UTILITY RECORD DRAWINGS FOR

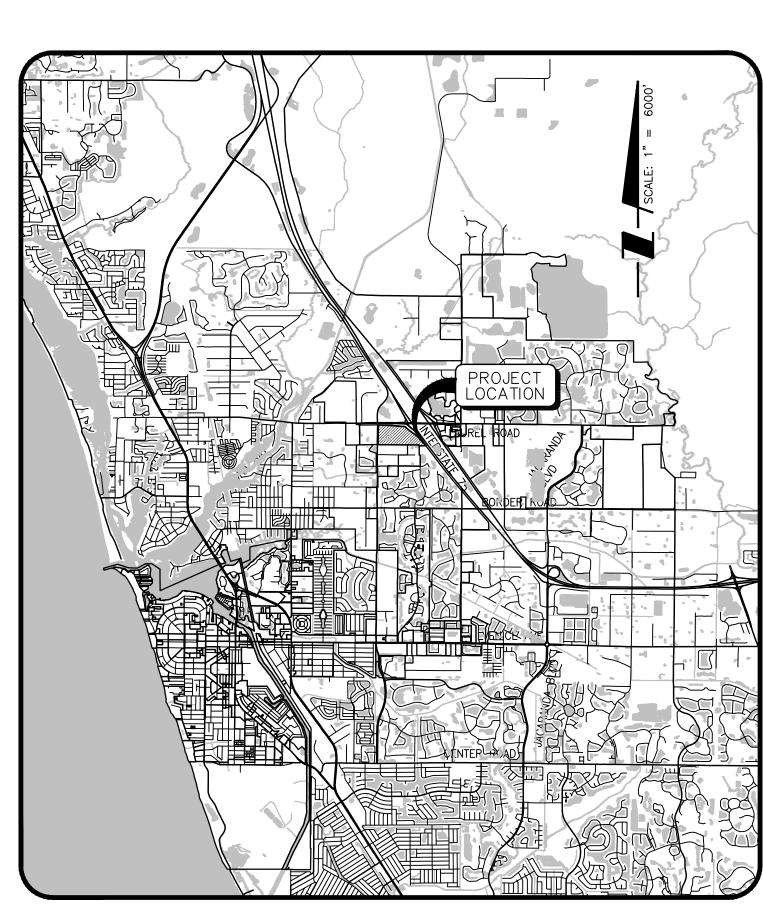
FORCEMAIN EXTENSION

PART OF SECTION 35, TOWNSHIP 38 SOUTH, RANGE 19 E, SARASOTA COUNTY, FLORIDA

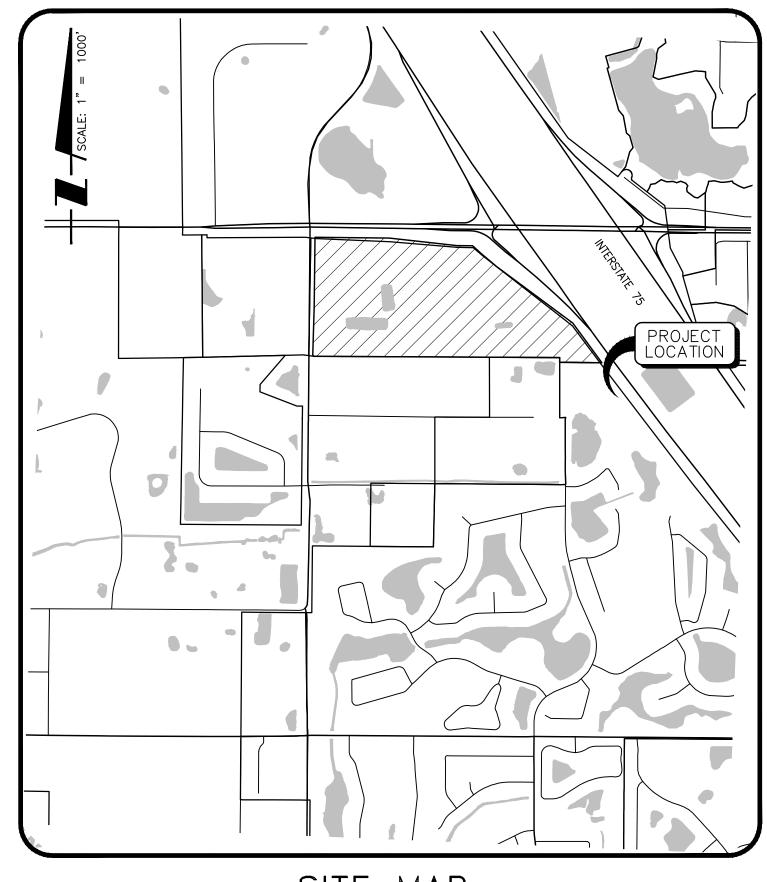
A DEVELOPMENT BY

SARASOTA MEMORIAL HEALTH CARE SYSTEM

1700 SOUTH TAMIAMI TRAIL SARASOTA, FLORIDA, 34239 (941) 917-2048







SITE MAP

NOTE: AS-BUILT INFORMATION IS SHOWN IN BRACKETS []
NOTE: AS-BUILT INFORMATION PROVIDED BY CONTRACTOR IS SHOWN IN PARENTHESES ()

AS-BUILT DRAWING



5265 OFFICE PARK BLVD. SUITE 101, BRADENTON, FLORIDA 34203
(941) 748-8340 (941) 896-9938 FAX

I HEREBY CERTIFY THAT THE AS—BUILT DRAWING OF THE IMPROVEMENTS
SHOWN IN BRACKETS [] UPON THE DESIGN CONSTRUCTION PLANS, IS
TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF A TRUE AND
CORRECT REPRESENTATION OF THE IMPROVEMENTS AS SHOWN AND WERE
COLLECTED IN THE FIELD BY A REPRESENTATIVE UNDER THE DIRECT
SUPERVISION OF THE SURVEYOR AND MAPPER.

DATE OF CERTIFICATION 07-19-2021
DATE OF FIELD SURVEY 06-15-2021

FIGURE 101, BRADENTON, FLORIDA 34203

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND A SEAL OF FLORIDA
LICENSED SURVEYOR AND MAPPER. THE SEAL APPEARING ON THIS
DOCUMENT WAS AUTHORIZED BY GERALD D. STROOP, JR., P.S.M.

GERALD D. STROOP, JR, PSM

FIGURAL SERVICIONES

FIGURAL SERVI

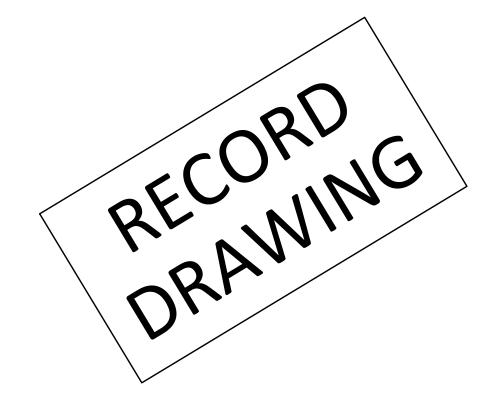
FLORIDA CERTIFICATE NO. 4679

RECORD DRAWINGS

December 5, 2022

Venice, Florida
"City on the Gulf"

APPROVED



INDEX TO SHEETS

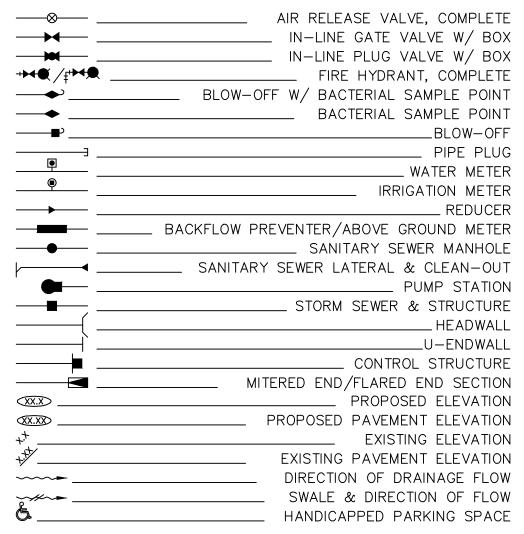
SHEET NO.	DE	SCRIP	TION			
1	COVER SHEET					
2	AERIAL LOCATION MAP					
3	SITE PLAN					
4-7	PLAN	PLAN AND PROFILE				
8	UTILIT	Y DETAILS				
9	BEST	MANAGEMEN	NT PRACTICES F	LAN		
10	BEST	MANAGEMEN	NT PRACTICES D	ETAILS		
<u> </u>						
<u> </u>						
<u>/5\</u>						
4						
<u>/3\</u> <u>/2\</u>						
	07/19/21	07/19/21 RECORD DRAWINGS			CRO	
<u> </u>	10/29/20 DATE				BLB/11	
110.	DATE		TATUS : I	REVISIO		51
PROJ	ECT S	URVEYOR	PROJECT EN		PROJECT MAI	NAGER
	ROBERT R. CUNNINGHAM RYAN D. BRADY, P.E. MELANIE DELEHANT P.S.M. NO.3924 FLORIDA LICENSE NO. 84132 FLORIDA LICENSE					
DATE	<u> </u>		CHE(CKED BY _		
RESERVED FOR STATUS AND DATE STAMPS PROJECT NUMBER						
				4375		
		DATE			INDEX NUMBER	
10)/2	9/202	U		D-ASB 01	

LEGEND

ABBREVIATIONS

ROC	BACK OF CURB or BACK OF GUTTER
	BACK OF COND OF BACK OF COTTEN
	DRAINAGE EASEMENT
	LAKE MAINTENANCE EASEMENT
	UTILITY EASEMENT
CUE	COUNTY UTILITY EASEMENT
	ELEVATION
INV	INVERT
LF	LINEAR FEET
NGVD	NATIONAL GEODETIC VERTICAL DATUM
PVI	POINT OF VERTICAL INTERSECTION
	NOT IN CONTRACT
R/W or ROW	RIGHT OF WAY
SB	SOIL BORING
STA	STATION
	UTILITY POLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
	CABLE TELEVISION
	FLORIDA POWER & LIGHT
	UNITED TELEPHONE OF FLORIDA
_	BASE LINE
_	CENTERLINE
_	FLOW LINE
_	PROPERTY LINE
	CORRUGATED METAL PIPE
	DUCTILE IRON PIPE
	POLYVINYL CHLORIDE PIPE
	HIGH DENSITY POLYETHYLENE
	REINFORCED CONCRETE PIPE
	_ ELLIPTICAL REINFORCED CONCRETE PIPEMANHOLE
MH	MANHOLE
	STORM SEWER STRUCTURE FEET LEFT or FEET RIGHT
7.77 LI/ 7.77 NI	ILLI LEFI OI FEET RIGHT

SYMBOLS



NOTE: OPEN SYMBOLS AND DASHED LINES DENOTE EXISTING IMPROVEMENTS





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Flad Structural Engineers Flad & Associates, Inc.

644 Science Drive Madison, WI 53711 Tel 608-238-2661 Fax 608-238-6727 www.flad.com



LICENSE #: CA 5140 Affiliated Engineers SE, Inc. 777 S Harbour Island Blvd. #450 Tampa, FL 33602 Tel: (813) 405-3800

Revision		By	Appd	YYYY.MM.DD
1 RECORD DRAWINGS 0 CONSTRUCTION DOCUMENTS		CROSS BLB	117073	07/19/21
Issued		Ву	Appd	YYYY.MM.DD
File Name: 215614375-006-002PL	RTD Dwn.	RTD Dsgn.	MDS Chkd.	2020-08-01 YYYY.MM.DD

Permit/Seal

MELANIE DELEHANTY SMITH, P.E. FLORIDA LICENSE NO. 75447

Client/Project Logo

smh

SARASOTA COUNTY PUBLIC HOSPITAL DISTRICT

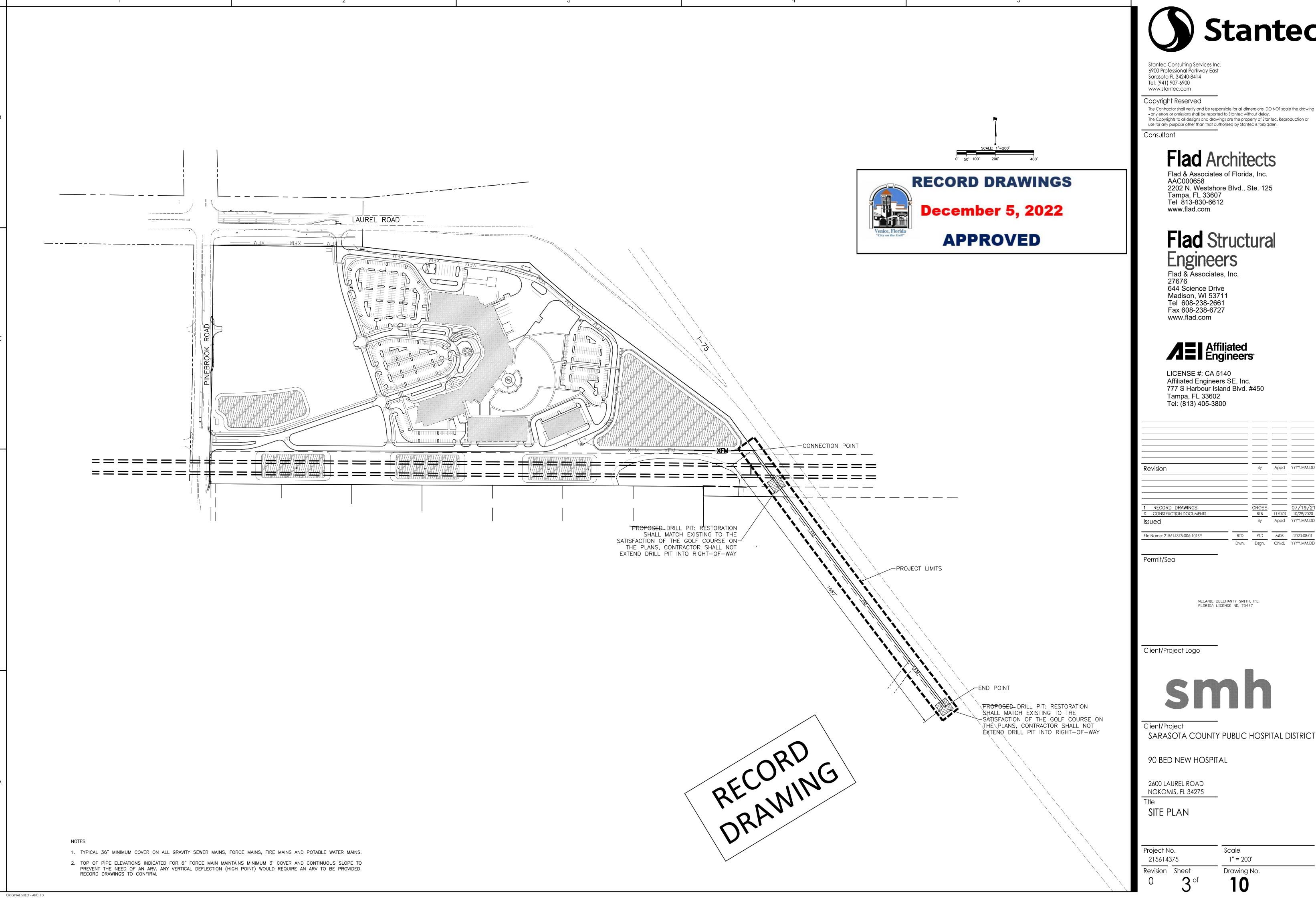
90 BED NEW HOSPITAL

2600 LAUREL ROAD NOKOMIS, FL 34275

AERIAL LOCATION MAP

Project No. 215614375 Scale 1" = 200'

Drawing No.





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644 Science Drive Madison, WI 53711



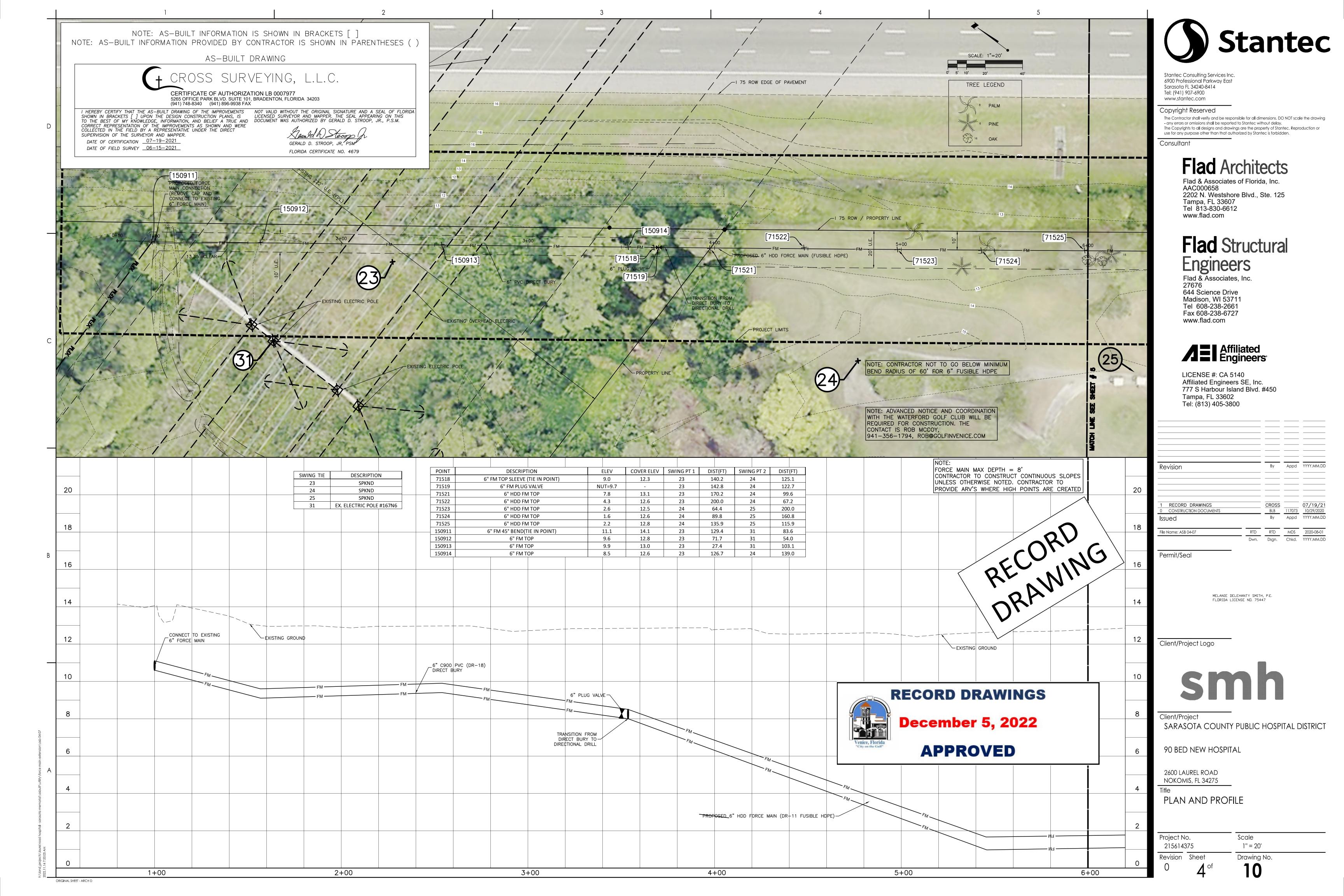
Affiliated Engineers SE, Inc. 777 S Harbour Island Blvd. #450

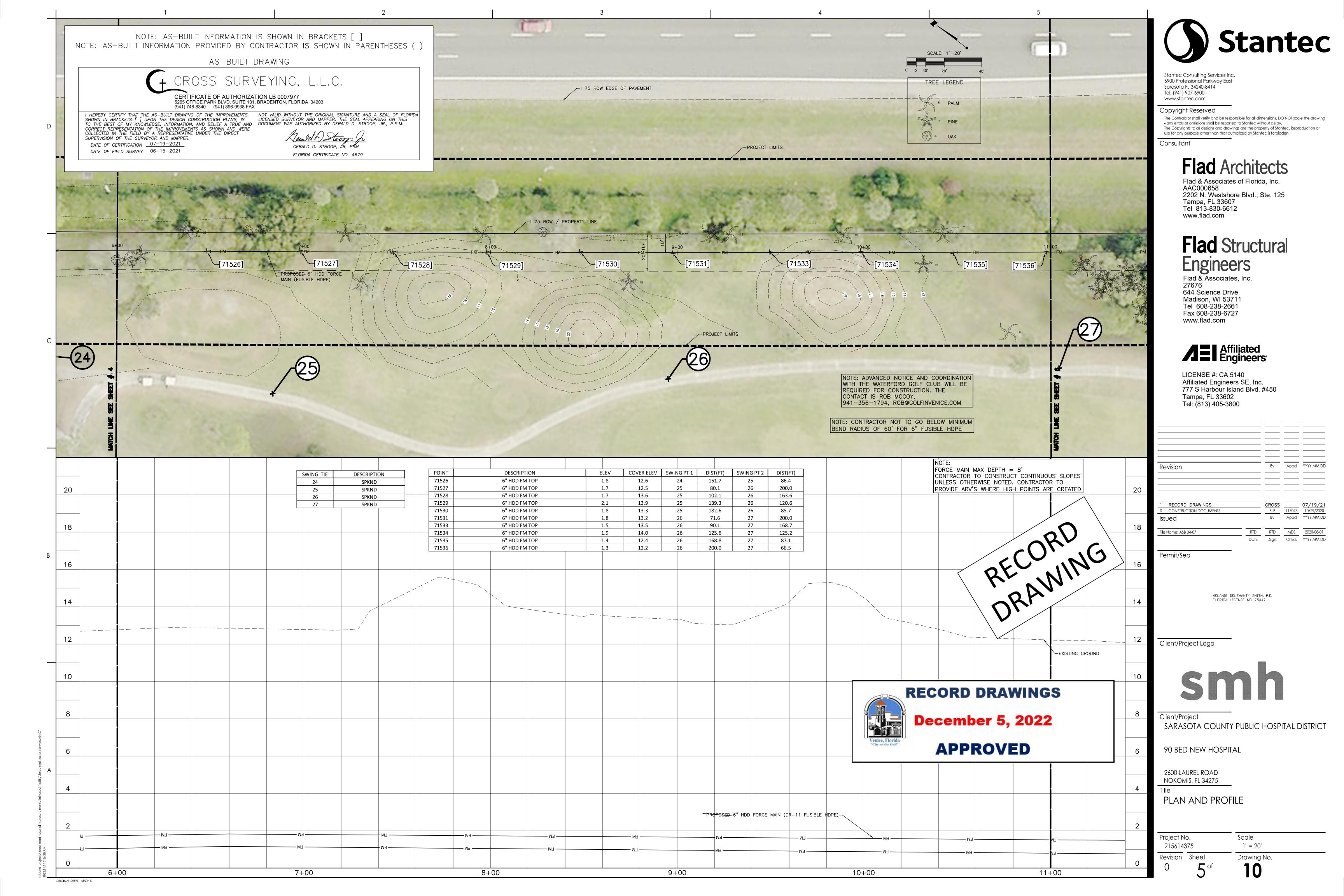
Revision		Ву	Appd	YYYY.MM.DD
1 RECORD DRAWINGS		CROSS		07/19/2
0 CONSTRUCTION DOCUMENTS Issued		BLB	117073 Appd	10/29/2020 YYYY.MM.DE
File Name: 215614375-006-101SP	RTD	RTD	MDS	2020-08-01
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DE

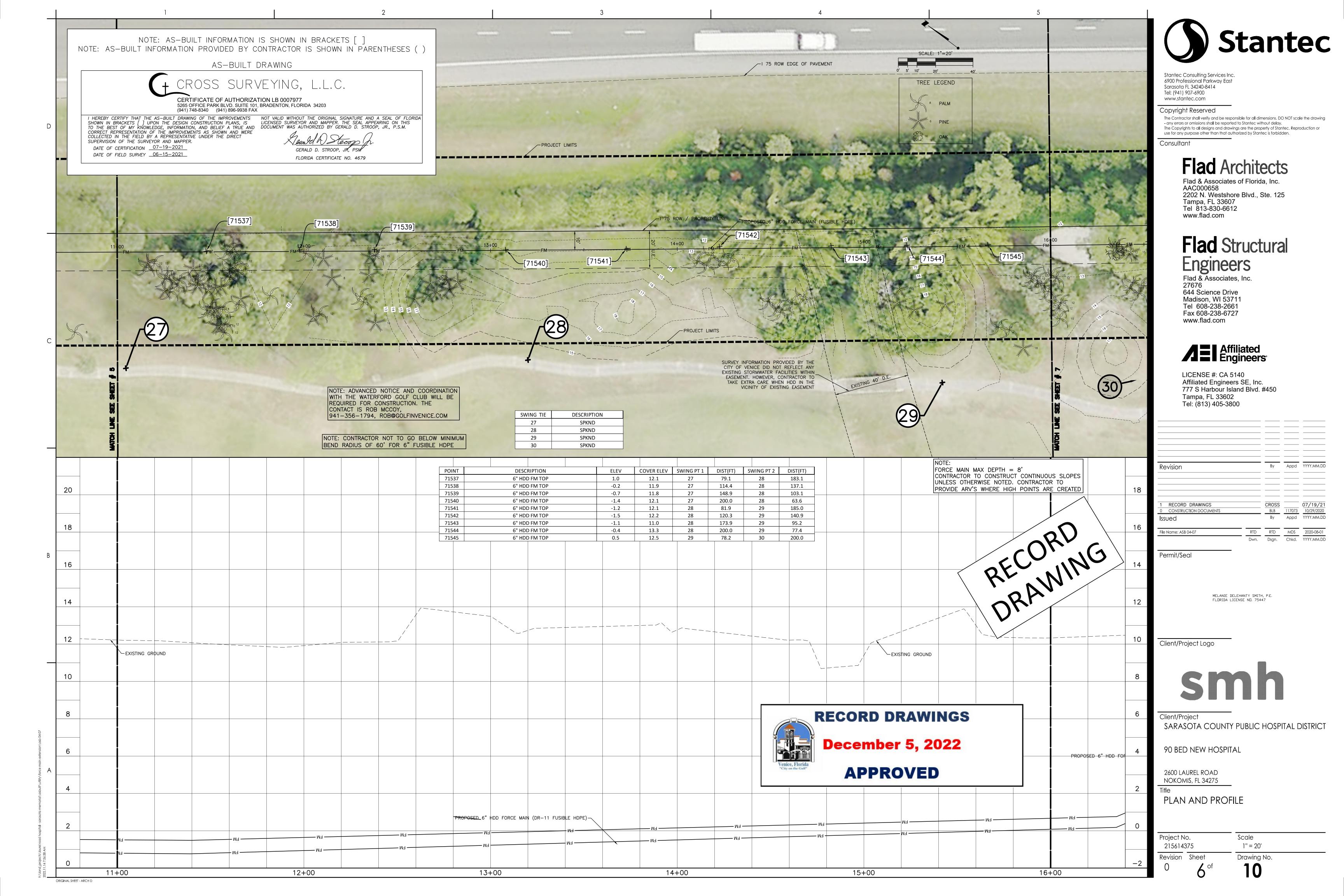
MELANIE DELEHANTY SMITH, P.E. FLORIDA LICENSE NO. 75447

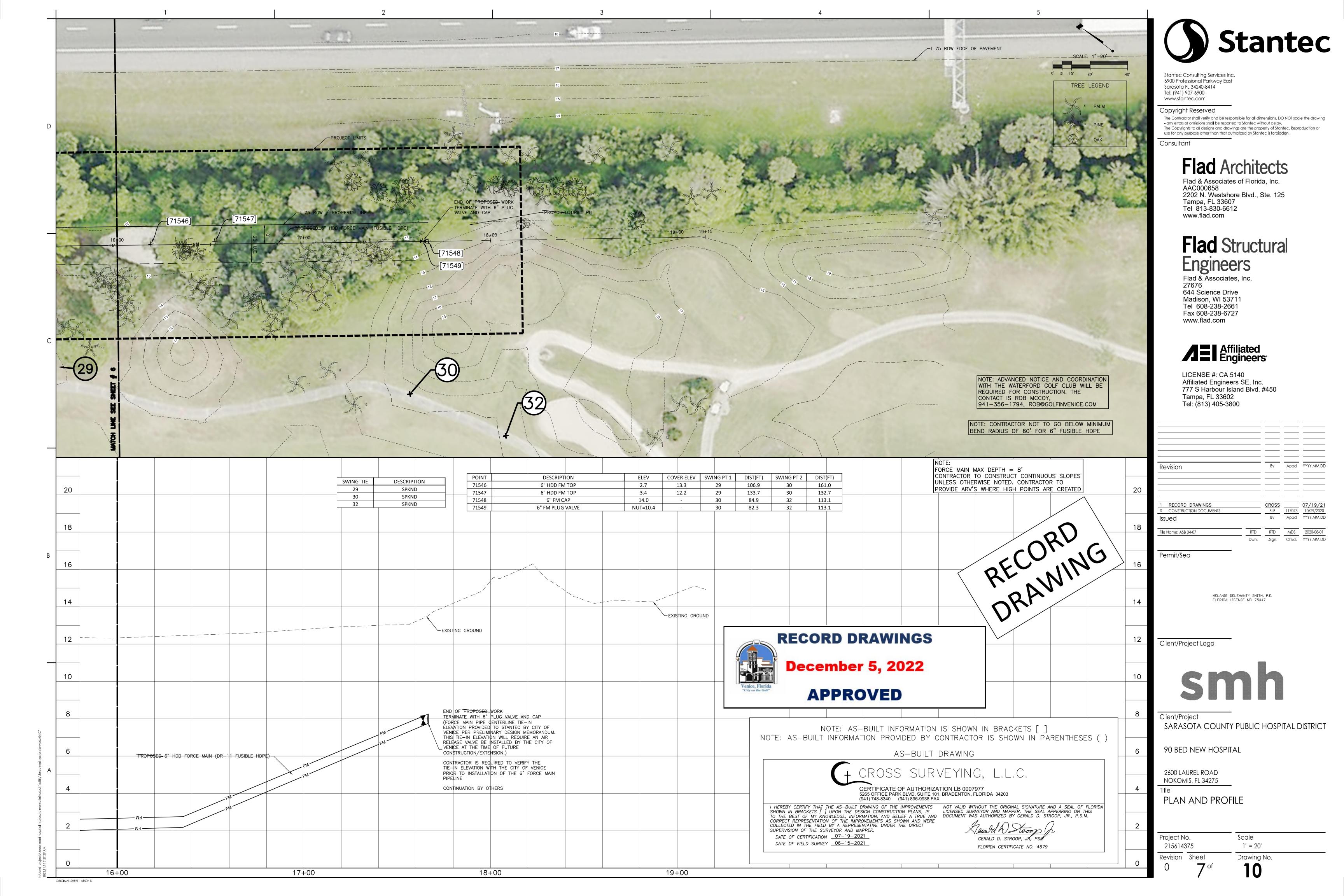


Drawing No.









- . ELEVATIONS SHOWN ON THE PLANS FOR FLOWLINES OF PROPOSED WASTEWATER MAINS SHALL BE ADHERED TO. IN MOST CASES THE DESIGN GRADES ARE CRITICAL AND ADJUSTMENTS CAUSED BY MIS-ALIGNMENT OR IMPROPER
- GRADES ARE IMPRACTICAL. COST TO RELAY MAIN, IF NECESSARY, SHALL BE BORNE BY THE CONTRACTOR. . THE CONTRACTOR SHALL INVESTIGATE AND VERIFY OR HAVE VERIFIED THE LOCATION OF EXISTING UTILITIES AND AN $^\circ$ OTHER SUBSURFACE FACILITIES BEFORE STARTING WORK. HE SHALL BE LIABLE FOR ANY EXPENSE RESULTING FROM DAMAGE TO SAME. ANY CONFLICTS WITH EXISTING UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE
- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE COUNTY, UTILITY COMPANIES AND THE ENGINEER 48 HOURS PRIOR TO ANY WORK AT SITE AND 48 HOURS PRIOR TO ANY TESTING.
- DELAYS OF PROJECT SHALL NOT BE INCURRED. THE COST FOR THE HOLDING OF THE POWER POLES SHALL BE INCLUDED IN THE WASTEWATER MAIN UNIT COST ITEMS CONTAINED IN THE PROPOSAL. S ALL DISTURBED AREAS IN EXISTING LAWNS SHALL BE REPLACED WITH SOD FOLIAL TO OR BETTER THAN EXISTING AND OF THE SAME TYPE. SWALE SLOPES AND BOTTOMS SHALL BE SODDED TO ELIMINATE EROSION. RESTORATION DUE TO EROSION OCCURRING PRIOR TO GRASS ROOTING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE

. THE CONTRACTOR SHALL COORDINATE HOLDING OF POLES WITH UTILITY COMPANIES IN ADVANCE SO UNNECESSARY

- . DUE TO THE PROXIMITY OF EXISTING DRAINAGE STRUCTURES, ROADWAY PAVEMENT, GOLFCART PATHS, CURBS, CULVERTS, RESIDENTIAL STRUCTURES, MAILBOXES, ETC., THE CONTRACTOR SHALL USE EXCAVATING METHODS WHICH SHALL PREVENT ANY DAMAGE TO SAME UNLESS REMOVAL IS REQUIRED. THE COST OF ANY DAMAGE AND THE
- 8. RESTORATION OF ALL EXISTING ROADWAYS TO CITY OF VENICE STANDARDS AND THE REPLACEMENT OF EXISTING CULVERTS AND DRIVEWAYS ETC., SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE SEWER MAIN ITEMS.

· ALL PVC FORCE MAINS SHALL BE GREEN IN COLOR. COLOR CODED PLASTIC COATED METAL TAPE 3" WIDE WITH THE WORD "FORCE MAIN" SHALL BE PLACED 18 INCHES BELOW FINISHED GROUND AND ABOVE FORCE MAIN. ALSO ATTACH A COLOR-CODED CONTINUOUS NUMBER 12 INSULATED WIRE ON TOP OF THE PIPE AND AS INDICATED ON THE DETAILS FOR VALVES, HYDRANTS, BLOWOFFS, ETC. THE COST FOR COLOR TAPE AND COPPER TRACING WIRE SHALL BE INCLUDED IN THE FORCE MAIN UNIT PRICES.

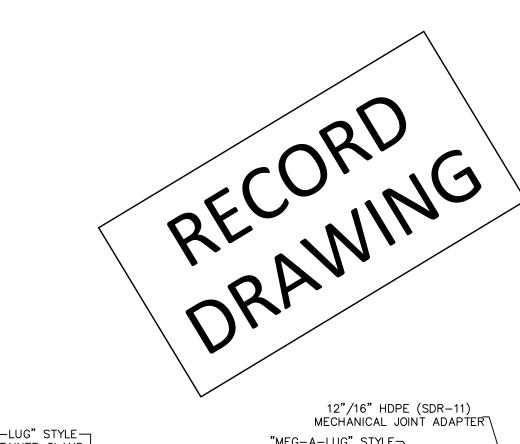
- . TESTING SHALL BE IN CONFORMANCE WITH CITY OF VENICE CODE, OR THE SPECIFICATIONS, WHICHEVER IS MORE
- ADDITIONAL COSTS INVOLVED WITH LAMPING THE NEWLY LAID SEWER PIPE, EXFILTRATION OR INFILTRATION TESTING AND PIPE DEFLECTION TESTS, ALL AS OUTLINED IN THE CITY OF VENICE CODE.
- 3. THE CONTRACTOR SHALL HAVE THE NEW SEWER SYSTEM T.V. INSPECTED AS PER THE CITY OF VENICE CODE.
- . THE CONTRACTOR SHALL LOCATE MANHOLES, SERVICES, ETC. BY USING A TWO (2) POINT SWING MEASUREMENT FROM PERMANENT PHYSICAL FEATURES THAT CAN READILY BE FOUND ON THE DRAWING AND IN THE FIELD. THESE MEASUREMENTS SHALL BE SHOWN ON THE AS-BUILT DRAWING BY THE CONTRACTOR.
- : THE CONTRACTOR SHALL FURNISH "AS—BUILT" STATIONING OF SEWER WYES USING EACH DOWN STREAM MANHOLE AS
- 3. TOP OF PIPE ELEVATIONS FOR ALL FORCE MAINS ARE REQUIRED AT A MAXIMUM INTERVAL OF EVERY 100' AND ON
- DIGITAL COPY OF RECORD DRAWINGS IN ACAD 14 FORMAT, RECORD INFORMATION SHALL BE ON UNIQUE LAYER(S), USING TEXT SHAPE FILE THAT COMES WITH STANDARD ACAD.



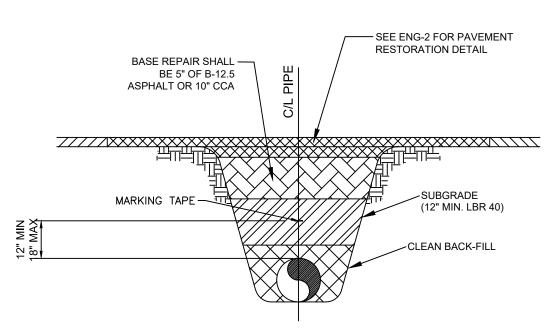
ORIGINAL SHEET - ARCH D

December 5, 2022

APPROVED







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		

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

1.) ALL PIPE FITTINGS SHALL BE COMPACT, DUCTILE IRON.

SHALL BE FUSION BONDED EPOXY COATED INSIDE AND OUT.

PIPE FITTINGS

N.T.S.

3.) ALL FITTINGS SHALL MEET ANSI/AWWA C116/A21.16 STANDARDS.

2.) ALL APPLICATIONS (RAW, POTABLE, REUSE, SEWER)

8.) SEE S-6 FOR GRAVITY SEWER PIPE TRENCH DETAIL.

CITY OF VENICE

ENGINEERING DEPARTMENT

401 WEST VENICE AVE.

VENICE FL 34285

(941) 486-2626

FAX (941) 480-3031

PRESSURE PIPE TRENCH DETAIL

N.1.G.	
UTILITIES - GENERAL	
UTILITY PIPE	
TRENCH	

DATE MAY 2020 SHEET NO.

/ SCH 40 PVC

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

10 | 14

FOR REVIEW AND APPROVAL, USING THE ASSUMPTIONS LISTED ABOVE.

VALVE BOX (AMERICAN FLOW CONTROL).

SHALL BE PERFORMED ON ALL TRACER WIRES.

5.) PRE-CAST PADS MAY BE USED WITH CITY APPROVAL

DIRECTLY PERPENDICULAR TO THE VALVE BOX.

REUSE WATER. AND GREEN FOR SEWER.

UTILITIES - GENERAL VALVE BOX

W/STEM EMBEDDED

24"X24"X6" CONCRETE PAD (3000 PSI AT 28 DAYS WITH

FIBER REINFORCEMENT)

VALVE BOX ASSEMBLY

SHALL BE DUCTILE IRON

2.) UNPAVED AREAS: SET PAD AND COVER 1 INCH ABOVE FINISHED GRADE.

T SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES

6.) FOR CURBED ROADWAYS: CURB SHALL BE ETCHED WITH THE LETTER "V"

(BLUE = WATER, GREEN = SEWER, PURPLE = REUSE). CONTINUITY TEST

7.) VALVE BOX COVERS SHALL BE PAINTED BLUE FOR POTABLE WATER, PURPLE FOR

VALVE BOX DETAIL

N.T.S.

MINIMUM LENGTH (FT) OF FORCE MAIN

TO BE RESTRAINED ON EACH SIDE OF FITTING

22.5 BEND: H 3 4 6 7 8 10 112 14

11.25 BEND: H 2 2 3 3 4 5 5 7

22.5 BEND: H | 5 | 7 | 8 | 10 | 12 | 15 | 118 || 21

11.25 BEND: H 2 3 4 5 6 7 89 10

ABBREVIATIONS: H=HORIZONTAL, VU=VERTICAL UP, VD=VERTICAL DOWN. 1.) FOR TEE OR REDUCER FITTINGS SUBMIT RESTRAINED JOINT LENGTH CALCULATIONS TO CITY ENGINEER

PLUGS: 52 73 96 115 136 174 293 246

2.) RESTRAINED JOINT LENGTH FOR WATER AND REUSE MAINS BASED ON TEST PRESSURE OF 150 PSI. RESTRAINED

MATERIAL (GM) SOIL TYPE, TRENCH TYPE 3, BURY 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

RESTRUCTED JOINT SHALL BE USED ON ALL JOINTS FROM ANY MAIN TEE TO ANY FIRE HYDRANT ASSEMBLY.

4.) THRUST BLOCKS WILL NOT BE ACCEPTED, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

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

PIPE SIZE (INCHES)

4 6 7 9 10 13 1156 19

12 | 20 | 26 | 32 | 37 | 48 | 528 | 68

2 3 4 4 5 6 78 9

8 10 12 16 1**2**0

18 21 25 31 327 43

23 | 33 | 43 | 51 | 60 | 76 | 800 | 104

6 8 11 13 16 20 224 28

22 | 30 | 40 | 48 | 56 | 72 | 8807 | 102

VU 3 | 4 | 5 | 6 | 7 | 10 | 112 | 14

VD 10 15 19 23 27 35 342 49

VD 7 10 13 15 18 23 28 33

MINIMUM LENGTH (FT) OF WATER OR REUSE MAIN TO BE RESTRAINED ON EACH SIDE OF FITTING

12 | 14 | 16 | 21 | 225 |

4) COPPERHEAD TRACING WIRE #12 AWG OR FOUAL SHALL BE USED

12 AWG COPPER TRACING WIRE

1.) PAVED AREAS: SET CONCRETE PAD AND COVER FLUSH WITH FINISHED PAVEMENT SURFACE.

3.) VALVES LOCATED IN DITCH AND OVER 4' DEPTH (LINE) MUST USE TRENCH ADAPTER

2" RECESSED SQUARE -FEMALE PLUG

FOR 12 AWG COPPER TRACING WIRE

2" SCHED. 40 PVC

PROFILE

PLACED FLUSH W/PAD

PLAN

W/SQUARE

THREAD

COUPLING

COMPACT BACKFILL

AROUND TOP SECTION

2" RECESSED PLUG

2" SLIP-BY

VALVE SIZE (I.E. 8)

YEAR INSTALLED (I.E. 2017)

7 3/8 "→

COVER DETAIL

APPROPRIATE SERVICE TYPE

FITTING

45 BEND:

FITTING

90 BEND: H

SHALL BE INDICATED (WATER, SEWER, REUSE, OR FIRE)

SERVICE (REUSE)
DIRECTION & # OF TURNS TO OPEN (I.E. L-10) —

MAY 2020 SHEET NO.

VALVE BOX DETAIL (U-6) - 2" SLIP-BY THREAD COUPLING 2" SCHED. 40 PVC

POTABLE WATER MAIN

RECLAIMED WATER MAIN

WATER MAIN

FORCE MAIN

REUSE MAIN

SANITARY SEWER

STORM WATER

ACCEPTABLE VARIANCES:

THE PIPELINES.

3' MIN

MINIMUM HORIZONTAL

SEPARATION DISTANCES (FT)

(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

OTHER UTILITIES 3 3 3 3 3 3 3

BOTH WATER AND SEWER WHERE POSSIBLE.

CENTERED AT THE POINT OF CROSSING.

CITY OF VENICE

ENGINEERING DEPARTMENT

401 WEST VENICE AVE.

VENICE FL 34285

(941) 486-2626

FAX (941) 480-3031

3 3 3 3 3 3 3

MAXIMUM JOINT DEFLECTION SHALL BE 90% OF MANUFACTURER'S RECOMMENDATION.

UPGRADE MAY BE REQUIRED, AT THE DISCRETION OF THE UTILITY DEPARTMENT.

WHEREVER POSSIBLE, THE LAYOUT OF UTILITIES SHALL PLACE SANITARY SEWER AND SEWER FORCE MAINS BELOW

RECLAIMED MAINS 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

A. WHERE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, C900 DR14 PVC PIPE SHALL BE USED FOR ONE OF

C. WHERE 36" MINIMUM DEPTH OF COVER CANNOT BE MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL

UTILITY CONFLICT & SEPARATION DETAIL

UTILITIES - GENERAL

UTILITY

CONFLICTS &

SEPARATIONS

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.

B. WHERE VERTICAL CLEARANCE CANNOT BE MAINTAINED, ONE FULL LENGTH OF DR14 C900 PIPE SHALL BE INSTALLED

SEWER (GRAVITY OR FORCE MAIN)

1.) PLUG VALVES SHALL BE MANUFACTURED BY DEZURIK.

2.) SEAT OF PLUG VALVE SHALL BE ON THE UPSTREAM SIDE OF THE BODY. 3.) VALVE SHALL BE INSTALLED IN

EXISTING STORM SEWER

POWER, CABLE TV,

DEFLECTION BASED ON -

6' MIN

PIPE SIZE AND TYPE

FORCE MAIN, GAS MAIN

WATER MAIN, TELEPHONE

CABLE, SANITARY SEWER,

PROPOSED

PIPELINE

WATER MAIN

FORCE MAIN

SANITARY SEWER

REUSE MAIN

STORM WATER

OTHER UTILITIES

MINIMUM VERTICAL SEPARATION

(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

6 6 6 6 6 6

6 6 6 6 6

MAY 2020

SHEET NO.

DISTANCES (IN)

FINISHED GRADE

- SEE TABLE

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Madison, WI 53711

Tel 608-238-2661

Fax 608-238-6727

Affiliated Engineers

Affiliated Engineers SE, Inc. 777 S Harbour Island Blvd. #450

Appd YYYY.MM.DD

RTD MDS 2020-08-01

Dwn. Dsgn. Chkd. YYYY.MM.DD

MELANIE DELEHANTY SMITH, P.E.

FLORIDA LICENSE NO. 75447

LICENSE #: CA 5140

Tampa, FL 33602

RECORD DRAWINGS

File Name: 215614375-006-501UD

Client/Project Logo

Issued

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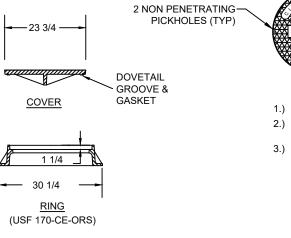
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Consultant

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- CONFORMANCE WITH 4.) ALL SEWER FORCE MAIN PLUG VALVES SHALL BE GEAR OPERATED.

PLUG VALVE DETAIL (SEWER FORCE MAINS ONLY) N.T.S.



<u>PUBLIC</u> <u>PRIVATE</u> 1.) HEAVY DUTY 130 LB. COVER 2) MANHOLE COVER SHALL BE U.S FOUNDARY TYPE CE-ORS 3.) SHALL BE LABELLED AS ILLUSTRATED

1.) MATERIAL: ASTM-A48 CLASS 30B GRAY IRON 2.) RING WT: 155 LBS. APP. 3.) COVER WT: 150 LBS. APP.

4.) INFLOW DISH REQUIRED TYPICAL COVER

30 1/4 (USF 580-CE-ORS) 1.) MATERIAL: ASTM-A48 CLASS

30B GRAY IRON

2.) RING WT: 90 LBS. APP.

3.) COVER WT: 130 LBS. APP.

LOW PROFILE COVER

MANHOLE COVERS DETAIL (ALL UNITS IN INCHES)

N.T.S.

Client/Project SARASOTA COUNTY PUBLIC HOSPITAL DISTRICT

2600 LAUREL ROAD

UTILITY DETAILS

Project No. 215614375 Revision Sheet

Drawing No.

MATERIAL/CLASS SERVICE COLOR POTABLE WATER MAIN BLUE AWWA C900 PVC / DR 18 RAW WATER MAIN WHITE 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 (POLYTUBING) / DR 9 REUSE SERVICE PURPLE PE (POLYTUBING) / DR 9 ASTMD3034 / SDR 26 GRAVITY SEWER MAIN GREEN (MIN. 8" DIAMETER) FUSIBLE PVC / SDR 26 ASTMD3034 / SDR 26 SEWER LATERAL GREEN / SDR 35 (MIN. 6" DIAMETER)

PIPE MATERIAL SCHEDULE

UTILITIES - GENERAL	DATE
	MAY 2020
PIPE FITTINGS	SHEET NO.
& MATERIAL	U-6
	PIPE FITTINGS

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

5.) ALL HARDWARE SHALL BE 316 SS.

RESTRAINED JOINT TABLE

MAY 2020 SHEET NO.

9. THE PROPOSED DE-WATERING METHOD(S) AND SCHEDULE SHALL BE COORDINATED WITH THE UTILITY AND/OR THE ENGINEER OF RECORD AND OTHER NECESSARY REGULATORY AGENCIES PRIOR TO

CONSTRUCTION. ADDITIONALLY, WHERE PRIVATE PROPERTY SHALL BE INVOLVED, ADVANCE PERMISSION

SHALL BE OBTAINED BY THE CONTRACTOR AND/OR DEVELOPER. 10. THE CONTRACTOR SHALL PROVIDE SOIL COMPACTION TESTING IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF THE SPECIFICATIONS DO NOT ADDRESS COMPACTION TESTS, THEY SHALL BE DONE IN ACCORDANCE WITH CITY OF VENICE UNIFORM WATER AND WASTEWATER SYSTEM AND REUSE CODE, LATEST EDITION. ALL SOIL COMPACTION TESTS RESULTS SHALL BE SUBMITTED TO THE ENGINEER OF

11. ALL CONSTRUCTION SHALL ADHERE TO CITY OF VENICE STANDARD DETAILS

TRENCH NOTES:

1. WHERE WATER, REUSE AND/OR SEWER MAINS CROSS WITH LESS THAN EIGHTEEN INCHES (18") VERTICAL CLEARANCE, ONE OF THE FOLLOWING METHODS OF PROTECTION SHALL BE UTILIZED: A.) WHERE A CONFLICT ARISES WITH AN EXISTING SEWER OR REUSE MAIN, THE PROPOSED WATER MÁIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC OR CL-51 D.I.P. CENTERED ON THE POINT OF CROSSING.

B.) WHERE A CONFLICT ARISES WITH AN EXISTING WATER OR REUSE MAIN, THE PROPOSED SEWER MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, CENTERED ON THE POINT OF CROSSING.

C.) WHERE A CONFLICT ARISES WITH PROPOSED WATER, REUSE AND/OR SEWER MAINS, THE WATER AND RESUE MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, OR CL-51 D.I.P., WHILE THE SEWER MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, CENTERED ON THE POINT OF CROSSING.

2. WHEN A WATER MAIN PARALLELS A WASTEWATER LINE, A HORIZONTAL SEPARATION OF AT LEAST TEN FEET (10') FROM OUTSIDE EDGE TO OUTSIDE EDGE, SHOULD BE MAINTAINED. WHEN SEPARATED BY LESS THAN 10 FEET (10') HORIZONTALLY THE WATER MAIN SHALL BE AWWA C-900 DR-14 PVC, OR CLASS-51 D.I.P. AND SEWER LINES SHALL BE AWWA C-900 DR-14 PVC. JOINTS SHALL BE STAGGERED TO 3. WHEN A WATER MAIN OR WASTEWATER LINE PARALLELS A REUSE MAIN, A HORIZONTAL SEPARATION OF AT LEAST FIVE FEET (5') CENTER OF PIPE TO CENTER OF PIPE, SHOULD BE MAINTAINED. IN NO CASE SHALL THE HORIZONTAL SEPARATION BE LESS THAN THREE FEET (3') FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE.

- 4. TRENCH SHALL BE BRACED OR SHORED IN ACCORDANCE WITH THE "FLORIDA TRENCH & SAFETY ACT". 5. WIDTH OF TRENCH BOTTOM SHALL BE OUTSIDE DIAMETER OF PIPE PLUS TWELVE INCHES (12") EACH
- SIDE. MAXIMUM. 6. CONTRACTOR SHALL PLACE METALLIC BURIAL IDENTIFICATION TAPE DIRECTLY ABOVE WATER MAIN IN CONFORMANCE WITH CITY CODE.
- 7. ALL WELL POINT HOLES SHALL BE FILLED WITH COARSE SAND OR OTHER SATISFACTORY GRANULAR MATERIAL AT TIME WELL POINTS ARE PULLED.
- 8. DISCHARGE FROM DE-WATERING OPERATION SHALL BE DISPOSED OF IN SUCH A MANNER THAT IT SHALL NOT INTERFERE WITH THE NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED, CREATE A PUBLIC NUISANCE OR FORM PONDING, THE OPERATIONS SHALL NOT CAUSE INJURY TO ANY PORTION OF THE WORK COMPLETED, OR IN PROGRESS, OR TO THE SURFACE OF STREETS, OR TO PRIVATE PROPERTY

PRESSURE MAIN RESTRAINED N.T.S

JOINT TABLE **UTILITIES - GENERAL**

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

UTILITIES - SEWER PLUG VALVE & MANHOLE COVERS

MAY 2020 SHEET NO. S-1

90 BED NEW HOSPITAL

NOKOMIS, FL 34275

Scale

CONTRACTOR SHALL WATER AS NECESSARY ALL SODDED AREAS UNTIL GRASS ROOTS.

REPLACEMENT OF ALL PRIVATE PROPERTY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE BORNE BY THE

9. FOR PAINTING AND SURFACE FINISHING REQUIREMENTS, REFER TO APPROPRIATE DIVISION OF THE PROJECT SPECIFICATIONS.

D. FORCE MAINS SHALL BE RESTRAINED JOINT IN ACCORDANCE WITH THE WATER MAIN DETAILS UNLESS OTHERWISE

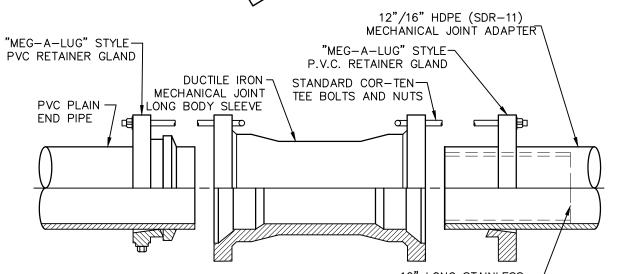
SEWER TESTING:

. THE CONTRACTOR SHALL INCLUDE IN HIS COST FOR THE VARIOUS ITEMS CONTAINED IN THE BID SCHEDULE, THE

EACH FITTING OR CHANGE IN GRADE. 4. RECORD DRAWINGS, IF PREPARED BY THE CONTRACTOR OR CONTRACTORS SURVEYOR. DRAFT COPIES OF THE RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINALIZING THE DRAWINGS. ONCE ACCEPTABLE TO THE ENGINEER THE CONTRACTOR/SURVEYOR WILL PROVIDE 9 SETS OF SIGNED AND SEALED FINALIZED DRAWINGS FOR SUBMITTAL TO THE CITY OF VENICE. ONCE APPROVED BY THE CITY OF VENICE, CONTRACTOR/SURVEYOR IS RESPONSIBLE TO PROVIDE THE ENGINEER OF RECORD ONE SET OF MYLARS AND A

RECORD DRAWINGS





HDPETRAN.DWG 07/17/03 (FOR USE WITH WASTEWATER AND POTABLE WATER)