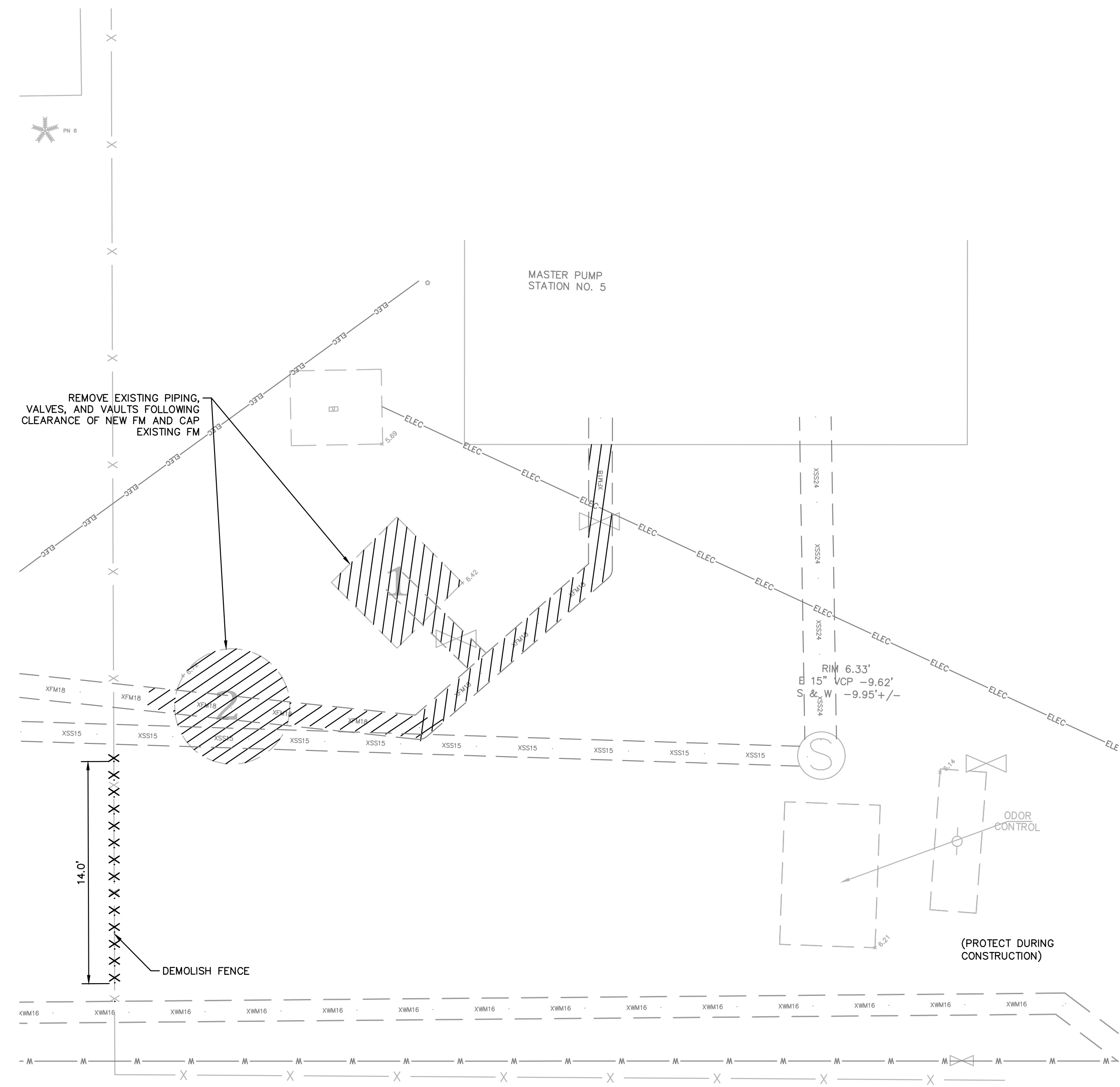


- NOTES:
- REFER TO SHEET 03 FOR ADDITIONAL SUBSURFACE UTILITY EXPLORATION INFORMATION.
 - CONTRACTOR TO TAKE PRECAUTION WHEN CONSTRUCTING FORCE MAIN AROUND INLET STRUCTURE TO PREVENT UNDER MIND.
 - CONTRACTOR TO FOLLOW RESTRAINED LENGTHS SET IN RESTRAIN LENGTH DETAILS ON SHEET 44 & 45.
 - CONSTRUCTION DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO CHAPTERS 62-621.300 AND 62-620 OF THE FLORIDA ADMINISTRATIVE CODE (FAC).
 - REFER TO DETAIL UG-12 SHEET 43 FOR COUNTY ROADWAY REPAIR REQUIREMENTS
 - CONTRACTOR SHALL RESTORE WORKING AREA WITHIN LIFT STATION FENCE PER THE MAG METER DETAIL SHEET 42

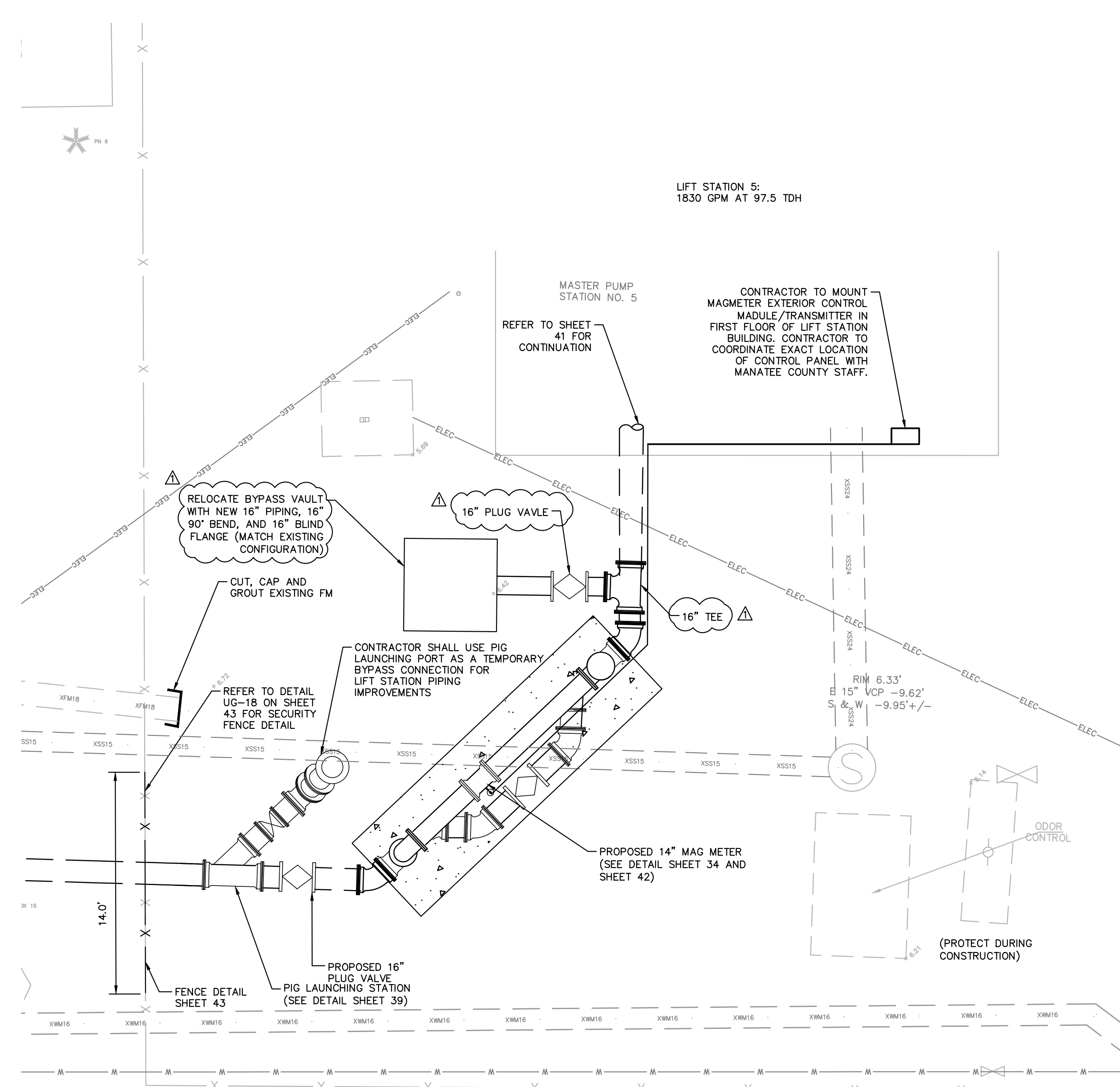
*NOTES:
 THE ELEVATIONS OF THE UTILITIES MARKED WITH AN ASTERISK (*) HAVE BEEN ASSUMED ON THE BASIS OF TYPICAL ANTICIPATED SOIL COVERAGE. CONTRACTOR SHALL NOT RELY ON THIS INFORMATION FOR CONSTRUCTION, BUT SHALL BE RESPONSIBLE FOR FIELD LOCATIONS (HORIZONTAL AND VERTICAL) OF ALL UTILITIES CROSSING THE PROPOSED FORCE MAIN. CONTRACTOR SHALL INCLUDE IN THE UNIT COST OF THE SUBJECT FORCE MAIN CONSTRUCTION, THE COST OF UTILITY ADJUSTMENTS NECESSARY TO ATTAIN DESIGN MINIMUM SEPARATION FOR UTILITIES CONFLICTING WITH THE CONSTRUCTION OF THE PROPOSED FORCE MAIN. INTERRUPTIONS OF ANY EXISTING UTILITY SERVICES SHALL BE NOTICED TO EFFECTED CUSTOMERS A MINIMUM OF 48 HOURS IN ADVANCE AND SHALL NOT EXCEED 4 HOURS IN DURATION.

WHERE CONCRETE REPAIRS ARE NECESSARY AND EXPANSION JOINTS ARE PRESENT, CONTRACTOR TO REMOVE AND REPLACE CONCRETE UP TO THE NEXT EXPANSION JOINT; OTHERWISE, REPLACE CONCRETE AS NECESSARY.

GROUNDWATER / DEWATERING NOTE:
 THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR THIS ISSUE. WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS.



EXISTING MLS 5 SITE PLAN
 3/16"=1'-0"



PROPOSED MLS 1M SITE PLAN
 3/16"=1'-0"

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ADDENDUM 3	03/22/2017	WWW
No.	REVISIONS	DATE BY

Kimley»Horn

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 PHONE: 813-620-1460
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT 148400012
DATE 3/22/2017
SCALE AS SHOWN
DESIGNED BY WWW
DRAWN BY JRT
CHECKED BY WEW

Manatee County
 FLORIDA

**FORCE MAIN 5
 REHABILITATION**

MANATEE COUNTY

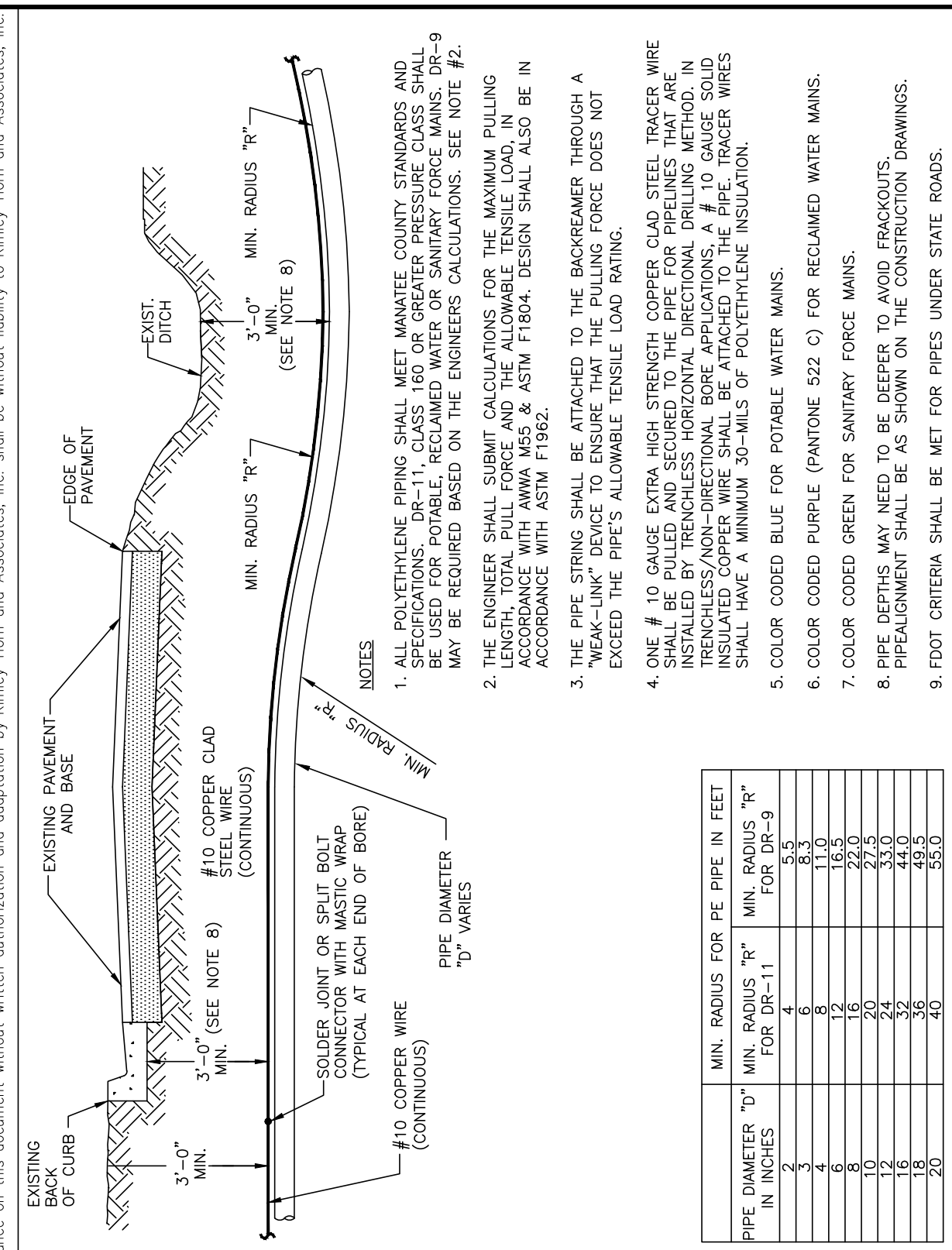
LICENSED PROFESSIONAL
W. WADE WOOD, P.E.
FL LICENSE NUMBER 69051

**LIFT STATION 5 MAG
 METER PLAN**

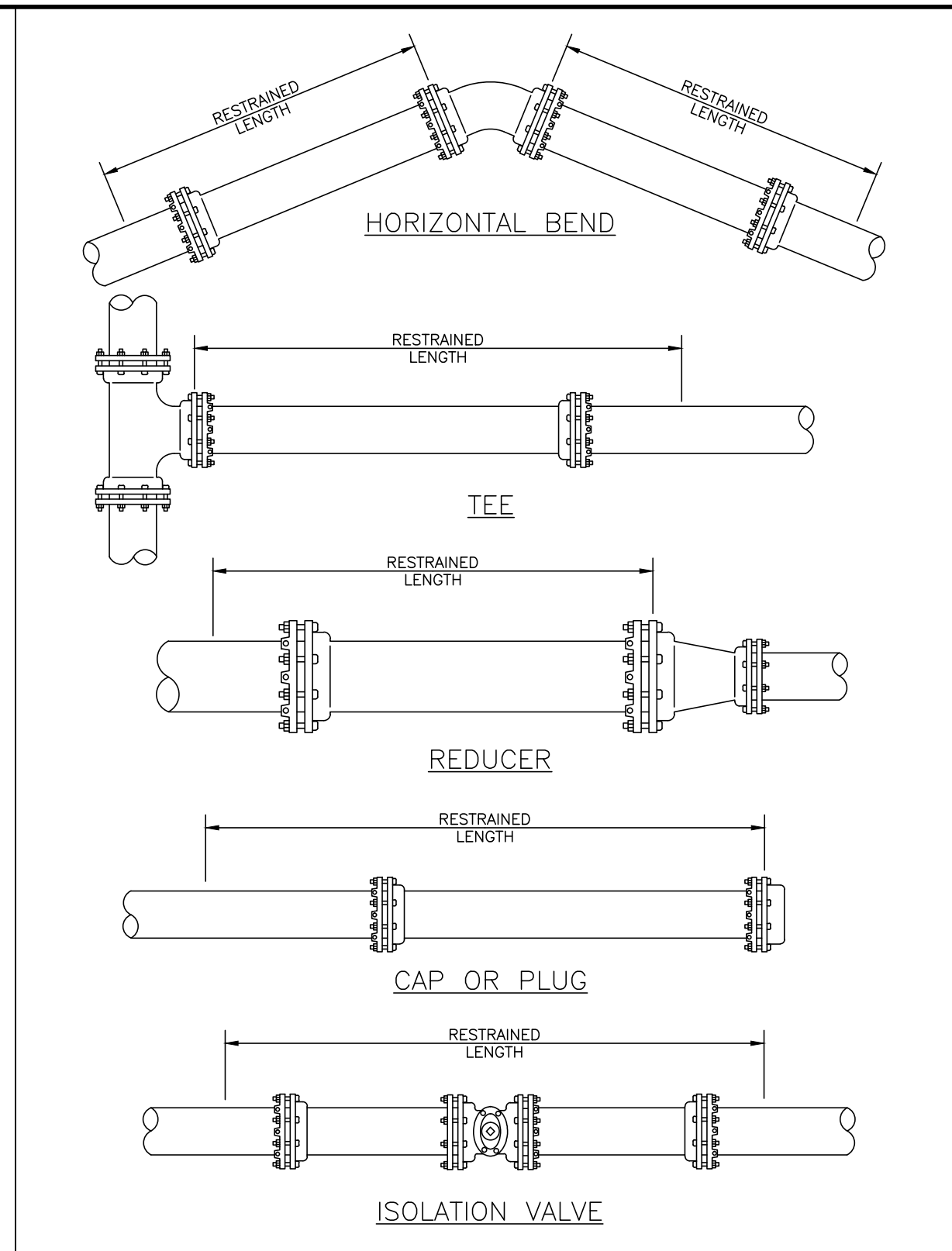
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SHEET NUMBER
34A

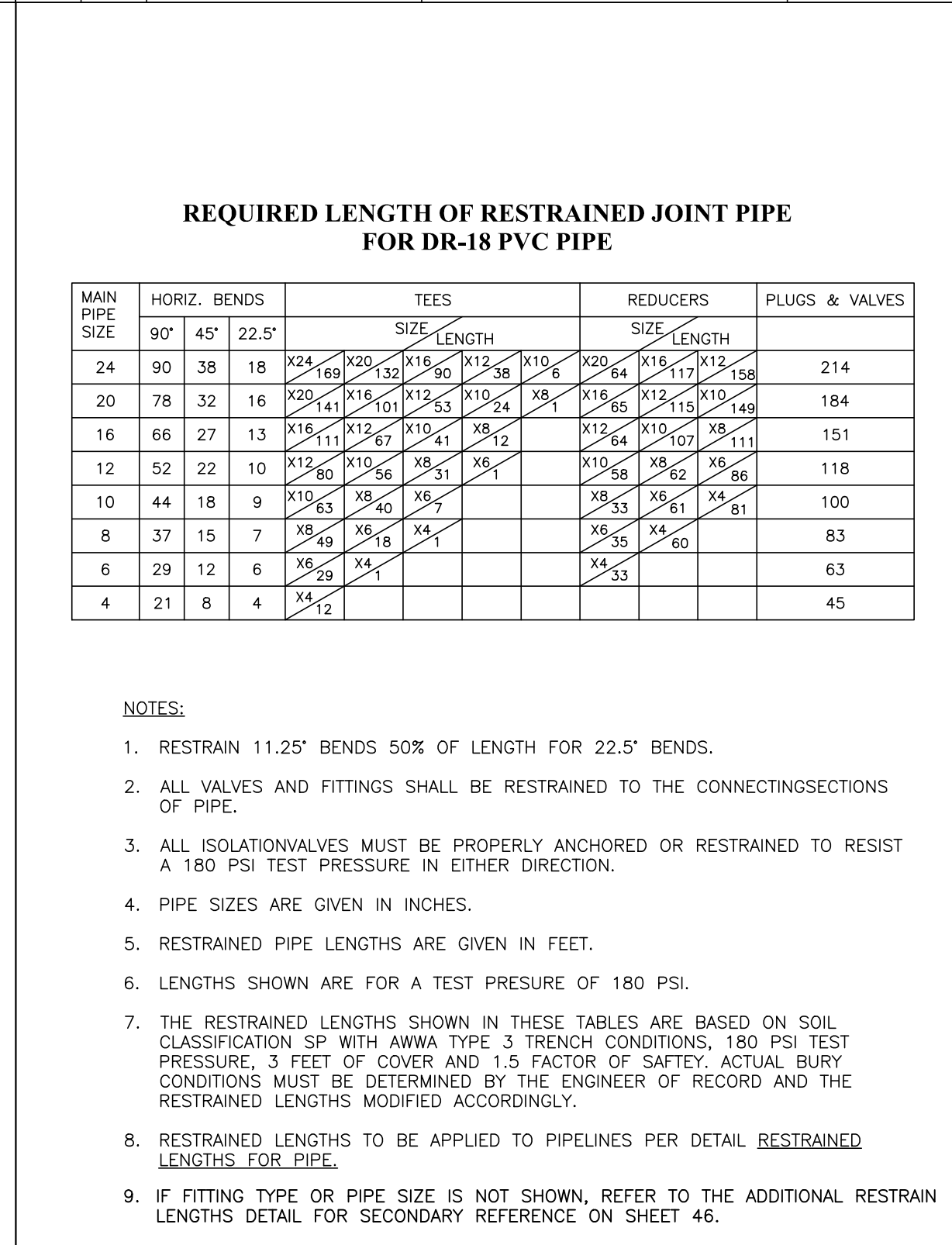
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PIPE DIAMETER "D" IN INCHES	MIN. RADIUS "R" IN FEET FOR DR-9	MIN. RADIUS "R" IN FEET FOR DR-11
1.5	3.0	3.0
2.0	4.0	4.0
2.5	5.0	5.0
3.0	6.0	6.0
3.5	7.0	7.0
4.0	8.0	8.0
4.5	9.0	9.0
5.0	10.0	10.0
5.5	11.0	11.0
6.0	12.0	12.0
6.5	13.0	13.0
7.0	14.0	14.0
7.5	15.0	15.0
8.0	16.0	16.0
8.5	17.0	17.0
9.0	18.0	18.0
9.5	19.0	19.0
10.0	20.0	20.0



MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45



MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45

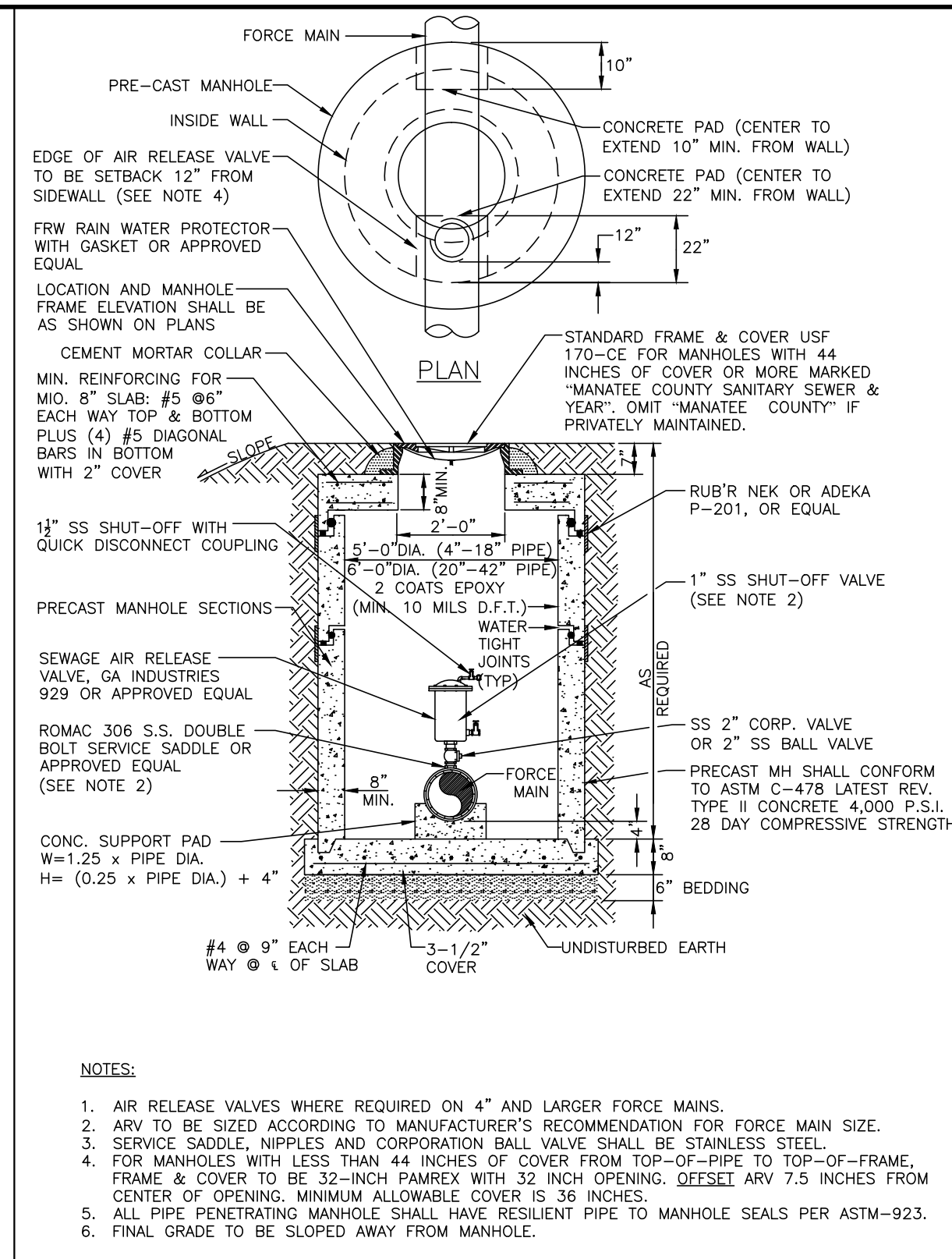
MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REVISIONS: REV. BY DATE CLB/BR 11/10 MAY 10, 2011 DATE OF APPROVAL

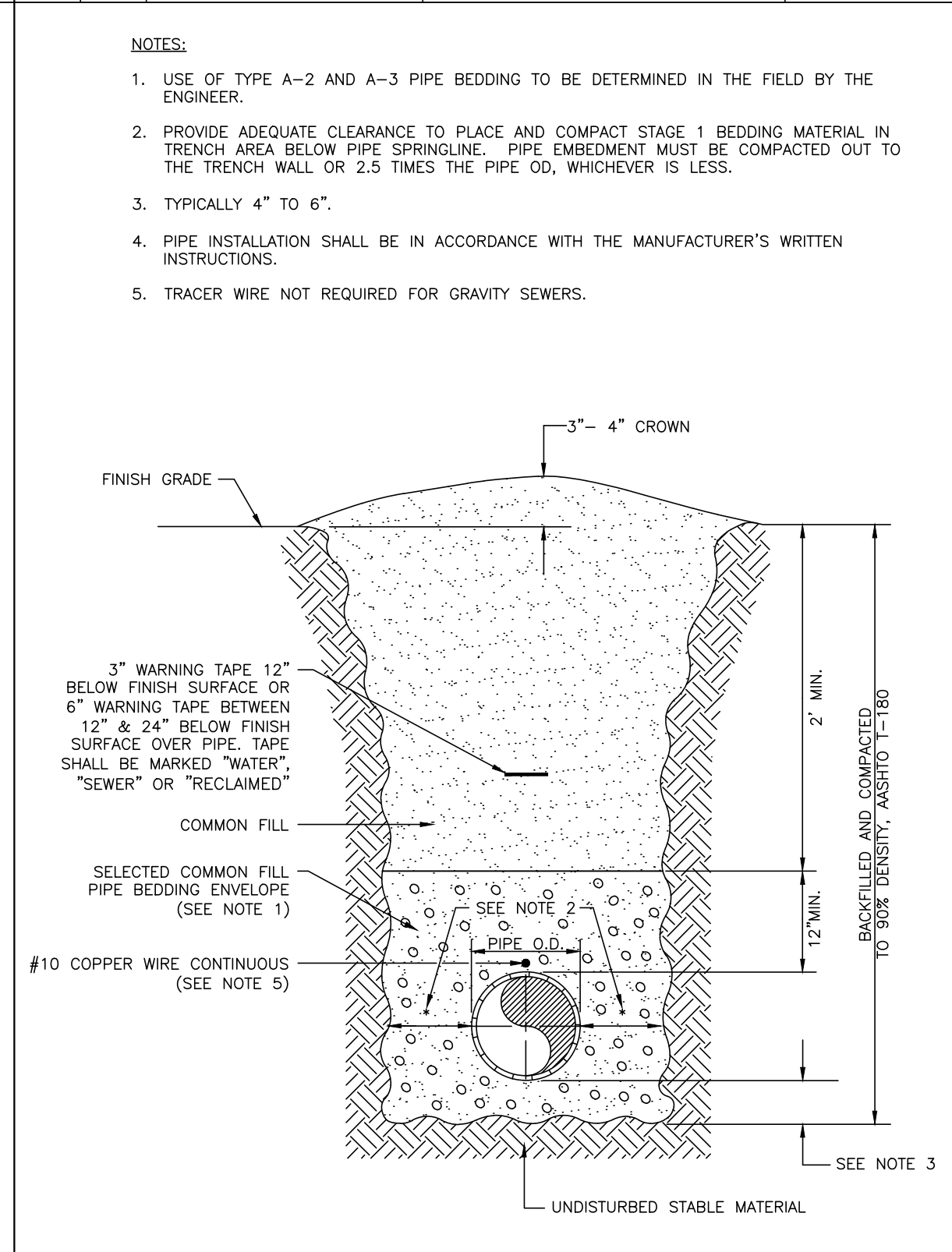
RESTRAINED LENGTHS FOR PVC PIPE

UG-8

NOTE: PAGE 108



MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45



MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45

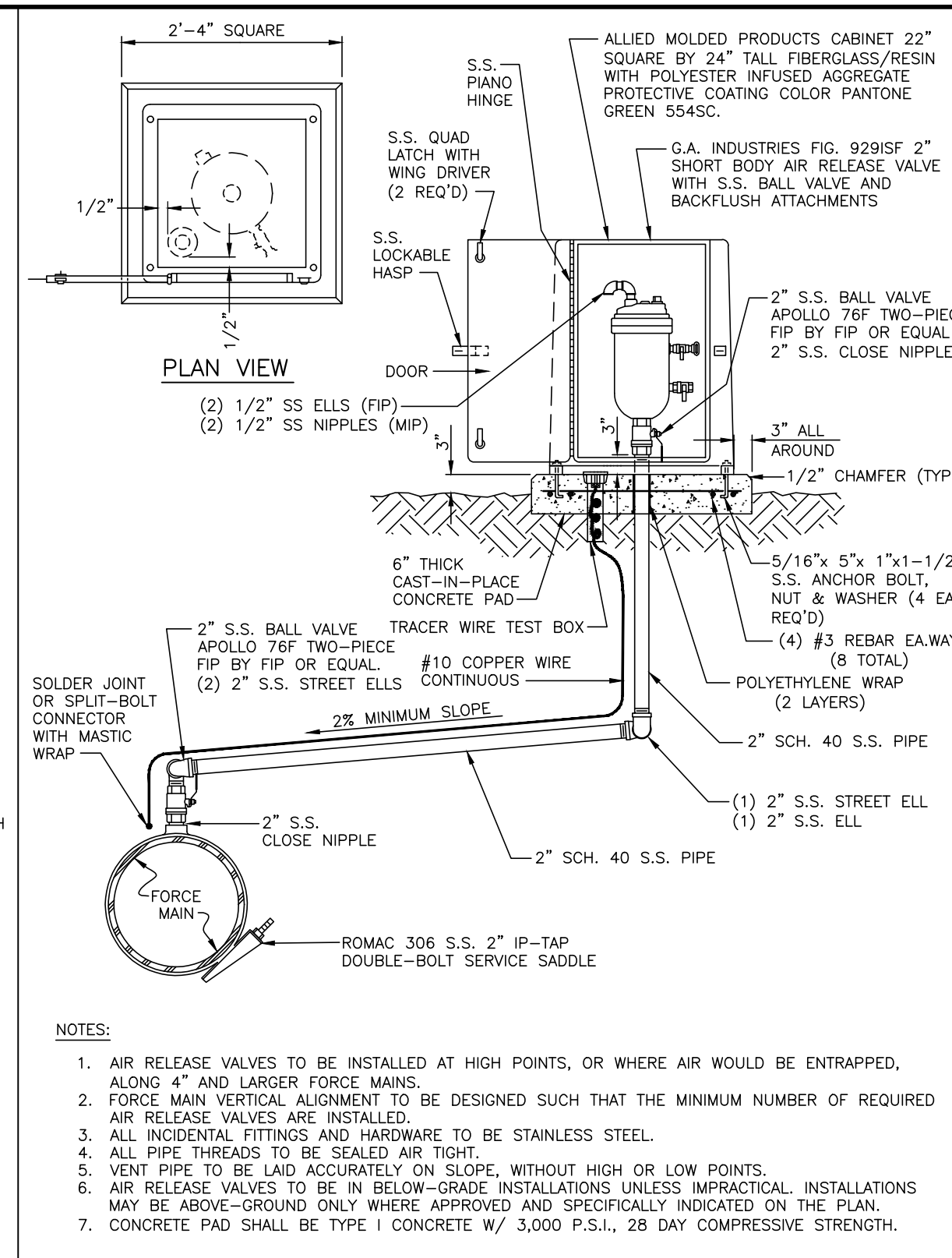
MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REVISIONS: REV. BY DATE WRT/KE 03/11 MAY 10, 2011 DATE OF APPROVAL

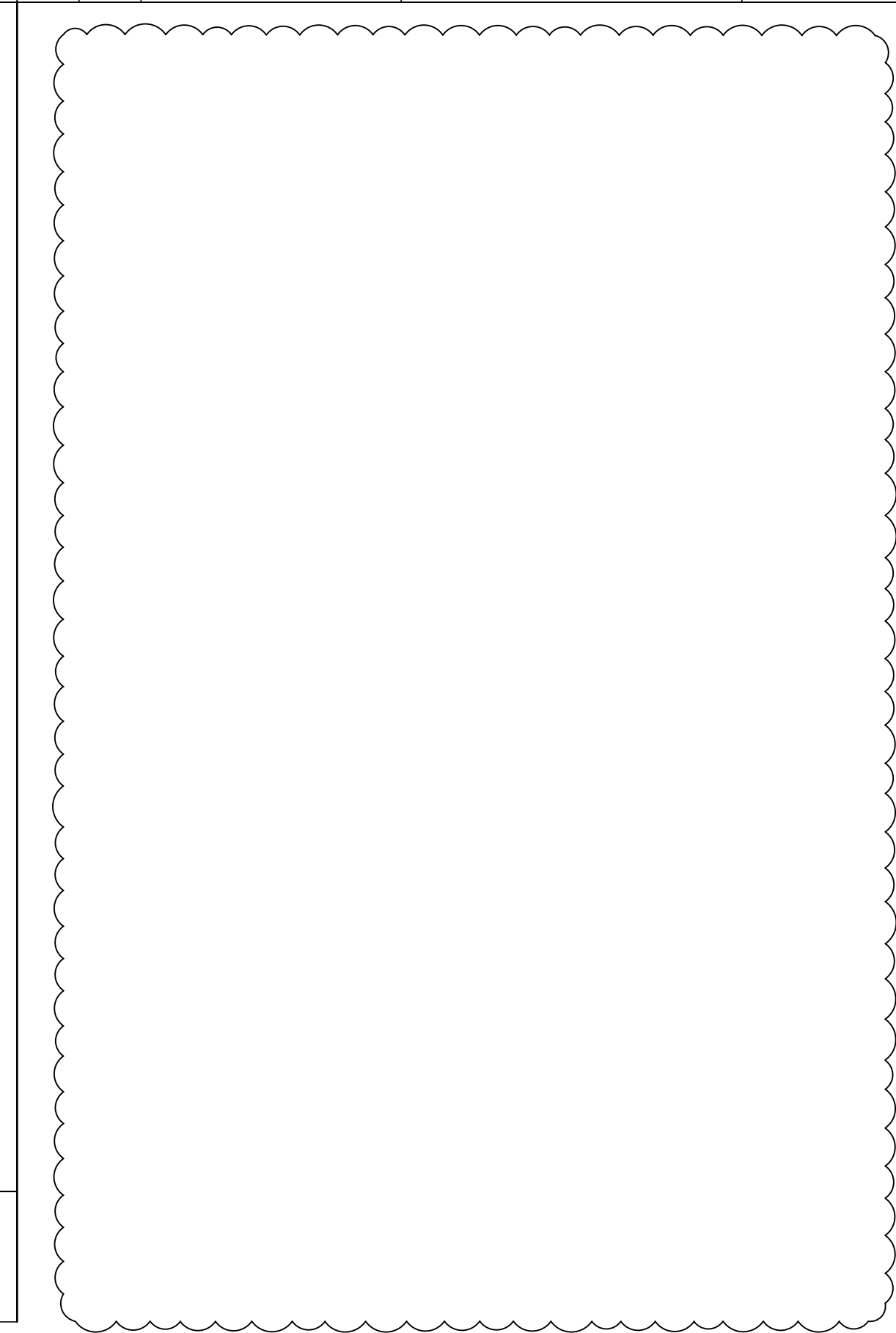
TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING

UG-11

NOTE: PAGE 111



MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45



MANATEE COUNTY
PUBLIC WORKS DEPARTMENT

REVISIONS: REV. BY DATE CLB/BR 11/10 MAY 10, 2011 DATE OF APPROVAL

HDPE TO PVC OR DI PIPE ADAPTER

UG-6

NOTE: PAGE 106

MAIN PIPE SIZE	HORIZ. BENDS	TEES	REDUCERS	PLUGS & VALVES
24	90 38 18	X24 X20 X16 X12 X10	X20 X16 X12 X10	214
20	78 32 16	X20 X16 X12 X10 X8	X16 X12 X10 X8	184
16	66 27 13	X16 X12 X10 X8 X6	X12 X10 X8 X6	151
12	52 22 10	X12 X10 X8 X6 X4	X10 X8 X6 X4	118
10	44 18 9	X10 X8 X6 X4 X3	X8 X6 X4 X3	100
8	37 15 7	X8 X6 X4 X3 X2	X6 X4 X3 X2	83
6	29 12 6	X6 X4 X3 X2 X1	X4 X3 X2 X1	63
4	21 8 4	X4 X3 X2 X1 X0	X3 X2 X1 X0	45

NO.	REVISIONS	DATE	BY
ADDENDUM 3		03/22/2017	WWW

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Manatee County
FLORIDA

FORCE MAIN 5 REHABILITATION

KHA PROJECT 148400012
DATE 3/22/2017
SCALE AS SHOWN
DESIGNED BY WWW
DRAWN BY JRT
CHECKED BY WEW
MANATEE COUNTY

LICENSED PROFESSIONAL
W. WADE WOOD, P.E.
FL LICENSE NUMBER 69051
FL DATE:

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CONSTRUCTION DETAILS