC.
900 Shady Lane, Kissimmee, Florida 34744-8695
(407) 847-2179 • Fax (407) 847-6140

SHEET 2 OF 3

CITY OF SAINT CLOUD
UNPLATTED LANDS

BENCHMARK
"5/8 REF 2"
IRON ROD SET
ELEV = 71.61'
N 1419640.607
E 557056.708

BENCHMARK
"NDS 966"
NAIL & DISC SET
ELEV = 70.57'
N 1419619.646
E 557571.492

OF SAINT CLOUD
PLATTED LANDS

JOHNSTON'S
SURVEYING INC.
900 Shady Lane, Kissimmee, Florida 34744-86
(407) 847-2179 • Fax (407) 847-6140

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN CONFORMANCE WITH THE CITY OF ST. CLOUD SPECIFICATION REQUIREMENTS, AGENCIES' SPECIFICATIONS AND REQUIREMENTS. HE SHALL OBTAIN A COPY OF THE SOIL REPORT REFERENCED HEREIN AND VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS. HE SHALL CLEAR AND GRUB ALL RIGHT-OF-WAYS, TRACTS AND APPROPRIATE EASEMENTS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, AND ALL OTHER DELETERIOUS MATERIAL.
2. THE EXACT LOCATION OF EXISTING UTILITIES ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BIDDING BY NOTIFYING THE UTILITY COMPANY TO LOCATE THEIR UTILITIES OR BY FIELD VERIFICATION. HE SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGED UTILITY RESULTING FROM HIS CONSTRUCTION AT HIS OWN EXPENSE.
3. THE CONTRACTOR SHALL FOLLOW ALL CITY OF ST. CLOUD STANDARD SPECIFICATIONS AND STANDARD DETAILS SHALL COVER ALL UTILITIES WORK. WHERE A CONFLICT EXISTS IN THE REQUIREMENTS OF A REFERENCED MATERIAL OR INSTALLATION STANDARD, THE REQUIREMENTS OF CITY OF ST. CLOUD SHALL PREVAIL. WHERE THE REQUIREMENTS OF A STATE OR LOCAL AGENCY HAVING JURISDICTION ARE MORE STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL.
4. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING STAMPED APPROVED PLANS, SPECIFICATIONS, AND ANY SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
5. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO ANY WORK BEING DONE. NO CORRECTIONS OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS AND BONDS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
8. ALL COPIES OF REQUIRED TEST RESULTS ARE TO BE SENT TO THE CITY OF ST. CLOUD DIRECTLY FROM THE TESTING AGENCY.
9. ALL PAVING AND DRAINAGE TO BE CONSTRUCTED PER APPROVED PLANS PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.
10. SIGNAGE TO BE PERMITTED BY SEPARATE INSTRUMENT.
11. ALL WET TAPS-- FIBER GASKETS ARE NOT PERMITTED.
12. THE SITE IS TO BE CLEARED AND GRUBBED.
13. ALL UNPAVED AREAS WITHIN THE CONSTRUCTION AREA AND RIGHT OF WAY SHALL BE SODDED WITH BAHIA GRASS AND/OR LANDSCAPED AS NOTED.

14. REFER TO PLANS FOR ALL EASEMENT REQUIREMENTS. EASEMENTS SHALL BE PLACED OVER UTILITIES WHEN REQUIRED.

15. WATER METERS WILL NOT BE RELEASED UNTIL PROJECT IS COMPLETE OR ARRANGEMENTS HAVE BEEN MADE THROUGH THE PUBLIC SERVICES ADMINISTRATOR

16. LIFT STATION START UPS WILL BE PERFORMED ON PERMANENT POWER ONLY. CONTRACTOR TO SETUP MEETING THROUGH THE ASSIGNED SITE INSPECTOR ONLY.

17. SECTION 6 AND 7 OF CITY OF ST. CLOUD LAND DEVELOPMENT CODE WILL BE UTILIZED IN CONJUNCTION WITH THESE DETAILS IN THE EVENT THERE ARE CONFLICTING DETAILS IN THE STANDARD DETAILS OR DETAILED INFORMATION IS REQUIRED.

18. PIPE MATERIAL CAN INCLUDE DUCTILE IRON, PVC, CERT A LOC AND HDPE. THE CITY RESERVES THE RIGHT TO ACCEPT OR DENY MATERIAL PER PROJECT.

THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF AS-BUILT DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

- A). DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
- B). DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER AND WASTEWATER PIPING AND RELATED APPURTENANCES. CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL CLASS, ETC.
- C). DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
- D). LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS.
- E). DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.

1. ALL ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, OSCEOLA COUNTY AND CITY OF ST. CLOUD STANDARDS.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATION INDICATED ON THE PLANS AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED.
3. ALL PAVED AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVING SECTIONS AS INDICATED.
4. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTORS SHALL SAW-CUT THE EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATIONS WITH THE PROPOSED PAVEMENT.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM DRAINAGE STRUCTURES TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL, PRIOR TO ORDERING MATERIALS.
6. THE CITY OF ST. CLOUD MAY BE RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWATER SYSTEM IN ACCORDANCE WITH THE GUIDELINES SET FORTH BY THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT PERMIT. DOCUMENTS ARE ON FILE UNDER SFWM PERMIT
7. ANY UNSUITABLE MATERIAL FOUND WITHIN LIMITS OF ROADWAY OR PAVEMENT SHALL BE REMOVED AND MAY BE USED FOR SHOULDER OR BEHIND CURB PLACEMENT.
8. ALL RUBBLE, CONCRETE, PAVEMENT, FOOTING, CURB, DRIVE, DRIVE PINES AND WITH ROOTS AND OTHER UNDESIRABLE MATERIALS SHALL BE REMOVED FROM THE SITE. THE UNDESIRABLE MATERIALS RESULTING FROM THE CLEARING OPERATION SHALL BE DISPOSED OF IN A PROPER MANNER BEYOND THE LIMITS OF THE CLEARED SITE.
9. ALL AREAS TO BE FILLED SHALL BE DONE WITH CLEAN, SUITABLE MATERIAL COMPRISD OF NON TOXIC AND WITH LESS THAN 5% ORGANIC SUBSTANCES CONTENT, AND NOT CONTAINING ANY SIGNIFICANT AMOUNT OF ORGANIC SUBSTANCES (LESS THAN 3% BY WEIGHT) OR OTHER DELETERIOUS MATERIALS. FILL SHALL BE COMPACTED TO 98% DENSITY AS DETERMINED BY AASHTO T-180 AND 95% FOR AREAS BELOW ROAD SUBGRADE AS DETERMINED BY AASHTO T-1557. FILL SHALL BE COMPACTED IN 12" MAX. LIFTS TO 98% OR 95% MAX. DENSITY, UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL SOD ALL RETENTION AREAS AND ALL SIDE SLOPES AND OTHER DISTURBED AREAS ADJACENT TO DRAINAGE CONVEYANCE AREAS.

1. THE CONTRACTOR MUST SELECT, IMPLEMENT, AND OPERATE ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS AS DESCRIBED IN CHAPTERS 17-301, 17-302, 17-303, F.A.C. THE CONTRACTOR IS REQUIRED TO USE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS AS DESCRIBED IN THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DER, 1988).
2. THE CONTRACTOR SHALL CONTROL TURBID RUNOFF FROM THE PROJECT BY ROUGH EXCAVATING THE PROPOSED RETENTION AREAS IMMEDIATELY FOLLOWING CLEARING AND GRUBBING OPERATIONS. ALL DEWATERING DISCHARGE SHALL BE DIRECTED TO THESE AREA(S) FOR SETTLING PRIOR TO DISCHARGE OFF SITE.
3. THE CONTRACTOR SHALL INSTALL WATER QUALITY CONTROL DEVICES ALONG THE SITE PERIMETER, AS DESIGNATED ON THESE PLANS. THE CONTRACTOR SHALL RECEIVE THE ENGINEER'S APPROVAL OF THE INSTALLATION PRIOR TO ANY OTHER SITE CONSTRUCTION.
4. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE IN ACCORDANCE WITH INDEXES 102 AND 103 OF THE LATEST EDITION OF THE FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS" SIL FENCES, HAY BALES, AND/OR TURBIDITY BARRIERS SHALL BE INSTALLED AT ALL OFF-SITE DISCHARGE POINTS. ALL EROSION CONTROL/WATER QUALITY DEVICES SHALL BE LEFT IN PLACE UNTIL THIS DISTURBANCE IS COMPLETELY STABILIZED AND VEGETATED.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SOIL MOISTURE TO PREVENT WIND GENERATED SOIL EROSION. ALL SURFACES DISTURBED FOR 30 OR MORE DAYS SHALL BE VEGETATED WITH A TEMPORARY OR PERMANENT COVER.

1. THE CITY RESERVES THE RIGHT TO REQUIRE BY PASS PUMPING IN LIEU OF GENERATOR AT LIFTSTATIONS.
2. FIELD ADJUST ANY CHANGES WITH CITY OF ST. CLOUD ENGINEERING.
3. CONTRACTOR MUST COMPLY WITH ALL TRENCH SAFETY STANDARDS.
4. NO WATER MAIN SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF ANY SANITARY OR STORMWATER MANHOLE OR STRUCTURE.
5. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCHES IN DIAMETER UNLESS OTHERWISE NOTED.
6. SANITARY SEWER GRAVITY MAIN SHALL INCORPORATE GASKET JOINTS.
7. WHERE SANITARY HAZARDS EXIST, (SANITARY SEWER, FORCE MAIN, REUSE, & WATER) THE HAZARD MAIN SHALL BE CONSTRUCTED OF 18 FEET OF DUCTILE IRON PIPE (9 FEET EACH SIDE OF HAZARD CENTERLINE), OR THE WATER LINE ALIGNMENT SHOULD BE MODIFIED TO PROVIDE THE MINIMUM 12 INCHES OF VERTICAL CLEARANCE(18" PREFERRED). THERE SHOULD BE A MINIMUM HORIZONTAL CLEARANCE OF 6 FEET(10' PREFERRED) IN PARALLEL INSTALLATION. THE SANITARY SEWER MAIN IS TO BE CONSTRUCTED OF DUCTILE IRON PIPE WHERE HORIZONTAL AND VERTICAL CLEARANCES CANNOT BE MAINTAINED. FDEP APPROVAL REQUIRED FOR ANY SEPARATION MITIGATION.
8. CITY OF ST. CLOUD PERSONNEL FOR SANITARY SEWER WILL OBSERVE SEWER MAIN LOW AIR PRESSURE TEST IN ACCORDANCE WITH UNIBELL AND LAMPING OF ALL SANITARY SEWER LINES.
9. THE CONTRACTOR SHALL VERIFY F.D.E.P. CLEARANCE OF EXISTING MAIN PRIOR TO CONSTRUCTION OF NEW MAIN.
10. DENSITY TESTS SHALL BE REQUIRED FOR EACH RUN OF SEWER PIPE BETWEEN MANHOLES AT ONE FOOT LIFTS STARTING FROM THE SPRINGLINE OF THE PIPE TO GRADE. THIS CRITERIA SHALL APPLY TO WATER MAINS, REUSE, AND FORCE MAINS ALSO, BUT AT 300 FOOT INTERVALS MAXIMUM.
11. ALL SETS OF WATER AND SEWER SHOP DRAWINGS SHALL BE SUBMITTED TO CITY OF ST. CLOUD AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS.
12. CITY OF ST. CLOUD SHALL BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO THE START OF CONSTRUCTION.
13. NO WATER AND SEWER CONSTRUCTION SHALL START WITHOUT THE APPROPRIATE PERMITS AND SHOP DRAWINGS.
14. ALL GRAVITY MAINS WILL BE TV'D AND REVIEWED BY CITY STAFF. 15% OF THE LATERALS WILL TV'D AND REVIEWED BY THE INSPECTOR. MULTIPLE DEFICIENCIES WILL RESULT IN 100% TV'D.
15. SANITARY SEWER FOUR (4) INCHES TO FIFTEEN (15) INCHES SHALL BE PVC ASTM D3034 (SDR 35). THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD UN1 IS B-4.
16. SANITARY SEWER EIGHTEEN (18) INCHES TO TWENTY-SEVEN (27) INCHES SHALL BE ASTM F679 (SDR 35). THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477/ APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD UN1 IS B-7.
17. DIP SHALL BE ANSI/AWWA A21.51/C151 AND LINED WITH PROTECTO 401 OR EQUAL.
18. ALL TIE-INS TO EXISTING MANHOLES SHALL BE CORE DRILLED. PIPE SHALL BE TIED IN USING A FLEXIBLE CONNECTOR.REFER TO STANDARD DETAILS.
19. ALL SANITARY MANHOLES SHALL INCLUDE CONSHFERD CONCRETE ADAPTERS APPROVED EQUAL AND WILL BE REFLECTED IN SPEC'S REVIEW. THESE WILL BE INSPECTED BY CITY PERSONNEL.
20. FERNCO ADAPTERS ARE NOT ALLOWED. ONLY RIGID P.V.C. ADAPTERS WILL BE PERMITTED.
21. ALL SANITARY MANHOLES INTERIOR SURFACES SHALL BE COATED WITH TWO APPLICATIONS OF KOPPERS BITUMASTIC NO.300 OR APPROVED EQUAL.
22. ALL DIP PIPE FOUR (4) INCHES THROUGH FIFTY-FOUR (54) INCHES SHALL BE ANSI/AWWA A21.50/CS0 AND A21.51/C151, MINIMUM PRESSURE CLASS 150.
23. MARKINGS RECAL SHALL BE MECHANICAL JOINT DUCTILE IRON OR GRAY IRON CONFORMING TO ANSI/AWWA A21.10/C11G 250 PSI MIN. PRESSURE RATING.
24. WRITING TAPE SHALL BE INSTALLED 12" TO 18" OVER ALL PIPE. PIPE SHALL BE GREEN IN COLOR OR SHALL HAVE A CONTINUOUS 3" WIDE, PERMANENT GREEN STRIPE ON THE TOP OF THE PIPE.
25. THREE (3) CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE SHALL BE INSTALLED ON ALL DIRECTIONAL BORES AND TERMINATE AT VALVES OR WIRE PITS.
26. MAINTAIN A MINIMUM OF 36" OF COVER OVER ALL PIPES. IF LESS THAN 36" COVER (42 IN. IN OCCASIONAL CASES) RIGHTS OF WAY ENGINEER FOR EVALUATION.
27. SANITARY SEWER SHALL BE CONSTRUCTED UNDER THE FIRST MANHOLE IN AN ADJOINING PHASE. THERE SHALL BE NO TEMPORARY MANHOLES.
28. DUCTILE IRON PIPE SHALL BE ANSI/AWWA A21.51/C151 AND LINED WITH PROTECTO 401 OR EQUAL.
29. EXISTING UTILITIES SHOWN ON PLANS SHALL BE FIELD VERIFIED BY CONTRACTOR AS TO LOCATION, (HORIZONTAL AND VERTICAL), SIZE AND MATERIALS BEFORE COMMENCEMENT OF CONSTRUCTION.
30. HYDROSTATIC TESTING FOR PRESSURE PIPES AND JOINTS SHALL BE CONDUCTED AT 100 P.S.I. IN ACCORDANCE WITH CITY OF ST. CLOUD UTILITY MANUAL "HYDROSTATIC TESTS".
31. DENSITY TESTS SHALL BE PERFORMED AROUND ALL MANHOLE STRUCTURES AND WET WELLS EVERY 100sf USING 1' LIFTS.
32. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY OF ST. CLOUD PRIOR TO BEGINNING OF CONSTRUCTION.
33. LOCATE MARKERS (LOCATE BALLS) WILL BE USED EVERY 20 FEET AND AT ALL VALVES. UTILIZE MARKERS AT CHANGE OF DIRECTION. LOCATE MARKER WILL BE PLACED AT EVERY SEWER LATERAL. REFER TO SHEET 3 OF 12 IN THE STANDARD DETAILS FOR INSTALLATION INSTRUCTIONS. VALVE PADS WILL BE INSTALLED ACCORDINGLY (ROUND)

- PIPE LENGTHS SHOWN REPRESENT APPROXIMATE DISTANCES BETWEEN FITTING OF BRANCHES AND MAINS.
- ALL PIPE FITTINGS SHALL BE CLEARLY MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER. ALL PIPE AND FITTINGS SHALL BE SUITABLE FOR A MINIMUM OF 150 PSI WORKING PRESSURE. ALL PLASTIC PIPES SHALL BE INSTALLED WITH A 3" WIDE METALLIC CONTINUOUS TAPE INSTALLED 12"-18" ABOVE THE PIPE AND LOCATE BALLS USED FOR LOCATION PURPOSES. FOR DIRECTIONAL BORES, USE APPROVED 3 10 GAUGE LOCATOR WIRES TAPED DIRECTLY ON TOP OF THE PIPE. TERMINATE INSULATED LOCATOR WIRES, AT VALVES OR WIRE PITS. WIRE SHALL EXTEND 12" ABOVE TOP OF BOX, AT EACH VALVE BOX OR WIRE PIT. FOLLOW STANDARD DETAILS FOR INSTALLATION
- PIPE MATERIAL SHALL BE AS FOLLOWS:
PVC POTABLE WATER MAIN PIPE 4"-36" DIAMETER SHALL BE AWWA C-900-89, DR-18, WITH INTEGRAL BELL PUSH ON JOINTS CONFORMING TO ASTM D3139.
DUCTILE WATER MAIN PIPE 4"-54" SHALL BE ANSI A21.51/AWWA C151, CLASS 50 (MIN.), ANY FITTINGS REQUIRED SHALL BE MECHANICAL JOINT
DUCTILE IRON OR GRAY IRON CONFORMING TO ANSI/AWWA A21.10/C110, 250 PSI MIN. PRESSURE RATING OR DUCTILE IRON COMPACT FITTING 4"-12" IN ACCORDANCE WITH ANSI/AWWA A21.53/C153.
POLYETHYLENE MATERIALS SHALL COMPLY WITH ASTM 3350/4710 WITH A STANDARD PE CODE OF PE 100. HOPE MAIN LINE PIPE WILL TERMINATE WITH A FUSIBLE MJ FITTING AND GLAND.
TUBING SHALL BE PC-200, DR 9. PIPE 1/2"-3" SHALL BE PC-200, DR 9). ALL POLYETHYLENE MATERIAL SHALL BE GOVERNED BY AWWA C-901.
- ALL PVC AND PEP WATER SYSTEM MATERIALS SHALL BE APPROVED POTABLE WATER SERVICE BY THE NATIONAL SANITATION (NSF) AND BEAR THE NSF SEAL.
- ALL MECHANICAL JOINTS SHALL BE RESTRAINED.
- WHERE A WATER LINE IS LOCATED BELOW A STORM DRAIN, THE WATER MAIN SHALL BE DIP AND SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 18 INCHES.
- WHERE PROPOSED WATER LINES CONFLICT WITH PROPOSED STORM DRAINS, INSTALL 45 DEGREE BENDS AS NECESSARY TO OBTAIN THE PROPER CROSSING CLEARANCE.
- ALL GATE VALVES SHALL BE RESILIENT WEDGE MECHANICAL JOINT GATE VALVES, EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST IRON EXTENSIONS WHERE NEEDED.
- HYDRANTS SHALL BE PAINTED PER SECTION 52.7.2, CITY OF ST. CLOUD STANDARDS AND SPECIFICATIONS. BLUE BI-DIRECTIONAL REFLECTORS SHALL BE PLACED IN ROADWAY AT HYDRANT LOCATIONS IN ACCORDANCE WITH CITY OF ST. CLOUD LAND DEVELOPMENT REGULATIONS.
- THRUST RESTRAINT SHALL BE PROVIDED BY RESTRAINED JOINT SHOWN ON WATER DETAIL SHEET UNLESS OTHERWISE SHOWN ON FOR RESTRAINED JOINT DETAIL SEE STANDARD WATER DETAILS SHEET.
- INSTALLATION AND TESTING OF A WATER MAIN SHALL BE DONE IN ACCORDANCE WITH ALL UTILITY AND F.D.E.P. REQUIREMENTS. FIELD ADJUST ANY CHANGES WITH CITY OF ST. CLOUD ENGINEERING DEPARTMENT AND ENGINEER. FOR DETAILS SEE WATER SYSTEM DETAILS SHEETS.
- HYDROSTATIC TESTING CONSISTING OF PRESSURE TEST AND LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES. TESTING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AWWA C-600 OR M23 AS APPLICABLE AND OBSERVED BY THE CITY OF ST. CLOUD.
- DISINFECTION OF THE WATER DISTRIBUTION SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C651 - DISINFECTING WATER MAINS AND OBSERVED BY THE CITY OF ST. CLOUD.
- CONTRACTOR MUST COMPLY WITH ALL TRENCH SAFETY STANDARDS.
NO WATER MAIN SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORMWATER MANHOLE OR STRUCTURE.
- TO PROTECT EXISTING ACTIVE MAINS FROM BACKFLOW CONTAMINATION DURING FILLING, FLUSHING, AND TESTING OF THE NEW MAINS, THE NEW MAINS MUST REMAIN ISOLATED FROM THE EXISTING MAINS OR PARTIALLY CLEARED PHASES OF CONSTRUCTED MAINS UNTIL A LETTER OF CLEARANCE FOR THE NEW MAINS HAS BEEN OBTAINED FROM F.D.E.P.
- NEW MAINS SHALL BE FILLED WITH A CITY OF ST. CLOUD ISSUED JUMPER WITH APPROVED BACKFLOW PREVENTER. MAINS UP TO 8" IN DIAMETER SHALL BE FLUSHED WITH JUMPER. MAINS LARGER THAN 8" SHALL BE FLUSHED BY OPENING THE ISOLATING VALVE UNDER THE DIRECT SUPERVISION OF THE WATER UTILITY. TEMPORARY JUMPERS SHALL HAVE REDUCED PRESSURE ZONE TYPE BACKFLOW PREVENTERS.
- CONTRACTOR TO PLACE ALL GATE VALVES IN PAVEMENT OR GRASSED AREAS. PLACEMENT OF VALVES IN CURBING SHALL BE PROHIBITED.
- CITY OF ST. CLOUD PERSONNEL FOR POTABLE WATER SHALL OBSERVE PRESSURE TEST AND CHLORINATION OF LINES AND SHALL OBSERVE BACTERIOLOGICAL TESTS.
- BACKFLOW PREVENTION SHALL BE SUBJECT TO CITY OF ST. CLOUD APPROVAL.
- WHERE SANITARY HAZARDS (SANITARY SEWER, FORCE MAIN, STORM SEWER,) CROSS WATER LINES WITH 12 INCHES OF VERTICAL CLEARANCE(18" PREFERRED), THE SANITARY MAIN SHALL BE CONSTRUCTED OF 18 FEET OF DUCTILE IRON PIPE (9 FEET EACH SIDE OF HAZARD CENTERLINE), OR THE WATER LINE ALIGNMENT SHOULD BE MODIFIED TO PROVIDE THE MINIMUM 18 INCHES OF VERTICAL CLEARANCE. THERE SHOULD BE A MINIMUM HORIZONTAL CLEARANCE OF 6 FEET IN PARALLEL INSTALLATION(10' PREFERRED). THE SANITARY SEWER MAIN IS TO BE CONSTRUCTED OF DUCTILE IRON PIPE WHERE HORIZONTAL AND VERTICAL CLEARANCES CANNOT BE MAINTAINED. REFER TO THE SEPARATION CHART OF THE DETAILS FDEP APPROVAL REQUIRED FOR ALL SEPARATION MITIGATION.
- CONTRACTOR IS TO PLACE A 2-1/2" PVC PIPE AT ALL FITTING LOCATIONS, EXTENDING FROM FITTING TO ABOVE GROUND, TO FACILITATE HORIZONTAL AND VERTICAL LOCATION BY SURVIVOR OF RECORD FOR RECORD.
- THE CONTRACTOR SHALL VERIFY F.D.E.P. CLEARANCE OF EXISTING MAIN PRIOR TO CONSTRUCTION OF NEW MAIN.
- 2 SETS OF WATER, SEWER AND REUSE SHOP DRAWINGS SHALL BE SUBMITTED TO CITY OF ST. CLOUD AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO BEGINNING MATERIALS.
- CITY OF ST. CLOUD SHALL BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO THE START OF CONSTRUCTION.
- NO WATER, SEWER OR REUSE CONSTRUCTION SHALL START WITHOUT THE APPROPRIATE FDEP PERMITS AND A NOTICE TO PROCEED ISSUED BY THE CITY OF ST. CLOUD.
- ALL WATER, SEWER AND REUSE MAINS SHALL HAVE A MINIMUM COVER OVER TOP OF PIPE OF 36" IN CITY AND 42" IN COUNTY AREAS. IF COVER CANNOT BE MAINTAINED THE WATER MAIN SHALL BE DUCTILE IRON PIPE.
- WATER AND REUSE MAINS SHALL BE ALLOWED TO BE DEFLECTED IF PERMITTED BY THE CITY PER MANUFACTURER SPECIFICATIONS OR PROPER DEFLECTION UTILIZING FITTINGS. CURVATURE SHALL BE ATTAINED BY EITHER BENDING PIPE OR DEFLECTING PIPE AT PIPE JOINTS. IF PIPE IS DEFLECTED AT JOINTS, DEFLECTIONS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER OR THE AWWA STANDARD. CURVATURE OF PIPE ATTAINED BY BENDING PIPE SHALL BE PER THE FOLLOWING:
4" PVC: 100' RADIUS 6" PVC: 150' RADIUS
8" PVC: 200' RADIUS 10" PVC: 250' RADIUS
12" PVC: 300' RADIUS
- ALL FIRE HYDRANTS WILL BE INSTALLED PER THE CITY OF ST.CLOUD STANDARD DETAILS
- ALL REUSE PIPES SHALL BE INSTALLED USING WATER PIPE CRITERIA. PIPE SHALL BE PURPLE IN COLOR OR SHALL HAVE A CONTINUOUS 2" WIDE PERMANENT PURPLE STRIPE ON THE TOP OF THE PIPE.
- WATER AND REUSE WATER GATE VALVES AND TEMPORARY BLOWOFFS OR HYDROGUARDS ARE REQUIRED AT ALL PHASE LINES. REFER TO THE ST. CLOUD UTILITY MANUAL A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY OF ST. CLOUD PRIOR TO BEGINNING CONSTRUCTION.
- LOCATE MARKERS (LOCATE BALLS) WILL BE USED EVERY 25 FEET AND AT ALL VALVES. UTILIZE MARKERS AT CHANGE OF DIRECTION. REFER TO SHEET 3 OF 16 IN THE STANDARD DETAILS FOR INSTALLATION INSTRUCTIONS. VALVE PADS WILL BE INSTALLED ACCORDING TO STANDARD
- ANY UNAUTHORIZED USE OF WATER WILL BE SUBJECT TO FINES

[illegible]

MUTTER ROAD EXTENSION
CITY OF ST. CLOUD

SEC 9810 TWP 28S RANG 30E

ST. CLOUD, FLORIDA

PROJECT NO./FILE NAME 16-044 NOTES	DSGN BKJ
CE JOB # OEI 16-044	DRWN BKJ
SCALE N/A	CHKD JEM

INFORMATIONAL COPY ONLY, UNLESS EMBOSSED WITH REGISTERED ENGINEER'S SEAL AND EXPIRATION DATE

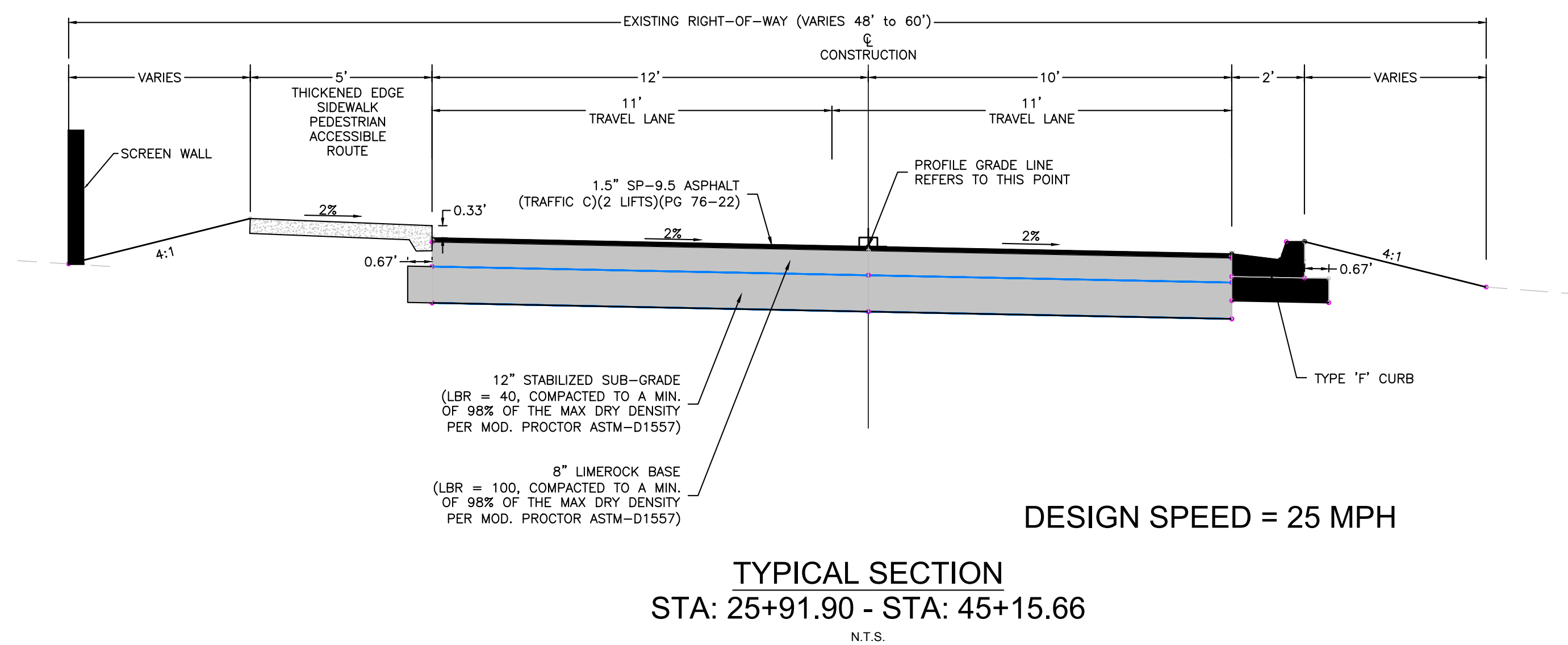
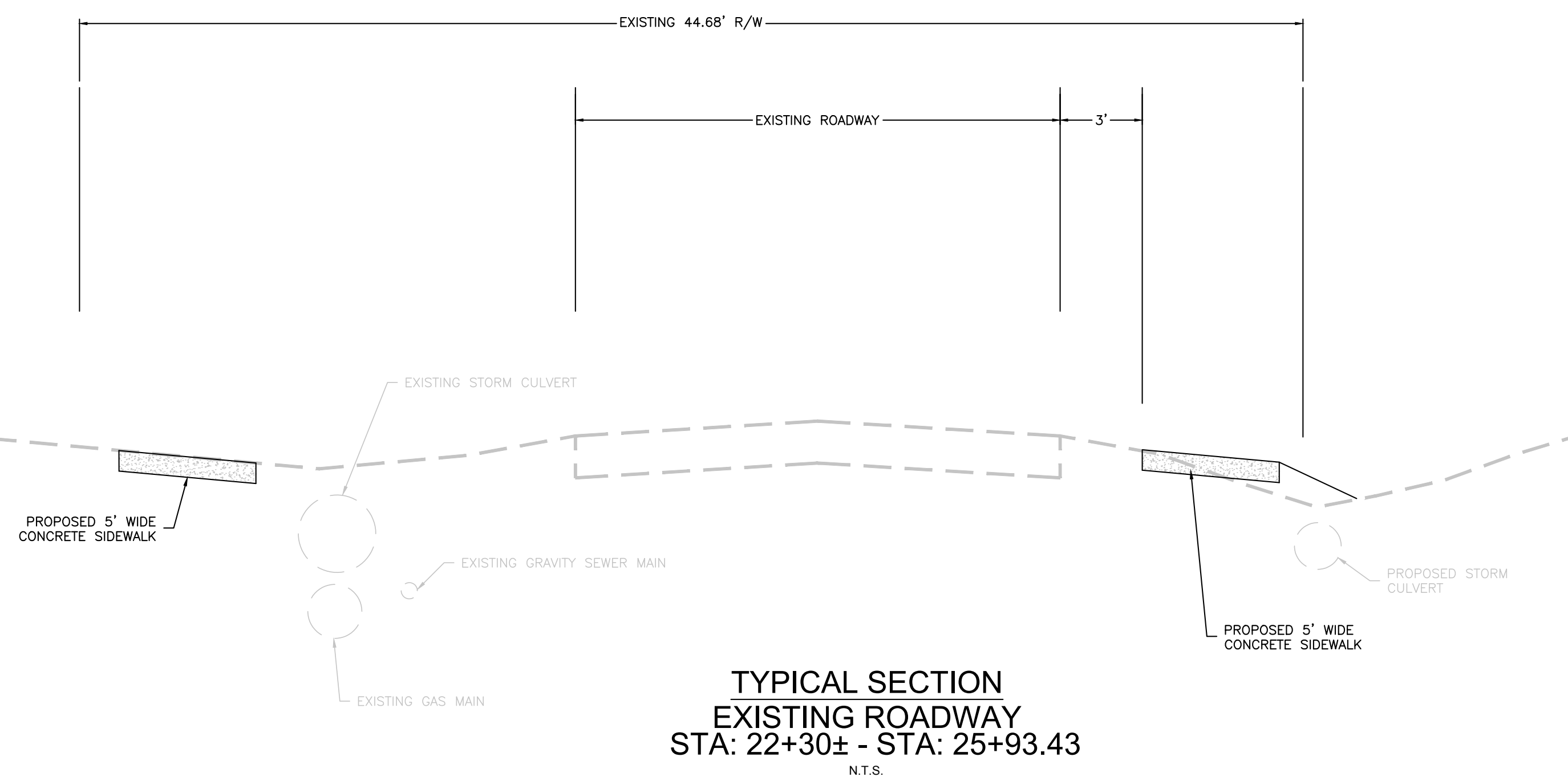
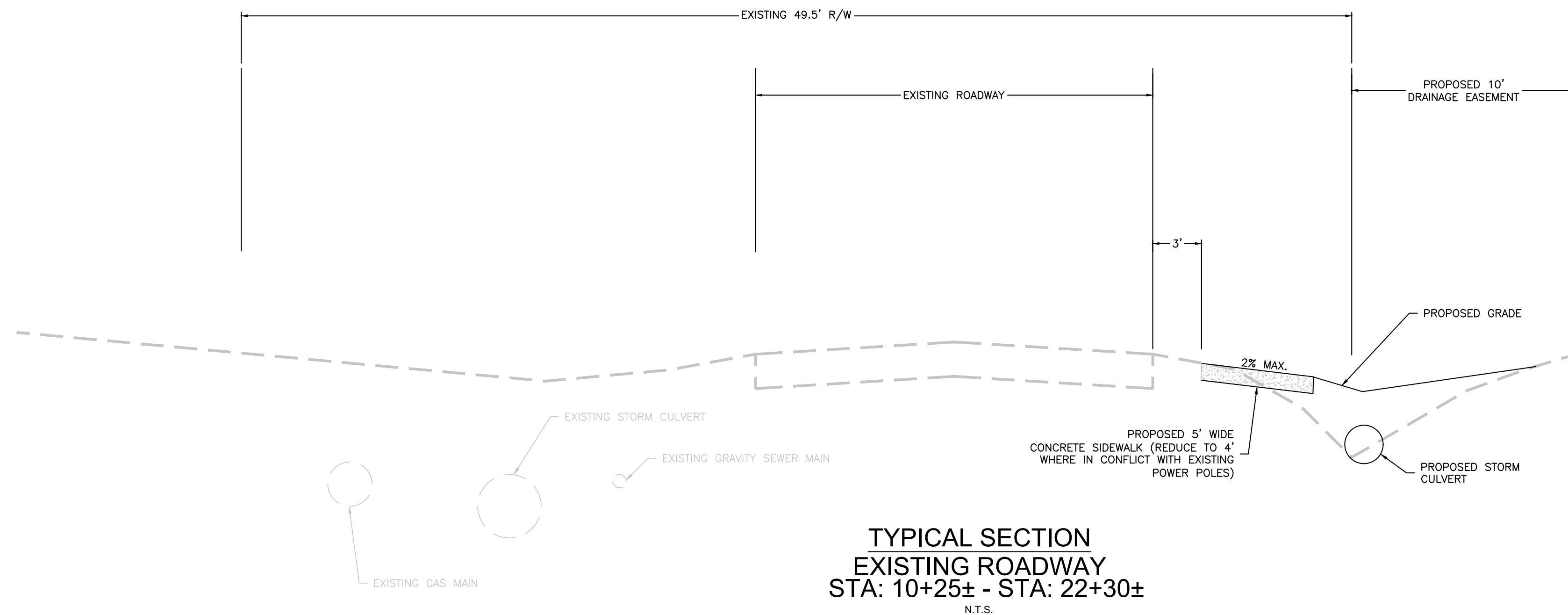
JOHN ERIC MOODY
LICENSE
No. 48927

★ ★ ★

STATE OF
FLORIDA
PROFESSIONAL ENGINEER

9/27/2016
JOHN ERIC MOODY, P.E. No. 48927

SHEET



OSCEOLA
ENGINEERING
INCORPORATED

CERTIFICATE OF AUTHORIZATION NUMBER: DD026265
1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
PHONE 407.891.0452 FAX 407.891.9173

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TYPICAL SECTIONS

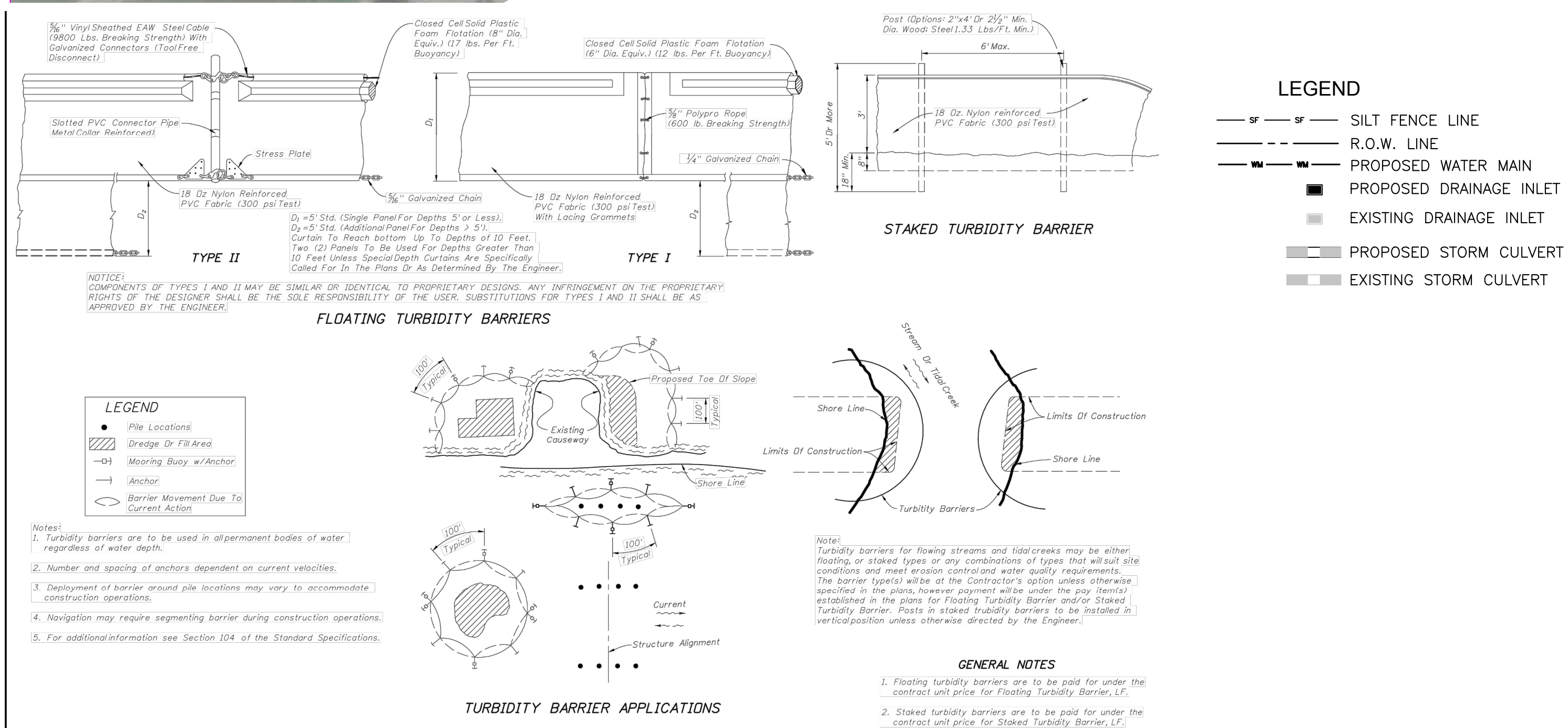
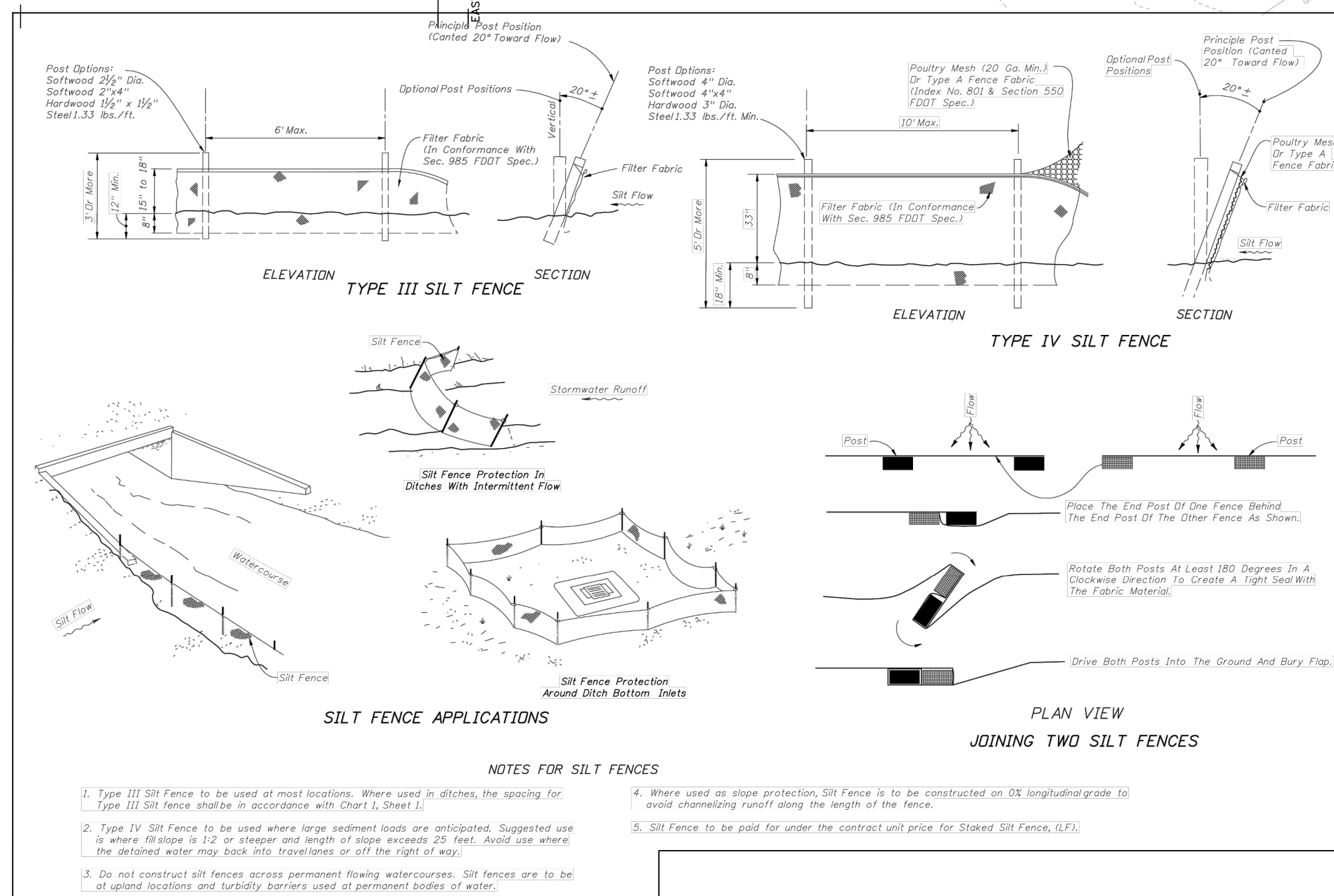
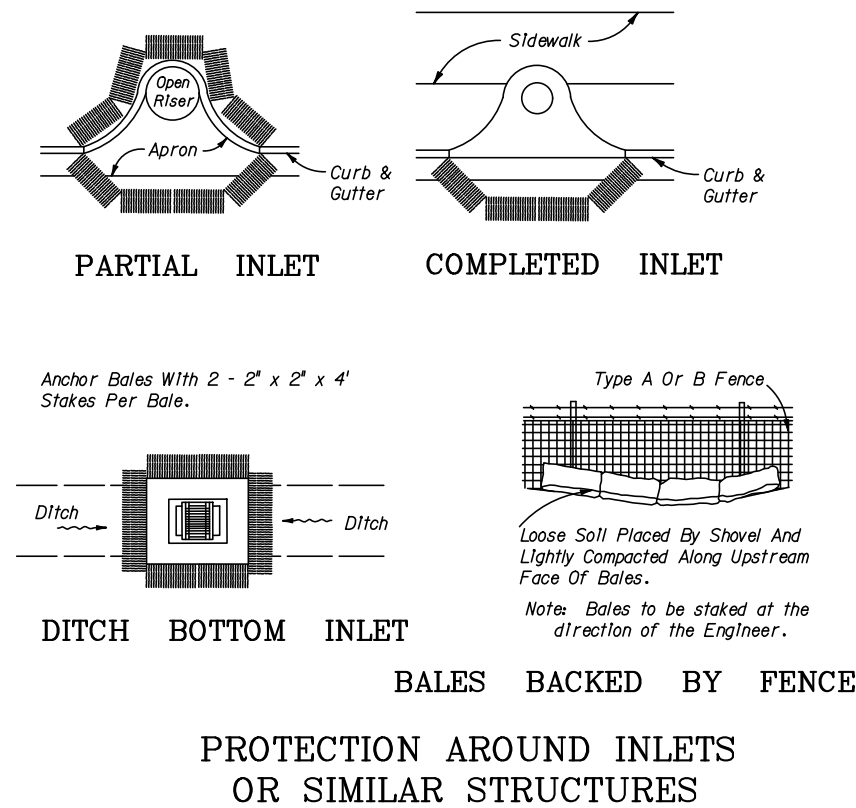
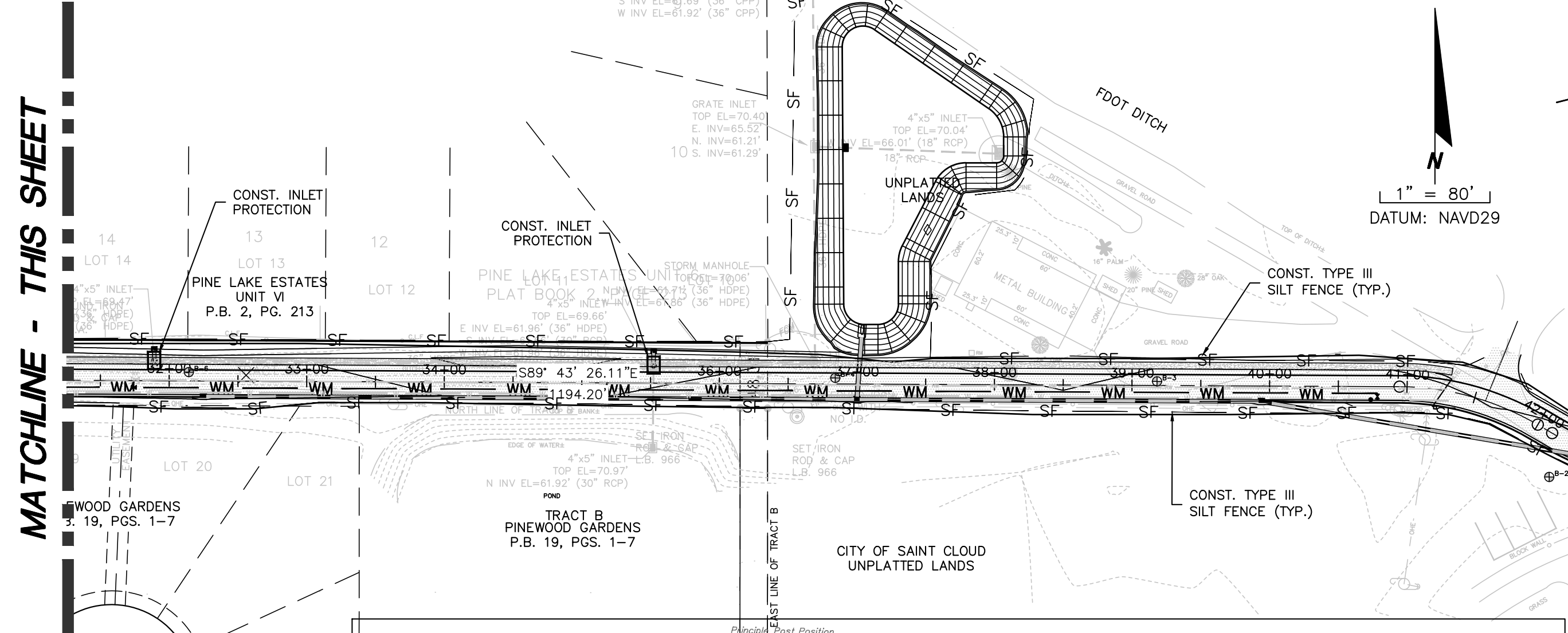
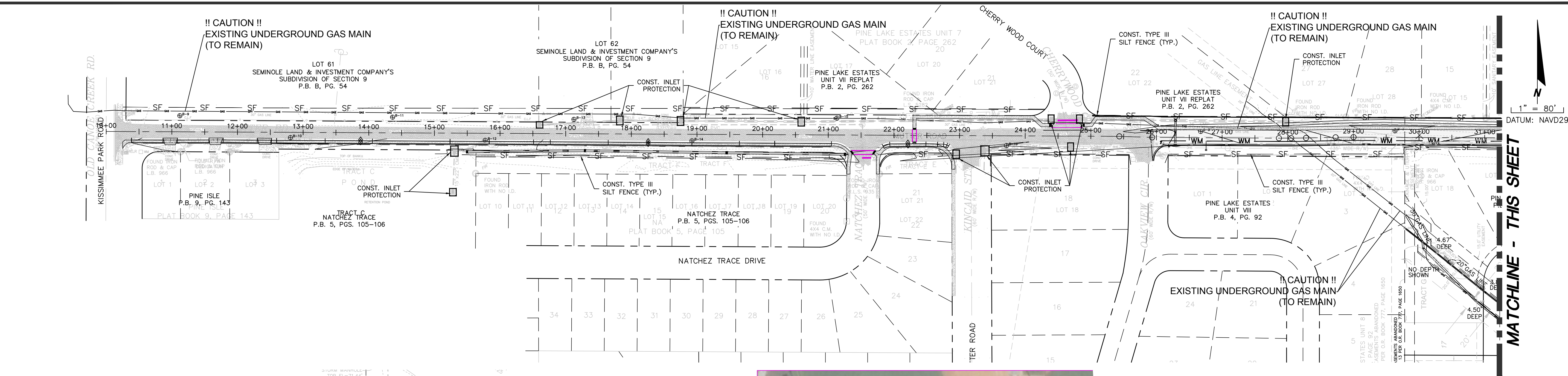
MUTTER ROAD EXTENSION
CITY OF ST. CLOUD

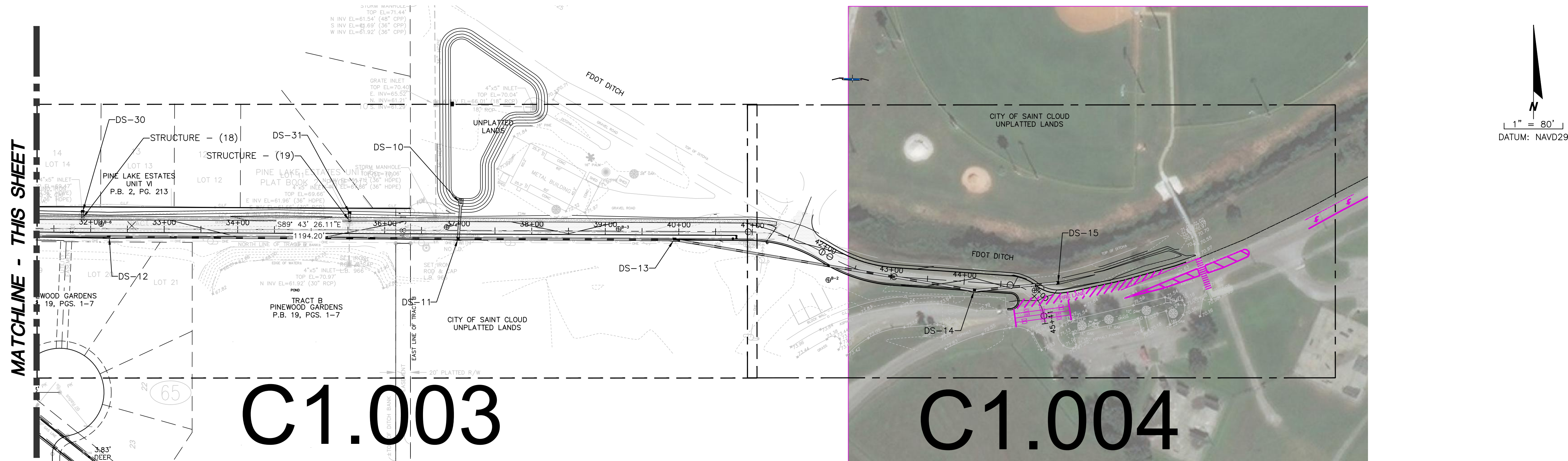
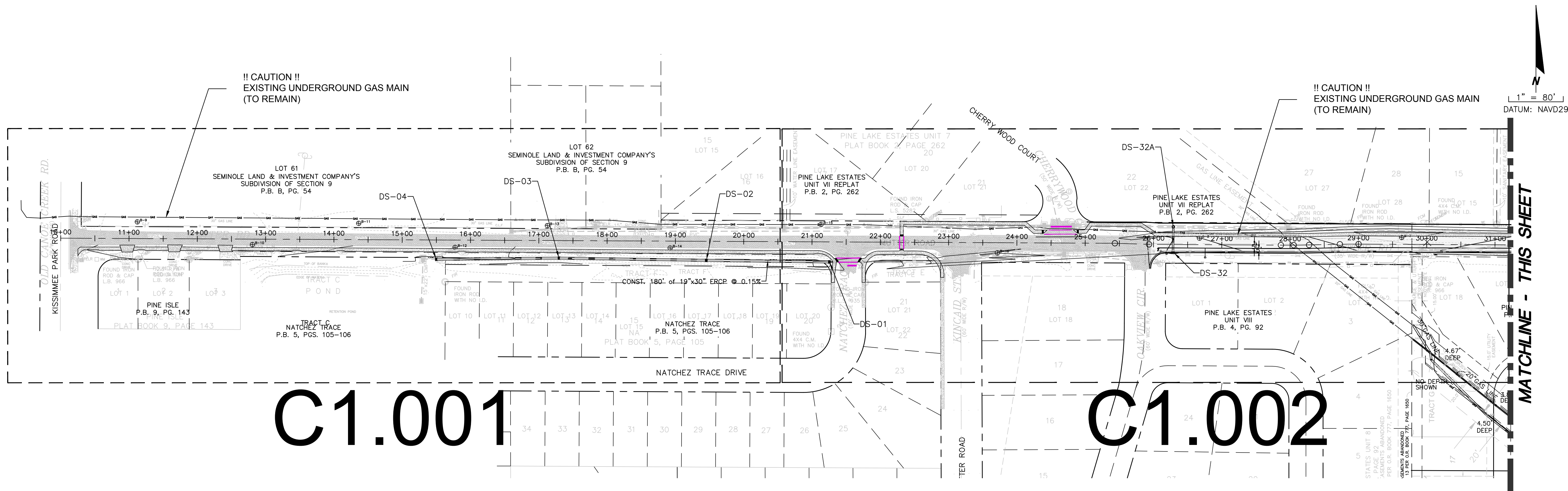
ST. CLOUD, FLORIDA

PROJECT NO./FILE NAME	DISC#
16-044 TYP SECT	BKJ
DEI JOB #	DRWN
OEI 16-044	BKJ
SCALE	CHWD
N/A	JEM

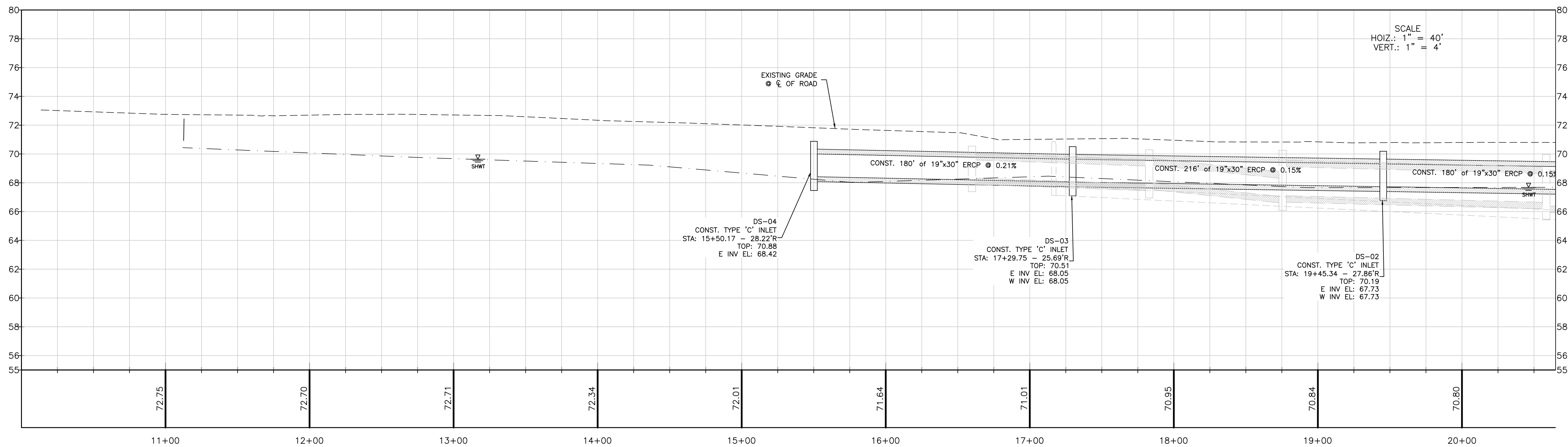
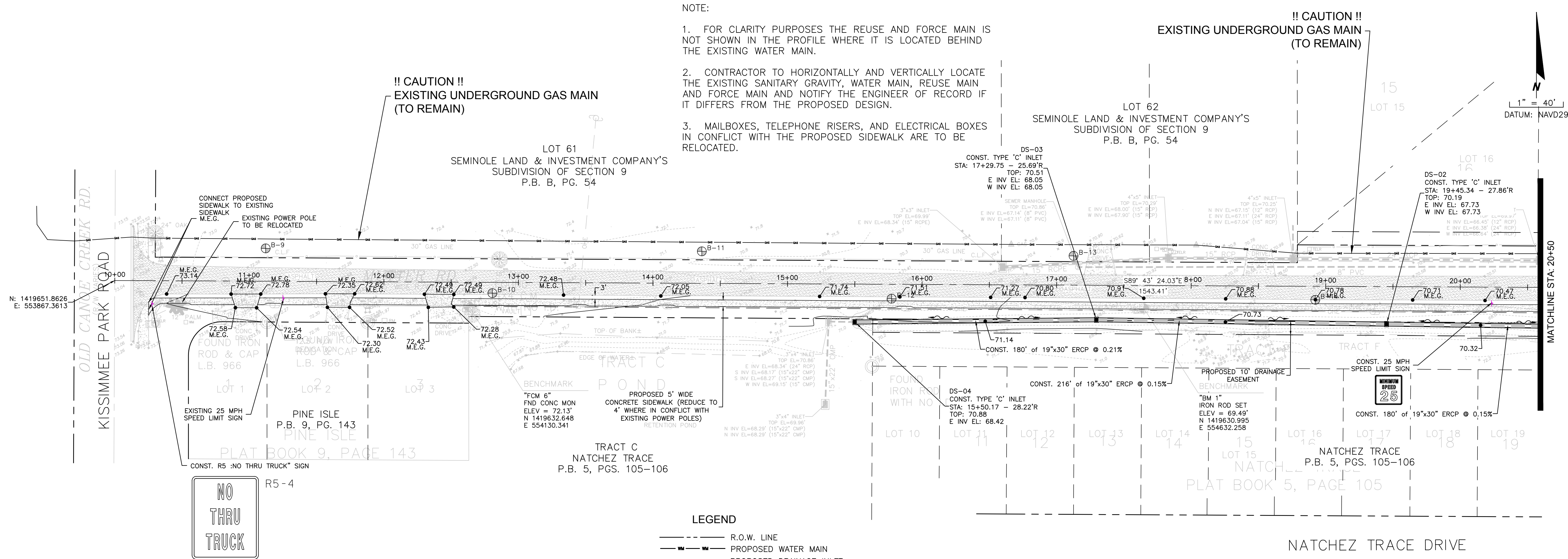
INFORMATIONAL COPY ONLY. UNLESS
CROSSCHECK WITH PREPARED
ENGINEERING DRAWING, DATE

9/27/2018
JOHN ERIC MOODY, P.E. No. 48927
SHEET

[illegible]



 OSCEOLA ENGINEERING INCORPORATED CERTIFICATE OF AUTHORIZATION NUMBER: 00026265 1005 FLORIDA AVENUE, SAINT CLOUD, FL 34786 PHONE: 887.891.0452 FAX: 887.891.1317/3		NO. DATE DESCRIPTION		BY
		NO. DATE DESCRIPTION		
MASTER SITE PLAN		MUTTER ROAD EXTENSION CITY OF ST. CLOUD		
ST. CLOUD, FLORIDA		SEC 0410, TWP 26S, RNG 30E		
PROJECT NO./FILE NAME MSP		ISSN BKJ		
OEI JOB # OEI 16-044		DRAWN BKJ		
SCALE 1"=80'		CHECKED JEM		
INFORMATIONAL COPY ONLY, UNLESS ENDORSED WITH REFERENCE TO ENGINEERING PROJECT NUMBER, DATE				
				
9/27/2016 JOHN ERIC MOODY, P.E. No. 48927				
SHEET C1.000				



NOTE:

1. FOR CLARITY PURPOSES THE REUSE AND FORCE MAIN IS NOT SHOWN IN THE PROFILE WHERE IT IS LOCATED BEHIND THE EXISTING WATER MAIN.
2. CONTRACTOR TO HORIZONTALLY AND VERTICALLY LOCATE THE EXISTING SANITARY GRAVITY, WATER MAIN, REUSE MAIN AND FORCE MAIN AND NOTIFY THE ENGINEER OF RECORD IF IT DIFFERS FROM THE PROPOSED DESIGN.
3. MAILBOXES, TELEPHONE RISERS, AND ELECTRICAL BOXES IN CONFLICT WITH THE PROPOSED SIDEWALK ARE TO BE RELOCATED.

!! CAUTION !!
EXISTING UNDERGROUND GAS MAIN
(TO REMAIN)

LOT 62
SEMINOLE LAND & INVESTMENT COMPANY'S
SUBDIVISION OF SECTION 9
P.B. B, PG. 54

DS-02
CONST.

DS-02
CONST. TYPE 'C' INLET
STA: 19+45.34 - 27.86'R
TOP: 70.19
E INV EL: 67.73
W INV EL: 67.73

1" = 40'
DATUM: NAVD29

MATCHLINE STA: 20+50

NATCHEZ TRACE DRIVE



OSCEOLA
ENGINEERING
INCORPORATED

CERTIFICATE OF AUTHORIZATION NUMBER: 00026265
1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
PHONE 407.891.0452 FAX 407.891.9173

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**MUTTER ROAD
PLAN & PROFILE**

**MUTTER ROAD EXTENSION
CITY OF ST. CLOUD**

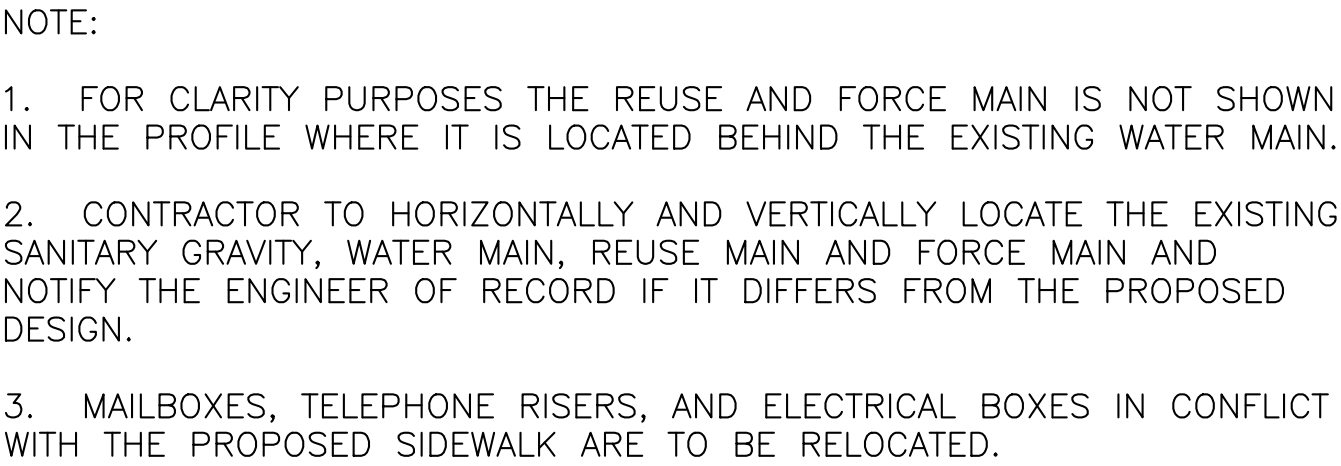
SEC 9&10, TWP 26S, RANG
LOUISIANA, FLORIDA

PROJECT NO./FILE NAME	DSON
16-044 PP	BKJ
CE JOB #	DRWN
OEI 16-044	BKJ
SCALE	CHKD
1"=40'	JEM

INFORMATIONAL COPY ONLY, UNLESS EMBOSSED OR NOT REPRODUCED
ENGINEER'S EXPIRATION DATE

JOHN ERIC MOODY
No. 48927
STATE OF FLORIDA
PROFESSIONAL ENGINEER
9/27/2016
JOHN ERIC MOODY, P.E. No. 48927

SHEET

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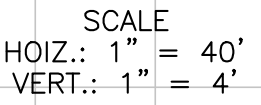
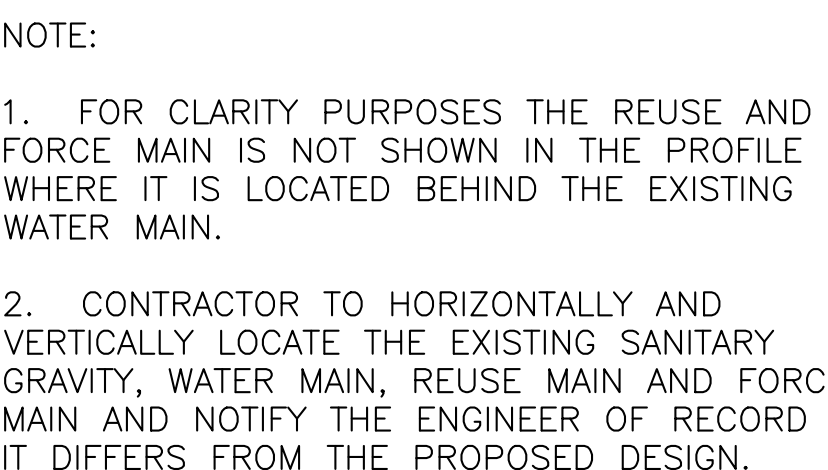
**MUTTER ROAD
PLAN & PROFILE**

**MUTTER ROAD EXTENSION
CITY OF ST. CLOUD**

ST. CLOUD, FLORIDA

SEC 38.10, T11P 26S, R16E

PROJECT NO/FILE NAME 16-044 PP		DSGN BJK	
OIL JOB # OEI 16-044		DRWN BJK	
SCALE 1"=40'		CHKD JEM	
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9/27/2016 JOHN ERIC MOODY, P.E. NO. 48927			
SHEET		C1002	



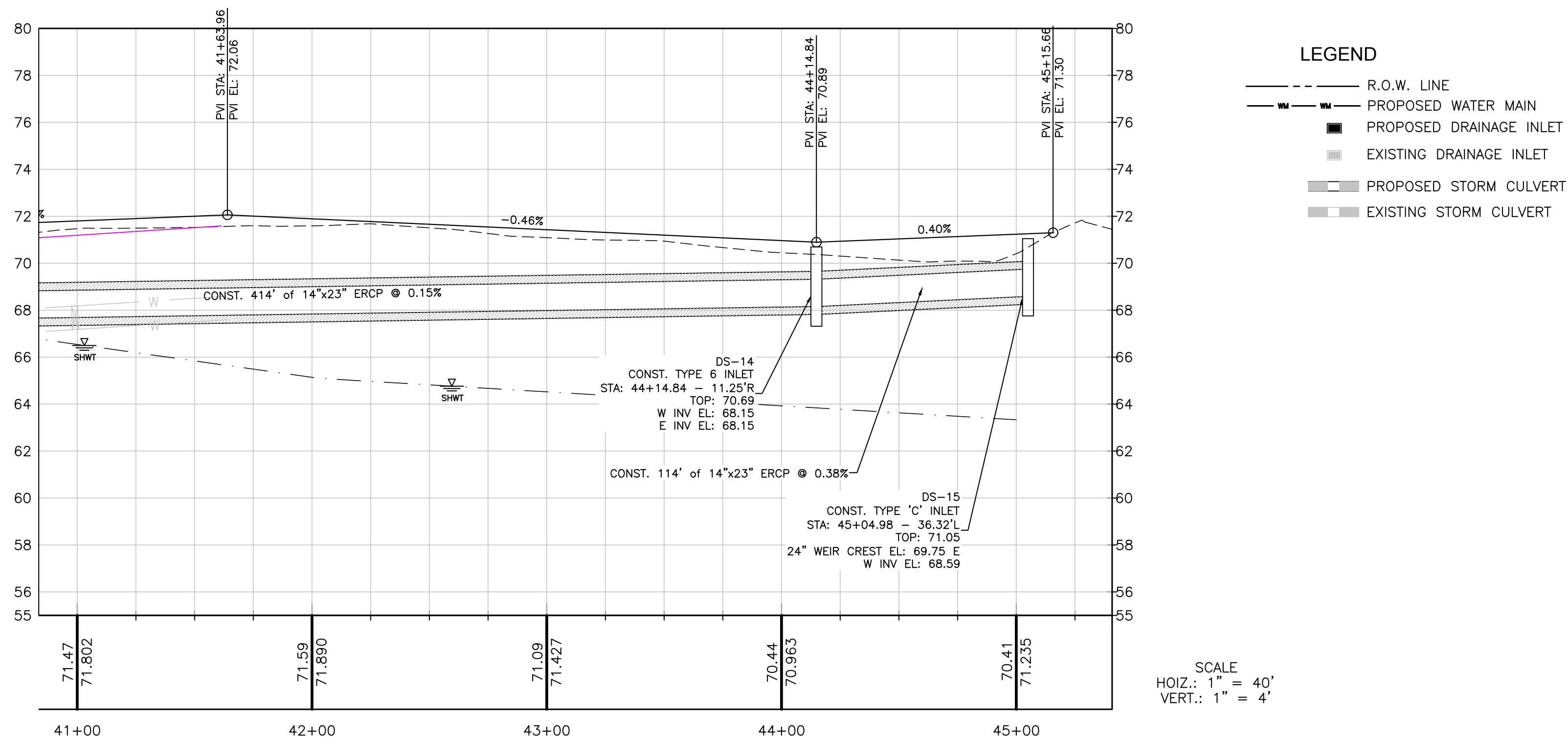
**MUTTER ROAD
PLAN & PROFILE**

**MUTTER ROAD EXTENSION
CITY OF ST. CLOUD**

PROJECT NO./FILE NAME 16-044 PP BJK		DSGN BJK
CE JOB # OEI 16-044		DRWN BJK
SCALE 1"=40'		CHKD JEM
INFORMATIONAL COPY ONLY, UNLESS EMBOSSED OR OTHERWISE INDICATED ENGINEER'S NAME AND DATE		

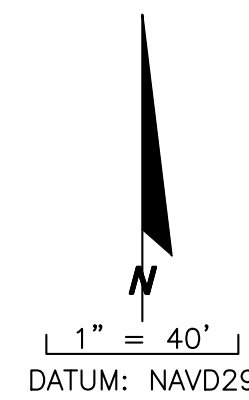
9/27/2016
JOHN ERIC MOODY, P.E. NO. 48927

C1.003



NOTE:

1. FOR CLARITY PURPOSES THE REUSE AND FORCE MAIN IS NOT SHOWN IN THE PROFILE WHERE IT IS LOCATED BEHIND THE EXISTING WATER MAIN.
2. CONTRACTOR TO HORIZONTALLY AND VERTICALLY LOCATE THE EXISTING SANITARY GRAVITY, WATER MAIN, REUSE MAIN AND FORCE MAIN AND NOTIFY THE ENGINEER OF RECORD IF IT DIFFERS FROM THE PROPOSED DESIGN.

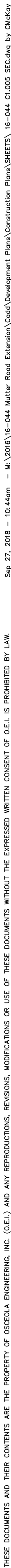
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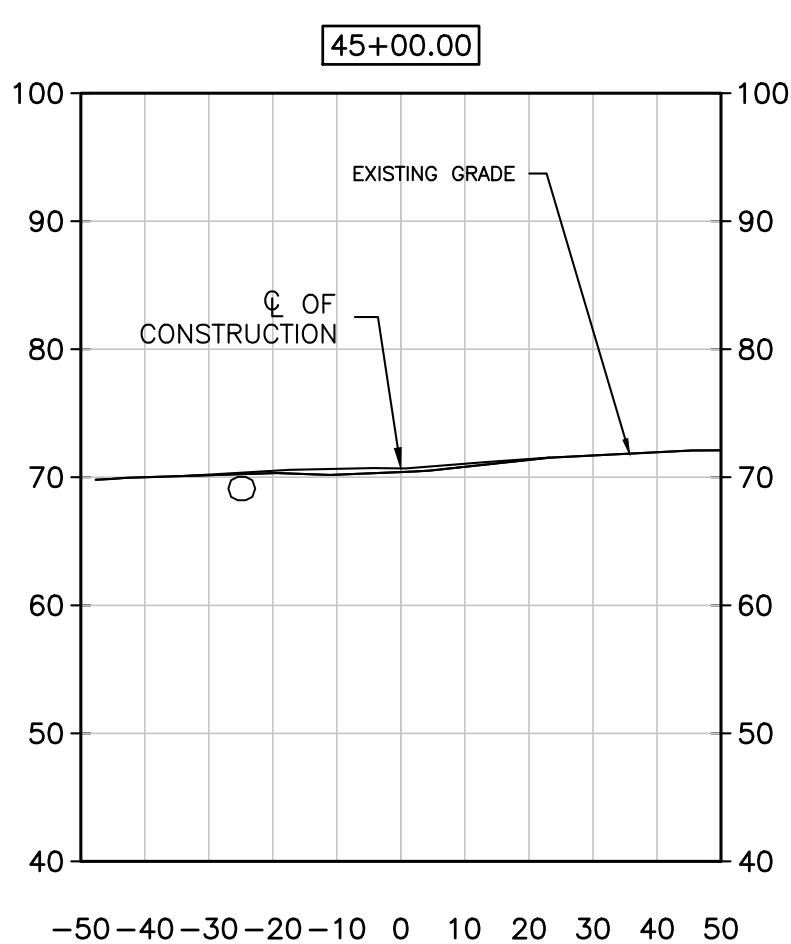
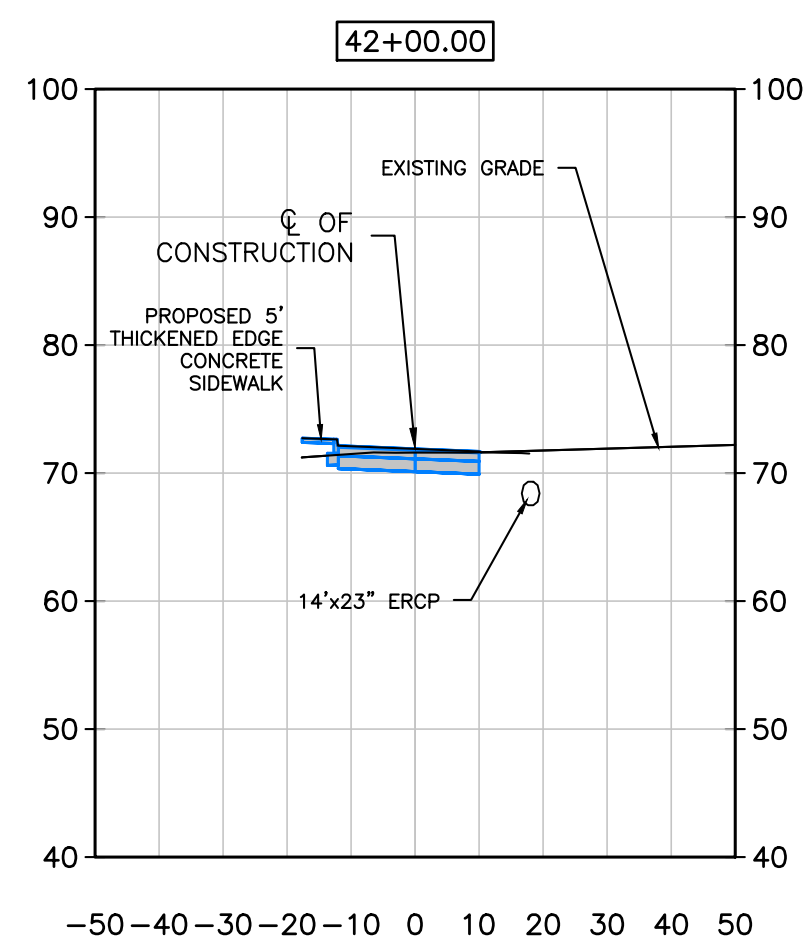
**MUTTER ROAD
PLAN & PROFILE**

**MUTTER ROAD EXTENSION
CITY OF ST. CLOUD**

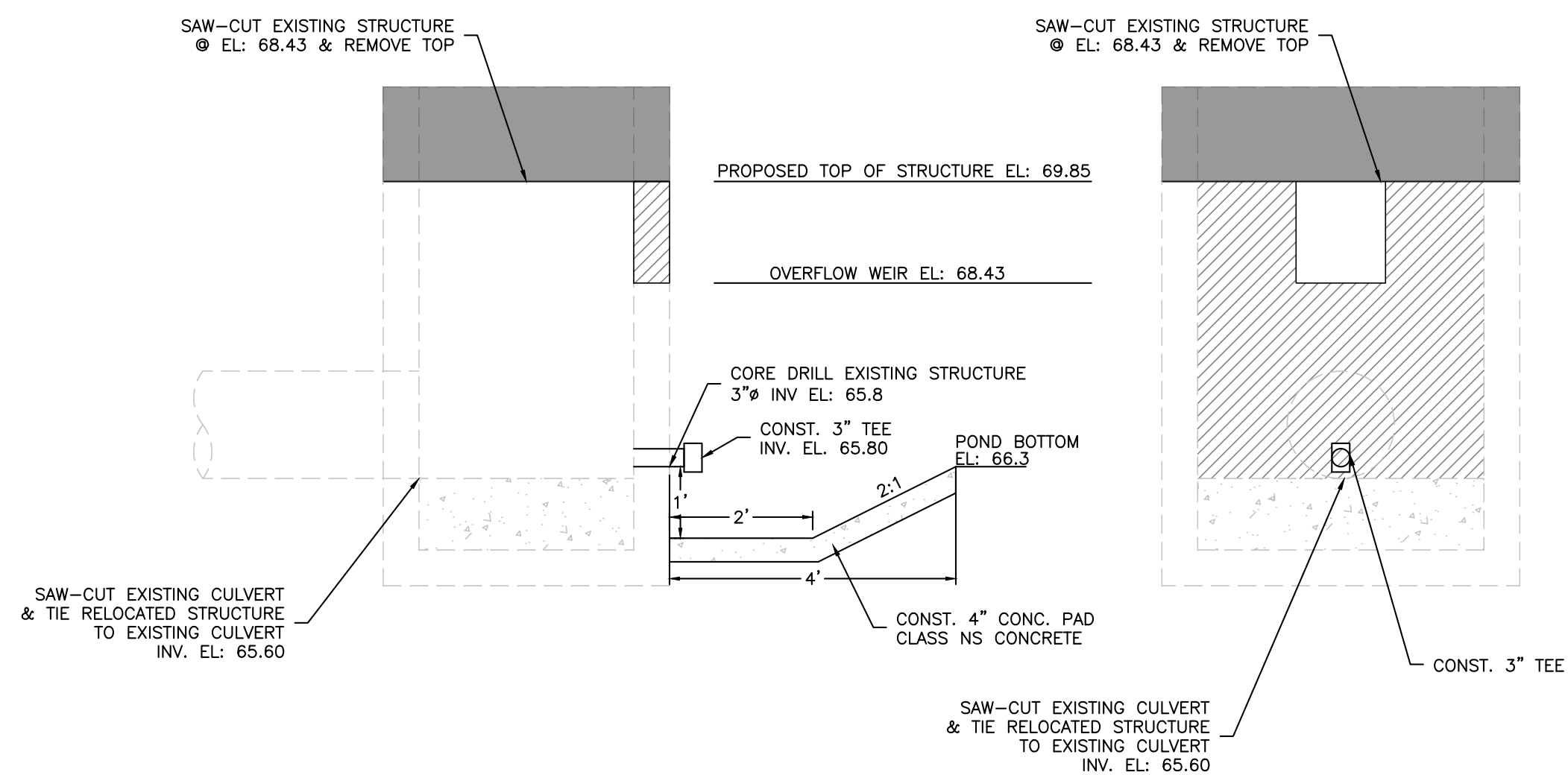
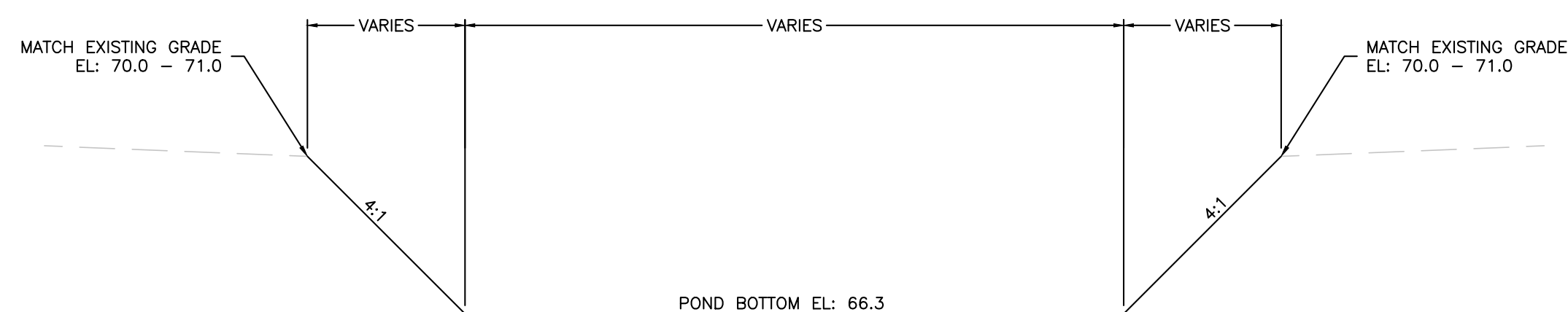
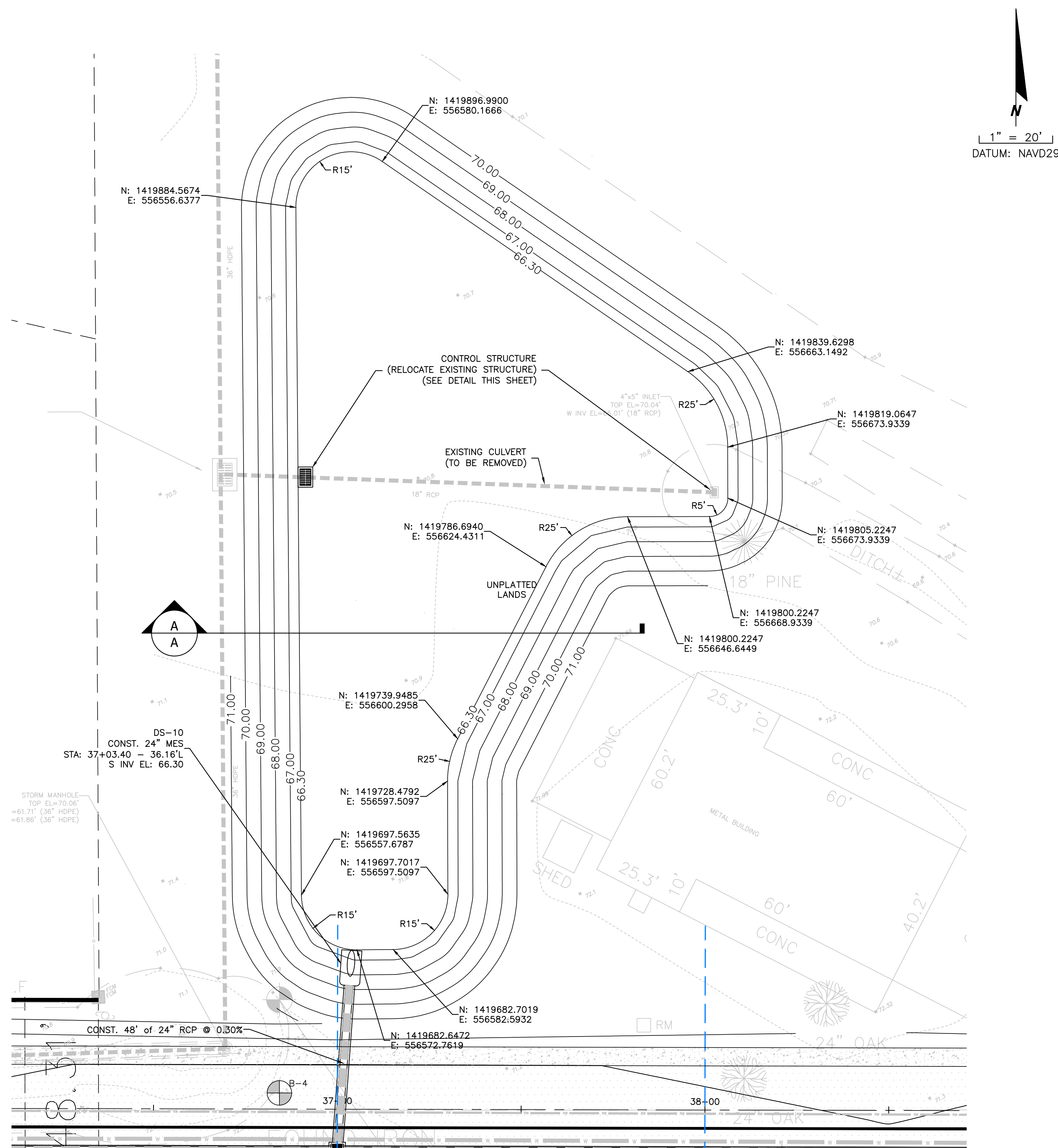
ST. CLOUD, FLORIDA

PROJECT NO./FILE NAME	DISC#
16-044 PP	BKJ
OEI JOB #	DRWN
OEI 16-044	BKJ
SCALE	CHKD
1"=40'	JEM
INFORMATIONAL: PROJECT ONLY, UNLESS CIRCUMSTANCES HAVE TRANSFERRED ENGINEERING RESPONSIBILITY TO DATE	
9/27/2016	
JOHN ERIC MOODY, P.E. No. 48927	
SHEET	





Page 15 of 20



PROPOSED
CONTROL STRUCTURE
(MODIFY EXISTING STRUCTURE)
NOT TO SCALE

[illegible]

POND DETAILS

MUTTER ROAD EXTENSION
CITY OF ST. CLOUD

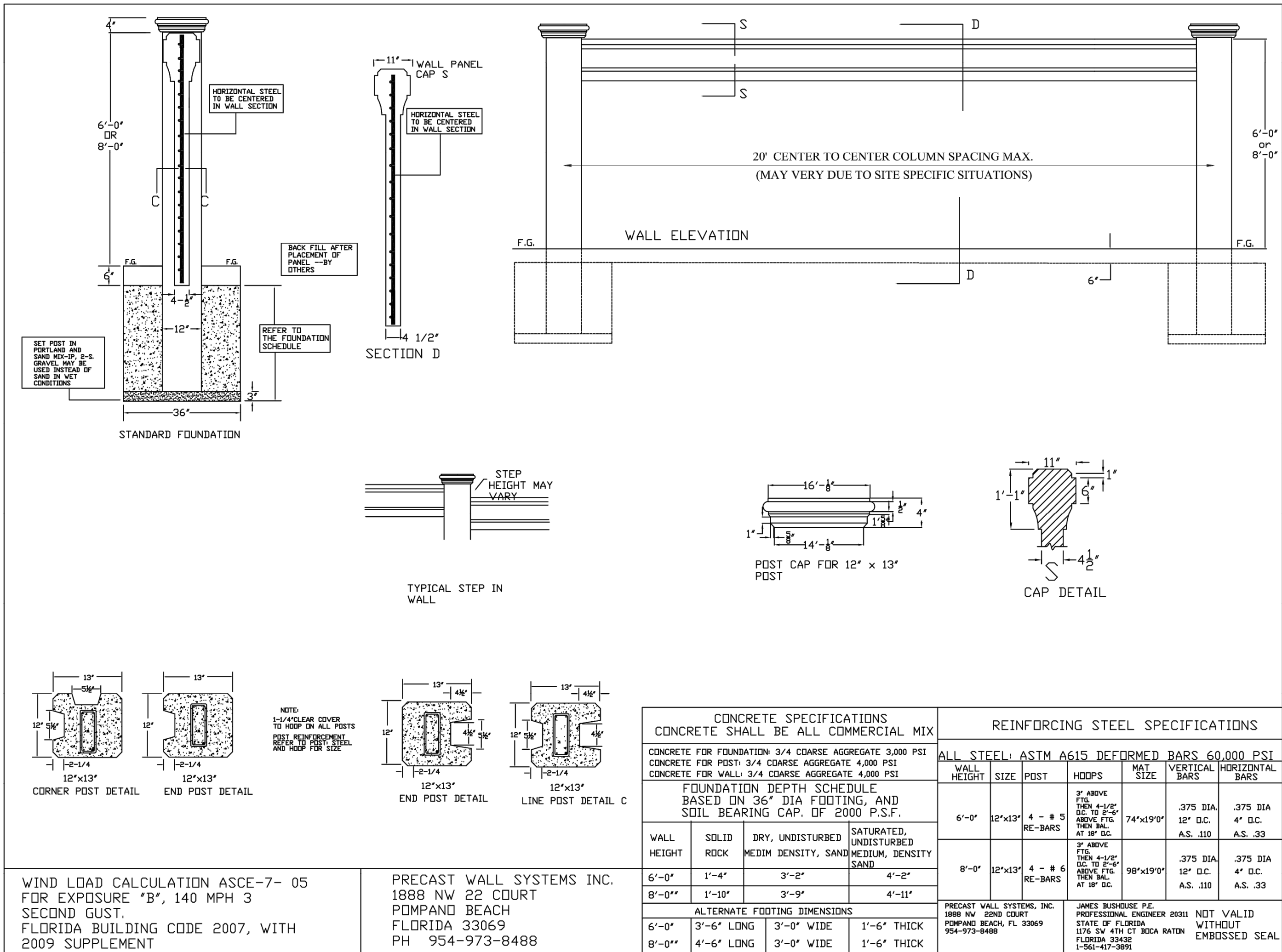
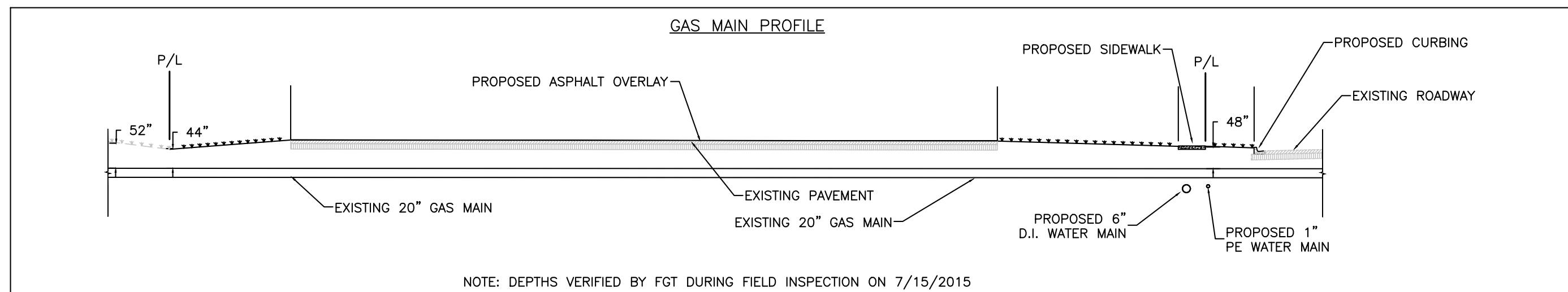
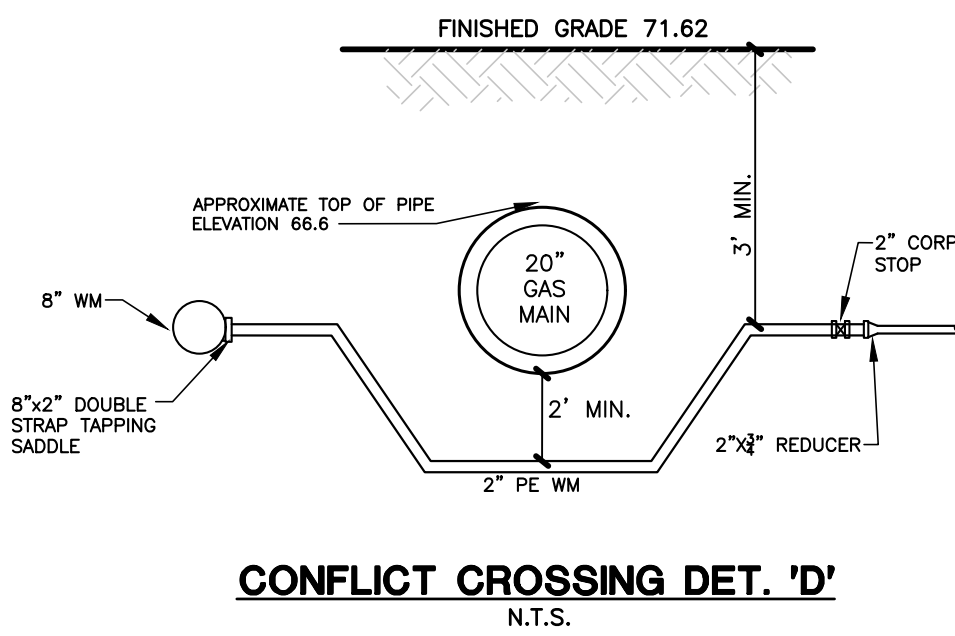
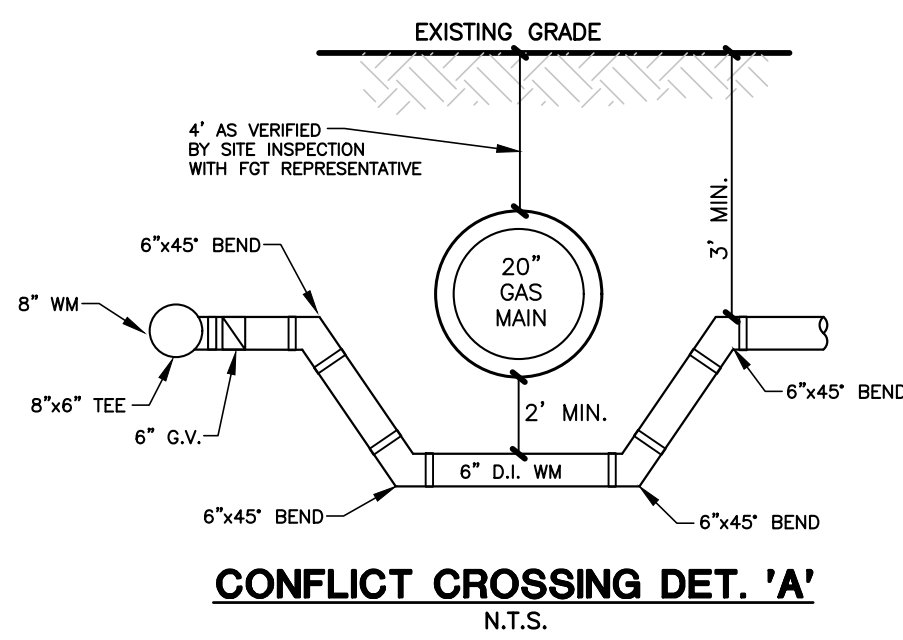
ST. CLOUD, FLORIDA
SEC 9&10, TWP 26S, RNG 30E

PROJECT NO./FILE NAME	DSGN
16-044 POND	BJK
DEI JOB #	DRWN
OEI 16-044	BJK
SCALE	CHKD
1"=40'	JEM

INFORMATIONAL COPY ONLY, UNLESS
 EMBOSSED OR NOT REPRODUCED
 ENGINEER'S SEAL REQUIRED FOR DATE

9/27/2018
 JOHN ERIC MOODY, P.E. No. 48927
 SHEET

C5.001

[illegible]

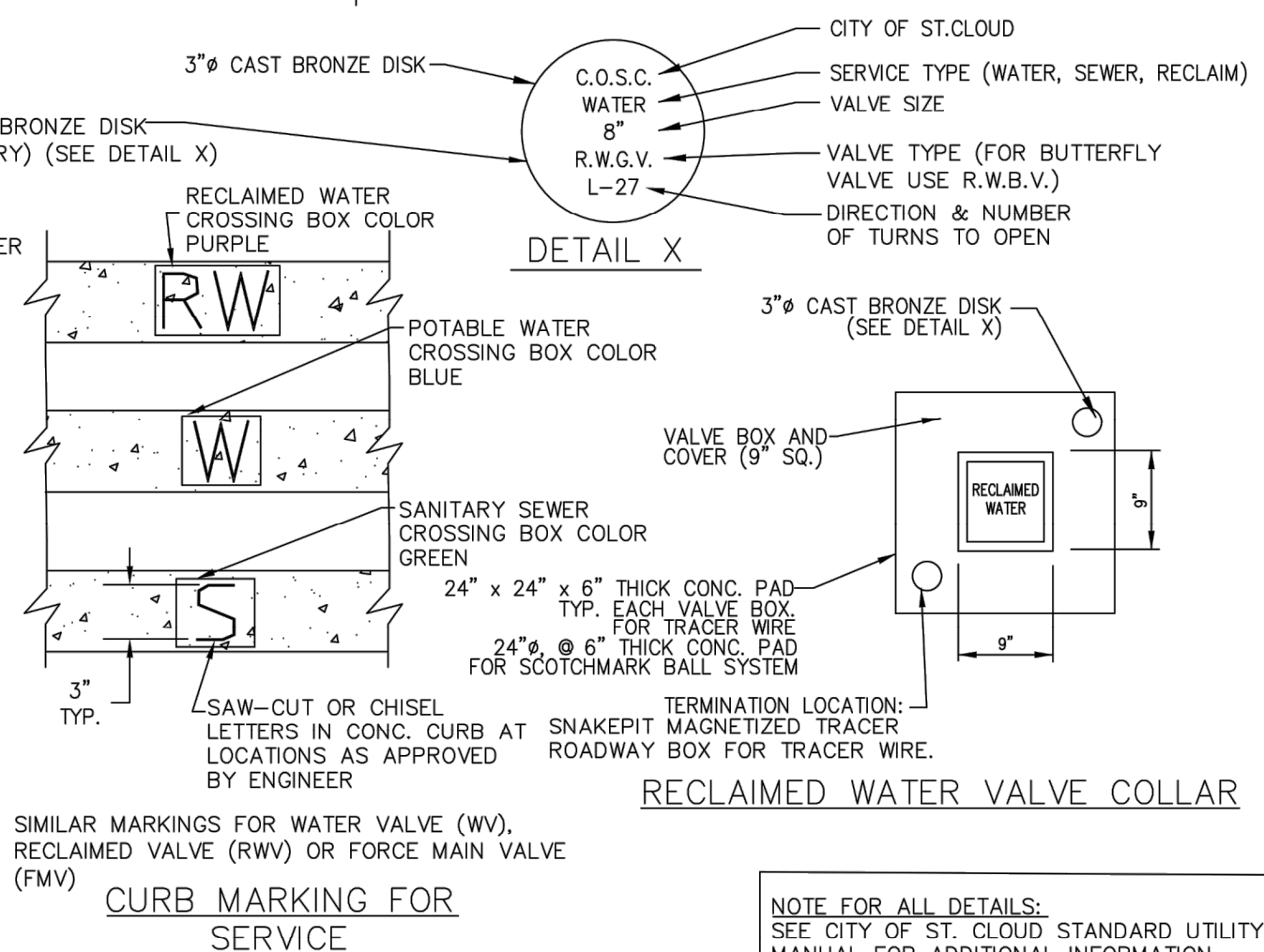
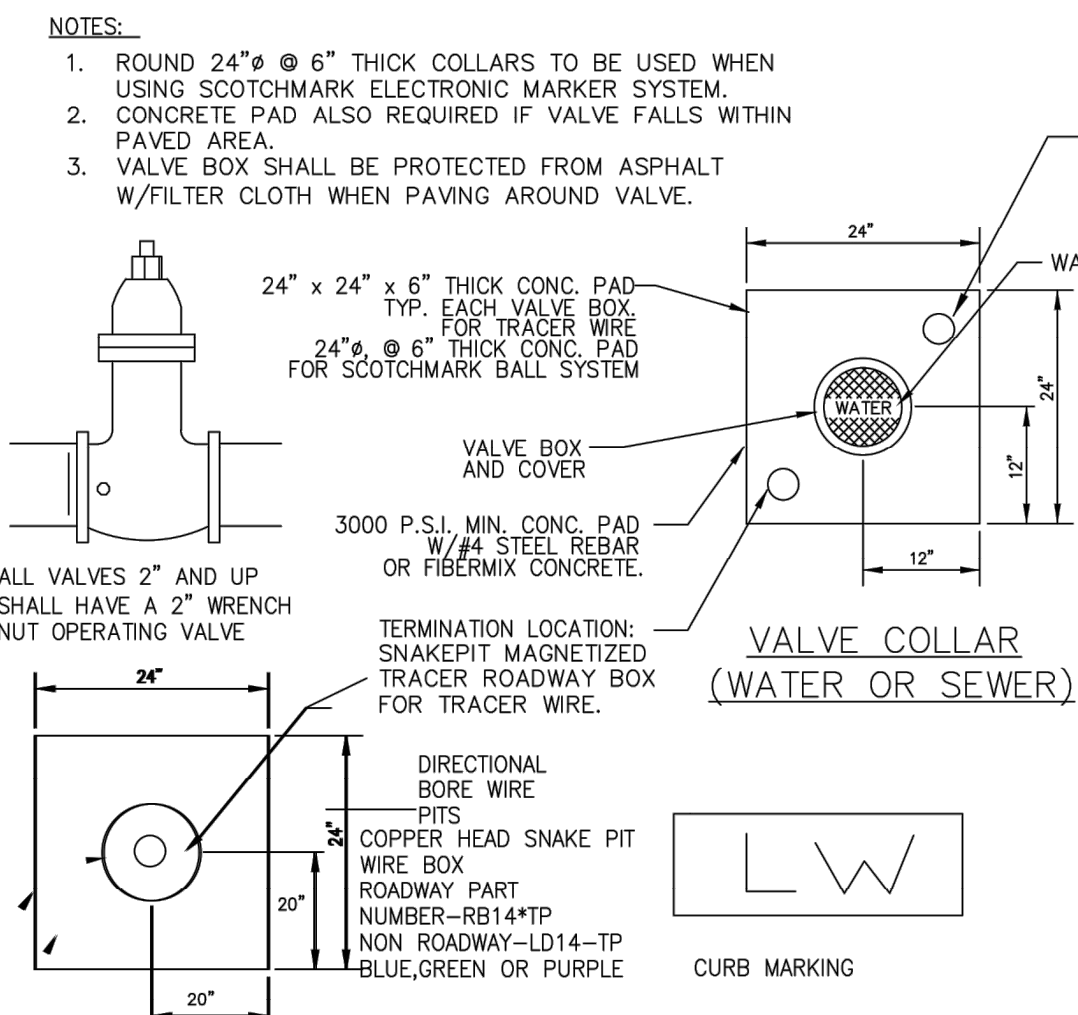
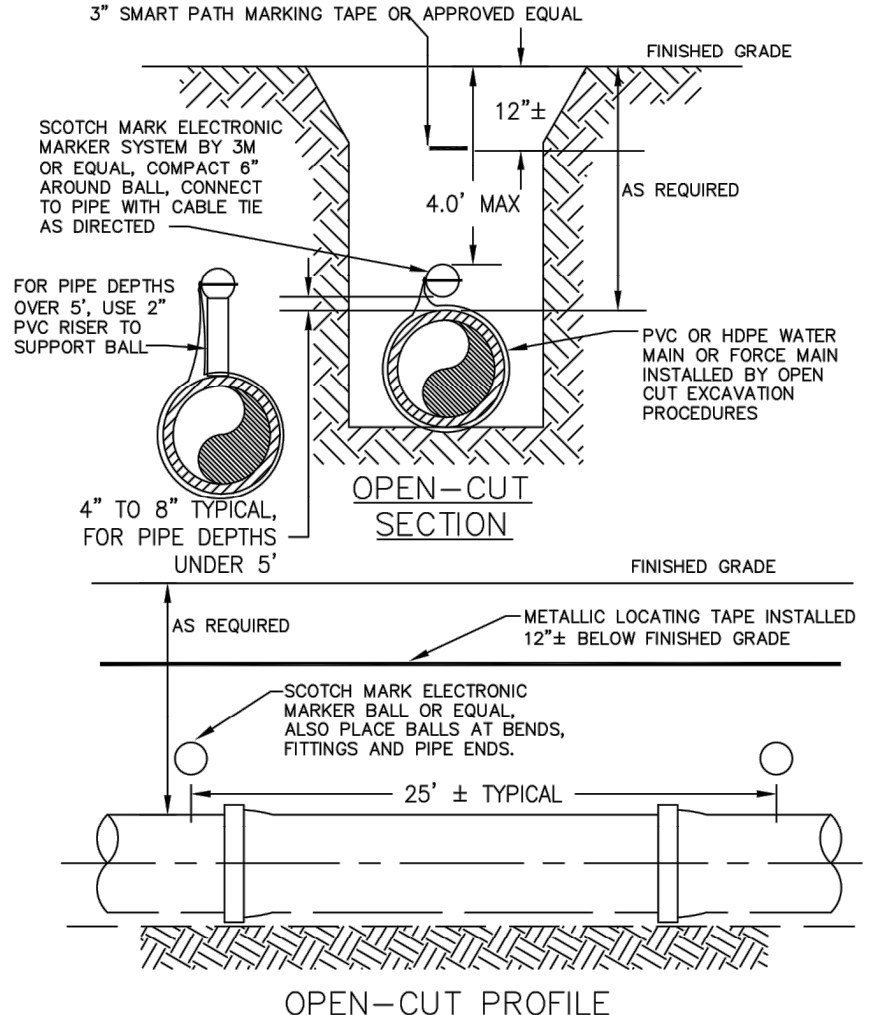
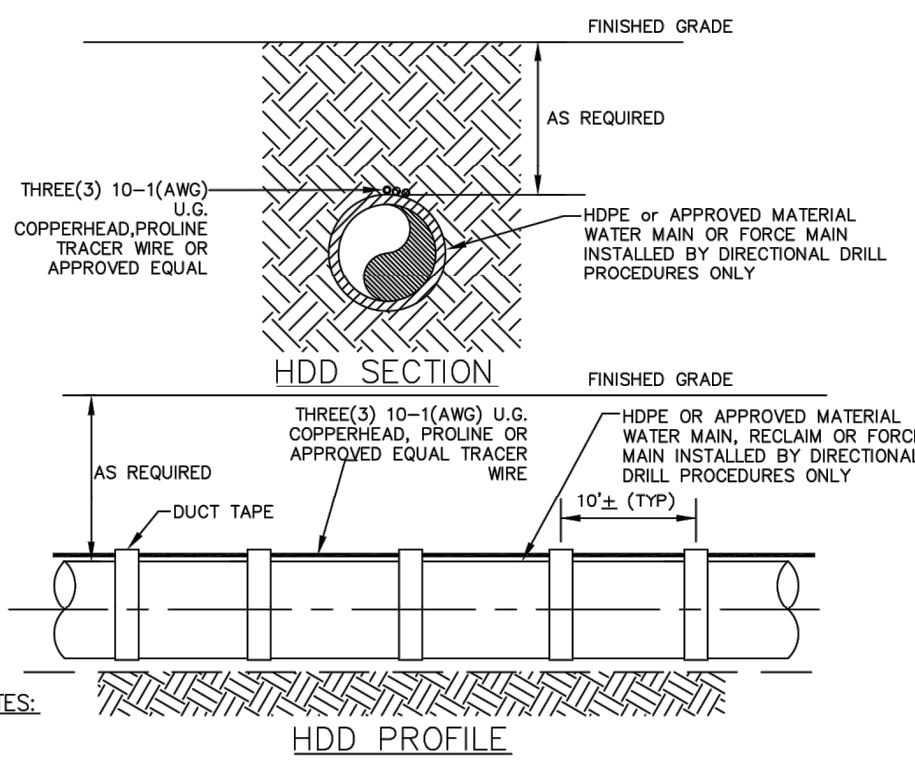
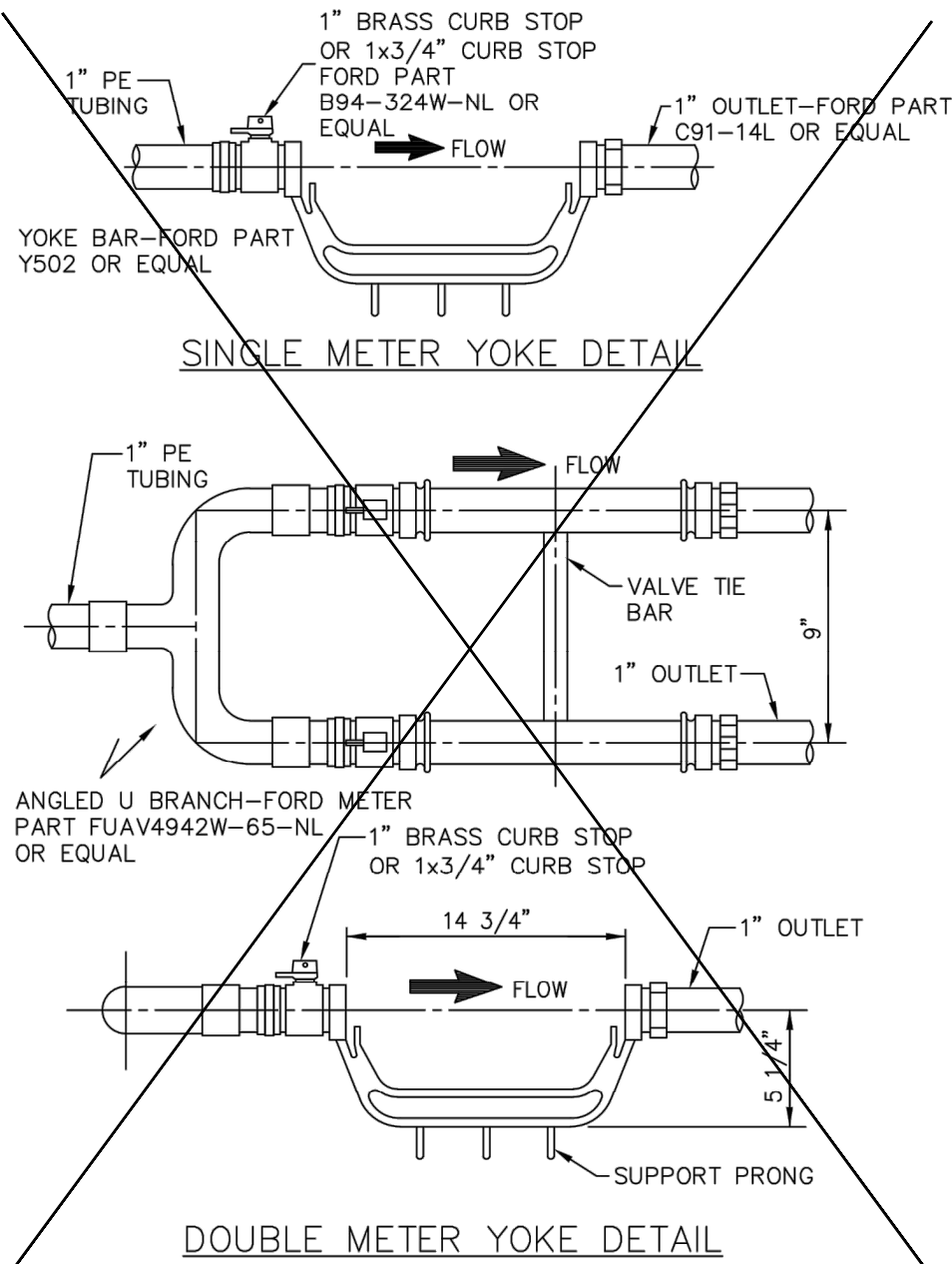
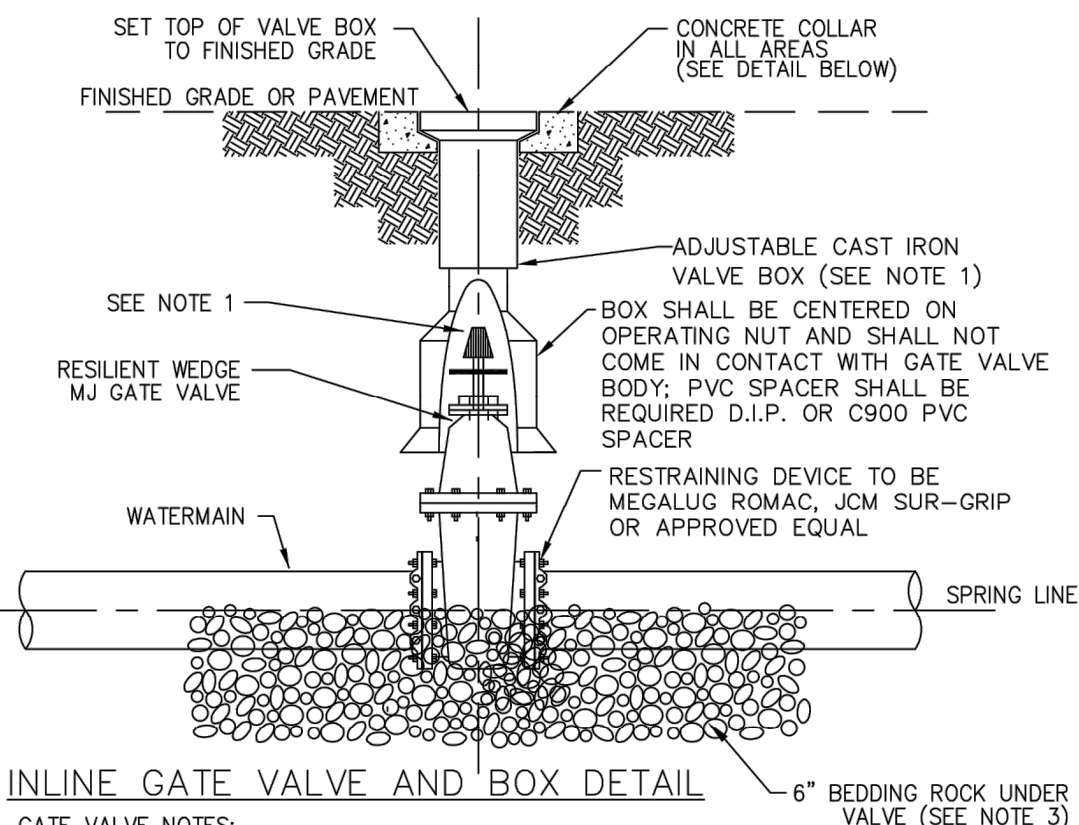
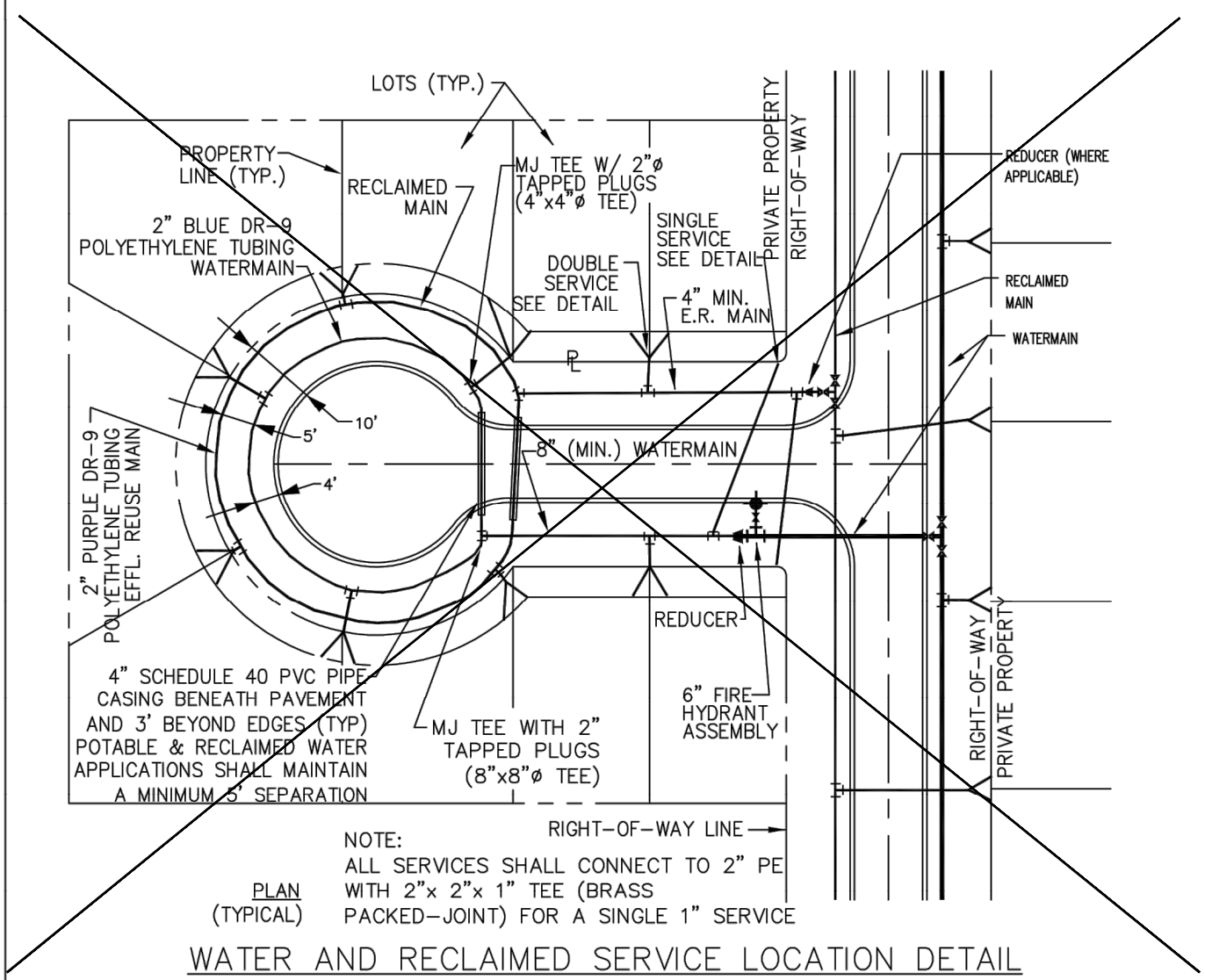
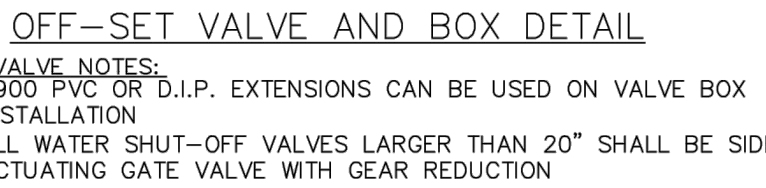
DETAILS

MUTTER ROAD EXTENSION
CITY OF ST. CLOUD

SEC 9&10, TWP 26S, RNG 30E

PROJECT NO./FILE NAME 16-044 DETAILS		DSGN BKJ
OEI JOB # OEI 16-044	DRWN BKJ	
SCALE N/A	CHKD JEM	
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9/27/2018 JOHN ERIC MOODY P.E. No. 48927		
SHEET		

C6.001



**OSCEOLA
ENGINEERING
INCORPORATED**

CERTIFICATE OF AUTHORIZATION NUMBER: 00026365
 1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
 PHONE 407.591.10452 FAX 407.591.9173

[illegible]

STANDARD CITY OF ST. CLOUD DETAILS

MUTTER ROAD EXTENSION
CITY OF ST. CLOUD

T. CLOUD, FLORIDA

PROJECT NO./FILE NAME 16-044 DETAILS	DSGN BJK
OEI JOB # OEI 16-044	DRWN BJK
SCALE N/A	CHKD JEM

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JOHN ERIC MOODY
P.E.
No. 48927

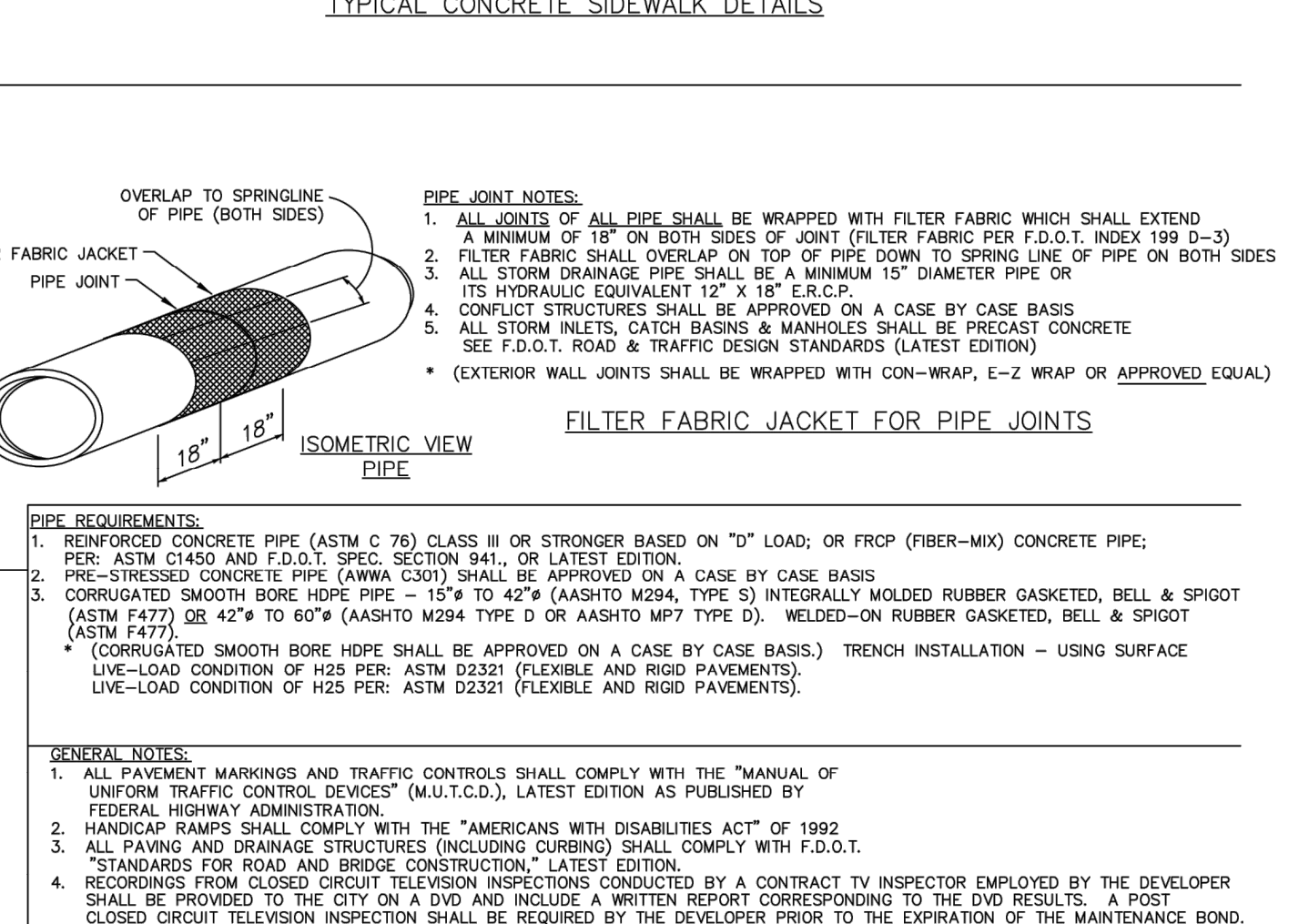
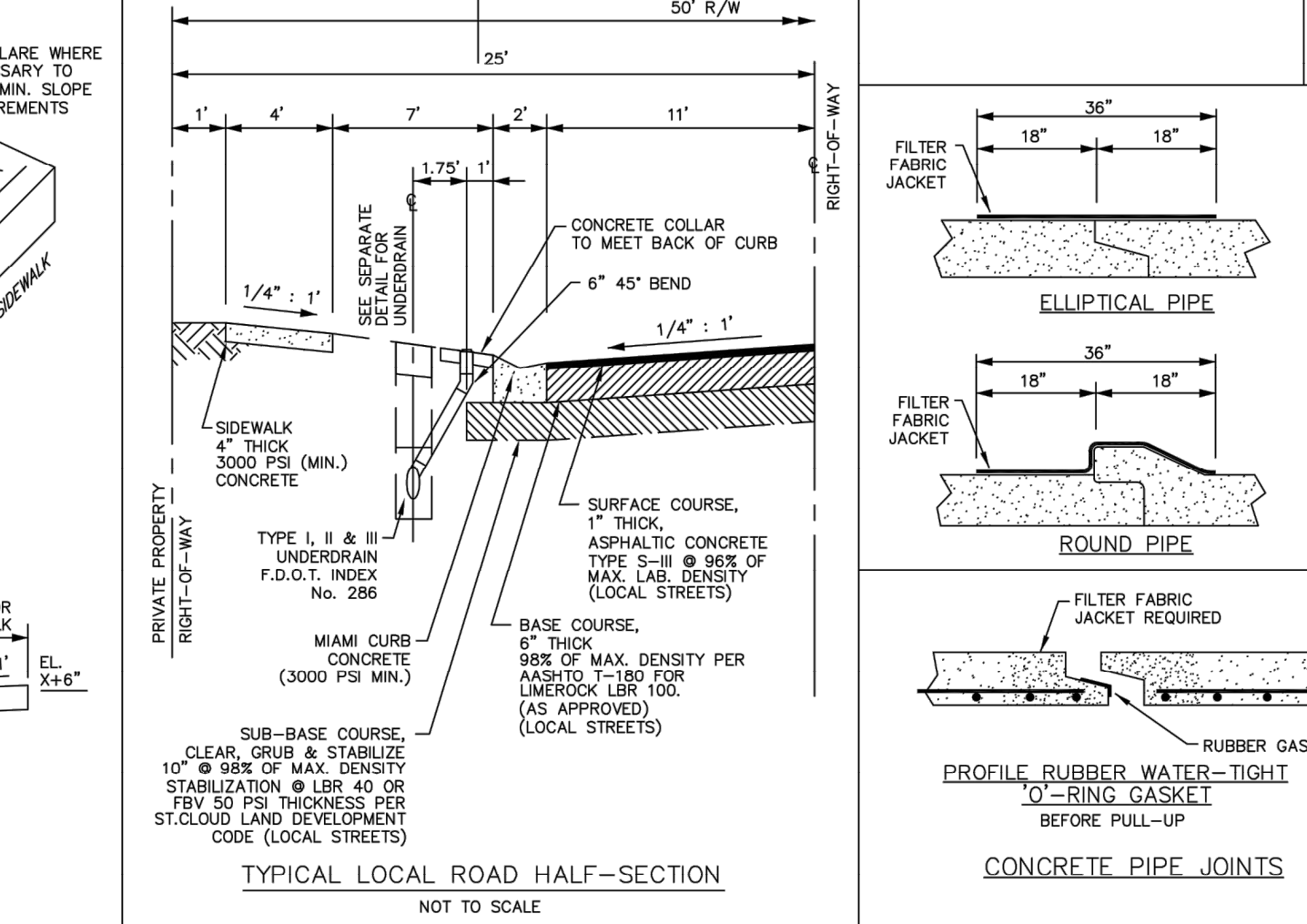
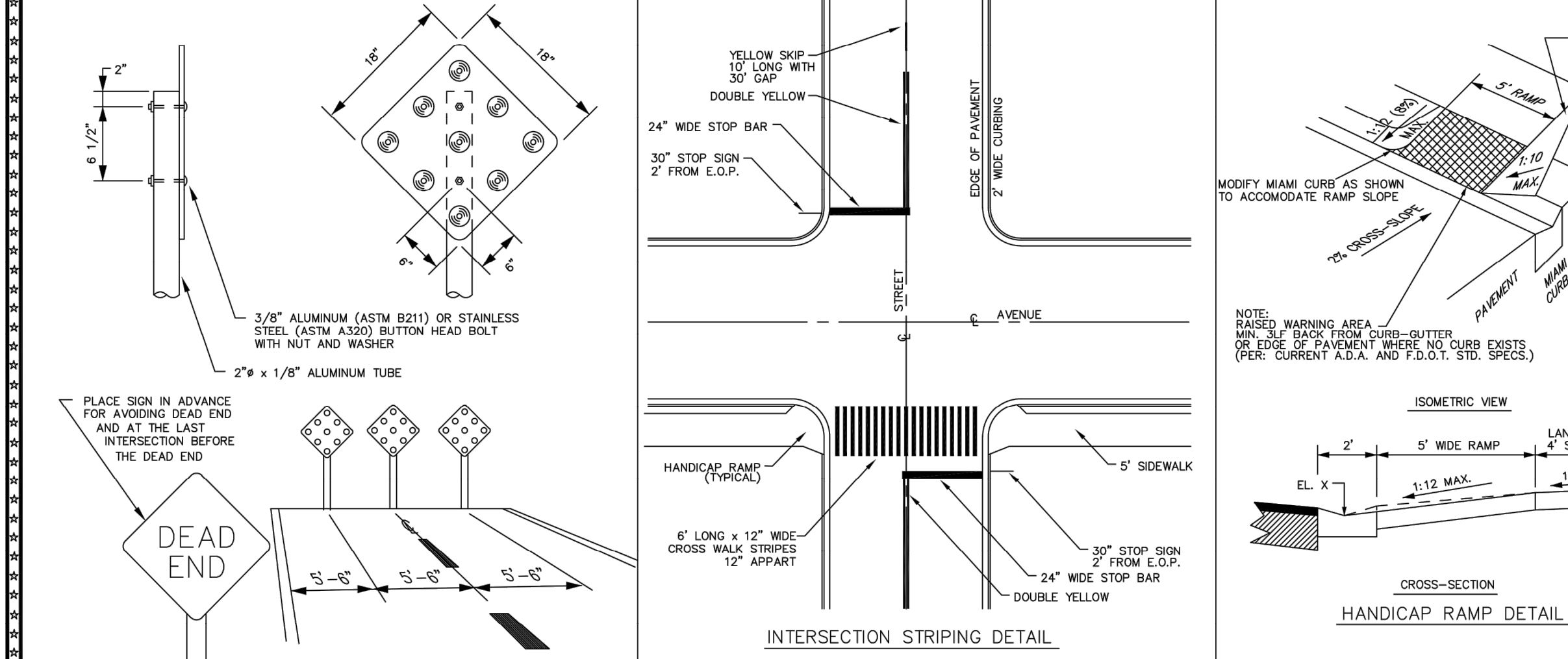
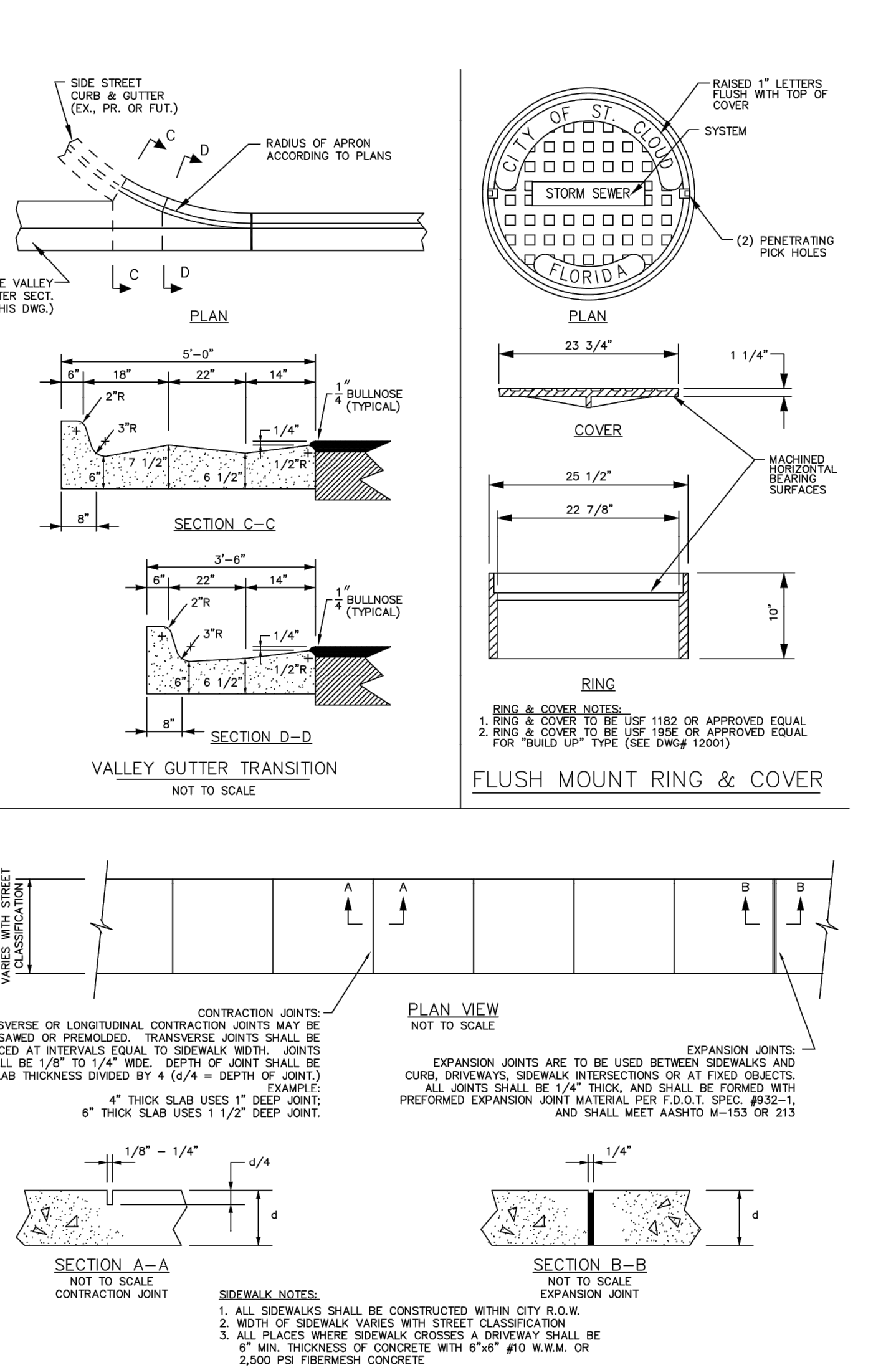
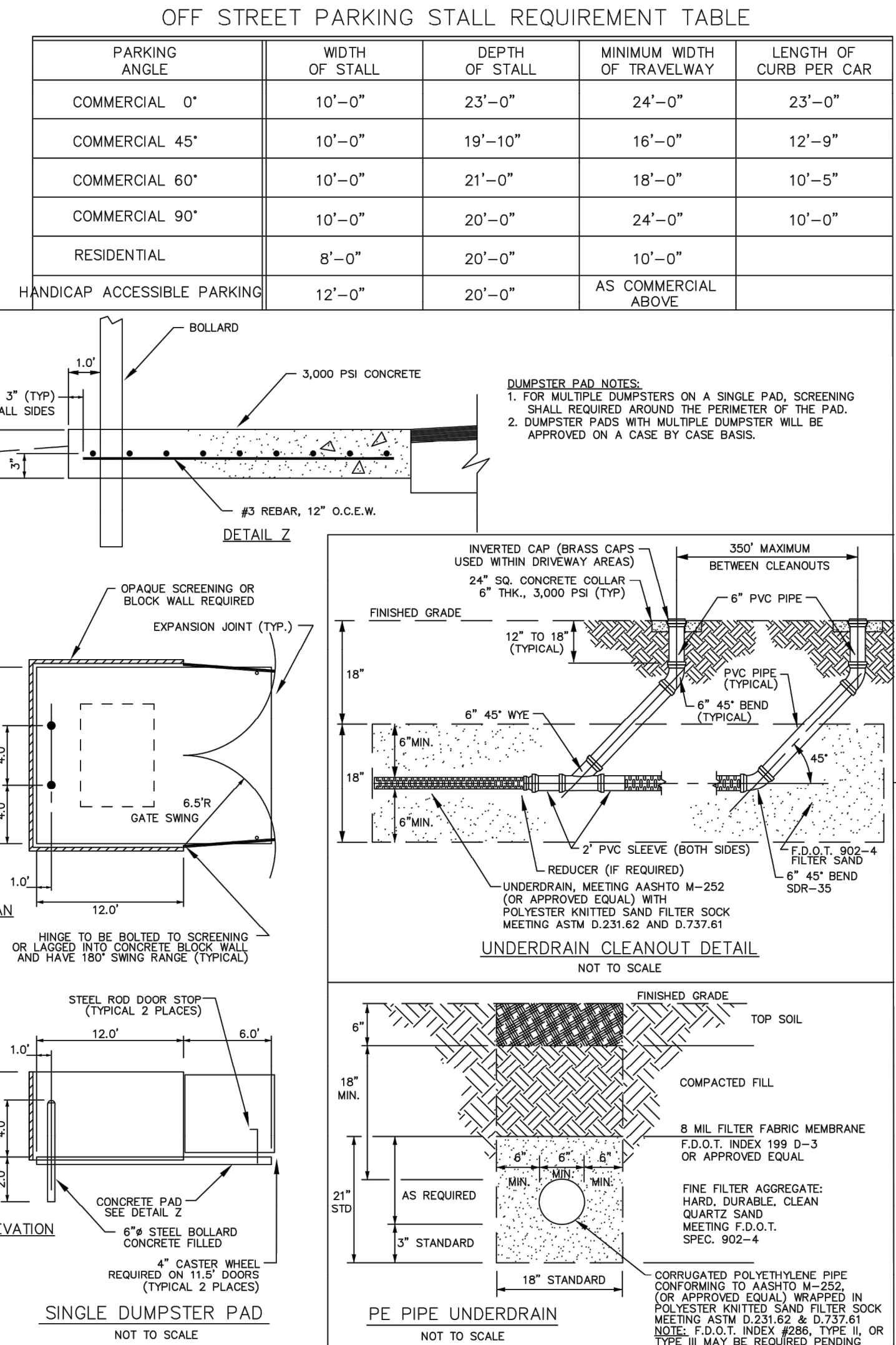
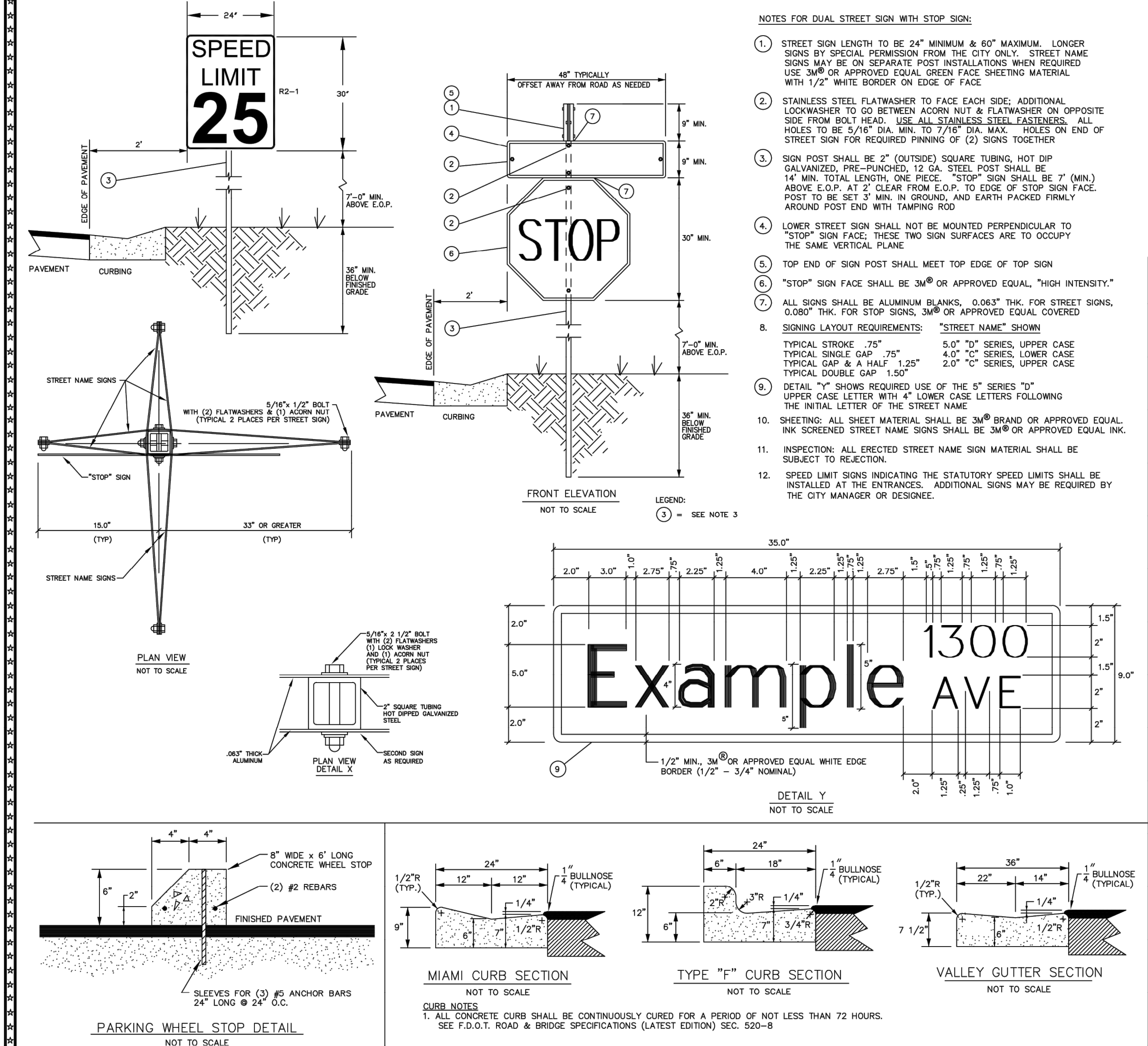
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

9/27/2018
JOHN ERIC MOODY, P.E. No. 48927

SHEET

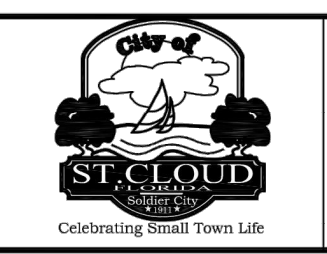
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DR: CC 11/17 OK: KF 11/17 DR: CC 11/17		REV. NO. 1 AP: KF 11/17 REV. NO.: AP:		REV. NO.: AP:		REV. NO.: AP:		REV. NO.: AP:		REV. NO.: AP:		REV. NO.: AP:		REV. NO.: AP:	
DESCRIPTION:		DESCRIPTION:		DESCRIPTION:		DESCRIPTION:		DESCRIPTION:		DESCRIPTION:		DESCRIPTION:		DESCRIPTION:	
FILENAME: 15-STORMWATER-STREETS-AND-SIDEWALKS		XREF'S: XREFS													

REVISIONS
DR: CC 11/17 OK: KF 11/17 DR: CC 11/17
REV. NO. 1 AP: KF 11/17 REV. NO.: AP:
DESCRIPTION:



OSCOLA ENGINEERING CORPORATION

CERTIFICATE OF AUTHORIZATION NUMBER: 00026245
1003 FLORIDA AVENUE, SAINT CLOUD, FL 34769
PHONE 407.891.0452

REVISIONS	DESCRIPTION	DATE	NO.

STANDARD CITY OF ST. CLOUD DETAILS

MUTTER ROAD ROAD EXTENSION

CITY OF ST. CLOUD

SEC 08-02, TWP 26S, RANG 30E

ST. CLOUD, FLORIDA

PROJECT NO./FILE NAME	DISC#
16-044 DETAILS	BKJ
DEI JOB #	DRWN
OEI 16-044	BKJ
SCALE	CHKD
N/A	JEM

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DATE

STATE OF FLORIDA

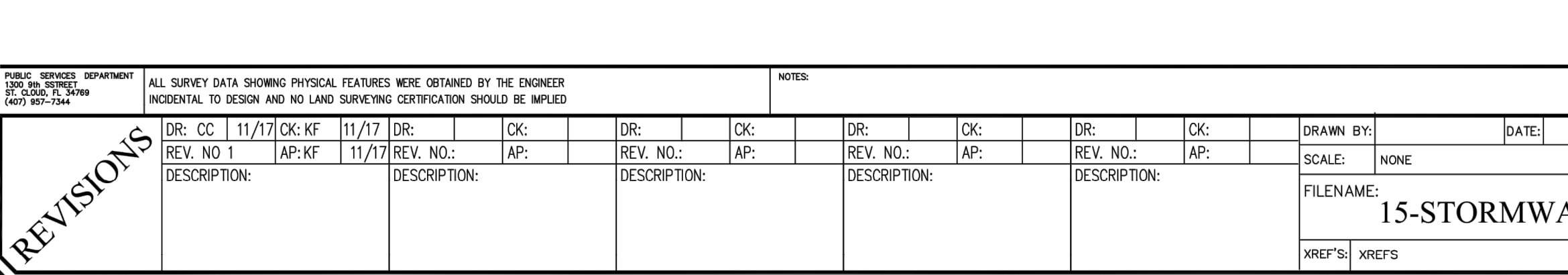
PROFESSIONAL ENGINEER

JOHN ERIC MOODY, P.E. No. 48927

9/27/2016

SHEET

C6.003



USE FLARE WHERE NECESSARY TO MEET MIN. SLOPE REQUIREMENTS

4" SIDEWALK

25'

50' R/W

1' 4' 7' 2' 11'

1.75" 1"

1/4" : 1"

CONCRETE COLLAR TO MEET BACK OF CURB

6" 45° BEND

SEE SEPARATE DETAIL FOR UNDERDRAIN

1/4" : 1"

4" THICK 3000 PSI (MIN.) CONCRETE

TYPE I, II & III UNDERDRAIN F.D.O. INDEX No. 296

MIAMI CURB CONCRETE (3000 PSI MIN.)

BASE COURSE, 6" THICK 95% OF MAX. DENSITY PER ASPHSTO T-180 FOR LMRACK LER 100. (AS APPROVED) (LOCAL STREETS)

SUB-BASE COURSE, CLEAR, GRUB & STABILIZE 10" @ 98% OF MAX. DENSITY STABILIZATION @ LER 40 OR FSV 50 PSI THICKNESS ST.CLOUD LAND DEVELOPMENT CODE (LOCAL STREETS)

PRIVATE PROPERTY RIGHT-OF-WAY

RIGHT-OF-WAY

EL. +6"

ENDING OR SIDEWALK 1/4" : 1"

CONCRETE PIPE JOINTS

ELLIPITICAL PIPE

36" 18" 18"

FILTER FABRIC JACKET

ROUND PIPE

36" 18" 18"

FILTER FABRIC JACKET REQUIRED

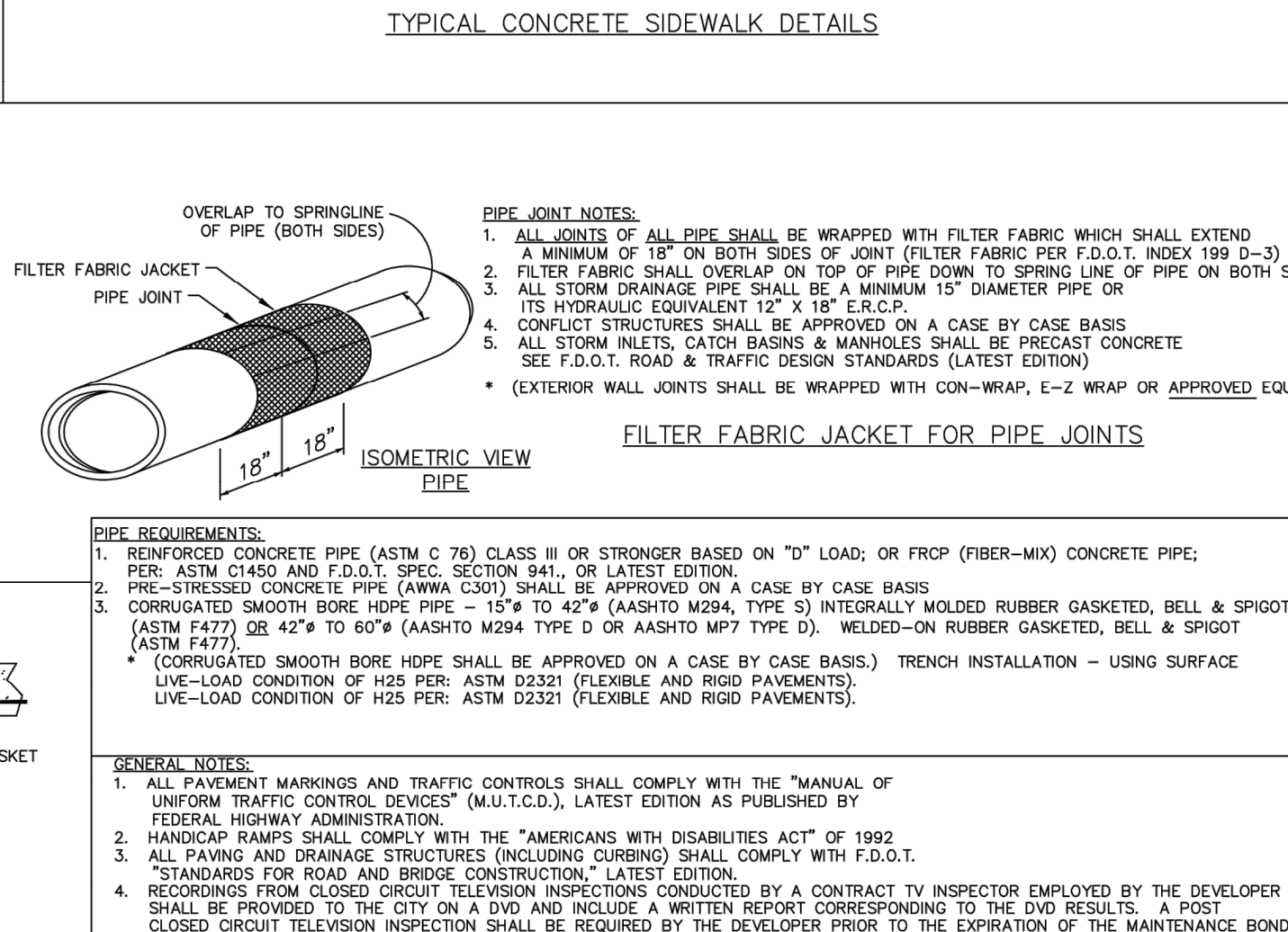
RUBBER GA O-RING GASKET BEFORE PULL-UP

PROFILE RUBBER WATER-TIGHT O-RING GASKET BEFORE PULL-UP

TYPICAL LOCAL ROAD CROSS-SECTION

NOT TO SCALE

(TYPE I SHOWN)



PROJECT NO./FILE NAME 16-044 DETAILS		DSGN BJK	
OEI JOB # OEI 16-044		DRWN BJK	
SCALE N/A		CHKD JEM	
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