

LEE COUNTY

BOARD OF COUNTY COMMISSIONERS

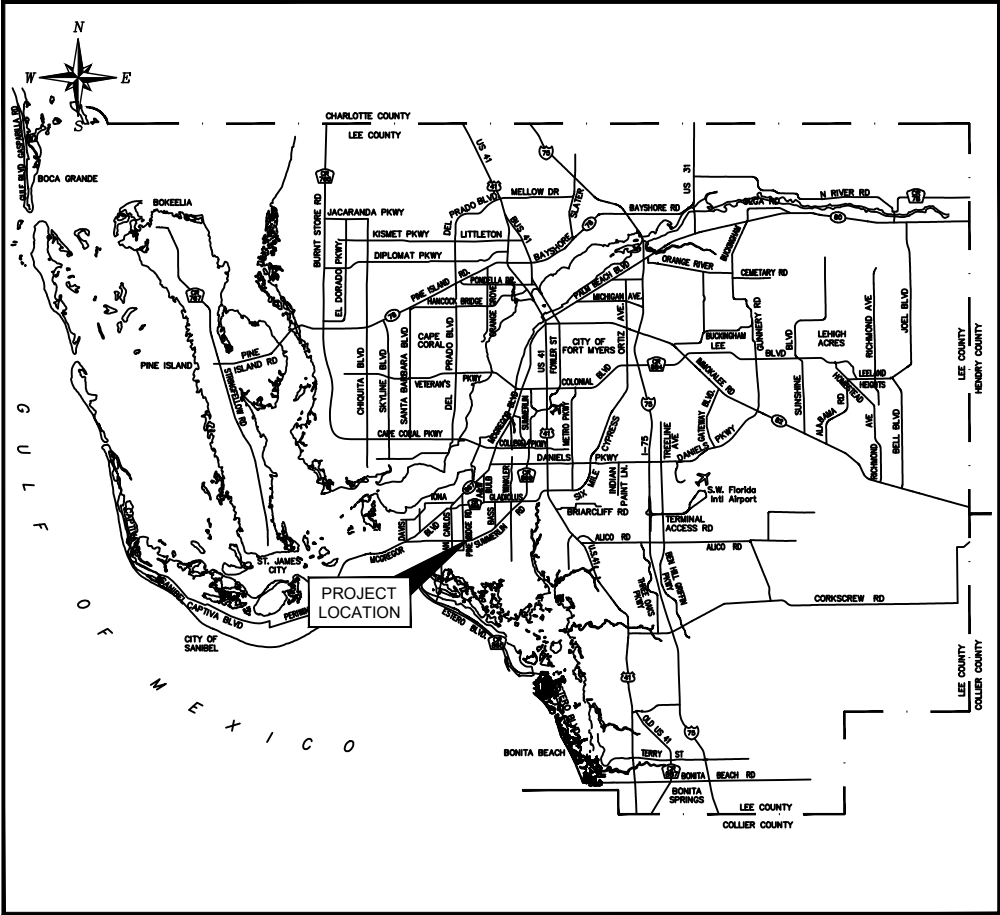
LEE COUNTY UTILITIES ENGINEERING

FIESTA VILLAGE TO FORT MYERS BEACH

REUSE TIE-IN

LEE COUNTY, FLORIDA

SHEET INDEX	
Sheet Number	SHEET DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	LCU STANDARD SYM-ABB & NOTES SHEET
4	11x17 LCU TITLE BLOCK
5	LCU STANDARD DETAILS SHEET



PROJECT LOCATION
N.T.S.



PROJECT SITE
N.T.S.

ATTENTION IS DIRECTED IN THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE THROUGH REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM NAVD88.

SHEET INDEX

Sheet Number	SHEET DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	LCU STANDARD SYM-ABB & NOTES SHEET
4	11x17 LCU TITLE BLOCK
5	LCU STANDARD DETAILS SHEET

LEE COUNTY COMMISSIONERS

- DIST 1. Kevin Ruane
- DIST 2. Cecil L. Pendergrass
- DIST 3. David Mulicka
- DIST 4. Brian Hamman
- DIST 5. Michael Greenwell

COUNTY MANAGER

Dave Harner

ASSISTANT COUNTY MANAGER

Mark Mora

DIRECTOR OF PUBLIC UTILITIES

Pamela S. Keyes, P.E.

REVISIONS			
No.	DATE	DESCRIPTION	APPROVED

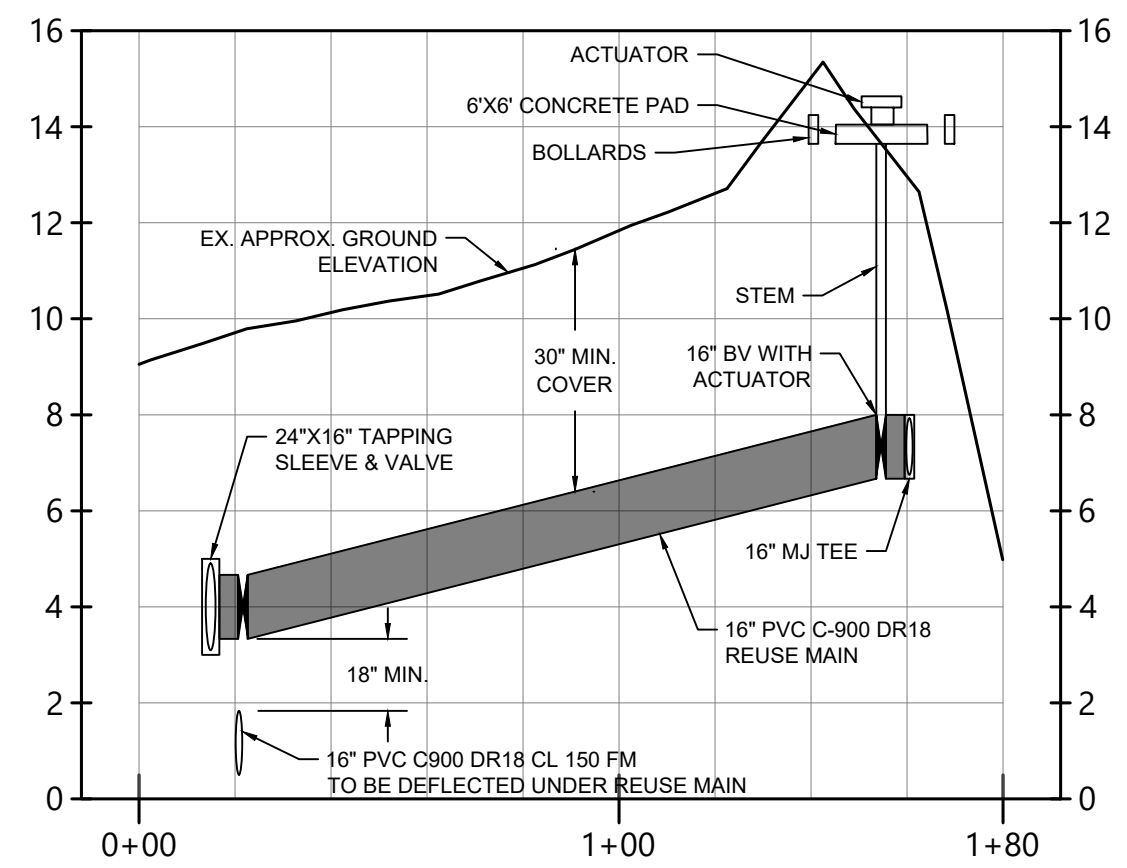
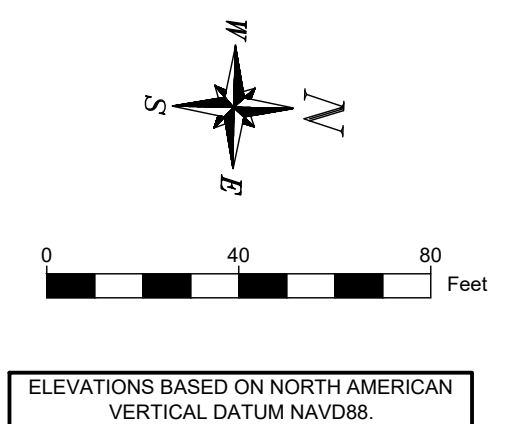
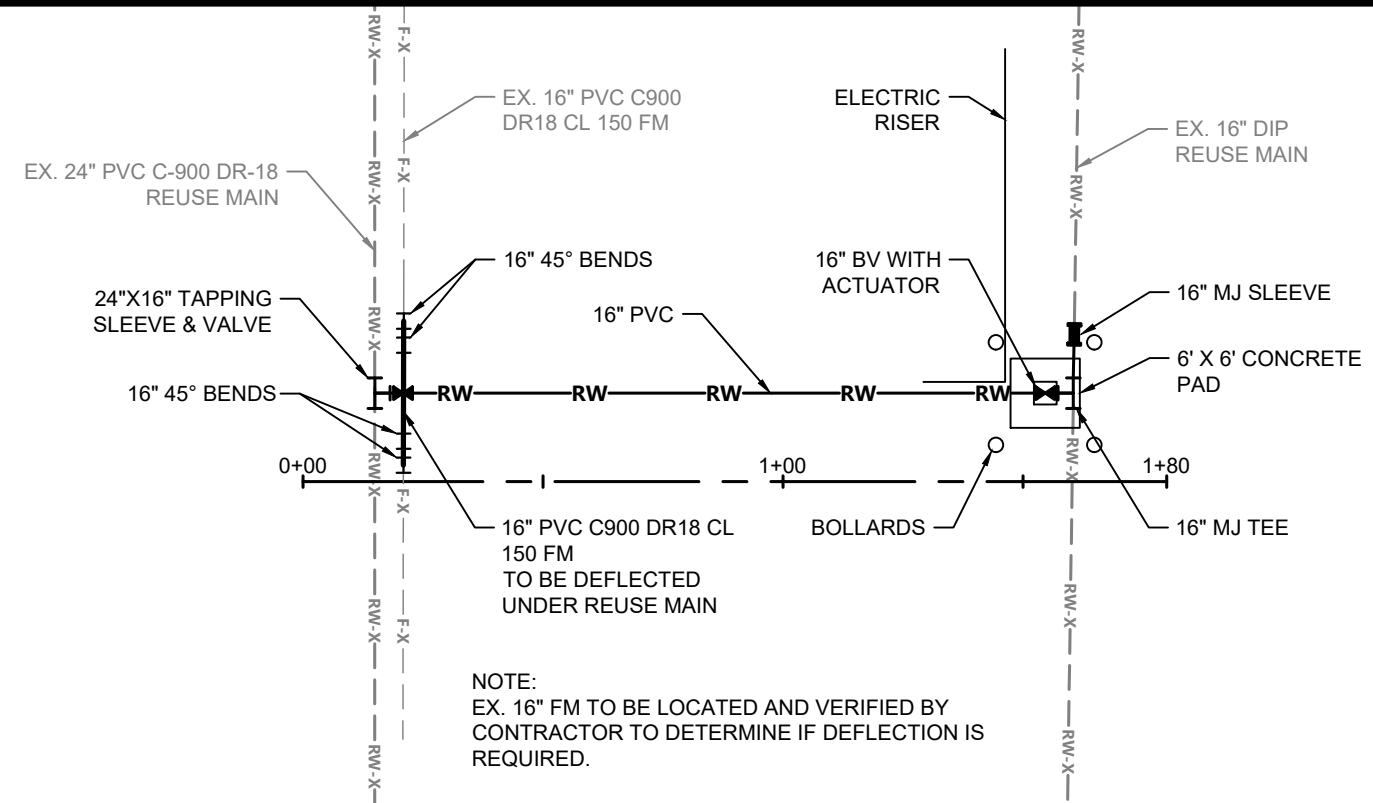


LEE COUNTY
UTILITIES
ENGINEERING

1500 MONROE STREET
FORT MYERS, FLORIDA 33901

DATE:	02/25/2025	PROJECT No.:	----	SHEET No.:	1 OF 4
-------	------------	--------------	------	------------	--------

SYMBOLS		ABBREVIATIONS		LCU STANDARD PLAN NOTES		LCU STANDARD PLAN NOTES CONTINUED		STANDARD DETAILS		DATE
<div><div>A</div><div></div></div>	AIR RELEASE VALVE	AC - ASBESTOS CEMENT		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		17. LCU REQUIRES THERE TO BE A MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION AND 18" VERTICAL SEPERATION 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.		<div><div>TYPE 3 ASPHALTIC CONCRETE OR REQUIRED</div><div>EXISTING SURFACE SHALL BE CUT SQUARE BY MECHANICAL SAWING (SEE GENERAL NOTE 3)</div><div>25'</div><div>25'</div><div>TACK VERTICAL FACE JOIN AND/OR BUTT JOINT TO SATISFACTION OF COUNTY ENGINEER</div><div>3" MIN. S-1 ASPHALT (SEE GENERAL NOTE 1)</div><div>MATERIALS CLEAN DRY SAND, FINE LIMEROCK OR PIT SHELL MECH. COMPACTED TO AT LEAST 95% OF MAX. DENSITY, OR 98% IF UNDER PAVED AREA OF ROADWAY, AS DETERMINED BY AASHTO SPECIFICATION T-180.</div><div>BACKFILL ZONE</div><div>12" TYPICAL</div><div>36" MIN.</div><div>VARIES</div><div>VARIES</div><div>PIPE DIAMETER VARIES</div></div>	CHECKED	
<div><div>SP</div><div></div></div>	BACTERIAL SAMPLE POINT	ARV - AIR RELEASE VALVE		2. THE CONTRACTOR SHALL COMPLY WITH ALL REGULATORY AND PERMITTING AGENCIES' REQUIREMENTS.		18. THE TRUNK OF PALM TREES SHALL BE A MINIMUM OF FIVE (5) FEET AND THE TRUNK OF SHADE TREES SHALL BE A MINIMUM OF TEN (10) FEET FROM ANY EXISTING OR PROPOSED LCU OWNED AND MAINTAINED PIPE/INFRASTRUCTURE.			DRAWN	
<div><div></div><div></div></div>	BEND	BOV - BLOW-OFF VALVE		3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY LCU.		19. AS THE WORK PROGRESSES THE CONTRACTOR SHALL PROVIDE FOR ALL CHANGES AND DEVIATIONS FROM THE LCU STAMPED/APPROVED CONSTRUCTION PLANS TO BE RECORDED. THE EXACT LOCATION OF ALL CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT SHALL BE RECORDED WITH X, Y, AND Z COORDINATES WITH RESPECT TO THE NAVD 1988 STATE PLANE FLORIDA WEST COORDINATE SYSTEM, AS WELL AS ANY OTHER RECORD INFORMATION REQUIRED BY THE LCU DESIGN MANUAL.				
<div><div></div><div></div></div>	BLOW-OFF VALVE	BV - BUTTERFLY VALVE		4. ALL CONSTRUCTION PERFORMED MUST BE DONE BY A CONTRACTOR PROPERLY LICENSED IN THE STATE OF FLORIDA. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE WORK MAY BEGIN. REQUIRED ATTENDEES INCLUDE BUT ARE NOT LIMITED TO: THE ENGINEER OF RECORD OR HIS/HER DESIGNEE, THE UNDERGROUND CONTRACTOR AND THE LCU INSPECTOR ASSIGNED TO THE PROJECT. LCU IS TO BE NOTIFIED A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.				<div><div>OVERLAY WITH 1" S-3 ASPHALT OR MATCH EXISTING, 25 FEET IN EACH DIRECTION WITH 2" WIDE X 3/4" DEEP MILLED BUTT JOINT AT EACH END.</div></div>		
<div><div></div><div></div></div>	CAP	CI - CAST IRON		5. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE WORK MAY BEGIN. REQUIRED ATTENDEES INCLUDE BUT ARE NOT LIMITED TO: THE ENGINEER OF RECORD OR HIS/HER DESIGNEE, THE UNDERGROUND CONTRACTOR AND THE LCU INSPECTOR ASSIGNED TO THE PROJECT. LCU IS TO BE NOTIFIED A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.				<div><div>GENERAL NOTES</div><div>1. THE LIMITS OF ASPHALT (OVERLAY) REPLACEMENT SHALL BE DETERMINED BY LEE COUNTY.</div><div>2. FOR GRAVITY PIPE LINES, MAY USE ROCK 1' (FT) ABOVE PIPE.</div><div>3. USING A 3/4" THICK X 2" WIDE BUTT JOINT AT EACH END.</div><div>4. COMPACTION 6" LIFTS WITH DENSITIES EVERY 12".</div></div>		
<div><div></div><div></div></div>	CROSS	CMP - CORRUGATED METAL PIPE		6. ONE COPY OF THE LCU APPROVED/STAMPED CONSTRUCTION PLANS MUST BE MAINTAINED BY THE CONTRACTOR AT THE SITE AT ALL TIMES.				<div><div>PAVEMENT RESTORATION DETAIL FOR PUBLIC ROADS</div><div>N.T.S.</div></div>		
<div><div></div><div></div></div>	FIRE HYDRANT, EXISTING	CO - CLEANOUT		7. ANY AND ALL WORK AND MATERIALS INSTALLED BY THE CONTRACTOR THAT ARE INTENDED FOR OWNERSHIP AND MAINTENANCE BY LCU, WHICH DO NOT CONFORM TO LCU SPECIFICATIONS AND WHICH DO NOT HAVE PRIOR LCU WRITTEN APPROVAL, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.				<div><div>CROSSING PIPE</div><div>WITH MIN. 18" VERTICAL SEPARATION BETWEEN PIPES</div><div>ONE FULL LENGTH (20' PVC/18" DIP) CENTERED ON CROSSING PIPE</div><div>ONE FULL LENGTH (20' PVC/18" DIP) CENTERED ON CROSSING PIPE</div><div>WATER MAIN</div></div>		
<div><div></div><div></div></div>	FIRE HYDRANT	DDCV - DOUBLE DETECTOR CHECK VALVE (DCDA)		8. ANY WORK PERFORMED ON INFRASTRUCTURE INTENDED FOR OWNERSHIP AND MAINTENANCE BY LCU WITHOUT THE KNOWLEDGE OF LCU IS SUBJECT TO RE-EXCAVATION, REMOVAL AND REPLACEMENT OF SAME TO BE DONE AT THE CONTRACTOR'S EXPENSE.				<div><div>TYPICAL WATER MAIN PIPE JOINT LOCATION AT PERPENDICULAR CROSSINGS</div><div>PURSUANT TO CH. 62-555.314, F.A.C.</div><div>N.T.S.</div></div>		
<div><div></div><div></div></div>	GATE VALVE, EXISTING	DI - DUCTILE IRON		9. LCU INSPECTION STAFF IS TO BE PRESENT FOR ALL HOT TAPS, PRESSURE TESTS, LIFT STATION START-UPS AND FOR ANY OTHER 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 MINIMUM OF TWO WEEKS NOTICE.				<div><div>RIGHT OF WAY</div><div>EXISTING PAVEMENT</div><div>36" MIN.</div><div>30" MIN.</div><div>WATER MAIN</div></div>		
<div><div></div><div></div></div>	GATE VALVE, PLUG VALVE	EOP - EDGE OF PAVEMENT		10. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LCU UTILITY INFRASTRUCTURE TO VERIFY HORIZONTAL LOCATION, VERTICAL LOCATION, PIPE DIAMETER, AND PIPE MATERIAL PRIOR TO SCHEDULING THE CONNECTION WITH LCU.				<div><div>TYPICAL ROADWAY SECTION</div><div>N.T.S.</div></div>		
<div><div></div><div></div></div>	IRRIGATION METER	FH - FIRE HYDRANT		11. 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.						
<div><div></div><div></div></div>	MANHOLE, EXISTING	FM - FORCE MAIN		12. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF AT LEAST TWO (2) WORKING DAYS NOTICE TO THE INDIVIDUAL UTILITY COMPANIES PRIOR TO CONSTRUCTION.						
<div><div></div><div></div></div>	MANHOLE	GM - GRAVITY MAIN		13. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND LCU IMMEDIATELY TO REPORT ANY CONFLICT WITH LCU UTILITIES/STRUCTURES ARISING DURING CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE DRAWINGS.						
<div><div></div><div></div></div>	MECHANICAL JOINT SLEEVE	GV - GATE VALVE		14. 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-CAST VALVE PADS WILL BE ACCEPTED.						
<div><div></div><div></div></div>	POWER POLE	HDPE - HIGH DENSITY POLYURETHANE		15. LCU REQUIRES 36" OF MINIMUM COVER FOR ALL UNDERGROUND PIPING. IF LCU REQUIRED COVER CANNOT BE MAINTAINED, ALTERNATE METHODS OF CONSTRUCTION OR PIPE PROTECTION MUST 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.						
<div><div></div><div></div></div>	REDUCER, EXISTING	IRR - IRRIGATION		16. 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						
<div><div></div><div></div></div>	REDUCER	MH - MANHOLE								
<div><div></div><div></div></div>	SEWER CLEAN OUT, EX. (LATERAL)	PSP - PERMANENT SAMPLE POINT								
<div><div></div><div></div></div>	SEWER CLEAN OUT (LATERAL)	PV - PLUG VALVE								
<div><div></div><div></div></div>	TEE, SADDLE	PVC - POLYVINYL CHLORIDE								
<div><div></div><div></div></div>	WATER METER, EXISTING	RCP - REINFORCED CONCRETE PIPE								
<div><div></div><div></div></div>	WATER METER	RDCR - REDUCER								
<div><div></div><div></div></div>	S-SHAPED FITTING	ROW - RIGHT OF WAY								
<div><div></div><div></div></div>	LINE STOP	SP - STEEL PIPE								
<div><div></div><div></div></div>	DDCV (DCDV)	TSP - TEMPORARY SAMPLE POINT								
<div><div></div><div></div></div>	LIFT STATION	VCP - VITRIFIED CLAY PIPE								
<div><div></div><div></div></div>	CASING (WATER/SEWER)	WM - WATER MAIN								
										REV #
										REVISION

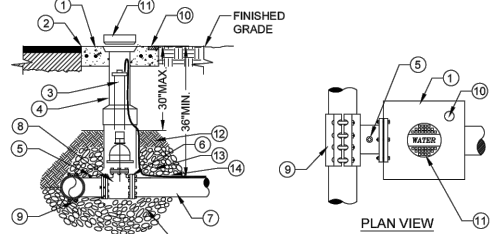


LEE COUNTY
UTILITIES
ENGINEERING
1500 MONROE STREET
FORT MYERS, FLORIDA 33901

DRAWN: DRW	CHECKED: JW
DESIGNED: JW	DATE: 02/25/2025
HORIZ. SCALE (FULL):	
VERT. SCALE (FULL):	

SHEET TITLE: REUSE TIE-IN PLAN & PROFILE	
TITLE: REUSE WATER MAIN TIE-IN	

FILE NAME: FMB RECLAIM TIE-IN.DWG	
PROJECT: FIESTA VILLAGE TO FORT MYERS BEACH REUSE TIE-IN	
PROJECT NO.: ----	SHEET NUMBER: 3 OF 4



- 1 CONCRETE PAD - 24"x24"x4" THK. (SEE VALVE INSTALLATION DETAIL G-02)
- 2 SET TOP OF BOX FLUSH WITH FINISHED GRADE
- 3 EXTENSION STEM IF TOP OF OPERATING NUT IS MORE THAN 30" BELOW FINISH GRADE
- 4 VALVE BOX (SEE VALVE INSTALLATION DETAIL G-02)
- 5 OUTLET FOR TESTING
- 6 MJ RESTRAINED
- 7 MAIN SIZE VARIES
- 8 TAPPING VALVE (SEE VALVE INSTALLATION DETAIL G-02)
- 9 LCU APPROVED ALL STAINLESS STEEL PRESSURE RATED TAPPING SLEEVE. FOR SIZE ON SIZE TAPS A FLANGED TAPPING SLEEVE IS REQUIRED. SPRING LOADED TAPPING SLEEVE IS REQUIRED WHEN CONNECTING TO HDPE (SEE APPROVED MATERIAL LIST)
- 10 BRASS PLATE (SEE VALVE INSTALLATION DETAIL G-02)
- 11 CAST IRON DROP COVER MARKED "WATER", "SEWER", "REUSE", OR "FIRE"
- 12 COMPACTED SUITABLE EARTH BACKFILL
- 13 3/4" GRANULAR MATERIAL #57 STONE
- 14 10 GAUGE DOUBLE INSULATED COPPER LOCATING WIRE (SEE LCU STANDARD DETAIL)

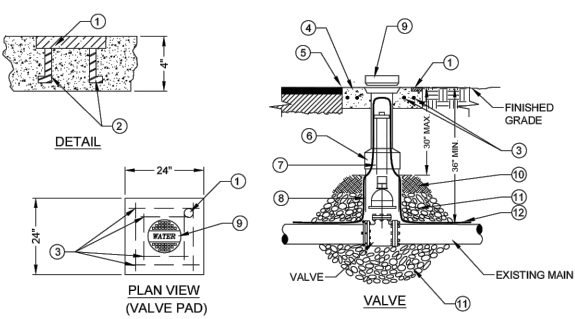
Lee County
Utilities
Engineering

TAPPING SLEEVE & VALVE

4/23/25

G-01.dwg

NOT TO SCALE
April 23, 2025 8:51 AM S:\Utilities\ENGINEERING\ACAD\LCU-CAD-Stnds\151209 LCU STD DETAILS\CAD FILES\G-01.dwg



- 1 BRASS PLATE: SIZE OF VALVE, VALVE TYPE NO. OF TURNS & DIRECTION TO OPEN VALVE WFO & YEAR INSTALL SYSTEM "WATER" OR "SEWER" OR "REUSE" OR "FIRE"
- 2 ANCHOR
- 3 EIGHT (8) #4 BARS OVERLAP EACH CORNER BY 2"
- 4 24" SQ X 4" THK. CONC. PAD SURROUNDING BOX, MIN. 3000 P.S.I. POURED IN PLACE
- 5 SET TOP OF BOX FLUSH WITH FINISHED GRADE
- 6 HEAVY DUTY TRAFFIC BEARING CAST IRON VALVE BOX, ADJUSTABLE SCREW TYPE, 5 1/2" DIAMETER SHAFT THAT IS LCU APPROVED
- 7 EXTENSION STEM WITH 2" OPERATING NUT AS REQUIRED, IF NUT IS MORE THAN 30" BELOW FINISH GRADE.
- 8 RISER NOT TO BEAR ON VALVE OR PIPE (RISER PIPE MATERIAL MUST BE PVC)
- 9 CAST IRON DROP COVER MARKED "WATER" OR "SEWER" OR "REUSE" OR "FIRE"
- 10 COMPACTED SUITABLE EARTH BACKFILL
- 11 3/4" GRANULAR MATERIAL #57 STONE
- 12 10 GAUGE DOUBLE INSULATED COPPER LOCATING WIRE (SEE LCU DETAIL G-03)

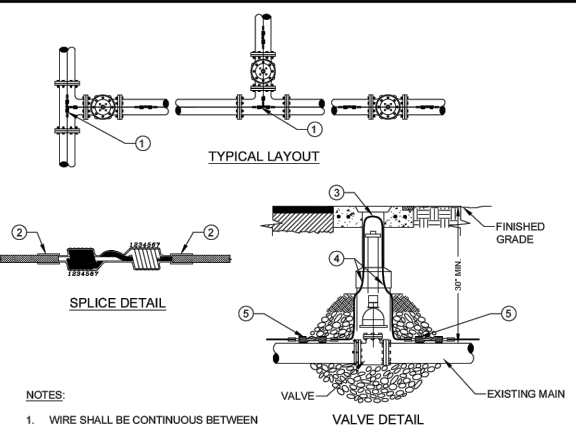
Lee County
Utilities
Engineering

GATE VALVE

4/22/25

G-02.dwg

NOT TO SCALE
April 22, 2025 12:42 PM S:\Utilities\ENGINEERING\ACAD\LCU-CAD-Stnds\151209 LCU STD DETAILS\CAD FILES\G-02.dwg



- NOTES:
- 1. WIRE SHALL BE CONTINUOUS BETWEEN VALVE BOXES, THE PVC RISER PIPE SHALL BE NOTCHED AND THE WIRE ATTACHED TO THE RISER PIPE TO ALLOW FOR THE WIRE TO FIT INSIDE THE CAST IRON VALVE BOX WITHOUT SHEARING THE WIRE.
 - 2. LOCATING WIRE SHALL BE LAID ON TOP OF THE MAIN, AND SHALL BE TAPED TO IT AT 10' INTERVALS AND TAPED AT ALL FITTINGS. TAPE SHALL BE 10 MIL POLYETHYLENE.
 - 3. CONTRACTOR SHALL CONDUCT A CONTINUITY TEST ON ALL LOCATING WIRE SPLICES PRIOR TO SCHEDULING THE OFFICIAL FINAL INSPECTION WITH LCU.
 - 4. ALL SPLICES SHALL UTILIZE A DIRECT BURY WATERPROOF SPLICE KIT. (SEE APPROVED MATERIAL LIST)
- 1 SPLICE RUN TOGETHER, KEEP CLEAR OF FITTING, TYPICAL
 - 2 COVER SPLICE WITH 2 WRAPS OF 10 MIL. POLYETHYLENE TAPE
 - 3 6" LOOP OF BARE WIRE, 9" MAX DEPTH TO TOP OF BARE WIRE
 - 4 10 GAUGE DOUBLE INSULATED COPPER LOCATING WIRE
 - 5 SPLICE (SEE DETAIL THIS SHEET)

Lee County
Utilities
Engineering

LOCATING WIRE FOR PRESSURE MAINS

1/26/24

G-03.dwg

NOT TO SCALE
January 26, 2024 11:58 AM S:\Utilities\ENGINEERING\ACAD\LCU-CAD-Stnds\151209 LCU STD DETAILS\CAD FILES\G-03.dwg

PIPE SIZE	HORIZONTAL DEFLECTIONS				VERTICAL DEFLECTIONS		DEAD ENDS & VALVES Lr (FT.)	REDUCERS (SEE NOTES)	TEES				
	90° BENDS (L/FT.)	45° BENDS (L/FT.)	11.25° BENDS (L/FT.)	22.5° BENDS (L/FT.)	45° BENDS (SEE NOTE 2) (L/FT.)	22.5° BENDS (L/FT.)			SIZE	BRANCH SIZE	L/A (FT.)	L/B (FT.)	
4"	20	10	5	5	20	5	45	6 x 4	30	4"	4"	10	10
6"	20	10	5	5	30	5	60	8 x 6	35	6"	6"	10	10
8"	30	15	5	5	40	10	80	10 x 6	60	8"	8"	10	10
10"	35	15	10	5	50	10	95	10 x 6	60	10"	10"	10	10
12"	40	15	10	5	60	10	110	12 x 10	35	10"	10"	10	20
16"	50	20	10	5	75	15	145	12 x 6	60	12"	8" OR LESS	10	10
20"	60	25	15	5	90	20	175	16 x 12	60	12"	12"	20	20
24"	70	30	15	10	105	20	200	16 x 10	85	12"	12"	10	10
30"	80	35	15	10	125	25	240	20 x 16	60	18"	18"	20	20
36"	90	40	20	10	145	30	280	20 x 12	110	18"	12"	10	10
								24 x 20	60	20"	20"	20	20
								24 x 16	110	20"	20"	20	20
								30 x 24	85	24"	24"	20	20
								30 x 20	130	24"	20"	10	10
								36 x 30	85	24"	24"	20	40
								36 x 20	60	24"	20"	20	20
								36 x 24	155	24"	20"	20	20
										12" OR LESS	12" OR LESS	10	10
										18" OR LESS	18" OR LESS	10	10
										30"	30"	20	75
										30"	24"	20	20
										30"	20"	20	20
										12" OR LESS	12" OR LESS	10	10
										36"	36"	20	110
										36"	24"	20	30
										36"	20"	20	20
										16" OR LESS	16" OR LESS	10	10

NOTES:
L/A = RESTRAINED LENGTH OF PIPE ON LARGE SIDE THE REDUCER, NO RESTRAINT IS REQUIRED ON THE SMALL SIDE OF THE REDUCER
L/B = RESTRAINED LENGTH ALONG PIPE ON BOTH SIDES OF THE TEE

- NOTES:
- L/A = RESTRAINED LENGTH OF PIPE ON LARGE SIDE THE REDUCER. NO RESTRAINT IS REQUIRED ON THE SMALL SIDE OF THE REDUCER.
 - L/B = RESTRAINED LENGTH ALONG THE RUN ON BOTH SIDES OF THE TEE
 - L/R = RESTRAINED LENGTH ALONG THE BRANCH OF THE TEE
 - ALL DEAD END LINES OR VALVES, PERMANENT OR TEMPORARY, SHALL BE RESTRAINED PER THE ABOVE RESTRAINT TABLE. ALL VALVES ARE TO BE TREATED AS A DEAD END AND RESTRAINED IN EACH DIRECTION.
 - A SAFETY FACTOR OF 2.0 IS USED FOR VERTICAL DEFLECTIONS (DIP). A SAFETY FACTOR OF 2.0 IS USED FOR ALL OTHER CASES.

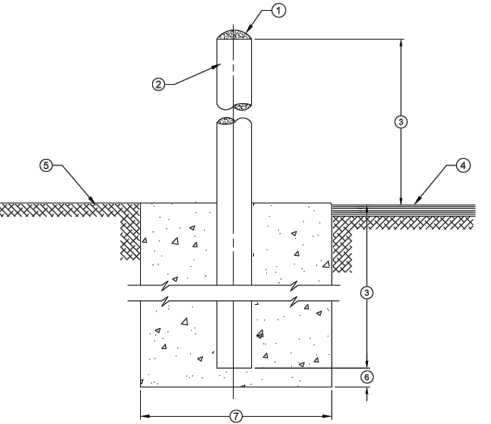
Lee County
Utilities
Engineering

RESTRAINED LENGTH SCHEDULE

4/24/25

G-10.dwg

NOT TO SCALE
April 24, 2025 1:39 PM S:\Utilities\ENGINEERING\ACAD\LCU-CAD-Stnds\151209 LCU STD DETAILS\CAD FILES\G-10.dwg



- 1 FILL AND TOP PIPE WITH CONCRETE
 - 2 6" DIA. X 6'-0" LONG PRESSURE CLASS 350 D.I.P.
 - 3 3'-0" MINIMUM
 - 4 PAVEMENT
 - 5 FINISHED GRADE
 - 6 3"
 - 7 18" DIA. CONCRETE ENCASEMENT 3000 P.S.I.
- NOTE:
- PAINT BOLLARD TO LCU STANDARDS - SAFETY YELLOW

Lee County
Utilities
Engineering

BOLLARD POST DETAIL

4/4/24

G-12.dwg

NOT TO SCALE
April 4, 2024 7:24 AM S:\Utilities\ENGINEERING\ACAD\LCU-CAD-Stnds\151209 LCU STD DETAILS\CAD FILES\G-12.dwg



LEE COUNTY
UTILITIES
ENGINEERING

1500 MONROE STREET
FORT MYERS, FLORIDA 33901

DRAWN: DRW	CHECKED: JW
DESIGNED: JW	DATE: 02/25/2025
HORIZ. SCALE (FULL):	
VERT. SCALE (FULL):	

SHEET TITLE:
LCU STANDARD SYMBOLS,
ABBREV. & NOTES SHEET

TITLE:
REUSE WATER MAIN
TIE-IN

PROJECT:
FIESTA VILLAGE TO FORT MYERS BEACH
REUSE TIE-IN

PROJECT NO.: ----	FILE NAME: FMB RECLAIM TIE-IN LCU SYM-ABB-NOTES.dwg	SHEET NUMBER: 4 OF 4
----------------------	--	-------------------------