



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



COQUINA BEACH DRAINAGE IMPROVEMENTS

MANATEE COUNTY

465-6005719

APRIL 2020

PHASE 2

100% PLANS



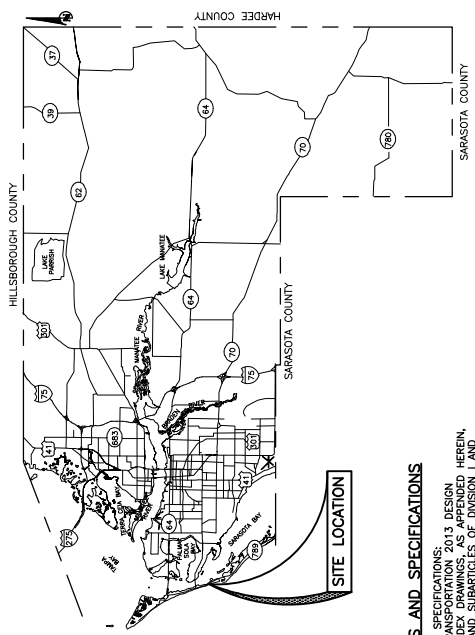
VICINITY MAP
N.T.S.

PROJECT DESCRIPTION
PROJECT SCOPE IS TO PROVIDE PERVIOUS CONCRETE PARKING AND DRAINAGE.

PROJECT SITE

RELATED STANDARDS AND SPECIFICATIONS
GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION 2013 DESIGN SPECIFICATIONS, LATEST EDITION, AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.

FOR DESIGN STANDARDS CLICK ON THE "DESIGN STANDARDS" LINK AT THE FOLLOWING WEB SITE:
[HTTP://WWW.DOT.STATE.FL.US/DESIGN/](http://www.dot.state.fl.us/design/)
FOR THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION CLICK ON THE "SPECIFICATIONS LINK AT THE FOLLOWING WEB SITE:
[HTTP://WWW.DOT.STATE.FL.US/SPECIFICATIONS/INDEX/](http://www.dot.state.fl.us/specifications/index/)
ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:
MANATEE COUNTY ENGINEERING
1022 26TH AVENUE EAST BRADENTON FLORIDA 34208



SITE LOCATION

NO	INDEX OF SHEETS
1	COVER SHEET
2-3	GENERAL NOTES AND LEGEND
4-4A	AERIAL SITE PLANS
5-10	EXISTING CONDITIONS
11	BEST MANAGEMENT PRACTICES
12	EROSION CONTROL DETAILS
13-18	GEOMETRY PLAN
19-22	COORDINATE DATA TABLES
23	TYPICAL SECTIONS
24-29	GRADING AND PAVING PLAN
30-35	DRAINAGE AND UNDERDRAIN PLAN
36-37	DETAILS
38-43	TREE REMOVAL PLAN
UAS1-UAS6	UTILITY ADJUSTMENT PLAN



Know what's below
Call before you dig

KEY SHEET REVISIONS	
DATE	DESCRIPTION

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
COVER SHEET

PROJECT #	465-6005719
SURVEY #	6982
SEC./TWN./RGE	10/35S/16E
SCALE	N/A
BY	DATE
DESIGNED	ZNS 08/09/13
DESIGNED	MS/ES 08/2015
DRAWN	MS/ES 08/2015
CHECKED	MS 08/2015
MICHAEL L. STURM	
FLORIDA P.E. # 46005	



PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1000 1st Street East, Bradenton, FL 34208

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY EXISTING AERIAL SITE PLAN

PROJECT #	465-6003719
SURVEY #	8982
SEC./TWP./RGE	10/28S/16E
SCALE	1"=300'
DATE	07/16/04
BY	MS
DESIGNED	MS
DRAWN	KR
CHECKED	MS
MICHAEL L. STURM	
FLORIDA P.E. # 46005	



PUBLIC WORKS DEPARTMENT
1000 1st Street, Suite 100
1000 1st Street, Suite 100
1000 1st Street, Suite 100

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY PROPOSED AERIAL SITE PLAN

PROJECT #	465-6003719
SURVEY #	8982
SEC./TWP./RGE	10/35S/16E
SCALE	1"=300'
DATE	07/16/04
DESIGNED	MS
DRAWN	KR
CHECKED	MS
DATE	08/20/15
MICHAEL L. STURM	
FLORIDA P.E. # 46005	
Signature & Date	
SHEET 4A	

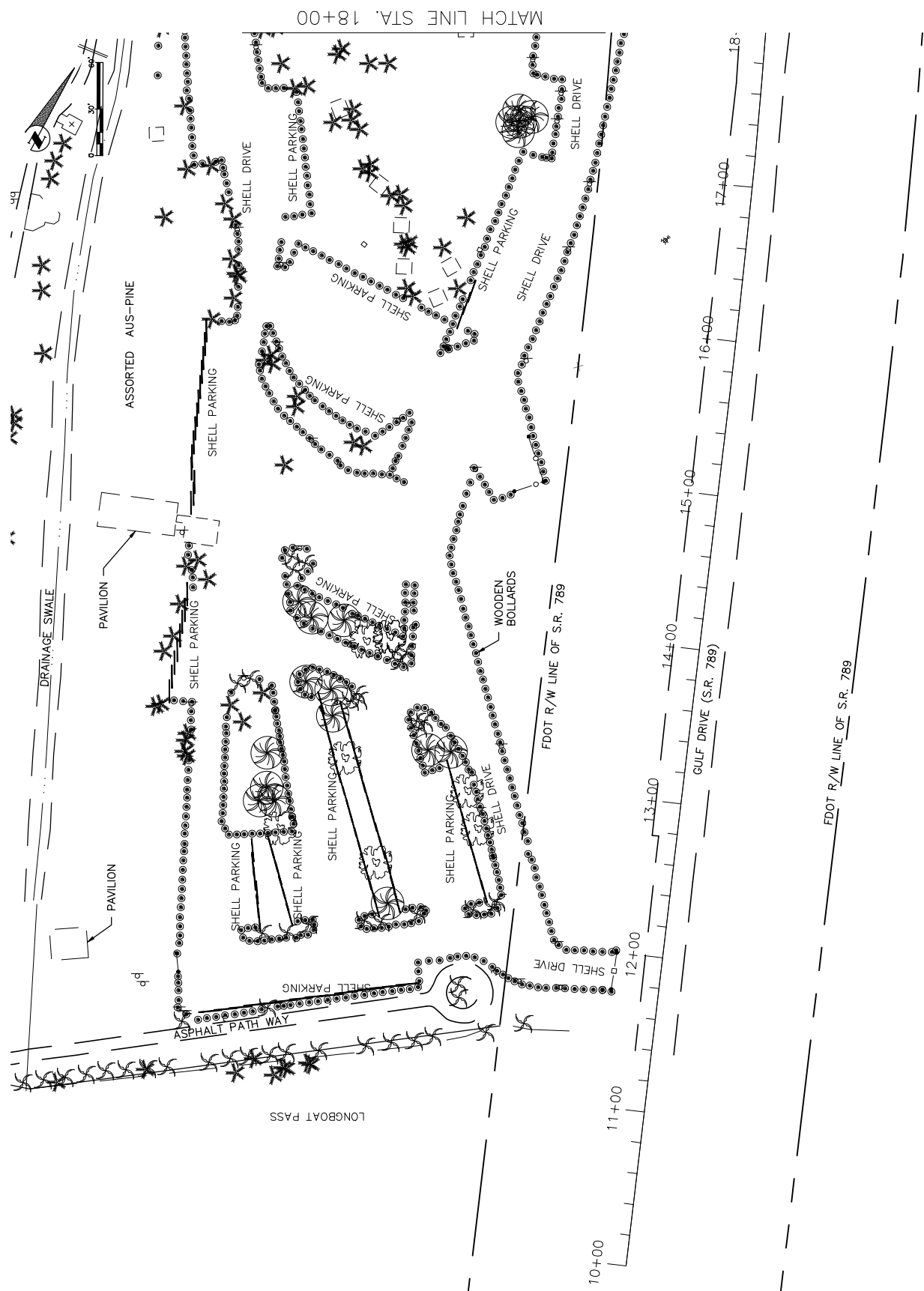


PUBLIC WORKS DEPARTMENT
1000 1st Street, Suite 100
Tampa, FL 33602

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY EXISTING CONDITIONS

PROJECT #	465-6002719
SURVEY #	6982
SEC./TWN./RGE	10/35S/18E
SCALE	1"=60'
DATE	
BY	
DATE	
DESIGNED	ZNS 08/09/13
DRAWN	MS/ES 08/2015
CHECKED	TMF 08/2016
DATE	MS/ES 8/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date
SHEET 5



FDOT R/W LINE OF S.R. 789

GULF DRIVE (S.R. 789)

FDOT R/W LINE OF S.R. 789

SHELL DRIVE

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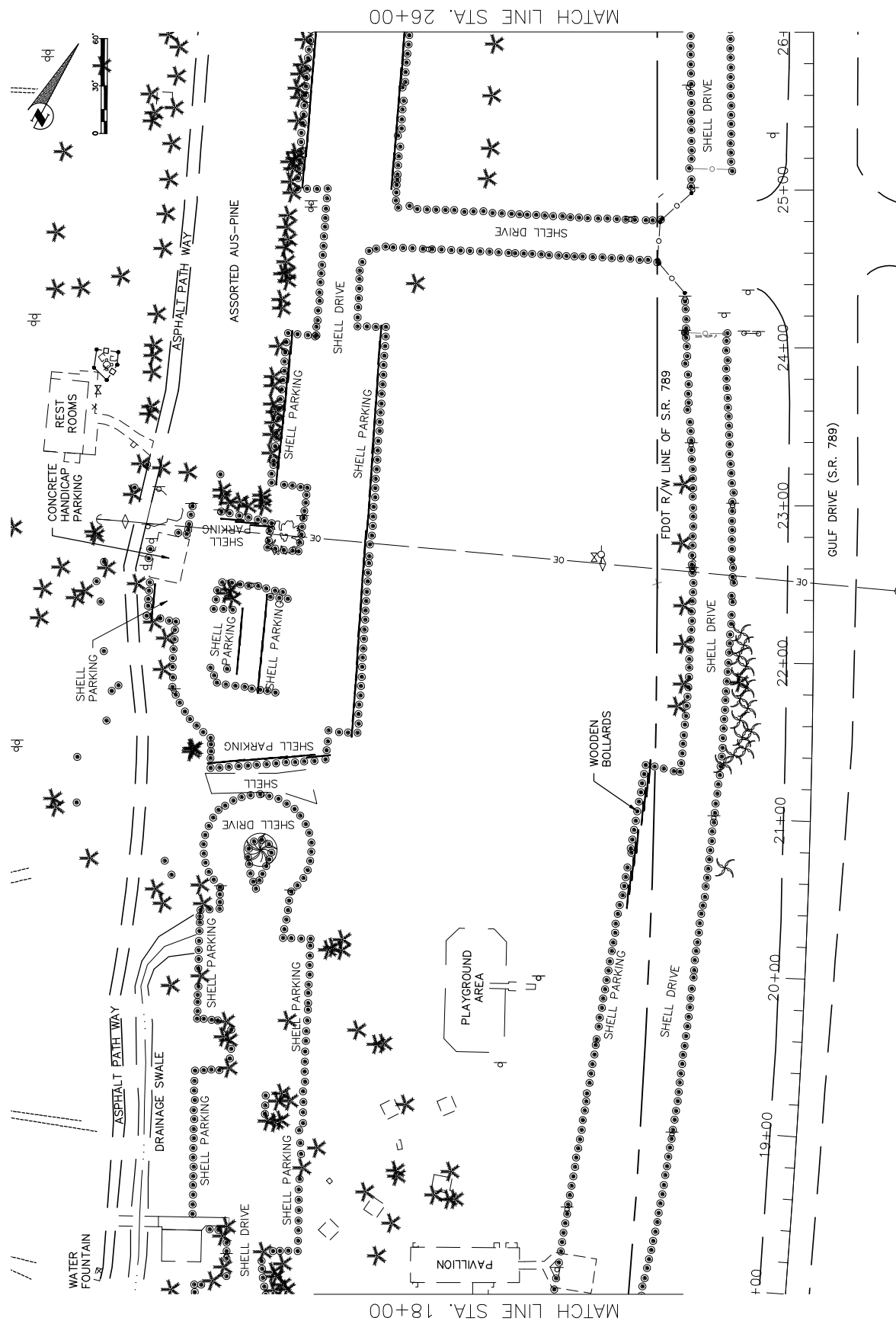
SHELL DRIVE



EXISTING CONDITIONS

[illegible]

Signature & Date
SHEET 6

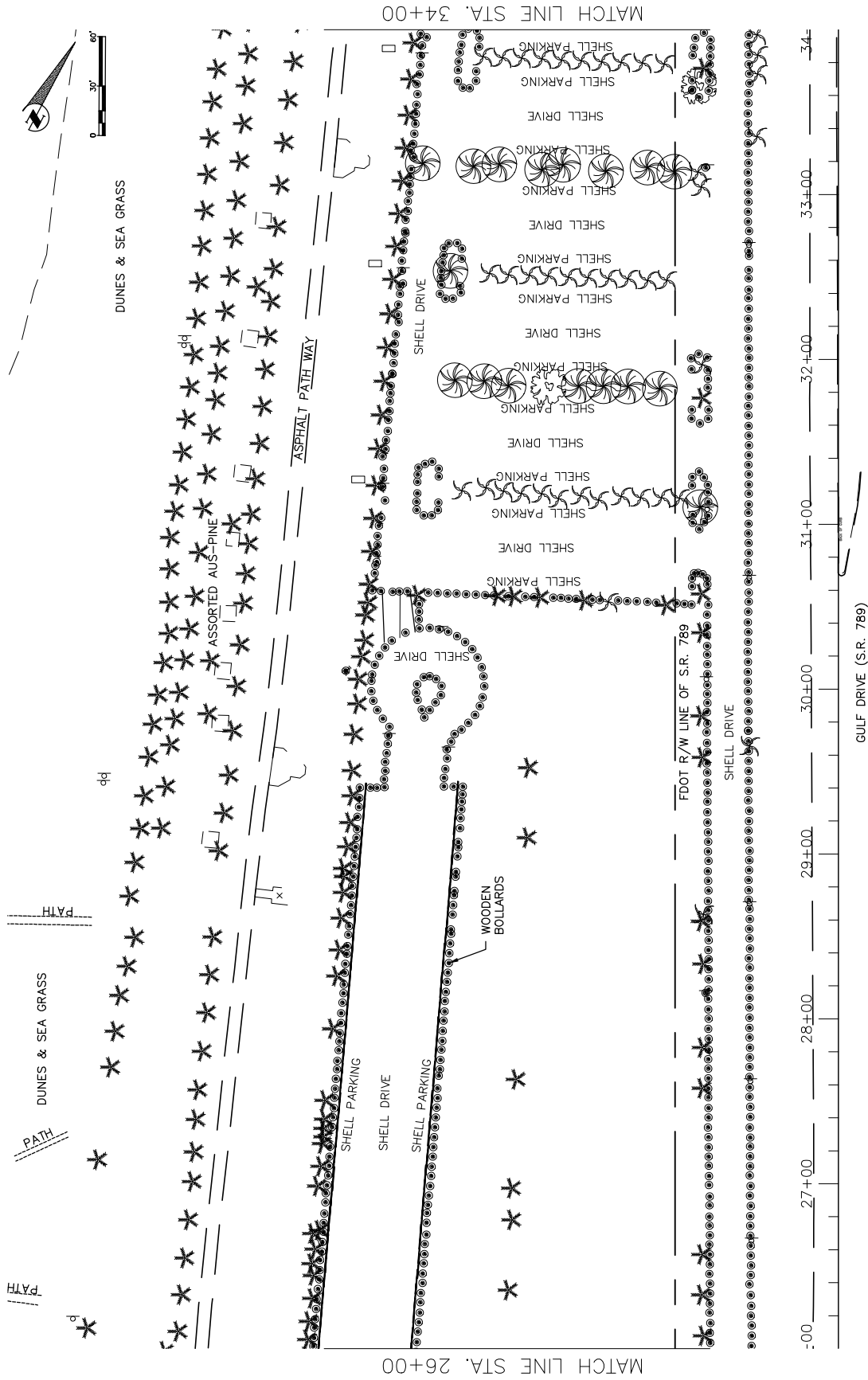
FDOT R/W LINE OF S.R. 789

**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
EXISTING CONDITIONS**

DATE	BY	REVISION DESCRIPTION

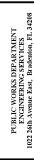
PROJECT #	465-6005719
SURVEY #	6982
SEC./TWN./RGE	10/3/S5/16E
SCALE	1"=60'
SURVEYED	BY DATE
DESIGNED	ZNS 08/05/15
DRAWN	MS/ES 08/2015
CHECKED	TMF 08/2016
	MS/ES 8/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date
SHEET 7



FDOT R/W LINE OF S.R. 789

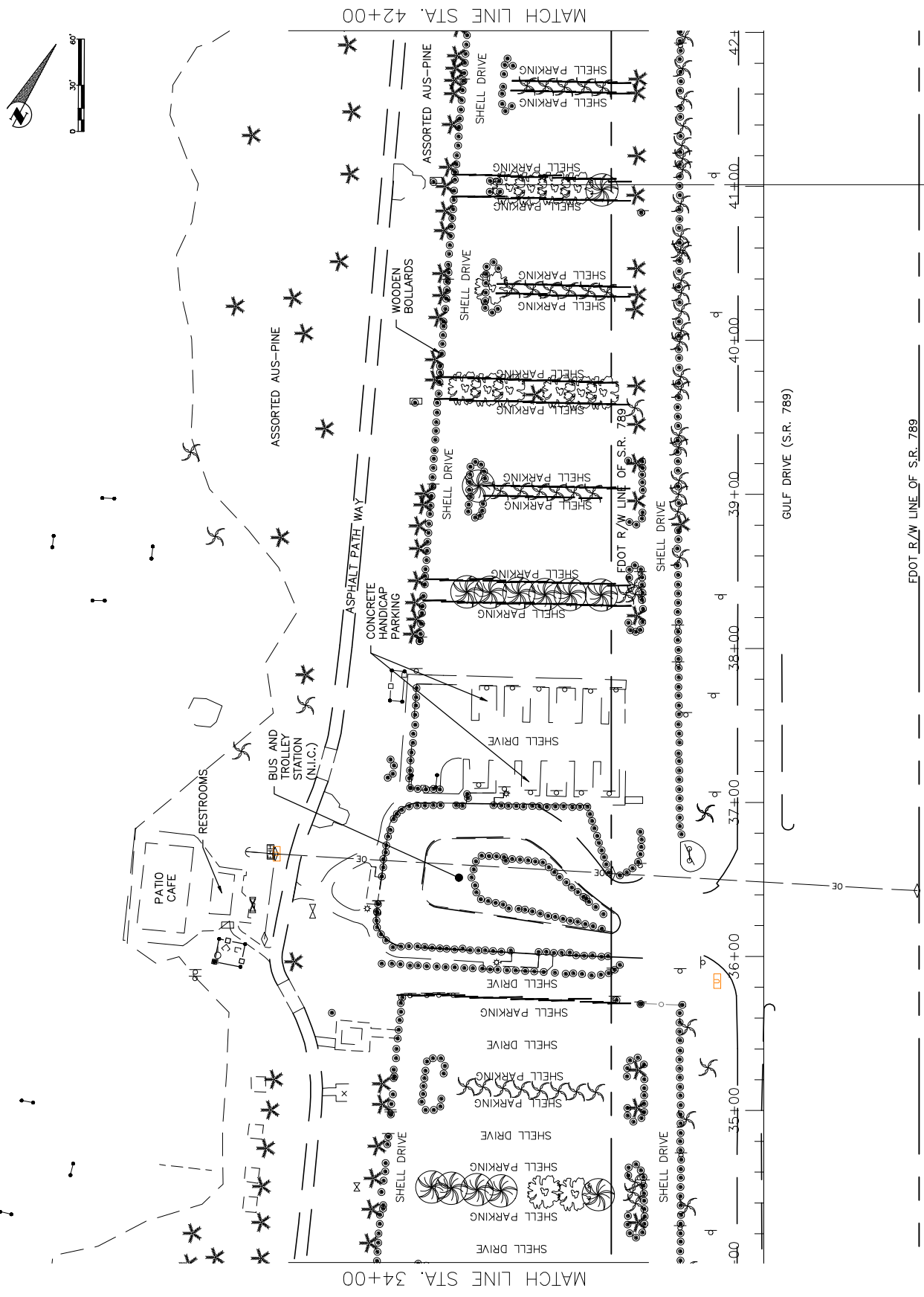
SHEET 7



MANATEE COUNTY
EXISTING CONDITIONS

NO.	PROJECT #	465-6002/19	6882	1"=60'
REVISION DESCRIPTION	BY	DATE	SEC./PIN./R/E	10/55/16E
DATE	BY	DATE	DESIGNED	09/05/15
			DRAWN	09/2016
			CHECKED	8/2016
			MICHAEL L. STURM	
			FLORIDA P.E. # 46005	

Signature & Date
SHEET 8



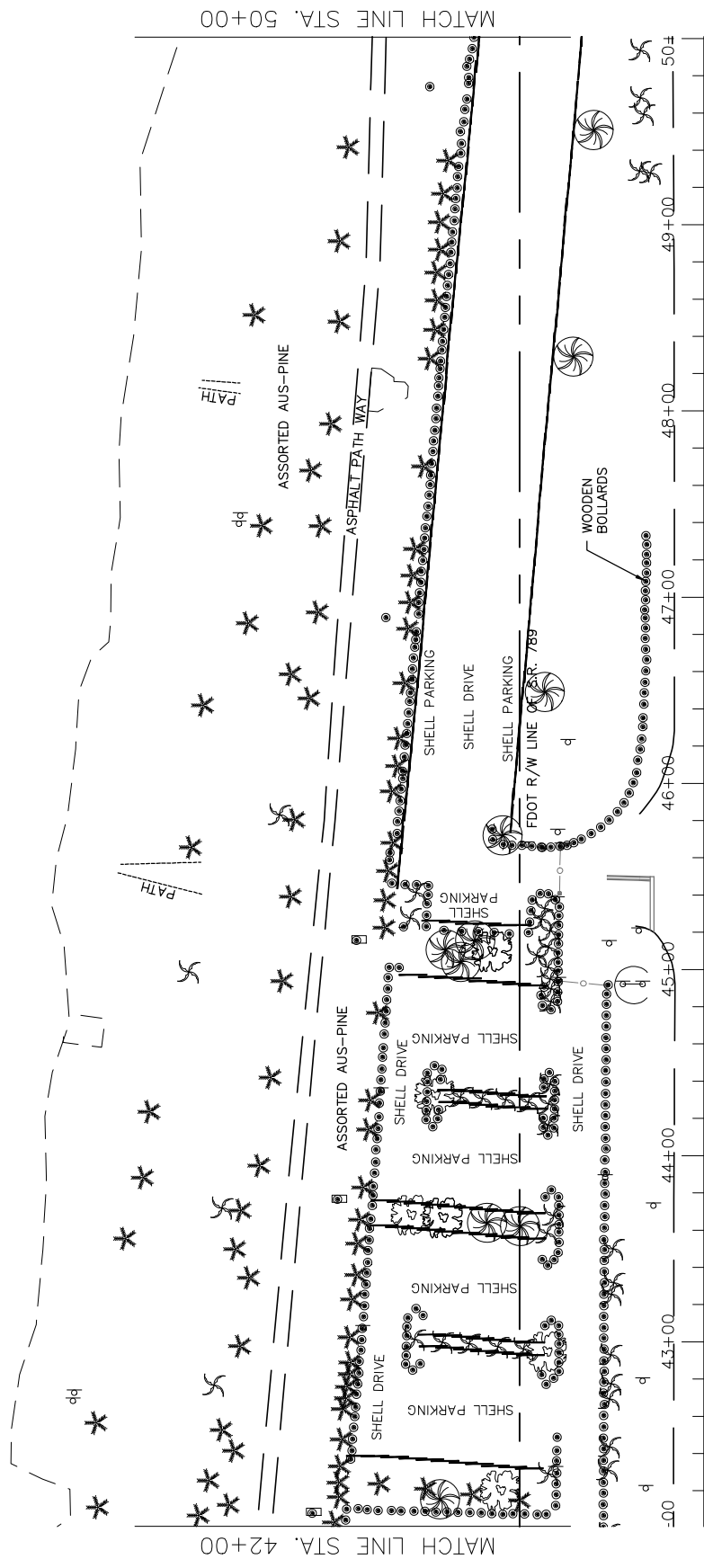
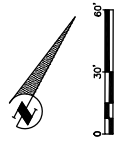


PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1002 2nd St., Manatee, FL 34458

**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
EXISTING CONDITIONS**

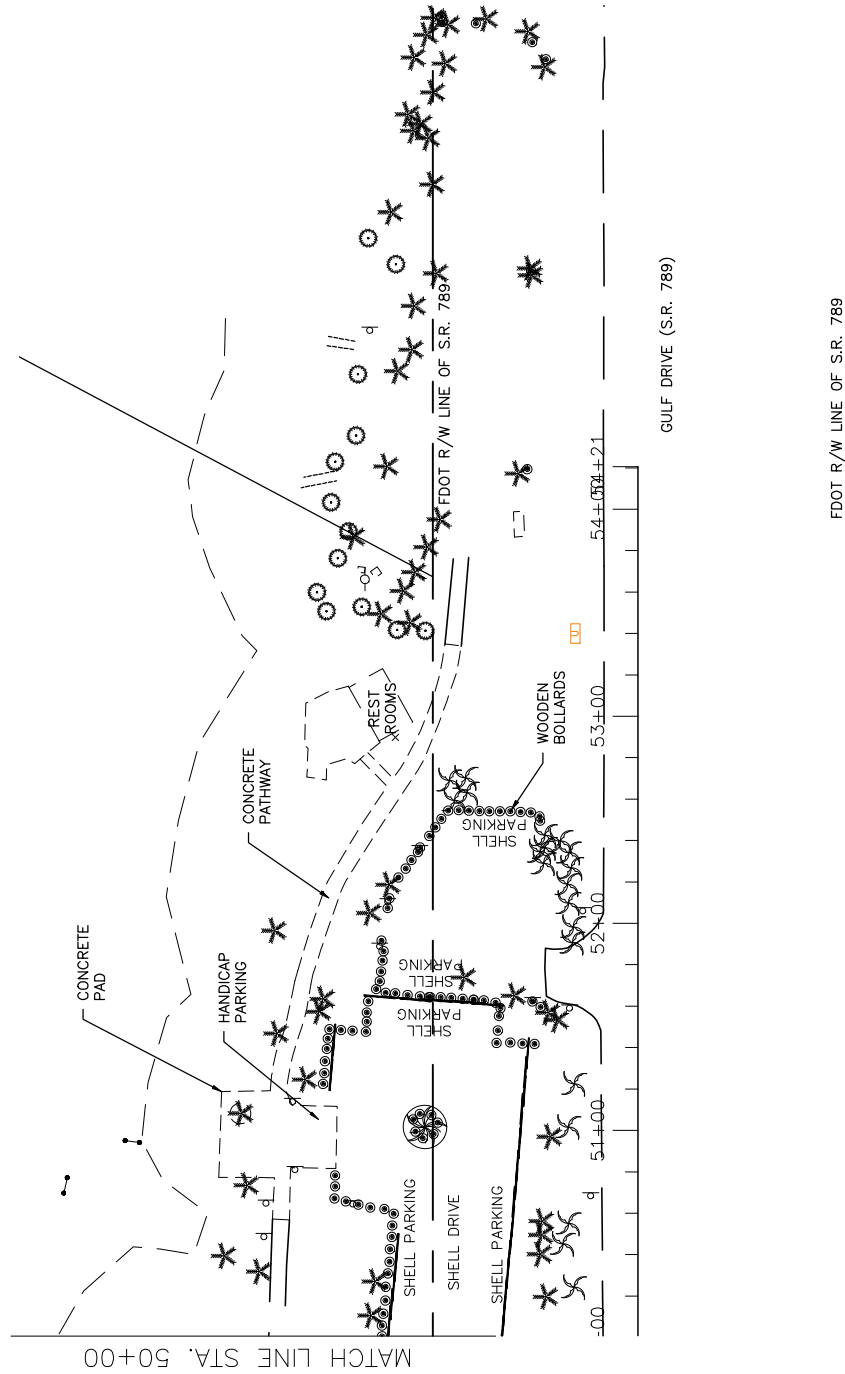
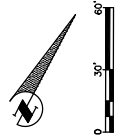
PROJECT #	465-6002719
SURVEY #	6982
SEC./TWN./RGE.	10/25S/18E
SCALE	1"=60'
DATE	
BY	
DATE	
DESIGNED	ZNS 08/09/13
DESIGNED	MS/ES 08/2015
DRAWN	TNF 08/2016
CHECKED	MS/ES 8/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

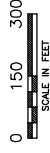
Signature & Date
SHEET 9



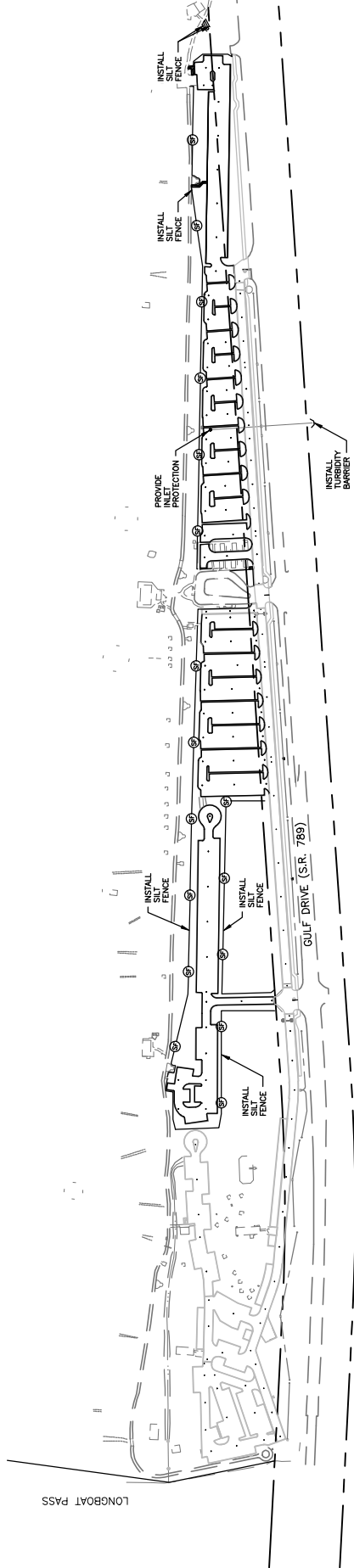
GULF DRIVE (S.R. 789)

FDOT R/W LINE OF S.R. 789

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[illegible]

Signature & Date
SHEET 11

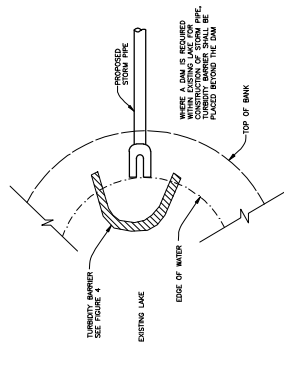


LONGBOAT PASS

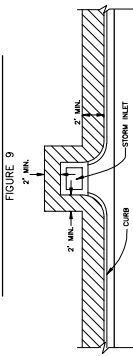
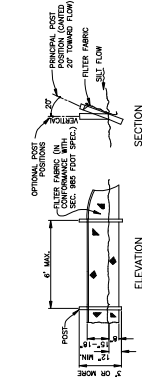
**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
EROSION CONTROL DETAILS**

[illegible]

NOTE:
REFERENCE THE STATE OF FLORIDA
EROSION AND SEDIMENT CONTROL
DESIGNER AND REVIEWER MANUAL, LATEST
EDITION, FOR ALL TEMPORARY EROSION
CONTROL MEASURES.



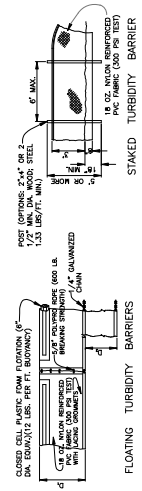
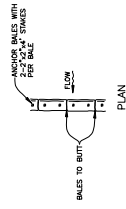
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE

SOD ALONG CURB
AND AROUND INLET

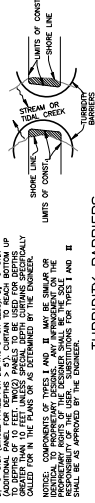
TYPICAL SILT FENCE



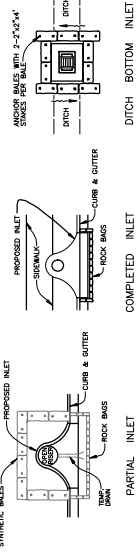
TYPICAL BALE SILT BARRIER



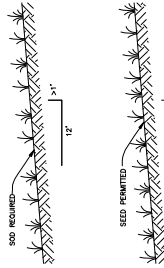
FLLOATING	TURBIDITY	BARRIERS
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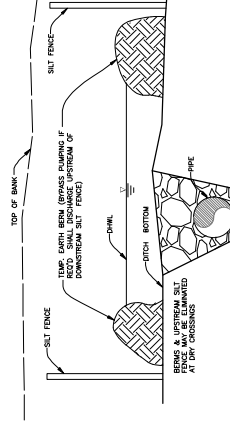
TURBIDITY BARRIERS



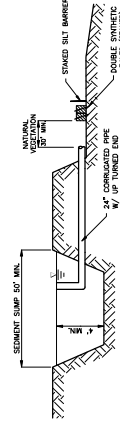
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



GRASS SLOPES
FIGURE 13



UNDERGROUND PIPE CROSSING



SEDIMENT SUMP SECTION

MICHAEL L. STURM
FLORIDA P.E. # 46005

Signature & Date

SHEET 12

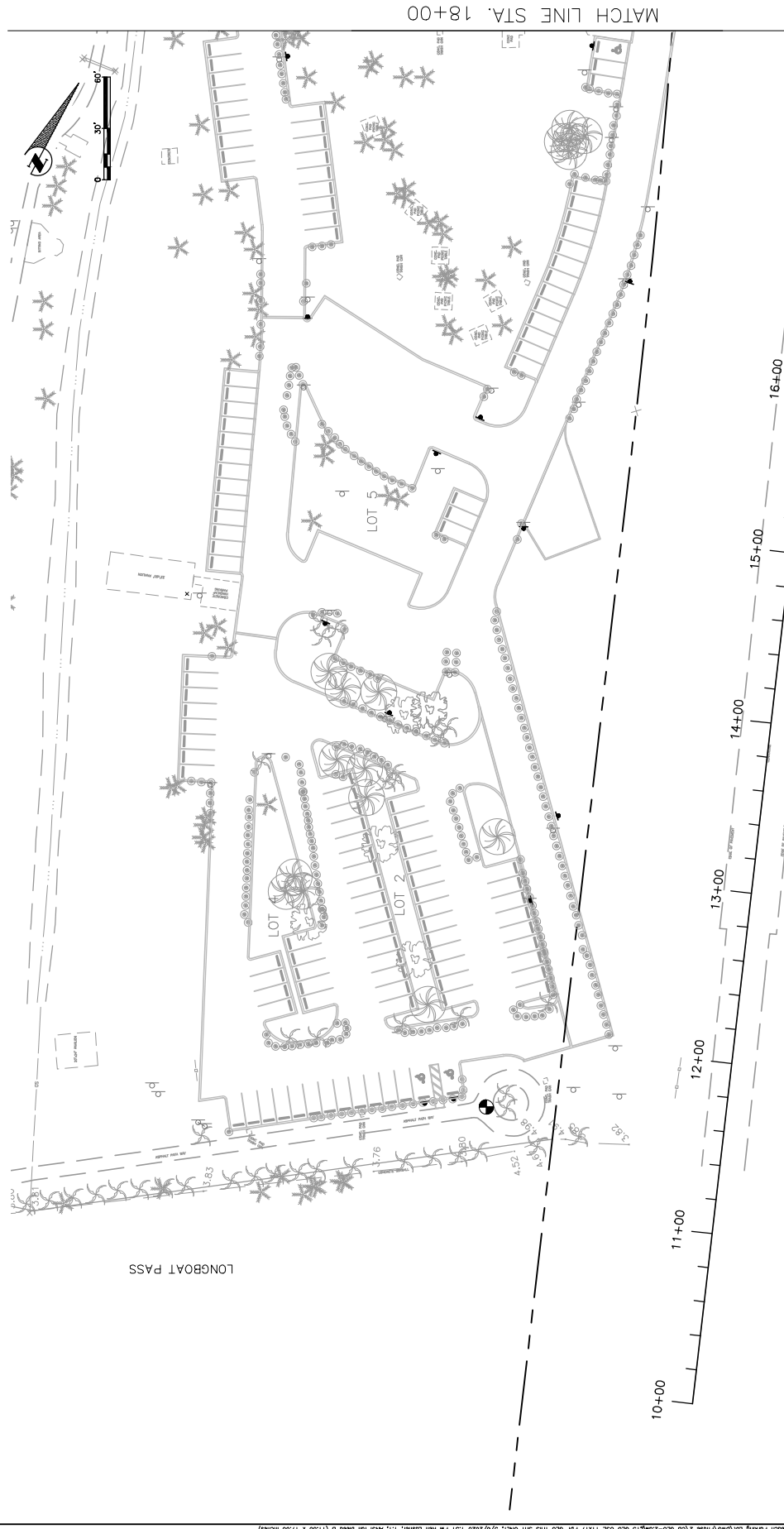


PUBLIC WORKS DEPARTMENT
1032 3RD Avenue East, Bradenton, FL 34208

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY GEOMETRY PLAN

REVISION	DESCRIPTION	BY	DATE
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Signature & Date
SHEET 13



LEGEND:

COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (NEST ZONE) TWO 83/2011.

ALL DIMENSIONS ON THIS SHEET ARE FROM FACE OF CURB.

ALL RADI ARE 2 FEET UNLESS OTHERWISE NOTED.

ALL STRIPING TO BE PAINT UNLESS OTHERWISE NOTED.

WOODEN BOLLARDS SHALL BE INSTALLED IN UNPAVED AREAS 2 FEET BEHIND CURB, SPACED 5 FEET ON CENTER, ALONG ALL PROPOSED CURBING TO PREVENT VEHICLES FROM ENTERING UNPAVED AREAS. BOLLARDS SHALL NOT BE INSTALLED IN LOCATIONS THAT BLOCK EXISTING EMERGENCY AND MAINTENANCE VEHICLE ACCESS LOCATIONS. BOLLARDS SHALL MATCH EXISTING BOLLARDS IN DIAMETER AND MATERIAL. SEE DETAIL.

ALL THE SIGNING, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON TRAFFIC CONTROL DEVICES (MUTCD), FDOT DESIGN STANDARDS, AND THE MANATEE COUNTY PUBLIC WORKS DEPARTMENT - HIGHWAY, TRAFFIC, AND STORMWATER STANDARDS.

RS-1

PR. GATE

TRIP. BOL.

DO NOT ENTER

EMERGENCY VEHICLES ONLY

NO PARKING

RV PARKING

STOP

30' STOP SIGN AND 24" WHITE STOP BAR

REGULATORY SIGN AND TYPE

NUMBER OF PARKING SPACES

PWT/STRIPING DIMENSION

PROPOSED 4" METAL GATE AND POLES

TRIPLE WOODEN BOLLARDS

RV PARKING

RV PARKING

EMERGENCY VEHICLES ONLY

10+00

11+00

12+00

13+00

14+00

15+00

16+00

17+00

18+00

GULF DRIVE (S.R. 789)

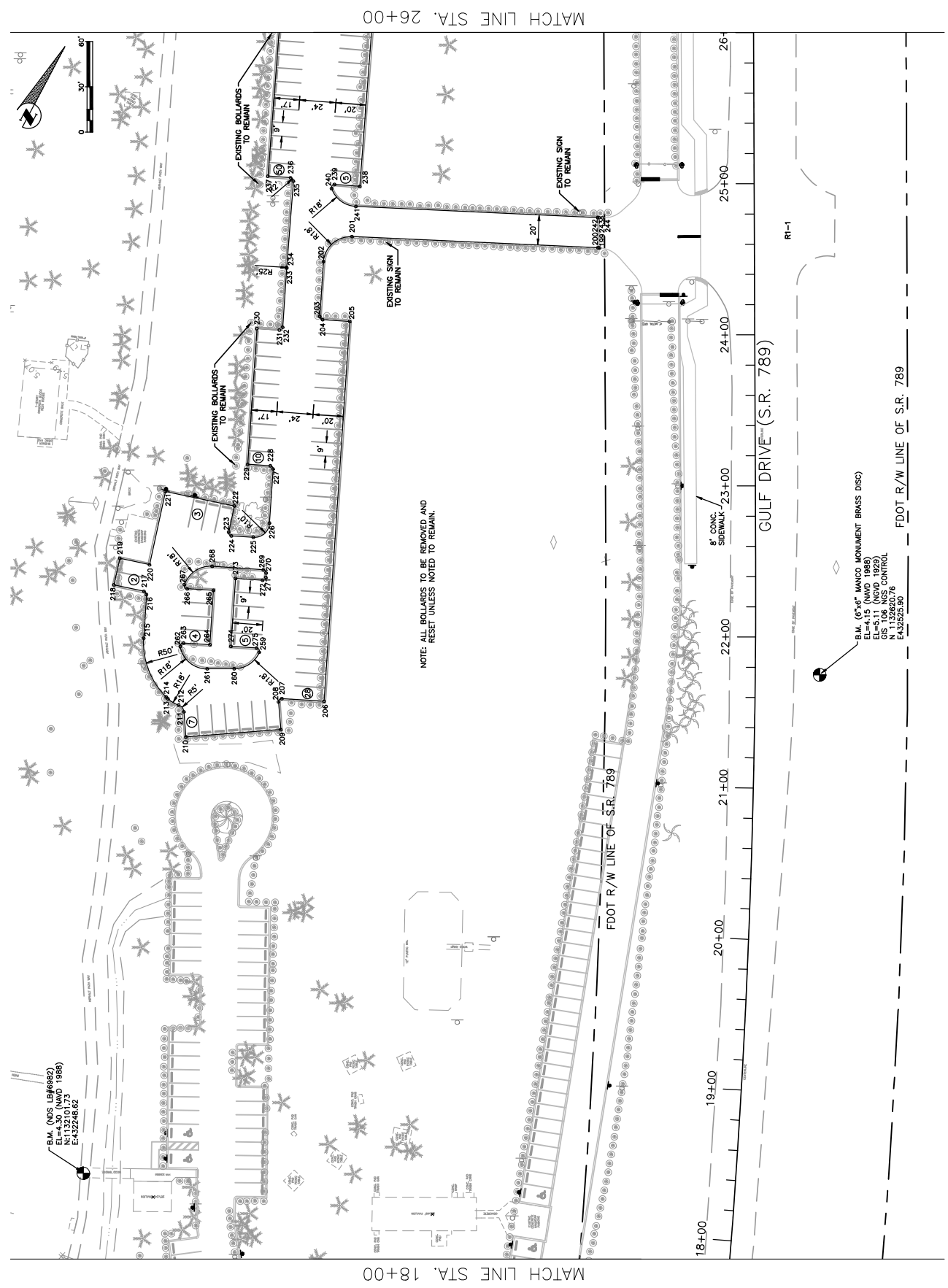
FDOT R/W LINE OF S.R. 789

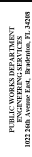


COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
GEOMETRY PLAN

PROJECT #	465-6005719
SURVEY #	6982
SEC./TWP./RGE	10/35S/16E
SCALE	1"=60'
DATE	07/16/04
BY	MS
DATE	08/20/15
DESIGNED	MS/ES
DRAWN	TMF
CHECKED	MS
MICHAEL L. STURM FLORIDA P.E. # 46005	

Signature & Date
SHEET 14

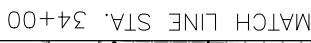




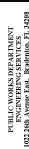
GEOMETRY PLAN

Signature & Date

SHEET 15

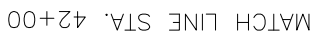


MATCH LINE STA. 26+00



MANATEE COUNTY
GEOMETRY PLAN

Signature & Date
SHEET 16



FDOT R/W LINE OF S.R. 789

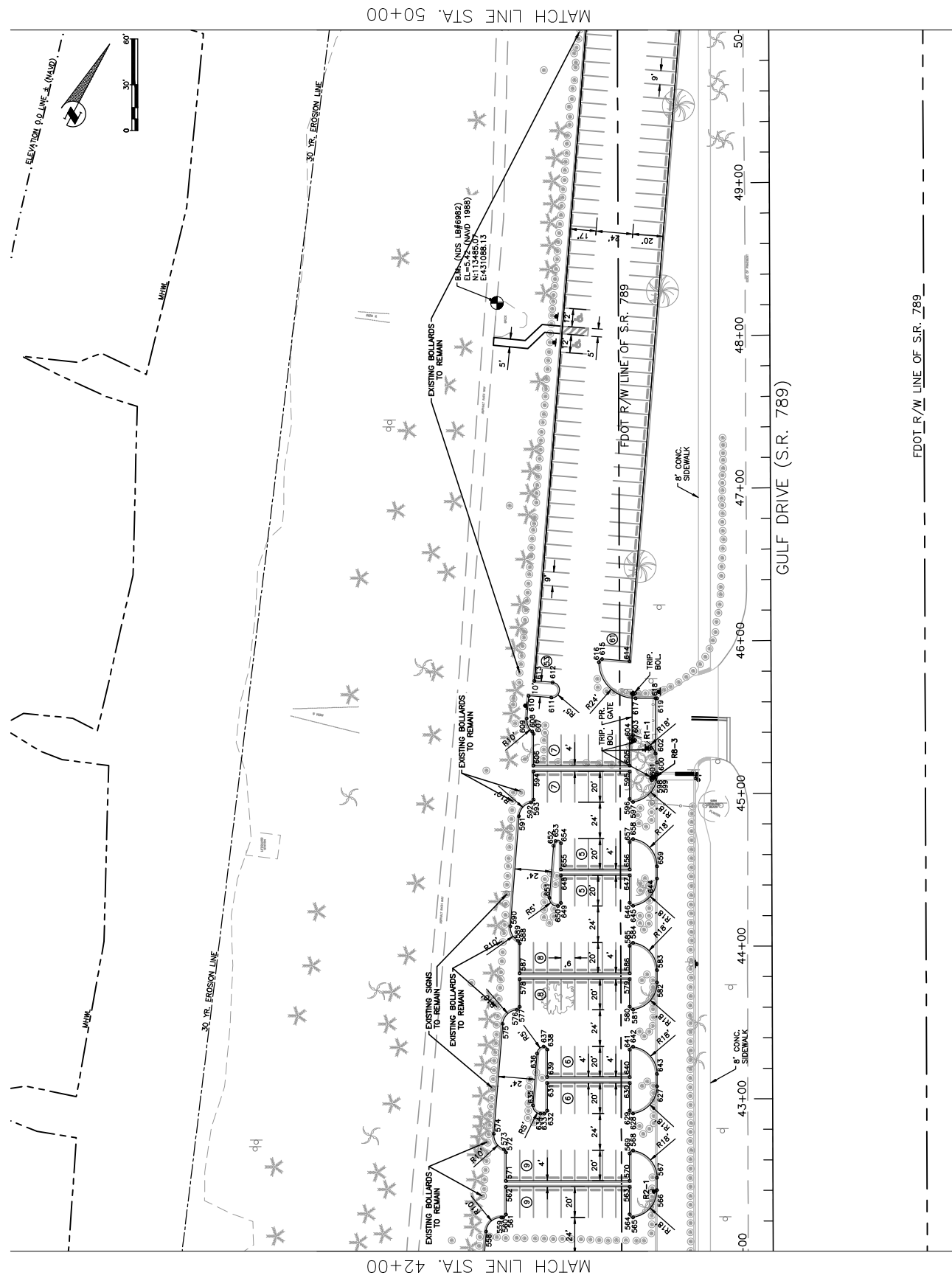
Signature & Date

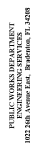
MANATEE COUNTY
GEOMETRY PLAN

[illegible]

Signature & Date

SHEET 17





MANATEE COUNTY
COORDINATE DATA TABLE

PROJECT #	465-6005719
SURVEY #	6982
SEC./TWN./RGE	10/35S/16E
SCALE	1"=60'
	BY DATE
SURVEYED	ZNS 07/16/04
DESIGNED	MS/ES 08/2015
DRAWN	TMF 03/2016
CHECKED	MS 03/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date

SHEET 19

[illegible][illegible][illegible][illegible][illegible]

PLEASE

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
COORDINATE DATA TABLE

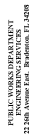
[illegible]

COORDINATE DATA TABLE		
Point #	Northing	Easting
681	1135151.618	431026.608

[illegible]

COORDINATE DATA TABLE			
Point #	Northing	Easting	
641	1134461.992	431393.019	
642	1134464.796	431394.084	
643	1134456.342	431416.345	
644	1134569.574	431356.659	
645	1134546.432	431351.053	
646	1134547.138	431348.138	
647	1134562.950	431339.803	
648	1134541.967	431299.995	
649	1134526.044	431308.384	
650	1134523.342	431307.551	
651	1134525.515	431300.104	
652	1134556.849	431286.634	
653	1134560.340	431286.463	
654	1134560.666	431290.138	
655	1134545.506	431298.129	
656	1134566.489	431337.938	
657	1134582.301	431329.603	
658	1134585.106	431330.668	
659	1134576.651	431352.928	
660	1135094.869	431032.499	
661	1135100.201	431044.901	
662	1135106.632	431042.137	
663	1135088.985	431001.087	
664	1135126.942	430981.780	
665	1135124.553	430977.063	
666	1135154.884	430961.700	
667	1135164.545	430980.774	
668	1135170.964	430983.115	
669	1135183.983	430977.574	
670	1135205.131	431027.264	
671	1135187.163	431034.911	
672	1135184.528	431041.486	
673	1135191.373	431057.412	
674	1135134.656	431033.900	
675	1135128.088	431031.281	
676	1135127.582	431030.103	
677	1135129.917	431023.668	
678	1135146.427	431015.305	
679	1135153.287	431017.808	
680	1135154.244	431020.057	

COORDINATE DATA TABLE			
Point #	Northing	Easting	
594	1134593.728	431252.363	
595	1134623.105	431308.095	
596	1134607.293	431316.429	
597	1134606.587	431319.345	
598	1134629.729	431324.951	
599	1134630.102	431324.754	
600	1134630.987	431324.288	
601	1134636.806	431321.220	
602	1134641.573	431317.571	
603	1134645.260	431298.960	
604	1134642.456	431297.895	
605	1134626.644	431306.229	
606	1134597.267	431250.498	
607	1134615.609	431240.830	
608	1134616.635	431239.464	
609	1134622.480	431232.298	
610	1134636.165	431226.415	
611	1134642.089	431240.196	
612	1134651.276	431236.247	
613	1134646.537	431225.222	
614	1134687.000	431274.226	
615	1134679.927	431257.773	
616	1134677.136	431256.804	
617	1134667.349	431289.092	
618	1134673.494	431300.751	
619	1134673.961	431301.636	
627	1134449.265	431420.075	
628	1134426.122	431414.470	
629	1134426.829	431411.554	
630	1134442.641	431403.219	
631	1134417.461	431355.449	
632	1134401.538	431363.843	
633	1134398.836	431363.006	
634	1134397.729	431360.907	
635	1134400.178	431353.982	
636	1134431.512	431340.512	
637	1134436.907	431342.312	
638	1134436.907	431345.199	
639	1134420.999	431353.584	
640	1134446.179	431401.354	



MANATEE COUNTY
TYPICAL SECTIONS

Signature & Date

SHEET 23





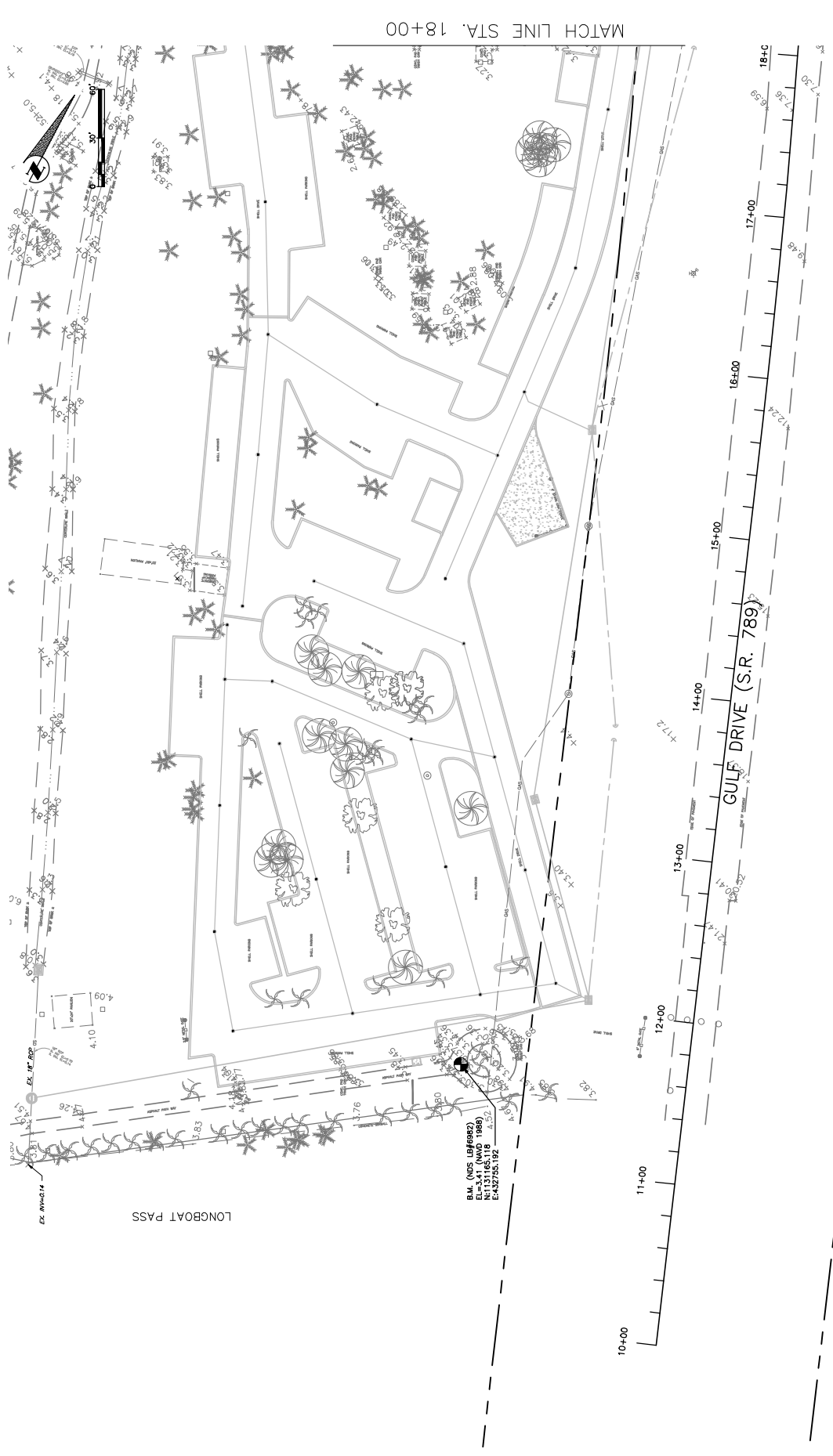
PUBLIC WORKS DEPARTMENT
1032 S.W. 1st Avenue East, Bradenton, FL 34209

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
GRADING AND PAVING PLAN

PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWN./RGE	10/35S/16E
SCALE	1"=60'
DATE	
BY	
DATE	

DESIGNED	MS	07/16/04
DRAWN	TMF	08/20/15
CHECKED	MS	03/20/16
MICHAEL L. STURM		
FLORIDA P.E. # 46005		

Signature & Date
SHEET 24



LEGEND

Ⓔ EMBEDDED RING INFILTRATION KIT

8 INCH PERVIOUS CONCRETE

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.

2. ELEVATIONS ARE BASED ON MVD 1988, AND ARE DERIVED FROM A BENCHMARK WITH AN ELEVATION OF 11.15 FEET (MVD 1988), AND BENCHMARK GS-105 (PD 462710) HAVING AN ELEVATION OF 3.29 FEET (MVD 1988).



PUBLIC WORKS DEPARTMENT
1035 5th Avenue East, Bradenton, FL 34209

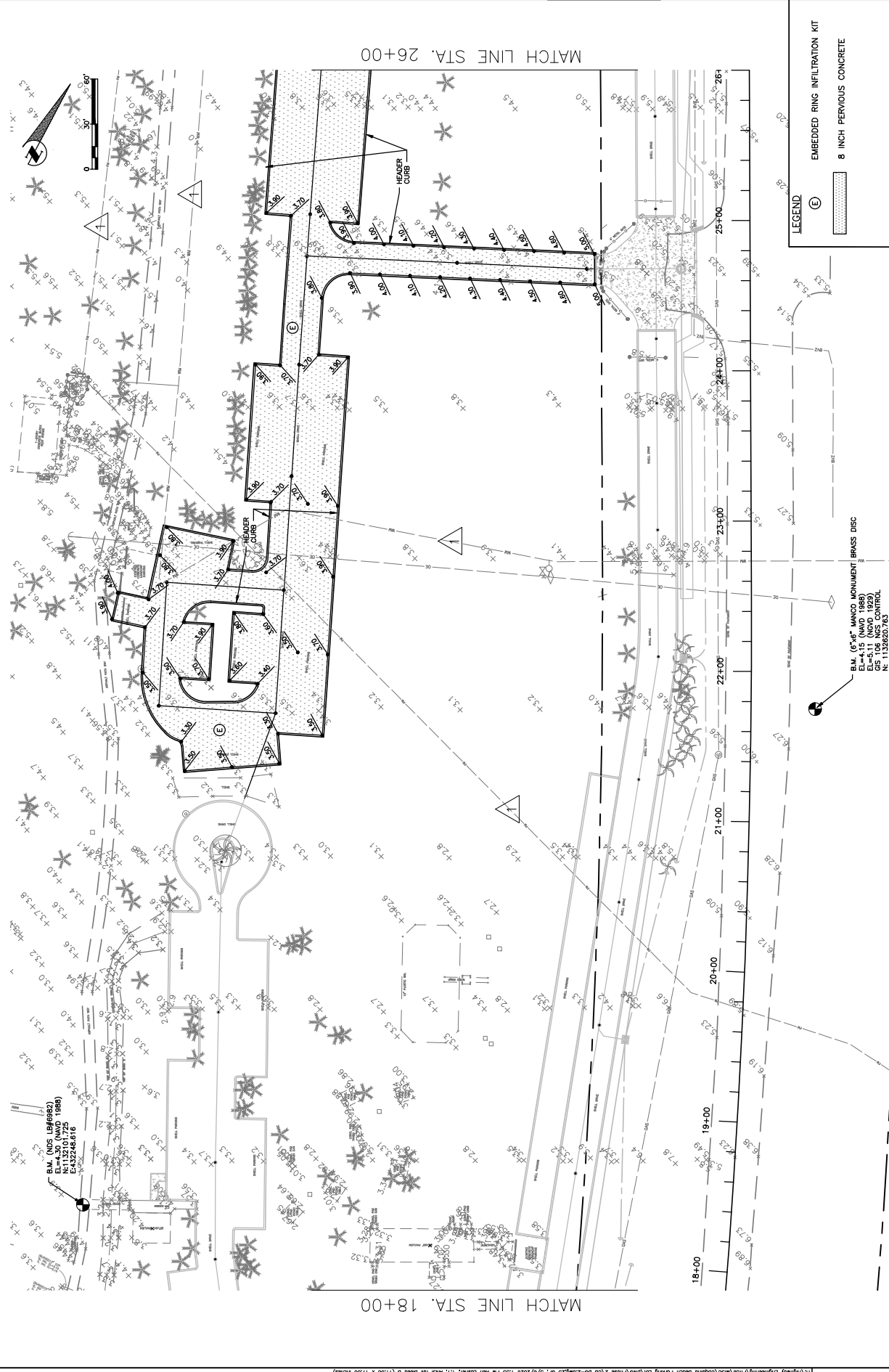
COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
GRADING AND PAVING PLAN

REVISION DESCRIPTION	BY	DATE

PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWP./RGE	10/35S/16E
SCALE	1"=60'
DATE	07/16/04
DESIGNED	MS
DRAWN	TMF
CHECKED	MS
DATE	03/20/16
DESIGNED BY	MS
DRAWN BY	MS
CHECKED BY	MS
DATE	03/20/16
DESIGNED BY	MS
DRAWN BY	MS
CHECKED BY	MS
DATE	03/20/16
DESIGNED BY	MS
DRAWN BY	MS
CHECKED BY	MS
DATE	03/20/16

MICHAEL L. STURM
FLORIDA P.E. # 46005

SHEET 25



1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011. ELEVATIONS ARE BASED ON NAD 1988, AND ARE DERIVED FROM A BENCHMARK OF 11.15 FEET (NAD 1988) AND BENCHMARK GS-105 (PG 46210) HAVING AN ELEVATION OF 3.29 FEET (NAD 1988).
- 2.

LEGEND

EMBEDDED RING INFILTRATION KIT

8 INCH PERVIOUS CONCRETE

B.M. (NOS. LE#6882)
N: 113201725
E: 432248.616

B.M. (5"x6" MANCO MONUMENT BRASS DISC)
EL=4.15 (NAD 1988)
N: 113201725
E: 432248.616
N: 1132020763
E: 432248.616



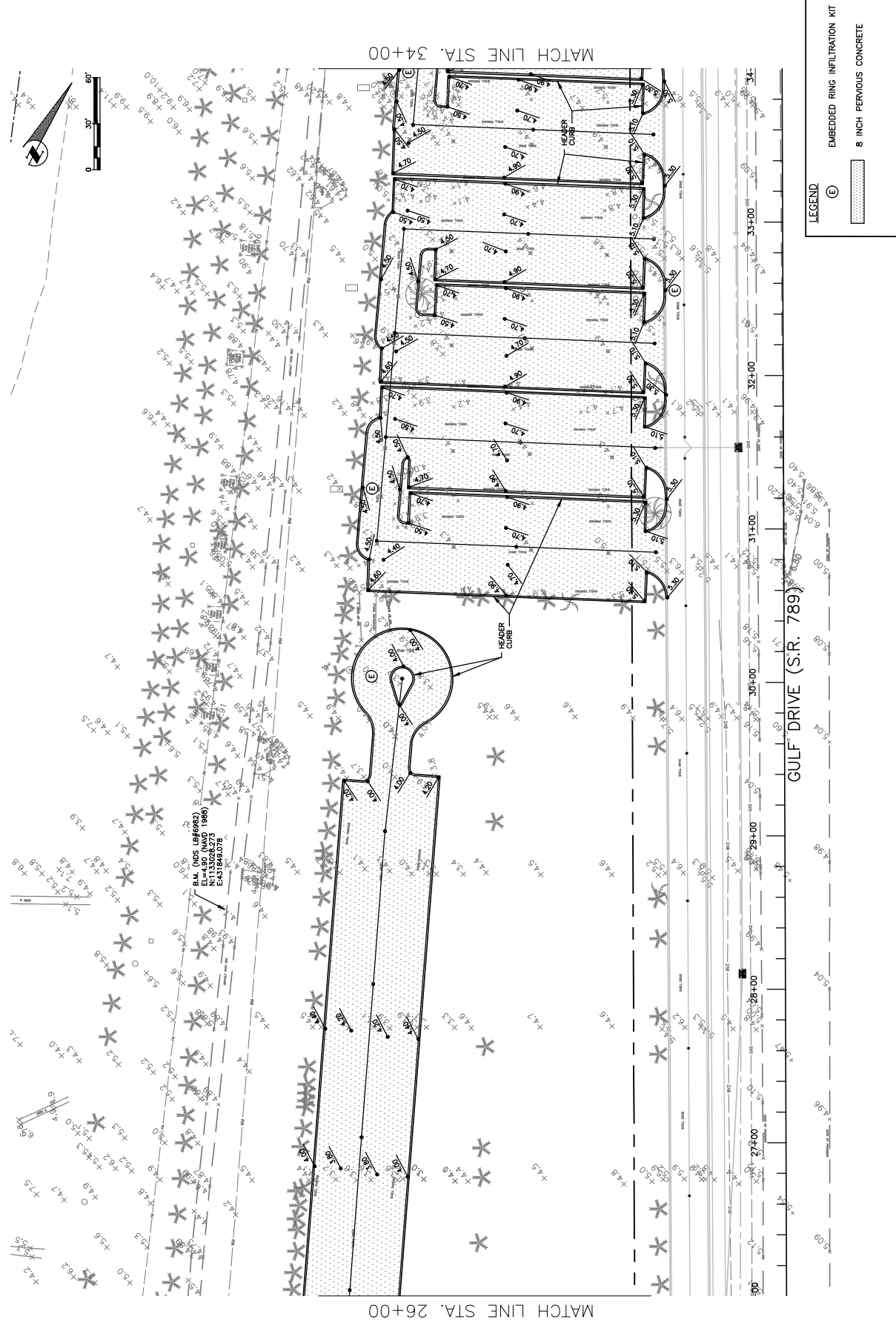
PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1000 1st Street East, Bradenton, FL 34209

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
GRADING AND PAVING PLAN

PROJECT #	465-6005719
SURVEY #	000-32635
SEC./TWP./RGE	10/35S/7EE
SCALE	1"=60'
DATE	
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REVISION DESCRIPTION	
BY	
DATE	

FLORIDA P.E. # 46005
MICHAEL L. STURM

SHEET 26

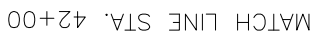


COQUINA BEACH DRAINAGE IMPROVEMENTS GRADING AND PAVING PLAN

GRADING AND PAVING PLAN

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SHEET 27

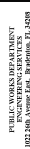


GULF DRIVE (S.R. 789)

LEGEND

	EMBEDDED RING INFILTRATION KIT
	8 INCH PERVIOUS CONCRETE

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.
2. ELEVATIONS ARE BASED ON NAVD 1988, AND ARE DERIVED FROM BENCHMARK GIS-106, HAVING AN ELEVATION OF 4.15 FEET (NAVD 1988), AND BENCHMARK GIS-105 (PID AGS9210) HAVING AN ELEVATION OF 3.29 FEET (NAVD 1988).

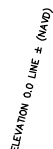


GRADING AND PAVING PLAN

[illegible]

Signature & Date

SHEET 28

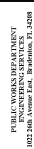


GULF DRIVE (S.R. 789)

LEGEND

	EMBEDDED RING INFILTRATION KIT
	8 INCH PERVIOUS CONCRETE

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.
2. ELEVATIONS ARE BASED ON NAVD 1988, AND ARE DERIVED FROM BENCHMARK GIS-106, HAVING AN ELEVATION OF 4.15 FEET (NAVD 1988), AND BENCHMARK GIS-105 (PID AG9210) HAVING AN ELEVATION OF 3.29 FEET (NAVD 1988).

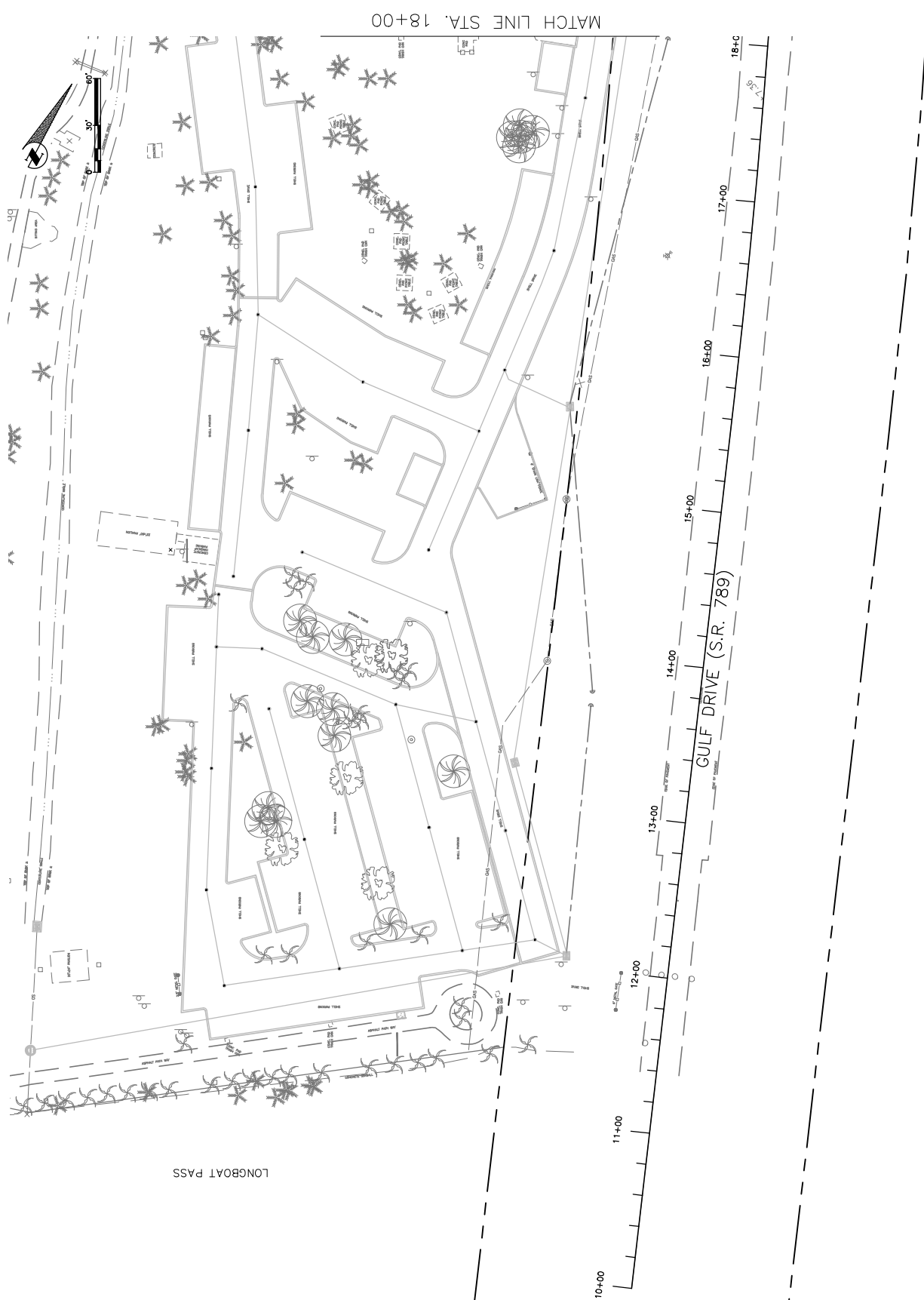


**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
DRAINAGE AND UNDERDRAIN PLAN**

[illegible]

Signature & Date

SHEET 30



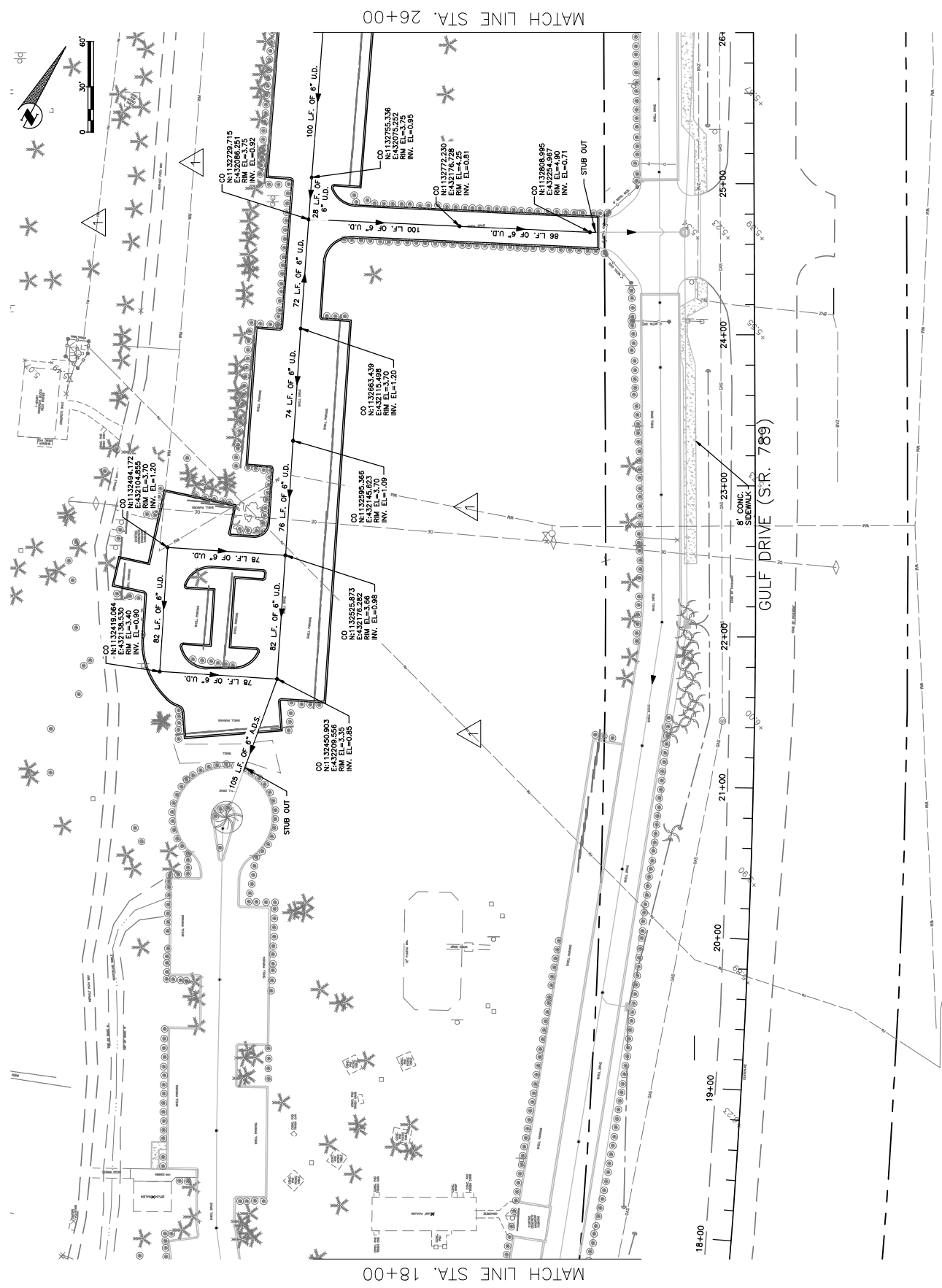
LONGBOAT PASS

MATCH LINE STA. 18+00

[illegible]

Signature & Date

SHEET 31





PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1032 S.W. 1st Avenue East, Bradenton, FL 34209

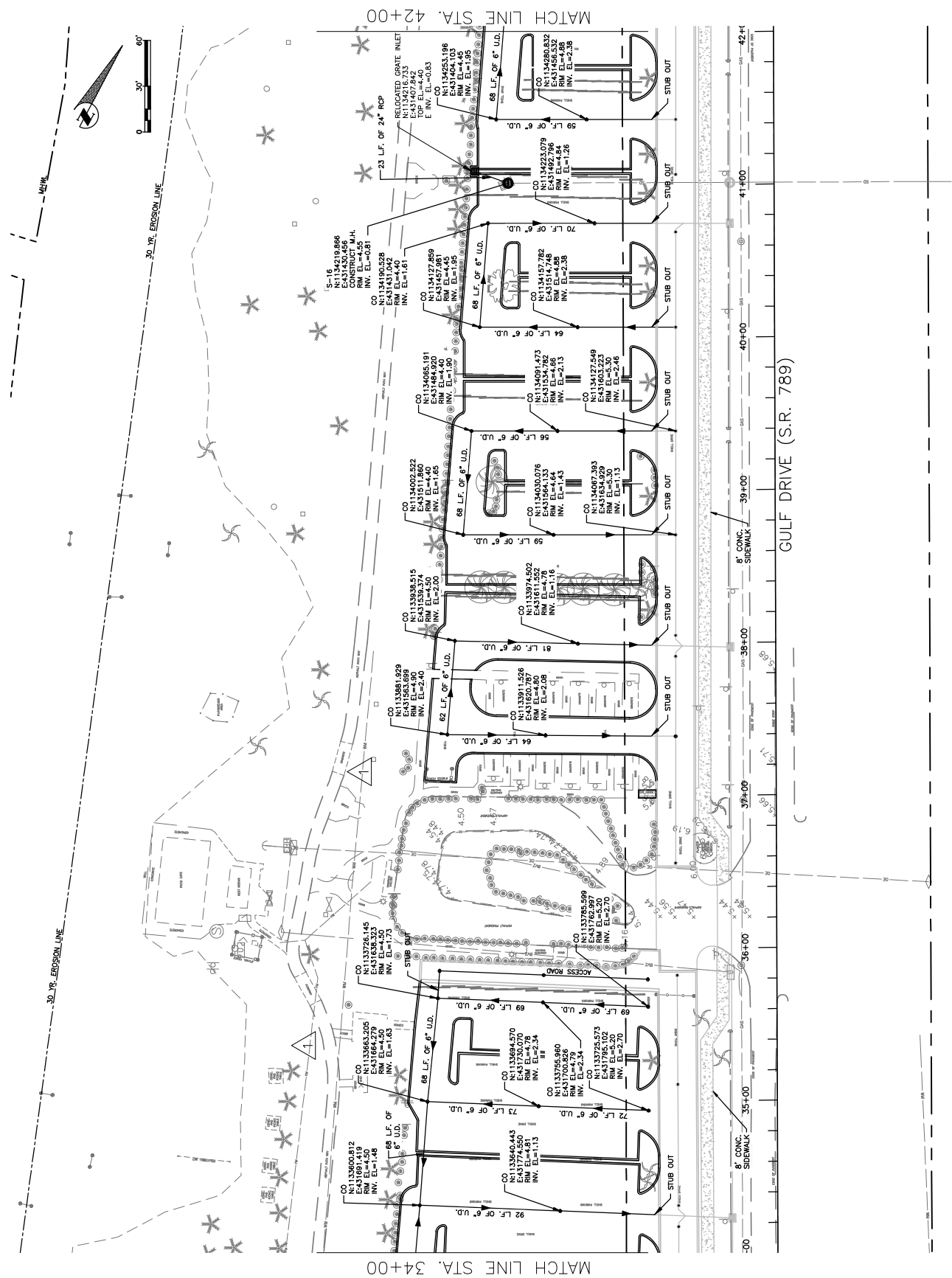
COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY DRAINAGE AND UNDERDRAIN PLAN

NO.	DATE	BY	REVISION DESCRIPTION
1	07/11/19	KHL	UPDATED PUBLIC UTILITIES
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07/11/19	KHL	UPDATED PUBLIC UTILITIES	
	BT	REVISION DESCRIPTION	

PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWN./RGE	10/355/16E
SCALE	1"=60'
BY	DATE
SURVEYED	ZNS 07/16/04
DESIGNED	MS 08/2015
RAW/RAWN	TW/KL 03/2016
CHECKED	MS 03/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date
SHEET 33





PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1032 S.W. 1st Avenue East, Bradenton, FL 34209

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
DRAINAGE AND UNDERDRAIN PLAN

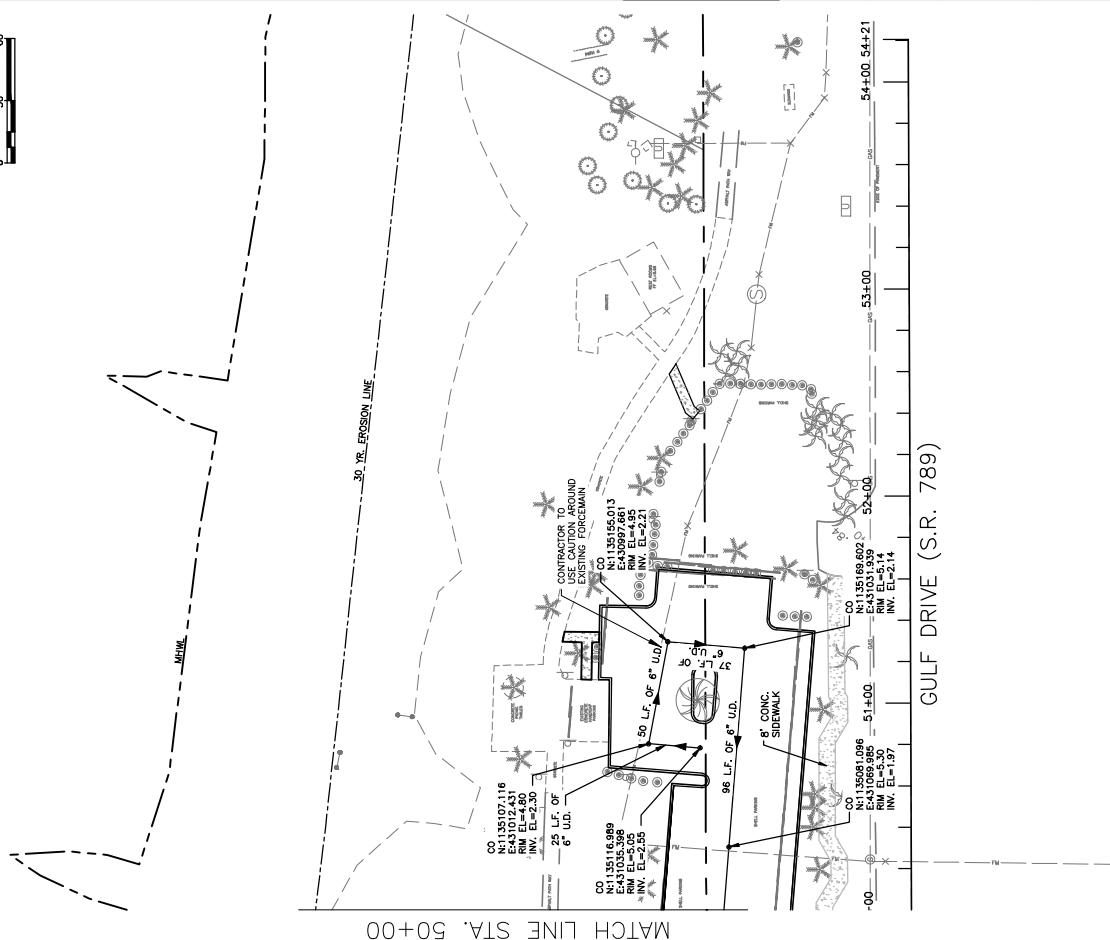
NO.	DATE	BY	REVISION DESCRIPTION
1	07/11/19	KHL	UPDATED PUBLIC UTILITIES
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**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
DRAINAGE AND UNDERDRAIN PLAN**

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Signature & Date

SHEET 35



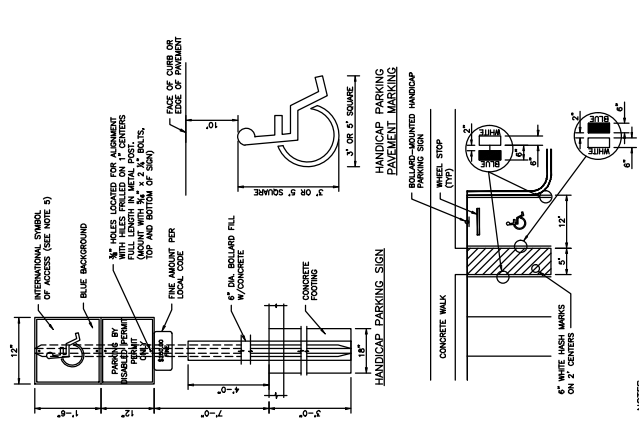
MATCH LINE STA. 50+00



PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1032 5th Avenue East, Bradenton, FL 34209

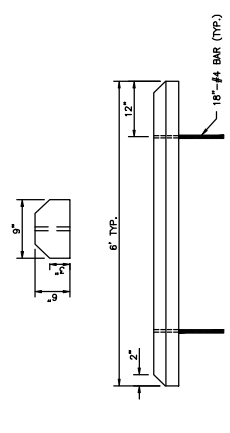
COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY DETAILS

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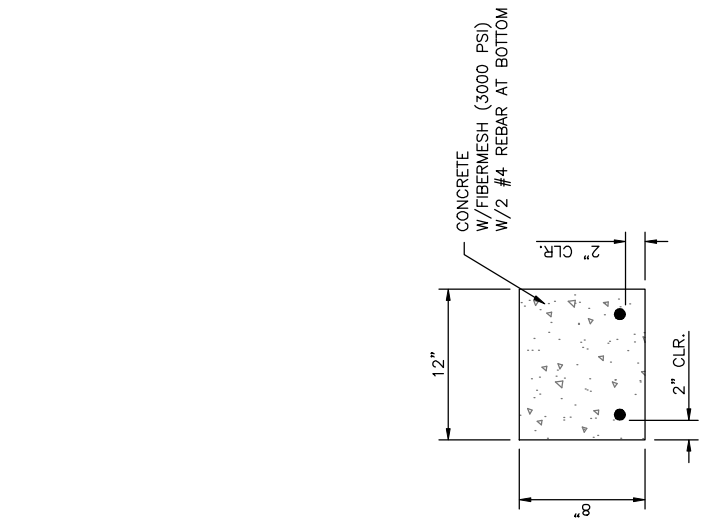


- NOTES:
1. WHEEL STOP SHALL BE GALVANIZED, ALUMINUM, NUTS, WASHERS AND SPACERS MUST BE IN STROOF.
 2. CONCRETE FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH (C) OF 4000 PSI.
 3. SIGNS SHALL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER.
 4. MESSAGE LETTERING SHALL BE UPPER CASE (WHITE) SERIES (B) 2" HIGH IN ACCORDANCE WITH M-1.
 5. UNIFORM TRAFFIC CONTROL DEVICES.
 6. REFLECTING COATING SHALL BE WHITE WHEELCHAIR SYMBOL (WHICH SHALL HAVE A MINIMUM REFLECTIVITY OF 150 CD/MTX/M²/DEGREE).
 7. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPED NOT EXCEEDING 1:12 ALL DIRECTIONS.

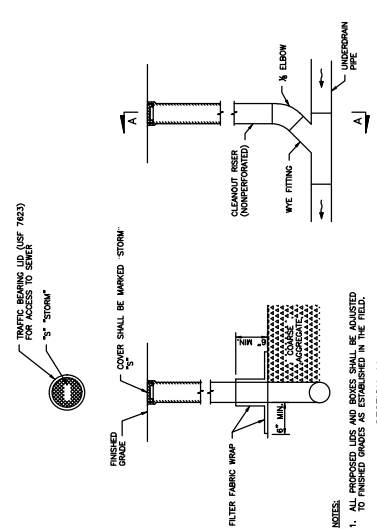
HANDICAP PARKING/MARKING DETAIL
N.T.S.



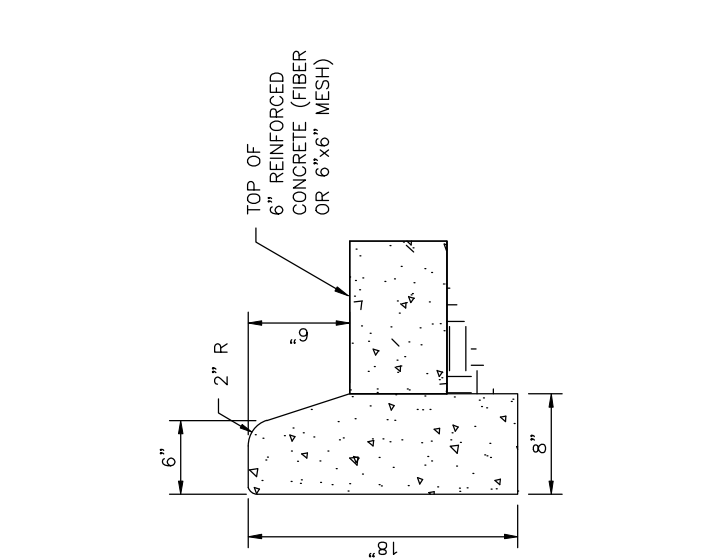
RECYCLED MATERIAL WHEEL STOP
N.T.S.



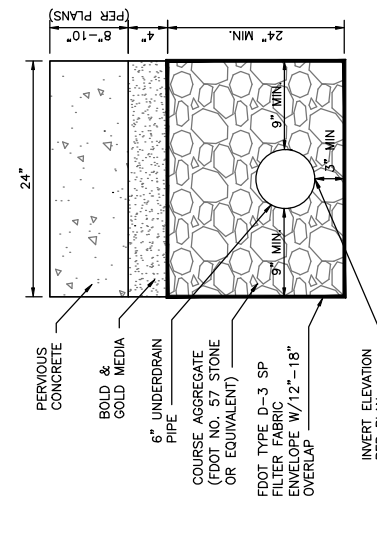
HEADER CURB
N.T.S.



UNDERDRAIN CLEAN-OUT
(INDEX 286) N.T.S.



TYPE "D" CURB
N.T.S.



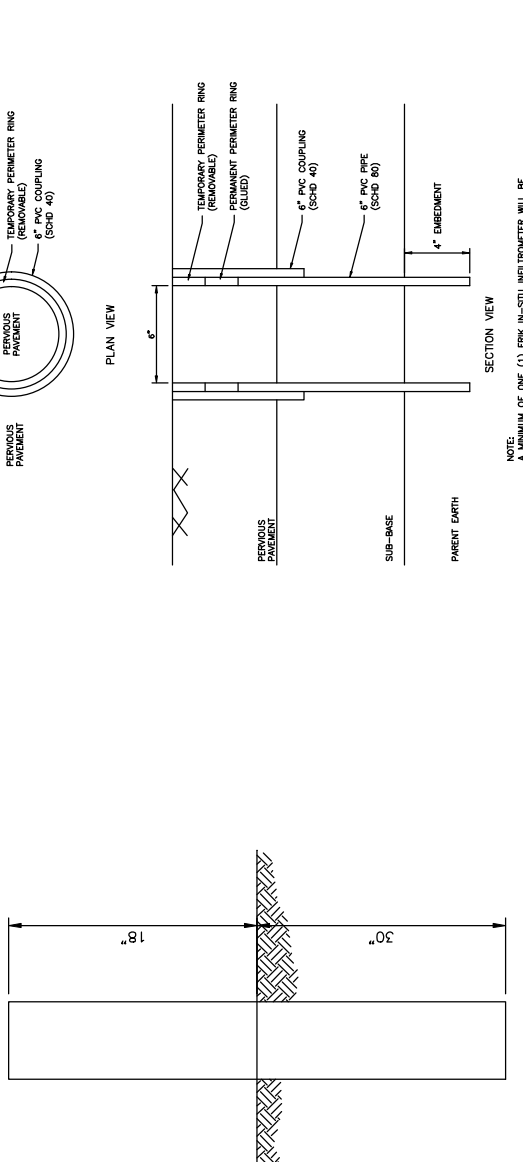
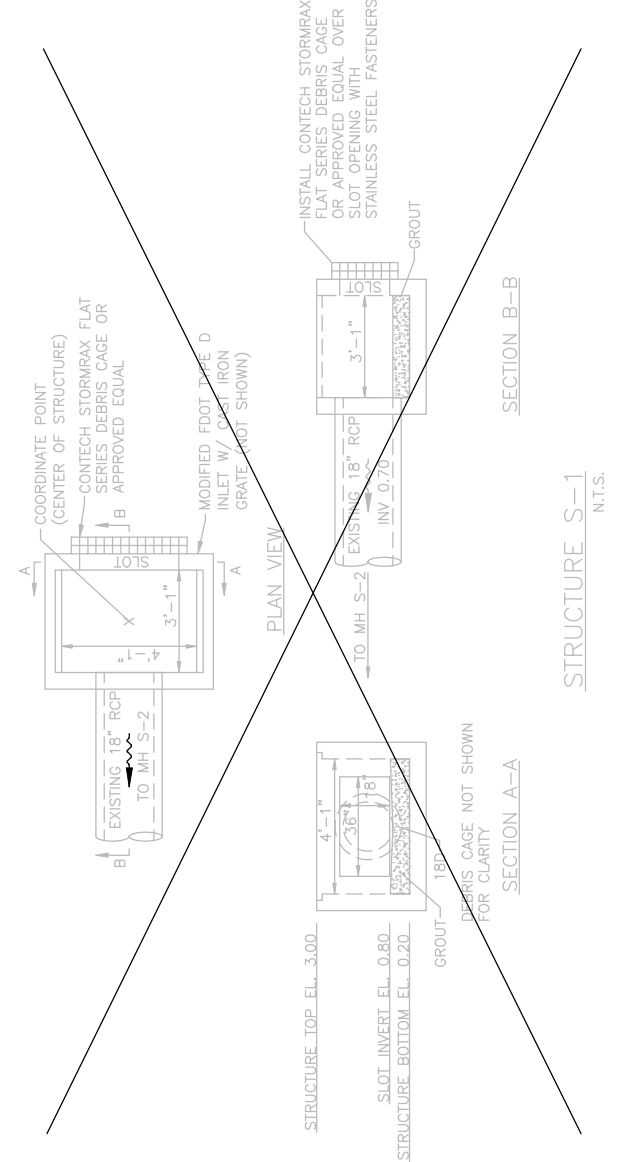
UNDERDRAIN DETAIL FDOT TYPE II
(INDEX 286) N.T.S.



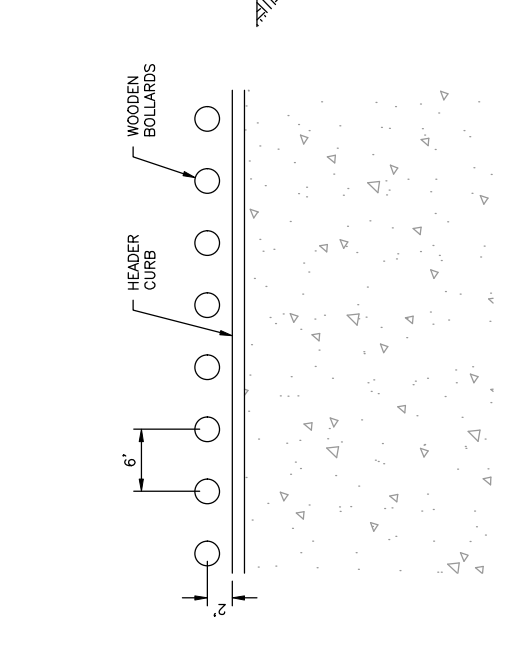
PUBLIC WORKS DEPARTMENT
1000 Manatee Avenue East, Bradenton, FL 34209

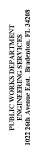
COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY DETAILS

PROJECT #	465-6005719
SURVEY #	6982
SEC./TWN./RGE	10/35S/16E
SCALE	NTS
DATE	
BY	
CHECKED	
DESIGNED	
DRAWN	
DATE	
MICHAEL L. STURM	
FLORIDA P.E. # 46005	



NOTE:
A MINIMUM OF ONE (1) ERIK IN-SITU INFILTRATOR WILL BE REQUIRED FOR EACH SECTION OF PERVIOUS PAVEMENT INSTALLED. FOR UNDERSECTIONS, A MINIMUM OF TWO (2) ERIK IN-SITU INFILTRATORS PER ACRE OF PERVIOUS PAVEMENT WILL BE REQUIRED.
EMBEDDED RING INFILTRATION KIT (ERIK)
IN-SITU INFILTRATOR
N.T.S.



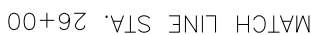


**MANATEE COUNTY
TREE REMOVAL PLAN**

PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWN./RGE	10/35S/16E

Signature & Date

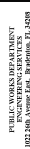
SHEET 39



LEGEND

13 TREE TO BE REMOVED X TOTAL TREES TO BE REMOVED THIS SHEET

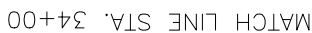
1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.
2. ELEVATIONS ARE BASED ON NAVD 1988, AND ARE DERIVED FROM BENCHMARK GIS-106, HAVING AN ELEVATION OF 4.15 FEET (NAVD 1988), AND BENCHMARK GIS-105 (PID AGS210) HAVING AN ELEVATION OF 3.29 FEET (NAVD 1988).



**MANATEE COUNTY
TREE REMOVAL PLAN**

NAME	PROJECT #	SURVEY #	SEC./TWN./RGE	DATE
B7	465-0005719	000-19835	10,255 / NE	T=60'
MICHAEL L. STUMM				
FLORIDA P.E.# 46005				

Signature & Date



LEGEND

30 TREE TO BE REMOVED X
TOTAL TREES TO BE REMOVED
THIS SHEET

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.
2. ELEVATIONS ARE BASED ON NAVD 1988, AND ARE DERIVED FROM BENCHMARK GIS-106, HAVING AN ELEVATION OF 4.15 FEET (NAVD 1988), AND BENCHMARK GIS-105 (PID AG9210) HAVING AN ELEVATION OF 3.29 FEET (NAVD 1988).



PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1032 S.W. 1st Avenue East, Bradenton, FL 34209

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY TREE REMOVAL PLAN

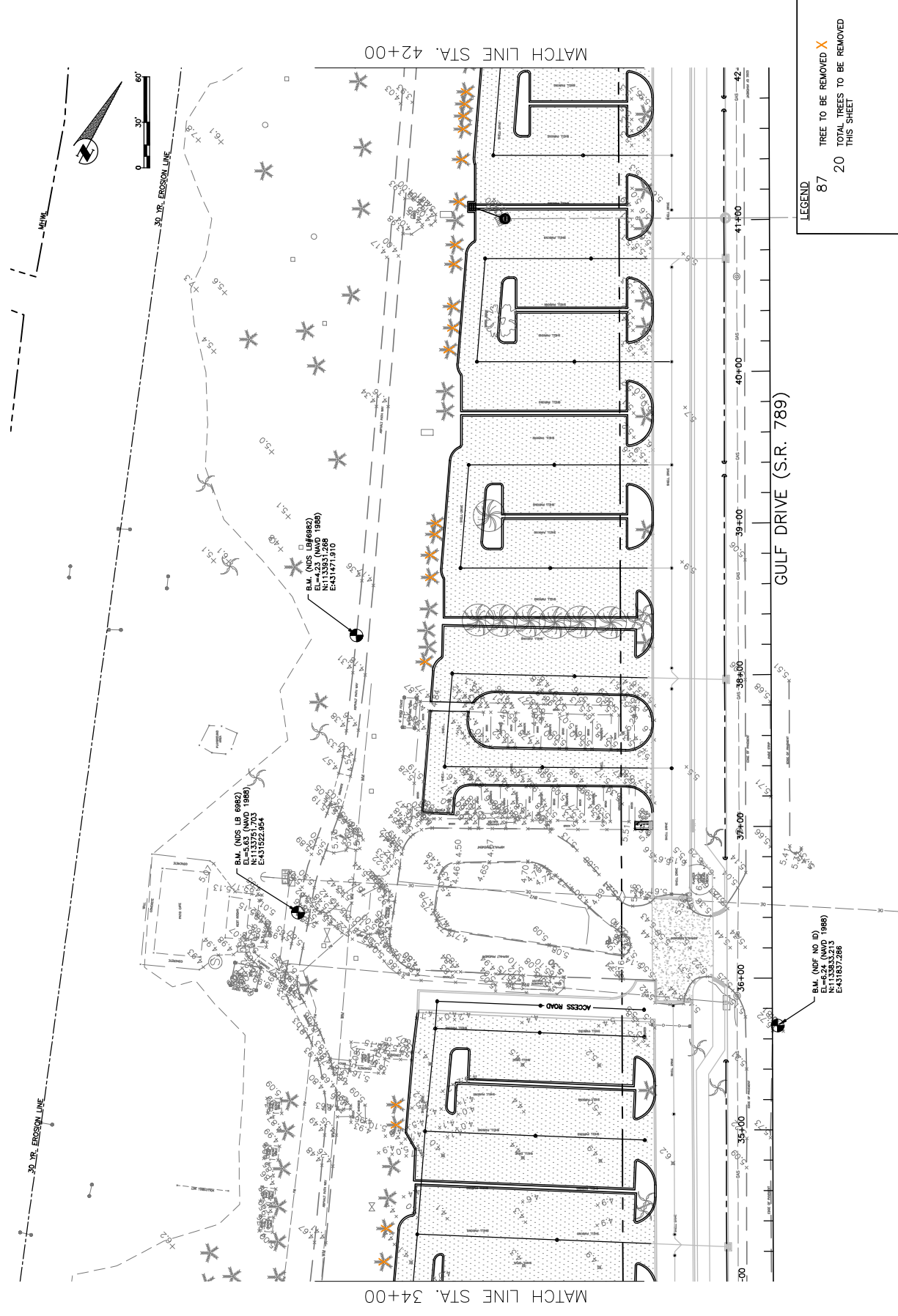
PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWP./RGE	10/28S/16E
SCALE	1"=60'
DATE	07/16/04
DESIGNED	MS
DRAWN	TMF
CHECKED	MS
DATE	03/2016
BY	DATE
REVISION DESCRIPTION	BY DATE

PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWP./RGE	10/28S/16E
SCALE	1"=60'
DATE	07/16/04
DESIGNED	MS
DRAWN	TMF
CHECKED	MS
DATE	03/2016
BY	DATE
REVISION DESCRIPTION	BY DATE

FLORIDA P.E. # 46005
MICHAEL L. STURM

SIGNATURE & DATE

SHEET 41





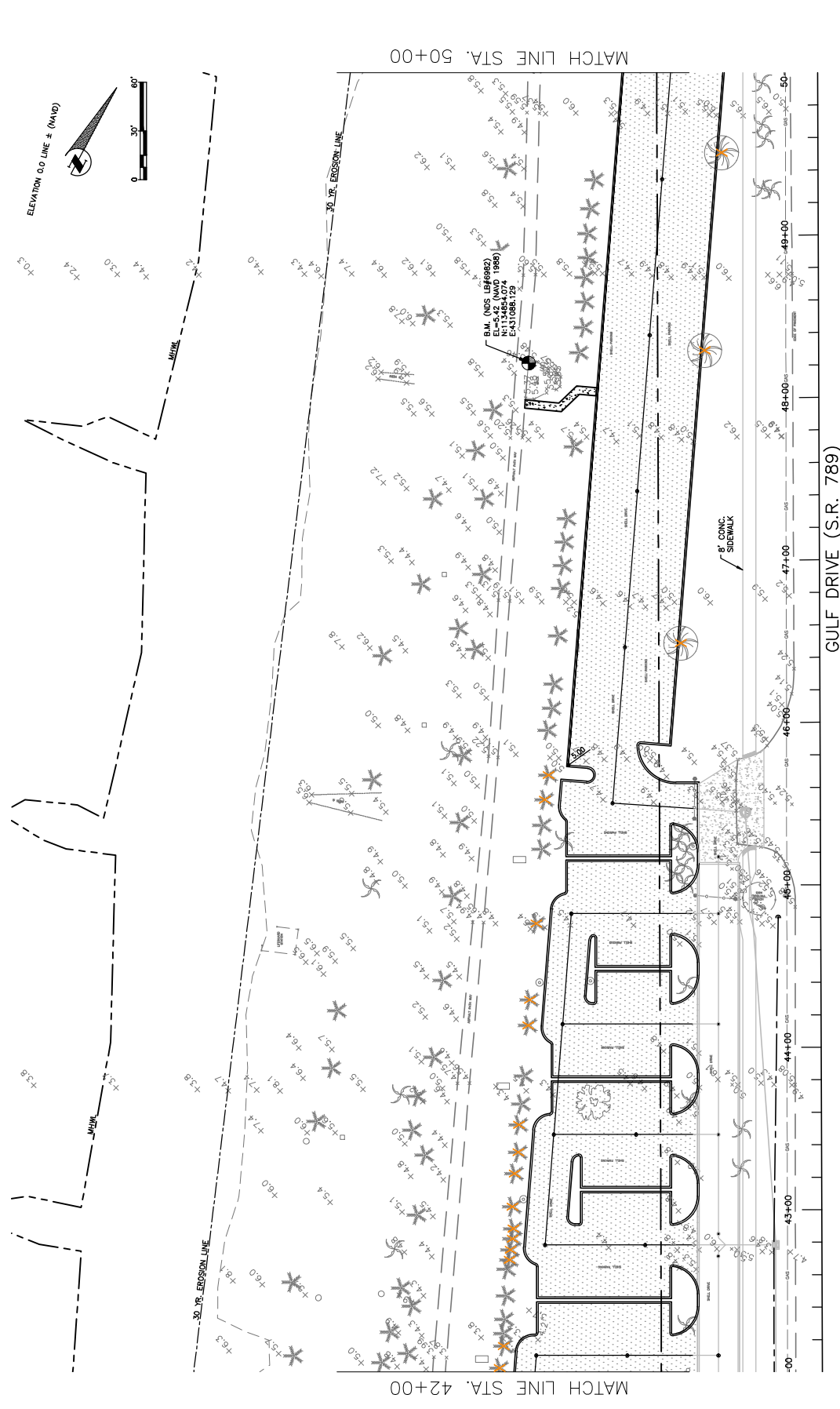
PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1032 3RD AVENUE EAST, BIRMINGHAM, FL 34608

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY TREE REMOVAL PLAN

NO.	REVISION DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

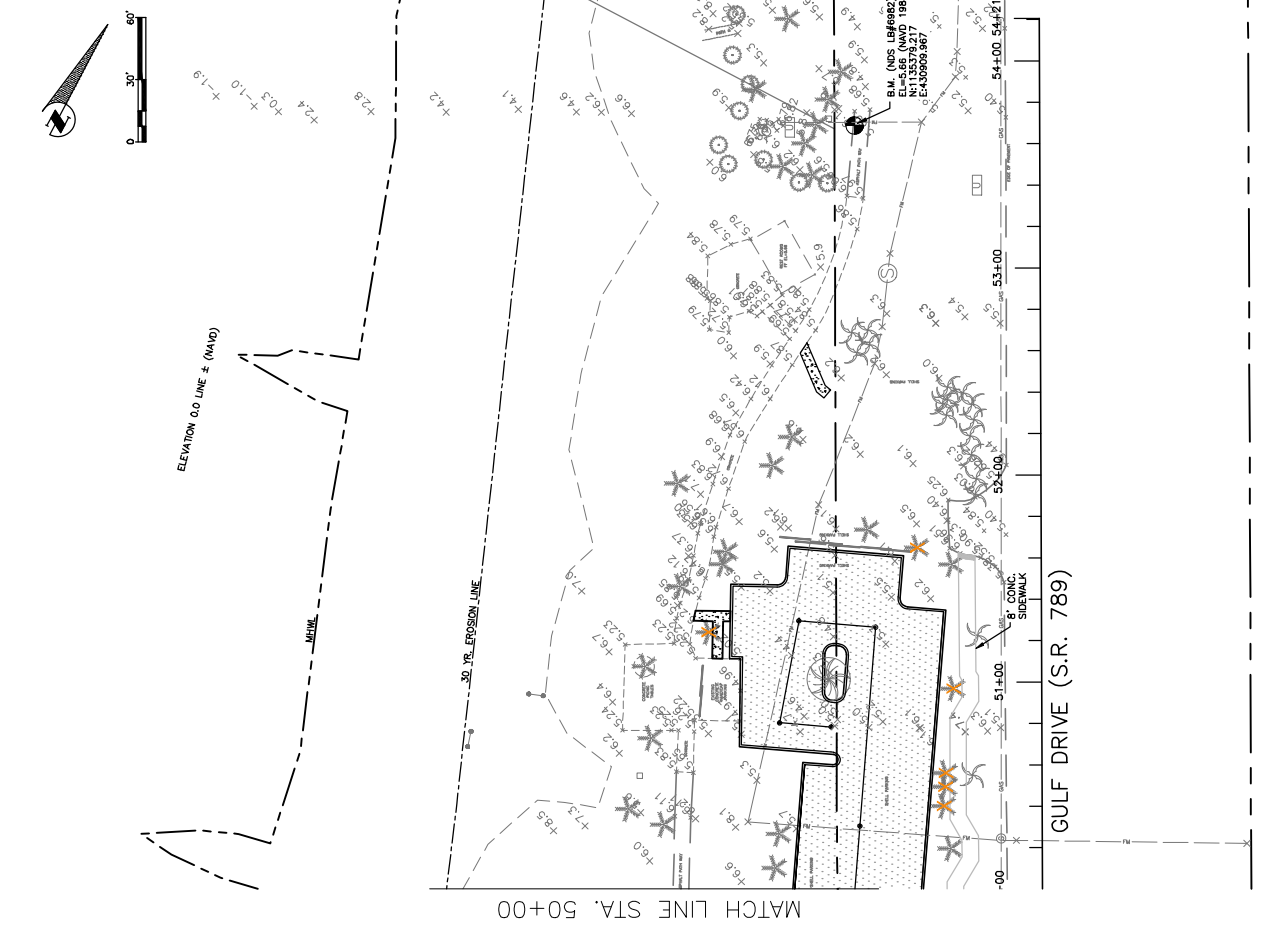
PROJECT #	465-6005719
SURVEY #	000-32835
SEC./TWP./RGE	10/35S/16E
SCALE	1"=60'
SURVEYED	ZNS 07/16/04
DESIGNED	MS 08/2015
DRAWN	TMF 03/2016
CHECKED	MS 03/2016
APPROVED	MICHAEL L. STURM
FLORIDA P.E. #	46005

SHEET 42



LEGEND
87 TREE TO BE REMOVED X
18 TOTAL TREES TO BE REMOVED
THIS SHEET

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.
2. ELEVATIONS ARE BASED ON NAD 1988, AND ARE DERIVED FROM A BENCHMARK OF 11.15 FEET (NAD 1988), AND BENCHMARK GS-105 (PD 462710) HAVING AN ELEVATION OF 3.29 FEET (NAD 1988).



COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
TREE REMOVAL PLAN

PROJECT #	465-600719
SURVEY #	000-32835
SEC./TWP./RGE	10/25S/16E
SCALE	1"=60'
DATE	07/16/04
DESIGNED	MS
DRAWN	MS
CHECKED	MS
DATE	03/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

LEGEND

87 TREE TO BE REMOVED X

6 TOTAL TREES TO BE REMOVED THIS SHEET

1. COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE) NAD 83/2011.

2. ELEVATIONS ARE BASED ON NAVD 83 DATUM. ELEVATIONS ARE FROM BENCHMARK GS-105, HAVING AN ELEVATION OF 4.15 FEET (NAVD 1988), AND BENCHMARK GS-105 (PID A69210) HAVING AN ELEVATION OF 3.29 FEET (NAVD 1988).

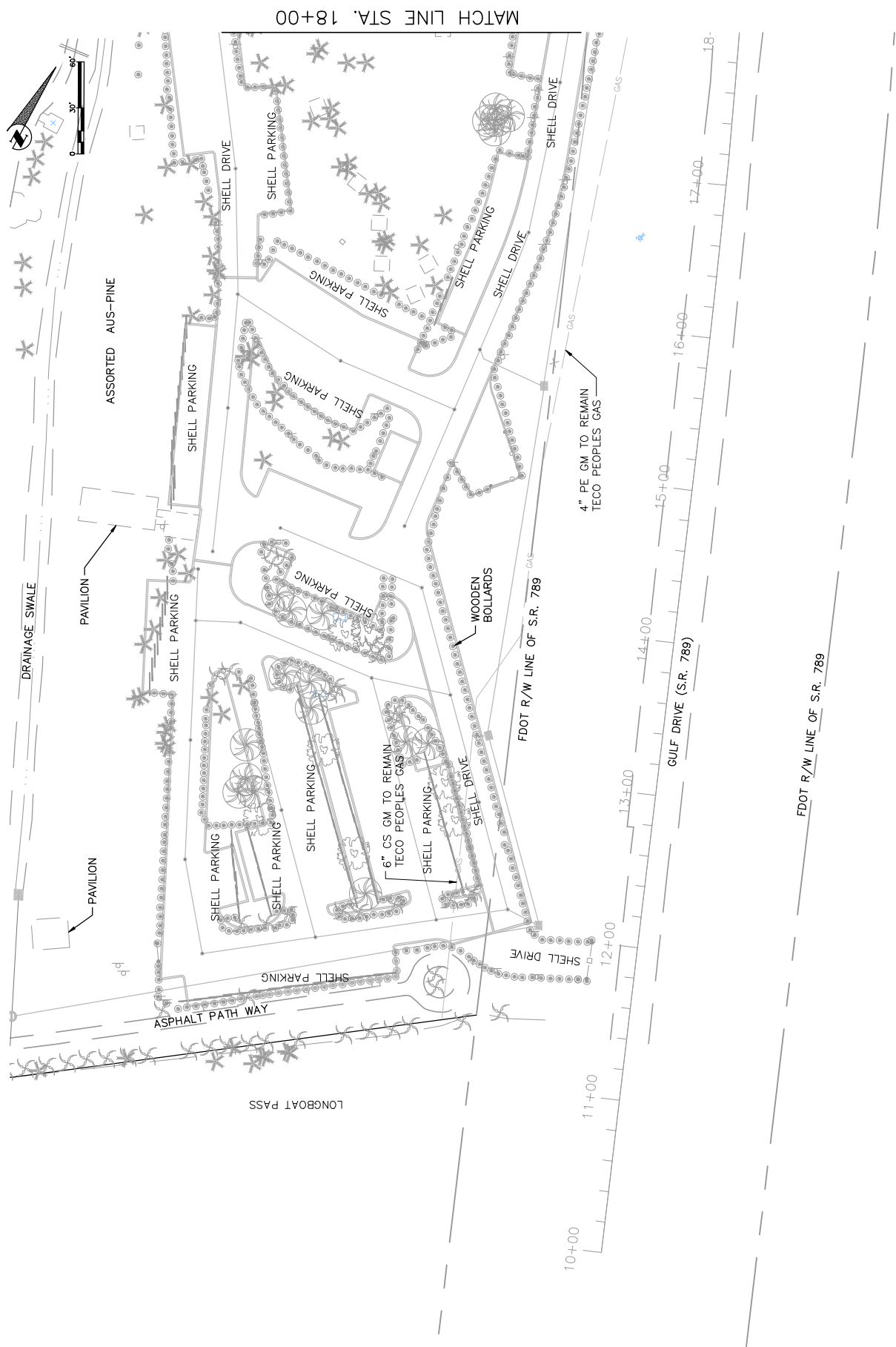


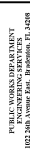
PUBLIC WORKS DEPARTMENT
1000 2nd Avenue East, Bradenton, FL 34208

**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
UTILITY ADJUSTMENT SHEET**

PROJECT #	465-6002719
SURVEY #	6982
SEC./TWP./RGE	10/35S/18E
SCALE	1"=60'
DATE	
BY	
DATE	
DESIGNED	ZNS 08/09/13
DESIGNED	MS/ES 08/2015
DRAWN	TNF 08/2016
CHECKED	MS/ES 8/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date
SHEET UAS1

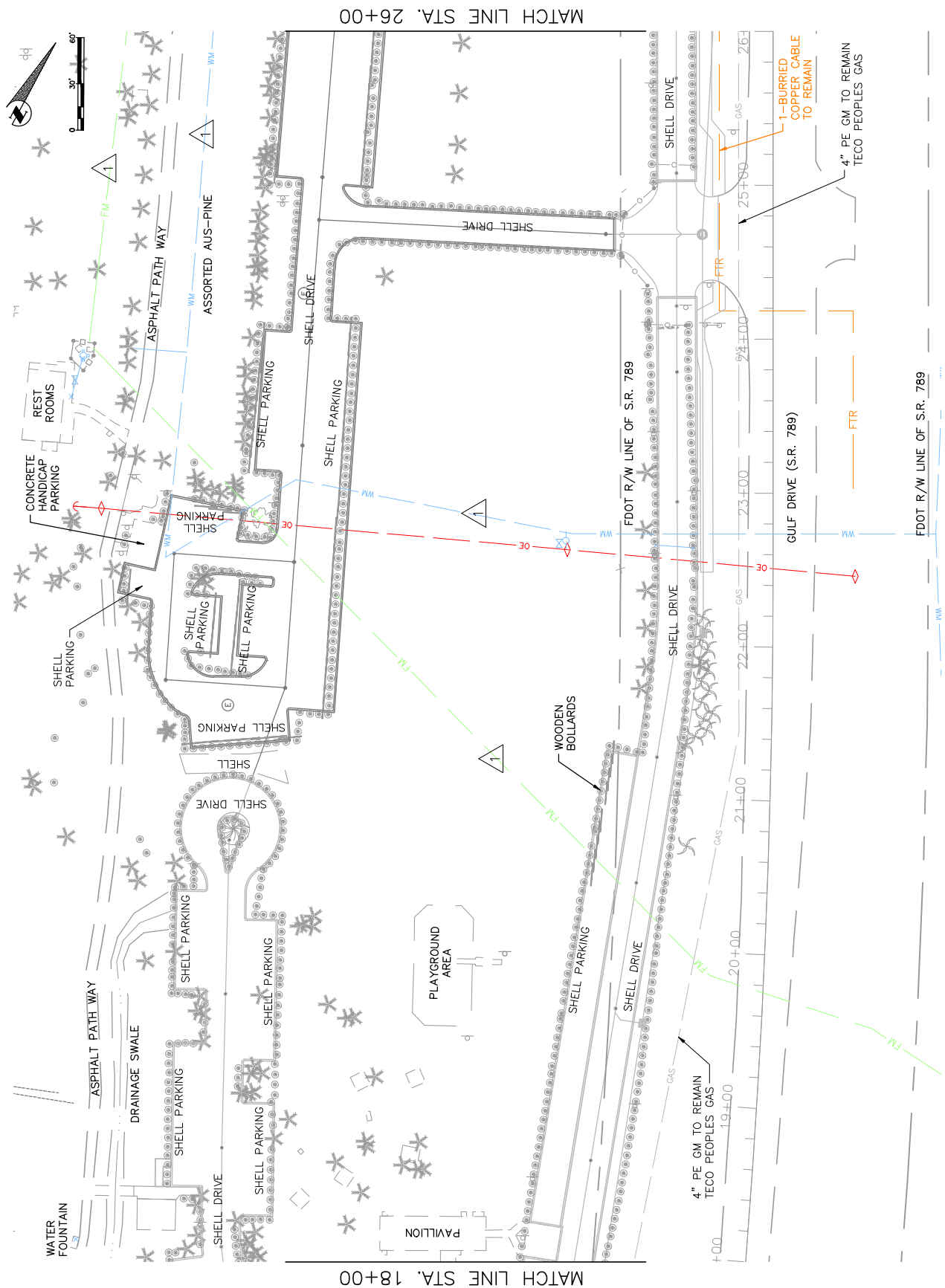


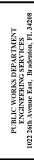


**COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
UTILITY ADJUSTMENT SHEET**

[illegible]

Signature & Date
SHEET UAS2



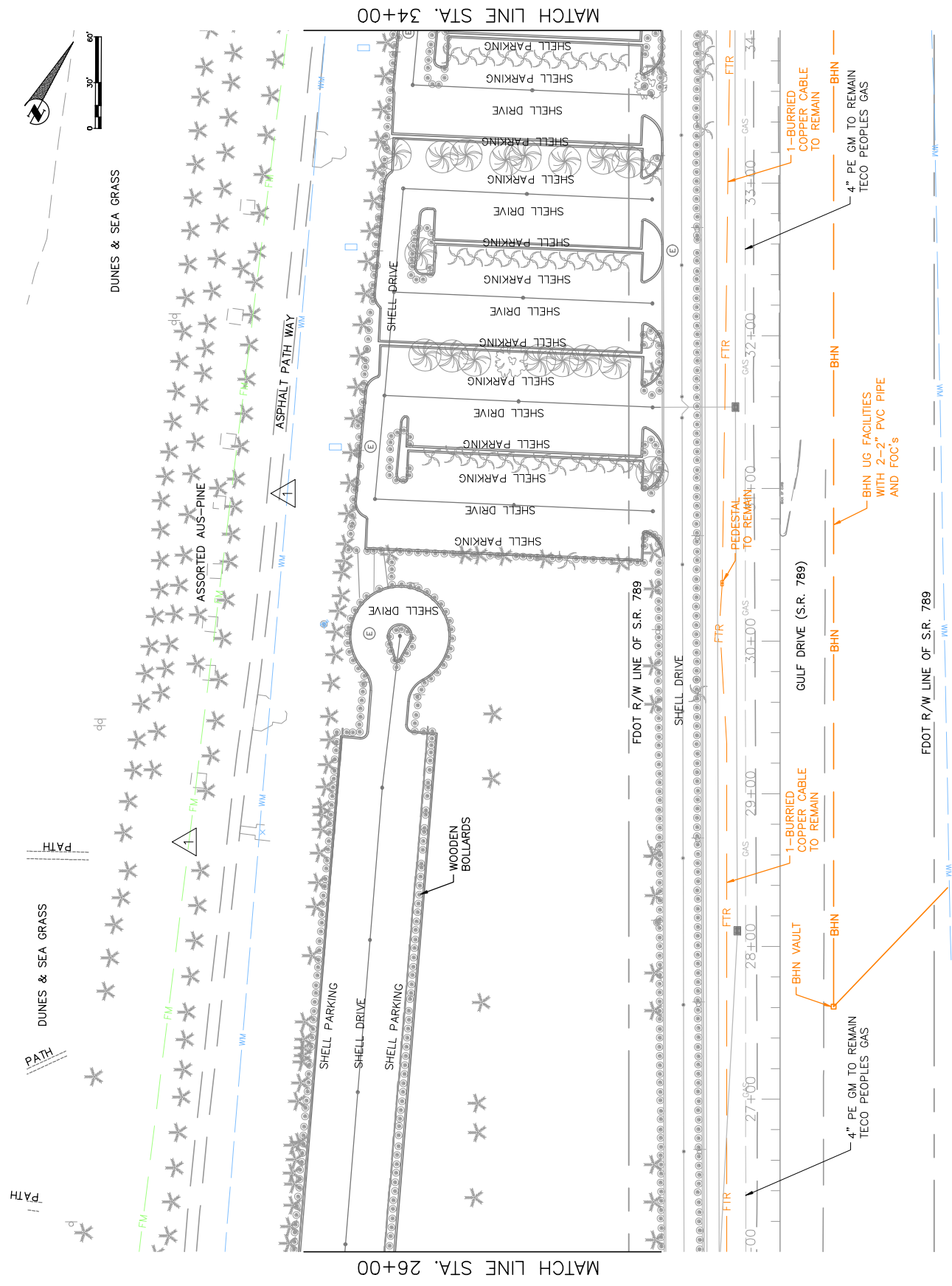


UTILITY ADJUSTMENT SHEET

[illegible]

Signature & Date

SHEET UAS3



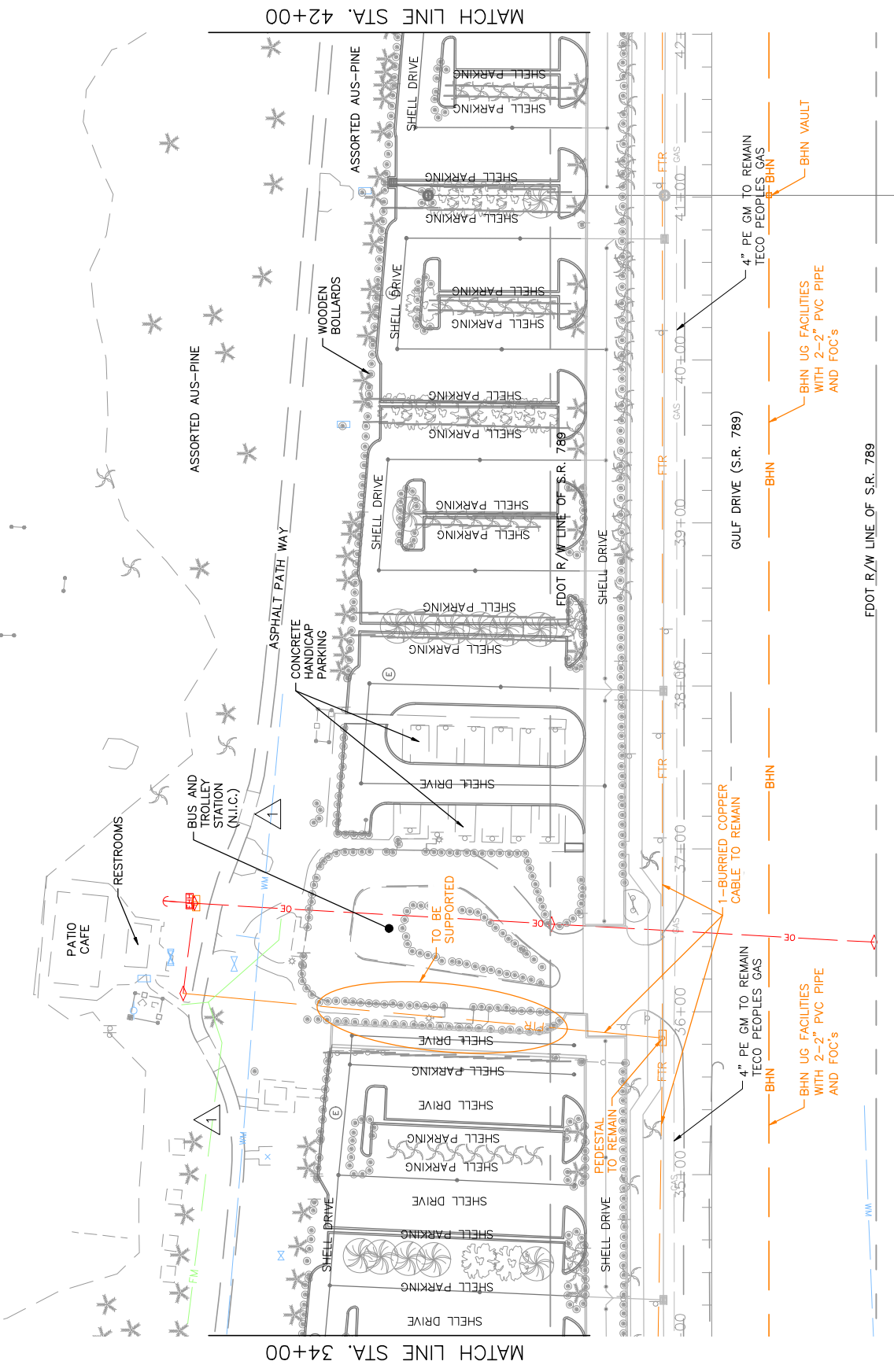
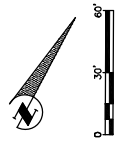


PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1000 2nd Street, Suite 100, Manatee, FL 34408

COQUINA BEACH DRAINAGE IMPROVEMENTS MANATEE COUNTY UTILITY ADJUSTMENT SHEET

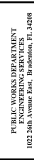
PROJECT #	465-6002719
SURVEY #	6982
SEC./TOWN/RGE	10/255/18E
SCALE	1"=60'
DATE	08/09/13
BY	MS/ES
DESIGNED	MS/ES
DRAWN	TMF
CHECKED	MS/ES
DATE	08/2016
DESIGNED	MS/ES
DRAWN	TMF
CHECKED	MS/ES
DATE	08/2016
DESIGNED	MS/ES
DRAWN	TMF
CHECKED	MS/ES
DATE	08/2016

SIGNATURE & DATE
SHEET UAS4



MATCH LINE STA. 34+00

MATCH LINE STA. 42+00

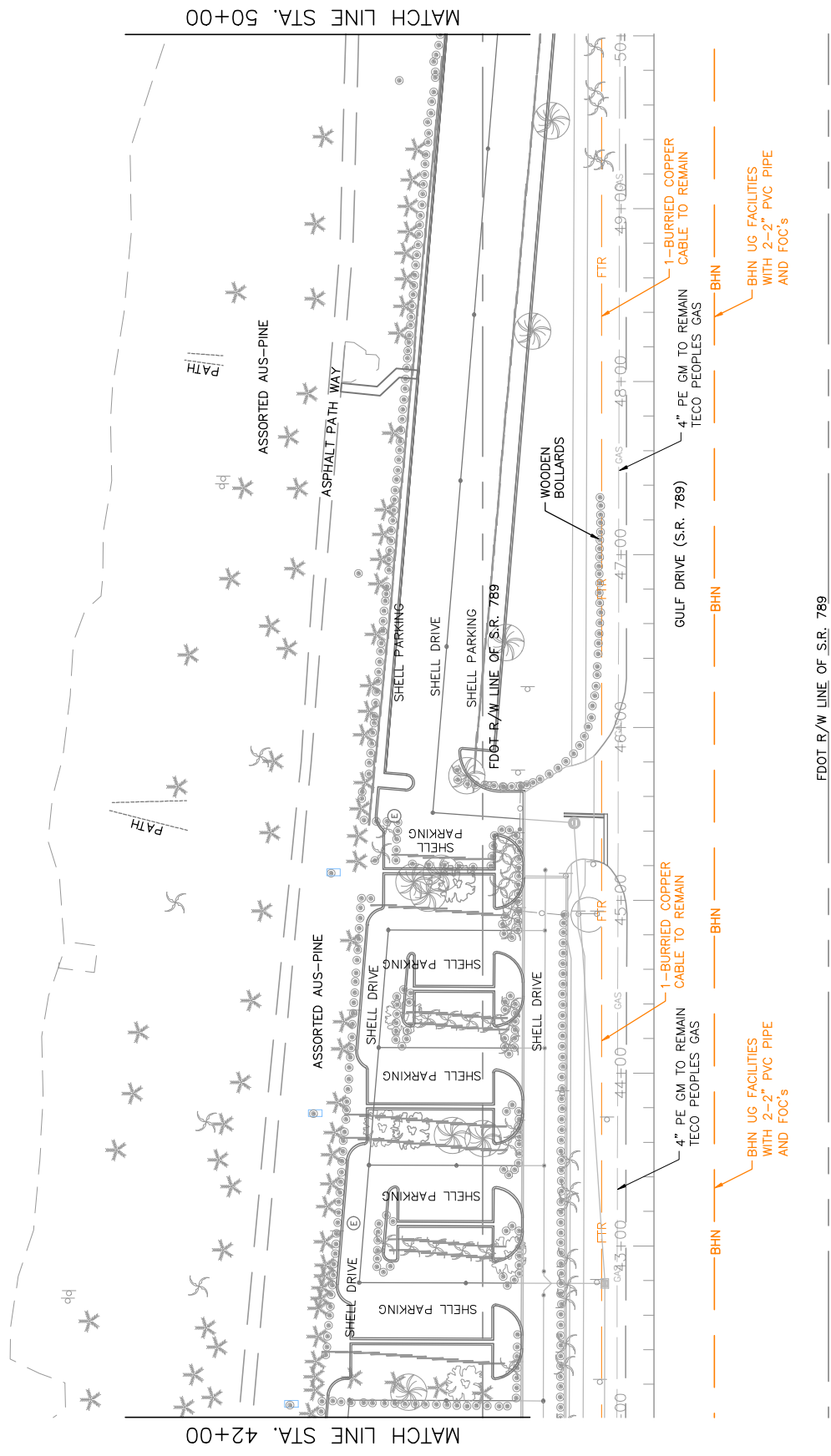
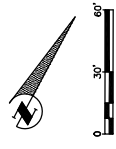


UTILITY ADJUSTMENT SHEET

[illegible]

Signature & Date

SHEET UAS5



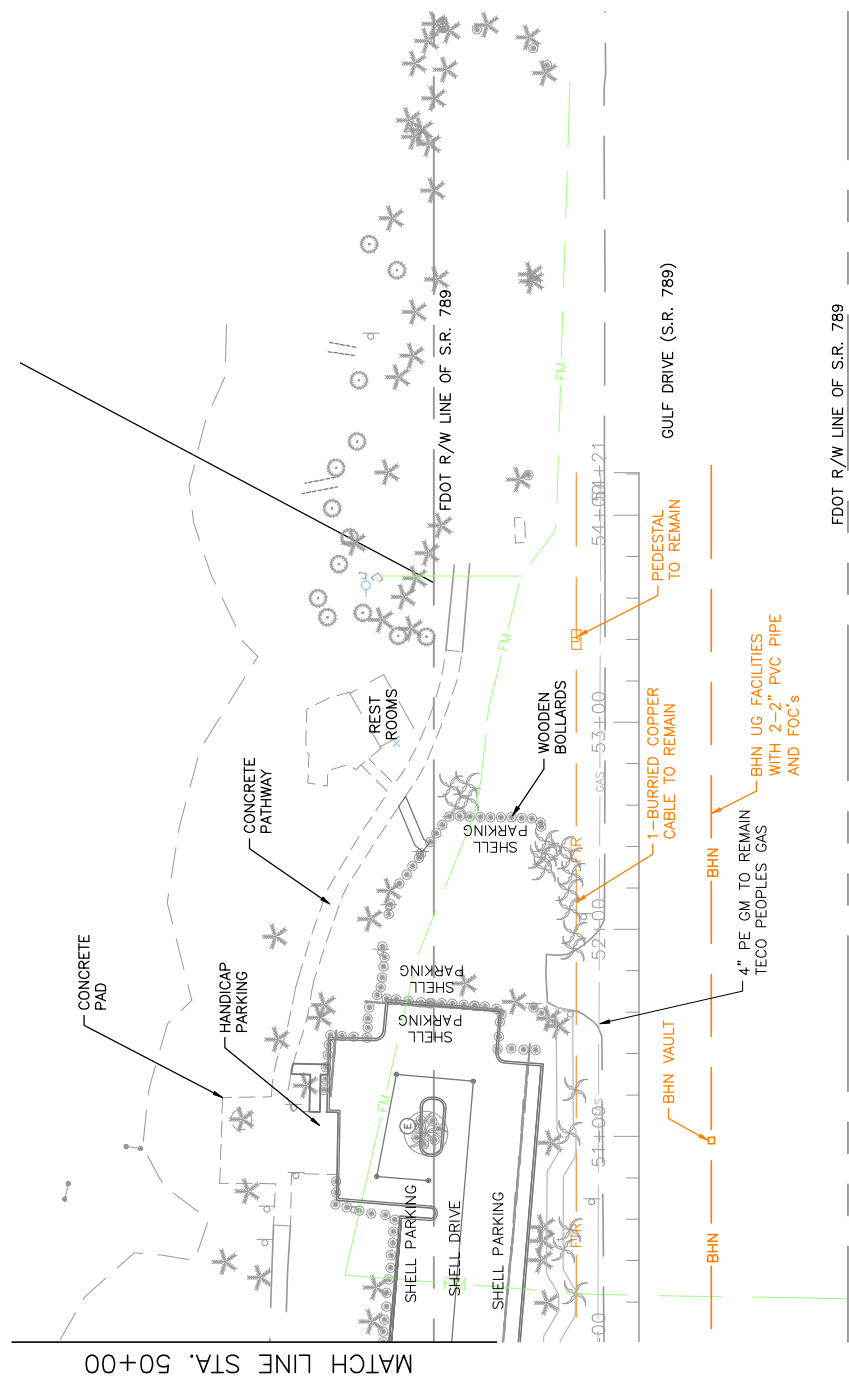
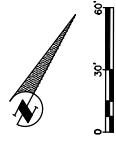


PUBLIC WORKS DEPARTMENT
MANATEE COUNTY
1000 2nd Street, Suite 100, Manatee, FL 34461

COQUINA BEACH DRAINAGE
IMPROVEMENTS
MANATEE COUNTY
UTILITY ADJUSTMENT SHEET

PROJECT #	465-600719
SURVEY #	6982
SEC./TWN./RGE	10/25S/16E
SCALE	1"=60'
DATE	
BY	
DATE	
DESIGNED	ZNS 08/09/15
DESIGNED	MS/ES 08/2015
DRAWN	TMF 08/2016
CHECKED	MS/ES 8/2016
MICHAEL L. STURM	
FLORIDA P.E. # 46005	

Signature & Date
SHEET UAS6



FDOT R/W LINE OF S.R. 789

CONSTRUCTION PLANS FOR COQUINA BEACH IPO PHASE 2 MANATEE COUNTY, FLORIDA

MAY 2020



PROJECT TEAM:

OWNER:
MANATEE COUNTY
1253 17TH AVE. EAST
BRADENTON, FL 34208
CONTACT: MICHAEL STURM, P.E.
941-708-7450 ext. 7332

ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
100 2ND AVE S, SUITE 100N
ST PETERSBURG, FL 33701
CONTACT: JON AND J. FLAVAGAN
727-498-2100

SURVEYOR:
ZNS ENGINEERING LC
100 2ND AVE S, SUITE 100N
BRADENTON, FLORIDA 34208

LANDSCAPE ARCHITECT:
KIMLEY-HORN AND ASSOCIATES, INC.
100 2ND AVE S, SUITE 100N
ST PETERSBURG, FL 33701
CONTACT: JON AND J. FLAVAGAN
727-498-2100

UTILITY CONTACTS:

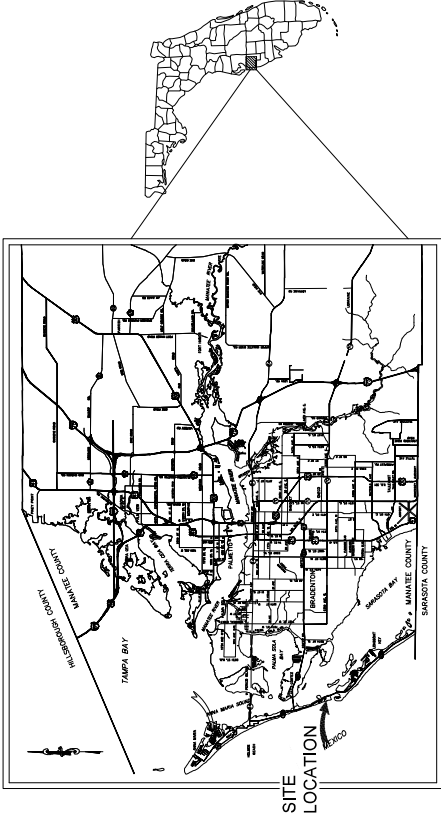
FLORIDA POWER & LIGHT
JOEL BRAY
1253 17TH AVE. EAST
BRADENTON, FL 34208
386-588-1421
386-588-1403

FRONTIER COMMUNICATIONS
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TAMPA, FL 33607
813-675-1074

TAMPA ELECTRIC COMPANY TECO
DANNY HASKETT
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TAMPA, FL 33619
813-275-3783

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5413 S.W. 84 EAST
BRADENTON, FL 34208
727-333-2841

CROWN CASTLE FIBER
DANNY HASKETT
10000 W. WALNUT AVE. SUITE A-200
TAMPA, FL 33619
786-810-7073

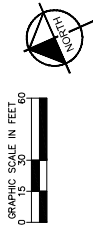
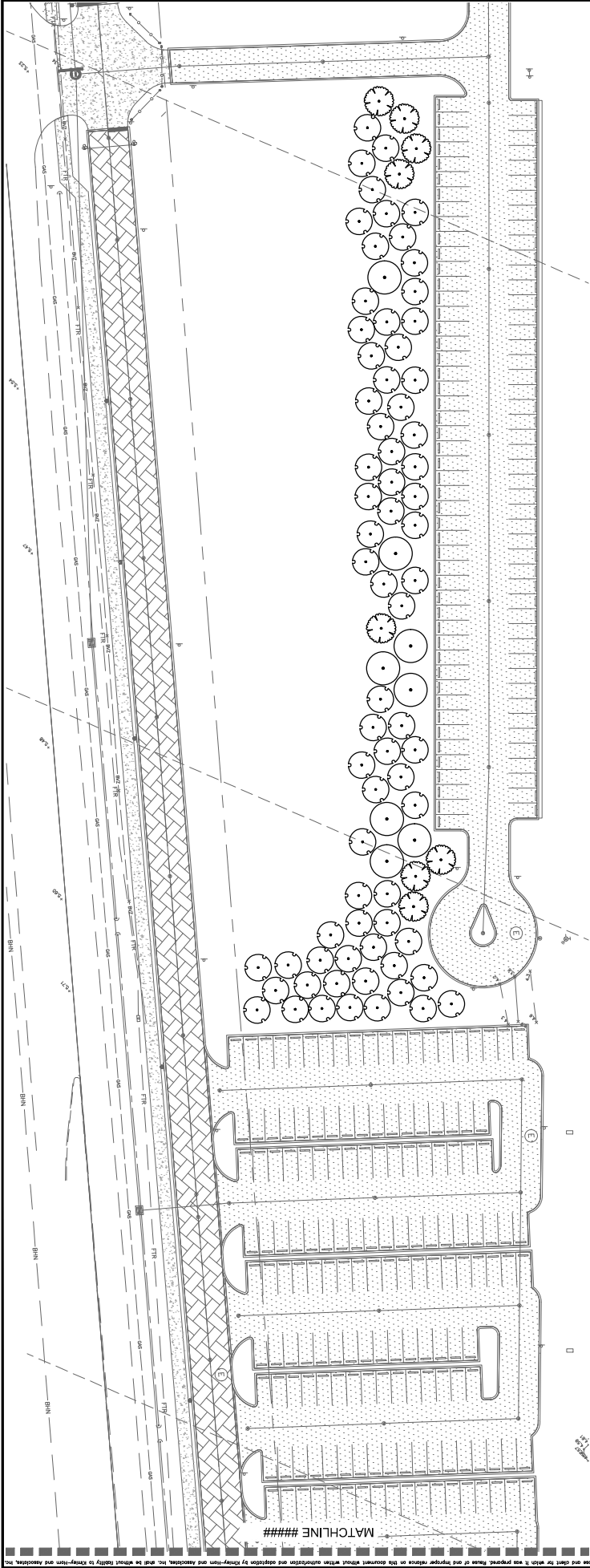


PROJECT VICINITY MAP
N.T.S.

Sheet List Table	
Sheet Number	Sheet Title
00	COVER SHEET
L-201	PHASE 2 LANDSCAPE PLAN
L-150	LANDSCAPE NOTES
I-201	PHASE 2 IRRIGATION PLAN
I-150	IRRIGATION DETAILS
I-151	IRRIGATION NOTES

THE SITE CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE DIRECTION OF THE ENGINEER. THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE STAKEOUT. THE SITE CONSTRUCTION STAKEOUT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR CLARIFICATION PRIOR TO THAT STAKEOUT.

THIS DOCUMENT IS PROTECTED BY SECTION 196 OF THE FLORIDA CONSTITUTION AND AS SUCH, NO REPRODUCTION OR ALTERATION OF THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS PERMITTED. ANY UNAUTHORIZED REPRODUCTION OR ALTERATION OF THIS DOCUMENT IS PROHIBITED. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OTHER WORK OR FOR ANY OTHER PROJECTS. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OTHER WORK OR FOR ANY OTHER PROJECTS.	
DATE	MAY 2020
NO.	148-0004
SHEET NUMBER	00
DESIGNED BY	DAVID J. FLAVAGAN
PROJECT NUMBER	00001495



PLANT SCHEDULE PHASE 2

TREES	QTY	BOTANICAL NAME	COMMON NAME	GAL.	CONT.	HT.	SPREAD	SEEDING	REMARKS
	8	BUCCIDA BUCERAS 'SHADY LADY'	SHADY LADY BLACK OLIVE	30 GAL.	CONTAINER	12 FT MIN	3-4 FT MIN	AS SHOWN	PLANT SIZES BASED ON AVAILABILITY.
	8	BURSERIA SIMARUBA	GUMBO LIMBO	30 GAL.	CONTAINER	12 FT MIN	3-4 FT MIN	AS SHOWN	PLANT SIZES BASED ON AVAILABILITY.
	71	CONOCARPUS ERECTUS	GREEN BUTTWOOD	30 GAL.	CONTAINER	10-12 FT	3-4 FT MIN	AS SHOWN	STANDARD PLANT SIZES BASED ON AVAILABILITY.



		KHA PROJECT 145400041		SHEET NUMBER L-201	
© 2020 KIMLEY-HORN AND ASSOCIATES, INC. 100 SE 1ST AVE, SUITE 150N FORT LAUDERDALE, FL 33301 PHONE: 772-547-3999 WWW.KIMLEY-HORN.COM CA 0000096		DATE: 05/21/2020		PHASE 2 LANDSCAPE PLAN	
DESIGNED BY: KHA		SCALE: AS SHOWN		LANDSCAPE ARCHITECT STATE OF FLORIDA EXPIRATION DATE: 06/30/2020	
DRAWN BY: JLD		CHECKED BY: DUF		MANATEE COUNTY, FLORIDA	
NO.		DATE		BY	
REVISIONS					

1. SCOPE OF WORK

1.1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THESE PLANS.

1.2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

1.3. WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS.

- 2.1. PROTECT ALL EXISTING UTILITIES, ADJACENT CONSTRUCTION OR EXISTING ROAD AND PREVENTED TO REMAIN OPEN AND ACCESSIBLE TO THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY UTILITIES DAMAGED BY THE CONSTRUCTION UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S WORK SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT NO COST TO THE OWNER.
- 2.2. MAINTAIN ALL NECESSARY ROAD DEVICES THROUGHOUT THE DURATION OF ALL CONSTRUCTION ACTIVITIES.
- 2.3. WHERE APPLICABLE, SUBMIT A DETAILED PROJECT SPECIFIC WORK ZONE TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT) AND THE TEXAS A.P.C. APPLICATION OF FOOT STANDING PLANS FOR ROAD AND BRIDGE CONSTRUCTION, ISSUE 16/2020.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO PLANT MATERIAL EXISTING ON THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES, SHRUBS, AND PLANTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN PLANT MATERIAL KILLED OR DAMAGED BY A BURNHART AND/OR UNWISHTLY SHALL BE REPLACED WITH PLANT MATERIAL OF THE SAME SPECIES AND SIZE AND TO THE SAME REGULATORY

3. SUBMITTALS

3.1. SUBMIT MATERIAL SAMPLES LISTED BELOW FOR APPROVAL ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

3.2. SUBMIT TESTING RESULTS OF SOIL MIXTURE AS PER SECTION 6 BELOW.

4.1. ALL PLANT MATERIAL SHALL CONFORM TO THE SPECIFICATIONS INDICATED ON THE DRAWINGS AND SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1, OR BETTER, AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE LANDSCAPE ARCHITECT AND OWNER.

4.3. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH. UPON DELIVERY TO THE SITE, DURING PROGRESS OF THE WORK AND/OR AFTER COMPLETION, REJECTED PLANTS SHALL BE REMOVED AND REPLACED IMMEDIATELY.

5.1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. NO PLANT MATERIAL SHALL BE HANDLED BY STEMS.

- 6.1. TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW.
- 6.2. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF TWO PARTS OF TOPSOIL, AND ONE PART SAND, AS DESCRIBED BELOW. SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR CANIER REPRESENTATIVE

LOAMY CHARACTER, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOT STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND HAVE A PH BETWEEN 5.5 AND 7.0.

6.5. PLANT TREES IN THE EXISTING NATIVE SOIL ON SITE. UNLESS DETERMINED TO BE UNSUITABLE- AT WHICH POINT THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

7.1. PROVIDE WATER NECESSARY FOR PLANTING ESTABLISHMENT AND MAINTENANCE. WATER SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS.

8. FERTILIZER

8.1. PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND

9. MULCH

9.2. PROVIDE A THREE (3) INCH MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH PLANTING BED AND TREE RING (5/8 (6) FOOT DIAMETER MINIMUM).
UNLESS SPECIFIED OTHERWISE.

10.1. CONTAINER GROWN PLANTS SHALL HAVE BEEN GROWN IN ITS CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW EMERSON BOOTS TO HAVE NEVER USED SO THAT THE BOOT MESSAGE WILL REMAIN IN ITS SHADE AND WON'T TOGETHER MAINTAIN

Kimley»Horn

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WWW.KIMLEY-HORN.COM CA 0000696

ES, INC.	SCALE	AS SHOWN
SON	DESIGNED BY	KHA
	DRAWN BY	JLD
96	CHECKED BY	DJF

DAVID J. FLANAGAN
LA0001495
REGISTERED PROFESSIONAL ARCHITECT
STATE OF FLORIDA

SHEET NUMBER
L-150

10.2. INSUFFICIENT OR POORLY STRUCTURED ROOT SYSTEMS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

10.3. ROOTS PLUS GROWER (RPG) PRODUCTS SHALL BE USED WHERE SPECIFIED.

11.1. ALL QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. CONTRACTOR SHALL CONFIRM ALL QUANTITIES PER PLAN PRIOR TO BIDDING AND CONSTRUCTION.

12.1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GRADING WHICH CONSISTS OF FINAL FINISHED GRADING INCLUDING ADDITIONAL SOIL MIXTURE AS NEEDED FOR LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. FINISH GRADE SHALL ACCOUNT FOR THICKNESS OF SOIL AND/OR MULCH DEPTH.

12.2. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CML ENGINEER

- 13.1. CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBER-OR OBJECTIVABLE MATTER DAILY. REMOVE ALL MORTAR, CEMENT, AND TOXIC MATERIAL FROM THE SURFACE OF ALL PLANT BEDS. DO NOT MIX THESE MATERIALS WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL, WHICH WILL IN ANY WAY ADVERSELY AFFECT PLANT GROWTH, IMMEDIATELY CALL TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- 13.2. LOCATE, MAINTAIN AND PROTECT ALL UTILITIES ABOVE AND BELOW GROUND. CALL, SURNAME, STATE ONE CALL OR

13.4. NOTIFY LANDSCAPE ARCHITECT IN WRITING IMMEDIATELY IF CONFLICTS EXIST WITH PROPOSED TREE LOCATIONS AND EXISTING/PROPOSED LIGHT POLES. TREES INSTALLED IN CONFLICT WITH LIGHT POLES ARE SUBJECT TO RELOCATION AT THE EXPENSE OF THE CONTRACTOR.

13.6. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.

13.7. EXCAVATE ALL PLANTING PITS IN DRAINAGE PERCOLATION IS AVAILABLE. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. IF POOR DRAINAGE EXISTS, NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY. IN NO EVENT, NO ALLOWANCE WILL BE MADE FOR PLANT DUE TO IMPROPER DRAINAGE. CONTRACTOR SHALL ENSURE ELIMINATION OF ALL AIR POCKETS AROUND ROOTS.

13.8. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ALL BURLAP, ROPE, WIRES, BASKETS, ETC., SHALL BE REMOVED FROM UPPER ONE THIRD (1/3) OF ROOT BALLS.

13.10. ALL SUCHER GROWTH AND BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT IN ACCORDANCE WITH ANSI A300.

13.11. SUBSIDIARY AND BRANCHING CUPS SHALL BE SEVERED IN ACCORDANCE WITH THE REMAINING SPECIFICATIONS DETAIL 8.

13.13. FAILURE TO FOLLOW THE ABOVE PLANTING PROCEDURE SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR THE CORRECTIVE MEASURES TO BE TAKEN TO STABILIZE AND MAINTAIN TREES IN A PLUMB AND UPRIGHT POSITION.

14. LAWN SODDING

14.2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS TO A MINIMUM DEPTH OF THREE (3) INCHES, FROM ONE (1) INCH OF TOPSOIL ACROSS ENTIRE LAWN BED AND MARK THOROUGHLY WITH TOP FOUR (4) INCHES OF SOIL TO BRING THE GROUND TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WORKING NOT MORE THAN ONE-FOURTH (1/4) POUND PER FOOT OF WIDTH. DURING THE ROLLING, ALL AREAS OF THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL, PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.

14.5. SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS. ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM WEEDY TRUNK, INSECTS AND DISEASE OF ANY KIND.

14.6. SOD PANELS SHALL BE Laid TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAND AREA. SOD SHALL BE Laid UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS.

14.8. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE HEAT AND MOISTURE. THE ROOTS TO THE SUN, ALL SOD SHALL BE STAKED SO AS NOT TO BE DAMAGED BY EXCESSIVE HEAT AND MOISTURE.

15. CLEANUP

15.1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM THIS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND WORK (INCLUDING REGRAVING IF NECESSARY).

16.1. ALL PLANT MATERIAL SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) AS NECESSARY TO INSURE HEALTHY AND MORGOROUS GROWING CONDITIONS BY THE CONTRACTOR UPON DELIVERING TO THE SITE AND UNTIL FINAL ACCEPTANCE OF WORK.

17. FINAL INSPECTION AND ACCEPTANCE OF WORK

Horn	KHA PROJECT 148400041	
	DATE MAY 2020	

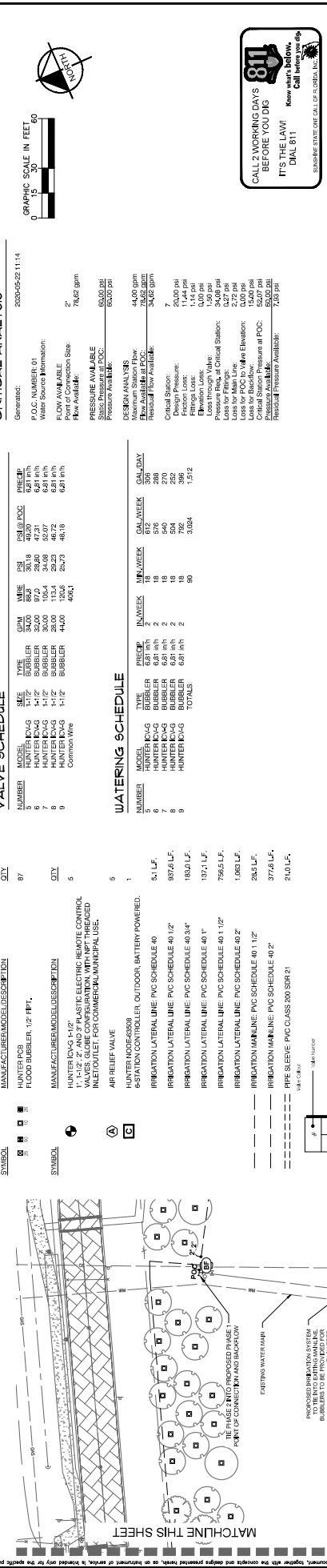
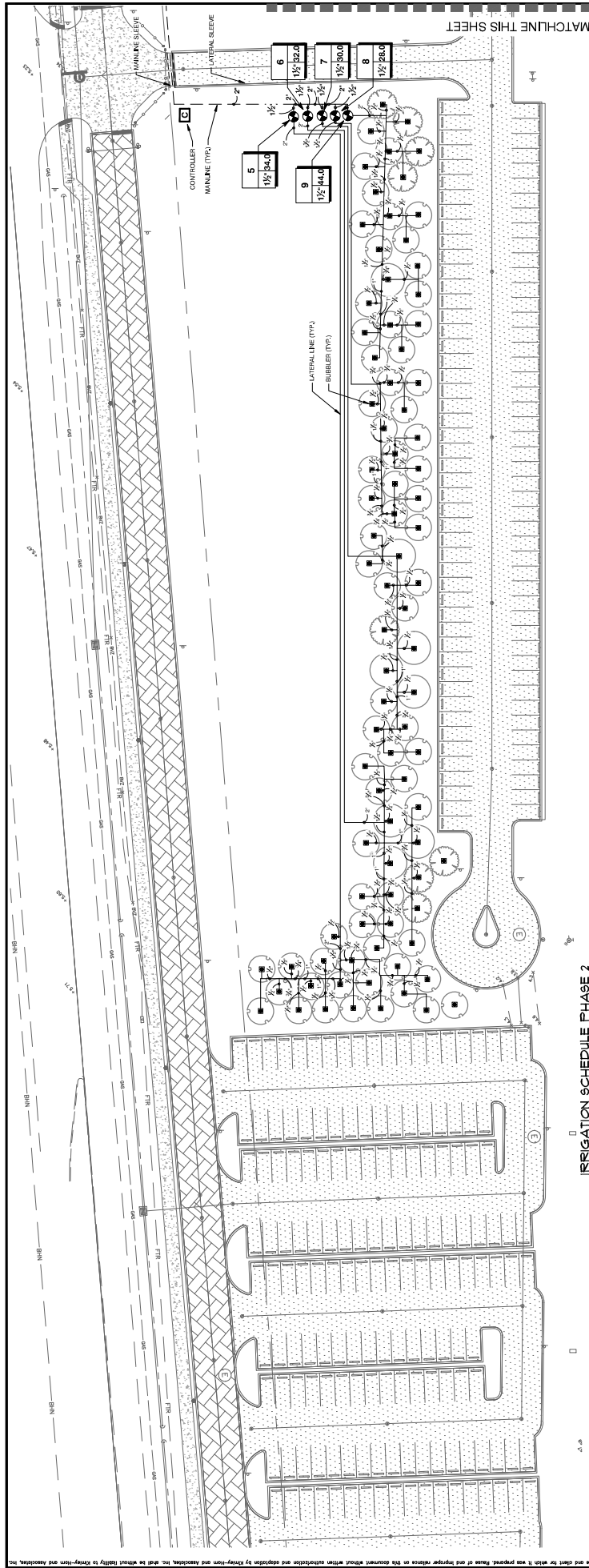
WARRANTY

16.1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION AND ACCEPTANCE OF THE WORK BY THE OWNER AND/OR OWNER'S REPRESENTATIVE.

18.3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN, MOODROB AND HEALTHY PLANT SPECIFIED AT NO ADDITIONAL COST TO THE OWNER. ANY REPLACED PLANT MATERIAL SHALL BE SUBJECT TO A NEW ONE (1) YEAR WARRANTY.

B&B = BALLED AND BURRIAPED
BR = BARE ROOT
CAL = CALIPR
CAL = CALIPR
CDB = CROWN DISEASE
FG = FIELD GROWN

RPG-
ROCKEY
ROOTS PLUS SHOWER

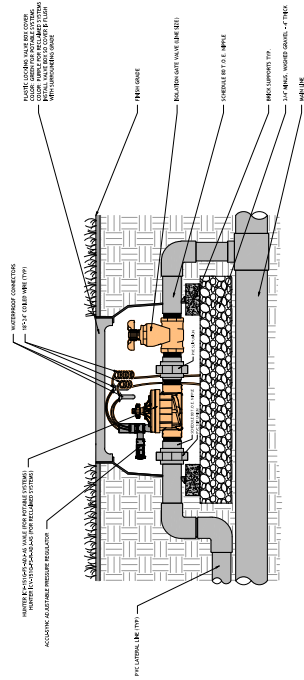
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IN/WEEK	MIN/WEEK	IN	MIN	IN	MIN	IN	MIN	IN	MIN
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2	18	3050	105.4	34.08	52.07	6.81 IN		6.81 IN	
2	18	3200	105.4	34.08	52.07	6.81 IN		6.81 IN	
2	18	4400	126.5	25.73	48.18	6.81 IN		6.81 IN	
				498.1					

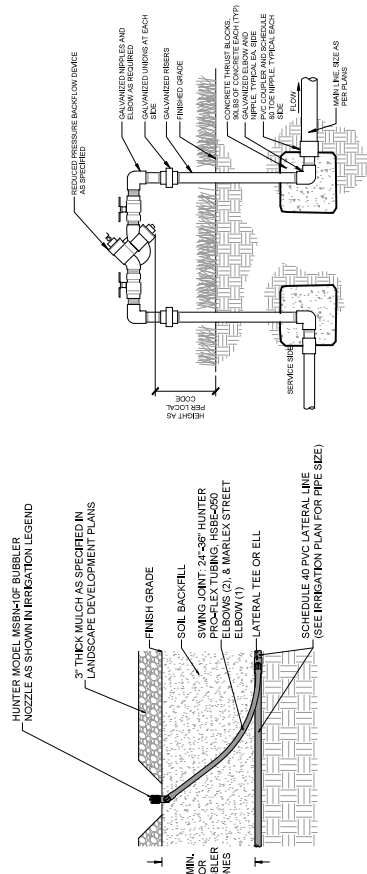
VALVE SCHEDULE			WATERING SCHEDULE		
NUMBER	MODEL	SIZE	NUMBER	MODEL	TYPE
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2	HUNTER P-C-G	1-1/2"	2	HUNTER P-C-G	BUBBLER
3	HUNTER P-C-G	1-1/2"	3	HUNTER P-C-G	BUBBLER
4	HUNTER P-C-G	1-1/2"	4	HUNTER P-C-G	BUBBLER
5	HUNTER P-C-G	1-1/2"	5	HUNTER P-C-G	BUBBLER
6	HUNTER P-C-G	1-1/2"	6	HUNTER P-C-G	BUBBLER
7	HUNTER P-C-G	1-1/2"	7	HUNTER P-C-G	BUBBLER
8	HUNTER P-C-G	1-1/2"	8	HUNTER P-C-G	BUBBLER
9	HUNTER P-C-G	1-1/2"	9	HUNTER P-C-G	BUBBLER
Common Wire			TOTALS:		

STAND	 HUNTER PCB FLUID LUBRICANT, 12" TPT.
STANDARD	MANUFACTURE MODEL DESCRIPTION HUNTER ICG H-17 PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, W/PNT' HEATED INLET/OUTLET FOR COMMERCIAL/MUNICIPAL USE. AIR RELIEF VALVE HUNTER NOG86908 6-STATION CONTROLLER, OUTDOOR, BATTERY POWERED. IRRIGATION LAT LINE PVC SCHEDULE 40 IRRIGATION LAT LINE PVC SCHEDULE 40 1/2" IRRIGATION LAT LINE PVC SCHEDULE 40 3/4" IRRIGATION LAT LINE PVC SCHEDULE 40 1" IRRIGATION LAT LINE PVC SCHEDULE 40 1 1/2" IRRIGATION LAT LINE PVC SCHEDULE 40 2" IRRIGATION MAINLINE PVC SCHEDULE 40 1 1/2" IRRIGATION MAINLINE PVC SCHEDULE 40 2" PWS SLUDGE P/C CLASS 300 SIPR 21 (M-Factor) - M-Hunter

[illegible]



1 HUNTER ICV ZONE CONTROL VALVE W/ ISOLATION GLOBE VALVE - SECTION VIEW
1 1/2" = 1'-0"



2

HUNTER BUBBLER MSBN - 10F DETAIL

1 1/2" = 1'-0"

PJ-148-CDD-03

3

BACKFLOW PREVENTER

SHEET

SECTION

NTS

[illegible]

