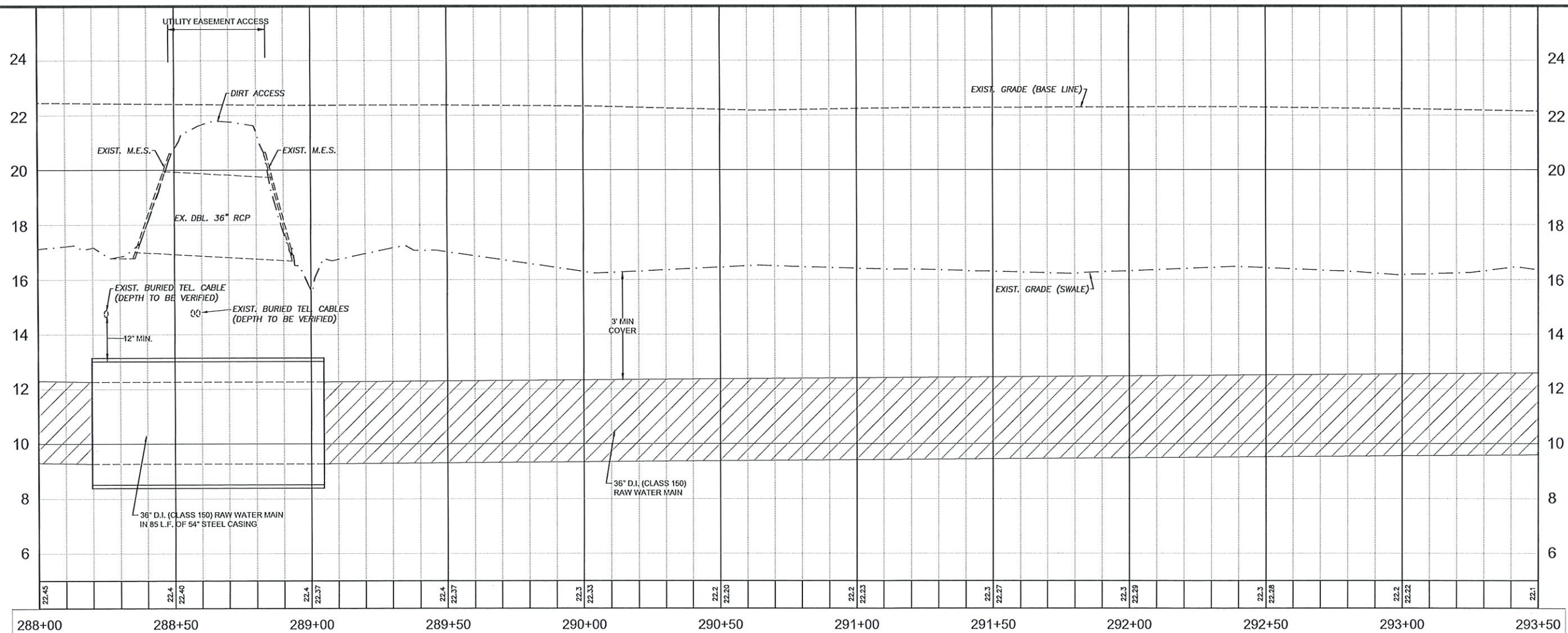
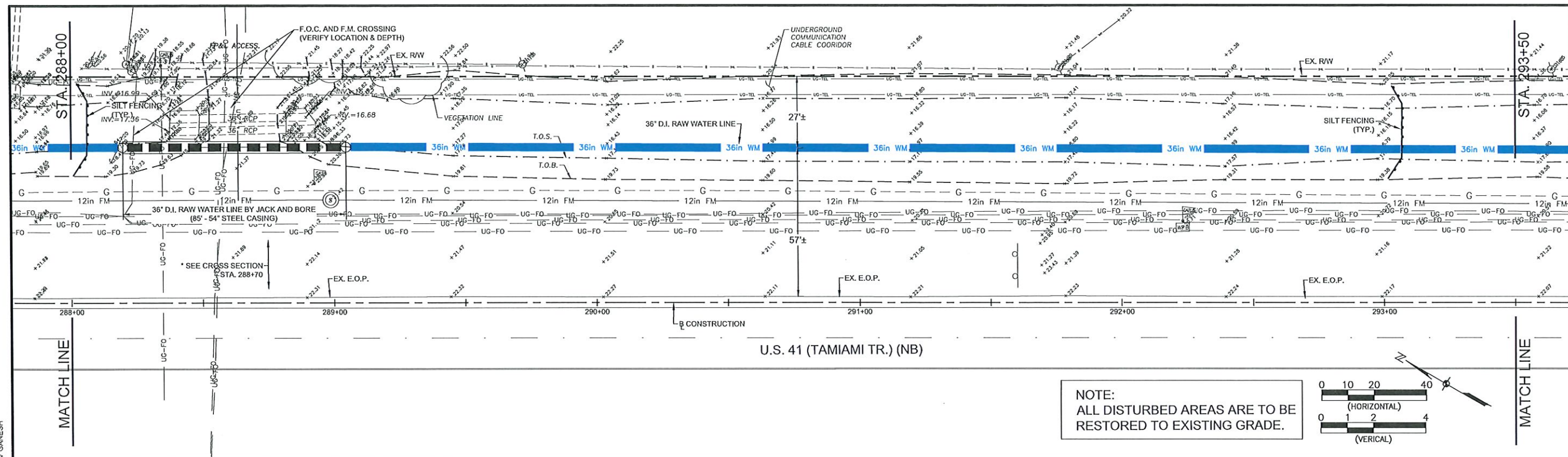


SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

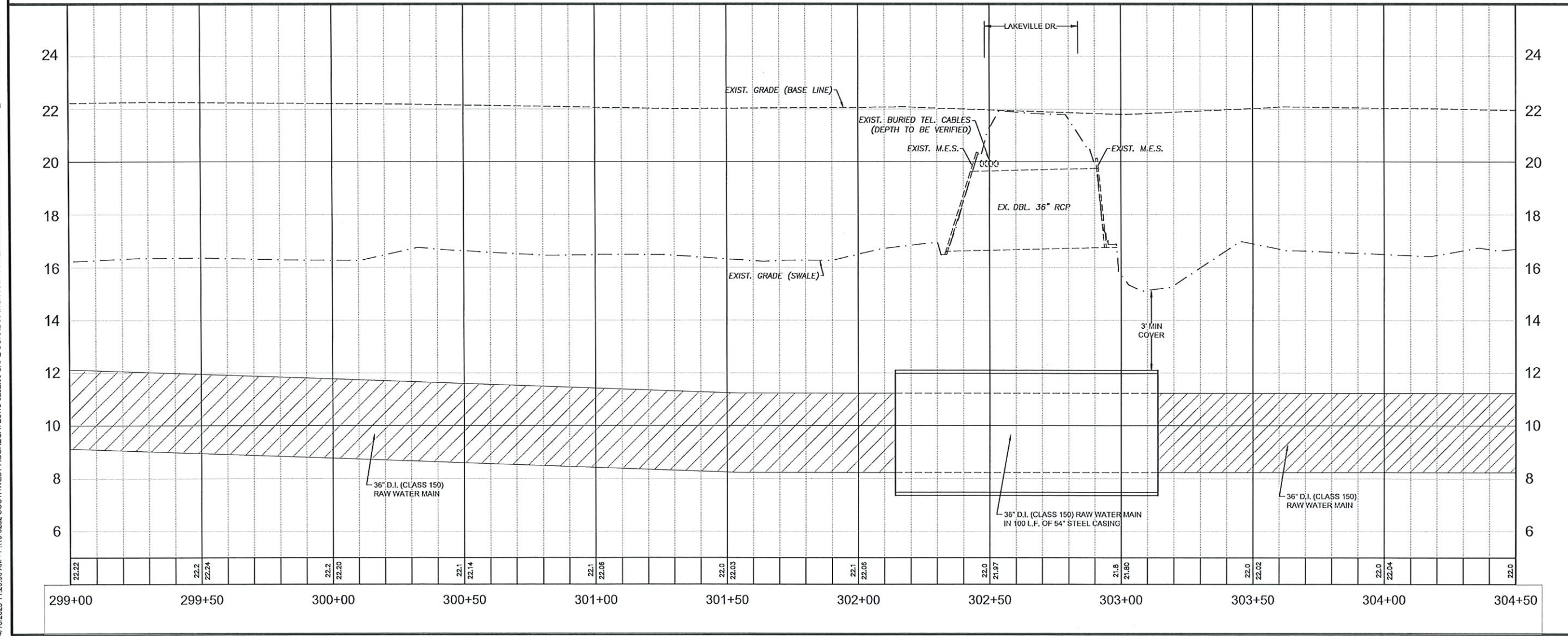
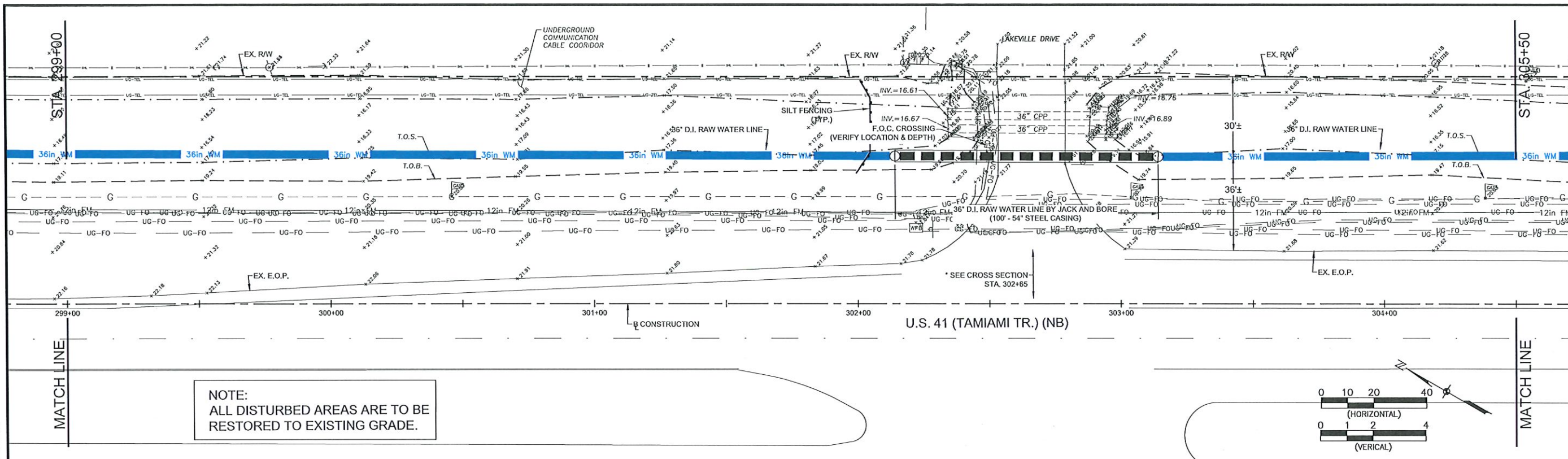
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PLAN AND PROFILE

SHEET NUMBER

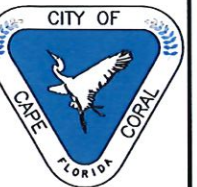
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4/10/2025 11:26:50 AM - P:\15-0252 SOUTHWEST AGGREGATE\15-0252.06 CAPE CORAL 30 INCH RAW WATER LINE\DESIGN\CADD\PLAN SET\6.3-6.33_PLAN-PROFILE (US 41).DWG - DEV GANESH



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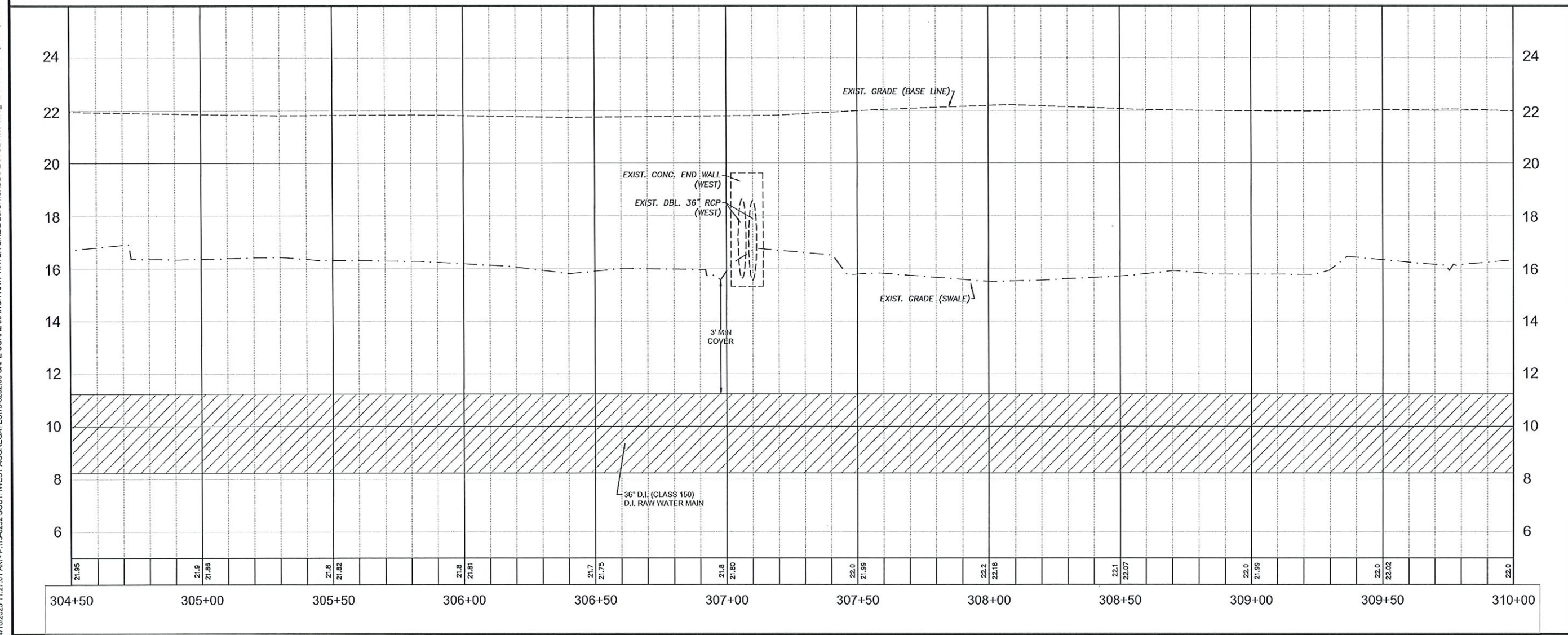
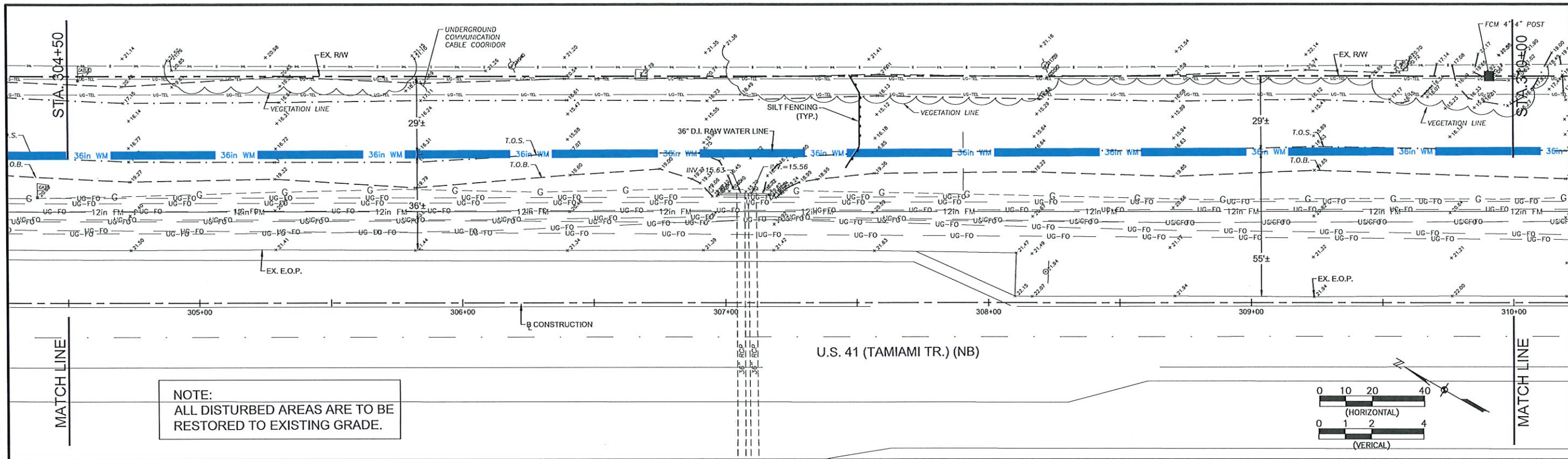
SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

REVISIONS	DESCRIPTION	DATE
NO.		
DATE:	APRIL, 2025	
PROJECT NO.	15-0252.06	
FILE NO.		
SCALE:	AS NOTED	

PLAN AND
PROFILE

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SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

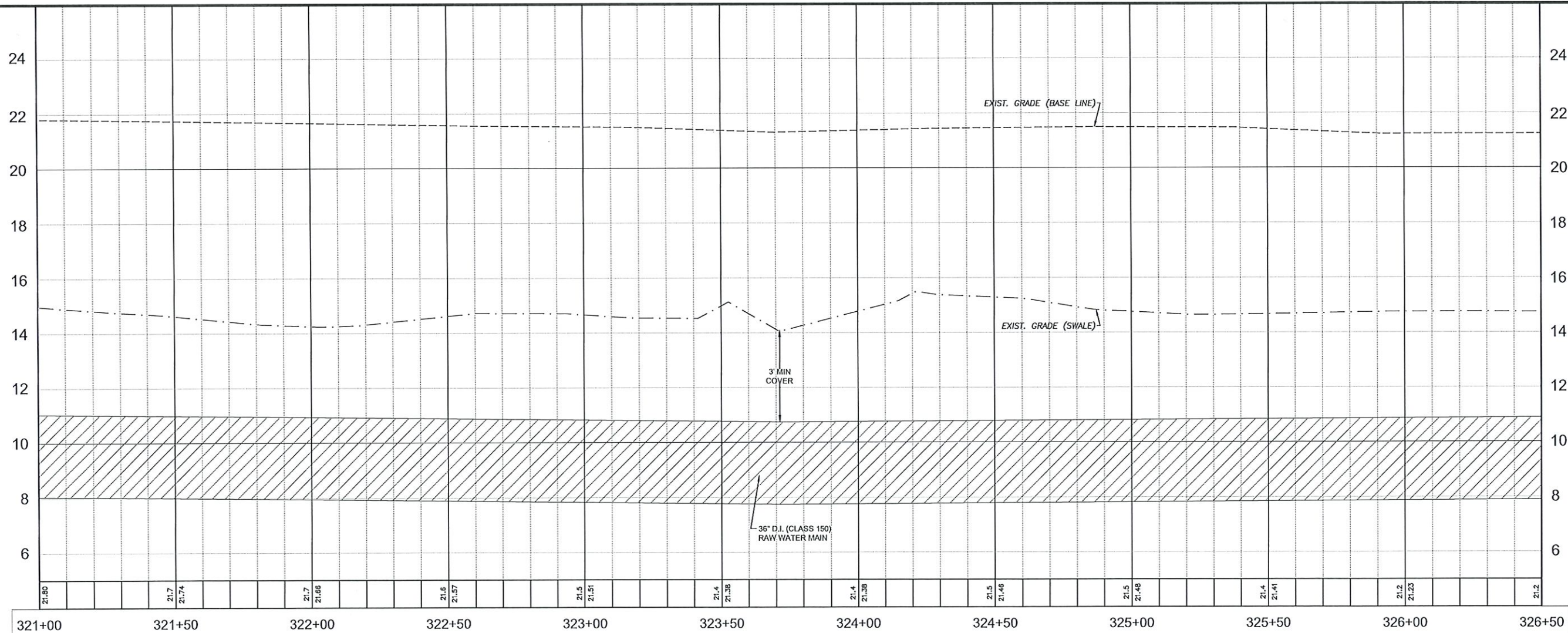
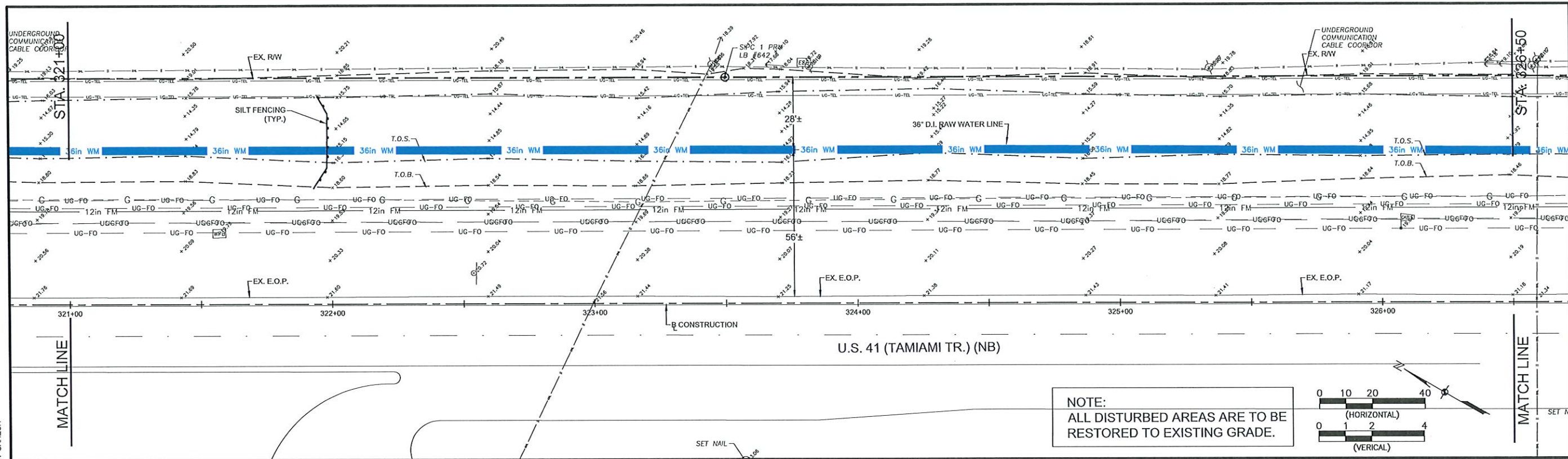
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DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

PLAN AND
PROFILE

SHEET NUMBER
6.22

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CITY OF CAPE CORAL
FLORIDA

**SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE**

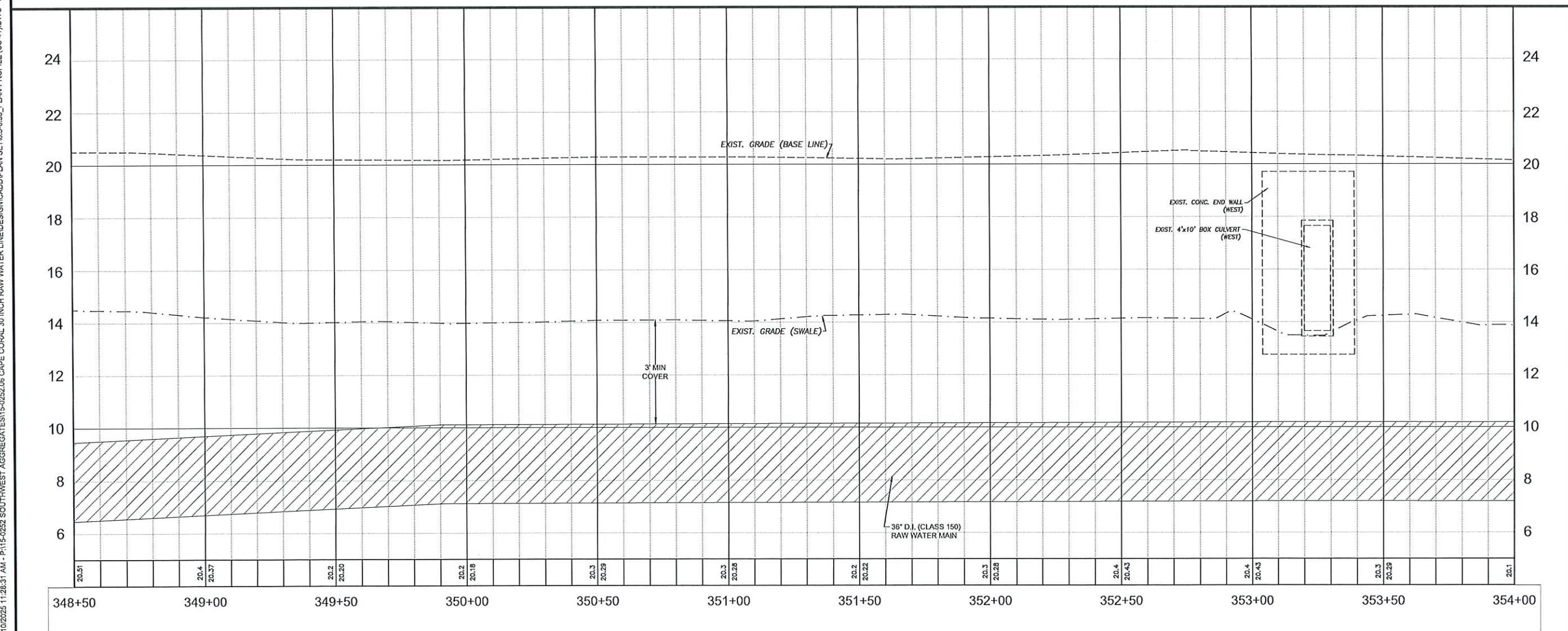
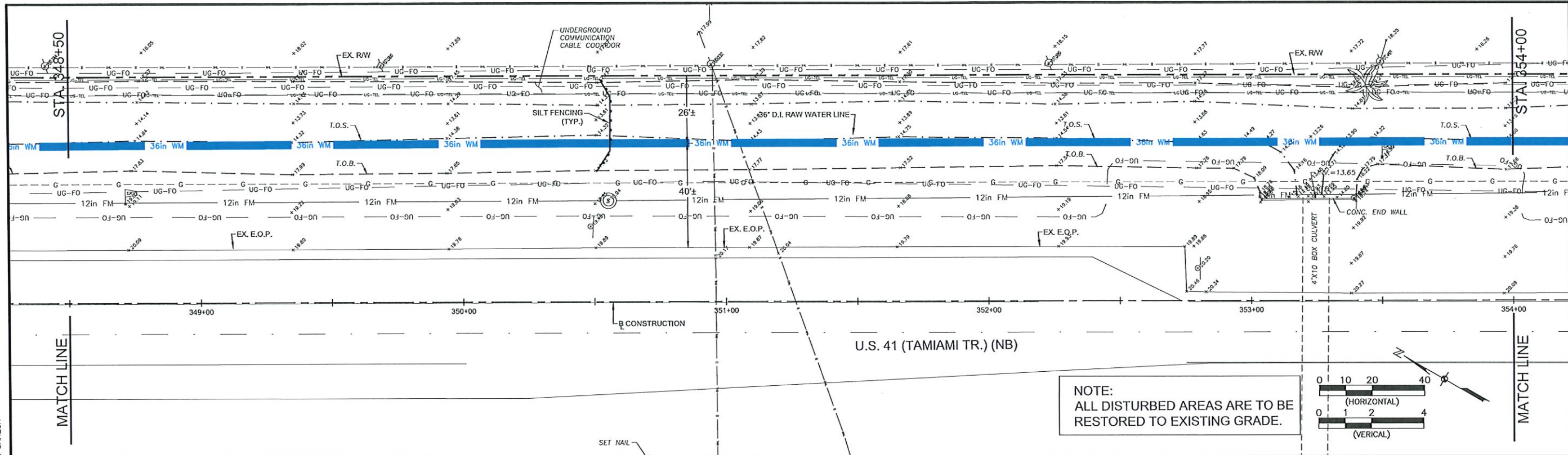
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DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

PLAN AND PROFILE

SHEET NUMBER
6.25

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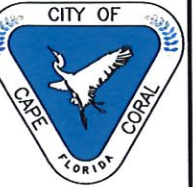
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TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

NO.	REVISIONS DESCRIPTION	DATE

DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

PLAN AND
PROFILE

SHEET NUMBER
6.30



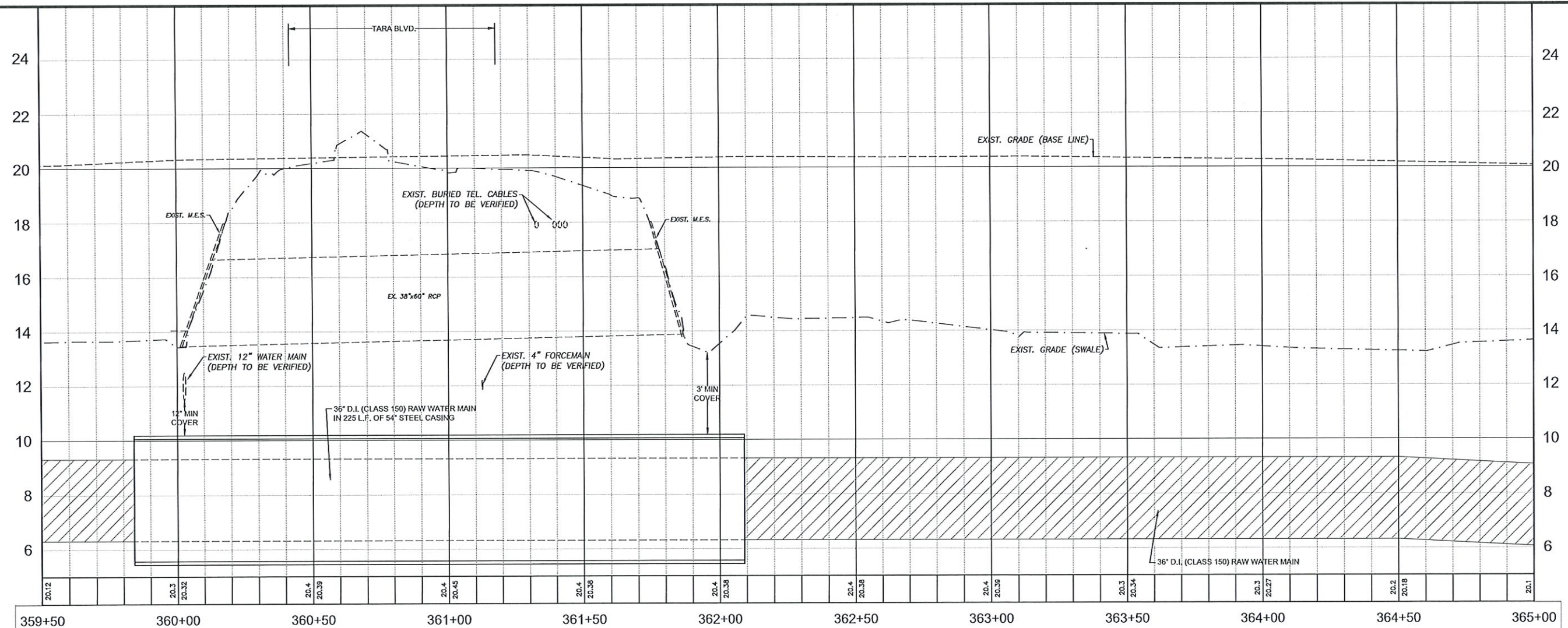
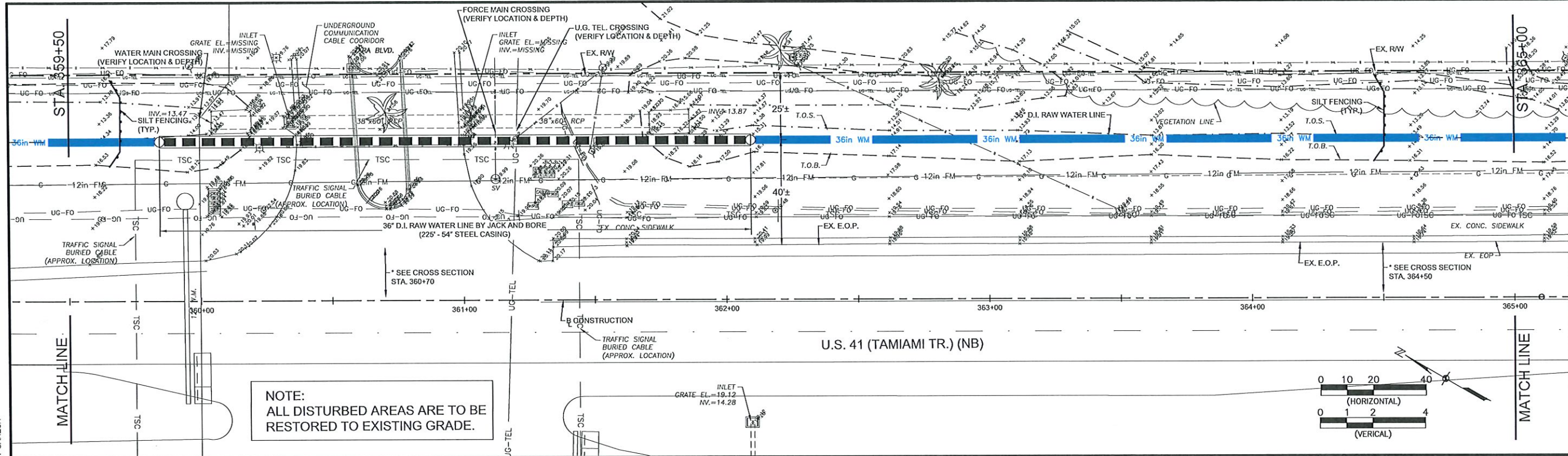
SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

REVISIONS		DATE
NO.	DESCRIPTION	
DATE:		APRIL, 2025
PROJECT NO.		15-0252.06
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SCALE:		AS NOTED

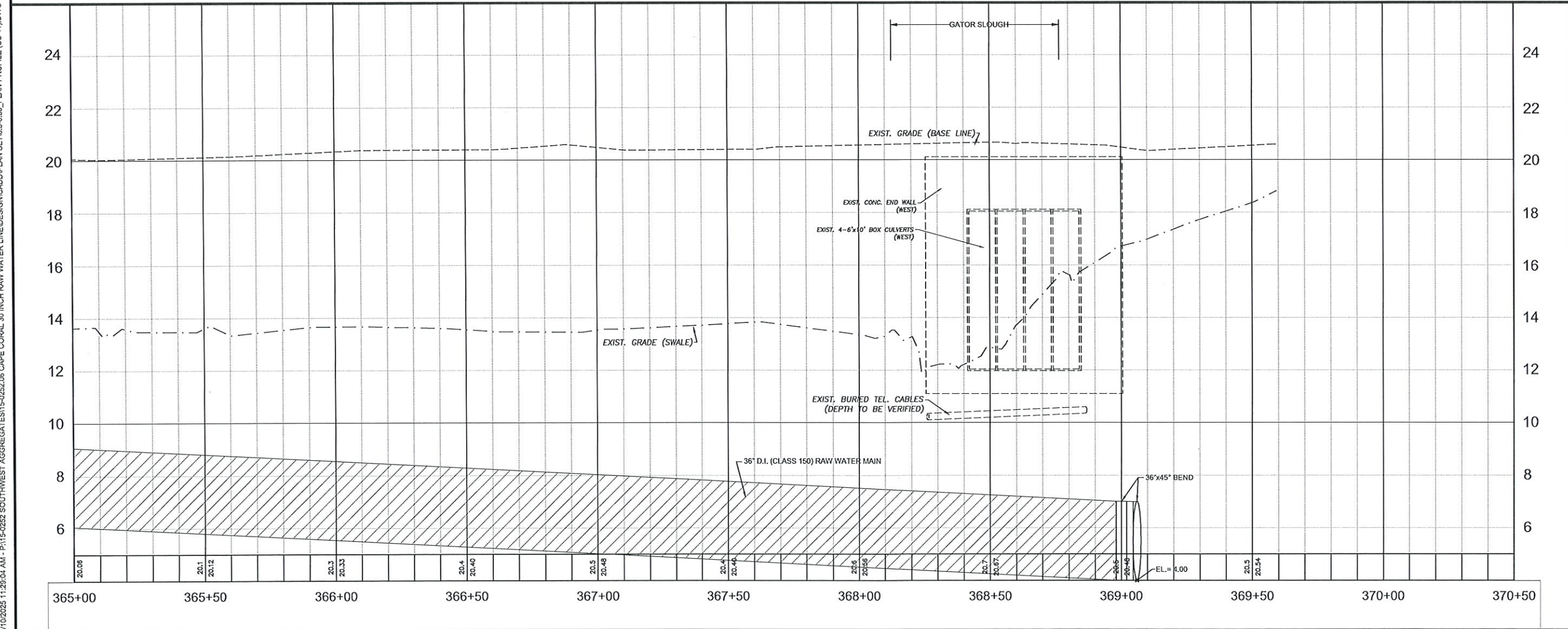
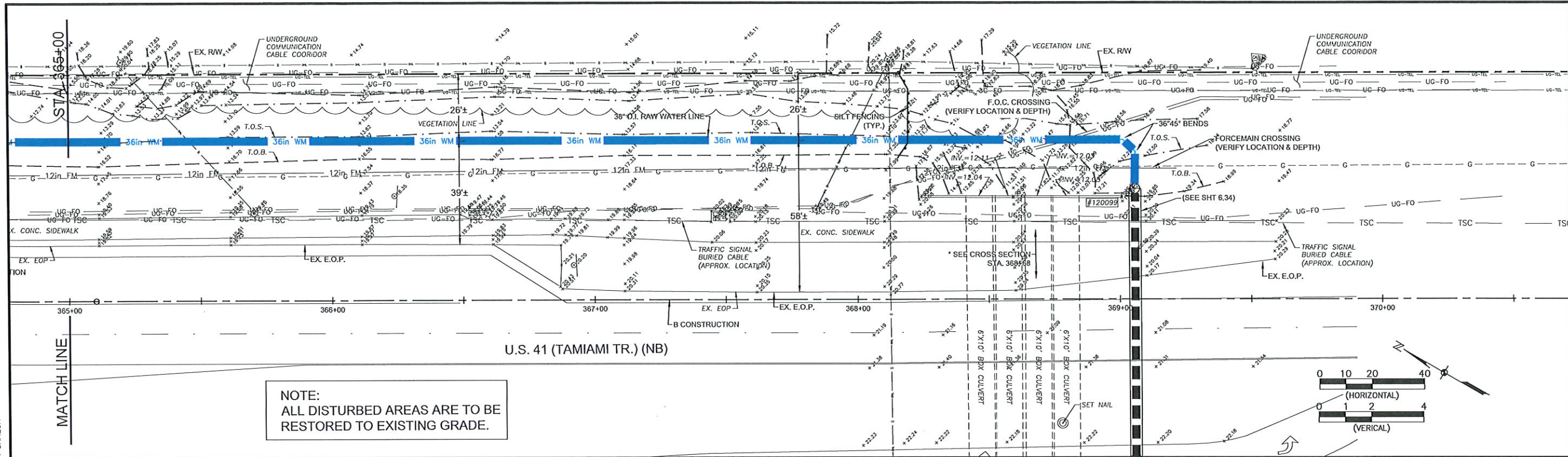
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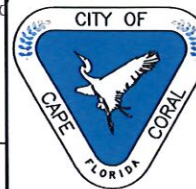


4/10/2025 11:29:04 AM - P115-0252 SOUTHWEST AGGREGATE(S) 15-0252.06 CAPE CORAL 30 INCH RAW WATER LINE DESIGN CADD PLAN SET 6.33, PLAN PROFILE (US 41) DWG - DEV GANESH



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SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

NO.	REVISIONS DESCRIPTION	DATE

PLAN AND
PROFILE

SHEET NUMBER
6.33



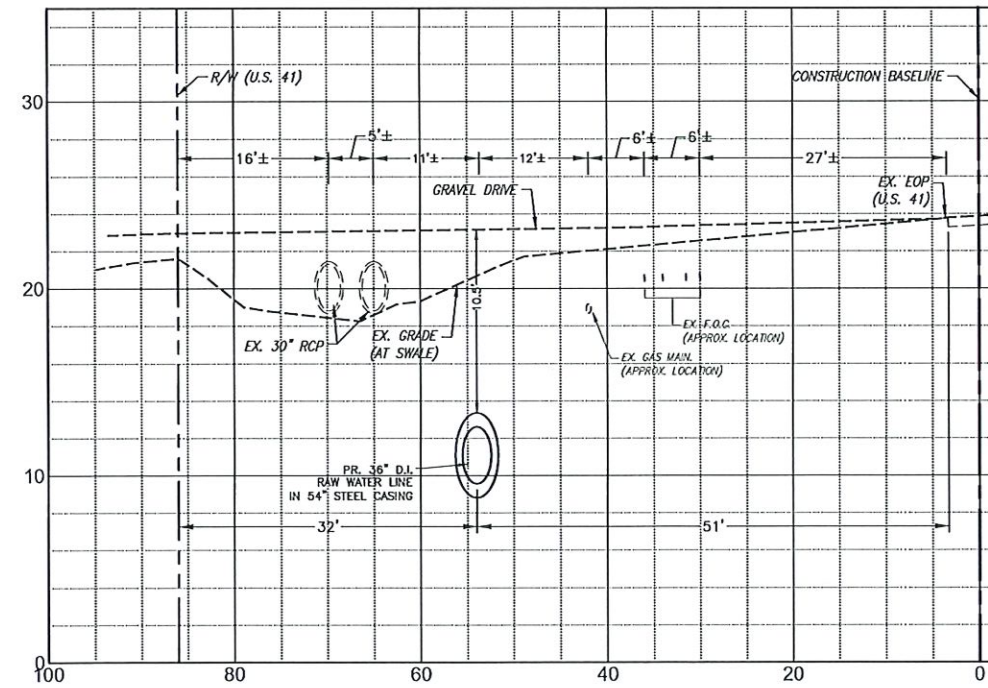
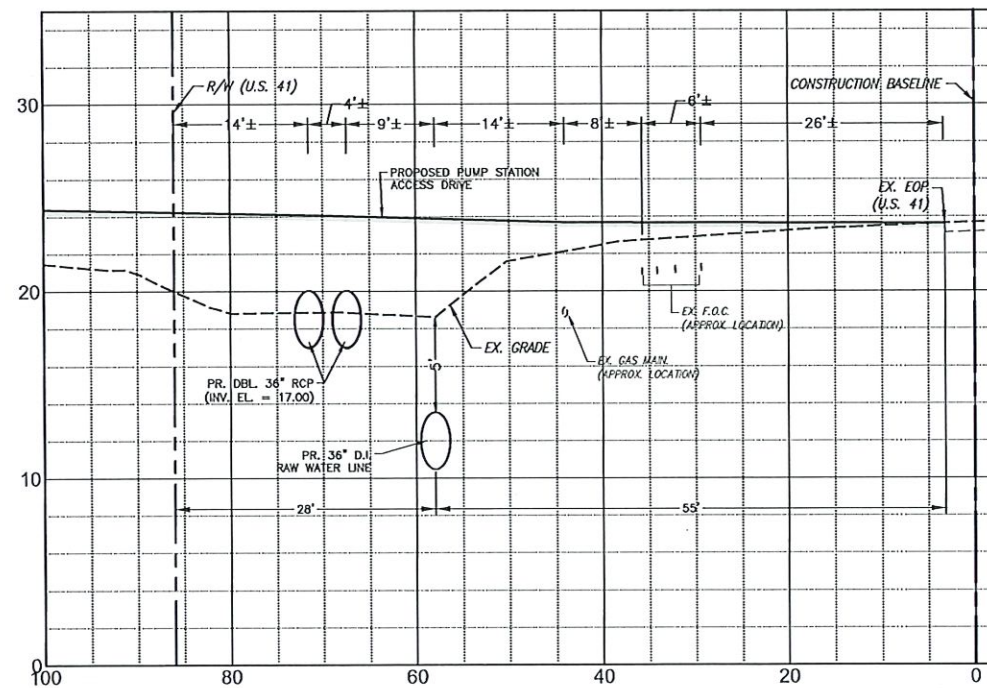
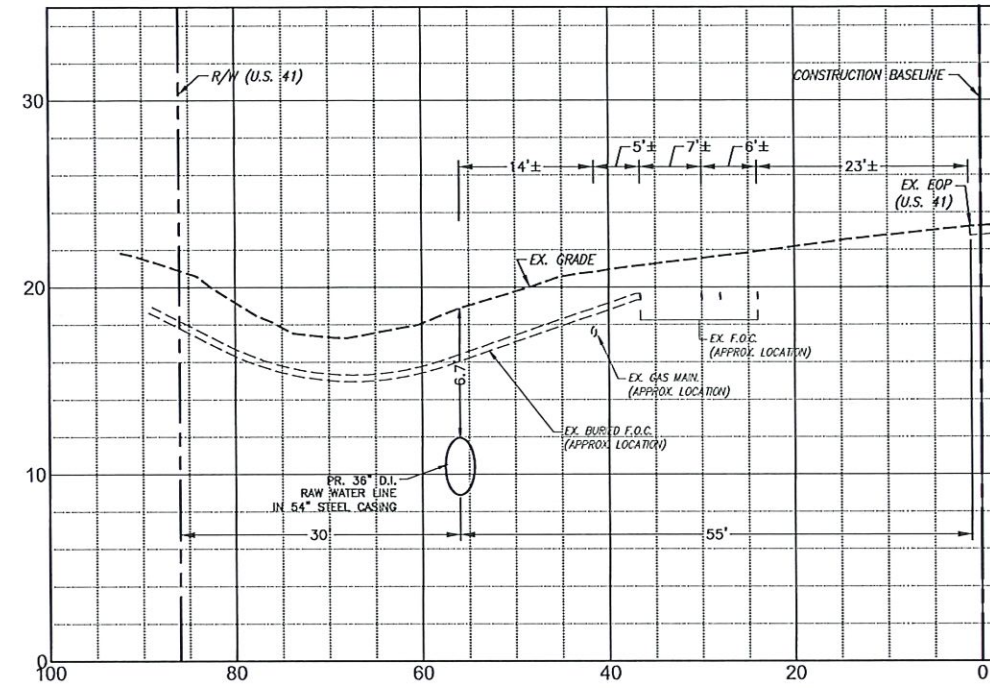
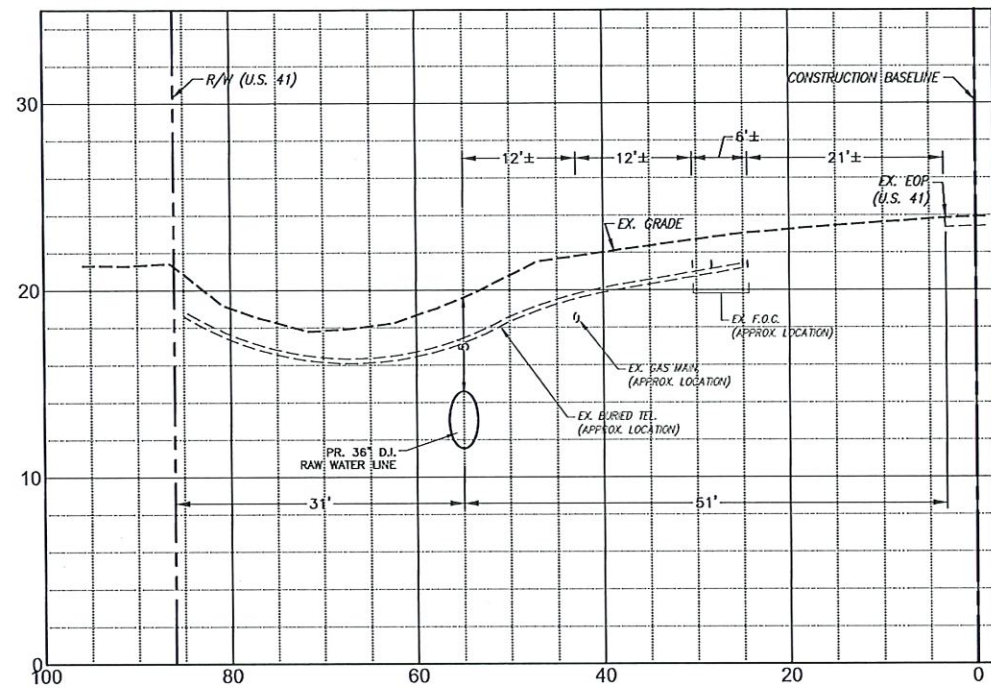
SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

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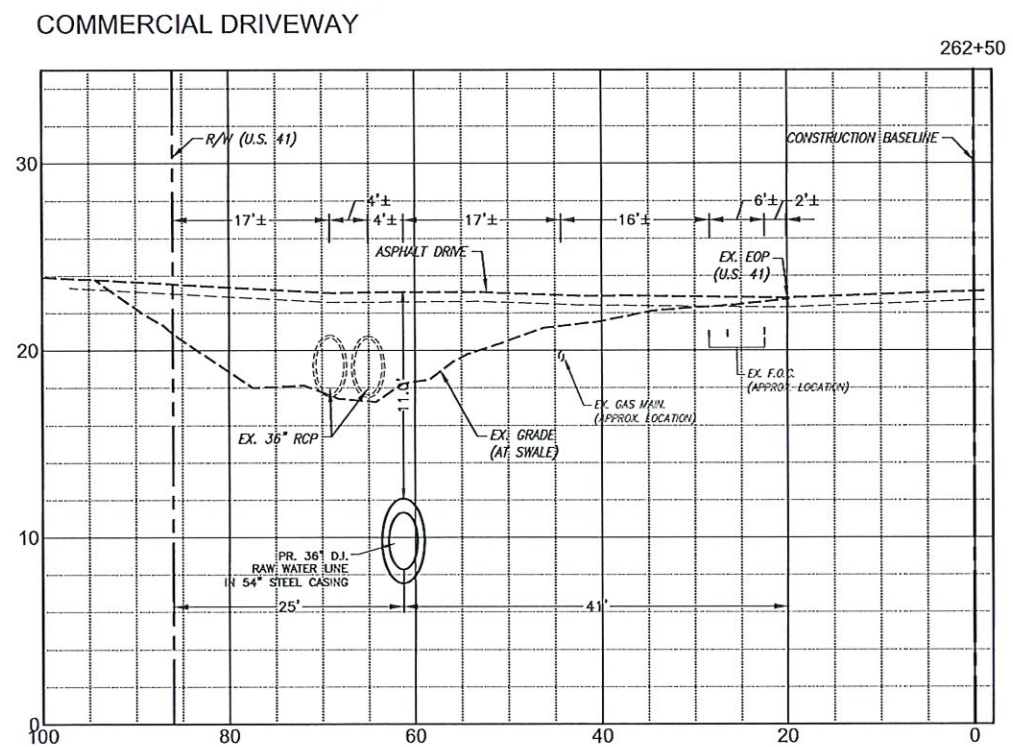
SPECIAL CROSS SECTIONS

SHEET NUMBER

7.1



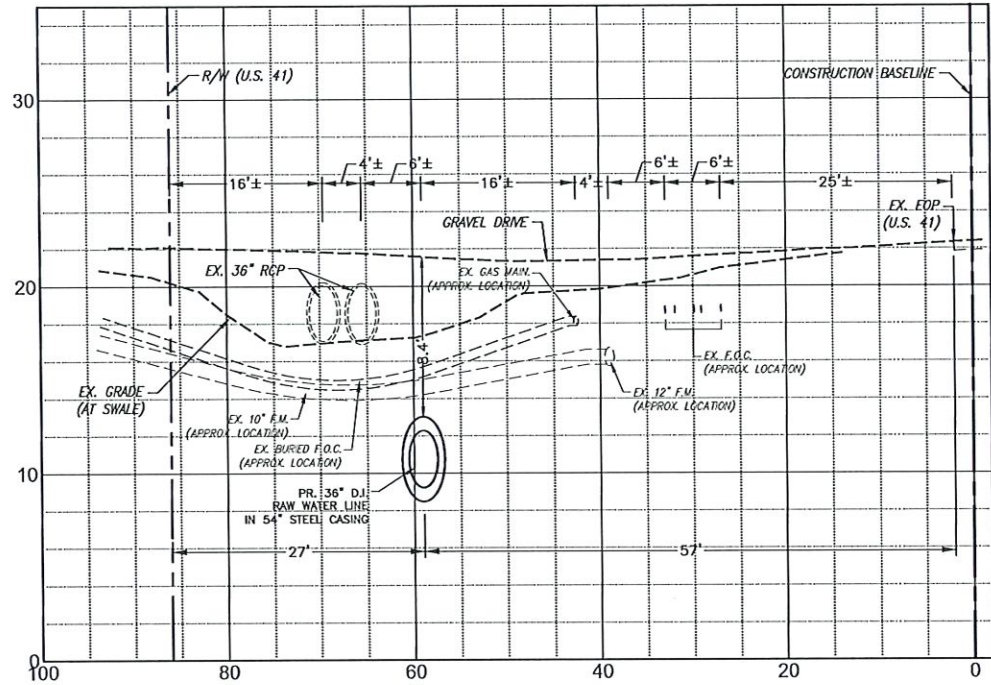
NOTE:
IT IS INCUMBENT UPON THE CONTRACTOR
PERFORMING THE WORK TO PERFORM "SOFT
DIGS" TO VERIFY DEPTH AND LOCATIONS OF
KNOWN UNDERGROUND UTILITIES.



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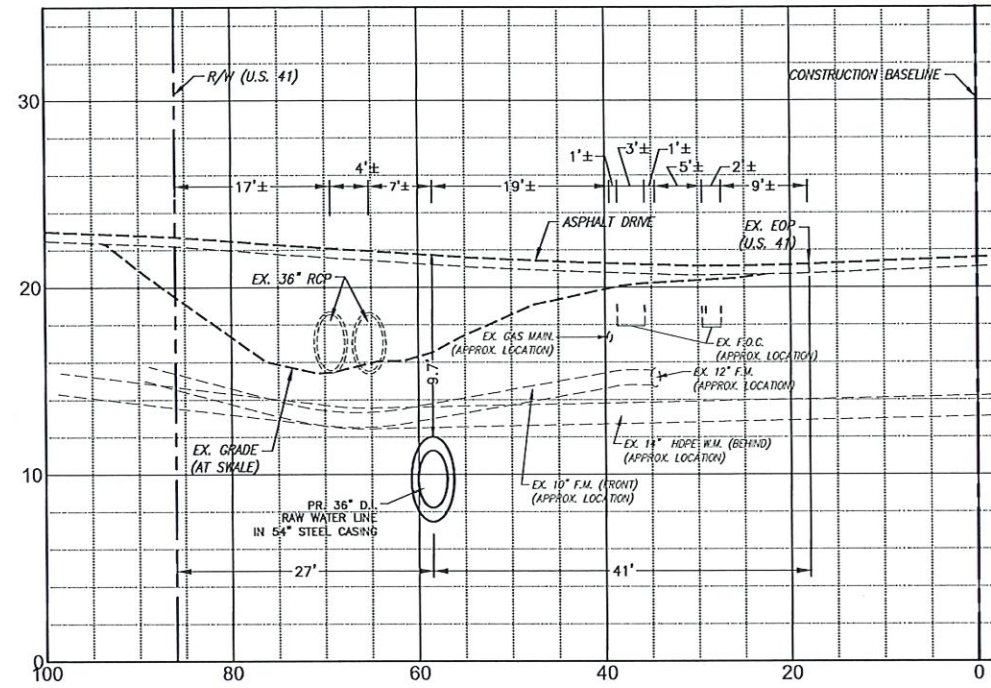
ACCESS DRIVE

288+70



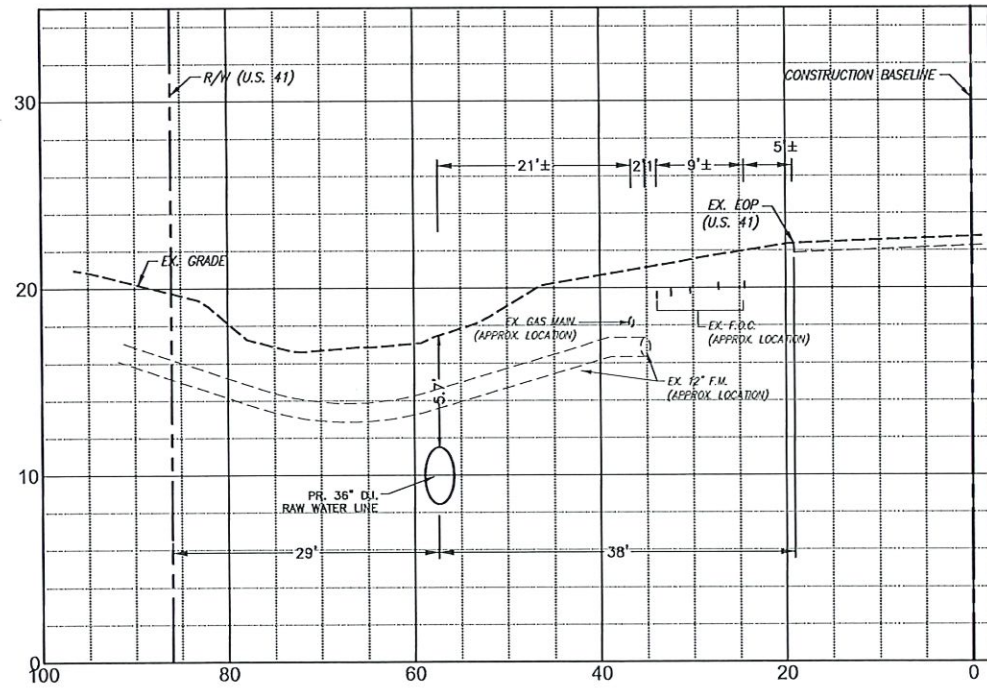
MAGNOLIA LANDING

313+05



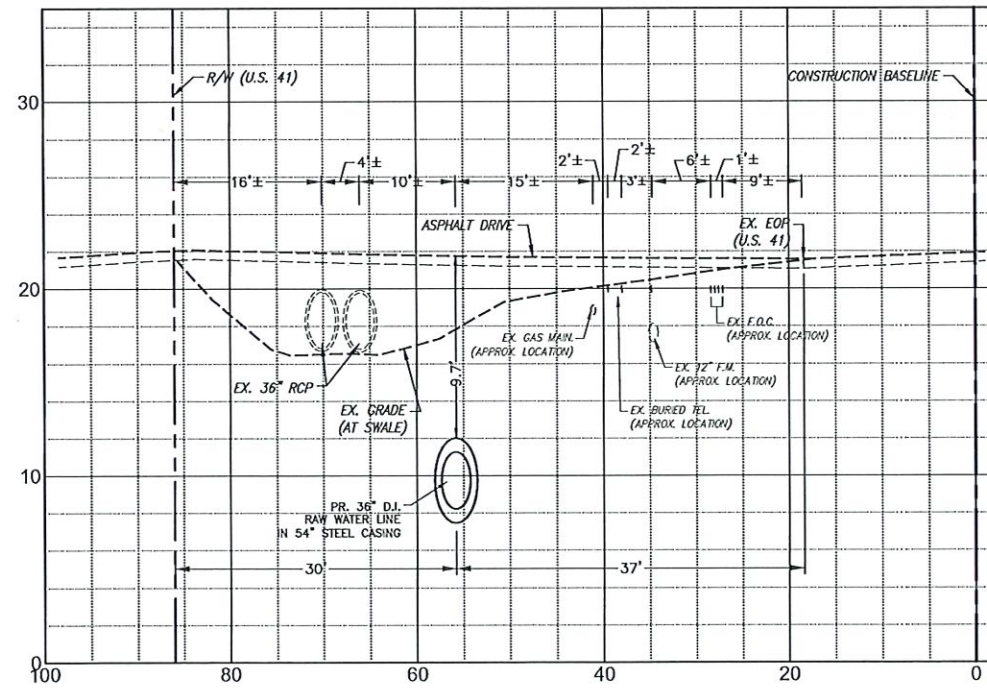
FORCEMAIN

276+39



LAKEVILLE DR.

302+65

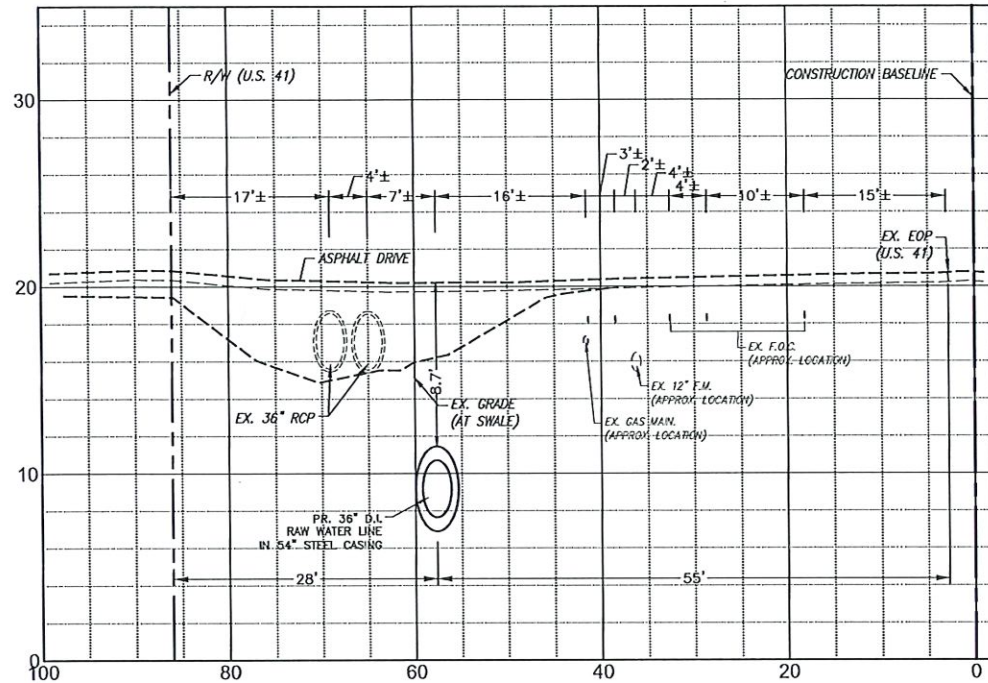


NOTE:
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DIGS" TO VERIFY DEPTH AND LOCATIONS OF
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4/10/2025 11:29:50 AM - P:\15-0252 SOUTHWEST AGGREGATES\15-0252.06 CAPE CORAL 30 INCH RAW WATER LINE\DESIGN\CADD\PLAN SET\1.7.7.7 SPECIAL X-SECTIONS.DWG - DEV GANESH

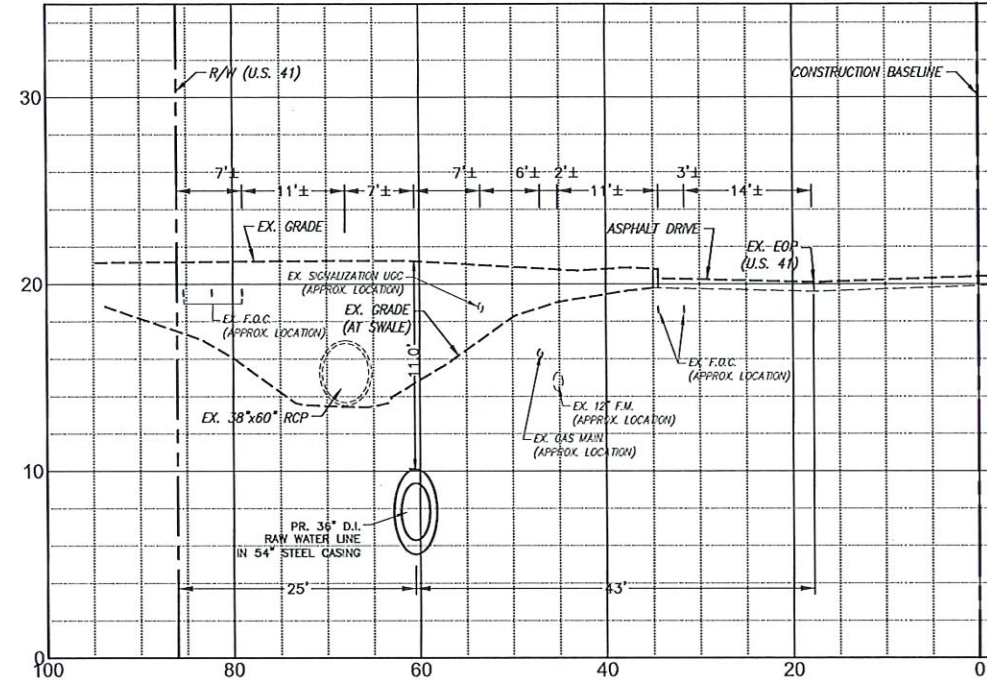
SUB STATION

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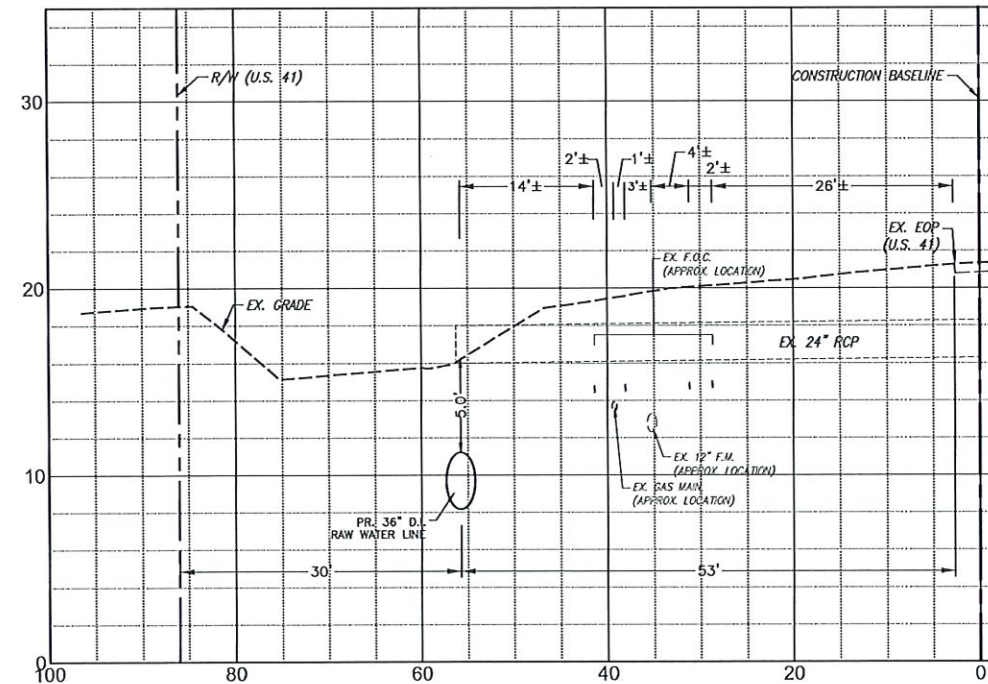
TARA BLVD.

360+70



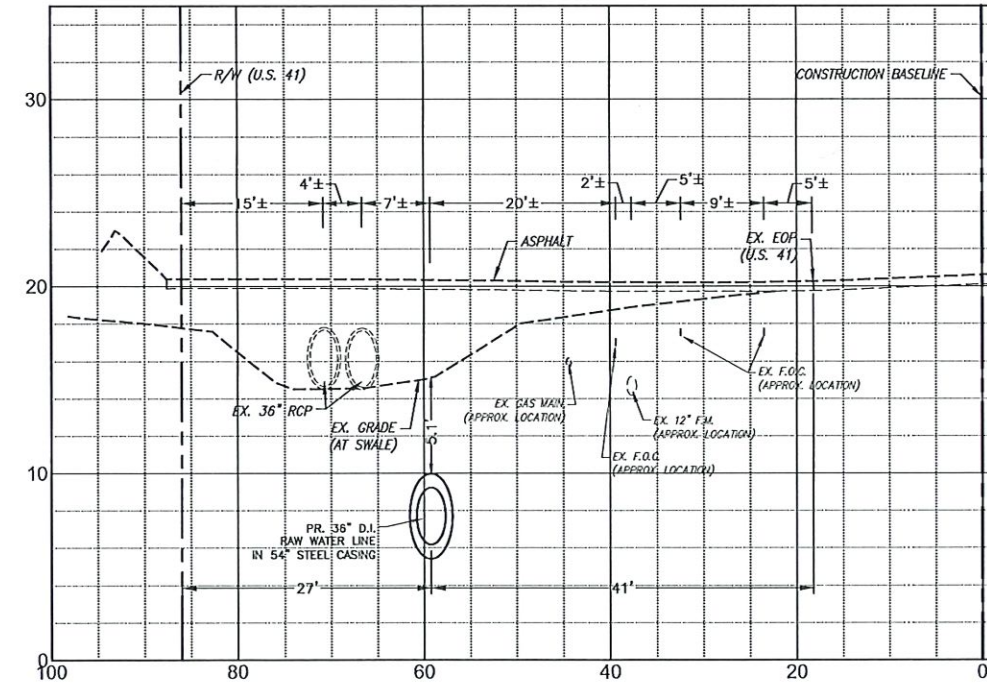
PIPE

334+63



TURNOUT

346+40



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SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

REVISIONS	DESCRIPTION	DATE
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DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO.
SCALE: AS NOTED

CROSS
SECTIONS

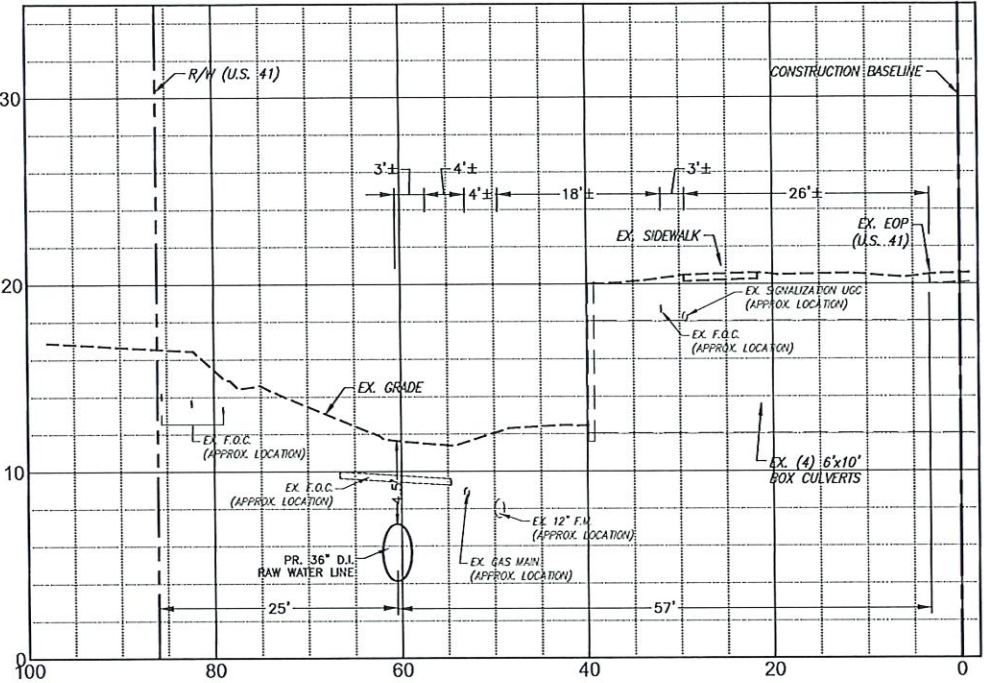
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7.4

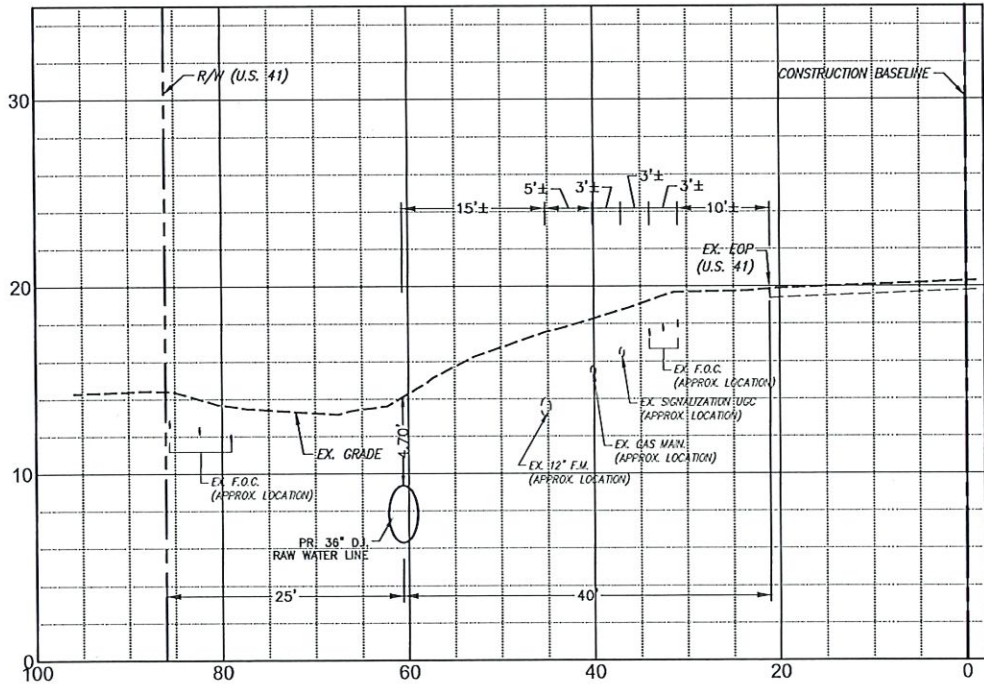
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BOX CULVERT (GATOR SLOUGH)

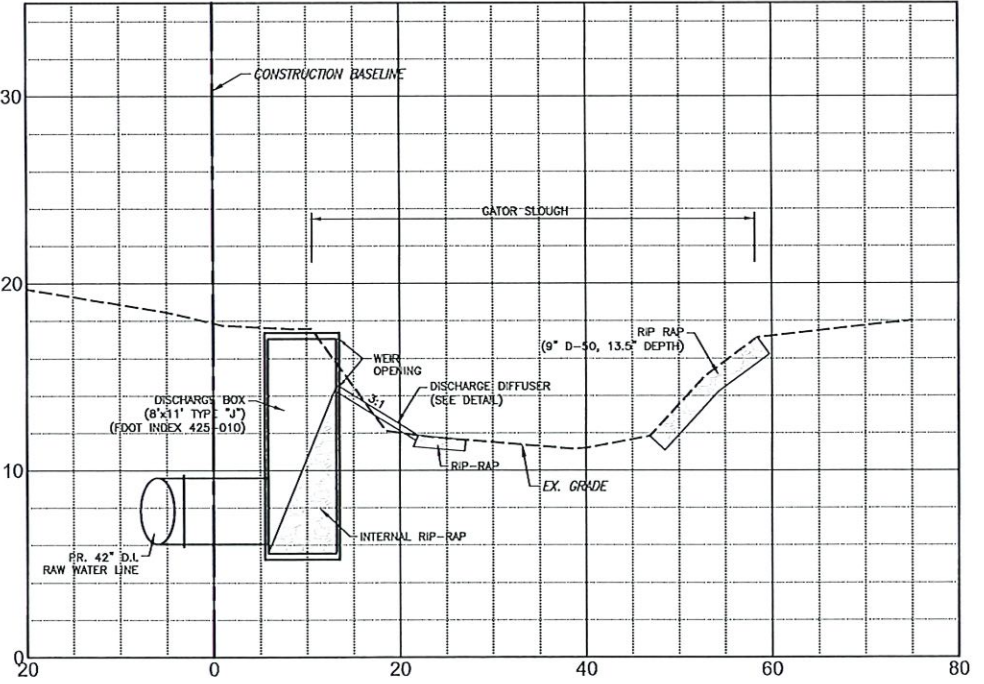
368+68



364+50



403+20.75



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0 5 10 20
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DISCHARGE BOX
GATOR SLOUGH

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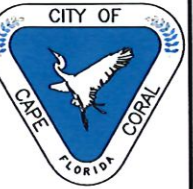
SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

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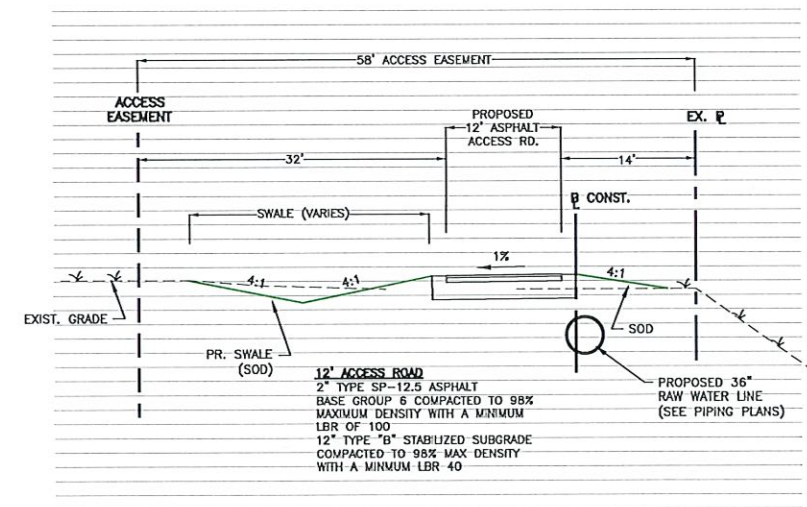
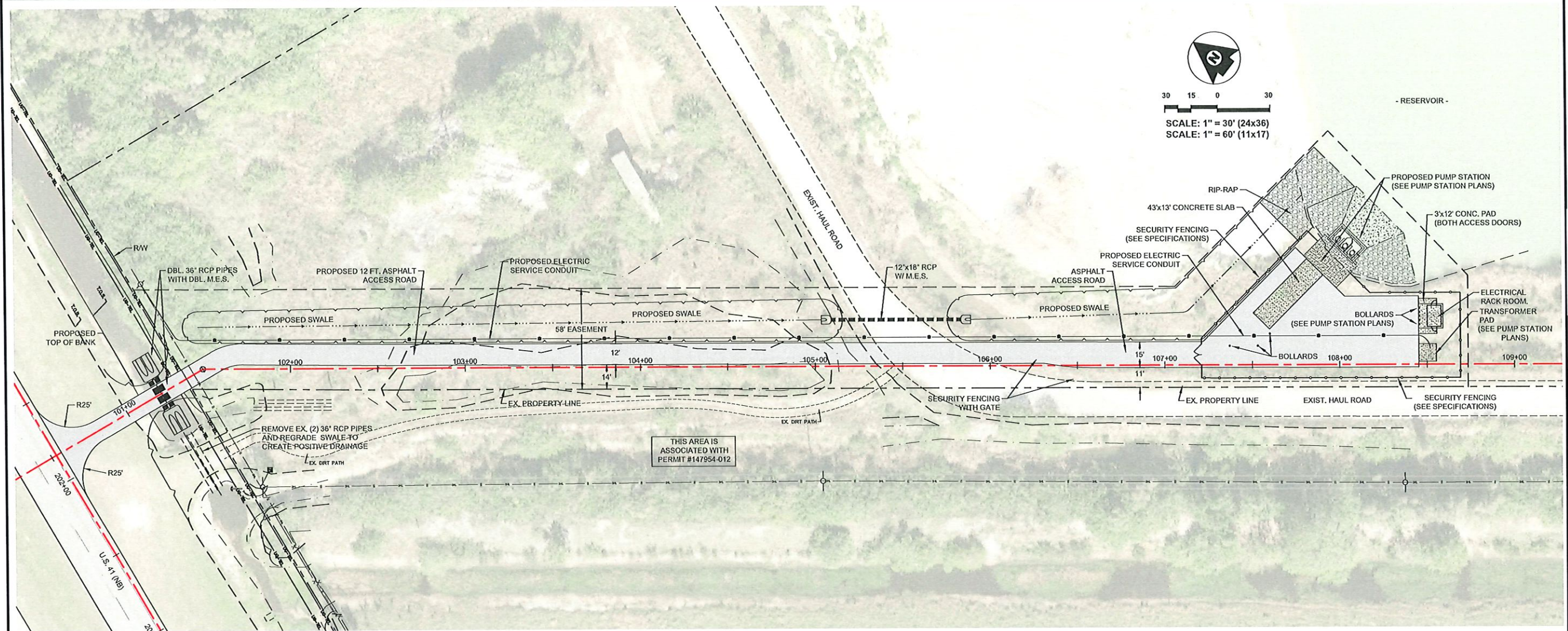
SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

REVISIONS	
NO.	DESCRIPTION DATE
DATE:	APRIL, 2025
PROJECT NO.	15-0252.06
FILE NO.	-
SCALE:	AS NOTED

PUMP STATION SITE PLAN

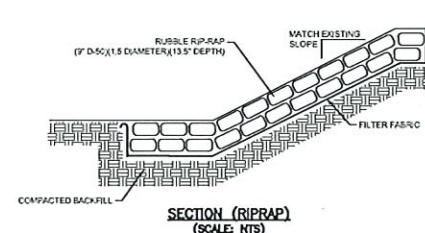
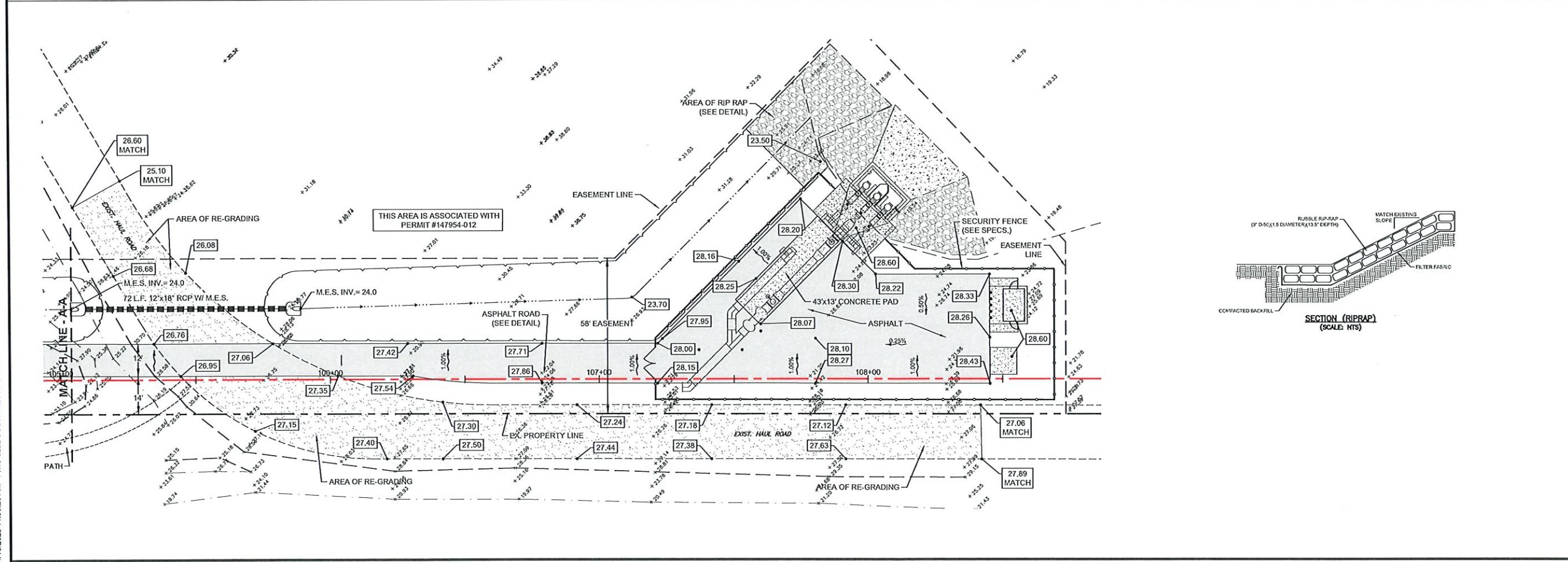
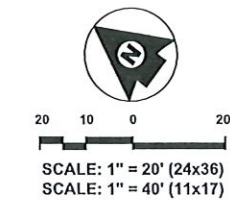
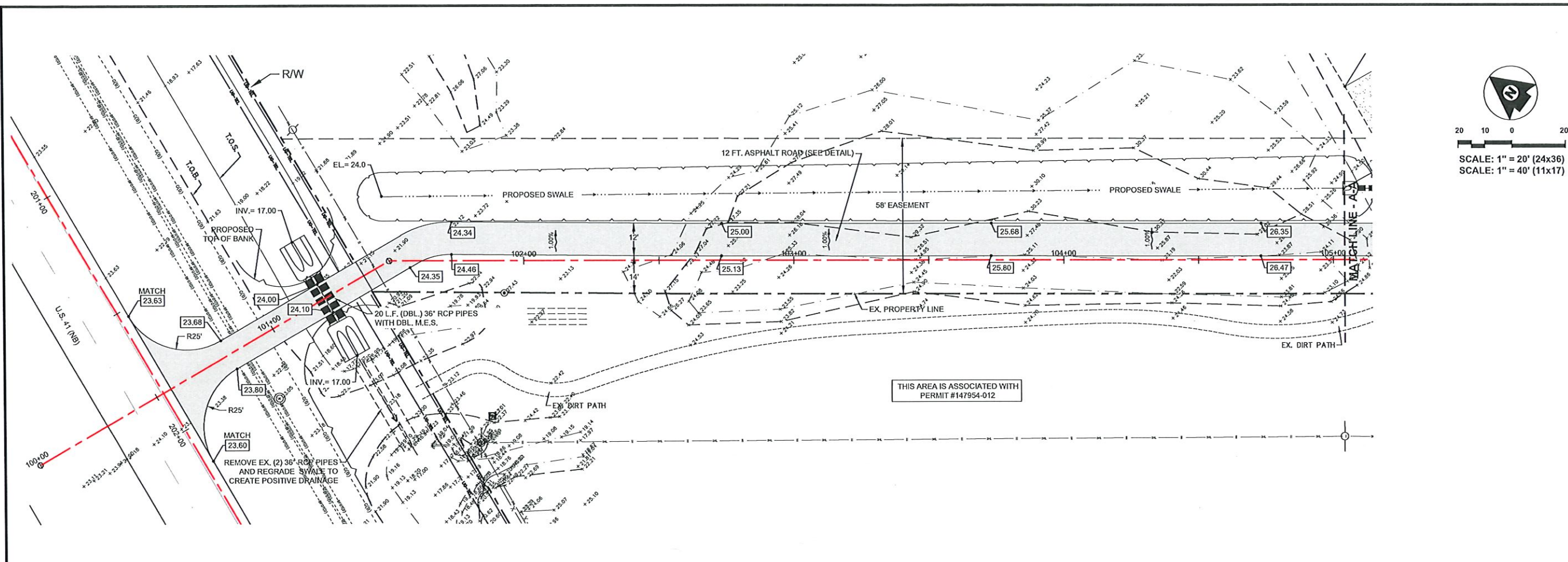
SHEET NUMBER

3.1



TYPICAL SECTION (PUMP STATION ACCESS ROAD)
(SCALE: NTS)

4/10/2025 11:30:26 AM - P115-0222 SOUTHWEST AGGREGATE SITE 15-0222.06 CAPE CORAL 30 INCH RAW WATER LINE DESIGN CADD PLAN SET 18.2 PUMP STATION SITE DRAINAGE PLAN DWG - DEV GANESH



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TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

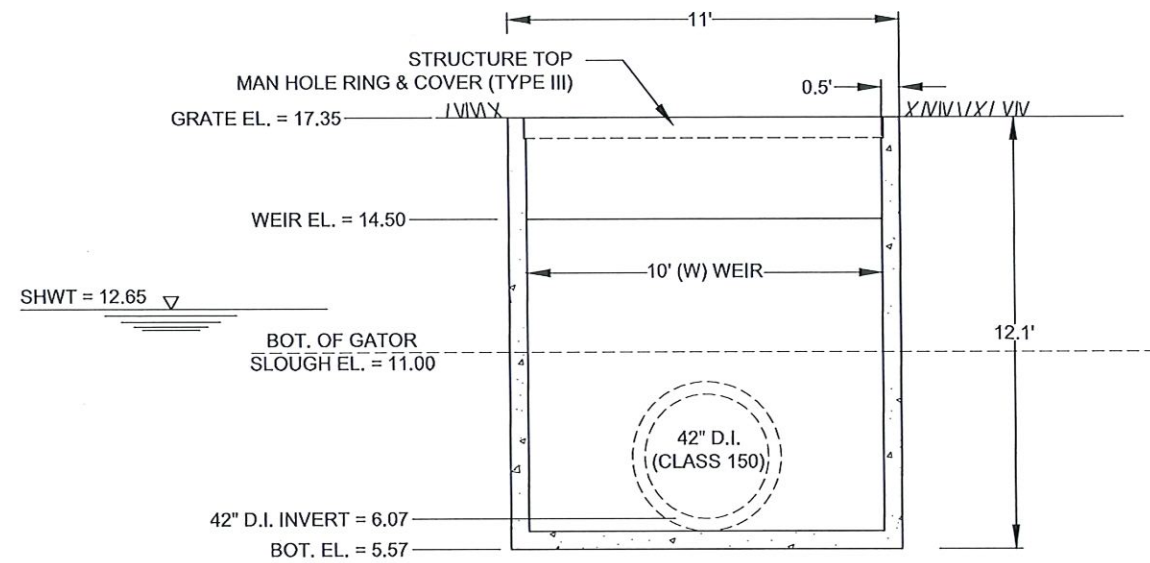
REVISIONS	DESCRIPTION	DATE
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DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

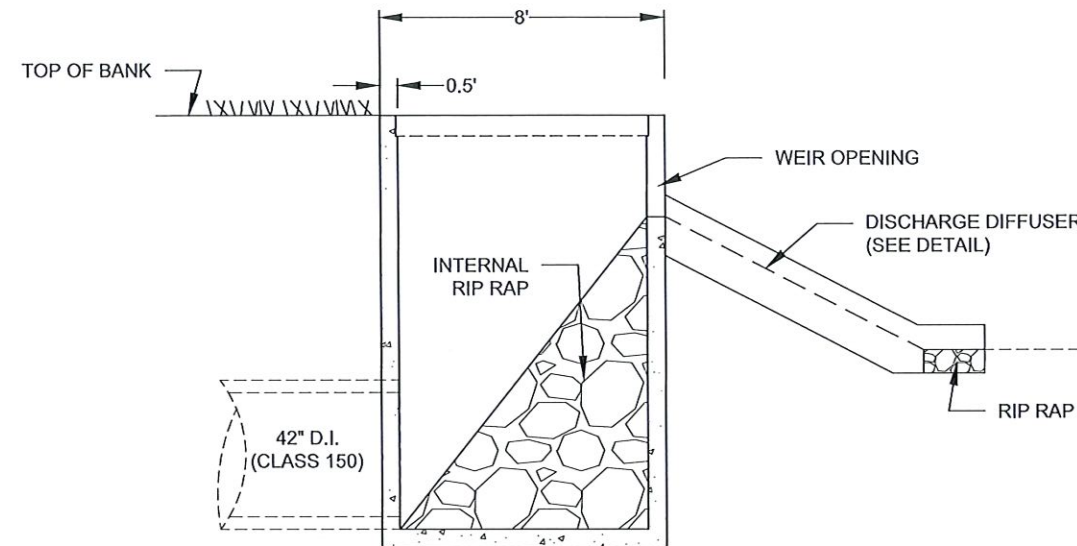
PUMP STATION
ACCESS ROAD
DRAINAGE PLAN

SHEET NUMBER
8.2

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SECTION (FRONT)

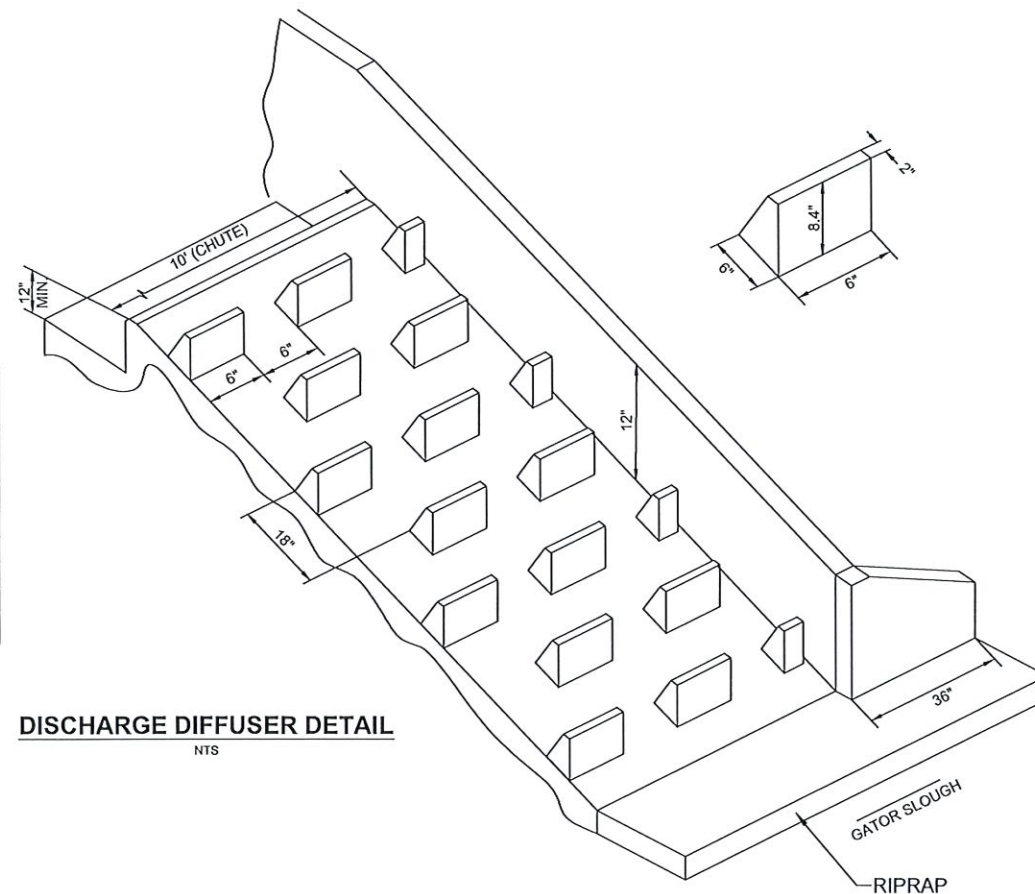


SECTION (SIDE)

GATOR SLOUGH DISCHARGE BOX
11'X11' TYPE "J" (FDOT INDEX 425-010)

NTS

DIFFUSER SUMMARY	
FLOW DEPTH ON APRON	1'
BAFFLE HEIGHT	0.7'
BAFFLE SPACING	1.5'
FIRST BAFFLE OFFSET	1.5'
APRON LENGTH	7.5'
NUMBER OF BAFFLE ROWS	5
BAFFLE PIER WIDTH	0.5'
NUMBER OF PIERS PER ROW	10
VELOCITY AT APRON EXIT	1.5'/s



DISCHARGE DIFFUSER DETAIL

NTS



SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

REVISIONS		DATE	DESCRIPTION
NO.			
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DATE:		APRIL, 2025	
PROJECT NO.		15-0252.06	
FILE NO.			
SCALE:		AS NOTED	

PROJECT
DETAILS

SHEET NUMBER
9.1



SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36" RAW WATER PIPE LINE

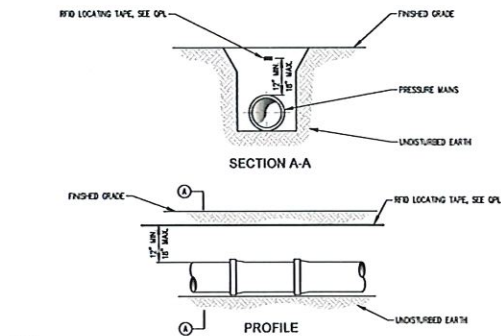
REVISIONS	DATE
DESCRIPTION	
NO.	

DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

PROJECT
DETAILS

SHEET NUMBER

9.2



- NOTES
- ALL WANS SHALL HAVE AN RFD LOCATING TAPE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE AS REQUIRED BY THE SPECIFICATIONS. TAPE SHALL BE INSTALLED DURING BACKFILLING 12" - 18" DIRECTLY ABOVE THE PIPE AND BE CONTINUOUSLY MARKED FOR THE TYPE OF PIPE (EXAMPLE: CAUTION WATER MAIN BURIED BELOW). THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS FOLLOWS:
BLUE ----- POTABLE WATER
GREEN ----- SANITARY SEWER
RED ----- SANITARY SEWER FORCE MAIN
ORANGE ----- IRRIGATION/SEWER WATER
 - PVC WANS SHALL BE A SOLID COLOR AND PERMANENTLY MARKED WITH THE MANUFACTURER'S NAME, PIPE SIZE AND/OR PRESSURE RATING.
 - ELECTRONIC MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL SECTIONS, AND SERVICES AT THE CORPORATION STOP OR SERVICE SERVICE. DO NOT INSTALL ELECTRONIC MARKER FOR CORPORATION STOPS UNLESS LOCATED UNDER EXISTING PAVEMENT. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DP FITTINGS. THE MARKERS SHALL BE:
POTABLE WATER ----- COLOR BLUE
SANITARY SEWER ----- COLOR GREEN
SANITARY SEWER FORCE MAIN ----- COLOR ORANGE
IRRIGATION/SEWER WATER ----- COLOR RED
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - RECORD DRAWINGS SHALL INCLUDE STATE PLANE COORDINATES AND ELEVATION FOR EACH ELECTRONIC MARKER.

UG-103 PIPE LOCATION TAPE, STRIPING AND MARKERS
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		PIPE LOCATION TAPE, STRIPING AND MARKERS	UG-103

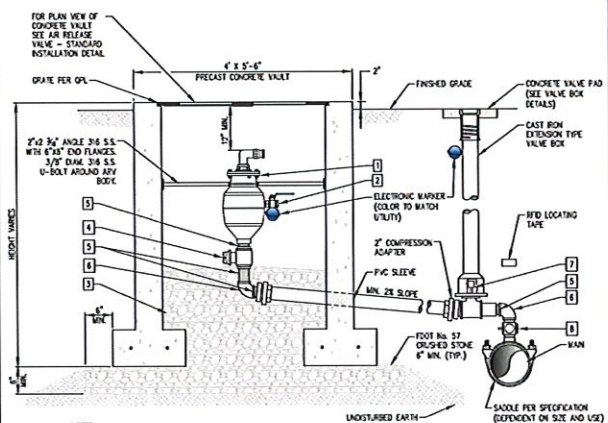
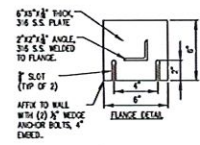
PIPE DIA (INCHES)	RESTRAINED LENGTH EACH SIDE OF RESTRAINED FITTING (FEET)								RESTRAINED LENGTH FOR REDUCERS (FEET)									
	DIP				PVC				SMALL END (INCHES)									
	90°	45°	22-1/2°	11-1/4°	90°	45°	22-1/2°	11-1/4°	4	6	8	10	12	16	20	24	30	36
4	35	15	10	5	55	25	20	10	*	*	*	*	*	*	*	*	*	*
6	55	25	10	5	80	35	20	20	46	*	*	*	*	*	*	*	*	*
8	65	30	15	10	90	40	20	20	74	51	*	*	*	*	*	*	*	*
10	80	35	20	10	110	50	25	20	97	79	53	*	*	*	*	*	*	*
12	98	40	20	10	130	55	30	20	120	105	84	56	*	*	*	*	*	*
16	136	65	25	15	165	70	35	20	*	152	136	116	91	*	*	*	*	*
20	173	100	30	15	200	104	40	20	*	197	184	168	148	96	*	*	*	*
24	209	134	35	20	216	139	45	25	*	240	229	215	199	156	101	*	*	*
30	263	154	41	20	275	194	50	25	*	305	297	285	272	237	193	138	*	*
36	317	235	66	25	333	248	95	30	*	*	*	*	*	312	275	229	146	*
42	368	283	129	25	388	300	140	30	*	*	*	*	*	*	348	309	238	151
48	420	331	172	30	444	352	187	35	*	*	*	*	*	*	419	385	323	247

RESTRAINED LENGTHS FOR VALVES, PLUGS, DEAD ENDS, TEE BRANCHES AND HOPE TO PVC TRANSITIONS SHALL BE THE SAME AS FOR 90° BENDS.
RESTRAINED LENGTHS FOR WYES SHALL BE THE SAME AS FOR 45° BENDS.
IF A JOINT FALLS AT THE MAXIMUM DISTANCE, IT SHALL BE RESTRAINED.
TABLE BASED ON DUCTILE IRON FITTINGS WITH A TEST PRESSURE 150 PSI AND 36" OF PIPE COVER.
** REDUCER SIZE NOT AVAILABLE.

UG-105 RESTRAINED JOINT SCHEDULE
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		RESTRAINED JOINT SCHEDULE	UG-105

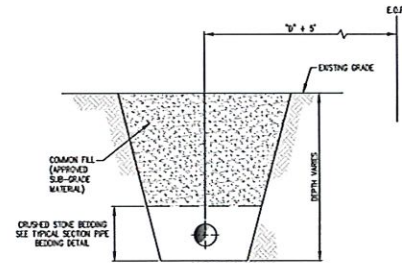
ITEM	QTY	DESCRIPTION
1	1	2" AIR & VAC RELEASE VALVE
2	1	3/4" CURB STOP
3	1	DRAINAGE BED, #17 STONE
4	1	2" FEM TO FEM CURB STOP
5	4	2" BRASS NIPPLE
6	2	2" BRASS 90° FITTING
7	1	2" RSG VALVE W/ SQUARE NUT
8	1	2" BRASS CORP STOP (M.I.P. ENDS)



- NOTES
- ALL PIPING, VALVES, AND APPURTENANCES TO BE BRASS OR 316 SS EXCEPT WHERE SPECIFIED OTHERWISE.
 - OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE AND CLEAR OF PEDESTRIAN WALKWAYS. IF PIPE AT RIGHT OF WAY LINE, NO OFFSET REQUIRED.
 - SEE QUALIFIED PRODUCTS LIST FOR SPECIFIC TYPE.

UG-226 AIR RELEASE VALVE - OFFSET INSTALLATION
NOT TO SCALE

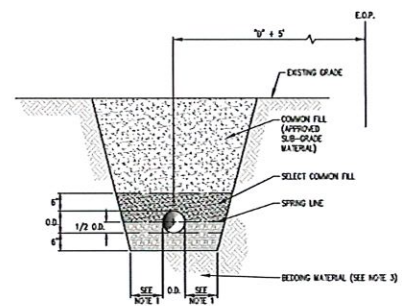
REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		AIR RELEASE VALVE OFFSET INSTALLATION	UG-226



- NOTES
- COMMON FILL (APPROVED SUB-GRADE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99) WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 7' ± 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY. COMMON FILL (APPROVED SUB-GRADE MATERIAL) (BIR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99).

UG-231 TYPICAL SECTION: BACKFILL - UNPAVED AREAS
NOT TO SCALE

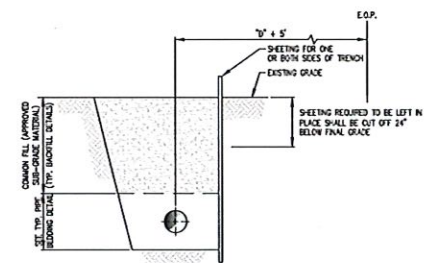
REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		TYPICAL SECTION BACKFILL - UNPAVED AREAS	UG-231



- NOTES
- DIMENSION VARIES WITH PIPE DIAMETER:
12" FOR NOMINAL PIPE DIAMETER OF 34" OR LESS
12" FOR NOMINAL PIPE DIAMETER OF MORE THAN 34" AND LESS THAN 42"
24" FOR NOMINAL PIPE DIAMETER OF 42" OR MORE.
 - COMMON FILL (APPROVED SUB-GRADE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99) WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 7' ± 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY. COMMON FILL (APPROVED SUB-GRADE MATERIAL) (BIR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99).
 - BEDDING MATERIAL SHALL BE FOOT #17 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #1 STONE IF ABOVE THE GROUNDWATER TABLE.
 - BEDDING FOR GRAVITY SEWER SHALL BE #17 STONE.
 - PROVIDE A "STONE BREAK" AT EVERY 100' TO PREVENT GROUNDWATER CONVEYANCE. SAND BREAK SHALL BE A MINIMUM 24" WIDE.

UG-232 TYPICAL SECTION: PIPE BEDDING DETAIL
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		TYPICAL SECTION PIPE BEDDING DETAIL	UG-232



- NOTES
- SHORING MAY BE UTILIZED AT CONTRACTOR'S DISCRETION & EXPENSE AS REQUIRED.
 - COMMON FILL (APPROVED SUB-GRADE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99) WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 7' ± 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY. COMMON FILL (APPROVED SUB-GRADE MATERIAL) (BIR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-99).

UG-234 TYPICAL SECTION: TRENCH SHORING
NOT TO SCALE

REVISION DATE	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 80027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
07-14-2022 ADOPTION DATE 08-17-2022		TYPICAL SECTION TRENCH SHORING	UG-234

4/10/2025 11:30:42 AM - P:\15-0252 SOUTH-WEST AGGREGATE\15-0252.06 CAPE CORAL 30 INCH RAW WATER LINE\DESIGN\CADD\PLAN SET\10.0 BMP SHEET.DWG - DEV GANESH

EROSION CONTROL NOTES

1. GENERAL

- a) THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, TOOLS, MATERIALS AND SERVICES NEEDED TO INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES. THESE MEASURES SHALL CONFORM TO THE PLANS AND SPECIFICATIONS AND ALL APPLICABLE STATE AND LOCAL REQUIREMENTS.
- b) EROSION AND SEDIMENT CONTROL BMPs IN ADDITION TO THOSE PRESENTED ON THE PLANS AND OUTLINED IN THE EROSION AND SEDIMENT CONTROL PLAN (ECP) OR STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFFSITE STORMWATER CONVEYANCES, OR OFFSITE RECEIVING WATERS. BMPs SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
- c) OFF SITE SURFACE WATER DISCHARGES WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES (SWFWMD) WITHIN 24 HOURS OF THE OCCURRENCE (1-800-836-0797) THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
- d) THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONTAINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-298.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
- e) FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES (SWFWMD) AT (1-800-836-0797). SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.

2. WETLAND PROTECTION

- IN AREAS OF CONSTRUCTION ADJACENT TO WETLANDS, THE FOLLOWING SHALL BE PERFORMED:
- a) THE ACTUAL WETLAND AND REQUIRED BUFFERS, AS SHOWN ON THE PLANS, MUST BE ESTABLISHED AND ROPED OFF PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY ADJACENT TO SAID AREAS.
- b) PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL ADJACENT TO WETLANDS OR BUFFER AREAS, A SILTATION BARRIER SHALL BE CONSTRUCTED.
- c) NO RIN DITCHING OF THE WETLANDS SHALL BE PERFORMED. WATER LEVELS IN THE WETLANDS SHALL BE MAINTAINED ACCORDING TO LEVELS EXISTING PRIOR TO SITE DISTURBANCE.
- d) IN AREAS OF WETLANDS IN WHICH WORK IS TO BE PERFORMED, SUCH AREAS MUST BE CLEARLY STAKED AND ROPED OFF. ALONG SUCH LIMITS, A SILTATION BARRIER MUST BE CONSTRUCTED.
- e) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BARRIERS. BARRIERS SHALL REMAIN IN PLACE UNTIL ALL AREAS ARE STABILIZED.
- f) THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISTURBANCE OF WETLAND AREAS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ALL PROTECTED AREAS.
- g) AREAS WHERE IMPACTS WILL BE PERFORMED SHALL BE STRIPPED OF EXISTING MATERIAL AND STOCKPILED FOR USE IN THE RE-CREATION OF THE DISTURBED AREAS OR IN LITTORAL ZONES.

3. EARTH MOVING ACTIVITIES

- a) THE CONTRACTOR SHALL EXERCISE CARE TO PRESERVE THE NATURAL LANDSCAPE AND SHALL PLAN CONSTRUCTION OPERATIONS SO AS TO PREVENT ANY UNNECESSARY DESTRUCTION, SCARING, OR DEFACING OF THE NATURAL SURROUNDINGS. EXCEPT WHERE CLEARING IS REQUIRED FOR PERMANENT WORK, FOR APPROVED CONSTRUCTION ROADS, OR FOR EXCAVATION OPERATIONS, ALL TREES, NATIVE SHRUBBERY AND VEGETATION SHALL BE PRESERVED AND SHALL BE PROTECTED FROM DAMAGE WHICH MAY BE CAUSED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS AND EQUIPMENT.
- b) THE FIRST STAGE OF THE EARTH MOVING ACTIVITY SHALL BE CONFINED TO THE EXCAVATION OF THE STORMWATER FACILITY.
- c) TOPSOIL SHOULD BE TAKEN FROM THE CONSTRUCTION AREAS AND SHOULD BE STOCKPILED FOR REUSE IN FINISHED GRADING. STOCKPILES SHOULD BE PLACED SO AS NOT TO ADD ANY ADDITIONAL SEDIMENT TO THE CONSTRUCTION.
- d) GRADED AREAS ARE TO BE SODDED WITHIN THIRTY (30) DAYS FOLLOWING EARTH MOVING PROCEDURES.
- e) TEMPORARY DIVERSION BERMS AND/OR BARRIERS SHALL BE REMOVED ONLY AFTER THE CONSTRUCTION OF THOSE AREAS DIRECTED TO THE BERMS AND/OR BARRIERS HAVE BEEN COMPLETED.
- f) THE SILT COLLECTION PONDS SHOULD BE REMOVED AND/OR REGRADED FOR PERMANENT USE, AS THE FINAL GRADING AND SODDING OVERLAP THE AREA USED BY SAME.

4. FILLS

- a) LAND TO BE CUT OR FILLED SHOULD BE CLEARED OF TREES, STUMPS, ROOTS, BRUSH, BOULDERS, SOD AND DEBRIS.
- b) FILL AREAS SHOULD BE SCARIFIED, KEYED AND DRAINED.
- c) FILL MATERIAL SHOULD BE FREE OF SOD, ROOTS, OR OTHER DECOMPOSABLE MATERIAL.
- d) THE PLACING AND SPREADING OF FILL MATERIAL SHOULD BE STARTED AT THE LOWEST POINT.
- e) GENERALLY, A 6:1 SLOPE SHOULD BE USED UNLESS SPECIFIC ENGINEERING DATA SHOWS A STEEPER SLOPE IS STABLE. SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL AND MAINTENANCE.
- f) FILLS SHOULD BE SODDED IMMEDIATELY UPON COMPLETION OF EARTH PLACEMENT.
- g) WATER MANAGEMENT SYSTEMS SHOULD BE PROVIDED TO PREVENT WATER CONCENTRATION AND ERODING THE FACE OF THE SLOPE. KEEP SURFACE WATER OFF THE FACE OF THE SLOPE.

5. CUTS

- a) DIVERSIONS SHOULD BE CONSTRUCTED AT TOP OF THE SLOPES PRIOR TO CUTTING OPERATIONS TO CONVEY WATER FROM FACE OF SLOPE.
- b) STEEPNESS OF CUTS WILL DEPEND ON SOIL TYPE AND DESIGN; HOWEVER, CUT SLOPES OF 4:1 OR FLATTER ARE DESIRABLE FOR EROSION CONTROL AND STABILITY.
- c) CUT SLOPES SHOULD BE SODDED IMMEDIATELY AFTER REMOVAL OF EARTH.

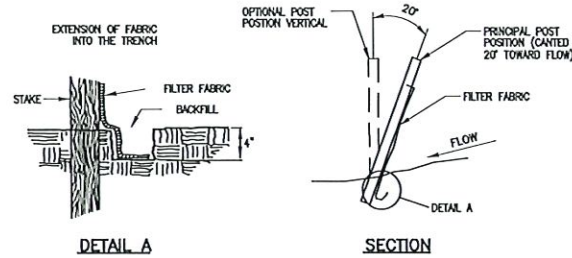
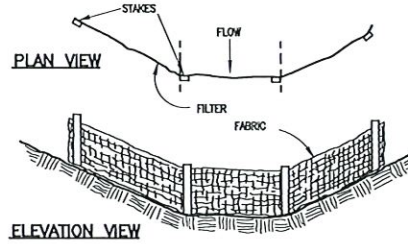
6. TEMPORARY SEDIMENT BASIN AND PERMANENT STORMWATER BASINS

- a) SITE PREPARATION: AREAS UNDER THE EMBANKMENT AND ANY STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIALS. IN ORDER TO FACILITATE CLEAN-OUT AND RESTORATION, THE POOL AREA (MEASURED AT THE TOP OF THE SPILLWAY) WILL BE CLEARED OF ALL BRUSH AND TREES.
- b) CUT-OFF TRENCH: A CUT-OFF TRENCH, WHEN POND DEPTHS ARE IN EXCESS OF THREE FEET, SHALL BE EXCAVATED ALONG THE CENTERLINE OF EARTH FILL EMBANKMENTS. THE MAXIMUM DEPTH SHALL BE TWO FEET. THE CUT-OFF TRENCH SHALL EXTEND UP BOTH ABUTMENTS TO THE RISER CREST ELEVATION. THE MINIMUM BOTTOM DEPTH SHALL BE FOUR FEET, BUT WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT. THE SIDE SLOPES SHALL BE NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR THE EMBANKMENT. THE TRENCH SHALL BE DEWATERED DURING THE BACKFILLING-COMPACTION OPERATIONS.
- c) EMBANKMENT: THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED BORROW AREAS. IT SHALL BE CLEAN SOIL FREE OF ROOTS, WOODY VEGETATIONS, OVER-SIZED STONES, ROCKS OR OTHER OBJECTIONABLE MATERIAL. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIAL SHALL BE PLACED IN SIX TO EIGHT INCHES THICK CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL. COMPACTION SHALL BE OBTAINED BY ROUTING HAULING EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OF TREAD TRUCK OF THE EQUIPMENT OR BY THE USE OF A COMPACTOR. THE EMBANKMENT SHALL BE CONSTRUCTED TO AN ELEVATION OF 10% HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLEMENT IF COMPACTION IS OBTAINED WITH HAULING EQUIPMENT. IF COMPACTORS ARE USED FOR COMPACTION, THE OVERBUILD MAY BE REDUCED TO NOT LESS THAN 5%.

- d) PIPE SPILLWAYS: THE RISER SHALL BE SECURELY ATTACHED TO THE BARREL OF THE OUTFALL PIPE. THE BARREL AND RISER SHALL BE PLACED ON A FIRM, SMOOTH SOIL FOUNDATION. THE CONNECTION BETWEEN THE RISER AND RISER BASE SHALL BE WATER TIGHT. THE FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE PLACED IN FOUR INCH LAYERS AND COMPACTED UNDER THE SHOULDERS AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
- e) EROSION POLLUTION CONTROL: CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.

7. MAINTENANCE

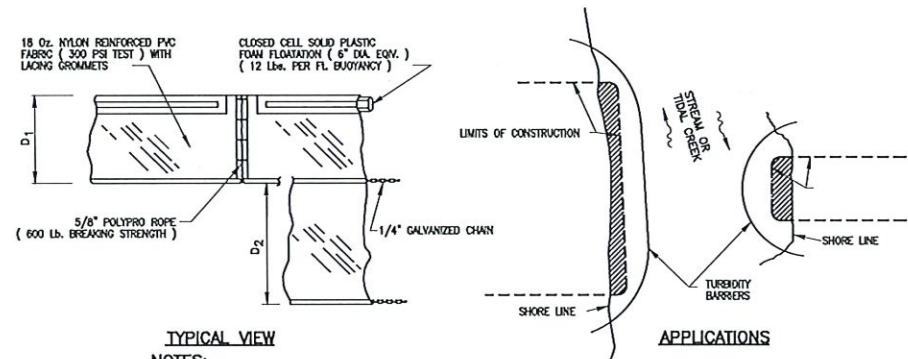
- a) REPAIR ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORK DAY.
- b) SEDIMENT SHALL BE REMOVED FROM SUMP AREAS. THE SEDIMENT SHALL BE PLACED IN SUCH A MANNER THAT IT WILL NOT ERODE FROM THE SITE. THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT OR IN OR ADJACENT TO A STREAM OR FLOOD PLAIN.
- c) AFTER CONSTRUCTION IS COMPLETED AND AREAS ARE SODDED, MAINTENANCE IS LIMITED TO VISUAL INSPECTIONS ON A ROUTINE BASIS. ANY DAMAGE TO THE BERM SHALL BE REPAIRED AT ONCE AND RE-SODDED. IF THE LEVEL OF WATER IS BEING MAINTAINED OVER THE EXPECTED DRAIN DOWN TIME, THE OUTFALL SYSTEM SHALL BE CLEANED AND REPAIRED.



1. FILTER BARRIERS MUST BE INSTALLED, AS INDICATED HEREIN, PRIOR TO CONSTRUCTION.
2. FILTER BARRIERS SHALL NOT BE INSTALLED IN ANY CONFIGURATION THAT BLOCKS THE THROAT OF ANY STORMWATER INLET.
3. INSPECTIONS AND REPAIRS TO BARRIERS SHALL BE MADE ONLY.
4. FILTER BARRIERS SHALL BE REMOVED UNTIL APPROVED BY ENGINEER.

STAKED SILT BARRIER

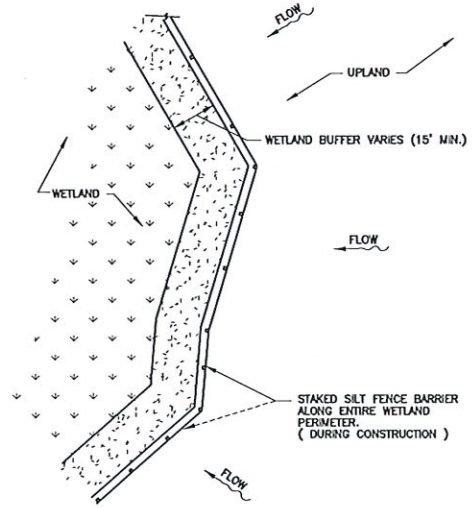
(DURING CONSTRUCTION ONLY)



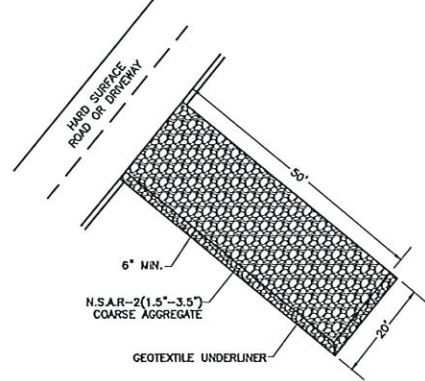
TYPICAL VIEW
NOTES:

1. D1 = 5' STANDARD (SINGLE PANEL FOR DEPTH 5' OR LESS). D2 = 5' STANDARD (ADDITIONAL PANEL FOR DEPTHS >5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.
2. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH WHEN ADJACENT TO CONSTRUCTION ACTIVITIES.
3. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
4. BARRIERS TO REMAIN IN PLACE UNTIL APPROVED FOR REMOVAL BY ENGINEER.

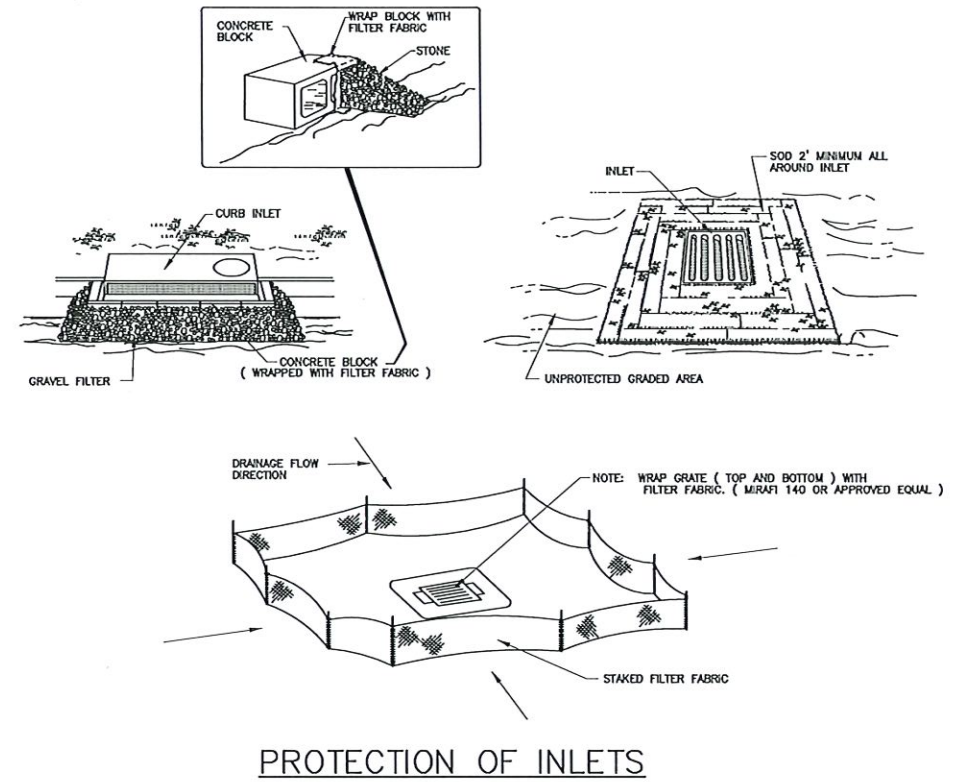
FLOATING TURBIDITY BARRIER



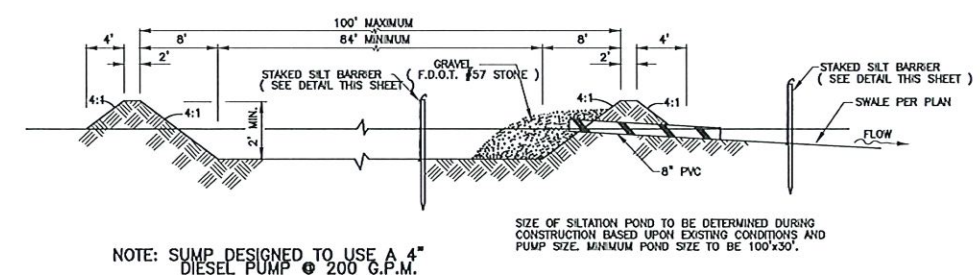
WETLAND PROTECTION



SOIL TRACKING
CONTROL DETAIL



PROTECTION OF INLETS



NOTE: SUMP DESIGNED TO USE A 4\"/>

SILTATION POND DETAILS

(REQUIRED DURING DEWATERING FOR SUMP EXCAVATION ONLY)

SED
Southwest Engineering & Design
25450 Airport Road, Suite B
Punta Gorda, Florida 33950
Tel. (941) 637-9555
Fax (941) 637-1149
www.sedfl.com
Certificate of Authorization
No. 26551

Edward P. Lomali Jr., P.E.
State of Florida, Professional Engineer
License No. 82507
This form has been
electronically signed and sealed by:
Edward P. Lomali Jr., P.E.
on the date adjacent to the seal.
Printed copies of this document
are not considered signed and
sealed and the signature must
be verified on any electronic copies.



SOUTHWEST AGGREGATE (RESERVOIR)
TO
CITY OF CAPE CORAL (GATOR SLOUGH)
36\"/>

REVISIONS	DESCRIPTION	DATE	NO.

DATE: APRIL, 2025
PROJECT NO. 15-0252.06
FILE NO. -
SCALE: AS NOTED

BEST
MANAGEMENT
PRACTICES

SHEET NUMBER
10.0