

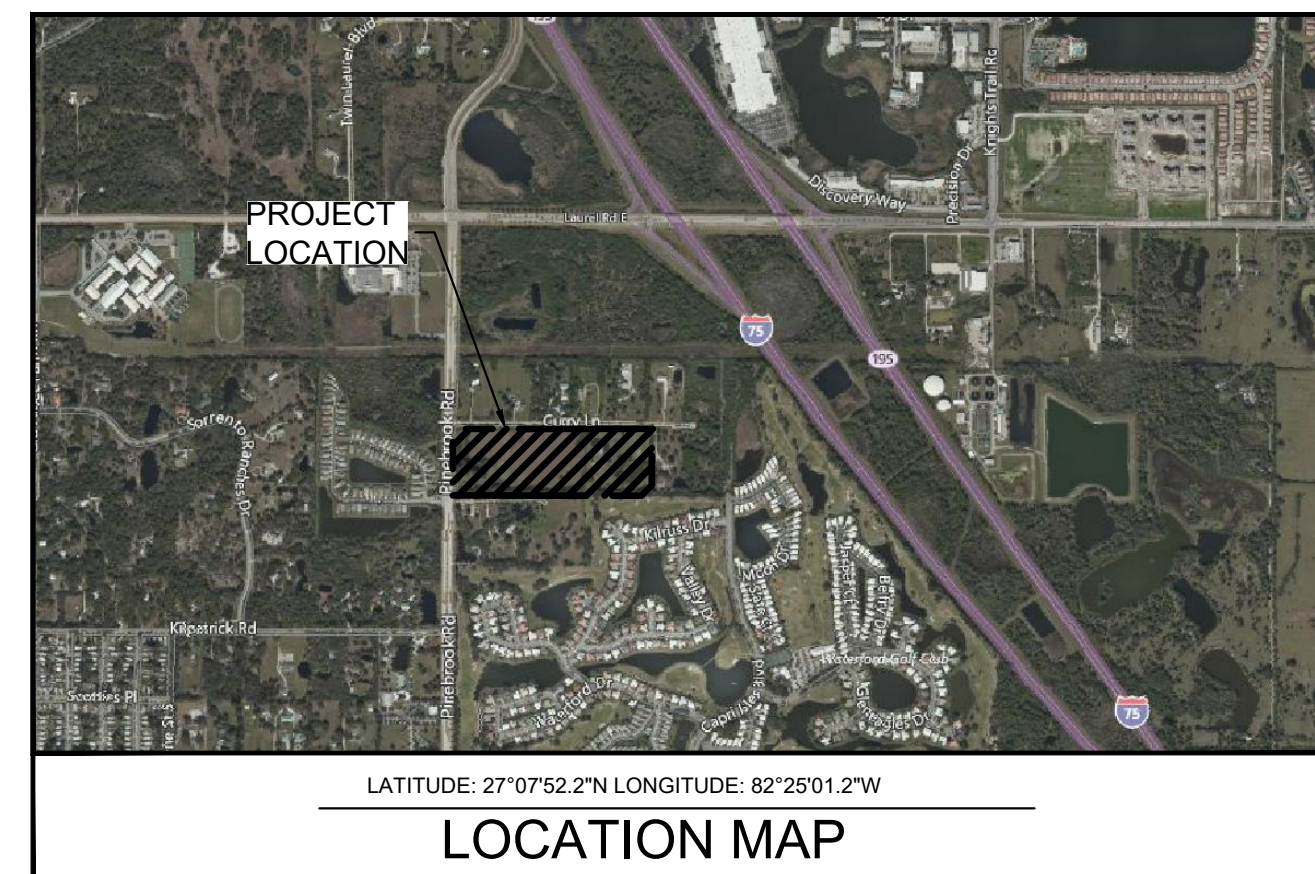
RECORD DRAWINGS FOR WATERMARK AT VENICE

PARTIAL CERTIFICATION #1

SECTION 33, TOWNSHIP 38 S, RANGE 19 E NORTH VENICE, FLORIDA FEBRUARY 2023

GENERAL NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF VENICE LAND DEVELOPMENT REGULATIONS.
 - THE CONTRACTOR SHALL RETAIN ON THE WORK SITE AT ALL TIMES COPIES OF ALL PERMITS NECESSARY FOR CONSTRUCTION.
 - THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS THE BENCHMARK DATUM FOR THIS PROJECT. CONVERSION FACTOR: NAVD 1988 + 1.12 FT = NGVD 1929.
 - ALL AREAS DESIGNATED AS "PRESERVE OR CONSERVATION" TO BE CLEARLY DELINEATED PRIOR TO CONSTRUCTION.
- #### GENERAL CONSTRUCTION NOTES:
- THERE SHALL BE NO CHANGE OR DEVIATION FROM THESE PLANS UNLESS APPROVED BY THE ENGINEER OR CITY OF VENICE.
 - ALL CLEARING AND GRUBBING DEBRIS TO BE REMOVED FROM SITE AND IS PART OF CLEARING AND GRUBBING ITEM.
 - IT IS THE INTENT OF THE OWNER THAT CERTAIN TREES BE DESIGNATED TO BE SAVED AND PROTECTED BY THE CONTRACTOR. IT IS ASSUMED THESE TREES ARE HEALTHY AND ARE EXPECTED TO BE PART OF THE LANDSCAPE DEVELOPMENT. THEREFORE, IF ANY TREE(S) DAMAGED BY CONSTRUCTION OPERATION OR BY OTHER MEANS (EXCLUDING LIGHTNING, WINDSTORM AND OTHER ACTS OF GOD) PERISHES WITHIN THE CONSTRUCTION PERIOD, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF THOSE TREES. NO ADDITIONAL COMPENSATION WILL BE MADE BY THE OWNER FOR THE LABOR, MATERIAL OR MACHINERY REQUIRED TO REMOVE SAID TREES(S). EXISTING VEGETATION (E.G., MELALEUCA AND BRAZILIAN PEPPER) EXISTING WITHIN THE PROJECT AREA SHALL BE REMOVED AND PROPERLY DISPOSED OF IN AN APPROVED LANDFILL.
 - WHERE EXCAVATIONS ARE IN CLOSE PROXIMITY OF TREES, THE CONTRACTOR SHALL USE EXTREME CARE IN NOT DAMAGING THE ROOT SYSTEM. NO EQUIPMENT, SUPPLIES OR VEHICLES SHALL BE STORED OR PARKED WITHIN THE DRIP LINE OF TREES TO REMAIN AND BE PRESERVED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ALL OF HIS EMPLOYEES AND SUBCONTRACTORS OF THIS REQUIREMENT AND TO ENFORCE SAME.
 - LAY SOD AROUND ALL INLETS, MITERED ENDWALLS, SWALES, LAKE SLOPES, AND TWO FEET (2) WIDE STRIP ADJACENT TO ALL CURBING, AND AS DIRECTED BY THE ENGINEER. ALL PROPOSED GROUND ELEVATIONS ARE FINISHED SOD ELEVATIONS. FINISH EARTHWORK GRADING WILL BE 0.2 FEET BELOW ELEVATIONS SHOWN TO ALLOW FOR SOD THICKNESS. SODDING INCLUDES MAINTAINING SLOPES AND SOD UNTIL COMPLETION AND ACCEPTANCE OF TOTAL PROJECT OR GROWTH IS ESTABLISHED WHICHEVER COMES LAST. ALL EROSION SILTATION AND MAINTAINING GRADES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THEN.
 - CALL "SUNSHINE" (1-800-432-4770), COMCAST, FPL, CITY OF VENICE UTILITIES DEPARTMENT, TECO, AND FRONTIER PRIOR TO CONSTRUCTION AND CONNECTION TO EXISTING UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.
 - ALL UTILITY LINES, STORM DRAIN LINES AND ACCESSORIES SUCH AS, BUT NOT LIMITED TO MANHOLES, CLEANOUTS, SEWER AND WATER SERVICES, VALVES, FIRE HYDRANTS AND INLETS WILL BE CONSTRUCTED TO ALIGNMENT AND LOCATIONS SHOWN ON PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - CLEARING, GRUBBING, STRIPPING, AND COMPACTION WILL BE INSPECTED BY THE ENGINEER PRIOR TO FILLING.
 - PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, CONSERVATION/PRESERVE AREAS, EXISTING LAKES & WATERWAYS WITHIN AND ADJOINING THE AREA OF CONSTRUCTION ACTIVITY SHALL BE PROTECTED BY ERECTION OF TREE PROTECTION BARRICADES AND/OR SILT BARRIERS. TREE PROTECTION BARRICADES SHALL MEET THE STANDARDS OF THE CITY OF VENICE. SILT BARRIERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "BEST MANAGEMENT PRACTICES PLAN" AND THE "BMP DETAILS" SHOWN ON PLANS. THROUGHOUT CONSTRUCTION PLANS, THE ENGINEER WILL DETERMINE THE EXTENT AND TYPE OF PROTECTIVE MEASURES TO BE CONSTRUCTED FOR PROTECTION OF CONSERVATION/PRESERVE AREAS. THE ENGINEER SHALL BE NOTIFIED WHEN PRESERVE AREA BARRICADES AND BARRIERS ARE IN PLACE.
 - THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF A FLORIDA REGISTERED SURVEYOR. AUTOCAD FILES WILL BE FURNISHED TO AID IN THE SITE CONSTRUCTION STAKEOUT. ANY DISCREPANCIES FOUND BETWEEN THE AUTOCAD FILES AND SITE CONSTRUCTION PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.
 - ALL DRAINAGE PIPE JOINTS SHALL BE WRAPPED PER FOOT INDEX NO. 280, SHEET 1.
 - ROADWAY AND DRAINAGE STRUCTURES SHALL MEET FDOT STANDARD SPECIFICATIONS SECTION 346 OF 3000 PSI CONCRETE.
 - THE WETLAND AND ASSOCIATED UPLAND VEGETATIVE BUFFER SHALL BE MAINTAINED IN ACCORDANCE WITH MANAGEMENT GUIDELINES CONTAINED WITHIN THE COMPREHENSIVE PLAN AS A CONSERVATION AREA OR PRESERVE. ALL ACTIVITIES INVOLVING FILLING, EXCAVATING, WELL DRILLING, ALTERING VEGETATION (INCLUDING TRIMMING OF BOTH TREES AND UNDERSTORY) AND STORING OF MATERIALS SHALL BE PROHIBITED WITHIN PRESERVATION AREAS. UNLESS WRITTEN APPROVAL IS FIRST OBTAINED FROM RESOURCE PROTECTION SERVICES TO FACILITATE IMPLEMENTATION OF APPROVED HABITAT MANAGEMENT PLANS OR THE REMOVAL OF NUISANCE/INVASIVE VEGETATION.
 - A TREE REMOVAL AND PROTECTION PERMIT WILL BE REQUIRED PRIOR TO ANY CONSTRUCTION, CLEARING OR TREE REMOVAL. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE CITY OF VENICE CODE.
 - EROSION AND SEDIMENT CONTROL BMPs IN ADDITION TO THOSE PRESENTED ON THE PLANS AND OUTLINED IN THE EROSION AND SEDIMENT CONTROL PLAN (ECP), BEST MANAGEMENT PRACTICES (BMP) PLAN, OR STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMPs SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
 - OFFSITE SURFACE WATER DISCHARGES, DISCHARGES TO THE M4, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO THE CITY OF VENICE WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
 - FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO THE CITY OF VENICE. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
 - IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND THE CITY OF VENICE SHALL BE CONTACTED.
 - FERTILIZER APPLICATION SHALL BE CONSISTENT WITH THE CITY OF VENICE CODE.
 - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM - STORMWATER:
 - NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(A), F.A.C.
 - A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A)PART III.C.2, F.A.C.
 - A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO AIR AND WATER QUALITY IN ACCORDANCE WITH RULE 62-621.300(4)(A)PART III.D.1, F.A.C.
 - THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(A)PART V.D.6, F.A.C., AND A COPY OF THE CERTIFIED DOCUMENT SHALL BE SUBMITTED TO AIR AND WATER QUALITY AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
 - A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO STATE INSPECTORS.
 - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM - DEWATERING:
THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR TO ANY PORTION OF THE M4 WILL REQUIRE SEPARATE PERMITTING FROM THE DEP. PERMITS SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING. ANALYTICAL RESULTS FROM PRE-DISCHARGE TESTING SHALL BE PROVIDED TO AIR AND WATER QUALITY.



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LAND USE DEVELOPMENT DATA	
PARCEL AREA:	29.4 ACRES
PRESENT ZONING:	RMF-1 (CITY OF VENICE, PID: 0387-140004, 0387-14-0003), RMF-3 (PID: 0387-13-0001)
ABUTTING ZONING:	WEST: PINEBROOK ROAD PUBLIC COUNTY RIGHT-OF-WAY EAST: RMF-1 (CITY OF VENICE) NORTH: CURRY LANE PRIVATE RIGHT-OF-WAY SOUTH: QUE-1 (SARASOTA COUNTY), RMF-1 (CITY OF VENICE), PUD (CITY OF VENICE)
PROPOSED ZONING:	RMF-3 (PID: 0387-13-0001), RMF-1 (PID: 0387-14-0004, 0387-14-0003)
PROJECT ADDRESS:	500 R AND F RANCH ROAD, 2800 AND 2806 CURRY LANE NOKOMIS, FL, 34275
PID:	0387-13-0001, 0387-14-0004, 0387-14-0003
PROJECT AREA:	29.4 ACRES

PROPOSED LAND USE:		
BUILDINGS	6.52 ACRES	(22.3%)
ROADS AND PARKING	4.56 ACRES	(15.5%)
SIDEWALK	2.74 ACRES	(9.3%)
PONDS @ CONTROL WATER LEVEL	3.55 ACRES	(12.1%)
EXISTING WETLAND	1.27 ACRES	(4.3%)
PERVIOUS AREA	10.76 ACRES	(36.5%)
TOTAL AREA	29.4 ACRES	(100%)

BUILDING SETBACKS:	FRONT : 20'
	SIDE : 15'
	REAR : 15'
MAXIMUM BUILDING HEIGHT:	35'
PROPOSED BUILDING HEIGHT:	PH1 (ONE BEDROOM DUPLEX BUILDING): 22'-6"
	PH2 (TWO BEDROOM DUPLEX BUILDING): 20'-8"
	PH3 (THREE BEDROOM DUPLEX BUILDING): 27'-6"
	CLUBHOUSE: 27'-6"
PROPOSED DENSITY:	PID 0387-13-0001: 194 UNITS / 19.4 AC. = 10 UNITS PER ACRE (MAXIMUM ALLOWED = 13 UNITS/ACRE)
	PID 0387-14-0003 AND 0387-14-0004: 50 UNITS / 10.0 AC. = 5 UNITS PER ACRE (MAXIMUM ALLOWED = 5 UNITS/ACRE)
	244 TOTAL UNITS

RECLAIMED WATER: PROVIDED BY CITY OF VENICE.

WATER: POTABLE WATER SUPPLY WILL BE FROM CITY OF VENICE UTILITIES.

SEWER: WASTEWATER SERVICES WILL BE PROVIDED BY CITY OF VENICE UTILITIES.

GARBAGE: GARBAGE PICKUP WILL BE PROVIDED BY CITY OF VENICE.

ROADWAYS: ACCESS TO THIS PROJECT IS PROVIDED FROM PINEBROOK ROAD AND CURRY LANE.

PARKING LOT: TO BE PRIVATELY MAINTAINED.

TREE LOCATION: THE PROPOSED DEVELOPMENT AND ITS ORIENTATION TO THE EXISTING TREES IS SHOWN ON THE AERIAL PHOTOGRAPH. TREES WILL BE PRESERVED WHERE POSSIBLE. TREE REMOVAL PERMIT WILL BE APPLIED FOR PRIOR TO CONSTRUCTION.

FEMA DESIGNATION:
NOTE: THE SUBJECT PROPERTY LIES IN FLOOD ZONE "X", BASE FLOOD ELEVATION NOT DETERMINED PER FLOOD INSURANCE RATE MAP FOR SARASOTA COUNTY, FLORIDA, COMMUNITY NO. 12115C0243F, DATED NOVEMBER 4, 2016, AND ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
FEMA DATUM IS NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).

ENVIRONMENTAL AND SURFACE WATER MANAGEMENT SYSTEM:		
DRAINAGE SYSTEM WILL BE PRIVATELY MAINTAINED.		
WELLS: THERE ARE NO KNOWN WELLS WITHIN THE PROJECT BOUNDARY.		
IMPERVIOUS/PERVIOUS AREAS: ACRES PERCENTAGE		
IMPERVIOUS AREA:	18.64	63.5%
PERVIOUS AREA:	10.76	36.5%
TOTAL:	29.4	100%
*POND @ CONTROL WATER LEVEL AREA AND EXISTING WETLAND AREA INCLUDED IN CALCULATION.		

ADA: ALL SIDEWALK STREET CROSSINGS AT CURBS, GUTTERS AND INTERSECTIONS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND FLORIDA ACCESSIBILITY CODE.

LANDSCAPE PLANS: INCLUDED WITH THIS SUBMITTAL.

TREE MITIGATION PLANS: INCLUDED WITH THIS SUBMITTAL.

REQUIRED PARKING CALCULATION:
MULTIFAMILY DWELLINGS: 2 SPACE PER UNIT
TOTAL REQUIRED PARKING SPACES = 244 UNITS * 2 SPACES = 488 TOTAL SPACES REQUIRED (10 ADA)

PARKING SPACES PROVIDED:
PROVIDED PARKING SPACES* = 502 SPACES PROVIDED (10 ADA)
*INCLUDES GARAGE SPACES

UTILITY COMPANIES:	
FPL	TECO GAS
5657 NORTH McINTOSH ROAD	8261 VICO COURT
SARASOTA, FLORIDA 34233	SARASOTA, FLORIDA 34240-7844
FRONTIER	COMCAST CABLE
1701 RINGLING BLVD.	5205 FRUITVILLE ROAD
SARASOTA, FLORIDA 34236	SARASOTA, FLORIDA 34232
941-906-6711	
VENICE UTILITIES	
401 W. VENICE AVE.	
VENICE, FL 34285	
(941)882-7297	
CONTACT: PATIENCE ANATASIO	

CITY OF VENICE REQUIRED NOTES:

- ALL WORK CONDUCTED IN THE CITY OF VENICE RIGHT-OF-WAY (ROW) WILL REQUIRE THE ISSUANCE OF A ROW PERMIT.
- ALL WORK CONDUCTED IN SARASOTA COUNTY AND/OR FDOT ROW SHALL REQUIRE A COPY OF STATE ISSUED PERMITS.
- TREE REMOVAL PERMIT MUST BE OBTAINED FROM THE CITY OF VENICE.
- POST DEVELOPMENT RUNOFF DOES NOT EXCEED PRE-DEVELOPMENT RUNOFF VOLUME OR RATE FOR A 24-HOUR, 25-YEAR STORM EVENT.
- ALL FIRE SERVICE BACKFLOW ASSEMBLIES SHALL BE INSTALLED BY A CERTIFIED CONTRACTOR WITH A CLASS I, II, OR V CERTIFICATE OF COMPETENCY ISSUED BY THE STATE FIRE MARSHALL AS PER F.S. 633.521.
- CONSTRUCTION SITE MUST BE POSTED WITH 24-HOUR CONTACT INFORMATION.
- ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, SHALL MEET CITY OF VENICE STANDARDS.
- CONTACT PUBLIC WORKS SOLID WASTE DIVISION (941-486-2422) FOR APPROVAL OF DUMPSTER LOCATION AND LAYOUT PRIOR TO CONSTRUCTION.
- CONSTRUCTION PLAN APPROVAL WILL NOT BE ISSUED UNTIL CONSTRUCTION PLANS FOR THE REQUIRED CURRY LANE ROADWAY AND UTILITY IMPROVEMENTS HAVE BEEN APPROVED.

DEVELOPER: WATERMARK RESIDENTIAL
111 MONUMENT CIRCLE, SUITE 1500
INDIANAPOLIS, IN 46204
PH: (463) 237-3246
CONTACT: GENE BEIERMANN, P.E.

ARCHITECT: STUDIO M ARCHITECTURE & PLANNING
2 WEST MAIN STREET
CARMEL, IN 46032
PH: (317) 810-1502

GEOTECH: ECS FLORIDA, LLC
4524 N. 56TH STREET
TAMPA, FL 33610
PH: (813) 302-1644
CONTACT: TRAVIS L. GIAFAGLIONE, E.I.

ENGINEER AND LANDSCAPE ARCHITECTURE: KIMLEY HORN AND ASSOCIATES, INC.
1777 MAIN STREET, SUITE 200
SARASOTA, FL 34236
PH: (941)379-7600
CONTACT: KYLE C. KRAGEL, P.E.

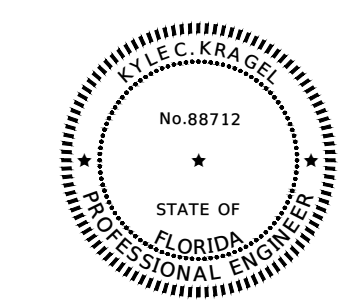
MEP: KBSO CONSULTING
1344 SOUTH RANGELINE ROAD, SUITE 202
CARMEL, IN 46032
PH (317) 344-8044

ENVIRONMENTAL: ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.
1191 SARASOTA CENTER BLVD
SARASOTA, FL 34240
PH: (941) 377-8608

SURVEYOR: BRITT SURVEYING, INC.
606 CYPRESS AVENUE
VENICE, FL 34285
PH : (941) 493-1396
CONTACT: RANDALL E. BRITT, PSM

PREPARED BY
Kimley»Horn

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WWW.KIMLEY-HORN.COM REGISTRY NO. 696



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY KYLE C. KRAGEL, P.E. ON THE DATE INDICATED TO THE RIGHT.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED VALID UNLESS THEY ARE SIGNED AND SEALED BY ANY ELECTRONIC COPIES.
KYLE C. KRAGEL, P.E. #88712
KIMLEY-HORN AND ASSOCIATES, INC.
REGISTERED PROFESSIONAL ENGINEER
1777 MAIN STREET, SUITE 200
SARASOTA, FLORIDA 34236

I HEREBY CERTIFY THAT THE DESIGN OF THIS PROJECT, AS PREPARED UNDER MY PERSONAL DIRECTION AND CONTROL, COMPLIES WITH ALL APPLICABLE STANDARDS, INCLUDING THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTIONS 335.075(1) AND (4), FLORIDA STATUTES.

KYLE C. KRAGEL, P.E.
FLA. P.E. LICENSE # 88712
REGISTRY NO. 696

DATE:

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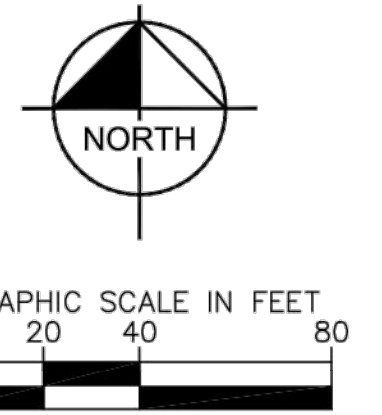
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RECORD DRAWING

SWING TIE REFERENCE POINTS

AS-BUILT NUMBER	DESCRIPTION	REFERENCE POINT	DISTANCE	REFERENCE POINT	DISTANCE	ELEVATION
1	8" GATE VALVE CONNECT TO EXISTING STUB-OUT	A	61.58'	B	17.88'	9.877' O.N.
2	WATER METER	A	61.58'	B	23.92'	N/A
3	8" 90° BEND (VERTICAL)	A	69.71'	B	25.72'	8.507' O.P.
4	WEST END 1" BACKFLOW PREVENTER	A	69.71'	B	25.72'	N/A
5	EAST END 1" BACKFLOW PREVENTER	A	69.71'	B	27.28'	N/A
6	2" GATE VALVE CONNECT TO EXISTING STUB-OUT	A	77.58'	B	27.28'	8.507' O.N.
7	RECLAIM WATER METER 2" POLY	A	105.18'	B	128.03'	10.691' O.P.
8	2" GATE VALVE	A	105.18'	B	73.37'	9.877' O.N.
9	8" 90° BEND (VERTICAL)	A	99.59'	B	14.58'	8.507' O.N.

SWING TIE TABLE
(DISTANCE AND ELEVATION SHOWN IN FEET)



- UTILITY NOTES:**
1. ALL UTILITY MAINS SHALL HAVE 3' OF COVER UNLESS OTHERWISE NOTED.
 2. ALL WATER, REUSE AND IRRIGATION MAINS 4 INCHES TO 12 INCHES SHALL BE PVC, C-900, DR-18, CL 150, UNLESS OTHERWISE NOTED.
 3. ALL ONE INCH (1") AND TWO INCH (2") WATER SERVICES (TYP) SHALL BE POLYETHYLENE (PE) TUBING AND CONFORM TO AWWA STANDARD C901, PE 3408 AND BE COPPER TUBING SIZE (CTS, SDR-9) WITH A WORKING PRESSURE RATING OF TWO HUNDRED (200) PSI.
 4. ALL SANITARY SEWER GRAVITY MAINS SHALL BE PVC, SDR-26, UNLESS OTHERWISE INDICATED.
 5. ALL VALVE COVERS AND/OR PADS THAT ARE WITHIN, ADJACENT TO OR IN CLOSE PROXIMITY TO SIDEWALK SHALL BE ADJUSTED TO MATCH SIDEWALK GRADES.
 6. ALL FIRE HYDRANT ASSEMBLIES SHALL INCLUDE A 6" GATE VALVE WHICH SHALL BE LOCATED OUTSIDE OF SIDEWALK.
 7. SEE UTILITY DETAIL DRAWINGS FOR WATER, IRRIGATION, REUSE AND SEWER SERVICE TERMINATIONS.
 8. SANITARY GRAVITY SEWER PIPE LENGTHS ARE FROM CENTER TO CENTER OF MANHOLES.
 9. ALL SINGLE AND DOUBLE WATER SERVICES UNDER ROADWAYS ARE TO BE SLEEVED.
 10. PIPE JOINTS SHALL BE RESTRAINED AS PER DETAILS AND NOTES.
 11. IRRIGATION DISTRIBUTION MAIN AND SERVICES DESIGNED BY OTHERS.
 12. UTILITY SYMBOLS ON THE PLAN MAY APPEAR LARGER THAN ACTUAL SIZE OR MOVED FROM INTENDED LOCATION FOR CLARITY. UTILITY APPEARANCES ARE TO BE INSTALLED PER DETAILS IN PLAN SET OR REFERENCED STANDARD DETAILS.
 13. POTABLE WATER MAIN WITHIN PROPERTY BOUNDARY IS PRIVATELY OWNED AND MAINTAINED AND DOES NOT REQUIRE AUTO-FLUSHING DEVICES. HOWEVER, THE OWNER IS ENCOURAGED TO USE AUTO-FLUSHING DEVICES TO PROVIDE WATER QUALITY AS NEEDED.
 14. PRIVATE FIRE HYDRANTS WILL BE MAINTAINED BY THE CITY OF VENICE FOR AN ANNUAL FEE AND MUST BE CONSTRUCTED PER CITY STANDARD DETAILS.
 15. THE BUILDINGS LABELED WITH A (S), DENOTES THE UNITS THAT ARE TO BE SPRINKLED FOR FIRE PROTECTION.

LEGEND

- REDUCER
- PROPOSED PLUG OR CAP
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATER SERVICE
- PROPOSED REUSE SERVICE
- PROPOSED SINGLE SEWER SERVICE
- GATE VALVE OR PLUG VALVE
- BLOW-OFF ASSEMBLY
- AIR RELEASE VALVE
- DIRECTION OF FLOW
- EXISTING WATER MAIN
- PROPOSED REUSE MAIN
- EXISTING REUSE MAIN
- PROPOSED SANITARY SEWER MAIN
- EXISTING SEWER MAIN
- PROPOSED FORCE MAIN
- EXISTING FORCE MAIN
- PROPOSED FIRE WATER
- FIRE HYDRANT ASSEMBLY
- WATER MAIN
- REUSE MAIN
- FORCE MAIN
- SANITARY SEWER
- GATE VALVE
- BACK FLOW PREVENTER
- FIRE WATER MAIN
- EXISTING LIGHT POLE
- EXISTING LIGHT POLE

- NOTES:**
- RECORD DRAWING BASED ON A CLIENT PROVIDED CONSTRUCTION PLANS FOR WATERMARK AT VENICE, NORTH VENICE, FLORIDA.
 - ELEVATIONS SHOWN HEREON ARE BASED ON FOUND SITE BENCHMARKS AS SHOWN REFERRING TO NAVD 1988.
 - DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF.
 - PARCEL SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY (RECORDED AND UNRECORDED, WRITTEN AND UNWRITTEN).
 - UNDERGROUND IMPROVEMENTS, UTILITIES AND/OR FOUNDATIONS WERE NOT LOCATED UNLESS OTHERWISE NOTED.
 - LOCATIONS AND ELEVATIONS OF CERTAIN FEATURES ARE CONTRACTOR PROVIDED AND WERE NOT FIELD VERIFIED.
 - ENVIRONMENTAL MATTERS ARE NOT WITHIN THE SCOPE OF THIS DRAWING.
 - THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DUSTIN D MARTIN PSM 6645, ON 02-10-23.
 - THE ELECTRONIC SIGNATURE HEREON IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE (FAC) 5J-17.062(3)
 - THIS IS NOT A SURVEY
 - DATE OF LAST FIELD WORK 02-09-2023.
 - RECORD DRAWINGS PREPARED UNDER THE DIRECT SUPERVISION OF DUSTIN D MARTIN, FLORIDA PSM 6645.
 - ANGLERIGHT SURVEYING
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FORT MYERS, FL 33906
813-539-5157

- LEGEND:**
- DEG - DEGREE
 - ELEV - ELEVATION
 - HDE - HIGH DENSITY POLY ETHYLENE
 - INV - INVERT
 - N/A - NOT AVAILABLE OR NOT APPLICABLE
 - P.O.L. - POINT ON LINE
 - PVC - POLY-VINYL CHLORIDE
 - T.O.N. - TOP OF NUT
 - T.O.P. - TOP OF PIPE
 - VERT - VERTICAL

EX. Public Right of Way
PINEBROOK ROAD
 Width Varies

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 PHONE: 941-379-7800
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LICENSED PROFESSIONAL
 KHA PROJECT 149876005
 DATE OCT. 2021
 SCALE AS SHOWN
 DESIGNED BY KCK
 DRAWN BY MSL
 CHECKED BY KCK DATE:

MASTER UTILITY PLAN

WATERMARK AT VENICE
 PREPARED FOR
THOMPSON THRIFT DEVELOPMENT, LLC
 CITY OF VENICE, FLORIDA

SHEET NUMBER
C-1A

RECORD DRAWINGS
 March 15, 2023
APPROVED

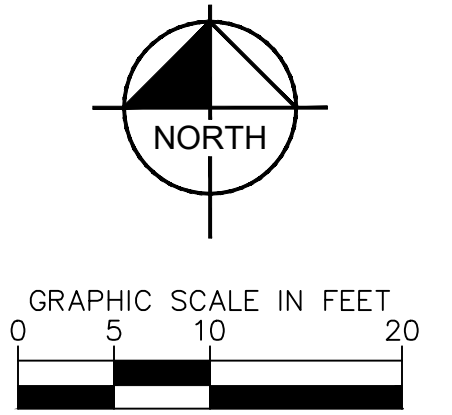
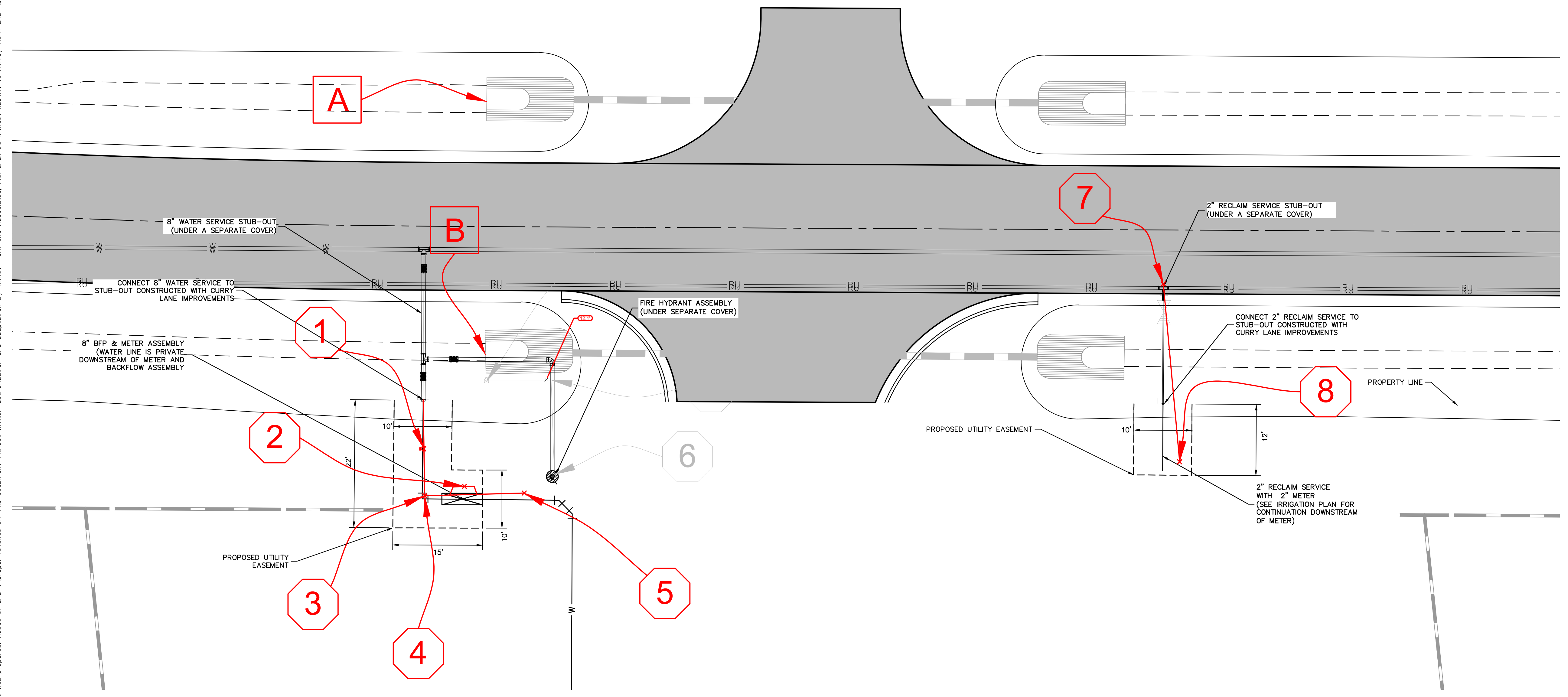
DUSTIN D. MARTIN, P.S.M., 156645
 PROFESSIONAL SURVEYOR & MAPPER
 STATE OF FLORIDA

R & F RANCH ROAD
 EX. 50' Wide Easement for Ingress and Egress
 Official Records Book 978, Page 545

MATCHLINE SEE SHEET C-1B

Plotted By: Owner - Sheet - S:\Pinbrook Curry_MF - Layout\CIC - March 10, 2023 11:35:22am C:\Users\Owner\OneDrive - Angleright Surveying\Active Jobs\Fort Myers\21-0617-Watermark Venice-Cougar-Ve-Built\CADD\WATERMARK_Ve_AB_CIC_03-10-23.dwg
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RECORD DRAWING



- UTILITY NOTES:**
1. ALL UTILITY MAINS SHALL HAVE 3' OF COVER UNLESS OTHERWISE NOTED.
 2. ALL WATER, REUSE AND IRRIGATION MAINS 4 INCHES TO 12 INCHES SHALL BE PVC, C-900, DR-18, CL 150, UNLESS OTHERWISE NOTED.
 3. ALL ONE INCH (1") AND TWO INCH (2") WATER SERVICES (TYP) SHALL BE POLYETHYLENE (PE) TUBING AND CONFORM TO AWWA STANDARD C900, PE 3408 AND BE COPPER TUBING SIZE (CTS, SDR-9) WITH A WORKING PRESSURE RATING OF TWO HUNDRED (200) PSI.
 4. ALL SANITARY SEWER GRAVITY MAINS SHALL BE PVC, SDR-26, UNLESS OTHERWISE INDICATED.
 5. ALL VALVE COVERS AND/OR PADS THAT ARE WITHIN ADJACENT TO OR IN CLOSE PROXIMITY TO SIDEWALK SHALL BE ADJUSTED TO MATCH SIDEWALK GRADES.
 6. ALL FIRE HYDRANT ASSEMBLIES SHALL INCLUDE A 6" GATE VALVE WHICH SHALL BE LOCATED OUTSIDE OF SIDEWALK.
 7. SEE UTILITY DETAIL DRAWINGS FOR WATER, IRRIGATION, REUSE AND SEWER SERVICE TERMINATIONS.
 8. SANITARY GRAVITY SEWER PIPE LENGTHS ARE FROM CENTER TO CENTER OF MANHOLES.
 9. ALL SINGLE AND DOUBLE WATER SERVICES UNDER ROADWAYS ARE TO BE SLEEVED.
 10. PIPE JOINTS SHALL BE RESTRAINED AS PER DETAILS AND NOTES.
 11. IRRIGATION DISTRIBUTION MAIN AND SERVICES DESIGNED BY OTHERS.
 12. UTILITY SYMBOLS ON THE PLAN MAY APPEAR LARGER THAN ACTUAL SIZE OR MOVED FROM INTENDED LOCATION FOR CLARITY. UTILITY APPEARANCES ARE TO BE INSTALLED PER DETAILS IN PLAN SET OR REFERENCED STANDARD DETAILS.
 13. POTABLE WATER MAIN WITHIN PROPERTY BOUNDARY IS PRIVATELY OWNED AND MAINTAINED AND DOES NOT REQUIRE AUTO-FLUSHING DEVICES. HOWEVER, THE OWNER IS ENCOURAGED TO USE AUTO-FLUSHING DEVICES TO PROVIDE WATER QUALITY AS NEEDED.
 14. PRIVATE FIRE HYDRANTS WILL BE MAINTAINED BY THE CITY OF VENICE FOR AN ANNUAL FEE AND MUST BE CONSTRUCTED PER CITY STANDARD DETAILS.
 15. ALL RESIDENTIAL BUILDINGS ARE TO BE SPRINKLED FOR FIRE PROTECTION.

LEGEND

- REDUCER
- PROPOSED PLUG OR CAP
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATER SERVICE
- PROPOSED REUSE SERVICE
- PROPOSED SINGLE SEWER SERVICE
- GATE VALVE OR PLUG VALVE
- BLOW-OFF ASSEMBLY
- AIR RELEASE VALVE
- DIRECTION OF FLOW
- EXISTING WATER MAIN
- PROPOSED REUSE MAIN
- EXISTING REUSE MAIN
- PROPOSED SANITARY SEWER MAIN
- EXISTING SEWER MAIN
- PROPOSED FORCE MAIN
- EXISTING FORCE MAIN
- PROPOSED FIRE WATER MAIN
- F.H.A. FIRE HYDRANT ASSEMBLY
- W.M. WATER MAIN
- R.M. REUSE MAIN
- F.M. FORCE MAIN
- S.S. SANITARY SEWER
- G.V. GATE VALVE
- B.F.P. BACK FLOW PREVENTER
- F.W. FIRE WATER MAIN
- EXISTING LIGHT POLE

NOTES:

RECORD DRAWING BASED ON A CLIENT PROVIDED CONSTRUCTION PLANS FOR WATERMARK AT VENICE, NORTH VENICE, FLORIDA.

ELEVATIONS SHOWN HEREON ARE BASED ON FOUND SITE BENCHMARKS AS SHOWN REFERRING TO NAVD 1988.

DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF.

PARCEL SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY (RECORDED AND UNRECORDED, WRITTEN AND UNWRITTEN).

UNDERGROUND IMPROVEMENTS, UTILITIES AND/OR FOUNDATIONS WERE NOT LOCATED UNLESS OTHERWISE NOTED.

LOCATIONS AND ELEVATIONS OF CERTAIN FEATURES ARE CONTRACTOR PROVIDED AND WERE NOT FIELD VERIFIED.

ENVIRONMENTAL MATTERS ARE NOT WITHIN THE SCOPE OF THIS DRAWING.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DUSTIN D MARTIN PSM 6645, ON 02-20-23.

THE ELECTRONIC SIGNATURE HEREON IS IN COMPLIANCE WITH FLORIDA ADMINISTRATIVE CODE (FAC)15J-17.062(3)

THIS IS NOT A SURVEY

DATE OF LAST FIELD WORK 02-09-2023.

RECORD DRAWINGS PREPARED UNDER THE DIRECT SUPERVISION OF DUSTIN D MARTIN, FLORIDA PSM 6645.

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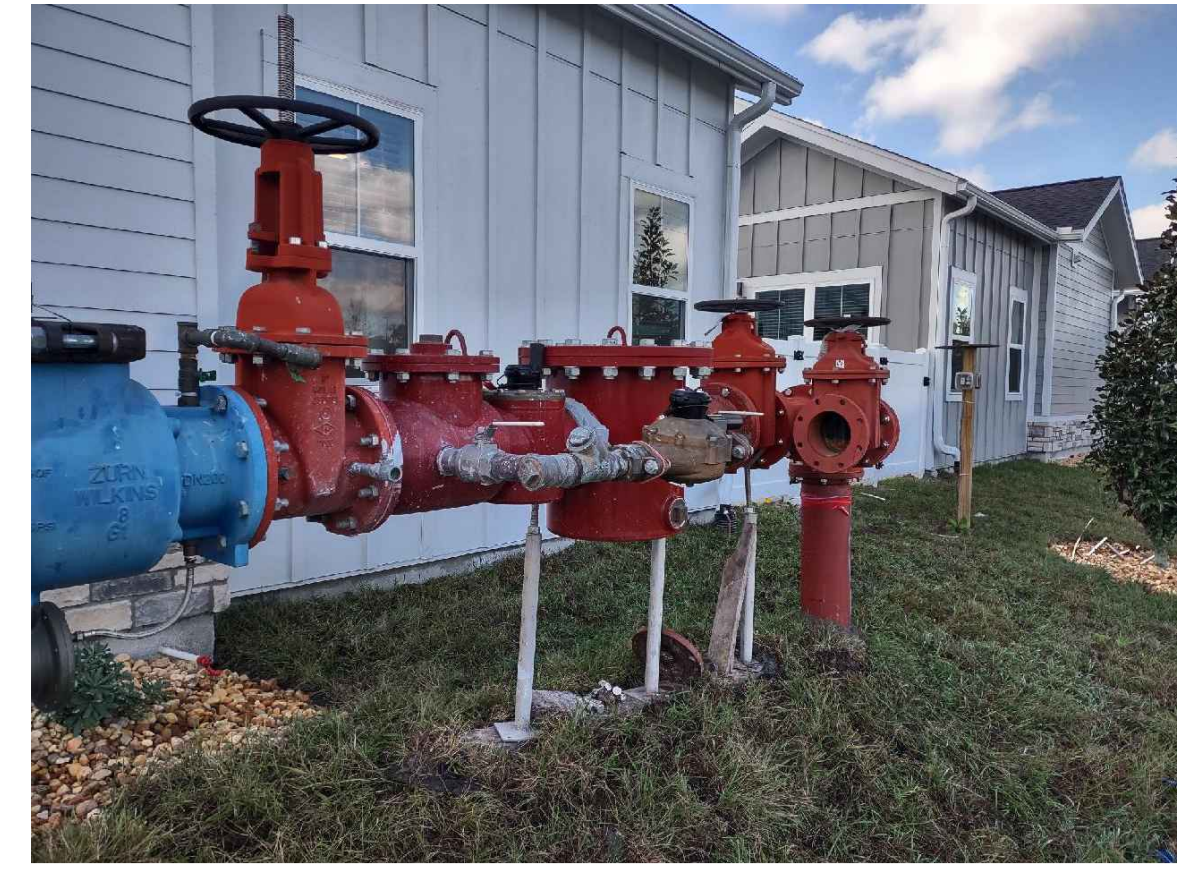
I HEREBY CERTIFY THAT THE RECORD DRAWING LOCATION DATA OF THE CONSTRUCTED CONDITIONS SHOWN HEREON CONFORM TO THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 51-17-051 (FAC), AND THAT SAID AS-BUILTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS SURVEYED UNDER MY DIRECTION.

LEGEND:
 DEG - DEGREE
 ELEV - ELEVATION
 HDPE - HIGH DENSITY POLY ETHYLENE
 INV - INVERT
 N/A - NOT AVAILABLE OR NOT APPLICABLE
 P.O.L. - POINT ON LINE
 PVC - POLY-VINYL CHLORIDE
 T.O.N. - TOP OF NUT
 T.O.P. - TOP OF PIPE
 VERT - VERTICAL

SWING TIE REFERENCE POINTS
 A = C/L END MES
 B = C/L END MES

SWING TIE TABLE
(DISTANCE AND ELEVATION SHOWN IN FEET)

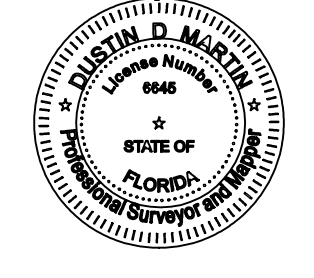
AS-BUILT NUMBER	DESCRIPTION	REFERENCE POINT	DISTANCE	REFERENCE POINT	DISTANCE	ELEVATION
1	6" GATE VALVE, CONNECT TO EXISTING STUB-OUT	A	61.58'	B	17.69'	0.87' T.O.N.
2	WATER METER	A	87.80'	B	23.59'	N/A
3	6" 90° BEND (VERTICAL)	A	69.71'	B	28.72'	8.50' T.O.P.
4	WEST END 6" BACKFLOW PREVENTER	A	69.71'	B	28.72'	N/A
5	EAST END 6" BACKFLOW PREVENTER	A	69.71'	B	27.28'	N/A
6	6" GATE VALVE	A	128.48'	B	122.27'	8.96' T.O.N.
7	2" RECLAIM WATER METER, 2" POLY	A	138.97'	B	128.03'	1.06' T.O.P.
8	6" 90° BEND (HORIZONTAL)	A	81.91'	B	17.10'	0.24' T.O.N.



VIEW OF BFP ASSEMBLY LOOKING SOUTHWEST, SHOWING WATER METER OFFSET ON NORTH SIDE.

RECORD DRAWINGS
 March 15, 2023
APPROVED

DUSTIN D. MARTIN, P.S.M., LS6645
 PROFESSIONAL SURVEYOR & MAPPER
 STATE OF FLORIDA



KHA PROJECT 149876005
 DATE SEPT. 2022
 SCALE AS SHOWN
 DESIGNED BY KCK
 DRAWN BY MSL
 CHECKED BY KCK

REVISIONS
 NO. 09/09/22/PLT
 DATE BY

WATERMARK AT VENICE
 PREPARED FOR
 THOMPSON THRIFT
 DEVELOPMENT, LLC
 CITY OF VENICE, FLORIDA

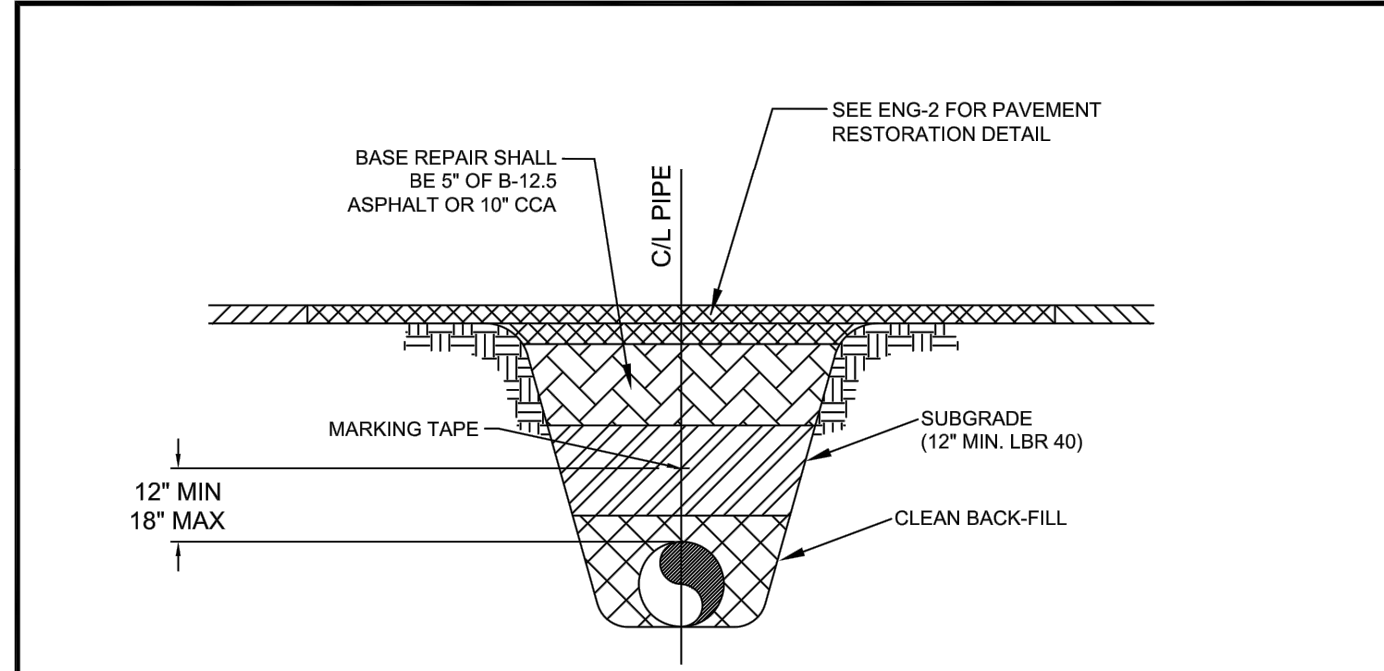
BACKFLOW AND
 METER ENLARGED
 PLAN

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SHEET NUMBER
C-1C

Plotted By: Rundo, Nick Sheet Set: Pinebrook, Curry, MF, L04004-C-4A, UTILITY DETAILS December 20, 2021 07:05:51pm K:\SAR-Civil\148876005-Pinebrook_Curry_MF\CAD\PlanSheets\C-4 UTILITY DETAILS.dwg
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RECORD DRAWINGS
March 15, 2023
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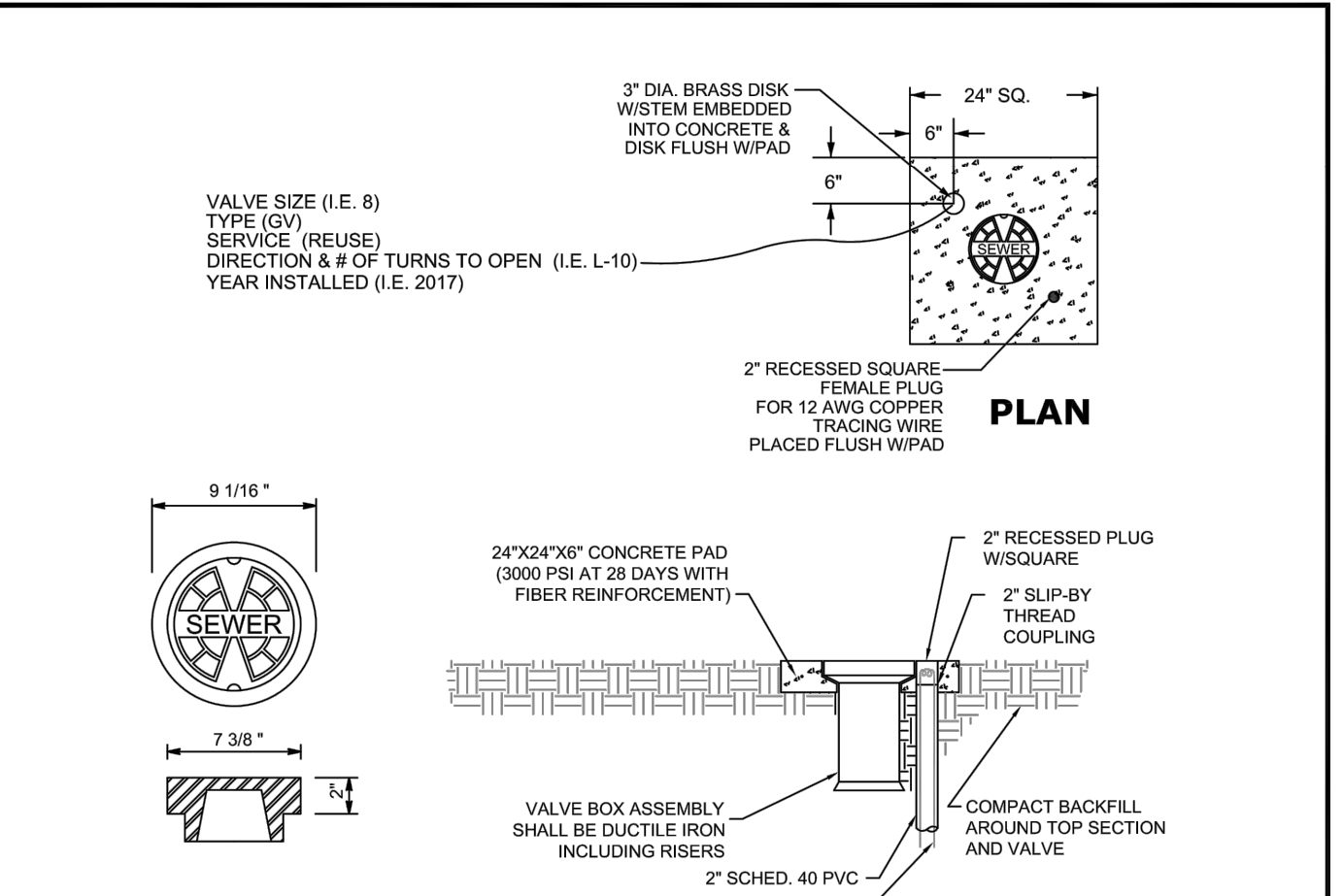
MARKING TAPE AND MESSAGES		
PIPE	TAPE COLOR	MESSAGE
PVC STORM WATER	WHITE	CAUTION STORM WATER OR STORM DRAIN BELOW
POTABLE WATER MAIN	BLUE	CAUTION POTABLE WATER MAIN BELOW
REUSE WATER MAIN	PURPLE	CAUTION REUSE WATER MAIN BELOW
SEWER FORCE MAIN	GREEN	CAUTION SEWER FORCE MAIN BELOW
SEWER & SERVICE LATERALS	GREEN	CAUTION SEWER MAIN BELOW

- COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE ATTACHED TO TOP OF PIPE AT 20' INTERVALS ON ALL RECLAIMED WATER, FORCE, OR POTABLE WATER MAINS. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE)
- MINIMUM COVER SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. MAXIMUM COVER SHALL BE 42" FROM FINISHED GRADE UNLESS OTHERWISE APPROVED.
- INSTALLATION OF PIPE SHALL BE IN CONFORMANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- PAVEMENT RESTORATION SHALL CONFORM WITH DETAIL ENG-2 OF THESE CITY STANDARDS.
- CONFLICTS - UTILIZE 45° BENDS WITH SEPARATION AS PER CITY DETAILS.
- ALL UTILITIES (PUBLIC & PRIVATE) THAT CROSS A DITCH/SWALE SHALL BE 30" MIN. BELOW THE ACTUAL DESIGN BOTTOM OF CONVEYANCE.
- MARKING TAPE SHALL BE 3" WIDE (MIN.) DETECTIBLE UNDERGROUND WARNING TAPE. INSTALL CENTERED DIRECTLY OVER THE PIPE.
- SEE S-6 FOR GRAVITY SEWER PIPE TRENCH DETAIL.

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 ENGINEERING DEPARTMENT
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UTILITIES - GENERAL
UTILITY PIPE TRENCH

DATE
 JAN 2021
 SHEET NO.
U-1

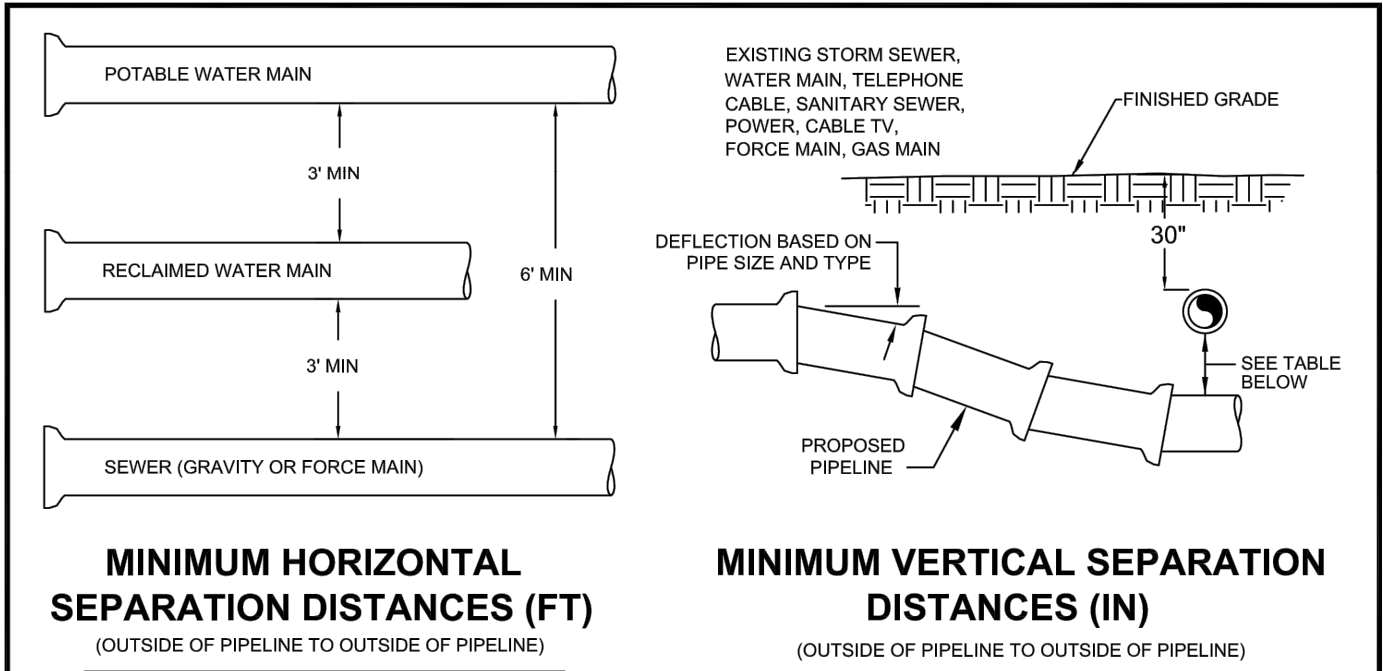


- PAVED AREAS: SET CONCRETE PAD AND COVER FLUSH WITH FINISHED PAVEMENT SURFACE.
- UNPAVED AREAS: SET PAD AND COVER 1 INCH ABOVE FINISHED GRADE.
- VALVES LOCATED IN DITCH AND OVER 4' DEPTH (LINE) MUST USE TRENCH ADAPTER VALVE BOX (AMERICAN FLOW CONTROL).
- COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE). CONTINUITY TEST SHALL BE PERFORMED ON ALL TRACER WIRES.
- PRE-CAST PADS MAY BE USED WITH CITY APPROVAL.
- FOR CURBED ROADWAYS: CURB SHALL BE ETCHED WITH THE LETTER "V" DIRECTLY PERPENDICULAR TO THE VALVE BOX.
- VALVE BOX COVERS SHALL BE PAINTED BLUE FOR POTABLE WATER, PURPLE FOR REUSE WATER, AND GREEN FOR SEWER.

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UTILITIES - GENERAL
VALVE BOX

DATE
 JAN 2021
 SHEET NO.
U-4



MINIMUM HORIZONTAL SEPARATION DISTANCES (FT)		MINIMUM VERTICAL SEPARATION DISTANCES (IN)	
(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)		(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)	
WATER MAIN	3 6 6 3 3 3 3	WATER MAIN	6 12 12 6 6 6 6
FORCE MAIN	6 3 3 3 3 3 3	FORCE MAIN	6 3 3 3 3 3 3
SANITARY SEWER	6 3 3 3 3 3 3	SANITARY SEWER	12 6 6 6 6 6 6
REUSE MAIN	3 3 3 3 3 3 3	REUSE MAIN	6 6 6 6 6 6 6
STORM WATER	3 3 3 3 3 3 3	STORM WATER	6 6 6 6 6 6 6
OTHER UTILITIES (TELEPHONE, CABLE, ETC.)	3 3 3 3 3 3 3	OTHER UTILITIES (TELEPHONE, CABLE, ETC.)	6 6 6 6 6 6 6

- MAXIMUM JOINT DEFLECTION SHALL BE 90% OF MANUFACTURER'S RECOMMENDATION.
- WHEREVER POSSIBLE, THE LAYOUT OF UTILITIES SHALL PLACE SANITARY SEWER AND SEWER FORCE MAINS BELOW SANITARY SEWER AND BELOW WATER MAINS, RESPECTIVELY. WHERE WATER MAINS ARE ABOVE GRAVITY SEWERS OR WASTEWATER FORCE MAINS, A VERTICAL CLEARANCE OF 6 INCHES IS ACCEPTABLE. STORM SHALL BE PLACED BELOW BOTH WATER AND SEWER WHERE POSSIBLE.
- ACCEPTABLE VARIANCES:
 - WHERE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, C900 DR14 PVC PIPE SHALL BE USED FOR ONE OF THE PIPELINES.
 - WHERE VERTICAL CLEARANCE CANNOT BE MAINTAINED, ONE FULL LENGTH OF DR14 C900 PIPE SHALL BE INSTALLED CENTERED AT THE POINT OF CROSSING.
 - WHERE 36" MINIMUM DEPTH OF COVER CANNOT BE MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED, AT THE DISCRETION OF THE UTILITY DEPARTMENT.
- NO UTILITY PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH ANY PART OF A SANITARY MANHOLE OR STORMWATER STRUCTURE WITHOUT APPROVAL FROM THE UTILITIES DIRECTOR OR CITY ENGINEER.

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UTILITIES - GENERAL
UTILITY CONFLICTS & SEPARATIONS

DATE
 JAN 2021
 SHEET NO.
U-5

NO.	REVISIONS	DATE

Kimley-Horn
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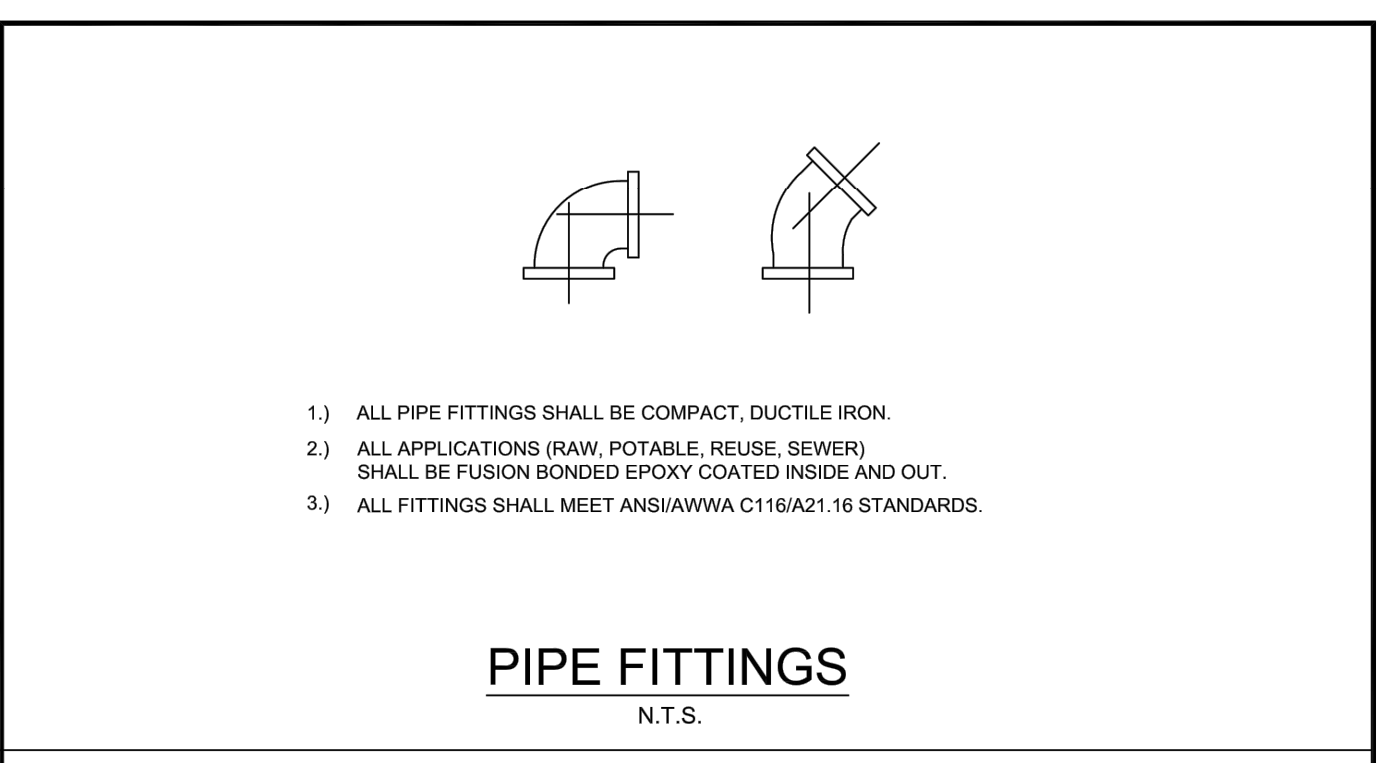
No. 88712
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

KHA PROJECT	149876005
DATE	12/15/21
SCALE	AS SHOWN
DESIGNED BY	KCK
DRAWN BY	MSL
CHECKED BY	KCK

UTILITY DETAILS

WATERMARK AT VENICE
 PREPARED FOR
THOMPSON THRIFT DEVELOPMENT, LLC
 CITY OF VENICE, FLORIDA

SHEET NUMBER
C-4A



- ALL PIPE FITTINGS SHALL BE COMPACT, DUCTILE IRON
- ALL APPLICATIONS (RAW, POTABLE, REUSE, SEWER) SHALL BE FUSION BONDED EPOXY COATED INSIDE AND OUT.
- ALL FITTINGS SHALL MEET ANSI/AWWA C116/A21.16 STANDARDS.

SERVICE	COLOR	MATERIAL/CLASS
POTABLE WATER MAIN	BLUE	
RAW WATER MAIN	WHITE	AWWA C900 PVC / DR 18 FUSIBLE C900 PVC / DR 18
REUSE MAIN	PURPLE	HDPE PPI PE 4710 / DR 11 (DUCTILE IRON PIPE SIZE)
FORCE MAIN (MIN. 4" DIAMETER)	GREEN	
WATER SERVICE	BLUE	PE (POLYUBING) / DR 9
REUSE SERVICE	PURPLE	PE (POLYUBING) / DR 9
GRAVITY SEWER MAIN (MIN. 8" DIAMETER)	GREEN	ASTMD3034 / SDR 26 FUSIBLE PVC / SDR 26
SEWER LATERAL (MIN. 6" DIAMETER)	GREEN	ASTMD3034 / SDR 26 / SDR 35 / SCH 40 PVC

PIPE MATERIAL SCHEDULE
N.T.S.

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UTILITIES - GENERAL
PIPE FITTINGS & MATERIAL

DATE
 JAN 2021
 SHEET NO.
U-6

FITTING		PIPE SIZE (INCHES)								
45 BEND:	H	6	9	12	14	16	21	23	25	29
	VU	4	6	7	9	10	13	15	16	19
	VD	12	20	26	32	37	48	53	28	68
22.5 BEND:	H	3	4	6	7	8	10	11	12	14
	VU	2	3	4	4	5	6	7	8	9
	VD	7	10	13	15	18	23	26	28	33
11.25 BEND:	H	2	2	3	3	4	5	5	6	7

FITTING		PIPE SIZE (INCHES)								
90 BEND:	H	23	33	43	51	60	76	83	90	104
45 BEND:	H	10	14	18	21	25	31	34	37	43
	VU	6	8	11	13	16	20	22	24	28
	VD	22	30	40	48	56	72	80	87	102
22.5 BEND:	H	5	7	8	10	12	15	17	18	21
	VU	3	4	5	6	7	10	11	12	14
	VD	10	15	19	23	27	35	38	42	49
11.25 BEND:	H	2	3	4	5	6	7	8	9	10
PLUGS:		52	73	96	115	136	174	193	211	246

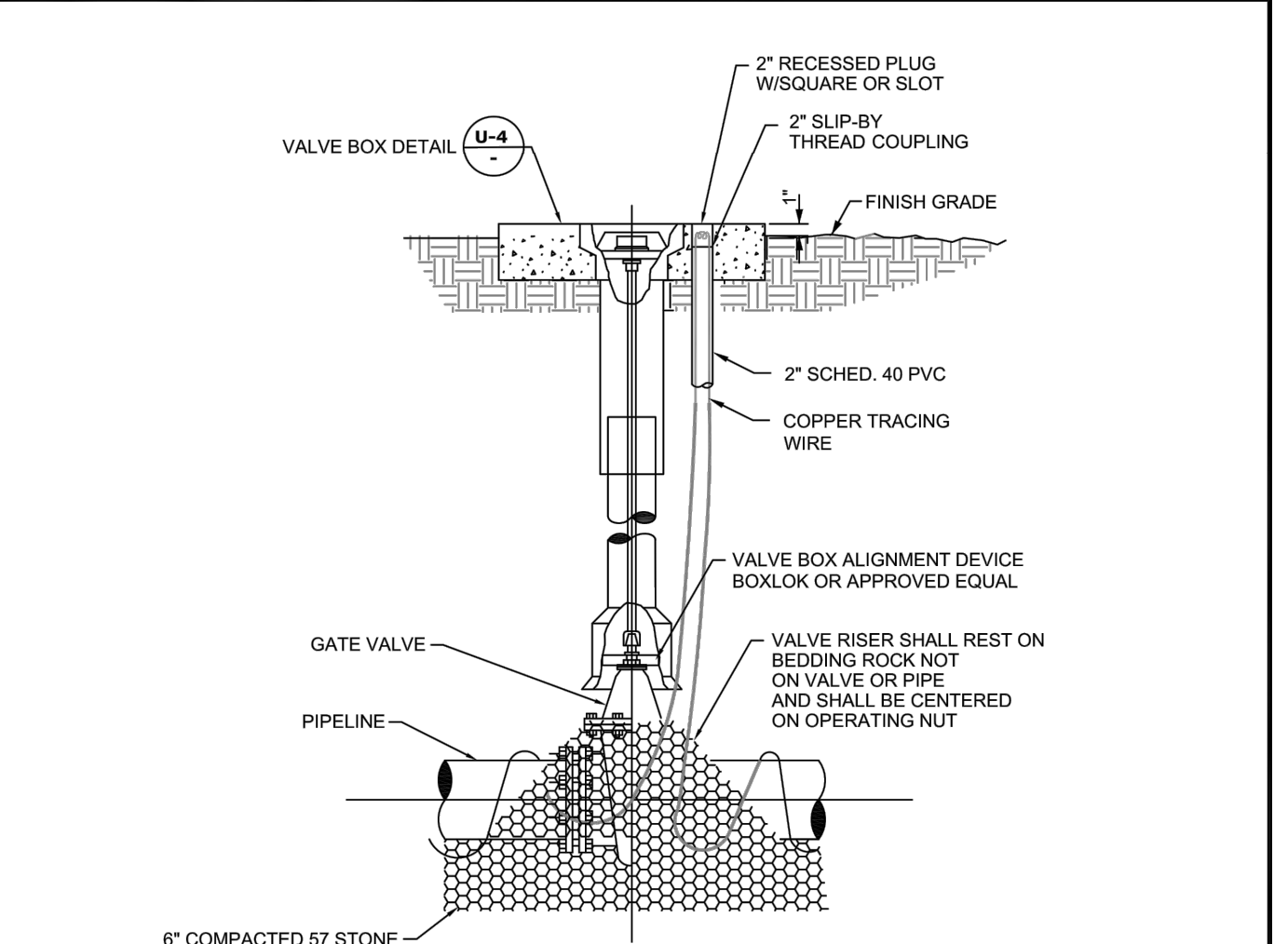
- ABBREVIATIONS: H=HORIZONTAL, VU=VERTICAL UP, VD=VERTICAL DOWN.
- FOR TEE OR REDUCER FITTINGS SUBMIT RESTRAINED JOINT LENGTH CALCULATIONS TO CITY ENGINEER FOR REVIEW AND APPROVAL, USING THE ASSUMPTIONS LISTED ABOVE.
 - RESTRAINED JOINT LENGTH FOR WATER AND REUSE MAINS BASED ON TEST PRESSURE OF 150 PSI. RESTRAINED JOINT LENGTH FOR FORCE (SEWER) MAINS BASED ON TEST PRESSURE OF 100 PSI. CALCULATIONS WERE MADE USING EBAA IRON SOFTWARE (AVAILABLE AT WWW.EBAA.COM) AND THE FOLLOWING ASSUMPTIONS: GRANULAR MATERIAL (GM) SOIL TYPE: TRENCH TYPE 3, BURIAL DEPTH OF 3 FT. AND SAFETY FACTOR OF 2 TO 1. IF FIELD CONDITIONS DIFFER FROM ABOVE ASSUMPTIONS EOR SHALL PROVIDE CALCULATIONS BASED ON ACTUAL CONDITIONS.
 - RESTRAINED JOINT SHALL BE USED ON ALL JOINTS FROM ANY MAIN TEE TO ANY FIRE HYDRANT ASSEMBLY.
 - THRUST BLOCKS WILL NOT BE ACCEPTED, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
 - ALL HARDWARE SHALL BE 316 SS.

PRESSURE MAIN RESTRAINED JOINT TABLE
N.T.S.

CITY OF VENICE
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UTILITIES - GENERAL
RESTRAINED JOINT TABLE

DATE
 JAN 2021
 SHEET NO.
U-7

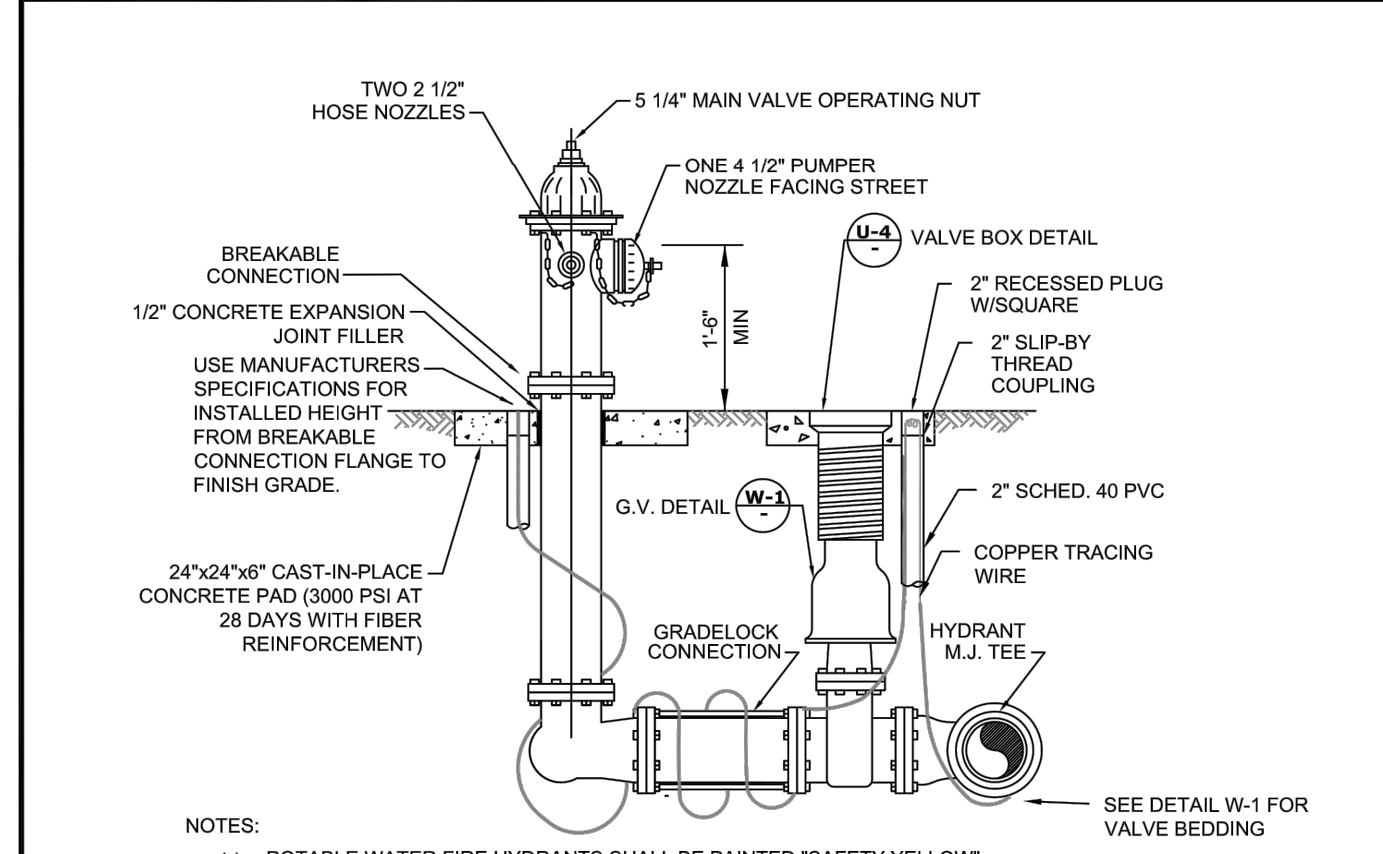


- GATE VALVES SHALL BE RESILIENT WEDGE-TYPE MANUFACTURED BY MUELLER, AMERICAN VALVE, OR EQUAL. ALL GATE VALVES SHALL BE FUSION BONDED EPOXY COATED (INTERIOR AND EXTERIOR) MEET ANSI/AWWA C550, AND BE NSF61 CERTIFIED. BRANCH VALVES SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE TEE.
- FOR VALVES LARGER THAN 12" IN USE BUTTERFLY STYLE VALVE.
- VALVE SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- COPPERHEAD TRACING WIRE PART #12 AWG OR EQUAL SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, PURPLE = REUSE)
- FOR CURBED ROADWAYS: CURB SHALL BE ETCHED WITH THE LETTER "V" DIRECTLY PERPENDICULAR TO THE VALVE BOX.
- ALL BOLTS AND HARDWARE SHALL BE 316 SS.

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UTILITIES - WATER
GATE VALVE

DATE
 JAN 2021
 SHEET NO.
W-1



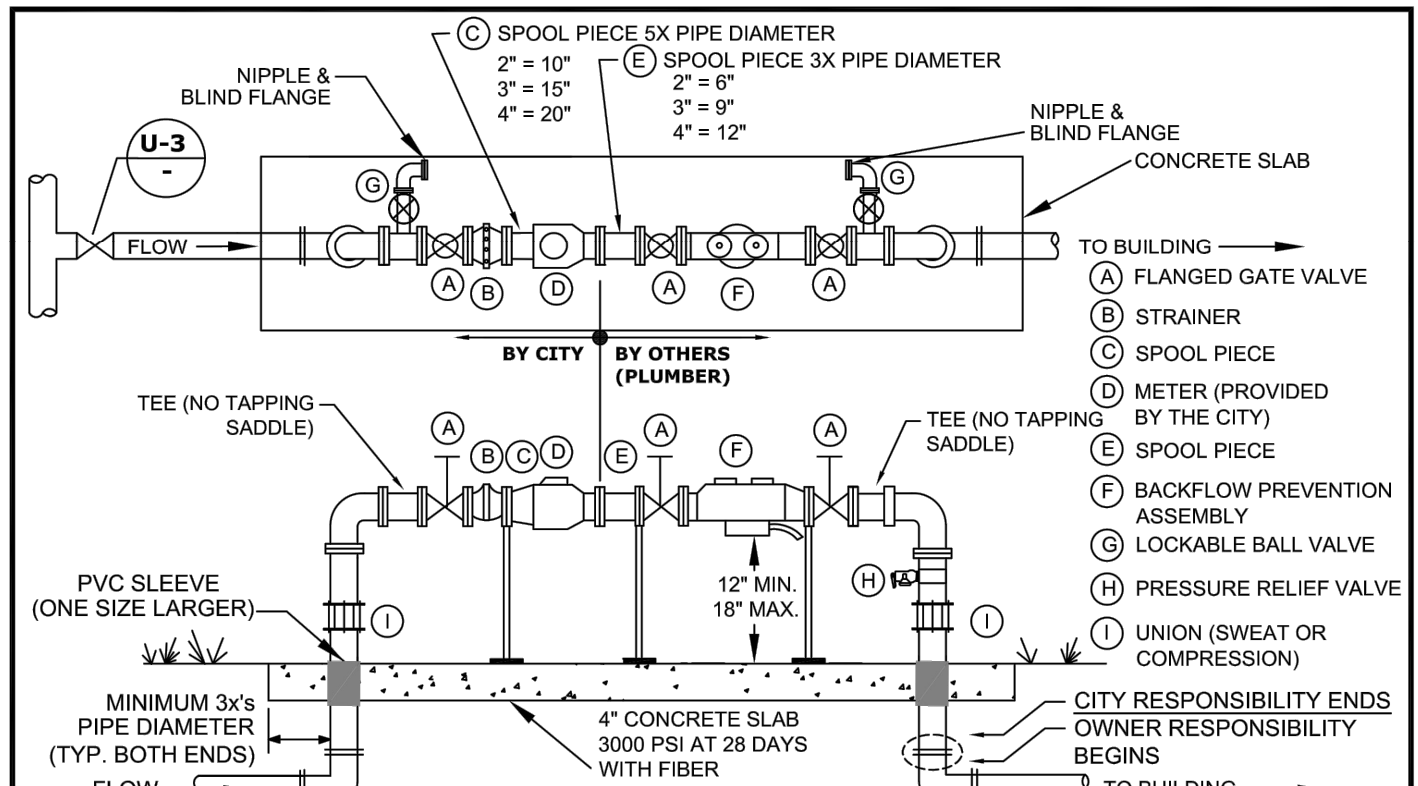
- POTABLE WATER FIRE HYDRANTS SHALL BE PAINTED "SAFETY YELLOW".
- REUSE FIRE HYDRANTS SHALL BE PAINTED PANTONE PURPLE 522C AND TAGGED WITH A PERMANENT LABEL "RECLAIMED WATER-DO NOT DRINK".
- HYDRANT SHALL BE MUELLER SUPER CENTURION MODEL A423, AMERICAN B84B-5 WITH BREAK-AWAY FEATURE. ALL BOLTS SHALL BE SS (BONNET, SAFETY FLANGE, SHOE).
- RESTRAINED JOINTS SHALL BE USED BETWEEN TEE AND HYDRANT.
- HYDRANTS SHALL HAVE "OUT OF SERVICE" TAGS AND BE BAGGED UNTIL MAINS ARE ACCEPTED BY CITY.
- ALL WEEP HOLES SHALL BE PLUGGED.
- HYDRANT LOCATED AT LEAST 3' OR MORE FROM ANY STORM WATER PIPE OR DITCH AND AT LEAST 6' OR MORE FROM ANY SANITARY SEWER STRUCTURE.
- FOR CLEARANCE ISSUES, PLEASE REFER TO CURRENT FLORIDA FIRE PREVENTION CODE REQUIREMENTS.
- COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (BLUE = WATER, PURPLE = REUSE)
- ASSEMBLY SHALL BE BEDDED IN 6" OF 57 STONE OR CRUSHED SHELL AND INSTALLED AT PROPER BURIAL DEPTH.
- FIRE HYDRANT ASSEMBLY INCLUDING GATE VALVE TO BE LOCATED AS CLOSE TO WATER MAIN AS POSSIBLE.
- GRADELOCK CONNECTION TO BE USED BETWEEN VALVE AND HYDRANT. FUSION BONDED EPOXY. ROTATE TO FINAL GRADE.

CITY OF VENICE
 ENGINEERING DEPARTMENT
 401 WEST VENICE AVE.
 VENICE FL 34285
 (941) 486-2626
 FAX (941) 480-3031

UTILITIES - WATER
FIRE HYDRANT ASSEMBLY

DATE
 JAN 2021
 SHEET NO.
W-2

Plotted By: Rundo, Nick Sheet Set: Pinbrook, Curry, MF, Layout: C-4B UTILITY DETAILS December 20, 2021 07:05:58pm K:\SAR-Civil\148876005-Pinbrook, Curry, MF, CAD, Plans\SheetSet-C-4 UTILITY DETAILS.dwg
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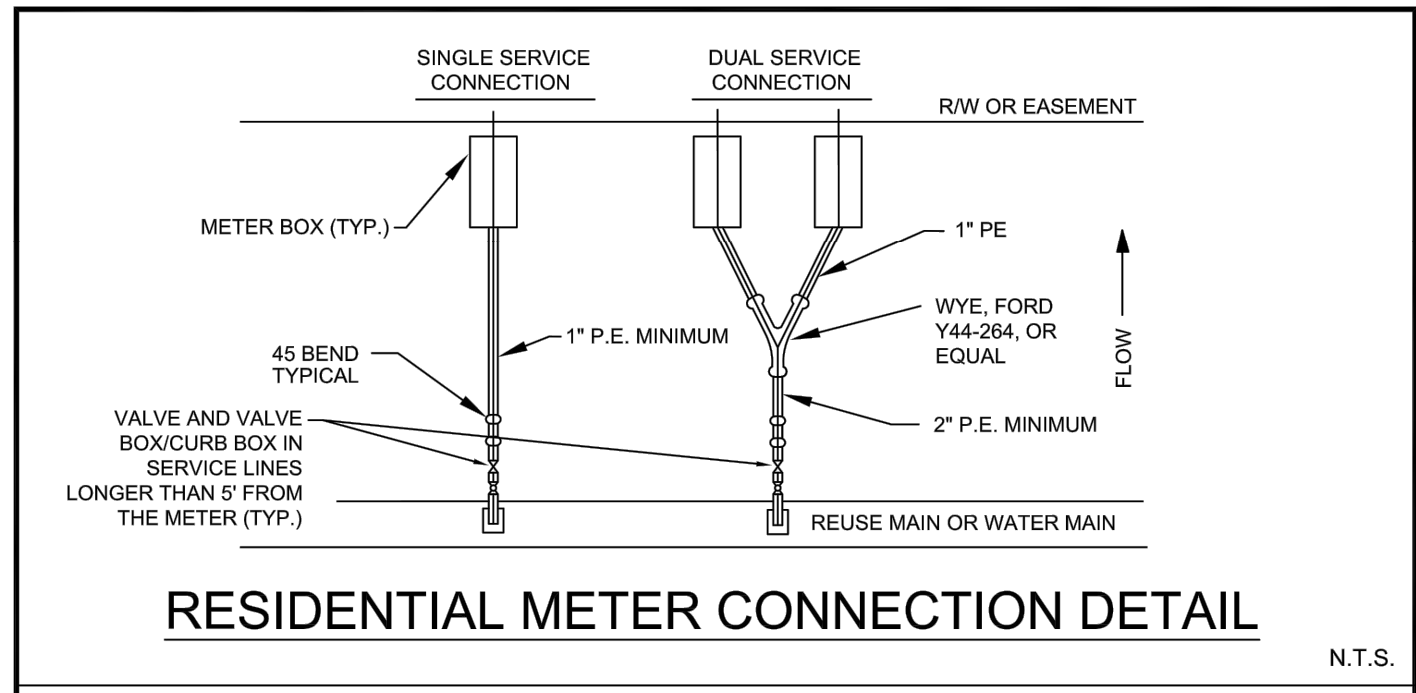


- 1) EITHER 90-DEGREE OR 45-DEGREE FITTINGS MAY BE USED WITH THE REQUIRED LENGTH OF RESTRAINED JOINT FITTINGS.
- 2) BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE DETERMINED BY THE CITY OF VENICE UTILITIES DEPARTMENT'S MOST CURRENT CROSS-CONNECTION CONTROL PROGRAM MANUAL, AND SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE METER.
- 3) ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR ASSE 1013.
- 4) ALL CONCRETE PIPE PENETRATIONS SHALL BE PROTECTED WITH A PVC SLEEVE, ONE SIZE LARGER THAN RISER PIPE.
- 5) VALVES SHALL BE FULL PORTED FULL FLOW BALL VALVES OR RESILIENT VERGED NON-RISING STEM GATE VALVES.
- 6) PIPE BETWEEN TAP & ISOLATION VALVE SHALL BE C900 PVC.
- 7) THE BACKFLOW ASSEMBLY SHALL MATCH THE WATER METER SIZE.
- 8) METERS 1-1/2" AND UP WILL HAVE FLANGES. LAY LENGTHS MUST BE VERIFIED PRIOR TO CONSTRUCTION OF ASSEMBLIES.
- 9) ASSEMBLIES 2" AND UP REQUIRE ONE UNION ON THE UPSTREAM RISER.
- 10) ASSEMBLIES 1-1/2" AND SMALLER REQUIRE TWO UNIONS.
- 11) METERS 1-1/2" AND SMALLER REQUIRE A LOCKABLE CURB STOP.
- 12) NO SPOOL PIECE REQUIRED FOR 3/4", 1", OR 1 1/2".
- 13) ALL COMMERCIAL AND MULTI FAMILY UNIT METERS MUST BE ABOVE GRADE. REUSE METERS 2" AND LESS MAY BE BELOW GROUND.
- 14) BACKFLOW PREVENTION ASSEMBLY AND BYPASS ARE NOT REQUIRED FOR REUSE METER ONLY.
- 15) BACKFLOW PREVENTION ASSEMBLIES SHALL ONLY BE BY-PASSED IF A TEMPORARY RP IS INSTALLED ON BY-PASS.
- 16) NO BRANCH OR TEE SERVICE CONNECTIONS SHALL EXIST BETWEEN THE WATER METER AND BACKFLOW PREVENTER.
- 17) THE ENGINEER OF RECORD SHALL SUBMIT METER SIZING CALCULATIONS BASED ON SERVICE DEMAND PER AWWA M-22 AND SUBJECT TO APPROVAL BY THE UTILITY DEPARTMENT.
- 18) PARALLEL BACKFLOW ASSEMBLY MAY BE PERMITTED TO ALLOW FOR UNINTERRUPTED SERVICE AND SHALL PROVIDE THE SAME DEGREE OF PROTECTION OR GREATER.
- 19) NO PVC SHALL BE PERMITTED ON THE CITY SIDE.

METER SIZE (IN.)	BY-PASS SIZE (IN.)
3/4"	NO BYPASS
1"	NO BYPASS
1 1/2"	1"
2"	1 1/2"
3"	2"
4"	3"

WATER & REUSE METER & BACKFLOW PREVENTION ASSEMBLY
ABOVE GROUND COMMERCIAL/MULTI-UNIT/SINGLE SERVICE/MASTER METER
N.T.S.

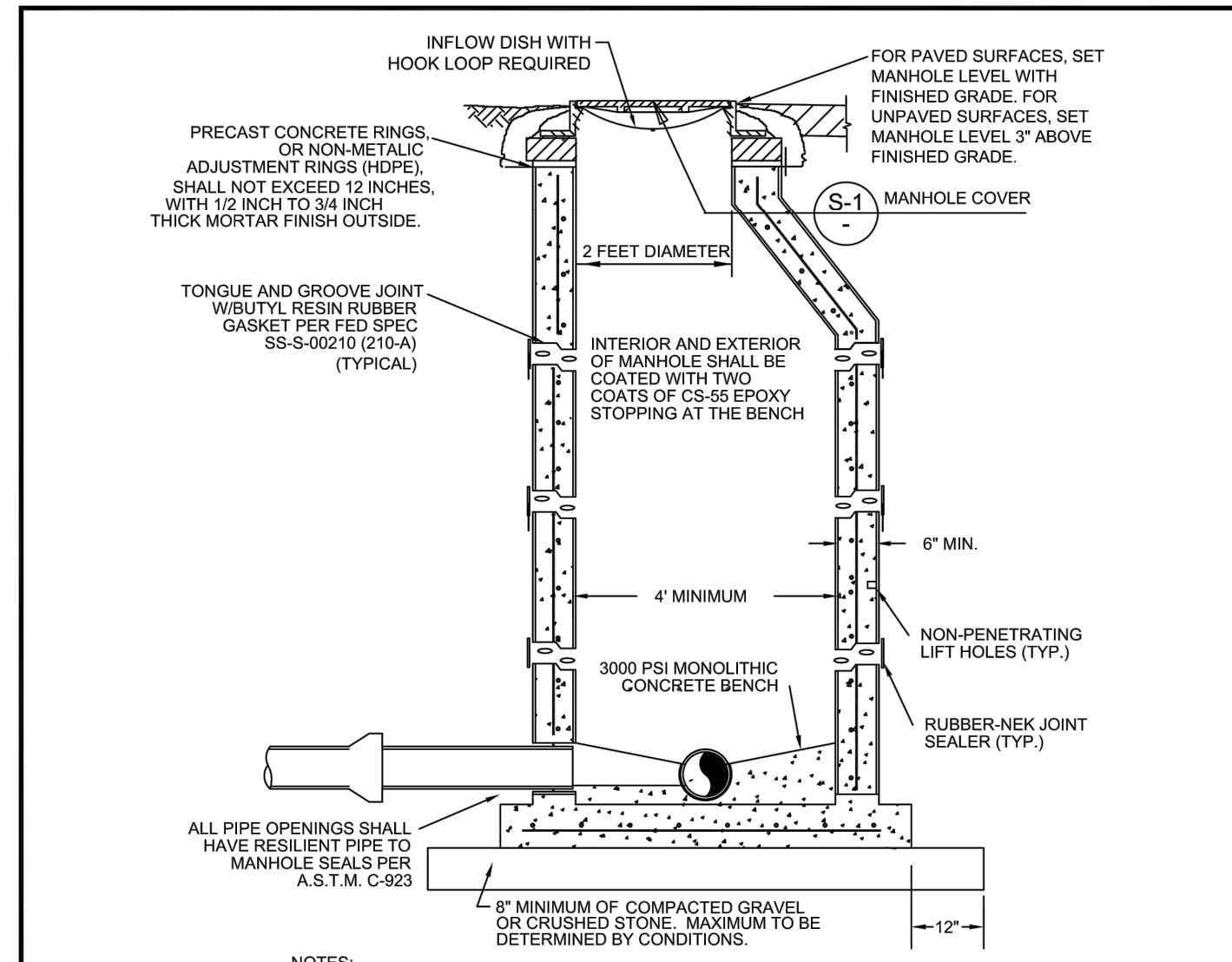
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	WATER & REUSE METER & BACKFLOW	SHEET NO. W-4



- 1) TAPS SHALL NOT BE CLOSER THAN TWO FEET APART OR WITHIN TWO FEET OF ANY JOINT.
- 2) TAPS IN MULTIPLE GROUPS SHALL NOT BE MADE IN THE SAME LONGITUDINAL LINE OF THE PIPE BUT MUST BE STAGGERED VERTICALLY.
- 3) TAPPING SADDLE SHALL BE EPOXY COATED, DUCTILE IRON BODY WITH SS 316 BAND(S) AND HARDWARE.
- 4) BRASS FITTINGS AND BALL VALVES SHALL BE FORD F1100 OR EQUAL.
- 5) CITY-APPROVED CURB BOXES SHALL BE USED ON THE CURB STOP AT THE MAIN, WHEN THE WATER SERVICE EXCEEDS 5' FROM THE METER, AND THE SERVICE IS 2" OR LESS IN DIAMETER.
- 6) ALL SERVICES SHALL HAVE COPPER TRACING WIRE.
- 7) ALL SLEEVE ENDS SHALL BE SEALED WITH FOAM SEAL.
- 8) INSERT STIFFENERS WILL NOT BE ACCEPTABLE.
- 9) ALL WATERWORKS BRASS MUST BE LEAD FREE.
- 10) METER SIZE AND SERVICE LINE PIPING DOWNSTREAM OF METER SHALL BE MINIMALLY SIZED BASED ON FIXTURE CALCULATIONS DETERMINED BY THE EOR.
- 11) FOR CURBED ROADWAYS: CURBS SHALL BE ETCHED WITH THE LETTER "W" FOR WATER SERVICE AND "R" FOR REUSE SERVICE DIRECTLY PERPENDICULAR TO THE METER.

WATER & REUSE SERVICE CONNECTION
N.T.S.

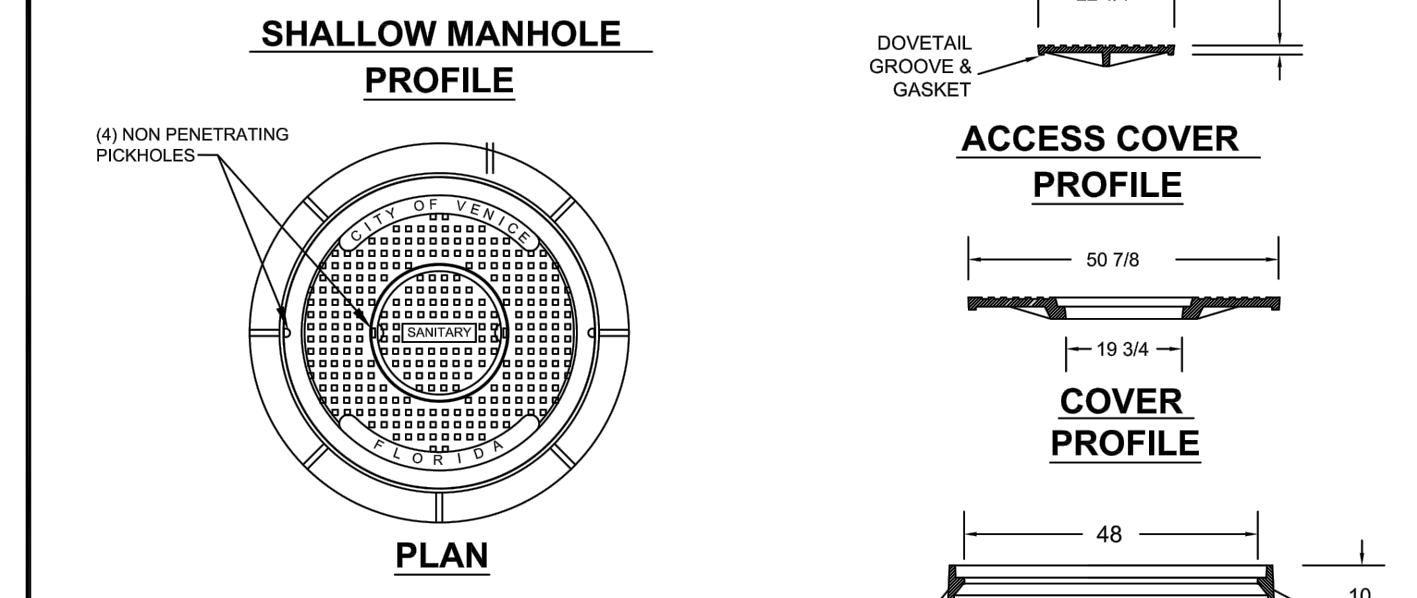
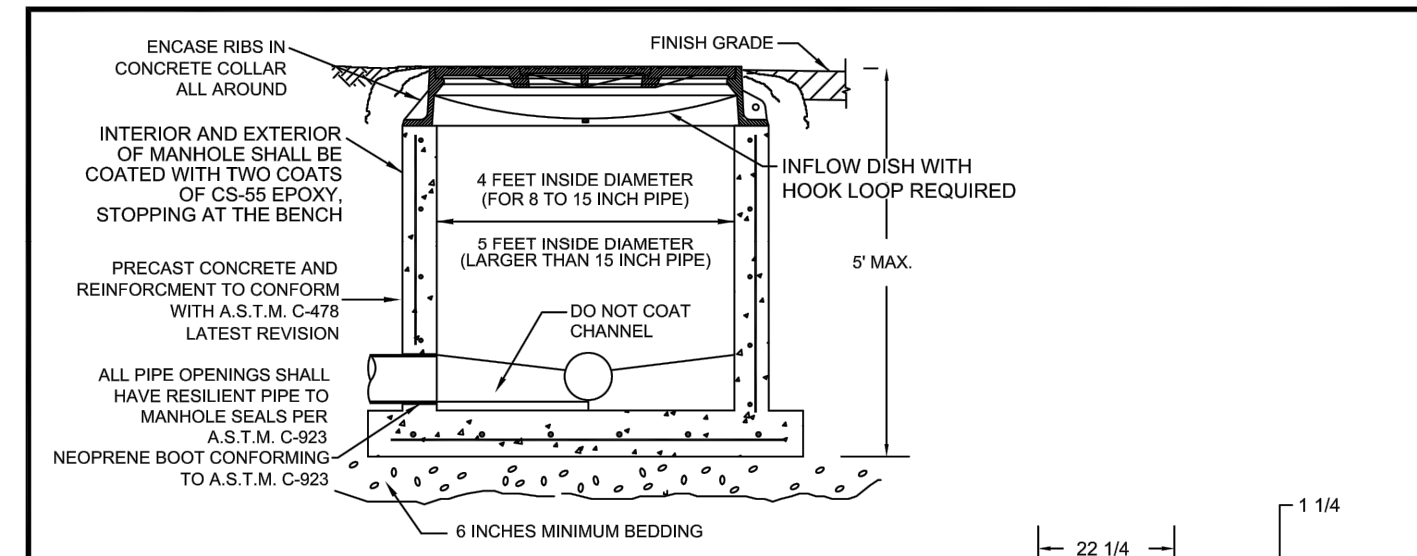
CITY OF VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITIES - WATER	DATE JAN 2021
	RESIDENTIAL METER & SERVICE CONNECTION	SHEET NO. W-8



- 1) MANHOLE SHALL CONFORM TO A.S.T.M. C-478 LATEST REVISION TYPE II CONCRETE, 4000 P.S.I. 28 DAY COMPRESSIVE STRENGTH.
- 2) TURBULENT MANHOLES AND DROP MANHOLES SHALL BE LINED WITH AGRU SURE GRIP HDPE. FOR EXISTING MANHOLES RECEIVING FORCE MAINS, LINE WITH RAVENS COAT 405 EPOXY.
- 3) ECCENTRIC CONE MANHOLES SHALL BE USED WHENEVER POSSIBLE, WHERE STRUCTURAL CONDITIONS DICTATE. A CONCENTRIC CONE MAY BE USED IN LIEU OF AN ECCENTRIC CONE.
- 4) FOR MANHOLES LESS THAN 5 FEET IN DEPTH, A SHALLOW MANHOLE (DETAIL 8, THIS SHEET) SHALL BE USED.
- 5) MONOLITHIC, DUCTILE IRON ADJUSTMENT RINGS MAY ONLY BE USED FOR SURFACE OVERLAY PROJECTS, NOT FOR NEW CONSTRUCTION.
- 6) INFLOW DISH SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.

SANITARY SEWER MANHOLE DETAIL
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITIES - SEWER	DATE JAN 2021
	SANITARY SEWER MANHOLE	SHEET NO. S-2

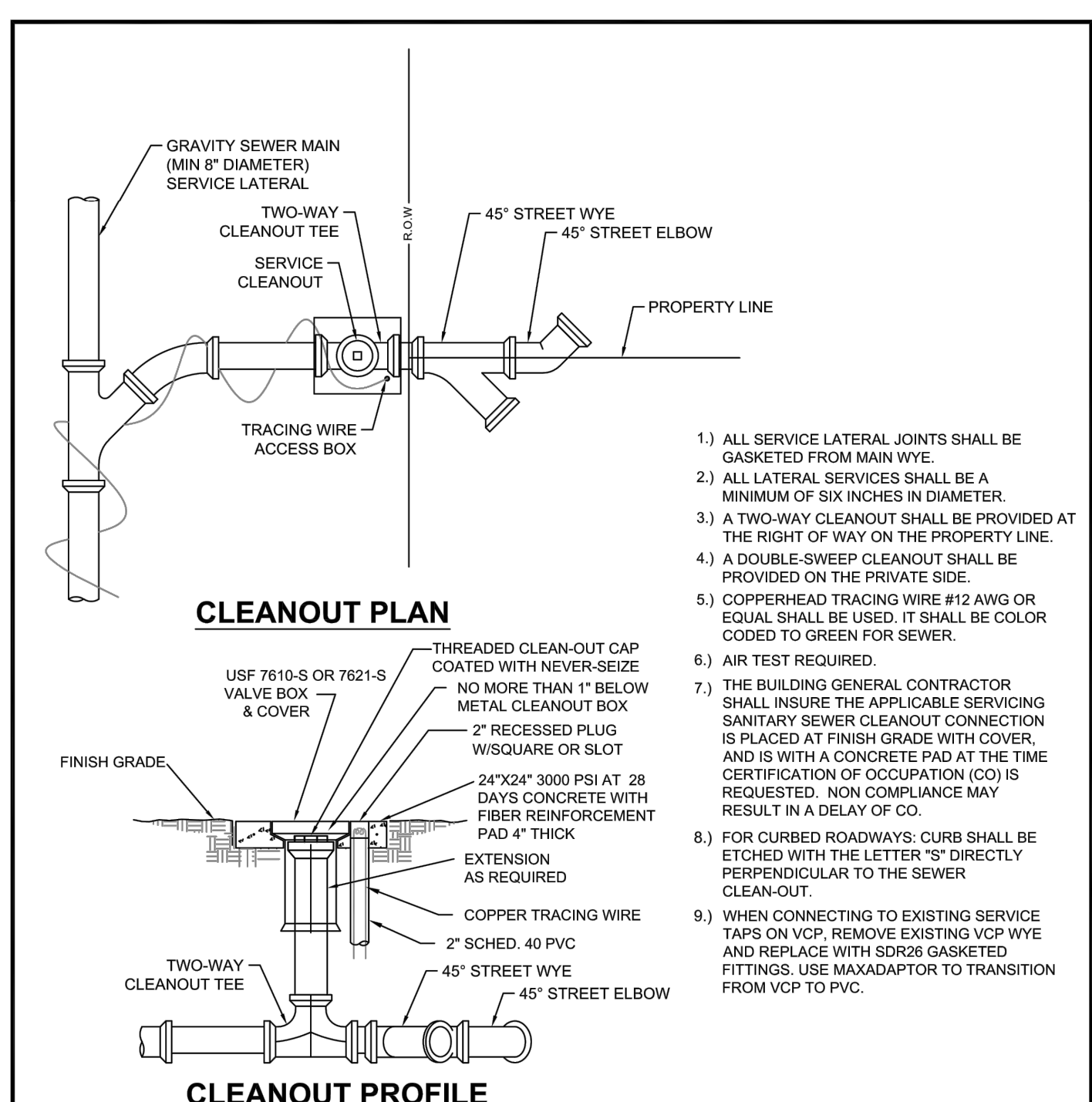


- 1) SHALLOW MANHOLE SHALL BE INSTALLED WHEREVER THE BASE OF THE MANHOLE IS LESS THAN 5 FEET BELOW THE FINISHED GRADE.
- 2) MANHOLE SHALL CONFORM TO A.S.T.M. C-478 LATEST REVISION TYPE II CONCRETE, 4000 P.S.I. 28 DAY COMPRESSIVE STRENGTH.
- 3) INTERCEPTOR MANHOLES, DROP MANHOLES, AND MANHOLES WITH INTERCEPTING FORCE MAINS SHALL BE LINED.
- 4) ALL JOINTS SHALL BE WRAPPED WITH RUBBER-NEK SEALER.
- 5) INFLOW DISH SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
- 6) COVER SPECIFICATIONS:
MATERIAL: ASTM A88 CLASS 308 GRAY IRON.
RING WT: 700 LBS. APP. (USF 690-AG-M)
OUTER COVER WT: 675 LBS. APP.
INNER COVER WT: 105 LBS. APP.

SHALLOW MANHOLE PROFILE
N.T.S.

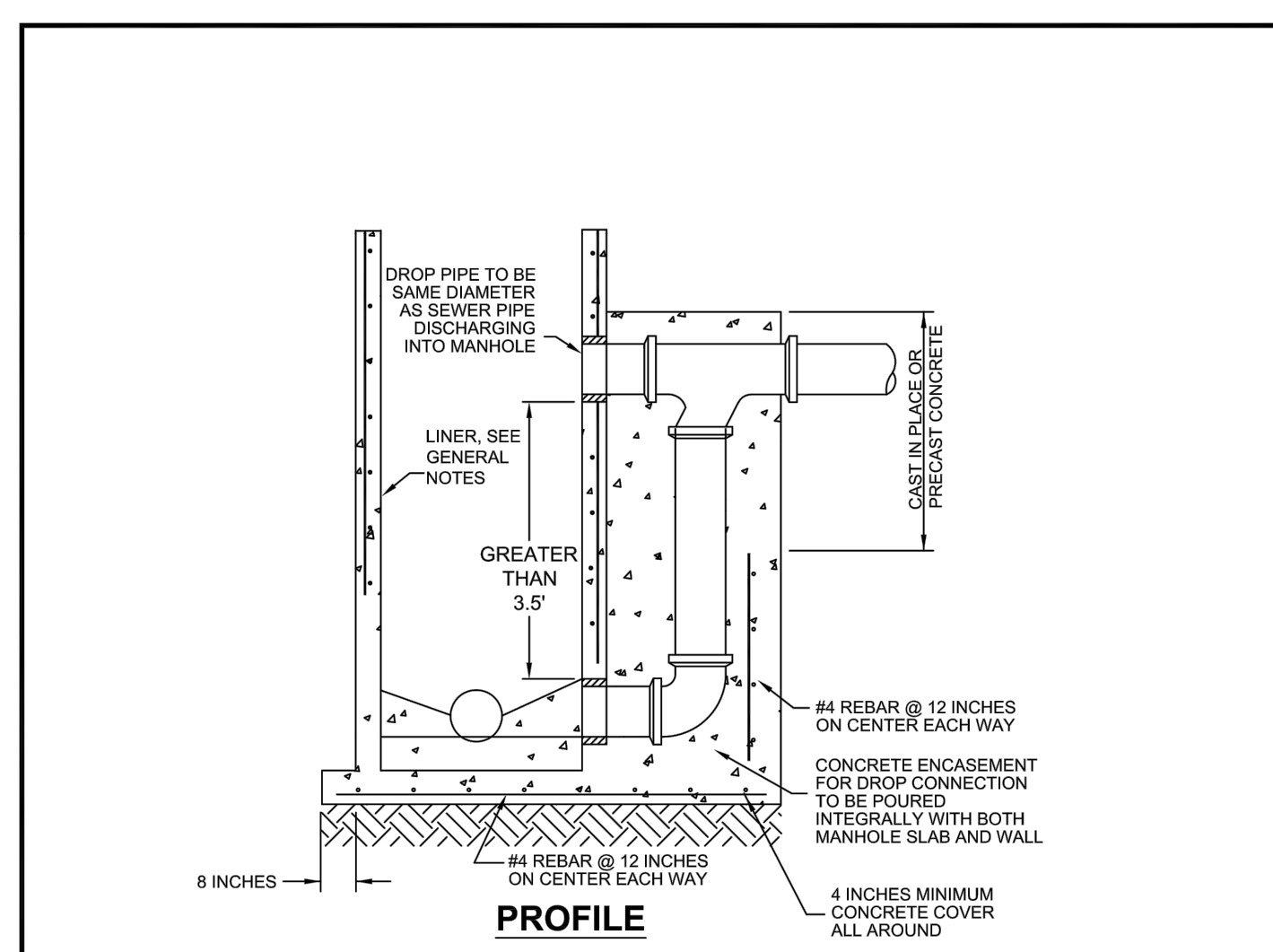
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	PRECAST SHALLOW MANHOLE	SHEET NO. S-3

RECORD DRAWINGS
March 15, 2023
APPROVED



- 1) ALL SERVICE LATERAL JOINTS SHALL BE GASKETED FROM MAIN WYE.
- 2) ALL LATERAL SERVICES SHALL BE A MINIMUM OF SIX INCHES IN DIAMETER.
- 3) A TWO-WAY CLEANOUT SHALL BE PROVIDED AT THE RIGHT OF WAY ON THE PROPERTY LINE.
- 4) A DOUBLE-SWEEP CLEANOUT SHALL BE PROVIDED ON THE PRIVATE SIDE.
- 5) COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE USED. IT SHALL BE COLOR CODED TO GREEN FOR SEWER.
- 6) AIR TEST REQUIRED.
- 7) THE BUILDING GENERAL CONTRACTOR SHALL INSURE THE APPLICABLE SERVICING SANITARY SEWER CLEANOUT CONNECTION IS PLACED AT FINISH GRADE WITH COVER, AND IS WITH A CONCRETE PAD AT THE TIME CERTIFICATION OF OCCUPATION (CO) IS REQUESTED. NON COMPLIANCE MAY RESULT IN A DELAY OF CO.
- 8) FOR CURBED ROADWAYS: CURBS SHALL BE ETCHED WITH THE LETTER "S" DIRECTLY PERPENDICULAR TO THE SEWER CLEAN-OUT.
- 9) WHEN CONNECTING TO EXISTING SERVICE TAPS ON VCP, REMOVE EXISTING VCP WYE AND REPLACE WITH SDR26 GASKETED FITTINGS. USE MANADAPTOR TO TRANSITION FROM VCP TO PVC.

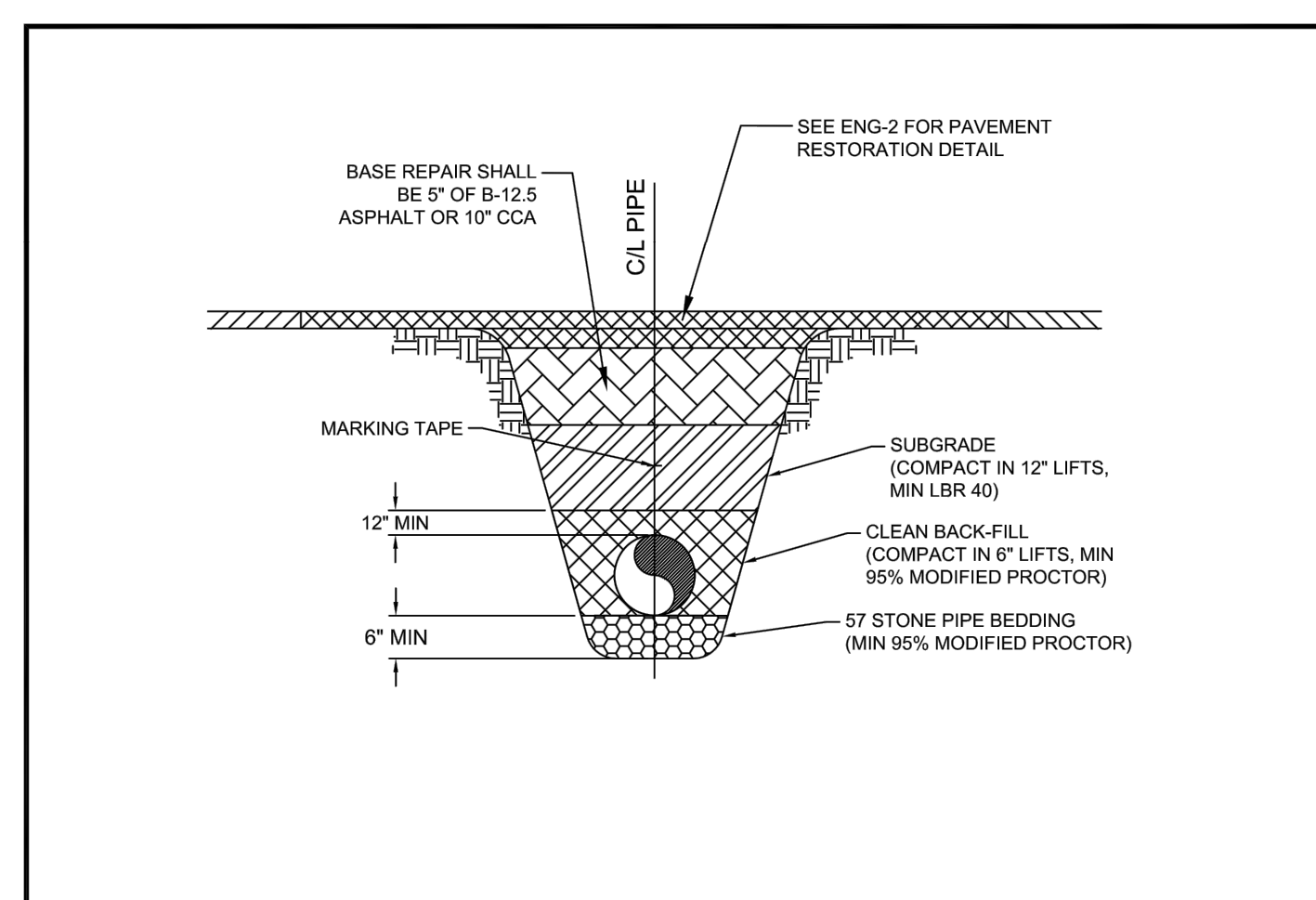
CITY OF VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITIES - SEWER	DATE JAN 2021
	SEWER SERVICE & CLEANOUT	SHEET NO. S-4



- 1) MANHOLE SHALL CONFORM TO A.S.T.M. C-478 LATEST REVISION TYPE II CONCRETE, 4000 P.S.I. 28 DAY COMPRESSIVE STRENGTH.
- 2) THE NEW CONSTRUCTION OF INTERCEPTOR MANHOLES, DROP MANHOLES, AND MANHOLES INTERCEPTING FORCE MAINS SHALL BE LINED WITH AGRU SURE GRIP HDPE WITH CONCRETE LINER. WHEN CONNECTING TO EXISTING MANHOLES, USE 250 MILS RAVEN 405 OR SPRAY WALL SPRAY-APPLIED LINER.
- 3) DROP MANHOLES SHALL NOT BE USED WITHOUT WRITTEN PERMISSION FROM THE UTILITY DEPARTMENT.

SANITARY SEWER DROP MANHOLE
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITIES - SEWER	DATE JAN 2021
	SANITARY DROP MANHOLE	SHEET NO. S-5



- 1) COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE ATTACHED TO TOP OF PIPE AT 20' INTERVALS ON ALL SEWER MAINS. IT SHALL BE COLOR CODED GREEN FOR SEWER.
- 2) MINIMUM COVER SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE.
- 3) INSTALLATION OF PIPE SHALL BE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 4) PAVEMENT RESTORATION SHALL CONFORM WITH DETAIL ENG-2 OF THESE CITY STANDARDS.
- 5) ALL UTILITIES (PUBLIC AND PRIVATE) THAT CROSS A DITCH / SWALE SHALL BE 36" MIN BELOW THE ACTUAL / DESIGN BOTTOM OF CONVEYANCE.
- 6) MARKING TAPE SHALL BE PROVIDED PER U-1.

SEWER PIPE TRENCH DETAIL
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITIES - GENERAL	DATE JAN 2021
	SEWER PIPE TRENCH	SHEET NO. S-6

Kimley-Horn
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 WWW.KIMLEY-HORN.COM REGISTRY NO. 696

WATERMARK AT VENICE
 PREPARED FOR
THOMPSON THRIFT DEVELOPMENT, LLC

UTILITY DETAILS

SHEET NUMBER
C-4B

PROJECT 149876005	DATE 12/15/21	SCALE AS SHOWN	DRAWN BY KCK	CHECKED BY KCK
KHA PROJECT		DATE		BY
SCALE		DRAWN BY		DATE
CHECKED BY		DATE		BY

STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 88712
 KYLE C. KRACEL

CITY OF VENICE
 FLORIDA