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## LEGEND

### ABBREVIATIONS

CL	CENTER LINE
EOP	EDGE OF PAVEMENT
R/W	RIGHT-OF-WAY
SIR	SET IRON ROD
FIR	FOUND IRON ROD
SCM	SET CONCRETE MONUMENT
U&D	UTILITY AND DRAINAGE EASEMENT
RCP	REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
T.E.	TOP ELEVATION
I.E.	INVERT ELEVATION
TOS	TOE OF SLOPE
FF	FINISHED FLOOR
SHWL	SEASONAL HIGH WATER LEVEL

### SYMBOLS

	DIRECTION OF WATER FLOW
	EXISTING OR PROPOSED GRADE
	SOIL BORING LOCATION
	STREET LIGHT
	PROPOSED CATCH BASIN
	WATER VALVE
	EXISTING POWER POLE
	HYDRANT
	SANITARY SEWER LINE
	SANITARY SEWER LINE
	EXISTING WATER LINE

PROJECT: PHASE 5 DRAINAGE IMPROVEMENTS

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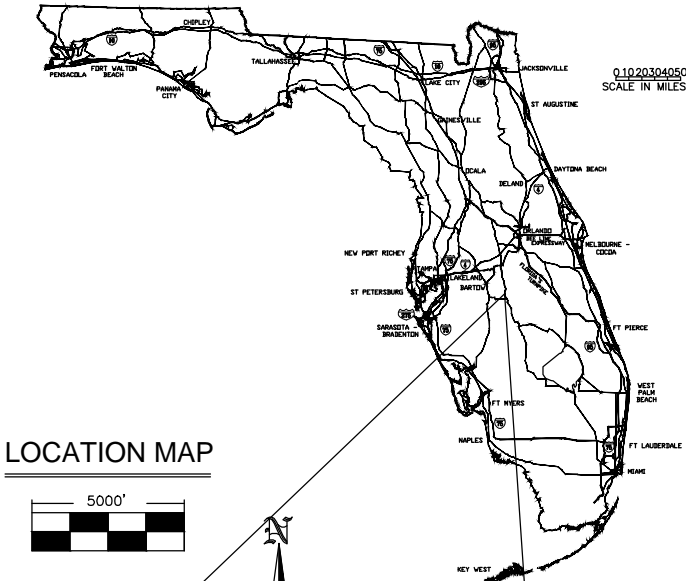
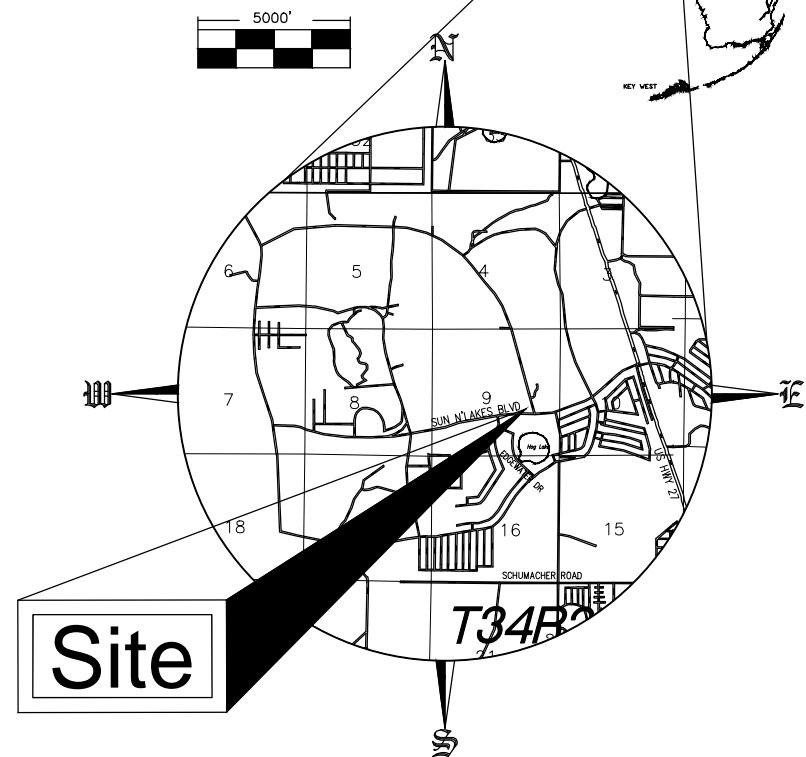
# SUN'N LAKE

FLORIDA'S CENTERPIECE COMMUNITY

SUN 'N LAKE OF SEBRING  
IMPROVEMENT DISTRICT

# PHASE 5 DRAINAGE IMPROVEMENTS

LOCATION MAP



### GENERAL NOTES:

- CONSTRUCTION TO ADHERE TO THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION AND AVOID ANY CONFLICTS. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. UTILITIES SHOWN ARE APPROXIMATE ONLY.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES AFFECTED BY THEIR WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CLEARING AND REMOVAL OF EXCESS MATERIAL FROM THE PROJECT.
- A MAINTENANCE OF TRAFFIC PLAN WILL BE REQUIRED FOR ANY CONSTRUCTION WITHIN THE RIGHT-OF-WAY. TRAFFIC BARRICADES AND CONES SHOULD BE PLACED PREVENTING TRAFFIC FROM ENTERING THE CONTRACTORS CONSTRUCTION AREA.
- LOCAL TRAFFIC ACCESS MUST BE MAINTAINED THROUGHOUT THE PROJECT.
- ALL TEMPORARY ROAD CLOSURES TO BE COORDINATED WITH DISTRICT STAFF. THE PUBLIC SHALL ALSO BE NOTICED FOR ANY ROAD CLOSURES OR LANE CLOSURES. NO ROAD CLOSURES SHALL OCCUR ON GARBAGE PICK-UP DAYS IF POSSIBLE. THURSDAY IS THE TRASH COLLECTION DAY FOR SUN 'N LAKE.

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG



ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

ORIGINAL SIZE 11"x17"

#### Important:

The information and design shown on these drawings is based on the best available information provided for design. The drawing is to scale as much as possible; however no measurements should be made by scaling from these drawings as some items may be not to scale for drawing clarity. Any questions or conflicts should be brought to the engineer immediately for clarification or resolution. Polston Engineering Inc. shall not be responsible for any errors made by others caused by making assumptions about the plans or errors caused by scaling the plans. All construction shall follow the accepted safety procedures and construction techniques as required by any applicable government standards.

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SUN'N LAKE OF SEBRING  
DRAINAGE IMPROVEMENTS  
PHASE 5 COVER SHEET

CULVERT REPAIR & INSTALL NOTES:

-LOCATIONS SHOWN ON MAP ARE APPROXIMATE.

-BACKFILL TO BE UTILIZED USING ACCEPTED CONSTRUCTION TECHNIQUES AS REQUIRED BY ANY APPLICABLE GOVERNMENT STANDARDS. CLEAN FILL IS TO BE USED WHEN REQUIRED.

-PIPE DEPTH AND WATER TABLE IS TO BE TAKEN INTO CONSIDERATION DURING CONSTRUCTION. IN SOME PROJECT AREAS THE PIPE IS EXPECTED TO INTERSECT THE SEASONAL HIGH WATER TABLE. DE-WATERING MAY BE REQUIRED.

-ALL PIPE JOINTS TO BE WRAPPED FOLLOWING FDOT INDEX 280.

-ALL PRICES PROVIDED TO DISTRICT SHOULD BE FOR A COMPLETE FINISHED PRODUCT INCLUDING ALL LABOR AND MATERIALS TO COMPLETE THE CONTRACTORS WORK. THIS INCLUDES ANY HAULING, DISPOSAL, OR DELIVERY.

GENERAL NOTES:

-THE CONTRACTOR SHALL COORDINATE ALL ACCESS PATHS WITH DISTRICT STAFF TO MINIMIZE IMPACTS OF PRIVATE PROPERTY THAT MAY NEED TO BE ACCESSED VIA EASEMENT. NOTIFICATION AND PERMISSION FROM THE OWNER OF THE PRIVATE PROPERTY ACCESSED BY THE CONTRACTOR IS REQUIRED.

-ANY WORK ON OR ADJACENT TO THE GOLF COURSE SHALL BE COORDINATED TO REDUCE IMPACT TO THE GOLF COURSE AND ITS PLAYERS.

-CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION AND AVOID ANY CONFLICTS. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. UTILITIES SHOWN ARE APPROXIMATE ONLY.

-THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES AFFECTED BY THEIR WORK.

-THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CLEARING AND REMOVAL OF EXCESS MATERIAL FROM THE PROJECT AREAS AS NEEDED BY THEIR WORK.

-THE CONTRACTOR IS EXPECTED TO BE FAMILIAR WITH THE PROJECT AREAS AND UNDERSTAND THE REQUESTED SCOPES OF WORK.

-ANY FINISH GRADES SHOWN ARE FOR THE FINAL GRADE AFTER SOD AND RESTORATION WORK. CONTRACTOR TO ACCOUNT FOR THIS IN THEIR GRADE WORK.

-THE SWALE AND DISTURBED AREAS ARE TO BE RESTORED AND SODDED WITH SAME SPECIES OF SOD.

MOT NOTES:

-THE CONTRACTOR WILL BE RESPONSIBLE FOR MOT WORK WHILE WORKING WITHIN THE PUBLIC RIGHT OF WAY. THIS INCLUDES ALL NECESSARY SIGNAGE AND BARRICADES REQUIRED FOR SAFE ACCESS AND DIRECTION.

-A MOT PLAN MAY BE REQUESTED BY THE OWNER OR ENGINEER OF RECORD. THIS PLAN SHALL BE SUPPLIED BY THE CONTRACTOR TO VERIFY THEY ARE PROVIDING ADEQUATE TRAFFIC CONTROL MEASURES.

-THE MOT PLAN SHALL CONSIST OF A MAP OR SKETCH OF THE ROADWAY AND THE PROPOSED SIGNAGE AND BARRICADES. THE SIGNAGE AND BARRICADES SHALL FOLLOW FDOT STANDARDS.

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**SUN'N LAKE OF SEBRING  
DRAINAGE IMPROVEMENTS  
SPECIFICATIONS**



BENEVENTO AVE.  
CULVERT

PONCE  
CULVERTS

TARREGA  
SOCK PIPE

UNIT 4 REAR  
DITCH CLEANING

PEBBLE BEACH  
DR. DITCH  
CLEANING

REAR LOT DITCH  
CLEANING

TAGUS ST.  
CULVERT

BOABADILLA &  
ALCANTARRA  
CULVERTS

MANOR DITCH  
CLEANING

SCALE: 1" = 1,500'

SHEET: 3 OF 22

JOB #: 16079

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REMARK

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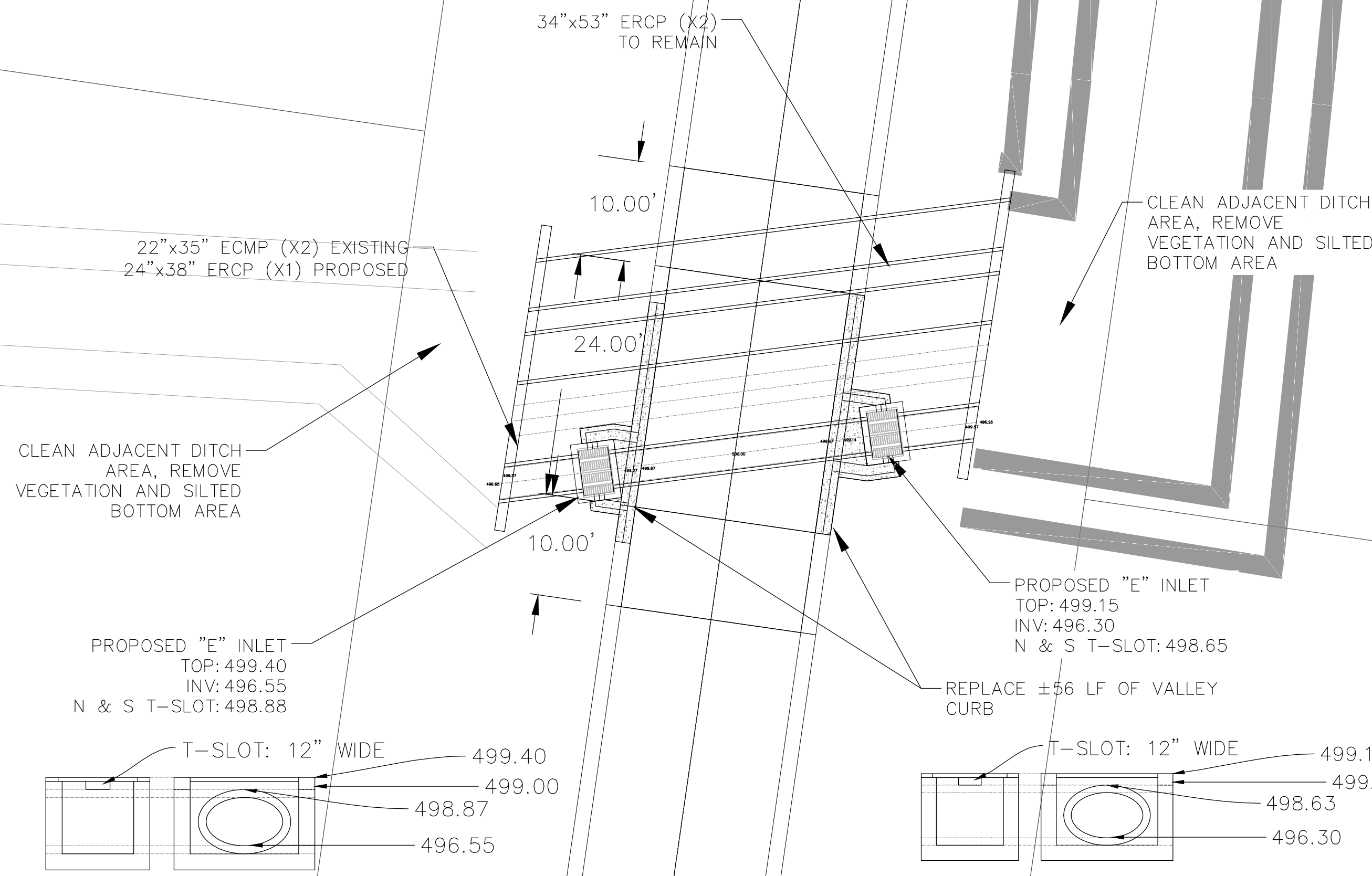
DR J RDP

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SUN'N LAKE OF SEBRING  
PHASE 5 DRAINAGE IMPROVEMENTS  
LOCATION MAP



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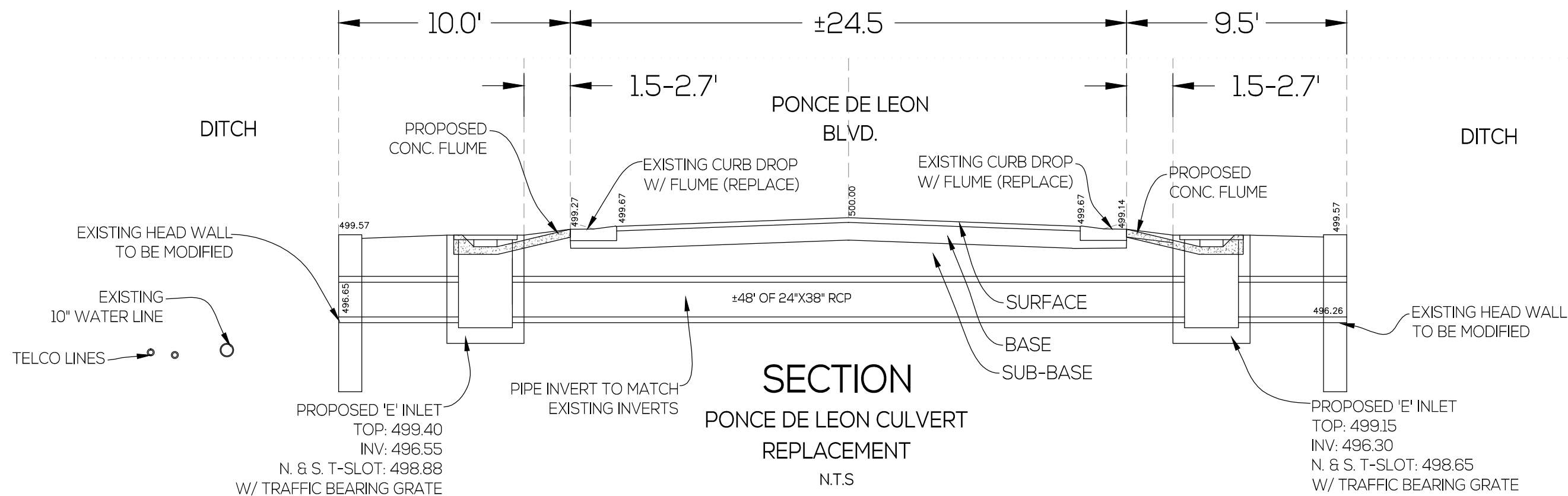
**SUN'N LAKE OF SEBRING  
UNIT 18 DRAINAGE IMPROVEMENTS  
PONCE DE LEON CULVERTS & DITCH**

SCALE: 1" = 10'  
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DATE  
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DRJ/RDP  
DR/CH

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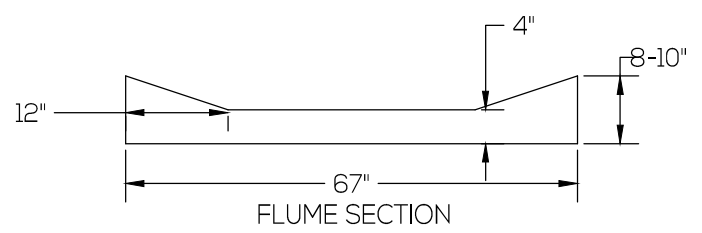
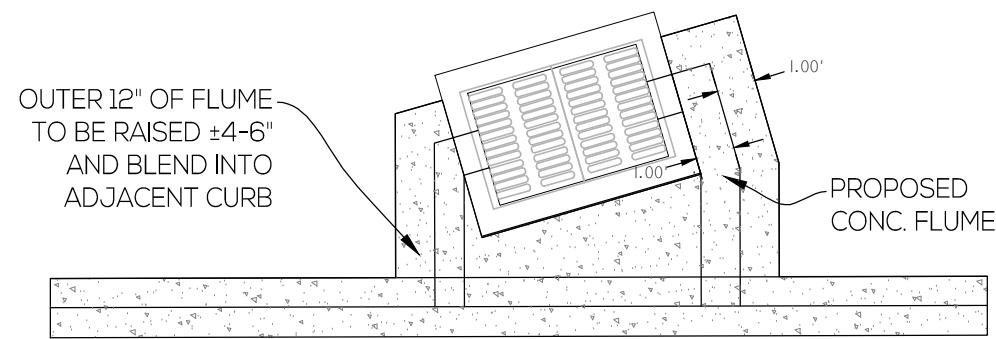


**SECTION**  
**PONCE DE LEON CULVERT**  
**REPLACEMENT**  
 N.T.S

NOTE:  
 -INLETS MUST HAVE STEEL INSERT REINFORCED TOPS WHERE THE GRATE SITS.  
 -ALL DISTURBED AREAS TO BE RESTORED AND SODDED.  
 -CONCRETE FLUME TO BE 4" THICK 3,000 PSI CONCRETE WITH W.W.F. EXTENDING INTO REPLACEMENT CURB.

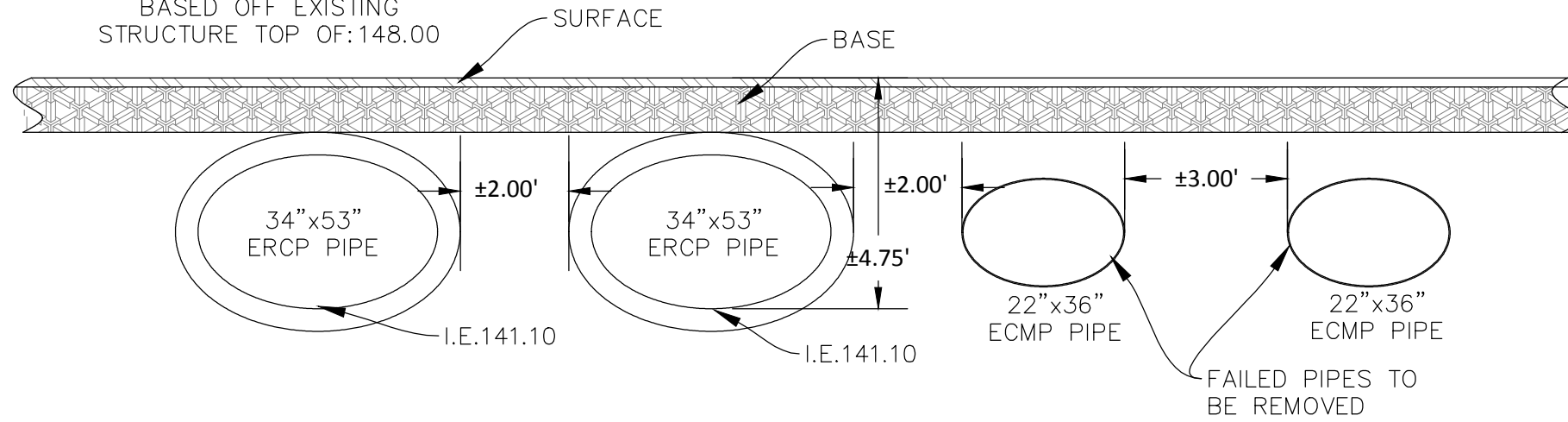
CULVERT NOTES:  
 -EXISTING DAMAGED PIPE & INLETS TO BE REMOVED.  
 -AT THE TIME OF DESIGN, THE CULVERTS WERE SUBMERGED. DEWATERING WILL LIKELY BE REQUIRED DEPENDING ON THE TIME OF YEAR CONSTRUCTION OCCURS.  
 -REFER TO FDOT INDEX 307 PAGE 1 & FDOT SPEC BOOK SECTION 430 FOR DETAILS ON PIPE INSTALLATION AND ROAD CUT. THE BEDDING AND BACKFILL MUST BE PROPERLY COMPACTED WITH ADEQUATE MATERIAL.  
 -ALL PIPE JOINTS TO BE WRAPPED WITH GEO-TEXTILE FABRIC ACCORDING TO FDOT INDEX 280.  
 -REPAIR ROADWAY, BASE, AND SUB-BASE. ASPHALT TO BE SAW CUT AND REPLACED OR EDGE MILLED AND OVERLAYED APPROXIMATELY 10 FEET ON EACH SIDE OF THE ROAD CUT AND HAVE A SMOOTH TRANSITION FROM OLD TO NEW.  
 -ROAD MATERIAL SPECIFICATIONS:

- SURFACE: 2" TYPE SP-9.5 ASPHALT
- BASE: 8" LIMEROCK OR SHELLROCK, 98% DENSITY, LBR 100 (AASHTO T180, LIMEROCK BEARING RATIO)
- SUB-BASE: 10" STABILIZED, 95% DENSITY, FBV 60 PSI

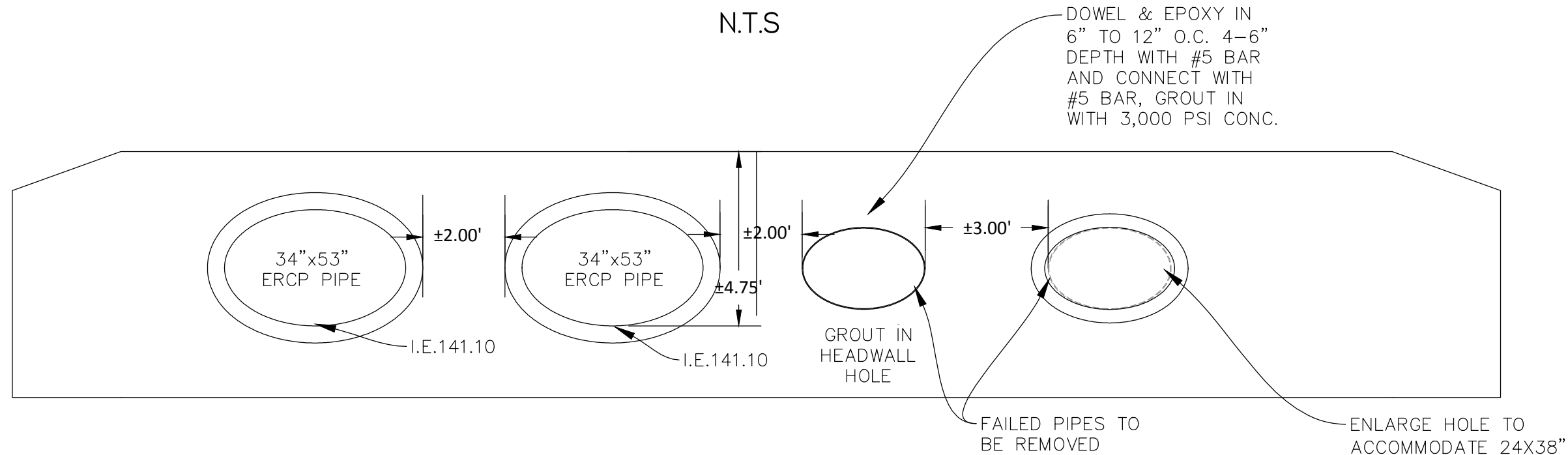


<p>2025 KENILWORTH BLVD.,          SEBRING, FLORIDA 33870          863-385-5564 PHONE          863-385-2462 FAX          CERTIFICATE OF AUTHORIZATION # 5684          ROGER DALE POLSTON P. E. # 33222          MARVIN LUTHER WOLFE P. E. # 46030</p>	<p><b>Polston Engineering inc.</b>          CIVIL ENGINEERING CONSULTANTS</p>	<p><b>SUN'N LAKE OF SEBRING</b>          UNIT 18 DRAINAGE IMPROVEMENTS          PONCE DE LEON CULVERTS &amp; DITCH</p>	<p>SCALE: 1" = N.T.S.          APPROVED BY: <b>BID SET</b>          NOT VALID UNLESS SEALED</p>	<p>JOB #: 16079          ORIGINAL SUBMITTAL          SHEET: 5 OF 22          DATE          REMARK          DR/CH</p>
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APPROXIMATE ROAD CROWN  
ELEVATION: 145.85 NGVD  
BASED OFF EXISTING  
STRUCTURE TOP OF: 148.00



## SECTION EXISTING PIPE LAYOUT N.T.S



## SECTION HEADWALL MODIFICATION N.T.S

SCA 1" = N.T.S.	SHIP # 6	OF 22	B # 16079
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R-MARK			H

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**SUN'N LAKE OF SEBRING**  
**UNIT 18 DRAINAGE IMPROVEMENTS**  
**PONCE DE LEON CULVERTS & DITCH**



EXAMPLE DETOUR / MOT FOR PONCE DE LEON:  
 -CONTRACTOR MAY MODIFY THE EXAMPLE LAYOUT IF IT FOLLOWS FDOT STANDARDS.  
 -PUBLIC NOTICING REQUIRED FOR ALL ROAD CLOSURES.  
 -LOCAL ACCESS TO HOMES ON PONCE IS REQUIRED.

DETOUR SIGNS



ROAD CLOSURE SIGNS & SM BARRICADES/CONES



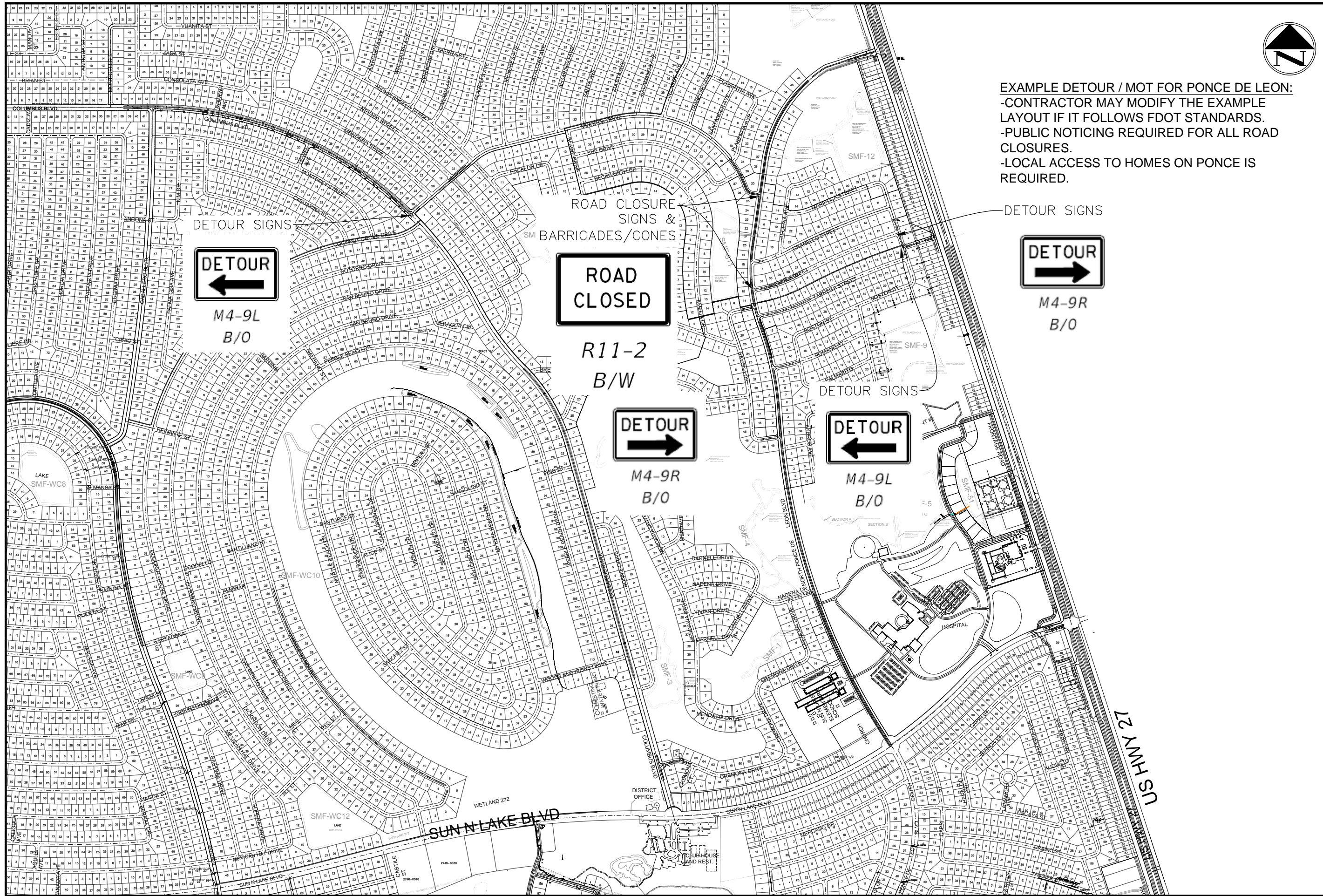
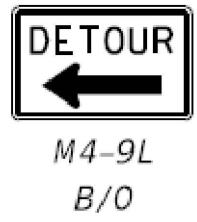
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B/W



DETOUR SIGNS



DETOUR SIGNS

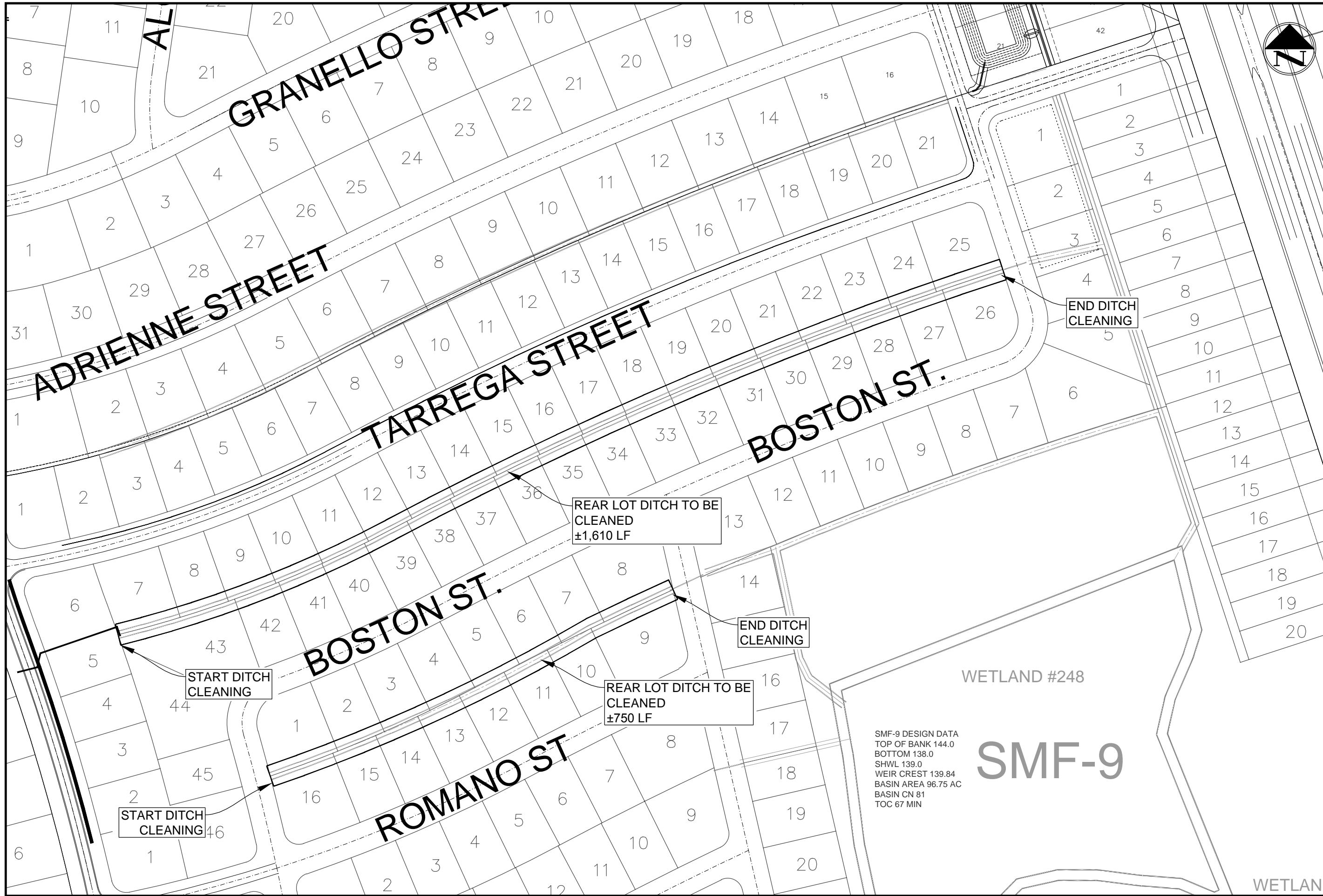


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**SUN 'N LAKE OF SEBRING**  
**UNIT 18 DRAINAGE IMPROVEMENTS**  
**PONCE DE LEON CULVERTS & DITCH**

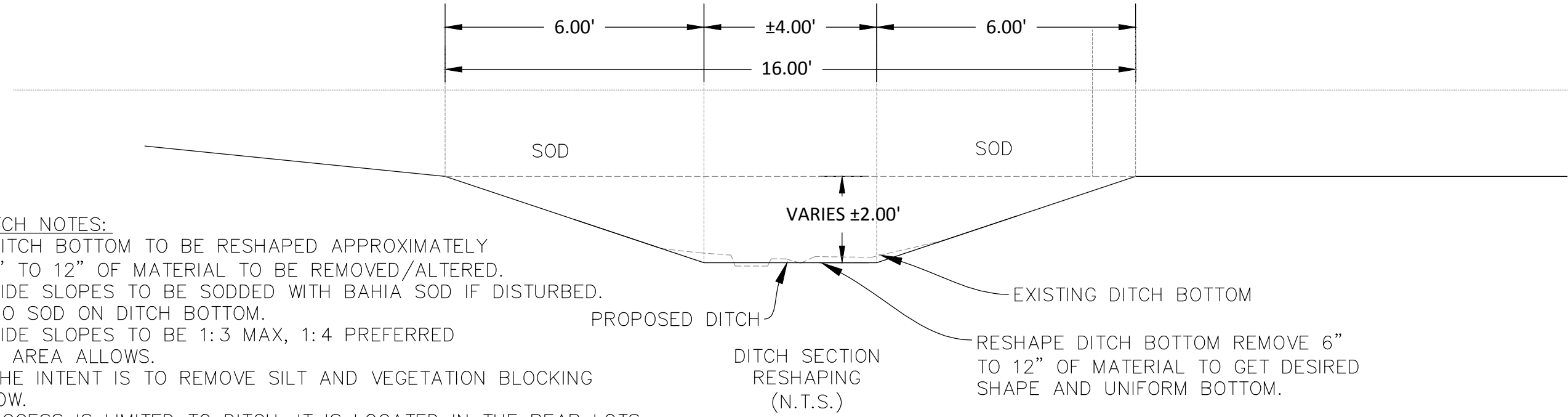


SMF-9 DESIGN DATA  
 TOP OF BANK 144.0  
 BOTTOM 138.0  
 SHWL 139.0  
 WEIR CREST 139.84  
 BASIN AREA 96.75 AC  
 BASIN CN 81  
 TOC 67 MIN

SMF-9

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<p>BID SET</p>		<p>DATE</p>	<p>REMARK</p>
<p>SUN'N LAKE OF SEBRING          UNIT 4 DRAINAGE IMPROVEMENTS          REAR LOT DITCH CLEANING</p>		<p>NOT VALID, UNLESS SEALED</p>	





**DITCH NOTES:**

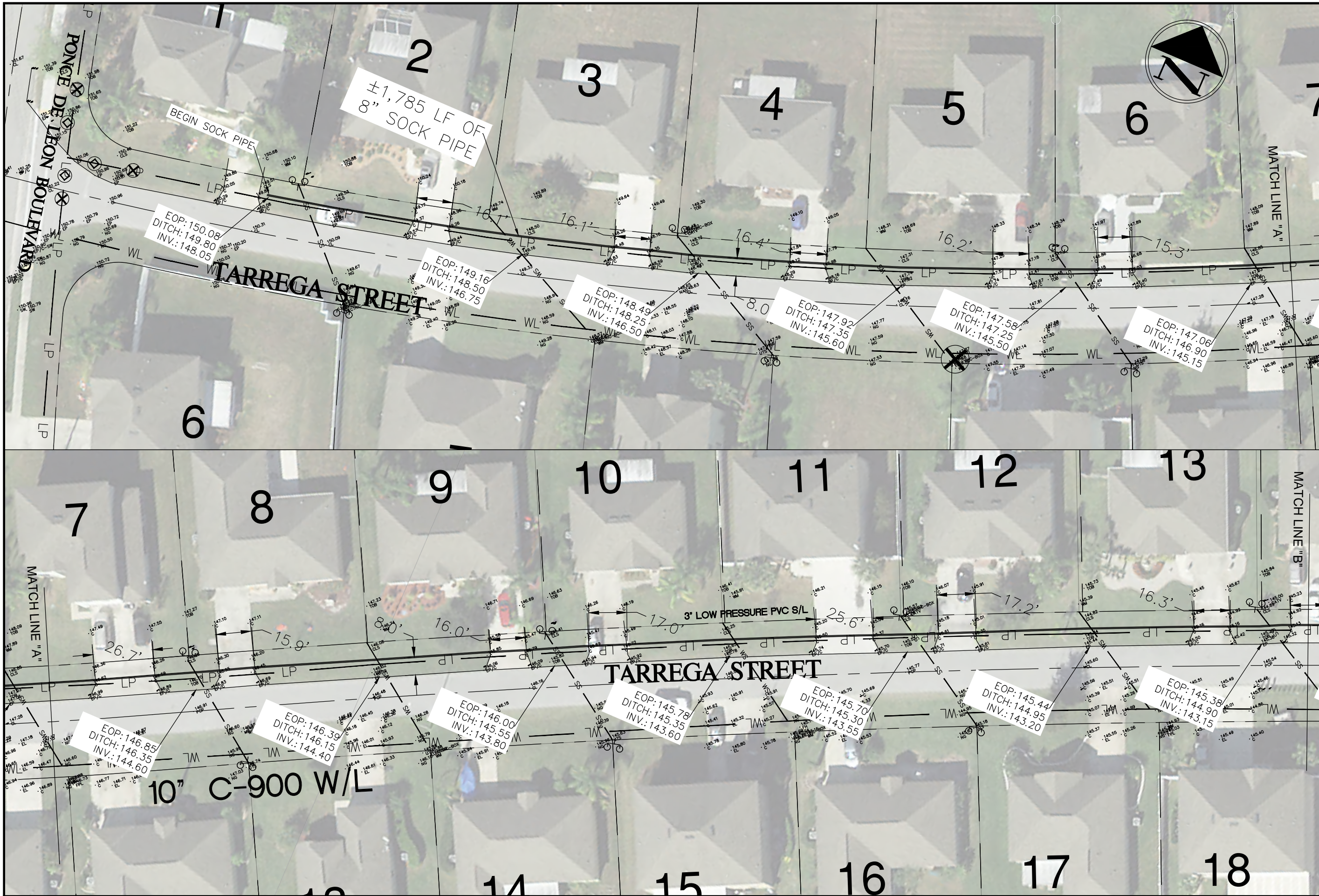
- DITCH BOTTOM TO BE RESHAPED APPROXIMATELY 6" TO 12" OF MATERIAL TO BE REMOVED/ALTERED.
- SIDE SLOPES TO BE SODDED WITH BAHIA SOD IF DISTURBED.
- NO SOD ON DITCH BOTTOM.
- SIDE SLOPES TO BE 1:3 MAX, 1:4 PREFERRED IF AREA ALLOWS.
- THE INTENT IS TO REMOVE SILT AND VEGETATION BLOCKING FLOW.
- ACCESS IS LIMITED TO DITCH, IT IS LOCATED IN THE REAR LOTS WITH HOMES ON MOST OF THE LOTS. MAY REQUIRE ACCESS THROUGH EASEMENTS AND RESTORATION IF DAMAGE TO YARDS OCCUR.

**SUN'N LAKE OF SEBRING**  
**UNIT 4 DRAINAGE IMPROVEMENTS**  
**REAR LOT DITCH CLEANING**

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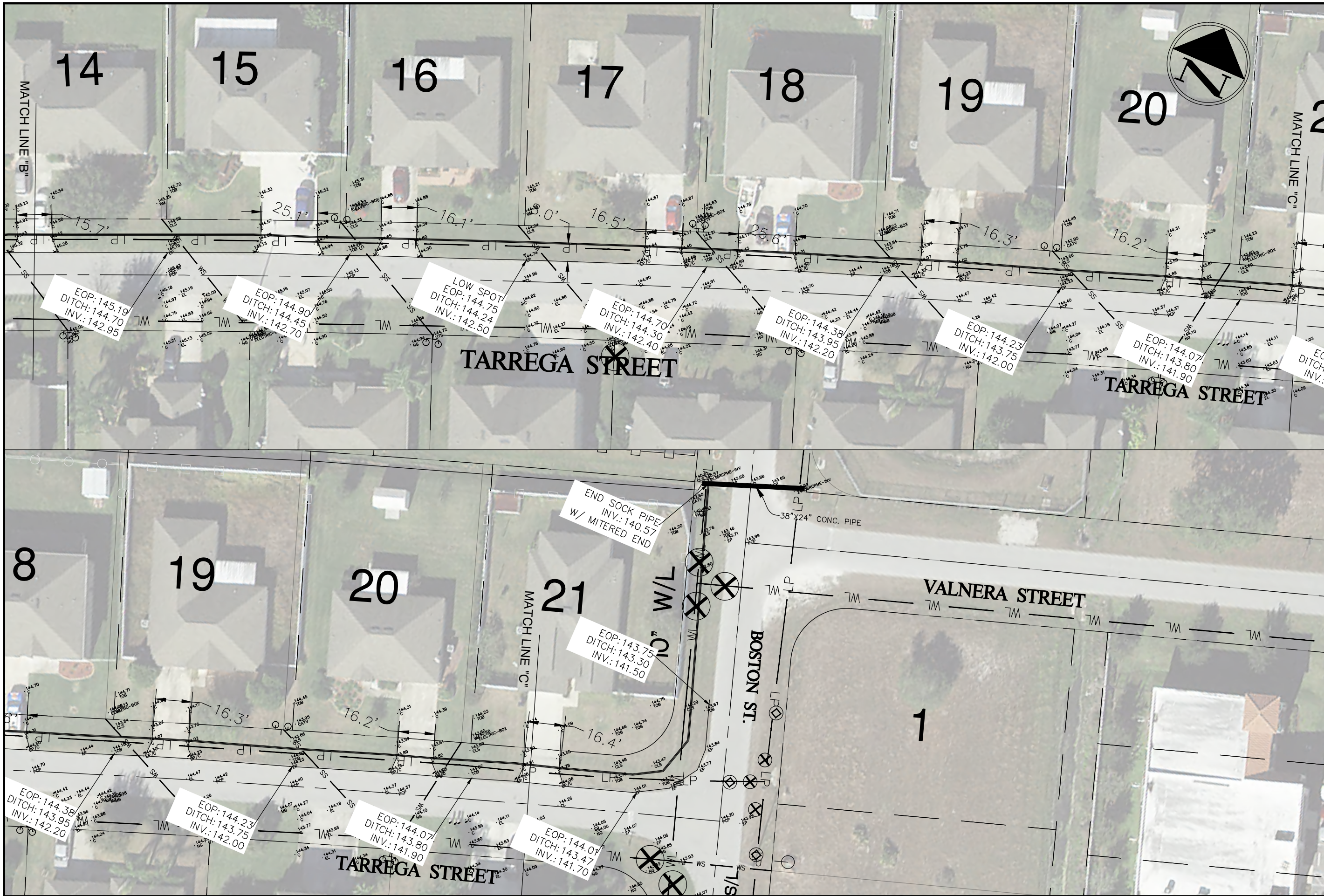


SCALE: 1" = 40'  
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**SUN'N LAKE OF SEBRING**  
**UNIT 4 DRAINAGE IMPROVEMENTS**  
**TARREGA SOCK PIPE**



SCALE: 1" = 40'

SHEET: 11 OF 22

JOB #: 16079

APPROVED BY: DRJ IRDP

ORIGINAL SUBMITTAL

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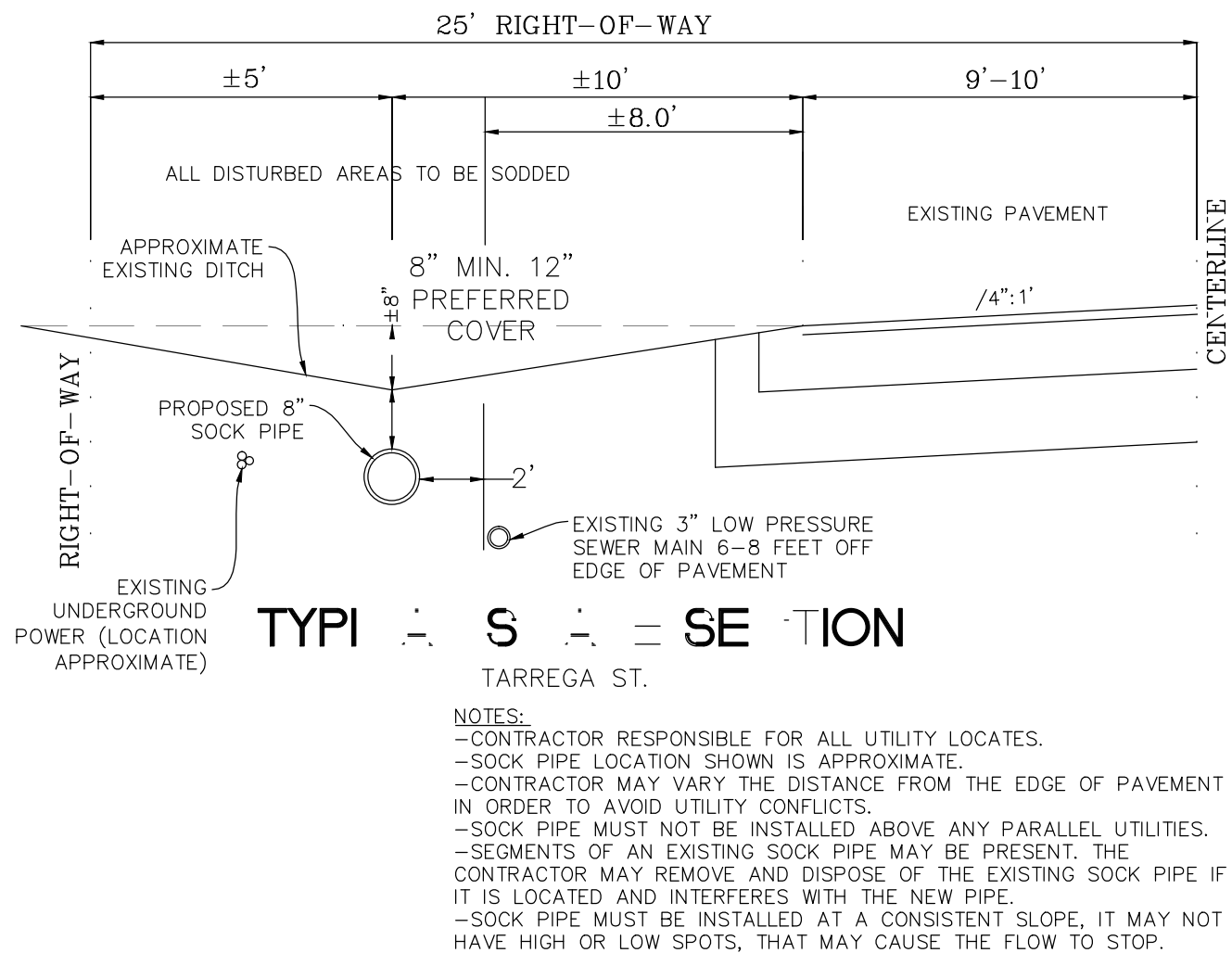
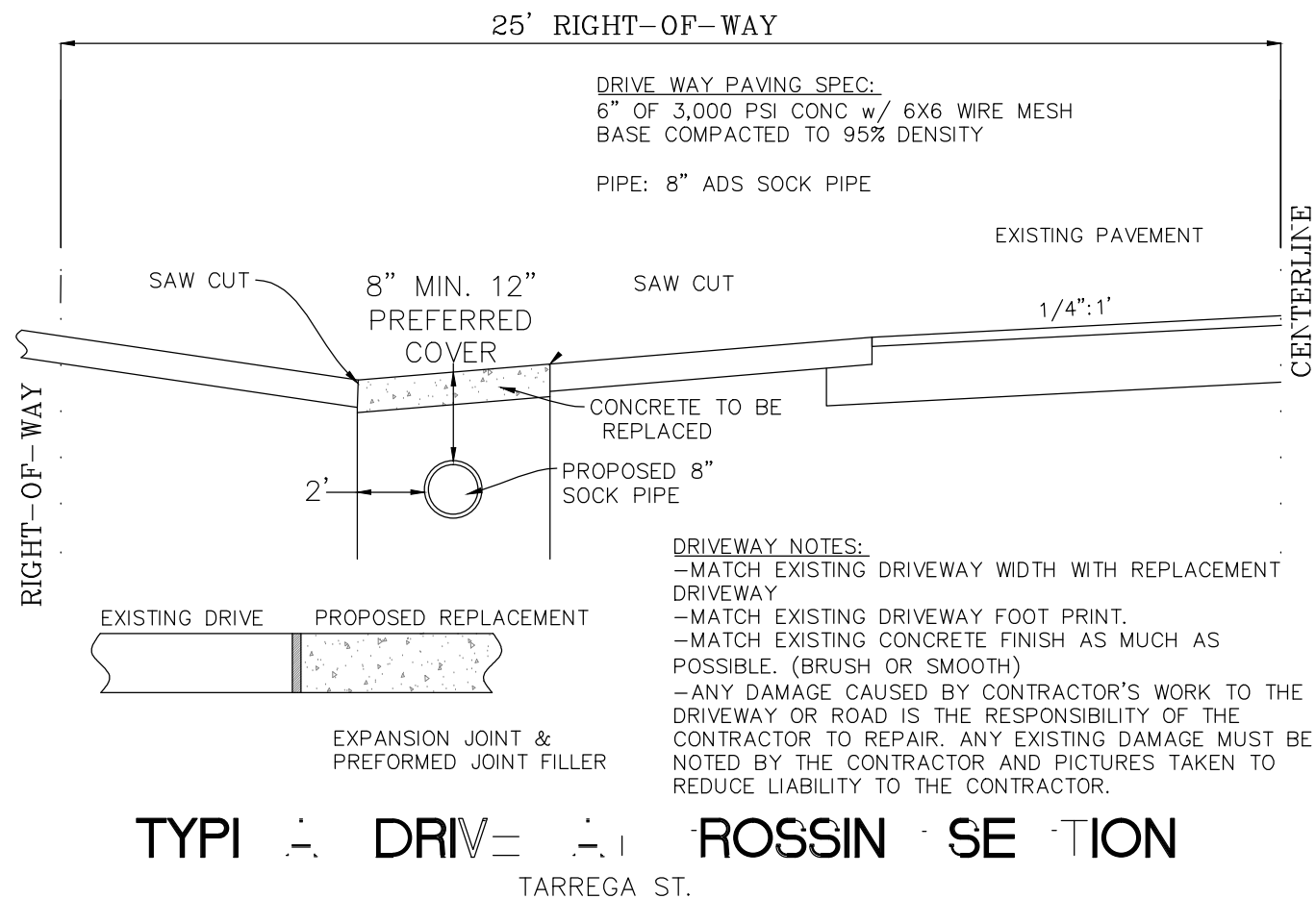
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**SUN'N LAKE OF SEBRING**  
**UNIT 4 DRAINAGE IMPROVEMENTS**  
**TARREGA SOCK PIPE**



**SUN'N LAKE OF SEBRING**  
 UNIT 4 DRAINAGE IMPROVEMENTS  
 TARREGA SOCK PIPE

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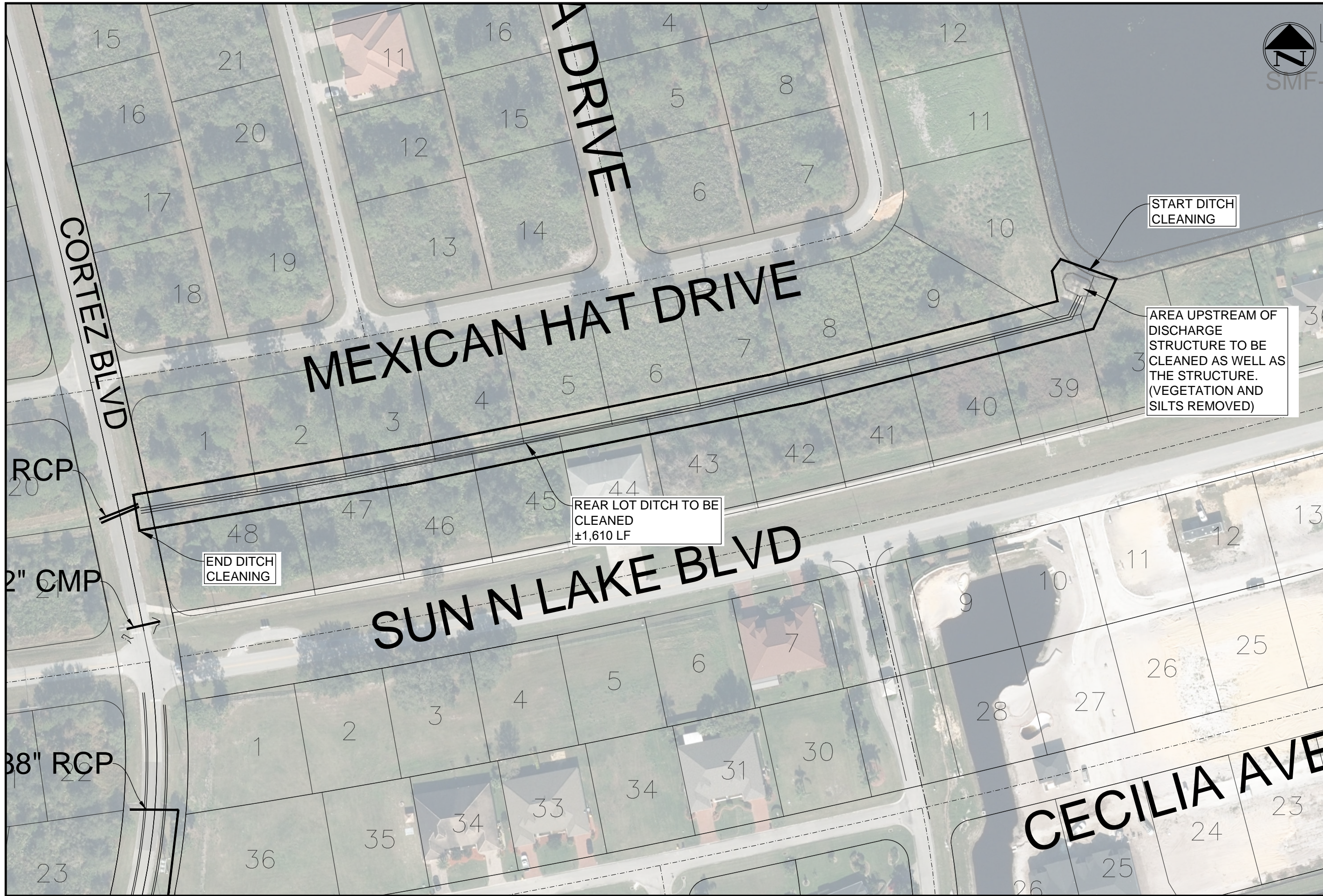
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		DR/CH

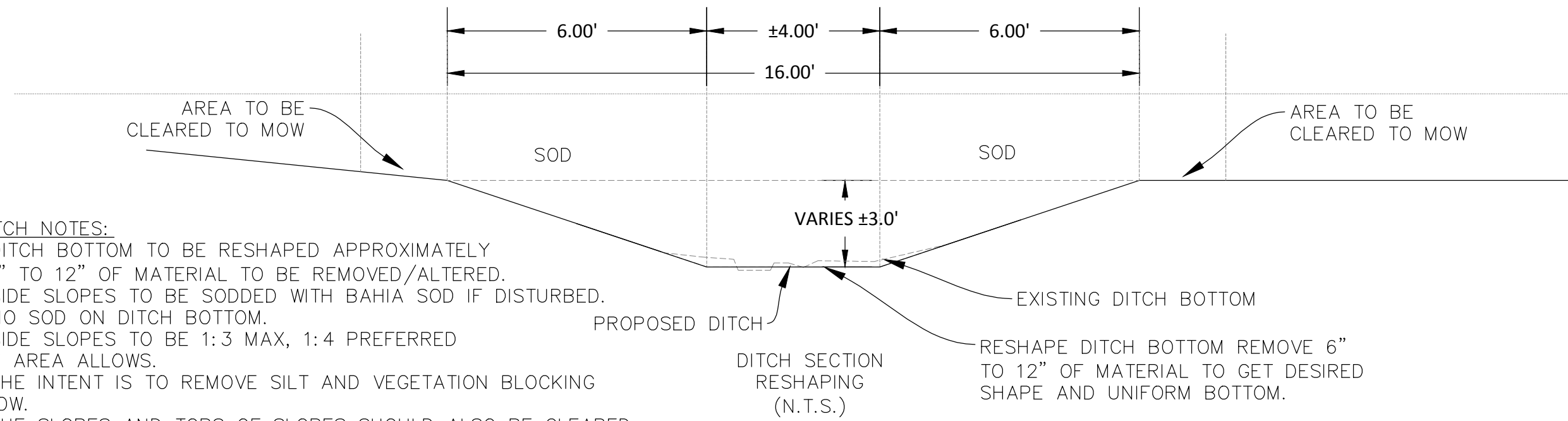
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**SUN'N LAKE OF SEBRING**  
 UNIT 16 DRAINAGE IMPROVEMENTS  
 REAR LOT DITCH CLEANING

**DITCH NOTES:**

- DITCH BOTTOM TO BE RESHAPED APPROXIMATELY 6" TO 12" OF MATERIAL TO BE REMOVED/ALTERED.
- SIDE SLOPES TO BE SODDED WITH BAHIA SOD IF DISTURBED.
- NO SOD ON DITCH BOTTOM.
- SIDE SLOPES TO BE 1:3 MAX, 1:4 PREFERRED IF AREA ALLOWS.
- THE INTENT IS TO REMOVE SILT AND VEGETATION BLOCKING FLOW.
- THE SLOPES AND TOPS OF SLOPES SHOULD ALSO BE CLEARED OF TALL WOODED VEGETATION. THIS MAY INCLUDE JUST KNOCKING DOWN VEGETATION ENOUGH TO CLEAR A PATH THAT CAN BE MOWED WITH A BUSH HOG. ROOT RAKING OR FULL VEGETATION REMOVAL IS NOT INTENDED FOR SLOPES OR EDGE OF SLOPES.



**SUN'N LAKE OF SEBRING**  
**UNIT 16 DRAINAGE IMPROVEMENTS**  
**REAR LOT DITCH CLEANING**

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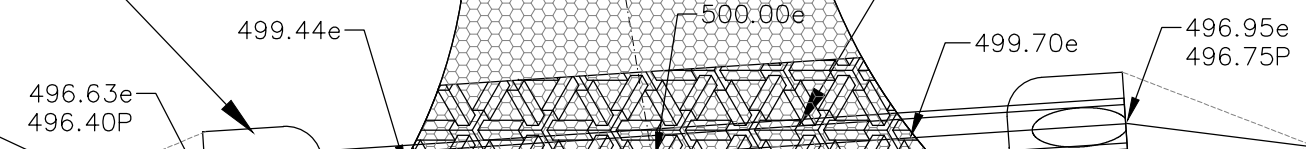
SCALE: 1" = N.T.S. SHEET: 14 OF 22 JOB #: 16079  
 APPROVED BY: 02-18-21 ORIGINAL SUBMITTAL DRJ/RDP  
**BID SET**  
 NOT VALID UNLESS SEALED DATE REMARK DR/CH



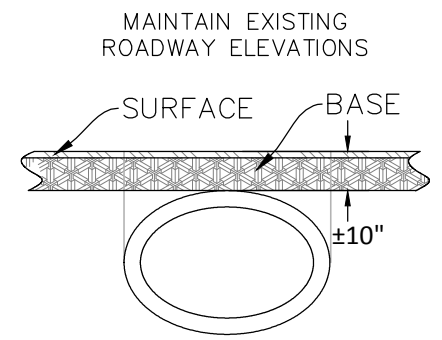
CONSTRUCT MITERED ENDS ON BOTH SIDES

MINOR RE-GRADING OF DITCH ADJACENT TO MITERS MAY BE REQUIRED FOR FITMENT

REMOVE FAILED STEEL CULVERT REPLACE WITH ±48' OF 19"x30" ERCP



NEDA ST.



CULVERT SINGLE TYPICAL - N.T.S

- CULVERT NOTES:**
- EXISTING SETTLED PIPES TO BE REMOVED AND REPLACED WITH NEW CULVERTS.
  - DEWATERING MAY BE REQUIRED TO ACHIEVE COMPACTION DEPENDING ON WATER TABLE AT THE TIME OF EXCAVATION.
  - REFER TO FDOT INDEX 125-001 PAGE 1 & FDOT SPEC BOOK SECTION 430 FOR DETAILS ON PIPE INSTALLATION AND ROAD CUT. THE BEDDING AND BACKFILL MUST BE PROPERLY COMPACTED WITH ADEQUATE MATERIAL.
  - ALL PIPE JOINTS TO BE WRAPPED WITH GEO-TEXTILE FABRIC ACCORDING TO FDOT INDEX 430-001.
  - ROAD MATERIAL SPECIFICATIONS:
    - SURFACE: 2" TYPE SP-9.5 ASPHALT
    - BASE: 10" LIMEROCK OR SHELLROCK, 98% DENSITY, LBR 100 (AASHTO T180, LIMEROCK BEARING RATIO)
    - SUB-BASE: STABILIZED, 98% DENSITY, FBV 60 PSI
  - PAVEMENT JOINT BETWEEN NEW AND EXISTING TO EITHER BE SAW CUT OR MILLED AND OVERLAID AT THE JOINT.
  - SOD ALL DISTURBED AREAS WITH BAHIA SOD.
  - WORK MAY IMPACT THE STOP SIGN, STOP SIGN MAY NEED TO BE REMOVED AND RELOCATED TO MISS THE CULVERT.

**SUN'N LAKE OF SEBRING**  
**UNIT 13 DRAINAGE IMPROVEMENTS**  
**ALCANTARRA CULVERT REPLACEMENT**

2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870  
 863-385-5564 PHONE  
 863-385-2462 FAX  
 CERTIFICATE OF AUTHORIZATION # 5684  
 ROGER DALE POLSTON P. E. # 33222  
 MARVIN LUTHER WOLFE P. E. # 46030

**Polston Engineering inc.**  
 CIVIL ENGINEERING CONSULTANTS

SCALE: 1" = 10'  
 APPROVED BY: **BID SET**  
 NOT VALID UNLESS SEALED

SHEET: 15 OF 22  
 JOB #: 16079  
 ORIGINAL SUBMITTAL  
 DRJ/RDP

DATE	REMARK



CONSTRUCT MITERED ENDS ON BOTH SIDES

MINOR RE-GRADING OF DITCH ADJACENT TO MITERS MAY BE REQUIRED FOR FITTMENT

BOABADILLA AVE.

REMOVE FAILED STEEL CULVERT REPLACE WITH ±40' OF 18" RCP

497.58e  
496.80P

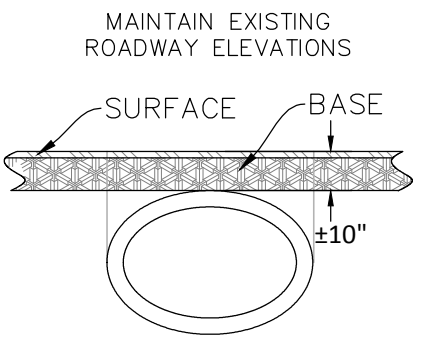
499.92e

500.00e

499.82e

497.82e  
497.00P

NEDA ST.



CULVERT SINGLE TYPICAL - N.T.S

- CULVERT NOTES:**
- EXISTING SETTLED PIPES TO BE REMOVED AND REPLACED WITH NEW CULVERTS.
  - DEWATERING MAY BE REQUIRED TO ACHIEVE COMPACTION DEPENDING ON WATER TABLE AT THE TIME OF EXCAVATION.
  - REFER TO FDOT INDEX 125-001 PAGE 1 & FDOT SPEC BOOK SECTION 430 FOR DETAILS ON PIPE INSTALLATION AND ROAD CUT. THE BEDDING AND BACKFILL MUST BE PROPERLY COMPACTED WITH ADEQUATE MATERIAL.
  - ALL PIPE JOINTS TO BE WRAPPED WITH GEO-TEXTILE FABRIC ACCORDING TO FDOT INDEX 430-001.
  - ROAD MATERIAL SPECIFICATIONS:
    - SURFACE: 2" TYPE SP-9.5 ASPHALT
    - BASE: 10" LIMEROCK OR SHELLROCK, 98% DENSITY, LBR 100 (AASHTO T180, LIMEROCK BEARING RATIO)
    - SUB-BASE: STABILIZED, 98% DENSITY, FBV 60 PSI
  - PAVEMENT JOINT BETWEEN NEW AND EXISTING TO EITHER BE SAW CUT OR MILLED AND OVERLAID AT THE JOINT.
  - SOD ALL DISTURBED AREAS WITH BAHIA SOD.
  - WORK MAY IMPACT THE STOP SIGN, STOP SIGN MAY NEED TO BE REMOVED AND RELOCATED TO MISS THE CULVERT.

SCALE: 1" = 10'	SHEET: 16 OF 22	JOB #: 16079
APPROVED BY: 02-18-21	ORIGINAL SUBMITTAL	DRJ IRDP
BID SET	DATE	REMARK
NOT VALID UNLESS SEALED		DR/CH

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ROGER DALE POLSTON P. E. # 33222  
MARVIN LUTHER WOLFE P. E. # 46030



**SUN'N LAKE OF SEBRING  
UNIT 13 DRAINAGE IMPROVEMENTS  
BOABADILLA CULVERT REPLACEMENT**





CONSTRUCT MITERED ENDS ON BOTH SIDES

499.03e

499.84e

CONSTRUCT NEW 12" X 18" ERCP ±45 LF OF PIPE

# TAGUS ST.

500.00e

500.00e

499.45

RE-GRADING OF DITCH ADJACENT TO MITERS WILL BE REQUIRED FOR FITTMENT

# ALCANTARRA AVE

499.24

499.81

500.00

499.91

### CULVERT NOTES:

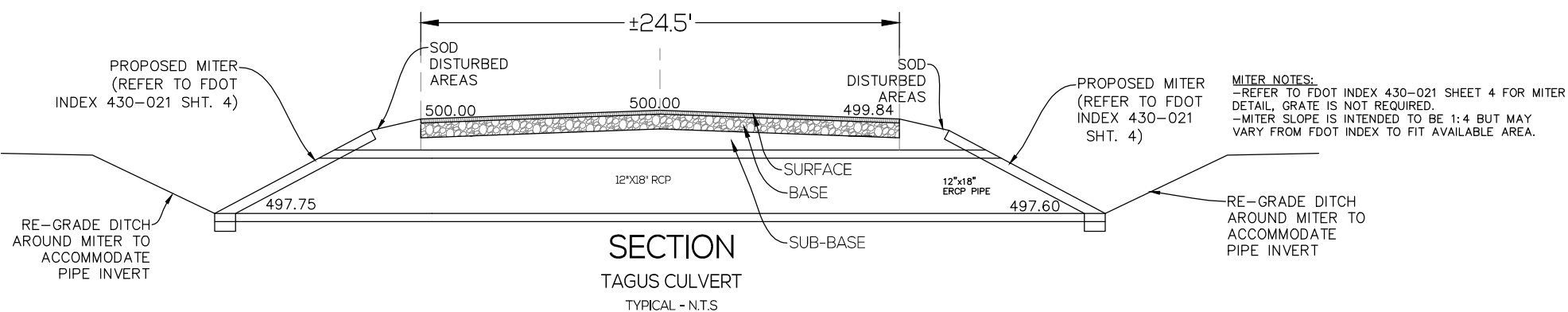
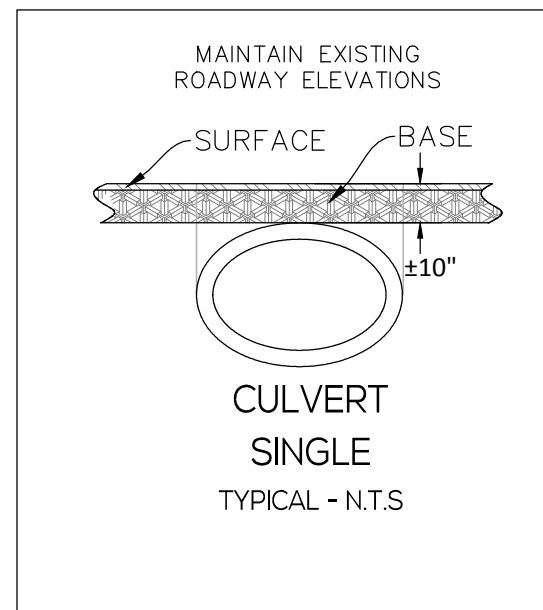
- DEWATERING MAY BE REQUIRED TO ACHIEVE COMPACTION DEPENDING ON WATER TABLE AT THE TIME OF EXCAVATION.
- REFER TO FDOT INDEX 125-001 PAGE 1 & FDOT SPEC BOOK SECTION 430 FOR DETAILS ON PIPE INSTALLATION AND ROAD CUT. THE BEDDING AND BACKFILL MUST BE PROPERLY COMPACTED WITH ADEQUATE MATERIAL.
- ALL PIPE JOINTS TO BE WRAPPED WITH GEO-TEXTILE FABRIC ACCORDING TO FDOT INDEX 430-001.

### -ROAD MATERIAL SPECIFICATIONS:

SURFACE: 2" TYPE SP-9.5 ASPHALT  
 BASE: 10" LIMEROCK OR SHELLROCK, 98% DENSITY, LBR 100 (AASHTO T180, LIMEROCK BEARING RATIO)

SUB-BASE: STABILIZED, 98% DENSITY, FBV 60 PSI

- PAVEMENT JOINT BETWEEN NEW AND EXISTING TO EITHER BE SAW CUT OR MILLED AND OVERLAID AT THE JOINT.
- SOD ALL DISTURBED AREAS WITH BAHIA SOD.
- WORK MAY IMPACT THE STOP SIGN, STOP SIGN MAY NEED TO BE REMOVED AND RELOCATED TO MISS THE CULVERT.



**MITER NOTES:**  
 -REFER TO FDOT INDEX 430-021 SHEET 4 FOR MITER DETAIL, GRATE IS NOT REQUIRED.  
 -MITER SLOPE IS INTENDED TO BE 1:4 BUT MAY VARY FROM FDOT INDEX TO FIT AVAILABLE AREA.

SCALE: 1" = 10'	SHEET: 17 OF 22	JOB #:	16079
APPROVED BY:	02-18-21 ORIGINAL SUBMITTAL	DRJ	DRJ
BID SET	DATE	REMARK	DR/CH
NOT VALID UNLESS SEALED			

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 ROGER DALE POLSTON P.E. # 33222  
 MARVIN LUTHER WOLFE P.E. # 46030

**Polston Engineering inc.**  
 CIVIL ENGINEERING CONSULTANTS

**SUN'N LAKE OF SEBRING**  
 UNIT 13 DRAINAGE IMPROVEMENTS  
 TAGUS CULVERT

**DITCH NOTES:**

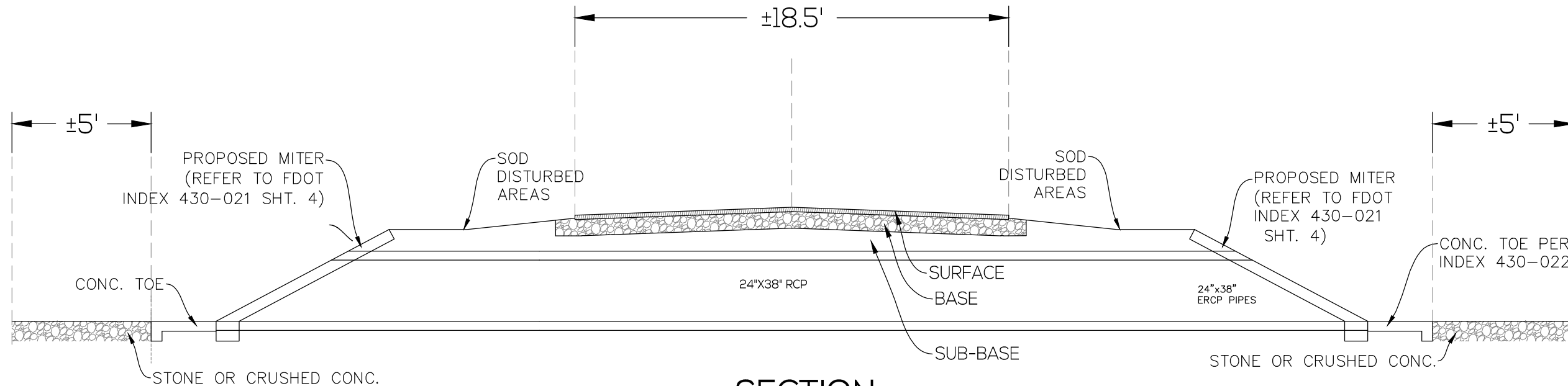
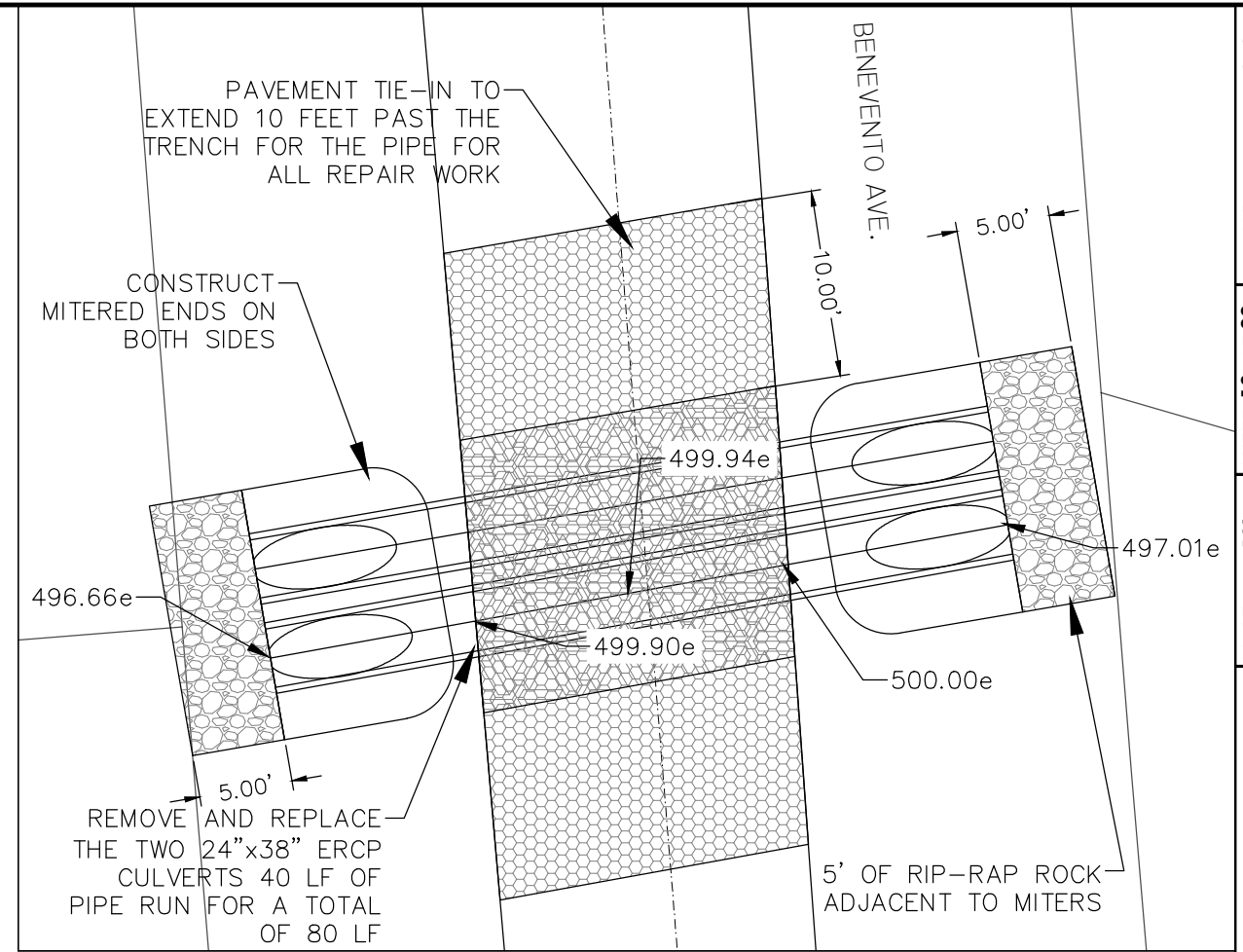
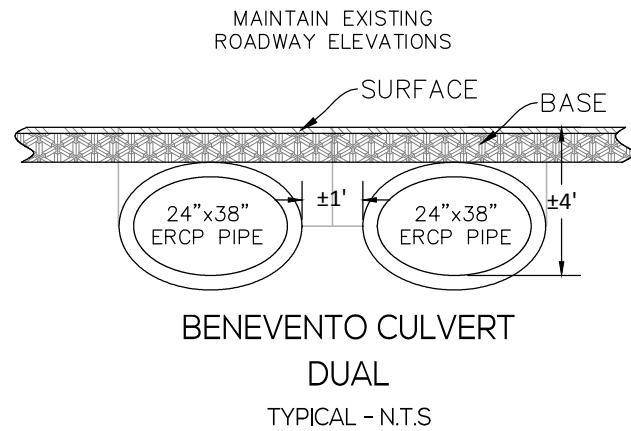
- ALL DISTURBED AREAS TO BE SODDED WITH BAHIA SOD IF NOT IN A RIP-RAP LOCATION.
- SIDE SLOPES TO BE 1:3 MAX, 1:4 PREFERRED IF AREA ALLOWS.
- DITCH BOTTOM 4-6" SIZED STONE/CRUSHED CONCRETE 8-12" THICK (WHERE SHOWN, OTHERWISE SOD)
- ALL RIP-RAP TO HAVE GEO-TEXTILE MATERIAL PLACED UNDER PRIOR TO INSTALLATION OF RIP-RAP ROCKS/STONE, MIRAFI 140N OR EQUIVALENT.

**RESTORATION NOTES:**

- ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITIONS.
- RESTORATION MAY INCLUDE, BUT NOT LIMITED TO, GRADING, AND SODDING.
- ANY DAMAGE TO THE ROADWAY FROM CONTRACTORS WORK WILL BE REPAIRED BY THE CONTRACTOR.

**CULVERT NOTES:**

- EXISTING SETTLED PIPES TO BE REMOVED AND REPLACED WITH NEW CULVERTS.
- AT THE TIME OF DESIGN, THE CULVERTS WERE PARTIALLY SUBMERGED. DEWATERING WILL BE REQUIRED TO ACHIEVE COMPACTION.
- REFER TO FDOT INDEX 125-001 PAGE 1 & FDOT SPEC BOOK SECTION 430 FOR DETAILS ON PIPE INSTALLATION AND ROAD CUT. THE BEDDING AND BACKFILL MUST BE PROPERLY COMPACTED WITH ADEQUATE MATERIAL.
- ALL PIPE JOINTS TO BE WRAPPED WITH GEO-TEXTILE FABRIC ACCORDING TO FDOT INDEX 430-001.
- ROAD MATERIAL SPECIFICATIONS:  
 SURFACE: 2" TYPE SP-9.5 ASPHALT  
 BASE: 10" LIMEROCK OR SHELLROCK, 98% DENSITY, LBR 100 (AASHTO T180, LIMEROCK BEARING RATIO)  
 SUB-BASE: STABILIZED, 98% DENSITY, FBV 60 PSI
- PAVEMENT JOINT BETWEEN NEW AND EXISTING TO EITHER BE SAW CUT OR MILLED AND OVERLAID AT THE JOINT.
- MATCH EXISTING GRADES FOR CULVERTS.



**SECTION**  
**BENEVENTO CULVERT**  
**REMOVAL & REPLACEMENT**  
 TYPICAL - N.T.S

**MITER NOTES:**

- REFER TO FDOT INDEX 430-021 SHEET 4 FOR MITER DETAIL, GRATE IS NOT REQUIRED.
- MITER SLOPE IS INTENDED TO BE 1:2 BUT MAY VARY FROM FDOT INDEX TO FIT AVAILABLE AREA.

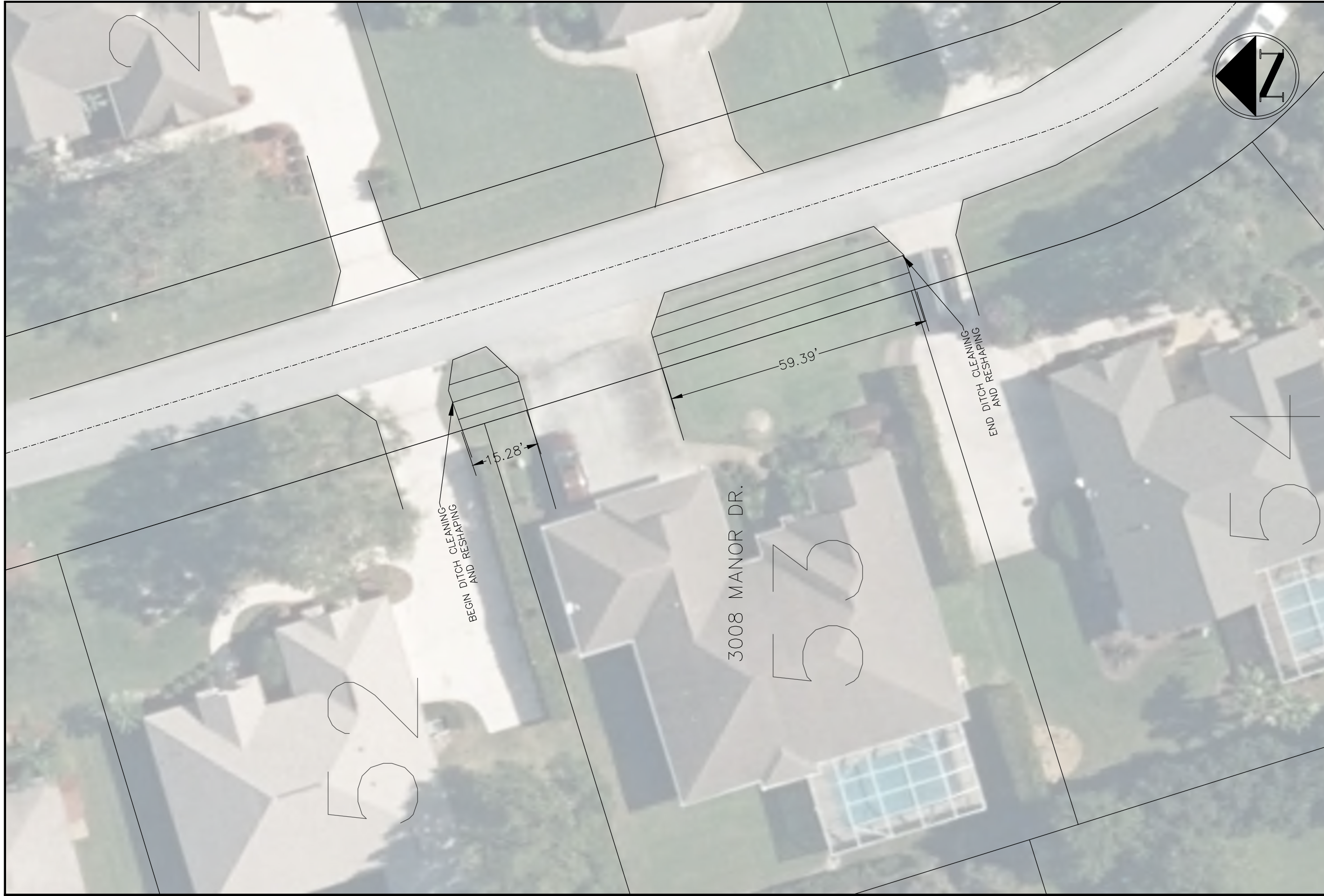
16079	JOB #:	DRJ/RDP
	ORIGINAL SUBMITTAL	
SHEET: 18 OF 22	APPROVED BY:	DATE
SCALE: 1" = 10'	BID SET	REMARK
NOT VALID UNLESS SEALED		

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CERTIFICATE OF AUTHORIZATION # 5684  
 ROGER DALE POLSTON P.E. # 33222  
 MARVIN LUTHER WOLFE P.E. # 46030

**Polston Engineering inc.**  
 CIVIL ENGINEERING CONSULTANTS

**SUN'N LAKE OF SEBRING**  
 UNIT 11 DRAINAGE IMPROVEMENTS  
 BENEVENTO CULVERT REPLACEMENTS



**SUN'N LAKE OF SEBRING**  
**UNIT 13 DRAINAGE IMPROVEMENTS**  
**MANOR DR. - ROADSIDE SWALE CLEANING**

**PE Polston Engineering Inc.**  
 CIVIL ENGINEERING CONSULTANTS

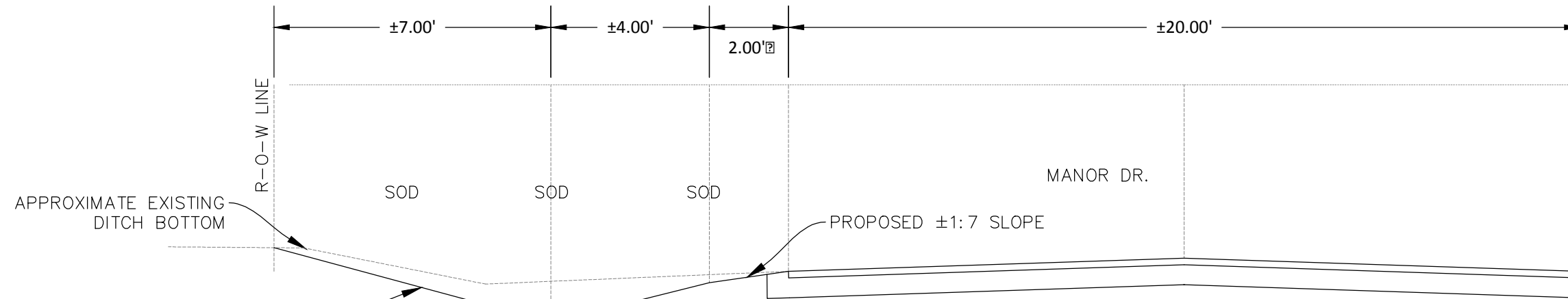
2925 KENILWORTH BLVD.,  
 SEBRING, FLORIDA 33870  
 863-385-5564 PHONE  
 863-385-2462 FAX  
 CERTIFICATE OF AUTHORIZATION # 5664  
 ROGER DALE POLSTON P. E. # 3322  
 MARVIN LUTHER WOLFE P. E. # 46030

SCALE: 1"= 20'  
 APPROVED BY:  
**BID SET**

NOT VALID UNLESS SEALED

DATE	REMARK	DR	CH

SHEET: 19 OF 22  
 JOB #: 16079  
 ORIGINAL SUBMITTAL  
 DRJ RDP



PROPOSED ±1:4 SLOPE  
(1:3 MAX)  
EXCAVATE 6" TO 12" TO  
MAKE GRADE FLOW WEST

ROADSIDE SWALE  
SECTION  
CLEANING/RESHAPING  
(N.T.S.)

PROPOSED 1:4 SLOPE  
(1:3 MAX)

**DITCH NOTES:**

- DITCH BOTTOM TO BE RESHAPED APPROXIMATELY 6" TO 12" OF MATERIAL TO BE REMOVED.
- ALL DISTURBED AREAS TO BE SODDED WITH ST. AUGUSTINE OR LIKE SOD.
- SIDE SLOPES TO BE 1:3 MAX, 1:4 PREFERRED IF AREA ALLOWS.
- THE INTENT OF THIS DITCH CLEANING IS TO PROVIDE A DITCH GRADE THAT IS 6 TO 8 INCHES LOWER THAN THE DRIVEWAY DIP GRADE, TO PROVIDE A DITCH BOTTOM LOWER THAN THE ADJACENT DRIVEWAYS, SO IT WILL NOT POND ON THE DRIVEWAY.
- CONTRACTOR TO BE MINDFUL OF EQUIPMENT ON ASPHALT SURFACE. ANY DAMAGE TO THE ROADWAY AS PART OF THE CONTRACTOR'S WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
- ANY DAMAGE CAUSED BY CONTRACTOR TO RIGHT OF WAY NOT PART OF THE SWALE CLEANING TO BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE AND SHALL BE SODDED WITH ST. AUGUSTINE SOD OR WITH THE TYPE OF SOD THAT WAS DISTURBED.  
(MOSTLY ST. AUGUSTINE SOD IN THIS AREA)

SCAFF: 1" = N.T.S.	SH: 1: 20	01: 22	B #:	16079
APP: V.D. BY:	02-18-21	ORIGINAL SUBMITTAL		DRJ/RD
BID SET				
DATE:				DR/H
NOT: V-ID: JUN-SS: -D				Rt.M.P.K

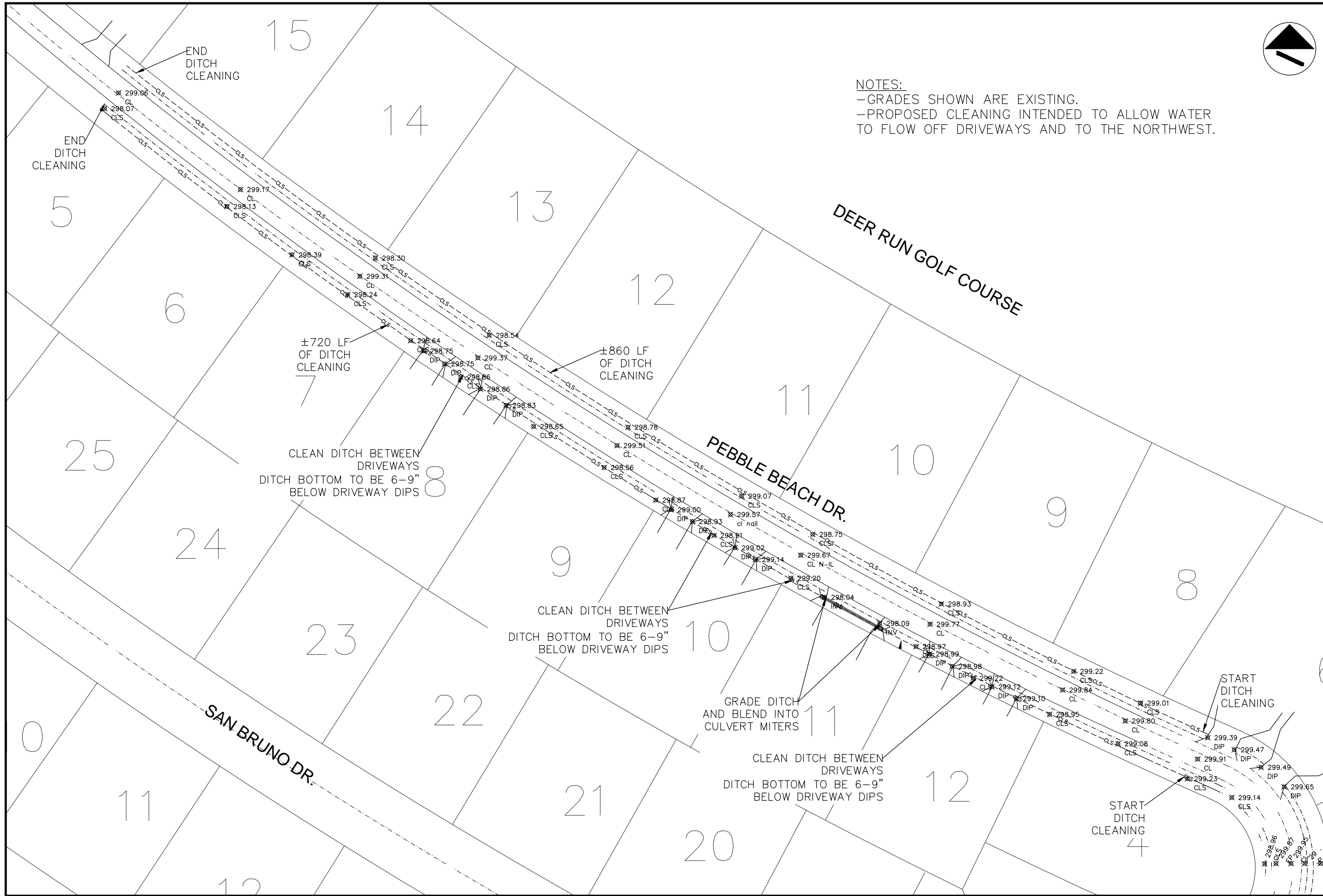
2925 KENILWORTH BLVD.,  
SEBRING, FLORIDA 33870  
863-385-5564 PHONE  
863-385-2462 FAX  
CERTIFICATE OF AUTHORIZATION # 4584  
ROGER D.L. POLSTON, P.E. # 33222  
MARVIN LUTHER WOLFE, P.E. # 46030



**SUN'N LAKE OF SEBRING**  
**UNIT 13 DRAINAGE IMPROVEMENTS**  
**MANOR DR. - SECTION**



NOTES:  
 -GRADES SHOWN ARE EXISTING.  
 -PROPOSED CLEANING INTENDED TO ALLOW WATER TO FLOW OFF DRIVEWAYS AND TO THE NORTHWEST.

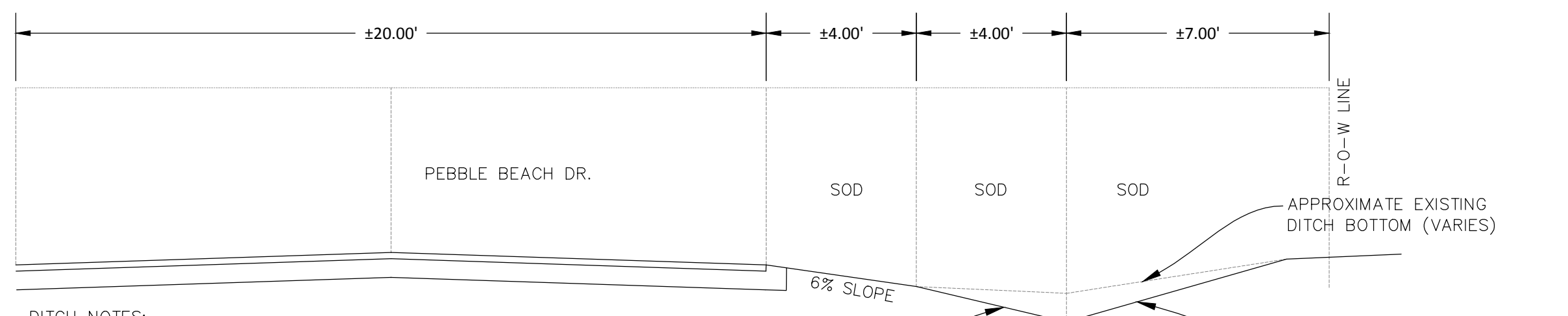
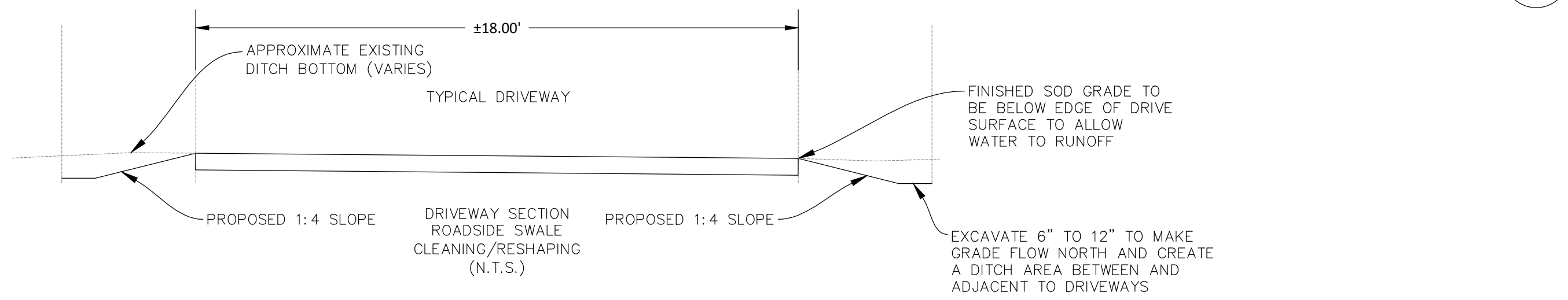


SCALE: 1" = 60'	SHEET: 21	OF: 22	B #: 16079
APP'D BY: DRJ	DATE: 02-18-21	ORIGINAL SUBMITTAL	DRJ IRD
BID SET			DR: H
NOT TO SCALE UNLESS SPECIFIED			DATE: 02-18-21
DRAWN BY: DAI			DATE: 02-18-21
CHECKED BY: R-MARK			DATE: 02-18-21

2925 KENILWORTH BLVD.,  
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 863-385-5564 PHONE  
 863-385-2462 FAX  
 CERTIFICATE OF AUTHORIZATION # 5684  
 ROGER DALE POLSTON P.E. # 33222  
 MARVIN LUTHER WOLFE P.E. # 46030



**SUN'N LAKE OF SEBRING**  
**UNIT 16 DRAINAGE IMPROVEMENTS**  
**PEBBLE BEACH DR. DITCH CLEANING**



**DITCH NOTES:**

- DITCH BOTTOM TO BE RESHAPED APPROXIMATELY 6" TO 12" OF MATERIAL TO BE REMOVED.
- CONTRACTOR TO ACCOUNT FOR SOD THICKNESS WHERE GRADING/CLEANING IS TO OCCUR, ±3" OF OVER EXCAVATION TO BE USED TO ACCOUNT FOR SOD.
- SIDE SLOPES TO BE SODDED WITH LIKE SOD WHERE DISTURBED.
- SIDE SLOPES TO BE 1:3 MAX, 1:4 PREFERRED IF AREA ALLOWS.
- CONTRACTOR TO BE MINDFUL OF EQUIPMENT ON ASPHALT SURFACE. ANY DAMAGE TO THE ROADWAY AS PART OF THE CONTRACTOR'S WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.
- ANY DAMAGE TO RIGHT OF WAY NOT PART OF THE SWALE CLEANING TO BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE AND SHALL BE SODDED WITH BAHIA SOD OR WITH THE TYPE OF SOD THAT WAS DISTURBED. (MOSTLY BAHIA SOD IN THIS AREA)

ROADSIDE SWALE SECTION CLEANING/RESHAPING (N.T.S.)

SCAL: 1" = N.T.S.	SH: 1: 22	OF: 22	B #: 16079
APP: VTD BY: 02-18-21	ORIGINAL SUBMITTAL		DRJ RD
BID SET			DAI H
NOT Y-10, UNL-SS, S-10			R-MARK DR. H

2925 KENILWORTH BLVD., SEBRING, FLORIDA 33870  
863-385-5564 PHONE  
863-385-2462 FAX

CERTIFICATE OF AUTHORIZATION # 5684  
ROGER DALE POLSTON P.E. # 33222  
MARVIN LUTHER WOLFE P.E. # 46030

**Polston Engineering inc.**  
CIVIL ENGINEERING CONSULTANTS

**SUN'N LAKE OF SEBRING**  
UNIT 16 DRAINAGE IMPROVEMENTS  
PEBBLE BEACH DR. DITCH CLEANING