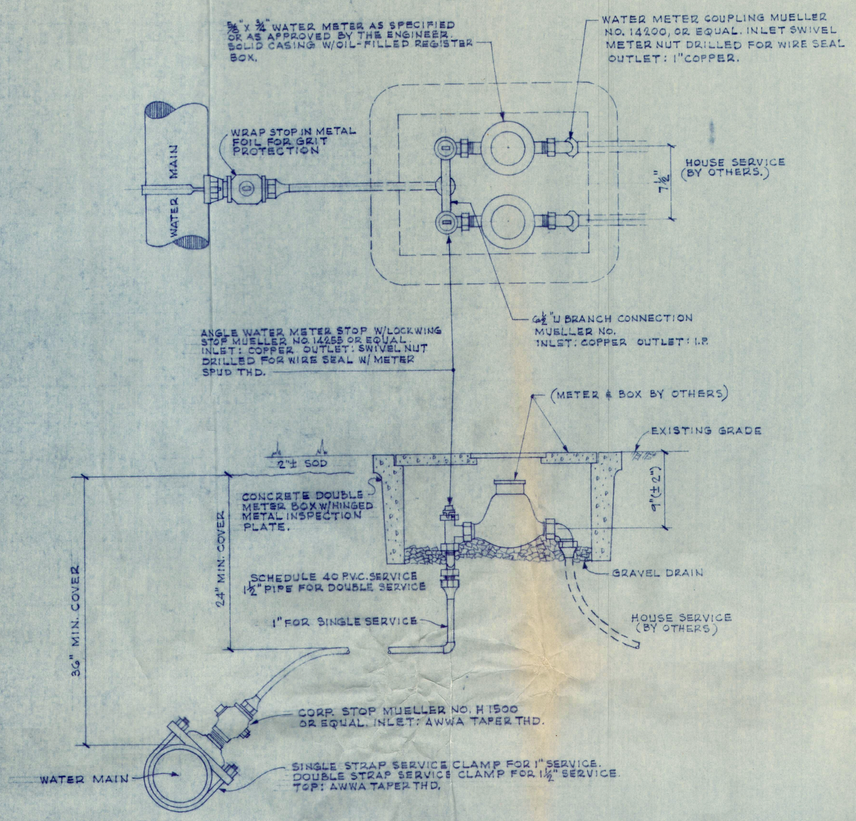
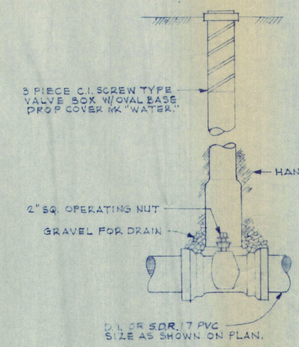
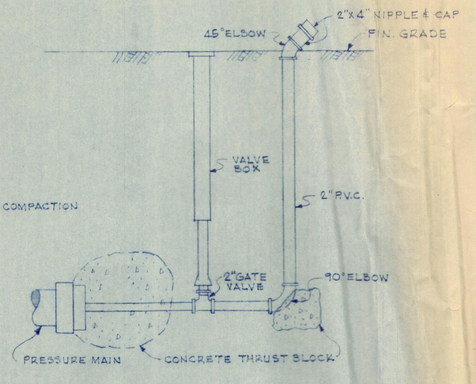


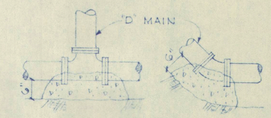
TYPICAL METERED SERVICE DETAILS



VALVE DETAIL



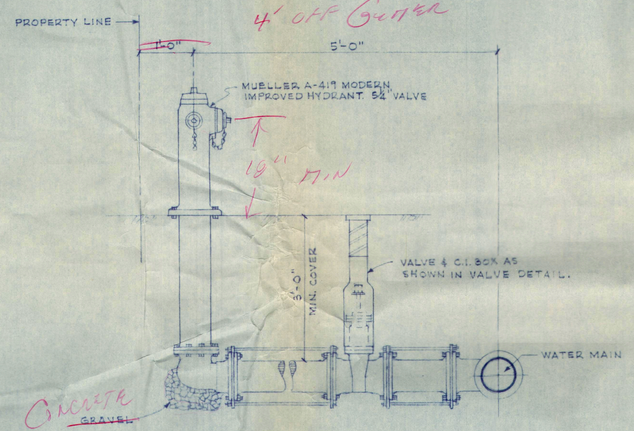
TYPICAL BLOWOFF DETAIL



THRUST BLOCK AREA DETERMINED BY CONCRETE CONTACT WITH UNDISTURBED MATERIAL.

THRUST BLOCK AREAS IN SQ. FT.				
PIPE SIZE	TEE	90° BEND	45° BEND	22 1/2° BEND
4	1.5	2.0	1.0	1.0
6	4.0	5.5	3.0	1.5
8	7.0	10.0	5.5	3.0
10	10.0	14.0	7.0	5.0

PRESSURE MAIN THRUST BLOCKS



TYPICAL FIRE HYDRANT

RECEIVED AUG 16 1976 TOWN OF LONGBOAT KEY

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

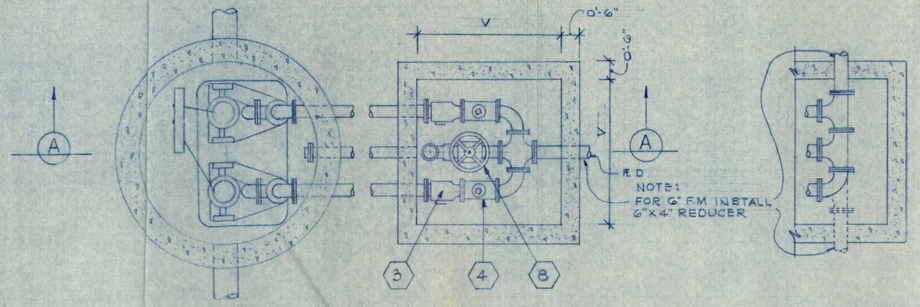
REVISED	DATE	DESCRIPTION	BY
	7-16-76	REVISED VALVE DETAIL	C.H.
	1/21/76	ADDED FIRE HYDRANT LOCATION	G.L.B.
	11/21/75	REV. BLOWOFF DETAIL & METERED SERVICE DETAILS	G.L.B.

DATE	7/21/75
SCALE	AS NOTED
DESIGN	G.L.B.
DRAWN	G.L.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 388-2178

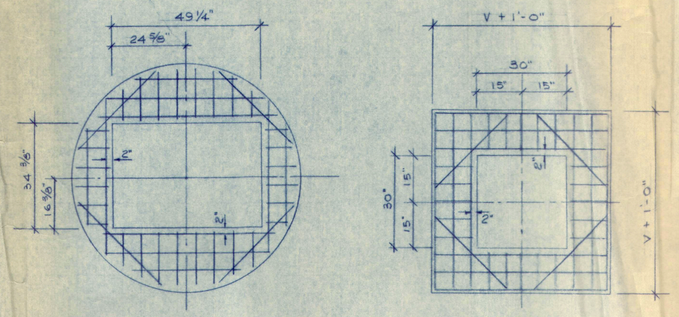
WATER SUPPLY DETAILS

DWRG No
191-080

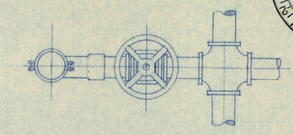


PLAN

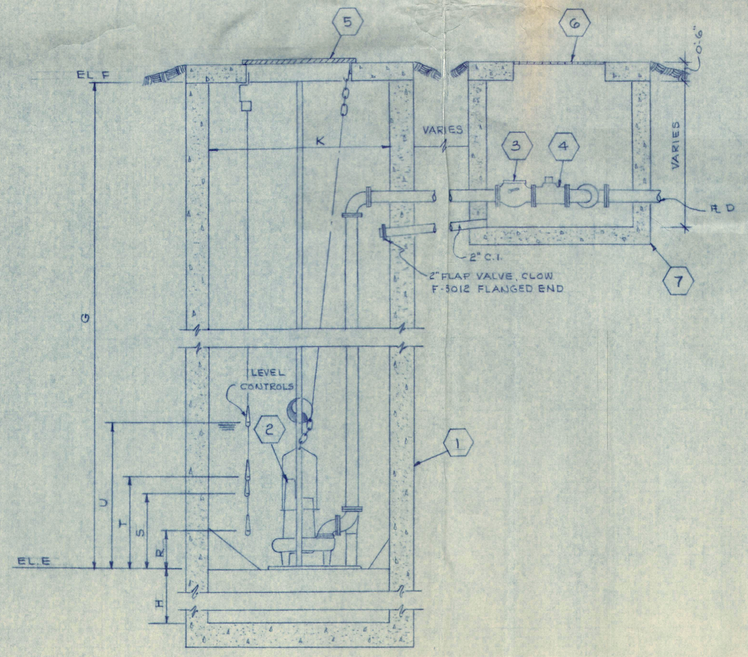
AUXILIARY PLAN
LEFT OR RIGHT
DISCHARGE



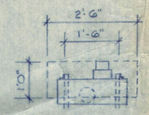
STEEL PLACEMENT IN COVERS



AUXILIARY
PUMPING
DETAIL

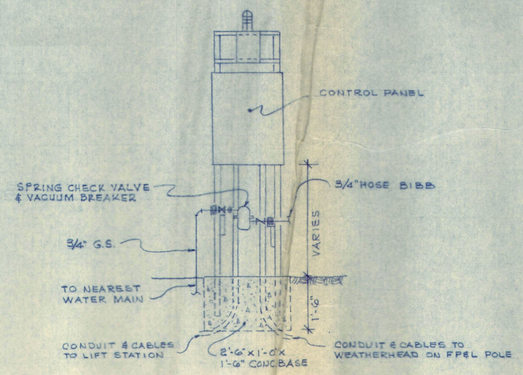


SECTION A



PLAN

LOCATION AS SHOWN ON
DWG# 191-065 LS4F BAY ISLES UNIT No 1
DWG# 191-143 LS6F BAY ISLES UNIT No 2



ELEVATION

CONTROL PANEL

MATERIAL SCHEDULE

Item	Description
1.	Precast Concrete Wet Well NOTE: Shop Drawings Required
2.	Pumps, Hydr-O-Matic, See Schedule
3.	Check Valve 4" Unless Otherwise Noted
4.	Eccentric Plug Valve 4" Unless Otherwise Noted
5.	Access Hatch Cover 4'-0" x 2'-6" Opening, Hydro-O-Matic
6.	Access Hatch Cover, 2'-6" x 2'-6" Opening, Bilco Type J-2, SS Fastenings
7.	Precast Concrete Valve Vault NOTE: Shop Drawings Required
8.	Auxiliary Pump Connection, See Detail

SCHEDULE OF LIFT STATION DATA

LIFT STATION NO.		"4F"	"6F"
A	Type		
B	Inf. Pipe Size	8"	10"
C	Fl. Line In	-8.20	-8.60
D	Fl. Line Out FM	4.0	2.0
E	LS Inv.	-12.20	-12.60
F	Grd. Elev.	7.0	5.20
G	Depth to Inv.	19.2	17.80
H	Depth of Ballast	1.50	1.50
J	Cy Ballast	1.09	1.09
K	Barrel Dia. Ft.	5'	5'
L	Pump Model	S300	S300
M	HP	3.0	3.0
N	RPM	1750	1750
P	Volt/Phase	230/3	230/3
Q	FM Size	6"	6"
R	Off	1.0	1.0
S	1 Pump	1.9	1.9
T	2 Pumps	2.4	2.4
U	H.W. Alarm	4.0	4.0
V	Valve Vault	4.0	4.0

AUG 16 1976
TOWN OF LONGBOAT KEY

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

DATE	DESCRIPTION	BY
3/5/76	ADD LS "6F" DATA	W.J.G.
11/21/75	REV. AUXILIARY PUMPING DETAIL & CONTROL PANEL	G.L.B.

DATE	4 Sept 75
SCALE	N.T.S.
DESIGN	W.F.B.
DRAWN	W.J.G.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES
LIFT STATION

LONGBOAT KEY

DWRG. No.
191-071

N32,200.000

N32,000.000

N31,800.000

N31,600.000

N31,400.000

N31,200.000

N31,000.000

BAY ISLES PARKWAY

BAY ISLES PARKWAY

E 37,200.000

E 36,800.000

Scale: 1"=40'

Pines
Aust.
Palms
Oaks
Cabbage

11 - 6"/15" Aust.
9 - 6'-30" Oaks
5 - 6'-12" Cabbage

24" Strang Culvert

30" Strang Culvert

Pines

Aust.

Pines

Cabbage

Palms

Oaks

Pines

Existing ditch

30'

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

DATE	SCALE	DESIGN	DRAWN	CHECK	APPROVED
11-24-76	1"=40'		E.N.B.		

REVISED	DATE	BY	DESCRIPTION

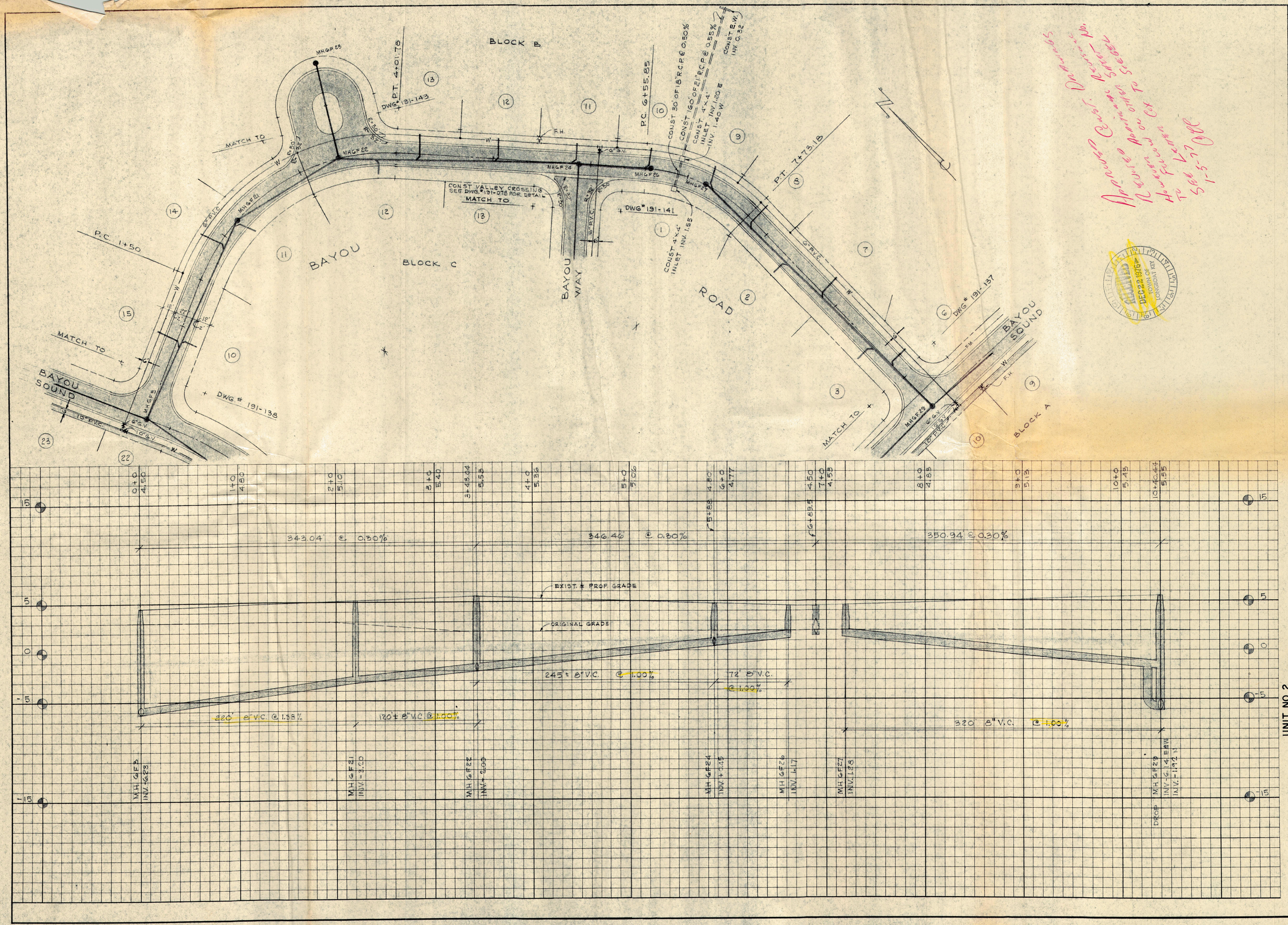
ARVIDA CORPORATION

BAY ISLES Unit #2

Filed
APR 15 1977
CLERK OF CIRCUIT COURT

DWRG. No.

191-207



BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

REVISED		
12/14/76	REVISED SAN. SEWER PROFILE	G.L.B.
10/27/76	REVISED SAN. SEWER PROFILE	G.L.B.
8/6/76	ADDED ORIGINAL GRADE	G.L.B.

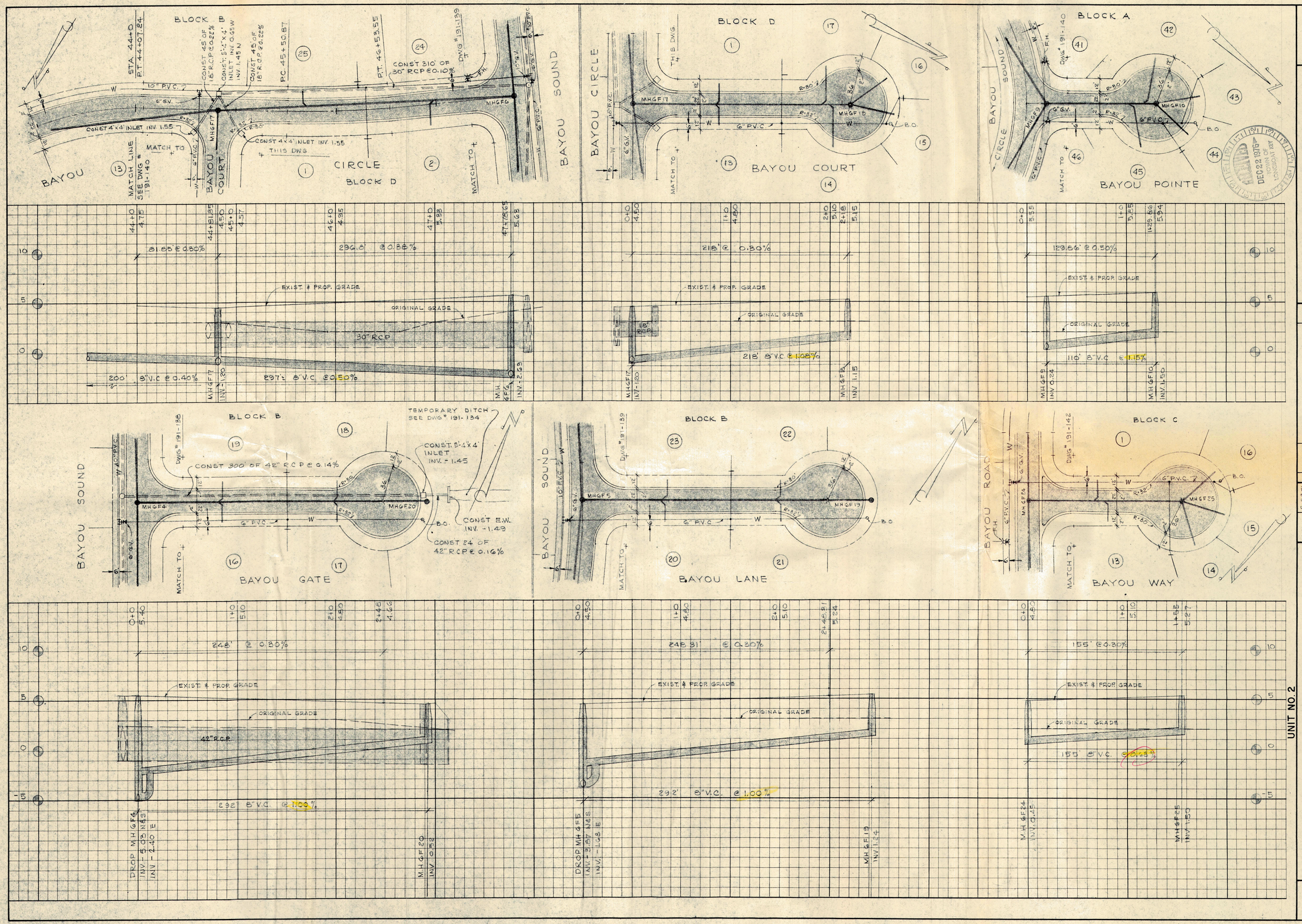
DATE	3-29-76
SCALE	HORZ 1"=40' VERT 1"=4'
DESIGN	G.L.B.
DRAWN	W.J.G.
CHECK	

UNIT NO. 2

ARVIDA CORPORATION
BAY ISLES

LONGBOAT KEY PHONE 388-2178

DWRG. No.
191-14



UNIT NO. 2

ARVIDA CORPORATION

BAY ISLES

PLAN & PROFILE

LONGBOAT KEY

PHONE - 388-2178

DATE	3-29-76	
SCALE	HORZ. 1"=40' VERT. 1"=4'	
DESIGN	G.L.B.	
DRAWN	W.J.G.	
CHECK		
APPROVED		

REVISED

12/14/76	REVISED SAN. SEWER GRADE	G.L.B.
10/28/76	REVISED SAN. SEWER GRADES	G.L.B.
8/6/76	ADDED ORIGINAL GRADE	G.L.B.

BENNETT & BISHOP

CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

DWRG. No.

191-141

DWG. No. 191-143

LONGBOAT KEY

ARVIDA CORPORATION
BAY ISLES
PLAN & PROFILE

PHONE 388-2178

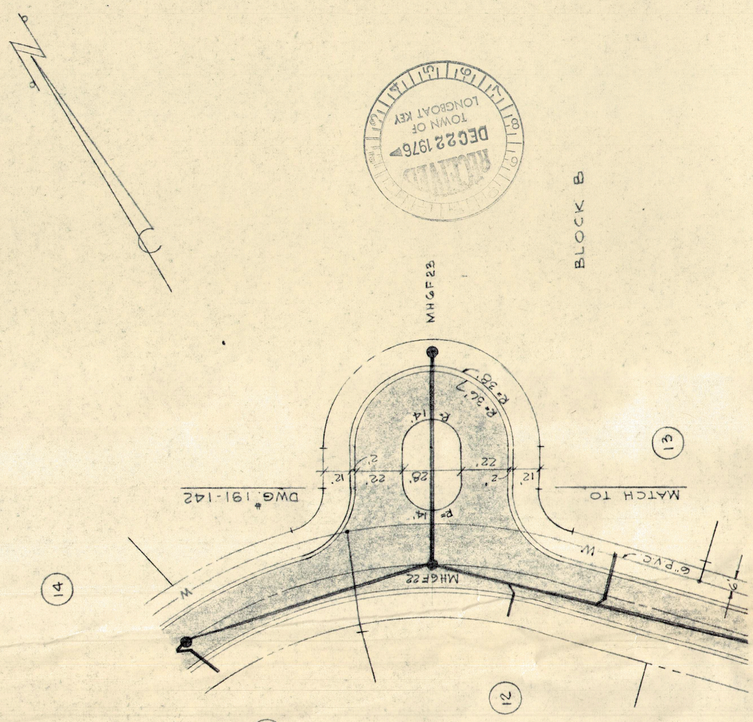
DATE	3-29-76
SCALE	HORZ. 1"=40' VERT. 1"=4'
DESIGN	G.L.B.
DRAWN	W.J.G.
CHECK	
APPROVED	

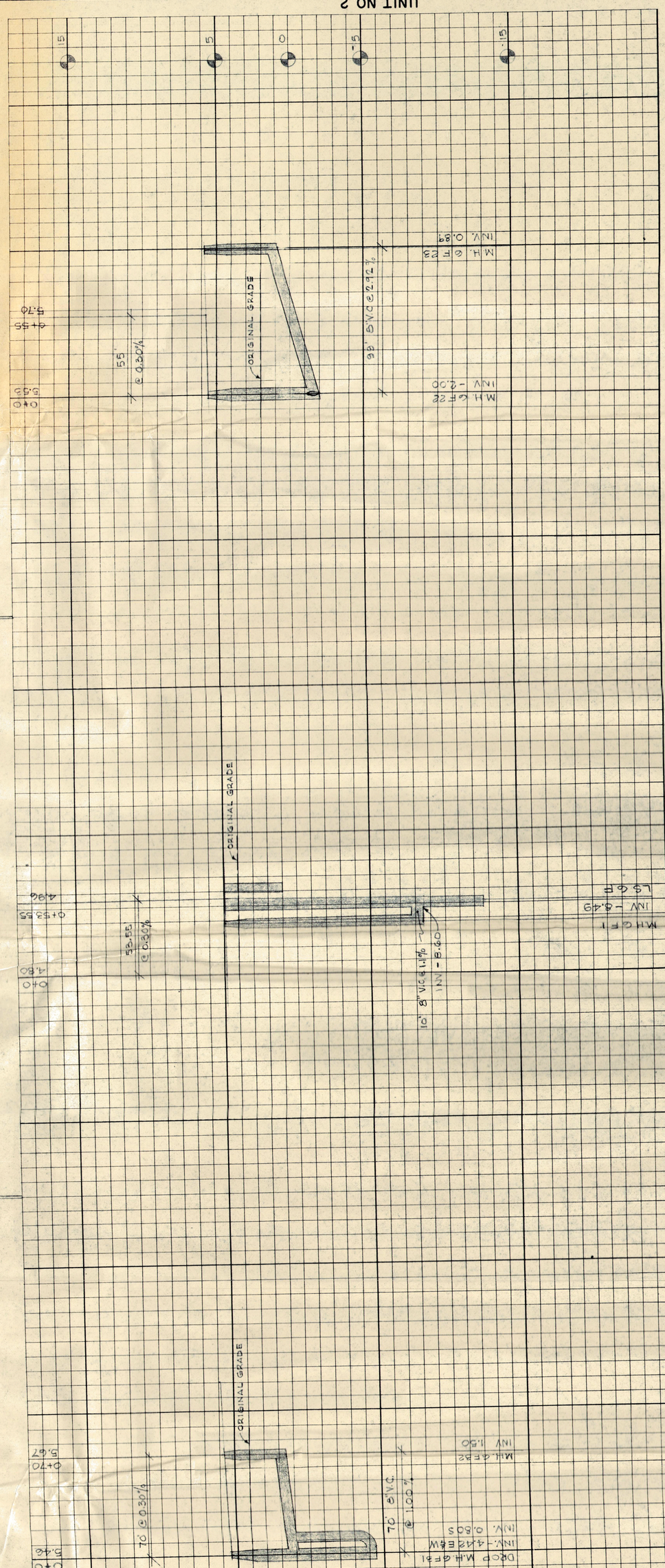
DATE:	DESCRIPTION	BY
12/14/76	REVISED SAN. SEWER GRADE	G.L.B.
10/27/76	REVISED SAN. SEWER GRADES	G.L.B.
8/9/76	ADDED ORIGINAL GRADE	G.L.B.
7/30/76	REV. P.V.C. FM. TO D.I. F.M.	G.L.B.

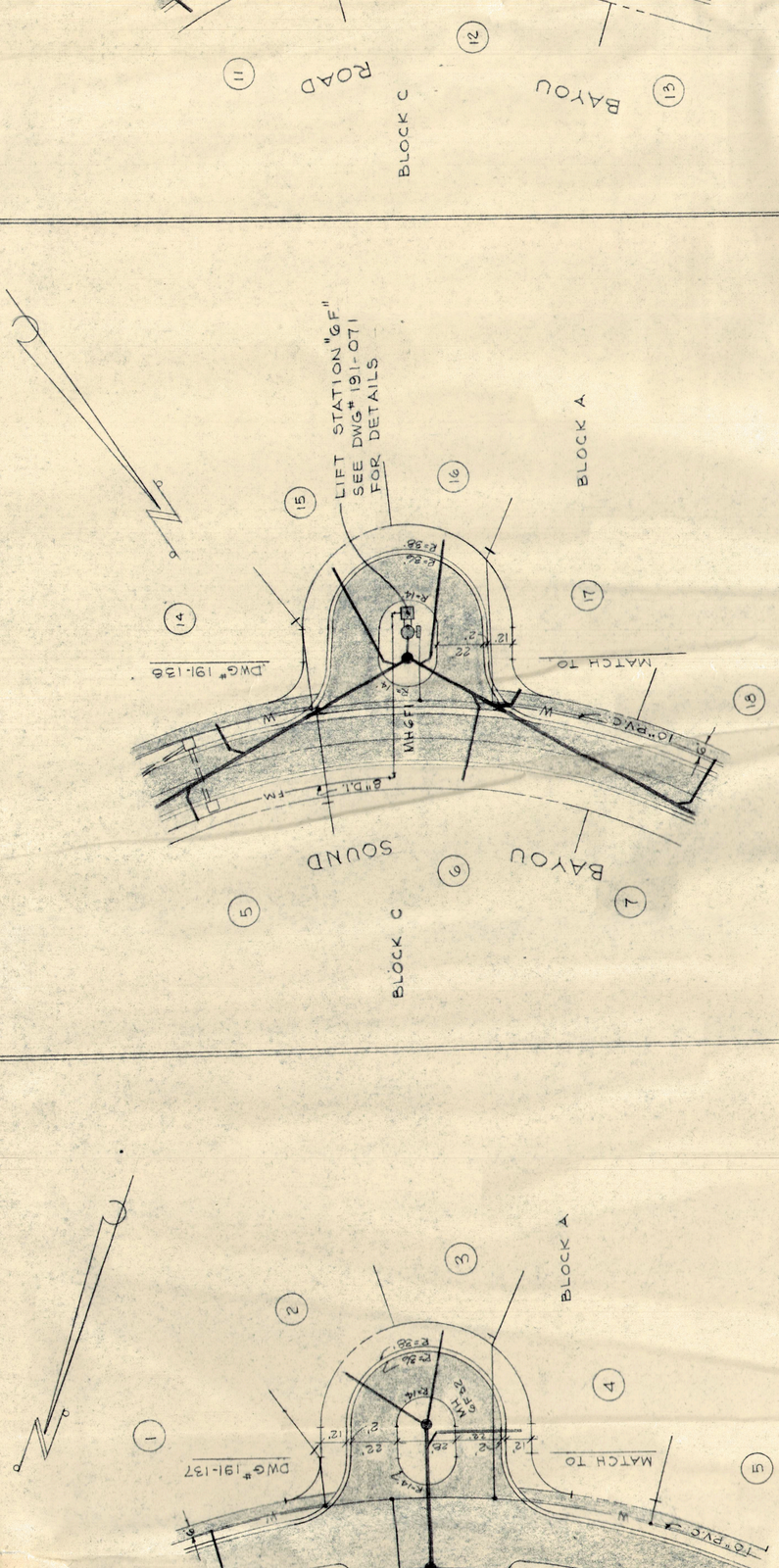
BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

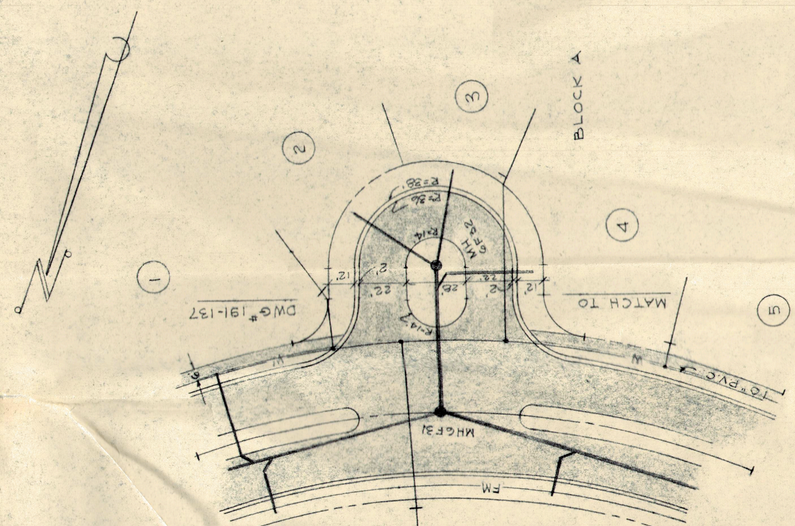
APPROVED BY

UNIT NO. 2









BLOCK A

BLOCK C

BAYOU

BLOCK B

SOUND

BAYOU ROAD

BAYOU GATE

BLOCK B

+ DWG # 191-143

CONST. VALLEY CROSSING

W 10" P.V.C. ♂

F.H.

P.T. 15+25.11

P.C. 16+84.23

BICYCLE PATH SEE DWG# 191-078 FOR CONST DETAILS

P.T. 17+85.46

CONST 45' OF 18" R.C.P. @ 0.30%

CONST 5'-4'X4' INLET INV 1.41E INV 1.01N

CONST 45' OF 18" RCP @ 0.30%

CONST 305' OF 24" R.C.P. @ 0.81%

CONST "J" BOX INV 0.07 S INV - 1.03 N & E

MATCH LINE STA. 22+0 SEE DWG# 191-139

MATCH TO

CONST 4'X4' INLET INV. 1.03 E INV. 1.49 N

MATCH LINE STA 11+0 SEE DWG# 191-137

P.C. 10+63.65

CONST 30' OF 18" R.C.P @ 0.20%

CONST 4'X4' INLET INV. 1.55

CONST 4'X4' INLET INV 1.55 MATCH TO

CONST 4'X4' INLET INV. 1.55

+ DWG # 191-142

MATCH TO +

+ DWG # 191-141

MH6F1

MH6F2

MH6F3

MH6F4

MH6F5

MH6F6

L.S. 5.2+

P.S.

F.M.

6" G.V.

6" P.V.C.

R=32'-7"

E=30'-7"

W

S

N

E

11+0 4.70

11+57.87 4.50

12+0 4.23

12+57.87 4.80

13+0 4.38

14+0 5.23

14+84.46 5.46

15+0 5.43

16+0 5.18

17+0 4.85

18+0 4.50

18+10.46

19+0 4.77

20+0 5.07

21+0 5.37

21+10.46 5.40

22+0 5.12

57.87' @ 0.33%

326.59' @ 0.30%

326' @ 0.30%

300' @ 0.30%

89.54' @ 0.31%

EXIST. & PROP. GRADE

ORIGINAL GRADE

24" R.C.P.

42" R.C.P.

2" P.I. F.M.

250'± 8" V.C. @ 0.40%

250' 8" V.C. @ 0.40%

315'± 8" V.C. @ 0.40%

300' 8" V.C. @ 0.40%

291'± 8" V.C. @ 0.40%

MH 6F1 INV. - 8.45

MH 6F2 INV. - 7.49

MH 6F3 INV. - 6.23

MH 6F4 INV. - 5.03 N & S INV. - 0.65

DROP

UNIT NO. 2

ARVIDA CORPORATION

BAY ISLES

LONGBOAT KEY

PHONE 388-2178

PLAN & PROFILE

DWRG. No. 191-138

BENNETT & BISHOP

CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

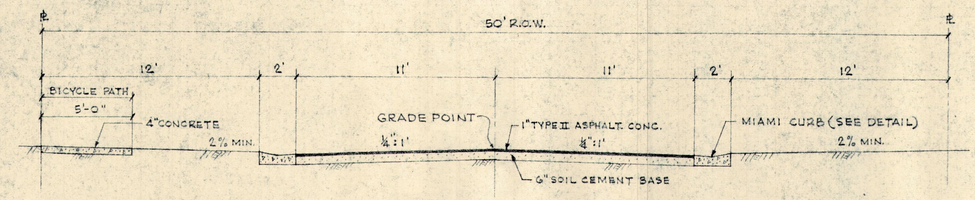
APPROVED BY

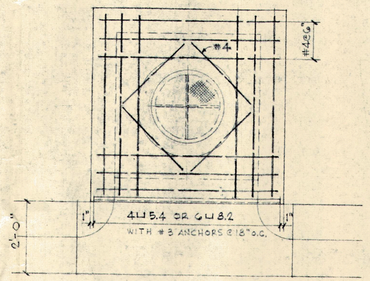
DATE	DESCRIPTION	BY
12/14/76	REVISED INV. & M.H. 6F5	G.L.B.
10/28/76	REVISED F.H. LOCATIONS	G.L.B.
8/12/76	ADDED F.M. PROFILE	G.L.B.
8/1/76	ADDED ORIGINAL GRADE	G.L.B.
7/30/76	REV. P.V.C. F.M. TO D.I. F.M.	G.L.B.

REVISIONS

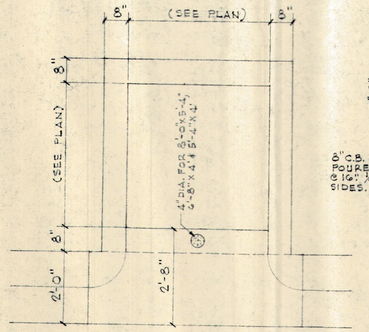
DATE	3-29-76
SCALE	HORIZ. 1"=40' VERT. 1"=4'
DESIGN	G.L.B.
DRAWN	M.J.G.
CHECK	
APPROVED	

DEC 22 1976 CLERK OF CIRCUIT COURT MANATEE COUNTY, FLA.





PLAN-COVER



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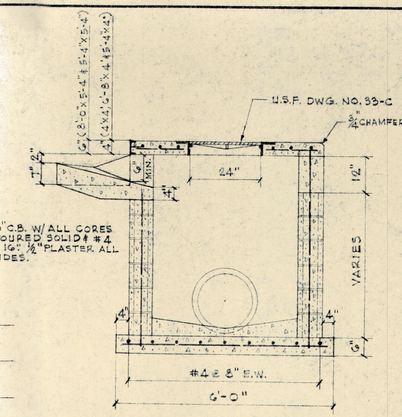
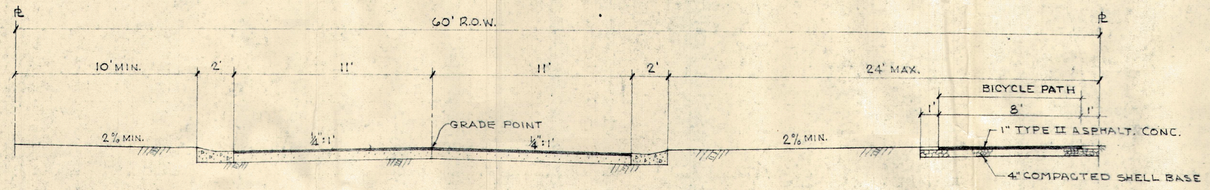
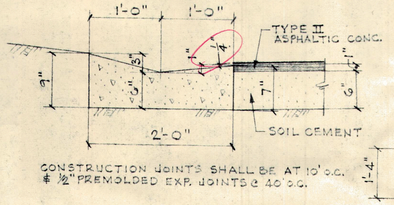


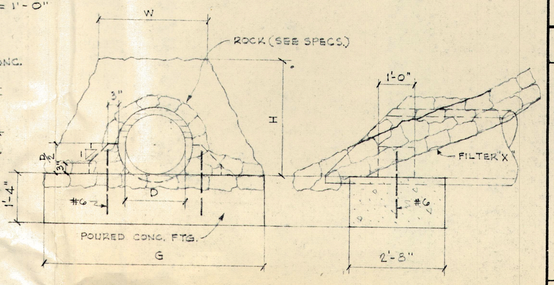
SECTION

TYPICAL CURB INLET
STANDARD
SCALE: 1/2" = 1'-0"



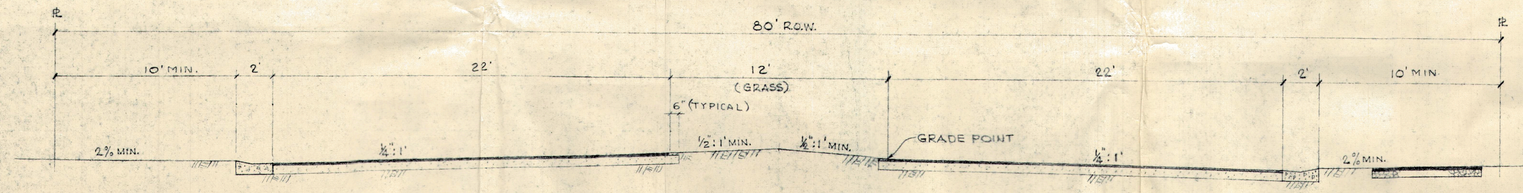


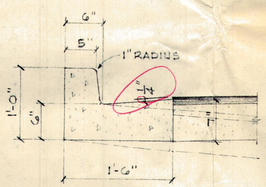
MIAMI CURB
SCALE: 1" = 1'-0"



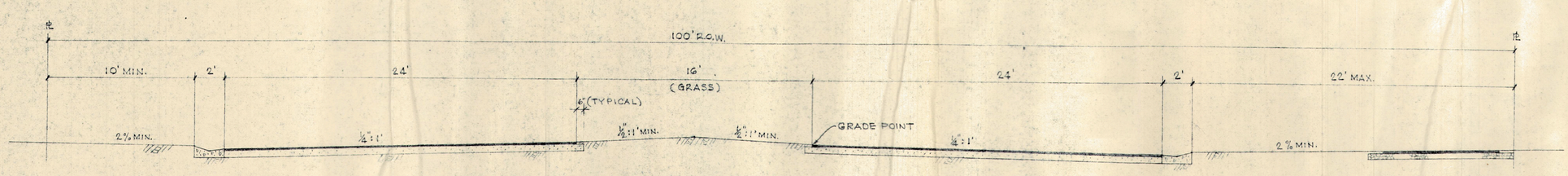
TYPICAL ENDWALL

DIMENSIONS			
D	G	W	H
18" OR 14"x23"	6'-0"	2'-11"	3'-1"
21"	6'-6"	3'-2"	3'-4"
24" OR 19"x30"	7'-0"	3'-5"	3'-7"
27"	8'-0"	4'-1"	3'-11"
30" OR 24"x38"	9'-0"	4'-10"	4'-2"
33" OR 27"x42"	10'-0"	5'-7"	4'-5"
36" OR 29"x45"	11'-0"	6'-3"	4'-9"
42" OR 34"x53"	12'-0"	6'-9"	5'-3"
48" OR 38"x60"	14'-0"	8'-2"	5'-10"
54" OR 43"x68"	16'-0"	9'-8"	6'-4"
60" OR 48"x76"	17'-0"	10'-1"	6'-11"



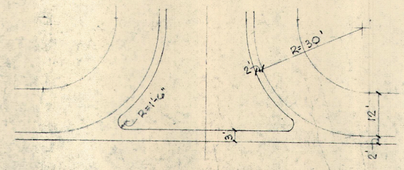


TYPE "H" CURB
SCALE: 1" = 1'-0"



TYPICAL ROAD SECTIONS
SCALE: 1/4" = 1'-0"

NOTE: 1. VARY ROAD ℄ LOCATION TO PRESERVE QUALITY TREES
2. SEE SASAKI-WALKER PLAN FOR LOCATION OF PEDESTRIAN & BICYCLE PATHS.



VALLEY CROSSING
SCALE: 1" = 20'

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

REVISED	DESCRIPTION	BY
12/21/76	REVISED TYPICAL ENDWALL	G.L.B.
12/27/76	REVISED TYPICAL ENDWALL	G.L.B.
2-17-76	ADDED BICYCLE PATH IN 20' R.O.W.	G.L.B.
2-17-76	REV. ENDWALL & CURB INLET DETAILS	G.L.B.
2-17-76	REMOVE DETAIL OF JUNCTION BOX	G.L.B.
12/17/75	REVISED JUNCTION BOX.	G.L.B.
12/17/75	REV. 80 Rd Sec. to 10' from ℄ Min.	G.L.B.
11/20/75	REVISED BICYCLE PATH DETAIL	G.L.B.

DATE	7/17/75
SCALE	AS NOTED
DESIGN	G.L.B.
DRAWN	G.L.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 388-2178
STREET & DRAINAGE DETAILS

DWRG. No.
191-078

BAY ISLES

GENERAL MASTER PLANS

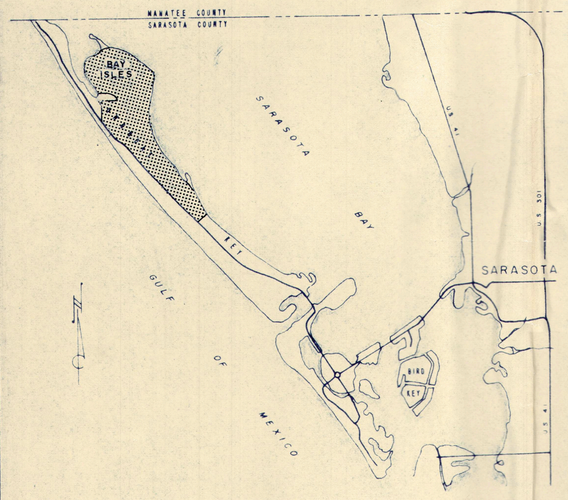
ARVIDA CORPORATION

301 Gulf of Mexico Drive - Sarasota, Florida

BENNETT & BISHOP

Consulting Engineers & Surveyors

Sarasota, Florida



LOCATION MAP

INDEX

No.	Name
191 - 074	SANITARY SEWERAGE MASTER
191 - 075	WATER SUPPLY MASTER
191 - 076	STREET & DRAINAGE MASTER
191 - 077	BICYCLE PATH MASTER
191 - 078	STREET & DRAINAGE DETAILS
191 - 079	SANITARY SEWERAGE DETAILS
191 - 080	WATER SUPPLY DETAILS

OFFICE COPY

Bay Isles Unit # 2

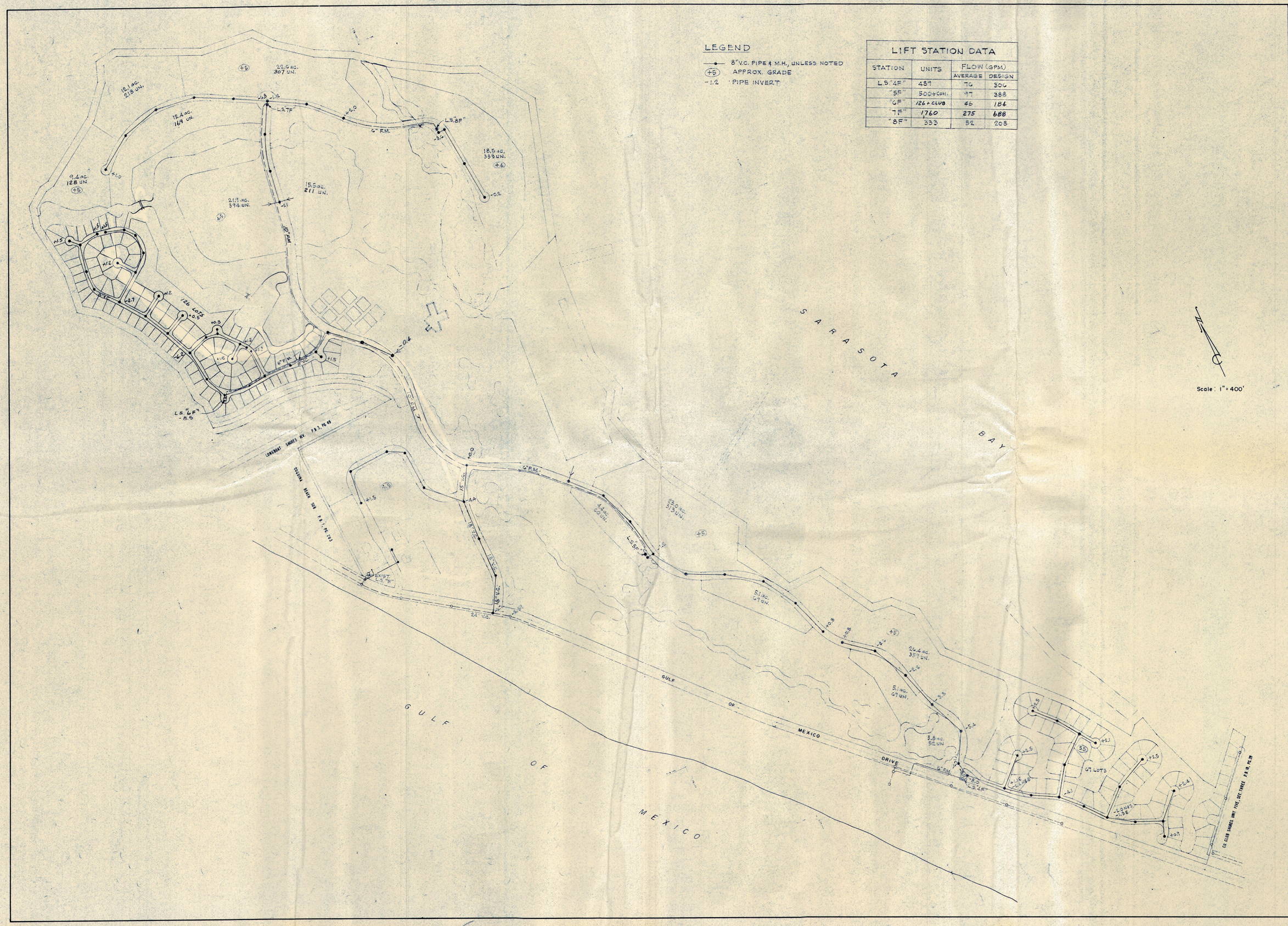
SUBMITTED AS PRELIM SUB DIVISION

REVIEW WAS FOR PRELIM SUBDIVISION ONLY

M+C 4-30

TOWN OF LONGBOAT KEY
REVIEWED BY:
BUILDING INSPECTOR
PLUMBING INSPECTOR
ELECTRICAL INSPECTOR
UTILITIES
PUBLIC WORKS
ENGINEERS
FIRE
Police

APR 02 1976
LONGBOAT KEY



LIFT STATION DATA

STATION	UNITS	FLOW (GPM) AVERAGE	FLOW (GPM) DESIGN
L.S. "4F"	489	76	306
"5F"	500+COM.	97	388
"6F"	126+CLUB	46	184
"7F"	1,760	275	688
"8F"	333	52	208

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

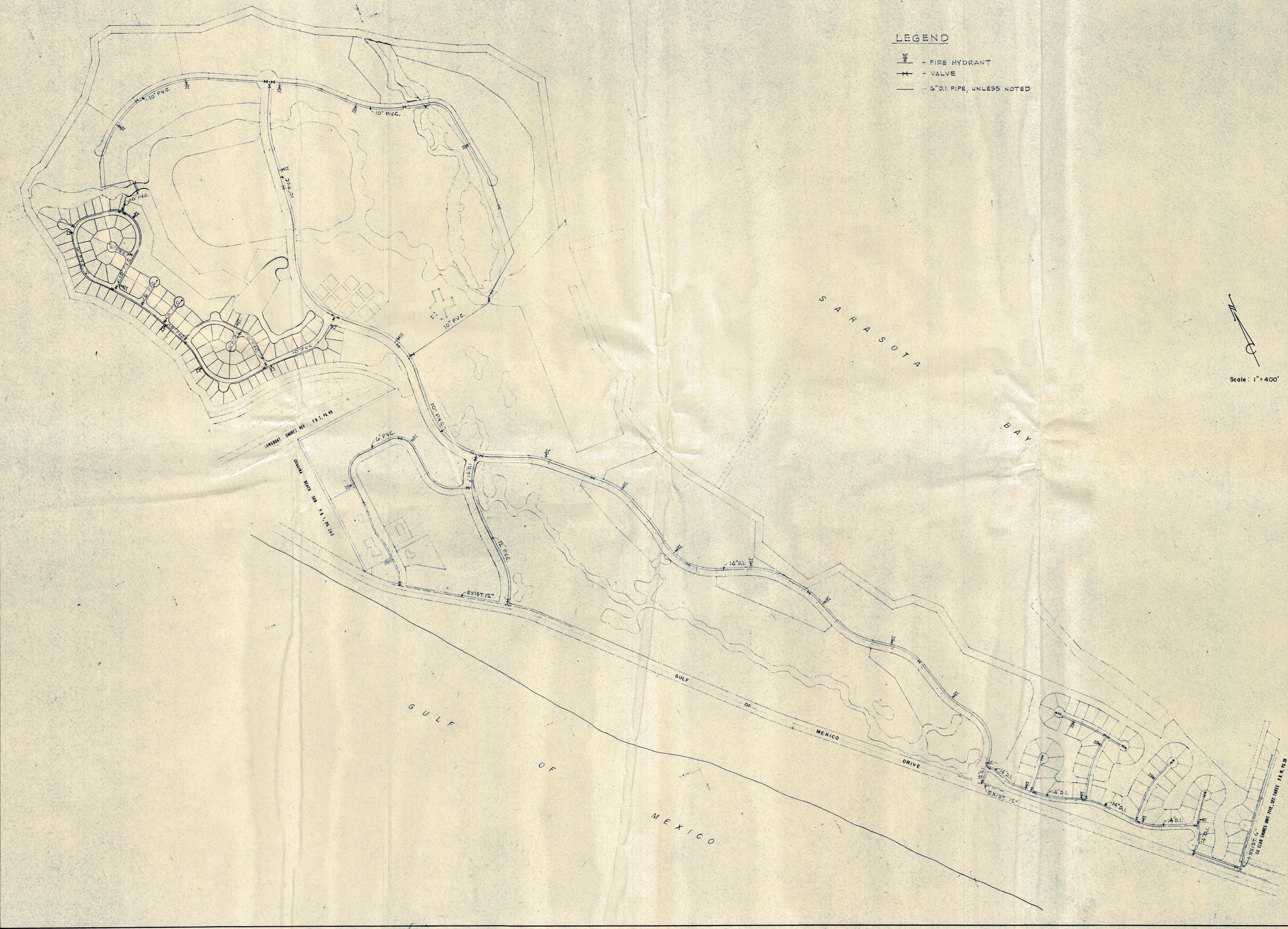
REVISED	DATE	DESCRIPTION	BY
	2-13-76	SHOW UNIT 2, SANITARY SEWERS & MISC. CHG.	C.H.
	12/17/75	Removed Alleys in Commercial Area	E.H.B.
	12/1/75	ADDED 8" V.C. PIPE IN COMM. AREA	G.L.B.

DATE	8/5/75
SCALE	1" = 400'
DESIGN	G.L.B.
DRAWN	G.L.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 388-2178

SANITARY SEWERAGE MASTER

DWRG. NO.
191-074



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CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

REVISED
2/17/75 Ramada Inn, Commercial Area
2/21/75 Revised Hope Island Loop

DATE 7/31/75
SCALE 1"=400'
DESIGN G.L.B.
DRAWN G.L.B.
CHECK

ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY PHONE 383-2178

WATER SUPPLY MASTER

DWRG. NO.
191-075

H.R.-A Area East of Mud Lake

	A	x	C	=	AC
H.R.-A portion	15.8		0.6		9.5
Golf Course portion	4.2		0.15		0.6
Pond	1.6		1.0		1.6
TOTAL	21.6		0.54		11.7

For Weirs #1, #2, #3, #4 (Sum of Areas)	A	x	C	=	AC
South Single Fam.	26		0.4		10.4
Seaplace Condo. (x-ing)	40		0.6		24.
Commercial Area	61.3		0.65		39.8
Boat Basin Comm. +	10.7		0.6		6.4
So. 80' Rd RW	11		0.75		8.2
M.F. Area Port. (A,B,C,D,E,F)	51.9		0.6		31.1
So. Golf Course	123.5		0.15		18.5
So. Golf Course Ponds	19.4*		1.0		19.4
Club Hse. + Parking	10.8		0.75		8.1
Part of 100' R.W.	6.5		0.75		4.9
Tennis Area	5.9		0.7		4.1
M.F. Area Port. G, L + Townhouse	39.9		0.6		23.9
M.F. Area Port. H.I.K. + HR-B	48.9		0.6		29.3
H.R.-C	20.0		0.6		12.0
M.F.-J	15.5		0.6		9.3
No. Golf Course	65.7		0.15		9.9
No. Golf Course Ponds	29.3*		1.0		29.3
TOTAL	586.3		0.49		288.6

*Ponds = 48.7 ac

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

REVISED	DATE	DESCRIPTION	BY
	5-26-76	REV. TO UNIT NO. 2 C.P.	W.J.G.
	12/17/75	Removed Alleys in Commercial Area	E.H.B.
	12/1/75	ADDED STREET WIDTHS & 20' FUTURE ADD. R.W.	G.L.B.

DATE	8-25-75
SCALE	1" = 400'
DESIGN	TJB
DRAWN	JS
CHECK	JS
APPROVED	[illegible]

ARVIDA CORPORATION
BAY ISLES

PHONE 368-2178

LONGBOAT KEY

STREET & DRAINAGE MASTER

DWRG. NO.
191-076

NOTE:

BICYCLE PATH AS SHOWN IS A CONCEPT BASED UPON PROVISIONAL DEVELOPMENT PLAN BY SUSAKI-WALKER. ACTUAL LOCATION IS SUBJECT TO APPROVAL AS VARIOUS PHASES ARE SUBMITTED.

Scale: 1" = 400'

BICYCLE PATH

PERIMETER CHANNEL

LONGBOAT SHORES REV. P.B.3, PG.49

ORIGINAL BLOCK 109, P.B.1, PG.183

BOAT BASIN

BOAT BASIN

PERIMETER CHANNEL

SARASOTA BAY

BAY ISLES BLVD.

BICYCLE PATH

OFFICAL BULKHEAD LINE TOWN OF LONGBOAT KEY

BICYCLE PATH

GULF OF MEXICO DRIVE

GULF OF MEXICO

HARBOR CAY LA.

HARBOR CAY PL.

HARBOR POINT RD.

HARBOR COVE CIR.

HARBOR SOUND DR.

CO. CLUB SHORES UNIT FIVE, SEC. THREE P.B. 18 PG. 28

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

REVISED	DATE	BY
2-3-76	CM	
1-13-75	E.M.B.	

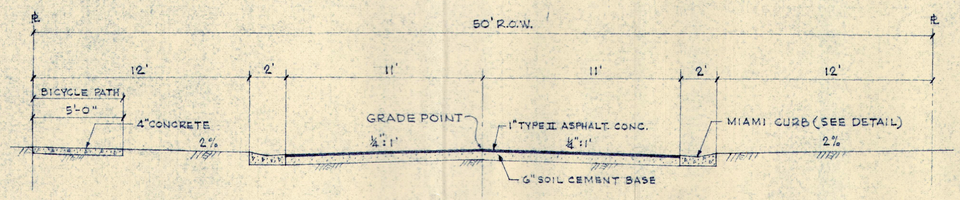
DATE: 12-5-74
SCALE: 1" = 400'
DESIGN:
DRAWN: E. H. B.
CHECK:
APPROVED:

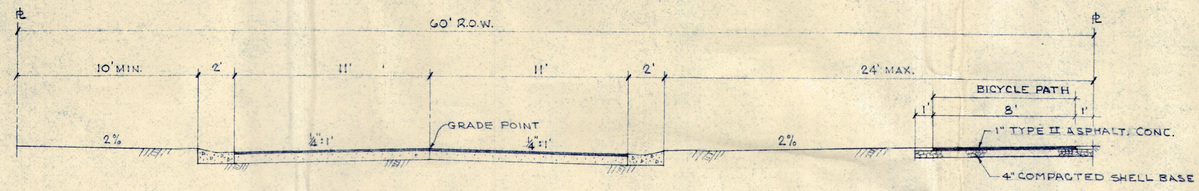
ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY

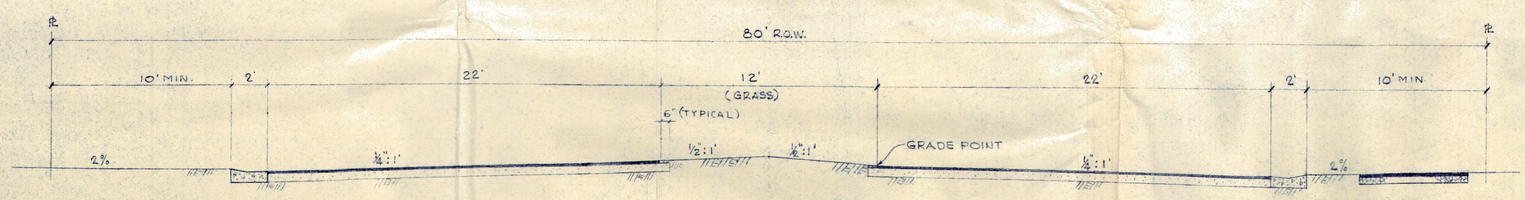
PHONE 388-2178

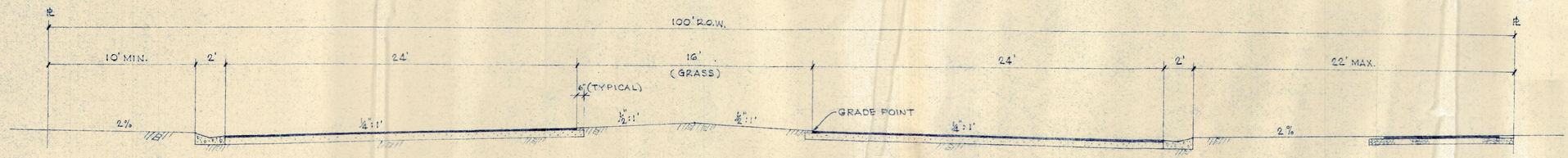
BICYCLE PATH MASTER

DWRG. NO.
191-077





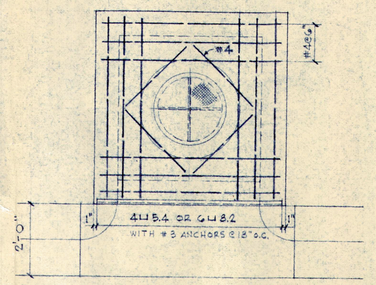




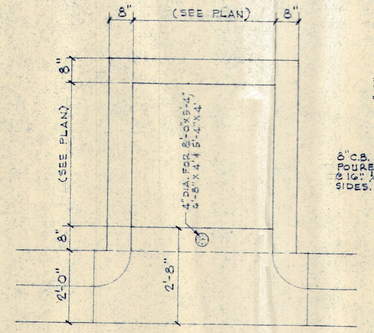
TYPICAL ROAD SECTIONS

SCALE: ¼"=1'-0"

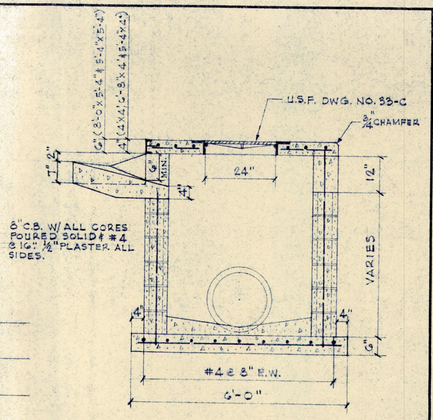
NOTE: 1. VARY ROAD ℄ LOCATION TO PRESERVE QUALITY TREES
2. SEE SASAKI-WALKER PLAN FOR LOCATION OF PEDESTRIAN & BICYCLE PATHS.



PLAN-COVER



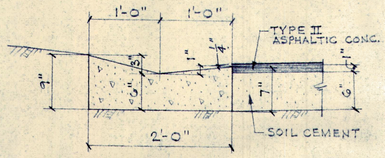
PLAN-COVER REMOVED



SECTION

TYPICAL CURB INLET
STANDARD

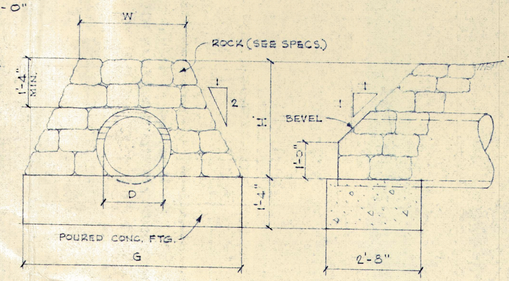
SCALE: ½" = 1'-0"



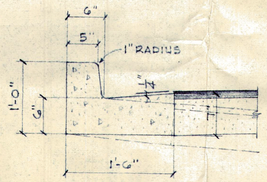
CONSTRUCTION JOINTS SHALL BE AT 10' o.c.
& ½" PREMOLDED EXP. JOINTS @ 40' o.c.

MIAMI CURB

SCALE: 1"=1'-0"



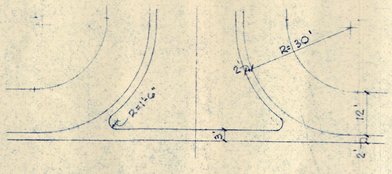
TYPICAL ENDWALL



TYPE "H" CURB

SCALE: 1"=1'-0"

DIMENSIONS			
D	G	W	H
18" OR 14"X 23"	6'-0"	2'-11"	3'-1"
21"	6'-6"	3'-2"	3'-4"
24" OR 19"X 30"	7'-0"	3'-5"	3'-7"
27"	8'-0"	4'-1"	3'-11"
30" OR 24"X 38"	9'-0"	4'-10"	4'-2"
33" OR 27"X 42"	10'-0"	5'-7"	4'-5"
36" OR 29"X 45"	11'-0"	6'-3"	4'-9"
42" OR 34"X 53"	12'-0"	6'-9"	5'-3"
48" OR 38"X 60"	14'-0"	8'-2"	5'-10"
54" OR 43"X 68"	16'-0"	9'-8"	6'-4"
60" OR 48"X 76"	17'-0"	10'-1"	6'-11"



VALLEY CROSSING

SCALE: 1"=20'

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SARASOTA FLORIDA

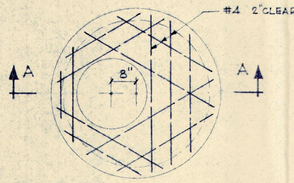
REVISED	DATE	BY
7-26-76	ADDED BICYCLE PATH TO ROW	J.L.B.
8-18-76	ADDED DETAIL OF CURB INLET	J.L.B.
9-15-76	REVISED Rd Sec. No. 3 (Meth. Min.)	J.L.B.
11/12/76	REVISED BICYCLE PATH DETAIL	J.L.B.

DATE	7/7/75
SCALE	AS NOTED
DESIGN	G.L.B.
DRAWN	G.L.B.
CHECK	
APPROVED	

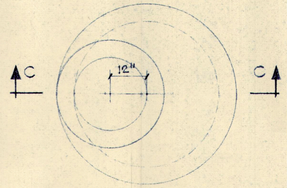
ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 383-2178

STREET & DRAINAGE DETAILS

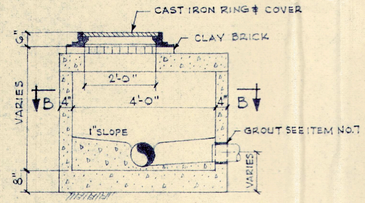
DWRG. No.
191-078



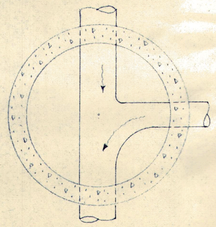
PLAN



PLAN

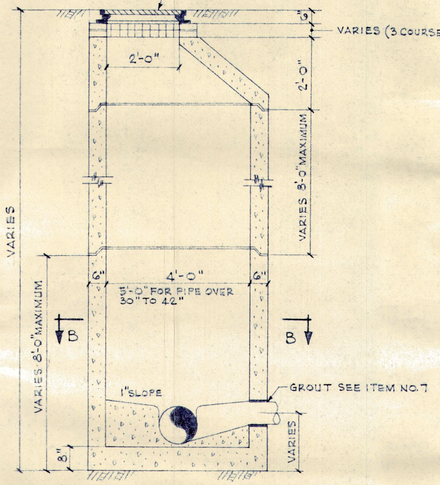


SECTION A-A



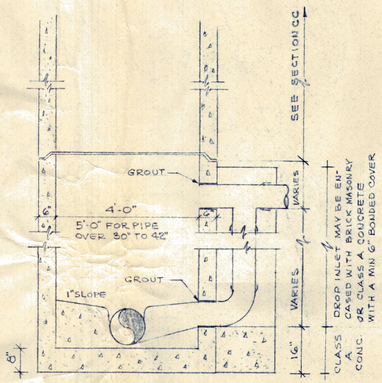
SECTION B-B

FOR DEPTHS 5'-0" & UNDER



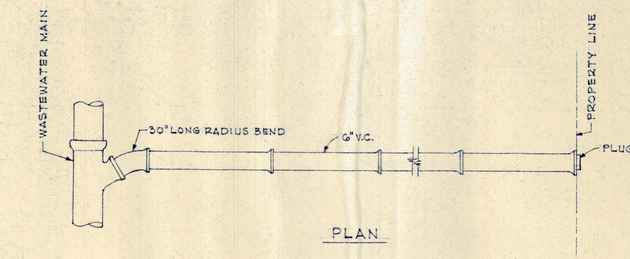
SECTION C-C

FOR DEPTHS OVER 5'-0"

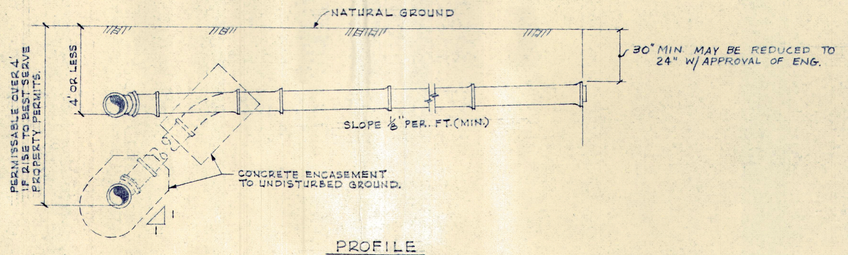


SECTION

DROP MAN HOLE

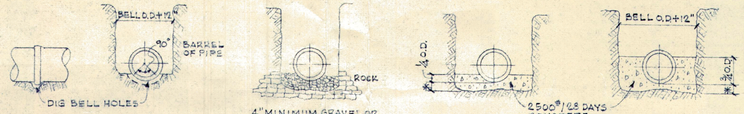


PLAN



PROFILE

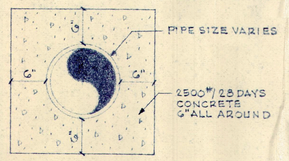
TYPICAL SERVICE CONNECTION



TRENCH IN EARTH | TRENCH IN ROCK | LOW CRADLE | HIGH CRADLE

* 3" MINIMUM FOR PIPES 24" AND SMALLER, 4" FOR LARGER PIPE.

TYPICAL EXCAVATION & PIPE SETTINGS



CONCRETE ENCASEMENT

MANHOLE SPECIFICATIONS

1. MANHOLES SHALL COMPLY WITH A.S.T.M. SPECIFICATION C-478, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
2. CONCRETE SHALL BE 4,000 P.S.I./ 28 DAY MINIMUM STRENGTH, WITH TYPE II CEMENT.
3. HEAVY DUTY MANHOLE RING (6" HIGH) AND COVER SHALL BE TYPE B (DWG. NO. 24) WITH FRAME (200 LB.) AND COVER (130 LB.) WITH BLIND PICKHOLE, AS MANUFACTURED BY U.S. FOUNDARY (CORR, MIAMI, FLA.), OR APPROVED EQUAL.
4. REINFORCING PER A.S.T.M. SPEC. C-478, LATEST REV.
5. LEVELING BRICKS TO BE CLAY ; MORTAR TO BE 2 PARTS CLEAN SAND AND 1 PART CEMENT WITH NO MORE THAN ¼ PART HYDRATED LIME, WITH JOINTS FULL & STRUCK FLUSH.
6. NO STEPS SHALL BE USED.
7. COMPLETELY FILL SPACE BETWEEN PIPES AND MANHOLE WALL WITH CEMENT MORTAR AFTER PIPE IS SET WITH 15 LB. EMBECO PER 100 LB. CEMENT.

GENERAL NOTES:

1. WHERE WATER & WASTEWATER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE WASTEWATER PIPE SHALL BE OF EITHER CAST IRON OR CONCRETE ENCASED VITRIFIED CLAY, (20' MIN.) CENTERED ON THE POINT OF CROSSING.
2. PARALLEL WATER & WASTEWATER MAINS SHALL MAINTAIN A HORIZONTAL SEPARATION OF AT LEAST 10' WHERE PRACTICAL.

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

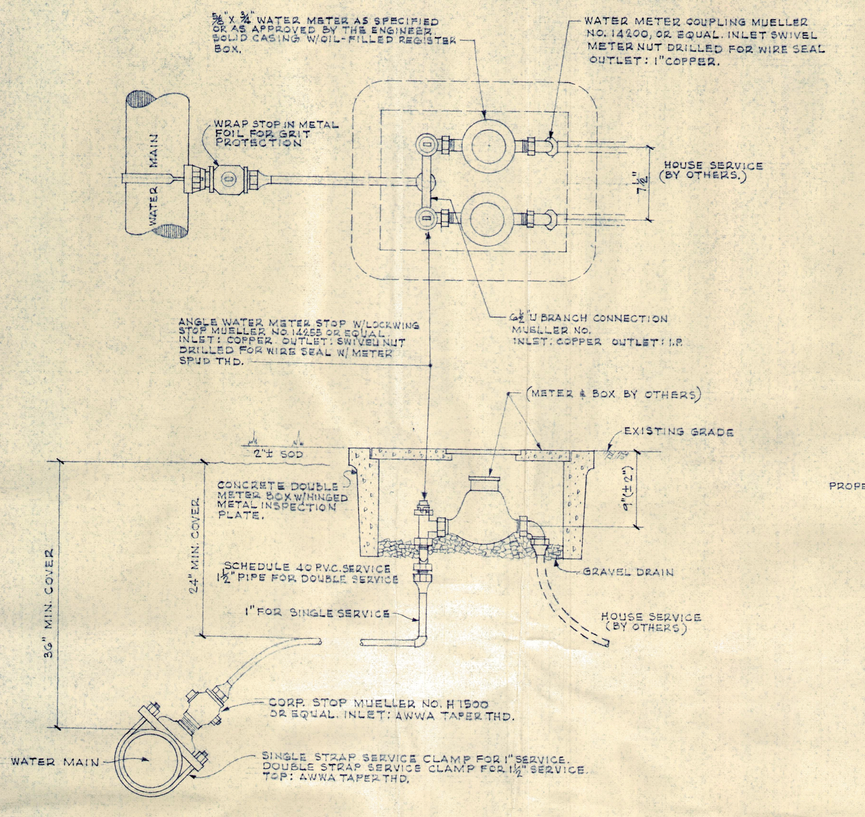
DESIGN	DATE	BY	DESCRIPTION
G.L.B.	2-16-76	GLB	ADD CONC. SERV. DETAILS
G.L.B.	11/20/75	G.L.B.	REVISED SECTION A-A, B-B & C-C

DATE	7/18/75
SCALE	AS NOTED
DESIGN	G.L.B.
DRAWN	G.L.B.
CHECK	
APPROVED	

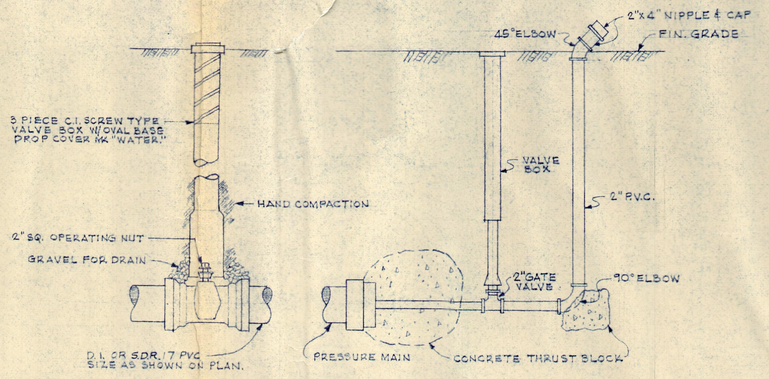
ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 383-2178

SANITARY SEWERAGE DETAILS

DWG. No.
191-079

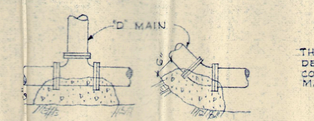


TYPICAL METERED SERVICE DETAILS



VALVE DETAIL

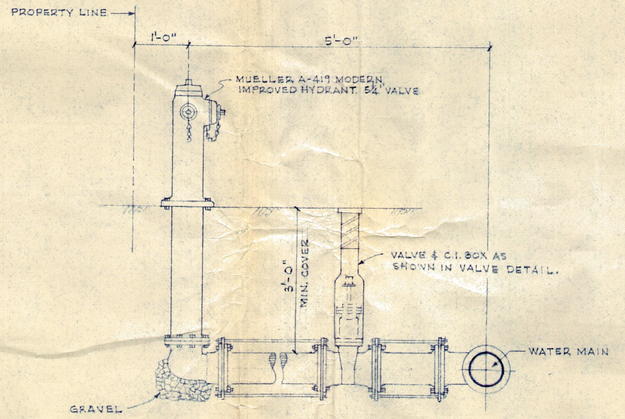
TYPICAL BLOWOFF DETAIL



THRUST BLOCK AREAS IN SQ. FT.

PIPESIZE	TEE	90° BEND	45° BEND	22½° BEND
	1.5	2.0	1.0	1.0
	4.0	5.5	3.0	1.5
	7.0	10.0	5.5	3.0
	10.0	14.0	7.0	5.0

PRESSURE MAIN THRUST BLOCKS



TYPICAL FIRE HYDRANT

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS
SARASOTA FLORIDA

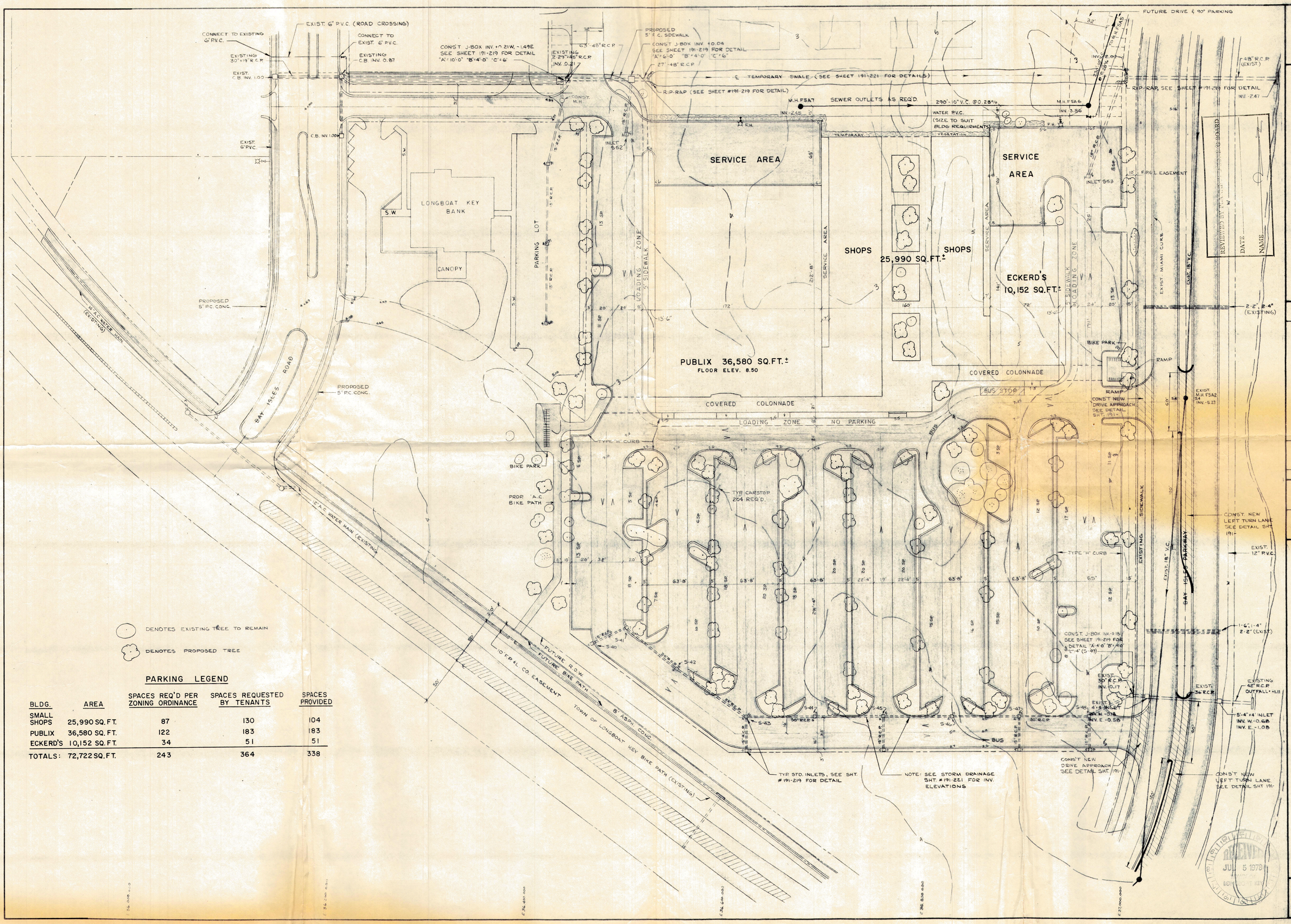
DESIGN	DATE	DESCRIPTION	BY
	2-24-76	REVISED WATER MAINS	GLB
	12/17/75	ADDED FIRE HYDRANT LOCATION	GLB
	11/21/75	REVISED DETAILS & METERED SERVICE DETAILS	GLB

DATE 7/21/75
SCALE AS NOTED
DESIGN G.L.B.
DRAWN G.L.B.
CHECK
APPROVED

ARVIDA CORPORATION
BAY ISLES
LONGBOAT KEY
PHONE 383-2178

WATER SUPPLY DETAILS

DWRG. No.
191-080



PARKING LEGEND

BLDG.	AREA	SPACES REQ'D PER ZONING ORDINANCE	SPACES REQUESTED BY TENANTS	SPACES PROVIDED
SMALL SHOPS	25,990 SQ. FT.	87	130	104
PUBLIX	36,580 SQ. FT.	122	183	183
ECKERD'S	10,152 SQ. FT.	34	51	51
TOTALS:	72,722 SQ. FT.	243	364	338

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

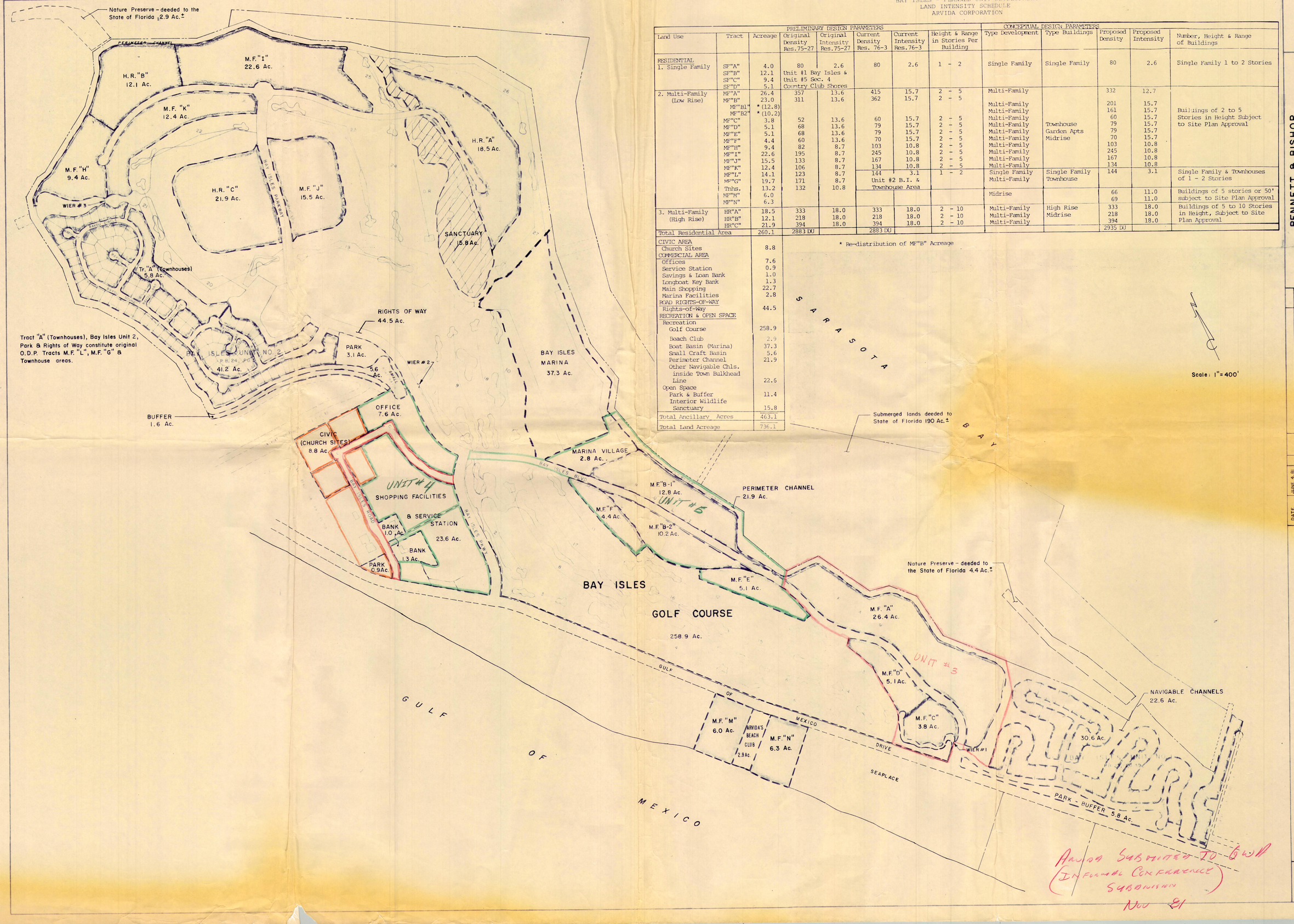
APPROVED BY

DATE	DESCRIPTION	BY
9-10-78	TEMPORARY WIDTH NOW 13'-6" E & W SIDE	
3-29-78	WIDENED TERRACE TO 15'-6" E. & W. SIDE OF BLDG.	
3-7-78	DELETED W. ENTRANCE RD. ADDED BIKE PATH	

SCALE	1" = 40'
DESIGN	
DRAWN	R.A.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES

DWRG. No.
191-216



BAY ISLES - PLANNED UNIT DEVELOPMENT
LAND INTENSITY SCHEDULE
ARVIDA CORPORATION

Land Use	Tract	Acreage	PRELIMINARY DESIGN PARAMETERS: Original Density Res.75-27	Original Intensity Res.75-27	Current Density Res. 76-3	Current Intensity Res.76-3	Height & Range in Stories Per Building	CONCEPTUAL DESIGN PARAMETERS: Type Development	Type Buildings	Proposed Density	Proposed Intensity	Number, Height & Range of Buildings
RESIDENTIAL												
1. Single Family	SF"A"	4.0	80	2.6	80	2.6	1 - 2	Single Family	Single Family	80	2.6	Single Family 1 to 2 Stories
	SF"B"	12.1	Unit #1 Bay Isles &									
	SF"C"	9.4	Unit #5 Sec. 4									
	SF"D"	5.1	Country Club Shores									
2. Multi-Family (Low Rise)	MF"A"	26.4	357	13.6	415	15.7	2 - 5	Multi-Family		332	12.7	
	MF"B"	23.0	311	13.6	362	15.7	2 - 5					
	MF"B1"	* (12.8)						Multi-Family		201	15.7	
	MF"B2"	* (10.2)						Multi-Family		161	15.7	Buildings of 2 to 5
	MF"C"	3.8	52	13.6	60	15.7	2 - 5	Multi-Family		60	15.7	Stories in Height Subject
	MF"D"	5.1	68	13.6	79	15.7	2 - 5	Multi-Family	Townhouse	79	15.7	to Site Plan Approval
	MF"E"	5.1	68	13.6	79	15.7	2 - 5	Multi-Family	Garden Apts	79	15.7	
	MF"F"	4.4	60	13.6	70	15.7	2 - 5	Multi-Family	Midrise	70	15.7	
	MF"H"	9.4	82	8.7	103	10.8	2 - 5	Multi-Family		103	10.8	
	MF"I"	22.6	195	8.7	245	10.8	2 - 5	Multi-Family		245	10.8	
	MF"J"	15.5	133	8.7	167	10.8	2 - 5	Multi-Family		167	10.8	
	MF"K"	12.4	106	8.7	134	10.8	2 - 5	Multi-Family		134	10.8	
	MF"L"	14.1	123	8.7	144	3.1	1 - 2	Single Family	Single Family	144	3.1	Single Family & Townhouses
	MF"G"	19.7	171	8.7	Unit #2 B.I. &			Multi-Family	Townhouse			of 1 - 2 Stories
	Tnhs.	13.2	132	10.8	Townhouse Area							
	MF"M"	6.0						Midrise		66	11.0	Buildings of 5 stories or 50'
	MF"N"	6.3								69	11.0	subject to Site Plan Approval
3. Multi-Family (High Rise)	HR"A"	18.5	333	18.0	333	18.0	2 - 10	Multi-Family	High Rise	333	18.0	Buildings of 5 to 10 Stories
	HR"B"	12.1	218	18.0	218	18.0	2 - 10	Multi-Family	Midrise	218	18.0	in Height, Subject to Site
	HR"C"	21.9	394	18.0	394	18.0	2 - 10	Multi-Family		394	18.0	Plan Approval
Total Residential Area		260.1	2883 DU		2883 DU					2935 DU		
CIVIC AREA												
Church Sites		8.8										
COMMERCIAL AREA												
Offices		7.6										
Service Station		0.9										
Savings & Loan Bank		1.0										
Longboat Key Bank		1.3										
Main Shopping		22.7										
Marina Facilities		2.8										
ROAD RIGHTS-OF-WAY												
Rights-of-Way		44.5										
RECREATION & OPEN SPACE												
Recreation												
Golf Course		258.9										
Beach Club		2.9										
Boat Basin (Marina)		37.3										
Small Craft Basin		5.6										
Perimeter Channel		21.9										
Other Navigable Chls. inside Town Bulkhead Line		22.6										
Open Space												
Park & Buffer		11.4										
Interior Wildlife Sanctuary		15.8										
Total Ancillary Acres		463.1										
Total Land Acreage		736.1										

* Re-distribution of MF"B" Acreage

Arvida Subdivision to GWW
(Informal Conference Submission
Nov 81

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS
SARASOTA FLORIDA
PHONE 388-2178
LONGBOAT KEY

APPROVED BY

BY	DESCRIPTION	DATE
	REVISED	

DATE JUNE 4, 81
SCALE 1"=400'
DESIGN
DRAWN
CHECK
APPROVED

ARVIDA CORPORATION
BAY ISLES
DIAGRAMATIC SITE PLAN

DWRG. NO.
191-237B

Exempt from Public Review

Box 98013586

H.R.-A Area East of Mud Lake

	A	x C	= AC
H.R.-C Portion	15.8	0.6	9.5
Golf Course Portion	4.2	0.15	0.6
Pond	1.6	1.0	1.6
TOTAL	21.6	0.54	11.7

For Weirs #1, #2, #3, (Sum of Areas)	A	x C	= AC
South Single Family	26	0.4	10.4
Seaplace Condo (x-ing)	40	0.6	24.
Commercial Area	61.3	0.65	39.8
Boat Basin Comm. +	10.7	0.6	6.4
So. 80' Road RW	11	0.75	8.2
M.F. Area Port. (A,B,C,D,E,F)	51.9	0.6	31.1
So. Golf Course	123.5	0.15	18.5
So. Golf Course Ponds	19.4*	1.0	19.4
Club Hse. + Parking	10.8	0.75	8.1
Part of 100' R.W.	6.5	0.75	4.9
Tennis Area	5.9	0.7	4.1
North Single Family + Townhouse	39.9	0.6	23.9
M.F. Area Port. H.I.K. + HR-B	48.9	0.6	29.3
H.R.-C	20.0	0.6	12.0
M.F.-J	15.5	0.6	9.3
No. Golf Course	65.7	0.15	9.9
No. Golf Course Ponds	29.3*	1.0	29.3
TOTAL	586.3	0.49	288.6

*Ponds = 48.7 ac

Scale: 1" = 400'

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

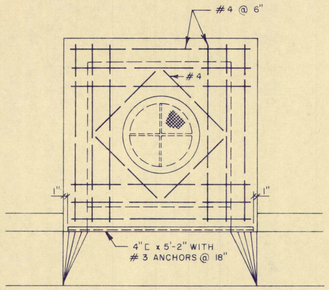
REVISED	DATE	DESCRIPTION	BY
	9-22-81	ARVIDA'S OFFICE SITE ADDED DRAINAGE REV.	

DATE	9-12-80
SCALE	1"=400'
DESIGN	T.J.B.
DRAWN	R.A.B.
CHECK	
APPROVED	

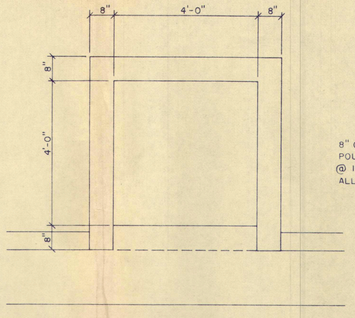
ARVIDA CORPORATION
BAY ISLES
STREET & DRAINAGE MASTER

LONGBOAT KEY PHONE 388-2178

DWRG. NO.
191-363



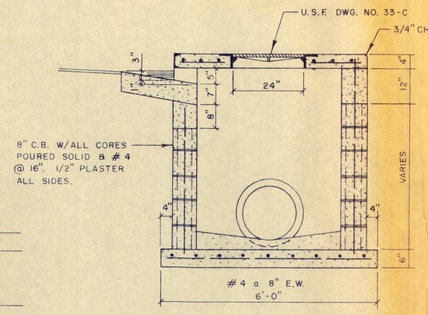
PLAN - COVER



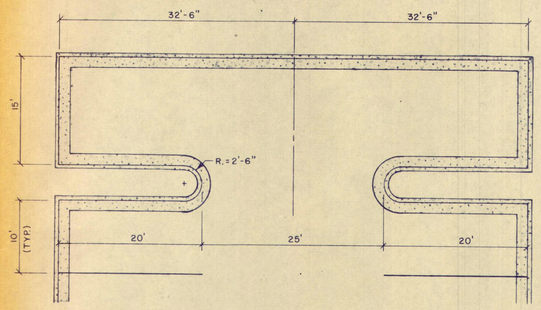
PLAN - COVER REMOVED

TYPICAL CURB INLET

SCALE: 1/2" = 1'-0"

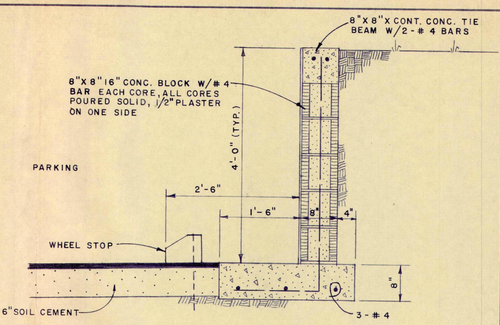


SECTION



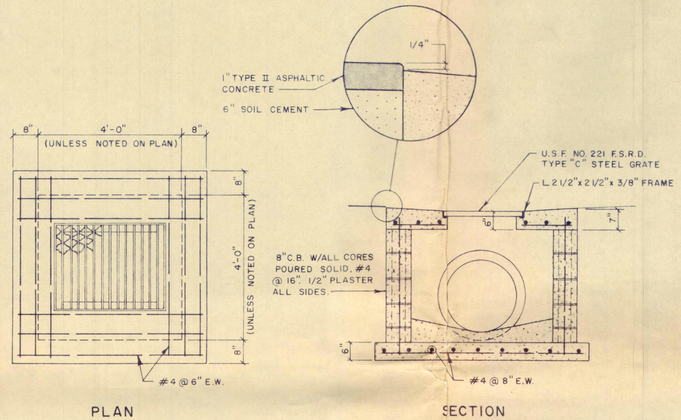
TURNAROUND DETAIL "A"

SCALE: 1" = 10'-0"



RETAINING WALL DETAIL

SCALE 3/4" = 1'-0"

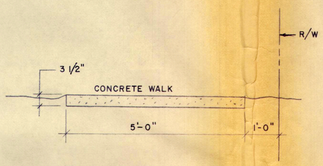


PLAN

SECTION

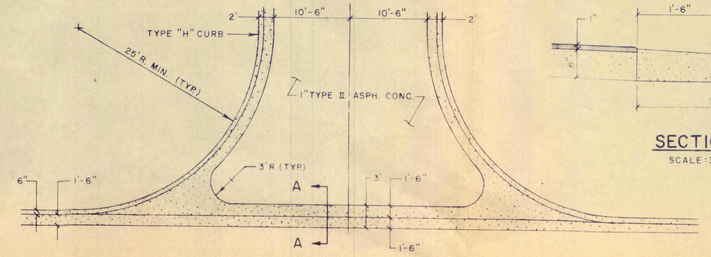
TYPICAL DROP INLET

SCALE: 1/2" = 1'-0"



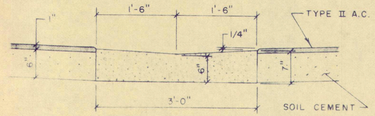
SIDEWALK DETAIL

SCALE 1/2" = 1'-0"



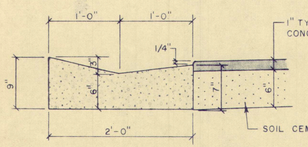
VALLEY GUTTER DETAIL

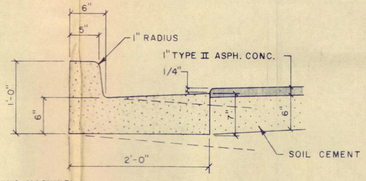
SCALE: 1" = 10'-0"



SECTION A-A

SCALE: 3/4" = 1'-0"

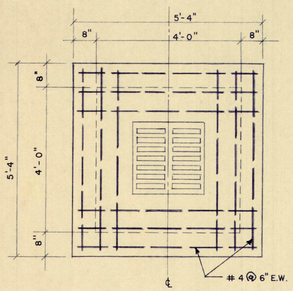




CURBS POURED WITH CONTINUOUS PAVING MACHINE SHALL HAVE JOINTS SAW CUT EVERY 10' FOLLOWING COMPLETION OF POUR. CONSTRUCTION JOINTS SHALL BE 10' O.C. AND 1/2" PREMOLDED EXP. JOINTS AT 40' O.C.

TYPE "K" CURB

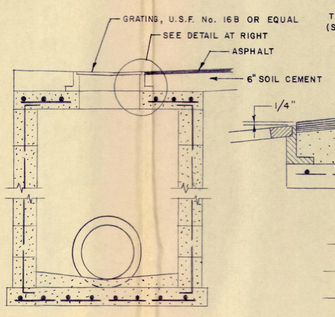
SCALE: 1" = 1'-0"



PLAN

TYPE "H" CURB

SCALE: 1" = 1'-0"



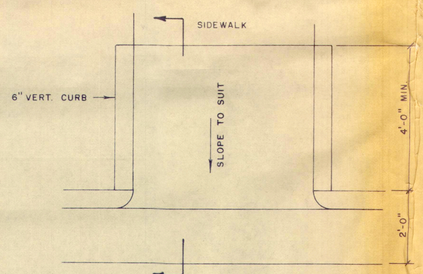
SECTION

NOTE:

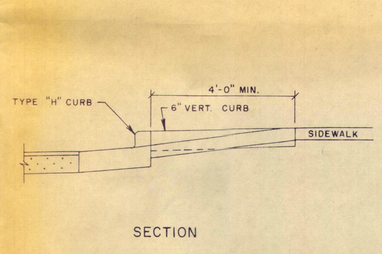
CONSTRUCTION DETAILS ARE THE SAME AS FOR STORM SEWER MANHOLE EXCEPT AS NOTED FOR COVER.

VALLEY GUTTER INLET

NOT TO SCALE



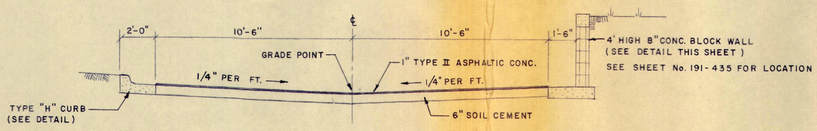
PLAN



SECTION

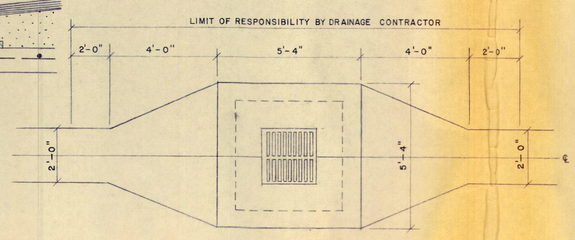
BICYCLE RAMP DETAIL

SCALE: 1/2" = 1'-0"



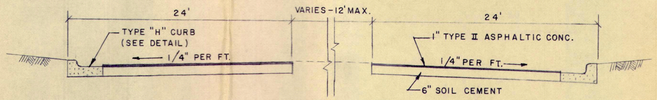
PARKING ACCESS ROAD

SCALE 1/4" = 1'-0"



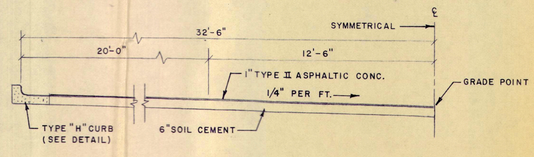
TYPICAL VALLEY CURB INLET IN VALLEY GUTTER

NOT TO SCALE



DIVIDED ROAD SECTION - ENTRANCE

NOT TO SCALE



PARKING SECTION

SCALE 1/4" = 1'-0"

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

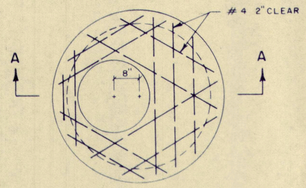
APPROVED BY

BY	DESCRIPTION	DATE
N.A.L.	REVISED PAVING & DRAINAGE DETAILS	4-23-81

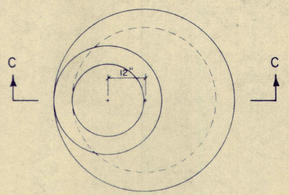
DATE 8-17-81
SCALE AS SHOWN
DESIGN
DRAWN N.A.L.
CHECK
APPROVED

ARVIDA CORPORATION
ARVIDA OFFICE BUILDING SITE
PAVING & DRAINAGE DETAILS

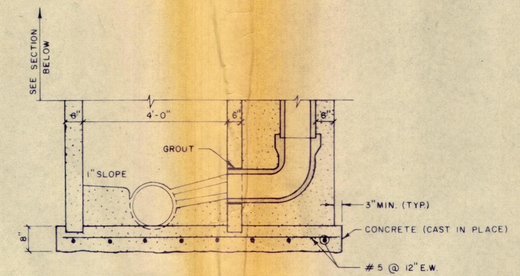
DWRG. NO.
191 - 453



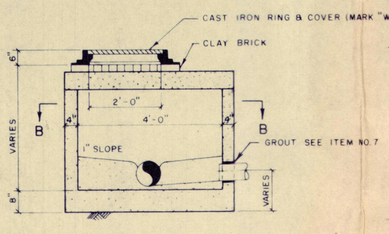
PLAN



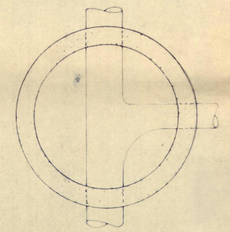
PLAN



ALTERNATE SECTION



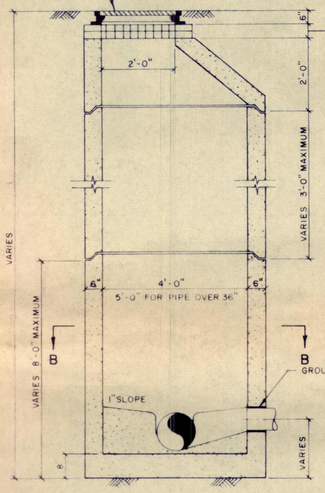
SECTION A-A



SECTION B-B

FOR DEPTHS 5'-0" & LESS

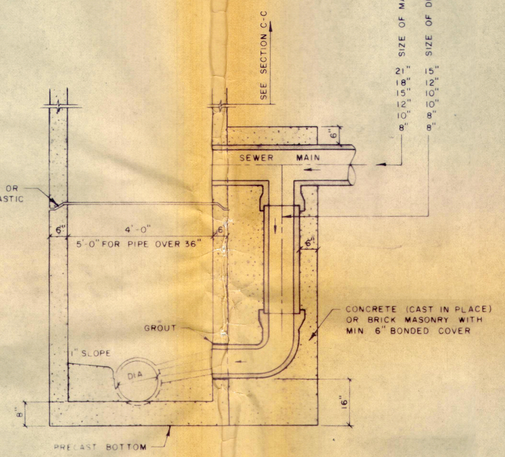
SCALE 1/2"=1'-0"



SECTION C-C

FOR DEPTHS OVER 5'-0"

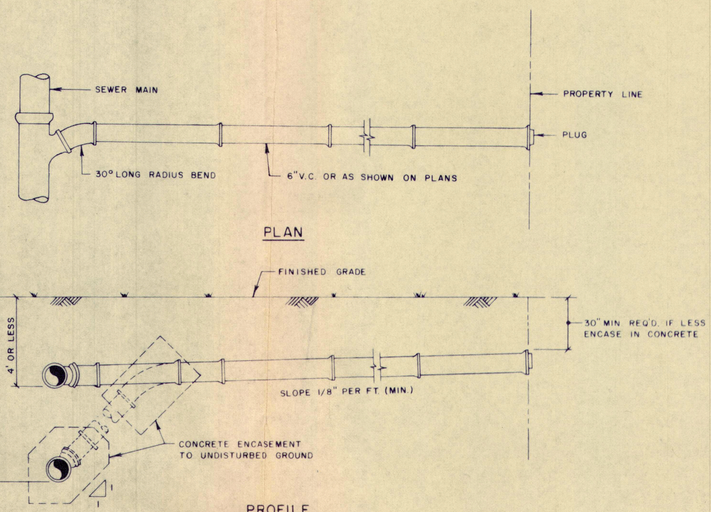
SCALE 1/2"=1'-0"



SECTION

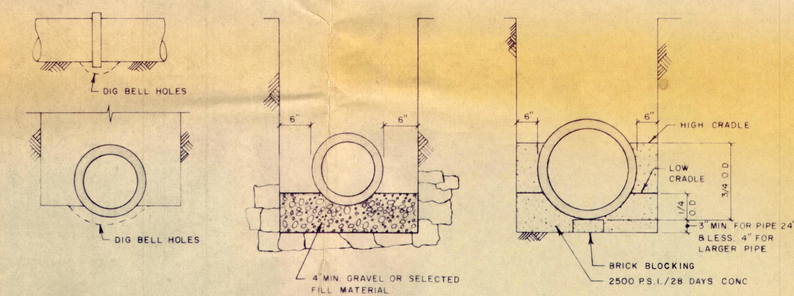
DROP MANHOLE

SCALE 1/2"=1'-0"



TYPICAL SERVICE CONNECTION

NO SCALE



TRENCH IN EARTH | TRENCH IN ROCK | CONCRETE CRADLES

TYPICAL EXCAVATION & PIPE SETTINGS

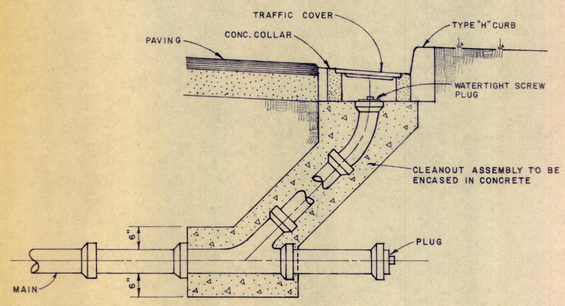
NO SCALE

MANHOLE SPECIFICATIONS:

1. MANHOLES SHALL COMPLY WITH SPECIFICATION C-478, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
2. CONCRETE SHALL BE 4,000 P.S.I./28 DAY MINIMUM STRENGTH, WITH TYPE V CEMENT.
3. HEAVY DUTY WATERPROOF MANHOLE FRAME AND COVER (7 1/2" HIGH) SERIES R-1916-D 370 LBS. WITH GASKET SEAL AND 4 COVER BOLTS, AS MANUFACTURED BY NEENAH FOUNDRY COMPANY, NEENH, WISCONSIN, OR APPROVED EQUAL.
4. REINFORCING PER A.S.T.M. SPEC C-478, LATEST REV.
5. LEVELING BRICKS TO BE CLAY, MORTAR TO BE 2 PARTS CLEAN SAND AND 1 PART CEMENT WITH NO MORE THAN 1/4 PART HYDRATED LIME, WITH JOINTS FULL & STRUCK FLUSH.
6. NO STEPS SHALL BE USED.
7. COMPLETELY FILL SPACE BETWEEN PIPES AND MANHOLE WALL WITH CEMENT MORTAR AFTER PIPE IS SET WITH 15 LB. EMBECO PER 100 LB. CEMENT.

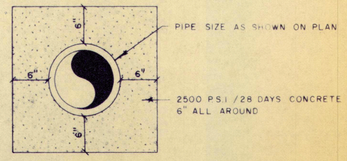
GENERAL NOTES:

1. WHERE WATER & WASTEWATER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE WASTEWATER PIPE SHALL BE OF EITHER CAST IRON OR CONCRETE ENCASED VITRIFIED CLAY, (20' MIN.) CENTERED ON THE POINT OF CROSSING.
2. PARRALLEL WATER & WASTEWATER MAINS SHALL MAINTAIN A HORIZONTAL SEPARATION OF AT LEAST 10' WHERE PRACTICAL.



CLEANOUT DETAIL

NO SCALE



CONCRETE ENCASEMENT

NO SCALE

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS
SARASOTA FLORIDA

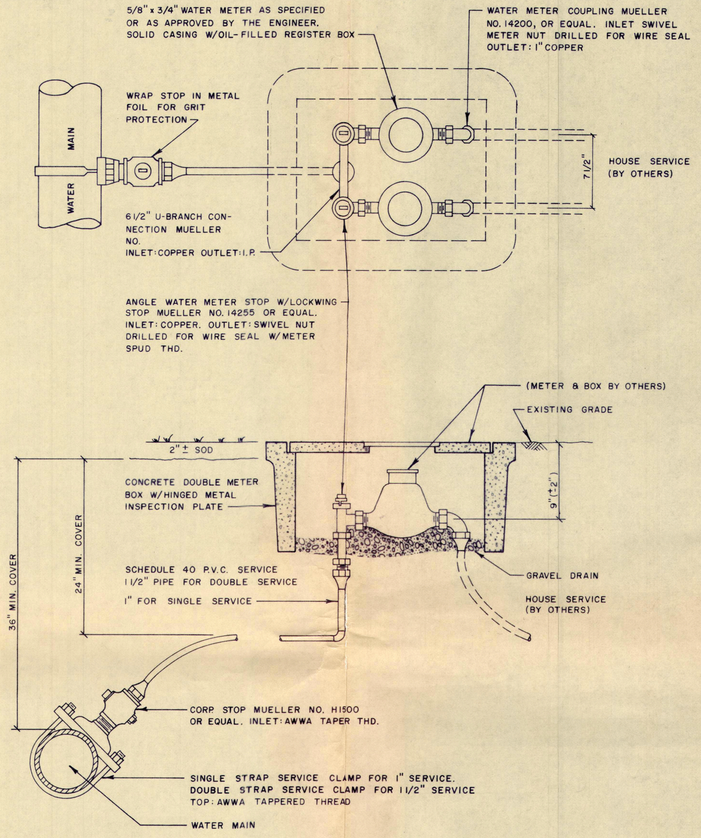
APPROVED BY

REVISED			BY
7-25-80	REVISED CLEANOUT DETAIL		
7-7-81	CHANGED WALL SEP. 20'-0" C.O. DETAIL		
DATE	DESCRIPTION		

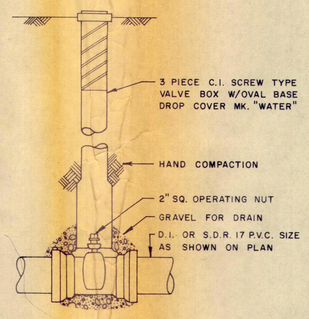
DATE	9-4-80
SCALE	AS SHOWN
DESIGN	W.F.B.
DRAWN	R.A.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES CIVIC COMMERCIAL CENTER
SANITARY SEWER DETAILS

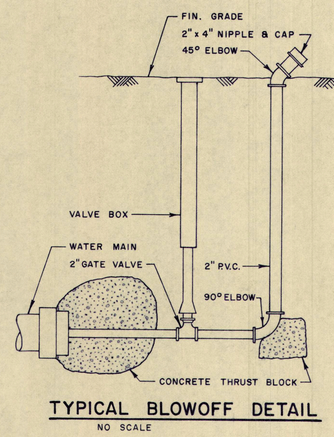
DRWG. NO.
191-454



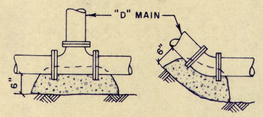
TYPICAL METERED SERVICE DETAILS
NO SCALE



VALVE DETAIL
NO SCALE



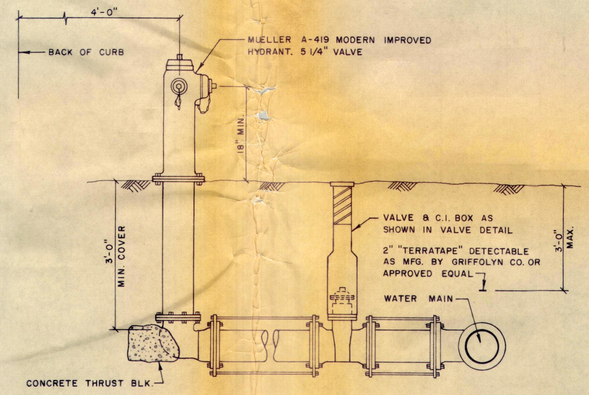
TYPICAL BLOWOFF DETAIL
NO SCALE



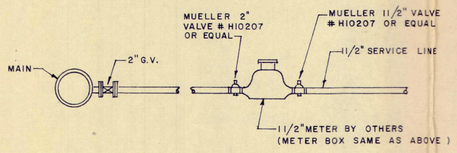
AREAS DETERMINED BY CONC. CONTACT WITH UNDISTURBED MATERIAL

THRUST BLOCK AREAS IN SQ. FT.				
SIZE	TEE	90° BEND	45° BEND	22 1/2° BEND
4"	1.5	2.0	1.0	1.0
6"	4.0	5.5	3.0	1.5
8"	7.0	10.0	5.0	3.0
10"	10.0	14.0	7.0	5.0

WATER MAIN THRUST BLOCKS



TYPICAL FIRE HYDRANT DETAIL
NO SCALE



TYPICAL 2" SERVICE DETAIL
NO SCALE

BENNETT & BISHOP
CONSULTING ENGINEERS & SURVEYORS SARASOTA FLORIDA

APPROVED BY

REVISED			
DATE	DESCRIPTION	BY
2-1-80	REV. TYP 4" SERV. & TYP METERED SERV	DRH
4-24-80	ADD W.M. CROSSING DETAIL	RAB
12-19-71	ADD TYPICAL 4" SERVICE DETAIL	V.W.

DATE	8-17-81
SCALE	AS SHOWN
DESIGN	
DRAWN	R.A.B.
CHECK	
APPROVED	

ARVIDA CORPORATION
BAY ISLES CIVIC COMMERCIAL CENTER

WATER SUPPLY DETAILS

DRWG. NO.
191-455