

SHEET INDEX

SHEET #	SHEET DESCRIPTION
01	COVER SHEET, SHEET INDEX, AND PROJECT LOCATION
02	GENERAL NOTES AND ABBREVIATIONS
03	LEGENDS AND TEST HOLE TABLE
04-08	DRUID RD (AREA A) - PLAN AND PROFILES
09-11	N MARTIN LUTHER KING JR AVE (AREA B) - PLAN AND PROFILES
12-13	FAIRMONT ST (AREA C) - PLAN AND PROFILES
14-15	FAIRMONT ST - SANITARY SEWER REPLACEMENT - PLAN AND PROFILES
16-20	MEMORIAL CAUSEWAY (AREA D) - RECONNECTIONS
21-22	CITY OF CLEARWATER STANDARD DETAILS
23-24	FDOT FY 2021-22 STANDARD PLANS DETAILS
---	AREA E, AREA F, AND AREA G - SEE SUPPLEMENTAL ATTACHMENT

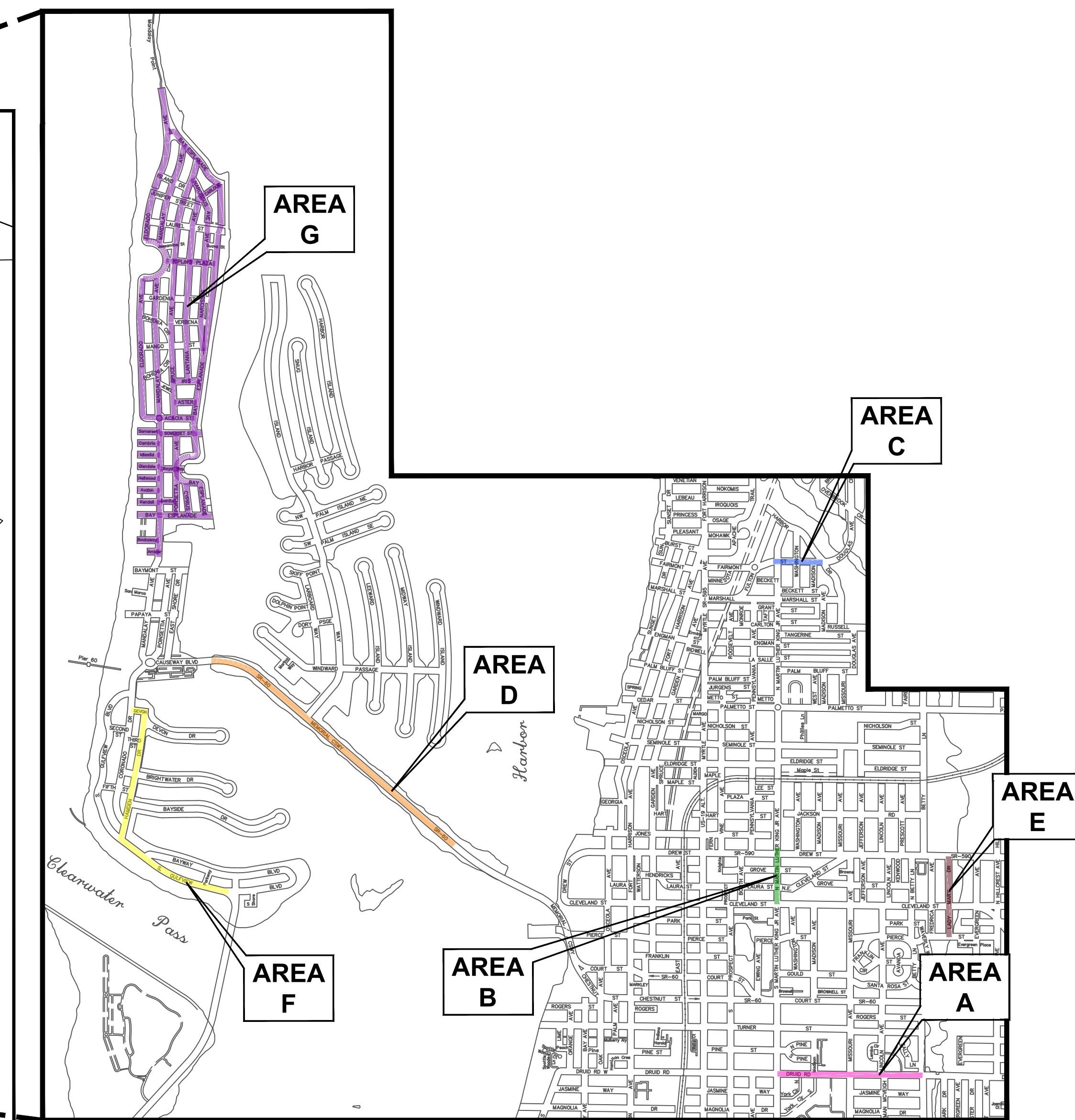
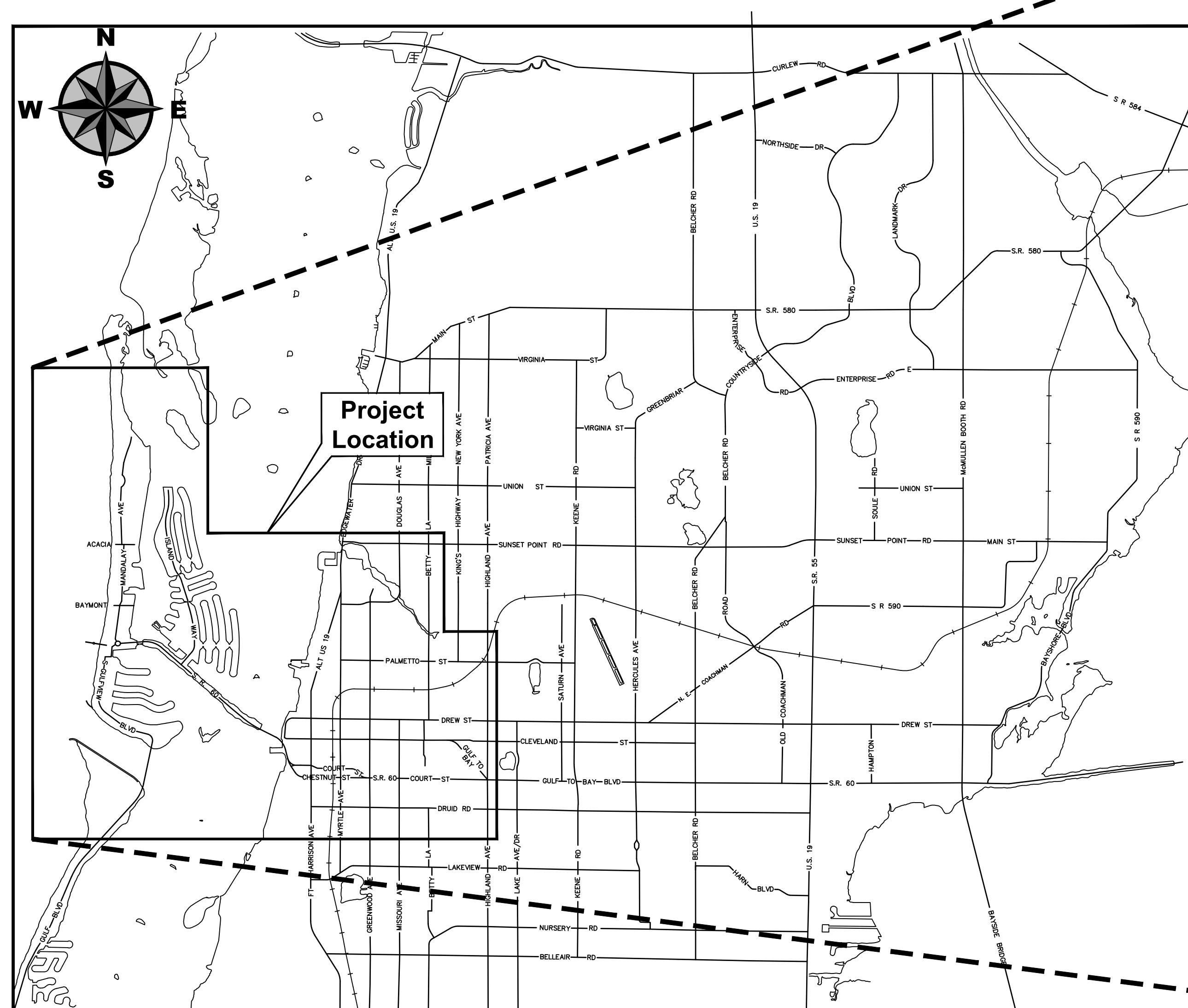


CLEARWATER

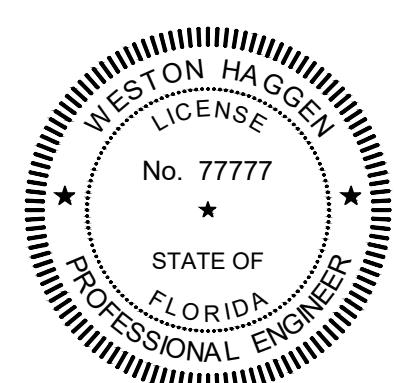
BRIGHT AND BEAUTIFUL • BAY TO BEACH



RECLAIMED WATER PIPING IMPROVEMENTS AREAS A - D



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN 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.

CITY OFFICIALS

Frank Hibbard
Mark Bunker
Kathleen Beckman
David Allbritton
Hoyt Hamilton
Jon Jennings

Mayor
Councilmember
Councilmember
Councilmember
Councilmember
City Manager

Tara L. Kivett, P.E.
City Engineer

Approved For Construction

CITY ENGINEER Tara L. Kivett, P.E. #86611

Date Approved

BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

GENERAL NOTES

- All work performed shall comply with the regulations and ordinances of the various governmental agencies having jurisdiction over the work.
- All workmanship and materials used in the construction of this project shall conform to the latest City of Clearwater standards, contract documents and specifications unless otherwise noted.
- Specific requirements of the Florida Department of Transportation (FDOT) "Design Standards" and "Standard Specifications for Road and Bridge Construction", most current editions, are incorporated into the contract documents by reference.
- The Contractor shall obtain all required permits prior to construction.
- The Contractor shall notify all utility companies at least forty eight (48) hours prior to start of construction, demolition and/or excavation in accordance with Florida Statutes.
- The Contractor shall call Sunshine 811, previously known as Sunshine State One Call of Florida, at 1-800-432-4770 or 811, a minimum of two (2) days and a maximum of five (5) days prior to start of construction.
- Locations, elevations and dimensions of existing utilities, structures and other features are shown according to the best information available at the time of the preparation of these plans, but do not purport to be absolutely correct. The Contractor shall verify the location, elevations and dimensions of all existing utilities, structures and other features affecting the work prior to construction.
- The Contractor shall be responsible to review the site to determine existing conditions. Anything not shown on these plans shall be brought to the attention of the City's Engineering Representative and shall not constitute additional scope of work approved by the Engineer.
- The Contractor shall contact the City's Engineering Representative immediately concerning any conflicts arising during construction.
- All construction activities must conform to the local noise ordinance.
- Hours of work shall be in accordance with the local governmental agency.
- These drawings do not include necessary components for construction safety. The Contractor is solely responsible for construction safety. Special precautions may be required in the vicinity of power lines and other utilities.
- The Contractor shall furnish, erect and maintain all necessary traffic control and safety devices in accordance with the U.S. Department of Transportation, "Manual on Uniform Traffic Control Devices" and the latest Florida Department of Transportation "Design Standards".
- The Contractor shall provide, erect and maintain effective barricades, danger signals, signs and pedestrian detours in all areas where required for the protection of the work and the safety of the public.
- Maintenance of Traffic (MOT): if it becomes necessary for the Contractor to close any street to through traffic within the limits of construction, access for local traffic with destination within the project limits of construction shall be maintained. If during construction, access for local traffic is changed, the property owners affected shall be given at least three (3) days advance notice. The Contractor shall submit to the City's Engineering Representative the Traffic Control Plan for approval prior to implementation.
- A registered Land Surveyor, at the Contractor's expense, shall reset all section corners or property corners dislocated or disturbed by any construction related activities.
- Any National Geodetic Survey (NGS) Monument within the limits of construction is to be protected. If in danger of damage, contractor shall notify the city's field representative immediately and contact the National Geodetic Survey information center.
- Unless noted on the plans, final grade is to generally be the same as existing grade. Restore uniformly and for proper yard drainage grade toward roadway.
- All new utilities shall be installed with the minimum thirty six (36) inches of cover.
- Where utilities cross the lowest pipe shall be installed first.
- The Contractor shall be responsible for testing of all newly constructed utilities in accordance with current standards of local jurisdiction. The Contractor shall notify the local jurisdiction and the Owner or an authorized representative at least forty eight (48) hours in advance of performing tests.
- The Contractor shall provide all sheeting, shoring and bracing required to protect adjacent structures or to minimize trench width. Where a separate pay item is not provided, the cost of all sheeting and bracing required shall be included in the contract price for the item of work for which sheeting, shoring and bracing is anticipated to be required in accordance with local, state, or federal regulations for construction.
- All concrete shall have a minimum compressive strength of 3,000 psi (28-day strength), unless otherwise noted on drawings.
- No surfacing material is to be applied to any manhole covers, frames, valve boxes, gas drops, etc. All existing and proposed utility and storm sewer structures whose tops will be exposed within any paved area shall be adjusted so that the top surface of covers or frames shall be flush with the pavement surface.
- Materials interfering with construction shall be disposed of as directed by the City's Engineering Representative, unless otherwise noted on plans.
- All excess soil resulting from construction activities that is not claimed by the Owner shall become the property of the Contractor and disposed of by the Contractor.
- All disturbed landscaped and/or grassed areas shall be restored uniformly and be generally at the same elevation as existing grades.
- All disturbed areas shall be replaced within fifteen (15) days to a condition equal to or better than existing conditions.
- All voids after placement of sod shall be filled with prepared soil mix. The sod shall be rolled to meet the proposed grades. Sod placed on slopes 3:1 or steeper shall be pegged.
- Areas of exposed earth resulting from construction shall be sodded in kind as directed by the City's Engineering Representative unless otherwise noted on plans.
- The Contractor shall maintain an accurate set of marked-up drawings (As-Builts) at the construction site.
- A CCTV inspection of the new sewer system in digital format utilizing the industry standard Pipeline Assessment and Certification Program (PACP) coding system shall be provided to the City. The video shall be taken prior to placing the new sewer system into service. Data will be collected utilizing CUES Granite software.
- Installation of gravity sewer pipe shall be in conformance with recommended practices contained in Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications ASTM D2321. Connections to manholes with sanitary pipe shall use a joint two (2) feet in length and shall use an approved water stop around pipe joint entry.
- The bottom trench width in an unsupported trench shall be limited to the minimum practicable width allowing working space to place and compact the backfill material. The use of trench boxes and movable sheeting shall be performed in such a manner that removal, backfill and compaction will not disturb compacted backfill material or pipe alignment. Dewatering of the trench bottom shall be accomplished using adequate means to allow preparation of bedding, placement of the backfill material and pipe in the trench without standing water. Dewatering shall continue until sufficient backfill is placed above the pipe to prevent flotation or misalignment.
- The Contractor shall dispose of all unsuitable materials, construction debris, and other waste materials offsite in accordance with applicable regulatory agency requirements at the Contractor's expense. All backfill shall be free of unsuitable materials.
- The Contractor shall be responsible for providing a Hurricane Preparation Plan to the City's Engineering Representative for review and approval prior to commencing construction activities.
- Any damage to city, county, or state roads caused by the Contractor shall be repaired by the Contractor in a timely manner and to the satisfaction of the City's Engineering Representative. Payment shall not be made for this work.
- The Contractor shall protect private property.

39. All RCW water service lines and meter boxes shall be installed with a minimum five (5) foot separation from existing potable water meter boxes and service lines, however separation may be reduced to three (3) foot where space is limited as approved by City's Engineering Representative.

40. The Contractor shall provide the City 60 days notice prior to starting any service line connections.

41. City of Clearwater to provide RCW service meter box location sheets to City's Engineering Representative directing location of RCW meter boxes to be installed.

42. All lane closures and work affecting traffic shall be scheduled, coordinated, and approved by the City. No lane closures on Memorial Causeway (SR60) will be allowed during Spring Break.

SURVEY NOTES

- The City of Clearwater Control Network's Horizontal Datum is: North American Datum (N.A.D.), Florida State Plane Coordinates, Florida West Zone 83(1999).
- The City of Clearwater Control Network's Vertical Datum is: North American Vertical Datum (N.A.V.D.) 1988.
- The survey was provided by ECHO UES, INC. The last date of field survey is 03-03-2021.

TREE PROTECTION

- The Contractor will be responsible for adhering to all Tree Protection measures required by the City of Clearwater codes, ordinances and Standard Specifications. This will include all tree barricades, root pruning and tree trimming/pruning activities. These requirements will apply within the specified "limits of work" and will also be applicable in all areas where the Contractor and/or his subcontractors stage, store or park vehicles, equipment, materials and debris.
- All tree pruning and/or root pruning on existing trees to be preserved will only be performed by or under the direct supervision of an International Society of Arboriculture (ISA) Certified Arborist. Furthermore, all tree work shall conform to the American National Standards Institute (ANSI) 2001, American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices (Pruning) ANSI A-300.
- Where called for on the plans, install tree barricades, erosion control/silt fencing or other approved protective barriers around all trees to be preserved, per City Standard Detail. Where applicable, and specifically approved by the City's Engineering Representative protective barriers may be placed in root prune trenches.
- Prior to any field changes taking place, it will be the Contractor's responsibility to review the potential impacts to existing trees with his Certified Arborist, and include any and all recommended tree protection measures in his proposal to modify the approved design. The City's Engineering Representative must approve, in writing, any changes to the approved design prior to implementation of said change.
- The Contractor will avoid any open excavations, fill or other construction activities whenever possible within the "critical root zone" of any existing tree (i.e., under the drip line/canopy).
- No vehicles, equipment or materials shall be parked or stored under/within the drip line/protective barrier area of any tree.
- Where construction activities are anticipated to last for an extended period of time near existing trees, the Contractor shall install and maintain City approved tree barricades as shown in the Standard Details and as approved by the City's Engineering Representative.
- Woodchips, mulch or another cushioning surface material approved by the City's Engineering Representative shall be placed to a minimum depth of ten (10) inches over areas where roots are present and construction traffic occurs.
- All tree protection measures shall remain in place at all times during construction until the City's Engineering Representative authorizes removal.
- The Contractor will coordinate with the City's Engineering Representative, Catherine Corcoran, at (727) 532-4749, to obtain approval in advance of any and all work within the critical root zone of any existing tree.

SEDIMENT & EROSION CONTROL

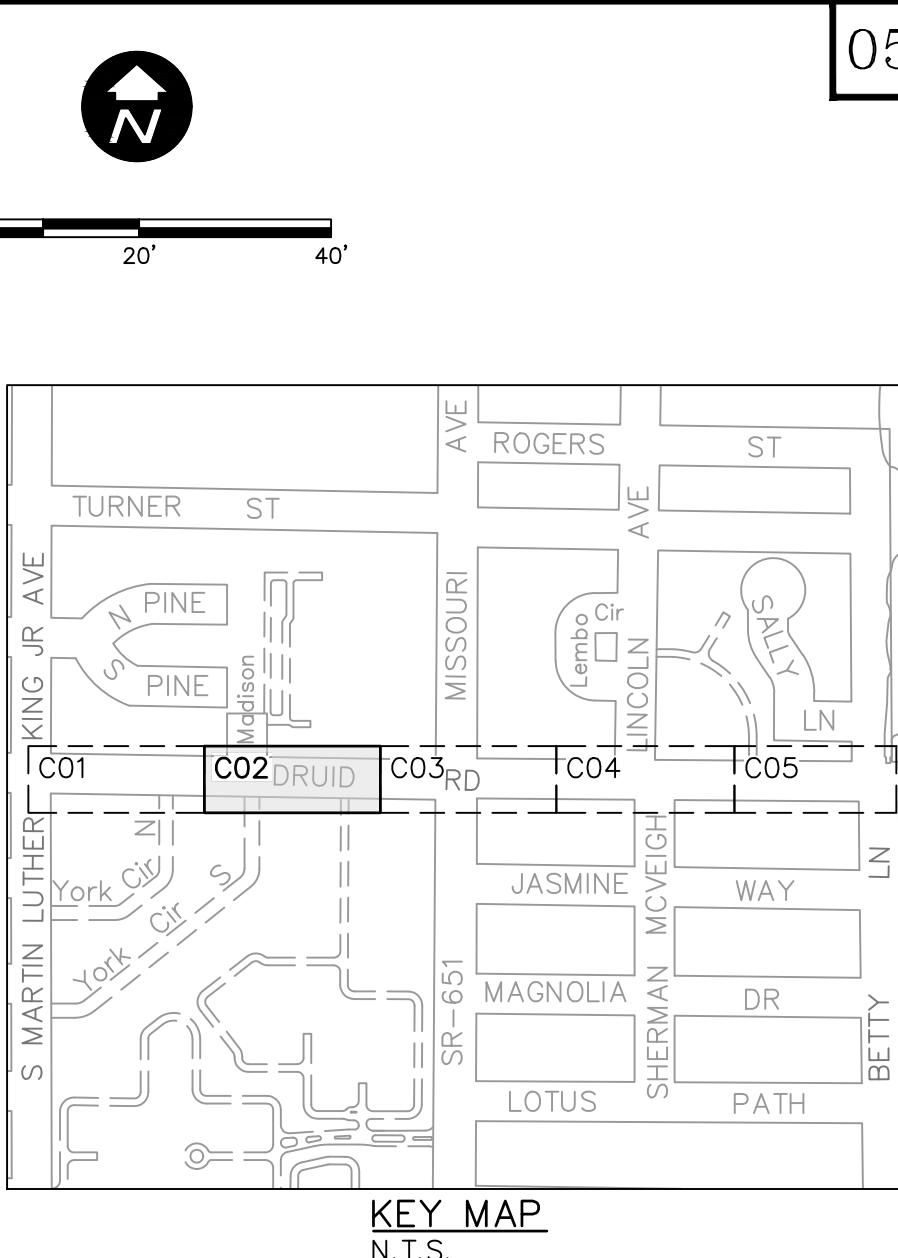
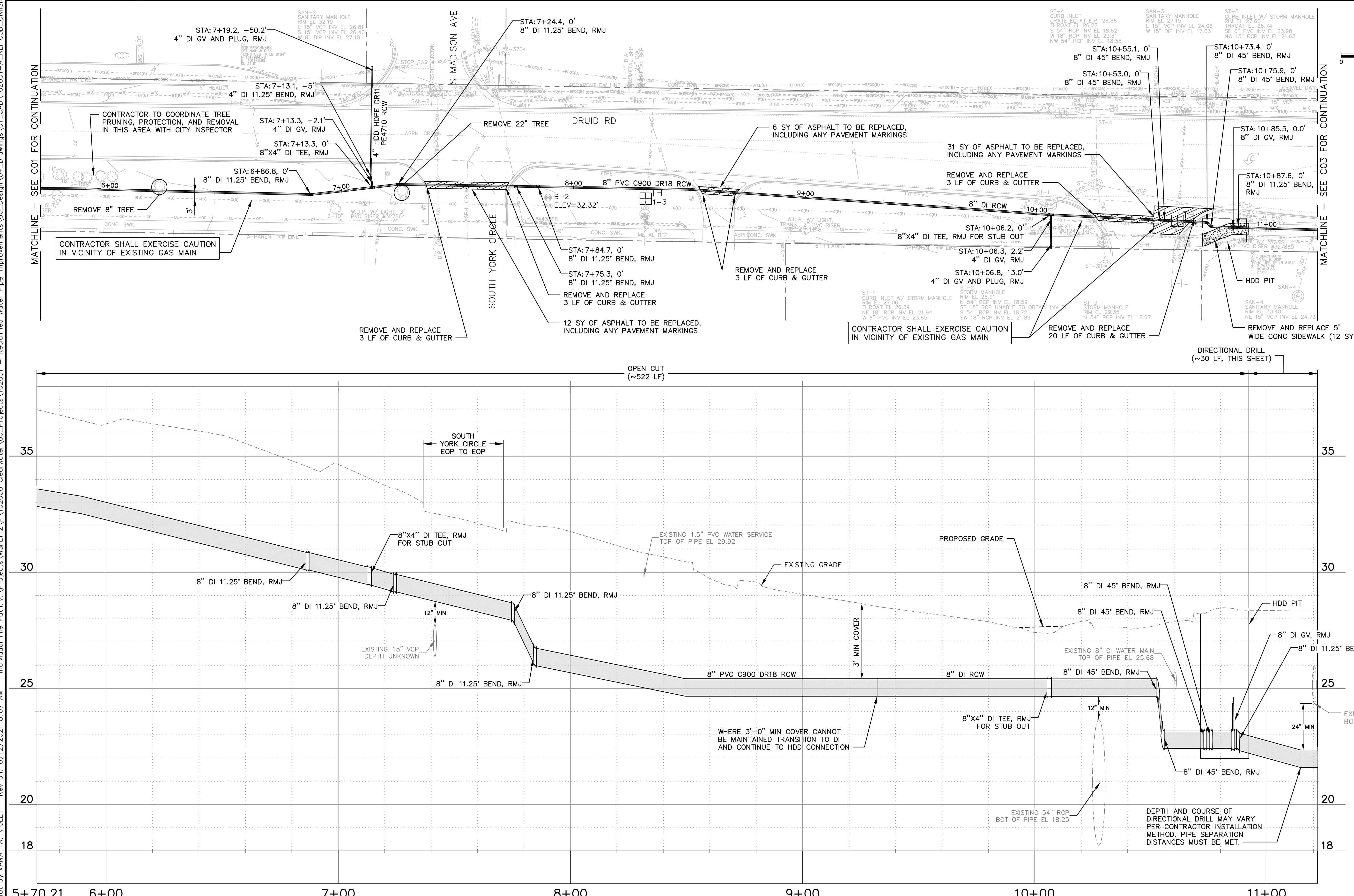
- It is the responsibility of the Contractor to control and prevent erosion and the transportation of sediment to surface drains and outfalls.
- The Contractor shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Florida Department of Environmental Protection (FDEP) Criteria for a National Pollution Discharge Elimination System (NPDES) Activities Permit.
- The Contractor must obtain a FDEP Generic Permit for The Discharge of Produced Ground Water, if dewatering with offsite discharge will be required. The Contractor is responsible for all required preliminary water samples to satisfy the FDEP Generic Permit for the Discharge of Produced Ground Water. Sampling shall occur thirty (30) days prior to the start of dewatering.
- Construction operations shall be carried out in such a manner that erosion and pollution shall be minimized. The submitted SWPPP shall be complied with. All applicable federal, state, and local laws shall be complied with at all times. Please note that no hay bales are allowed on City of Clearwater projects.

ROOT PRUNING

- Root pruning shall only be performed by or under the direct supervision of an International Society of Arboriculture (ISA) Certified Arborist.
- Any proposed root pruning trenches shall be identified (i.e., staked or painted) on site, inspected and approved by the City's Engineering Representative prior to actual root pruning.
- Root pruning shall be performed as far in advance of other construction activities as is feasible, but at a minimum shall be performed prior to any impacts to the soil. Associated tree protection measures should be implemented upon completion of said root pruning.
- If there is a likelihood of excessive wind and/or rain, an exceptional care shall be taken on any root pruning activities.
- Root pruning shall be limited to a minimum of twelve inches per one inch trunk diameter from the tree base. Any exception must be approved by the City's Engineering Representative prior to said root pruning.
- Roots shall be cut cleanly, as far from the trunk of the tree as possible. Root pruning shall be done to a minimum depth of eighteen (18) inches from existing grade, or to the depth of the disturbance if less than eighteen (18) inches.
- Root pruning shall be performed using a root cutting machine designed specifically for this purpose. Alternate equipment or techniques must be approved by the City's Engineering Representative, prior to any work adjacent to trees to be preserved.
- Root pruning shall be completed, inspected and accepted prior to the commencement of any excavation or other impacts to the critical root zones of trees to be protected.
- Excavations in an area where root are present shall not cause the tearing or ripping of tree roots. Roots must first be cleanly severed prior to continuing with the excavation, or tunneled around to prevent damage to the root.
- Tree roots shall not be exposed to drying out. Root ends shall be covered with native soil or burlap and kept moist until final backfill or final grades have been established.
- When deemed appropriate (e.g. during periods of drought) the city representative may require a temporary irrigation system be utilized in the remaining critical root zones of root pruned trees.

ABBREVIATIONS

ABAN	ABANDON(ED)	FLEX	FLEXIBLE	QTY	QUANTITY
ABS	ACRYLONITRILE BUTADIENE STYRENE	FLC	FLANGE	RCP	REINFORCED CONCRETE PIPE
A/C	AIR CONDITIONER, (ING)	FM	FORCE MAIN	RCW	RECLAIM WATER
ACP	ASBESTOS CEMENT PIPE	FPM	FEET PER MINUTE	RED	REDUCER, REDUCING
ADJ	ADJUSTABLE, ADJACENT	FPS	FEET PER SECOND	REF	REFERENCE
ALT	ALTERNATE, (IVE)	FPVC	FUSIBLE POLYVINYL CHLORIDE	REINF	REINFORCING
AOD	ANGLE OF DEFLECTION	FRP	FIBERGLASS REINFORCED PLASTIC	REQD	REQUIRED
APPROX	APPROXIMATE, (LY)	FT	FOOT	REV	REVISION, REVISED, REVERSED
ARV	AIR RELEASE VALVE	FWD	FORWARD	RJ	RESTRAINED JOINT (BELL)
ARVV	AIR RELEASE AND VACUUM VALVE	G	GAS	RR	RESTRAINED MECHANICAL JOINT
ASSY	ASSEMBLY	GAL	GALLON	RNG	RANGE
AUTO	AUTOMATIC	GALV	GALVANIZED	ROC	RADIUS OF CURVATURE
AUX	AUXILIARY	GM	GAS METER	RPM	REVOLUTIONS PER MINUTE
BC	BEGIN CURVE	GND	GROUND	RPZBP	REDUCED PRESSURE ZONE
BCV	BALL CHECK VALVE	GO	GEAR OPERATED	R/R	BACKFLOW PREVENTER
BF	BLIND FLANGE	GPD	GALLONS PER DAY	R/RT	RAILROAD
BFP	BACKFLOW PREVENTER	GPH	GALLONS PER HOUR	R/W	RIGHT
BFW	BUTTERFLY VALVE	GPM	GALLONS PER MINUTE		RIGHT OF WAY
BGO	BURIED GEAR OPERATOR	GPS	GALLONS PER SECOND		
BI	BLACK IRON	GR	GRADE	S	SOUTH
BIP	BLACK IRON PIPE	GV	GATE VALVE	SAN	SANITARY
BLDG	BUILDING	HB	HOSE BIBB	SCH	SCHEDULE
BM	BENCHMARK	HDD	HORIZONTAL DIRECTIONAL DRILL	SDR	STORM DRAIN
BOC	BACK OF CURB	HPDE	HIGH-DENSITY POLYETHYLENE	SE	STANDARD DIMENSION RATIO
BOF	BOTTOM OF FOOTING	HORIZ	HORIZONTAL	SEC	SOUTHEAST
BOS	BOTTOM OF SLAB, BOTTOM OF SLOPE	HP	HORSEPOWER	SECT	SECOND
BOT	BOTTOM	HR	HOUR, HANDRAIL	SF	SECTION
BRG	BEARING	HSP	HIGH SERVICE PUMP	SHT	SHEET
BSP	BLACK STEEL PIPE	HT	HEIGHT	SIM	SIMILAR
BV	BALL VALVE	HWL	HIGH WATER LEVEL	SQ	SPECIFICATION(S)
BVC	BEGIN VERTICAL CURVE	HWY	HIGHWAY	SS	SQUARE
C/C	CENTER TO CENTER	HYD	HYDRAULIC	SST	SANITARY SEWER
CATV	CABLE TELEVISION	ID	INSIDE DIAMETER	STA	STAINLESS STEEL
CB	CATCH BASIN	IN	INCORPORATED	STD	STANDARD
CF	CUBIC FOOT	INC	INCLUDING	STL	STEEL
CFM	CUBIC FEET PER MINUTE	INCL	INSTRUMENT, (ATION)	SVC	SERVICE
CFS	CUBIC FEET PER SECOND	INST	INTERIOR, INTERNAL	SW	SOUTHWEST
C&G	CURB AND GUTTER	INT	INVERT	SWR	SEWER
CI	CAST IRON, CUBIC INCH	INV	IRON PIPE	SY	SQUARE YARD
CIP	CAST IRON PIPE	IP	INTERNATIONAL PIPE STANDARD	SYM	SYMBOL
CJ	CONSTRUCTION JOINT	IPS	INTERNATIONAL PIPE STANDARD	SYMM	SYMMETRICAL
CL	CENTERLINE	LB(S)	POUNDS	SYS	SYSTEM
CMP	CORROUGATED METAL PIPE	LF	LINEAR FEET	TAN	TANGENT
CMU	CONCRETE MASONRY UNIT	LWL	LOW WATER LEVEL	T&B	TOP AND BOTTOM
CO	CLEAN OUT, COMPANY	MAN	MANUAL	TBM	TEMPORARY BENCHMARK
CONN	CONCRETE	MAX	MAXIMUM	TC	TOP OF CURB
CONSTR	CONSTRUCT, CONSTRUCTION	MES	MITERED END SECTION	TDH	TOTAL DYNAMIC HEAD
CONT	CONTINUOUS(LY), CONTINUATION	MFR(S)	MANUFACTURER(S)	TEMP	TEMPERATURE, TEMPORARY
COR	CORNER	MH	MANHOLE	TH	TEST HOLE
CORR	CORRIDOR, CORRUGATED	MIN	MINIMUM	THRD	THREADED
CPVC	CHLORINATED POLYVINYL CHLORIDE	MISC	MISCELLANEOUS	TOB	TOP OF BANK
CTR(S)	CENTER(S)	MJ	MECHANICAL JOINT	TOC	TOP OF CONCRETE
CTRL	CONTROL	MPH	MILES PER HOUR	TOF	TOP OF FOOTING
CV	CHECK VALVE	MSL	MEAN SEA LEVEL	TOS	TOP OF SLAB
CY	CUBIC YARD	MTD	MOUNTED	TV	TELEVISION
DBL	DOUBLE	MWL	MEAN WATER LEVEL	TWP	TOWNSHIP
DEG	DEGREE			TYP	TYPICAL
DEPT	DEPARTMENT			UG	UNDERGROUND
DET	DETAIL	N	NORTH(ING)	UGE	UNDERGROUND ELECTRIC
DI	DROP INLET, DUCTILE IRON	N/A	NOT APPLICABLE	USGS	UNITED STATES GEOLOGICAL SURVEY
DIA	DIAMETER	N.C.	NORMALLY CLOSED	UTC	UTILITY
DIM	DIMENSION	NE	NORTHEAST	UTIL	
DIP	DUCTILE IRON PIPE	N.I.C.	NOT IN CONTRACT		
DISCH	DISCHARGE	N.O.	NORMALLY OPEN	V	VALVE, VENT
DIV	DIVISION	N.O.(S)	NUMBER(S)	VAC	VACUUM
DJ	DISMANTLING JOINT	NOM	NOMINAL	VB	VALVE BOX
DMH	DROP MANHOLE	NORM	NORMAL	VCP	VITRIFIED CLAY PIPE
DRN	DRAIN	NPT	NATIONAL PIPE TAPER	VERT	VERTICAL
DWG(S)	DRAWING(S)	NPW	NONPOTABLE WATER	VFD	VARIABLE FREQUENCY DRIVE
DWV	DRAIN, WASTE, AND VENT	N.T.S.	NOT TO SCALE		
E	EAST(ING), ELECTRICAL	NW	NORTHWEST	W	WEST, WIDE, WATER
EA	EACH	OC	ON CENTER, ODOR CONTROL	W/	WITH
EC	END CURVE	OD	OUTSIDE DIAMETER	WM	WITHOUT
ECC	ECCENTRIC	O&M	OPERATION AND MAINTENANCE	W/O	WITHOUT
EJ	EXPANSION JOINT	OPP	OPPOSITE	WSP	WELDED STEEL PIPE
EL	ELEVATION			WT	WEIGHT
ELEC	ELECTRIC, (AL)	PC	POINT OF CURVE	WTF	WATER TREATMENT FACILITY
ELL	ELBOW - PLUMBING SMALLER THAN 4"	PCC	POINT OF COMPOUND CURVATURE	WWTP	WATER TREATMENT PLANT
EMER	EMERGENCY				



- MINIMUM SEPARATION BETWEEN PROPOSED 8" RECLAIMED WATER MAIN AND EXISTING GAS MAIN SHALL BE 3'.
- DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
- INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.
- ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED PER COLOR CODE AS DESCRIBED IN THE SPECIFICATIONS.

RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	DATE
OBID SET	VVV 10/2021
REVISION	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



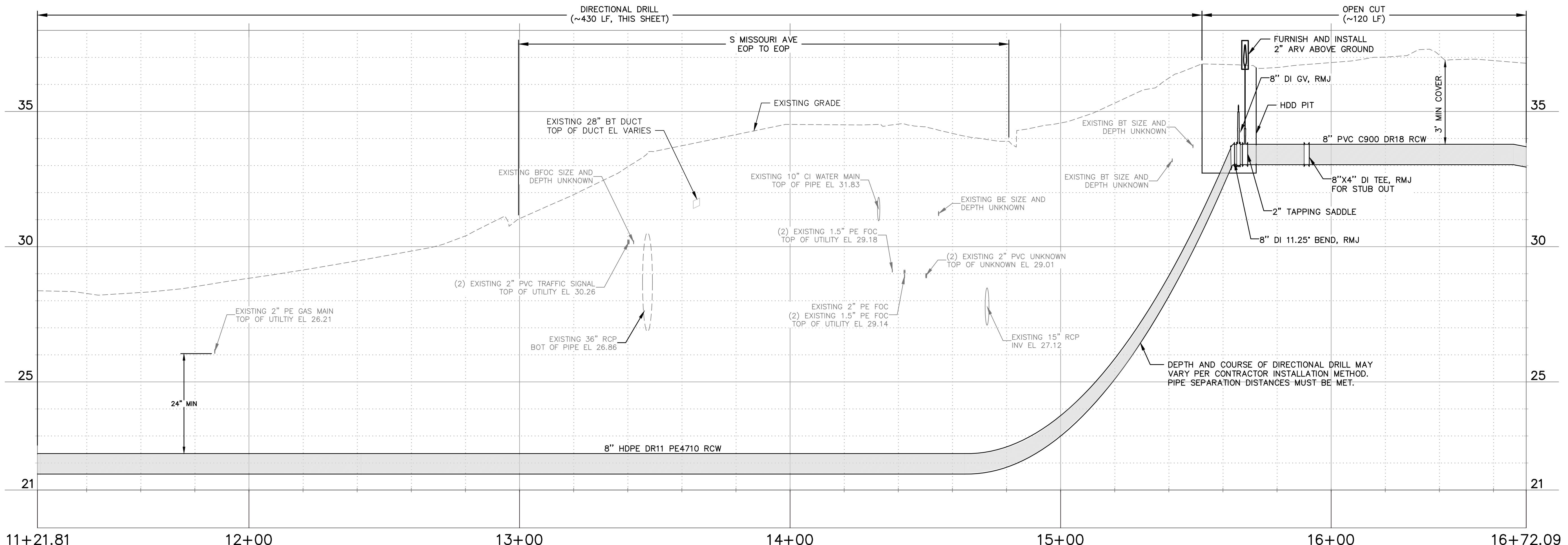
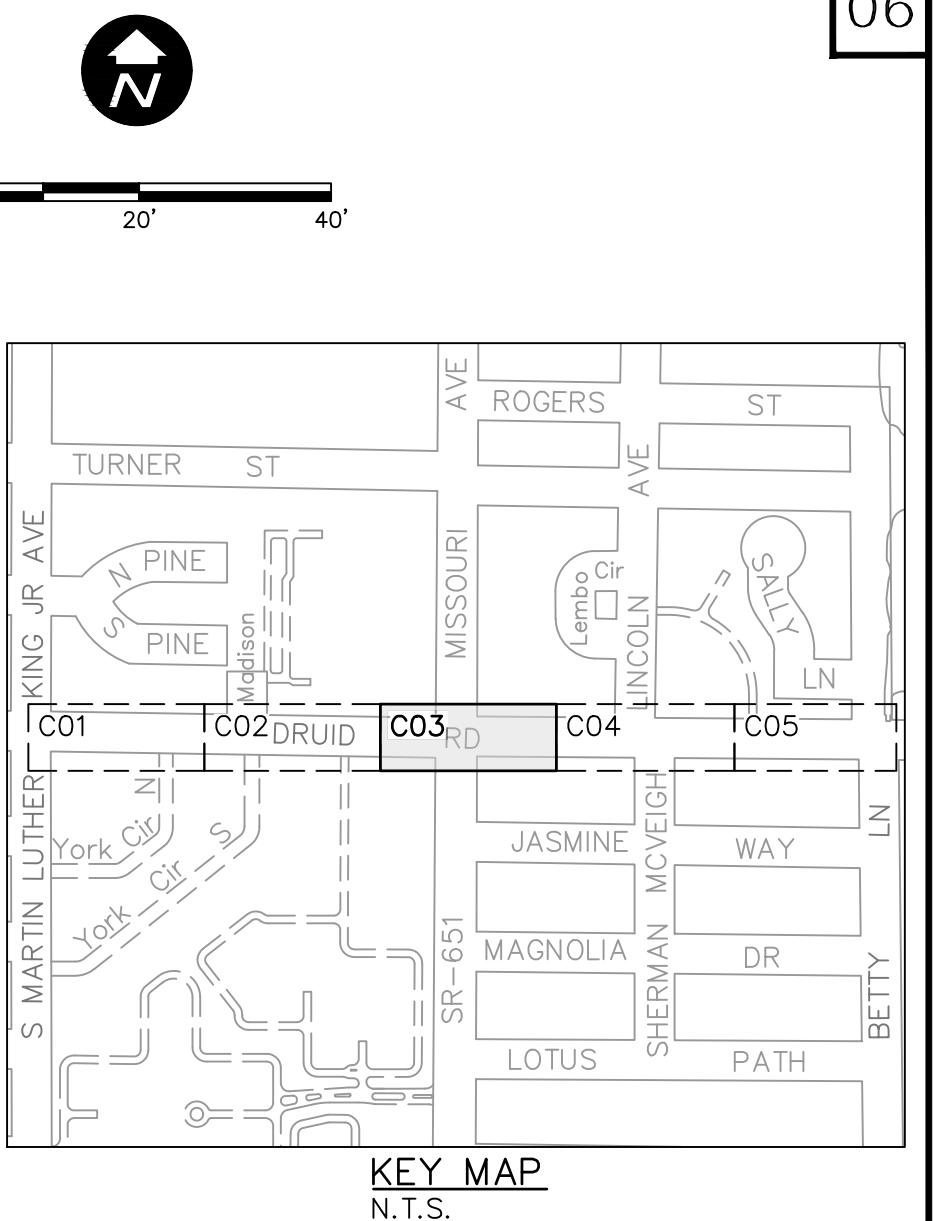
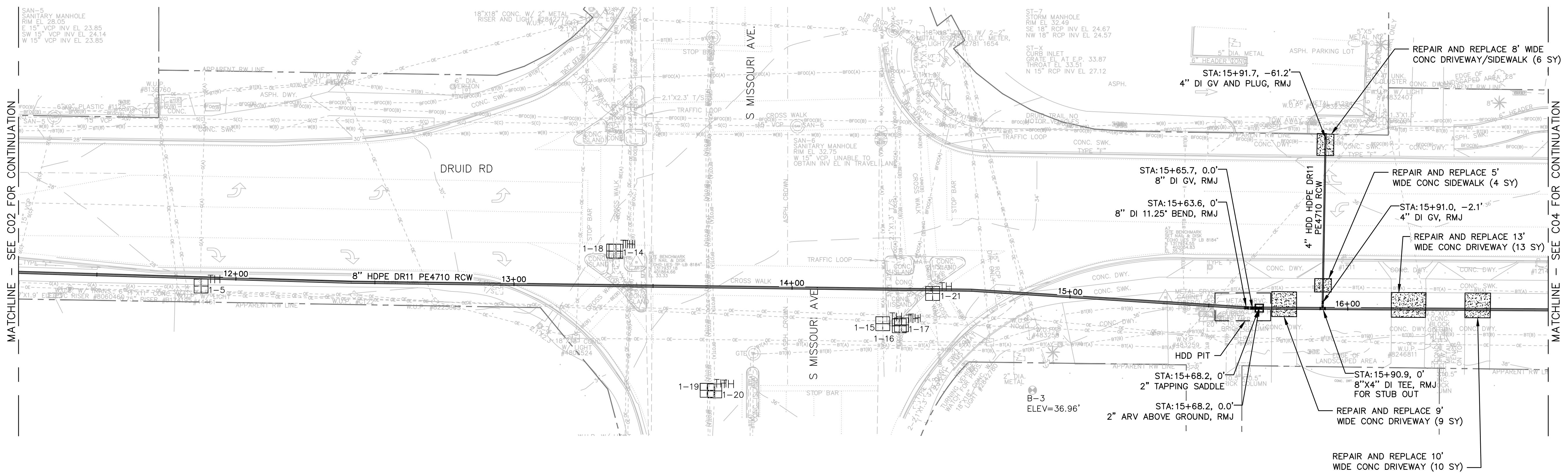
CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
DRUID RD (AREA A) – STA 5+70.21 TO STA 11+21.81
PLAN & PROFILE

CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-9019
CERTIFICATE OF AUTHORIZATION #28386

CHA

DWG NAME: C02	FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: VER. AS NOTED
CONTRACT NO.: 21-0029-UT	DATE DRAWN: 10/2021	DRAWN BY: VVV	HOR. AS NOTED
JOB NO.: 102031	DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 05 OF 24

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



Rev/Plot by: VANATTA, VIOLET Rev on: 01/12/2021 8:07 AM

Set:102031 RCW Imp

NOTES

- DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
- CONTRACTOR SHALL TEMPORARILY INSTALL AND MAINTAIN MILLINGS WHEN REMOVING ANY DRIVEWAYS UNTIL THE DRIVEWAYS ARE PERMANENTLY RESTORED.
- INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.

RECORD DRAWINGS			
SURVEYED BY:	DRAWN BY:		
REVIEWED BY:			
PROJECT ENGINEER	DATE		
OBID SET	VVV	10/2021	
APPROVED BY:	REVISION	BY	DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756

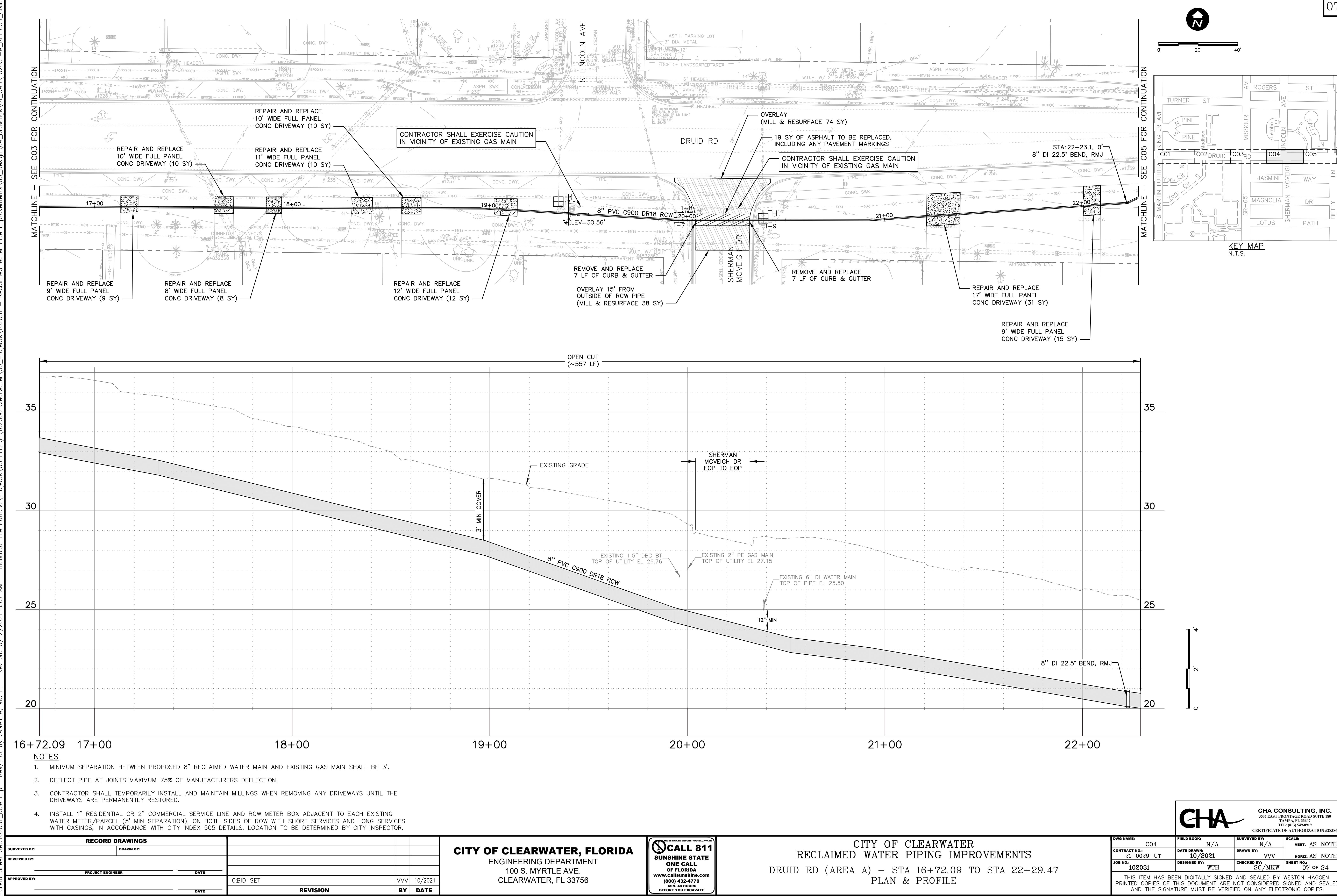


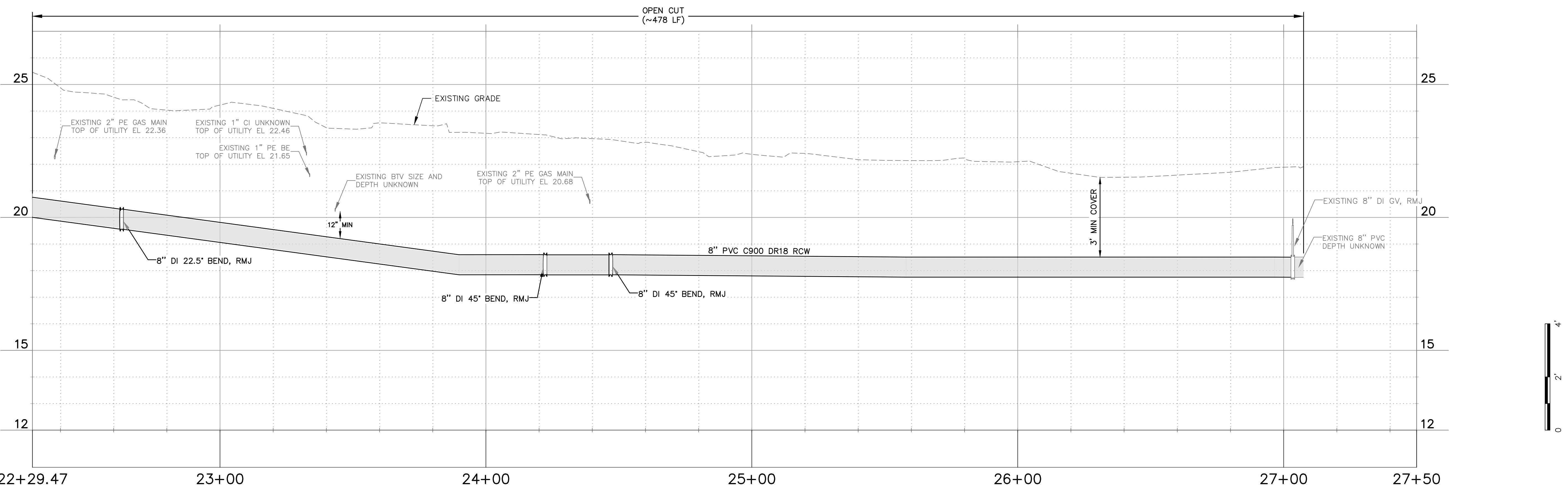
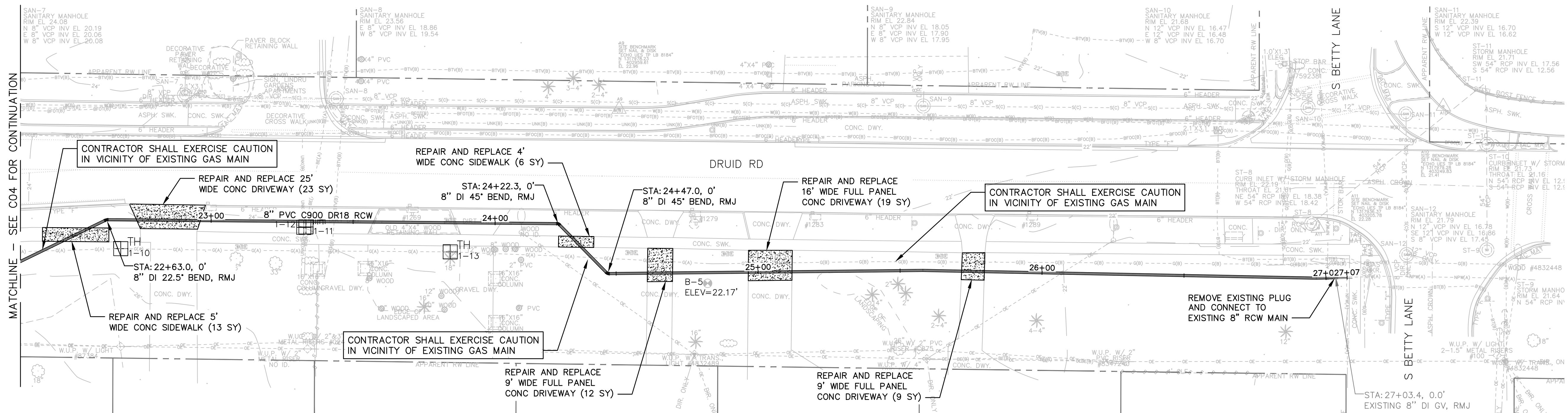
CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
DRUID RD (AREA A) - STA 11+21.81 TO STA 16+72.09
PLAN & PROFILE

CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-0919
CERTIFICATE OF AUTHORIZATION #2836

DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
C03	N/A	N/A	
21-0029-UT	10/2021	VVV	
102031	WTH	SC/MKW	06 DE 24

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.





RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	DATE
OBID SET	VVV 10/2021
REVISION	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756

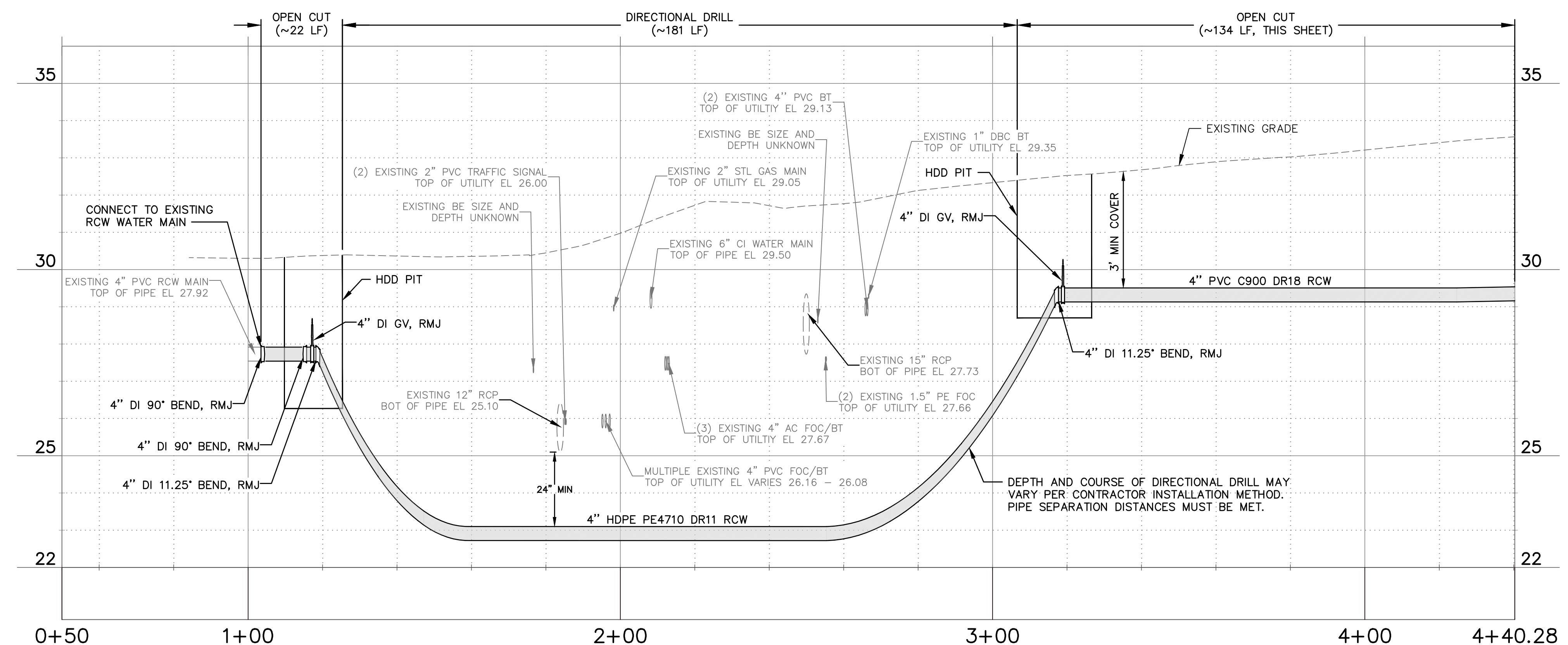
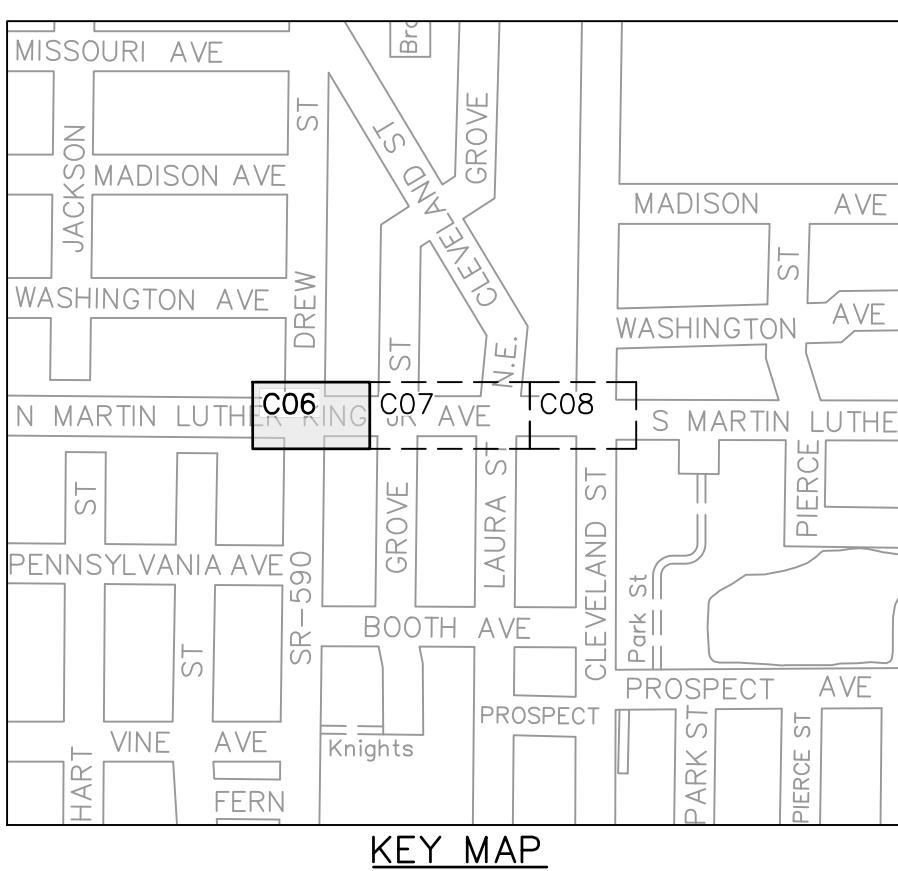
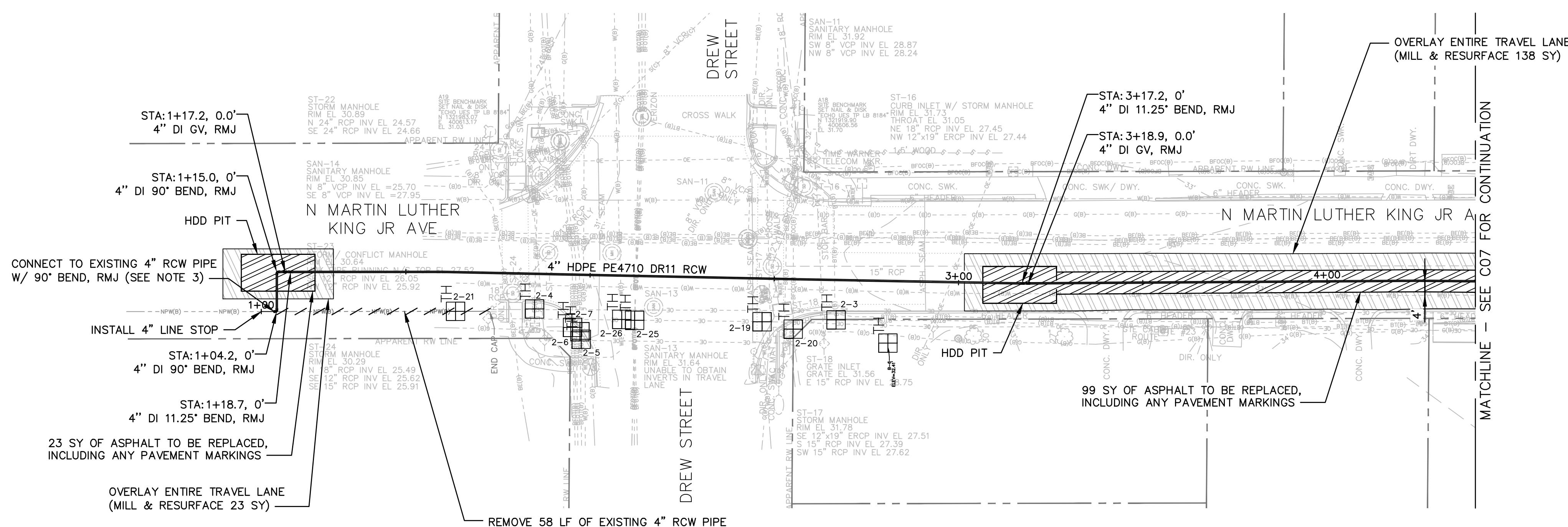


CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
DRUID RD (AREA A) - STA 22+29.47 TO STA 27+50
PLAN & PROFILE

DWG NAME:		FIELD BOOK:	SURVEYED BY:	SCALE:
C05	N/A	N/A	N/A	AS NOTED
CONTRACT NO.:	DATE DRAWN:	DRAWN BY:	VER.	
21-0029-UT	10/2021	VVV	AS NOTED	
JOB NO.:	DESIGNED BY:	CHECKED BY:	SHEET NO.:	
102031	WTH	SC/MKW	08 OF 24	
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.				

CHA

CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-0919
CERTIFICATE OF AUTHORIZATION #2836



NOTES

- MINIMUM SEPARATION BETWEEN PROPOSED 4" RECLAIMED WATER MAIN AND EXISTING WATER MAIN SHALL BE 4'.
- DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
- ONLY THE CITY MAY TURN EXISTING VALVES. IF RCW MAIN ISOLATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE CITY. ISOLATION VALVE IS APPROXIMATELY 1400 LF NORTH WEST AT THE INTERSECTION OF PLAZA STREET AND PENNSYLVANIA AVENUE NORTH.
- INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.

RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
OBID SET	VVV 10/2021
APPROVED BY:	
	DATE

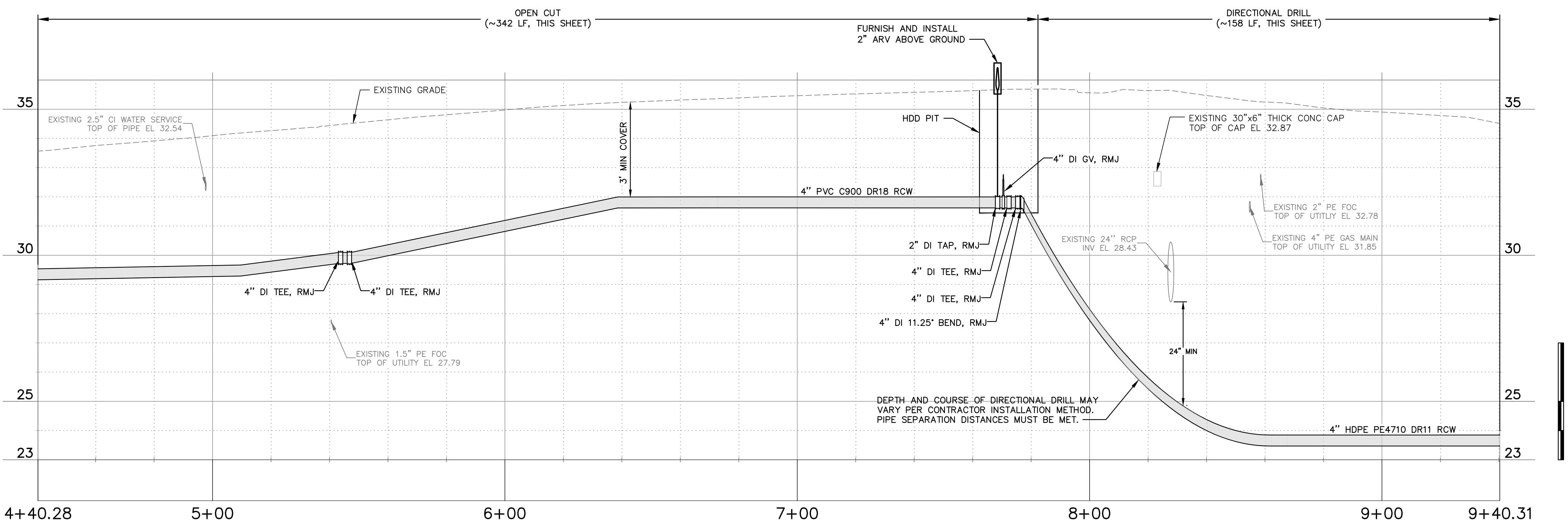
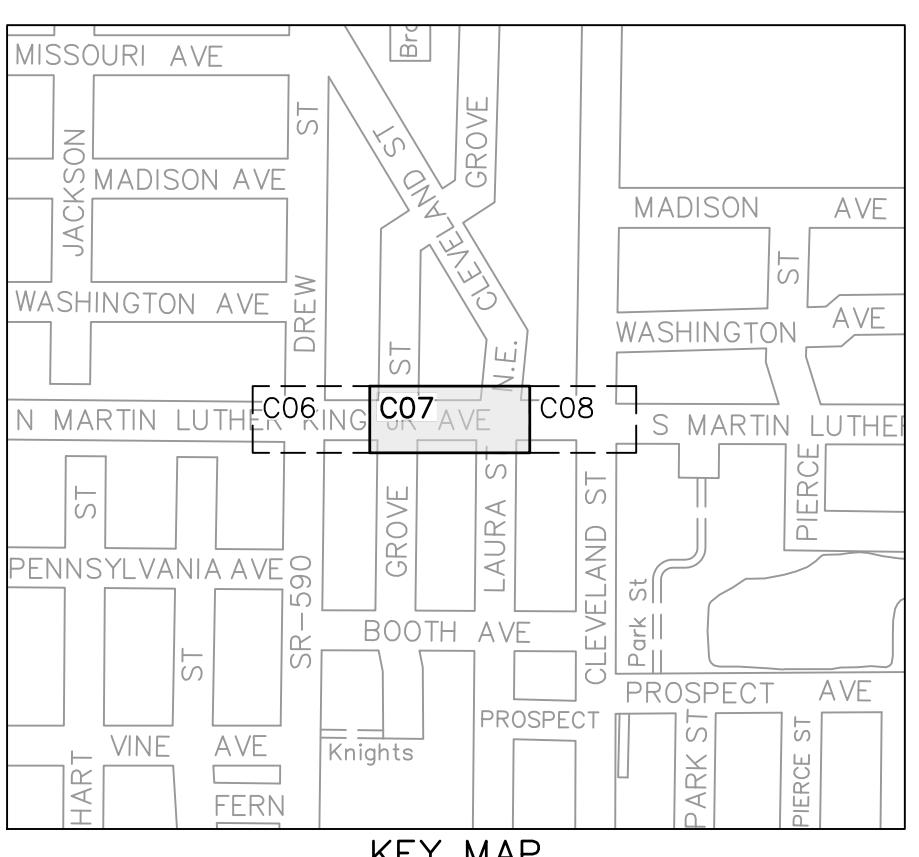
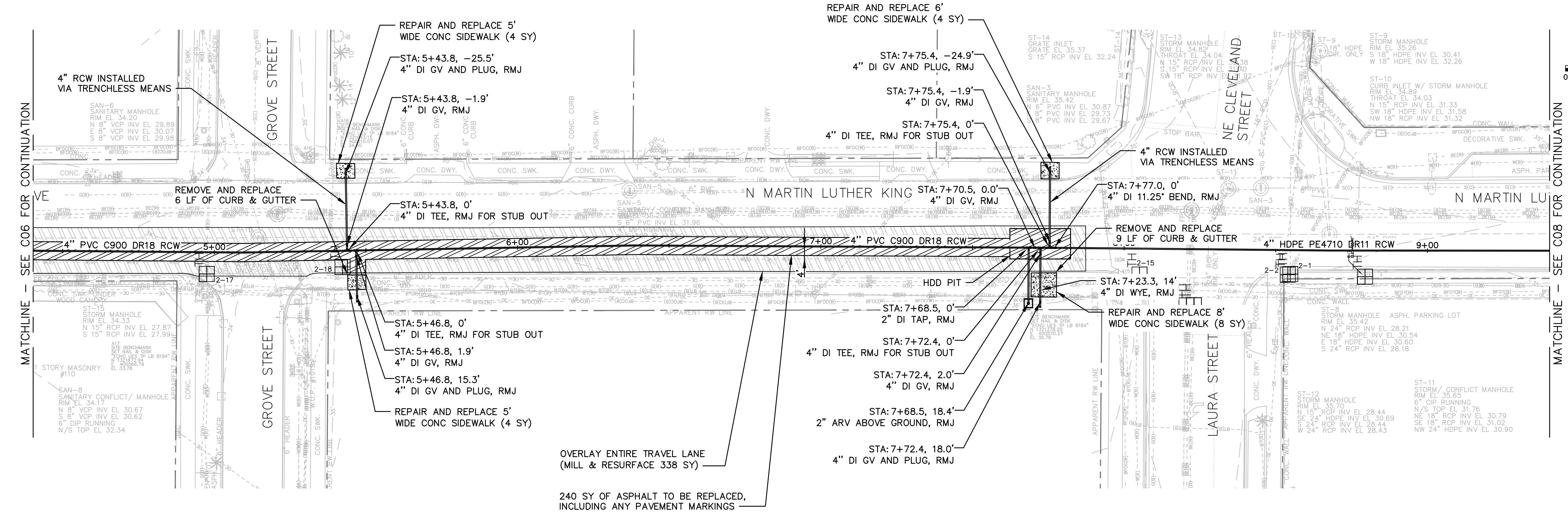
CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS**
N MARTIN LUTHER KING JR AVE (AREA B) – STA 0+50 TO STA 4+40.28
PLAN & PROFILE

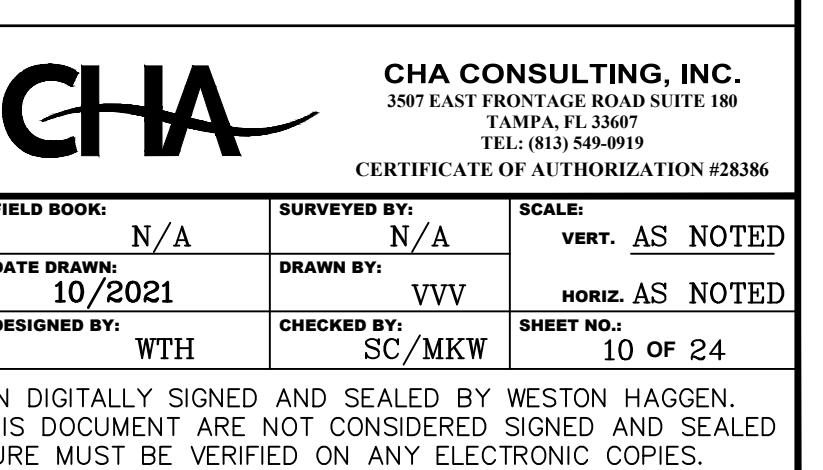
DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
C06	N/A	N/A	
21-0029-UT	10/2021	VVV	
102031	WTH	SC/MKW	09 OF 24

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



NOTES

- MINIMUM SEPARATION BETWEEN PROPOSED 4" RECLAIMED WATER MAIN AND EXISTING WATER MAIN SHALL BE 4'.
- DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
- INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.



RECORD DRAWINGS			
SURVEYED BY:	DRAWN BY:		
REVIEWED BY:			
PROJECT ENGINEER	DATE		
APPROVED BY:			
OBID SET	VVV	10/2021	
REVISION	BY	DATE	

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
N MARTIN LUTHER KING JR AVE (AREA B) - STA 4+40.28 TO STA
9+40.31 PLAN & PROFILE

DWG NAME: C07	FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: AS NOTED
CONTRACT NO.: 21-0029-UT	DATE DRAWN: 10/2021	DRAWN BY: VVV	VERT. AS NOTED
JOB NO.: 102031	DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 10 of 24
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.			

Dow/Pilot by VANITTA VIOL ET Dow 25.10.2003 8.03 AM Individual File Path: V:\Pilot\WCE1112

9

1

8

1

30

10

6

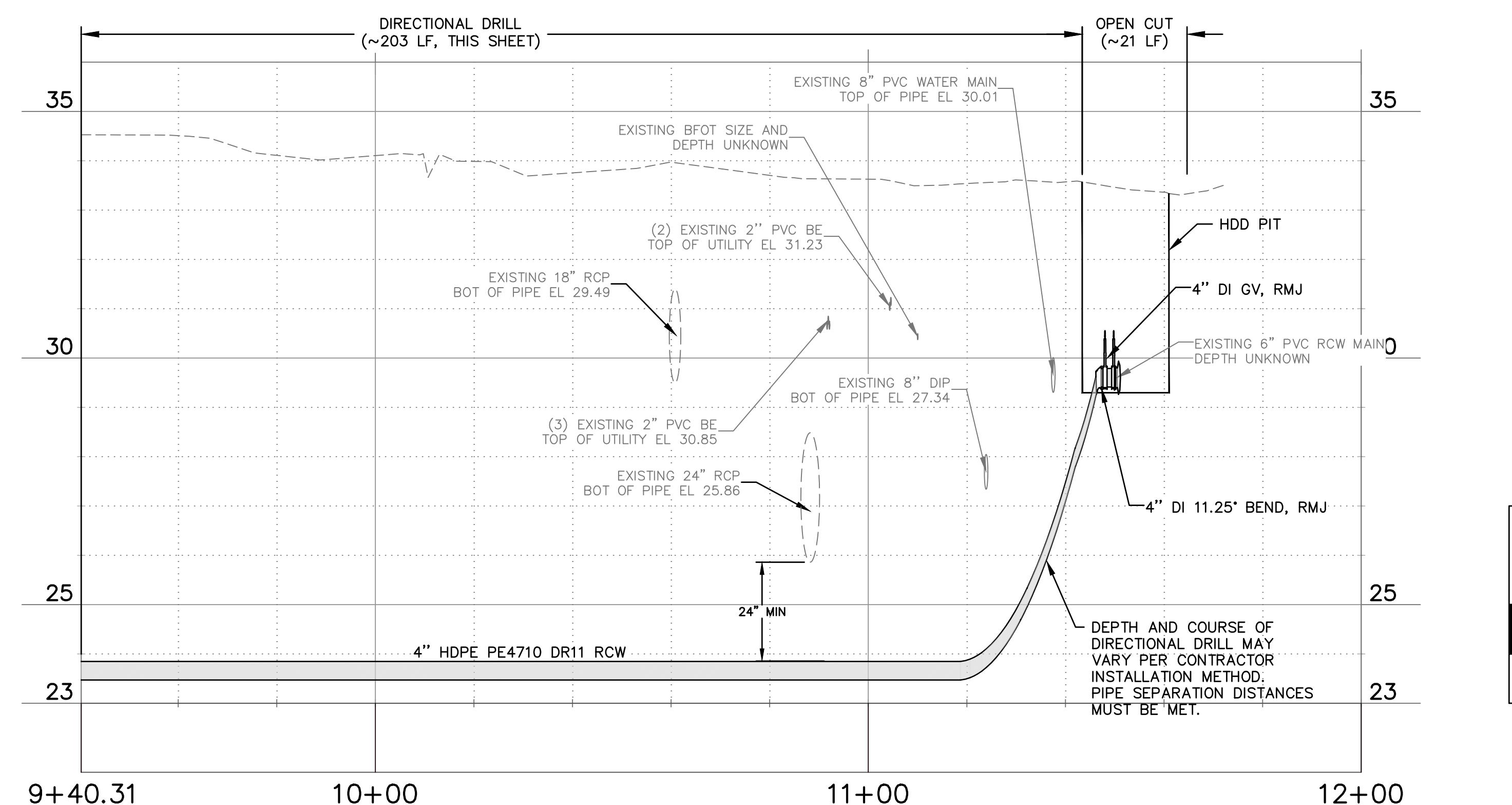
1

८

+

१५

2

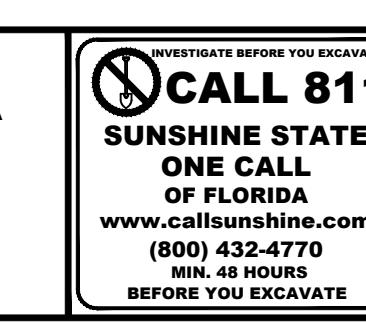


NOTES

1. MINIMUM SEPARATION BETWEEN PROPOSED 4" RECLAIMED WATER MAIN AND EXISTING WATER MAIN SHALL BE 4'.
 2. DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
 3. ONLY THE CITY MAY TURN EXISTING VALVES. IF RCW MAIN ISOLATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE CITY. ISOLATION VALVES ARE APPROXIMATELY 120 LF WEST ALONG NORTH MARTIN LUTHER KING JR AVENUE AND APPROXIMATELY 1320 LF EAST ALONG NORTH MARTIN LUTHER KING JR AVENUE.
 4. INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.

RECORD DRAWINGS			
SURVEYED BY:	DRAWN BY:		
REVIEWED BY:			
_____ PROJECT ENGINEER		_____ DATE	
APPROVED BY:		0:BID SET	VVV
_____ _____		_____ DATE	REVISION
			BY

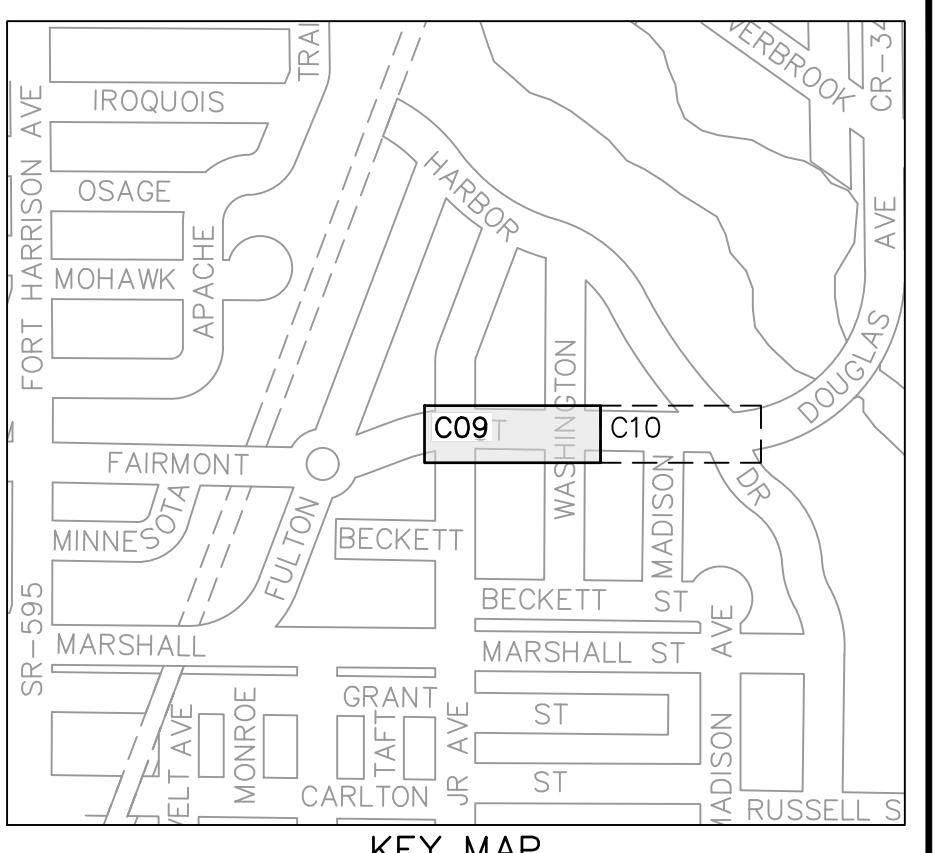
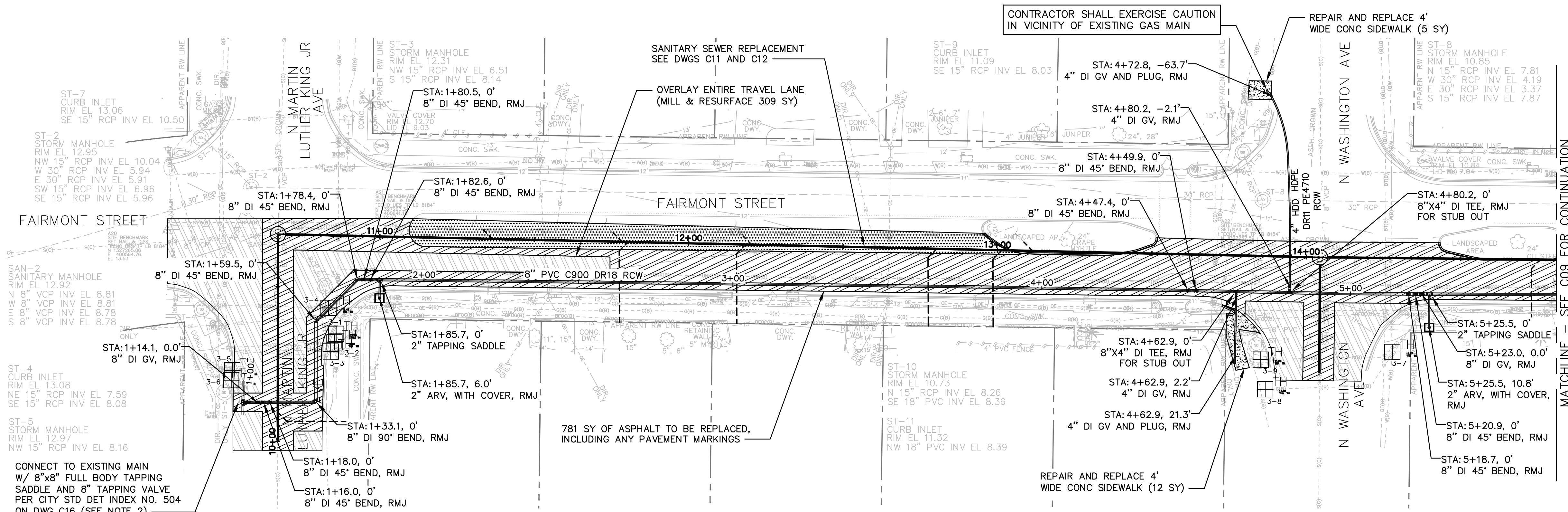
CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS**

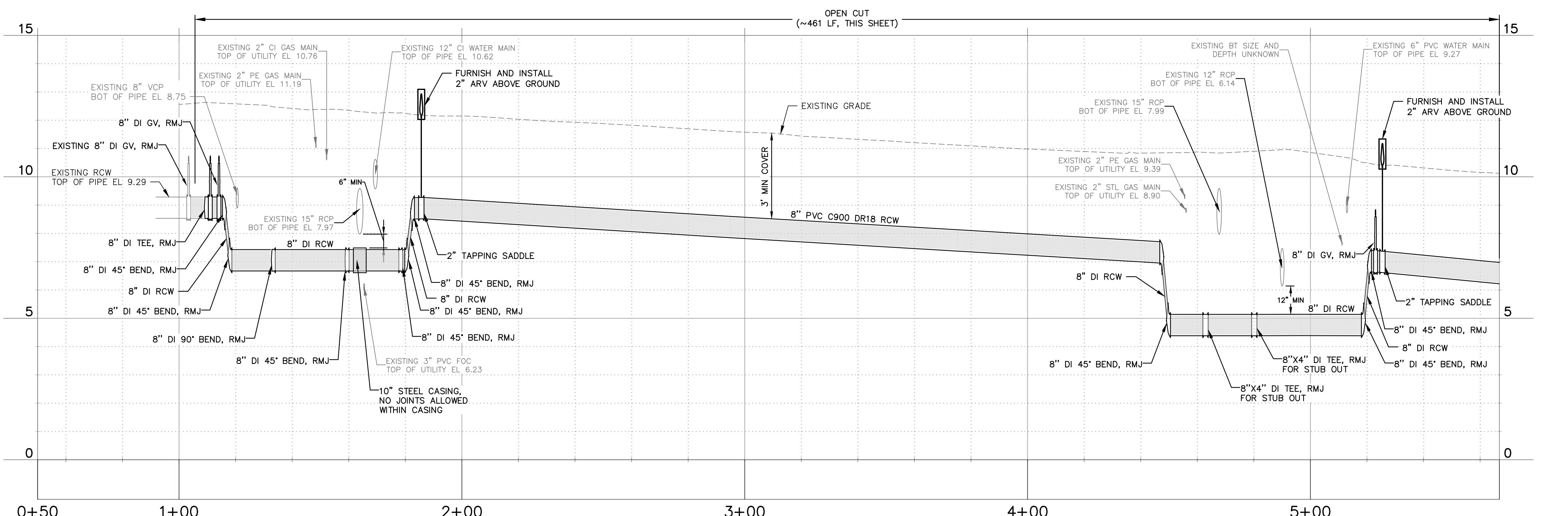
N MARTIN LUTHER KING JR AVE (AREA B) – STA 9+40.31 TO STA 12+00
PLAN & PROFILE

CHA	CHA CONSULTING, INC. 3507 EAST FRONTRAGE ROAD SUITE 180 TAMPA, FL 33607 TEL: (813) 549-0919 CERTIFICATE OF AUTHORIZATION #28386		
FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: <u>VERT.</u> AS NOTED	
DATE DRAWN: 10/2021	DRAWN BY: VVV	HORIZ. AS NOTED	
DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 11 OF 24	
BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. IF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED NATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.			



P

1



NOTES

1. DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DATA

2. ONLY THE CITY MAY TURN EXISTING VALVES. IF RCW MAIN ISOLATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE CITY. ISOLATION VALVE IS APPROXIMATELY 3320 LF SOUTH AT THE INTERSECTION OF NORTH MARTIN LUTHER KING JR AVENUE AND SEMINOLE STREET.

- MARTIN LUTHER KING JR AVENUE AND SEMINOLE STREET.

3. INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS, IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR.

4. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED PER COLOR CODE AS DESCRIBED IN THE SPECIFICATIONS

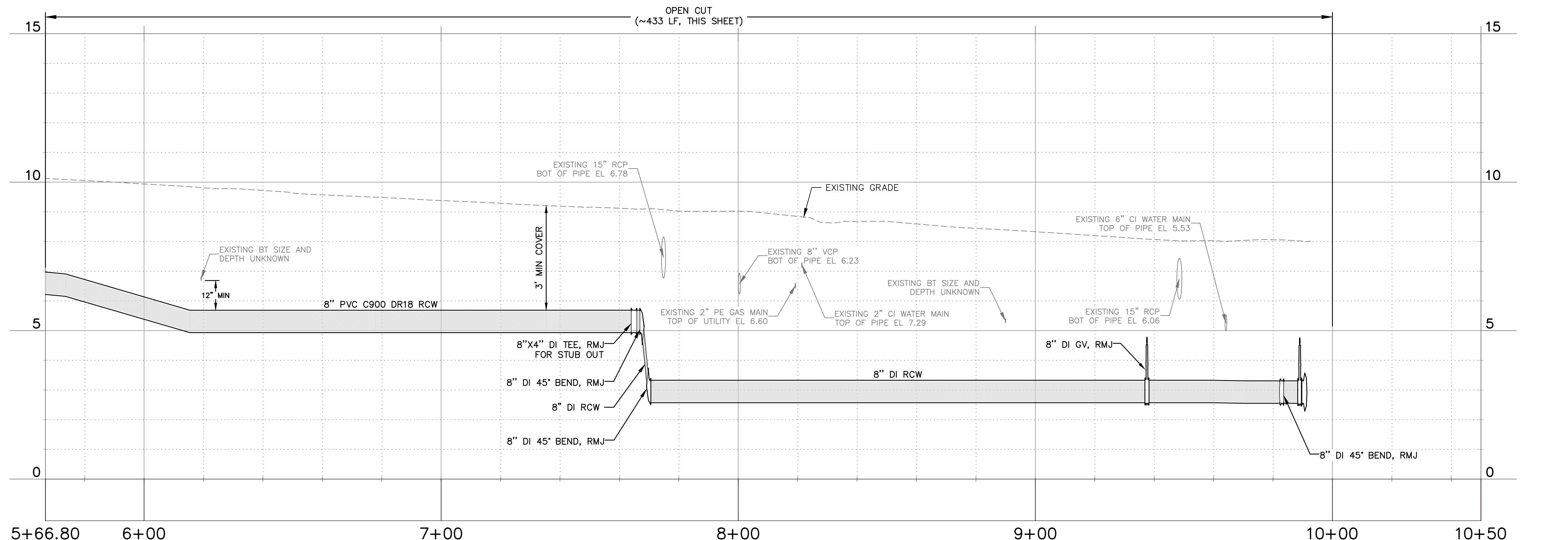
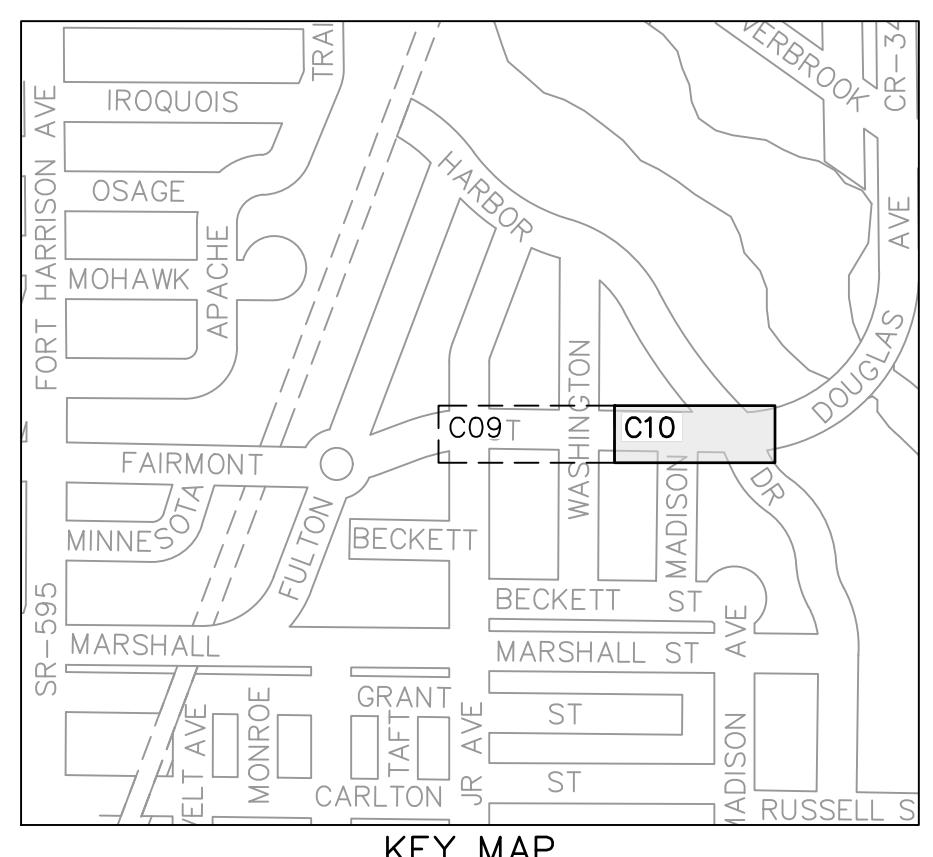
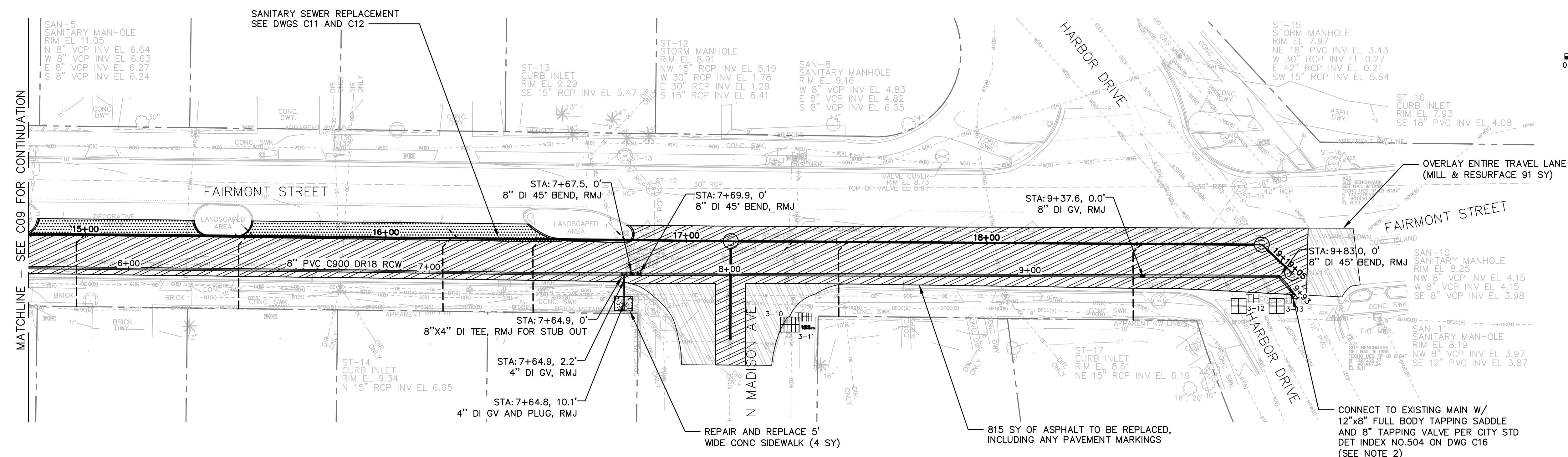
RECORD DRAWINGS		
SURVEYED BY:	DRAWN BY:	
REVIEWED BY:		
	PROJECT ENGINEER	DATE
APPROVED BY:		
	DATE	

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
FAIRMONT ST (AREA C) – STA 0+50 TO STA 5+66.80
PLAN & PROFILE**

CHA	CHA CONSULTING, INC.	
	3507 EAST FRONTAGE ROAD SUITE 180	
	TAMPA, FL 33607	
	TEL: (813) 549-0919	
CERTIFICATE OF AUTHORIZATION #28386		
FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: VERT. AS NOTED
DATE DRAWN: 10/2021	DRAWN BY: VVV	HORIZ. AS NOTED
DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 12 OF 24
THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED TURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.		



NOTES

- NOTES**

 1. DEFLECT PIPE AT JOINTS MAXIMUM 75% OF MANUFACTURERS DEFLECTION.
 2. ONLY THE CITY MAY TURN EXISTING VALVES. IF RCW MAIN ISOLATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE CITY. ISOLATION VALVES ARE APPROXIMATELY 280 LF NORTHEAST ALONG DOUGLAS AVENUE AND APPROXIMATELY 1770 LF SOUTH WITHIN THE MARSHALL WRF.
 3. INSTALL 1" RESIDENTIAL OR 2" COMMERCIAL SERVICE LINE AND RCW METER BOX ADJACENT TO EACH EXISTING WATER METER/PARCEL (5' MIN SEPARATION), ON BOTH SIDES OF ROW WITH SHORT SERVICES AND LONG SERVICES WITH CASINGS IN ACCORDANCE WITH CITY INDEX 505 DETAILS. LOCATION TO BE DETERMINED BY CITY INSPECTOR
 4. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED PER COLOR CODE AS DESCRIBED IN THE SPECIFICATIONS.

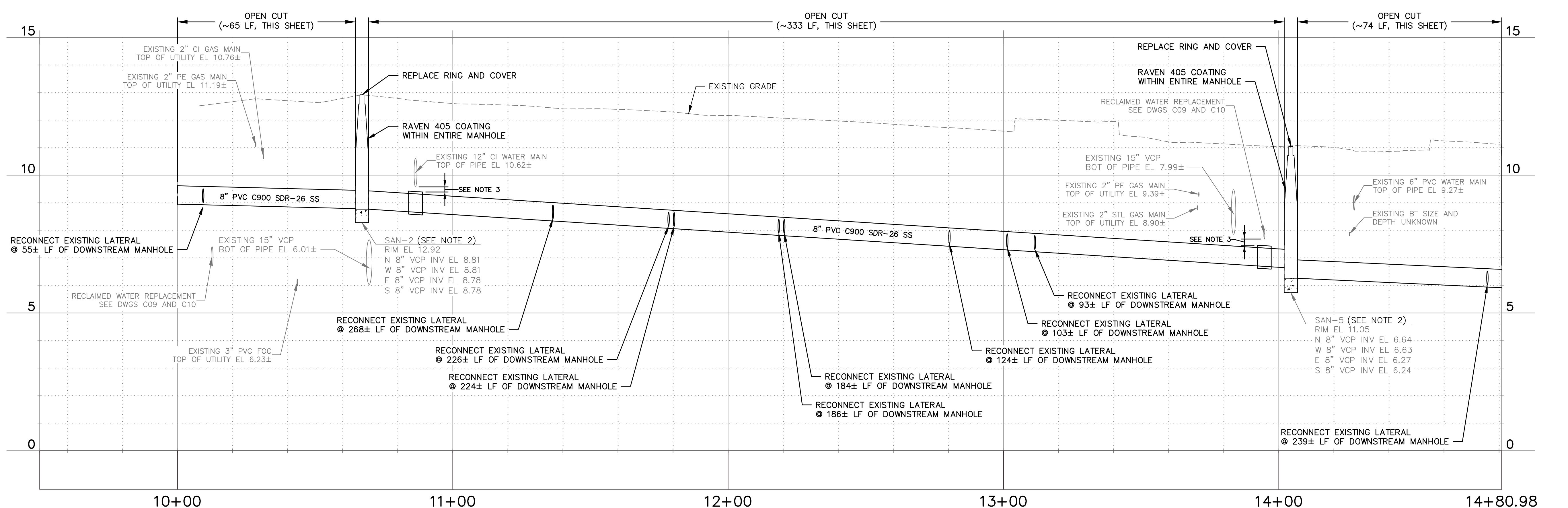
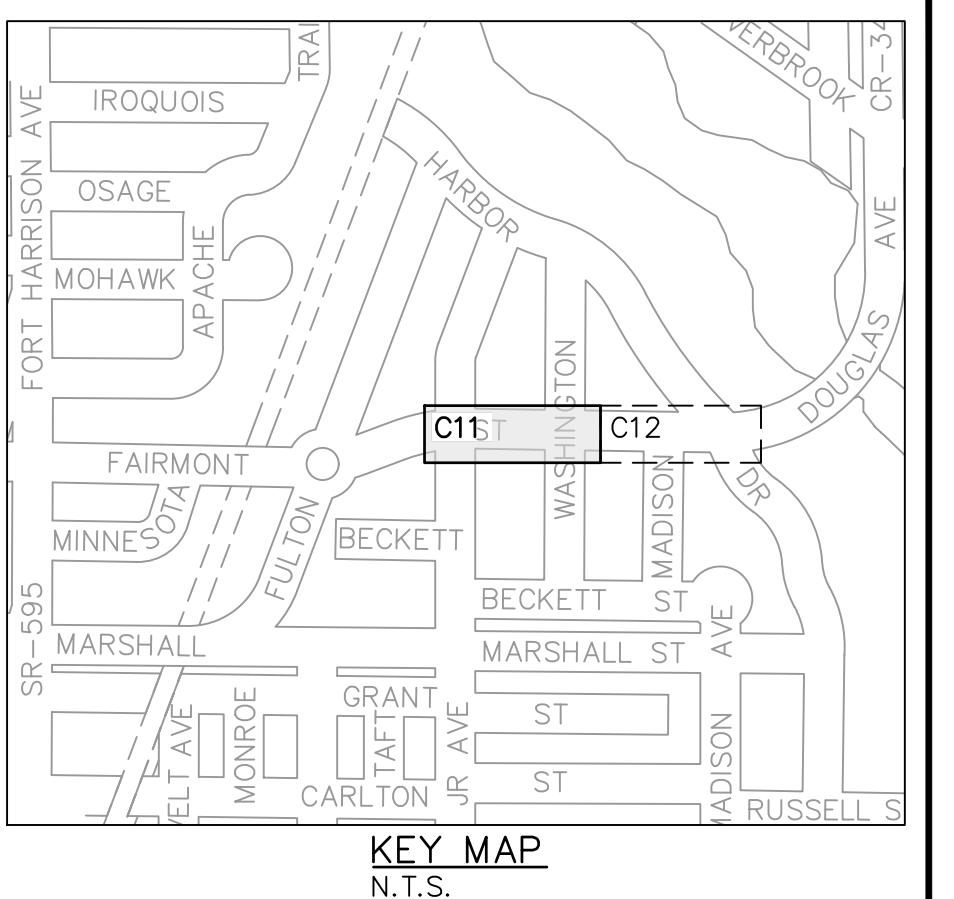
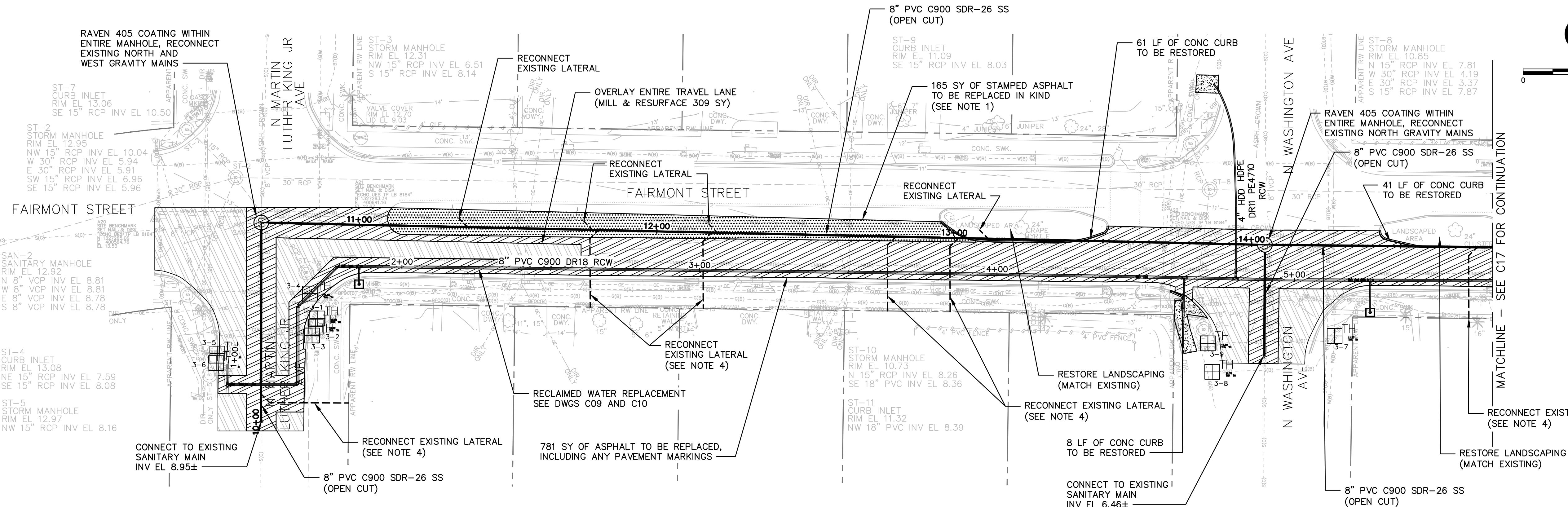
RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
_____ PROJECT ENGINEER _____	
DATE	
APPROVED BY:	
_____ _____	
DATE	

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS**
FAIRMONT ST (AREA C) – STA 5+66.80 TO STA 10+50
PLAN & PROFILE

CHA		CHA CONSULTING, INC. 3507 EAST FRONTAGE ROAD SUITE 180 TAMPA, FL 33607 TEL: (813) 549-0919
CERTIFICATE OF AUTHORIZATION #28386		
FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: VERT. AS NOTED
DATE DRAWN: 10/2021	DRAWN BY: VVV	HORIZ. AS NOTED
DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 13 OF 24
THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED TURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.		

**NOTES**

1. RESTORE EXISTING ASPHALT STAMPED MEDIAN, REPAINT ENTIRE MEDIAN, MATCH EXISTING COLOR.
2. REBUILD EXISTING BENCH FOLLOWING PIPE INSTALLATIONS.
3. WHEN SEPARATION IS LESS THAN 12" FROM EXISTING MAINS, A MINIMUM OF 5' OF 10" STEEL CASING SHALL BE INSTALLED AROUND 8" GRAVITY MAIN. NO JOINT SHALL BE ALLOWED IN CASING.
4. SOUTH SIDE LATERAL CONNECTIONS SHALL BE REPLACED TO EXISTING HOMEOWNER LATERAL. THE CLEANOUT SHALL BE REPLACED, IF THERE IS NO CLEANOUT, ONE SHALL BE INSTALLED IF THE EXISTING LATERAL IS PVC AND IN GOOD CONDITION, THE LATERAL MAY REMAIN PENDING RPR APPROVAL. ALL EXISTING LATERAL LOCATIONS ARE BASED ON GIS DATA AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM LOCATIONS AND QUANTITIES IN THE FIELD.

RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	DATE

OBID SET	REVISION	BY	DATE
		VVV	10/2021

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
FAIRMONT ST - SANITARY SEWER REPLACEMENT
STA 10+00 TO STA 14+80.98 PLAN & PROFILE

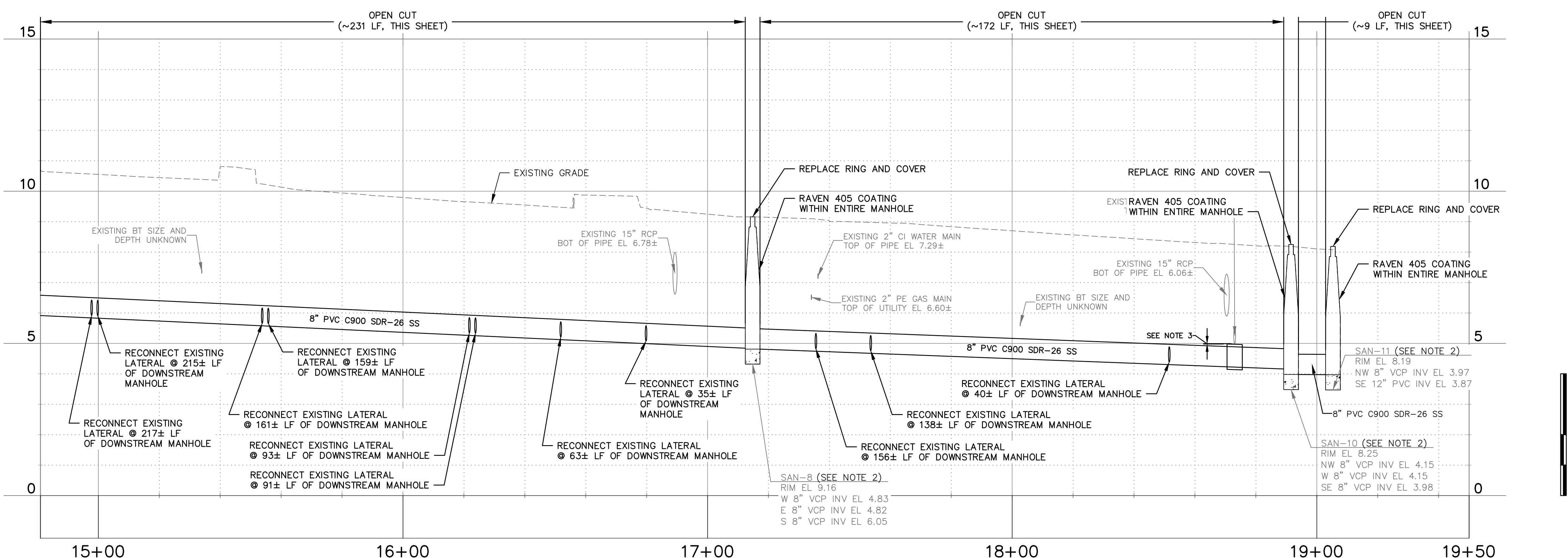
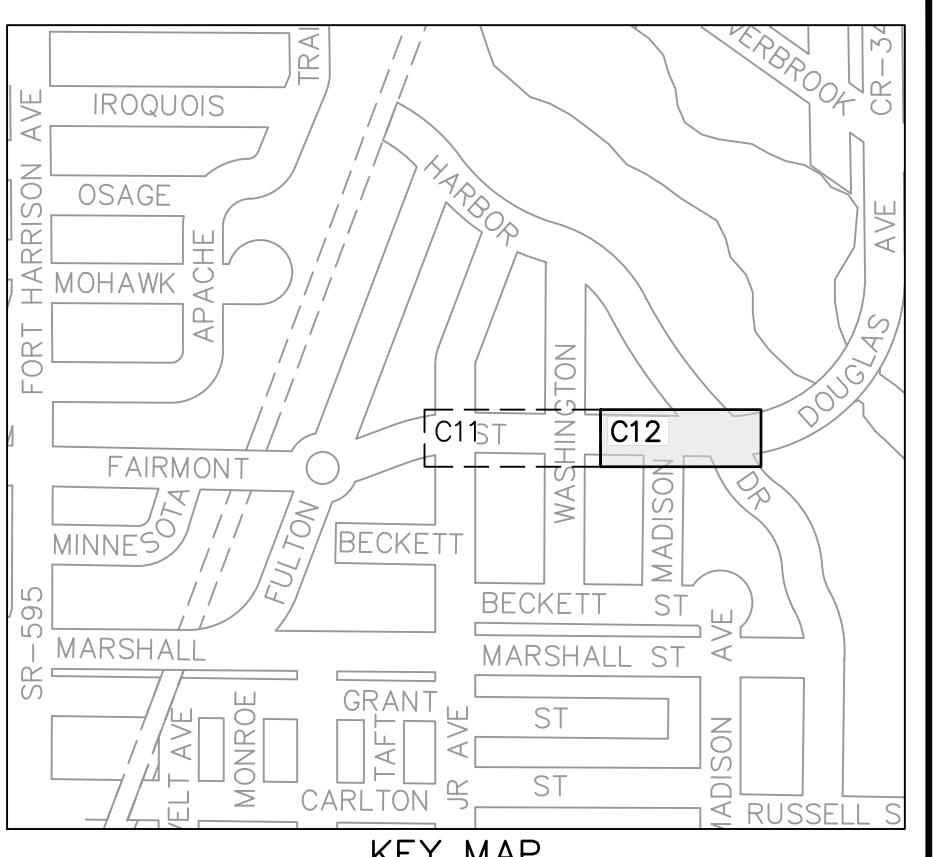
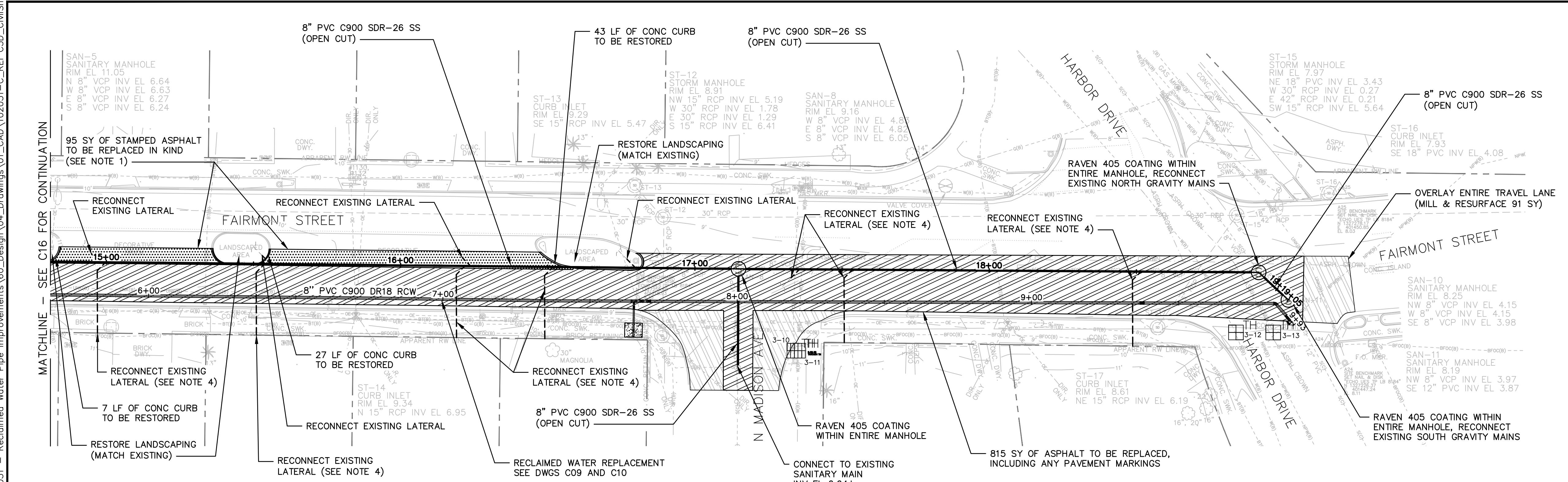
CHA

CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-0919

CERTIFICATE OF AUTHORIZATION #2836

DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
C11	N/A		
21-0029-UT	10/2021	VVV	
102031	WTH	SC/MKW	SHEET NO. 14 OF 24

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

**NOTES**

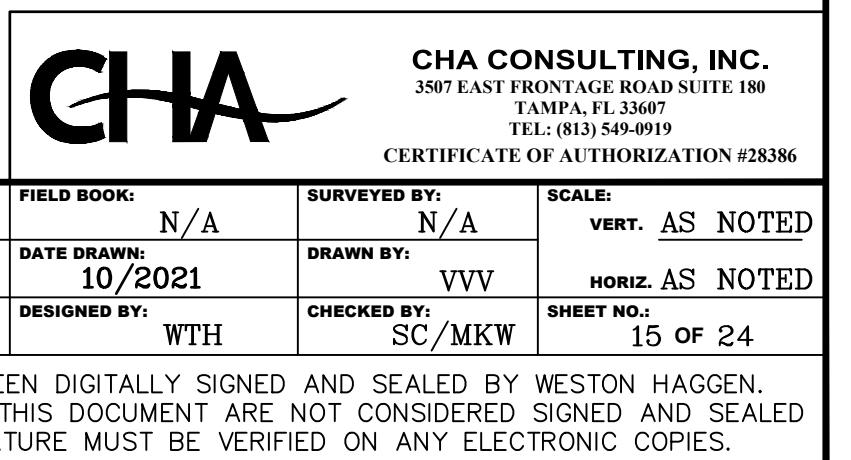
1. RESTORE EXISTING ASPHALT STAMPED MEDIAN, REPATENT ENTIRE MEDIAN, MATCH EXISTING COLOR.
2. REBUILD EXISTING BENCH FOLLOWING PIPE INSTALLATIONS.
3. WHEN SEPARATION IS LESS THAN 12' FROM EXISTING MAINS, A MINIMUM OF 5' OF 10" STEEL CASING SHALL BE INSTALLED AROUND 8" GRAVITY MAIN. NO JOINT SHALL BE ALLOWED IN CASING.
4. SOUTH SIDE LATERAL CONNECTIONS SHALL BE REPLACED TO EXISTING HOMEOWNER LATERAL. THE CLEANOUT SHALL BE REPLACED, IF THERE IS NO CLEANOUT, ONE SHALL BE INSTALLED IF THE EXISTING LATERAL IS PVC AND IN GOOD CONDITION, THE LATERAL MAY REMAIN PENDING RPR APPROVAL. ALL EXISTING LATERAL LOCATIONS ARE BASED ON GIS DATA AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM LOCATIONS AND QUANTITIES IN THE FIELD.

RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
OBID SET	VVV 10/2021
APPROVED BY:	
	DATE
	REVISION
	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
FAIRMONT ST - SANITARY SEWER REPLACEMENT
STA 14+80.98 TO STA 19+50 PLAN & PROFILE





0 200' 400'

NOTES

- EXISTING 8" ROW MAIN LOCATION OUTSIDE OF SURVEY CIRCLES IS APPROXIMATE.

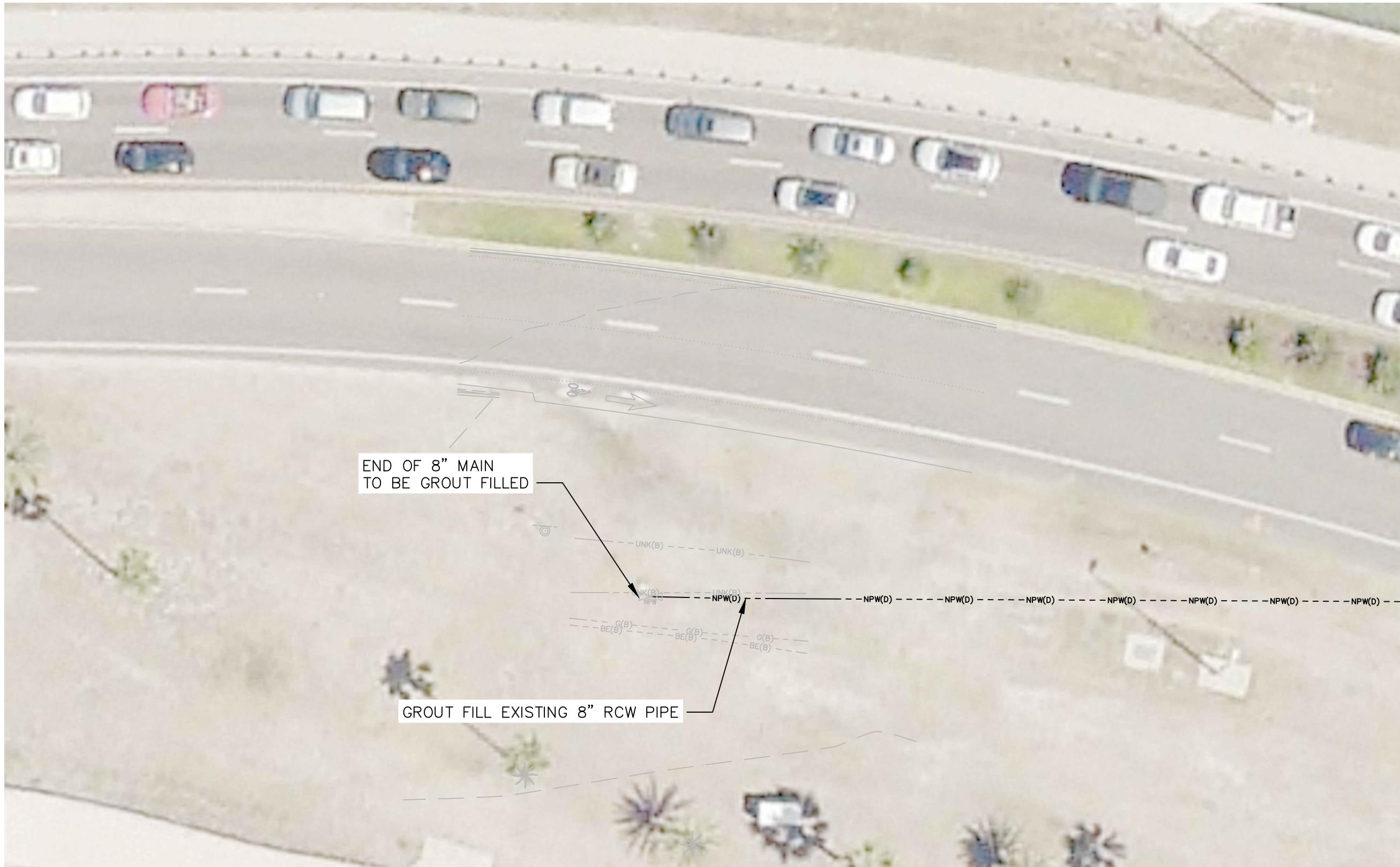
RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	DATE
OBID SET	VVV 10/2021
REVISION	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756

INVESTIGATE BEFORE YOU EXCAVATE
CALL 811
SUNSHINE STATE
ONE CALL
OF FLORIDA
www.811tampa.com
(800) 432-4770
MIN. 48 HOURS
BEFORE YOU EXCAVATE

CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
MEMORIAL CAUSEWAY (AREA D) RECONNECTIONS
OVERALL PLAN

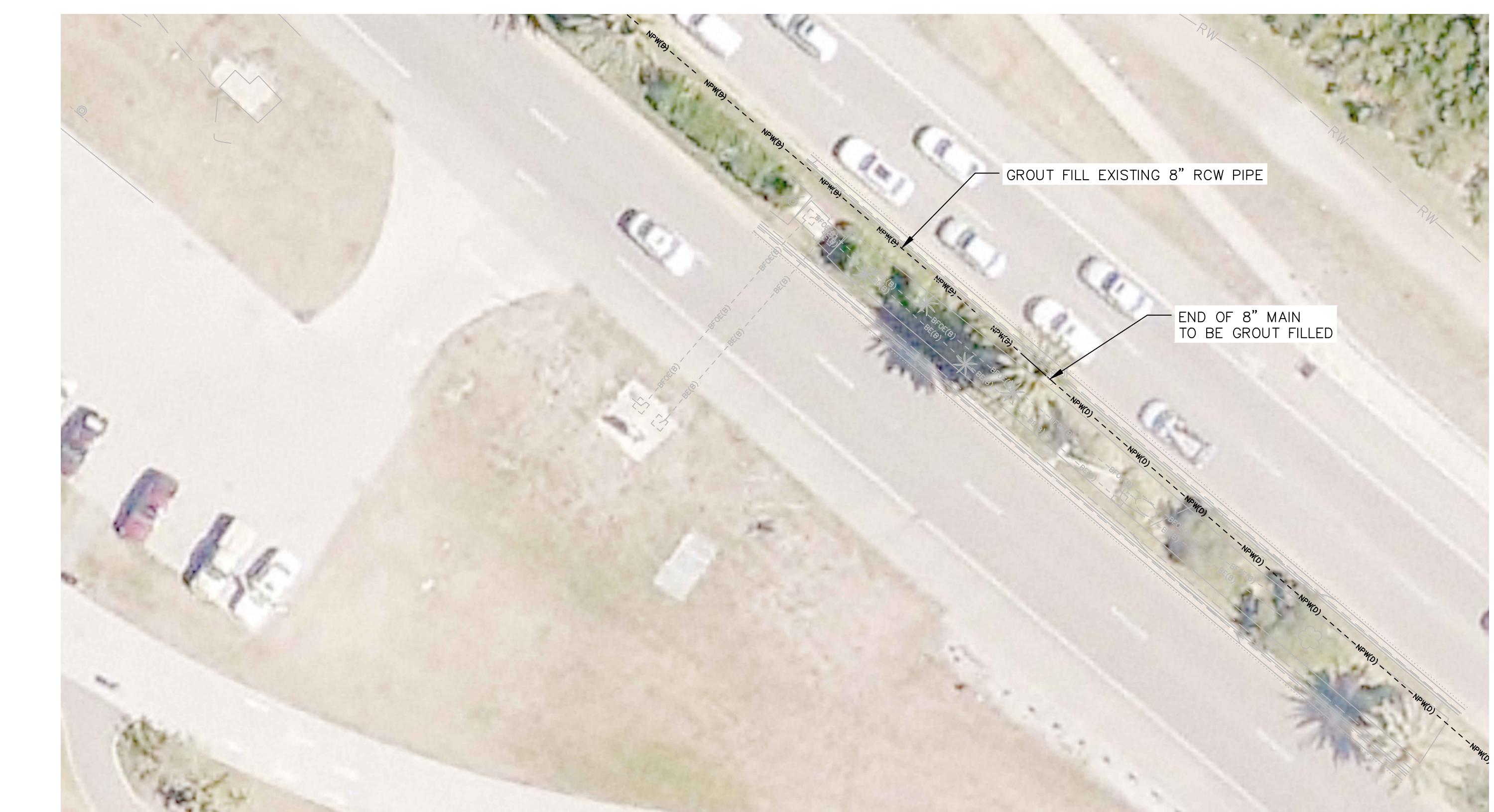
DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
C13	N/A	N/A	VERT. AS NOTED
CONTRACT NO.:	DATE DRAWN:	DRAWN BY:	SCALE:
21-0029-UT	10/2021	VVV	HORIZ. AS NOTED
JOB NO.:	DESIGNED BY:	CHECKED BY:	SHEET NO.:
102031	WTH	SC/MKW	16 OF 24
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.			



D1 – GROUT FILL TERMINATION POINT – PLAN



D4 – INSTALL CAP AND PLUG VALVE – PLAN



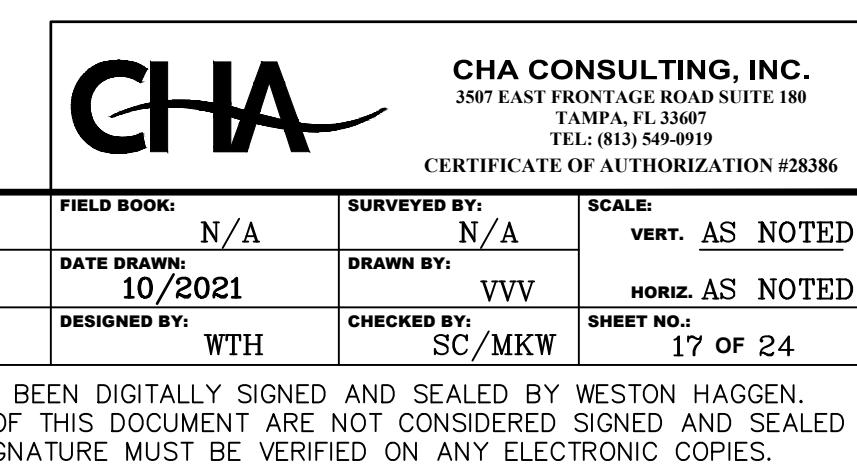
D8 – GROUT FILL TERMINATION POINT – PLAN

RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	
OBID SET	VVV 10/2021
REVISION	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



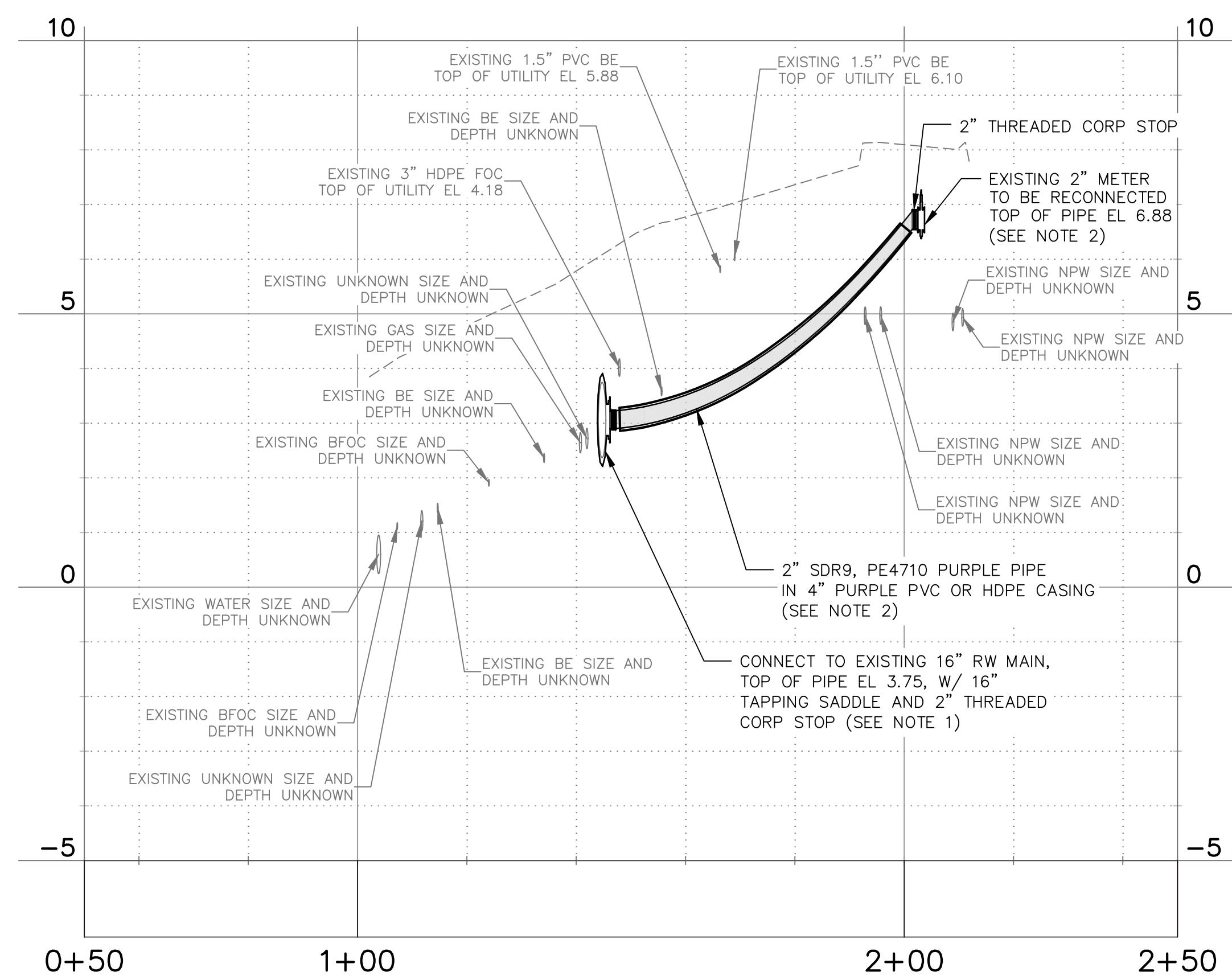
CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
MEMORIAL CAUSEWAY (AREA D) RECONNECTIONS – D1, D4 AND D8
PLANS



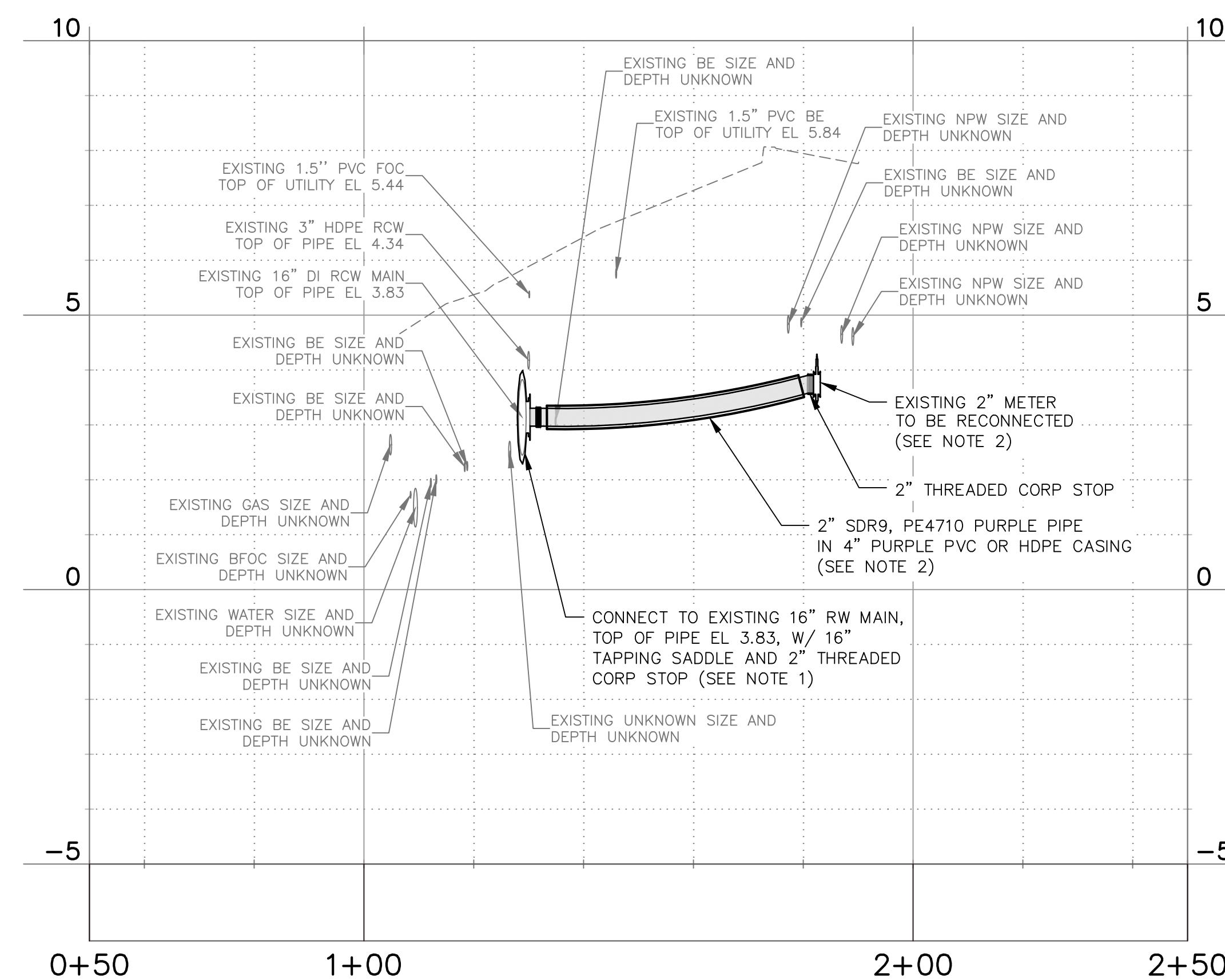
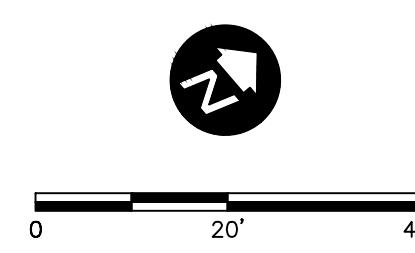
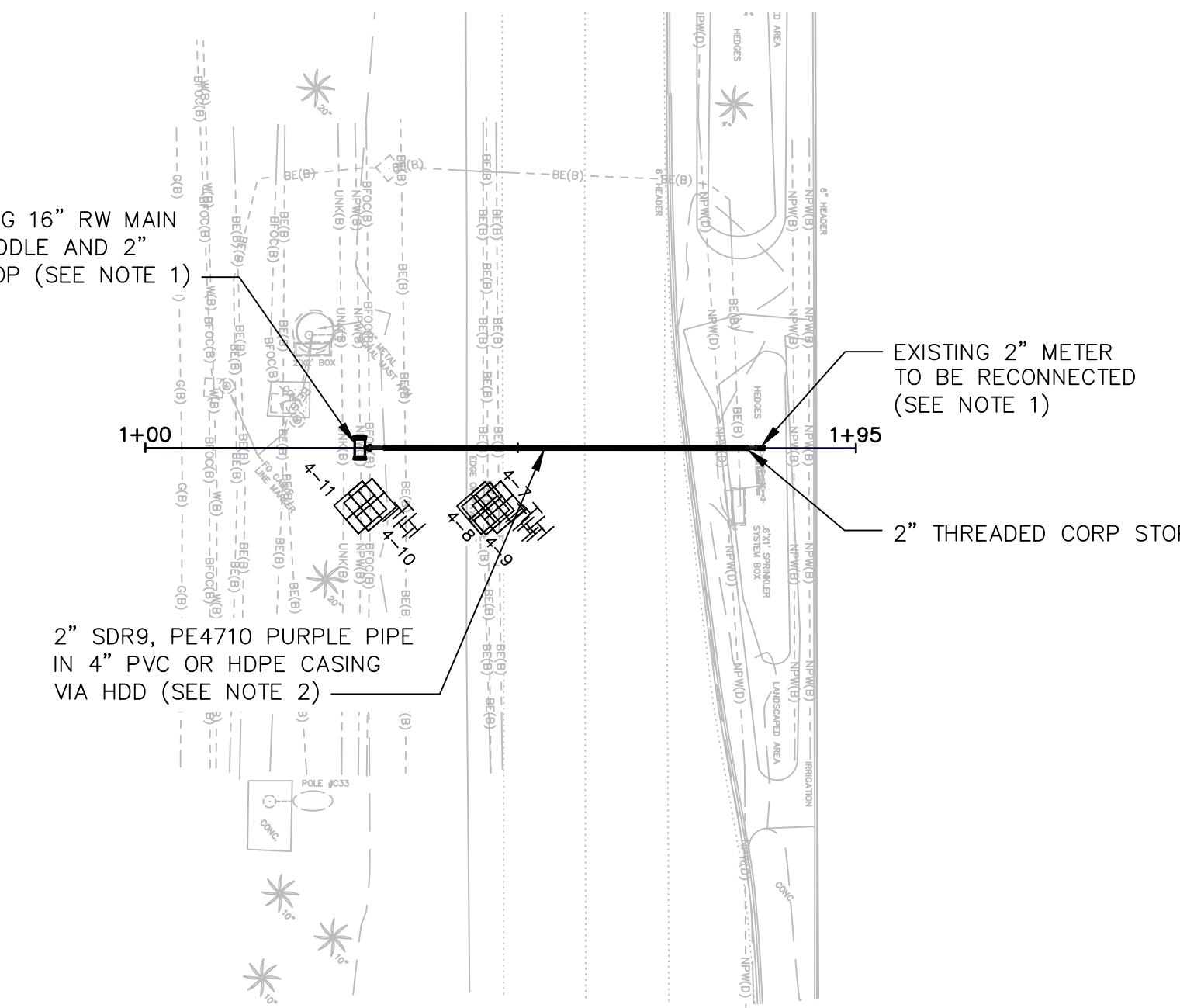
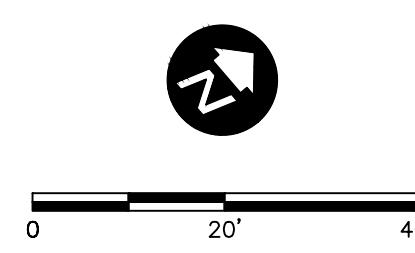
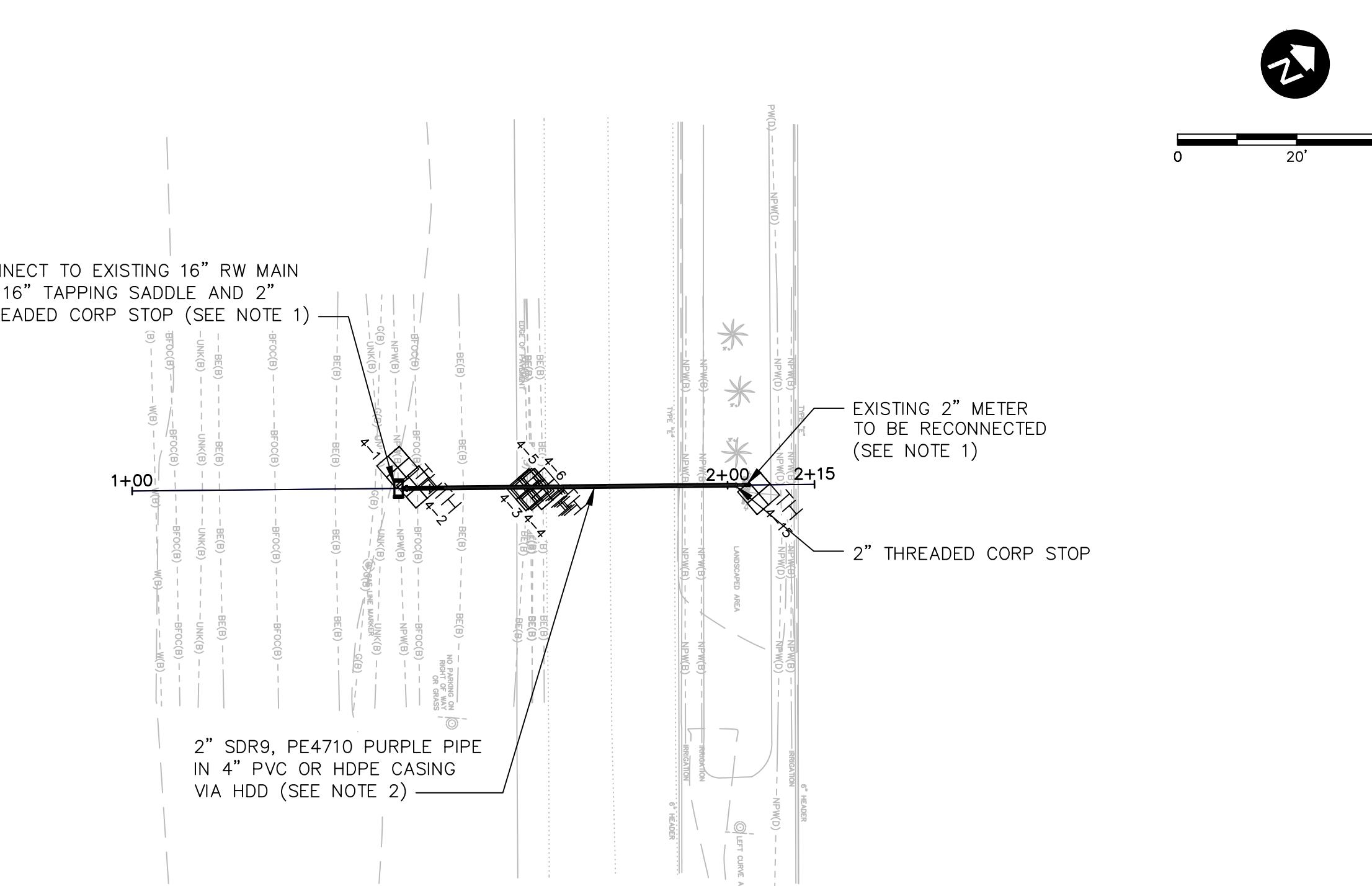
Rev. / NOTES

1. SEE INDEX NUMBERS 504, 505 PAGE 1 OF 3, 505 PAGE 2 OF 3 ON DRAWING C16, AND INDEX NUMBER 505 PAGE 3 OF 3 ON DRAWING C17 FOR DETAILS.
 2. CONTRACTOR SHALL MAINTAIN AT LEAST 12" MINIMUM SEPARATION BETWEEN RCW RECONNECTION PIPING AND EXISTING UTILITIES.
 3. CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AND DETERMINE ACTUAL ELEVATIONS PRIOR TO INSTALLATION OF NEW CASING PIPE.

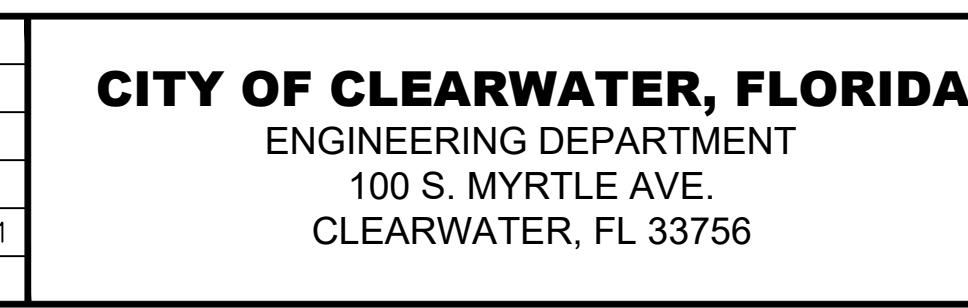
RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
_____ PROJECT ENGINEER	
	DATE
APPROVED BY:	
_____ DATE	
	OB:



D2 – METER RECONNECTION – PLAN & PROFILE

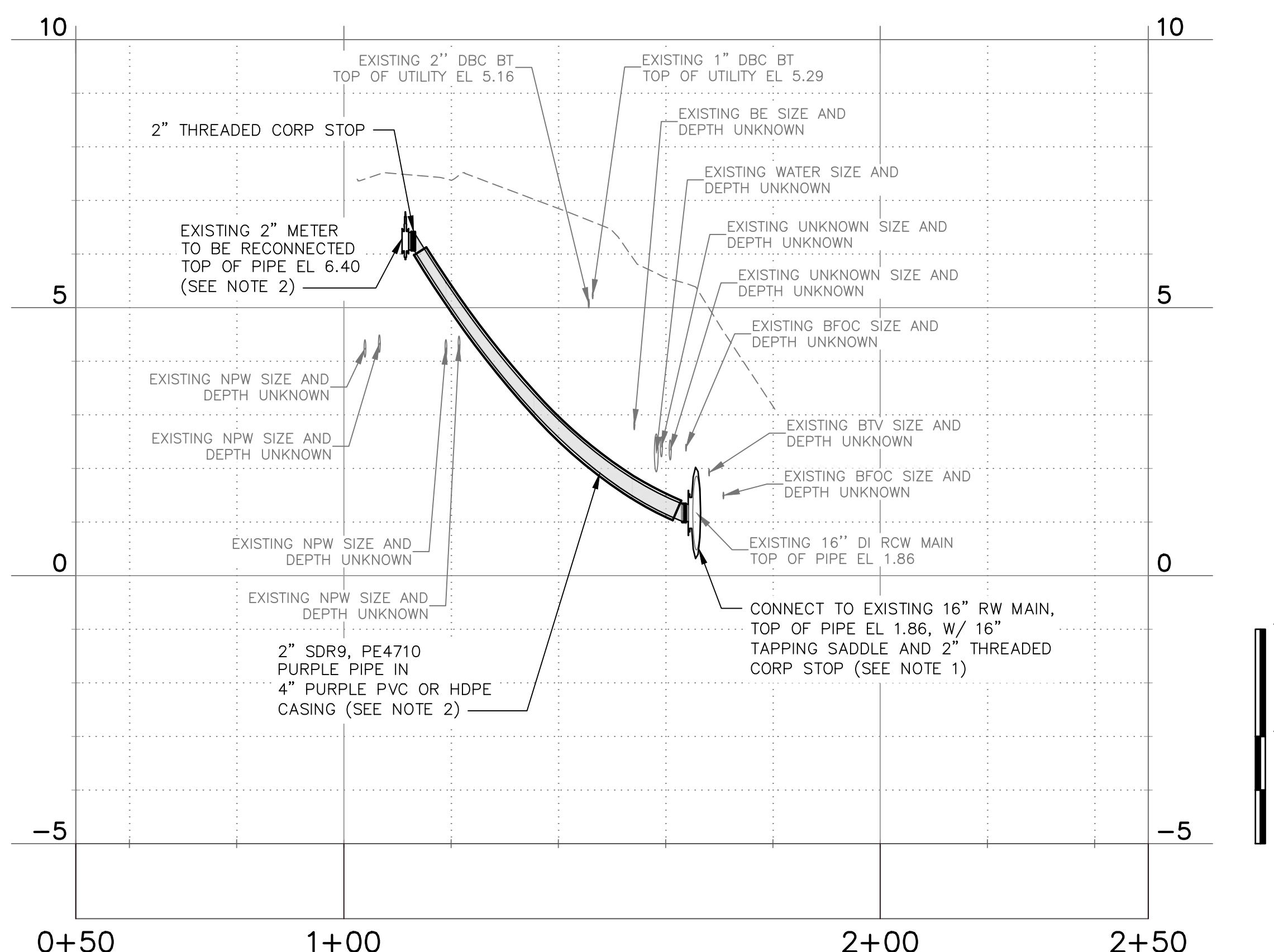
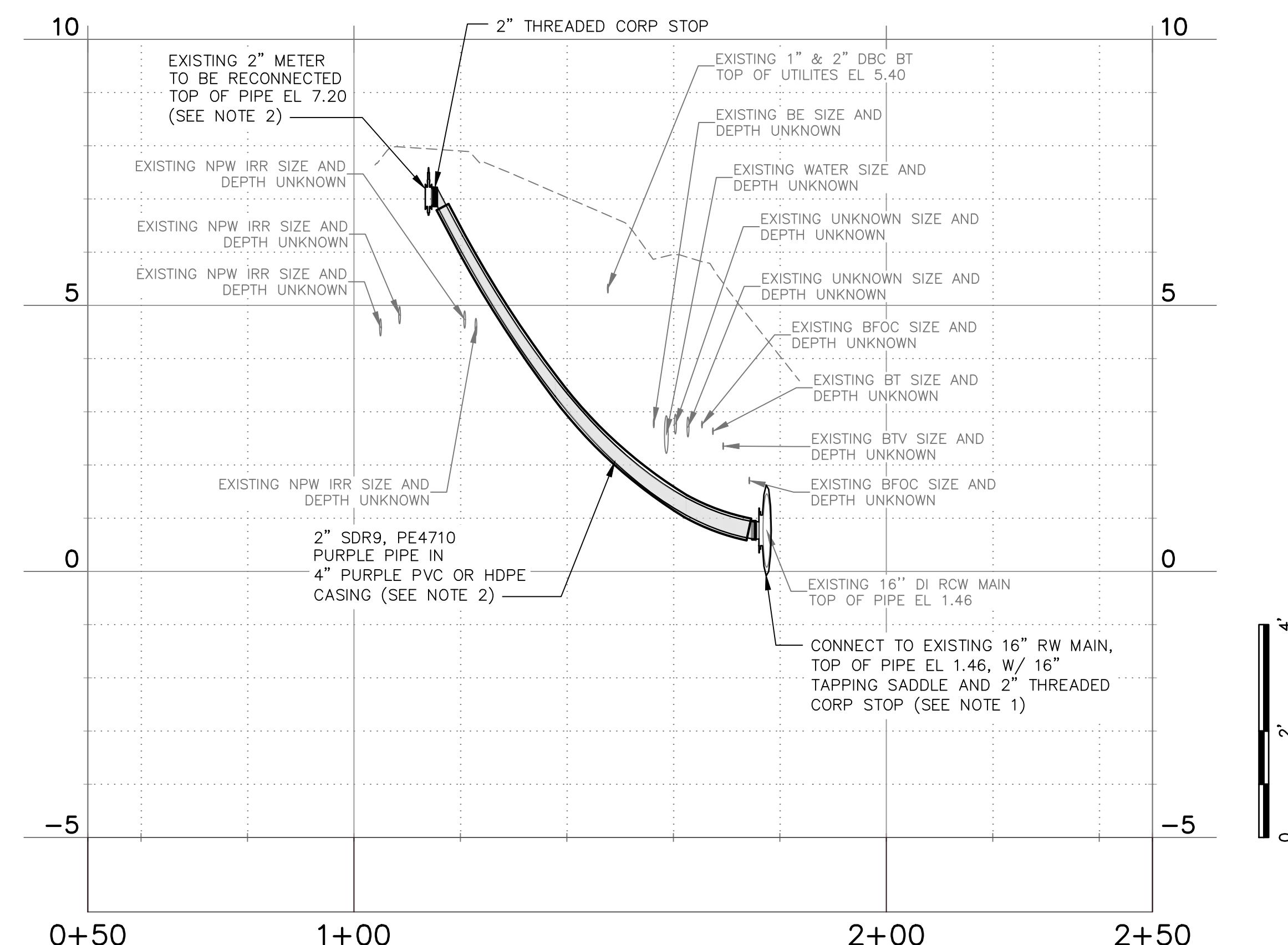
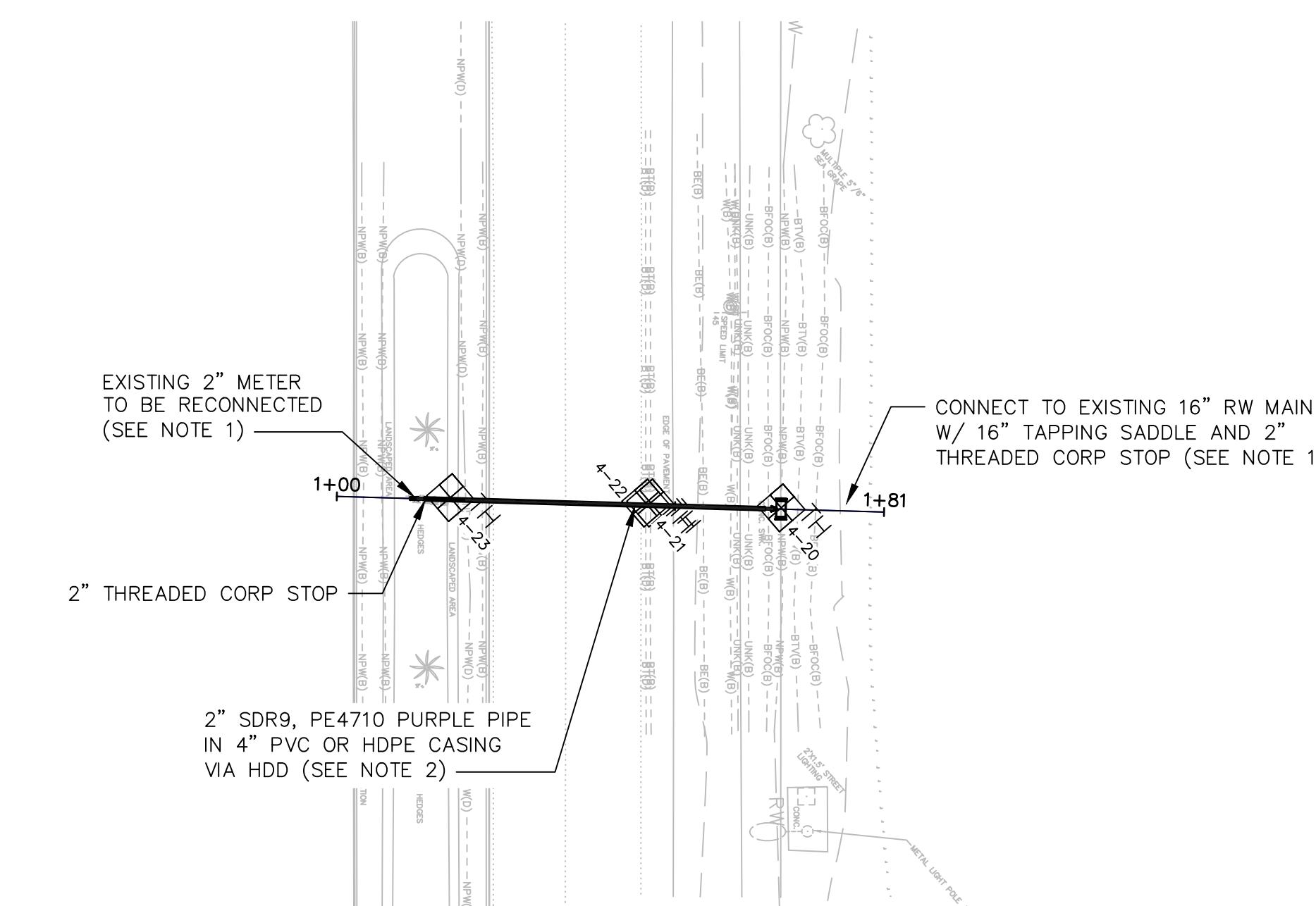
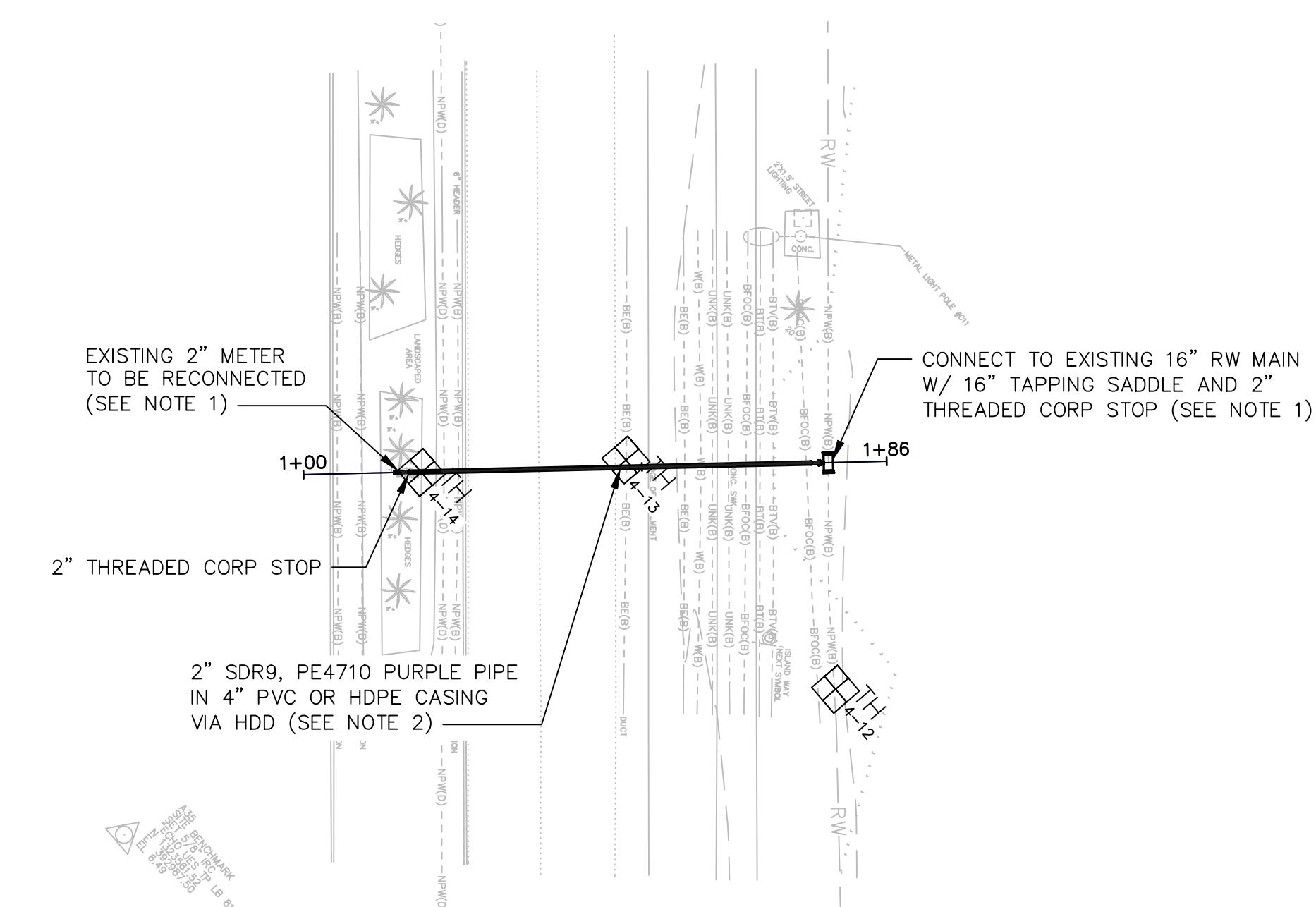
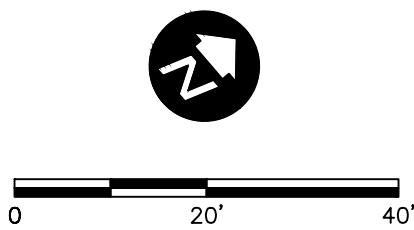
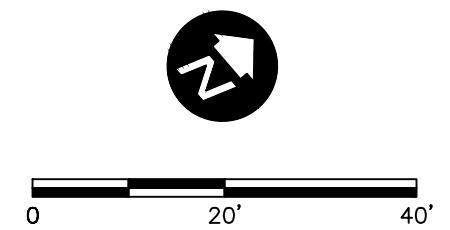


D3 – METER RECONNECTION – PLAN & PROFILE



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
MEMORIAL CAUSEWAY (AREA D) RECONNECTINOS – D2 AND D3
PLAN & PROFILES**

CHA		CHA CONSULTING, INC. 3507 EAST FRONTRAGE ROAD SUITE 180 TAMPA, FL 33607 TEL: (813) 549-0919
CERTIFICATE OF AUTHORIZATION #28386		
FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: <u>VERT. AS NOTED</u>
DATE DRAWN: 10/2021	DRAWN BY: VVV	HORIZ. AS NOTED
DESIGNED BY: WTH	CHECKED BY: SC/MKW	SHEET NO.: 18 OF 24
BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. IF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED NATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.		

**NOTES**

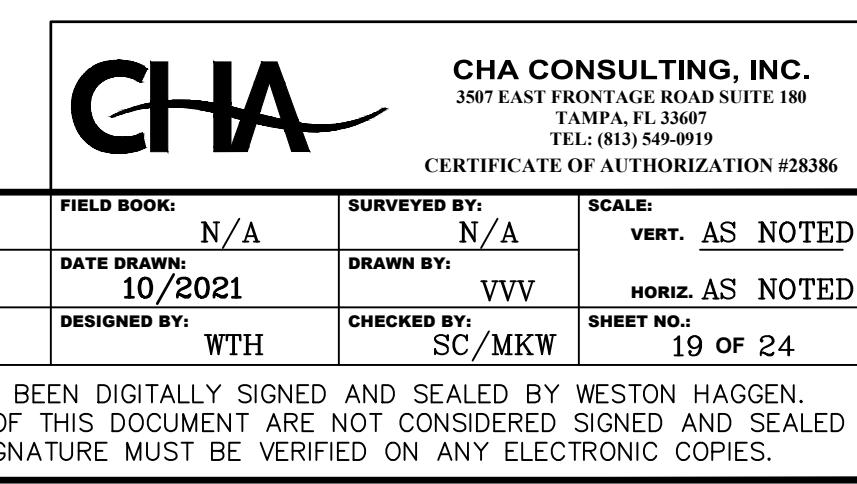
- SEE INDEX NUMBERS 504, 505 PAGE 1 OF 3, 505 PAGE 2 OF 3 ON DRAWING C16, AND INDEX NUMBER 505 PAGE 3 OF 3 ON DRAWING C17 FOR DETAILS.
- CONTRACTOR SHALL MAINTAIN AT LEAST 12" MINIMUM SEPARATION BETWEEN RCW RECONNECTION PIPING AND EXISTING UTILITIES.
- CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AND DETERMINE ACTUAL ELEVATIONS PRIOR TO INSTALLATION OF NEW CASING PIPE.

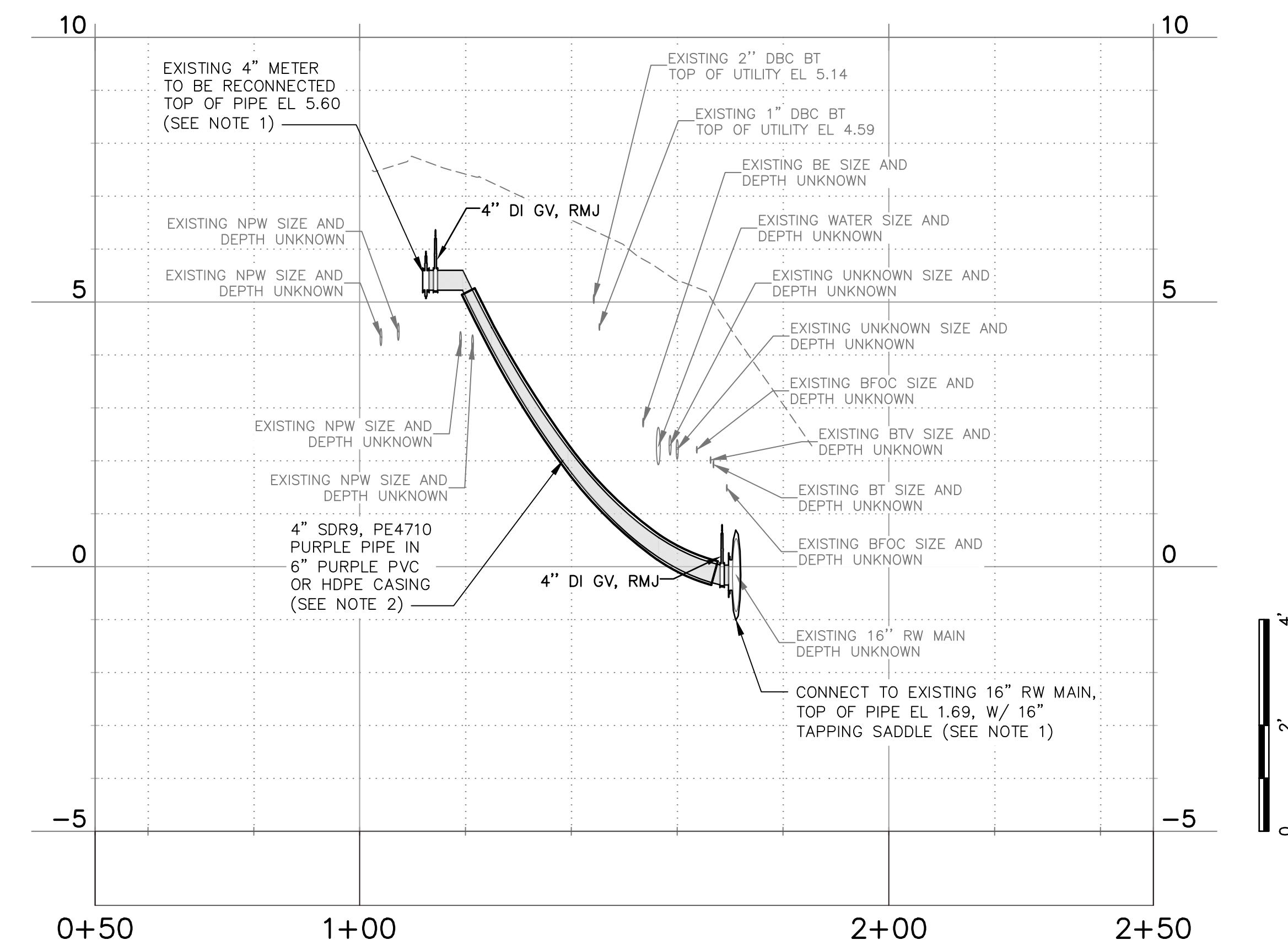
RECORD DRAWINGS	
SURVEYED BY:	DRAWN BY:
PROJECT ENGINEER	DATE
OBID SET	VVV 10/2021
APPROVED BY:	

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
MEMORIAL CAUSEWAY (AREA D) RECONNECTINOS – D5 AND D6
PLAN & PROFILES





D7 – METER RECONNECTION – PLAN & PROFILE

NOTES

- SEE INDEX NUMBERS 504, 505 PAGE 1 OF 3, 505 PAGE 2 OF 3 ON DRAWING C16, AND INDEX NUMBER 505 PAGE 3 OF 3 ON DRAWING C17 FOR DETAILS.
- CONTRACTOR SHALL MAINTAIN AT LEAST 12" MINIMUM SEPARATION BETWEEN RCW RECONNECTION PIPING AND EXISTING UTILITIES.
- CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AND DETERMINE ACTUAL ELEVATIONS PRIOR TO INSTALLATION OF NEW CASING PIPE.

RECORD DRAWINGS

SURVEYED BY:	DRAWN BY:
REVIEWED BY:	
PROJECT ENGINEER	DATE
APPROVED BY:	DATE

OBID SET

REVISION

BY

DATE

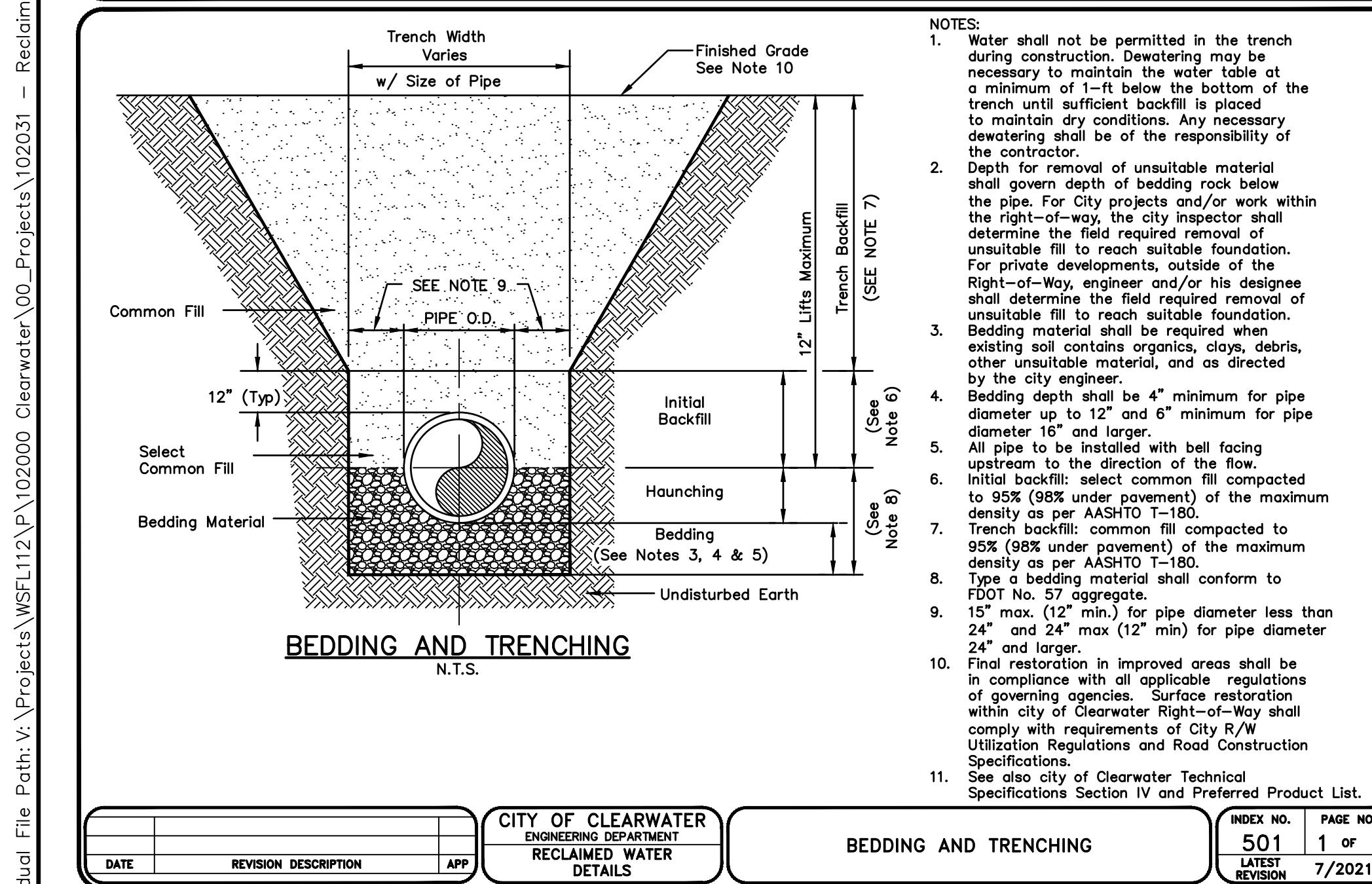
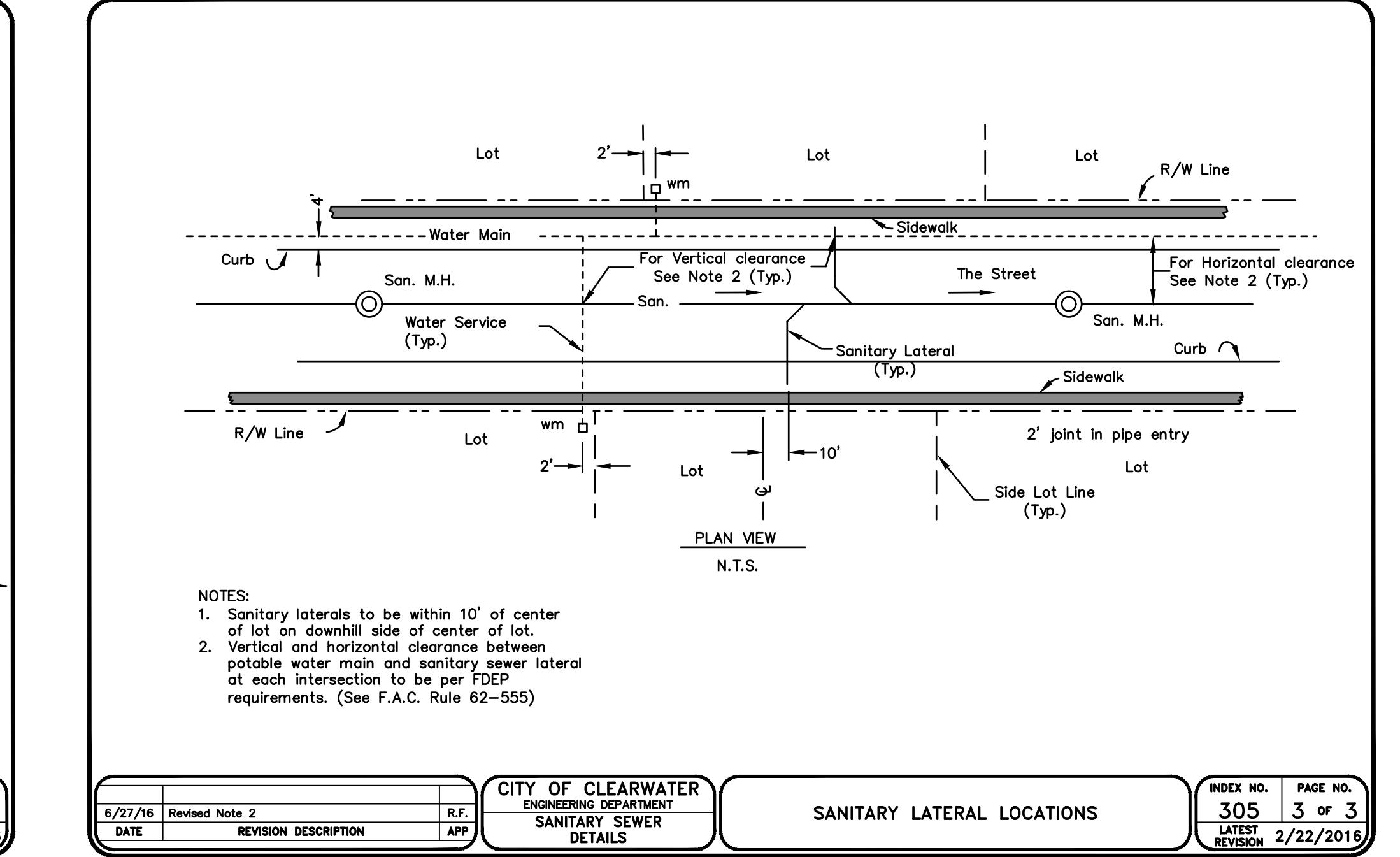
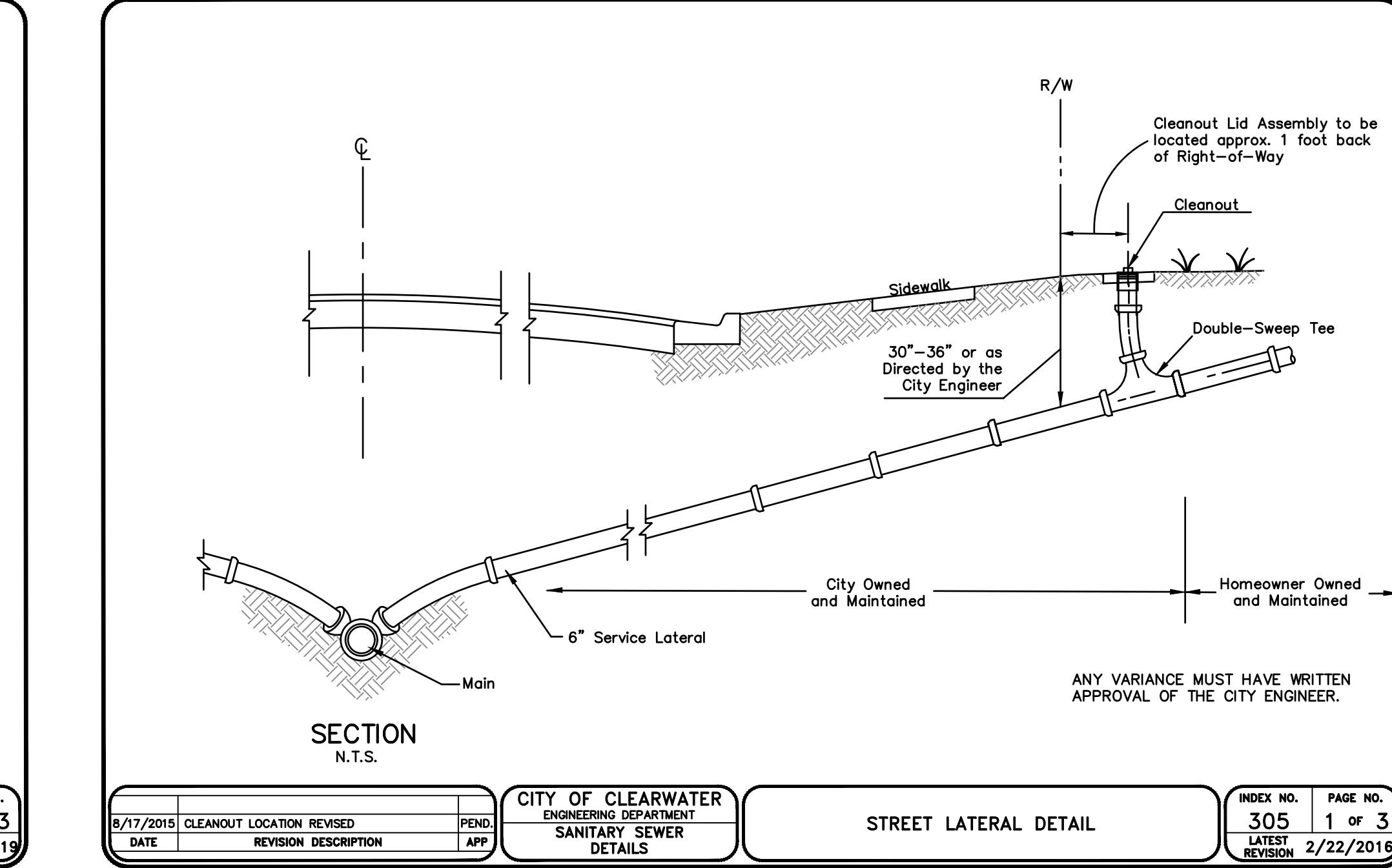
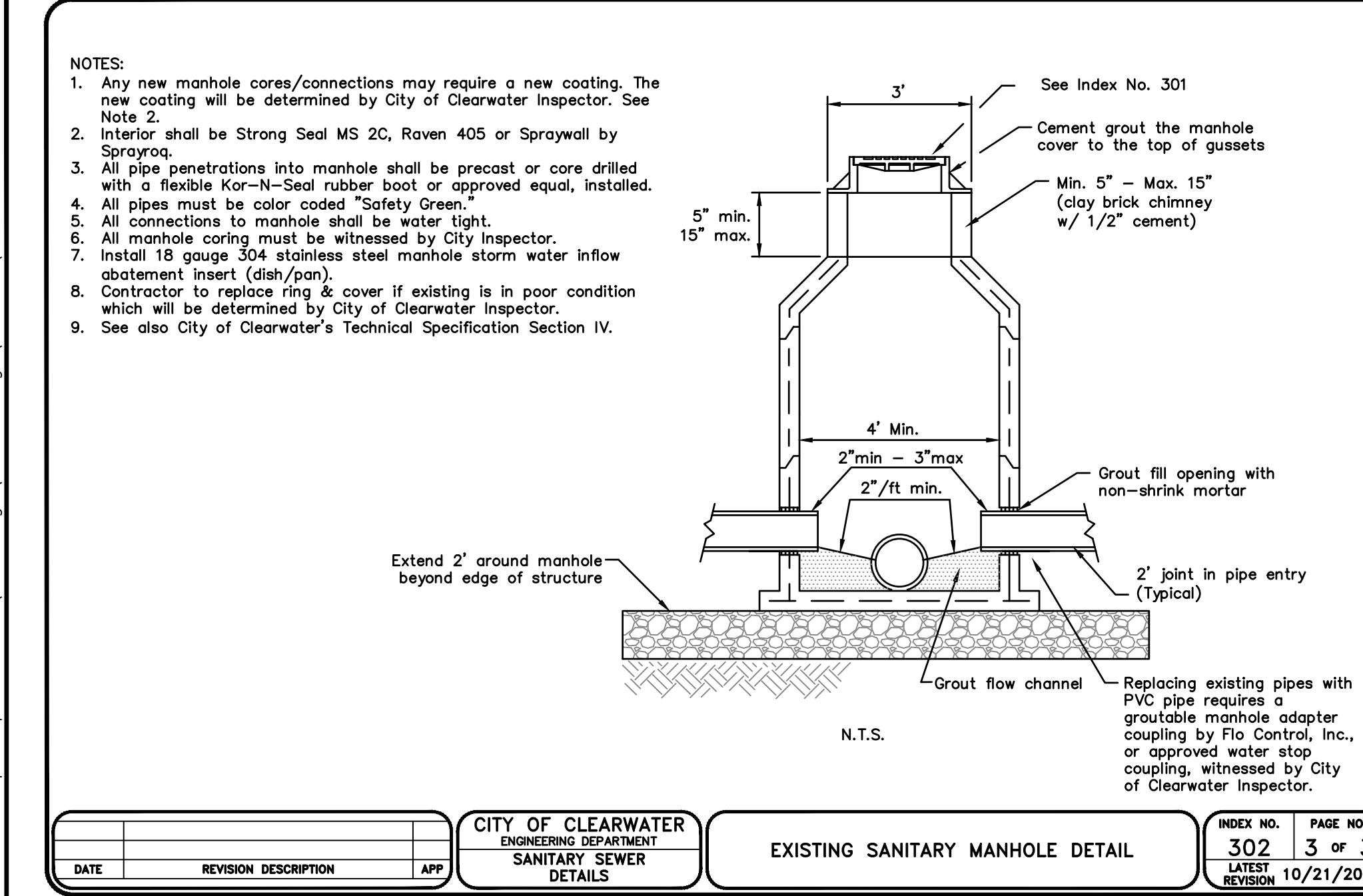
CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
MEMORIAL CAUSEWAY (AREA D) RECONNECTINOS – D7
PLAN & PROFILE**

DWG NAME: C17	FIELD BOOK: N/A	SURVEYED BY: N/A	SCALE: AS NOTED
CONTRACT NO.: 21-0029-UT	DATE DRAWN: 10/2021	DRAWN BY: VVV	VERT. AS NOTED
JOB NO.: 102031	DESIGNED BY: WTH	CHECKED BY: SC/MKW	HORZ. AS NOTED
SHEET NO. 20 OF 24			
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.			

CHA
CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-0919
CERTIFICATE OF AUTHORIZATION #28386

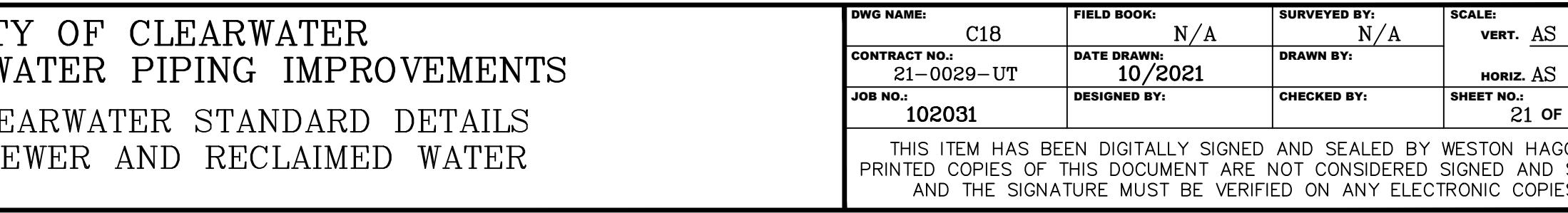
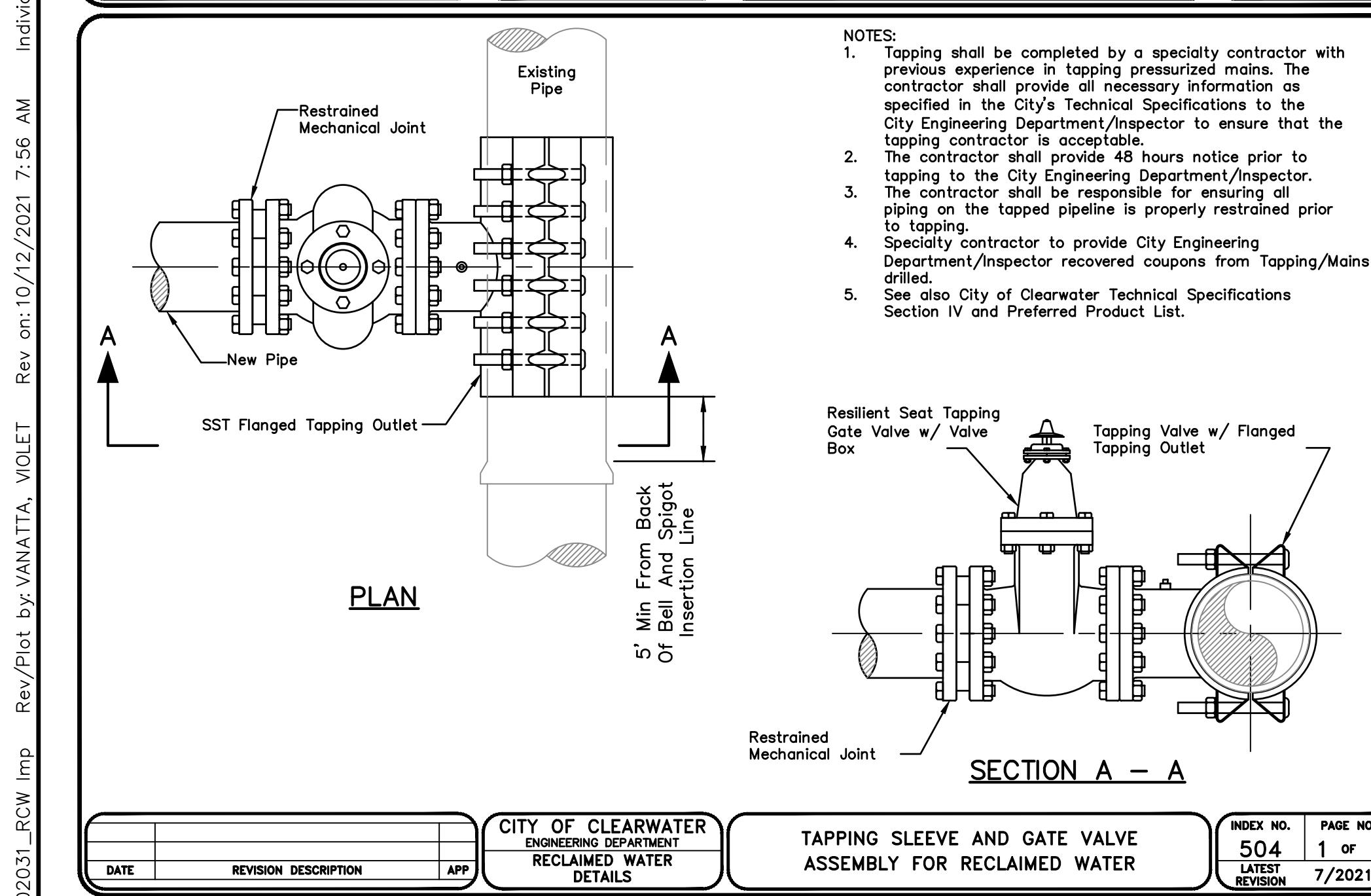


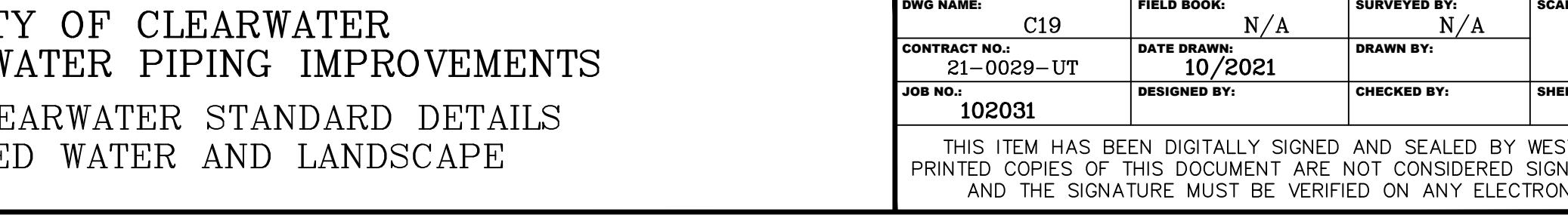
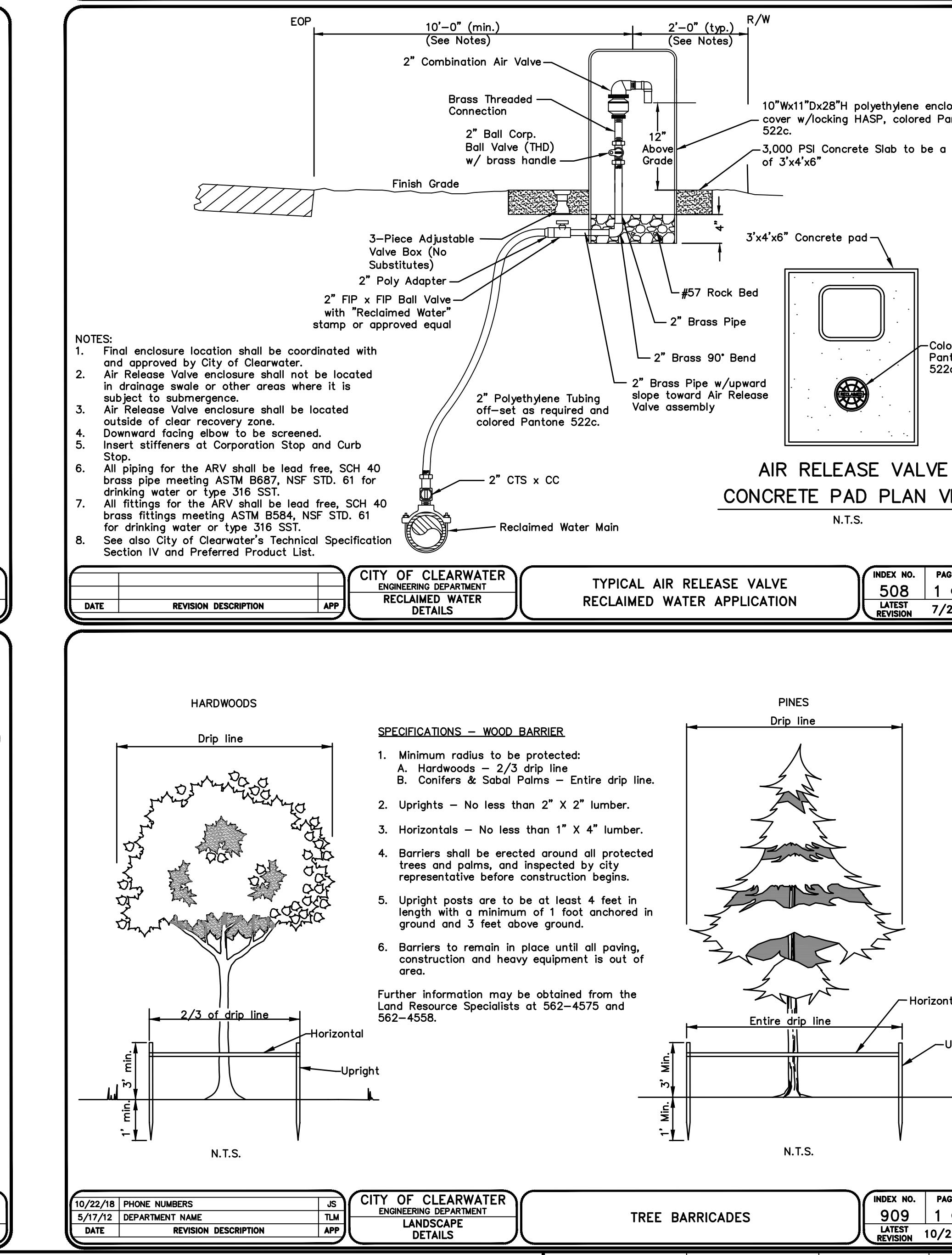
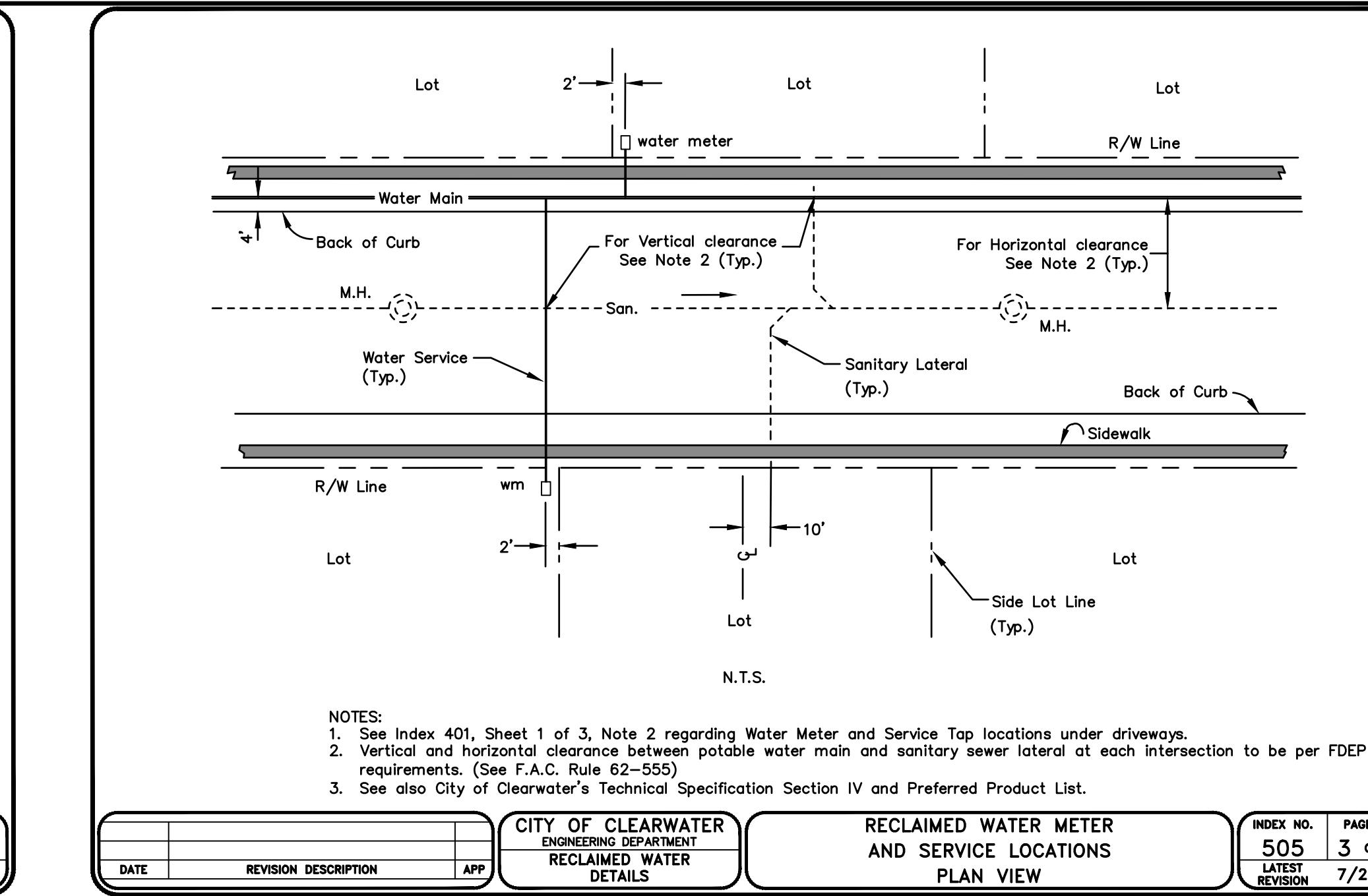
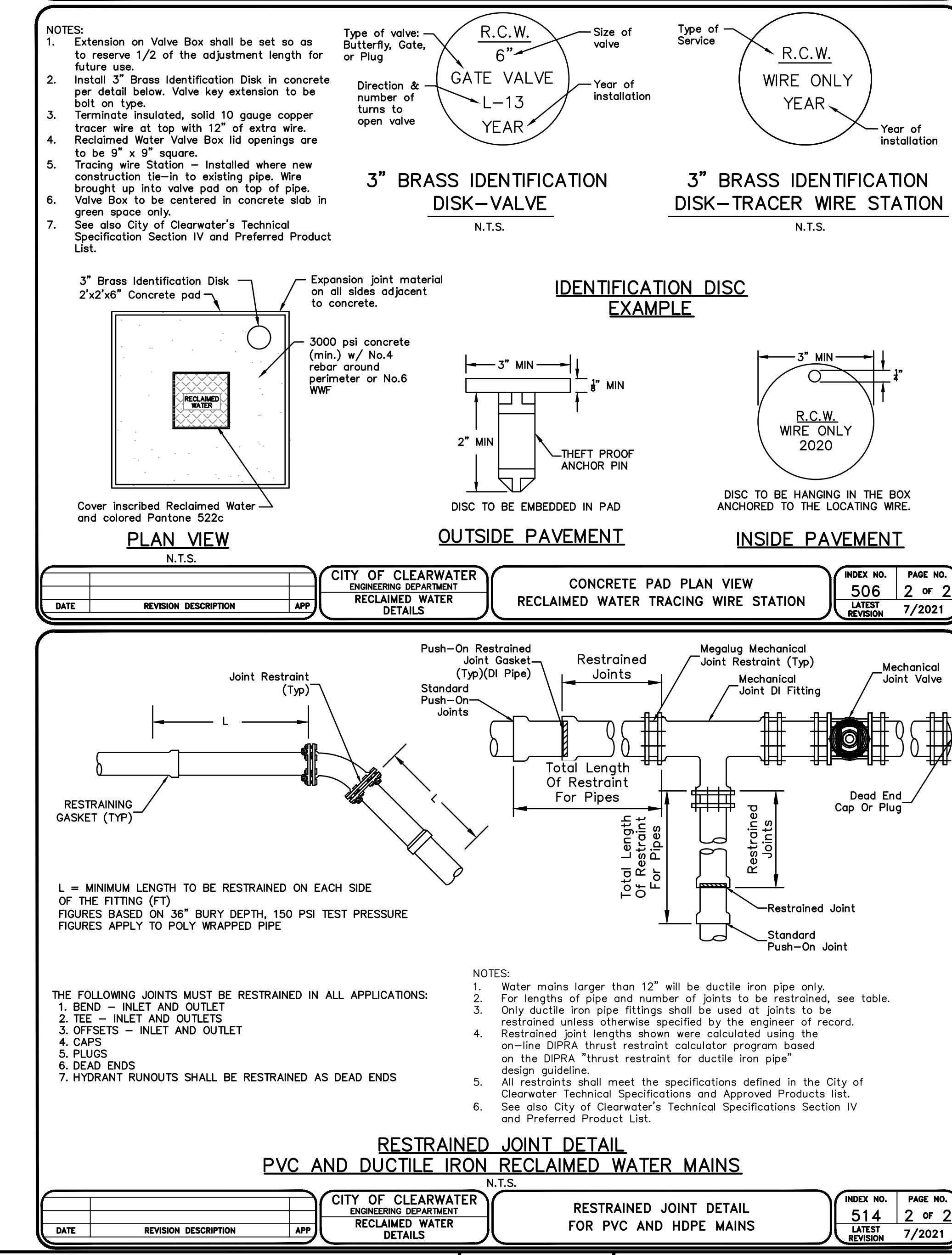
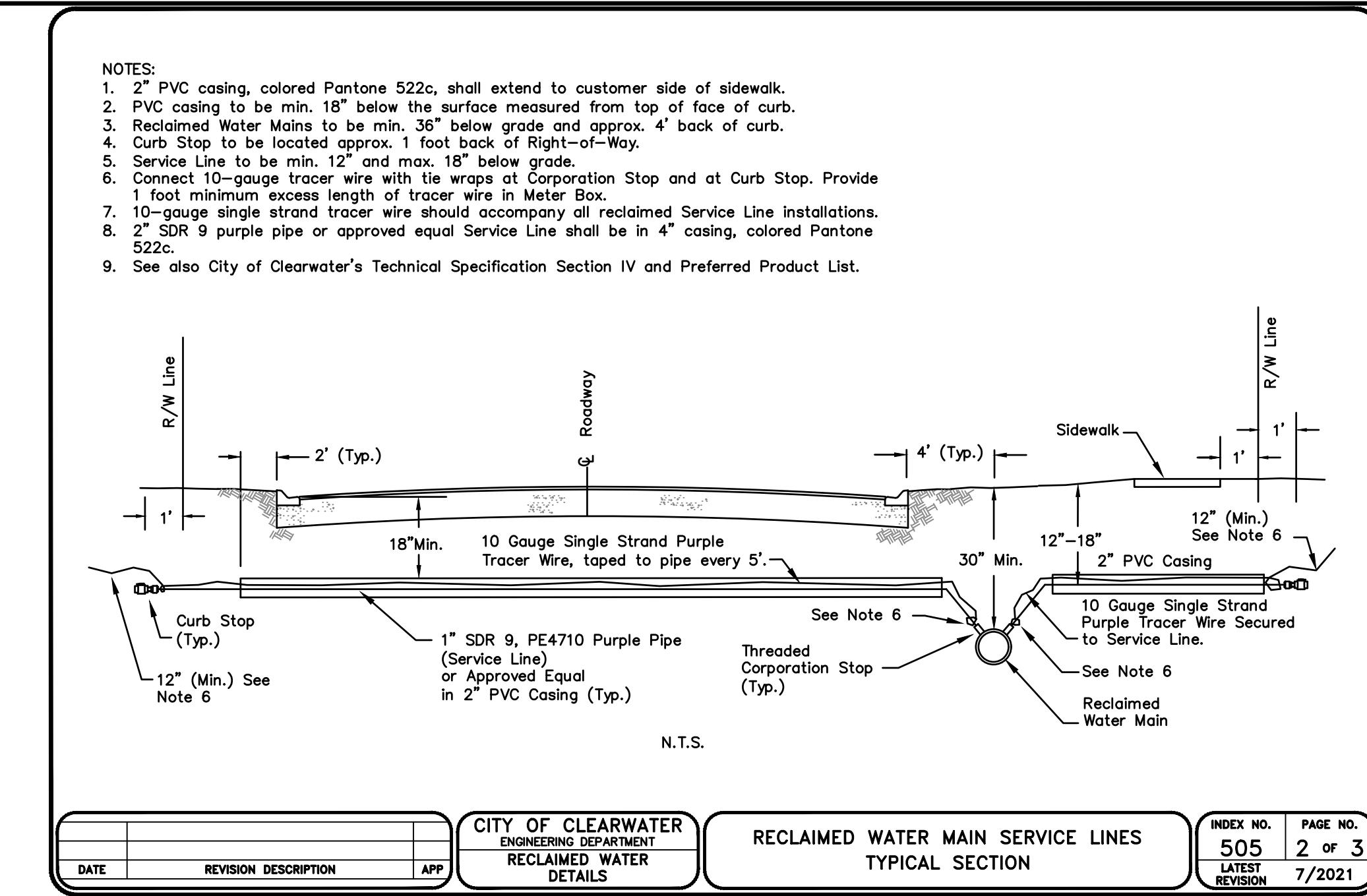
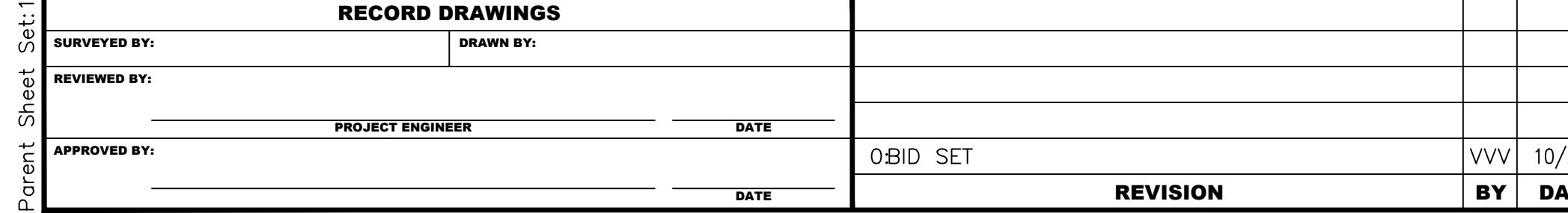
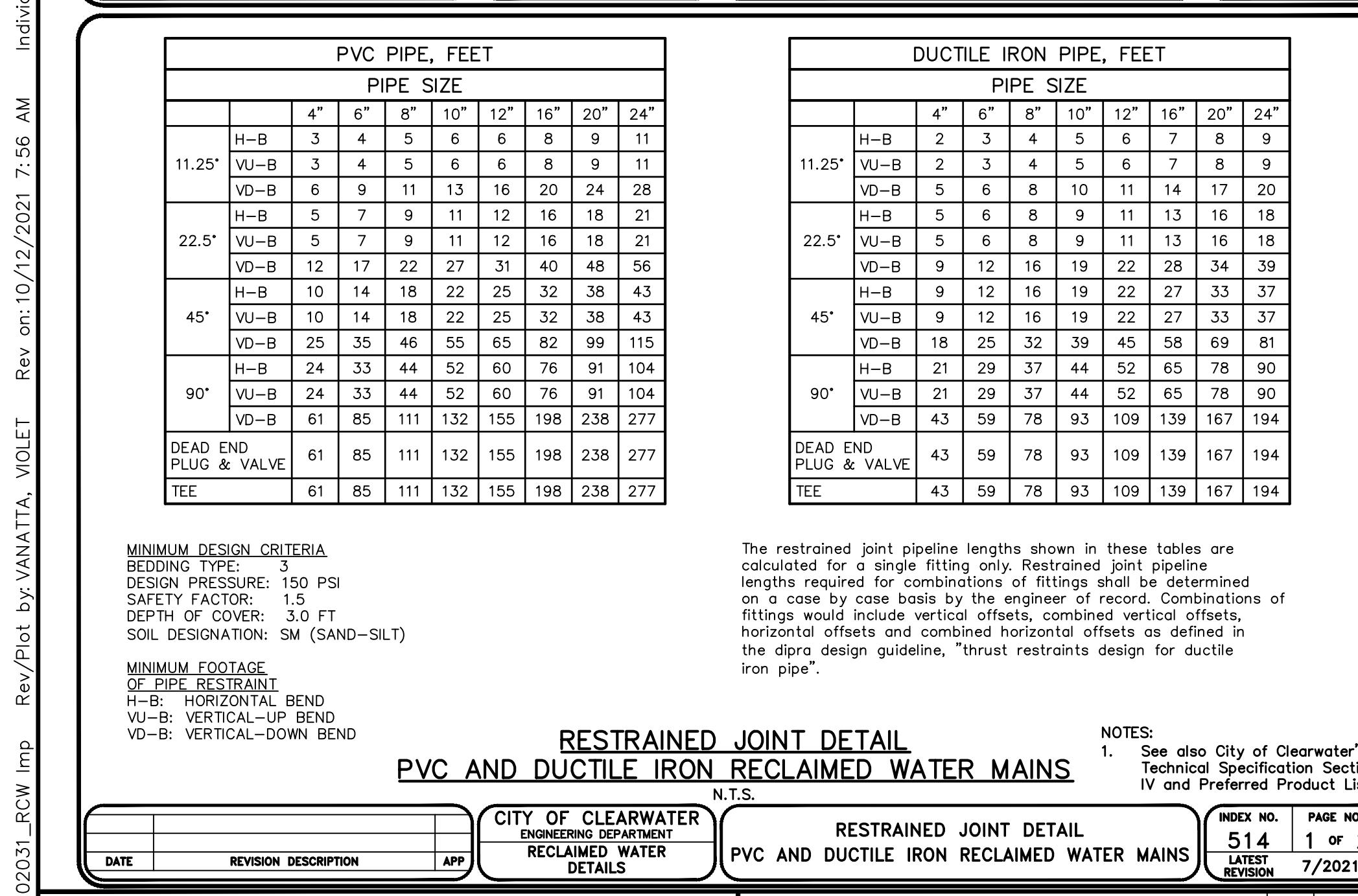
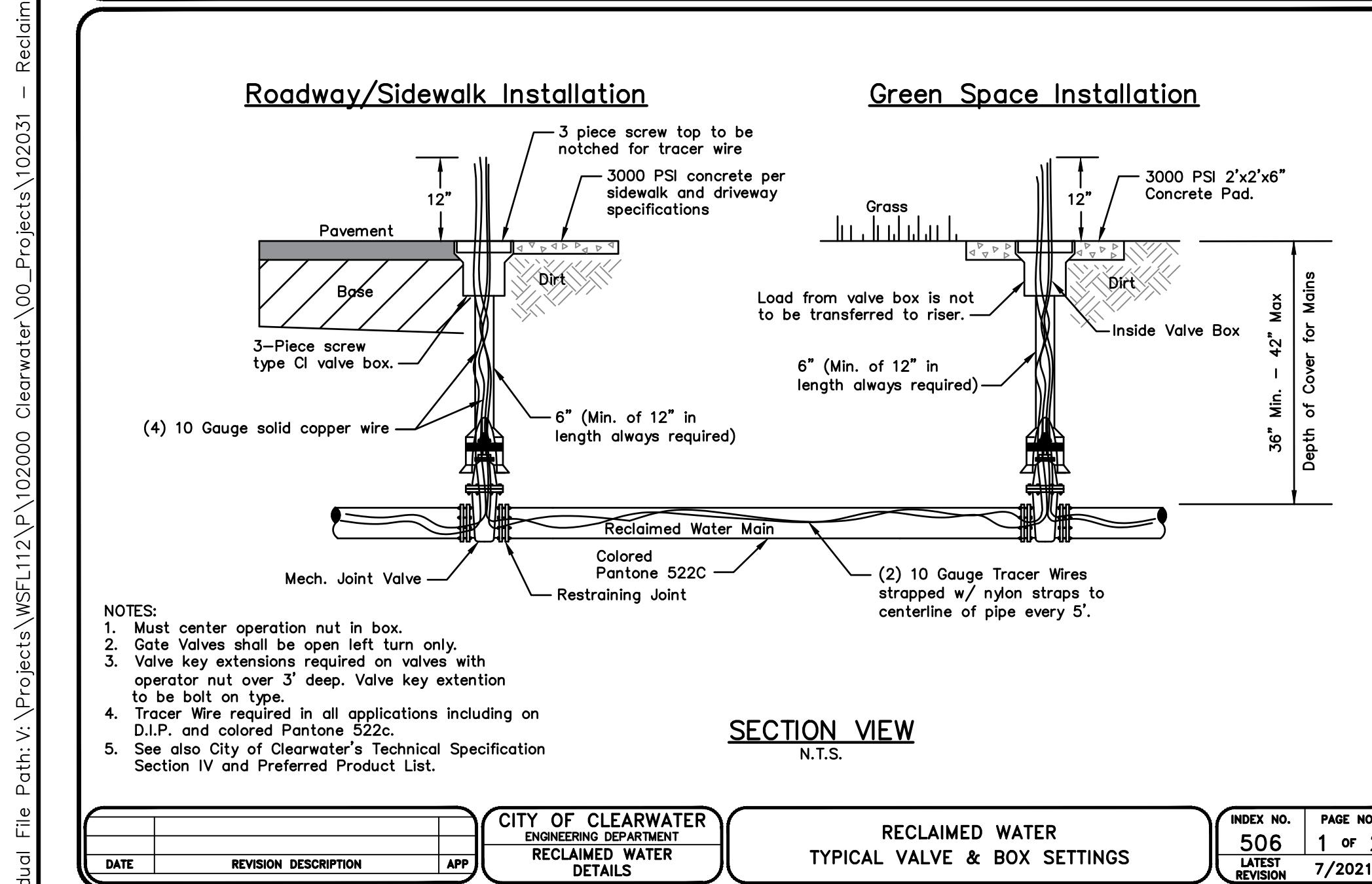
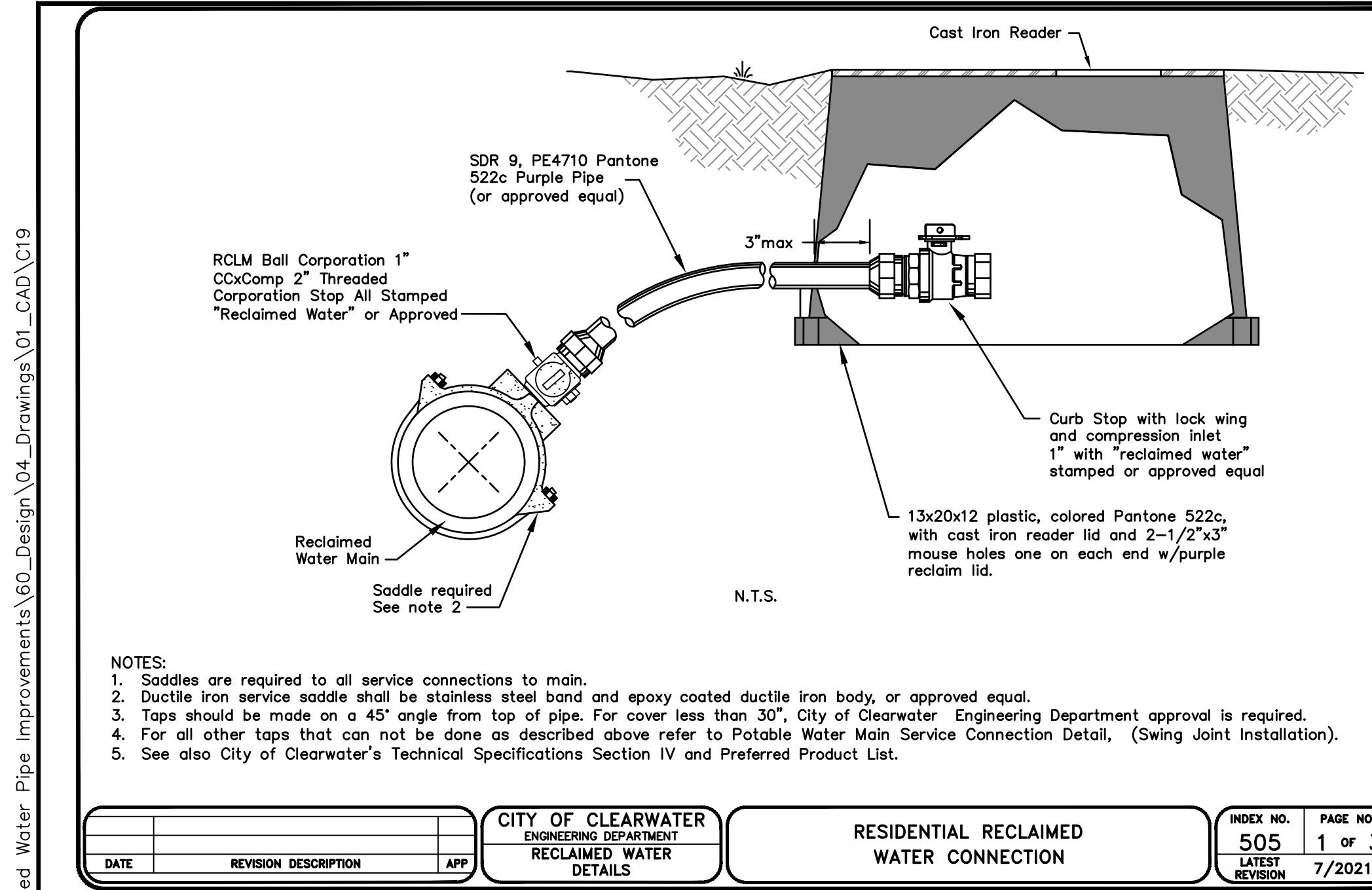
PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER		WASTEWATER FORCEMAIN		SANITARY SEWER		STORM SEWER		STRUCTURAL FOUNDATION, WALLS, ETC		ROADWAY RIGHTS-OF-WAY	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	HORIZ
POTABLE WATER MAIN	4 FEET NOTE: 2	12"	4 FEET NOTES: 2 & 4	12"	6 FEET NOTE: 4	12" / 18"	6 FEET NOTES: 3 & 4	12" / 18"	4 FEET NOTES: 2 & 4	12" / 18"	15 FEET NOTE: 6	5 FEET NOTE: 2A		
RECLAIMED WATER MAIN	4 FEET NOTES: 2 & 4	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12" / 18"	15 FEET NOTE: 6	5 FEET NOTE: 2A		
WASTEWATER FORCE MAIN	6 FEET NOTE: 4	12" / 18"	4 FEET NOTES: 3 & 4	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12" / 18"	15 FEET NOTE: 6	5 FEET NOTE: 2A		
SANITARY SEWER	6 FEET NOTE: 4	12" / 18"	4 FEET NOTES: 3 & 4	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12"	4 FEET NOTE: 2	12" / 18"	VARIES PER DEPTH	5 FEET NOTE: 2A		

NOTES:

- Water shall not be permitted in the trench during construction. Dewatering may be necessary to maintain the water table at a minimum of 4'-0" below the bottom of the trench until sufficient backfill is placed to maintain dry conditions. Any necessary dewatering shall be the responsibility of the contractor.
- Depth for removal of unsuitable material shall govern depth of bedding rock below the pipe. For City projects and/or work within the Right-of-Way, engineer and/or his designee shall determine the required amount of unsuitable fill to reach suitable foundation. For private developments outside of the Right-of-Way, engineer and/or his designee shall determine the required amount of unsuitable fill to reach suitable foundation.
- Bedding material shall be required when existing soil contains organics, clays, debris, or other unsuitable material, and as directed by the engineer.
- Bedding depth shall be 4" minimum for pipe diameter up to 12" and 6" minimum for pipe diameter 16" and larger.
- All pipe to be installed with bell facing upward in the direction of flow.
- Initial backfill: select common fill compacted to 95% (98% under pavement) of the maximum density as per AASHTO T-180.
- Trench backfill: common fill compacted to 95% (98% under pavement) of the maximum density as per AASHTO T-180.
- Type of bedding material shall conform to FDOT No. 57 aggregate.
- 15' max, (12' min.) for pipe diameter less than 24" and 18' max (12' min) for pipe diameter 24" and larger.
- Final restoration in improved areas shall be in compliance with all applicable regulations of governing agencies. Surface restoration within city of Clearwater Right-of-Way shall comply with requirements of City R/W Utilization Regulations and Road Construction Specifications.
- See also City of Clearwater Technical Specification Section IV and Preferred Product List.

CITY OF CLEARWATER
ENGINEERING DEPARTMENT
HORIZONTAL AND VERTICAL UTILITY SEPARATION REQUIREMENTS
INDEX NO. 502 PAGE NO. 1 of 1
DATE 7/2021 REVISION DESCRIPTION APP





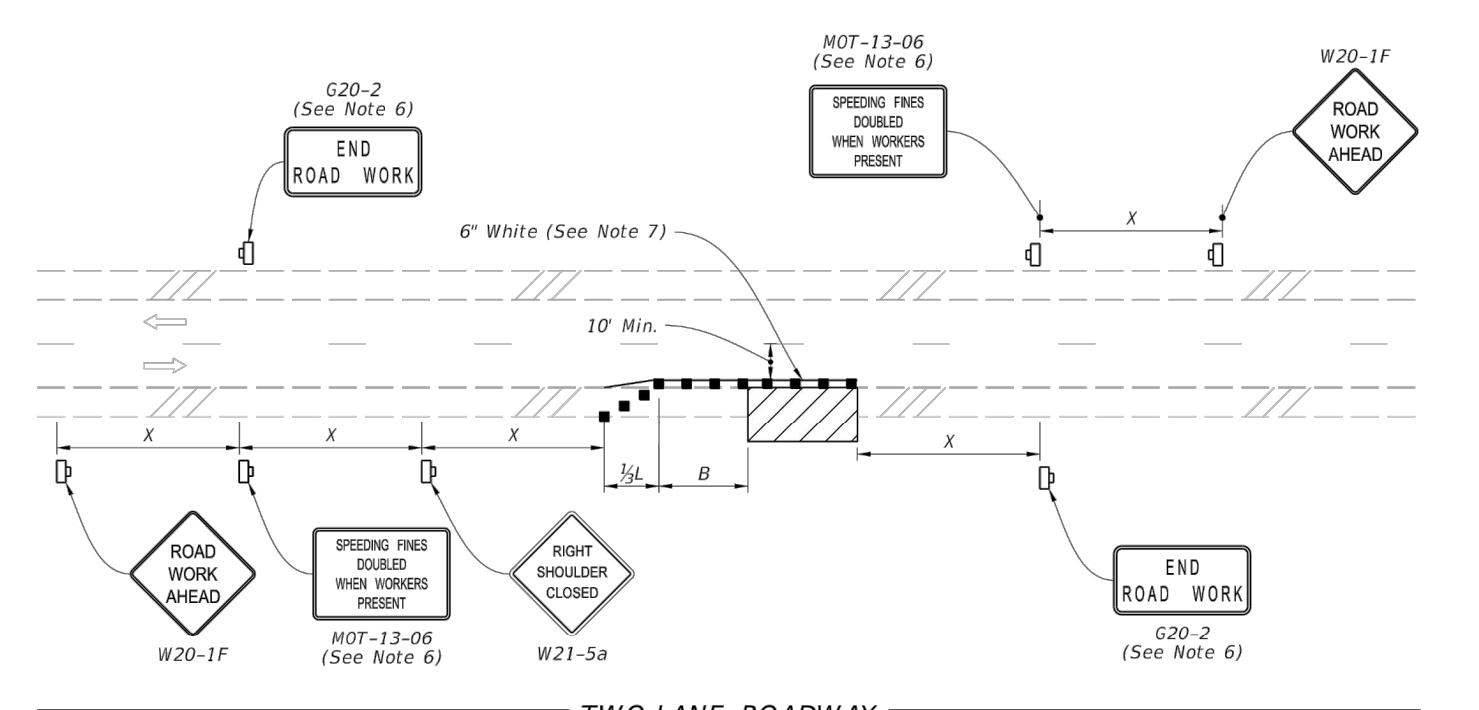
NOTES:

- This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
- L = Taper Length
X = Work Zone Sign Spacing
B = Buffer Length
See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
- For incidental work (e.g. mowing or litter removal), only the Road Work Ahead sign is required.
- When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
- For work less than two feet from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the temporary condition is in place for 24 hours or less.
- Temporary pavement markings may be omitted when the work zone is in place for 3 days or less.
- If the work encroaches on a marked bicycle lane or rideable shoulder, close the lane or shoulder in accordance with the Plans.
- Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.

SYMBOLS:

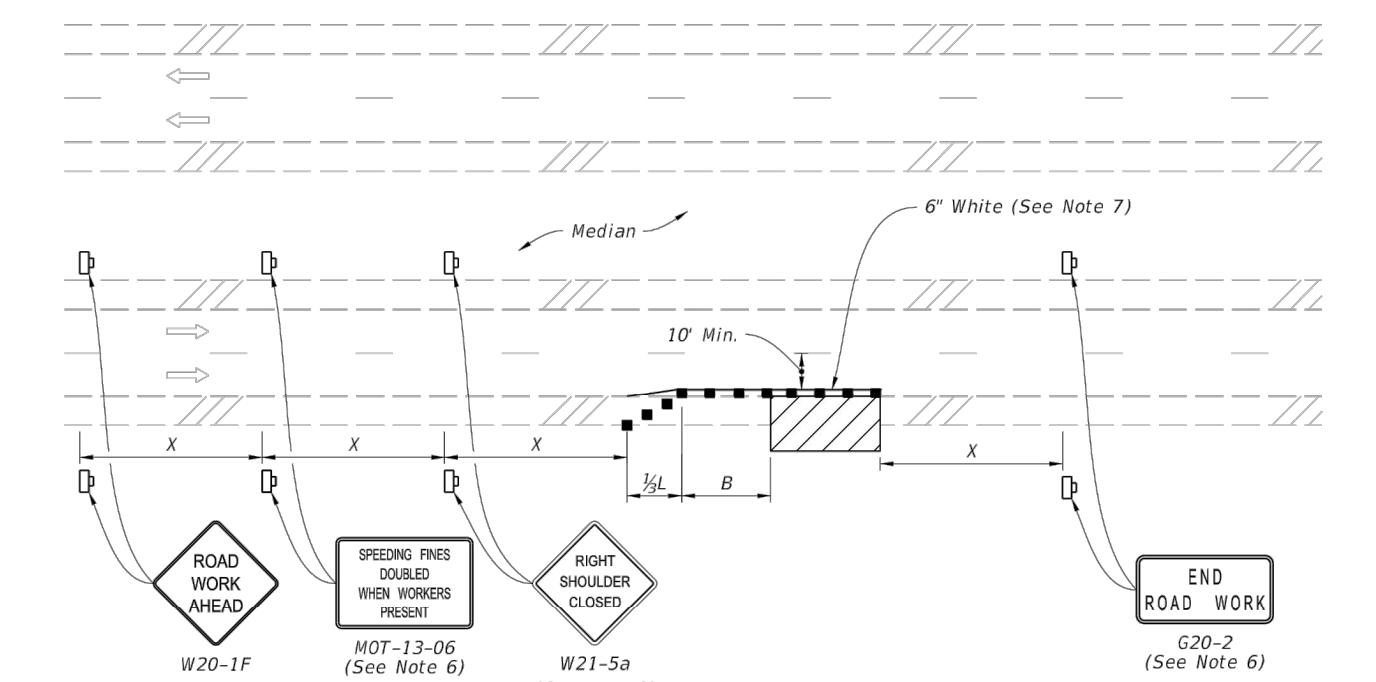
- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign

→ Lane Identification and Direction of Traffic



NOTE

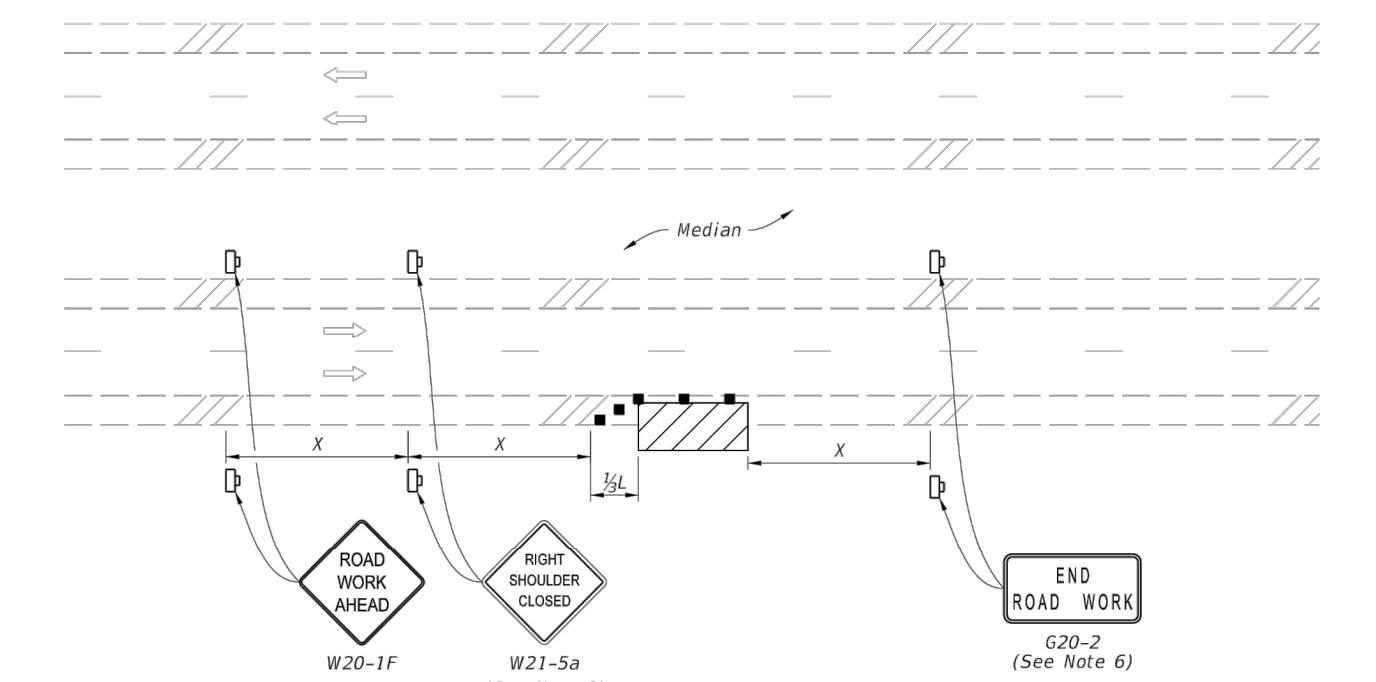
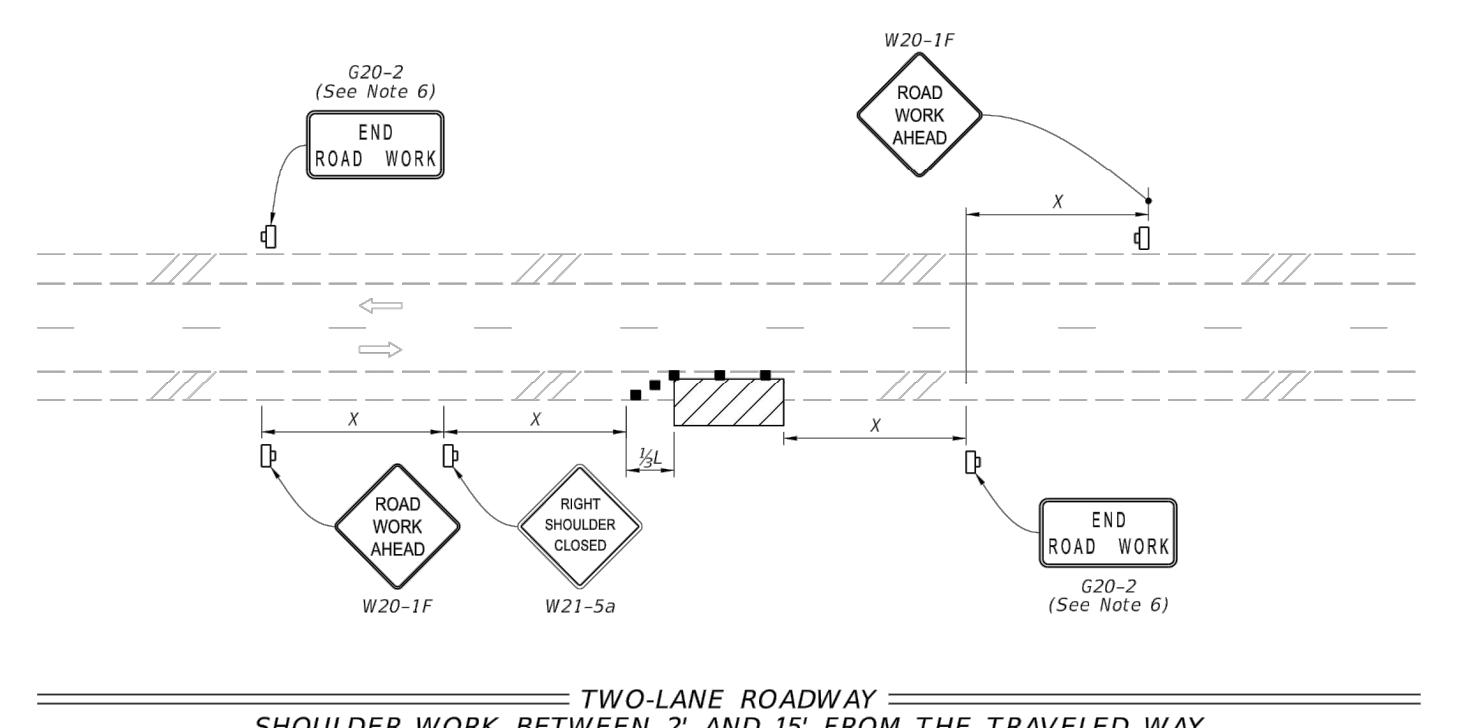
FDOT STANDARD TTC/MOT DETAILS ARE PROVIDED AS A REFERENCE TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MOT PLANS NECESSARY TO COMPLETE THE WORK EFFORT(S) IN COMPLIANCE WITH OWNER'S STANDARDS FOR EACH PROJECT WORK AREA.



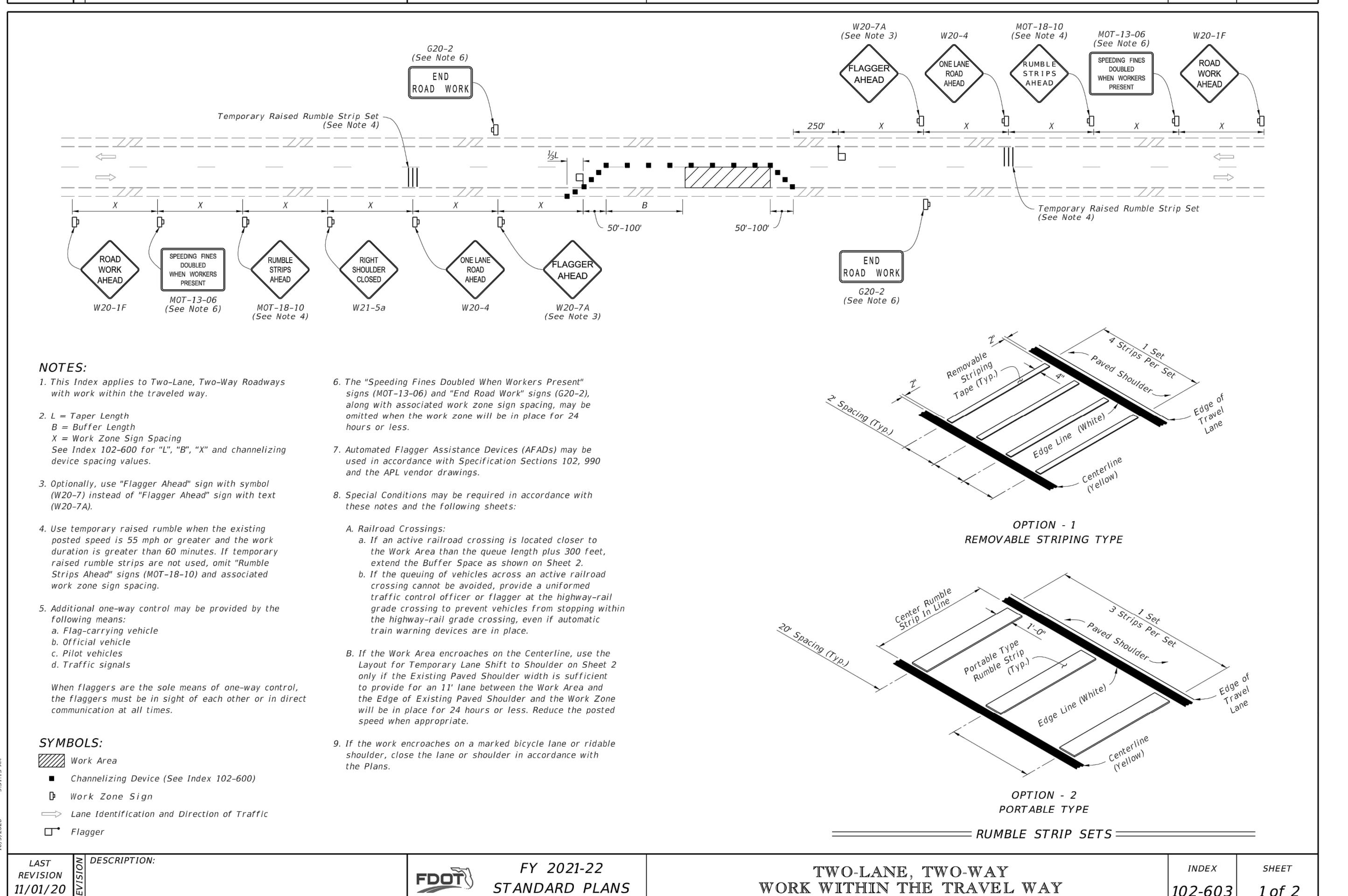
SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign

→ Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION:	FY 2021-22 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/20			102-602	1	of 2



LAST REVISION	DESCRIPTION:	FY 2021-22 STANDARD PLANS	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX	SHEET
11/01/20			102-603	1	of 2

RECORD DRAWINGS				
SURVEYED BY:	DRAWN BY:			
REVIEWED BY:				
PROJECT ENGINEER	DATE			
APPROVED BY:		OBID SET	REVISION	BY DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
FDOT FY 2021-22 STANDARD PLANS DETAILS

RECORD DRAWINGS				
SURVEYED BY:	DRAWN BY:			
REVIEWED BY:				
PROJECT ENGINEER	DATE			
APPROVED BY:		OBID SET	REVISION	BY DATE

LAST REVISION	DESCRIPTION:	FY 2021-22 STANDARD PLANS	TWO-LANE, TWO-WAY, INTERSECTION WORK	INDEX	SHEET
11/01/20			102-604	1	of 2

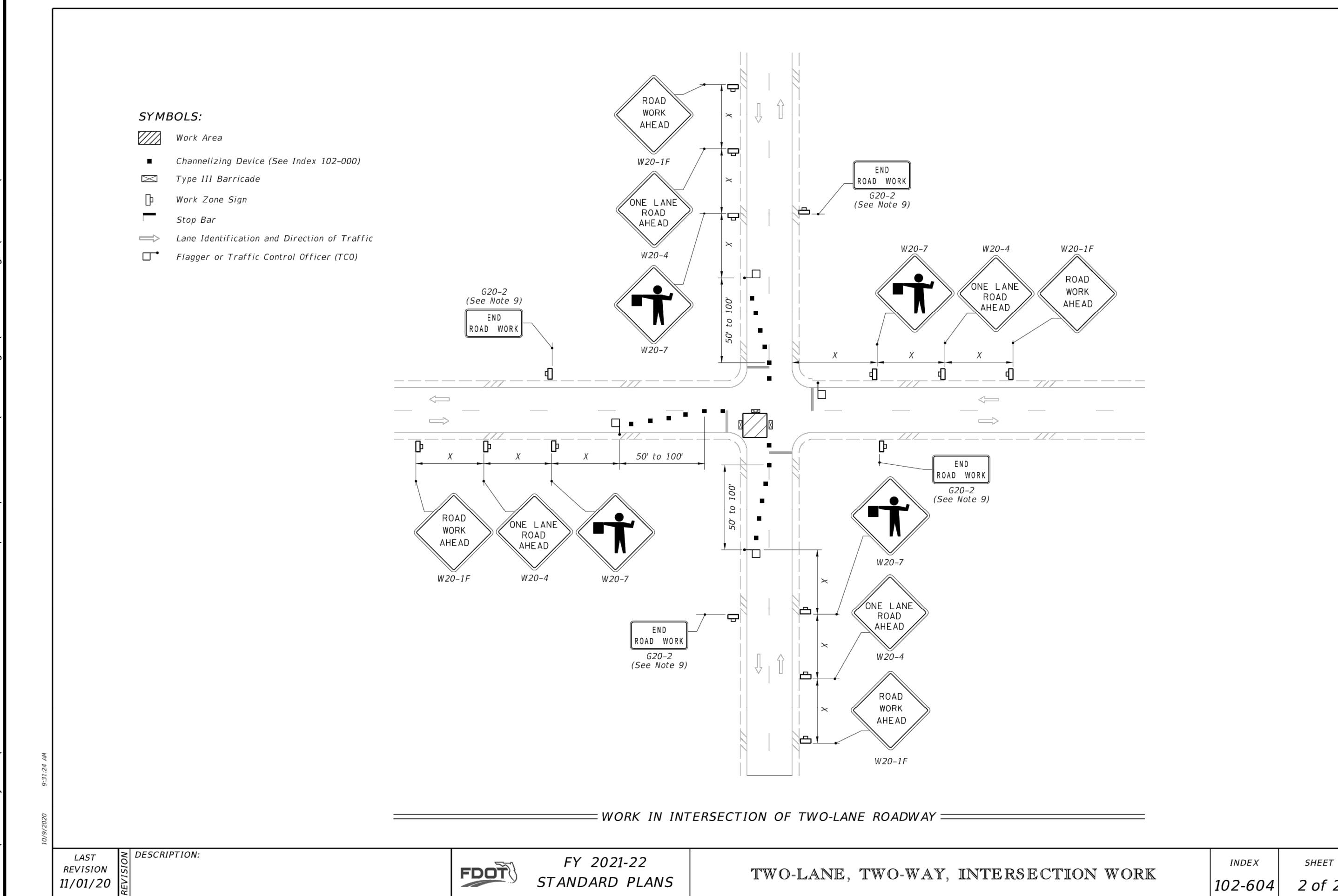


CHA CONSULTING, INC.
3507 EAST FRONTAGE ROAD SUITE 180
TAMPA, FL 33607
TEL: (813) 549-0919

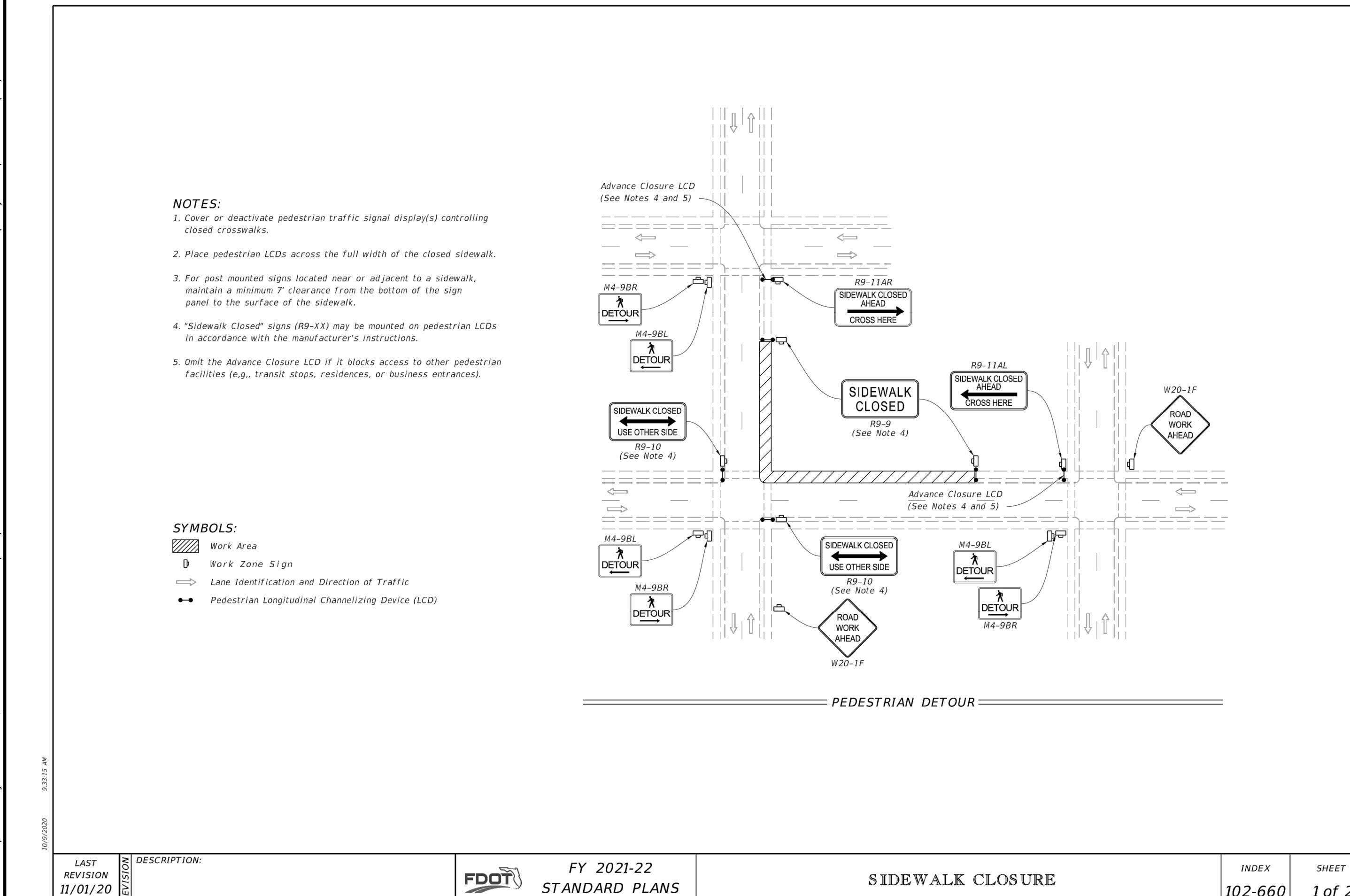
CERTIFICATE OF AUTHORIZATION #2836

DWG NAME:	FIELD BOOK:	SURVEYED BY:	SCALE:
C20	N/A	N/A	AS NOTED
CONTRACT NO.:	DATE DRAWN:	DRAWN BY:	HORZ. AS NOTED
21-0029-UT	10/2021		
JOB NO.:	DESIGNED BY:	CHECKED BY:	
102031			23 OF 24

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



LAST REVISION	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	TWO-LANE, TWO-WAY, INTERSECTION WORK	INDEX 102-604	SHEET 2 of 2
---------------	--------------	--------------------------------	--------------------------------------	---------------	--------------



LAST REVISION	DESCRIPTION:	FDOT FY 2021-22 STANDARD PLANS	SIDEWALK CLOSURE	INDEX 102-660	SHEET 1 of 2
---------------	--------------	--------------------------------	------------------	---------------	--------------

RECORD DRAWINGS	DRAWN BY:	
SURVEYED BY:		
REVIEWED BY:		
PROJECT ENGINEER	DATE	
APPROVED BY:		
OBID SET	VVV	10/2021
REVISION	BY	DATE

CITY OF CLEARWATER, FLORIDA
ENGINEERING DEPARTMENT
100 S. MYRTLE AVE.
CLEARWATER, FL 33756



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS**
FDOT FY 2021-22 STANDARD PLANS DETAILS

DWG NAME:	FIELD BOOK:	SURVEY BY:	SCALE:
C21	N/A	N/A	AS NOTED
CONTRACT NO.:	DATE DRAWN:	DRAWN BY:	VERT. AS NOTED
21-0029-UT	10/2021		HORZ. AS NOTED
JOB NO.:	DESIGNED BY:	CHECKED BY:	SHEET 24 of 24
102031			
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY WESTON HAGGEN. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.			

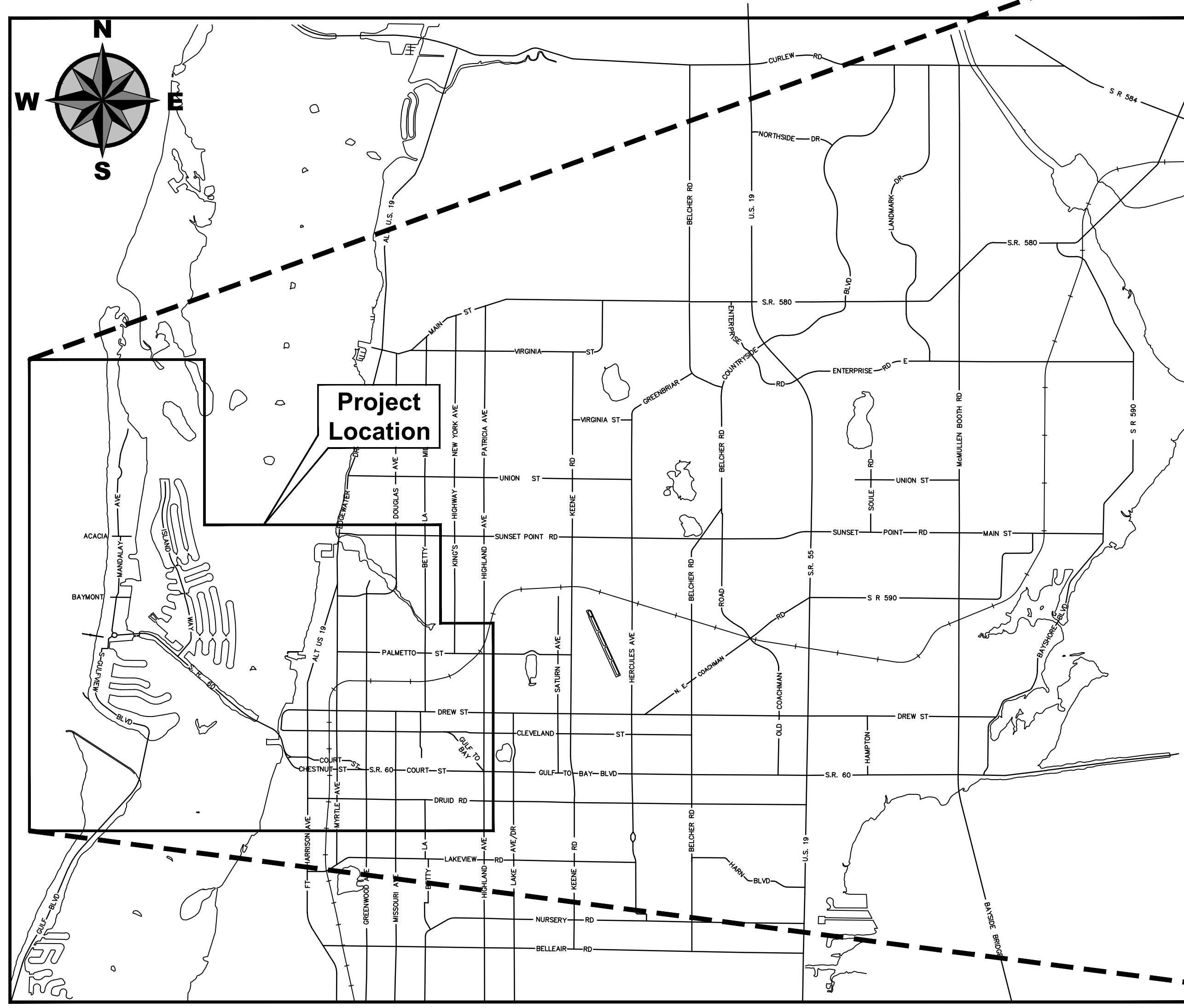
SHEET INDEX

SHEET #	SHEET DESCRIPTION
01	COVER SHEET, SHEET INDEX, AND PROJECT LOCATION
02	AREA E VALVE COVER
03 - 04	AREA E VALVE MAPS
05	AREA F VALVE COVER
06 - 10	AREA F VALVE MAPS
11	AREA G VALVE COVER
12 - 19	AREA G VALVE MAPS
20	AREA G SERVICE LINE COVER
21	AREA G1 SERVICE LINE COVER
22	AREA G2 SERVICE LINE COVER
23	AREA G3 SERVICE LINE COVER
24	AREA G4 SERVICE LINE COVER
25	AREA G5 SERVICE LINE COVER
26	AREA G6 SERVICE LINE COVER
27	AREA G7 SERVICE LINE COVER
28	AREA G8 SERVICE LINE COVER

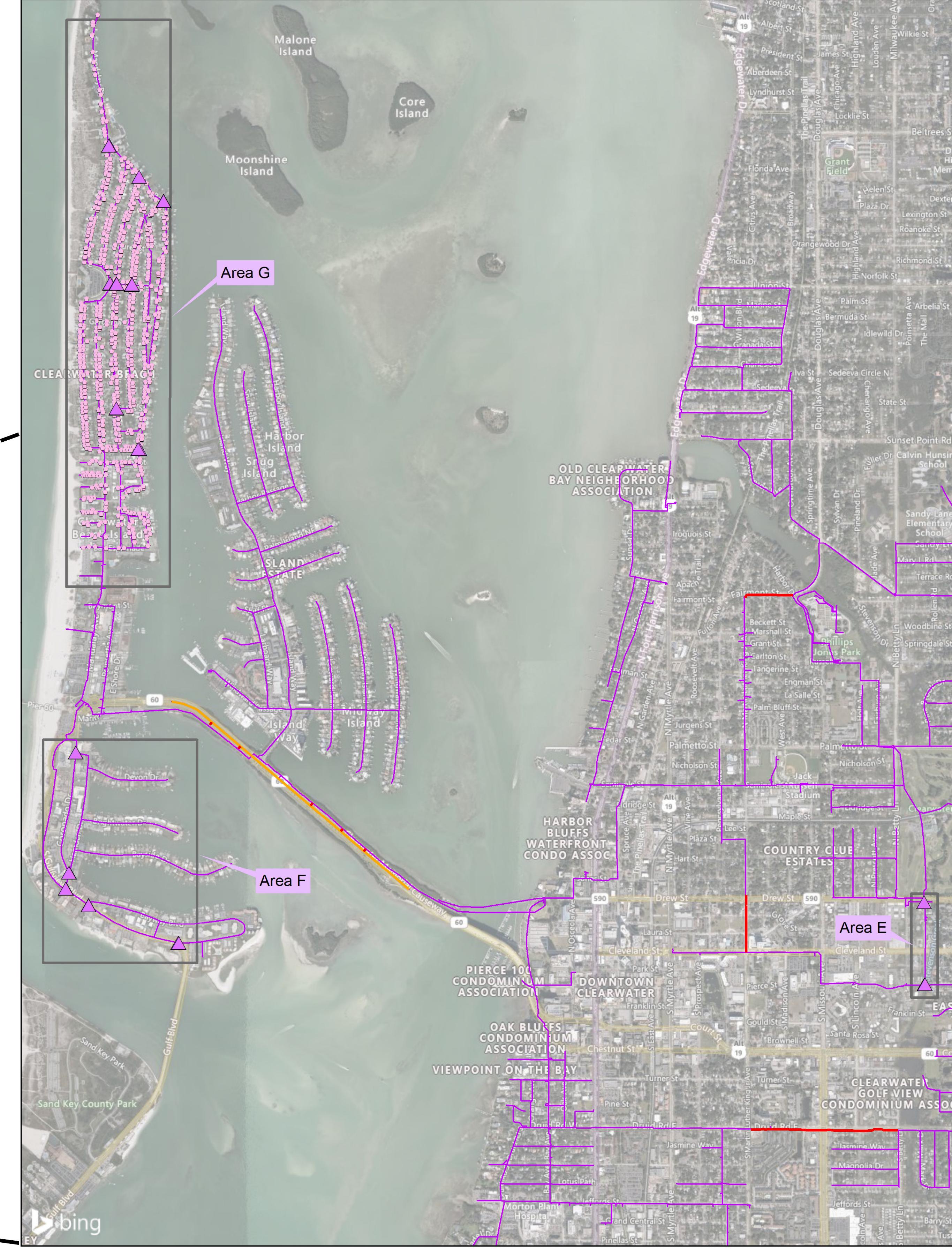
RECLAIMED WATER VALVE AND SERVICE LINE IMPROVEMENTS - AREAS E - G

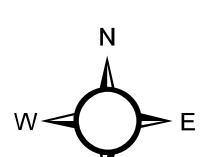
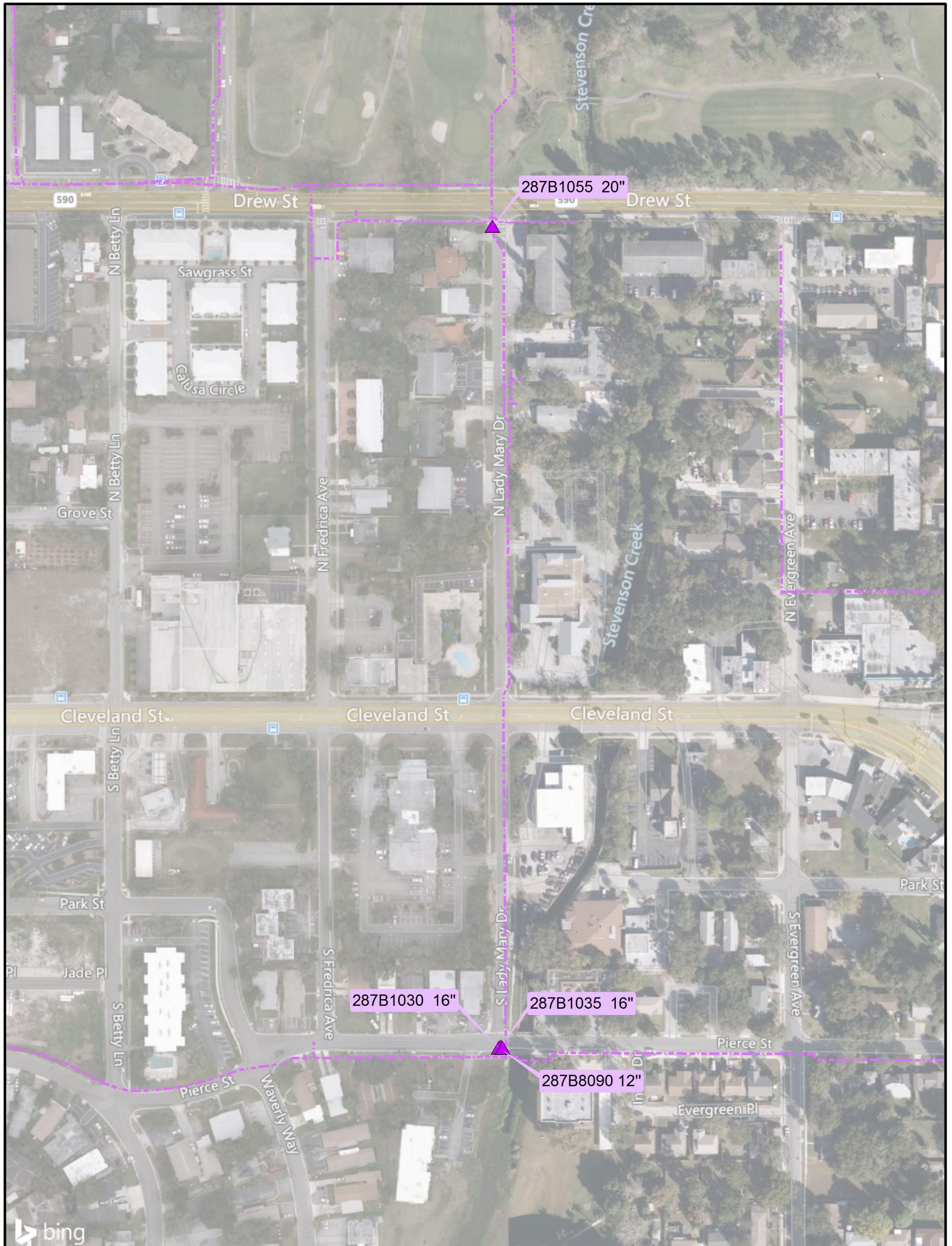


CLEARWATER
BRIGHT AND BEAUTIFUL • BAY TO BEACH



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027





0 150 300
Feet

LEGEND

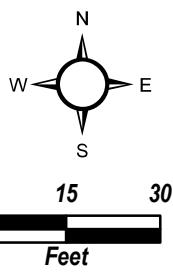
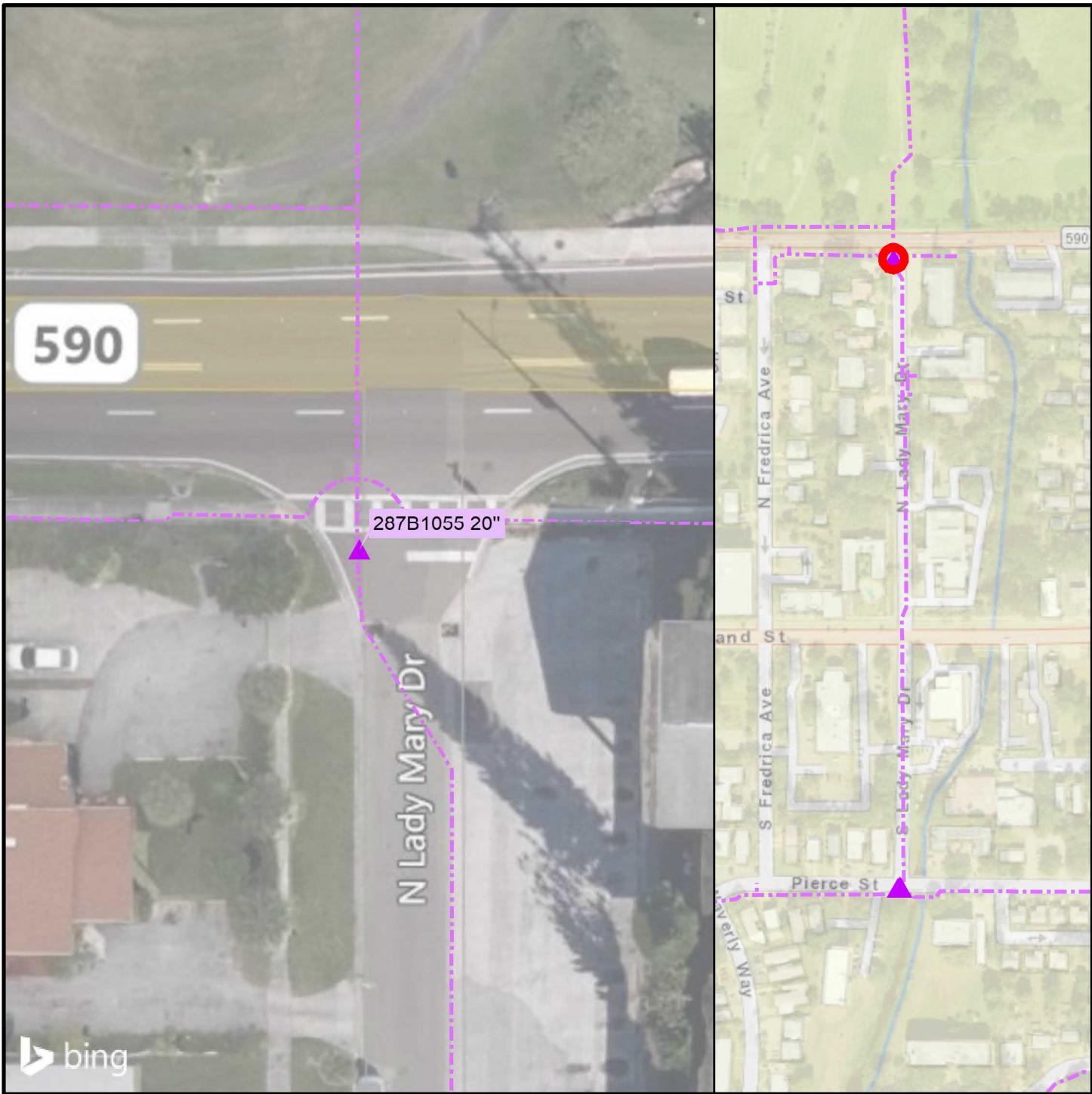
- ▲ RCW Valve
- - - Existing GIS RCW Main

BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027



CITY OF CLEARWATER
VARIOUS RECLAIMED WATER IMPROVEMENTS
S Lady Mary Dr Valve Replacements (Area E)

FIGURE E



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

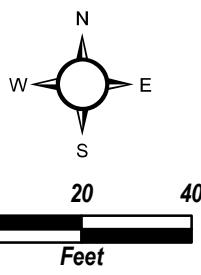
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: S Lady Mary and Drew
- Valve IDs: 287B1055 20"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - S Lady Mary and Drew

FIGURE E-1



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

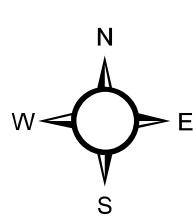
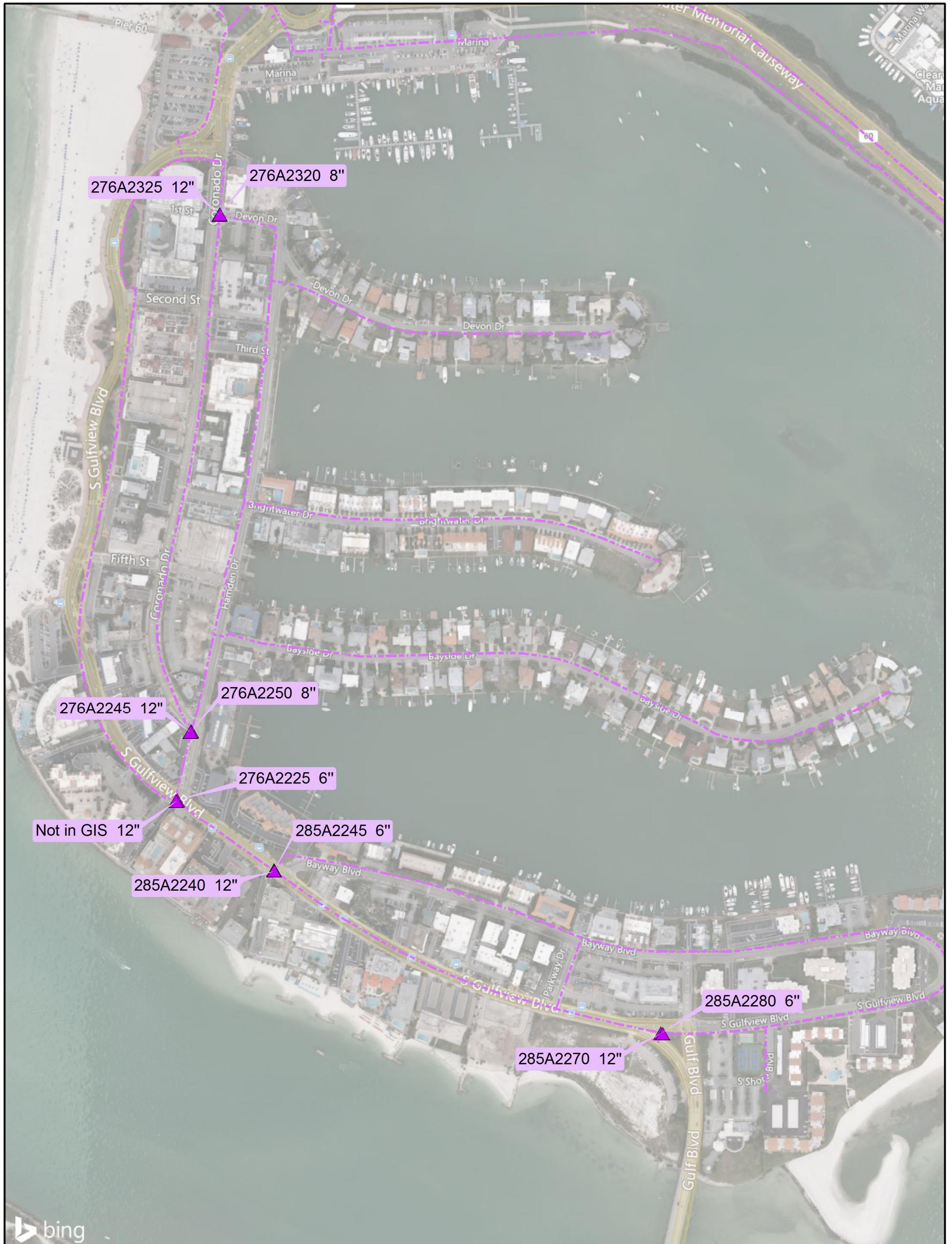
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: S Lady Mary and Pierce
- Valve IDs: 287B1030 16"
- 287B1035 16"
- 287B8090 12"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - S Lady Mary and Pierce

FIGURE E-2



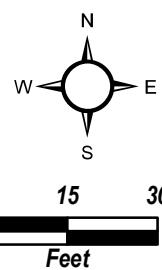
0 500 1,000
Feet

LEGEND

- ▲ RCW Valve
- - - Existing GIS RCW Main

BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027





BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

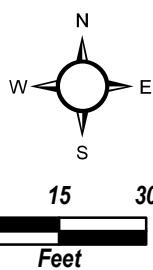
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Coronado and Devon
- Valve IDs: 276A2320 8"
- 276A2325 12"



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Coronado and Devon

FIGURE F-1



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

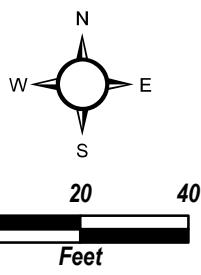
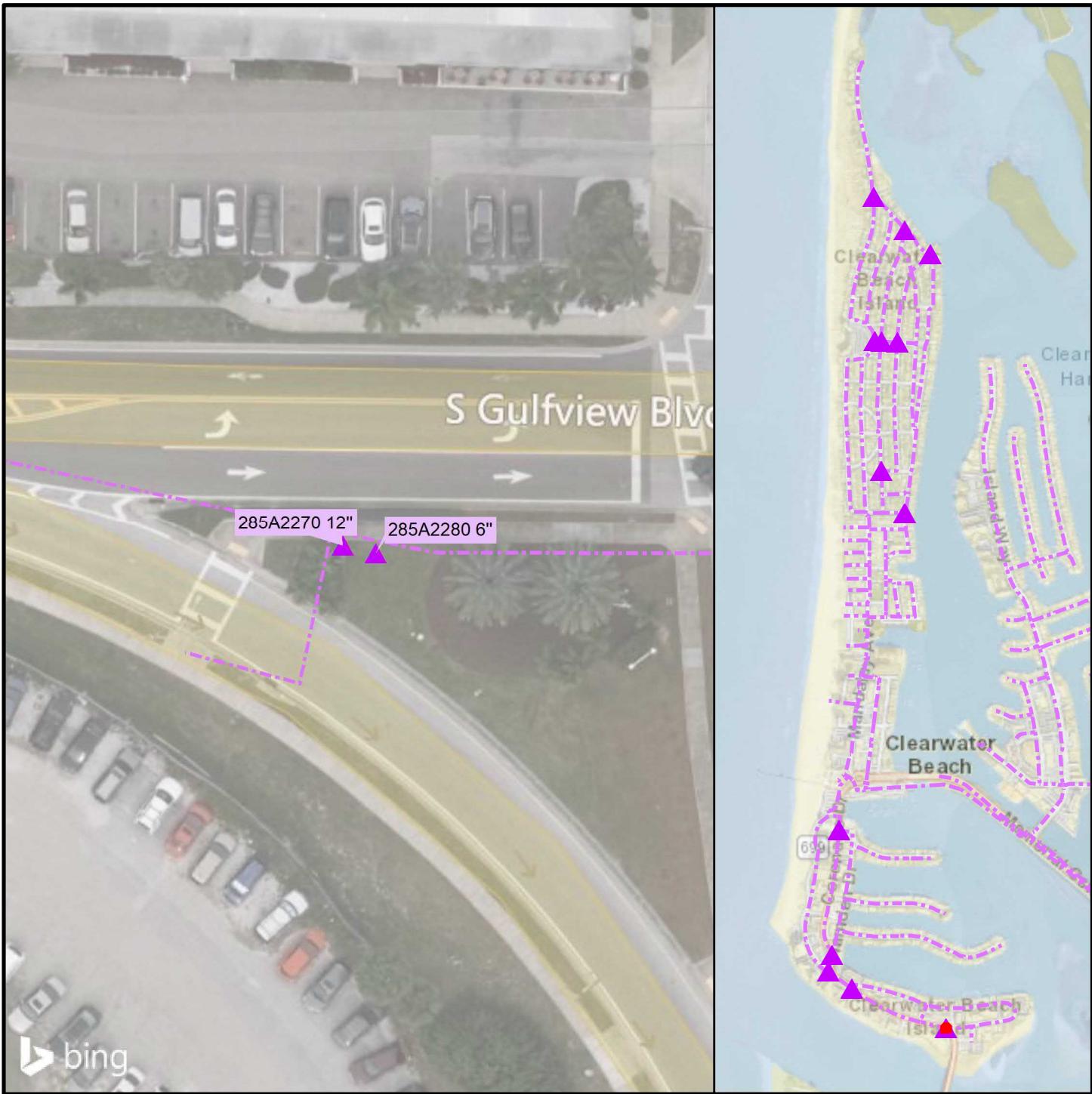
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Coronado and Hamden
- Valve IDs: 276A2245 12"
276A2250 8"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Coronado and Hamden

FIGURE F-2



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

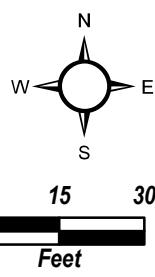
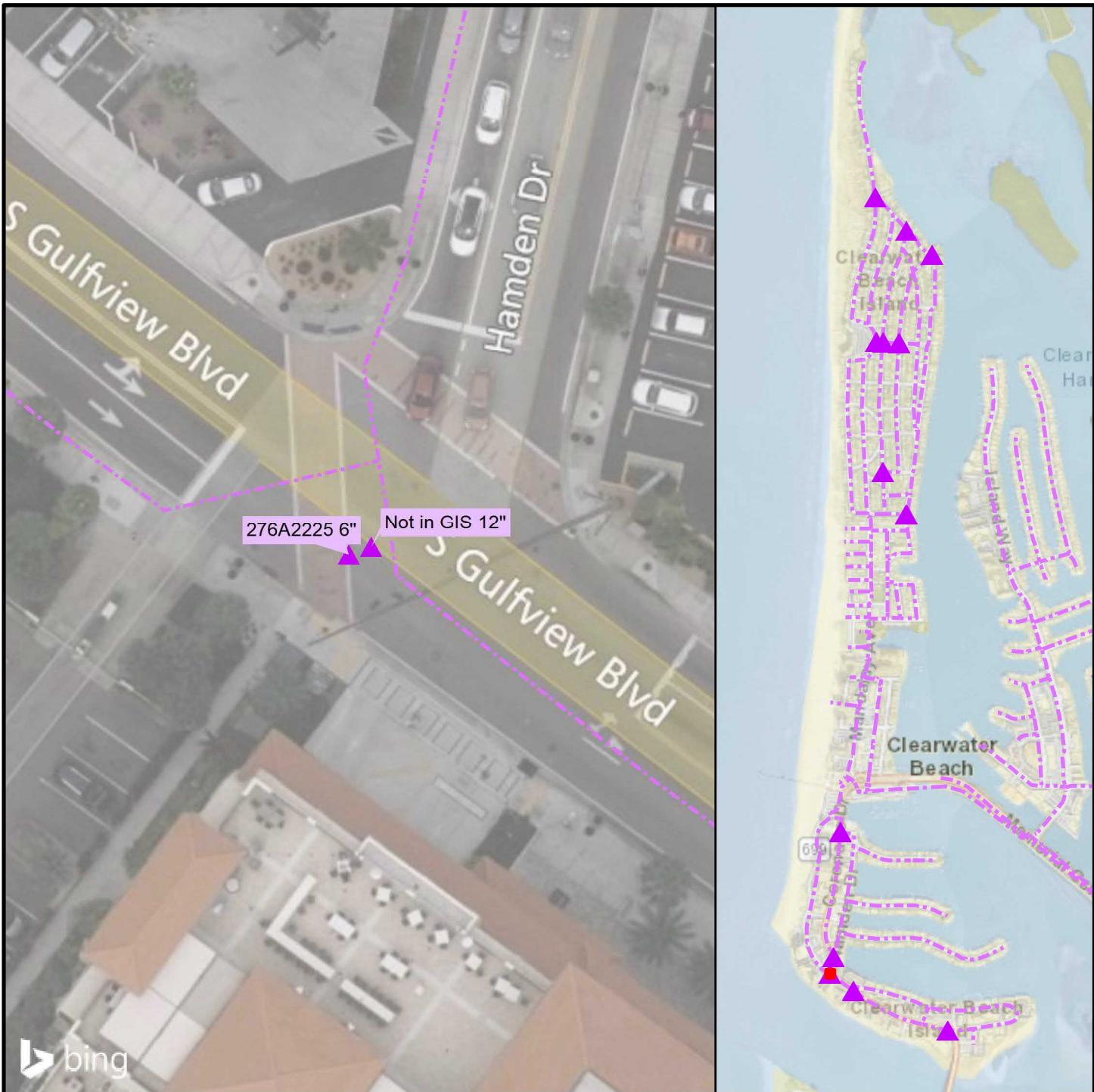
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Gulf Blvd and S Gulfview
- Valve IDs: 285A2270 12"
- 285A2280 6"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Gulf Blvd and S Gulfview

FIGURE F-3



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

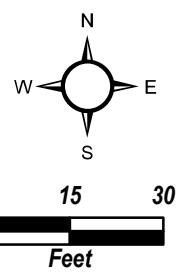
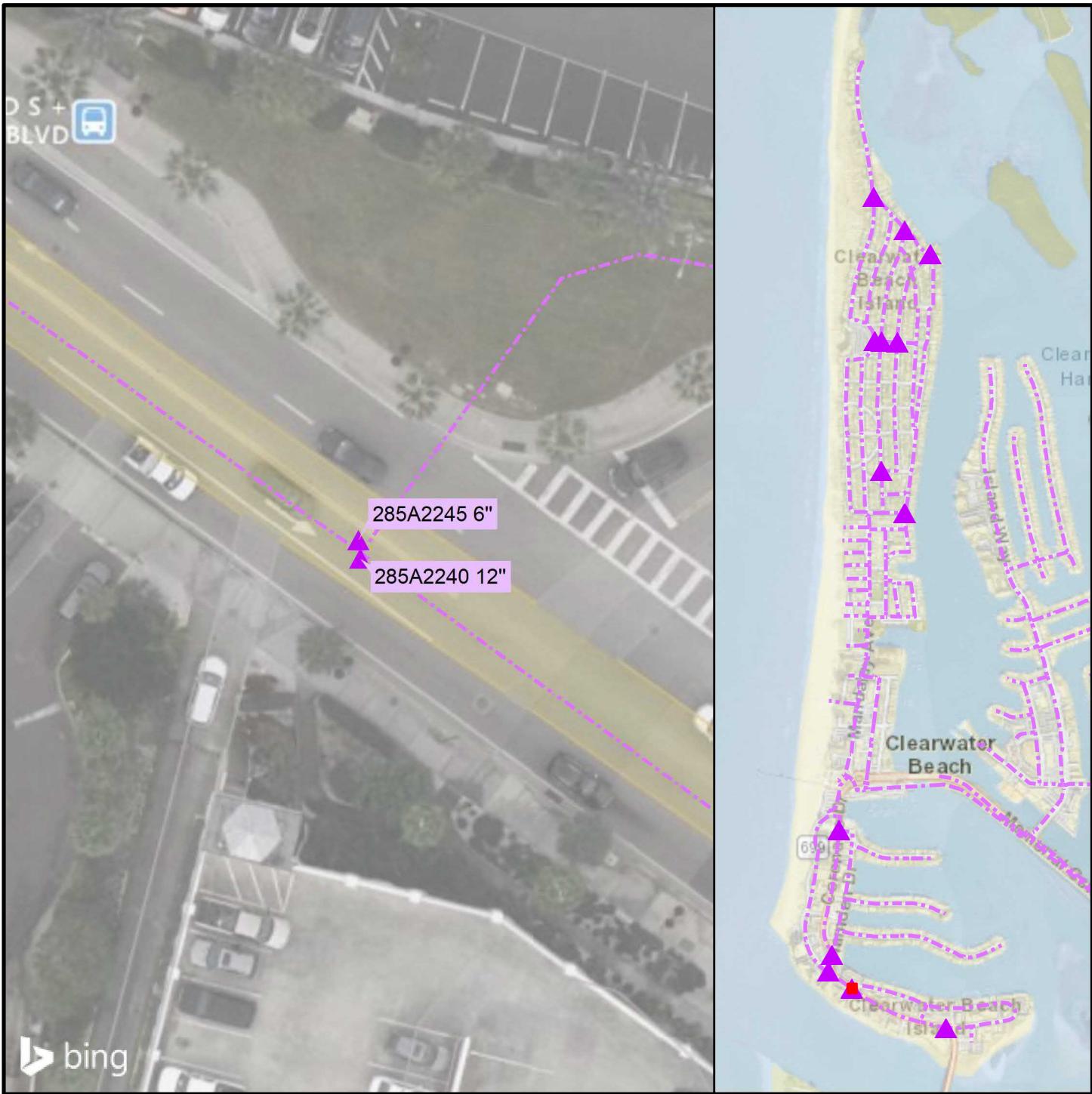
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Gulfview and Hamden
- Valve IDs: 276A2225 6"
- Not in GIS 12"



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Gulfview and Hamden

FIGURE F-4



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

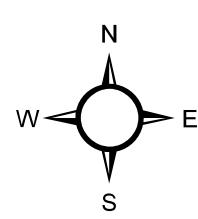
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: S Gulfview and Bayway
- Valve IDs: 285A2240 12"
285A2245 6"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - S Gulfview and Bayway

FIGURE F-5

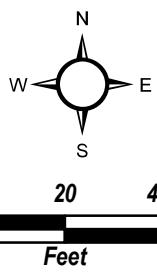
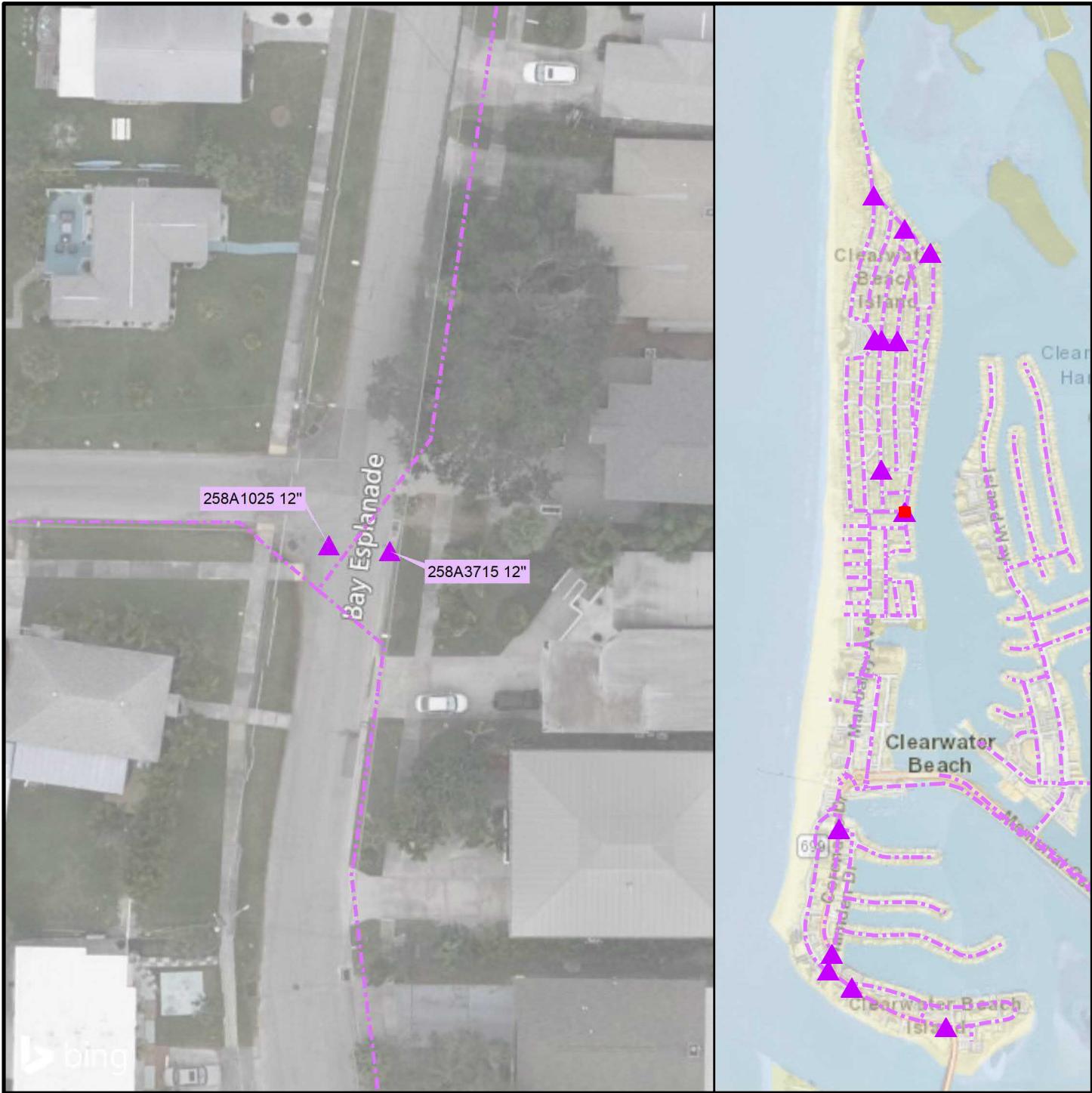


0 500 1,000
Feet

LEGEND

- ▲ RCW Valve
- - - Existing GIS RCW Main

CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
NORTH BEACH VALVE REPLACEMENTS (AREA G)



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

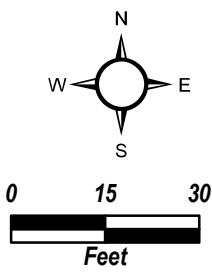
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Bay Espalade and Acadia St
- Valve IDs: 258A1025 12"
- 258A3715 12"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Bay Espalade and Acadia St

FIGURE G-1



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

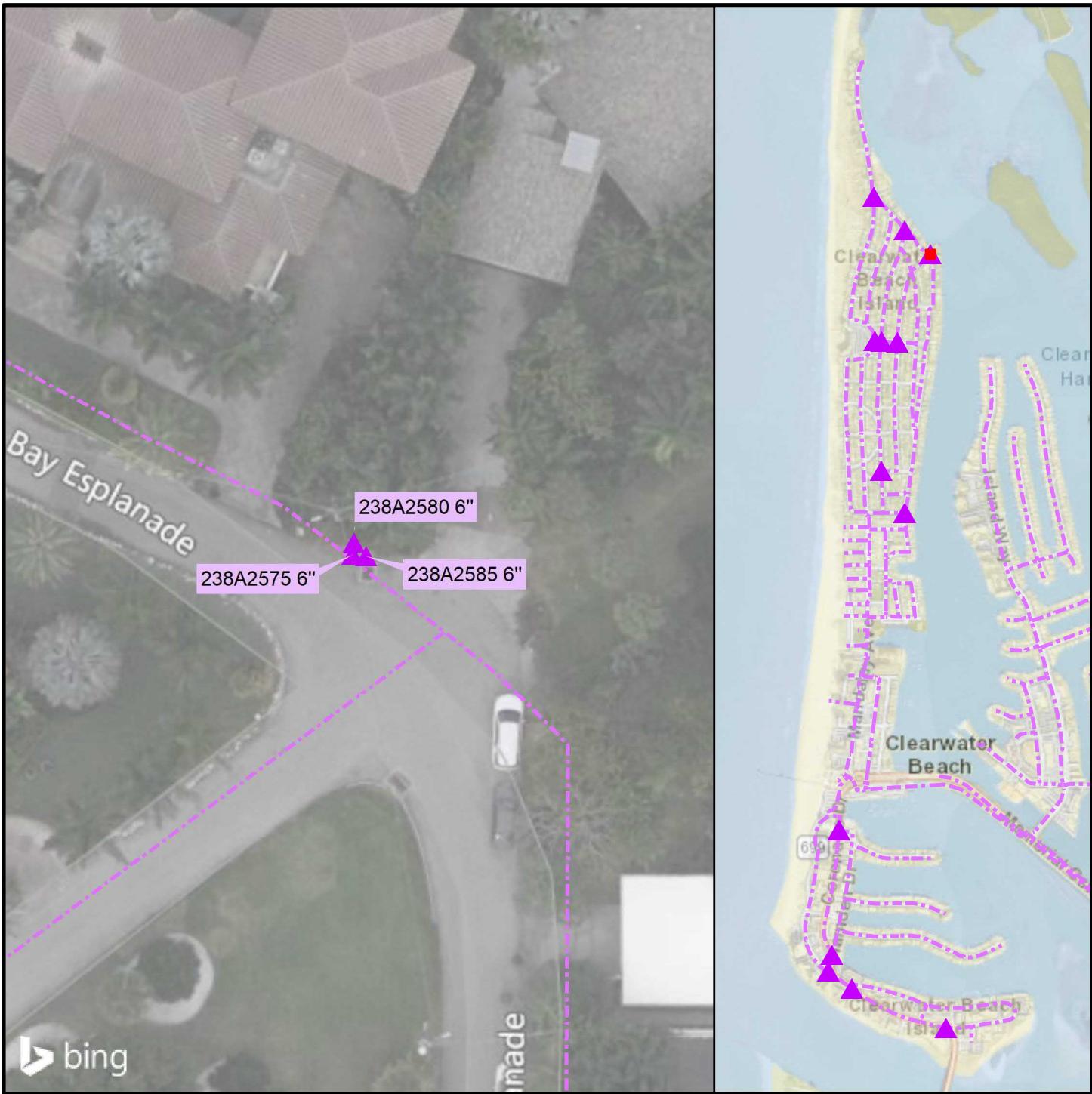
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Bay Espalade and Bruce Ave
- Valve IDs: 238A2610 12"

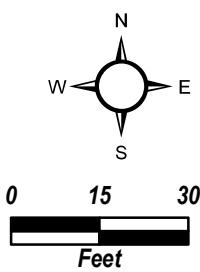


CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Bay Espalade and Bruce Ave

FIGURE G-2



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027



LEGEND

▲ Reclaimed Water Valve

- Existing GIS RCW Main

Intersection: Bay Espalade and Carlousel Drive

Valve IDs: 238A2575 6"

238A2580 6"

238A2585 6"

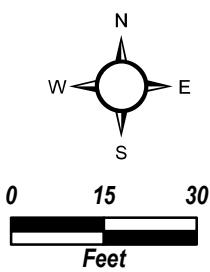


CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Bay Espalade and Carlousel Drive

FIGURE G-3



bing



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

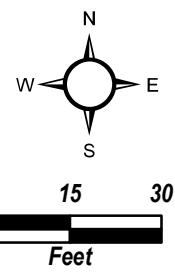
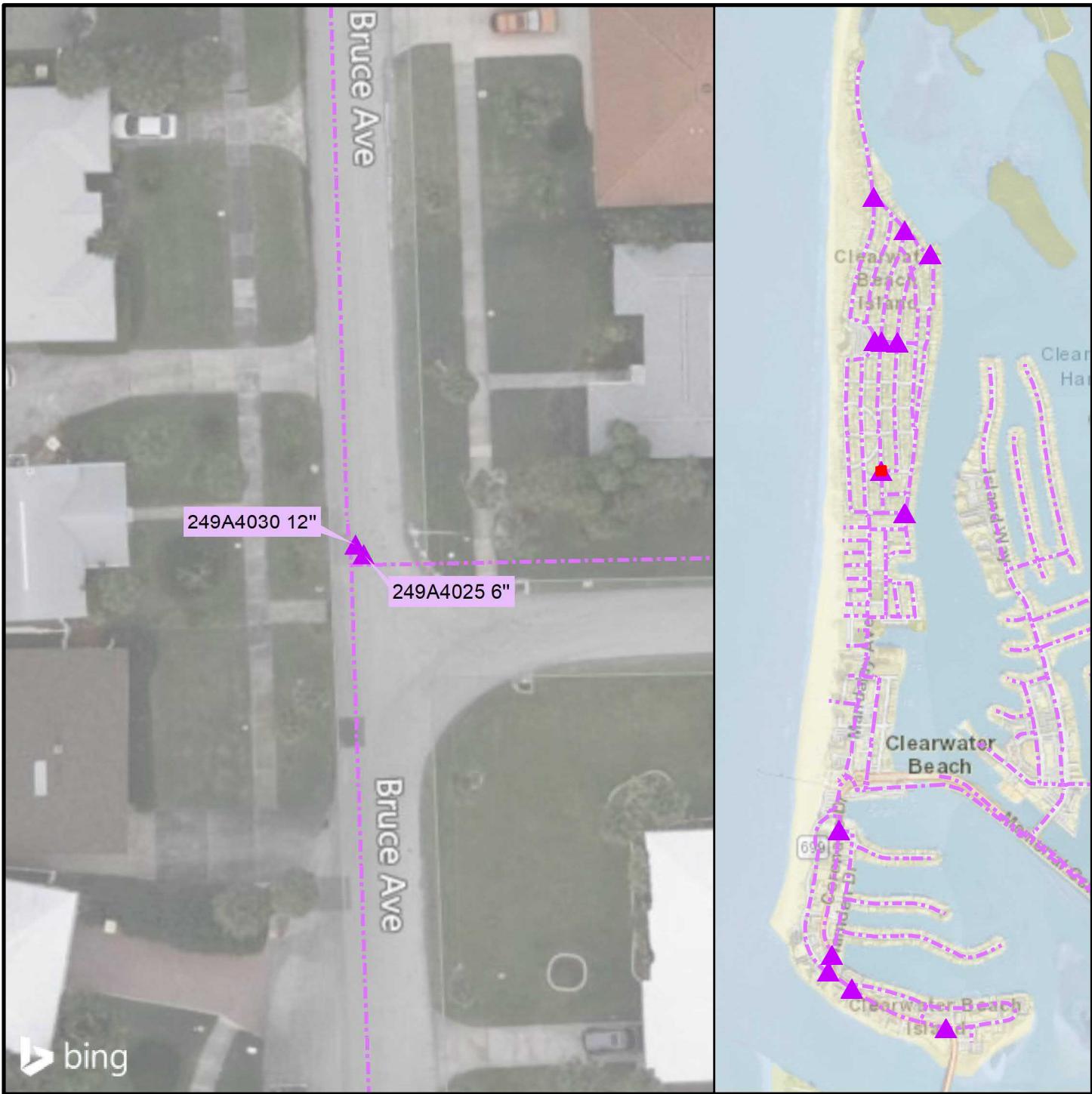
LEGEND

- ▲ Reclaimed Water Valve
 - Existing GIS RCW Main
- Intersection: Bay Espalade and Eldorado Ave
 Valve IDs: 238A2630 6"
 238A2640 6"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Bay Espalade and Eldorado Ave

FIGURE G-4



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

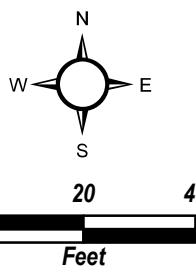
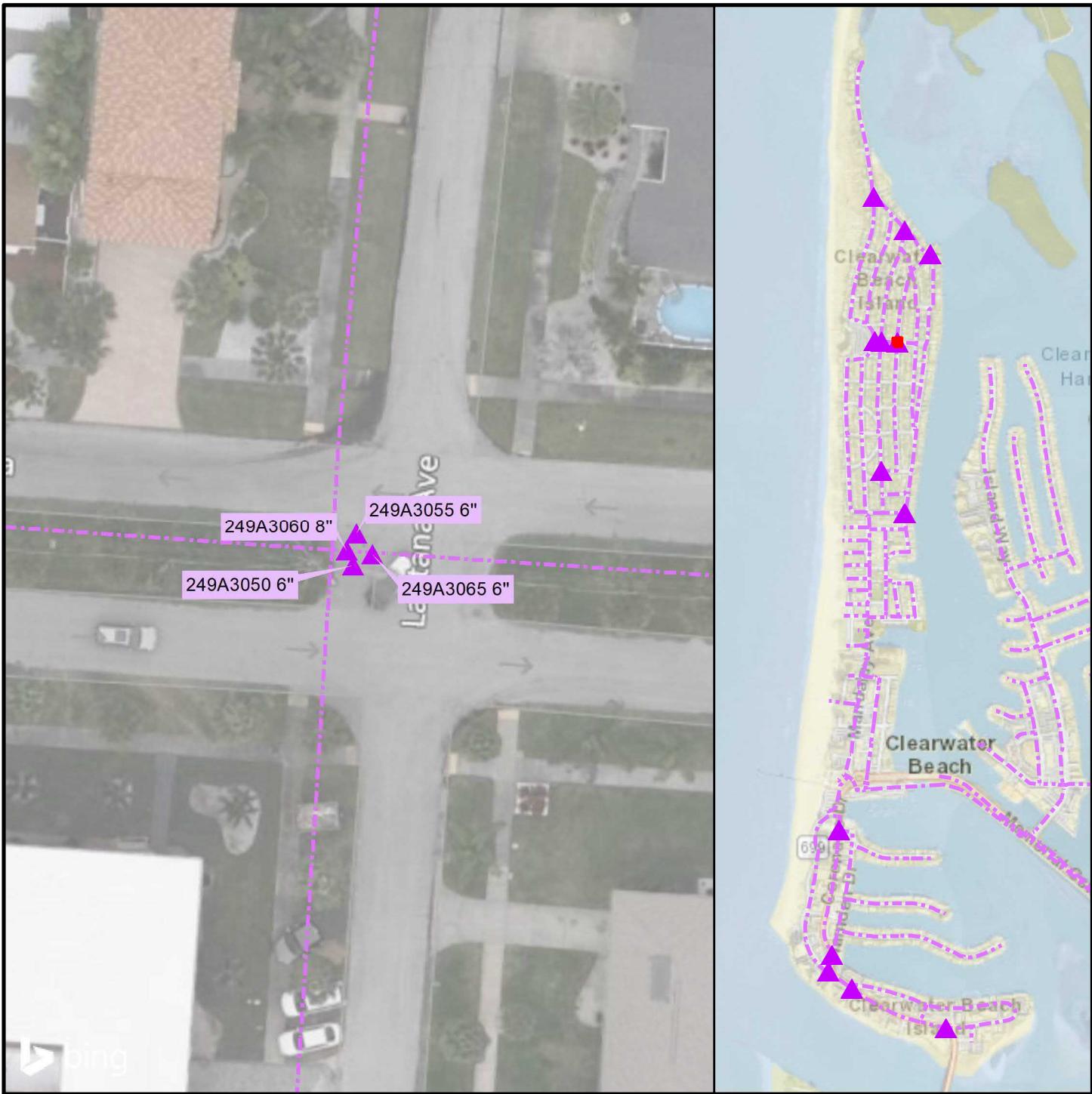
LEGEND

- ▲ Reclaimed Water Valve
- Existing GIS RCW Main
- Intersection: Bruce Ave and Iris Street
- Valve IDs: 249A4025 6"
249A4030 12"



**CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Bruce Ave and Iris Street**

FIGURE G-5



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

LEGEND

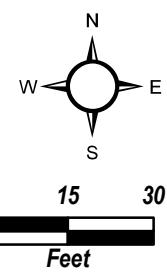
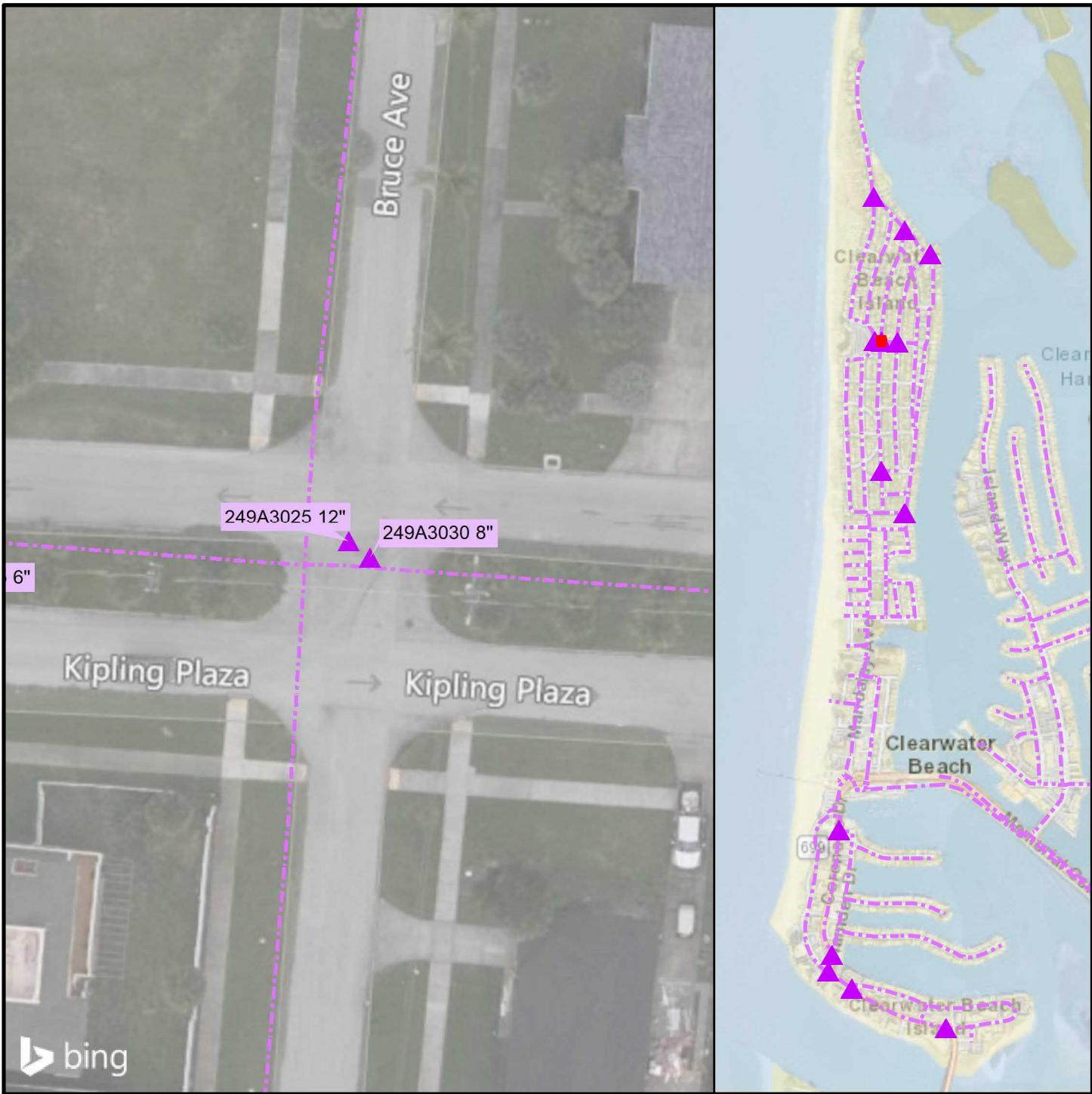
- ▲ Reclaimed Water Valve
- Existing GIS RCW Main

Intersection: Kipling Plaza and Lantana Avenue
 Valve IDs: 249A3050 6"
 249A3055 6"
 249A3060 8"
 249A3065 6"



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Kipling Plaza and Lantana Avenue

FIGURE G-6



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

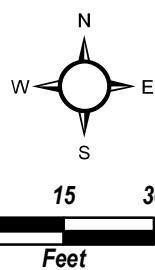
LEGEND

- ▲ Reclaimed Water Valve
 - Existing GIS RCW Main
- Intersection: Kipling Plaza and Bruce Avenue
 Valve IDs: 249A3025 12"
 249A3030 8"



CITY OF CLEARWATER
RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Kipling Plaza and Bruce Avenue

FIGURE G-7



BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027

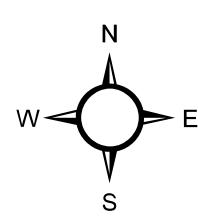
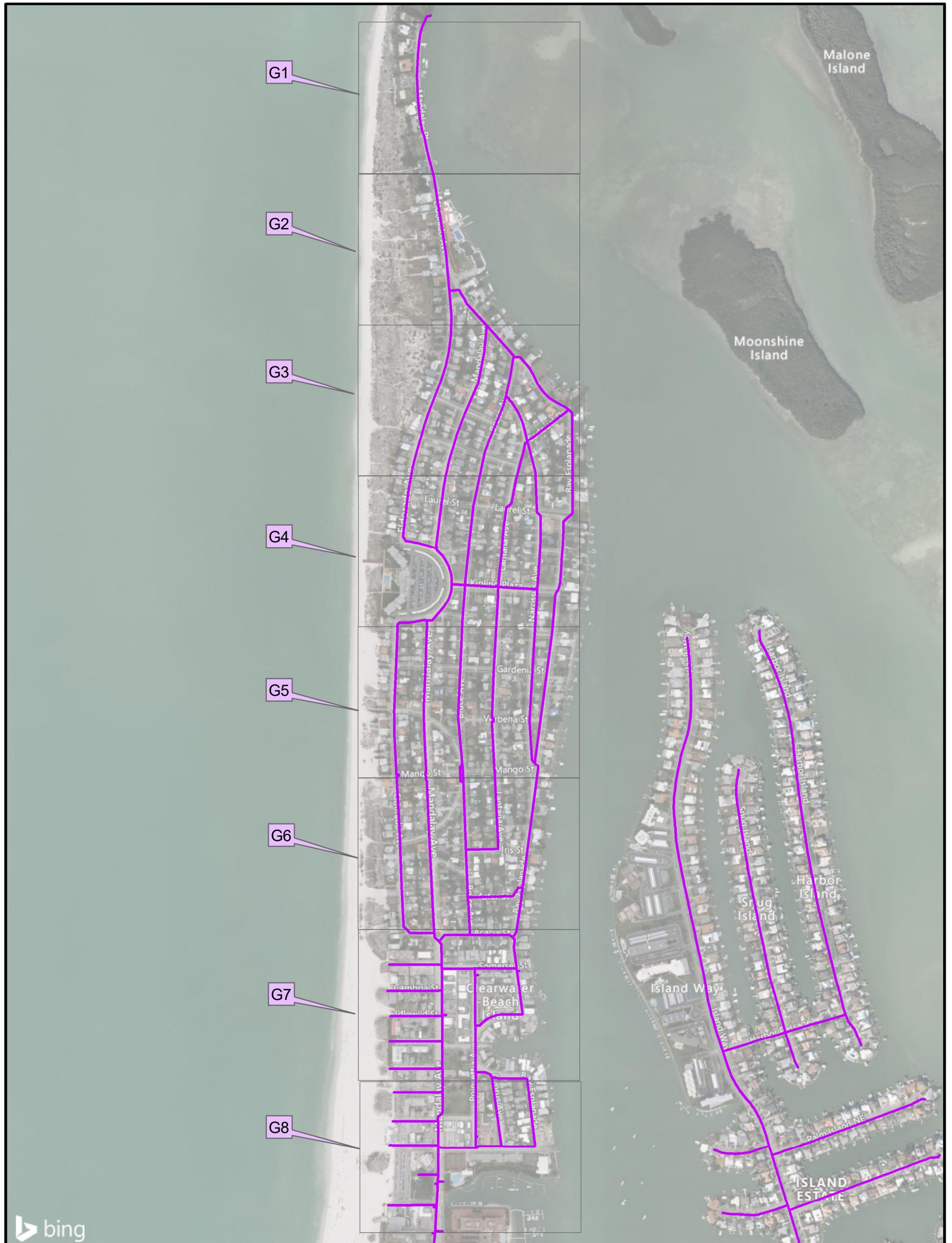
LEGEND

- ▲ Reclaimed Water Valve
 - Existing GIS RCW Main
- Intersection: Kipling Plaza and Eldorado Ave
 Valve IDs: 249A3005 6"
 249A3010 6"
 249A3015 6"



CITY OF CLEARWATER
 RECLAIMED WATER PIPING IMPROVEMENTS
Valve Replacements - Kipling Plaza and Eldorado Ave

FIGURE G-8



0 1,000 2,000
Feet

LEGEND

- Existing GIS RCW Main
- Sheets

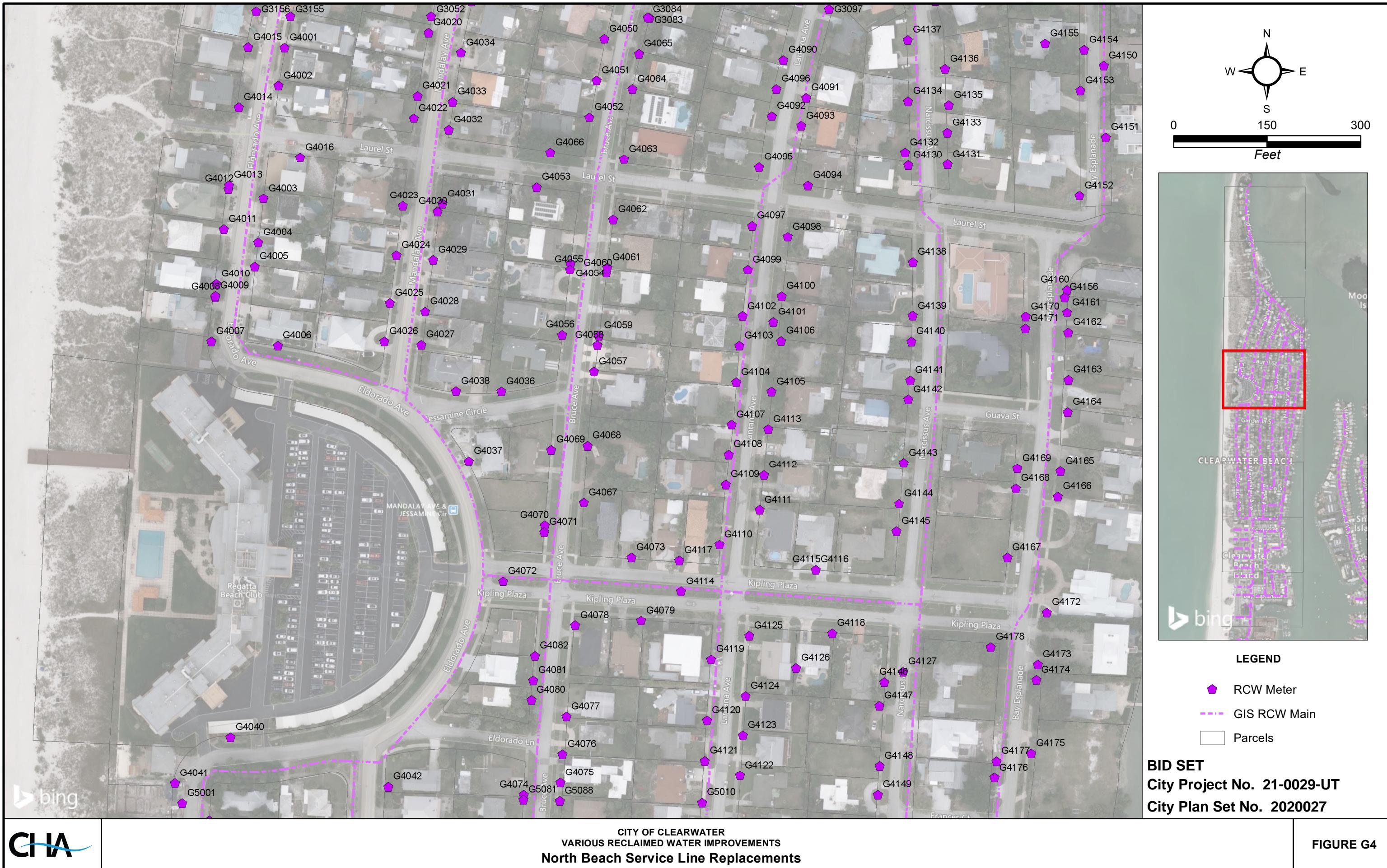
BID SET
City Project No. 21-0029-UT
City Plan Set No. 2020027











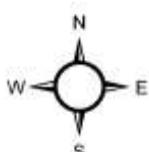








Example Service Line Map, all individual Service Line Maps will be provided to the selected bidder.



Legend

Address: 610 Mandalay Ave
Location: Grass
Longitude: -82.8267262003
Latitude: 27.9861747705
Distance from Curb: 50
Notes: Under construction fence line

Meter ID: G8001

- Replacement Meter
- Meters
- Reclaimed Pipe



CITY OF CLEARWATER
NORTH BEACH SERVICE LINE REPLACEMENTS
SERVICE LINE FIELD MAPS

