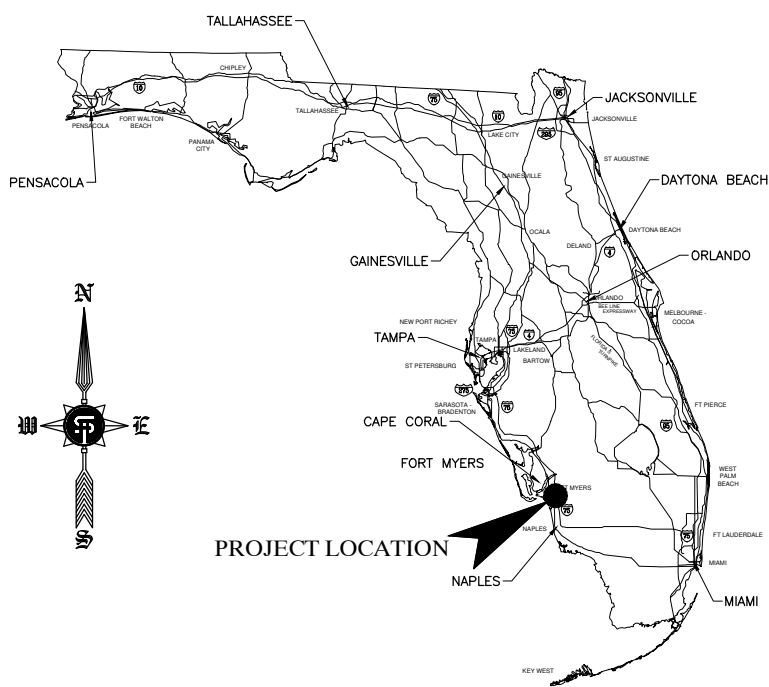
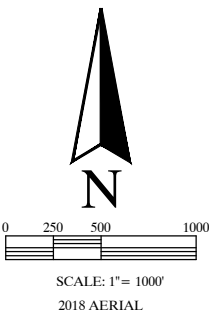
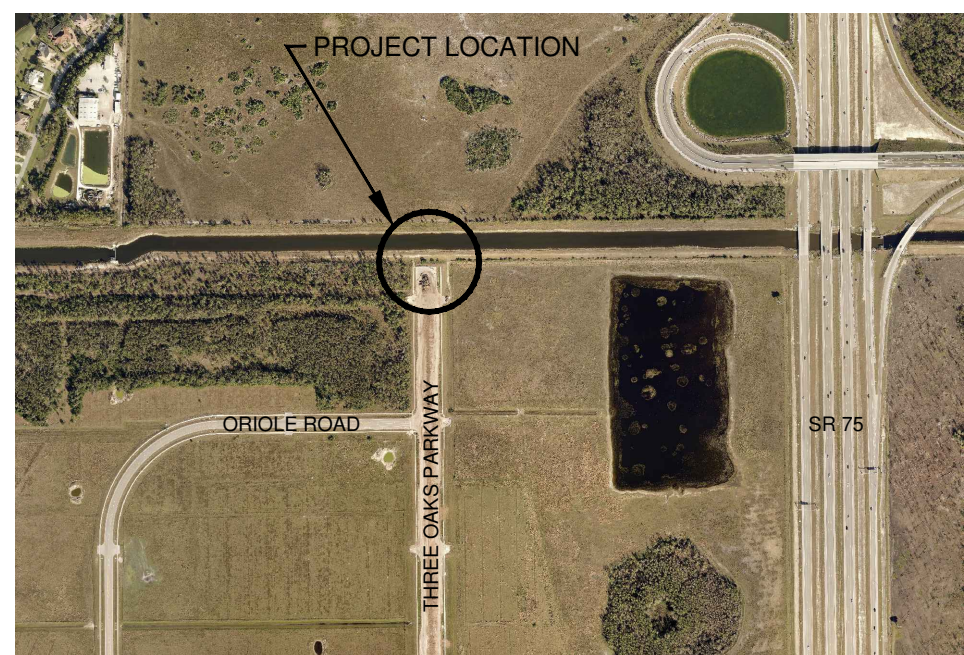


THREE OAKS PARKWAY  
30" WATER MAIN  
LEE COUNTY, FLORIDA  
SECTION 3, TOWNSHIP 45S, RANGE 25E



STATE MAP



LOCATION MAP

INDEX OF SHEETS

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2. SITE PLAN
3. SURVEYED SITE PLAN
4. SECTIONS
5. SECTION
6. UTILITY DETAILS
7. PROPOSED WATER MAIN DETAIL
8. DETAILS AND SPECIFICATIONS
9. EROSION CONTROL DETAILS

May 05, 2020 - 4:19pm Joe Nuccio  
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REVISION	DATE	REMARKS	CHG. BY
3	04-30-20	REVISED SET PER LCU COMMENTS 04-28-20	JN
2	01-29-20	REVISED BOX CULVERT LAYOUT	JN
1	05-01-19	REVISED PER LCU COMMENTS	JN

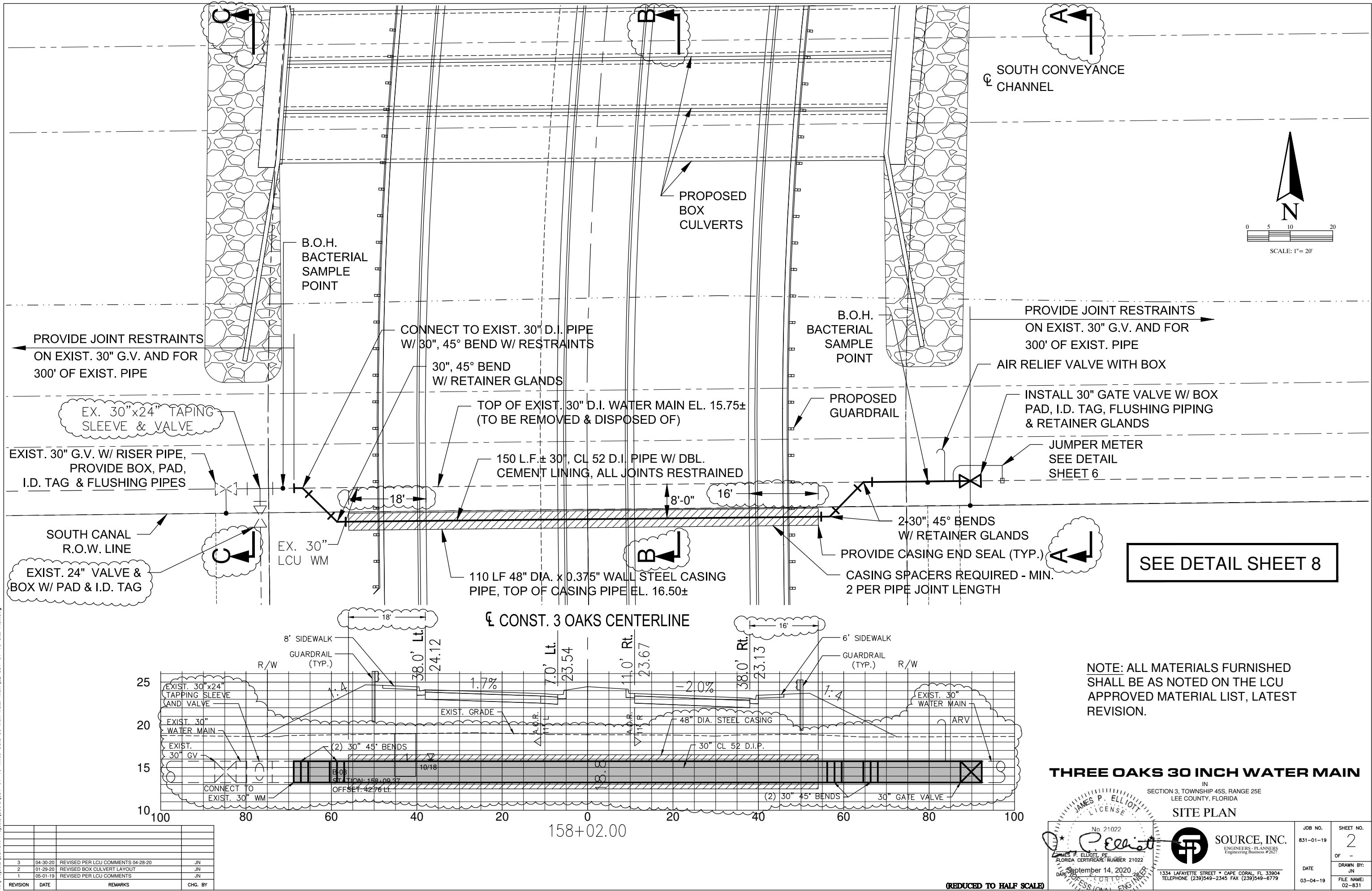
100% PLAN SET

(REDUCED TO HALF SCALE)

James P. Elliott  
No. 21022  
FLORIDA CERTIFICATE NUMBER 21022  
September 14, 2020  
DATE

SOURCE, INC.  
ENGINEERS - PLANNERS  
Engineering Business #2627  
1334 LAFAYETTE STREET • CAPE CORAL, FL 33904  
TELEPHONE (239)549-2345 FAX (239)549-6779

JOB NO. 831-01-19	SHEET NO. 1 OF -
DATE 03-04-19	DRAWN BY: JN FILE NAME: 018-831



May 05, 2020 - 4:20pm Joe Nuccio  
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REVISION	DATE	REMARKS	CHG. BY
3	04-30-20	REVISED PER LCU COMMENTS 04-28-20	JN
2	01-29-20	REVISED BOX CULVERT LAYOUT	JN
1	05-01-19	REVISED PER LCU COMMENTS	JN

### THREE OAKS 30 INCH WATER MAIN

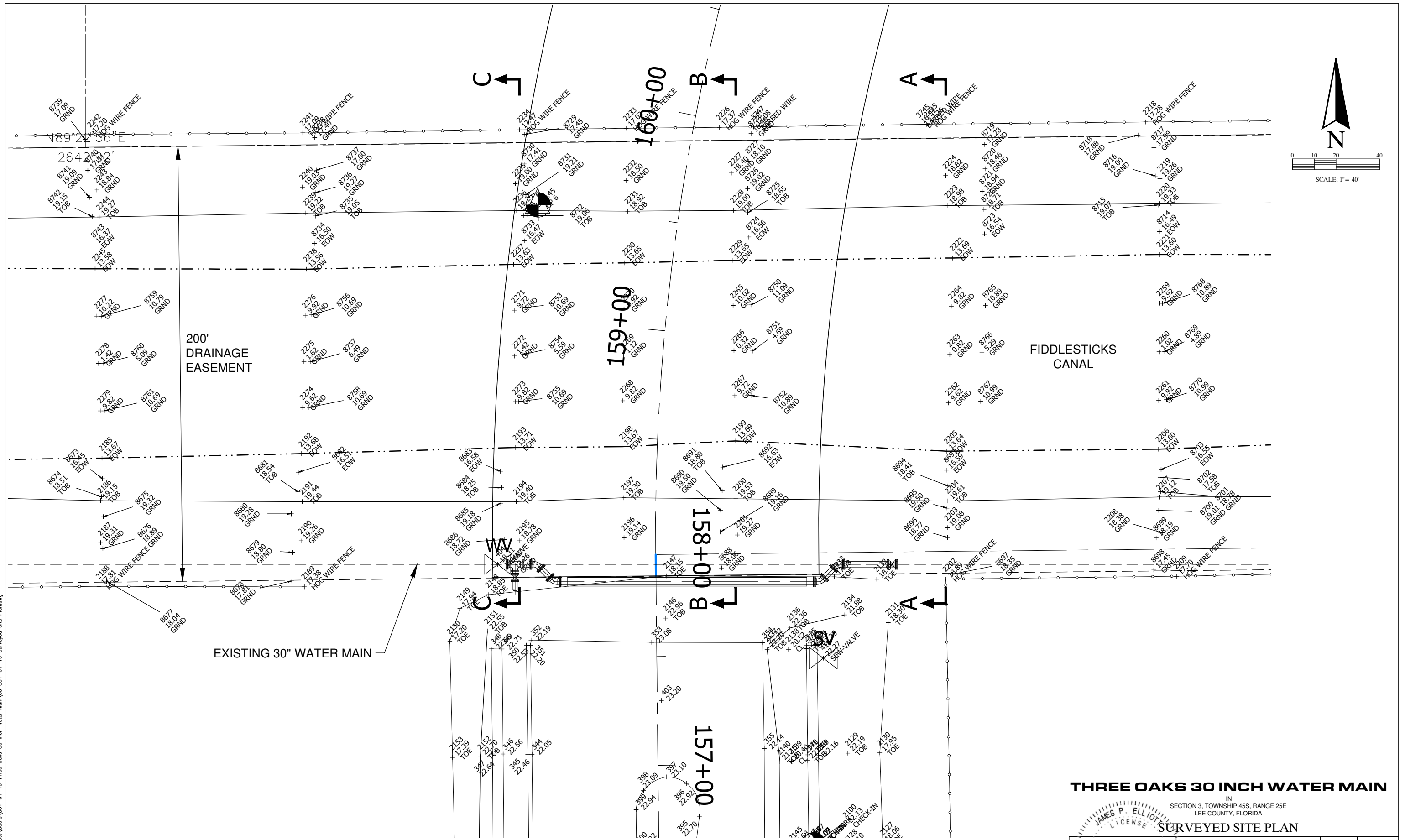
IN  
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LEE COUNTY, FLORIDA

#### SITE PLAN

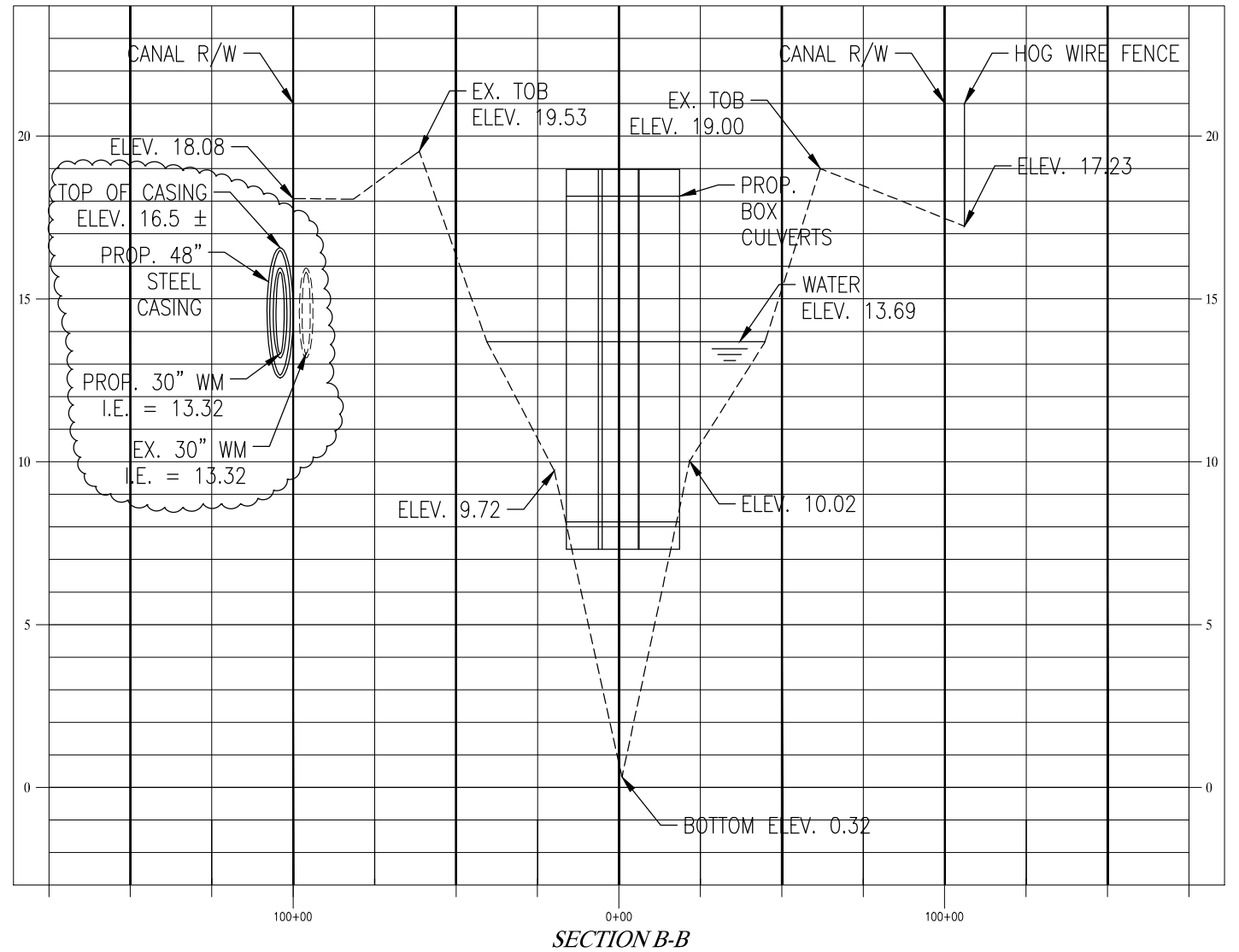
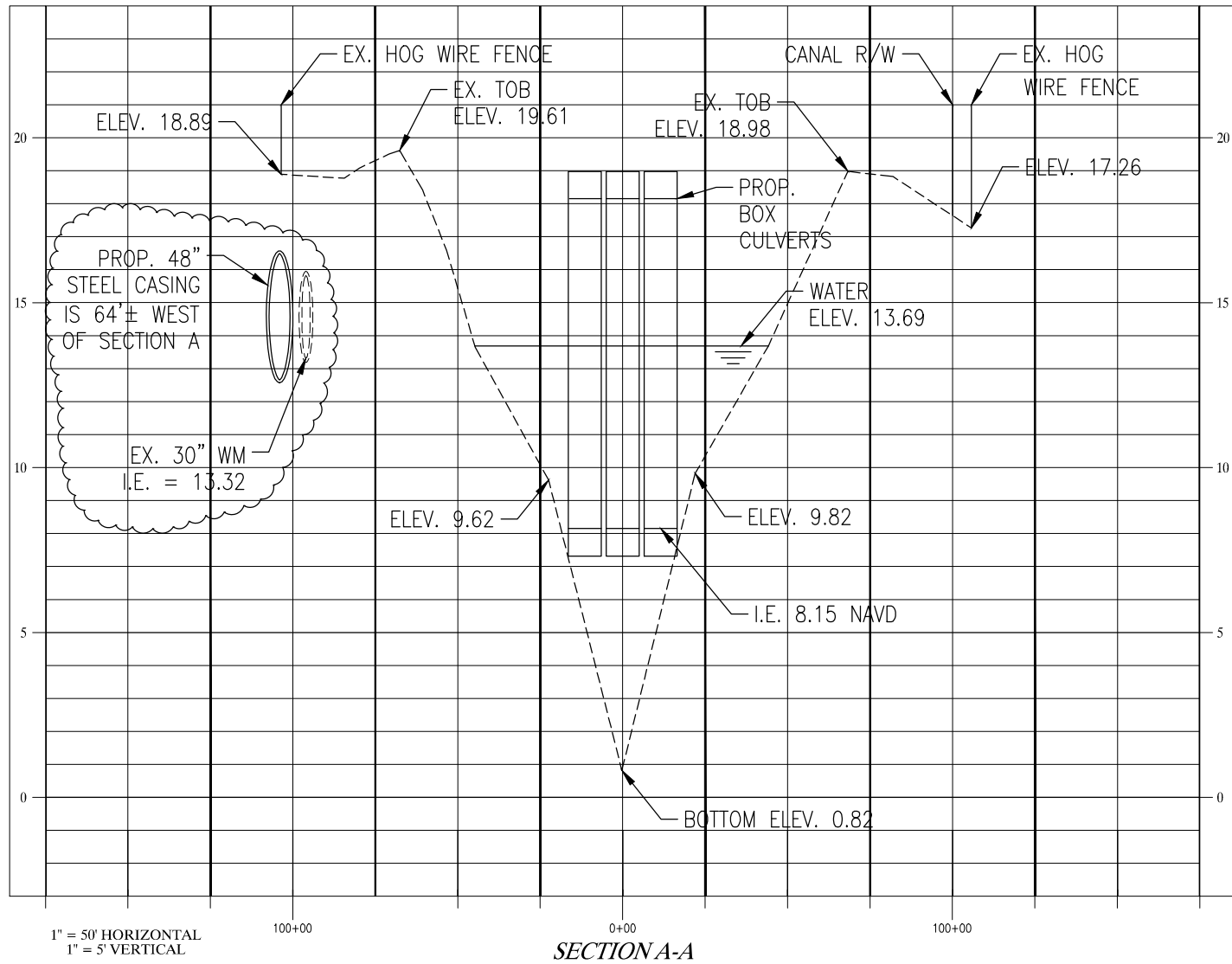
JAMES P. ELLIOTT, PE  
FLORIDA CERTIFICATE NUMBER 21022  
DATE 09/14/2020  
PROFESSIONAL ENGINEER

SOURCE, INC.  
ENGINEERS - PLANNERS  
Engineering Business #2627  
1334 LAFAYETTE STREET • CAPE CORAL, FL 33904  
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JOB NO.	SHEET NO.
831-01-19	2
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03-04-19	JN
	FILE NAME:
	02-831

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May 05, 2020 - 4:22pm Joe Nucio  
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### THREE OAKS 30 INCH WATER MAIN

IN  
SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA

#### SECTIONS

REVISION	DATE	REMARKS	CHG. BY
3	04-30-20	REVISED PER LCU COMMENTS 04-28-20	JN

James P. Elliott, P.E.  
FLORIDA CERTIFICATE NUMBER 21022  
DATE: September 14, 2020  
PROFESSIONAL ENGINEER



SOURCE, INC.  
ENGINEERS - PLANNERS  
Engineering Business #2627

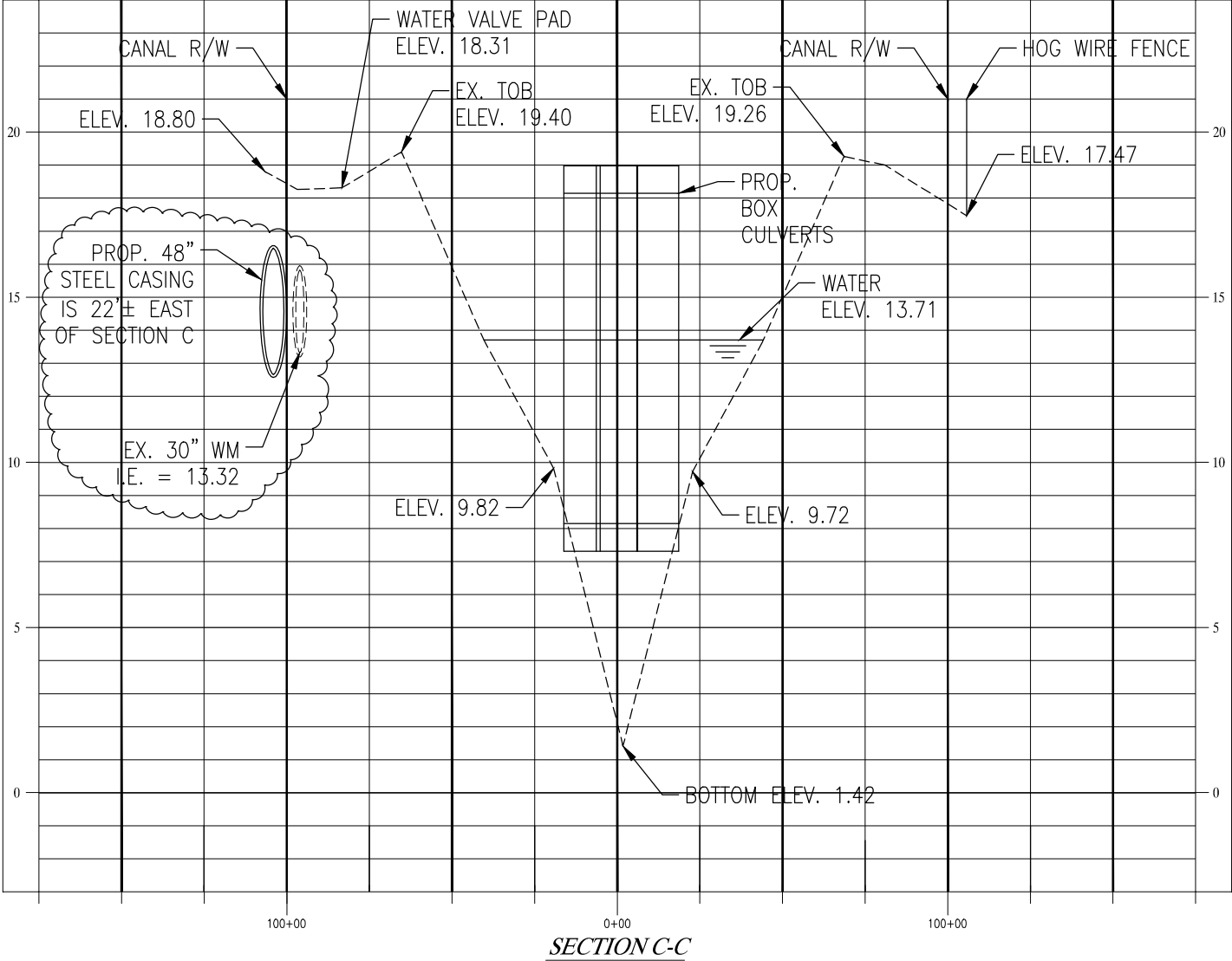
1334 LAFAYETTE STREET • CAPE CORAL, FL 33904  
TELEPHONE (239)549-2345 FAX (239)549-6779

JOB NO.	SHEET NO.
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DATE	DRAWN BY:
03-04-19	JN
FILE NAME:	04-831

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May 05, 2020 - 4:23pm Joe Nucio  
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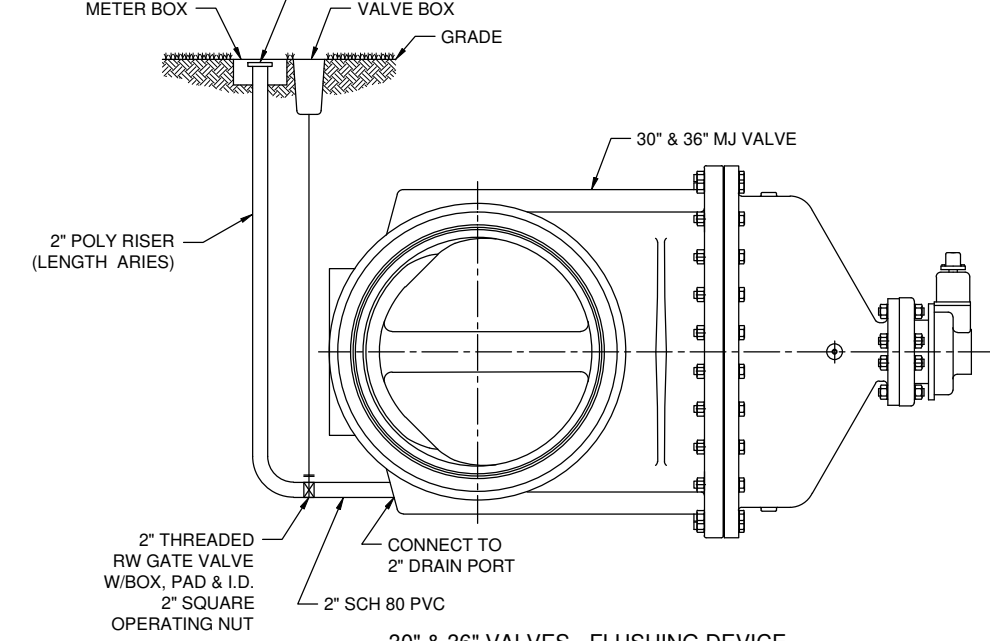
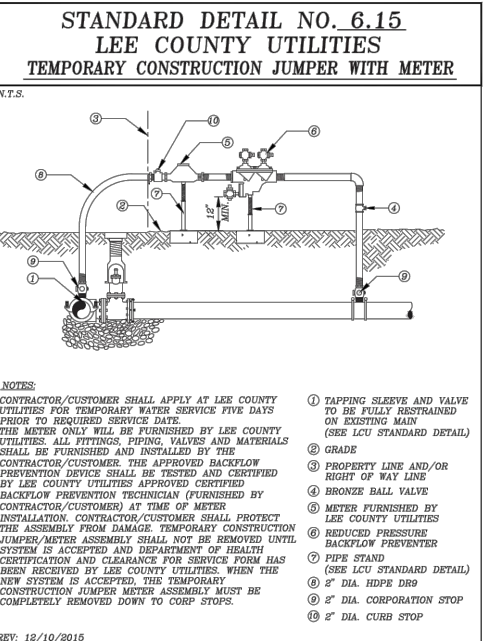
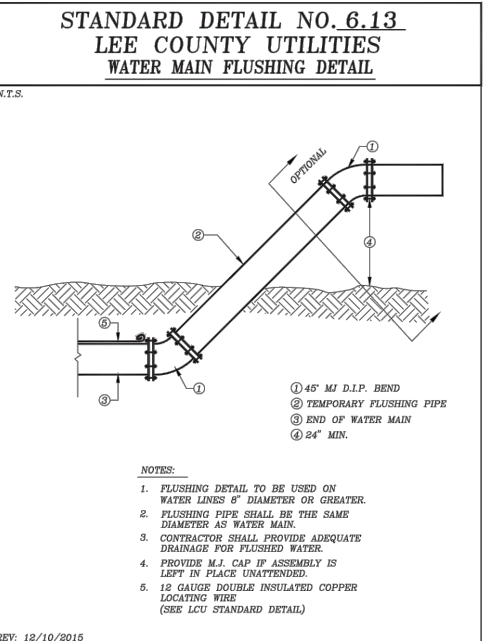
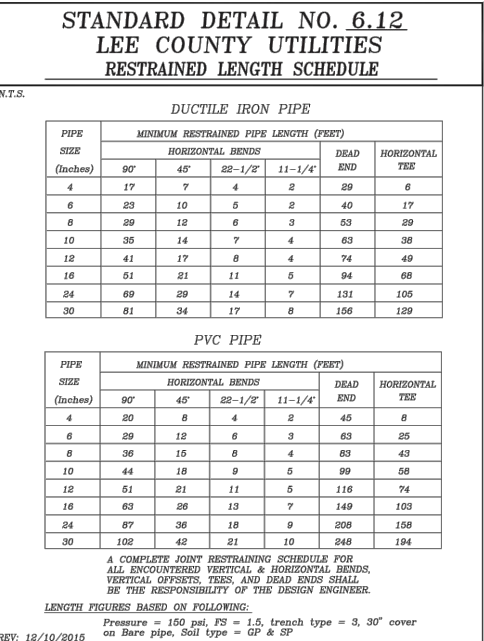
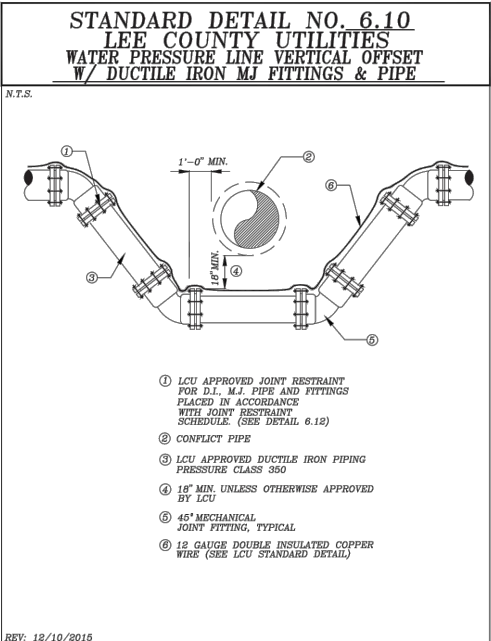
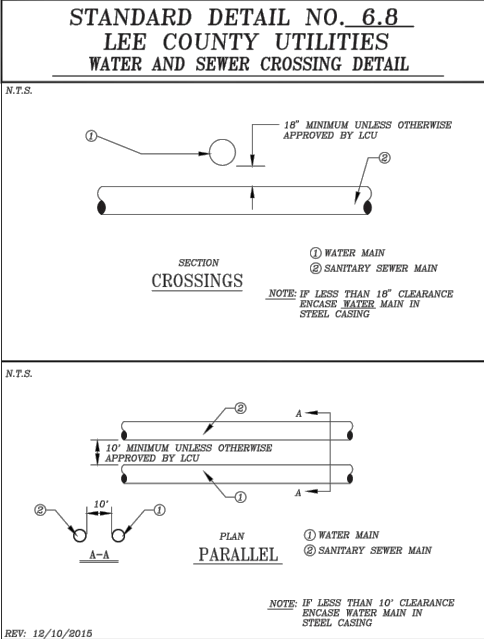
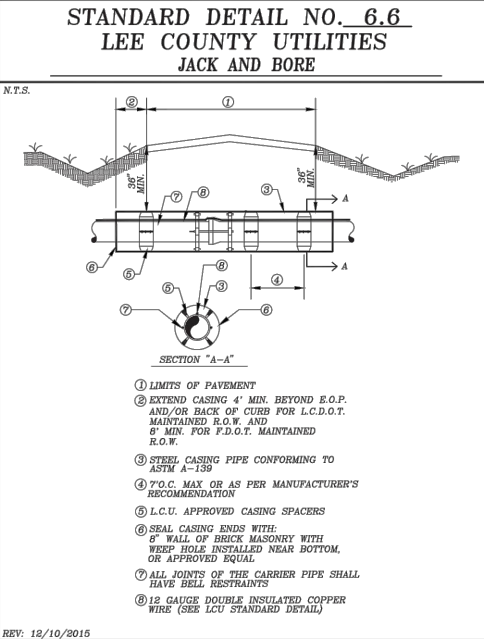
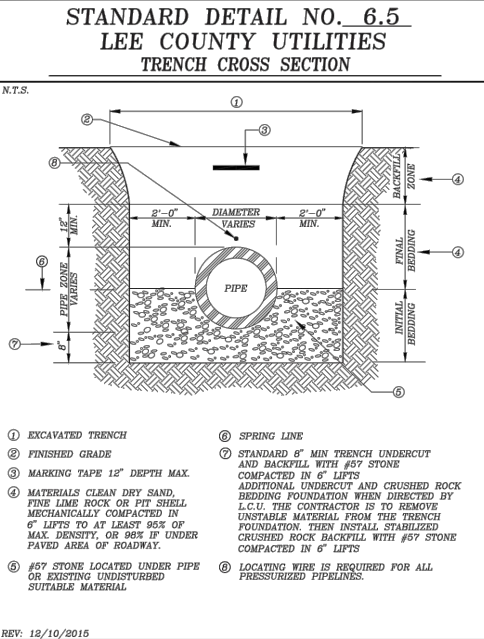
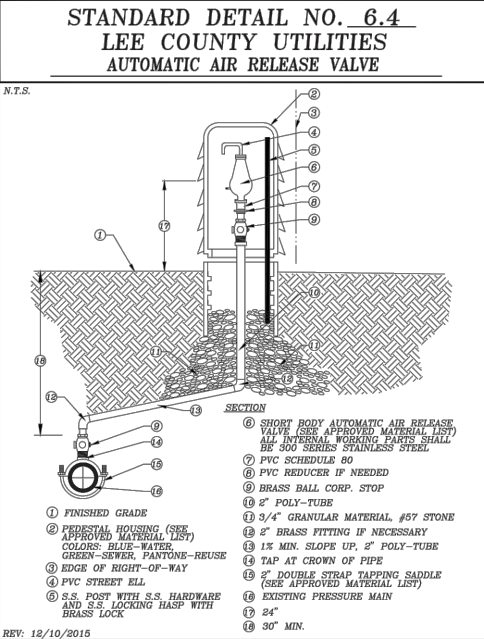
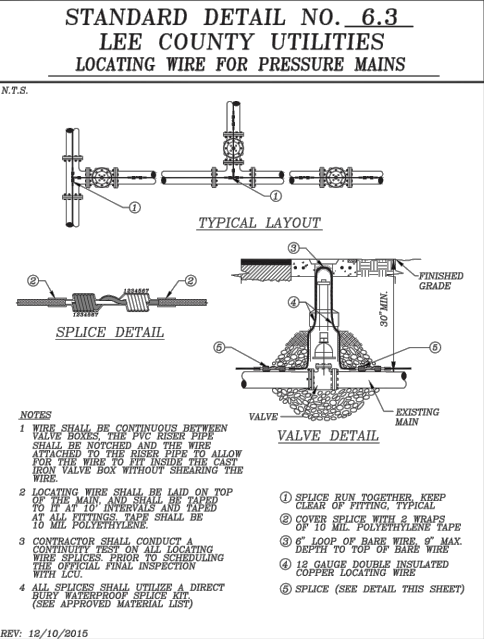
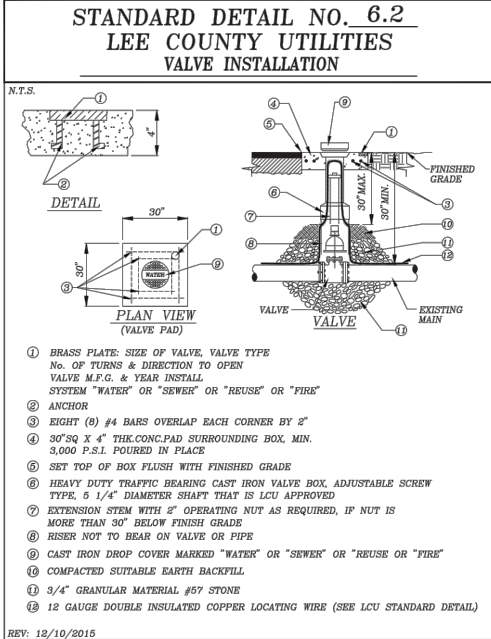
THREE OAKS 30 INCH WATER MAIN

IN  
SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA  
SECTION

				JOB NO. 831-01-19	SHEET NO. 5
JAMES P. ELLIOTT, P.E. FLORIDA CERTIFICATE NUMBER 21022 DATE: September 14, 2020		SOURCE, INC. ENGINEERS - PLANNERS Engineering Business #2627 1334 LAFAYETTE STREET • CAPE CORAL, FL 33904 TELEPHONE (239)549-2345 FAX (239)549-6779		DATE 03-04-19	DRAWN BY JN FILE NAME: 05-831

3	04-30-20	REVISED PER LCU COMMENTS 04-28-20	JN
REVISION	DATE	REMARKS	CHG. BY

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THREE OAKS 30 INCH WATER MAIN

IN SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA

UTILITY DETAILS

JOB NO. 831-01-19 SHEET NO. 6

DATE 03-04-19

REVISION 1 05-01-19 REVISED PER LCU COMMENTS JN

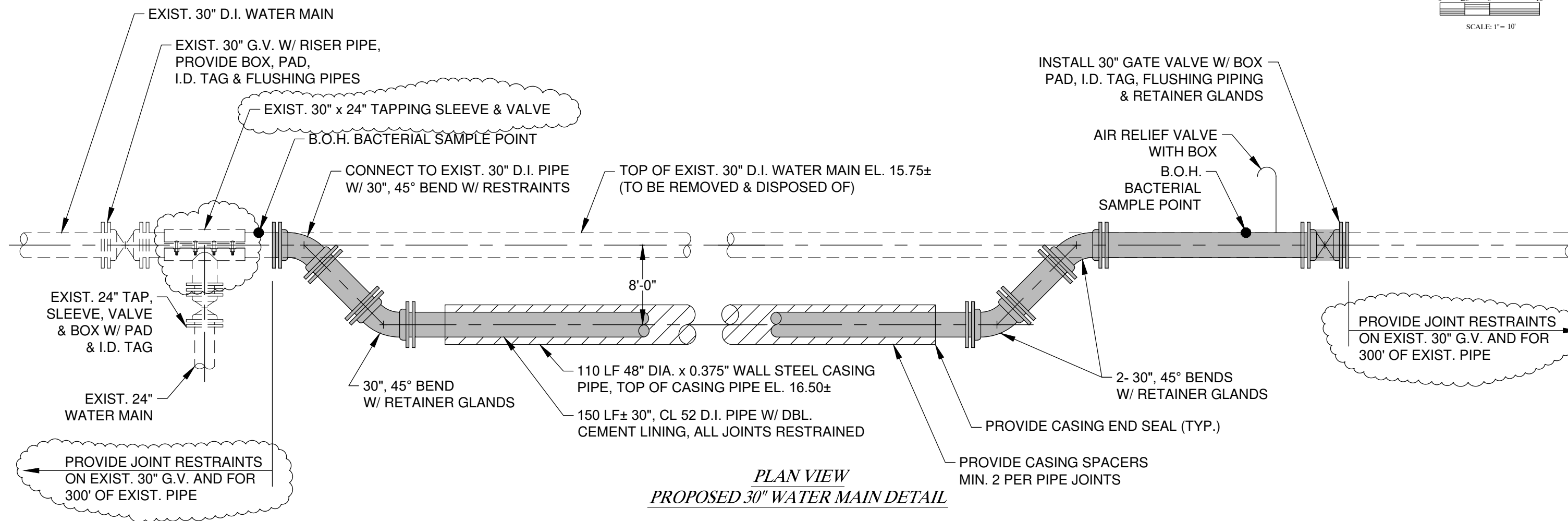
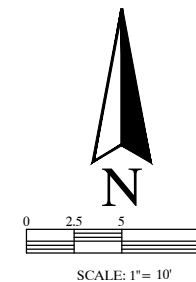
REMARKS CHG. BY

James P. Elliott, BE, PE  
FLORIDA CERTIFICATE NUMBER 21022  
DATE 10/14/2020

1334 LAFAYETTE STREET • CAPE CORAL, FL 33904  
TELEPHONE (239)549-2345 FAX (239)549-6779

SOURCE, INC.  
ENGINEERS - PLANNERS  
Engineering Business #2627

(REDUCED TO HALF SCALE)



D.I. PIPE - AMERICAN (DBL CEMENT LINED)  
AIR RELIEF VALVE - AIR MODEL DO40  
AIR RELIEF BOX - CHANNEL MODEL 1212 BLUE  
CASING SPACERS - CASCADE SEMES CCS  
JOINT RESTRAINT DEVICES + EBBALRON SERIES 1100  
OR APPROVED EQUAL

### THREE OAKS 30 INCH WATER MAIN

IN  
SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA

#### PROPOSED WATER MAIN DETAIL

JOB NO. 831-01-19	SHEET NO. 7	DATE 03-04-19	DRAWN BY JN FILE NAME 07-831

(REDUCED TO HALF SCALE)

May 05, 2020 - 4:24pm Joe Nuccio  
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REVISION	DATE	REMARKS	CHG. BY
3	04-30-20	REVISED PER LCU COMMENTS 04-28-20	JN
1	05-01-19	REVISED PER LCU COMMENTS	JN

May 05, 2020 - 4:25pm Joe Nucio  
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- LEE COUNTY UTILITIES  
STANDARD PLAN NOTES
- GENERAL
- THE STANDARD NOTES SHOWN BELOW SHALL BE INCLUDED ON ALL WATER AND SEWER PLANS SUBMITTED FOR APPROVAL TO LEE COUNTY UTILITIES (LCU).
1. ALL WORK SHALL CONFORM TO LATEST REVISION OF THE LCU DESIGN MANUAL WHICH IS AVAILABLE ON OUR WEB PAGE VIA THE FOLLOWING LINK:  
https://www.leegov.com/utilities/design-manual

2. ALL REGULATORY AND PERMITTING AGENCIES' REQUIREMENTS SHALL BE COMPLIED WITH AS WELL.

3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY LCU.

4. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS THAT MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.

5. ALL CONSTRUCTION WORK PERFORMED MUST BE DONE BY A CONTRACTOR LICENSED IN THE STATE OF FLORIDA TO DO THE WORK INTENDED.

6. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE WORK MAY BEGIN. REQUIRED ATTENDEES INCLUDE BUT ARE NOT LIMITED TO; THE ENGINEER OF RECORD OR HIS DESIGNEE, THE UNDERGROUND CONTRACTOR AND THE LCU INSPECTOR ASSIGNED TO THE PROJECT. LCU IS TO BE NOTIFIED TWO (2) WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.

7. ONE COPY OF THE LCU APPROVED/STAMPED CONSTRUCTION PLANS, ALL CONTRACT DOCUMENTS, REFERENCE DOCUMENTS AND TECHNICAL DOCUMENTS SUBMITTED MUST BE KEPT AT THE SITE AND MAINTAINED IN GOOD ORDER.

8. ALL WORK AND MATERIALS, WHICH DO NOT CONFORM TO LCU SPECIFICATIONS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTORS EXPENSE.

9. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF LCU IS SUBJECT TO RE-EXCAVATION, REMOVAL AND REPLACEMENT OF SAME TO BE DONE AT THE CONTRACTOR'S EXPENSE.

10. LCU INSPECTION STAFF IS TO BE PRESENT FOR ALL HOT TAPS, PRESSURE TESTS, LIFT STATION START-UPS AND FOR ANY NECESSARY INSPECTION. THE CONTRACTOR IS TO PROVIDE A MINIMUM OF TWO (2) WORKING DAYS NOTICE PRIOR TO SCHEDULING ANY OF THE ABOVE WITH THE EXCEPTION OF THE LIFT STATION START-UP WHICH REQUIRES ONE-WEEK NOTICE.

11. TRAFFIC MUST BE MAINTAINED AT ALL TIMES AS PER LEE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT) AND PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

12. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES BEFORE BEGINNING CONSTRUCTION.

13. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. LCU WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS OR THOSE OMITTED FROM THESE PLANS.

14. THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND PROVIDE AT LEAST TWO (2) WORKING DAYS NOTICE TO THE INDIVIDUAL UTILITY COMPANIES, FDOT AND LCDOT PRIOR TO CONSTRUCTION.

15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND TAKE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO ALL UNDERGROUND PIPELINES, TELEPHONE, CABLE TV, ELECTRIC LINES/CONDUITS AND STRUCTURES IN ADVANCE OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT MAY OCCUR DUE TO HIS FAILURE TO EXACTLY LOCATE AND PROTECT EXISTING UTILITIES AND STRUCTURES.

16. ANYTHING NOT SHOWN ON THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL NOT CONSTITUTE AN EXTRA, UNLESS APPROVED BY THE ENGINEER OF RECORD.

17. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND LCU IMMEDIATELY CONCERNING ANY CONFLICTS WITH LCU UTILITIES/STRUCTURES ARISING DURING CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE DRAWINGS.

18. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANS. IF ANY DISCREPANCIES IN QUANTITIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AND LCU.

19. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RESTORE ALL AREAS AFFECTED BY THE CONSTRUCTION TO ITS ORIGINAL CONDITION, OR BETTER.

20. WITHIN THE FDOT AND LCDOT RIGHT-OF-WAY, ALL DISTURBED AREAS SHALL RECEIVE GRASSING (SEEDING) OR SODDING MATERIALS IN ACCORDANCE WITH FDOT SPECIFICATIONS. THOSE AREAS THAT ARE CLASSIFIED AS DRAINAGE DITCHES SHALL RECEIVE FULL SOLID SOD.

21. ALL FRAMES, COVERS VALVE BOXES, METER BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION. ALL VALVE PADS SHALL BE POURED IN PLACE. NO PRE-FORMED VALVE PADS WILL BE ALLOWED.
- GENERAL NOTES CONTINUED:

THE STANDARD NOTES SHOWN BELOW SHALL BE INCLUDED ON ALL WATER AND SEWER PLANS SUBMITTED FOR APPROVAL TO LEE COUNTY UTILITIES (LCU).

22. APPROPRIATE TURBIDITY CONTROL DEVICES (E.G. SILT FENCES, HAY BALES) WILL BE UTILIZED DURING ALL PHASES OF INSTALLATION AND GRADING. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE NOTICE OF INTENT AND NOTICE OF TERMINATION TO THE EPA IN COMPLIANCE WITH LEE COUNTY'S NPDES PERMIT.

23. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND MAINTAINING AN EFFECTIVE STORM WATER POLLUTION PREVENTION PLAN.

24. LCU REQUIRES 30" OF COVER FOR ALL UNDERGROUND PIPING EXCEPT UNDER PAVEMENT, WHERE 36" OF COVER IS REQUIRED. IF LCU REQUIRED COVER CANNOT BE MAINTAINED, THE CONTRACTOR SHALL PROVIDE OTHER METHODS OF CONSTRUCTION OR PIPE PROTECTION, WHICH SHALL FIRST BE APPROVED BY LCU AND THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY. IF STATE AGENCIES REQUIRE ADDITIONAL COVER, MEETING THE REQUIREMENTS SHALL BE DONE AT NO ADDITIONAL COST TO THE COUNTY.

25. LCU REQUIRES THERE TO BE A MINIMUM OF TEN (10) FEET HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN POTABLE WATER & SANITARY SEWER MAINS. LCU ALSO REQUIRES MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION BETWEEN OTHER PUBLIC AND/OR PRIVATE UTILITIES, STRUCTURE(S), BUILDING(S), WALL(S), FOUNTAIN(S), FENCE(S) AND LCU INFRASTRUCTURE UNLESS SPECIFICALLY APPROVED BY LCU.

26. LCU REQUIRES THERE TO BE A MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION BETWEEN LCU INFRASTRUCTURE AND DRAINAGE INFRASTRUCTURE, MITERED END SECTIONS, INLETS, ETC. LCU ALSO REQUIRES MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION BETWEEN LCU INFRASTRUCTURE AND ALL NEW LIGHT POLE FOUNDATIONS.

27. THE ROOT BALL OF PALM TREES SHALL BE A MINIMUM OF FIVE (5) FEET AND THE ROOT BALL OF SHADE TREES SHALL BE A MINIMUM OF TEN (10) FEET FROM ANY EXISTING OR PROPOSED LCU OWNED AND MAINTAINED PIPE/INFRASTRUCTURE.

28. AS THE WORK PROGRESSES THE CONTRACTOR SHALL RECORD ALL CHANGES AND DEVIATIONS FROM THE LCU STAMPED/APPROVED CONSTRUCTION PLANS. IN ADDITION, HE SHALL RECORD THE EXACT LOCATION OF ALL CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT WITH COORDINATES WITH RESPECT TO THE NAD 1988 STATE PLANE FLORIDA WEST COORDINATE SYSTEM AS WELL AS ALL REQUIREMENTS SET FORTH IN THE LCU DESIGN MANUAL. THIS INFORMATION IS TO BE FORWARDED TO THE ENGINEER OF RECORD WHO PREPARED, SIGNED AND SEALED THE APPROVED CONSTRUCTION PLANS SO THAT HE CAN PREPARE 'RECORD DRAWINGS' PER THE REQUIREMENTS SET FORTH IN THE LCU DESIGN MANUAL.
- CONSTRUCTION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATIONS AND ELEVATIONS OF ANY BURIED UTILITY LINES OR CABLES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ANY UTILITY LINES OR CABLES DISTURBED BY THE CONSTRUCTION OPERATIONS.

2. THE CONTRACTOR SHALL SUPPLY SATISFACTORY DENSITY TESTS OF TRENCH BACKFILL MATERIALS TO THE ENGINEER PRIOR TO PAYMENT AND/OR FINAL ACCEPTANCE. (ONE TEST PER COURSE PER 600 SQUARE YARDS).

3. THE CONTRACTOR SHALL COORDINATE ALL CONNECTIONS OR RELOCATION OF EXISTING UTILITIES WITH APPROPRIATE UTILITY OWNERS.

4. THE CONTRACTOR SHALL SECURE ALL PERMITS NEEDED TO WORK IN PUBLIC RIGHT-OF-WAY.

5. THE CONTRACTOR SHALL COORDINATE ALL WORK IN THE COUNTY RIGHT-OF-WAY WITH THE LEE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT).

6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL IN ACCORDANCE WITH F.D.O.T. STANDARDS SPECIFICATIONS AND INDEXES AND THE FEDERAL HIGHWAY ADMINISTRATION'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART IV.

7. THE CONTRACTOR SHALL SEED AND MULCH, UNLESS OTHERWISE NOTED, ALL DISTURBED AREAS AND OTHERWISE RESTORE ALL AREAS TO EXISTING CONDITION OR BETTER.

8. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE ENGINEER IS SUBJECT TO RE-EXCAVATION, REMOVAL AND REPLACEMENT OF SAME TO BE DONE AT THE CONTRACTOR'S EXPENSE.

9. THE ENGINEER'S INSPECTION STAFF MAY OBSERVE PROJECT CONSTRUCTION.
- GOVERNING SPECIFICATIONS:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (F.D.O.T.) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 OR LATEST EDITION.

2. ALL WORK SHOWN BY INDEX NUMBER SHALL BE IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARDS, 2006 OR LATEST EDITION.

3. ALL UTILITY CONSTRUCTION TO BE IN ACCORDANCE WITH LEE COUNTY UTILITIES AND/OR NORTH FORT MYERS UTILITIES OPERATION MANUALS AND SUBJECT TO THE FINAL ACCEPTANCE BY LEE COUNTY UTILITIES OR NORTH FORT MYERS UTILITIES.

TECHNICAL SPECIFICATIONS:

1. ALL EMBANKMENT AND TRENCH FILL TO BE SUITABLE MATERIAL COMPLYING WITH AASHTO CLASSIFICATION GROUPS A-1, A-2, A-3, A-4, A-5, A-6, OR A-7-5 AND OTHERWISE PLACED AND COMPACTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS, SECTION 110.

2. STABILIZED SUBGRADE MATERIAL SHALL CONFORM TO F.D.O.T. STANDARD SPECIFICATIONS, SECTION 160 WITH A MINIMUM L.B.R. OF 40. (ALLOWABLE UNDERTOLERANCE PER SECTION 160-7.2 WILL NOT APPLY).

3. UNLESS OTHERWISE NOTED, FILL SHALL BE COMPACTED IN STRICT ACCORDANCE WITH THE BEDDING DETAILS.
- The diagram illustrates the typical casing detail for a 30-inch diameter Class 52 dip push-on joint-restrained pipe. The main section shows a cross-section of the pipe with a 48-inch diameter wall of 0.375-inch thick steel casing, buried directly. The casing is supported by spacers at a minimum of 2 per pipe joint. The pipe is shown with a 45-degree bend and a 90-degree bend. The diagram also shows the pipe restrained by an EBBA Iron Series 2500 dip joint restrainer or approved equal, and a gate valve. The gate valve is shown with a 45-degree bend and a 90-degree bend. The diagram includes dimensions for the casing, the pipe, and the joint. The scale is 1 inch = 8 feet.

**TYPICAL CASING DETAIL**  
SCALE: 1" = 8'

**30" PIPE RESTRAINTS**  
NEW FITTINGS - MEGALUG SERIES 1100  
EXIST. FITTINGS - SERIES 1100 SD  
NEW PIPE - MEGALUG SERIES 1700  
EXIST. PIPE - MEGALUG SERIES 1100 HD
- SPECIFICATIONS:
1. SCOPE OF SERVICES:

A. FURNISH AND INSTALL ALL PIPE, FITTINGS, JOINT RESTRAINTS, AND VALVES REQUIRED TO RELOCATE WATER MAIN AS SHOWN ON THESE DRAWINGS.

B. FURNISH AND INSTALL STEEL CASING PIPE VIA OPEN CUT INSTALLATION. DIAMETER OF CASING PIPE AND WALL THICKNESS SHALL BE AS NOTED ON THESE PLANS.

C. AFTER INSTALLING, CLEANING, TESTING AND CONNECTING OF THE RELOCATED PIPELINE TO THE EXISTING MAIN, ALL ABANDONED PIPING WITHIN LIMITS OF CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF OFF SITE.

2. PIPELINE MATERIALS:

A. WATER MAIN -- CLASS 52 DUCTILE IRON. PUSH ON JOINT PIPE SHALL BE REQUIRED. PIPE SHALL BE OF AMERICAN MANUFACTURE, DOUBLE CEMENT LINING AND INTERIOR COATING WITH AWWA 210/NSF APPROVED EPOXY COATING. PIPE SHALL BE U.S. MANUFACTURED BY U.S. PIPE, AMERICA PIPE OR APPROVED EQUAL.

B. JOINT RESTRAINT -- ALL PIPE JOINTS FOR THIS PROJECT SHALL BE RESTRAINED, AS MANUFACTURED BY EBBA IRON OR APPROVED EQUAL.

C. STEEL CASING PIPE -- SHALL BE PRIME STEEL PIPE CONFORMING TO THE REQUIREMENTS OF ASTM DESIGNATION A-139. CASING PIPE SHALL BE PROVIDED TO THE DIAMETER AND WALL THICKNESS AS CALLED OUT ON THESE DRAWINGS. CASING PIPE INSTALLED SHALL BE INSTALLED TO SIX FEET (6') BEYOND EDGES OF PROPOSED PAVEMENT.

D. CASING SPACERS -- SHALL BE AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING OR APPROVED EQUAL. CASING SPACERS SHALL BE INSTALLED WITH A MINIMUM OF TWO (2) SPACERS PER PIPE JOINT.

E. CASING END SEALS -- SHALL BE AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING OR APPROVED EQUAL.

F. DUCTILE IRON FITTINGS -- DUCTILE IRON FITTINGS USED FOR THIS PROJECT SHALL BE SHORT BODY, MECHANICAL JOINT FITTINGS, DOUBLE CEMENT LINED AND APOXY COATED CONFORMING TO NSF REQUIREMENTS FOR USE IN POTABLE WATER SYSTEMS. FITTINGS SHALL BE OF AMERICAN MANUFACTURE BY U.S. PIPE CORP., AMERICAN PIPE CO. OR APPROVED EQUAL.

G. GATE VALVE -- SHALL BE RESILIENT WEDGE GATE VALVE CONFORMING TO AWWA C509. VALVES SHALL BE AMERICAN MADE BY AMERICAN PIPE, MULLER, CLOW OR APPROVED EQUAL.
- (REDUCED TO HALF SCALE)
- THREE OAKS 30 INCH WATER MAIN

IN  
SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA

DETAILS AND SPECIFICATIONS

James P. Elliott  
No. 21022  
September 14, 2020  
Professional Engineer

James P. Elliott  
FLORIDA CERTIFICATE NUMBER 21022  
DATE: 09/14/2020

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SOURCE, INC.  
ENGINEERS - PLANNERS  
Engineering Business #2627

JOB NO.  
831-01-19

DATE  
03-04-19

SHEET NO.  
8

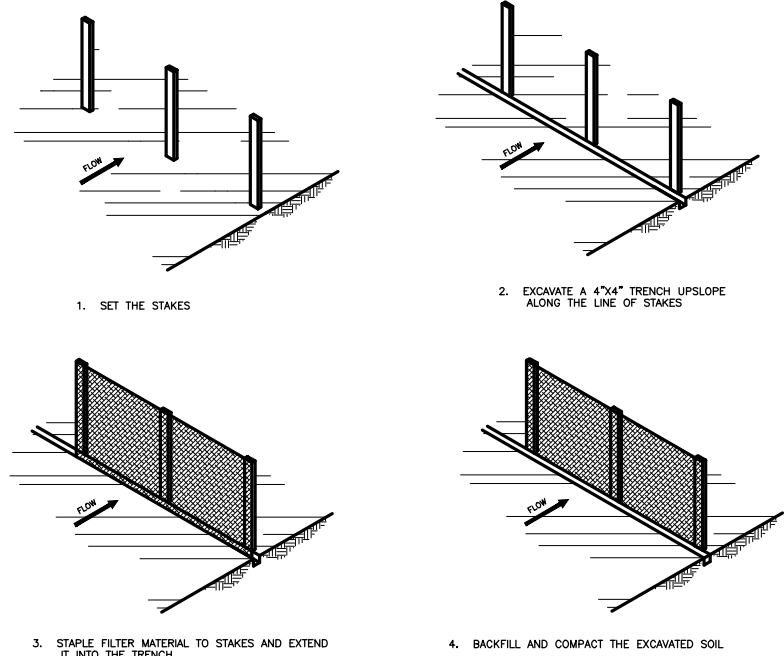
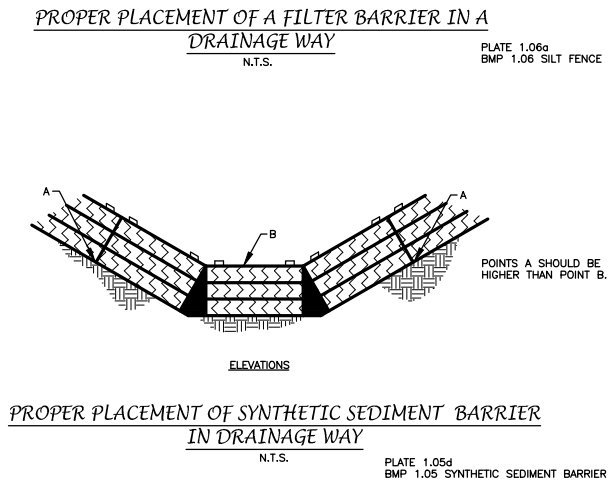
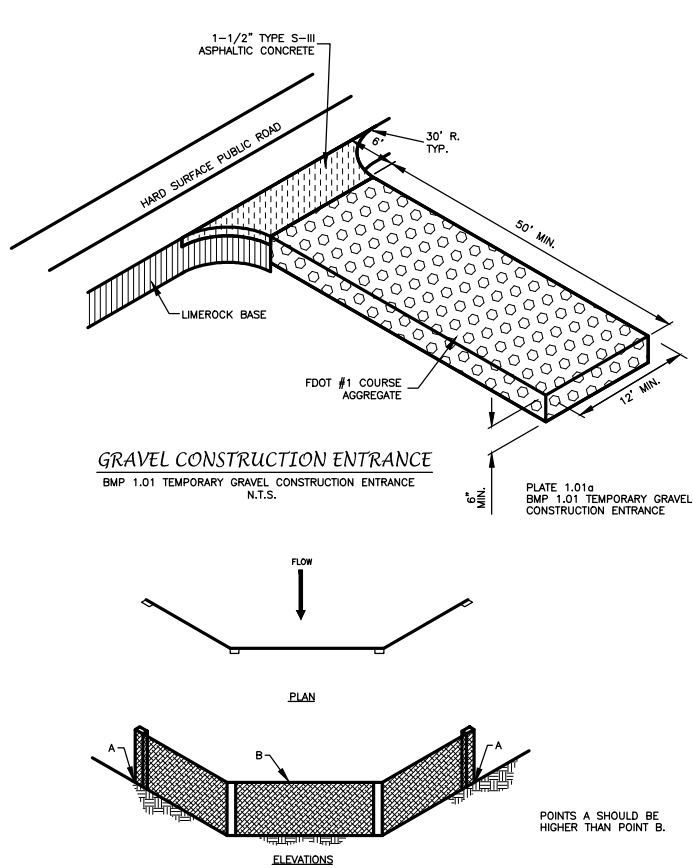
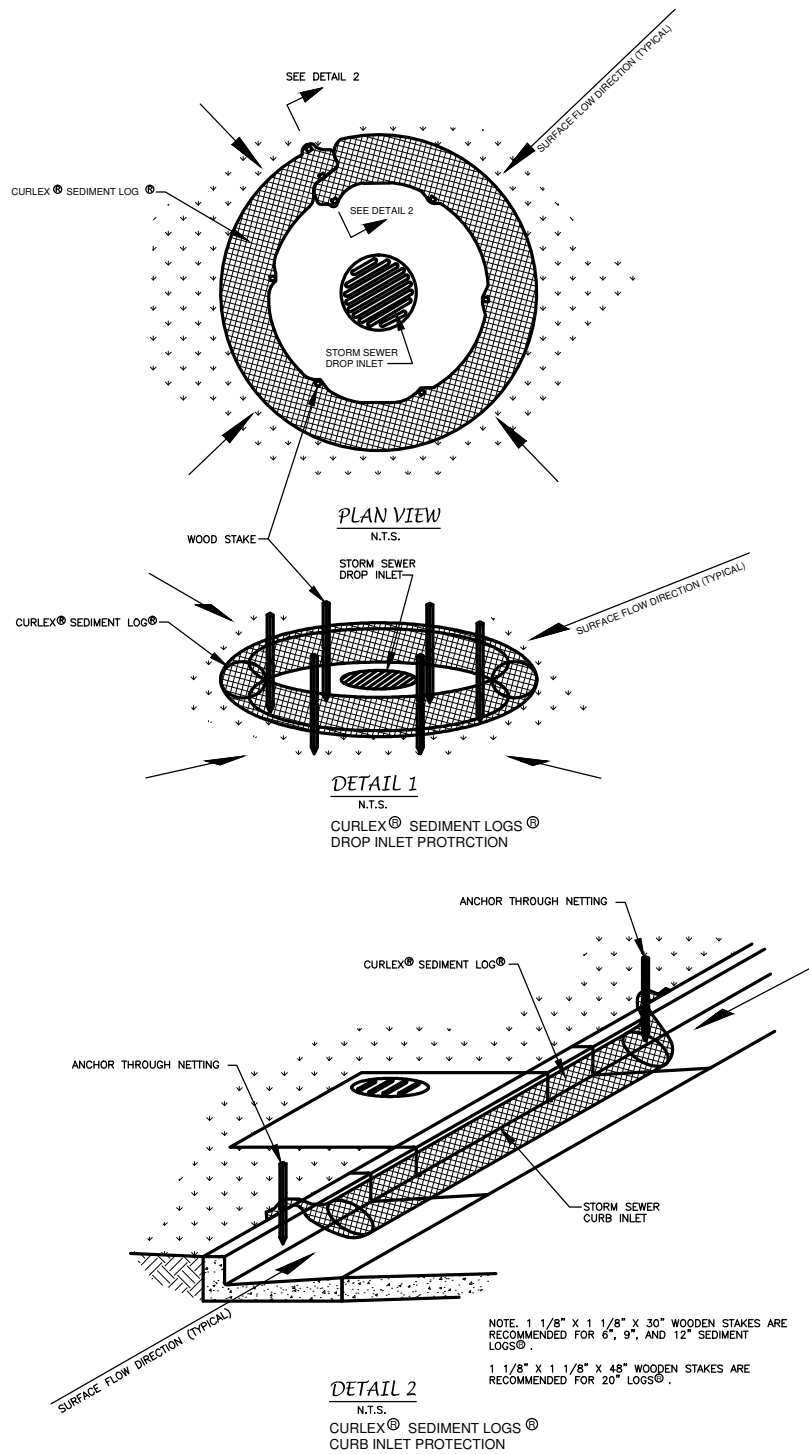
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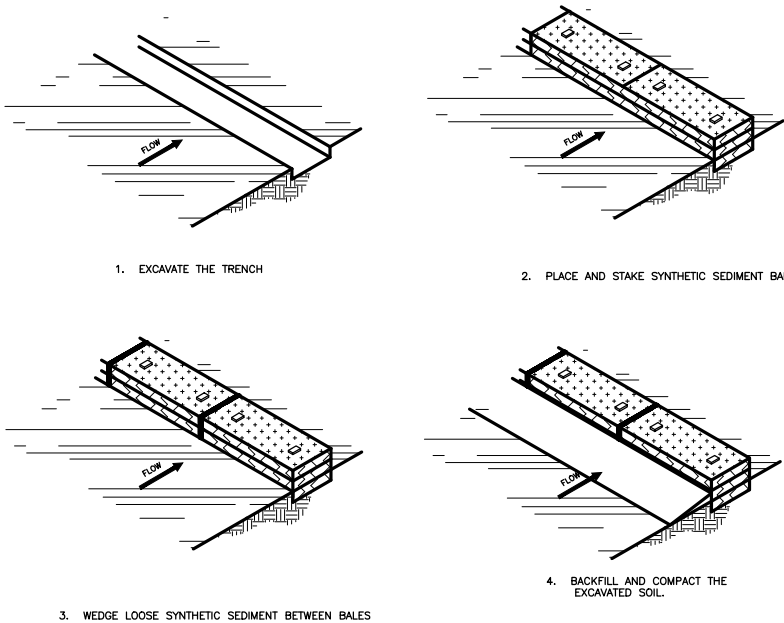
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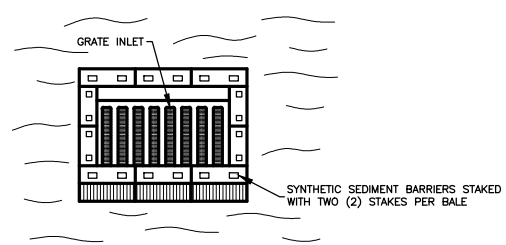
May 05, 2020 - 4:25pm Joe Nuccio  
X:\Projects\Current Projects\803\831-01-19 Three Oaks 30 inch Water Main\08 831-01-19 Erosion Control Details.dwg



**CONSTRUCTION OF A FILTER BARRIER**  
N.T.S.



**CONSTRUCTION OF A SYNTHETIC SEDIMENT BARRIER**  
N.T.S.



**SPECIFIC APPLICATION**  
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

**SYNTHETIC SEDIMENT BARRIER DROP INLET SEDIMENT FILTER**  
N.T.S.

**SOURCE:**  
MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL GUIDEBOOK, 1975

**GENERAL NOTES:**

- PRIOR TO COMMENCEMENT ACTIVITY APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED AROUND PROJECT PERIMETER TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF-SITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED AND APPROVING AGENCY HAS "FINALIZED" PROJECT.
- THE FOLLOWING MINIMUM REQUIREMENTS ARE RECOMMENDED:  
(REFERENCE FLORIDA DEVELOPMENT MANUAL, FDEP, PPS 6-301 TO 6-500).  
A) BMP 1.01 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE  
B) BMP 1.05 SYNTHETIC SEDIMENT BARRIER  
C) BMP 1.06 SILT FENCE  
D) BMP 1.08 STORM INLET DRAIN PROTECTION
- THESE DETAILS REPRESENT TYPICAL BEST MANAGEMENT PRACTICES (BMP) FOR SOIL EROSION CONTROL. THEY MAY NOT SATISFY ALL REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND SPECIFIC PERMIT CONDITIONS.
- IF THE APPROVING AGENCY DEEMS THESE METHODS OF EROSION CONTROL AS PRESENTED ON THIS SHEET TO BE INSUFFICIENT, THE CONTRACTOR SHALL BE GOVERNED BY THE APPROVING AGENCY'S OWN DESIGN STANDARDS AND SPECIFICATIONS.

**THREE OAKS 30 INCH WATER MAIN**

IN  
SECTION 3, TOWNSHIP 45S, RANGE 25E  
LEE COUNTY, FLORIDA

**EROSION CONTROL DETAILS**

		JOB NO.	SHEET NO.
		831-01-19	9
		DATE	DRAWN BY:
		03-04-19	JN
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(REDUCED TO HALF SCALE)