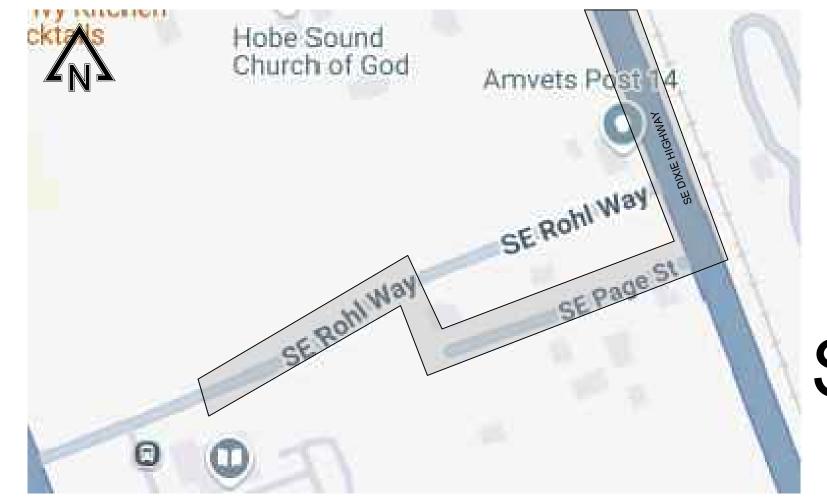
# PETTWAY WATERMAIN EXPANSION HOBE SOUND, FLORIDA

# MARTIN COUNTY

**JUNE 2025** 

# SOUTH MARTIN REGIONAL UTILITY (SMRU)



**SE ROHL WAY SE PETTWAY ST SE PAGE ST** 



# LOCATION MAPS (NTS)



**OVERALL SITE** 

## INDEX OF PLANS

INDEV	JE PLANS
SHEET NO.	SHEET TITLE
C-1	COVER
C-2	<b>ENGINEERING PLANS</b>
C-3	ENGINEERING PLANS
C-4	<b>ENGINEERING PLANS</b>
C-5	ENGINEERING PLANS
C-6	<b>ENGINEERING PLANS</b>
C-7	<b>ENGINEERING PLANS</b>
C-8	<b>ENGINEERING PLANS</b>
C-9	<b>ENGINEERING PLANS</b>
C-10	<b>ENGINEERING PLANS</b>
C-11	DETAILS
C-12	DETAILS
C-13	NOTES

**TOTAL NO OF SHEETS - 13** 

17120.23

Know what's below. Call before you dig.

ettway Grocery Contractors

**SE WASHINGTON AVE** 

**SE PETTWAY ST SE DIXIE HWY** 

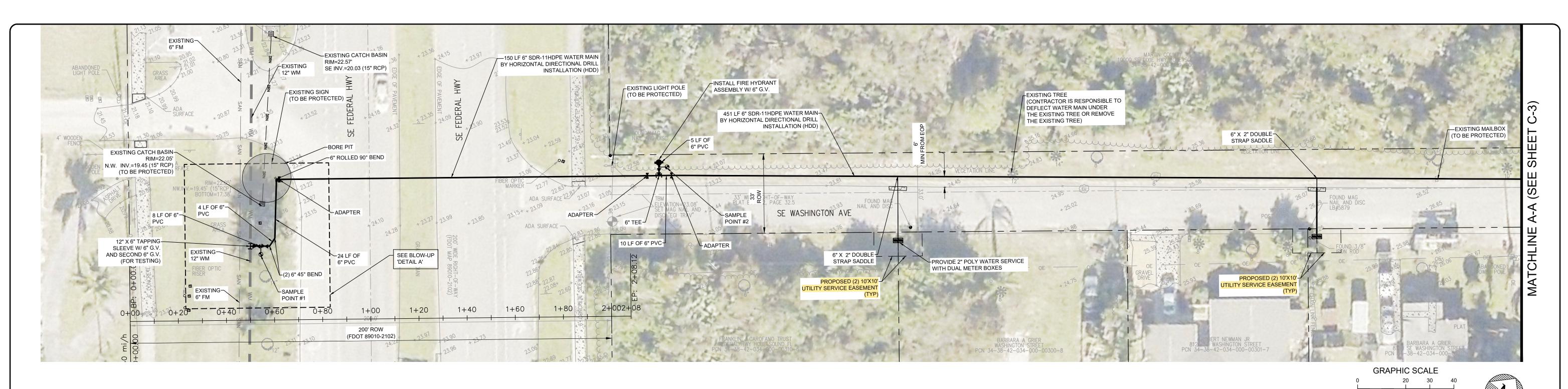
**SE RICH WAY** 

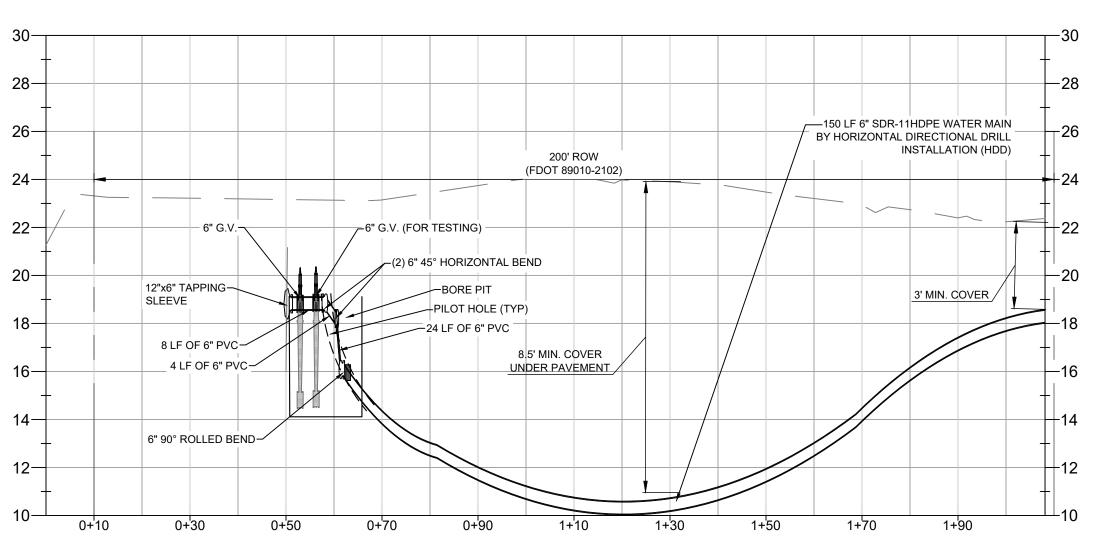
**SE WILLIAMS DR** 

**PERMIT SET SUBMITTAL** 

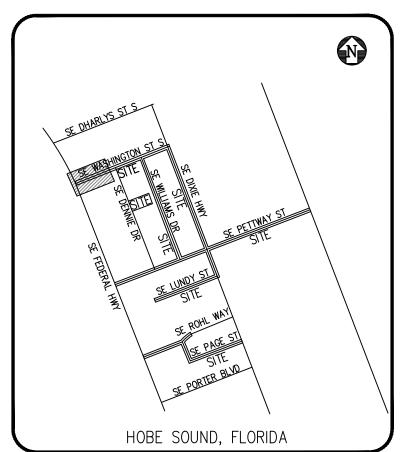
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E L E C T R O N I C C O P I E S





HORIZONTAL SCALE 1"=20' VERTICAL SCALE 1"=4'



LOCATION MAP

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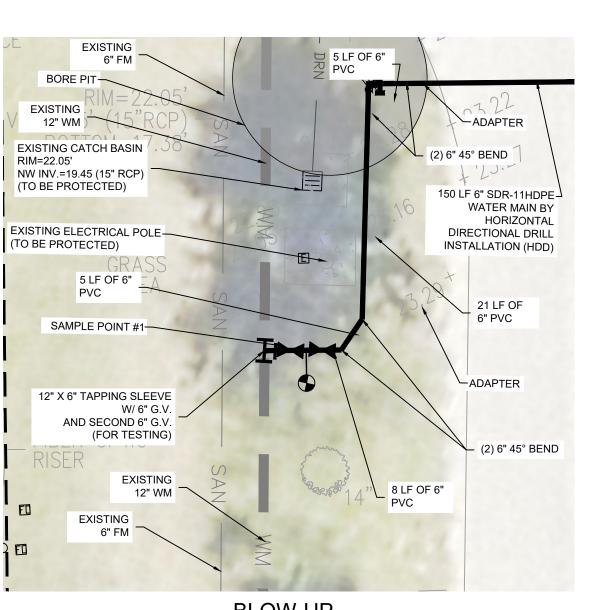
PROPOSED ENGINEERING LEGEND:		
₩\$	FIRE HYDRANT ASSEMBLY	
$\triangleleft$	FIRE DEPARTMENT CONNECTION	
X	GATE VALVE	
25.00	PROPOSED ELEVATION	
WGA	SINGLE WATER METER	
WOA WOA	DOUBLE WATER METER	
	MILLING & RESURFACE	
	CONCRETE REPLACEMENT	
	ASPHALT REPLACEMENT	
I	PVC/HDPE ADAPTER WATERMAIN	
	BORE PIT	

EXISTING LEGEND:		
*o'o	MEASURED ELEVATION	
4.	CONCRETE	
	CATCH BASIN	
~	FIRE HYDRANT	
DVI DVI	WATER VALVE	
O	WATER METER	
<b>&gt;</b>	REDUCER	
— wm —	EXISTING WATER	
E-SWR E-SWR	EXISTING SANITARY SEWER	
— FM —	EXISTING FORCE MAIN	
	EXISTING IRRIGATION MAIN	
OE	EXISTING OVERHEAD ELECTRIC	
100+00 101+00	CENTERLINE WITH STATIONING	

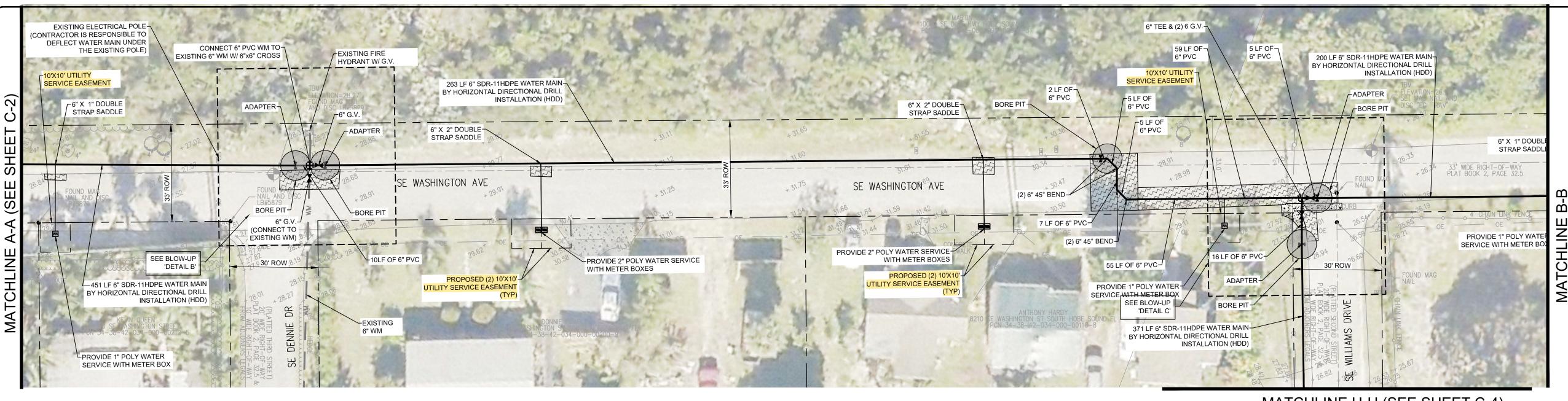
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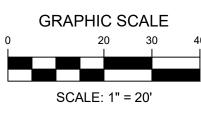
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**BLOW-UP DETAIL A** SCALE: 1"=10'





EXISTING FIRE

CONNECT 6" PVC WM TO-EXISTING 6" WM W/ 6"x6" CROSS

451 LF 6" SDR-11HDPE WATER MAIN BY HORIZONTAL DIRECTIONAL DRILL INSTALLATION (HDD)

EXISTING

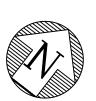
6" WM <sup>1</sup>

**BLOW-UP** 

SCALE: 1"=10'

10 LF OF-6" PVC

EXISTING G.V



-ADAPTER

(CONNECT TO

EXISTING WM)

265 LF 6" SDR-11HDPE WATER MAIN-

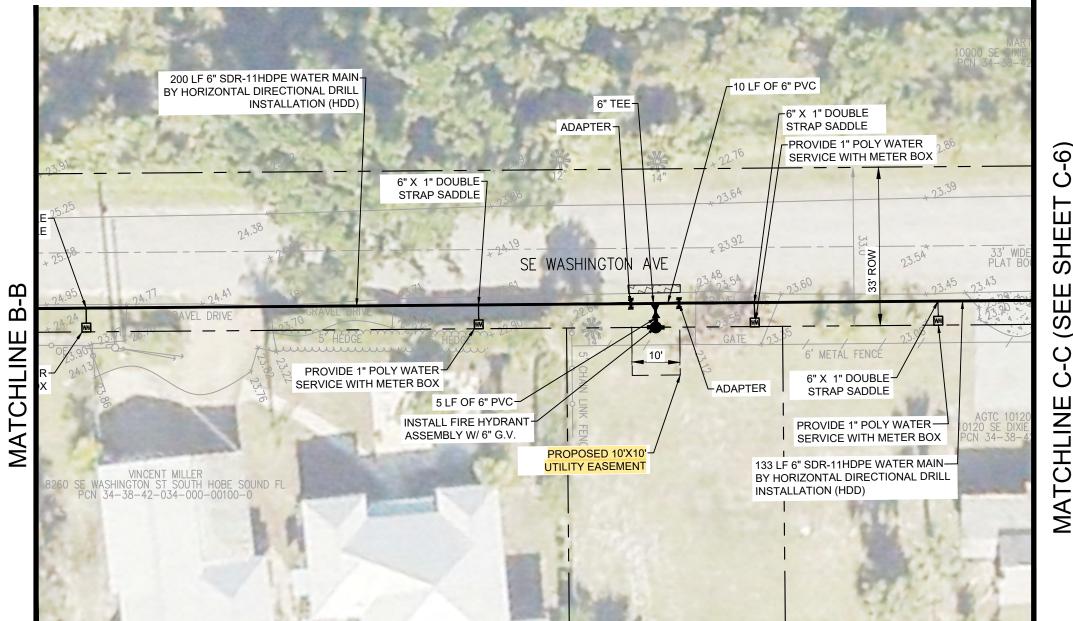
BY HORIZONTAL DIRECTIONAL

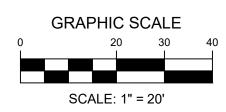
DRILL INSTALLATION (HDD)

17120.23

**BLOW-UP** DETAIL C SCALE: 1"=10'

MATCHLINE H-H (SEE SHEET C-4)





EXISTING LEGEND:

7

 $\bowtie$ 

---- WM ----

E-SWR-E-SWR-

— FM —

MEASURED ELEVATION

CONCRETE

CATCH BASIN

FIRE HYDRANT

WATER VALVE

WATER METER

EXISTING WATER

EXISTING SANITARY SEWER

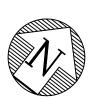
EXISTING FORCE MAIN

EXISTING IRRIGATION MAIN

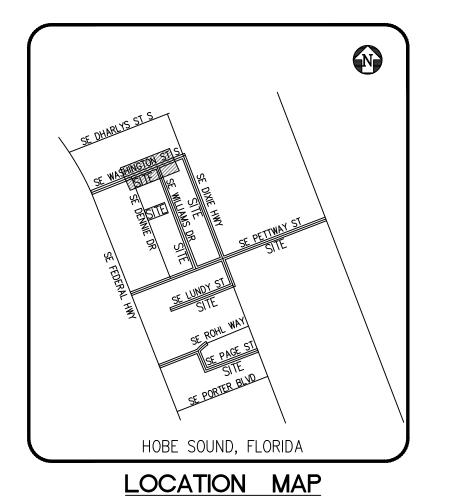
EXISTING OVERHEAD ELECTRIC

CENTERLINE WITH STATIONING

REDUCER







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CONCRETE SIDEWALK REPLACEMENT

PAVEMENT REPLACEMENT

\_\_\_\_\_ PVC/HDPE ADAPTER WATERMAIN

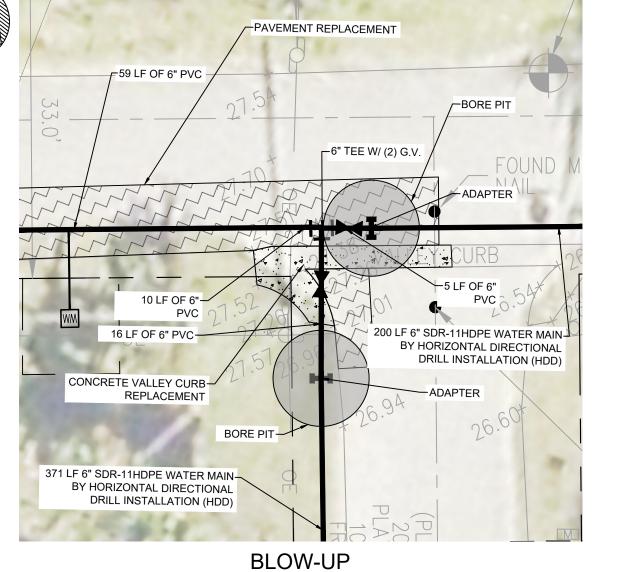
BORE PIT

ENGINEERING LEGEND:		
₩\$	FIRE HYDRANT ASSEMBLY	
A	FIRE DEPARTMENT CONNECTION	
$\bowtie$	GATE VALVE	
25.00	PROPOSED ELEVATION	
WMA	SINGLE WATER METER	
WAA WAA	DOUBLE WATER METER	
· !!!!!!!!!!!!!!!!!!!	GROUT EXISTING	

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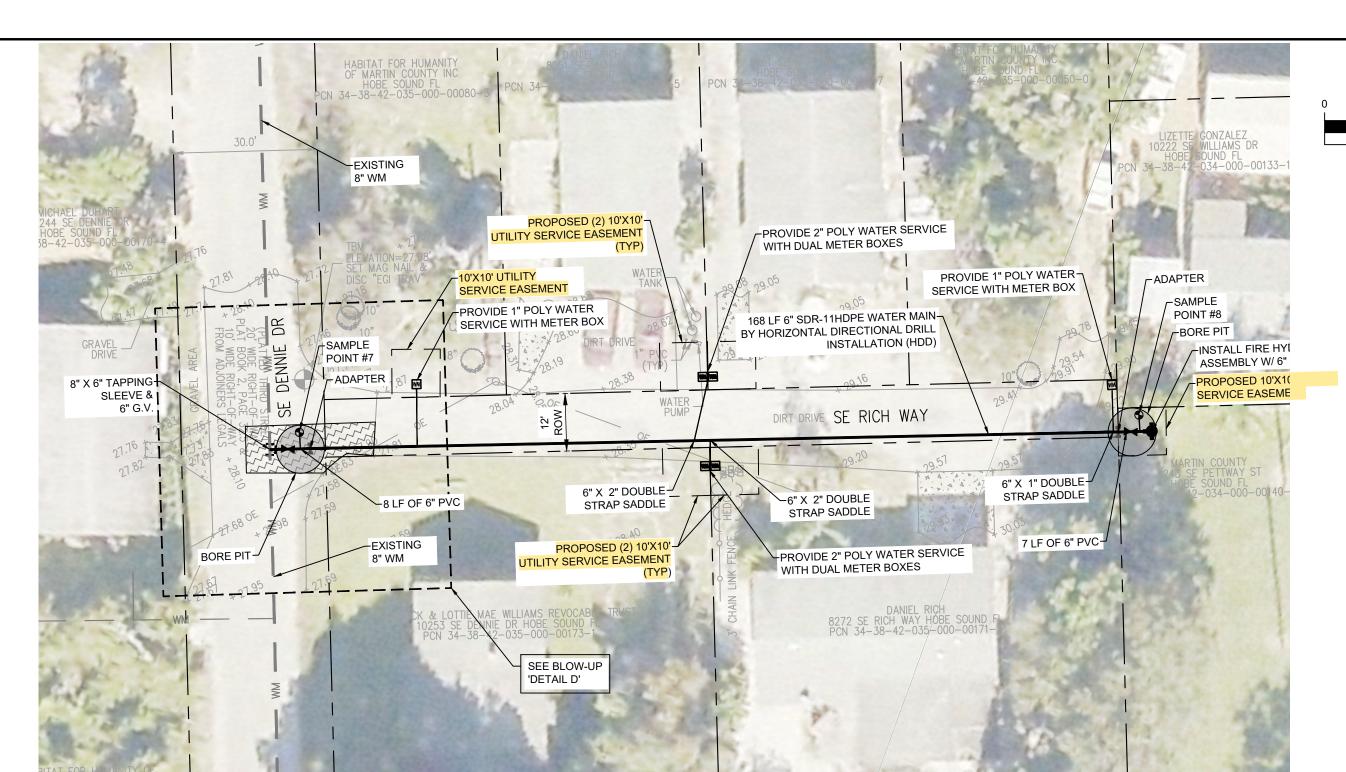
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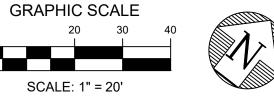
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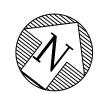


SUBMITTAL, PERMIT SET

PLOT: 10/31/2025 11:20:19 AM

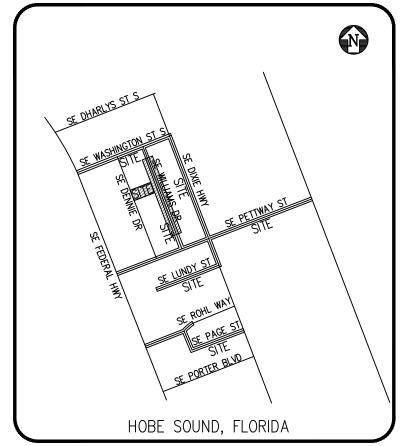






17120.23

PROVIDE 2" POLY WATER SERVICE WITH DUAL METER BOXES PROVIDE 1" POLY WATER 7 PROVIDE 1" POLY WATER -SERVICE WITH METER BOX 235 LF 6" SDR-11HDPE WATER MAIN-PROVIDE 2" POLY WATER SERVICE WITH DUAL METER BOXES SERVICE WITH METER BOX PROVIDE 1" POLY WATER-BY HORIZONTAL DIRECTIONAL DRILL SERVICE WITH METER BOX INSTALLATION (HDD) \_\_6" X 1" DOUBLE 6" X 1" DOUBLE STRAP SADDLE /-10 LF OF 6" PVC STRAP SADDLE 370 LF 6" SDR-11HDPE WATER MAIN BY HORIZONTAL DIRECTIONAL DRILL INSTALLATION (HDD) SE WILLIAMS DRIVE SE WILLIAMS DRIVE 6" X 1" DOUBLE-STRAP SADDLE 6" X 2" DOUBLE B.O.P.=23.32' (12" RCP) STRAP SADDLE T.O.P.=22.32' (6" HDPE WM) 6" X 1" DOUBLE-CLEARANCE=1.00' STRAP SADDLE 6" X 1" DOUBLE 6" X 2" DOUBLE PROVIDE 1" POLY WATER STRAP SADDLE ►6" X 2" DOUBLE STRAP SADDLE SERVICE WITH METER BOX PROVIDE 2" POLY WATER SERVICE WITH DUAL METER BOXES STRAP SADDLE INSTALL FIRE HYDRANT-EXISTING ELECTRICAL POLE ASSEMBLY W/ 6" G.V. EXISTING LIGHT POLE-(CONTRACTOR IS RESPONSIBLE (CONTRACTOR IS RESPONSIBLE PROVIDE 2" POLY WATER SERVICE PROPOSED 10'X10' O DEFLECT WATER MAIN UNDER TO DEFLECT WATER MAIN UNDER WITH DUAL METER BOXES **UTILITY EASEMENT** THE EXISTING POLE) THE EXISTING POLE)



LOCATION MAP

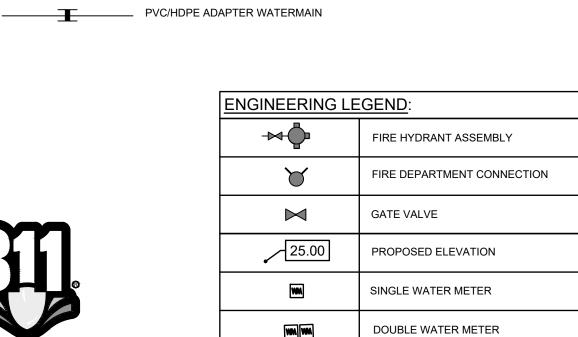
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PROPOSED



**GROUT EXISTING** 

CONCRETE SIDEWALK REPLACEMENT

PAVEMENT REPLACEMENT

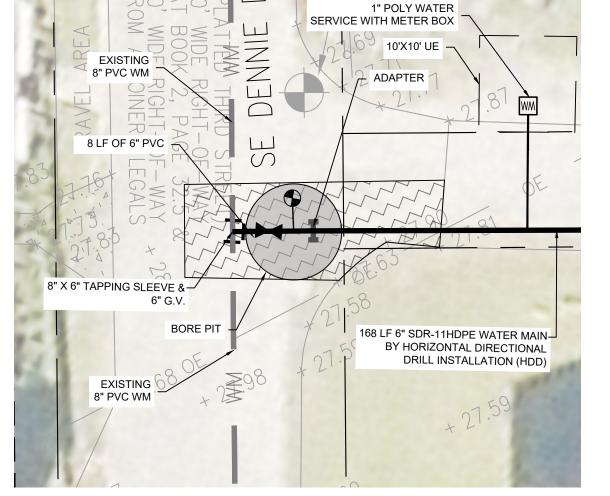
BORE PIT

	EXISTING LEGEND:	
*o'o <sub>o</sub>	MEASURED ELEVATION	
4.	CONCRETE	
	CATCH BASIN	
7	FIRE HYDRANT	
M	WATER VALVE	
O	WATER METER	
<b>&gt;</b>	REDUCER	
— ww —	EXISTING WATER	
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OE	EXISTING OVERHEAD ELECTRIC	
100+00 101+00	CENTERLINE WITH STATIONING	

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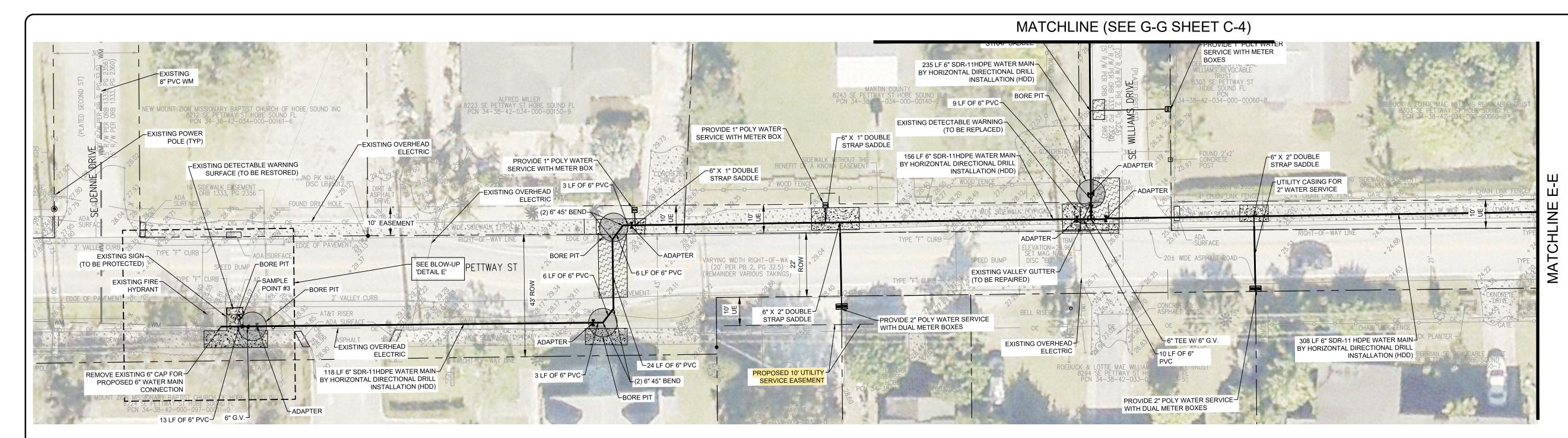
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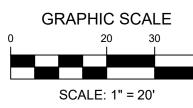
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**BLOW-UP** DETAIL D SCALE: 1"=10'

PLOT: 10/31/2025 11:26:08 AM





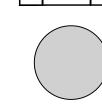
SCALE: 1" = 20'



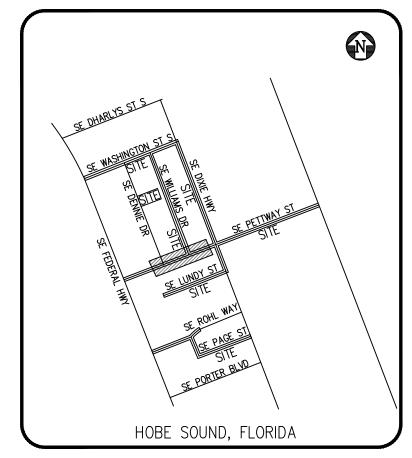
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**PROPOSED** 

CONCRETE SIDEWALK REPLACEMENT



BORE PIT PVC/HDPE ADAPTER WATERMAIN

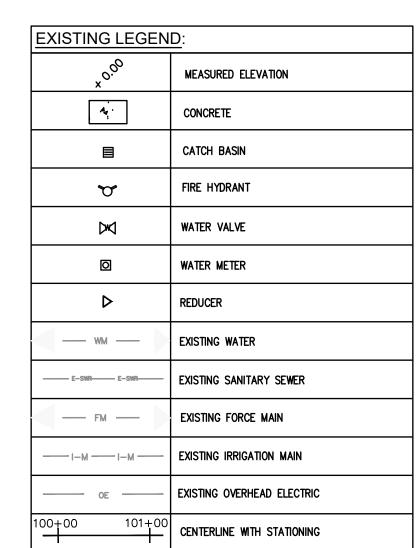


LOCATION MAP
N.T.S.

PERMIT SET **SUBMITTAL** 

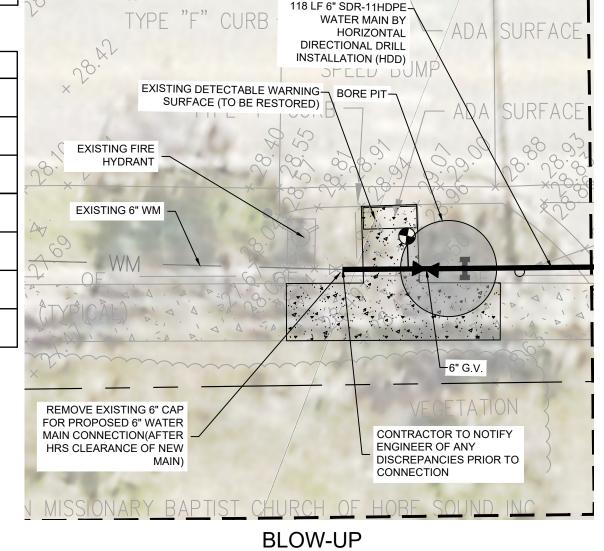
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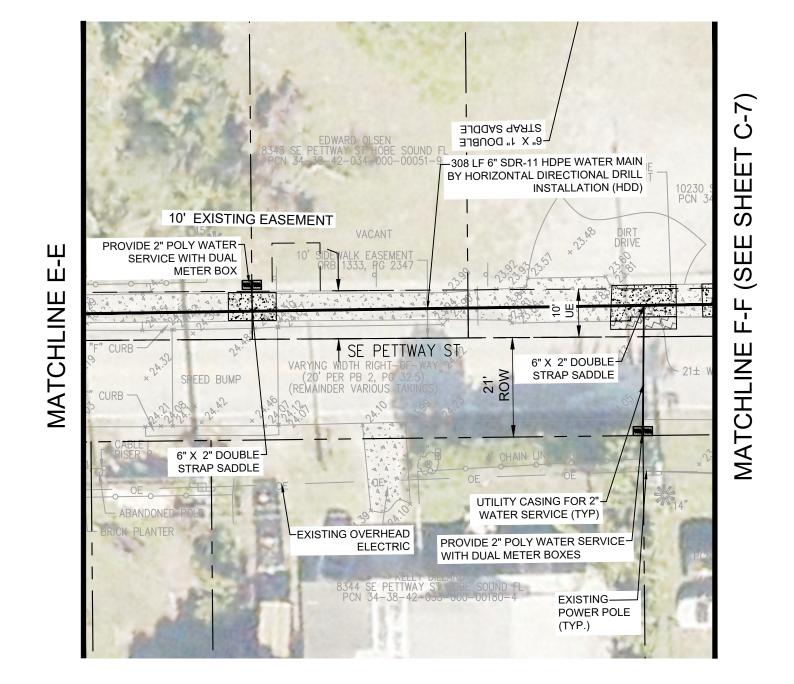


ENGINEERING LE	ENGINEERING LEGEND:		
₩\$	FIRE HYDRANT ASSEMBLY		
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25.00	PROPOSED ELEVATION		
WOA	SINGLE WATER METER		
WOA WAA	DOUBLE WATER METER		
· ////////////////////////////////////	GROUT EXISTING		





BLOW-UP DETAIL E SCALE: 1"=10'



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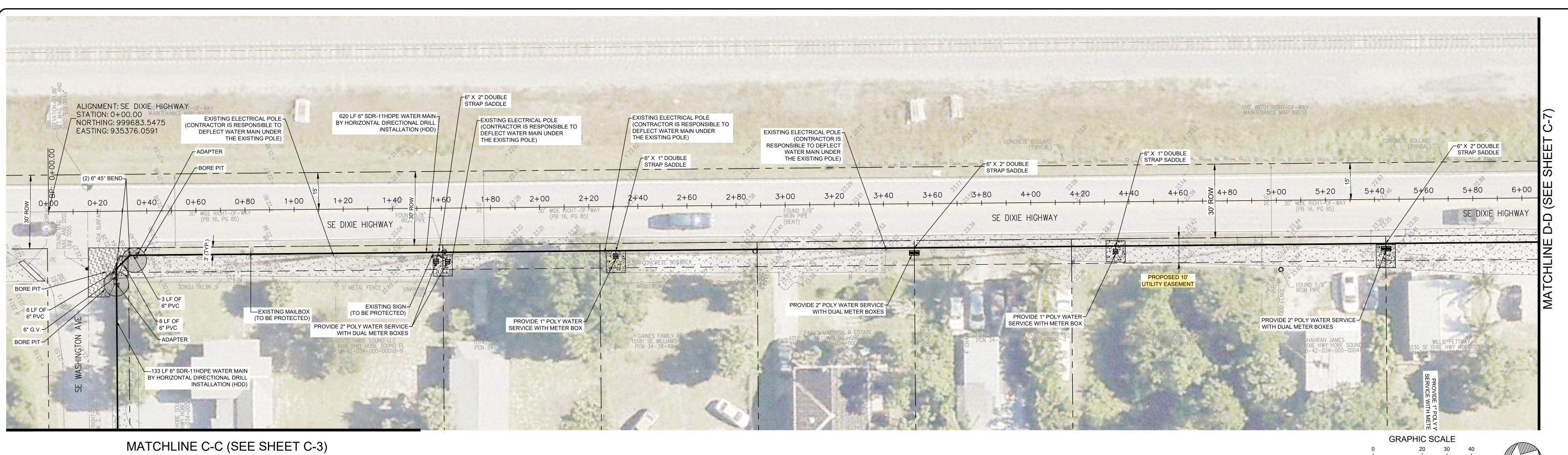
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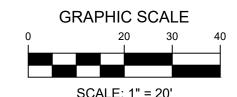
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- 14. TOTAL OF 8 SAMPLE POINTS TO BE INSTALLED. REFER TO PLANS FOR SAMPLE POINT LOCATIONS.

PLOT: 10/31/2025 11:22:59 AM



## SE DIXIE HIGHWAY PROFILE

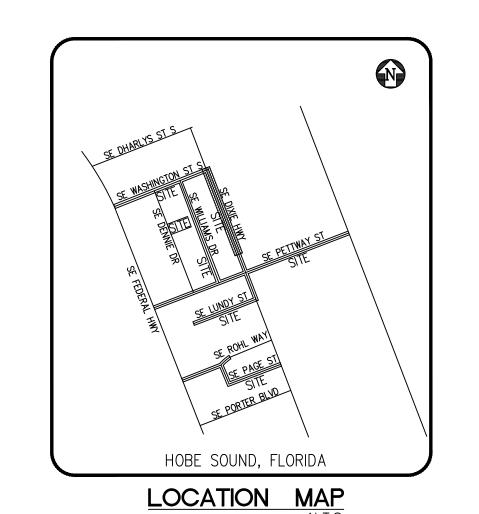






EXISTING SURFACE~ PILOT HOLE (TYP) —620 LF 6" SDR-11HDPE WATER MAIN BY HORIZONTAL DIRECTIONAL DRILL \_BORE PIT INSTALLATION (HDD) 3' MIN. COVER (TYP.) \_6"X1" DOUBLE STRAP SADDLE 6"X2" DOUBLE STRAP SADDLE L<sub>3</sub> LF OF 6" PVC STATION:3+52.56 6"X2" DOUBLE STRAP SADDLE 6" PVC STATION:5+44.70

> HORIZONTAL SCALE 1"=20' VERTICAL SCALE 1"=4'



PROPOSED CONCRETE SIDEWALK REPLACEMENT PAVEMENT REPLACEMENT PVC/HDPE ADAPTER WATERMAIN

PERMIT SET **SUBMITTAL** ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235.

SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE.

SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY

E L E C T R O N I C C O P I E S

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Know what's below. Call before you dig.

ENGINEERING LE	ENGINEERING LEGEND:		
₩\$	FIRE HYDRANT ASSEMBLY		
X	FIRE DEPARTMENT CONNECTION		
$\bowtie$	GATE VALVE		
25.00	PROPOSED ELEVATION		
WOA	SINGLE WATER METER		
WOA WAA	DOUBLE WATER METER		
· ////////////////////////////////////	GROUT EXISTING		

EXISTING LEGEND:	
*o'o	MEASURED ELEVATION
A.	CONCRETE
	CATCH BASIN
~	FIRE HYDRANT
M	WATER VALVE
O	WATER METER
<b>&gt;</b>	REDUCER
— wm —	EXISTING WATER
E-SWR E-SWR	EXISTING SANITARY SEWER
— FM —	EXISTING FORCE MAIN
	EXISTING IRRIGATION MAIN
OE	EXISTING OVERHEAD ELECTRIC
100+00 101+00	CENTERLINE WITH STATIONING

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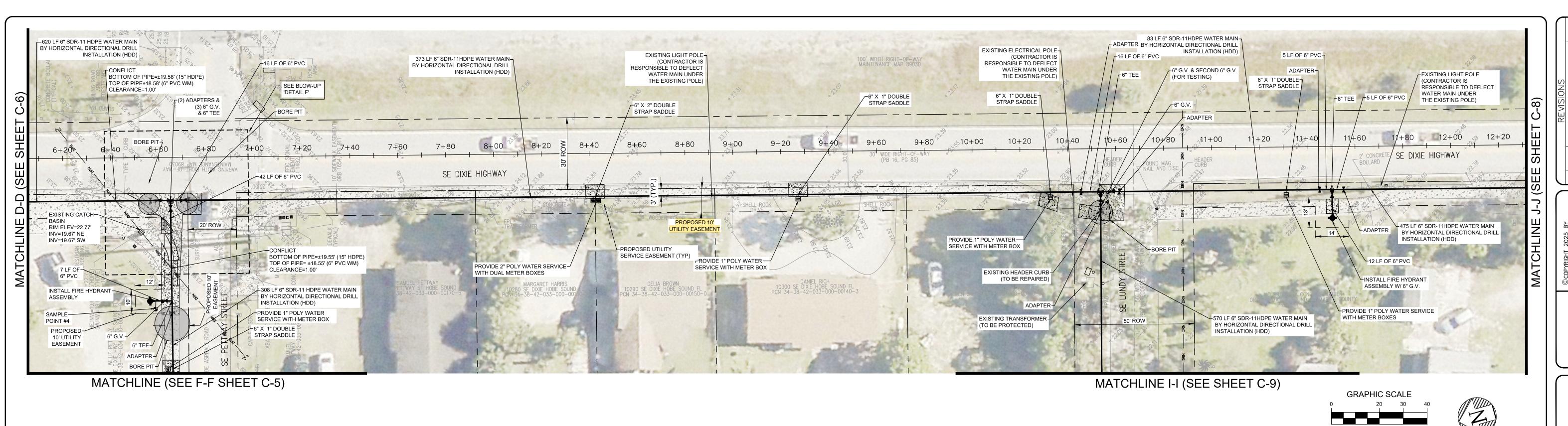
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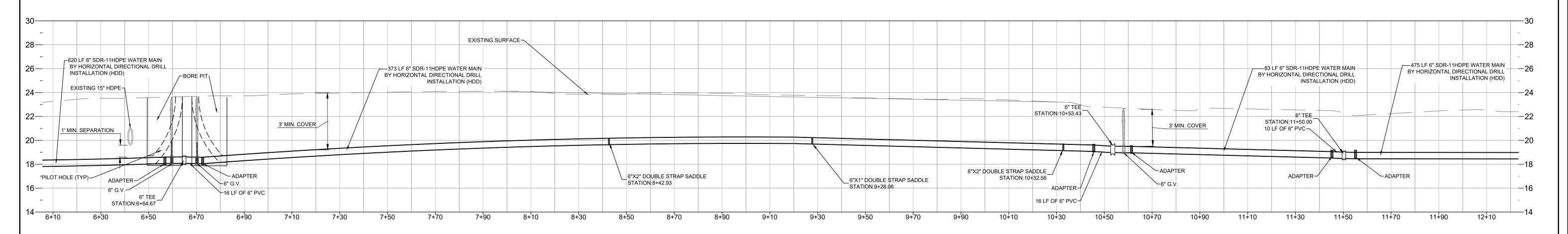
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PLOT: 10/31/2025 11:21:05 AM

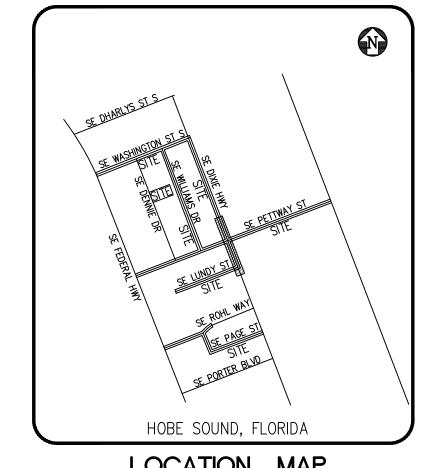
SUBMITTAL. PERMIT SET



## SE DIXIE HIGHWAY PROFILE



HORIZONTAL SCALE 1"=20' VERTICAL SCALE 1"=4'



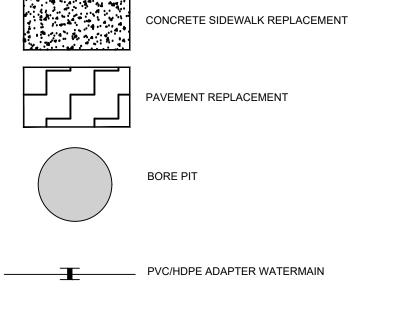
LOCATION MAP **PERMIT SET** 

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PLOT: 10/31/2025 11:24:31 AM

**SUBMITTAL** 

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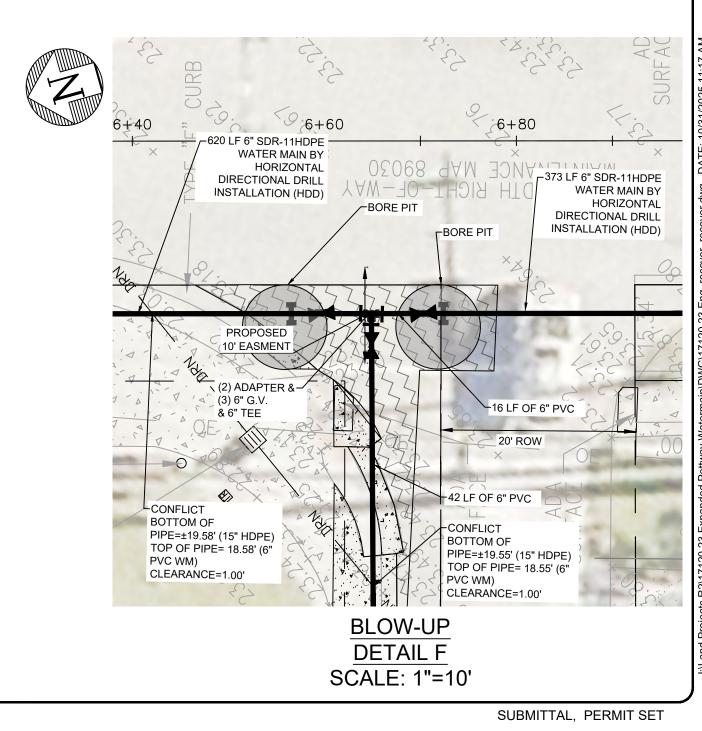
PROPOSED

ENGINEERING LE	GEND:
₩\$	FIRE HYDRANT ASSEMBLY
8	FIRE DEPARTMENT CONNECTION
$\bowtie$	GATE VALVE
25.00	PROPOSED ELEVATION
WOA	SINGLE WATER METER
WOA WOA	DOUBLE WATER METER
· 111111111111111111111111111111111111	GROUT EXISTING

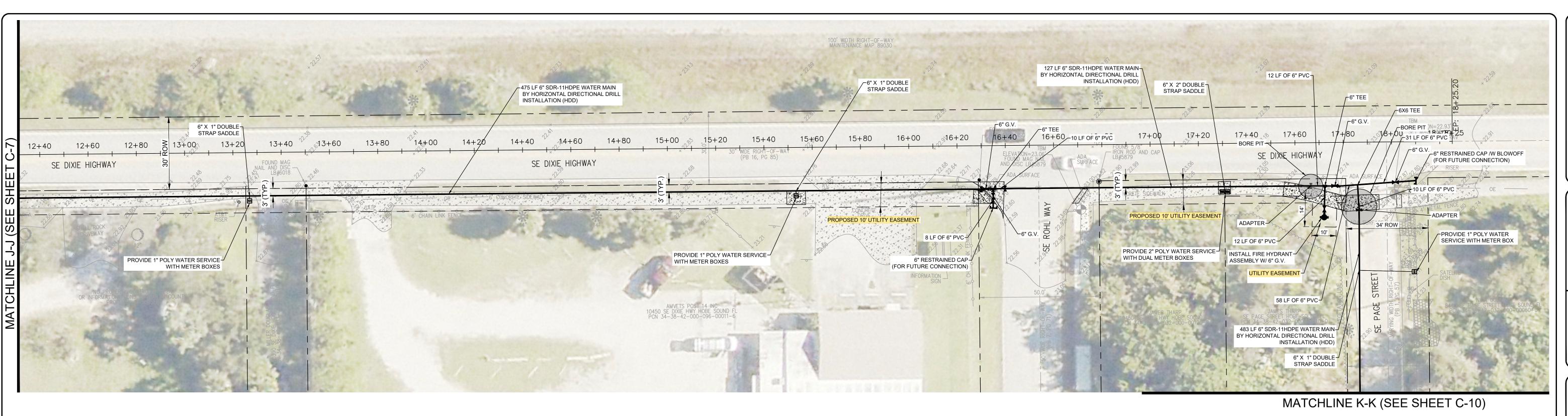
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*o;o	MEASURED ELEVATION	
4,	CONCRETE	
	CATCH BASIN	
8	FIRE HYDRANT	
DVJ	WATER VALVE	
O	WATER METER	
Þ	REDUCER	
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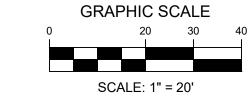
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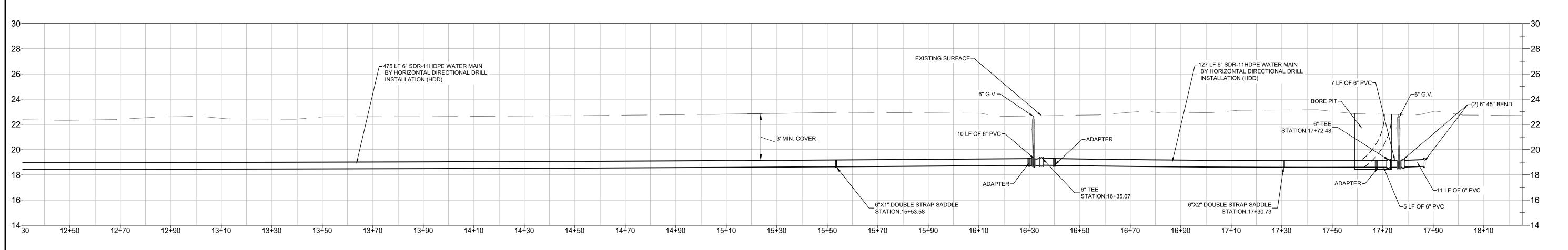
SCALE: 1" = 20'







## SE DIXIE HIGHWAY PROFILE



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# HOBE SOUND, FLORIDA

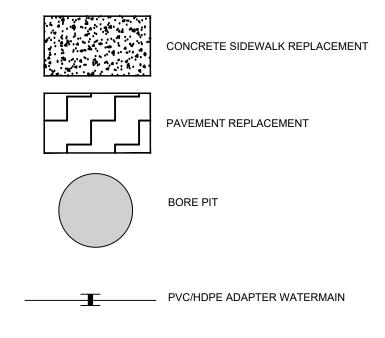
LOCATION MAP

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PROPOSED

ENGINEERING LE	ENGINEERING LEGEND:		
<b>→</b>	FIRE HYDRANT ASSEMBLY		
A	FIRE DEPARTMENT CONNECTION		
$\bowtie$	GATE VALVE		
25.00	PROPOSED ELEVATION		
WAA	SINGLE WATER METER		
WAA WAA	DOUBLE WATER METER		
· ////////////////////////////////////	GROUT EXISTING		

### EXISTING LEGEND: MEASURED ELEVATION CONCRETE CATCH BASIN 7 FIRE HYDRANT WATER VALVE WATER METER REDUCER EXISTING WATER ---- WM ----EXISTING SANITARY SEWER E-SWR-E-SWR EXISTING FORCE MAIN — FM — EXISTING IRRIGATION MAIN — I-M —— I-M — EXISTING OVERHEAD ELECTRIC CENTERLINE WITH STATIONING

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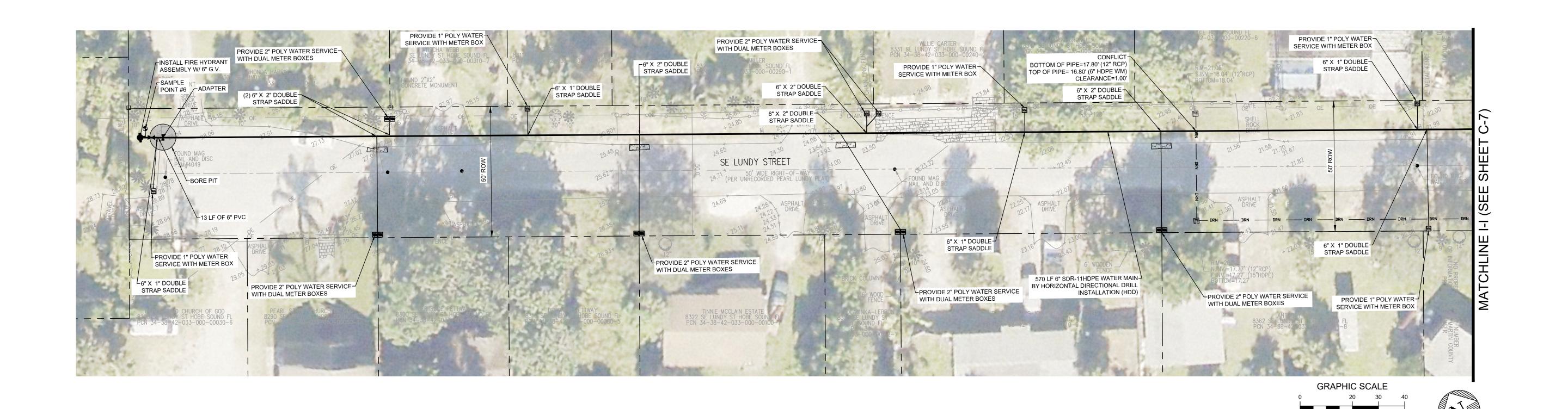
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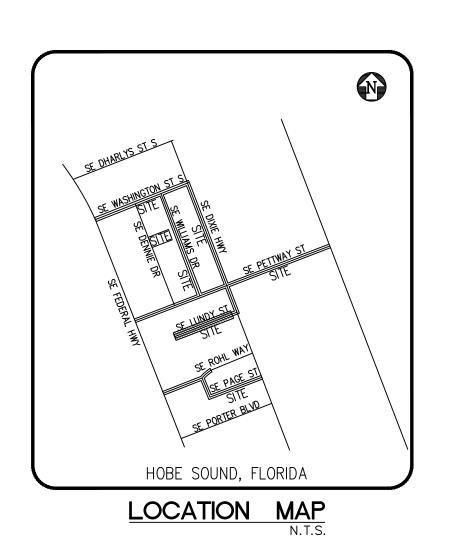
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PLOT: 10/31/2025 11:19:34 AM

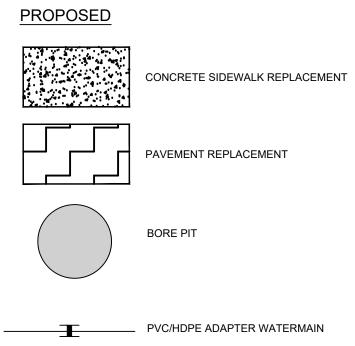




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₩\$	FIRE HYDRANT ASSEMBLY	
$\triangleright$	FIRE DEPARTMENT CONNECTION	
$\bowtie$	GATE VALVE	
25.00	PROPOSED ELEVATION	
WOA	SINGLE WATER METER	
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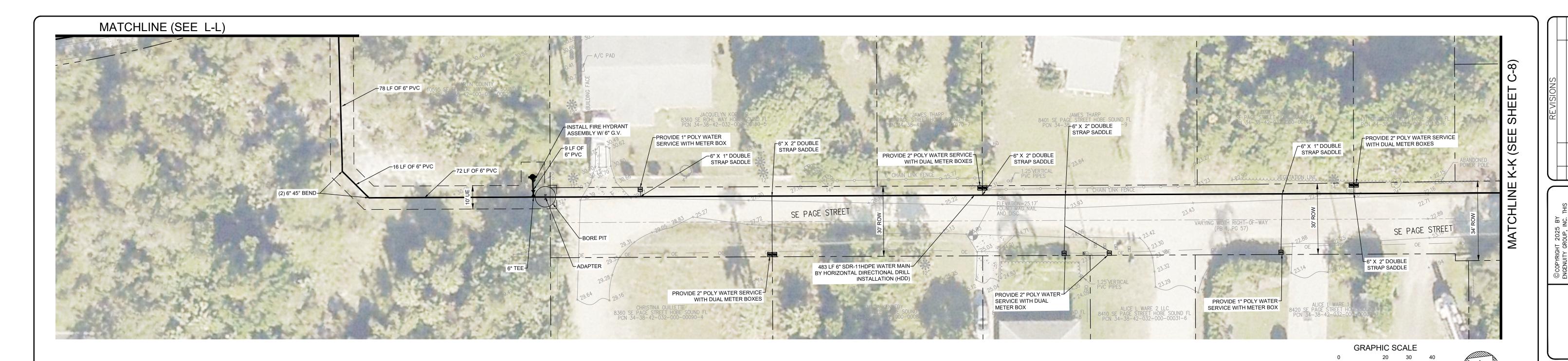
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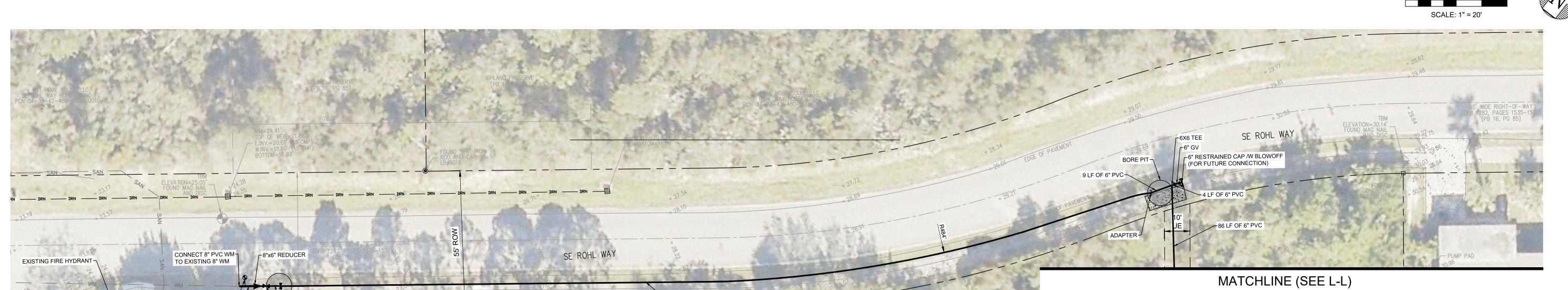
MARTIN COUNT
HOBE SOUND, FLOF
PETTWAY WATERMAIN EX

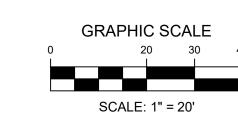
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PLOT: 10/31/2025 11:23:55 AM

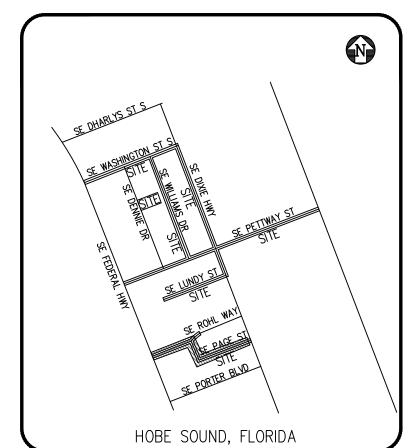
SCALE: 1" = 20'











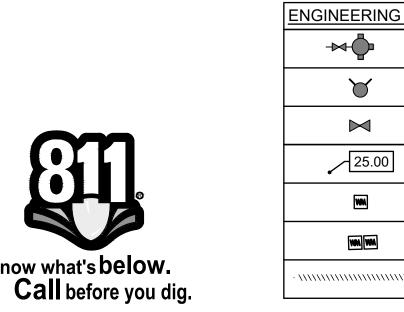
LOCATION MAP N.T.S.

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CONCRETE SIDEWALK REPLACEMENT

PAVEMENT REPLACEMENT

\_\_\_\_ PVC/HDPE ADAPTER WATERMAIN

BORE PIT

BORE PIT

ADAPTER

8 LF OF 6" PVC

PROPOSED

POINT #5

8 LF OF 8" PVC

6" G.V. –

ENGINEERING LEGEND:		
FIRE HYDRANT ASSEMBLY		
FIRE DEPARTMENT CONNECTION		
GATE VALVE		
PROPOSED ELEVATION		
SINGLE WATER METER		
DOUBLE WATER METER		
GROUT EXISTING		

×0.00	MEASURED ELEVATION
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CENTERLINE WITH STATIONING

**EXISTING LEGEND**:

→347 LF 6" SDR-11HDPE WATER MAIN

BY HORIZONTAL DIRECTIONAL DRILL INSTALLATION (HDD)

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- 8. CONTRACTOR SHALL PROVIDE SIGN AND SEALED RECORD DRAWINGS AND BORING LOGS.
- 9. CONTRACTOR TO VERIFY WATER SERVICE HAS BEEN RE-SUPPLIED TO ALL AFFECTED PROPERTIES.
- 10. CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE OF TRAFFIC AND WILL BE REQUIRED TO PROVIDE A MAINTENANCE OF TRAFFIC PLAN PREPARED BY A CERTIFIED FDOT MOT DESIGN FOR APPROVAL BY THE RELEVANT ENTITIES (ENGINEER, SMRU, MARTIN COUNTY, ETC)
- 11. THE FOLLOWING UTILITY SERVICE PROVIDERS HAVE BEEN CONTACTED FLORIDA POWER & LIGHT, COMCAST, AT&T, SPRINT AND THE MARTIN COUNTY TRAFFIC DIVISION. THESE PROVIDERS HAVE INDICATED THAT THEIR UNDERGROUND UTILITIES ARE NOT WITHIN THE IMPROVEMENT AREAS SHOWN ON THESE PLANS. HOWEVER, THIS INFORMATION DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY UTILITY LOCATIONS AND CONTACT 811 BEFORE CONSTRUCTION COMMENCEMENT.
- 12. MINIMUM COVER: HDPE = 36"; PVC = 36".
- 13. CONTRACTOR RESPONSIBLE FOR SHORING OF ALL OPEN CUT AREAS TO AVOID DAMAGE TO EXISTING ROADS, INCLUDING USE OF TRENCH BOX, IF NECESSARY.
- 14. TOTAL OF 8 SAMPLE POINTS TO BE INSTALLED. REFER TO PLANS FOR SAMPLE POINT LOCATIONS.

A Higher Standard of Excellence - PETTWAY V Hobbe engineers - surveyors - sis mappens group inc.

1280 N CONGRESS AVE, SUITE 101 WEST PALM BEACH, FLORIDA 33409 PH (561)655–1151 - FAX (561)832–9390 .

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PLOT: 10/31/2025 11:22:21 AM

**MARCH 2021** 

MES

VALVE SETTING DETAIL

CONSTRUCTION STANDARDS AND DETAILS

SOUTH MARTIN REGIONAL UTILITY (SMRU,

1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS

RW. MW

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MES

WATER AND SEWER

SEPARATION STATEMENT

CONSTRUCTION STANDARDS AND DETAILS

SOUTH MARTIN REGIONAL UTILITY (SMRU)

**MARCH 2021** 

MES

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MARCH 2021

DRAWING NUMBER

**MARCH 2021** 

RAWING NUMBER

8. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL TRENCH SAFETY

TYPICAL TRENCH DETAIL

CONSTRUCTION STANDARDS AND DETAILS

SOUTH MARTIN REGIONAL UTILITY (SMRU,

REGULATIONS.

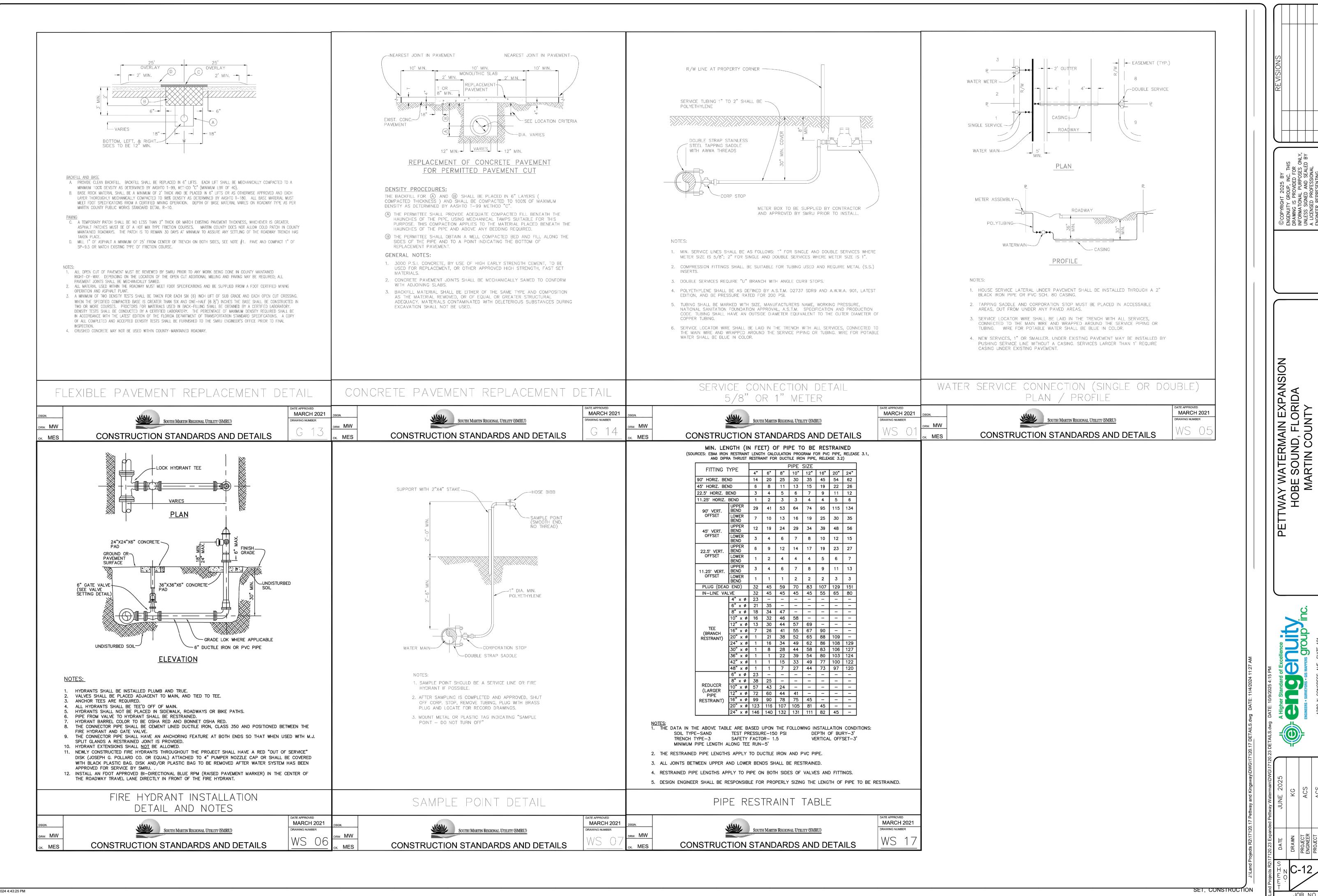
MARCH 2021

PRESSURE PIPE CONFLICT DETAIL

SOUTH MARTIN REGIONAL UTILITY (SMRU)

CONSTRUCTION STANDARDS AND DETAILS

SUBMITTAL, PERMIT SET



PLOT: 10/31/2025 11:23:25 AM

JOB NO. 17120.23

- 1. CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF PERMANENT REFERENCE MONUMENTS DISTURBED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
- 2. ALL UNSUITABLE MATERIAL SUCH AS MUCK, MARL, AND DEBRIS SHALL BE REMOVED AND PROPERLY DISPOSED OF WITHIN THE LIMITS OF CONSTRUCTION. CLEAN GRANULAR MATERIAL SHALL BE USED AS BACKFILL AND PLACED IN 12 INCH LIFTS.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE PLANS. UTILITIES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND MAY NOT SHOW ACTUAL LOCATIONS. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION AND DEPTH OF THEIR LINES PRIOR TO
- 4. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE DE-ENERGIZING OF POWER LINES AND/OR HOLDING POWER POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 5. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE REPLACEMENT OF TRAFFIC LOOPS IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED INSPECTIONS AND
- SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.
- 7. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OR INSTALLATION AS REQUIRED BY THE ENGINEER OR BY APPROPRIATE GOVERNING AGENCIES.
- 8. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR, AT NO ADDITIONAL COST TO THE OWNER, ALL NECESSARY PERMITS, FEES AND LICENSES.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE REQUIRED NOTICES AND COMPLYING WITH ALL PERMIT(S)
- 10. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE HOLDING OF OTHER UTILITY POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 11. ALL CONCRETE SHALL BE 3,000 p.s.i. UNLESS OTHERWISE SPECIFIED.
- 12. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY.
- 13. ENGENUITY GROUP, INC. SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF THE WORKERS OR THE GENERAL PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATIONS (OSHA) REQUIREMENTS AND FOR THE SAFETY OF THE GENERAL PUBLIC.
- 14. ALL MATERIALS AND WORKMANSHIP MUST BE IN ACCORDANCE WITH THE LOCAL UTILITY STANDARDS AND
- 15. CONTRACTOR SHALL ASSURE THAT ALL TRENCHES MORE THAN FIVE FEET DEEP WILL HAVE TRENCH PROTECTION PER THE TRENCH SAFETY ACT. THE METHOD OF TRENCH PROTECTION THE CONTRACTOR SELECTS MUST BE IN COMPLIANCE 5. PROGRESS SCHEDULE WITH OSHA REGULATIONS.
- 16. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR IS TO INCLUDE IN THEIR BID PACKAGE, PER THE TRENCH SAFETY ACT, ONE ITEM OF COST PERTAINING TO TRENCH PROTECTION.
- 17. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COMPLY WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITTING REQUIREMENTS. COMPLIANCE INCLUDES SUBMITTAL OF A NOTICE OF INTENT (NOI) FOR CONSTRUCTION ACTIVITIES WITH AN ATTACHED STORM WATER POLLUTION PREVENTION (SWPPP). THE NOI AND SWPPP SHALL BE SUBMITTED TO APPLICABLE AGENCIES.

#### **POLLUTION PREVENTION NOTES:**

FROM THE CONSTRUCTION SITE.

A POLLUTION PREVENTION PLAN MUST BE FILED WITH THE APPROPRIATE GOVERNING AGENCIES.

#### 1. THE FOLLOWING ARE TO BE COMPLETED PRIOR TO CONSTRUCTION:

- A. INSTALLATION OF A TWO FOOT (2') HIGH EROSION CONTROL FENCE STAKED EVERY TEN FEET (10') AROUND THE PERIMETER OF THE PROPERTY
- B. PLACEMENT OF HAY BALES AT LOW POINTS WHERE THE POSSIBILITY OF RUNOFF WILL BE THE GREATEST.
- C. TURBIDITY BARRIERS MUST BE PLACED BEFORE ALL BANK IMPROVEMENTS AND OUTFALL STRUCTURE
- D. ESTABLISHMENT OF CONSTRUCTION DEBRIS COLLECTION FACILITIES WITH METHODS TO PROPERLY DISPOSE OF
- COLLECTED CONSTRUCTION DEBRIS OFF-SITE IN A LICENSED FACILITY. E. PLACEMENT OF HAY BALES COMPLETELY AROUND ANY STORM COLLECTION STRUCTURE THAT MAY RECEIVE RUNOFF
- F. INSTALLATION OF FILTER FABRIC OR EQUIVALENT IN ALL STORM COLLECTION STRUCTURES THAT MAY RECEIVE RUNOFF FROM THE CONSTRUCTION SITE.

#### 2. THE FOLLOWING PROCEDURES ARE TO BE IMPLEMENTED DURING CONSTRUCTION:

- A. EVERY WEEK THE CONSTRUCTION MANAGER IS TO INSPECT THE FOLLOWING POLLUTION PREVENTION FACILITIES TO INSURE THAT THEY ARE IN PLACE AND WORKING PROPERLY. IF THEY ARE FOUND NOT TO BE WORKING PROPERLY THE CONSTRUCTION MANAGER WILL TAKE CORRECTIVE ACTION WITHIN FORTY-EIGHT (48) HOURS:
- MAINTENANCE OF OPERATING CONDITION OF THE TWO FOOT (2') HIGH EROSION FENCE. • MAINTENANCE OF OPERATING CONDITION OF ALL HAY BALES PLACED AROUND INLETS AND LOW POINTS ON THE
- DISPOSAL OF ALL CONSTRUCTION DEBRIS TO AN OFF SITE LICENSED WASTE DISPOSAL FACILITY. • INSPECTION OF ALL INLETS WHERE FILTER FABRIC OR ITS EQUIVALENT HAS BEEN PLACED IN THE STRUCTURE.
- MAINTENANCE OF ALL TURBIDITY BARRIERS.

CLEAN AND REMOVE SEDIMENTS AND TRASH AS NEEDED

- B. THERE WILL BE NO MAINTENANCE OF VEHICLES PERFORMED ON-SITE. THERE WILL BE NO DISPENSING OR DISPOSAL OF MOTOR OIL, HYDRAULIC FLUID OR FUEL OIL ON-SITE.
- C. EVERY THREE MONTHS DURING CONSTRUCTION AND ONE MONTH AFTER THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES THE CONTRACTOR IS TO INSPECT AND CLEAN OUT ALL CATCH BASINS AND INLETS, RELIEVING RUNOFF
- D. IF MODIFICATIONS ARE MADE TO THE POLLUTION PREVENTION PLAN THEY MUST BE SUBMITTED IN WRITING.

#### CONCRETE FOR CURBS, SIDEWALKS, AND DRIVEWAYS

#### CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS

- 1 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 2500 PSL TYPE II PORTI AND CEMENT MINIMUM CEMENT CONTENT OF 400 LB/CY OF CONCRETE. MAXIMUM WATER CEMENT RATIO OF 0.66 LB/LB. SLUMP RANGE OF 0.6 INCHES. PLACED OVER COMPACTED SUBGRADE (AT LEAST 98% OF THE MAXIMUM DENSITY DETERMINED BY AASHTO T-180)
- SAW CONTRACTION JOINTS AS SOON AS THE CONCRETE HAS HARDENED TO THE DEGREE THAT EXCESSIVE RAVELING WILL NOT OCCUR AND BEFORE UNCONTROLLED SHRINKAGE CRACKING BEGINS. CONSTRUCT EXPANSION JOINTS IN CURB AT ALL INLETS AND RADIUS POINTS. ENSURE THAT THE JOINT IS 1/2 INCH IN WIDTH.
- 3. CURB IS TO HAVE A BRUSH FINISH.SIDEWALK AND DRIVEWAYS ARE TO HAVE A BROOM FINISH. STRIKE-OFF CONCRETE PERPENDICULAR TO FORMS. FINISH THE EDGE OF DRIVEWAYS AND SIDEWALKS WITH AN EDGING TOOL HAVING A RADIUS OF 1/2 INCH.
- 4. CONTINUOUSLY CURE CONCRETE FOR A PERIOD OF AT LEAST 72 HOURS. COMMENCE CURING AFTER COMPLETELY FINISHING AND AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT APPLICATION OF THE CURING MATERIAL WITHOUT MARRING THE SURFACE.CURE CONCRETE USING EITHER WET BURLAP, MEMBRANE CURING COMPOUND (AT LEAST 200 SQUARE FEET PER GALLON) OR POLYETHYLENE SHEETING.

#### **EARTHWORK:**

- 1. SHOULD UNCHARTED OR INCORRECTLY CHARTED PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, NOTIFY THE ENGINEER IMMEDIATELY. COOPERATE WITH RESPONSIBLE UTILITY COMPANIES IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION.
- DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE RESPECTIVE UTILITY OWNER
- CONTRACTOR SHALL SUSTAIN IN THEIR PLACES AND PROTECT FROM DIRECT OR INDIRECT INJURY ALL PIPES, POLES, UTILITIES, WALLS, BUILDINGS, AND OTHER STRUCTURES OR PROPERTY IN THE VICINITY OF WORK, WHETHER ABOVE OR BELOW THE GROUND, OR THAT MAY APPEAR IN THE TRENCH. CONTRACTOR SHALL TAKE ALL RISKS ATTENDANT TO THE PRESENCE OR PROXIMITY OF PIPES, POLES, WALLS, BUILDINGS, AND OTHER STRUCTURES AND PROPERTY, OF EVERY KIND AND DESCRIPTION, IN OR OVER HIS TRENCHES, EXCAVATIONS OR IN THE VICINITY OF HIS WORK WHETHER ABOVE OR BELOW THE GROUND AND SHALL BE RESPONSIBLE FOR ALL DAMAGE AND ASSUME ALL EXPENSE FOR DIRECT OR INDIRECT INJURY. CAUSED BY HIS WORK, TO ANY OF THEM, OR TO ANY PERSON OR PROPERTY BY REASON OF INJURY TO THEM, WHETHER SUCH STRUCTURES ARE OR ARE NOT SHOWN ON THE
- PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, BENCHMARKS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY
- PROVIDE EROSION CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
- WHEN EXCAVATIONS EXCEED 5 FEET IN DEPTH. CONTRACTOR SHALL MEET THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S EXCAVATION SAFETY STANDARDS 29 C.F.R.S. 1926.650, SUBPART P.

#### GENERAL:

#### 1. WORK INCLUDED:

- THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERINTENDENCE, QUALITY CONTROL, MATERIALS, PLANT, POWER, LIGHT, HEAT, FUEL, WATER, TOOLS, APPLIANCES, EQUIPMENT, SUPPLIES, AND OTHER MEANS OF CONSTRUCTION NECESSARY AND PROPER FOR PERFORMING AND COMPLETING THE WORK. CONTRACTOR SHALL PERFORM AND COMPLETE THE WORK IN THE MANNER BEST CALCULATED TO PROMOTE SCHEDULED CONSTRUCTION CONSISTENT WITH SAFETY OF LIFE AND PROPERTY AND TO THE SATISFACTION OF THE OWNER, AND IN STRICT ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL CLEAN UP THE WORK, MAINTAIN IT DURING CONSTRUCTION, AND PAY ALL COSTS INCIDENTAL THERETO. CONTRACTOR SHALL REPAIR OR RESTORE ALL STRUCTURES AND PROPERTY THAT MAY BE DAMAGED OR DISTURBED DURING PERFORMANCE OF THE
- THE COST OF INCIDENTAL WORK DESCRIBED IN THESE GENERAL REQUIREMENTS, FOR WHICH THERE ARE NO SPECIFIC CONTRACT ITEMS, SHALL BE CONSIDERED AS PART OF THE GENERAL COST OF DOING THE WORK AND SHALL BE INCLUDED IN THE PRICES FOR THE VARIOUS CONTRACT ITEMS. NO
- ADDITIONAL PAYMENT WILL BE MADE THEREFORE THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUCH MODERN PLANT, TOOLS, AND EQUIPMENT AS MAY BE NECESSARY IN THE OPINION OF THE ENGINEER, TO PERFORM IN A SATISFACTORY AND ACCEPTABLE MANNER ALL THE WORK REQUIRED BY THE CONTRACT. ONLY EQUIPMENT OF ESTABLISHED REPUTATION AND PROVEN EFFICIENCY SHALL BE USED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ADEQUACY OF WORKMANSHIP, MATERIALS AND EQUIPMENT, PRIOR APPROVAL OF THE ENGINEER NOTWITHSTANDING.
- D. THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING REQUIRED INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

PERFORM PREPARATORY WORK AND OPERATIONS IN MOBILIZING FOR BEGINNING WORK ON THE PROJECT, INCLUDING, BUT NOT LIMITED TO, THOSE OPERATIONS NECESSARY FOR THE MOVEMENT OF PERSONNEL, EQUIPMENT, SUPPLIES, AND INCIDENTALS TO THE PROJECT SITE AND FOR THE ESTABLISHMENT OF TEMPORARY OFFICES, BUILDINGS, SAFETY EQUIPMENT AND FIRST AID SUPPLIES, AND OTHER FACILITIES. INCLUDE THE COSTS OF BONDS AND ANY REQUIRED INSURANCE AND ANY OTHER PRE-CONSTRUCTION EXPENSE NECESSARY FOR THE START OF THE WORK, EXCLUDING THE COST OF CONSTRUCTION MATERIALS.

#### 3. MAINTENANCE OF TRAFFIC:

- PREPARE AND SUBMIT A MAINTENANCE OF TRAFFIC PLAN FOR REVIEW. A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA OR A PERSON THAT HAS SATISFACTORILY COMPLETED THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION "FLORIDA ADVANCED WORK ZONE TRAFFIC CONTROL COURSE" SHALL PREPARE THE PLAN
- CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN TRAFFIC CONTROL THROUGH THE WORK AREA FOR THE DURATION OF CONSTRUCTION. PROVIDE TRAFFIC CONTROL DEVICES THAT ARE ON THE FLORIDA DEPARTMENT OF TRANSPORTATION'S "QUALIFIED PRODUCT LIST".

#### 4. PROVISIONS FOR CONTROL OF POLLUTION:

- SUFFICIENT PRECAUTIONS SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT THE RUN-OFF OF POLLUTING SUBSTANCES SUCH AS SILT, CLAY, FUELS, OILS, BITUMEN'S OR OTHER POLLUTING MATERIALS HARMFUL TO HUMANS, FISH, OR OTHER LIFE, INTO THE SUPPLIES AND SURFACE WATERS OF THE STATE OF FLORIDA. CONTROL MEASURES MUST BE ADEQUATE TO ASSURE THAT TURBIDITY IN THE RECEIVING WATER WILL NOT BE INCREASED MORE THAN 29 NEPHELOMETRIC TURBIDITY UNITS (NTU) ABOVE BACKGROUND UNLESS OTHERWISE PERMITTED. SPECIAL PRECAUTIONS SHALL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT OPERATIONS WHICH PROMOTE EROSION. EROSION EVIDENT WITHIN THE LIMITS OF CONSTRUCTION OR OTHER AREAS AFFECTED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- FILL OUT A NOTICE OF INTENT FORM (FDEP FORM 62-621.300(4)(B) AND SUBMIT IT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

- PREPARE A CONSTRUCTION PROGRESS SCHEDULE COVERING ALL THE WORK INVOLVED IN THE CONTRACT. THIS INCLUDES SUBMITTAL AND APPROVAL OF SHOP DRAWINGS ON CRITICAL ITEMS, FABRICATION AND DELIVERY OF IDENTIFIABLE MATERIALS AND EQUIPMENT, SPECIFIC ITEMS OR WORK IN THE SCOPE, INTERFACES REQUIRED WITH OTHER CONTRACTS THAT MAY BE PART OF AN OVERALL PROJECT, AND SPECIFIC DEPENDENCIES UPON ACTS OR ACTIVITIES OF PARTIES NOT UNDER THE CONTROL OF CONTRACTOR.
- THE BAR GRAPH METHOD OR CRITICAL PATH METHOD ARE ACCEPTABLE FOR SCHEDULING CONSTRUCTION ACTIVITY

#### 6. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- SUBMIT COPIES OF ALL REQUIRED SHOP DRAWINGS, PRODUCT DATA AND SAMPLES FOR ENGINEER'S REVIEW
- SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND TRANSMITTAL LETTERS PERTAINING THERETO SHALL BE IDENTIFIED WITH THE TITLE OF THE PROJECT, SUBMISSION DATE, AND THE CONTRACTOR'S ACKNOWLEDGEMENT THAT HE HAS REVIEWED THEM AND FOUND THEM ACCEPTABLE. NOTIFY ENGINEER IN WRITING, AT THE TIME OF SUBMITTAL, OF ANY DEVIATIONS IN THE SUBMITTALS FROM THE REQUIREMENTS OF THE CONTACT
- THE REVIEW AND APPROVAL OF SHOP DRAWINGS, SAMPLES OR PRODUCT DATA BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM
- HIS/HER RESPONSIBILITY WITH REGARD TO THE FULFILLMENT OF THE TERMS OF THE CONTRACT DOCUMENTS. ALL RISKS OF ERROR AND OMISSION ARE ASSUMED BY THE CONTRACTOR AND THE ENGINEER WILL HAVE NO RESPONSIBILITY THEREFORE.

#### 7. BORING LOGS, OTHER REPORTS AND DRAWINGS UTILIZED BY ENGINEER:

A. BORING LOGS, OTHER REPORTS AND DRAWINGS UTILIZED BY ENGINEER, IF ENCLOSED, ARE PROVIDED FOR CONTRACTOR'S INFORMATION AND ARE NOT A PART OF THE CONTRACT DOCUMENTS. THERE IS NO TECHNICAL DATA IN THE BORING LOGS, OTHER REPORTS OR DRAWINGS THAT SHOULD BE RELIED ON BY THE CONTRACTOR.

#### 8. CONSTRUCTION STAKING AND RECORD DRAWINGS:

- THE BASELINES AND BENCHMARKS FOR PRIMARY CONTROL, NECESSARY TO ESTABLISH LINES AND GRADES NEEDED FOR CONSTRUCTION ARE SHOWN ON THE DRAWINGS. THESE BASELINES AND BENCHMARKS SHALL BE USED AS THE ORIGIN OF ALL SURVEYS, LAYOUTS AND MEASUREMENTS TO ESTABLISH CONSTRUCTION LINES AND GRADES. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE LOSS OR DAMAGE OF PRIMARY CONTROL POINTS. ANY STAKES AND/OR CONTROL POINTS LOST OR DAMAGED BY CONSTRUCTION ACTIVITY WILL BE RE-ESTABLISHED BY
- CONTRACTOR AT NO ADDITIONAL EXPENSE TO OWNER. CONSTRUCTION STAKING AND RECORD DRAWINGS SHALL BE PERFORMED BY A PROFESSIONAL SURVEYOR AND MAPPER LICENSED IN THE STATE OF
- FLORIDA.DESIGN DATA SHALL BE LINED-OUT. RECORD DATA SHALL BE ADDED NEXT TO EACH LINED-OUT DESIGN DIMENSION OR ELEVATION.

- UTILITY INSTALLATIONS AND STRUCTURES SHALL BE UNDERSTOOD TO INCLUDE ALL POLES, TRACKS, PIPES, WIRES, CONDUITS, HOUSE SERVICE CONNECTIONS, VAULTS, MANHOLES AND ALL OTHER APPURTENANCES AND FACILITIES PERTAINING THERETO WHETHER OWNED OR CONTROLLED BY THE OWNER, OTHER GOVERNMENTAL BODIES OR PRIVATELY OWNED BY INDIVIDUALS, FIRMS OR CORPORATIONS, USED TO SERVE THE PUBLIC WITH TRANSPORTATION, TRAFFIC CONTROL, GAS, ELECTRICITY, TELEPHONE, SEWERAGE, DRAINAGE, WATER OR OTHER PUBLIC OR PRIVATE PROPERTY
- WHICH MAY BE AFFECTED BY THE WORK CONTRACTOR SHALL PROTECT ALL UTILITY INSTALLATIONS AND STRUCTURES FROM DAMAGE DURING WORK. ACCESS ACROSS ANY BURIED PUBLIC UTILITY INSTALLATION OR STRUCTURE SHALL BE MADE ONLY IN SUCH LOCATIONS AND BY MEANS APPROVED BY THE UTILITY OWNER. THE CONTRACTOR SHALL SO ARRANGE OPERATIONS AS TO AVOID ANY DAMAGE TO THESE FACILITIES. ALL REQUIRED PROTECTIVE DEVICES AND
- CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR. ALL EXISTING PUBLIC UTILITIES DAMAGED BY THE CONTRACTOR WHICH ARE SHOWN ON THE DRAWINGS OR HAVE BEEN LOCATED IN THE FIELD BY THE UTILITY OWNER SHALL BE REPAIRED BY THE CONTRACTOR. PUBLIC UTILITY INSTALLATIONS OR STRUCTURES OWNED OR CONTROLLED BY THE OWNER OR OTHER GOVERNMENTAL BODY, WHICH ARE SHOWN ON THE DRAWINGS TO BE REMOVED, RELOCATED, REPLACED OR REBUILT BY THE CONTRACTOR SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS
- CONTRACT ITEMS. NO SEPARATE PAYMENTS SHALL BE MADE THEREFORE. WHERE PUBLIC UTILITY INSTALLATIONS OR STRUCTURES OWNED OR CONTROLLED BY THE OWNER OR OTHER GOVERNMENTAL BODY ARE ENCOUNTERED DURING THE COURSE OF THE WORK, AND ARE NOT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, AND WHEN IN THE OPINION OF THE ENGINEER. REMOVAL. RELOCATION. REPLACEMENT OR REBUILDING IS NECESSARY TO COMPLETE THE WORK UNDER THIS CONTRACT SUCH WORK SHALL BE ACCOMPLISHED BY THE UTILITY HAVING JURISDICTION, OR SUCH WORK MAY BE ORDERED, IN WRITING BY THE ENGINEER, FOR THE CONTRACTOR TO ACCOMPLISH. IF SUCH WORK IS ACCOMPLISHED BY THE UTILITY HAVING JURISDICTION IT WILL BE CARRIED OUT EXPEDITIOUSLY AND THE CONTRACTOR SHALL GIVE FULL COOPERATION TO PERMIT THE UTILITY TO COMPLETE THE REMOVAL, RELOCATION, REPLACEMENT OR REBUILDING AS REQUIRED. IF SUCH WORK IS ACCOMPLISHED BY THE CONTRACTOR, IT WILL BE IN ACCORDANCE WITH THE GENERAL AND
- SUPPLEMENTARY CONDITIONS. CONTRACTOR SHALL GIVE WRITTEN NOTICE TO OWNER AND GOVERNMENTAL UTILITY DEPARTMENTS AND OTHER OWNERS OF PUBLIC UTILITIES OF THE LOCATION OF THE PROPOSED CONSTRUCTION OPERATIONS, AT LEAST SEVENTY-TWO (72) HOURS IN ADVANCE OF BREAKING GROUND IN ANY AREA OR ON ANY UNIT OF THE WORK
- THE MAINTENANCE, REPAIR, REMOVAL, RELOCATION OR REBUILDING OF PUBLIC UTILITY INSTALLATIONS AND STRUCTURES, WHEN ACCOMPLISHED BY THE CONTRACTOR AS HEREIN PROVIDED, SHALL BE DONE BY METHODS APPROVED BY THE UTILITY OWNER.

#### 10. FIELD OBSERVATIONS AND TESTING:

- A. FIELD OBSERVATIONS WILL BE PERFORMED BY ENGINEER AND ALL FIELD TESTING OF MATERIALS WILL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY. THE COST OF PASSING TESTS WILL BE PAID BY OWNER. FAILING TESTS SHALL BE PAID BY THE CONTRACTOR.
- FOR TESTS SPECIFIED TO BE MADE BY THE CONTRACTOR (FOR EQUIPMENT/MATERIAL PRIOR TO DELIVERY TO THE PROJECT SITE), THE TESTING PERSONNEL SHALL MAKE THE NECESSARY INSPECTIONS AND TESTS AND THE REPORTS THEREOF SHALL BE IN SUCH FORM AS WILL FACILITATE CHECKING TO DETERMINE COMPLIANCE WITH THE CONTRACT DOCUMENTS. COPIES OF THE REPORTS SHALL BE SUBMITTED AND AUTHORITATIVE CERTIFICATION THEREOF MUST BE FURNISHED TO THE ENGINEER AS A PREREQUISITE FOR THE ACCEPTANCE OF ANY MATERIAL OR EQUIPMENT.
- THE CONTRACTOR WILL BE NOTIFIED THEREOF AND WILL BE DIRECTED TO REFRAIN FROM DELIVERING SAID MATERIAL, OR TO REMOVE IT PROMPTLY FROM THE SITE OR FROM THE WORK AND REPLACE IT WITH ACCEPTABLE MATERIAL, WITHOUT ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE PROPER OPERATION OF MATERIAL DURING TESTS AND CONSTRUCTION PERIODS AND

IF, IN THE MAKING OF ANY TEST OF ANY MATERIAL, IT IS ASCERTAINED BY THE ENGINEER THAT THE MATERIAL DOES NOT COMPLY WITH THE CONTRACT,

- SHALL NEITHER HAVE NOR MAKE ANY CLAIM FOR DAMAGE THAT MAY OCCUR TO MATERIAL PRIOR TO THE TIME WHEN THE OWNER FORMALLY TAKES OVER THE OPERATION THEREOF. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FIELD TESTING.
- PIPE TRENCHES SHALL BE TESTED AT RANDOMLY SELECTED LOCATIONS ALONG THE LENGTH OF EACH PIPE RUN WITHIN EACH 300' INTERVAL (MAXIMUM) AND BETWEEN EACH SET OF TWO STRUCTURES IF A PIPE RUN SEPARATING THE TWO IS LESS THAN 300' IN LENGTH. ALL PIPE AND STRUCTURE TRENCHES SHALL BE BACKFILLED USING A MAX. OF 12" LIFTS. ALL BACKFILL MATERIAL SHALL BE CLEAN, DRY STRUCTURAL
- FILL WITH NO DELETERIOUS OR ORGANIC MATERIAL PRESENT AT LEAST ONE TEST SHALL BE PERFORMED FOR EVERY 12" OF DEPTH, STARTING AT THE SPRINGLINE OF THE PIPE, COVERING THE 12" LAYER BELOW TESTS SHALL BE PERFORMED AT EVERY STRUCTURE BEGINNING AT THE BASE OF THE STRUCTURE (COVERING THE 12" BELOW THE BASE OF THE
- STRUCTURE WITH EACH 12" LIFT SUBGRADE COMPACTION SHALL BE CHECKED AT 200 FOOT INTERVALS. FOR CURB AND SIDEWALK CHECK CONCRETE SLUMP PER ASTM C143 AND OBTAIN A SET OF TEST CYLINDERS EVERY PER ASTM C39, FOR EVERY 1000 LINEAR FEET

STRUCTURE) WITH ONE TEST FOR EVERY 12" LIFT. TESTS SHALL ALTERNATE FROM CORNER TO CORNER OR FROM SIDE TO SIDE AROUND THE

- (OR FOR EVERY 50 CUBIC YARDS PLACED PER DAY). BASE ROCK - ANALYZE MATERIAL WHEN IT IS DELIVERED TO THE SITE FOR COMPLIANCE WITH THE SPECIFICATIONS. CHECK COMPACTION AT 300 FOOT INTERVALS BUT ALTERNATE LEFT SIDE TO RIGHT SIDE.
- ASPHALT VERIFY ASPHALT TEMPERATURE AT ARRIVAL TO SITE TO VERIFY COMPLIANCE WITH MIX DESIGN. ALL DENSITY TESTS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF FLORIDA. ALL TESTS AND LOCATIONS ARE SUBJECT TO REVIEW BY REPRESENTATIVES OF OUR OFFICE AND ADDITIONAL TESTS MAY BE REQUIRED BASED ON

#### 11. SALVAGE MATERIAL:

A. ALL SALVAGEABLE MATERIAL AND EQUIPMENT REMOVED FROM THE EXISTING CONSTRUCTION FOR WHICH SPECIFIC USE, RELOCATION OR OTHER DISPOSAL IS NOT SPECIFICALLY NOTED ON THE DRAWINGS OR OTHERWISE SPECIFIED, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO HIM. ALL MATERIAL AND EQUIPMENT NOT IN SALVAGEABLE CONDITION AS DETERMINED BY THE ENGINEER. SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER AT THE CONTRACTOR'S EXPENSE. THE ACTUAL STORAGE SITE FOR SALVAGEABLE MATERIAL WILL BE DESIGNATED BY THE OWNER.

FIELD OBSERVATIONS OF CONSTRUCTION TECHNIQUES OR MATERIALS USED ON SITE.

#### 12. CLEANING:

- A. DURING CONSTRUCTION OF THE WORK, THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE OF THE WORK AND ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE AND SHALL REMOVE THE SAME FROM ANY PORTION OF THE SITE IF, IN THE OPINION OF THE ENGINEER, SUCH MATERIAL, DEBRIS, OR RUBBISH CONSTITUTES A NUISANCE OR IS OBJECTIONABLE.
- B. AT THE CONCLUSION OF THE WORK, ALL TOOLS, TEMPORARY STRUCTURES AND MATERIALS BELONGING TO THE CONTRACTOR SHALL BE PROMPTLY TAKEN AWAY AND CONTRACTOR SHALL REMOVE AND PROMPTLY DISPOSE OF ALL RUBBISH OR ANY OTHER FOREIGN MATERIALS. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL MATERIAL INSTALLED AND SHALL DELIVER SUCH MATERIALS UNDAMAGED IN A CLEAN AND NEW CONDITION.

#### CONTRACTOR SHALL OBTAIN A "DEWATERING GENERAL WATER USE PERMIT" FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT PRIOR TO COMMENCING DEWATERING UNLESS THE WORK QUALIFIES FOR A 'NO-NOTICE' AUTHORIZATION AS DESCRIBED IN RULE 40E-20.302(3) OF THE FLORIDA

ADMINISTRATIVE CODE.

13 DEWATERING:

B. IF ENGINEER HAS ALREADY OBTAINED A DEWATERING PERMIT, CONTRACTOR SHALL BE RESPONSIBLE FOR EITHER FOLLOWING THE PERMIT REQUIREMENTS, OR REVISING THE PERMIT WITH SFWMD TO CONFORM WITH CONTRACTOR'S PLANNED MEANS AND METHODS FOR THE DEWATERING

- 1. DELIVER A REPRESENTATIVE LOAD OF THE ROCK MATERIAL TO THE SITE FOR A TESTING LABORATORY TO SAMPLE. ALLOW SUFFICIENT TIME FOR TEST LABORATORY TO ANALYZE BEFORE COMMENCING PLACEMENT ON THE ROAD.
- 2. REPRESENTATIVE LOAD OF ROCK IS TO REMAIN IN STOCKPILE FORM THROUGHOUT ROCK DELIVERY SO THAT ENGINEER CAN MONITOR QUALITY OF ROCK MATERIAL BEING DELIVERED.

TESTING LABORATORY WILL DETERMINE LAB DENSITY PER AASHTO T180 AND THE LIMEROCK BEARING RATIO.

- 3. ROCK BASE: MINIMUM LIMEROCK BEARING RATIO OF 100. AT LEAST 97 PERCENT OF THE MATERIAL SHALL PASS A 3-1/2 INCH SIEVE AND THE MATERIAL SHALL BE GRADED UNIFORMLY DOWN TO DUST. ALL CRUSHING OR BREAKING-UP WHICH MIGHT BE NECESSARY IN ORDER TO MEET SUCH SIZE REQUIREMENT SHALL BE DONE BEFORE THE MATERIAL IS PLACED ON THE ROAD, MATERIAL SHALL NOT CONTAIN CHERTY OR OTHER EXTREMELY HARD PIECES, OR LUMPS, BALLS OR POCKETS OF SAND OR CLAY SIZE MATERIAL IN SUFFICIENT QUANTITY AS TO BE DETRIMENTAL TO THE PROPER BONDING FINISHING, OR STRENGTH OF THE ROCK BASE.
- 4. COMPACT SUBGRADE TO AT LEAST 98 PERCENT OF THE MAXIMUM DENSITY DETERMINED BY ASTM D1557 (AASHTO T180).
- VERIFY SUBGRADE IS READY TO RECEIVE BASE MATERIAL
- 6. SPREAD THE ROCK UNIFORMLY. REMOVE ALL SEGREGATED AREAS OF FINE OR COARSE ROCK AND REPLACE THEM WITH PROPERLY GRADED ROCK.
- 7. AFTER SPREADING OF THE BASE IS COMPLETED, THE ENTIRE SURFACE SHALL BE SCARIFIED AND SHAPED SO AS TO PRODUCE THE EXACT GRADE AND CROSS SECTION AFTER COMPACTION. FOR DOUBLE COURSE BASE, THIS SCARIFYING SHALL EXTEND TO A DEPTH SUFFICIENT TO PENETRATE SLIGHTLY THE SURFACE OF THE FIRST COURSE.
- 8. WHEN THE SPECIFIED THICKNESS OF THE ROCK BASE IS GREATER THAN 6 INCHES, CONSTRUCT THE BASE IN MULTIPLE COURSES OF EQUAL THICKNESS. INDIVIDUAL COURSES SHALL NOT BE LESS THAN 3 INCHES.
- WHEN THE MATERIAL DOES NOT HAVE THE PROPER MOISTURE CONTENT TO INSURE THE REQUIRED DENSITY. WETTING OR DRYING WILL BE REQUIRED. IF THE MATERIAL IS DEFICIENT IN MOISTURE, WATER WILL BE ADDED AND UNIFORMLY MIXED IN BY DISKING THE BASE COURSE TO ITS FULL DEPTH. IF THE MATERIAL CONTAINS AN EXCESS OF MOISTURE, IT SHALL BE ALLOWED TO DRY BEFORE BEING COMPACTED. WETTING OR DRYING OPERATIONS SHALL INVOLVE MANIPULATION OF THE ENTIRE WIDTH AND DEPTH OF THE BASE AS A UNIT. AS SOON AS PROPER CONDITIONS OF MOISTURE ARE ATTAINED, THE MATERIAL SHALL BE COMPACTED TO AN AVERAGE DENSITY NOT LESS THAN NINETY-EIGHT (98) PERCENT OF THE MAXIMUM DENSITY DETERMINED BY AASHTO T-180.
- 10. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THE SURFACE SHALL BE "HARD-PLANED" WITH A BLADE GRADER IMMEDIATELY PRIOR TO THE APPLICATION OF THE PRIME COAT TO REMOVE THE THIN GLAZE OR CEMENTED SURFACE AND TO ALLOW FREE PENETRATION OF THE PRIME MATERIAL. THE MATERIALS PLANED FROM THE BASE SHALL BE
- 11. IF AT ANY TIME. THE SUBGRADE MATERIAL BECOMES MIXED WITH THE BASE COURSE MATERIAL. DIG OUT AND REMOVE THE MIXTURE, AND RESHAPE AND COMPACT THE SUBGRADE. THEN REPLACE THE MATERIALS REMOVED WITH CLEAN BASE MATERIAL, AND SHAPE AND COMPACT. PERFORM THIS WORK AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 12. IN THE PRESENCE OF THE ENGINEER, CHECK THE FINISHED SURFACE OF THE BASE COURSE WITH A TEMPLATE CUT TO THE REQUIRED CROWN AND WITH A 15-FOOT STRAIGHTEDGE LAID PARALLEL TO THE CENTERLINE OF THE ROAD. CORRECT ALL IRREGULARITIES GREATER THAN ¼ INCH TO THE SATISFACTION OF THE ENGINEER BY SCARIFYING AND REMOVING OR ADDING ROCK AS REQUIRED, AND RECOMPACT THE ENTIRE AREA.
- 13. IF AT ANY TIME THE SUBGRADE MATERIAL SHOULD BECOME MIXED WITH THE BASE COURSE MATERIAL, THE CONTRACTOR SHALL, WITHOUT ADDITIONAL COMPENSATION, DIG OUT AND REMOVE THE MIXTURE, RESHAPE AND COMPACT THE SUBGRADE AND REPLACE THE MATERIALS REMOVED WITH CLEAN BASE MATERIAL, WHICH SHALL BE SHAPED AND COMPACTED AS SPECIFIED ABOVE.
- 14. IF CRACKS OR CHECKS APPEAR IN THE BASE, EITHER BEFORE OR AFTER PRIMING, WHICH IN THE OPINION OF THE ENGINEER WOULD IMPAIR THE STRUCTURAL EFFICIENCY OF THE BASE COURSE, THE CONTRACTOR SHALL REMOVE SUCH CRACKS OR CHECKS BY RESCARIFYING, RESHAPING, ADDING BASE MATERIAL WHERE NECESSARY AND
- 15. ASPHALT MIX DESIGN FOR EACH ASPHALT TYPE SPECIFIED ON THE DRAWINGS. MIX DESIGN SHALL INCLUDE THE INFORMATION SPECIFIED IN PARAGRAPH 334-3 OF THE FDOT SPECIFICATIONS.
- 16. PRIMER: PROVIDE CUTBACK ASPHALT, RC-70 OR RC-250 COMPLYING WITH FDOT SPECIFICATION 916-3.
- 17. TACK COAT: RA-500 MEETING THE REQUIREMENTS OF FDOT SPECIFICATION 916-2.
- A. ASPHALT CONCRETE: ASPHALTIC CONCRETE SURFACE COURSE SHALL BE COMPOSED OF A MIXTURE OF AGGREGATE, MINERAL FILLER, IF NEEDED, AND ASPHALT CEMENT, THE CONSTITUENTS OF THE MIXTURE SHALL BE COMBINED IN SUCH PROPORTIONS AS TO PRODUCE A MIXTURE HAVING A STABILITY WITHIN THE LIMITS IN THE FDOT "STANDARD SPECIFICATIONS". THE JOB MIX FORMULA, SIZE AND PERCENT OF AGGREGATES SHALL BE AS SPECIFIED IN THE FDOT "STANDARD SPECIFICATIONS". THE THICKNESS OF THE SURFACE COURSE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS.
- 18. ASPHALT CONCRETE: MEETS THE REQUIREMENTS OF SECTION 334 OF THE FDOT SPECIFICATIONS.
- 19. SPREAD THE ASPHALT MIXTURE ONLY WHEN THE SURFACE UPON WHICH IT IS TO BE LAID HAS BEEN PREVIOUSLY PREPARED, IS INTACT, FIRM, AND PROPERLY CURED, AND IS DRY.
- 20. VERIFY GRADIENTS AND ELEVATIONS OF BASE ARE CORRECT.
- 21. DO NOT BEGIN PAVING INSTALLATION WITHOUT ENGINEER ACCEPTANCE OF THE SUBSTRATE.
- 22. SPREAD THE ASPHALT MIXTURE ONLY WHEN THE AIR TEMPERATURE IN THE SHADE AND AWAY FROM THE ARTIFICIAL HEAT IS AT LEAST 40°F FOR LAYERS GREATER THAN 1-INCH IN THICKNESS AND AT LEAST 45°F FOR LAYERS 1-INCH OR LESS IN THICKNESS.
- 23. CLEAN THE SURFACE OF THE BASE OR PAVEMENT TO BE COVERED OF ALL LOOSE AND DELETERIOUS MATERIAL BY THE USE OF POWER BROOMS OR BLOWERS, SUPPLEMENTED BY HAND BROOMING WHERE NECESSARY.
- 24. WHERE AN ASPHALT MIX IS TO BE PLACED ON AN EXISTING PAVEMENT OR OLD BASE WHICH IS IRREGULAR, FILL ALL DEPRESSIONS IN THE EXISTING SURFACE MORE THAN 1 INCH DEEP BY SPOT PATCHING WITH A LEVELING COURSE MIXTURE, AND THEN COMPACT THEM THOROUGHLY. FILL CRACKS LARGER THAN 1/4 INCH IN WIDTH WITH A SLURRY MIXTURE OF SAND AND EMULSION.

#### 25. PRIMER:

- A. APPLY PRIMER OVER SUBSTRATE AT A UNIFORM RATE OF NOT LESS THAN 0.15 GALLON/SQUARE YARD FOR
- SHELLROCK BASES AND NOT LESS THAN 0.10 GALLON/SQUARE YARD FOR LIMEROCK BASES. B. APPLY TO CONTACT SURFACES OF CURBS, GUTTERS, AND OTHER CEMENT SURFACES.
- C. USE CLEAN SAND TO BLOT EXCESS PRIMER.

RECOMPACTING

- 26. TACK COAT: A. APPLY TACK COAT ON EXISTING PAVEMENTS THAT ARE TO BE OVERLAID.
- B. APPLY TACK COAT IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS AND FDOT SPECIFICATIONS.
- SECTION 300-8 C. COAT SURFACES OF MANHOLES, CATCH BASINS, AND STEEL FRAMES WITH OIL TO PREVENT BOND WITH ASPHALT PAVING. DO NOT TACK COAT THESE SURFACES.
- D. APPLY TACK COAT AT THE RATE OF APPLICATION BETWEEN 0.02 TO 0.08 GALLONS PER SQUARE YARD.
- 27. MAINTAIN THE TEMPERATURE OF THE MIX AT THE TIME OF SPREADING WITHIN ±25°F OF THE ESTABLISHED MIX TEMPERATURE. ENGINEER WILL TAKE MIX TEMPERATURES AT AN AVERAGE FREQUENCY OF ONE PER FIVE TRUCKS. IF THE TEMPERATURE FAILS TO FALL WITHIN THE SPECIFIED TOLERANCE RANGE, TAKE CORRECTIVE ACTION.
- DO NOT PLACE ASPHALT MIXTURES WHILE RAIN IS FALLING, OR WHEN THERE IS WATER ON THE SURFACE TO BE 29. BEFORE STARTING ANY ROLLING, CHECK THE SURFACE; CORRECT ANY IRREGULARITIES; REMOVE ALL DRIPPINGS, FAT SANDY ACCUMULATIONS FROM THE SCREED, AND FAT SPOTS FROM ANY SOURCE AND REPLACE THEM WITH

28. IMMEDIATELY CEASE TRANSPORTATION OF ASPHALT MIXTURES FROM THE PLANT WHEN RAIN BEGINS AT THE ROADWAY.

- SATISFACTORY MATERIAL. WHEN CORRECTING A DEPRESSION WHILE THE MIXTURE IS HOT, SCARIFY THE SURFACE AND ADD FRESH MIXTURE.
- 30. COMPACT MIXTURE IN ACCORDANCE WITH PARAGRAPH 330-10 OF THE FDOT SPECIFICATIONS. 31. OBTAIN A SMOOTH SURFACE ON ALL PAVEMENT COURSES PLACED AND THEN STRAIGHTEDGE ALL INTERMEDIATE AND FINAL COURSES WITH A 15-FOOT ROLLING STRAIGHTEDGE. FURNISH A 15-FOOT STRAIGHTEDGE AND MAKE IT AVAILABLE

AT THE JOB SITE AT ALL TIMES DURING THE PAVING OPERATION FOR CHECKING JOINTS AND SURFACE IRREGULARITIES.

STRAIGHTEDGE. CORRECT ALL DEFICIENCIES IN EXCESS OF 3/16-INCH IN ACCORDANCE WITH PARAGRAPH 330-12 OF THE

- 32. PRODUCE A FINISHED SURFACE OF UNIFORM TEXTURE AND COMPACTION WITH NO PULLED, TORN, OR LOOSENED PORTIONS AND FREE OF SEGREGATION, AND STREAKS, SAND SPOTS, OR RIPPLES. 33. UPON COMPLETION OF FINAL SURFACE COURSE ENGINEER WILL TEST FINISHED SURFACE WITH A 15- FOOT ROLLING
- FDOT SPECIFICATIONS. 34. ENGINEER MAY DETERMINE PAVEMENT THICKNESS FROM THE DEPTH OF CORE BORINGS. THE MAXIMUM ALLOWABLE DEFICIENCY IN THICKNESS FOR PAVEMENT OF A SPECIFIED THICKNESS OF 2½ INCHES OR MORE IS ½ INCH. FOR PAVEMENT OF A SPECIFIED THICKNESS OF LESS THAN 2½ INCHES IS ¼ INCH.
- 35. IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM MECHANICAL INJURY FOR AS LONG AS REQUIRED UNTIL ACCEPTED BY ENGINEER.

#### CONTRACTOR'S RESPONSIBILITIES:

AND WATER LINES.

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BIDDING THE WORK AND TO PERFORM SUCH TESTS, STUDIES AND SURVEYS AS DEEMED NECESSARY TO SATISFY THE CONTRACTOR AS TO THE ACTUAL SURFACE AND SUBSURFACE CONDITIONS EXISTING AT THE SITE. ACTUAL CONDITIONS THAT DIFFER FROM THOSE SHOWN ON DRAWINGS SHALL NOT CONSTITUTE FOR
- THE CONTRACTOR SHALL CHECK ALL DRAWINGS FURNISHED TO HIM AND SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON
- 3. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR IS ISSUED A NOTICE TO PROCEED
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES, RULES AND REGULATIONS, INCLUDING BUT NO LIMITED TO; UTILITY, COUNTY, CITY AND STATE.

THE DRAWINGS SHALL BE OF LIKE EFFECT AS IF SHOWN OR MENTIONED IN BOTH.

- 5. THE CONTRACTOR SHALL CALL SUNSHINE (811) 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
- 6. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ADVANCE OF CONSTRUCTION.
- 7. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA
- STATUTE 553.851 FOR THE PROTECTION OF ANY UNDERGROUND GAS PIPE. 8. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED CABLE, SANITARY LINES,
- 9. THE CONTRACTOR, SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES, STRUCTURES, PAVEMENT, ETC. FROM DAMAGE OR DISRUPTION OF SERVICE AND SHALL PROTECT THE OWNER AGAINST ANY CLAIMS THAT MAY ARISE AS A RESULT OF CONSTRUCTION ACTIVITIES. REPAIRS OF SUCH UTILITIES, STRUCTURES, PAVEMENT, ETC. SHALL BE MADE TO THE SATISFACTION OF THE ENGINEER AND ALL REGULATORY AGENCIES.
- 10. IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCY BETWEEN THE DRAWINGS AND THE PHYSICAL CONDITIONS. OR ANY ERROR OR OMISSIONS IN THE DRAWINGS. IN THE LAYOUT AS GIVE BY THE POINTS AND INSTRUCTIONS, OR DISCOVERS UNFORESEEN BE THE CONTRACTOR'S DUTY TO IMMEDIATELY INFORM THE ENGINEER IN WRITING, AND THE ENGINEER SHALL PROMPTLY CHECK THE ACCURACY OF THE INFORMATION. ANY WORK DONE AFTER SUCH DISCOVERY, UNTIL NECESSARY CHANGES ARE AUTHORIZED WILL BE DONE AT THE CONTRACTOR'S

11. DURING ALL UNDERGROUND CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR

- PROVIDING THE APPROPRIATE CLEARANCES FROM ANY PROPOSED OR EXISTING UTILITIES OR STRUCTURES, AS REQUIRED BY THE PLANS, SPECIFICATION, UTILITY AUTHORITY, AND ANY GOVERNING AGENCY. THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY IF THE APPROPRIATE CLEARANCE IS NOT AVAILABLE.
- 12. REGULATIONS AND LEGAL REQUIREMENTS REGARDING WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODES.
- 13. UPON COMPLETION OF THE WORK SPECIFIED IN THESE PLANS, THE ENGINEER WILL CONDUCT A FINAL INSPECTION. FINAL PAYMENT TO THE CONTRACTOR WILL NOT BE APPROVED UNTIL THE PROJECT IS CERTIFIED AS COMPLETE BY THE ENGINEER.
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING, "AS-BUILT" INFORMATION, AND ALL REQUIRED DENSITY TESTING, AND SHALL PROVIDE ALL "AS-BUILT" INFORMATION AND TEST RESULTS TO THE ENGINEER.

15. ALL UTILITY LINE TESTING AND SAMPLING SHALL BE IN ACCORDANCE WITH UTILITY AND HEALTH

- DEPARTMENT CRITERIA. A MINIMUM OF 24 HOUR NOTICE MUST BE PROVIDED PRIOR TO TESTING. 16. ALL CONCRETE SHALL BE 3000 p.s.i. UNLESS OTHERWISE NOTED
- 17. SOD SHALL MATCH EXISTING UNLESS OTHERWISE NOTED.

WHETHER OR NOT SHOWN ON THE PLANS.

- 18. SIDEWALK SHALL MATCH EXISTING UNLESS OTHERWISE NOTED. 19. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND UTILITIES
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OSHA REQUIREMENTS AND THE SAFETY OF THE GENERAL PUBLIC.

#### PAVEMENT MARKING GENERAL NOTES

#### PAVEMENT MARKING:

- A. DO NOT APPLY MARKINGS WITHIN 5 DAYS OF PAVEMENT PLACEMENT WITH THE EXCEPTION OF FRICTION COURSE WHICH IS 30 DAYS.
- B. PRIOR TO APPLYING PAVEMENT MARKINGS, REMOVE ANY MATERIAL THAT WOULD ADVERSELY AFFECT THE
- D. PRIOR TO APPLICATION OF THERMOPLASTIC MATERIAL TO PORTLAND CEMENT CONCRETE SURFACES, APPLY A TWO-PART EPOXY PRIMER SEALER RECOMMENDED BY THE MANUFACTURER.

C. DO NOT APPLY WHEN WINDS ARE SUFFICIENT TO CAUSE SPRAY DUST

- E. ESTABLISH TACK POINTS AT APPROPRIATE INTERVALS FOR USE IN ALIGNING MARKINGS.
- F. APPLY ONLY DURING DAYLIGHT HOURS AND, AS FAR AS PRACTICAL, SHALL BE TERMINATED IN TIME TO PERMIT SUFFICIENT DRYING BY SUNSET. G. THE SURFACE WHICH IS TO BE PAINTED SHALL BE CLEANED, BY COMPRESSED AIR OR OTHER EFFECTIVE MEANS, IMMEDIATELY BEFORE THE START OF PAINTING AND SHALL BE CLEAN AND DRY WHEN THE PAINT IS

APPLIED. ANY VEGETATION OR LOOSE SOIL SHALL BE REMOVED FROM THE PAVEMENT BEFORE STRIPING

H. THOROUGHLY MIX PAINT BEFORE POURING INTO THE PAINTING MACHINE. NO THINNING OF THE PAINT IN THE MACHINE WILL BE ALLOWED AT ANY TIME. BEFORE THE START OF EACH DAY'S WORK THE PAINT CONTAINER, THE CONNECTIONS, AND THE SPRAY NOZZLES ON THE MACHINE SHALL BE THOROUGHLY CLEANED WITH PAINT

2. PROTECTION: A. DO NOT ALLOW TRAFFIC ONTO NEWLY PAINTED TRAFFIC STRIPES AND MARKINGS UNTIL THEY ARE

#### SUFFICIENTLY DRY TO PERMIT VEHICLES TO CROSS THEM WITHOUT DAMAGE.

- A. PAVEMENT MARKINGS WHICH FAIL TO MEET THE GUIDELINES, INCLUDING THE PERMISSIBLE TOLERANCES AND THE APPEARANCE REQUIREMENTS, ARE MARRED OR DAMAGED BY TRAFFIC OR FROM ANY OTHER CAUSE SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER, DRIPS AND SPATTERED PAINT SHALL BE REMOVED. WHENEVER IT IS NECESSARY TO REMOVE PAINT IT SHALL BE DONE BY MEANS WHICH WILL NOT DAMAGE THE UNDERLYING SURFACE OF THE PAVEMENT. WHEN NECESSARY TO CORRECT A DEVIATION WHICH EXCEEDS THE PERMISSIBLE TOLERANCE IN ALIGNMENT, THAT PORTION OF THE STRIP AFFECTED SHALL BE REMOVED AND
- REPAINTED IN ACCORDANCE WITH THESE GUIDELINES. B. MISALIGNMENT, DEFECTIVE SURFACES, AND THE LIKE, SHALL BE CORRECTED BY SANDBLASTING OR BY ANY OTHER TYPE OF MECHANICAL DEVICE WHICH WILL EFFECTIVELY REMOVE THE PAINT WITHOUT DAMAGE TO THE

## 7. DIMENSION AND ALIGNMENT TOLERANCE:

PAVEMENT SURFACE

- A. NO MARKING SHALL BE LESS THAN THE INDICATED WIDTH. NO MARKING SHALL EXCEED THE INDICATED WIDTH
- BY MORE THAN ½ INCH. B. CORRECTIONS OF VARIATION IN THE WIDTH OF, AND THE ALIGNMENT OF STRIPS SHALL NOT BE MADE ABRUPTL' BUT THE STRIPES SHOULD BE RETURNED TO THE DESIGN WIDTH AT THE RATE OF AT LEAST 10 FEET FOR EACH 1/2 INCH OF CORRECTION.
- C. WHERE A STRIPE DEVIATES FROM THE CORRECT ALIGNMENT, AS INDICATED BY THE STRING LINE, BY MORE THAN ONE INCH IN ANY 20 FOOT LENGTH, IT SHALL BE OBLITERATED AND THE STRIPE CORRECTED.

AIN