

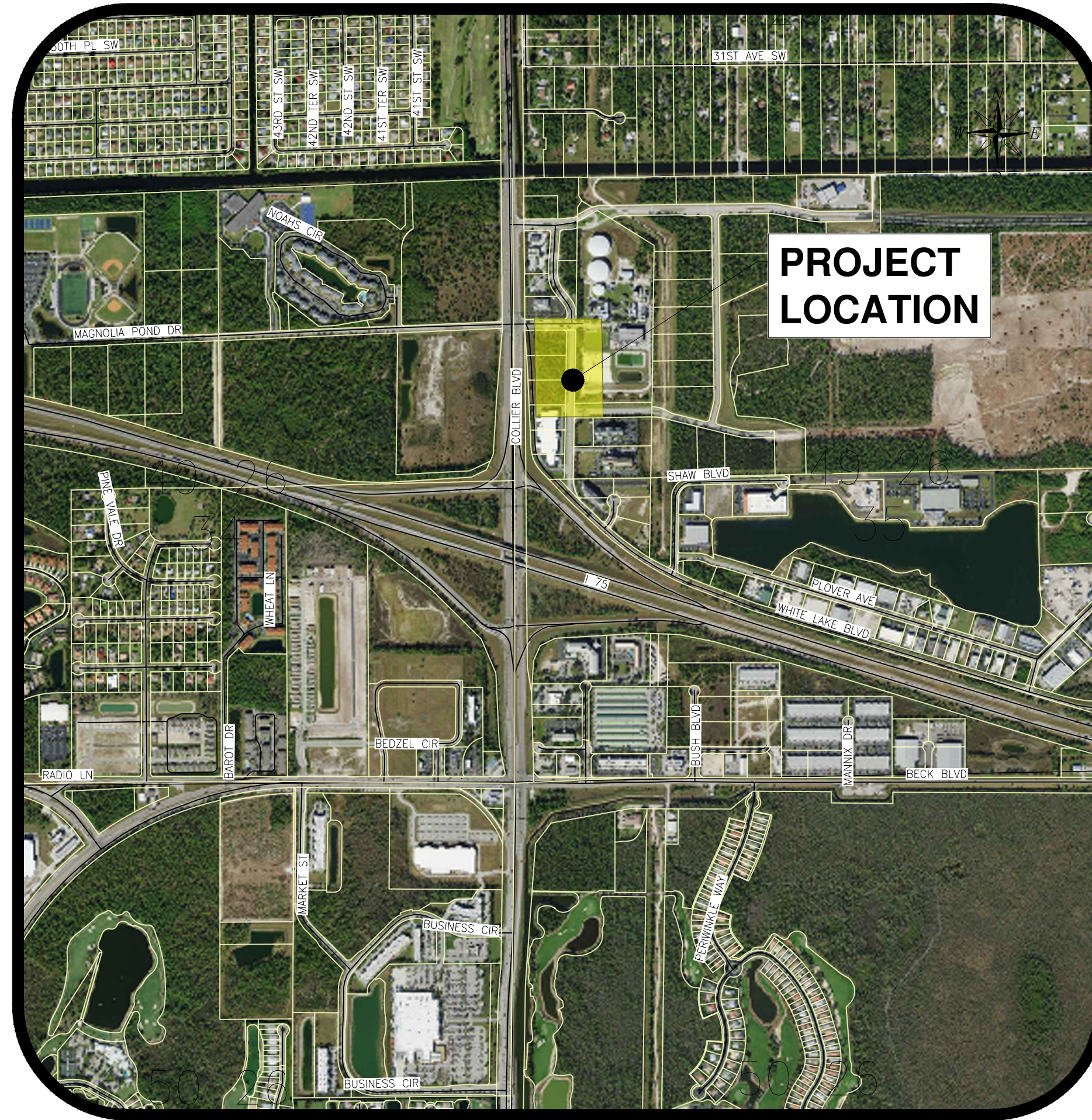
# White Lake Boulevard Water Main Replacement

Located in Collier County  
Section 35, Township 49 South, Range 26 East  
Collier County Project No:71010.70

Plans Prepared For:



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Location Map

N.T.S.

Prepared by:



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Bonita Springs, Florida 34134

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Revision	Date	Description	By

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3800 VIA DEL REY  
BONITA SPRINGS, FL 34134  
FLORIDA P.E. LICENSE NO. 66086  
EB/LB 0005151

DATE: 07/24  
FILE NAME: CCU302 - COVER-RECORD.DWG  
JOB CODE: CCU302  
DRAWING NUMBER: 1 OF 8

SUBMITTAL  
60%

White Lake Blvd.  
Water Main Replacement





**GENERAL NOTES:**

- ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 88).
- THE CONTRACTOR SHALL POT HOLE TO LOCATE (HORIZONTALLY AND VERTICALLY) ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND PROVIDE IN WRITING ANY DISCREPANCIES TO THE COUNTY. EXTREME CAUTION TO BE USED WHEN EXCAVATING, AS NUMBER AND LOCATION OF EXISTING UTILITIES ARE BASED ON RECORD INFORMATION THAT HAS NOT BEEN FIELD VERIFIED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION TO PROTECT ANY EXISTING UTILITIES. DAMAGE TO EXISTING UTILITIES AND PROPERTY DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY OWNERS PRIOR TO THE BEGINNING OF CONSTRUCTION AND COORDINATE WITH UTILITY OWNERS DURING CONSTRUCTION. THE PRESENCE OF THE UTILITIES ARE LIKELY IN THE PROJECT AREA. CONTRACTOR TO COORDINATE WITH, BUT NOT LIMITED TO, THESE UTILITIES PRIOR TO AND DURING CONSTRUCTION:

SERVICE PROVIDER	SERVICE	TELEPHONE
CENTURYLINK	FIBER, TELEPHONE	DISPATCH (855)-742-6062
COLLIER COUNTY INFORMATION TECHNOLOGY	FIBER	HARIS DOMOND (239)-252-5000
COLLIER COUNTY STAKE & LOCATES	SEWER, WATER	COLLIER COUNTY STAKES & LOCATES (239)-252-5924
COLLIER COUNTY TRAFFIC OPERATIONS	ELECTRIC, FIBER	HARIS DOMOND (239)-252-5000
COMCAST	CATV	USIC DISPATCH (800)-778-9140
CROWN CASTLE FIBER	FIBER	STAKE CENTER LOCATING (801)-364-1063
CROWN CASTLE NG	FIBER	STAKE CENTER LOCATING (801)-364-1063
FDOT D1 ITS	ELECTRIC, FIBER	CARLOS OGANDO (239)-989-2473
FLORIDA POWER & LIGHT-COLLIER	ELECTRIC	USIC DISPATCH CENTER (800)-778-9140
SUMMIT BROADBAND INC.	FIBER	CHARLES HARTSOCK (239)-444-0033
TECO PEOPLES GAS-FT MYERS	GAS	BRENDA PERRY (727)-224-1696
HOTWIRE COMMUNICATIONS	CATV, FIBER, TELEPHONE	CRISTOPHER WILSON (954)-643-3203

- EXISTING FACILITIES INCLUDING DRIVEWAYS, SIDEWALK, UTILITIES AND OTHER EXISTING FACILITIES SHALL BE RESTORED TO A CONDITION EQUAL OR BETTER THAN WHAT EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE COUNTY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE/REPAIR ANY EXISTING LANDSCAPING/PRIVATE IMPROVEMENTS WITHIN THE ROW, E.G. SOD, BUSHES, AND TREES, SPRINKLER PIPING, SPRINKLER HEADS, IRRIGATION SYSTEMS, AND FENCING THAT MAY HAVE BEEN DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COSTS TO THE OWNER. CONTRACTOR TO REPLACE OR REPAIR DAMAGED PROPERTY OR IMPROVEMENTS TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL TEMPORARILY CONNECT IRRIGATION COMPONENTS DURING CONSTRUCTION TO ENSURE IRRIGATION SYSTEMS CONTINUED USE DURING CONSTRUCTION.
- ANY SURVEY MONUMENTS INCLUDING PROPERTY CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A MONUMENT IS IN DANGER OF BEING DISTURBED, THE CONTRACTOR SHALL PROPERLY REFERENCE ITS LOCATION AND RESET THE MONUMENT AS REQUIRED BY THE CONTRACTOR'S FLORIDA LICENSED SURVEYOR, AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, GRATES, ETC. AS NECESSARY TO MATCH PROPOSED GRADES. PAVEMENT AROUND VALVES, MANHOLES, AND METER BOXES SHALL BE FLUSH WITH ACCESS TO ALL UTILITIES MAINTAINED AT ALL TIMES. NO ADDITIONAL PAYMENT SHALL BE MADE FOR WORK AS THE COST IS INCIDENTAL TO THE COST OF CONSTRUCTION.
- CONTRACTOR SHALL RELOCATE OR ADJUST MAILBOXES, MANHOLES, VALVES, GRATES, SIGNS, ETC. IN CONFLICT WITH THE PROPOSED CONSTRUCTION AND SHALL REPAIR, ADJUST, AND/OR REPLACE ITEMS AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. MAILBOXES REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE AT A MINIMUM REINSTALLED/REPLACED PER FDOT STANDARD INDEX NO. 532 OR TO MATCH THE PRECONSTRUCTION CONDITION AS APPROVED BY THE OWNER. REPLACED/REINSTALLED MAILBOX SHALL BE LOCATED INSTALLED PER USPS GUIDELINES (41-45" ABOVE GRADE TO BOTTOM OF MAILBOX WITH THE FRONT OF THE MAILBOX 6-8" FROM THE EOP).
- THE CONTRACTOR SHALL NOTIFY THE COUNTY PROJECT MANAGER OF ANY ENCROACHMENT ONTO PRIVATE PROPERTY A MINIMUM OF 14 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL NOTIFY COLLIER COUNTY UTILITIES DEPARTMENT AT LEAST 10 CALENDAR DAYS IN ADVANCE OF ALL PLANNED SERVICE INTERRUPTIONS & REQUESTS FOR VALVE OPERATION, AND RECEIVE COUNTY PROJECT MANAGER'S APPROVAL BEFORE PROCEEDING WITH PLANNED INTERRUPTIONS.
- THE CONTRACTOR SHALL PROVIDE 10 DAYS WRITTEN NOTICE TO THE ENGINEER OF RECORD, OWNER'S CEI REPRESENTATIVE, AND COLLIER COUNTY PROJECT MANAGER PRIOR TO THE FOLLOWING ACTIVITIES:
  - COMMENCEMENT
  - CHANGES TO APPROVED SCHEDULES, SUBCONTRACTORS, AND RESIDENT SUPERINTENDENT
  - WATER SYSTEM
    - HOT TAPS
    - PRESSURE TESTS
    - CHLORINATION OF WATER MAINS
    - FLUSHING
    - BACTERIOLOGICAL SAMPLING
    - FINAL CONNECTION OF NEW MAINS
    - BEGINNING AC PIPE REMOVAL
    - FINAL ABANDONMENT OF EXISTING MAINS
    - WATER SERVICE AND WATER METER SWITCH OVER
    - BACKFLOW DEVICE INSTALLATION
  - WASTEWATER SYSTEM
    - TESTING OF BYPASS PUMP STATION
    - TEMPORARY AND PERMANENT FORCE MAIN PRESSURE TESTS

- INFILTRATION/EXFILTRATION TESTS
  - LAMPING OF SEWER LINE
  - TELEVISION VIDEO TAPING OF SEWER LINES
- CONTRACTOR TO PROVIDE SILT FENCE, STACKED SYNTHETIC BALES AND OTHER APPROPRIATE MEASURES TO EFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS OR SUITABLE EROSION PROTECTION TREATMENT.
  - EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
  - CONTRACTOR SHALL RETAIN, ON THE WORK SITE, COPIES OF ALL PERMITS NECESSARY FOR CONSTRUCTION.
  - CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER OF RECORD AND COUNTY PROJECT MANAGER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
  - CONTRACTOR SHALL PROMPTLY REPORT ALL FIELD CHANGES TO THE ENGINEER OF RECORD AND COUNTY PROJECT MANAGER.
  - DAMAGE TO EXISTING UTILITIES AND PROPERTY DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT CONTRACTOR EXPENSE.
  - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING UTILITY SERVICE AT ALL TIMES DURING CONSTRUCTION WITHIN THE PROJECT LIMITS. THIS INCLUDES HAVING A SUPPLY OF REPAIR MATERIALS ONSITE THAT MATCHES EXISTING IN THE EVENT OF A BREAK.
  - CONTRACTOR SHALL NOT LEAVE TRENCHES OR HOLES OPEN OVER NIGHT OR OVER WEEKENDS/HOLIDAYS.
  - ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
  - WORK AREAS ARE TO BE CLEANED ON A DAILY BASIS INCLUDING, BUT NOT LIMITED LITTER COLLECTION, TO SWEEPING STREETS AND DAILY WATERING.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DEWATERING PERMITS.
  - CONTRACTORS WILL BE RESPONSIBLE FOR STORING ALL MATERIALS FOR THE PROJECT, INCLUDING ALL MATERIALS PURCHASED BY COLLIER COUNTY IN A SECURED, FENCED IN STORAGE AREA. CONTRACTOR IS TO PROVIDE LEASE AGREEMENT WITH PROPERTY OWNER, RIGHT -OF-WAY PERMITS, AND TEMPORARY USE PERMITS TO THE ENGINEER AND COUNTY WITHIN TEN (10) DAYS OF THE ISSUED NOTICE TO PROCEED. NO MATERIAL MAY BE STORED WITHIN THE RIGHT-OF-WAY. ALL MATERIAL STORED SHALL BE COVERED, PER THE MANUFACTURER'S RECOMMENDATIONS AND COUNTY SPECIFICATIONS.
  - ALL STORAGE LOTS USED FOR THE PROJECT MUST BE MAINTAINED DAILY INCLUDING, BUT NOT LIMITED TO; MOWING AND WEEDING, LITTER REMOVAL, FENCE AND SCREEN REPAIR AS NEEDED, DAILY SWEEPING AND DUST CONTROL, AND PERMIT RENEWAL AS REQUIRED.
  - PAVEMENT AROUND VALVES, MANHOLES, AND METER BOXES SHALL BE FLUSH WITH ACCESS TO ALL UTILITIES MAINTAINED AT ALL TIMES.
  - ALL COSTS AND EXPENSES OF ANY AND ALL REPAIRS, REPLACEMENTS, MAINTENANCE AND RESTORATIONS OF ABOVEGROUND IMPROVEMENTS PERMITTED WITHIN A CUE SHALL BE THE SOLE FINANCIAL RESPONSIBILITY OF THE GRANTOR, ITS SUCCESSORS OR ASSIGNS.
  - THERE IS NO PROPOSED CLEARING OR VEGETATION REMOVAL.
  - AIR RELEASE VALVES SHALL BE LOCATED AT ALL HIGH POINTS ON ALL PROPOSED COUNTY OWNED MAINS WHERE AIR WILL NOT BE RELEASED THROUGH SERVICE LINES, AND ON BOTH SIDES OF CONFLICT CROSSINGS. IN CASES WHERE REVERSAL OF FLOW IS NOT EXPECTED, AIR RELEASE ASSEMBLY SHALL BE PROVIDED AT HIGH POINTS AND ON THE UPSTREAM SIDE OF CONFLICT CROSSINGS. ALL AIR RELEASE ASSEMBLY LOCATIONS SHALL BE BASED ON AS-BUILT CONDITIONS.
  - THE APPROVAL OF THESE CONSTRUCTION PLANS DOES NOT AUTHORIZE CONSTRUCTION OF REQUIRED IMPROVEMENTS WHICH ARE INCONSISTENT WITH EASEMENT OF RECORD.
  - WITHIN THE LIMITS OF THIS PROJECT AS DEPICTED IN THIS PLAN SET, DURING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES AND THE INFRASTRUCTURE ON THE SITE, I.E. OPEN SPACE, PAVED AREAS, ETC.
  - COUNTY PERMIT TO PERFORM WORK AND/OR MAINTENANCE IN PUBLIC RIGHT-OF-WAY IS REQUIRED FOR WORK WITHIN THE PUBLIC ROAD ROW.
  - ALL CONTRACTORS AND REPRESENTATIVES ON-SITE MUST HAVE COLLIER COUNTY CONTRACTOR IDENTIFICATION BADGES ON THEIR PERSON, CLEARLY DISPLAYED, AT ALL TIMES.

**TRAFFIC CONTROL NOTES:**

- ACCESS ONTO EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC, DELIVERY VEHICLES, POSTAL VEHICLES, EMERGENCY VEHICLES, PUBLIC TRANSPORTATION, SOLID WASTE & RECYCLING VEHICLES, AND PROPERTY OWNERS, RESPECTIVELY. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES ON PUBLIC OR PRIVATE ROADWAYS.
- THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE 2009 EDITION WITH REVISION NUMBERS 1 AND 2 INCORPORATED, DATED MAY 2012 OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD PART VI, TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AS REVISED TO DATE), FOR GENERAL TRAFFIC CONTROL ZONE REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION BOOKLET "FY 2024-25 STANDARD PLANS FOR ROAD CONSTRUCTION" DATED JULY 1, 2024 THROUGH JUNE 30, 2025 NOS. IR 102-000 THROUGH 102-120.
- WHERE FLAGGER AND WORKER SIGNS ARE USED, THE SIGNS SHALL BE COVERED OR REMOVED DURING PERIODS WHEN CONSTRUCTION OPERATIONS ARE SUSPENDED SUCH AS NIGHTS, WEEKENDS, AND HOLIDAYS.
- PLACEMENT OF ALL CONSTRUCTION SIGNS SHALL BE FIELD LOCATED TO NOT BE IN CONFLICT WITH EXISTING SIGNS. EXISTING SIGNS NOT IN USE OR IN CONFLICT WITH LANE OR ROAD CLOSURE SHALL BE COVERED TEMPORARILY.

- LANE CLOSURES SHALL BE SCHEDULED AS FOLLOWS:
  - ONE TRAVEL LANE SHALL BE KEPT OPEN FOR EACH DIRECTION WITHIN THE WORK AREA THROUGHOUT THE DURATION OF CONSTRUCTION, EXCEPT WHEN A ROAD CLOSURE IS PERMITTED BY THE COUNTY.
  - THE LOCATION AND DURATION OF EACH LANE CLOSURE INCLUDING TURN LANES, SHALL BE APPROVED BY THE COUNTY
  - NO WORK SHALL BE DONE REQUIRING A LANE CLOSURE BETWEEN THE FOLLOWING HOURS:
    - FROM 7:00 AM TO 9:00 AM, AND 4:00PM TO 6:00 PM, MONDAY THROUGH FRIDAY, UNLESS APPROVED BY COUNTY.
    - WEEKENDS, HOLIDAYS, AND SPECIAL EVENT DAYS, AS PERMITTED BY THE COUNTY.
    - EMERGENCIES AS DEEMED NECESSARY BY COLLIER COUNTY EMERGENCY MANAGEMENT, LAW ENFORCEMENT AUTHORITIES OR THE COUNTY
- THE MINIMUM WIDTH OF ANY TRAVEL LANE AT ANY TIME SHALL BE 10 FEET.
- LEFT TURN LANES SHALL BE PROVIDED DURING ALL PHASES OF CONSTRUCTION WHERE A LEFT TURN LANE IS EXISTING.
- THE CONTRACTOR SHALL PHASE HIS CONSTRUCTION OPERATIONS IN SUCH A WAY THAT WILL MAINTAIN EXISTING ACCESS TO ALL SIDE STREET AND DRIVEWAYS AT ALL TIMES. A FLAGGER SHALL BE USED WHEN 2-WAY ACCESS, E.G. LANE CLOSURES TO A SIDE STREET IS NOT PROVIDED TO DIRECT VEHICLES ENTERING OR EXITING THE SIDE STREET. ADDITIONAL FLAGGERS MAY BE NECESSARY WHEN THE WORK ZONE INCLUDES A SIDE STREET.
- UTILITY RELOCATION WORK SHALL BE COORDINATED BY THE CONTRACTOR TO AVOID ANY CONFLICT WITH THE VARIOUS PHASES OF THE TRAFFIC CONTROL PLAN.
- EXISTING ROADWAY PATCHING SHALL BE COMPLETE IN CONJUNCTION WITH WATER, STORMWATER, AND WASTEWATER CONSTRUCTION. FINAL OVERLAY SHALL NOT BE STARTED UNTIL ALL TESTING OF WATER & WASTEWATER SYSTEMS ARE COMPLETED, NEW SERVICES (WATER & WASTEWATER) ARE INSTALLED, & EXISTING WATER, WASTEWATER, & STORMWATER MAINS ARE ABANDONED OR REMOVED. EXISTING PAVEMENT SHALL BE MILLED ADJACENT TO CURB, GUTTERS, & OTHER IDENTIFIED LOCATIONS. SEE STRIPING PLANS FOR STRIPING REQUIREMENTS. TEMPORARY STRIPING (PAINTED) SHALL BE INSTALLED IMMEDIATELY FOLLOWING OVERLAY. FOLLOWING 30 DAY ASPHALT CURING TIME, THE PERMANENT THERMO-PLASTIC STRIPING SHALL BE INSTALLED. CONTRACTOR SHALL FIELD VERIFY REQUIREMENTS WITH OWNER & COLLIER COUNTY RIGHT-OF-WAY PRIOR TO STRIPING.
- ALL SIGN RELATED WORK TO BE COORDINATED WITH FELIX BURGOS, 239-252-5179, TO MAINTAIN INTEGRITY OF OUR SIGN ASSET DATABASE. CONTRACTOR TO FOLLOW TRAFFIC OPERATIONS SIGNING AND PAVEMENT MARKINGS SPECIAL PROVISION DETAILS WHICH INDICATE USING A 2.5" X 2.5" GALVANIZED METAL SQUARE TUBULAR SIGN POST.
- THE CONTRACTOR SHALL REPLACE ALL SIGNS WITH NEW SIGNS, POSTS, AND HARDWARE TO MEET CURRENT COLLIER COUNTY AND FDOT SPECIFICATIONS/STANDARDS. ALL REMOVED SIGNS SHALL BE RETURNED TO COLLIER COUNTY TRAFFIC OPERATIONS AT 2885 HORSESHOE DRIVE SOUTH, NAPLES, FL 34104.

**STORMWATER NOTES:**

- ALL EXISTING CULVERT PIPES DESIGNATED TO REMAIN SHALL BE INSPECTED BY THE CONTRACTOR, COUNTY R/W, AND OWNER. ALL CULVERT PIPE SHALL BE CLEANED AS NECESSARY AND DIRECTED. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING EXISTING AND NEW CULVERT PIPE CLEAN OF ALL SILT UNTIL ACCEPTANCE OF THE PROJECT.
- EXISTING DRAINAGE STRUCTURES & PIPING WITHIN THE CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED IN THESE PLANS OR AS SPECIFIED BY THE ENGINEER. CARE SHALL BE TAKEN IN ALL WORK NEAR EXISTING FACILITIES.
- EXISTING DRAINAGE SWALES SHALL BE REGRADED AS INDICATED ON THESE PLANS & AS NECESSARY AS A RESULT OF THE UTILITY PLANS OR AS SPECIFIED BY THE ENGINEER. CARE SHALL BE TAKEN IN ALL WORK NEAR EXISTING FACILITIES.



Revision	Date	Description	By

DESIGNED BY:	B.B.
DRAWN BY:	J.R.
APPROVED:	A.D.
JOB CODE:	CCU302
SCALE: 24x36	N/A
11x17	N/A



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 Business License LC 26000266

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*WHITE LAKE BLVD. WATER MAIN REPLACEMENT*

GENERAL NOTES

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
 CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)1.276

JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

MUNICIPALITY:	COLLIER COUNTY
SBC/TWN/RGE:	35/49S/26E
DATE:	07/24
SUBMITTAL TYPE:	60%
SHEET	2 OF 8



**WATER and WASTEWATER NOTES:**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC STANDARDS, (LATEST EDITION), COLLIER COUNTY'S DEVELOPMENT STANDARDS AND SPECIFICATIONS, AND COLLIER COUNTY WATER-SEWER DISTRICT UTILITIES STANDARDS MANUAL.
- ALL COLLIER COUNTY WATER-SEWER DISTRICT UTILITIES (DESIGN CRITERIA, SPECIFICATIONS, AND DETAILS) ARE APPLICABLE TO THIS PROJECT AND ARE MADE PART OF THE CONTRACT DOCUMENTS BY REFERENCE TO CURRENT COUNTY UTILITY STANDARDS, LOCATED AT THE FOLLOWING WEB ADDRESS: <https://www.colliercountyfl.gov/government/public-utilities/water-sewer-district/engineering-and-project-management/resources> IN THE EVENT OF CONFLICT BETWEEN THE COUNTY UTILITY STANDARDS AND THESE SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- NEW WATER MAIN AND SERVICE PIPING (FROM MAIN TO CURB STOP AT METER) SHALL BE CONSTRUCTED, PRESSURE TESTED, FULL BORE FLUSHED, & BACTERIOLOGICALLY CLEARED FROM F.D.E.P. CONTRACTOR SHALL COORDINATE ALL WATER SYSTEM SAMPLING WITH COUNTY. UPON F.D.E.P. CLEARANCE, WATER MAIN SHALL BE PLACED INTO SERVICE. NEW WATER SERVICES SHALL BE CONNECTED TO THE PRIVATE WATER SERVICE PIPING (COORDINATE TEMPORARY SHUTDOWNS WITH INDIVIDUAL OWNERS) ONCE THE WATER SYSTEM IS CLEARED FOR USE. EXISTING WATER MAINS SHALL REMAIN IN SERVICE FOR ONE (1) WEEK TO ALLOW VERIFICATION OF RECONNECTION OF ALL SERVICES (COUNTY WILL TEMPORARILY SHUT DOWN LINE FOR VERIFICATION). UPON VERIFICATION, CONTRACTOR CAN COMPLETE ABANDONMENT OF EXISTING WATER MAINS. PRIOR TO BEGINNING PRESSURE TESTING OF WATER MAINS, CONTRACTOR TO ENSURE ALL AIR HAS BEEN REMOVED FROM THE MAIN AND THE WATER MAIN HAS PASSED A TWO (2) HOUR MINIMUM PRETEST.
- WATER MAIN DISINFECTION SHALL BE PER AWWA C651 (CURRENT EDITION) AND COLLIER COUNTY TECHNICAL SPECIFICATION 025400, WHICH REQUIRES BACTERIAL SAMPLING POINTS AT THE BEGINNING OF EACH NEW MAIN TO BE CLEARED FOR USE, AT 1000-FOOT INTERVALS, AND ALL DEAD ENDS. PERMANENT SAMPLING POINTS ARE REQUIRED EVERY 3000 FEET OR ONE AT 2/3 OF THE LENGTH FROM THE POINT OF CONNECTION IF THE NEW WATER MAIN IS LESS THAN 3000 FEET LONG.
- ALL POTABLE LINES 4" OR LARGER SHALL BE AWWA C-900 OR DR-18 P.V.C., UNLESS OTHERWISE NOTED. ALL LINES SMALLER THAN 4" SHALL BE SCH 80 POTABLE WATER LINES LOCATED UNDER PAVEMENT AND NON-RESIDENTIAL DRIVEWAYS SHALL BE AWWA C-900, CLASS 200, DR18, UNLESS OTHERWISE NOTED. WATER SERVICES SHALL BE POLYETHYLENE ONE AND A HALF INCHES IN DIAMETER.
- CONTRACTOR SHALL USE 45° BENDS WITH MEGALUGS AT CONFLICTS WITH RESTRAINTS PER DETAIL G-4.
- NOT ALL PROPOSED BENDS ARE SHOWN IN THE PROPOSED WATER LINE. ADDITIONAL FITTINGS MAY BE REQUIRED TO BEND THE WATER LINE AS REQUIRED.
- PROPOSED FIRE HYDRANTS SHALL BE LOCATED AS SHOWN ON UTILITY DETAIL SHEETS. THE CONTRACTOR SHALL PROVIDE AND INSTALL REFLECTIVE PAVEMENT MARKERS PER COLLIER COUNTY STANDARDS AT PROPOSED FIRE HYDRANTS.
- THE TOP OF ALL WATER LINES SHALL BE LOCATED A MINIMUM OF 30" AND A MAXIMUM OF 48" BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED.
- ALL WATER SERVICE TAPING SADDLES SHALL BE STAINLESS STEEL FORD MODEL FS313 OR ROMAX MODEL 306.
- EXISTING ASBESTOS CEMENT (A.C.) PIPE IS TO BE REMOVED AND DISPOSED OF PER COLLIER COUNTY REQUIREMENTS AND AT AN APPROVED F.D.E.P. SITE. ALL PROCEDURES FOR EXCAVATION, LISTING OF SAFETY EQUIPMENT, TRACKING TO A LANDFILL, AND LOADING OF THE WATER MAIN SHALL BE PROVIDED TO THE COUNTY WASTE STAFF FOR APPROVAL PRIOR TO WORK STARTING ON THE PROJECT. EACH INDIVIDUAL PIECE OF EXISTING WATER MAIN SHALL BE INDIVIDUALLY DOUBLE WRAPPED PER COLLIER COUNTY STANDARDS.
- THE CONTRACTOR SHALL PLACE PROPOSED VALVES AS SHOWN. THE VALVE BOX SHALL NOT BE PLACED IN PAVEMENT OF DRIVEWAY AREAS, UNLESS OTHERWISE NOTED.
- AFTER SERVICES ARE CONNECTED TO A RESIDENCE, THE CONTRACTOR SHALL FLUSH THE SYSTEM USING A SPIGOT LOCATED ON THE OUTSIDE OF THE HOME, WITH THE PROPERTY OWNERS PERMISSION.
- IN CASE OF ANY SERVICE INTERRUPTION DUE TO THE CONTRACTOR'S ACTIVITIES, THE WATER DEPARTMENT WILL CALL THE CONTRACTOR, AND IF THEY DO NOT RESPOND VIA PHONE WITHIN 1 HOUR AND ARRIVE ONSITE WITHIN THE SECOND HOUR, THE COUNTY WILL COMPLETE THE REPAIR AND INVOICE THE CONTRACTOR. THE CONTRACTOR WILL BE INVOICED ON A TIME AND MATERIAL (T&M) BASIS, WITH A MINIMUM OF 2 HOURS AT \$82 AN HOUR. PRIVATE WATER CHARGES AS A RESULT OF THE CONTRACTORS WORK SHALL BE PAID FOR BY THE CONTRACTOR.
- LOCATION MARKERS ARE TO BE PLACED AT THE FOLLOWING LOCATIONS:
  - EVERY ON HUNDRED (100) FEET ALONG THE PROPOSED WATER MAIN
  - ONE (1) AT EVERY SERVICE LATERAL END
  - ONE (1) AT EVERY FITTING, BEND, OR CHANGE IN ALIGNMENT, AND VALVES
  - TWO (2) ON LONG SERVICES ONE AT MAIN, ONE NEAR ROAD
  - ONE (1) ON SHORT SERVICES NEAR THE ROAD
- NOT ALL KNOWN EXISTING SANITARY LATERALS AND WATER SERVICES ARE SHOWN. THE CONTRACTOR SHALL RECONNECT ALL EXISTING LATERALS AND SERVICES WHETHER SHOWN OR NOT. ALL LATERALS AND SERVICES SHALL BE REPLACED WITH NEW MATERIAL TO THE RIGHT-OF-WAY AND INCLUDE A CLEANOUT ON EACH SEWER LATERAL. WHEN CLAY LATERALS ARE ENCOUNTERED, THEY SHALL BE REPLACED WITH P.V.C. UNTIL PVC IS ENCOUNTERED OR TO THE HOUSE CLEANOUT, AS DIRECTED BY THE EOR AND COUNTY. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER AND COLLIER COUNTY FOR ACCESS TO PRIVATE PROPERTY VIA SIGNED RIGHT OF ENTRY FORMS.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL LOCATE (HORIZONTAL & VERTICAL) ALL EXISTING SANITARY SEWER LATERALS AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCY BETWEEN THE LOCATIONS DEPICTED IN THE DRAWINGS. PROPOSED SANITARY SEWER LATERAL LOCATIONS SHALL BE MODIFIED BY THE CONTRACTOR AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. ADDITIONALLY, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CONFLICTS BETWEEN THE EXISTING OR PROPOSED SANITARY SEWER LATERALS AND EXISTING OR PROPOSED WATER, WASTEWATER, OF STORMWATER FACILITIES (INCLUDING STORMWATER STRUCTURES). PROPOSED FACILITIES SHALL BE ADJUSTED BY THE CONTRACTOR AS NECESSARY TO AVOID EXISTING OR PROPOSED SANITARY SEWER LATERALS AT NO ADDITIONAL COST TO THE OWNER. MOLDED P.V.C. FITTINGS SHALL BE USED TO CONNECT THE SERVICE LATERAL TO THE EXISTING P.V.C. PRIVATE SEWER SERVICE. NEOPRENE BOOTS MAY ONLY BE USED IF THE PRIVATE SEWER LATERAL IS CLAY AT THE CONNECTION POINT DETERMINED BY THE EOR AND OWNER.
- CONTRACTOR TO VERIFY ELEVATIONS OF EXISTING AND PROPOSED PIPE INVERTS CONNECTING TO MANHOLES PRIOR TO MANHOLE FABRICATION.
- DESIGN IS BASED UPON A SURVEY PERFORMED BY GRADYMINOR FROM 2021. DESIGN IS ALSO BASED ON GRAVITY SEWER RECORD DRAWINGS DATED 1976.
- CONTRACTOR TO UTILIZE METALIZED TAPE AND MARKER BALLS FOR ALL UNDERGROUND PIPING PER COUNTY STANDARDS. ADDITIONALLY, ALL PRESSURE PIPING AND SERVICES LARGER THAN 2" SHALL BE INSTALLED WITH A #12 AWG LOCATING TONE WIRE.
- CONTRACTOR SHALL INSTALL AIR RELEASE VALVES AT ALL HIGH POINTS AS DETERMINED BY THE APPROVED AS-BUILT PROFILE IN ADDITION TO THE AIR RELEASE VALVES SHOWN ON THE DRAWINGS.
- CONTRACTOR TO LOCATE EXISTING/PROPOSED SAN. SEWER SERVICES, AS WELL AS ANY STORMWATER CONFLICTS, AND DEFLECT WATER MAIN AS REQUIRED TO AVOID CONFLICTS.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL LOCATE BY POT HOLING OR SOFT DIGGING ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT AND PROVIDE THE COUNTY, EOR, AND CEI A REPORT (BEFORE CONSTRUCTION) OF THE FINDINGS ON EACH LOCATION THAT INCLUDES THE STATION AND OFFSET, LOCATION, UTILITY TYPE, DEPTH FROM GRADE, SIZE, MATERIAL, DATE, TIME, AND A MINIMUM OF (2) PICTURES (AN OVERALL SITE PICTURE AND A PICTURE OF THE UTILITY FOUND). THE CONTRACTOR SHALL MARK THE FOUND UTILITY WITH A WOODEN LATH AND RIBBON, WITH THE UTILITY TYPE FOUND, SIZE, AND DEPTH WRITTEN ON THE LATH.

**LEGEND LINETYPE AND SYMBOLS**

	EX FORCE MAIN
	EX SANITARY SEWER
	EX WATERMAIN
	PROPERTY LINE
	EX EDGE OF PAVEMENT
	EX RIGHT OF WAY LINE
	EX VEGETATION
	PROP FM

**PAVEMENT PATTERNS:**

	CONCRETE
	BRICK PAVERS
	ASPHALT & PAVEMENT OVERLAY

**ABBREVIATIONS:**

AE	ACCESS EASEMENT	N.T.S.	NOT TO SCALE
ARV	AIR RELEASE VALVE	NAVD '88	NORTH AMERICAN VERTICAL DATUM OF 1988
BLVD OR BLVD.	BOULEVARD	NGVD '29	NATIONAL GEODETIC VERTICAL DATUM OF 1929
C.L.	CHAIN LINK	NO.	NUMBER
CO	CLEAN OUT	OH OR OHW	OVERHEAD UTILITY WIRES
COM	COMMUNICATIONS	OR	OFFICIAL RECORDS BOOK
CONC.	CONCRETE	PB OR P.B.	PLAT BOOK
CUE	COUNTY UTILITY EASEMENT	PC	POINT OF CURVATURE
DEMO	DRAINAGE EASEMENT	PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
AC.	ACRE(S)	PG	PAGE
DEMO	DEMOLITION	PI	POINT OF INTERSECTION
DIP	DUCTILE IRON PIPE	PL	PROPERTY LINE
DR OR DR.	DRIVE	PRC	POINT OF REVERSE CURVATURE
DWG.	DRAWING	PROP OR PROP.	PROPOSED
EL.	ELEVATION	PT	POINT OF TANGENCY
ESMT.	EASEMENT	PV	PULL VALVE
EOW	EDGE OF WATER	PUE	PUBLIC UTILITY EASEMENT
EX OR EXIST OR	EXISTING	PVC	POLYVINYL CHLORIDE
EX.	EXISTING	R/W OR ROW	RIGHT-OF-WAY
FDC	FIRE DEPARTMENT CONNECTION	RCP	REINFORCED CONCRETE PIPE
FL	FLOW LINE	RD OR RD.	ROAD
FM	FORCE MAIN	RED	REDUCER
FPL OR FP&L	FLORIDA POWER & LIGHT	RGE	RANGE
FO	FIBER OPTIC	RWM	RAW WATER MAIN
GV	GATE VALVE	SAN OR SAN.	SANITARY SEWER
HDD	HORIZONTAL DIRECTIONAL DRILL	SEC	SECTION
HDPPE	HIGH-DENSITY POLYETHYLENE	SFWMD	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
IQ	IRRIGATION QUALITY	ST	STORM
ICV	IRRIGATION CONTROL VALVE	STA.	STATION
IRR	IRRIGATION	SWLK.	SIDEWALK
IRV	IRRIGATION VALVE	T.O.P.	TOP OF PIPE
IT	INFORMATION TECHNOLOGY	TCE	TEMPORARY CONSTRUCTION EASEMENT
LAT	SANITARY LATERAL	TOB	TOP OF BANK
LBE	LANDSCAPE BUFFER EASEMENT	TOS	TOE OF SLOPE
LME	LAKE MAINTENANCE EASEMENT	TWN	TOWNSHIP
LN OR LN.	LANE	TYP.	TYPICAL
MES	MAINTENANCE EASEMENT	UE	UTILITY EASEMENT
MES	MITERED END SECTION	WM	WATER MAIN
MIN.	MINIMUM	WV	WATER VALVE
MJ	MECHANICAL JOINT		



DESIGNED BY:	B.B.		
DRAWN BY:	J.R.		
APPROVED:	A.D.		
JOB CODE:	CCU302		
SCALE: 24x36	N/A		
11x17	N/A		
Revision	Date	Description	By



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 3800 Via Dei Rey  
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**WHITE LAKE BLVD. WATER MAIN REPLACEMENT**

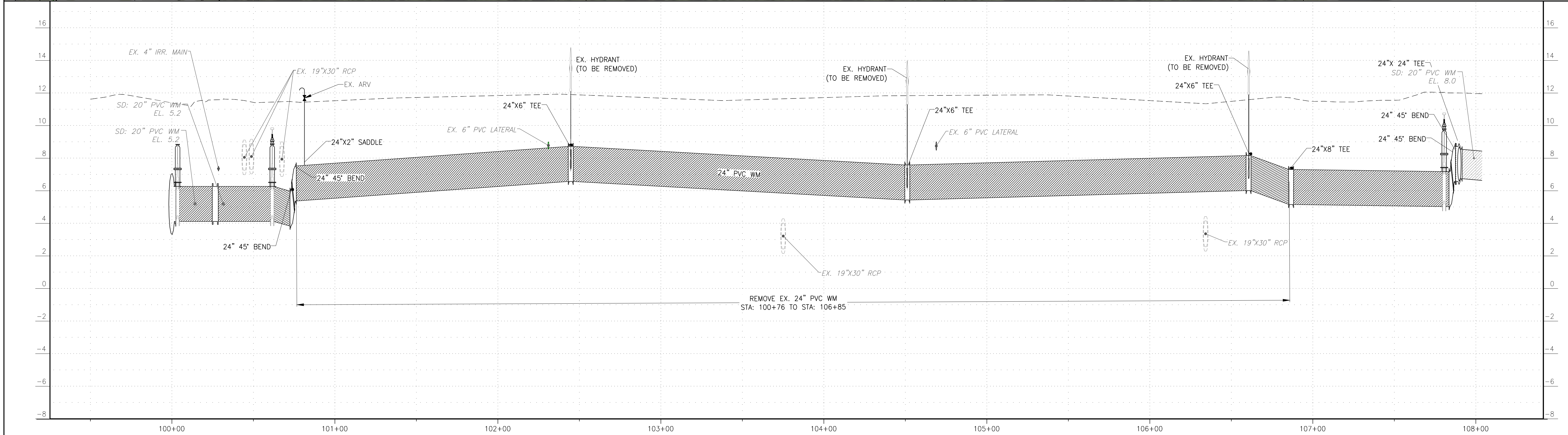
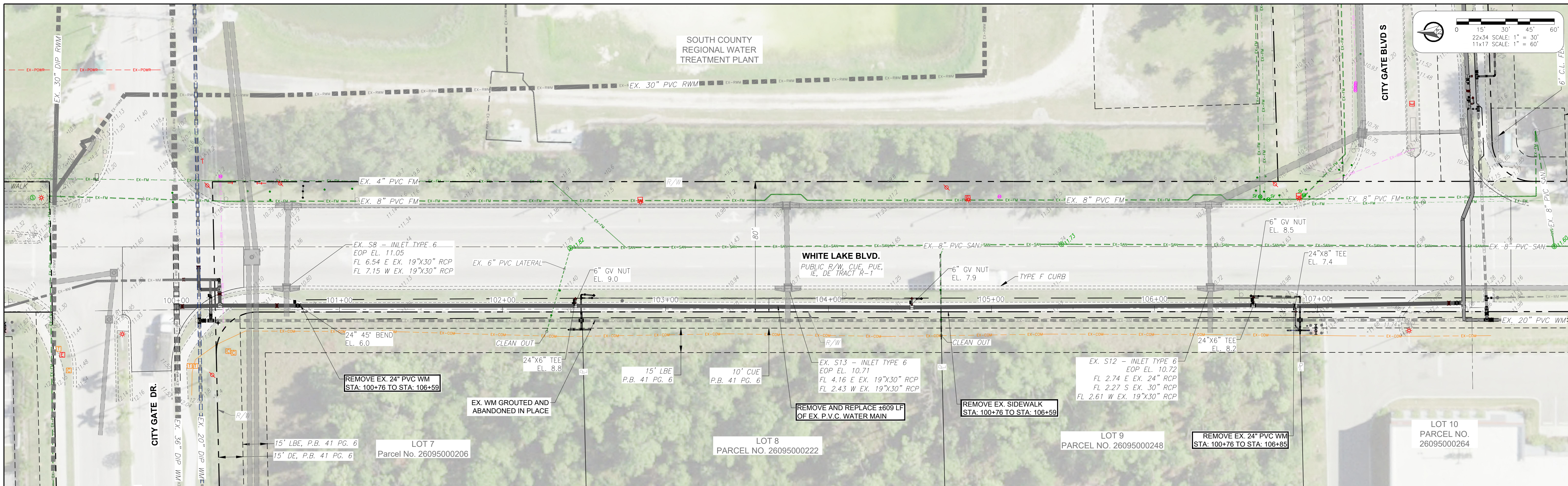
**GENERAL NOTES**

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
 CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)1.276

JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

MUNICIPALITY:	COLLIER COUNTY
SEC./TWN/RGE:	35/49S/26E
DATE:	07/24
SUBMITTAL TYPE:	60%
SHEET	3 OF 8





DESIGNED BY: E.P.  
 DRAWN BY: J.R.  
 APPROVED: A.D.  
 JOB CODE: CCU302

22X34 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 30'

11X17 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 60'



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 Bonita Springs, Florida 34134

**White Lake Water Main Replacement**  
 EXISTING CONDITIONS AND DEMOLITION  
 PLAN FOR WHITE LAKE BLVD. EX. AND  
 DEMO PLAN

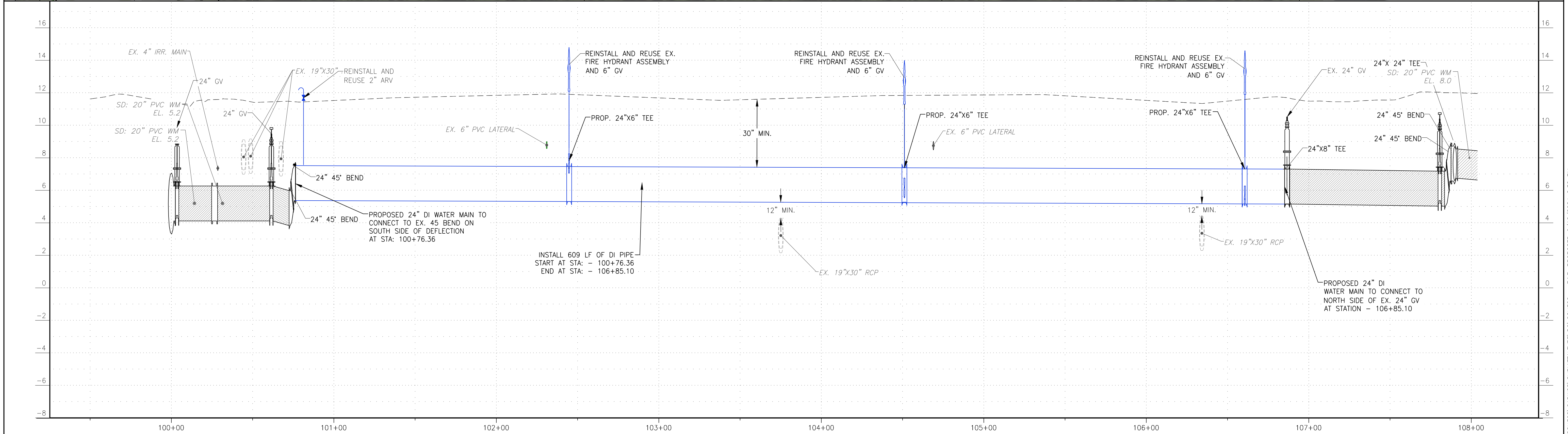
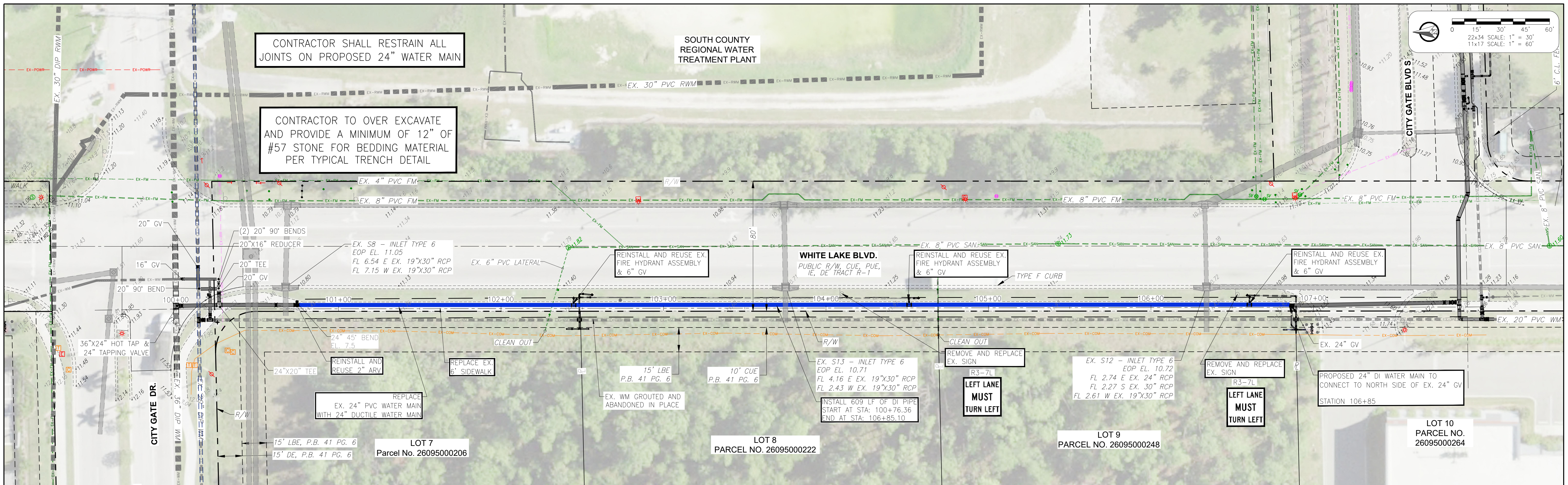
ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
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MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 35/49/26  
 DATE: 07/24  
 SUBMITTAL TYPE: 60%  
 SHEET 4 OF 8

JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

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DESIGNED BY: E.P.  
 DRAWN BY: J.R.  
 APPROVED: A.D.  
 JOB CODE: OCCU302  
 22X34 SCALE: VERTICAL 1" = 3'  
 HORIZONTAL: 1" = 30'  
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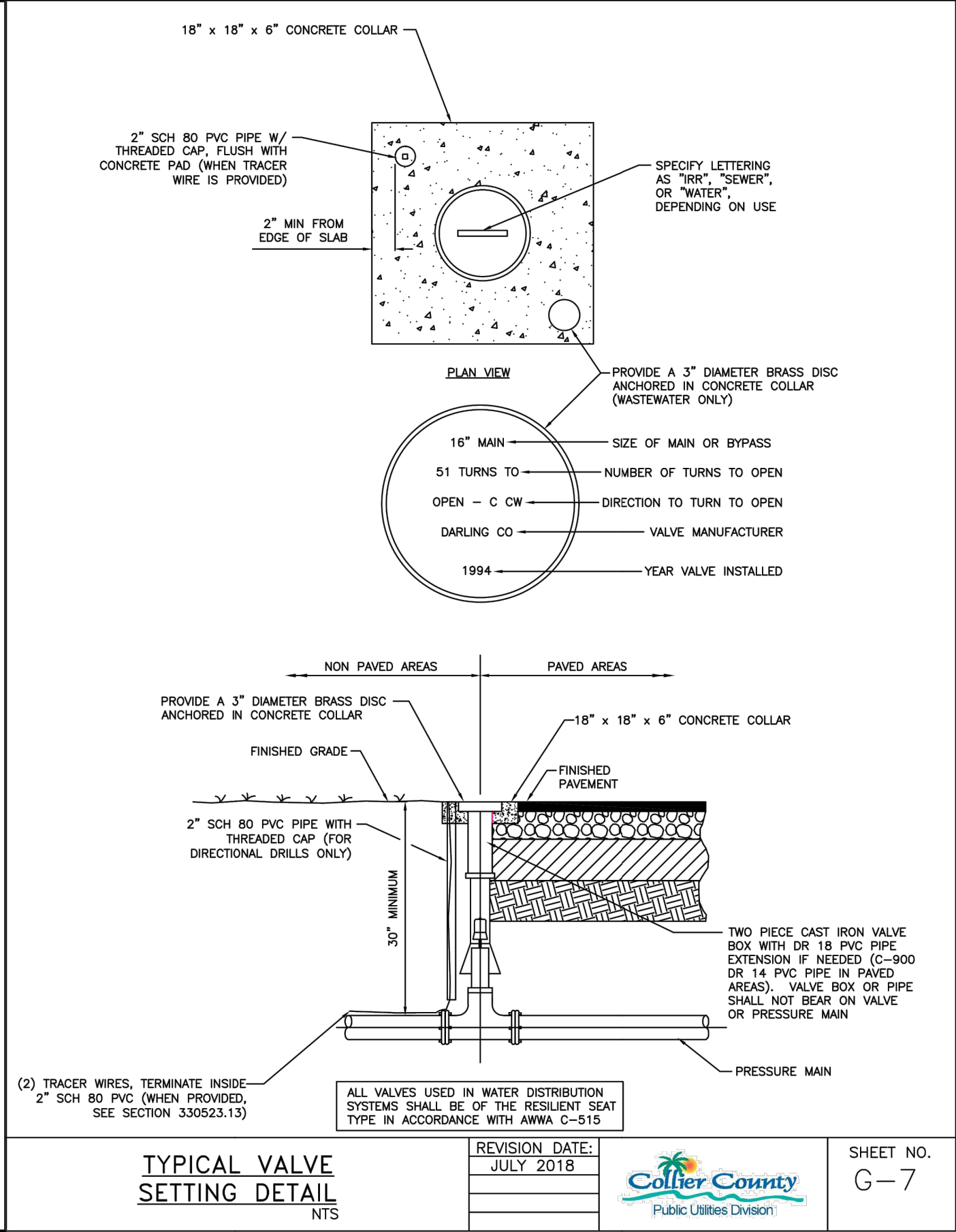
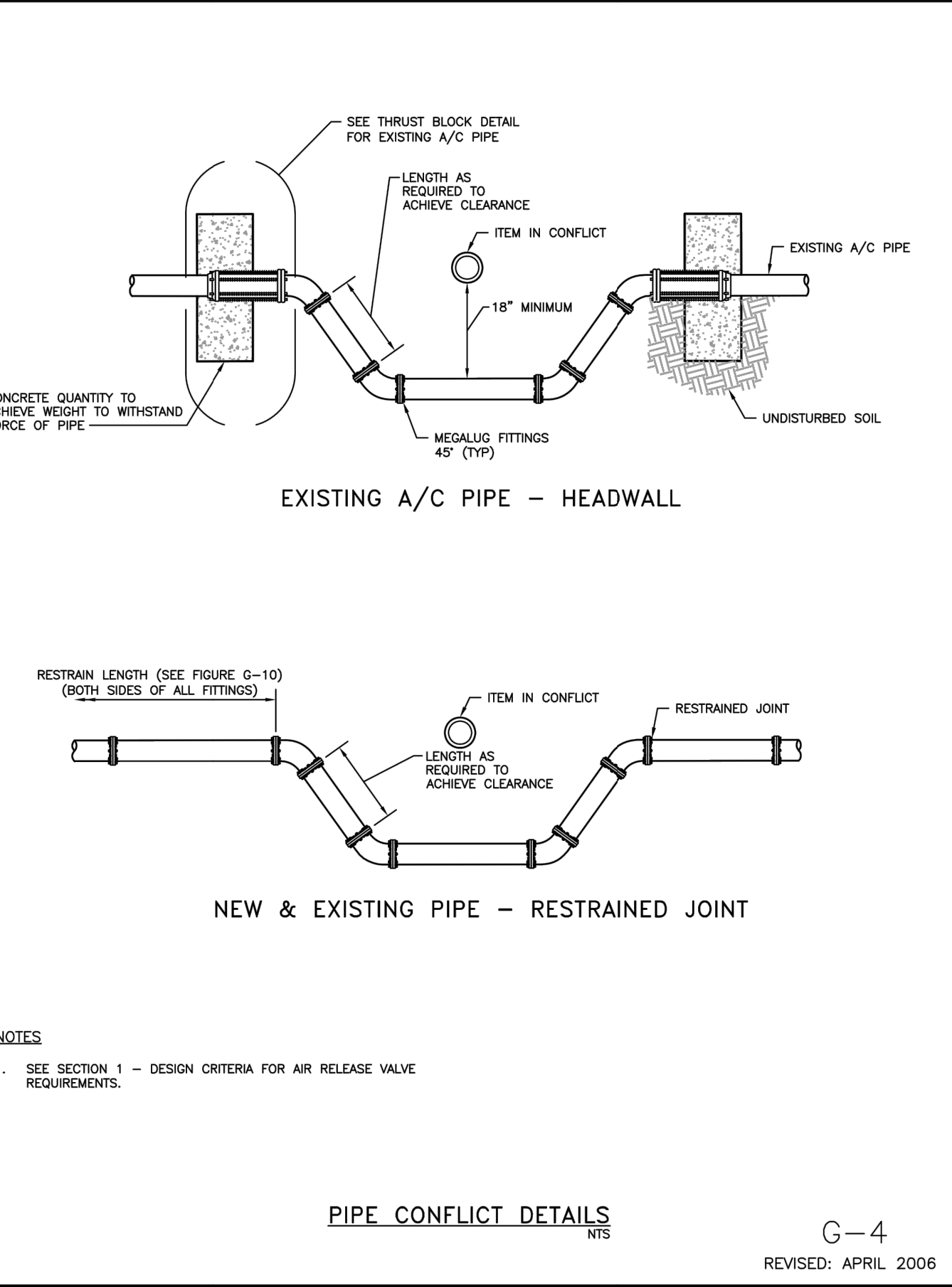
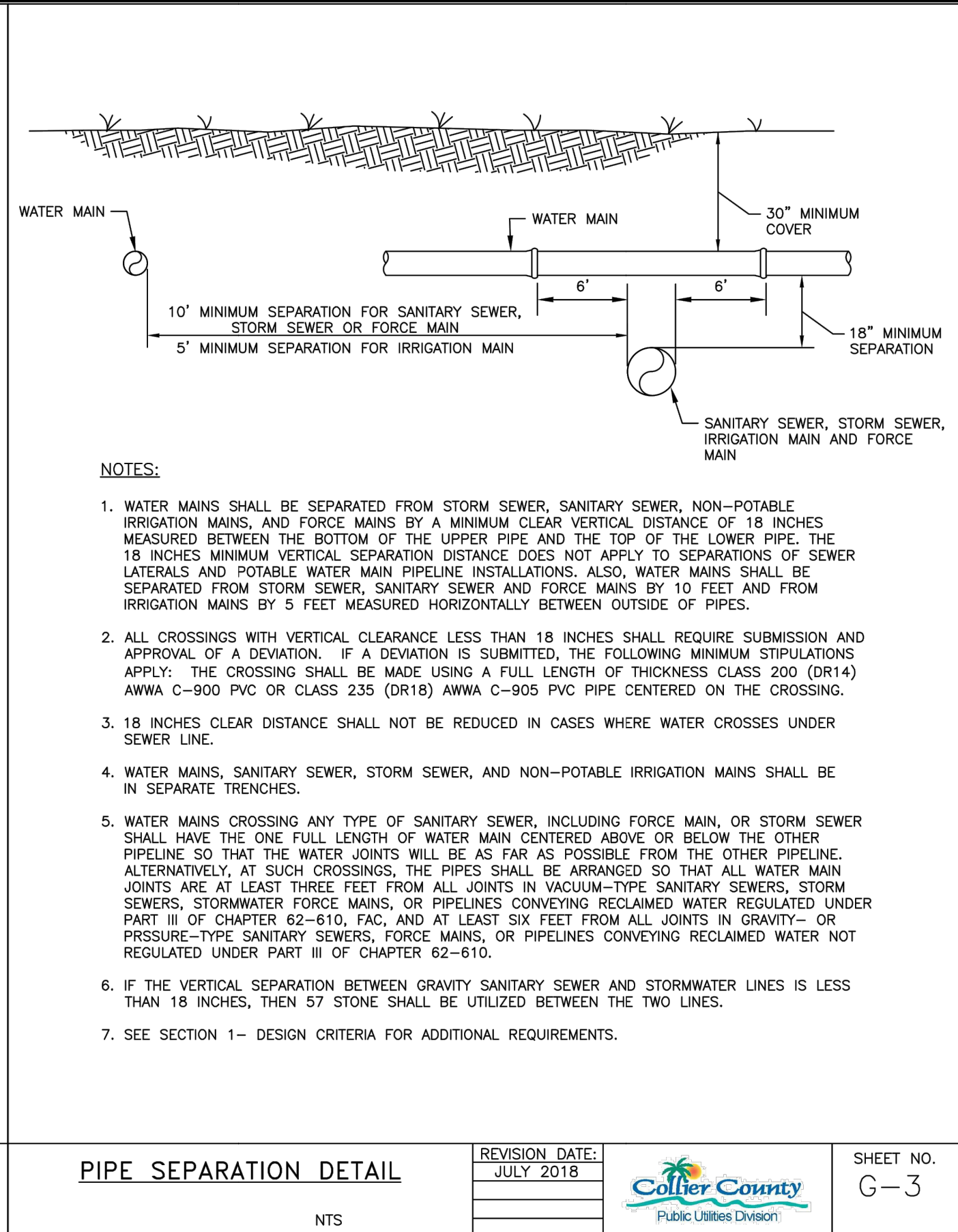
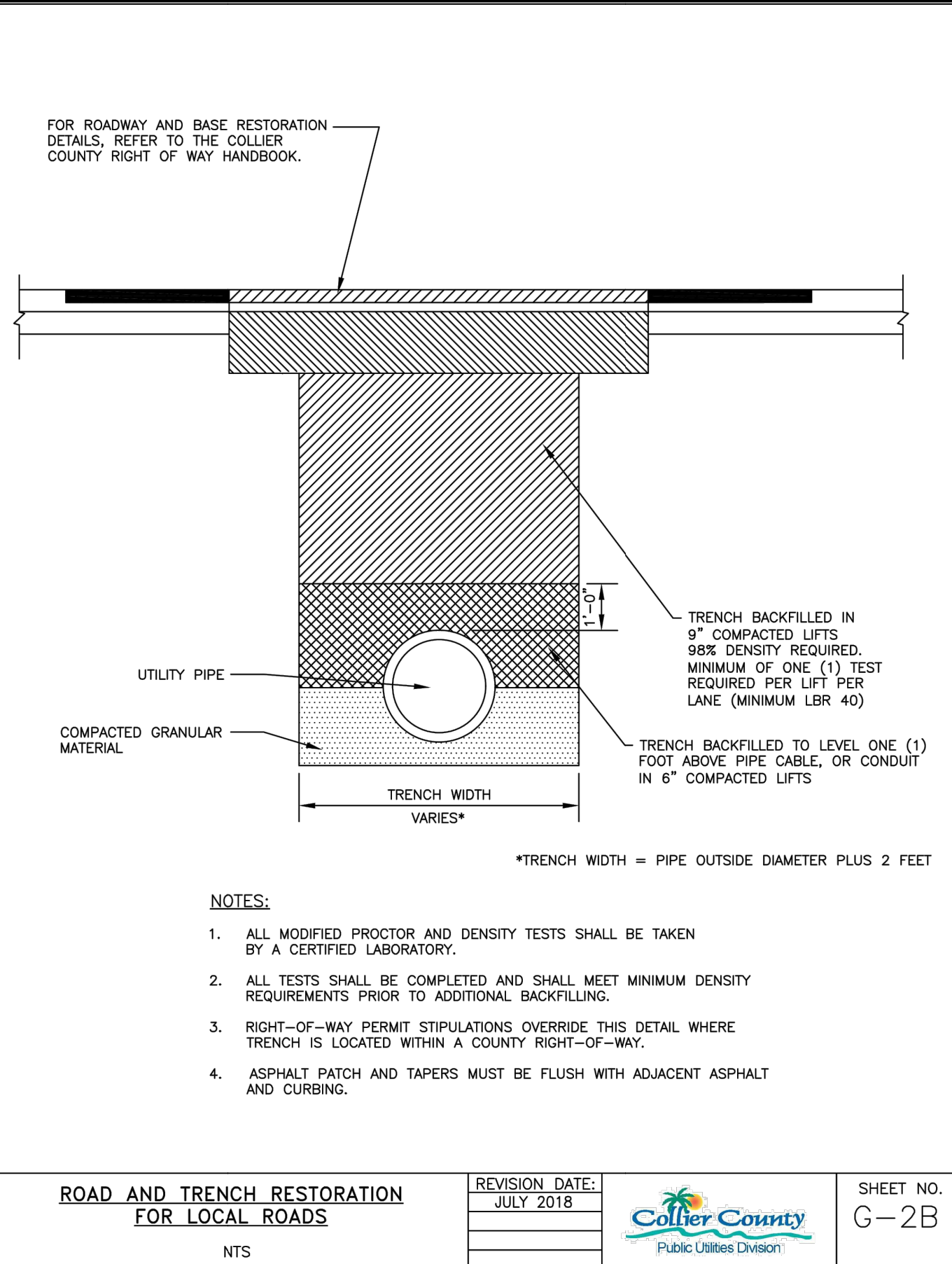
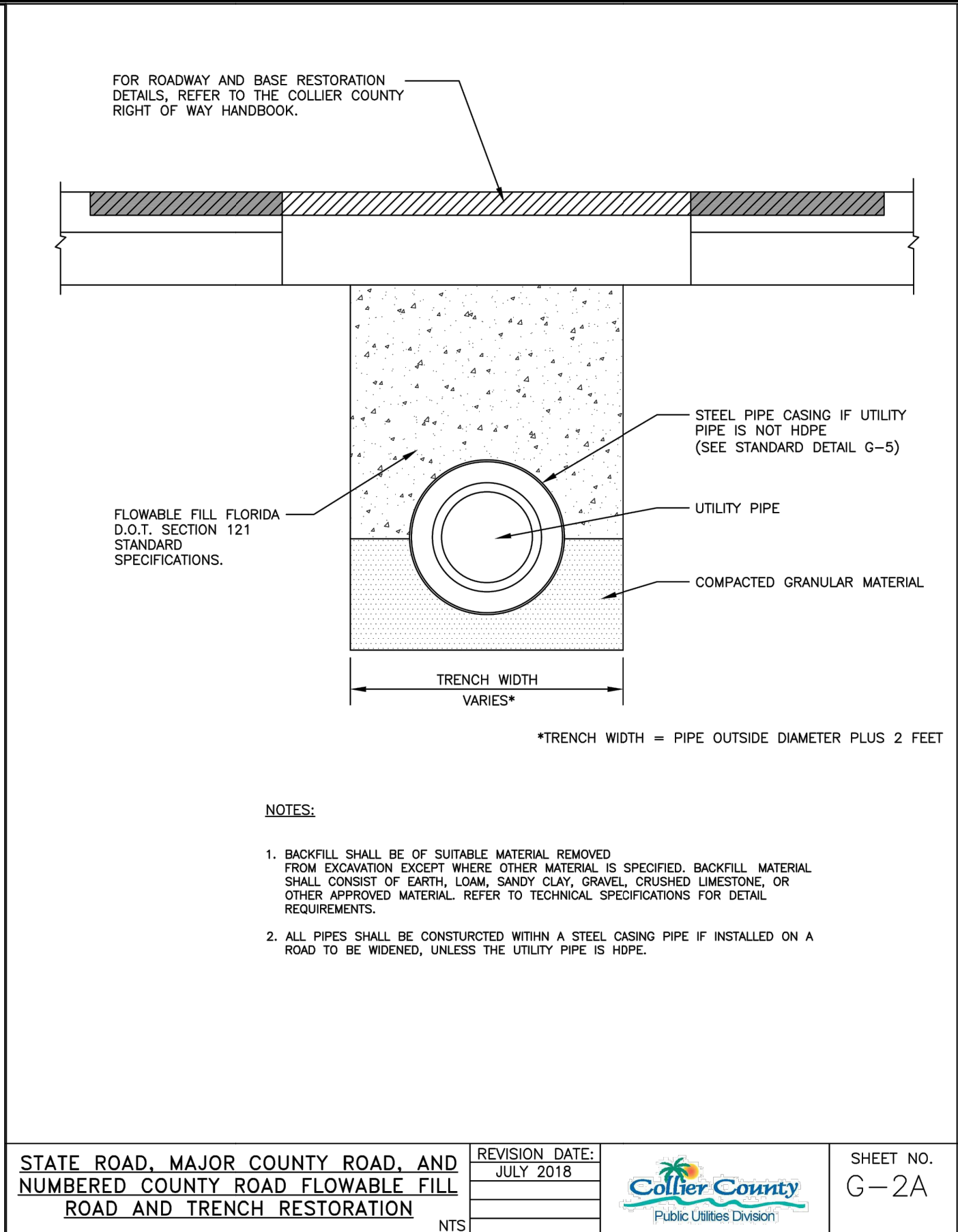
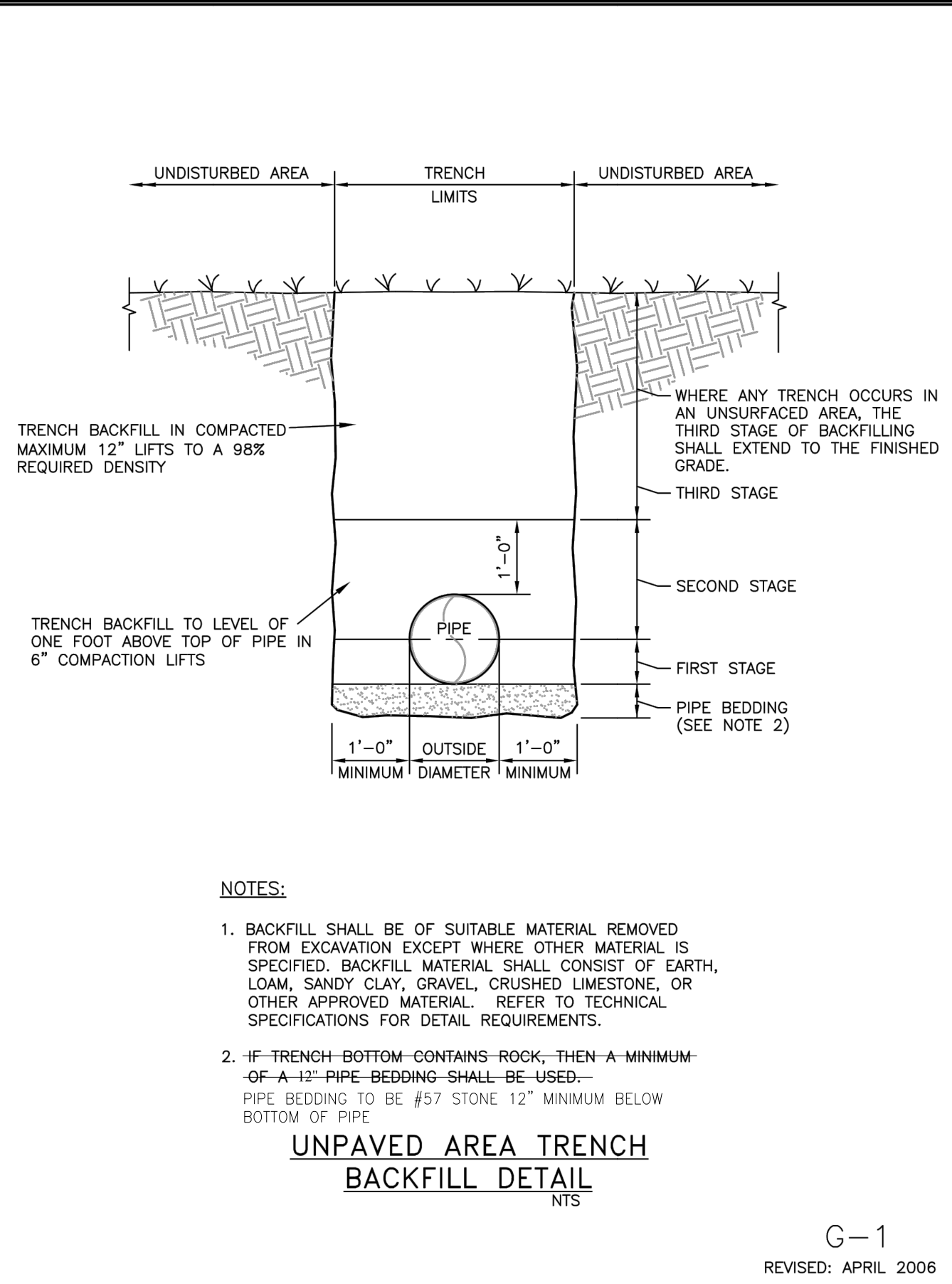
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*White Lake Water Main Replacement*  
**PLAN & PROFILE**  
**WHITE LAKE BLVD. - PROPOSED**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
 CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)1.276

MUNICIPALITY: COLLIER COUNTY	DATE: 07/24
SEC/TWN/RGE: 35/49/26	SUBMITTAL TYPE: 60%
JUSTIN A. FREDERIKSEN, P.E. FLORIDA P.E. LICENSE NO. 66086	SHEET 5 OF 8

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Revision	Date	Description	By

DESIGNED BY: B.B.  
DRAWN BY: J.R.  
APPROVED: A.D.  
JOB CODE: CCU302  
SCALE: N/A  
By



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Bonita Springs, Florida 34134

WHITE LAKE BLVD. WATER MAIN REPLACEMENT

GENERAL DETAILS

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)1.276

JUSTIN A. FREDERIKSEN, P.E.  
FLORIDA P.E. LICENSE NO. 66086

MUNICIPALITY: COLLIER COUNTY  
SEC./TWN/RGE: 35/49S/26E  
DATE: 07/24  
SUBMITTAL TYPE: 60%  
SHEET 6 OF 8



PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)							
	HORIZONTAL BENDS				DEAD ENDS (2)	VERTICAL BENDS		45° LOWER
	90°	45°	22-1/2°	11-1/4°		UPPER	LOWER	
4	23	9	5	2	55	23	8	
6	32	13	6	3	77	32	11	
8	40	17	8	4	100	41	14	
10	48	20	10	5	120	50	17	
12	56	23	11	6	141	58	20	
16	71	29	14	7	181	75	25	
18	77	32	15	8	200	83	28	
20	84	35	17	8	218	90	30	
24	96	40	19	10	253	105	35	
30	112	47	22	11	303	125	41	
36	127	53	25	13	350	145	47	

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)	
	TEE (3)	REDUCER (4)
6 x 4	0	40
6 x 6	34	
8 x 4	0	72
8 x 8	55	
10 x 6	3	74
10 x 10	75	
12 x 4	0	122
12 x 8	31	75
12 x 12	95	
16 x 6	0	153
16 x 10	44	107
16 x 16	134	
18 x 8	0	157
18 x 12	68	108
18 x 18	152	
20 x 10	20	161
20 x 16	120	77
20 x 20	170	
24 x 12	37	187
24 x 18	132	109
24 x 24	204	
30 x 16	78	213
30 x 20	138	165
30 x 30	252	
36 x 18	94	259
36 x 24	170	181
36 x 36	298	

**NOTES:**

- RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCE SHOWN ON THE TABLES MEASURED FROM THE POINT OF CONNECTION.
- ISOLATION VALVES SHALL BE TREATED AS DEAD ENDS. WITH RESTRAINT ON BOTH SIDES OF THE VALVE.
- RESTRAINT IS FOR BRANCH OF TEE. IF BRANCH SIZE IS NOT ON TABLE, USE NEXT LARGEST BRANCH.
- RESTRAINT IS FOR LARGE DIAMETER SIDE OF REDUCER. IF REDUCER SIZE IS NOT ON TABLE, USE NEXT SMALLER REDUCER (SMALL END).
- THIS SCHEDULE IS TO BE USED FOR DUCTILE IRON AND PVC PIPE.

**PIPE RESTRAINT SCHEDULE**  
NTS

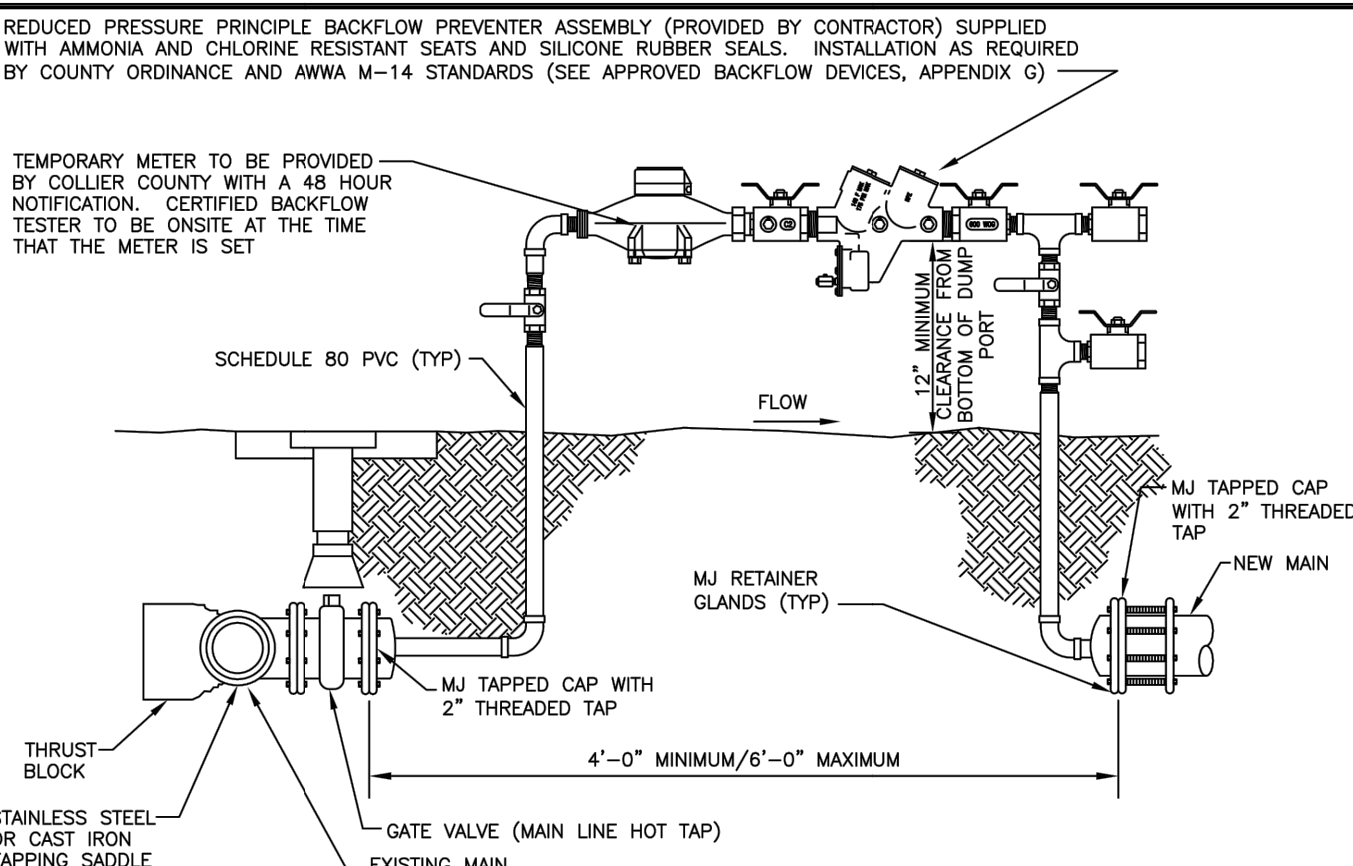
G-10  
REVISED: APRIL 2006

**TEMPORARY BLOWOFF ASSEMBLY WITH BACTERIAL SAMPLING POINT DETAIL**  
NTS

REVISION DATE:  
JANUARY 2014



SHEET NO.  
W-1



**NOTES:**

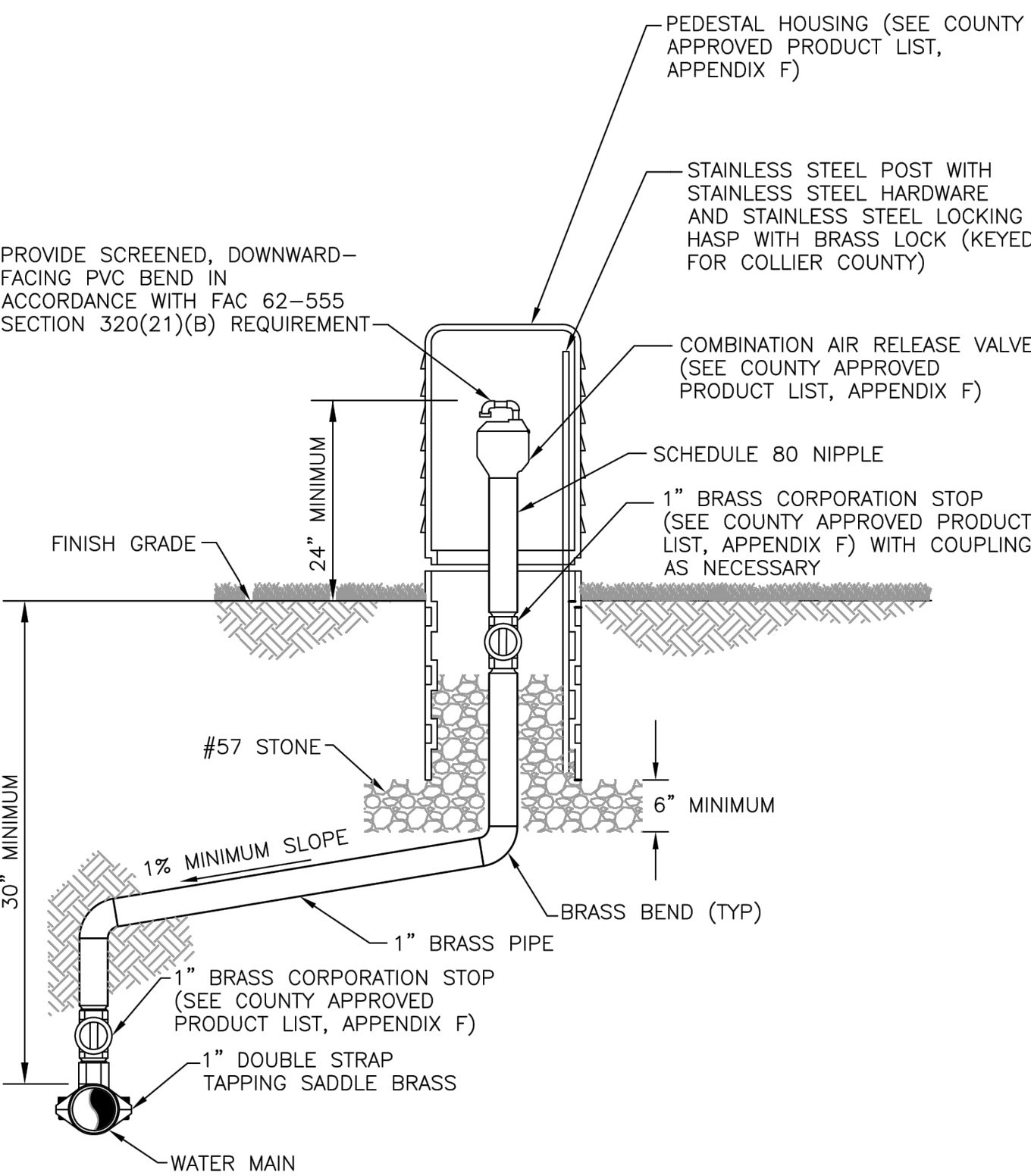
- FINAL CONNECTION TO BE WITNESSED BY COLLIER COUNTY WATER DISTRIBUTION.
- MJ TAPPED CAPS TO BE PROPERLY RESTRAINED.
- INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER.
- TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
- JUMPER ASSEMBLY MUST BE MINIMUM OF 18" ABOVE FINISHED GRADE.
- BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
- THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY SHALL BE USED.
- THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIECE INSTALLED FOR FINAL CONNECTION UNTIL AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND COUNTY ACCEPTANCE.
- GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OR LESS AT THE DISCRETION OF THE WATER DISTRIBUTION DEPARTMENT.
- ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
- FOR INSTALLATIONS WHERE LESS THAN 20' OF NEW WATER MAIN IS BEING CONSTRUCTED BETWEEN THE PERMANENT BACKFLOW ASSEMBLY AND THE EXISTING MAIN, NO TEMPORARY JUMPER IS REQUIRED.

**CONNECTION TO EXISTING WATER MAIN DETAIL (GAP CONFIGURATION)**  
NTS

JULY 2018



SHEET NO.  
W-4



**POTABLE WATER AIR RELEASE VALVE DETAIL**  
NTS

W-5

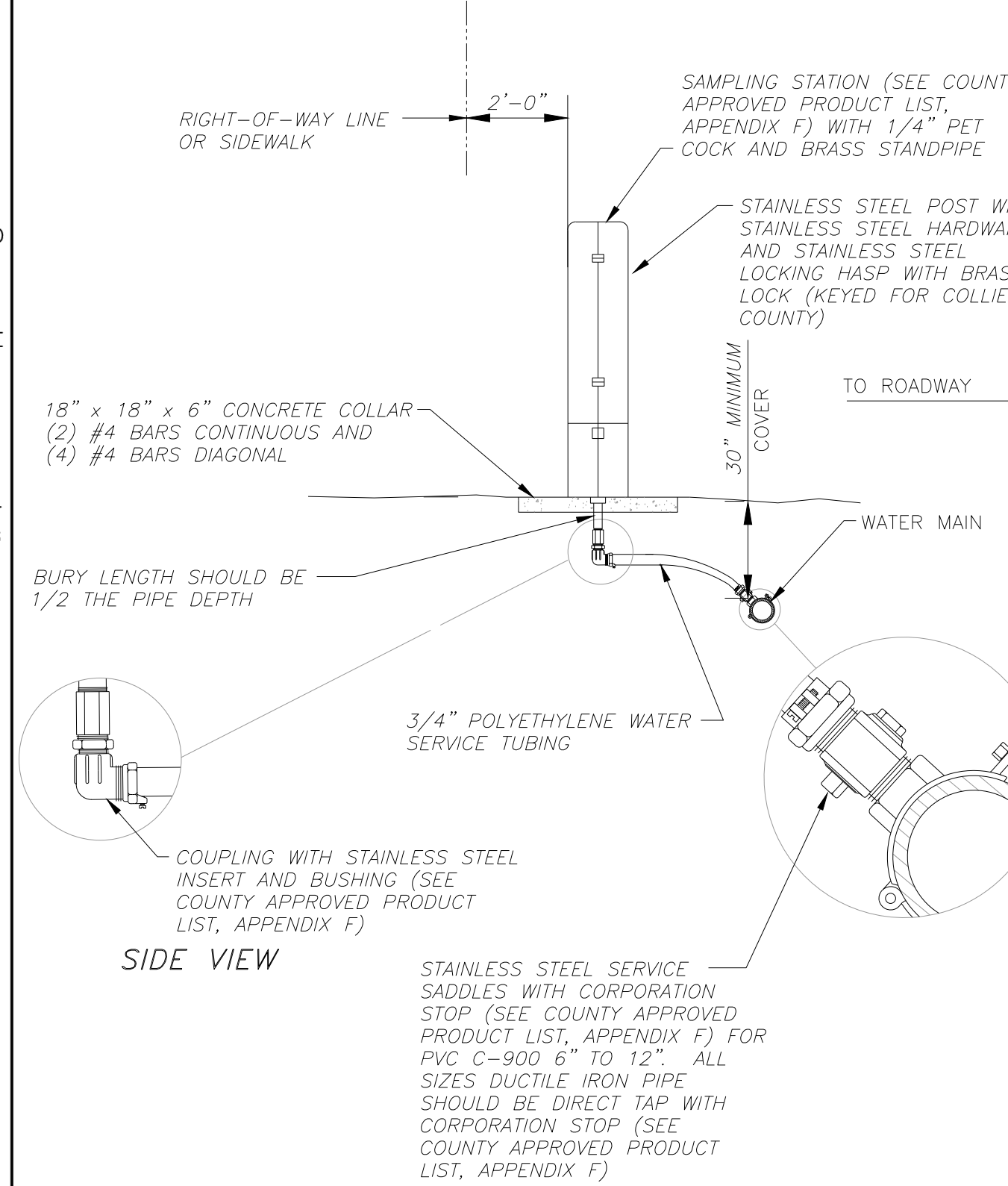
REVISED: AUGUST 2008

**FIRE HYDRANT DETAIL**  
NTS

REVISION DATE:  
JULY 2018



SHEET NO.  
W-3



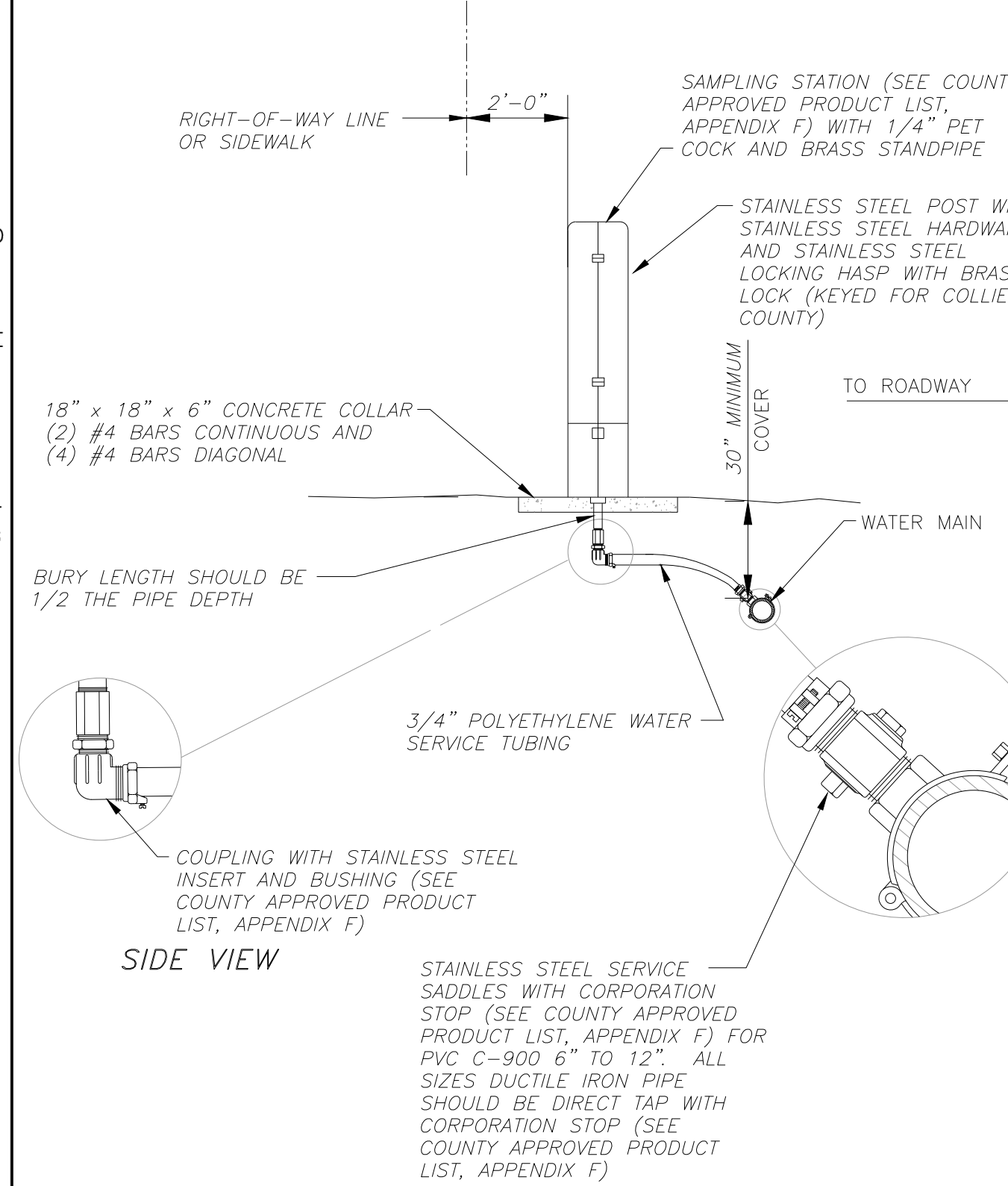
**NOTES:**

- HYDRANT MUST BE CURRENT YEAR MANUFACTURE AND YEAR OF MANUFACTURE MUST BE CAST ON BARREL.
- ALL EXISTING MAINS WHERE FIRE HYDRANTS ARE TO BE INSTALLED SHALL BE HOT TAPPED.
- TAPPING SADDLES MAY BE EITHER STAINLESS STEEL OR DUCTILE IRON. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
- ALL FIRE HYDRANT BARRELS SHALL BE A MINIMUM 5-1/4" IN DIAMETER.
- ALL FIRE HYDRANTS INSTALLED SHALL BE OF THE BREAK AWAY FLANGE TYPE AND SHALL MEET THE REQUIREMENTS OF THE LOCAL FIRE CONTROL DISTRICT.
- HYDRANT SHALL CONFORM WITH AWWA C-502.
- THRUST RESTRAINT SHALL BE BY MJ RETAINER GLANDS.
- ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

**PERMANENT BACTERIAL SAMPLE POINT DETAIL**  
NTS

W-6

REVISED: AUGUST 2008



Revision	Date	Description	By

DESIGNED BY:	B.B.
DRAWN BY:	J.R.
APPROVED:	A.D.
JOB CODE:	CCU302
SCALE:	N/A



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 3800 Via Dei Rey  
 Bonita Springs, Florida 34134

**WHITE LAKE BLVD. WATER MAIN REPLACEMENT**

**WATER AND GENERAL DETAILS**

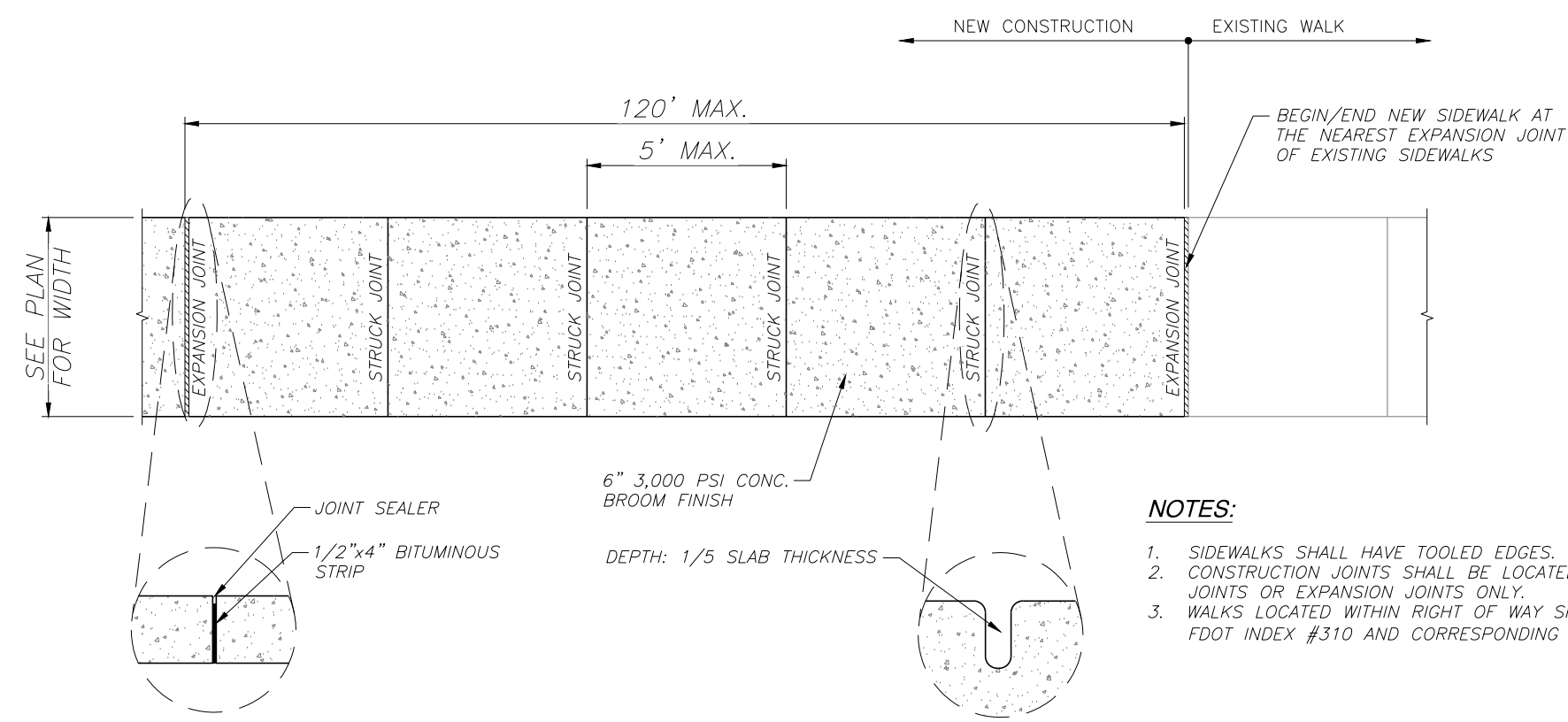
ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
 CONVERSION FACTOR TO NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) IS (+)1.276

JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

MUNICIPALITY:	COLLIER COUNTY
SEC./TWN./RGE:	35/49S/26E
DATE:	07/24
SUBMITTAL TYPE:	60%
SHEET	7 OF 8

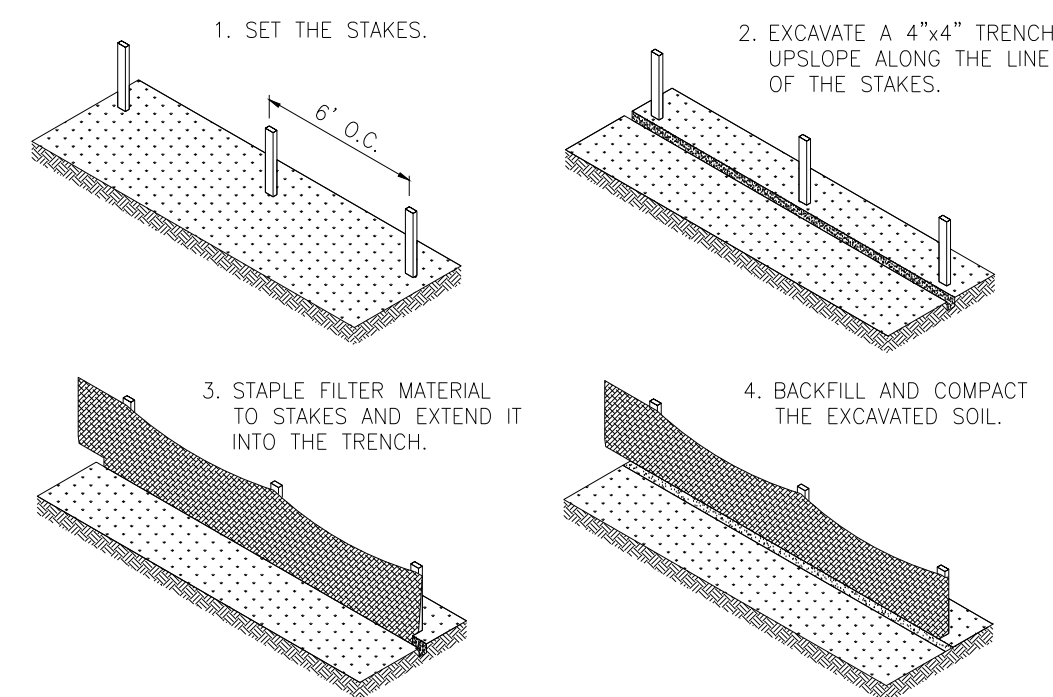
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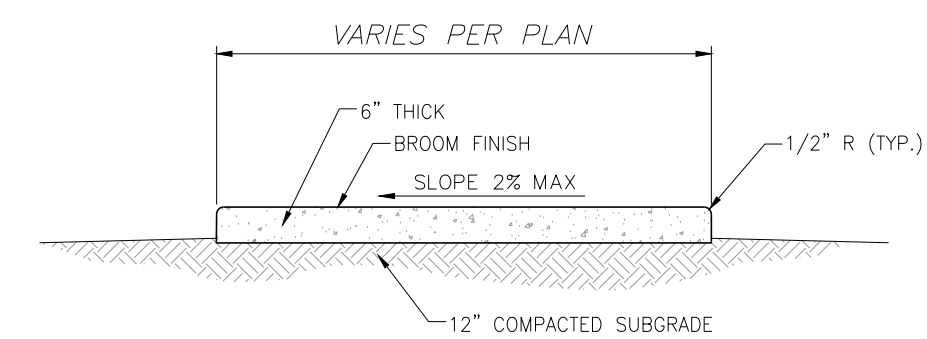


**SIDEWALK DETAIL**  
NOT TO SCALE

- NOTES:**
1. SIDEWALKS SHALL HAVE TOOLED EDGES.
  2. CONSTRUCTION JOINTS SHALL BE LOCATED AT STRUCK JOINTS OR EXPANSION JOINTS ONLY.
  3. WALKS LOCATED WITHIN RIGHT OF WAY SHALL COMPLY WITH FDOT INDEX #310 AND CORRESPONDING SPECIFICATIONS.

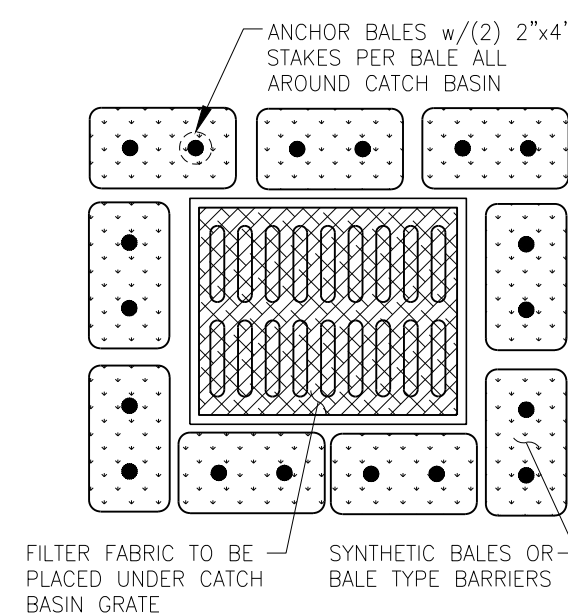


**TYPICAL SILT FENCE DETAIL**  
N.T.S.



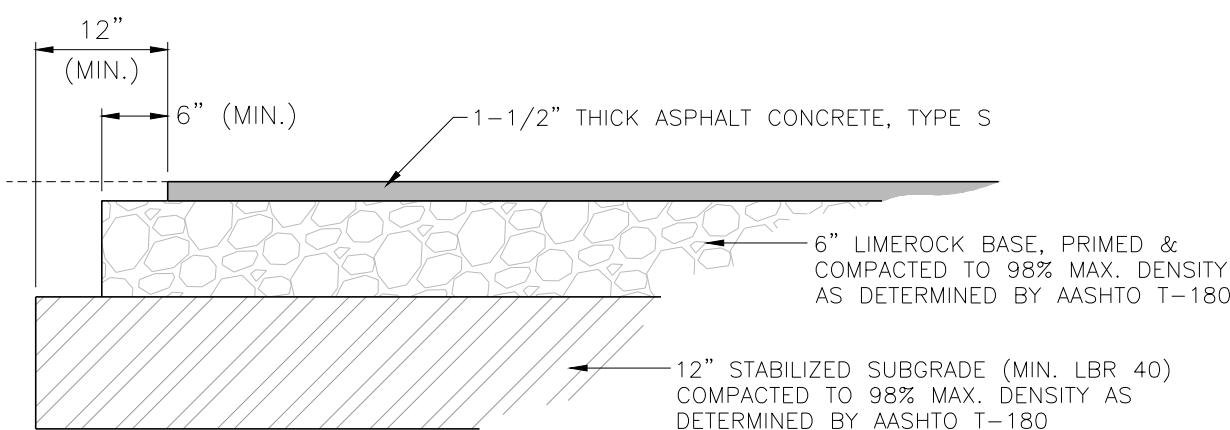
1. THE PROPOSED FILL SHALL BE COMPACTED IN 12" LIFTS TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180 AND THE ENGINEER'S SPECIFICATIONS.
2. SUBGRADE SHALL BE SAND, COMPACTED TO A FIRM EVEN SURFACE, TRUE TO GRADE AND CROSS-SECTION, AND BE MOIST WHEN CONCRETE IS PLACED.
3. SIDEWALK SHALL HAVE CONTRACTION JOINTS AT 5' INTERVALS AND AN EXPANSION JOINT EVERY 120' MAXIMUM.

**TYPICAL CONCRETE SIDEWALK SECTION**  
NOT TO SCALE



**CATCH BASIN PROTECTION DETAIL**  
NOT TO SCALE

- NOTES:**
1. BALES SHOULD BE ANCHORED w/2-1"x2" (OR 1" DIA.)x4" WOOD STAKES. STAKES OF OTHER MATERIAL OR SHAPE PROVIDING EQUIVALENT STRENGTH MAY BE USED IF APPROVED BY ENGINEER. STAKES OTHER THAN WOOD SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
  2. RAILS AND POSTS SHALL BE 2"x4" WOOD. OTHER MATERIALS PROVIDING EQUIVALENT STRENGTH MAY BE USED IF APPROVED BY ENGINEER.
  3. ADJACENT BALES SHALL BE BUTTED FIRMLY TOGETHER.
  4. WHERE USED IN CONJUNCTION w/SILT FENCE, BALES SHALL BE PLACED ON THE UPSTREAM SIDE OF THE FENCE.



- NOTES:**
1. ASPHALTIC CONCRETE PAVEMENT (TYPE S) SHALL BE CONSTRUCTED IN TWO 3/4" LIFTS. THE SECOND LIFT SHALL BE CONSTRUCTED AFTER SUBSTANTIAL COMPLETION OF BUILDING CONSTRUCTION.
  2. 5-1/2" LIMEROCK BASE MATERIAL MAY BE SUBSTITUTED AS AN ALTERNATE DESIGN TO THE 12" STABILIZED SUBGRADE. ALL SPECIFICATIONS FOR LIMEROCK BASE MATERIAL SHALL BE ADHERED TO.

**TYPICAL PAVEMENT SECTION**  
NOT TO SCALE



Revision	Date	Description	By

DESIGNED BY:	B.B.
DRAWN BY:	J.R.
APPROVED:	A.D.
JOB CODE:	CCU302
SCALE:	N/A



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**WHITE LAKE BLVD. WATER MAIN REPLACEMENT**

MISCELLANEOUS DETAILS

ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88)  
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MUNICIPALITY:	COLLIER COUNTY
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DATE:	07/24
SUBMITTAL TYPE:	60%
SHEET	8 OF 8