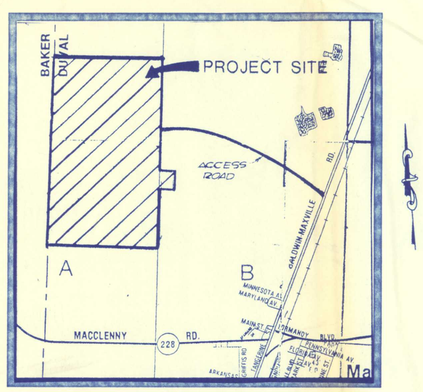
PHASES I AND II
"AS - BUILTS"
OF
TRAIL RIDGE LANDFILL
FOR
TRAIL RIDGE LANDFILL INC.



VICINITY MAP

SCALE : 1" = 3000'

S. S. S. 4 3 2 INC.

SUNSHINE STATE SURVEYORS INC.

SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH
JACKSONVILLE, FLORIDA 32216
(904) 642-8550

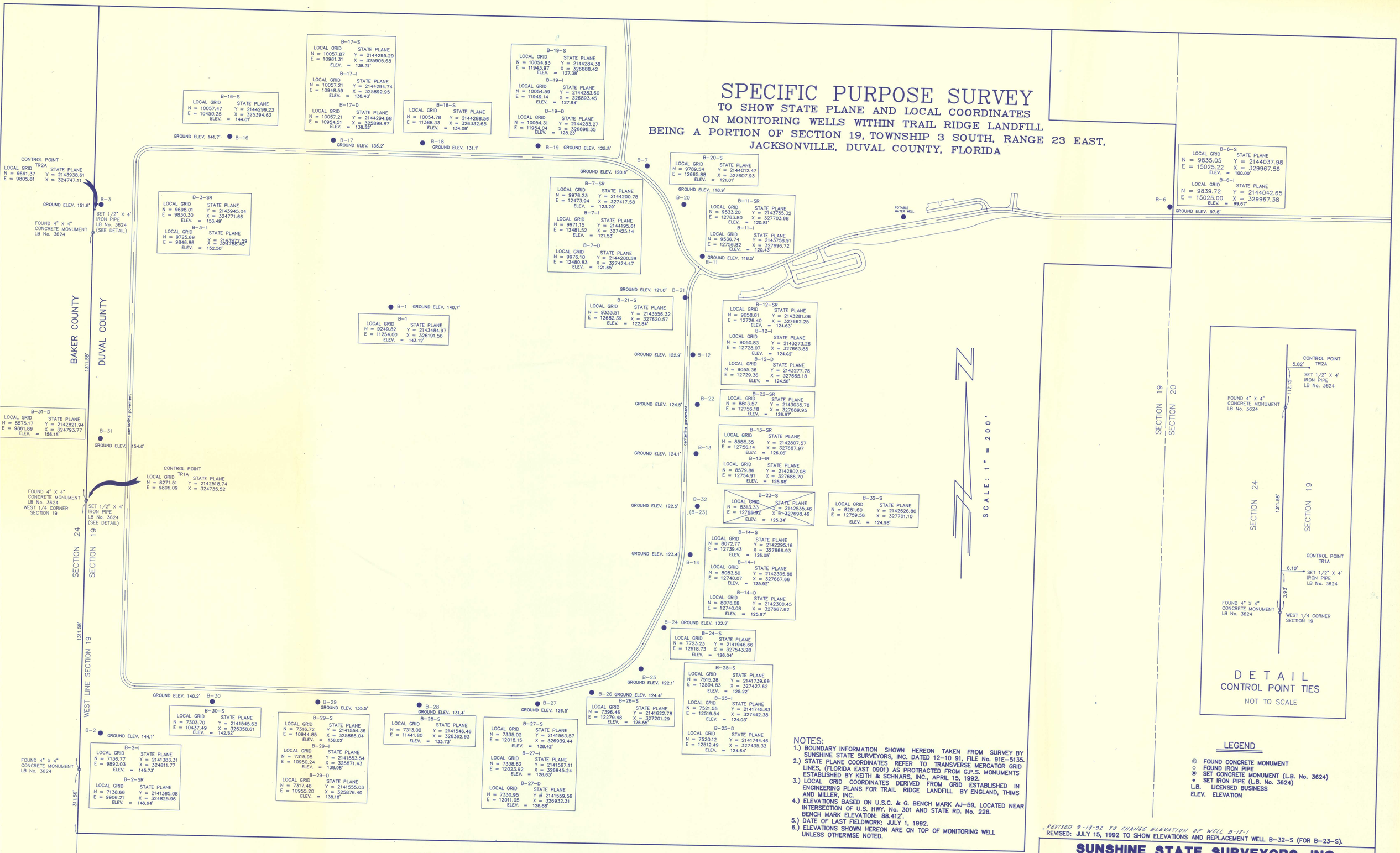
UPDATED: JANUARY, 1993
UPDATED: DECEMBER, 1992
DATE: SEPTEMBER, 1992

INDEX OF DRAWINGS

SPECIFIC PURPOSE SURVEY

TO SHOW STATE PLANE AND LOCAL COORDINATES ON MONITORING WELLS WITHIN TRAIL RIDGE LANDFILL

BEING A PORTION OF SECTION 19, TOWNSHIP 3 SOUTH, RANGE 23 EAST, JACKSONVILLE, DUVAL COUNTY, FLORIDA



NOTES:

1.) BOUNDARY INFORMATION SHOWN HEREON TAKEN FROM SURVEY BY SUNSHINE STATE SURVEYORS, INC. DATED 12-10 91, FILE No. 91E-5135.
2.) STATE PLANE COORDINATES REFER TO TRANSVERSE MERCATOR GRID LINES, (FLORIDA EAST 0901) AS PROTRACTED FROM G.P.S. MONUMENTS ESTABLISHED BY KEITH & SCHNARS, INC., APRIL 15, 1992.
3.) LOCAL GRID COORDINATES DERIVED FROM GRID ESTABLISHED IN ENGINEERING PLANS FOR TRAIL RIDGE LANDFILL BY ENGLAND, THIMS AND MILLER, INC.
4.) ELEVATIONS BASED ON U.S.C. & G. BENCH MARK AJ-59, LOCATED NEAR INTERSECTION OF U.S. HWY. No. 301 AND STATE RD. No. 228. BENCH MARK ELEVATION: 88.412'.
5.) DATE OF LAST FIELDWORK: JULY 1, 1992.
6.) ELEVATIONS SHOWN HEREON ARE ON TOP OF MONITORING WELL UNLESS OTHERWISE NOTED.

LEGEND

- ◎ FOUND CONCRETE MONUMENT
- ○ FOUND IRON PIPE
- ◉ SET CONCRETE MONUMENT (L.B. No. 3624)
- • SET IRON PIPE (L.B. No. 3624)
- L.B. LICENSED BUSINESS
- ELEV. ELEVATION

REVISED 9-18-92 TO CHANGE ELEVATION OF WELL B-12-I
REVISED: JULY 15, 1992 TO SHOW ELEVATIONS AND REPLACEMENT WELL B-32-S (FOR B-23-S).

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32216

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH IN CHAPTER 21HH-6, F.A.C.

NOTE: NOT VALID WITHOUT RAISED EMBOSSED SEAL

SCALE 1" = 200'

DATE APRIL 23, 1992

ARTHUR R. MARTHOMICK, JR.
REGISTERED SURVEYOR, No. 4166, FLORIDA

LEGEND

- ◎ CONC. MON. FOUND
- ◉ CONC. MON. (SET)
- • IRON CORNER (SET)
- FENCE
- ○ CORNER (FOUND)
- • CROSS CUT

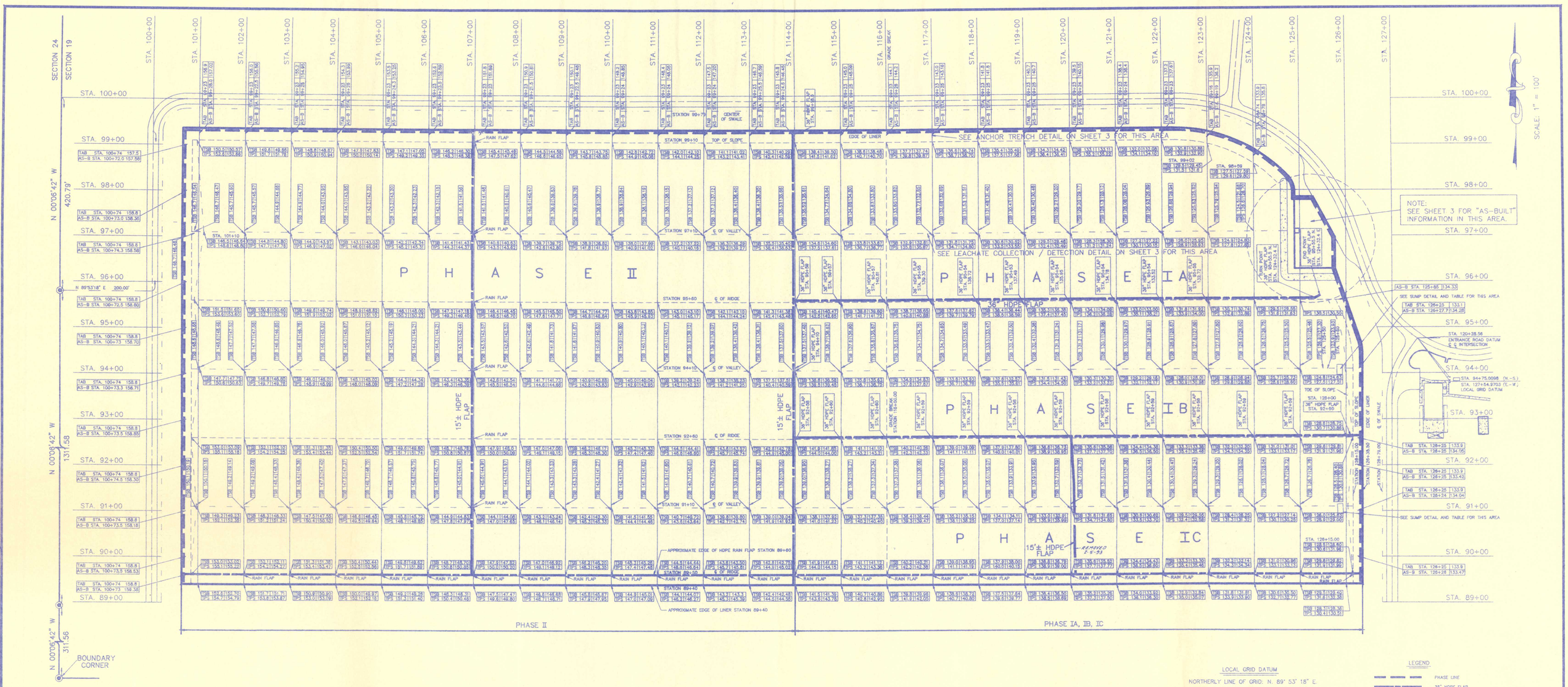
SHEET 1

FIELD BOOK NO. 339/75-78;363/2-5
DRAWN BY J.L.R.
CHECKED BY R.S.C.

R - 23 - E

ORDER NO. S92-205
FILE NO. 92D-5246

ACAD: \TRAILRID\PIZCOORD.DWG



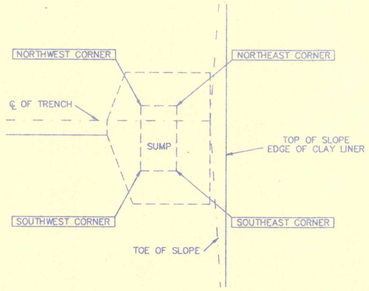
LOCAL GRID DATUM

NORTHERLY LINE OF GRID: N. 89° 53' 18" E.
WESTERLY LINE OF GRID: N. 00° 06' 42" W.
REFERENCE STATIONS: 100+00.00 (N.-S.)
100+00.00 (E.-W.) AT THE POINT OF
INTERSECTIONS (P.I.) FOR CURVE NUMBER 2

NOTE:
FOR DETAILS SEE SHEET NO. 3

LEGEND

- PHASE LINE
- 36" HDPE FLAP
- LINER
- ℄ OF VALLEY
- ℄ OF RIDGE
- ℄ OF DITCH
- FLOW ARROWS
- TOP OF SUBBASE ELEV. — (DESIGN) TSB 149.2 — ("AS-BUILT") TPS 151.3
- TOP OF PROTECTIVE SOIL ELEV.
- TOP OF ANCHOR BERM — (DESIGN) TAB STA. 99+23 145.0 — AS-B STA. 99+25 145.09 — ("AS-BUILT")



SUMP DETAIL

SUMP TABLE

PHASE	CORNER	DESIGN EL.	ASBUILT EL.
IA	NORTHEAST	121.5	121.42
IA	NORTHWEST	121.5	121.38
IA	SOUTHEAST	121.5	121.24
IA	SOUTHWEST	121.5	121.37
IB	NORTHEAST	121.4	121.38
IB	NORTHWEST	121.4	121.34
IB	SOUTHEAST	121.4	121.43
IB	SOUTHWEST	121.4	121.36
IC	NORTHEAST	122.9	123.04
IC	NORTHWEST	122.9	122.95
IC	SOUTHEAST	122.9	123.03
IC	SOUTHWEST	122.9	123.05

SHEET 2

DATE	PHASE
5-12-92	IA
5-13-92	REVISED SPOT EL. OF TPS AT STA. 123+00 E AND STA. 99+02 N
6-12-92	IB
1-24-93	ADDED PHASE IC AND PHASE II
2-5-93	REMOVED RAIN FLAP PHASE I-C

I HEREBY CERTIFY THAT THE CLAY SUB-BASE, PROTECTIVE SAND, 36" HDPE FLAP, AND THE TOP OF CLAY BERM SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY CHAPTER 472.027 OF THE FLORIDA STATUTES.

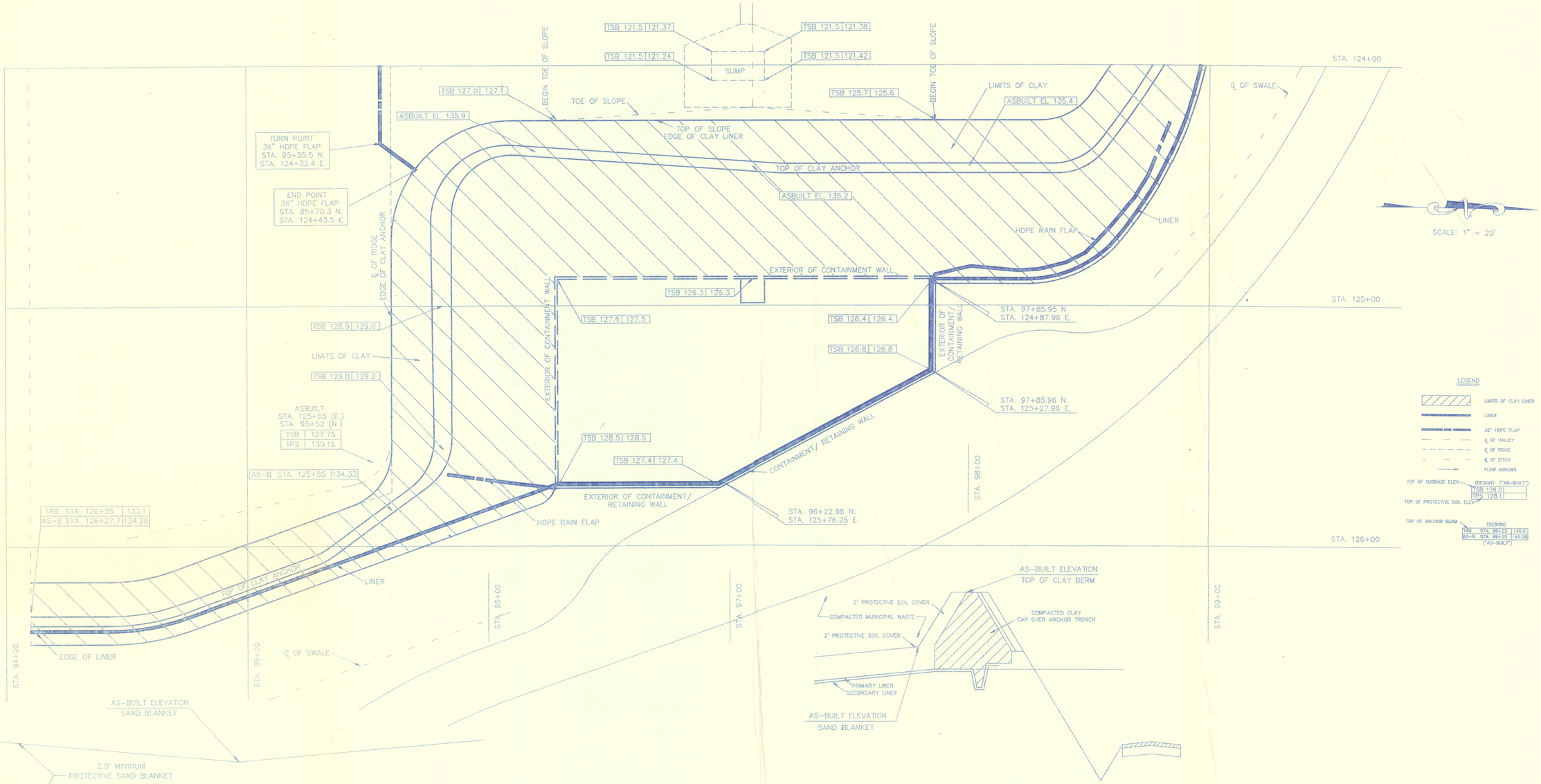
2-8-93

ARTHUR A. MASTRONICOLA, JR. FLA REG SURVEYOR NO. 4166

"AS-BUILT"

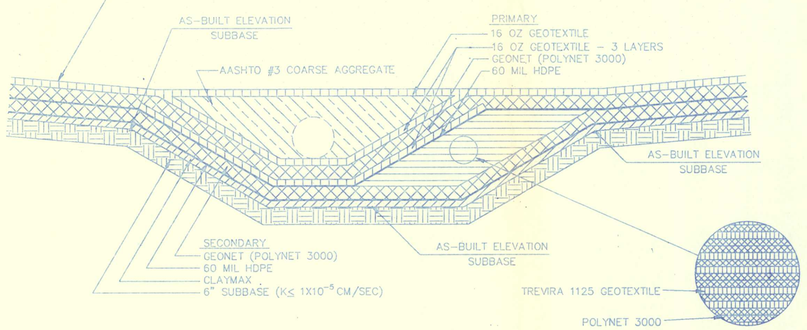
LINER SYSTEM AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



NORTH ANCHOR TRENCH DETAIL

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



LEACHATE COLLECTION / DETECTION TRENCH DETAIL

SHEET 3

DATE	PHASE
5-12-92	IA
5-13-92	REVISED LOCATION OF CLAY ANCHOR BERM AT STA. 96+20±
6-12-92	IB
1-24-93	REVISED TO SHOW HDPE RAIN FLAP AT CONTAINMENT AREA

I HEREBY CERTIFY THAT THE CLAY SUB-BASE, PROTECTIVE SAND, 36" HDPE FLAP, AND THE TOP OF CLAY BERM SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY CHAPTER 472.027 OF THE FLORIDA STATUTES.

1-27-93

ARTHUR A. MASTRONICOLA FLA. REG. SURVEYOR NO. 4166

"AS-BUILT"

LINER SYSTEM AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

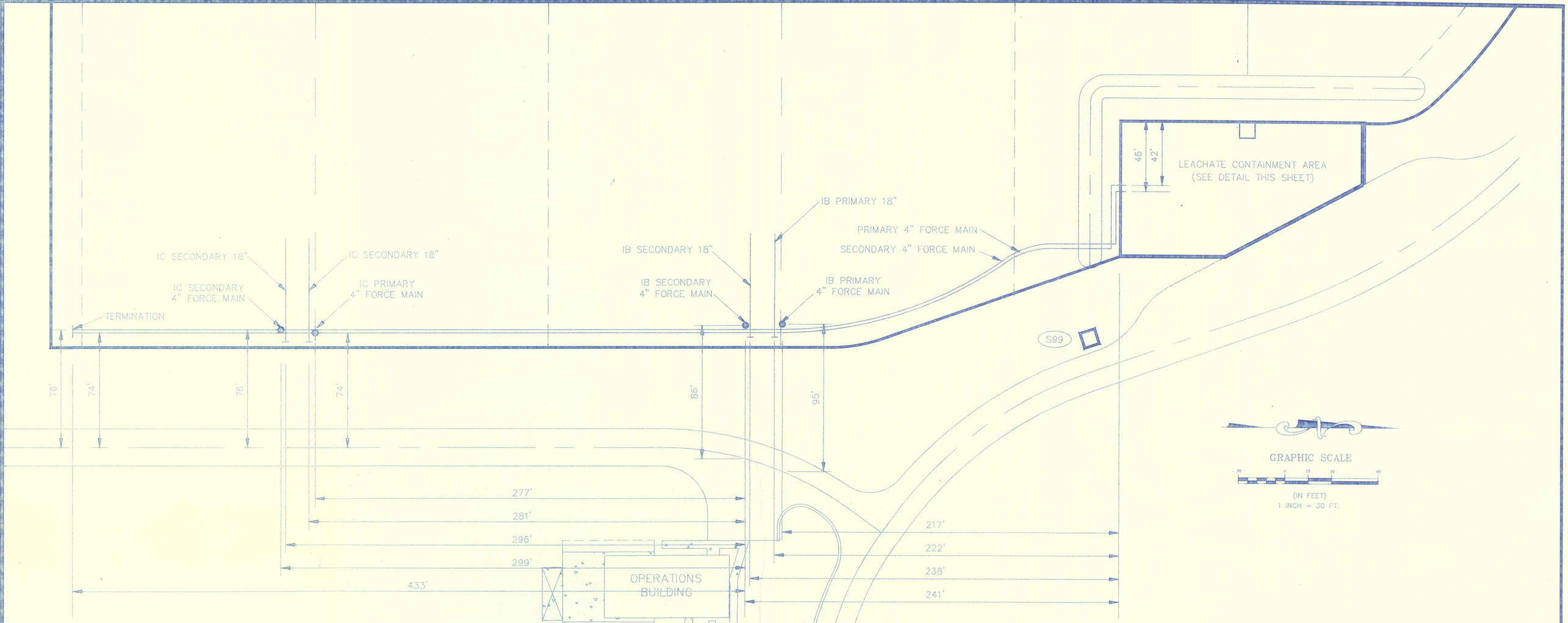
PHASE	DATE	LOCATION	
I A	3-9-92	STA. 95+60.00 TO STA. 97+86.00 (NORTH) STA. 124+17.60 TO STA. 125+76.00 (EAST)	(CONTAINMENT AREA)
I A	3-14-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 114+00.00 TO STA. 117+00.00 (EAST)	
I A	3-18-92	STA. 97+06.00 TO STA. 99+10.00 (NORTH) STA.114+00.00 TO STA. 118+00.00 (EAST)	
I A	3-20-92	STA. 97+05.00 TO STA. 99+10.00 (NORTH) STA. 119+00.00 (EAST)	
I A	3-20-92	STA. 97+05.00 TO STA. 97+15.00 (NORTH) STA. 13+80.00 TO STA. 14+00.00 (EAST)	
I A	3-21-92	STA. 97+05.00 TO STA. 99+10.00 (NORTH) STA. 120.00 (EAST)	
I A	3-25-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 121+00.00 TO STA. 122+00.00 (EAST)	
I A	3-25-92	STA. 96+95.00 TO STA. 25.00 (NORTH) STA. 125+00.00 TO STA. 125+50.00 (EAST)	(CONTAINMENT AREA)
I A	3-31-92	STA. 95+60.00 TO STA. 99+01.68 (NORTH) STA. 122+20.00 TO STA. 123+00.00 (EAST)	
I A	4-1-92	STA. 95+60.00 TO STA. 98+59.00 (NORTH) STA. 123+20.00 TO STA. 124+00.00 (EAST)	
I B	4-6-92	STA. 92+60.00 TO STA. 95+45.00 (NORTH) STA. 114+00.00 TO STA. 117+00.00 (EAST)	
I B	4-10-92	STA. 92+60.00 TO STA. 95+45.00 (NORTH) STA. 118+00.00 TO STA. 122+00.00 (EAST)	
I A & I B	4-23-92	STA. 92+60.00 TO STA. 98+00.00 (NORTH) STA. 124+00.00 TO STA. 126+15.00 (EAST)	
I C	5-4-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 114+00.00 TO STA. 121+00.00 (EAST)	
I C	5-6-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 122+00.00 TO STA. 123+00.00 (EAST)	
I C	5-8-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 124+00.00 TO STA. 125+85.00 (EAST)	
I A	5-8-92	STA. 95+53.00 TO STA. 99+31.00 (NORTH) STA. 114+00.00 TO STA. 124+00.00 (EAST)	
I A	5-11-92	STA. 95+60.00 TO STA. 99+08.00 (NORTH) STA. 114+00.00 TO STA. 123+00.00 (EAST)	

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

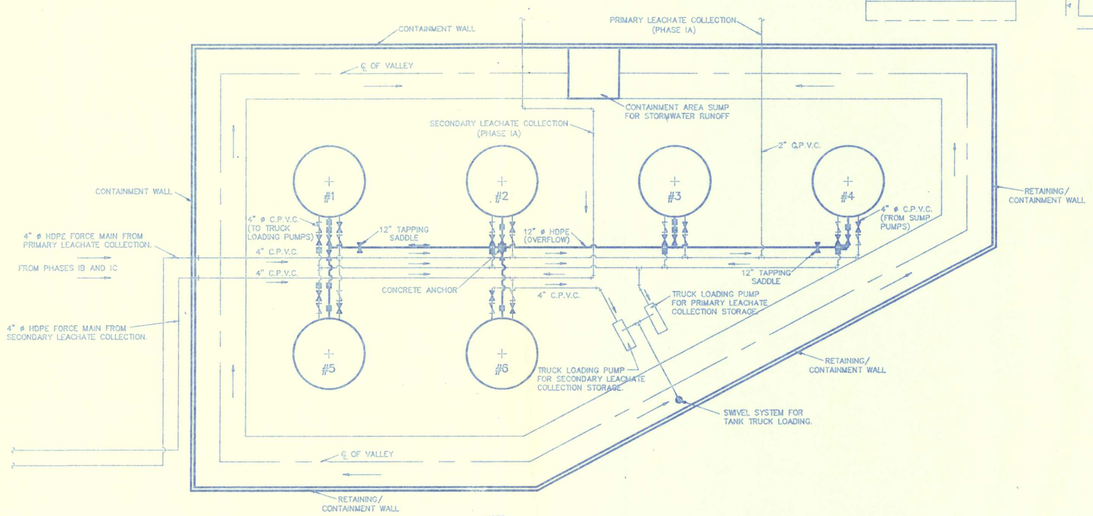
PHASE	DATE	LOCATION	
I C	5-11-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 125+90.00 TO STA. 126+15.00 (EAST)	
II	5-9-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 100+90.90 TO STA. 103+00.00 (EAST)	
II	5-20-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 104+00.00 TO STA. 106+00.00 (EAST)	
II	5-27-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 109+00.00 TO STA. 110+00.00 (EAST)	
II	5-28-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 111+00.00 (EAST)	
II	6-2-92	STA. 92+60.00 TO STA. 95+40.00 (NORTH) STA. 100+85.00 TO STA. 103+00.00 (EAST)	
I B	6-3-92	STA. 92+60.00 TO STA. 95+85.5 (NORTH) STA. 114+00.00 TO STA. 126+00.00 (EAST)	
I B	6-11-92	STA. 92+60.00 TO STA. 95+60.00 (NORTH) STA. 125+50.00 TO STA. 126+27.70 (EAST)	
I B	6-12-92	STA. 92+60.00 (NORTH) STA. 126+13.00 TO STA. 126+25.00 (EAST)	
II A	6-12-92	STA. 97+06.00 TO STA. 97+14.00 (NORTH) STA. 106+00.00 TO STA. 111+00.00 (EAST)	(LEACHATE TRENCH)
I B	6-16-92	STA. 92+60.00 (NORTH) STA. 114+00.00 TO STA. 126+10.00 (EAST)	
II B	6-17-92	STA. 92+60.00 (NORTH) STA. 104+00.00 TO STA. 106+00.00 (EAST)	
II B	6-19-92	STA. 92+60.00 TO 95+35.00 (NORTH) STA. 107+00.00 TO 109+00.00 (EAST)	
II B	6-13-92	STA. 94+10.00 (NORTH) STA. 101+03.00 TO 104+00.00 (EAST)	
II B	7-9-92	STA. 89+06.00 TO STA. 92+60.00 (NORTH) STA. 126+03.00 TO STA. 126+31.00 (EAST)	
II C	7-10-92	STA. 89+40.00 TO STA. 92+55.00 (NORTH) STA. 100+85.00 TO STA. 102+00 (EAST)	
I A	7-13-92	STA. 97+85.00 TO STA. 98+60.00 (NORTH) STA. 124+83.00 TO STA. 124+87.00 (EAST)	(CONTAINMENT AREA)
II C	7-15-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 105+00.00 TO STA. 106+00.00 (EAST)	
II B	7-17-92	STA. 92+60.00 TO STA. 94+06.00 (NORTH) STA. 112+00.00 TO STA. 114+00.00 (EAST)	

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

PHASE	DATE	LOCATION
I C	7-20-92	STA. 89+40.00 TO STA. 92+40.00 (NORTH) STA. 115+00.00 TO STA. 126+27.00 (EAST)
II C	7-24-92	STA. 89+40.00 TO STA. 92+40.00 (NORTH) STA. 107+00.00 TO STA. 109+00.00 (EAST)
I C	7-27-92	STA. 89+40.00 TO STA. 91+10.00 (NORTH) STA. 115+00.00 TO STA. 126+00.00 (EAST)
II B	8-13-92	STA. 94+06.00 TO STA. 94+10.00 (NORTH) STA. 111+40.00 TO STA. 112+60.00 (EAST)
II C	8-27-92	STA. 89+40.00 TO STA. 91+13.00 (NORTH) STA. 111+20.00 TO STA. 112+00.00 (EAST)
II C	9-1-92	STA. 89+00.00 TO STA. 91+00.00 (NORTH) STA. 113+00.00 TO 114+00.00 (EAST)
II C	9-2-92	STA. 91+00.00 TO STA. 92+60.00 (NORTH) STA. 112+00.00 TO STA. 113+80.00 (EAST)
II C	9-3-92	STA. 91+06.00 TO STA. 92+60.00 (NORTH) STA. 113+80.00 TO STA. 115+00.00 (EAST)
II C	9-15-92	STA. 95+60.00 TO STA. 99+08.00 (NORTH) STA. 99+91.00 TO STA. 107+00.00 (EAST)
II C	10-12-92	STA. 89+60.00 TO STA. 91+10.00 (NORTH) STA. 100+13.00 TO STA. 107+00.00 (EAST)
II C	10-28-92	STA. 95+00.00 TO STA. 99+10.00 (NORTH) STA. 112+00.00 STA. 113+00.00 (EAST)
II B	11-10-92	STA. 94+00.00 TO STA. 96+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II A	11-18-92	STA. 95+00.00 TO STA. 97+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II A	11-30-92	STA. 97+00.00 TO STA. 98+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II ABC	12-23-92	STA. 89+00.00 TO STA. 98+00.00 (NORTH) STA. 101+00.00 TO STA. 114+00.00 (EAST)
II A	1-8-93	ODD FILL-IN TIE SHOTS
II A	1-19-93	STA. 99+00.00 TO STA. 99+127.00(NORTH) STA. 109+00.00 TO STA. 114+00.00 (EAST)



NOTE:
ALL DIMENSIONS ON THIS SHEET WERE PROVIDED BY JAX. UTILITIES CONSTRUCTION AND FIELD VERIFIED BY SUNSHINE STATE SURVEYORS (9-10-92).



NOTE:
TANKS #1-#5 ARE FOR PRIMARY LEACHATE COLLECTION STORAGE, TANK #6 IS FOR SECONDARY LEACHATE COLLECTION STORAGE.

EXPANSION COUPLING
SPRING LEVERED CPVC CHECK VALVE
CPVC BUTTERFLY VALVE

LEACHATE STORAGE, PUMPING AND CONTAINMENT

N.T.S.

SHEET 5

"AS-BUILT"

DATE:	COMMENTS
1-24-93	ADDED EXPANSION JOINTS, CONCRETE ANCHOR, AND REMOVED PRESSURE TEST ASSEMBLY TO CONTAIN. AREA
9-11-92	PHASE IA AS-BUILT

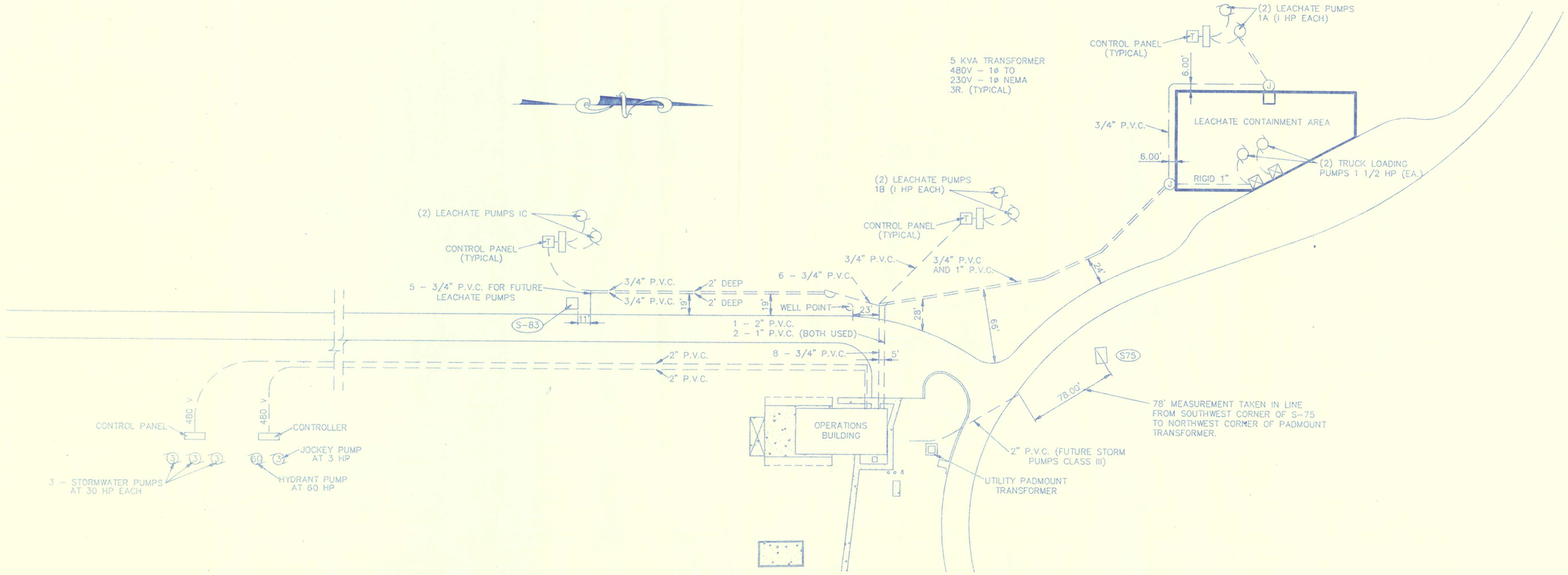
I HEREBY CERTIFY THAT THE LEACHATE FORCE MAIN AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61-HH6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

1-29-93

ARTHUR A. MASTRONICOLA JR. FLA. REG. SURVEYOR NO. 4166

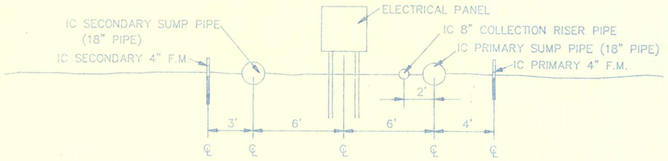
LEACHATE AREA FORCE MAIN AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

JAX. UTILITIES CONSTRUCTION DIVISION OF THE HASKELL COMPANY



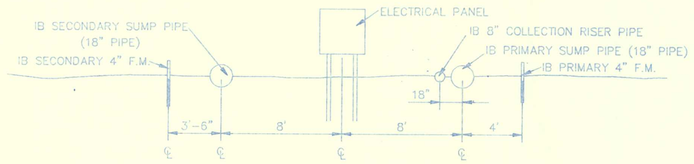
ELECTRICAL "AS-BUILT" FOR SUMPS IA, IB, AND IC FOR LEACHATE CONTAINMENT AREA

N.T.S.



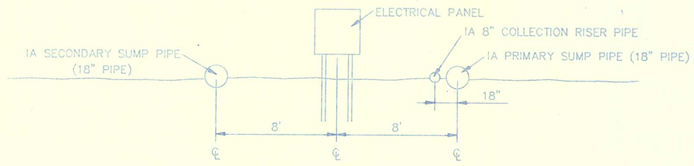
PHASE IC LEACHATE SUMP AREA

N.T.S.



PHASE IB LEACHATE SUMP AREA

N.T.S.



PHASE IA LEACHATE SUMP AREA

N.T.S.

NOTE:
ALL DIMENSIONS ON THIS SHEET WERE
PROVIDED BY JAX. UTILITIES CONSTRUCTION
AND FIELD VERIFIED BY SUNSHINE STATE SURVEYORS

"AS-BUILT"

SHEET 6

DATE:	COMMENTS
1-24-93	REVISED TO SHOW OPERATIONS BUILDING
9-11-92	PHASE IA AS-BUILT

LEACHATE AREA ELECTRICAL AS-BUILT
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA

JAX. UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY

AS-BUILT STORM DRAINAGE DATA
PHASE I & PHASE II

SEE SHEET 8, 9 & 10

STRUCTURE NO.	STRUCTURE DESCRIPTION	TOP ELEVATION		SLOT ELEVATION		INVERT ELEVATION		STATION	
		DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT
S 4	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" W)	*	*	*
S 5	MOD. FDOT TYPE 'E' INLET (DETAIL A)	146.50	146.49	143.76 (S)	143.70	141.76 (18" E) 141.30 (42" W)	141.18 (42" CMP)	93+30.00 (N) 100+21.00 (E)	93+29.30 (N) 100+19.15 (E)
S 6	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	141.30 (42" E)	141.42 (42" CMP)	93+30.00 (N) 99+64.50 (E)	93+31.11 (N) 99+67.60 (E)
S 7	FDOT TYPE 'E' INLET	145.09	145.09	142.35 (S)	142.32	139.85 (24" N)	139.84 (24"CMP)	99+27.82 (N) 100+21.00 (E)	99+29.09 (N) 100+21.45 (E)
S 8	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	139.85 (24" S)	139.85 (24" CMP)	100+31.00 (N) 100+21.00 (E)	100+18.28 (N) 100+21.21 (E)
S 9	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	*	*	*
S 10	MOD. FDOT TYPE 'E' INLET (DETAIL A)	138.91	138.90	136.17 (W)	136.15	134.17 (18" S) 134.17 (42" N)	* 134.20 (42" CMP)	99+79.00 (N) 106+93.00 (E)	99+79.08 (N) 106+93.11 (E)
S 11	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	134.17 (42" S)	134.05 (42" CMP)	100+31.00 (N) 106+93.00 (E)	100+31.65 (N) 106+93.06 (E)
S 12	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	*	*	*
S 13	MOD. FDOT TYPE 'E' INLET (DETAIL A)	134.91	134.89	132.17 (W)	132.14	130.17 (18" S) 130.17 (42" N)	* 130.21 (42" CMP)	99+79.00 (N) 111+63.50 (E)	99+79.30 (N) 111+62.70 (E)
S 14	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	130.17 (42" S)	130.19 (42" CMP)	100+31.00 (N) 111+63.50 (E)	100+32.00 (N) 111+63.10 (E)
S 15	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	146.33 (30" ADS) (TEMP. END OF PIPE)	*	*
S 16	MOD. FDOT TYPE 'E' INLET (DETAIL A)	131.81	131.80	129.07 (W)	129.07	127.07 (18" S) 127.07 (42" N)	* 127.06 (42" CMP)	99+79.00 (N) 115+28.50 (E)	99+79.40 (N) 115+28.00 (E)
S 17	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	127.07 (42" S)	127.28 (42"CMP)	100+31.00 (N) 115+28.50 (E)	100+31.80 (N) 115+28.70 (E)
S 18	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	141.28 (30" ADS) (TEMP. END OF PIPE)	*	*
S 19	MOD. FDOT TYPE 'E' INLET (DETAIL A)	126.23	126.05	123.49 (W)	123.35	121.49 (18" S) 121.49 (42" N)	* 121.35 (42" CMP)	99+79.00 (N) 120+32.00 (E)	99+78.80 (N) 120+31.50 (E)
S 20	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	121.49 (42" S)	121.39 (42" CMP)	100+31.00 (N) 120+32.00 (E)	100+31.30 (N) 120+32.30 (E)
S 21	FDOT TYPE 'E' INLET	122.65	122.71	119.91 (NW)	119.98	115.45 (24" NE)	115.80 (24" CMP)	98+79.70 (N) 124+85.30 (E)	98+79.70 (N) 124+85.51 (E)
S 22	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	115.45 (24" SW)	115.47 (24" CMP)	99+21.80 (N) 125+23.60 (E)	99+22.82 (N) 125+24.00 (E)
S 23	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" E)	*	*	*
S 24	MOD. FDOT TYPE 'E' INLET (DETAIL B)	121.50	121.53	118.76 (S)	118.76	116.76 (18" W) 116.76 (42" E)	* 116.72 (42" RCP)	88+80.00 (N) 126+79.00 (E)	88+79.78 (N) 126+79.64 (E)
S 25	FDOT TYPE 'E' INLET W/7' TYPE J BOTTOM (ALTERNATE A)	121.50	121.37	117.75 (S)	118.66	116.76 (42" W) 113.76 (42" N)	* 113.42 (42" RCP)	88+80.00 (N) 127+32.50 (E)	88+82.34 (N) 127+31.01 (E)
S 73	CONCRETE ENDWALL DOUBLE 48" R.C.P.	-	-	-	-	118.00 (DBL 48" E)	117.57 (N&S) (48" RCP)	100+28.75 (N) 123+23.00 (E)	100+29.40 (N) 123+22.80 (E)
S 74	CONCRETE ENDWALL DOUBLE 48" R.C.P.	-	-	-	-	117.16 (DBL 48" W)	117.03 (48" RCP) 117.05 (48" RCP)	100+08.40 (N) 123+90.00 (E)	100+08.90 (N) 123+90.00 (E)
S 75	INLET STRUCTURE	115.70	116.58	110.70(NW)	111.31	104.13 (60" S)	104.33 (60" RCP)	95+65.00 (N) 127+24.20 (E)	95+64.03 (N) 127+21.71(E)
S 77	CONCRETE ENDWALL DOUBLE 48" C.M.P.	-	-	-	-	106.40 (DBL 48" E)	106.58 (48" RCP) 106.84 (48" RCP)	106+07.75 (N) 123+36.60 (E)	106+08.70 (N) 123+37.90 (E)
S 78	CONCRETE ENDWALL DOUBLE 48" C.M.P.	-	-	-	-	105.48 (DBL 48" W)	105.55 (48" RCP) 105.61 (48" RCP)	106+13.60 (N) 124+00.35 (E)	106+14.10 (N) 124+00.40 (E)
S 83	FDOT TYPE 'E' INLET	121.50	121.46	118.76 (S)	118.63	116.76 (24" E)	116.77 (24" RCP)	91+00.00 (N) 126+79.00 (E)	90+99.83 (N) 126+78.16 (E)
S 84	FDOT TYPE 'E' INLET W/7' TYPE J BOTTOM	121.50	121.48	117.75 (S)	118.69	116.76 (24" W) 111.56 (42" S)	116.74 (24" RCP) 111.40 (42" RCP)	91+00.00 (N) 127+32.50 (E)	91+04.04 (N) 127+38.68 (E)

AS-BUILT SPREADER PIPE DATA

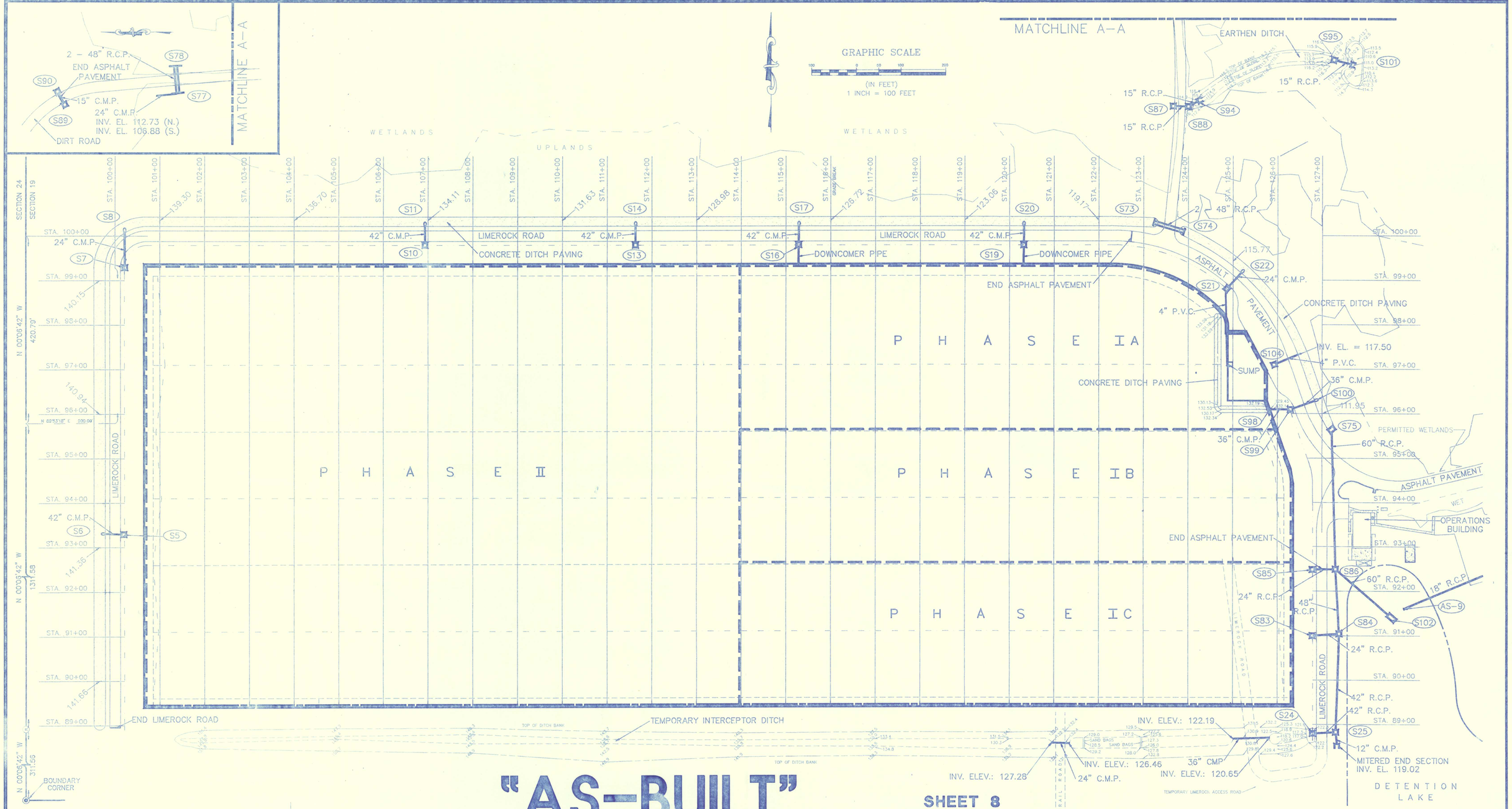
SEE SHEET 9

8" X 2" SADDLE	STATION		DEPTH
SP-1	91+26.21(N)	129+62.18(E)	(2.8' BELOW GROUND)
SP-2	90+27.93(N)	129+96.07(E)	(2.7' BELOW GROUND)
SP-3	89+31.29(N)	130+07.89(E)	(2.6' BELOW GROUND)
SP-4	88+57.76(N)	130+75.70(E)	(3.2' BELOW GROUND)
SP-5	88+45.26(N)	131+70.76(E)	(2.8' BELOW GROUND)
SP-6	88+05.52(N)	132+62.81(E)	(3.0' BELOW GROUND)
SP-7	87+29.09(N)	133+36.52(E)	(2.5' BELOW GROUND)
SP-8	85+47.29(N)	137+59.12(E)	(2.0' BELOW GROUND)
SP-9	84+52.99(N)	137+73.97(E)	(2.7' BELOW GROUND)
SP-10	83+44.94(N)	136+98.14(E)	(3.4' BELOW GROUND)
SP-11	82+57.76(N)	136+55.08(E)	(3.5' BELOW GROUND)
SP-12	82+23.42(N)	136+25.75(E)	(3.8' BELOW GROUND)
SP-13	82+24.12(N)	135+23.08(E)	(2.9' BELOW GROUND)
SP-14	82+41.02(N)	134+13.30(E)	(3.5' BELOW GROUND)
SP-15	82+55.77(N)	133+23.12(E)	(3.0' BELOW GROUND)
SP-16	82+70.27(N)	132+37.86(E)	(3.1' BELOW GROUND)
SP-17	82+56.89(N)	131+31.74(E)	(2.5' BELOW GROUND)
SP-18	82+19.35(N)	130+39.40(E)	(2.5' BELOW GROUND)
SP-19	81+78.85(N)	129+54.12(E)	(2.8' BELOW GROUND)
SP-20	81+79.04(N)	128+51.65(E)	(3.0' BELOW GROUND)

AS-BUILT STORM DRAINAGE DATA
ANCILLARY AREA

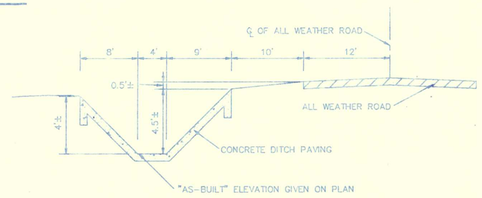
SEE SHEET 11 & 12

STRUCTURE NO.	STRUCTURE DESCRIPTION	TOP ELEVATION		SLOT ELEVATION		INVERT ELEVATION		STATION	
		DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT
AS-1	E DITCH BOTTOM	99.50	99.55	98.50 (W)	98.53	95.50	95.51 (36" RCP)	-	97+57.76 (N) 143+26.88 (E)
AS-2	U TYPE ENDWALL	-	-	-	-	95.40	95.64 (36" RCP)	-	98+32.03 (N) 143+38.39 (E)
AS-3	E DITCH BOTTOM INLET	100.50	100.55	100.00 (E) 100.00 (W)	100.06 (E) 100.00 (W)	97.50 (E) 98.00 (W)	97.47 (18" RCP) 97.93 (18" RCP)	-	97+52.26 (N) 138+15.59 (E)
AS-4	E DITCH BOTTOM INLET	100.50	99.97	100.00 (E) 100.00 (W)	99.50 (E) 99.49 (W)	96.60 (E) 97.10 (W)	96.64 (24" RCP) 97.11 (18" RCP)	-	97+96.78 (N) 140+32.55 (E)
AS-5	U TYPE ENDWALL	-	-	-	-	95.00	94.95 (24" RCP)	-	99+32.91 (N) 142+68.04 (E)
AS-6	C DITCH BOTTOM INLET	111.00	111.07	110.00 (W)	110.05 (W)	106.75	106.86 (15" RCP)	-	94+78.16 (N) 131+51.26 (E)
AS-7	C INLET	112.50	112.47	-	-	106.55 (N) 106.30 (S)	106.59 (15" RCP) 106.53 (18" RCP)	-	94+12.70 (N) 131+71.35 (E)
AS-8	C INLET	113.75	113.99	-	-	106.05 (N) 106.05 (W)	106.54 (18" RCP) 106.24 (18" RCP)	-	93+07.04 (N) 132+29.46 (E)
AS-9	U TYPE ENDWALL	-	-	-	-	103.00	103.34 (18" RCP)	-	91+60.84 (N) 128+83.48 (E)
AS-10	C INLET	107.20	107.25	106.70 (W)	106.80 (W)	104.75	104.58 (15" RCP)	-	95+47.34 (N) 133+09.26 (E)
AS-11	U TYPE ENDWALL	-	-	-	-	104.55	104.62 (15" RCP)	-	95+79.51 (N) 133+82.24 (E)
AS-12	STRAIGHT ENDWALL	-	-	-	-	94.10	-	-	97+47.30 (N) 144+18.88 (E)
AS-13	STRAIGHT ENDWALL	-	-	-	-	94.00	-	-	97+99.11 (N) 144+27.33 (E)
AS-14	C INLET	102.50	102.52	101.50	101.54	100.40	100.41 (18" RCP)	-	97+17.23 (N) 136+52.18 (E)
AS-15	U TYPE ENDWALL	-	-	-	-	100.25	100.09 (36" RCP)	-	96+07.73 (N) 136+82.06 (E)
AS-16	CURB INLET	102.75	GRATE NOT IN PLACE	-	-	97.75 (W) 97.75 (E)	98.05 (36" RCP) 98.03 (36" RCP)	-	96+36.08 (N) 137+95.70 (E)



"AS-BUILT"

SHEET 8



TYPICAL CONCRETE DITCH SECTION

N.T.S.

NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES.

LEGEND

- 144.66 — "AS-BUILT" SPOT ELEVATION
- PHASE LINE
- EDGE OF LINER
- ℄ OF VALLEY
- ℄ OF RIDGE
- ℄ OF DITCH
- "AS-BUILT" STORM STRUCTURE WITH PIPES
- "AS-BUILT" MITERED END SECTION WITH STORM PIPES
- S17 — STRUCTURE NUMBER

DATE:	COMMENTS
1-12-93	RESHOT N.W. CONCRETE DITCH PAVING ELEVATIONS DUE TO CONCRETE DITCH REPLACEMENT
9-11-92	PHASE IA AS-BUILT

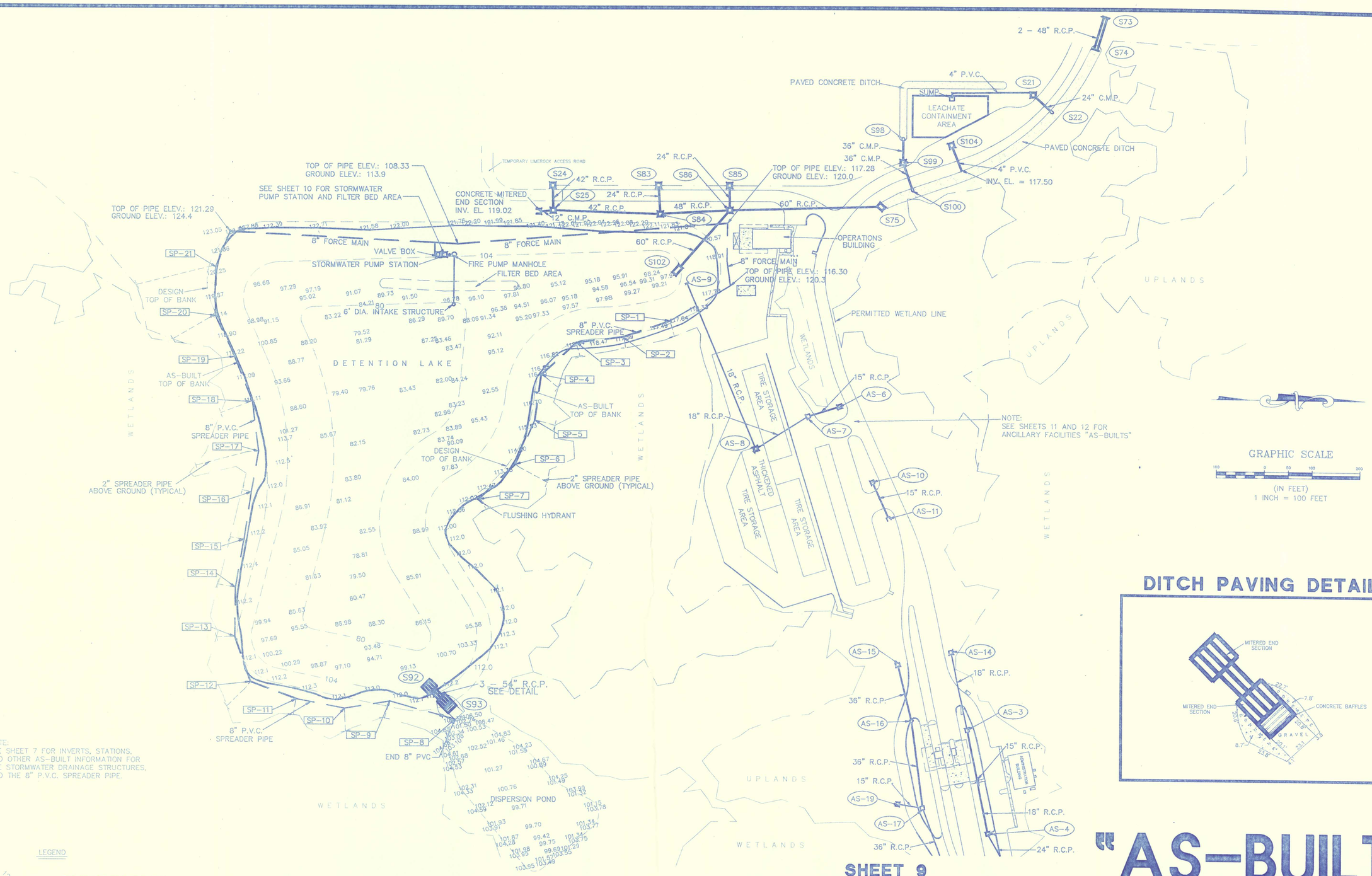
I HEREBY CERTIFY THAT THE CONCRETE DITCH PAVING, EARTHEN DITCH, DETENTION POND, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61-HH6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

1-28-93

ARTHUR A. MASTRONICOLA JR. FLA. REG. SURVEYOR NO. 4166

DRAINAGE STRUCTURE AS-BUILT PHASE I AND PHASE II FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550

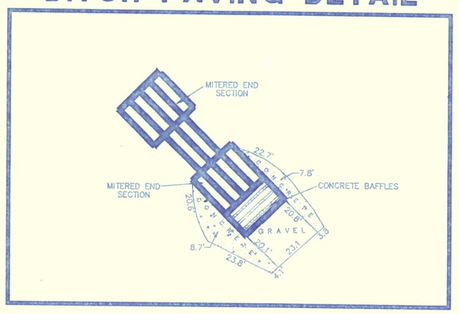


NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES, AND THE 8" P.V.C. SPREADER PIPE.

LEGEND

124.0	"AS-BUILT" SPOT ELEVATION
150	DESIGN CONTOUR
	"AS-BUILT" TOP OF BANK
S93	STRUCTURE NUMBER
	"AS-BUILT" STORM INLET WITH PIPES
	"AS-BUILT" STORM CULVERT
SP-13	SPREADER PIPE NUMBER
	"AS-BUILT" 8" P.V.C. SPREADER PIPE

DITCH PAVING DETAIL



SHEET 9

"AS-BUILT"

DATE:	COMMENTS
1-26-93	REVISED TO ADD TIRE STORAGE AREA, BYPASS ROAD AND OPERATIONS BUILDING AS-BUILTS.
12-12-92	REVISE AS-BUILT TOPO ALONG EAST END OF POND
11-24-92	DITCH PAVING AS-BUILT
9-11-92	PHASE IA AS-BUILT

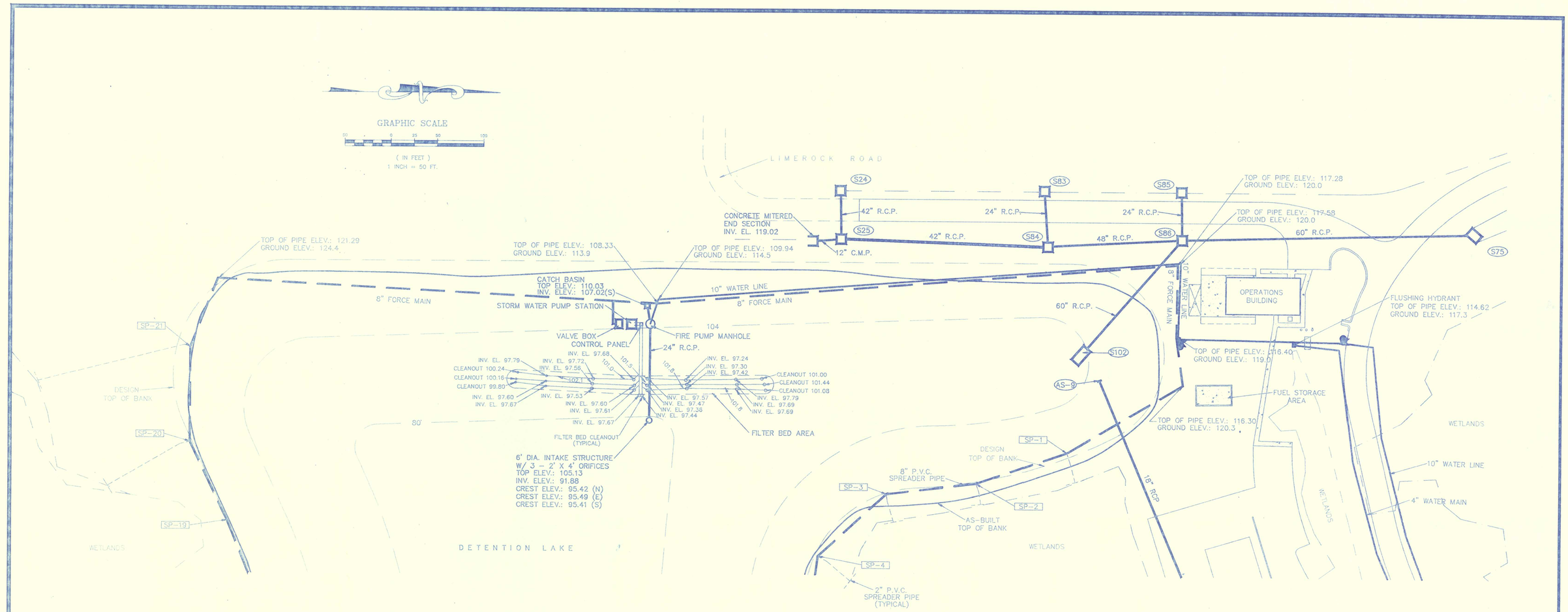
I HEREBY CERTIFY THAT THE DETENTION POND, DISPERSION POND, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21-HH6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

1-29-93

ARTHUR A. MASTRONICOLA JR. PLA. REG. SURVEYOR NO. 4166

DETENTION LAKE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



AS-BUILT TABLE

STRUCTURE TYPE	DESIGN	AS-BUILT
STORM WATER PUMP STATION		
TOP EL.	111.0	111.52
BOTTOM EL.	92.40	92.17
INV EL. 12" P.V.C (W.)	97.32	97.16 (W.)
INV EL. 12" P.V.C (E.)	97.32	97.37 (E.)

LEGEND

- 124.0 — "AS-BUILT" SPOT ELEVATION
- 150 — DESIGN CONTOUR
- "AS-BUILT" TOP OF BANK
- S93 — STRUCTURE NUMBER
- "AS-BUILT" STORM INLET WITH PIPES
- "AS-BUILT" STORM CULVERT
- SP-13 — SPREADER PIPE NUMBER
- "AS-BUILT" 8" P.V.C. SPREADER PIPE

NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES, AND THE 8" P.V.C. SPREADER PIPE.

"AS-BUILT"

SHEET 10

DATE:	COMMENTS
1-26-93	REVISED TO SHOW OPERATIONS BUILDING AS-BUILT
9-11-92	PHASE IA AS-BUILT

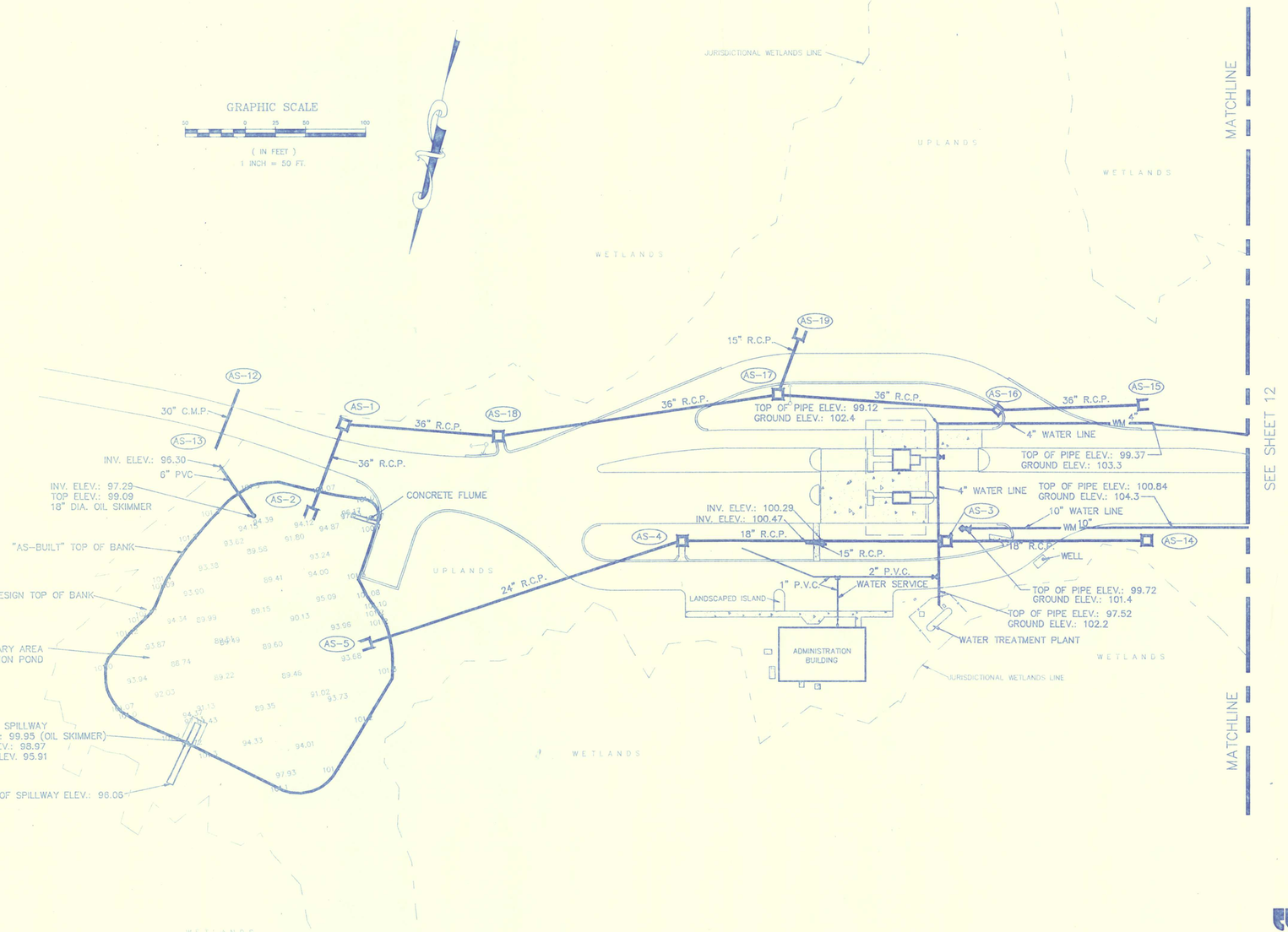
I HEREBY CERTIFY THAT THE FILTER BED, PUMP STATION, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21-HH6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

1-26-93

ARTHUR A. MASTRONICOLA JR. FLA. REG. SURVEYOR NO. 4166

FILTER BED AREA DETAIL FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



"AS-BUILT"

SHEET 11

LEGEND

S93	STRUCTURE NUMBER
	"AS-BUILT" STORM INLET WITH PIPES
	"AS-BUILT" STORM CULVERT
	"AS-BUILT" FIRE HYDRANT WITH GATE VALVE
	"AS-BUILT" MITERED END SECTION WITH STORM PIPE
WM 10"	"AS-BUILT" 10" WATER MAIN
FM 8"	"AS-BUILT" 8" FORCE MAIN

NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES.

DATE:	COMMENTS
1-24-93	REVISED TO SHOW BYPASS ROAD AND TO SHOW ADMINISTRATION BUILDING AS-BUILT.
12-14-92	REVISED TO SHOW NEW AS-BUILT TOPO OF POND
10-30-92	REVISED TO SHOW AS-15 THROUGH AS-19
9-11-92	PHASE IA AS-BUILT

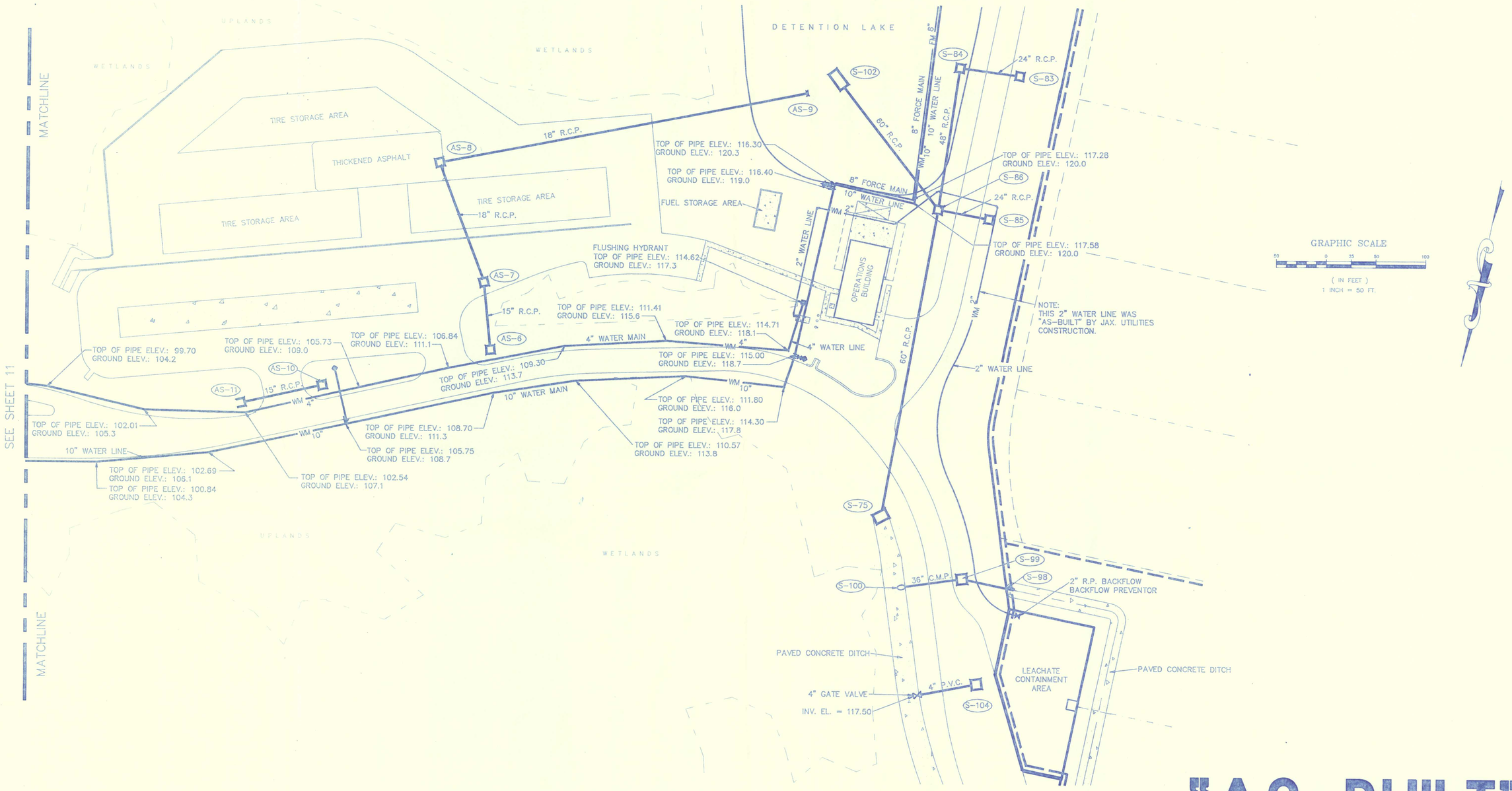
I HEREBY CERTIFY THAT THE ANCILLARY POND, DRAINAGE STRUCTURES, AND WATER LINES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21HH-6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

1-25-93

ARTHUR A. MASTRONICOLA JR. FLA. REG. SURVEYOR NO. 4166

ANCILLARY FACILITIES FORCE MAIN, WATER MAIN, AND DRAINAGE STRUCTURE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



LEGEND

(S93)	STRUCTURE NUMBER
	"AS-BUILT" STORM INLET WITH PIPES
	"AS-BUILT" STORM CULVERT
	"AS-BUILT" FIRE HYDRANT WITH GATE VALVE
	"AS-BUILT" MITERED END SECTION WITH STORM PIPE
WM 10"	"AS-BUILT" 10" WATER MAIN
FM 8"	"AS-BUILT" 8" FORCE MAIN

NOTES:

1. SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES.
2. 2" WATER LINE SHOWN ON THIS PLAN WAS LOCATED BY JAX UTILITIES CONSTRUCTION

SHEET 12

"AS-BUILT"

DATE:	COMMENTS
1-24-93	REVISED TO SHOW TIRE STORAGE AREA AND TO ADD ADMINISTRATION BUILDING AS-BUILT.
9-11-92	PHASE IA AS-BUILT

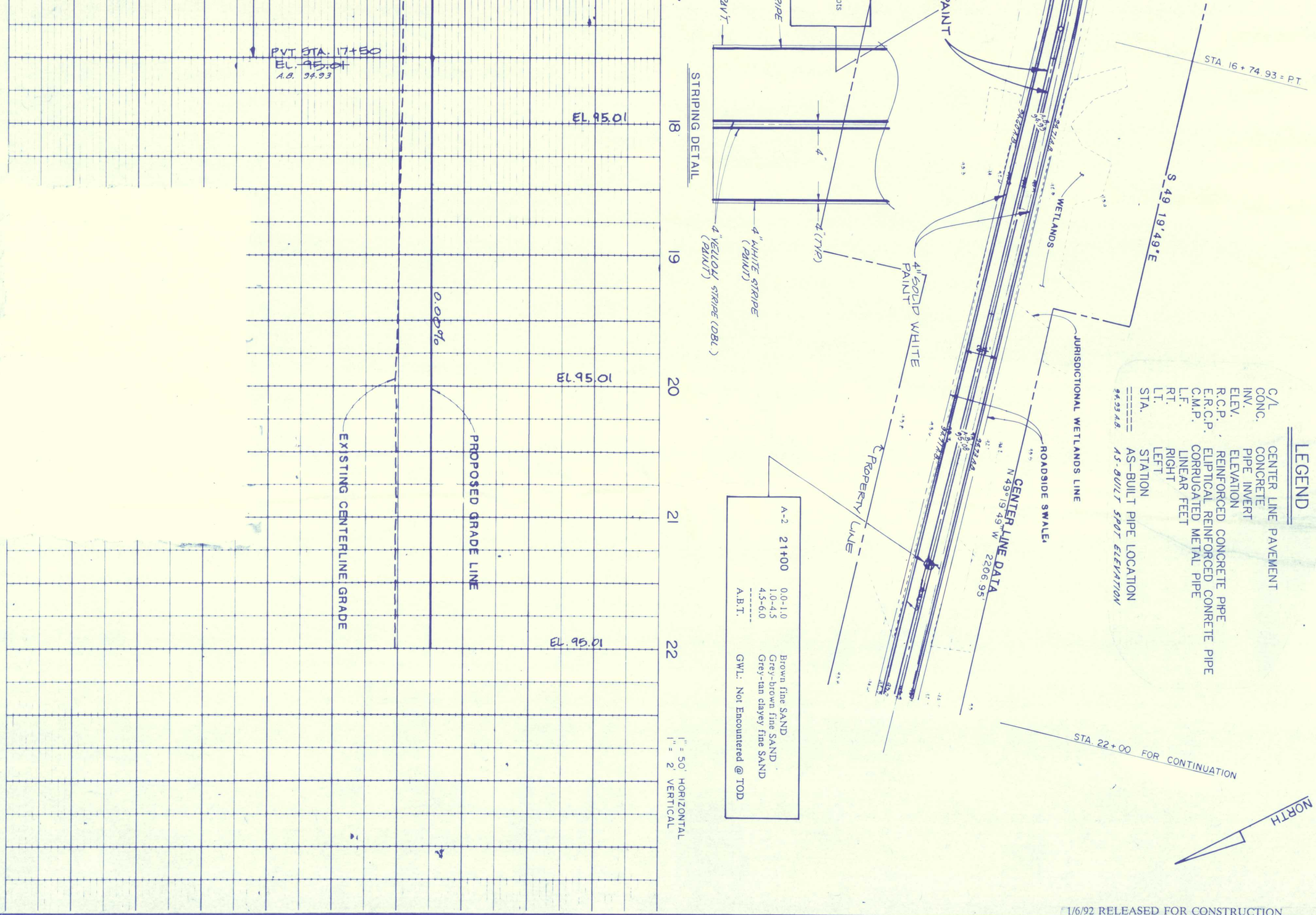
I HEREBY CERTIFY THAT THE WATER MAINS, FORCE MAINS, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 61-HH6 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

1-25-93

ARTHUR A. MASTRONICOLA JR. FLA. REG. SURVEYOR NO. 4166

ANCILLARY FACILITIES FORCE MAIN, WATER MAIN, AND DRAINAGE STRUCTURE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



1/6/92 RELEASED FOR CONSTRUCTION

SHEET 13

AS-BUILT

STORM DRAINAGE
(STA. 10+00 - STA. 22+00)

TRAIL RIDGE LANDFILL
(PLAN A)

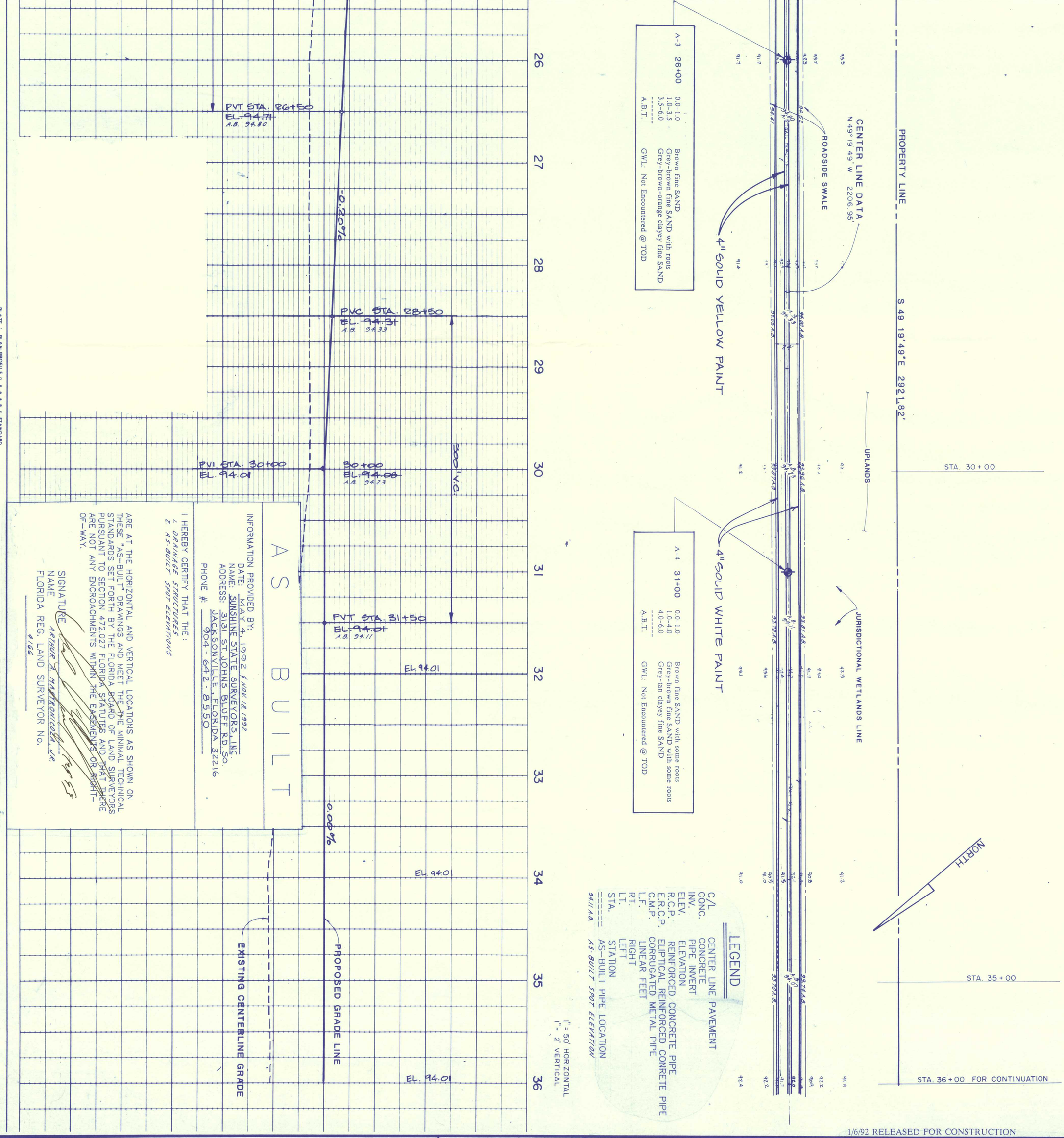
SCALE: 1" = 50'
WORK ORDER NO. 592-61
DRAWN BY: J.L.R.
CHECKED BY: R.S.C.

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

DATE OF LAST FIELDWORK: 11-18-92

FIELD BOOK 336/30-34
386/31-38

FILE No. 92D-5190



AS BUILT

INFORMATION PROVIDED BY:
DATE: MAY 4, 1992 & NOV 18, 1992
NAME: SUNSHINE STATE SURVEYORS, INC.
ADDRESS: 3131 ST JOHNS BLUFF RD. SO.
JACKSONVILLE, FLORIDA 32216
PHONE #: 904-642-8550

I HEREBY CERTIFY THAT THE:
1. DRAINAGE STRUCTURES
2. AS-BUILT SPOT ELEVATIONS

ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN ON THESE "AS-BUILT" DRAWINGS AND MEET THE THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO SECTION 472.027 FLORIDA STATUTES AND THAT THERE ARE NOT ANY ENCROACHMENTS WITHIN THE EASEMENTS OR RIGHT-OF-WAY.

SIGNATURE ARTHUR J. MARTRONICOLA, JR.
NAME
FLORIDA REG. LAND SURVEYOR No. 4166

PLATE 1 PLAN PROFILE O. P. R. & R. E STANDARD
DE'ZOEN CORPORATION
PRINTED IN U.S.A.

DATE OF LAST FIELDWORK: 11-18-92

FIELD BOOK 336 / 30-34
386/31-38

FILE No. 92D-5190

1/6/92 RELEASED FOR CONSTRUCTION

SHEET 14

AS-BUILT

STORM DRAINAGE
(STA. 22+00 - STA. 36+00)

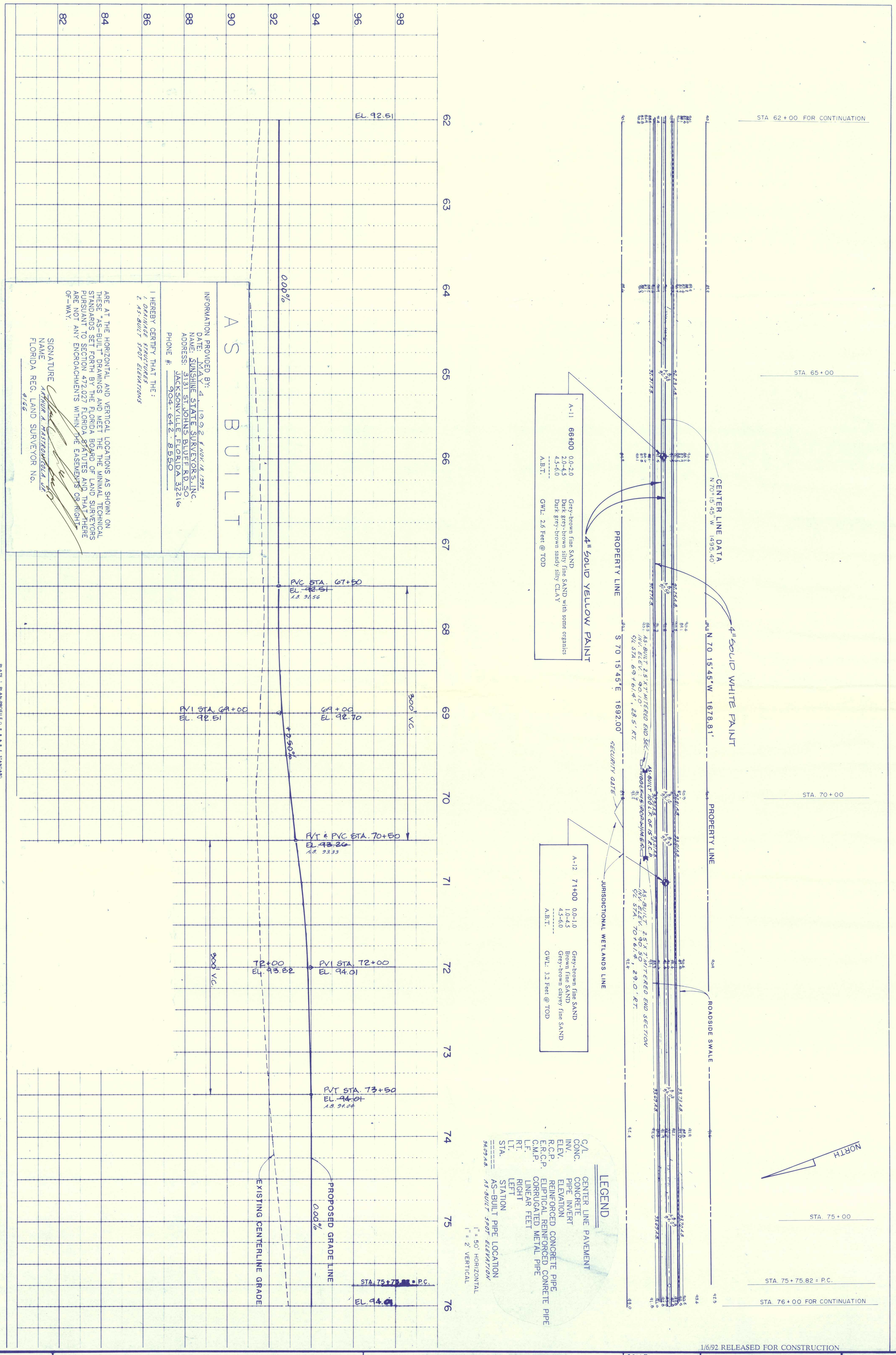
TRAIL RIDGE LANDFILL
(PLAN A)

SCALE: 1" = 50'
WORK ORDER No. S92-61
DRAWN BY: J.L.R.
CHECKED BY: R.S.C.

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

PROFILE		BY	DATE
NOTE BOOK No.	SURVEYED		
	PLOTTED		
	GRADES CHECKED		
	B.M. & NOTED		
	STRUCTURE NOTATIONS CHECKED		

PLAN		BY	DATE
NOTE BOOK No.	SURVEYED		
	PLOTTED		
	ALIGNMENT CHECKED		
	RIGHT OF WAY CHECKED		



1/6/92 RELEASED FOR CONSTRUCTION

DATE OF LAST FIELDWORK: 11-18-92

FIELD BOOK 336/30-34 386/31-38

FILE No. 92D-5190

SHEET 17

AS-BUILT

STORM DRAINAGE

(STA. 62+00 - STA. 76+00)

TRAIL RIDGE LANDFILL

(PLAN A)

SCALE: 1" = 50'

WORK ORDER No. S92-61

DRAWN BY: J.L.R.

CHECKED BY: R.S.C.

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

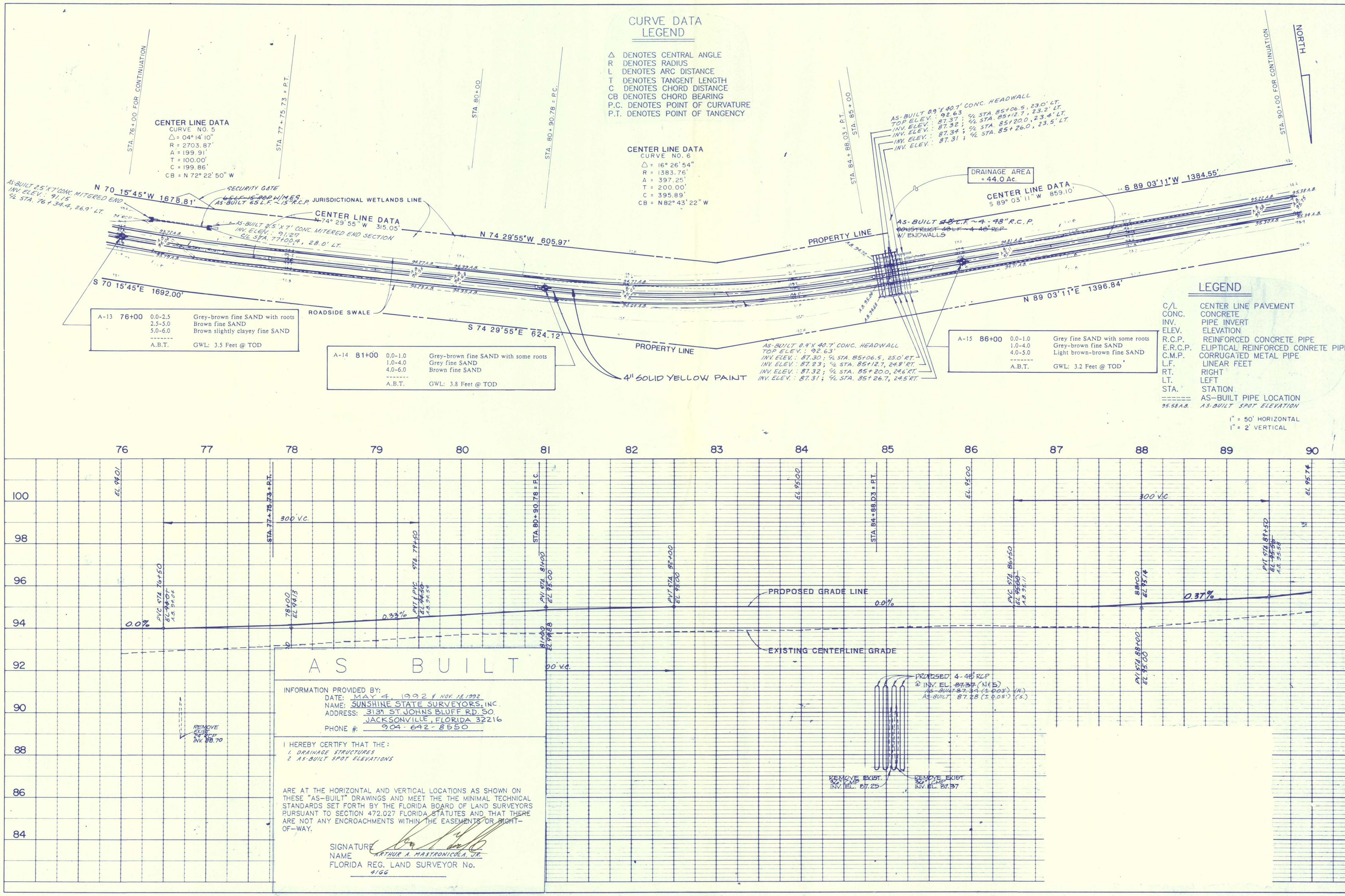


PLATE 1 PLAN-PROFILE O. P. R. & R. E. STANDARD
DETZGEN CORPORATION
PRINTED IN U.S.A.

DATE OF LAST FIELDWORK: 11-18-92

FIELD BOOK 336/30-34
386/31-38

FILE No. 92D-5190

PLAN
NOTE BOOK No.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT OF WAY CHECKED
DATE
BY

PROFILE
NOTE BOOK No.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. & NOTED
STRUCTURE NOTATIONS CHECKED
DATE
BY

1/6/92 RELEASED FOR CONSTRUCTION

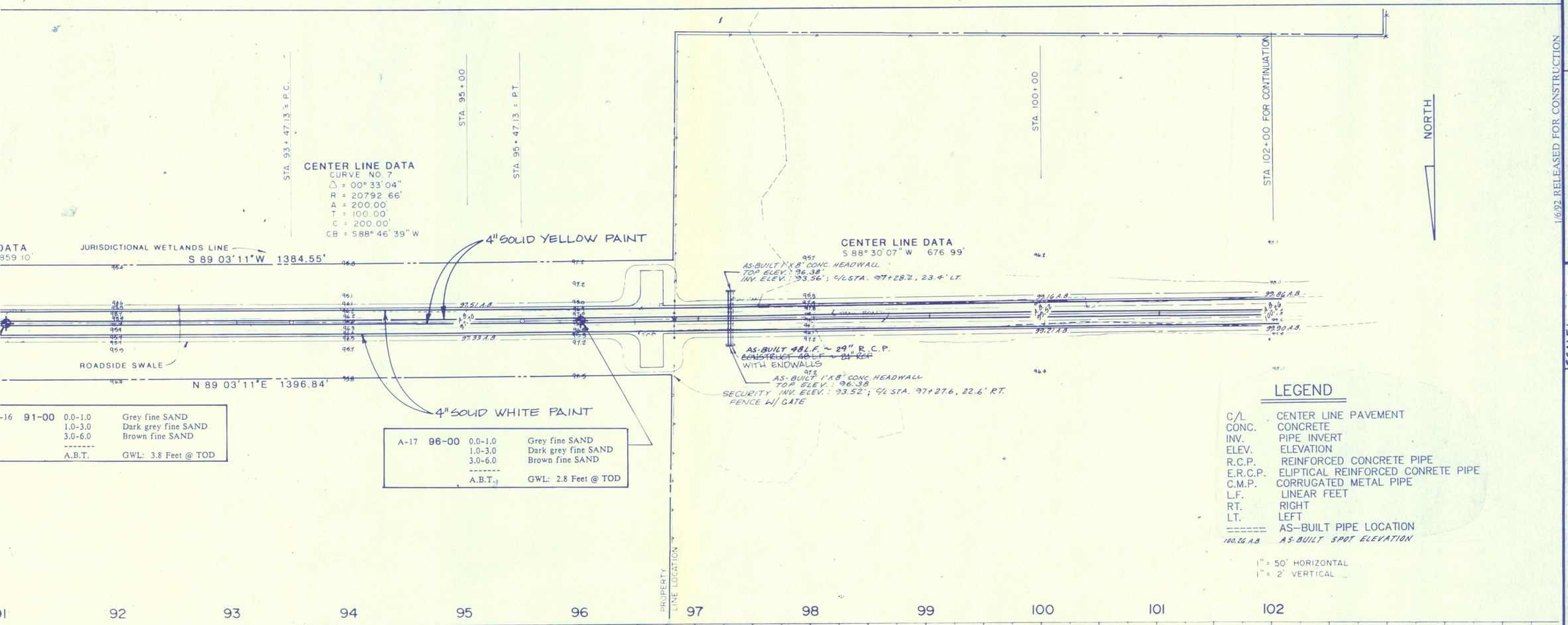
S.S.S. INC.
SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

SCALE: 1" = 50'
WORK ORDER No. S92-61
DRAWN BY: J.L.R.
CHECKED BY: R.S.C.

STORM DRAINAGE
(STA. 76+00 - STA. 90+00)
TRAIL RIDGE LANDFILL
(PLAN A)

AS-BUILT

SHEET 18



-16	91-00	0.0-1.0	Grey fine SAND
		1.0-3.0	Dark grey fine SAND
		3.0-6.0	Brown fine SAND

		A.B.T.	GWL: 3.8 Feet @ TOD

A-17	96-00	0.0-1.0	Grey fine SAND
		1.0-3.0	Dark grey fine SAND
		3.0-6.0	Brown fine SAND

		A.B.T.	GWL: 2.8 Feet @ TOD

LEGEND

C/L	CENTER LINE PAVEMENT
CONC.	CONCRETE
INV.	PIPE INVERT
ELEV.	ELEVATION
R.C.P.	REINFORCED CONCRETE PIPE
E.R.C.P.	ELIPTICAL REINFORCED CONRETE PIPE
C.M.P.	CORRUGATED METAL PIPE
L.F.	LINEAR FEET
RT.	RIGHT
LT.	LEFT
======	AS-BUILT PIPE LOCATION
100.26 A.B.	AS-BUILT SPOT ELEVATION

1" = 50' HORIZONTAL
1" = 2' VERTICAL

A S B U I L T

INFORMATION PROVIDED BY:
DATE: MAY 4, 1992 & NOV. 18, 1992
NAME: SUNSHINE STATE SURVEYORS, INC.
ADDRESS: 3131 ST. JOHNS BLUFF RD. SO.
JACKSONVILLE, FLORIDA 32216
PHONE #: 904-642-8550

I HEREBY CERTIFY THAT THE:
1. DRAINAGE STRUCTURES
2. AS-BUILT SPOT ELEVATIONS

ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN ON THESE "AS-BUILT" DRAWINGS AND MEET THE THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO SECTION 472.027 FLORIDA STATUTES AND THAT THERE ARE NOT ANY ENCROACHMENTS WITHIN THE EASEMENTS OR RIGHT-OF-WAY.

SIGNATURE [signature] 1-27-93
NAME ARTHUR A. MASTROMOLA, JR.
FLORIDA REG. LAND SURVEYOR No. 4166

PLATE: PLAN PROFILE O.P.R.&R.E. STANDARD
DETZEN CORPORATION
PRINTED IN U.S.A.

DATE OF LAST FIELDWORK: 11-18-92
FIELD BOOK 336/30-34
386/31-38
FILE No. 92D-5190

1/6/92 RELEASED FOR CONSTRUCTION

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

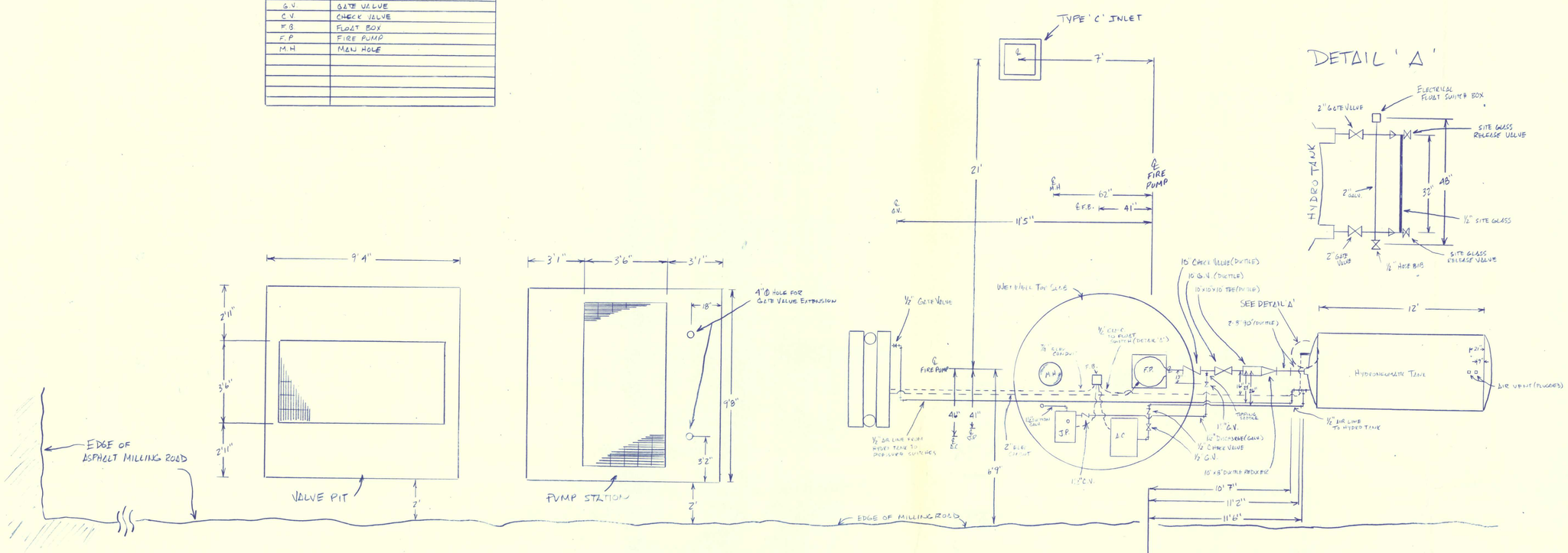
SCALE: 1" = 50'
WORK ORDER No. 592-61
DRAWN BY: J.L.R.
CHECKED BY: R.S.C.

STORM DRAINAGE
(STA. 90+00 - 102+24.12)
TRAIL RIDGE LANDFILL
(PLAN A)

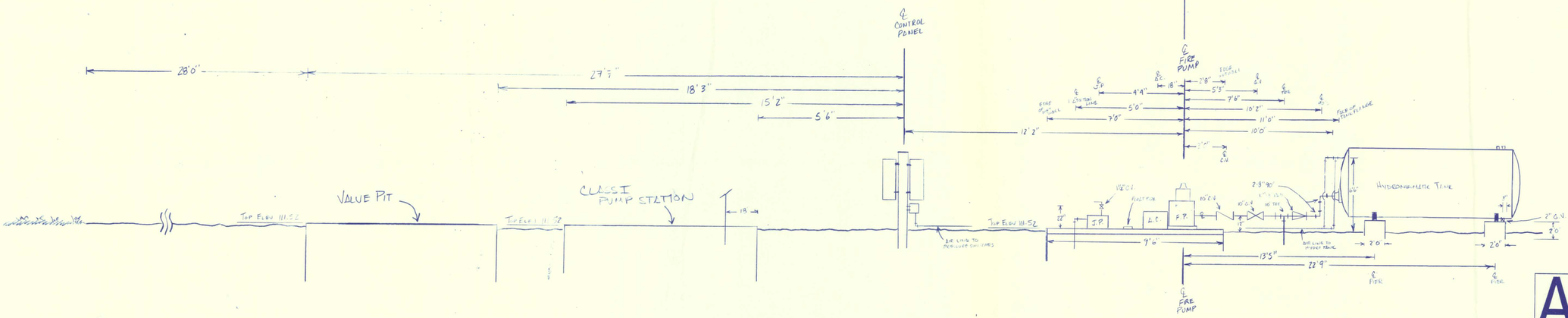
AS-BUILT

SHEET 19

FIRE PUMP / HYDRO TANK LEGEND	
INITIAL	DESCRIPTION
℄	CENTER LINE
A.C.	AIR COMPRESSOR
J.P.	JOCKEY PUMP
G.V.	GATE VALVE
C.V.	CHECK VALVE
F.B.	FLOAT BOX
F.P.	FIRE PUMP
M.H.	MAN HOLE



CLASS I FIRE PUMP/HYDRO TANK-STORMWATER ASBUILT - 'PLAN VIEW' N.T.S.



CLASS I FIRE PUMP/HYDRO TANK - STORMWATER ASBUILT - 'ELEVATION VIEW' N.T.S.

SHEET 20

AS-BUILT

I hereby certify that the materials used in the construction of:

___ Pavement	___ Water Main
___ Curb & Gutter	___ Sanitary Gravity Sewer
___ Storm Drainage	___ Force Main
	X Lift Station

are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.

Name BUCKLEY K. WILLIAMS Date 12-23-92

Signature

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

DATE: 12-22-92

CLASS I FIRE PUMP/HYDRO TANK - STORMWATER ASBUILT

TRAIL RIDGE LANDFILL

THE HASKELL COMPANY
ARCHITECTS/ENGINEERS/CONTRACTORS

AS-BUILT

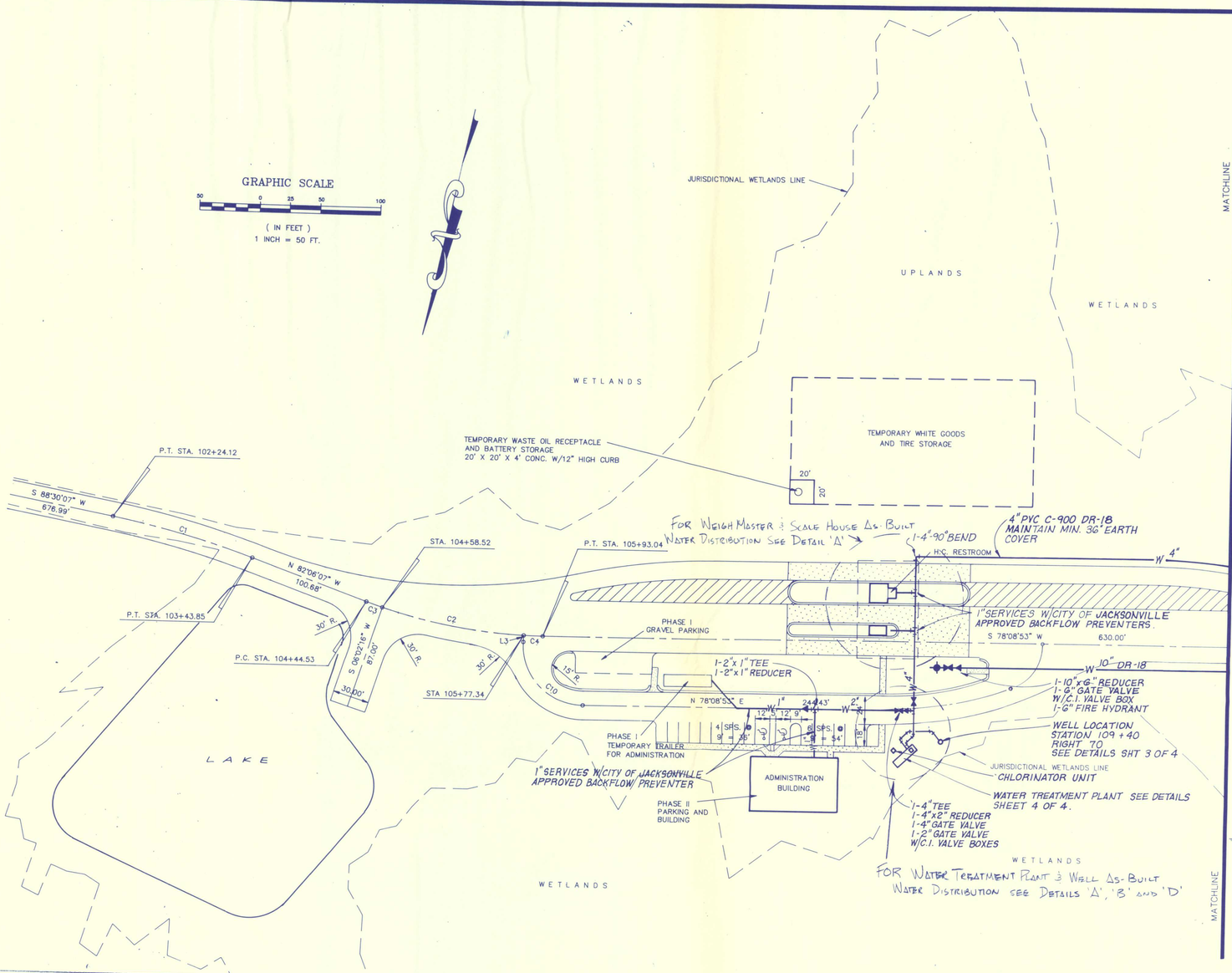
In accordance with Chapter 471, Florida Statutes, I hereby certify that the
____ Pavement
____ Curb & Gutter
____ Storm Drainage
____ Water Main (DRAINAGE)
____ Sanitary Sewer
____ Force Main
____ Lift Station
are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.
Name L. KENNETH WILLIAMS Date 7-18-92
Signature [signature] FL Prof. Eng. No. 20769

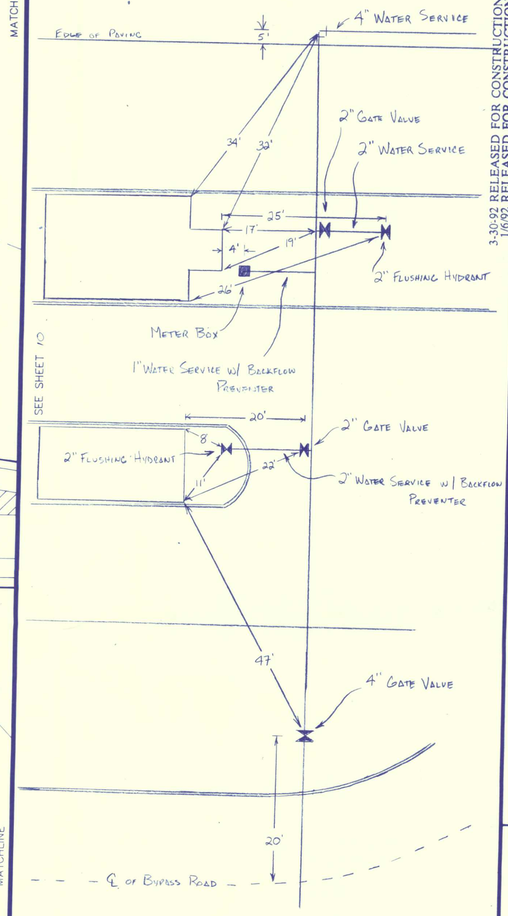
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

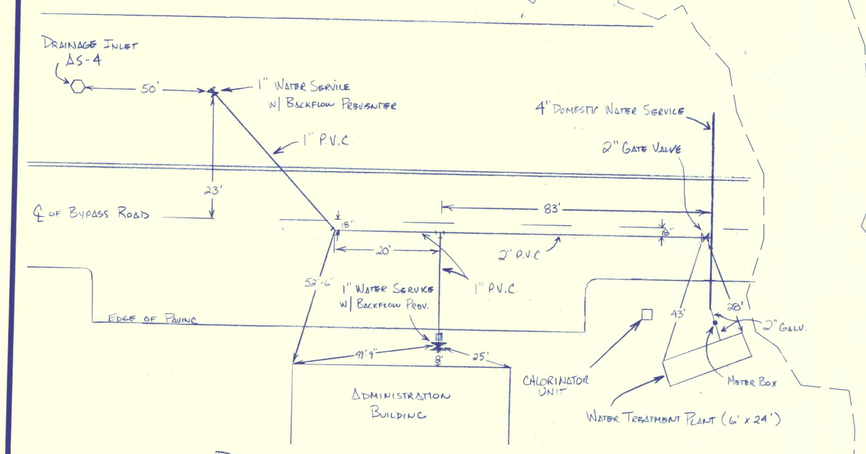
I hereby certify that the materials used in the construction of:
____ Pavement
____ Curb & Gutter
____ Storm Drainage
____ Water Main
____ Sanitary Gravity Sewer
____ Force Main
____ Lift Station
are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.
Name JACKLEY K. WILLIAMS Date 7/8/92
Signature [signature]

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

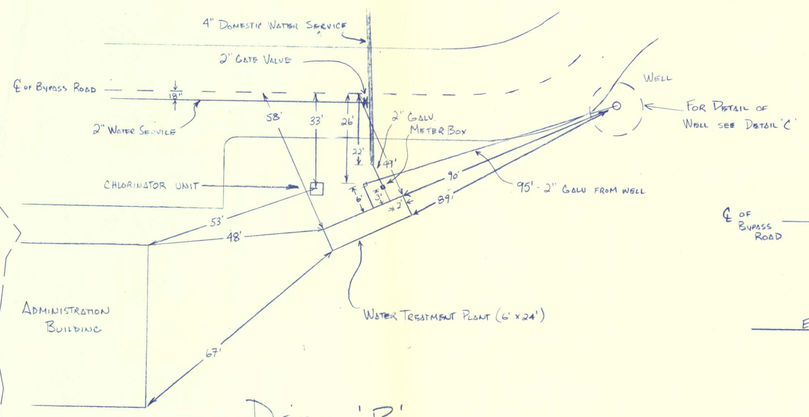




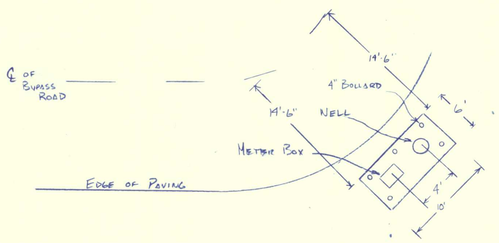
DETAIL 'A'
N.T.S.



DETAIL 'D'
N.T.S



DETAIL 'B'
N.T.S.



DETAIL 'C'
N.T.S.

3-30-92 RELEASED FOR CONSTRUCTION (UPDATED)
1/6/92 RELEASED FOR CONSTRUCTION
REVISIONS

ENG. PROJ. NO. E 89-113-9
DRAWN BY: S.J.L.
CHECKED BY: J.T.
DATE 11-26-91

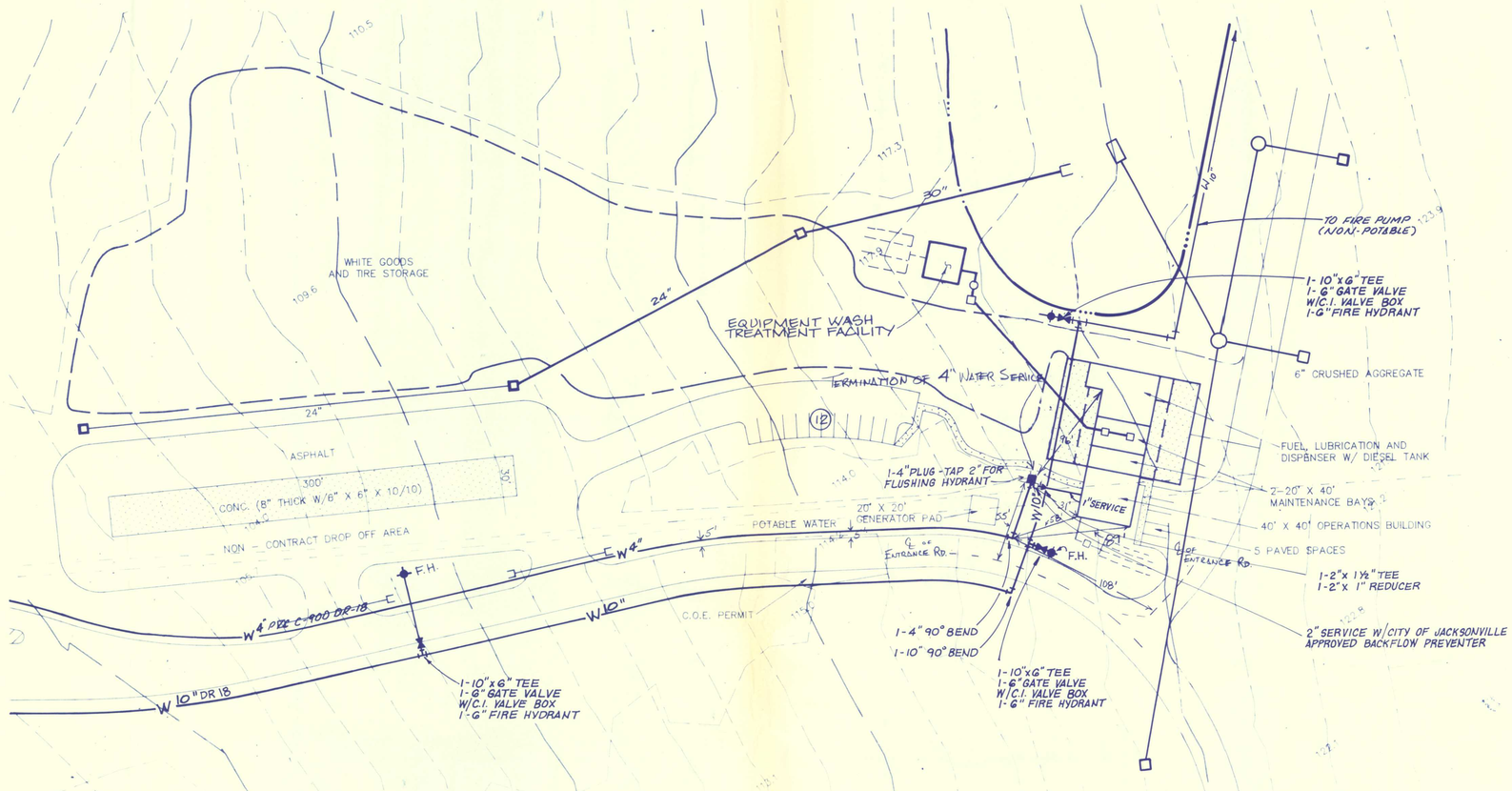
WATER TREATMENT FACILITY
TRAILRIDGE LANDFILL

JACKSONVILLE FLORIDA

DRAWING NO.
WT 1

RELEASED FOR CONSTRUCTION

PROJ NO



AS-BUILT

I hereby certify that the materials used in the construction of:

____ Pavement
____ Curb & Gutter
____ Storm Drainage
✓ Water Main
____ Sanitary Gravity Sewer
____ Force Main
____ Lift Station

are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.

Name [illegible] Date 7/5/92

Signature [illegible]

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

In accordance with Chapter 471, Florida Statutes, I hereby certify that the

____ Pavement
____ Curb & Gutter
____ Storm Drainage
✓ Water Main (DISINFECTED)
____ Sanitary Gravity Sewer
____ Force Main
____ Lift Station

are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.

Name SANDRA L. SANDERS Date 7-1-92

Signature [illegible] FL Prof. Eng. No. 20269

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

NOTE: REFER TO SHEET A3 FOR LIMITS
OF PHASE I AND PHASE II CONSTRUCTION

3-30-92 RELEASED FOR CONSTRUCTION (UPDATED).

REVISIONS

ENG. PROJ. NO. E-91-126-2
DRAWN BY: C.D.T.
CHECKED BY: J.M.
DATE: JAN. 1992

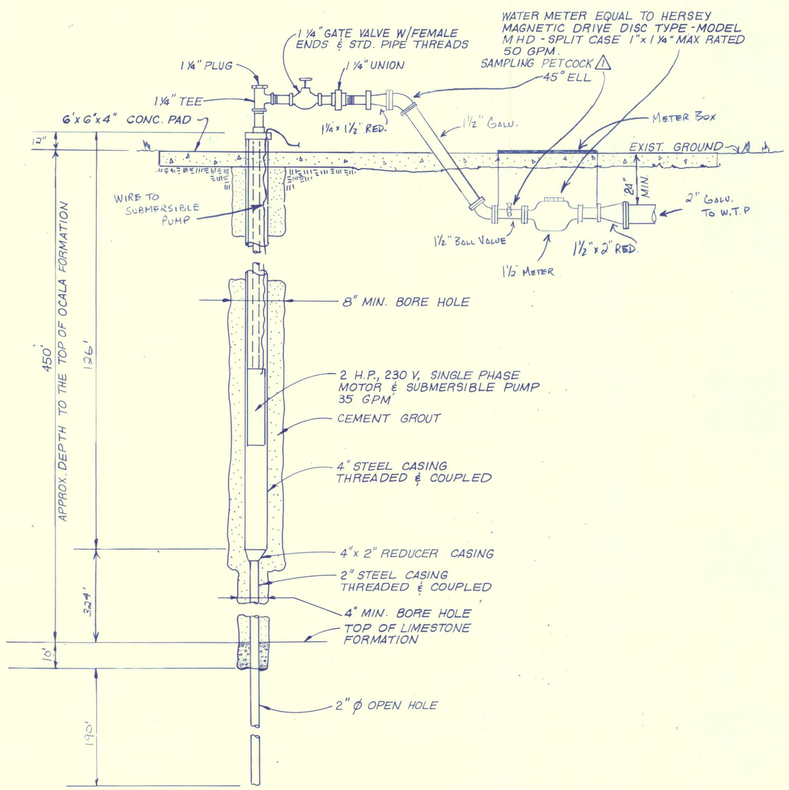
WATER TREATMENT FACILITY
TRAIL RIDGE LANDFILL
JACKSONVILLE, FLORIDA

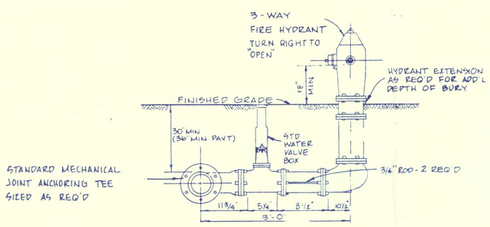
JACKSONVILLE, FLORIDA

1 FOR CONSTRUCTION ____ BY ____

DRAWING NO.
WT 2

PROJ. NO. 91-126-2





HYDRANT INSTALLATION WITH TIE RODS USING MECHANICAL JOINT FITTINGS

WATER NOTES

1. TEN FEET HORIZONTAL AND 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER LINES AND SANITARY SEWER LINES AND SERVICES (MINIMUM).
2. ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE CAST IRON VALVE BOX TO GRADE.
3. ALL WATER LINES SHALL HAVE A MINIMUM OF 30" COVER FROM FINISH GRADE IN UNPAVED AREAS AND 36" COVER IN PAVED AREAS.
4. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF WATER FACILITIES WITH ALL OTHER CONSTRUCTION AND SHALL BE RESPONSIBLE FOR LOCATION OF AND PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES DURING CONSTRUCTION.
5. WATER LINES ARE DESIGNED TO FINISH GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL ALL WORK IS COMPLETED.
6. UNSUITABLE MATERIALS UNDER WATER PIPE OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED PER CITY OF JACKSONVILLE STANDARDS. ALL UNSUITABLE MATERIAL IS TO BE HAULED OFF-SITE.
7. FOR WATER DETAILS SEE DRAWING NO. 3 .
8. THE CONTRACTOR SHALL INDICATE THE LOCATION OF THE TERMINATION OF EACH WATER LINE WITH A STAKE OR MARKER SUITABLE TO THE OWNER OR ENGINEER.
9. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE.
10. THRUST BLOCKING IS REQUIRED WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS.
11. ALL PVC WATER MAIN MATERIALS SHALL BE AS FOLLOWS:
    a. SIZES 4" AND UP, INCLUDING 8" IN DIAMETER - DR 18.
    b. SIZES SMALLER THAN 4" SHALL BE SCH. 40 - N.S.F. APPROVED.
12. ALL GATE VALVES SHALL BE RESILIENT SEAT TYPE OR DOUBLE WEDGE TYPE. VALVES SHALL BE MECHANICAL JOINT, CAST IRON, BRONZE FITTED. ALL VALVES SHALL OPEN BY TURNING TO THE RIGHT. VALVES SHALL BE RATED AT 200 PSI WORKING PRESSURE AND 400 PSI TEST PRESSURE.
13. FIRE HYDRANTS SHALL BE CITY OF JACKSONVILLE STANDARD.
14. ALL WATER MAINS SHALL BE PRESSURE TESTED AT 150 PSI FOR 2 HOURS IN ACCORDANCE WITH AWWA STANDARDS AND CITY OF JACKSONVILLE STANDARD REQUIREMENTS.
15. ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST CITY OF JACKSONVILLE STANDARDS AND SPECIFICATIONS.
16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS.
17. THESE ENGINEERING DRAWINGS MAY NOT SHOW ALL THE CITY STANDARD DETAILS REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT THE CONSTRUCTION BE IN ACCORDANCE WITH ALL CURRENT CITY STANDARD DETAILS AND SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF JACKSONVILLE STANDARD DETAILS AND SPECIFICATIONS FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO BEGINNING CONSTRUCTION.
18. "AS-BUILT"

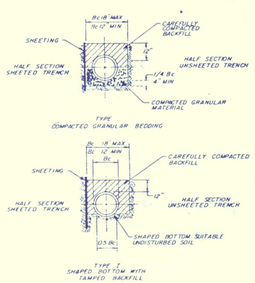
    AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR THERFORE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF JACKSONVILLE STANDARDS AND SPECIFICATIONS. THE COST OF AS-BUILT SERVICES SHALL BE REFLECTED AS PART OF THE CONSTRUCTION COSTS FOR THE WATER DISTRIBUTION SYSTEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE AS-BUILT DRAWINGS FOR APPROVAL BY THE OWNER.

WATER TREATMENT PLANT SPECIFICATIONS

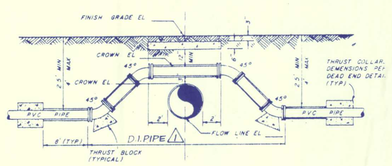
THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND READY FOR SERVICE ONE (1) PACKAGED STEEL WATER TREATMENT PLANT WITH A CAPACITY OF 10,000 GALLONS PER DAY.

THE PLANT SHALL BE SIMILAR AND EQUAL THAT MANUFACTURED BY WETHERELL TREATMENT SYS. INC. HAVING THE FOLLOWING COMPONANTS:

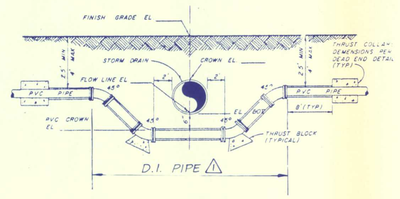
STORAGE TANK VOLUME:	2,660 GAL. MIN.
HYDRO PNEUMATIC TANK VOLUME:	1050 GAL. MIN.
AERATOR - 4 TRAY	19.3 SQ. FT.
2-HIGH SERVICE PUMPS	70 GPM @140 TDH
GAS CHLORINATION SYSTEM	0-25 LB/DAY MIN.
AIR COMPRESSOR	2 CFM @70 P.S.I.
ELECTRICAL CONTROL PANEL AND PUMP CONTROLLER SYSTEM	



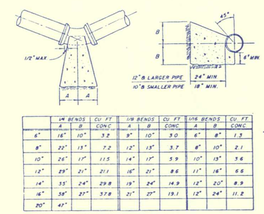
BEDDING DETAILS CLASS "B"



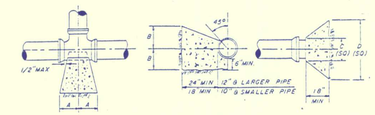
WATER CROSSING OVER STORM



WATER CROSSING UNDER STORM



	1/4 BENDS		CU. FT. CONC.	1/8 BENDS		CU. FT. CONC.	1/16 BENDS		CU. FT. CONC.
	A	B		A	B		A	B	
6"	18"	18"	1.7	9"	18"	1.0	4"	8"	1.2
8"	22"	13"	2.2	12"	13"	1.7	6"	10"	2.1
10"	26"	17"	11.5	14"	17"	5.9	10"	13"	3.6
12"	29"	21"	21.1	16"	21"	8.6	11"	16"	6.6
14"	33"	24"	29.8	18"	24"	14.9	12"	20"	8.9
16"	38"	27"	37.8	21"	27"	19.1	13"	24"	11.2
20"	45"								

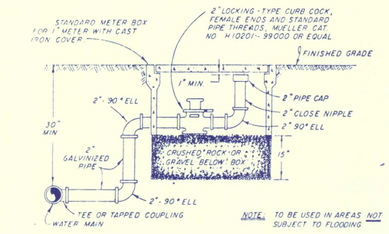


SIZE	TEE		CU. FT. CONC.
	A	B	
6"	10"	12"	3.5
8"	13"	16"	5.4
10"	16"	20"	9.4
12"	18"	24"	16.6
14"	22"	27"	23.2
16"	24"	30"	28.6
20"			

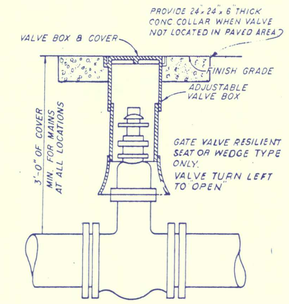
SIZE	PLUG		CU. FT. CONC.
	A	B	
6"	10"	21"	2.6
8"	12"	29"	4.5
10"	14"	36"	6.9
12"	16"	41"	9.0
14"	18"	48"	12.2
16"	20"	54"	15.2
20"			

NOTES
1. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
2. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR GOOD SOIL (A-1 THRU A-3, CLEAN SAND AND GRAVELS).
3. POOR SOIL (A4 THRU A8, SILTY SOILS, CLAYS, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

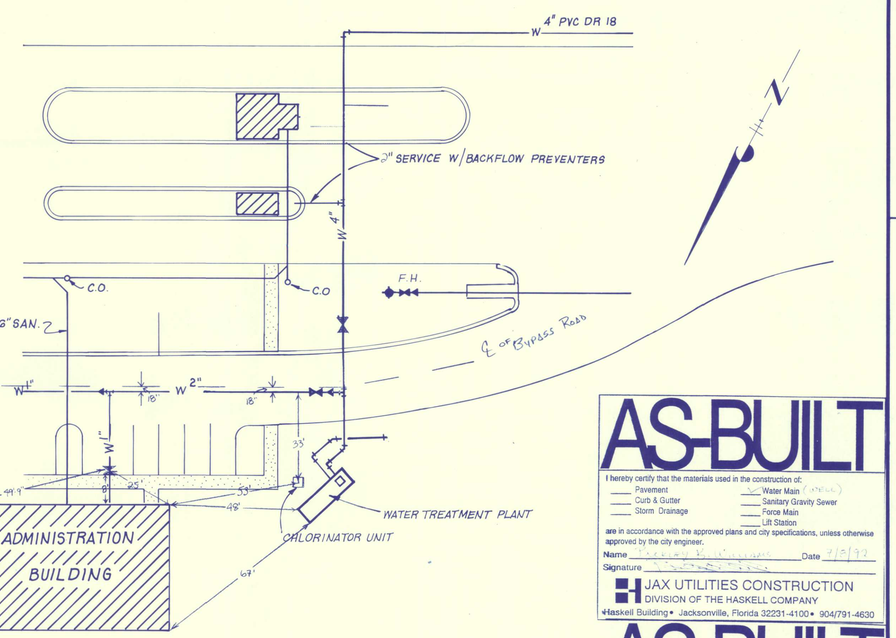
THRUST BLOCKS



FLUSHING VALVE BELOW GRADE TYPE



TYPICAL DETAIL GATE VALVE AND BOX



WATER TREATMENT PLANT SITE

N.T.S.

FOR ASBUILT ON WATER TREATMENT PLANT SITE SEE PLAN AND DETAILS ON SHEET WT1

AS-BUILT

I hereby certify that the materials used in the construction of:
___ Pavement ___ Water Main (PVC)
___ Curb & Gutter ___ Sanitary Gravity Sewer
___ Storm Drainage ___ Force Main
___ Lift Station
are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.
Name [illegible] Date 7/2/92
Signature [illegible]
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

In accordance with Chapter 471, Florida Statutes, I hereby certify that the
___ Pavement ✓ Water Main (PVC DR 18)
___ Curb & Gutter ___ Sanitary Gravity Sewer
___ Storm Drainage ___ Force Main
___ Lift Station
are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.
Name IGNACIO L. SANCHEZ Date 7-14-92
Signature [illegible] FL Prof. Eng. No. 32756
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

3-30-92 RELEASED FOR CONSTRUCTION (UPDATED)

REVISIONS
△1 2-20-92 REVISED PER REVIEW COMMENTS

EN9 PROJ. NO. E91-126-2
DRAWN BY C.D.T.
CHECKED BY: J.M.
DATE JAN. 1992

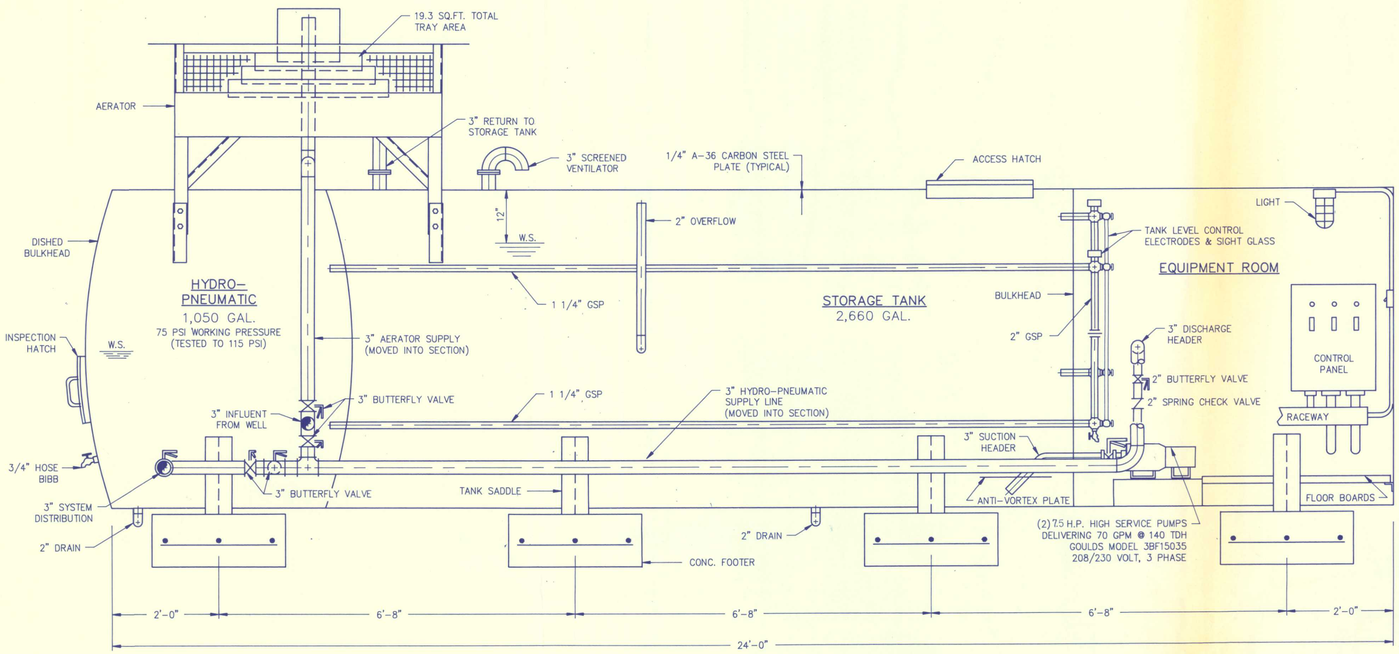
WATER TREATMENT FACILITY
TRAIL RIDGE LANDFILL
JACKSONVILLE, FLORIDA

JACKSONVILLE, FLORIDA

DRAWING NO.
WT 3

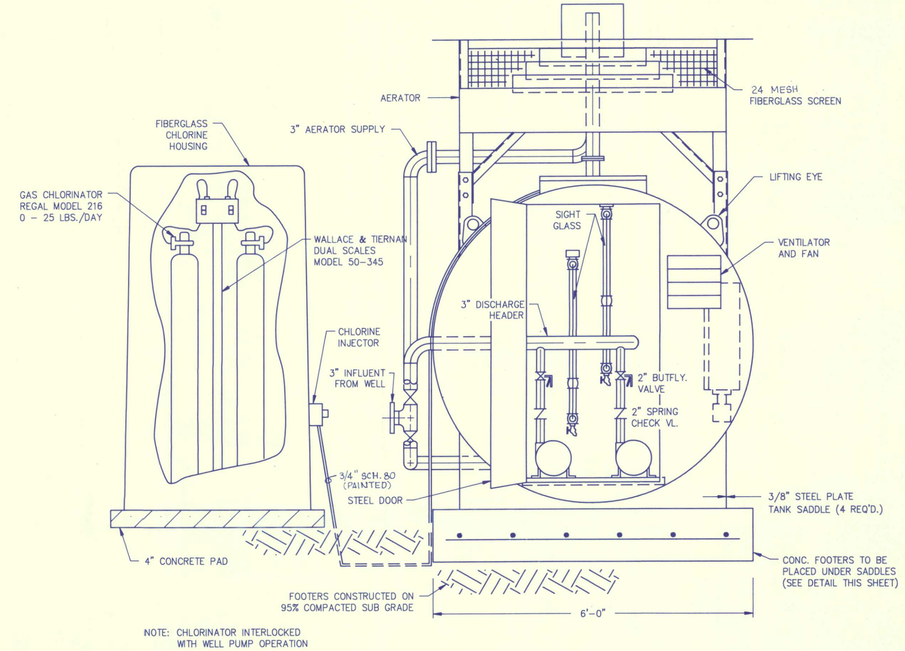
NOT RELEASED FOR CONSTRUCTION BY: _____

PROJ. NO. 91-126-2



LONGITUDINAL SECTION

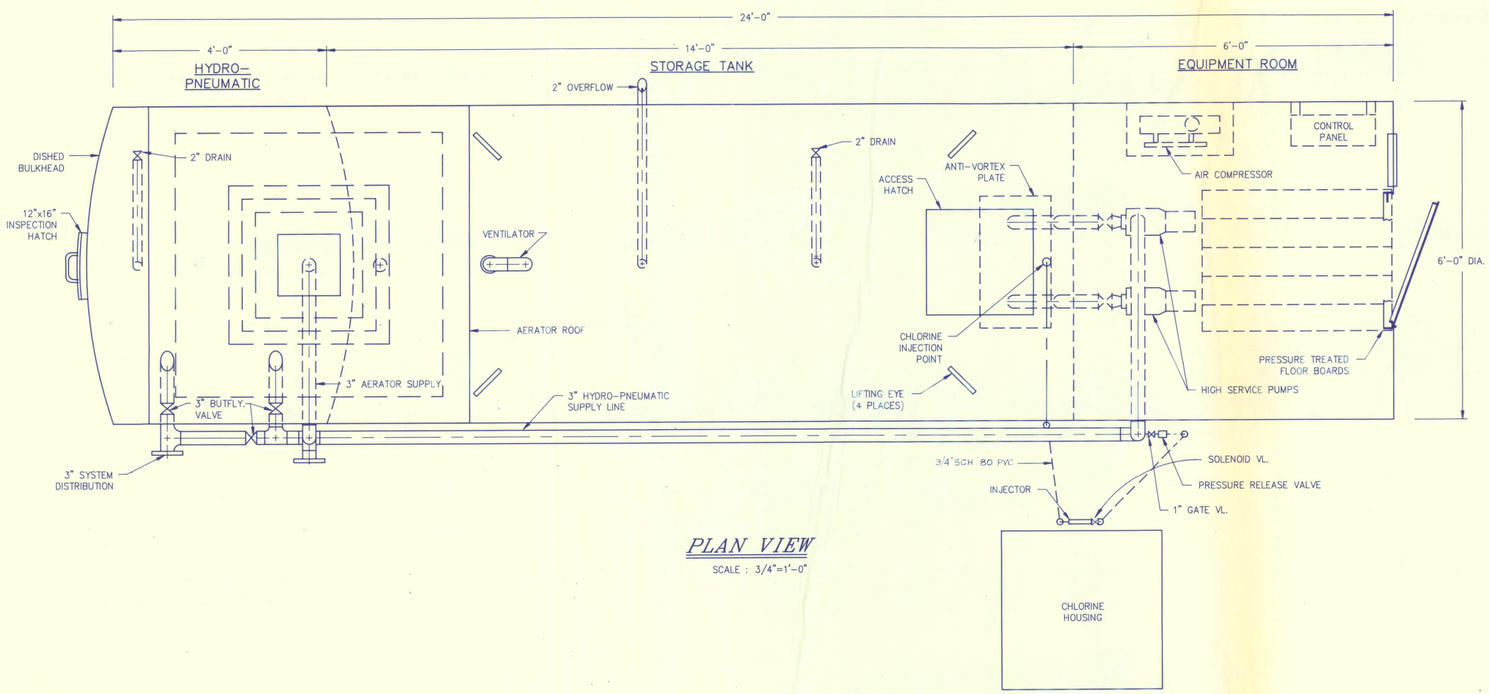
SCALE : 3/4"=1'-0"



NOTE: CHLORINATOR INTERLOCKED WITH WELL PUMP OPERATION

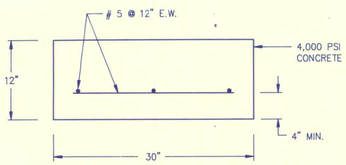
END VIEW

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



PLAN VIEW

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



FOOTER DETAIL

3/32" SCALE

NOTE :

TANK TO BE CONSTRUCTED OF 1/4" STEEL PLATE. ALL WELDED CONSTRUCTION.

SANDBLAST ALL STEEL SURFACES TO SSPC-SP6 COMMERCIAL BLAST CLEANING SPECIFICATIONS.

PAINTING TO BE AS FOLLOWS :
INTERIOR - INCLUDING AERATOR, STORAGE, AND HYDRO TANK SHALL HAVE TWO COATS OF MOBILE 40-AW-13, 7 MIL. EA. OR 14 MIL. TOTAL DRY FILM THICKNESS.
EXTERIOR - ONE COAT OF MOBILE PRIMER 40-DR-5 H.B. EPOXY, 4 MIL. DFT.,ONE FINISH COAT OF MOBILE 72-AQ-2 (TAN BARK) POLYURETHANE ENAMEL 1.5 MIL. DRY FILM THICKNESS.

AS-BUILT

I hereby certify that the materials used in the construction of:
___ Pavement ✓ Water Main PLANT
___ Curb & Gutter ___ Sanitary Gravity Sewer
___ Storm Drainage ___ Force Main
___ Lift Station
are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.
Name RUCKER K. WILLIAMS Date 7/8/92
Signature [illegible]
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

In accordance with Chapter 471, Florida Statutes, I hereby certify that the
___ Pavement ✓ Water Main (DOM 33 PC)
___ Curb & Gutter ___ Sanitary Gravity Sewer
___ Storm Drainage ___ Force Main
___ Lift Station
are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.
Name [illegible] Date 7-14-92
Signature [illegible] FL Prof. Eng. No. 20209
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

10,000 G.P.D.
WATER TREATMENT PLANT
"AS BUILT"

Glenn Wetherell

WETHERELL TREATMENT SYSTEMS, INC.
ORMOND BEACH, FLORIDA

SCALE AS SHOWN	APPROVED BY GOW	DRAWN BY S. R. J.
DATE 6 / 8 / 92		REVISED 8-7-92

TRAIL RIDGE

WT 4