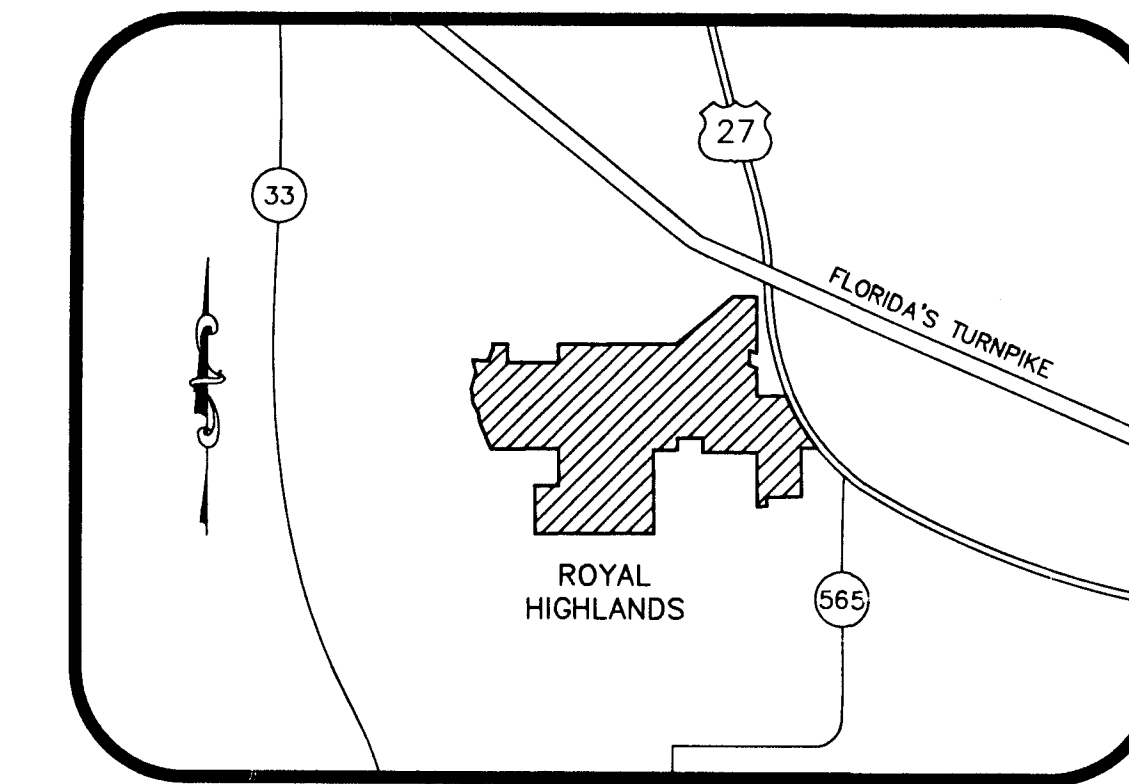
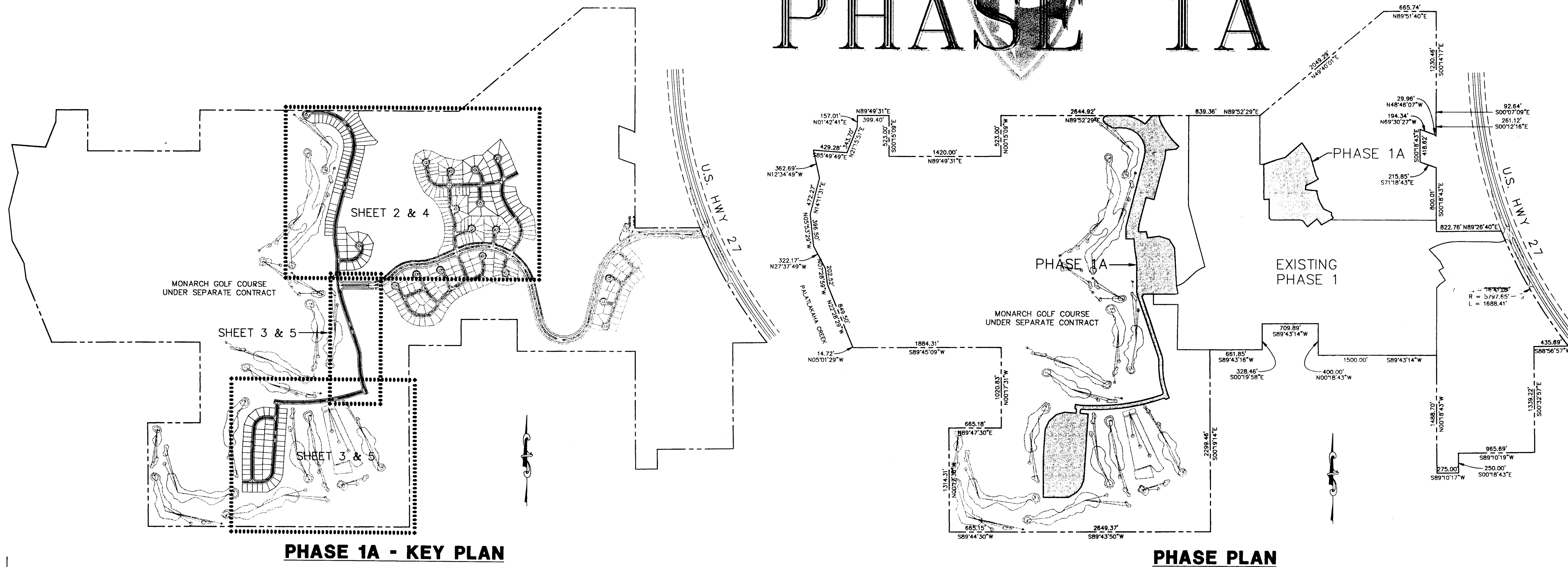




ROYAL HIGHLANDS

PHASE 1A



LOCATION MAP

INDEX OF SHEETS	
1	COVER SHEET
2-3	LOT LAYOUT PLANS
4-5	DRAINAGE PLANS
6	WATER RETENTION AREA DETAILS
7-8	UTILITY PLANS
9-13	DETAIL SHEETS
14-22	PLAN & PROFILE SHEETS

DEVELOPMENT NOTES

OVERALL MASTER DRAINAGE SYSTEM DESIGNED BY HARTMAN & ASSOCIATES, INC. ST. JOHNS PERMIT NO. 4-089-0301.

FOR WETLAND IMPACTS AND MITIGATION PLANS, SEE SUBMITTAL BY HARTMAN & ASSOCIATES, INC.

CONTRACTOR SHALL VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER.

CONTRACTOR SHALL LOCATE AND MAINTAIN IN GOOD WORKING ORDER ALL ABOVE GROUND AND BELOW GROUND UTILITIES. CONTRACTOR SHALL COORDINATE THE RELOCATION OR ALTERATION OF EXISTING UTILITIES AS MAY BE REQUIRED.

WATER UTILITY CONNECTIONS SHALL BE COORDINATED THROUGH THE CITY OF LEESBURG.

ALL SUB-BASE, BASE AND ASPHALTIC CONCRETE PAVING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LAKE COUNTY PUBLIC SERVICES DEPARTMENT.

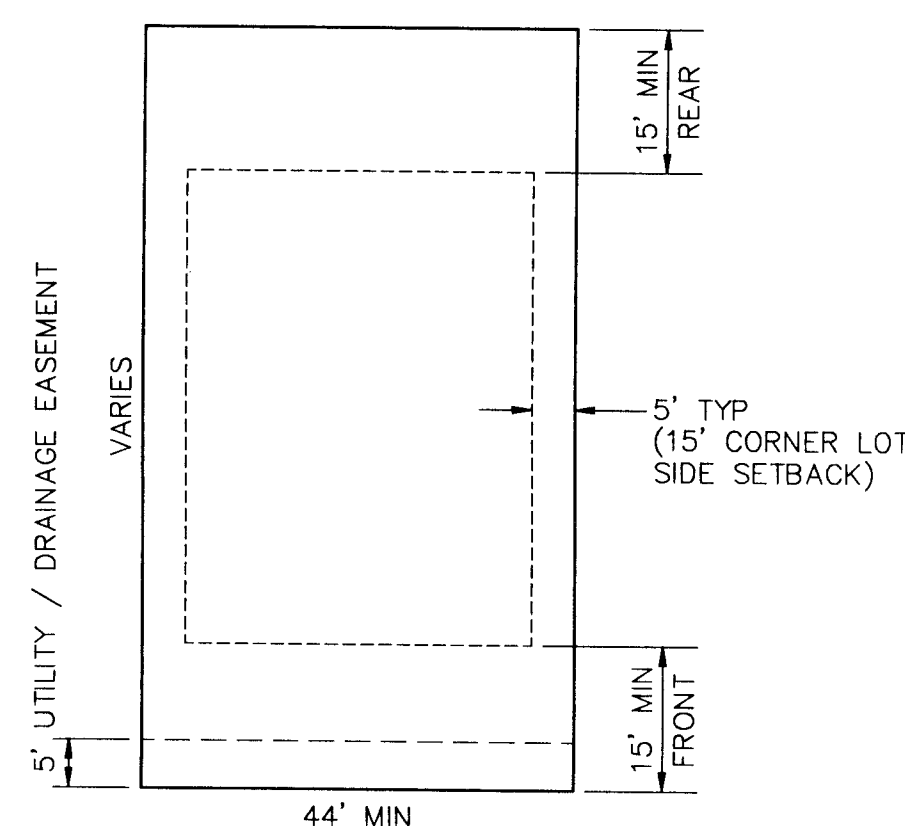
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS, LAKE COUNTY PUBLIC SERVICES DEPARTMENT, SOUTHERN STANDARD BUILDING CODE, AND ALL OTHER APPLICABLE CODES.

ALL DISTURBED OPEN AREAS SHALL BE SODED, SEEDED AND MULCHED OR OTHERWISE STABILIZED TO PREVENT EROSION IMMEDIATELY FOLLOWING COMPLETION OF THE SITE CONSTRUCTION.

CONTRACTOR SHALL SUPPLY THE ENGINEER WITH "AS-BUILT" CONDITIONS OF ACTUAL CONSTRUCTION.

REMOVAL OF TREES SHALL BE AS DIRECTED BY THE OWNER.

MAINTENANCE ENTITY: PRINGLE COMMUNITIES, INC.



TYPICAL LOT LAYOUT

MIN. LOT SIZE = 4400 SQ. FT.

ROYAL HIGHLANDS LEGAL DESCRIPTION

THAT PART OF SECTIONS 12, 13, AND 14, OF TOWNSHIP 21 SOUTH, RANGE 24 EAST, IN LAKE COUNTY, FLORIDA, AND THAT PART OF SECTION 18, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF SAID SECTION 13, TOWNSHIP 21 SOUTH, RANGE 24 EAST, AND RUN N.89°52'29"E. ALONG THE NORTH LINE OF THE N.W. 1/4 OF SAID SECTION 13 A DISTANCE OF 2644.92 FEET TO THE NORTHEAST CORNER OF THE N.W. 1/4 OF SAID SECTION 13; THENCE N.89°52'29"E., ALONG THE NORTH LINE OF THE N.E. 1/4 OF SAID SECTION 13 A DISTANCE OF 639.36 FEET; THENCE N.49°40'01"E., 2049.29 FEET TO A POINT ON THE NORTH LINE OF THE S.E. 1/4 OF THE S.E. 1/4 OF THE AFOREMENTIONED SECTION 12, TOWNSHIP 21 SOUTH, RANGE 24 EAST; THENCE N.89°51'40"E., ALONG THE NORTH LINE OF THE S.E. 1/4 OF THE S.E. 1/4 OF SAID SECTION 12 A DISTANCE OF 665.74 FEET TO A POINT ON THE EAST LINE OF THE S.E. 1/4 OF SAID SECTION 12; THENCE S.00°14'17"E. ALONG THE EAST LINE OF THE S.E. 1/4 A DISTANCE OF 1230.46 FEET; THENCE CONTINUE S.00°07'09"E. ALONG THE EAST LINE OF THE S.E. 1/4 OF SAID SECTION 12 A DISTANCE OF 92.64 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 12, SAID POINT ALSO BEING THE NORTHEAST CORNER OF THE AFOREMENTIONED SECTION 13; THENCE S.00°12'16"E. ALONG THE EAST LINE OF THE N.E. 1/4 OF SAID SECTION 13 A DISTANCE OF 261.12 FEET; THENCE N.48°46'07"W., 29.96 FEET; THENCE N.69°30'27"W., 194.34 FEET; THENCE S.00°18'43"E., 418.62 FEET; THENCE S.71°18'43"E., 215.85 FEET TO A POINT ON THE EAST LINE OF THE N.E. 1/4 OF THE AFOREMENTIONED SECTION 13; THENCE S.00°18'43"E., ALONG THE EAST LINE OF THE N.E. 1/4 OF THE SAID SECTION 13 A DISTANCE OF 800.01 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1200 FEET OF GOVERNMENT LOT 1 OF THE AFOREMENTIONED SECTION 18, TOWNSHIP 21 SOUTH, RANGE 25 EAST; THENCE N.89°26'40"E. ALONG THE SOUTH LINE OF THE NORTH 1200 FEET OF SAID GOVERNMENT LOT 1 A DISTANCE OF 822.76 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY NO. 27, SAID POINT BEING ON A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 5797.65 FEET AND A RADIAL BEARING OF S.67°45'52"W., THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE AND SAID SOUTHWESTERLY RIGHT-OF-WAY LINE THROUGH A CENTRAL ANGLE OF 16°41'09" AN ARC LENGTH OF 1688.41 FEET TO A POINT ON THE SOUTH LINE OF GOVERNMENT LOT 2 IN THE AFOREMENTIONED SECTION 18, TOWNSHIP 21 SOUTH, RANGE 25 EAST; THENCE S.88°56'57"W. ALONG THE SOUTH LINE OF SAID GOVERNMENT LOT 2 A DISTANCE OF 435.69 FEET TO A POINT ON THE EAST LINE OF THE WEST 1/2 OF GOVERNMENT LOT 3 OF SAID SECTION 18; THENCE S.00°32'52"E., ALONG THE EAST LINE OF THE WEST 1/2 OF GOVERNMENT LOT 3 A DISTANCE OF 1339.22 FEET TO A POINT ON THE SOUTH LINE OF SAID GOVERNMENT LOT 3; THENCE S.89°10'19"W. ALONG THE SOUTH LINE OF SAID GOVERNMENT LOT 3, 965.69 FEET TO A POINT ON THE EAST LINE OF THE WEST 275 FEET OF GOVERNMENT LOT 4 OF SAID SECTION 18; THENCE S.00°18'43"E. ALONG THE EAST LINE OF THE WEST 275 FEET OF SAID GOVERNMENT LOT 4 A DISTANCE OF 250.00 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 250 FEET OF THE WEST 275 FEET OF SAID GOVERNMENT LOT 4; THENCE S.89°10'17"W., ALONG THE SOUTH LINE OF THE NORTH 250 FEET OF THE WEST 275 FEET OF SAID GOVERNMENT LOT 4 A DISTANCE OF 275 FEET TO A POINT ON THE WEST LINE OF THE S.W. 1/4 OF SAID SECTION 18; THENCE N.00°18'43"W. ALONG THE WEST LINE OF THE S.W. 1/4 A DISTANCE OF 1428.70 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 400 FEET OF THE N.E. 1/4 OF THE S.E. 1/4 OF THE AFOREMENTIONED SECTION 13 OF TOWNSHIP 21 SOUTH, RANGE 24 EAST; THENCE S.89°43'14"W. ALONG THE SOUTH LINE OF THE NORTH 400 FEET

OF THE N.E. 1/4 OF THE S.E. 1/4 A DISTANCE OF 1500.00 FEET TO A POINT ON THE WEST LINE OF THE EAST 1500 FEET OF THE N.E. 1/4 OF THE S.E. 1/4 OF SAID SECTION 13; THENCE N.00°18'43"W. ALONG THE WEST LINE OF THE EAST 1500 FEET OF THE N.E. 1/4 OF THE S.E. 1/4 A DISTANCE OF 400.00 FEET TO A POINT ON THE NORTH LINE OF THE S.E. 1/4 OF SAID SECTION 13; THENCE S.89°43'14"W. ALONG THE NORTH LINE OF THE S.E. 1/4 A DISTANCE OF 709.89 FEET TO A POINT ON THE EAST LINE OF THE N.W. 1/4 OF THE N.W. 1/4 OF THE S.E. 1/4 OF THE SAID SECTION 13; THENCE S.00°19'58"E. ALONG THE EAST LINE OF THE N.W. 1/4 OF THE N.W. 1/4 OF THE S.E. 1/4 A DISTANCE OF 328.46 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE N.W. 1/4 OF THE N.W. 1/4 OF SAID SECTION 13; THENCE S.89°43'16"W., ALONG THE SOUTH LINE OF THE NORTH 1/2 OF THE N.W. 1/4 OF THE N.W. 1/4 OF SAID SECTION 13; THENCE S.00°19'58"E. ALONG THE EAST LINE OF THE S.W. 1/4 OF SAID SECTION 13; THENCE S.00°19'14"E. ALONG THE EAST LINE OF THE S.W. 1/4 OF SAID SECTION 13 A DISTANCE OF 2299.46 FEET TO THE SOUTHEAST CORNER OF THE S.W. 1/4 OF SAID SECTION 13; THENCE S.89°34'50"W., ALONG THE SOUTH LINE OF THE S.W. 1/4 A DISTANCE OF 2649.37 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 13; THENCE S.89°44'30"W., ALONG THE SOUTH LINE OF THE AFOREMENTIONED SECTION 14 OF TOWNSHIP 21 SOUTH, RANGE 24 EAST, A DISTANCE OF 665.15 FEET TO A POINT ON THE WEST LINE OF THE EAST 1/2 OF THE S.E. 1/4 OF THE S.E. 1/4 OF SAID SECTION 14; THENCE N.00°17'35"W. ALONG THE WEST LINE OF THE EAST 1/2 OF THE S.E. 1/4 OF THE S.E. 1/4 OF SAID SECTION 14; THENCE N.27°37'49"W., 849.50 FEET; THENCE N.07°29'59"W., 202.52 FEET; THENCE N.27°37'49"W., 322.17 FEET; THENCE N.05°53'29"W., 396.50 FEET; THENCE N.14°11'31"E., 472.27 FEET; THENCE N.12°34'49"W., 362.69 FEET; THENCE S.85°49'49"E., 429.28 FEET; THENCE N.21°15'51"E., 343.70 FEET; THENCE N.01°42'41"E., 157.01 FEET TO A POINT ON THE NORTH LINE OF THE N.E. 1/4 OF THE AFOREMENTIONED SECTION 14; THENCE LEAVING SAID CENTERLINE RUN N.89°49'31"E. ALONG THE NORTH LINE OF THE N.E. 1/4 OF SAID SECTION 14 A DISTANCE OF 399.40 FEET TO A POINT ON THE WEST LINE OF THE EAST 1420 FEET OF THE EAST 1/2 OF SAID SECTION 14; THENCE S.00°15'09"E. ALONG THE WEST LINE OF THE EAST 1420 FEET OF THE EAST 1/2 OF SAID SECTION 14 A DISTANCE OF 523.00 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 523 FEET OF THE EAST 1420 FEET OF THE EAST 1/2 OF SAID SECTION 14; THENCE N.89°49'31"E. ALONG THE SOUTH LINE OF THE NORTH 523 FEET OF THE EAST 1420 FEET OF THE EAST 1/2 OF SAID SECTION 14 A DISTANCE OF 1420.00 FEET TO A POINT ON THE EAST LINE OF THE N.E. 1/4 OF SAID SECTION 14; THENCE N.00°15'09"W. ALONG THE EAST LINE OF THE N.E. 1/4 A DISTANCE OF 523.00 FEET TO THE POINT OF BEGINNING.

ALL OF THE ABOVE IS SUBJECT TO ALL EASEMENTS, RIGHTS-OF-WAY AND RESTRICTIONS OF RECORD, IF ANY.

OWNER

PRINGLE COMMUNITIES, INC.
JOHN PRINGLE, PRESIDENT
26600 ACE AVENUE
LEESBURG, FL 34748
PHONE (352) 365-2303
FAX (352) 365-6221

ENGINEER

NEWMAN CONSULTING ENGINEERS, INC.
KEITH E. RIDDLE, P.E.
P.O. BOX 490264
LEESBURG, FL 34749-0264
PHONE (352) 787-7482
FAX (352) 787-7412

SURVEYOR

HALL, FARNER & ASSOCIATES, INC.
GEORGE W. FARNER, P.L.S.
2007 W. BUTLER ST.
LEESBURG, FL 34748
PHONE (352) 787-5115
FAX (352) 787-0767

SITE DATA - PHASE 1A

PROJECT AREA = 45 ACRES
NO. OF PHASE 1A LOTS = 172 SINGLE FAMILY UNITS
MIN. LOT AREA = 4,400 SQ.FT.
ZONING = "PUD"
SETBACKS: FRONT = 15 FEET
SIDE = 5 FEET
REAR = 15 FEET
WATER SERVICE - CITY OF LEESBURG
SEWER SERVICE - CITY OF LEESBURG
SOILS - SEE SOILS REPORT

AS BUILT

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

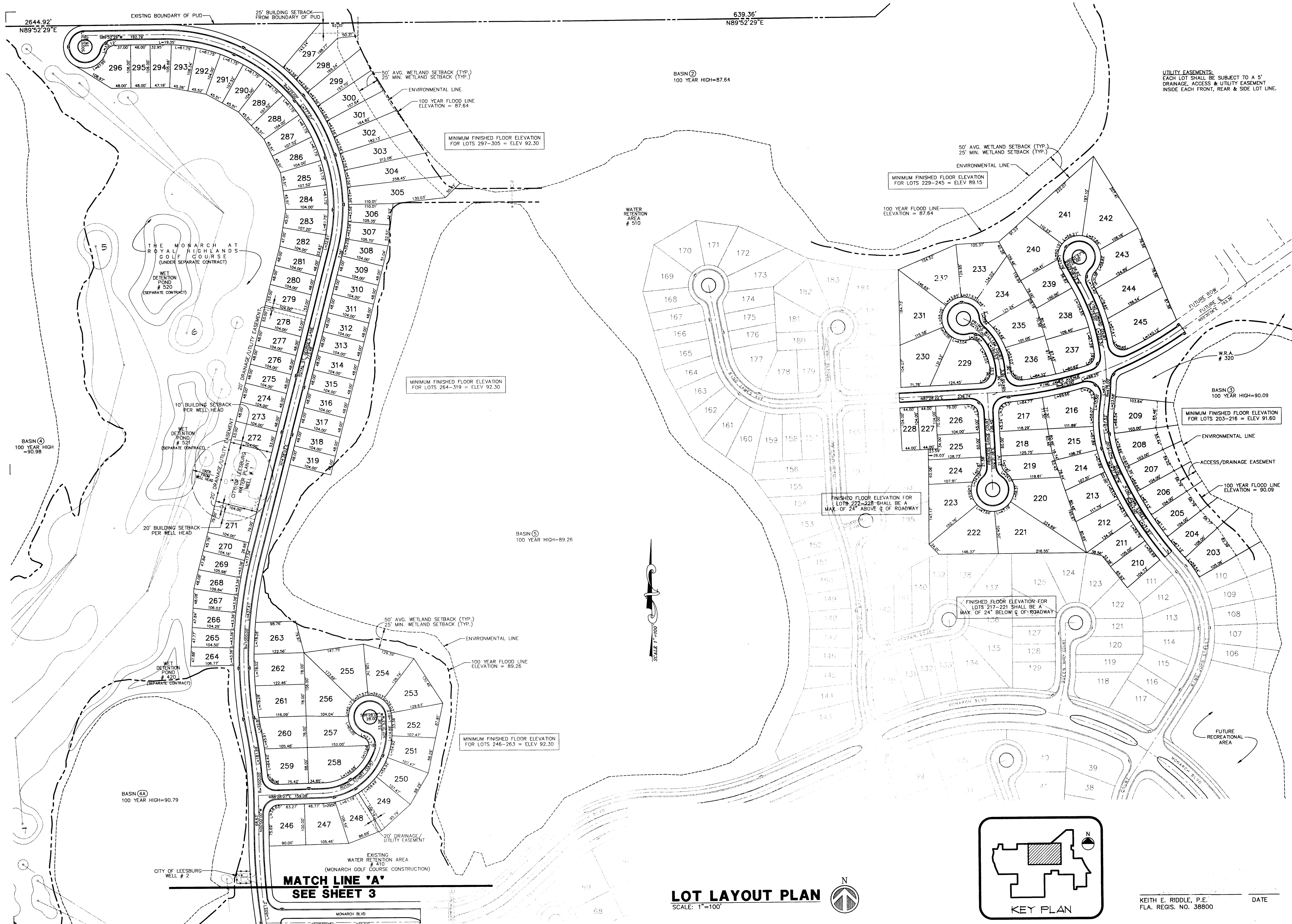
NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

CONSTRUCTION PLANS
ROYAL HIGHLANDS - PHASE 1A
FLORIDA
LAKE COUNTY

SHEET NO.
1
22

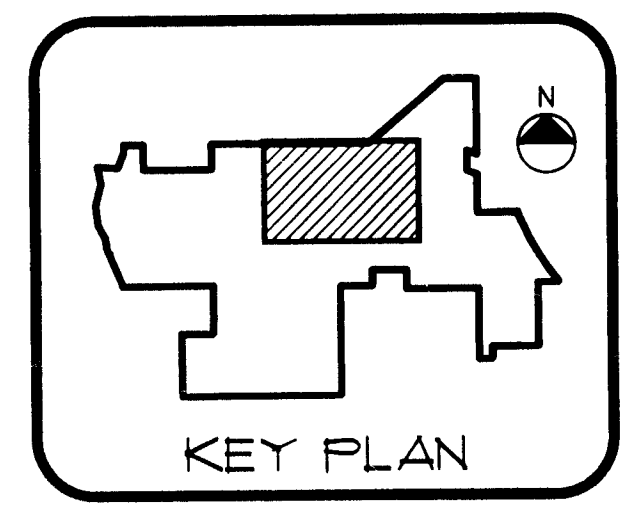
REV # 1 AS-BUILT LOTS 240-319 2/18/97
REV # 2 AS-BUILT LOTS 209-249 + 320-374 1/1/97
REV # 3 REV PER SJRWMD 7/24/96
REV # 4 REV PER SJRWMD 6/20/96
REV # 5 REV LOT SIZES & NUMBERING PER OWNER 5/7/96

PROJECT NO: 93092



MATCH LINE 'A'
SEE SHEET 3

LOT LAYOUT PLAN
SCALE: 1"=100'



KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

AS-BUILT LOTS 246-319 2/18/97

REV 01 AS-BUILT LOTS 203-245 & 312-314 1/17/97

REV 02 REV PER SURV 7/24/96

REV 03 REV PER SURV 8/20/96

REV 04 REV BUILDING SETBACK PER WELL HEAD 5/10/96

REV 05 REV LOT SIZES & NUMBERING PER OWNER 5/7/96

LOT LAYOUT PLAN

ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY FLORIDA

SHEET NO.

2

22

FILE: 93092\PH-1A\PH1A-02X

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412



UTILITY EASEMENTS:
EACH LOT SHALL BE SUBJECT TO A 5' DRAINAGE ACCESS & UTILITY EASEMENT INSIDE EACH FRONT, REAR & SIDE LOT LINE.

MINIMUM FINISHED FLOOR ELEVATION FOR LOTS 297-305 = ELEV 92.30

MINIMUM FINISHED FLOOR ELEVATION FOR LOTS 229-245 = ELEV 89.15

MINIMUM FINISHED FLOOR ELEVATION FOR LOTS 264-319 = ELEV 92.30

MINIMUM FINISHED FLOOR ELEVATION FOR LOTS 203-216 = ELEV 91.60

FINISHED FLOOR ELEVATION FOR LOTS 222-228 SHALL BE A MAX OF 24" ABOVE Q OF ROADWAY

FINISHED FLOOR ELEVATION FOR LOTS 217-221 SHALL BE A MAX OF 24" BELOW Q OF ROADWAY

MINIMUM FINISHED FLOOR ELEVATION FOR LOTS 246-263 = ELEV 92.30

BASIN (4) 100 YEAR HIGH = 90.98

BASIN (5) 100 YEAR HIGH = 89.26

BASIN (4A) 100 YEAR HIGH = 90.79

BASIN (2) 100 YEAR HIGH = 87.64

BASIN (3) 100 YEAR HIGH = 90.09

THE MONARCH AT ROYAL HIGHLANDS GOLF COURSE (UNDER SEPARATE CONTRACT)

WET DETENTION POND # 520 (SEPARATE CONTRACT)

WET DETENTION POND # 521 (SEPARATE CONTRACT)

CITY OF LEESBURG WATER WELL # 1

WET DETENTION POND # 420 (SEPARATE CONTRACT)

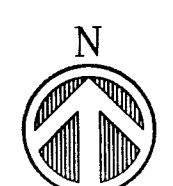
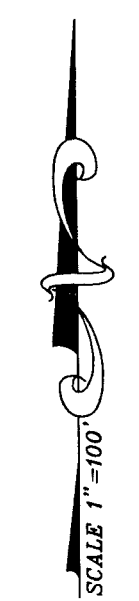
CITY OF LEESBURG WATER WELL # 2

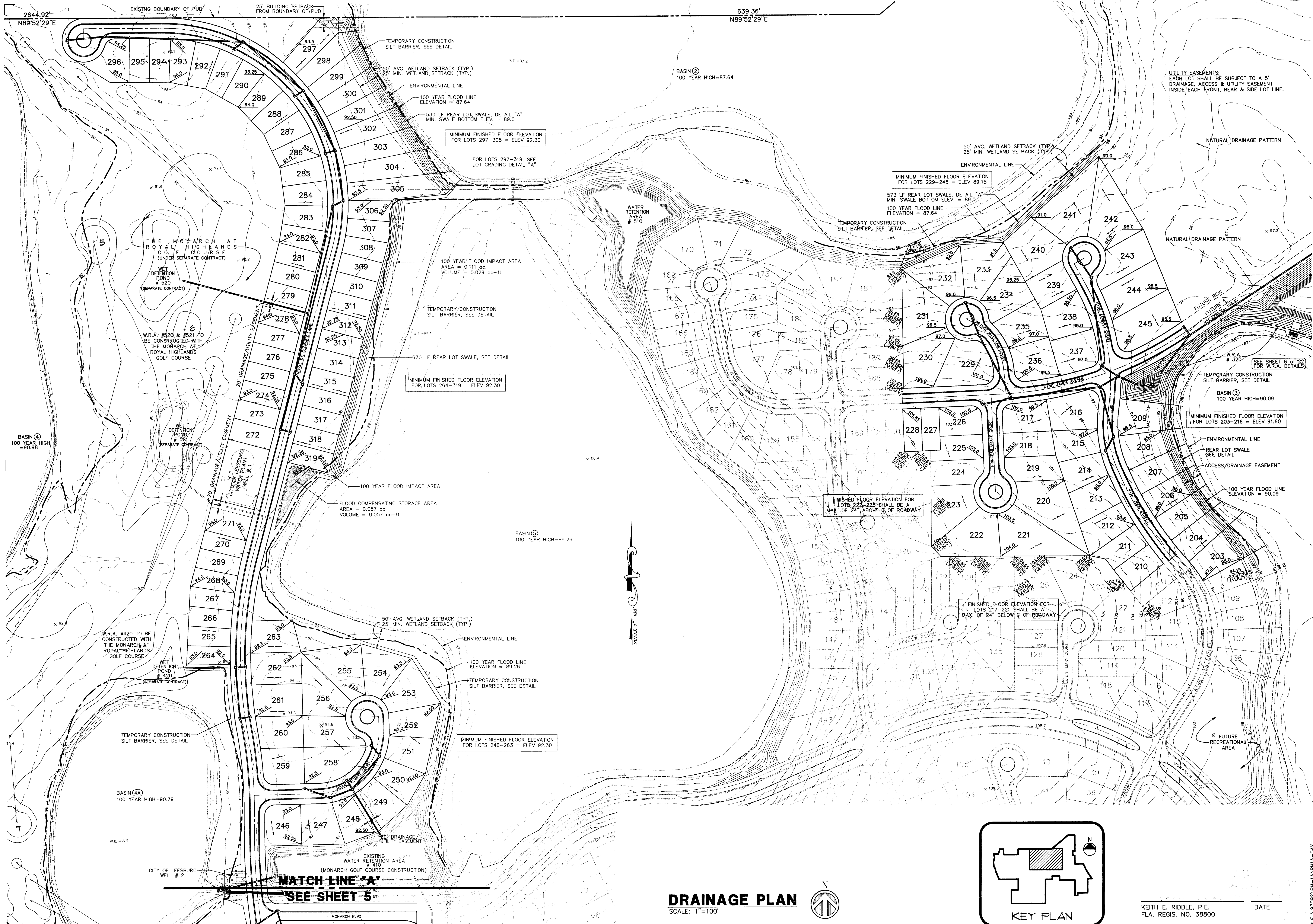
EXISTING WATER RETENTION AREA # 410 (MONARCH GOLF COURSE CONSTRUCTION)

WATER RETENTION AREA # 510

W.R.A. # 320

FUTURE RECREATIONAL AREA





NEWMAN CONSULTING ENGINEERS, INC.
 P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
 PHONE (352) 787-7482 • FAX (352) 787-7412

NE

REV. 05 AS-BUILT LOTS 246-319	2/18/97
REV. 04 AS-BUILT LOTS 243-245 & 320-374	1/17/97
REV. 03 REV. PER SURVAD 7/24/96	
REV. 02 REV. PER SURVAD 6/20/96	
REV. 01 REV. PER SURVAD 5/7/96	

DRAINAGE PLAN

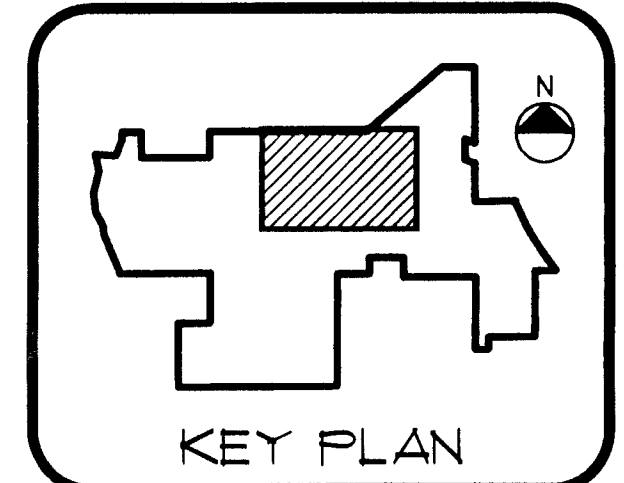
ROYAL HIGHLANDS - PHASE 1A

FLORIDA

LAKE COUNTY

DRAWN R.S.H.	CHECKED K.E.R.	SCALE: 1"=100'	DATE: 4/19/96
PROJECT NO. 93092		SHEET NO. 4	
22		DATE	

FILE: 93092A-PH-1A(RH)A-04X



DRAINAGE PLAN
SCALE: 1"=100'



KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

MATCH LINE 'A'
SEE SHEET 5

CITY OF LEESBURG
WELL # 2

W.E.=86.2

BASIN (4A)
100 YEAR HIGH=90.79

TEMPORARY CONSTRUCTION
SILT BARRIER, SEE DETAIL

W.R.A. #420 TO BE
CONSTRUCTED WITH
THE MONARCH AT
ROYAL HIGHLANDS
GOLF COURSE

W.R.A. #520 & #521 TO
BE CONSTRUCTED WITH
THE MONARCH AT
ROYAL HIGHLANDS
GOLF COURSE

THE MONARCH AT
ROYAL HIGHLANDS
GOLF COURSE
(UNDER SEPARATE CONTRACT)

2644.92'
N89°52'29"E

EXISTING BOUNDARY OF PUD

25' BUILDING SETBACK
FROM BOUNDARY OF PUD

639.36'
N89°52'29"E

BASIN (2)
100 YEAR HIGH=87.64

MINIMUM FINISHED FLOOR ELEVATION
FOR LOTS 297-305 = ELEV 92.30

100 YEAR FLOOD IMPACT AREA
AREA = 0.111 ac.
VOLUME = 0.029 cc-ft

MINIMUM FINISHED FLOOR ELEVATION
FOR LOTS 264-319 = ELEV 92.30

BASIN (5)
100 YEAR HIGH=89.26

FLOOD COMPENSATING STORAGE AREA
AREA = 0.057 ac.
VOLUME = 0.057 cc-ft

670 LF REAR LOT SWALE, SEE DETAIL

530 LF REAR LOT SWALE, DETAIL "A"
MIN. SWALE BOTTOM ELEV. = 89.0

50' AVG. WETLAND SETBACK (TYP.)
25' MIN. WETLAND SETBACK (TYP.)

MINIMUM FINISHED FLOOR ELEVATION
FOR LOTS 229-245 = ELEV 89.15

573 LF REAR LOT SWALE, DETAIL "A"
MIN. SWALE BOTTOM ELEV. = 89.0
100 YEAR FLOOD LINE
ELEVATION = 87.64

FINISHED FLOOR ELEVATION FOR
LOTS 222-228 SHALL BE A
MAX. OF 24" ABOVE C. OF ROADWAY

FINISHED FLOOR ELEVATION FOR
LOTS 217-221 SHALL BE A
MAX. OF 24" BELOW C. OF ROADWAY

UTILITY EASEMENTS:
EACH LOT SHALL BE SUBJECT TO A 5'
DRAINAGE, ACCESS & UTILITY EASEMENT
INSIDE EACH FRONT, REAR & SIDE LOT LINE.

NATURAL DRAINAGE PATTERN

NATURAL DRAINAGE PATTERN

W.R.A. #320
SEE SHEET 6 OF 22
FOR W.R.A. DETAILS

MINIMUM FINISHED FLOOR ELEVATION
FOR LOTS 203-216 = ELEV 91.60

100 YEAR FLOOD LINE
ELEVATION = 90.09

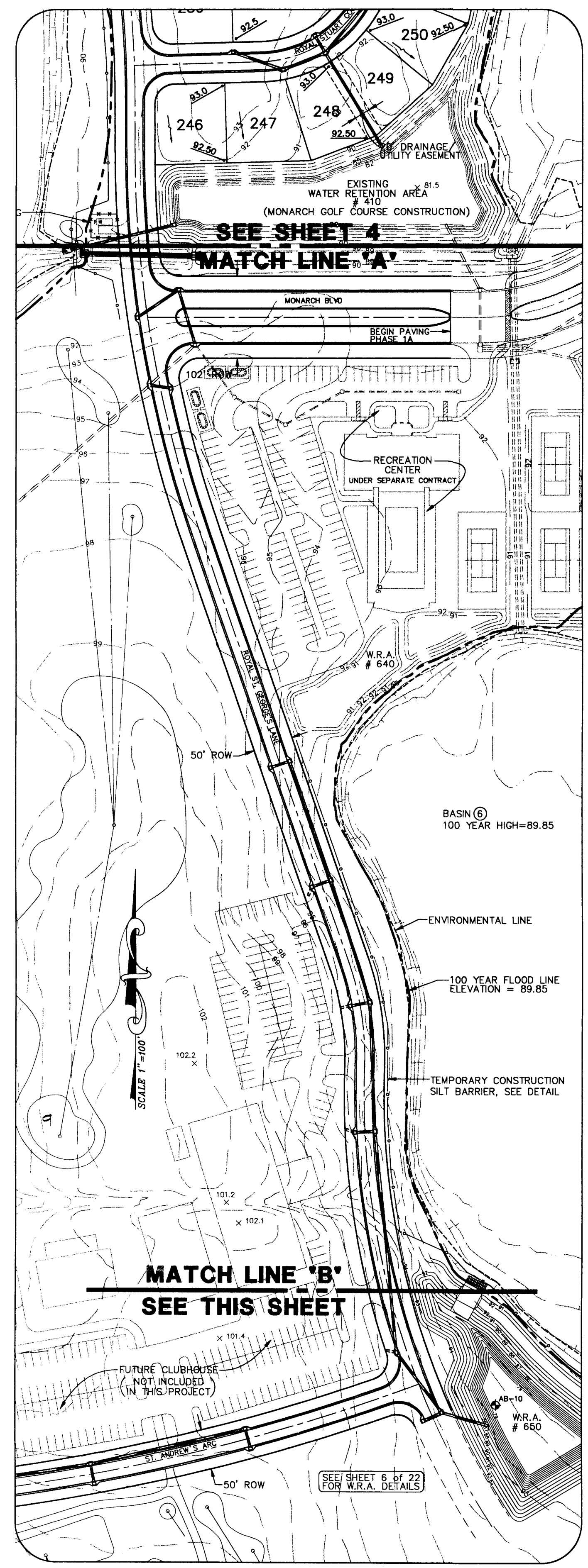
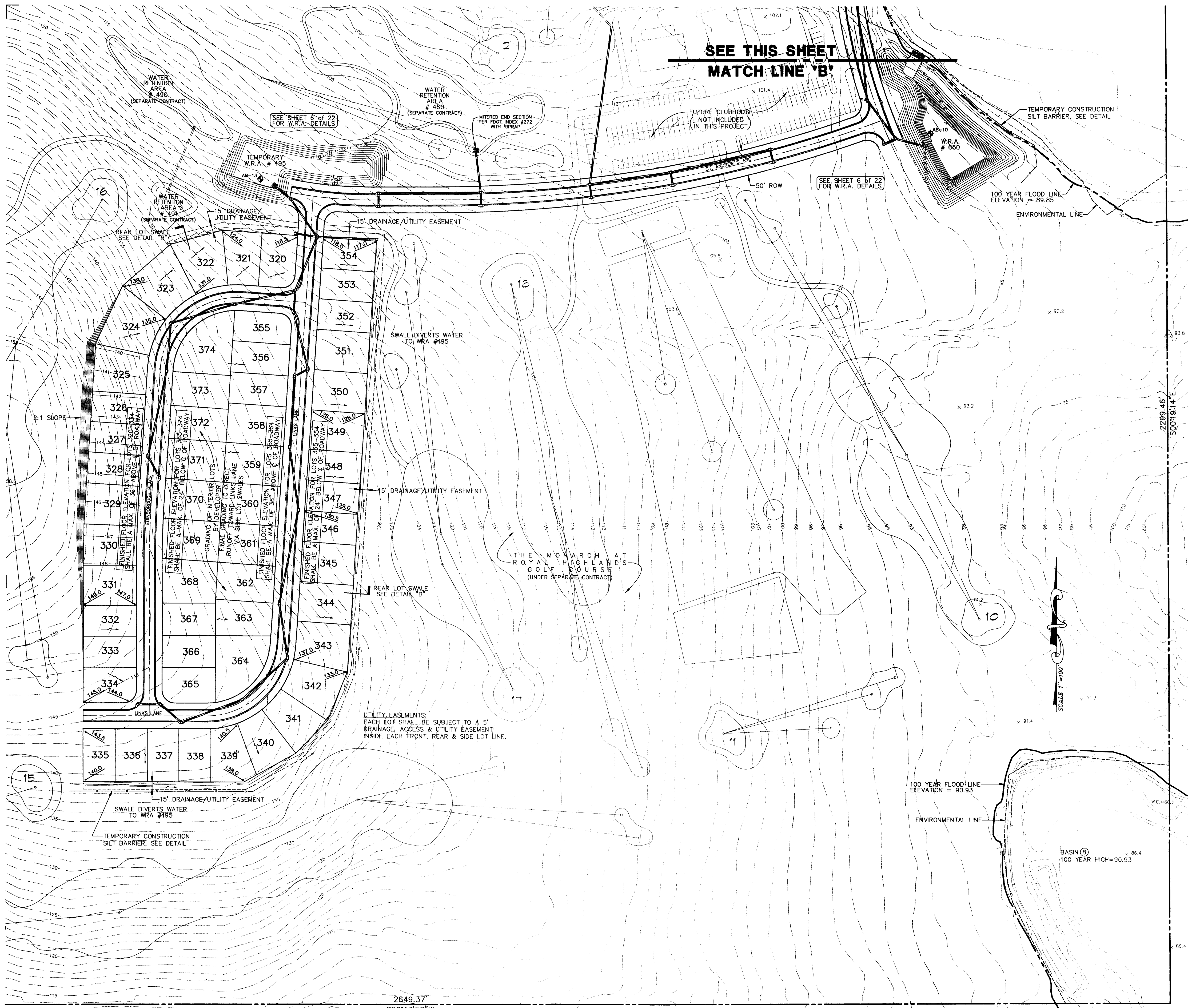
100 YEAR FLOOD LINE
ELEVATION = 90.09

100 YEAR FLOOD LINE
ELEVATION = 90.09

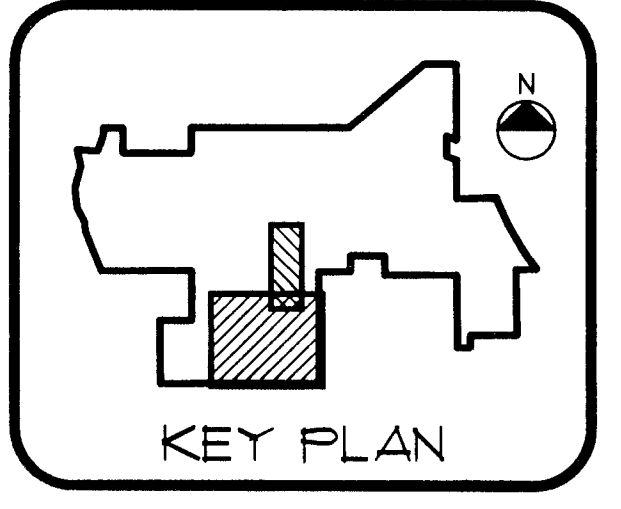
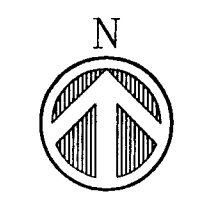
100 YEAR FLOOD LINE
ELEVATION = 90.09

100 YEAR FLOOD LINE
ELEVATION = 90.09

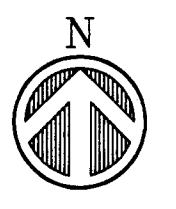
100 YEAR FLOOD LINE
ELEVATION = 90.09



DRAINAGE PLAN
SCALE: 1"=100'



DRAINAGE PLAN
SCALE: 1"=100'



KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

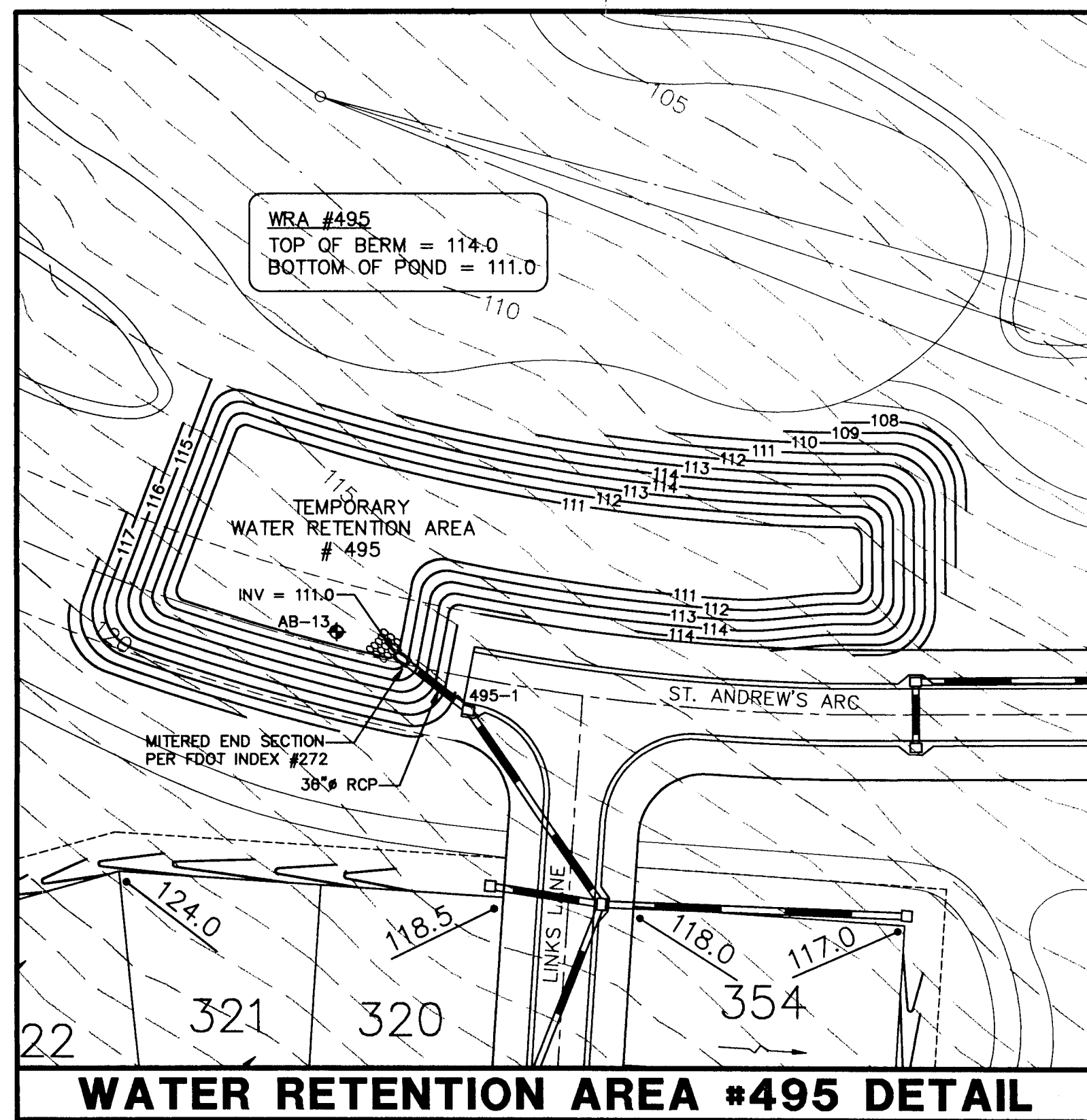
DATE

NE
NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

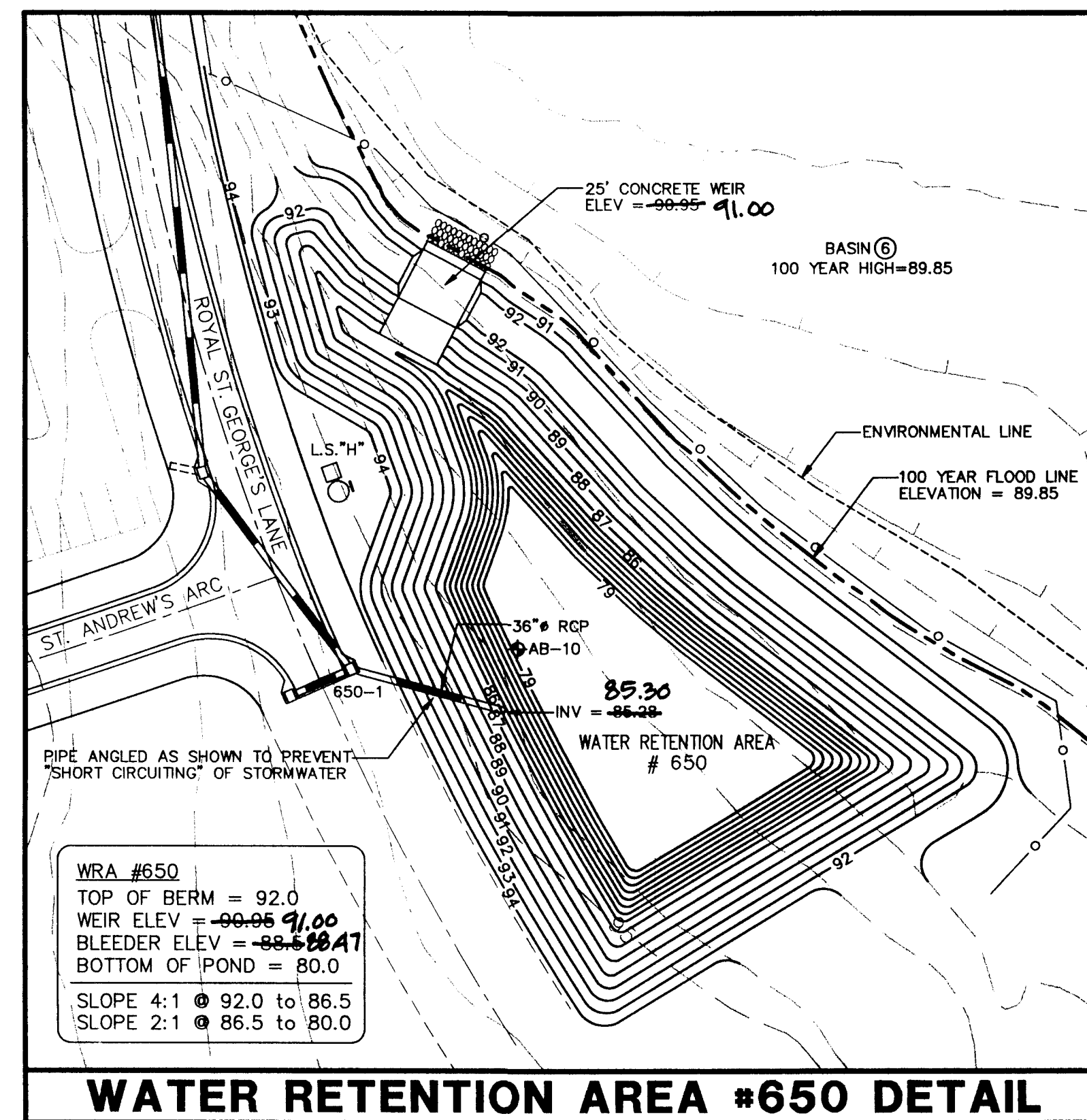
REV #	AS-BUILT LOTS 246-249	2/18/17
REV #	AS-BUILT LOTS 248-249	3/20/17
REV #	REV PER SURVMD	7/24/96
REV #	REV PER SURVMD	6/20/96
REV #	REV PER SURVMD	5/7/96

DRAINAGE PLAN
ROYAL HIGHLANDS - PHASE 1A
FLORIDA
LAKE COUNTY

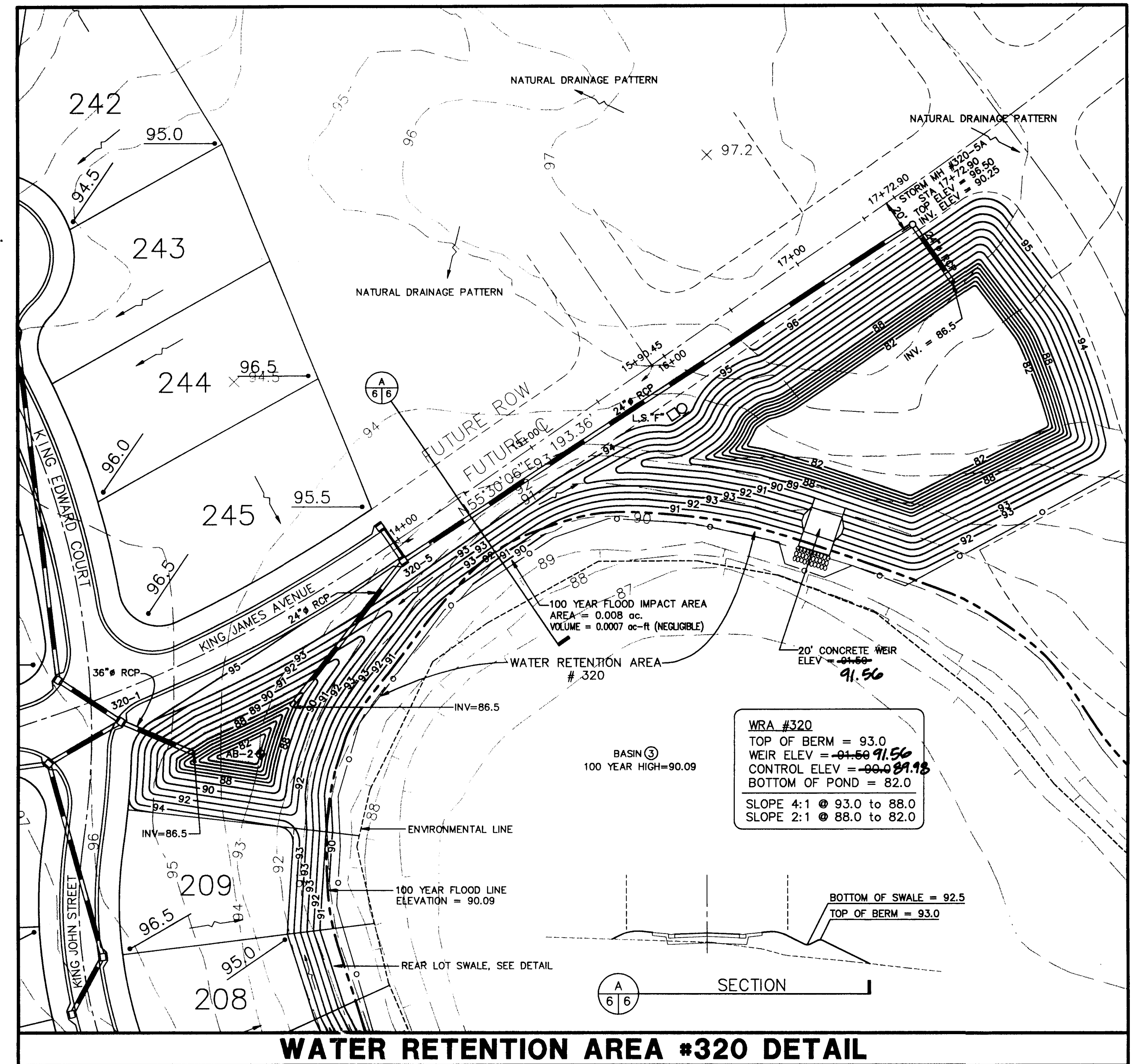
SHEET NO
5
22



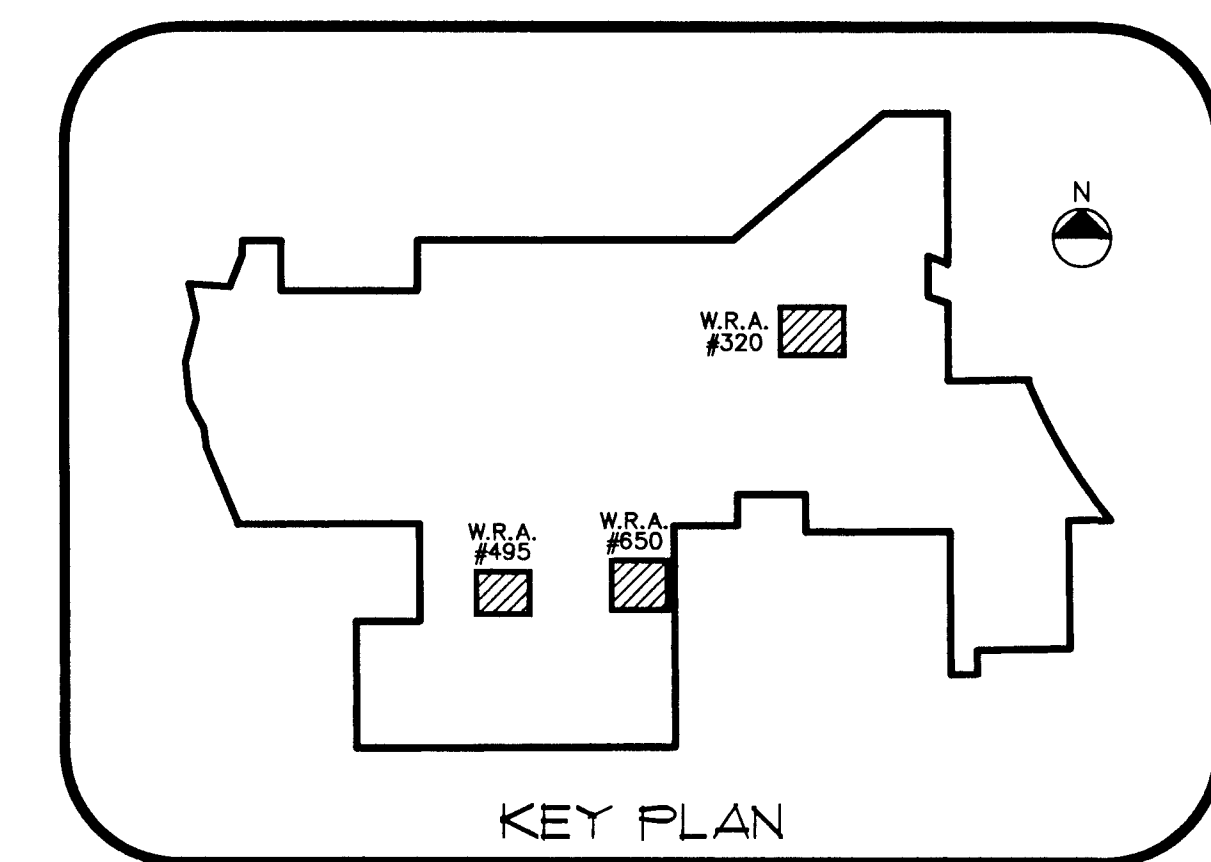
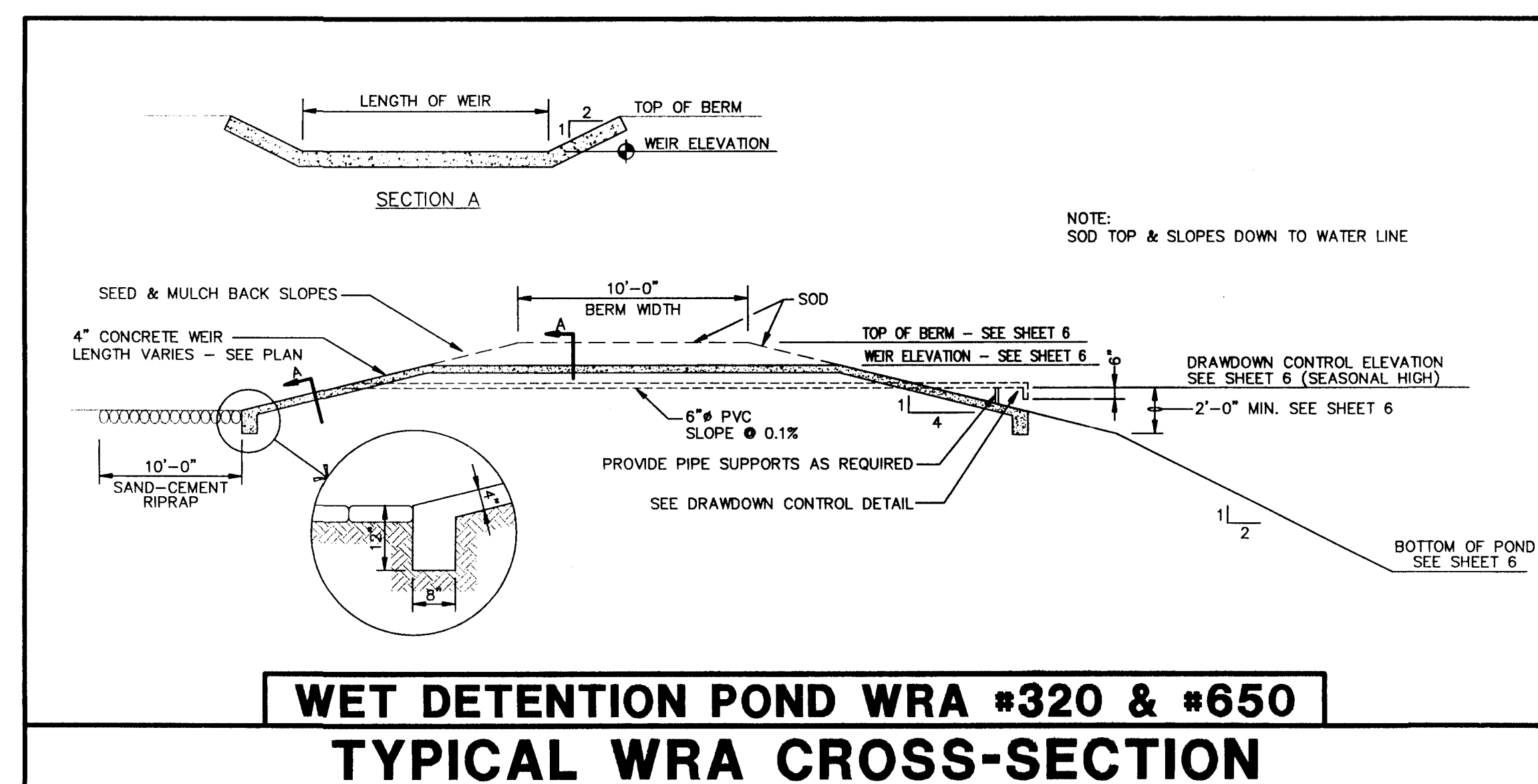
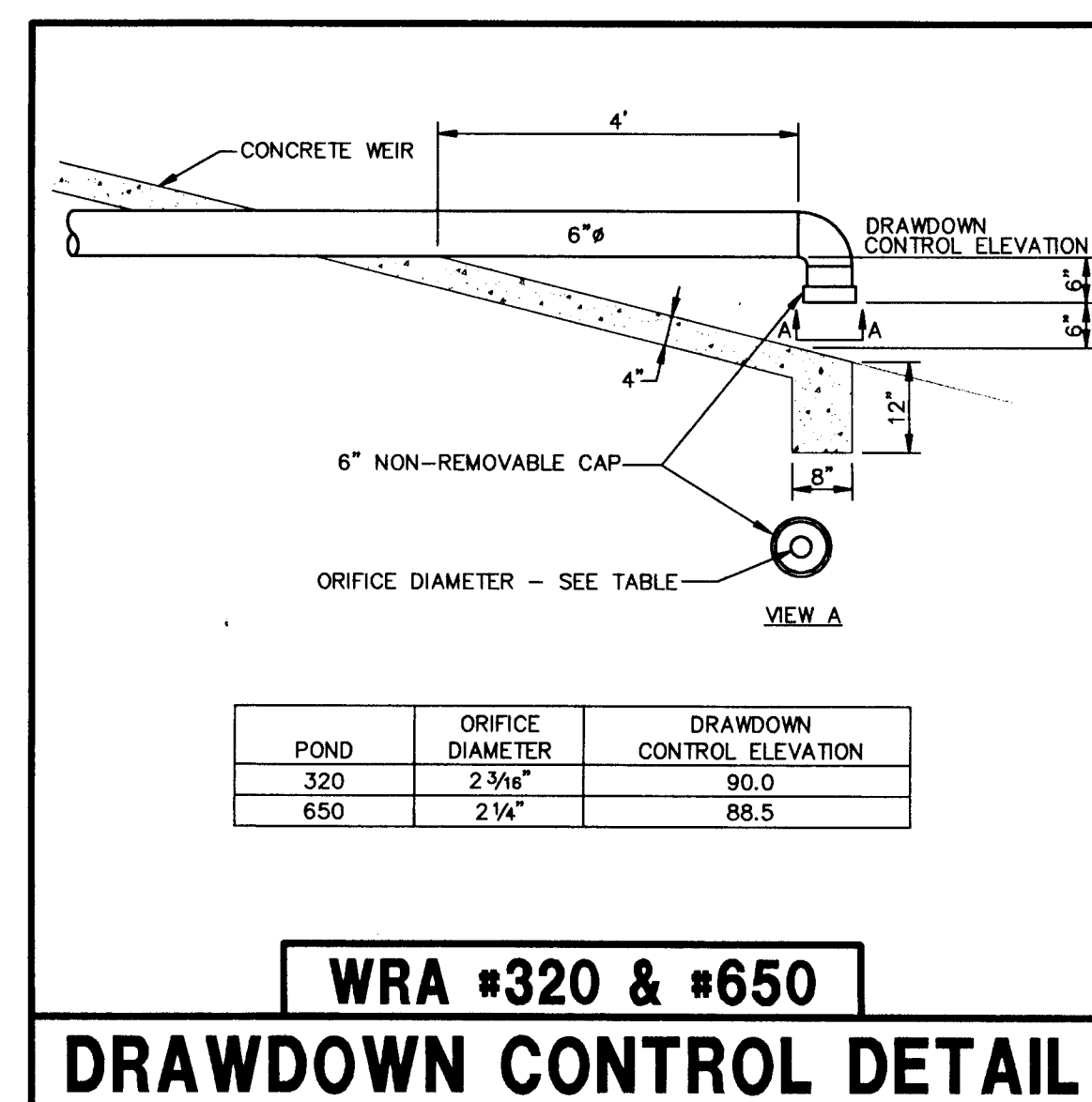
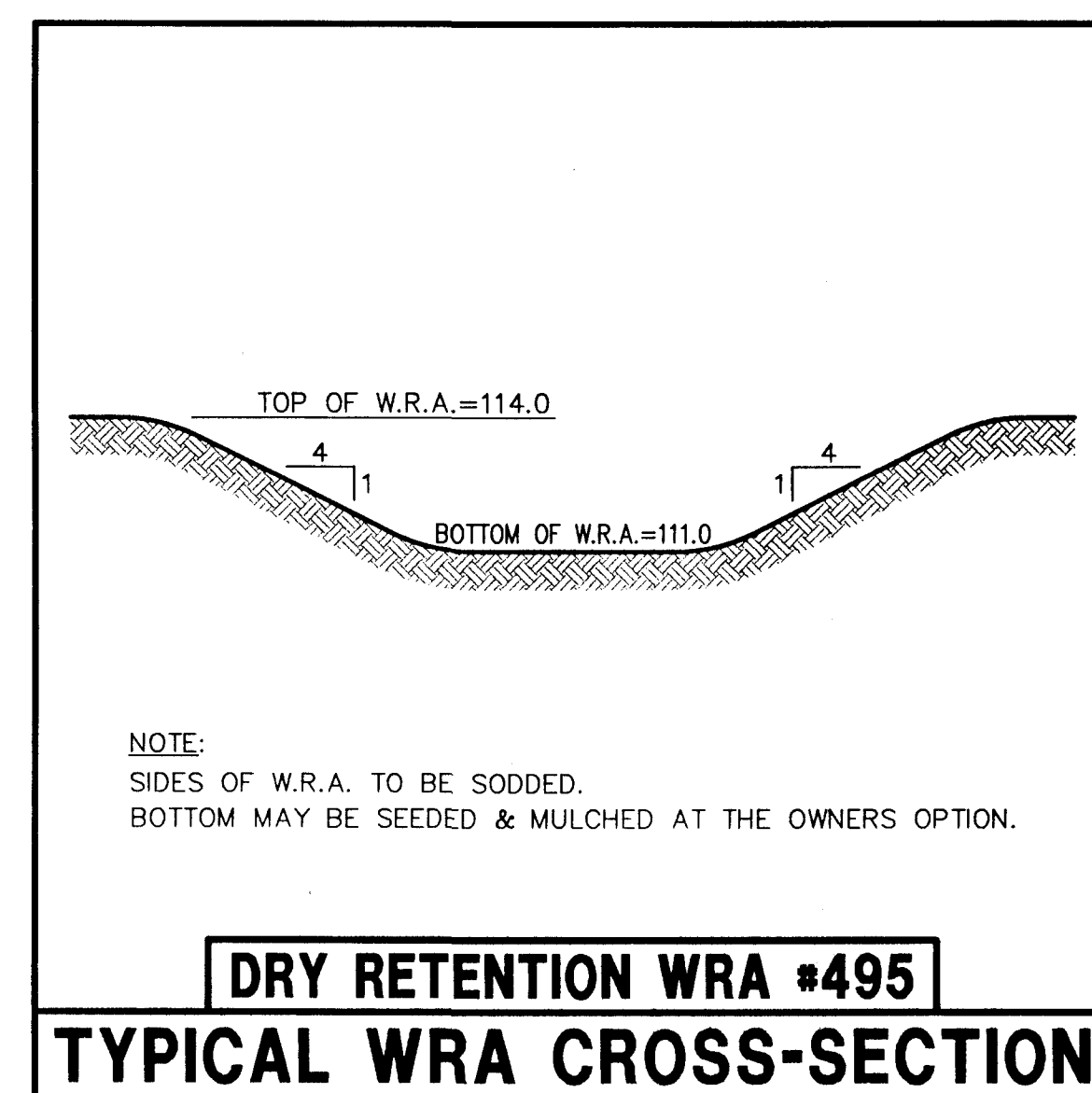
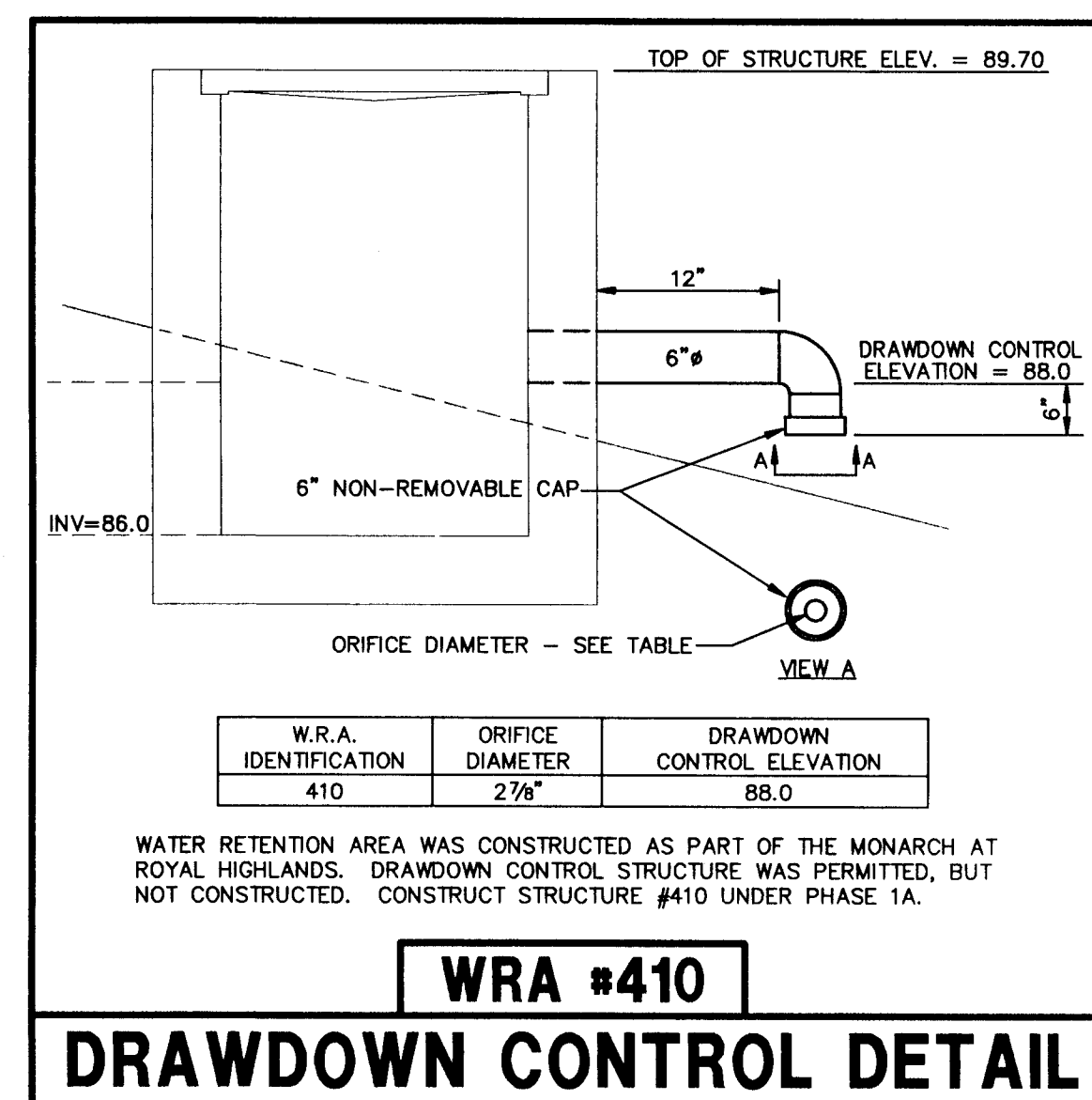
WATER RETENTION AREA #495 DETAIL



WATER RETENTION AREA #650 DETAIL



WATER RETENTION AREA #320 DETAIL



NE

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (904) 787-7482 • FAX (904) 787-7412

DATE:	4/19/96	SCALE:	1" = 50'
DRAWN:	R.S.H.	CHECKED:	K.E.R.
REV #	REV #	REV #	REV #
1	2	3	4
AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319
2/18/97	2/18/97	2/18/97	2/18/97
REV #	REV #	REV #	REV #
1	2	3	4
AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319
1/10/97	1/10/97	1/10/97	1/10/97
REV #	REV #	REV #	REV #
1	2	3	4
REV PER SURVIMD 7/24/96	REV PER SURVIMD 7/24/96	REV PER SURVIMD 7/24/96	REV PER SURVIMD 7/24/96
6/20/96	6/20/96	6/20/96	6/20/96
PROJECT NO: 93092	PROJECT NO: 93092	PROJECT NO: 93092	PROJECT NO: 93092
REV #	REV #	REV #	REV #
1	2	3	4
REV LOT SIZES & NUMBERING PER OWNER	REV LOT SIZES & NUMBERING PER OWNER	REV LOT SIZES & NUMBERING PER OWNER	REV LOT SIZES & NUMBERING PER OWNER
5/7/96	5/7/96	5/7/96	5/7/96

WATER RETENTION AREA DETAILS
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY
FLORIDA

SHEET NO.
6
22

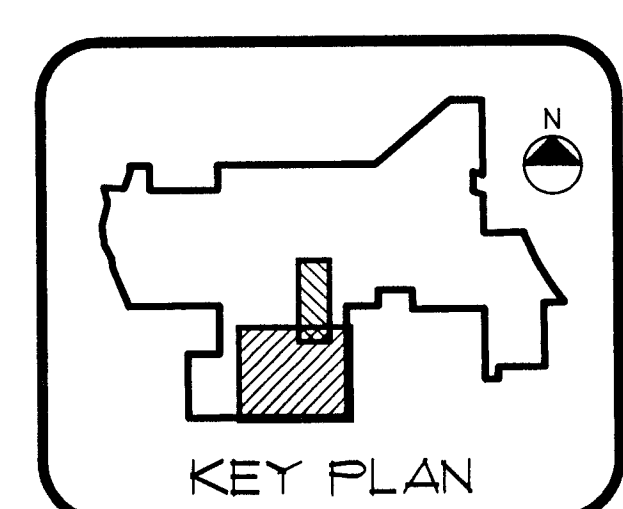
KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

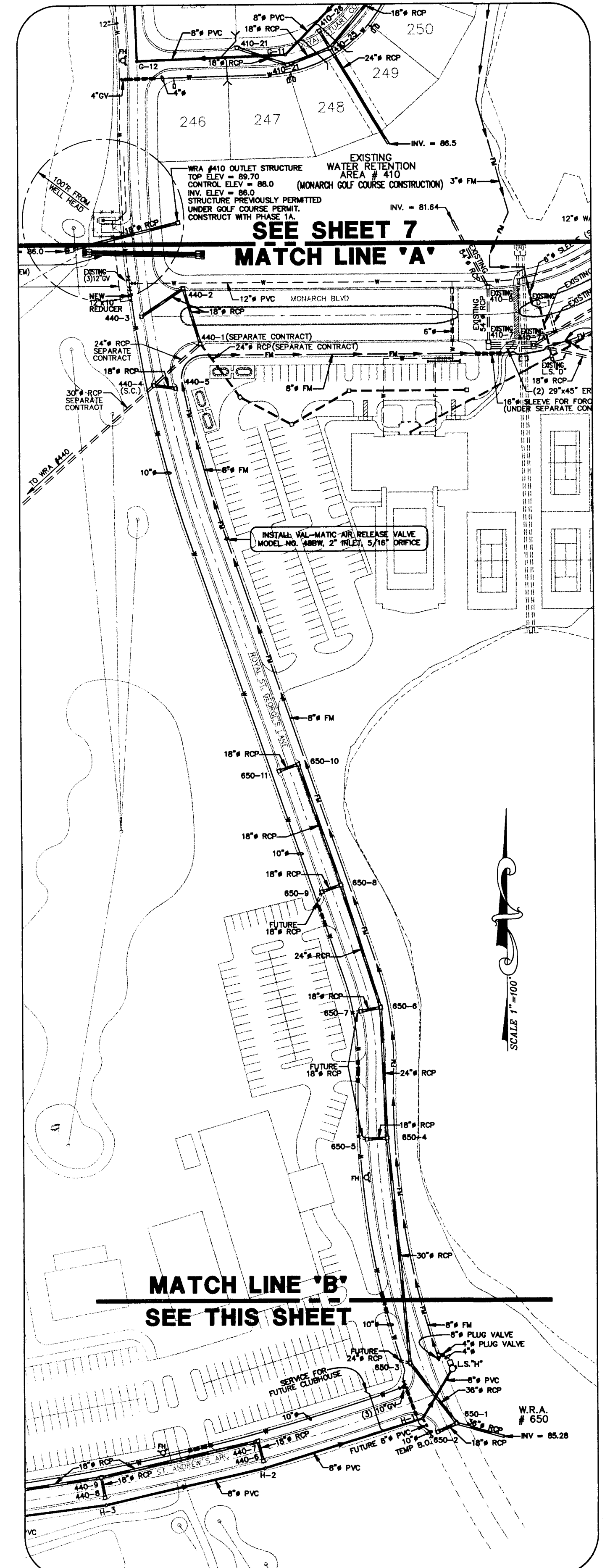
FILE: \93092\PH-1A\PH1A-6X



SITE PLAN
SCALE: 1"=100'



SITE PLAN
SCALE: 1"=100'



NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

2/18/97

Ag. BUILT Lots 246-319

BROWN	R.S.H.	REV #5	AS-BUILT	DATE	2/18/97
CHECKED	K.E.R.	REV #4	REV PER SURVIMD	DATE	7/24/96
SCALE	1"=100'	REV #3	REV LOT #342 PER OWNER	DATE	7/17/96
DATE	4/19/96	REV #2	REV PER SURVIMD	DATE	6/20/96
PROJECT NO.	93092	REV #1	REV LOT SIZES & NUMBERING PER OWNER	DATE	5/7/96

UTILITY PLAN

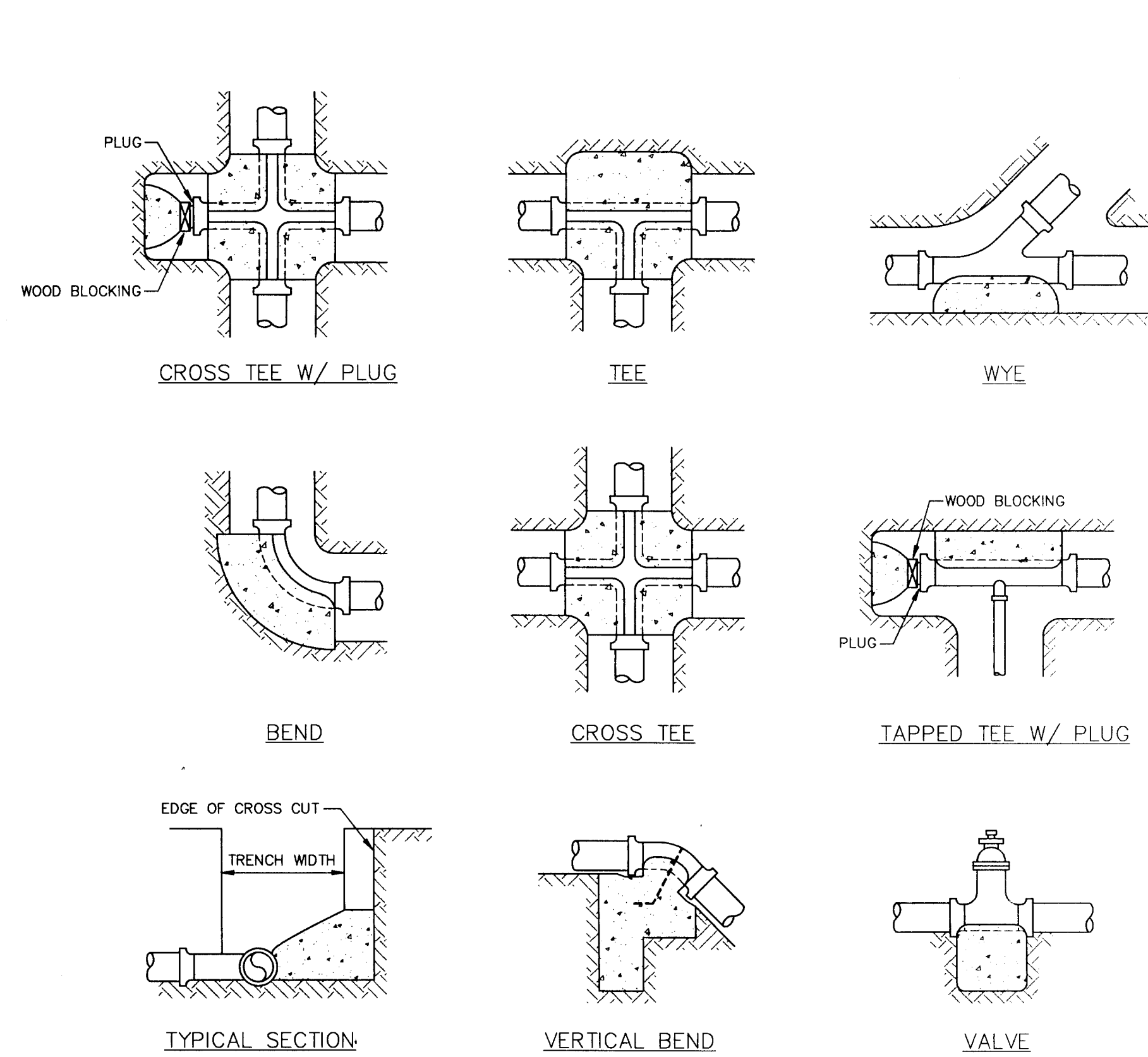
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY
FLORIDA

SHEET NO.
8
22

KEITH E. RIDDLE, P.E.
FLA. REGS. NO. 38800

DATE

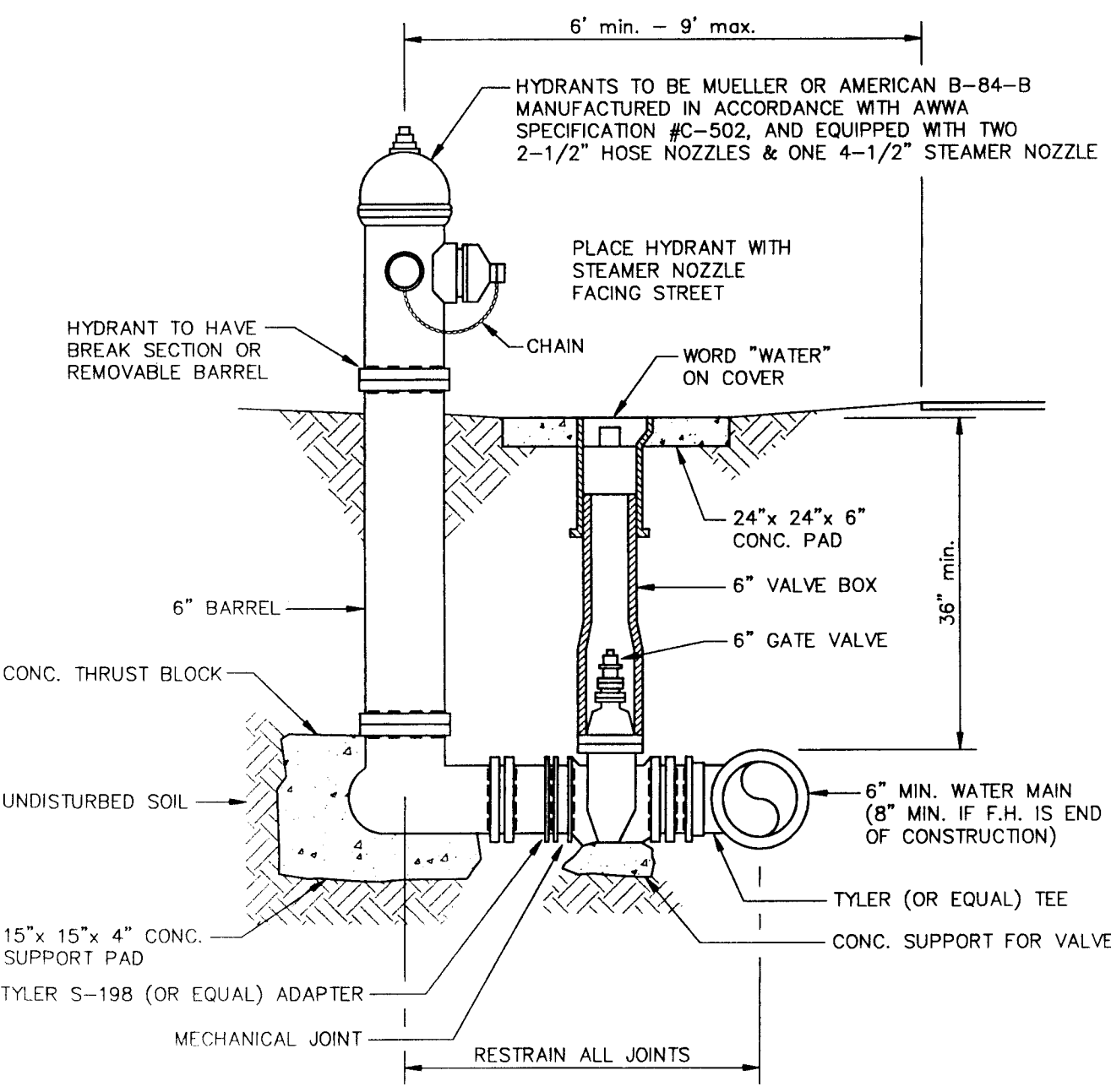
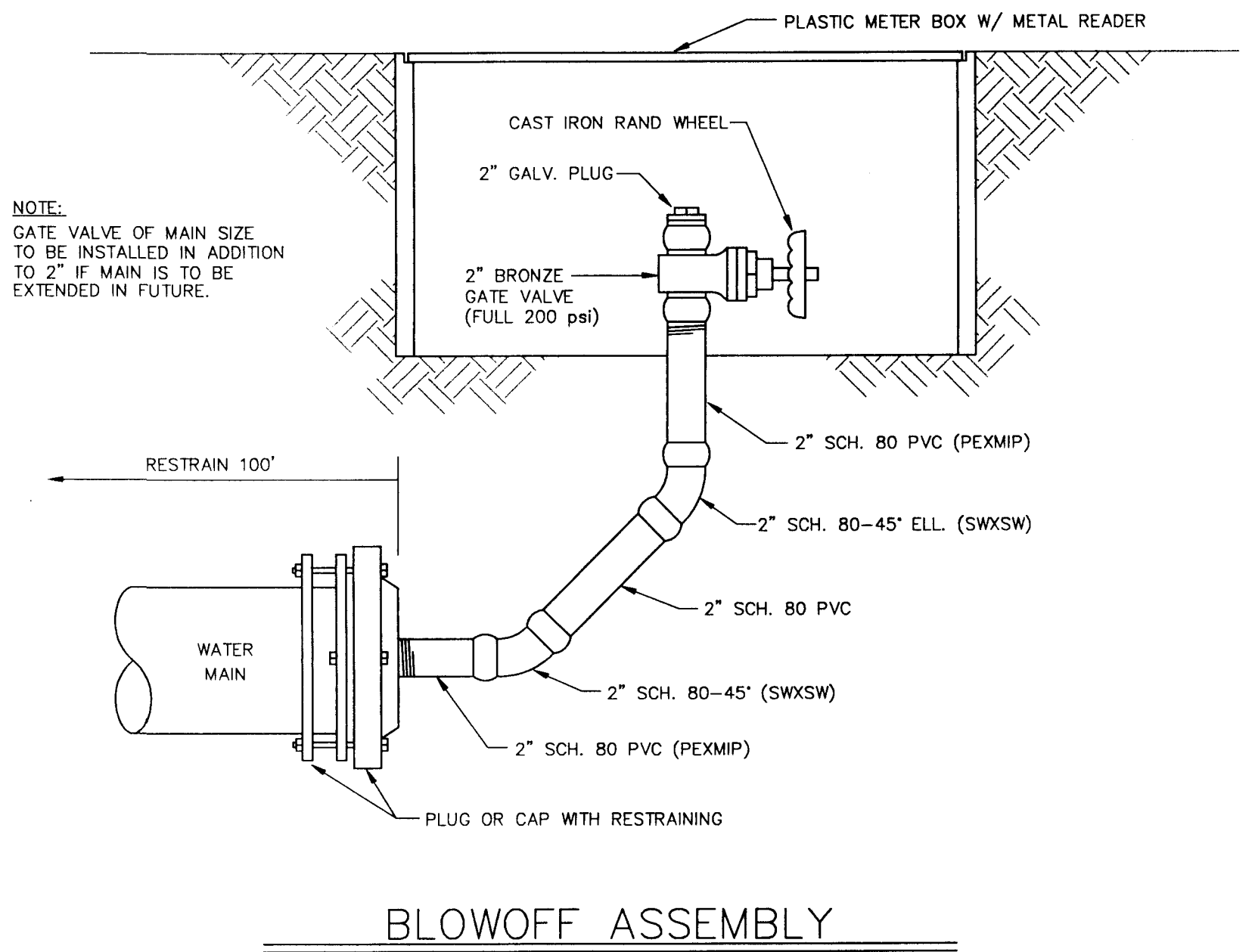
FILE: 93092\PH-1A\RH1A-08X



THRUST BLOCK DETAILS

PIPE SIZE	THRUST BLOCK BEARING AREA (ft ²)		
	FITTING 90° ELBOW	FITTING 45° ELBOW	VALVES, TEES DEAD ENDS
3"	1.0	1.0	1.0
4"	1.4	0.9	1.0
6"	3.0	1.8	2.2
8"	5.4	3.1	3.9
10"	8.4	4.8	6.0
12"	12.0	6.9	8.50

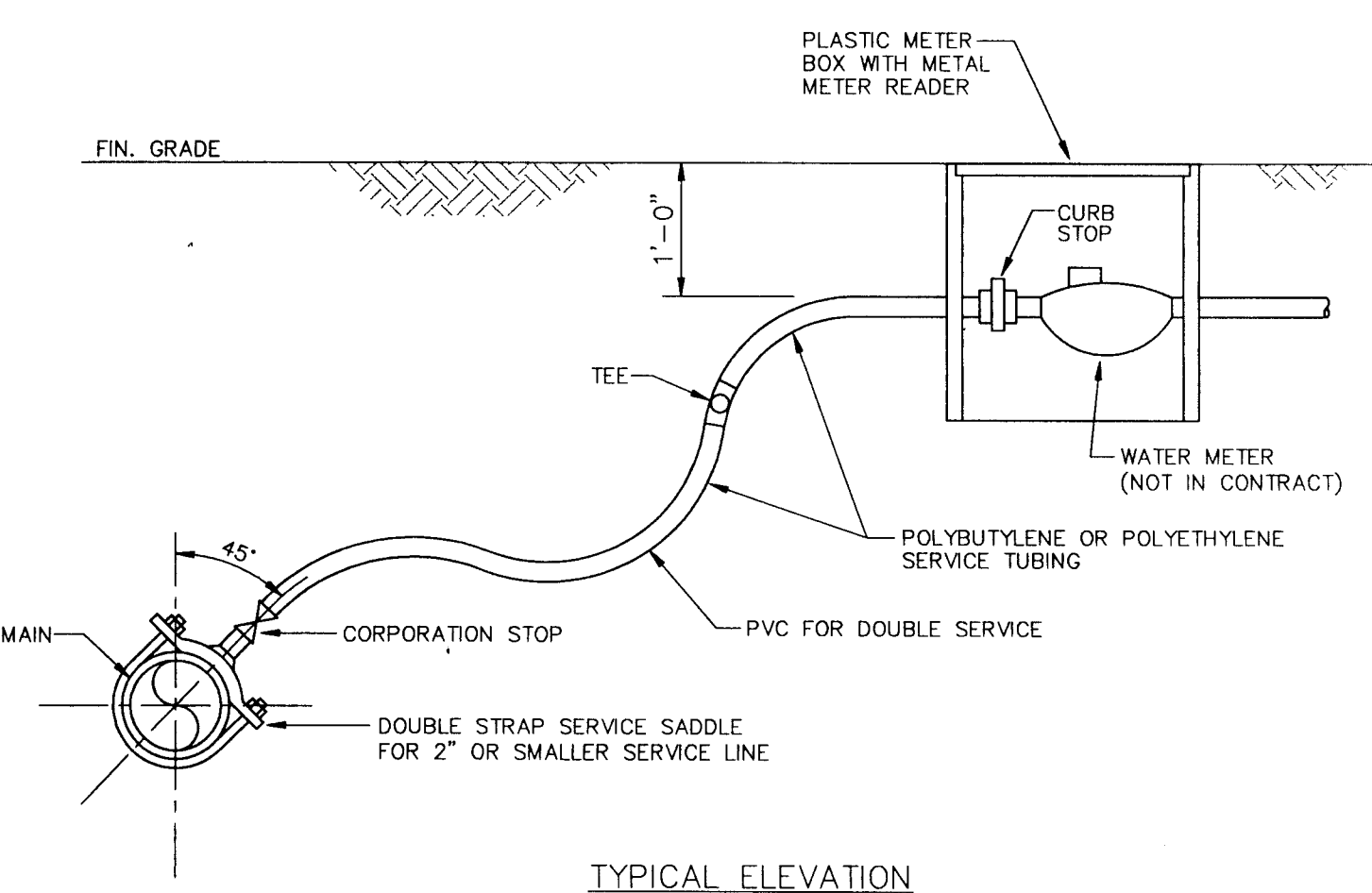
NOTES:
 ASSUME MAX. PIPE PRESSURE = 150 P.S.I.
 ASSUME ALLOWABLE SOIL BEARING PRESSURE = 2000 P.S.F.
 F_c = 2500 P.S.I. (THRUST BLOCK CONCRETE)
 THRUST BLOCK BEARING FACE SHALL BE APPROXIMATELY SQUARE.
 POUR THRUST BLOCK AGAINST UNDISTURBED MATERIAL.



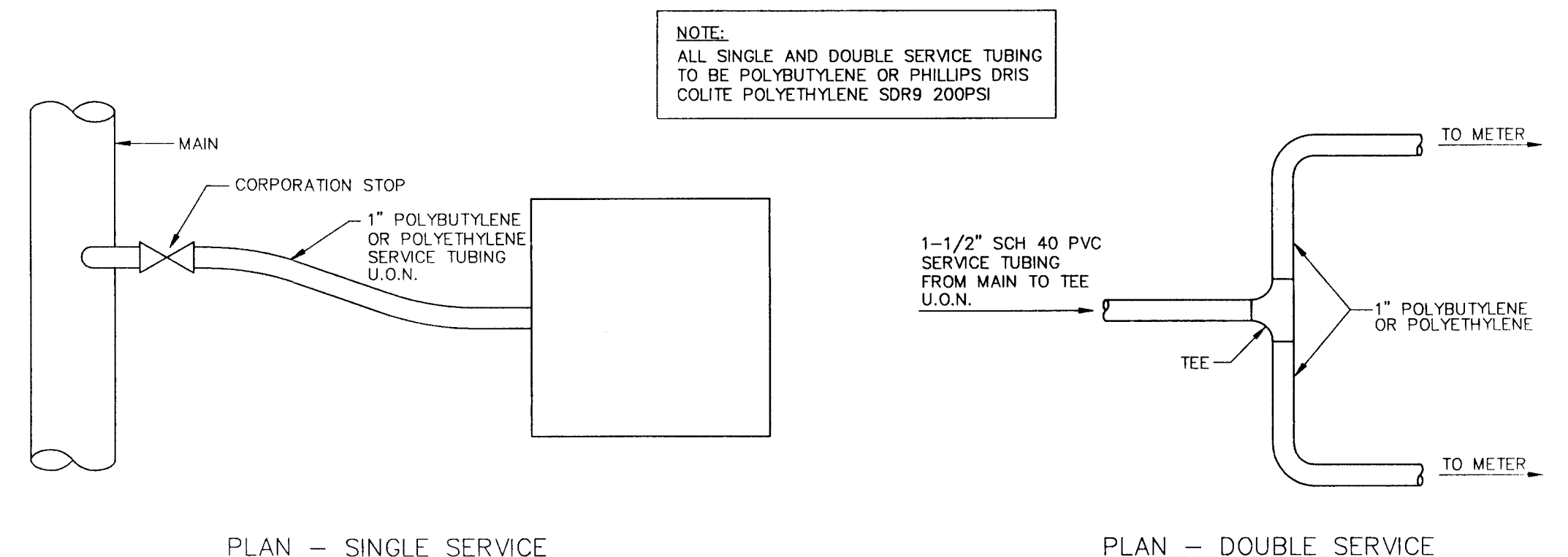
FIRE HYDRANT DETAIL

- GENERAL NOTES**
- Pressure Test—The pipes shall be completely filled with water, bleeding air as necessary, and subjected to a pressure of 150 psi which shall be maintained, by pumping, for at least two hours and until all exposed joints and fittings have been inspected for leakage. After leaks, if any, have been satisfactorily repaired the lines will be retested. Prior to testing, thrust blocks shall be installed and all piping shall be adequately braced and supported so that no damage will result from the application of the test. Leakage in gallons per hour shall not exceed that as determined by the following formulas as set forth in AWWA Standard C-600:

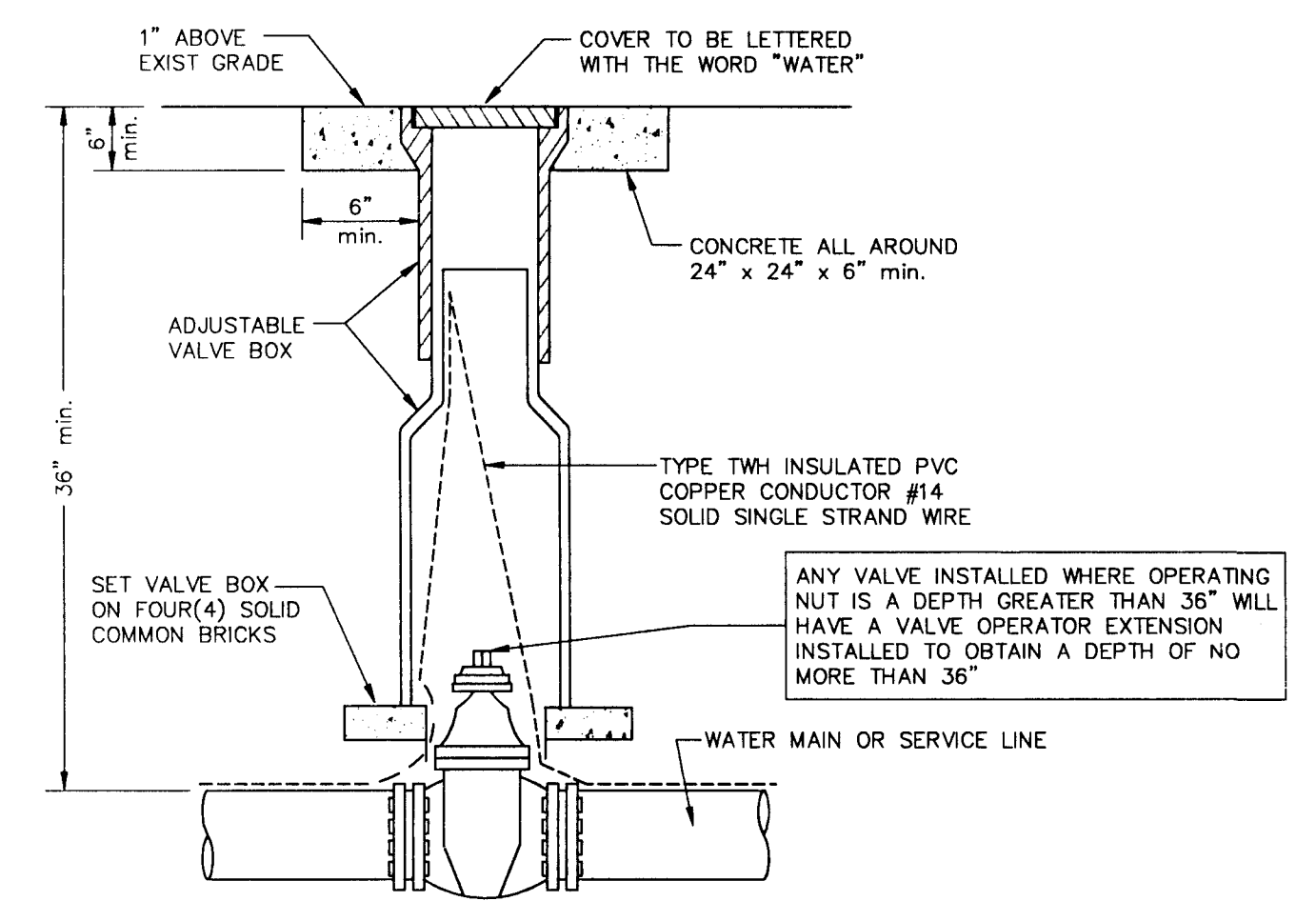
$$L = \frac{ND(P)^{0.5}}{3700}$$
 Where L: Leakage in gallons per hour
 N: Number of joints in section tested
 S: Length of pipe tested
 D: Nominal diameter of the pipe — inches
 P: Average test pressure maintained during the leakage test in psig.
 - After completion of construction and testing, the water system shall be sterilized with chlorine before acceptance for domestic operation. The amount of chlorine applied shall be sufficient to provide a dosage of 50 parts per million or more. After thoroughly flushing the system with clean water, the chlorine solution shall be introduced in a manner conforming to A.W.W.A. specification C-651. The Chlorine solution shall remain in the system for a contact period of at least 24 hours, during which every valve in the system shall be opened and closed several times to assure contact with all parts of the system. Upon completion of the sterilization operation, the system shall be flushed with chlorinated water from a domestic source. Samples shall then be taken by the contractor for testing to the satisfaction and in accordance with the Florida Department of Environmental Protection regulations.
 - Gate Valves — 2 1/2" or smaller: Bronze body Federal Spec., 150 psi working pressure with threaded joints equal to American 3 FG or Red and White 280. The use of this type of valve would have to be approved by the City.
 - Gate Valves — 3" and larger: Iron body, non-rising stem type and shall be equipped with a 2" square cast iron operating nut with corrosion protection coating inside and out, resilient seated valve which meets all requirements of AWWA Standard C-509.
 - Contractor to furnish owner with one T-handle socket wrench for each different size operating nut on valves installed and one spanner wrench for each four fire hydrants installed.
 - Valve Boxes: All valves installed underground shall be provided with an adjustable, screw type cast iron valve box and cover marked "Water". Minimum inside diameter of 5 inches and designed so as not to bear on or transmit any surface load to the valve or pipe. Minimum 24" x 24" x 6" deep concrete collar shall be placed around the top of the box at ground level.
 - Minimum cover: All mains to have 3'-0" minimum cover and all service lines to have 1'-6" minimum cover.
 - Separation of water mains and sanitary hazards: Parallel installation — water mains shall be laid at least 10 feet horizontal from any sanitary hazard, including sanitary sewer lines & manholes, force mains, storm sewers and reuse water lines. Crossing installation — water mains crossing any of the above sanitary hazards shall be laid to provide a vertical separation of at least 18 inches between the outside of the water main and the outside of the sewer, whenever possible. When local conditions prevent this vertical separation the following construction shall be used. A) Sanitary hazards passing over or under water mains should be constructed of materials with joints that are equivalent to water main standards of construction and shall be pressure tested to assure water tightness. B) Water mains passing under sanitary hazards shall, in addition, be protected by providing a minimum vertical separation of 18 inches between the bottom of the sewer and the top of the water main. C) As an alternative to A above, sanitary hazards shall be encased in concrete for a minimum of ten (10) feet on each side of the water main.
 - All water pipe to be P.V.C. conforming to A.W.W.A. C-900. The pipe shall have a dimension ratio (dr) of 18 or less and shall be a pressure class of 150 psi.
 - Tracking wire shall be taped to the pipe at two locations per joint. Tracking wire shall be type TWH insulated P.V.C. copper conductor No.14 solid single strand. The wire shall be a continuous run from valve to valve. Should a splice be required, it shall be made good and firm and properly insulated so water and corrosion will not deteriorate the copper. Metallic locating tape shall be placed in the trench 18" above the top of pipe.
 - All fittings shall be cast iron or ductile iron. Fittings shall conform to A.N.S.I. Standard A 21.10 with mechanical joints in accordance with A.N.S.I. Standard A 21.11. Where mechanical joint fittings interface with P.V.C. pipe, a transition gasket shall be used.
 - City of Leesburg "Water Construction Requirements" are incorporated herein by reference. In the case of a discrepancy between the specifications above and those required by the City, the City specifications shall govern for all material and installation procedures.



TYPICAL ELEVATION



WATER SERVICE DETAILS



GATE VALVE & BOX

NEWMAN CONSULTING ENGINEERS, INC.
 P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
 PHONE (352) 787-7482 • FAX (352) 787-7412

NE

DRAWN: R.S.H.	REV #5	DATE: 2/18/97	PROJECT NO: 93092
CHECKED: K.E.R.	REV #4	DATE: 1/17/97	
SCALE: N.T.S.	REV #3	DATE: 4/19/96	
DATE: 4/19/96	REV #2	DATE: 7/12/96	
PROJECT NO: 93092	REV #1	DATE: 7/12/96	

TYPICAL WATER DETAILS

ROYAL HIGHLANDS — PHASE 1A

LAKE COUNTY FLORIDA

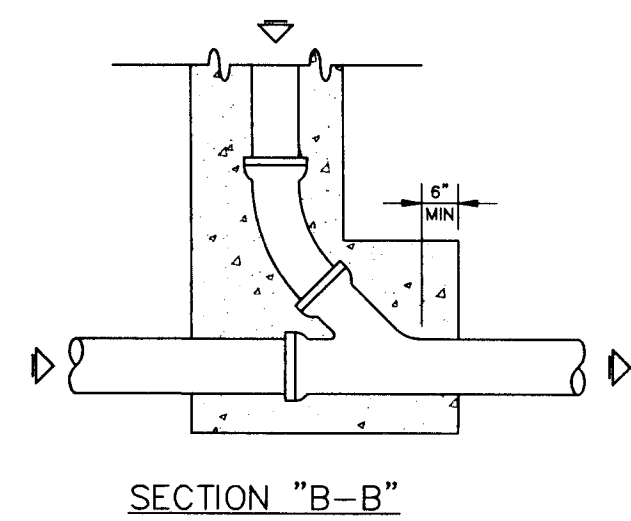
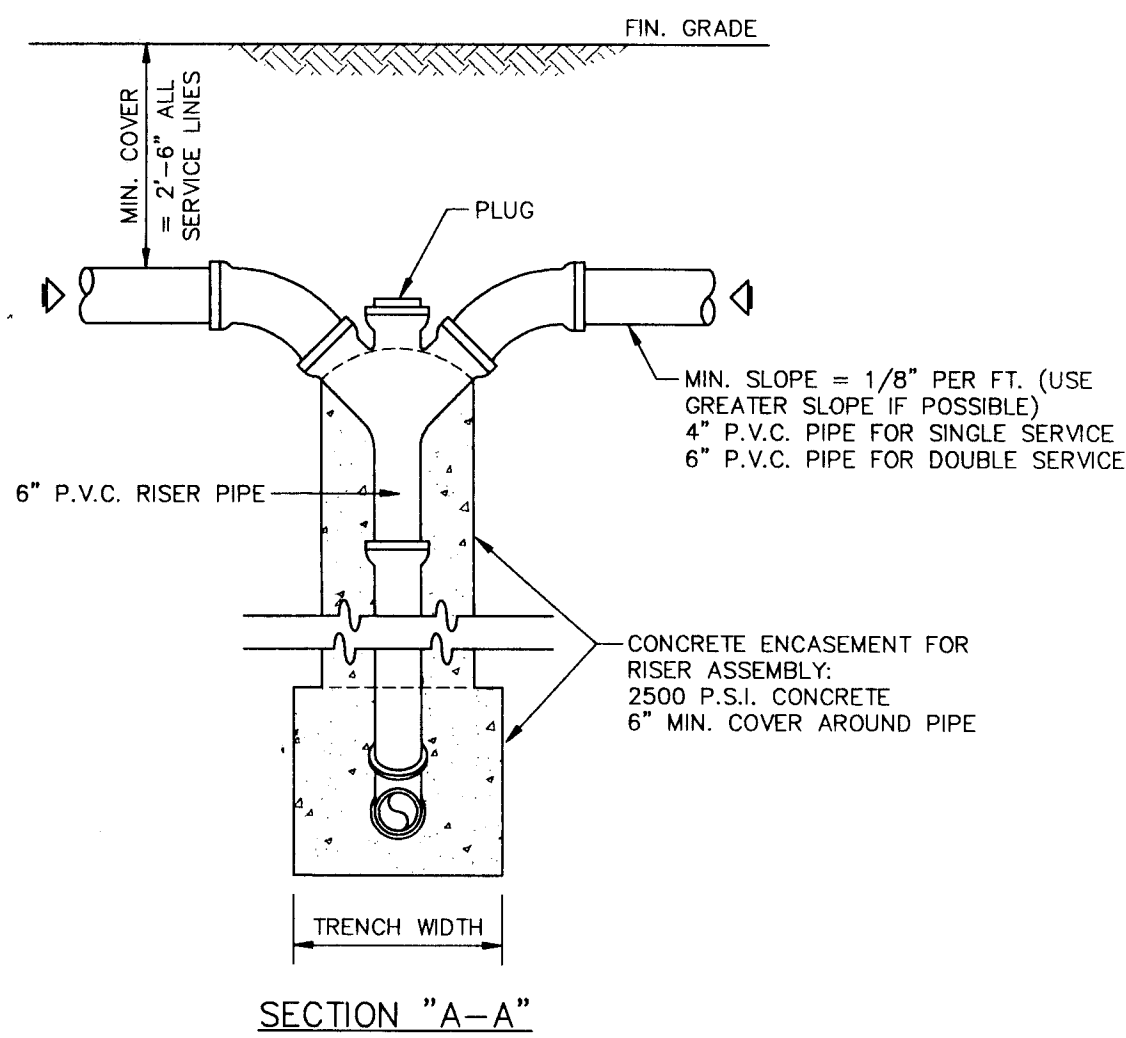
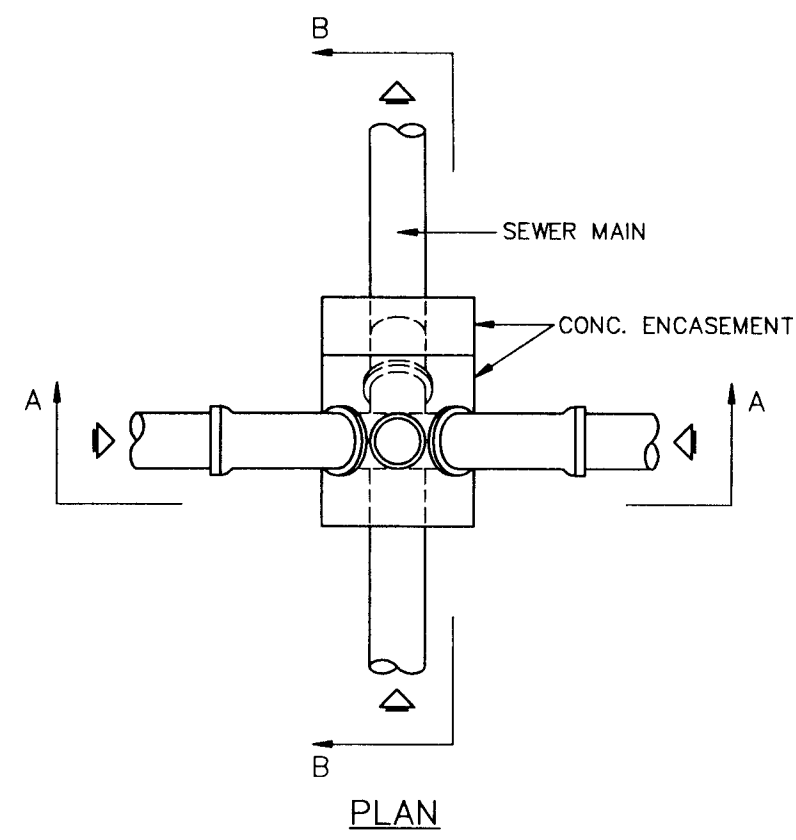
9

22

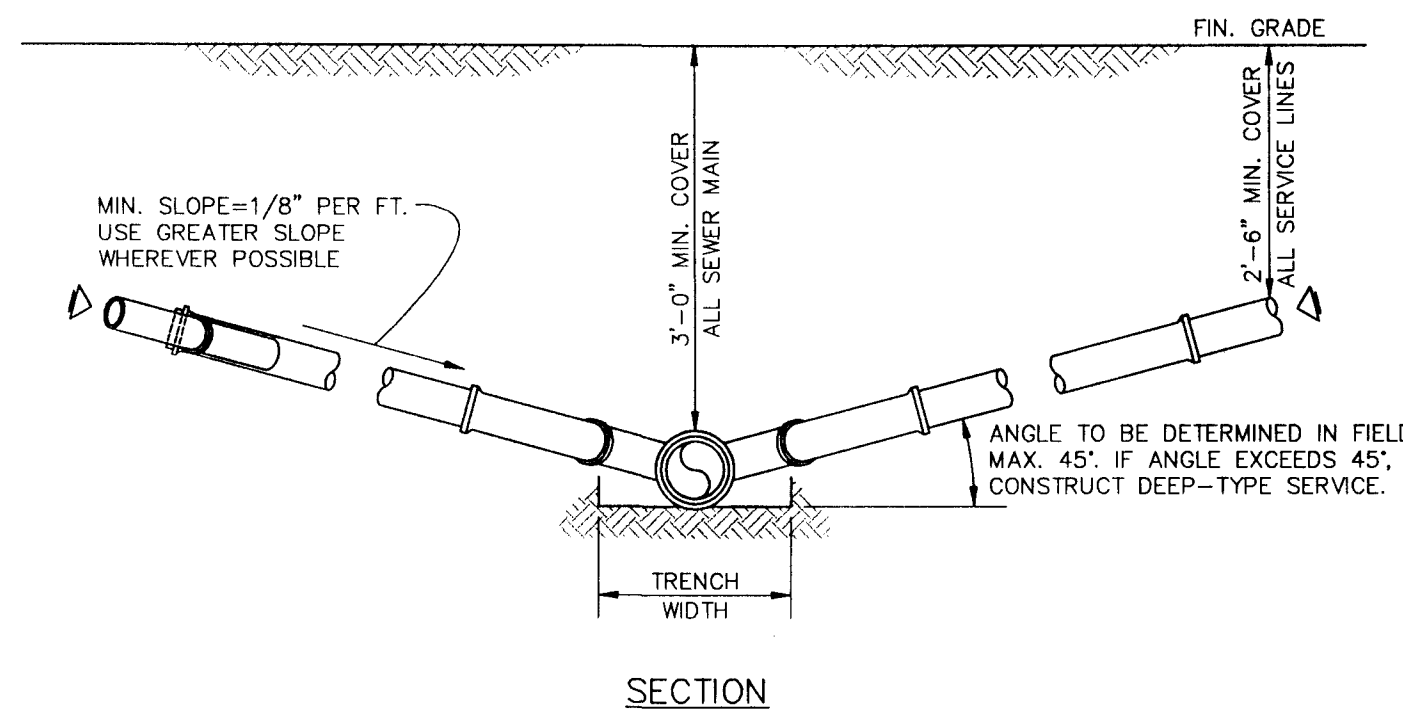
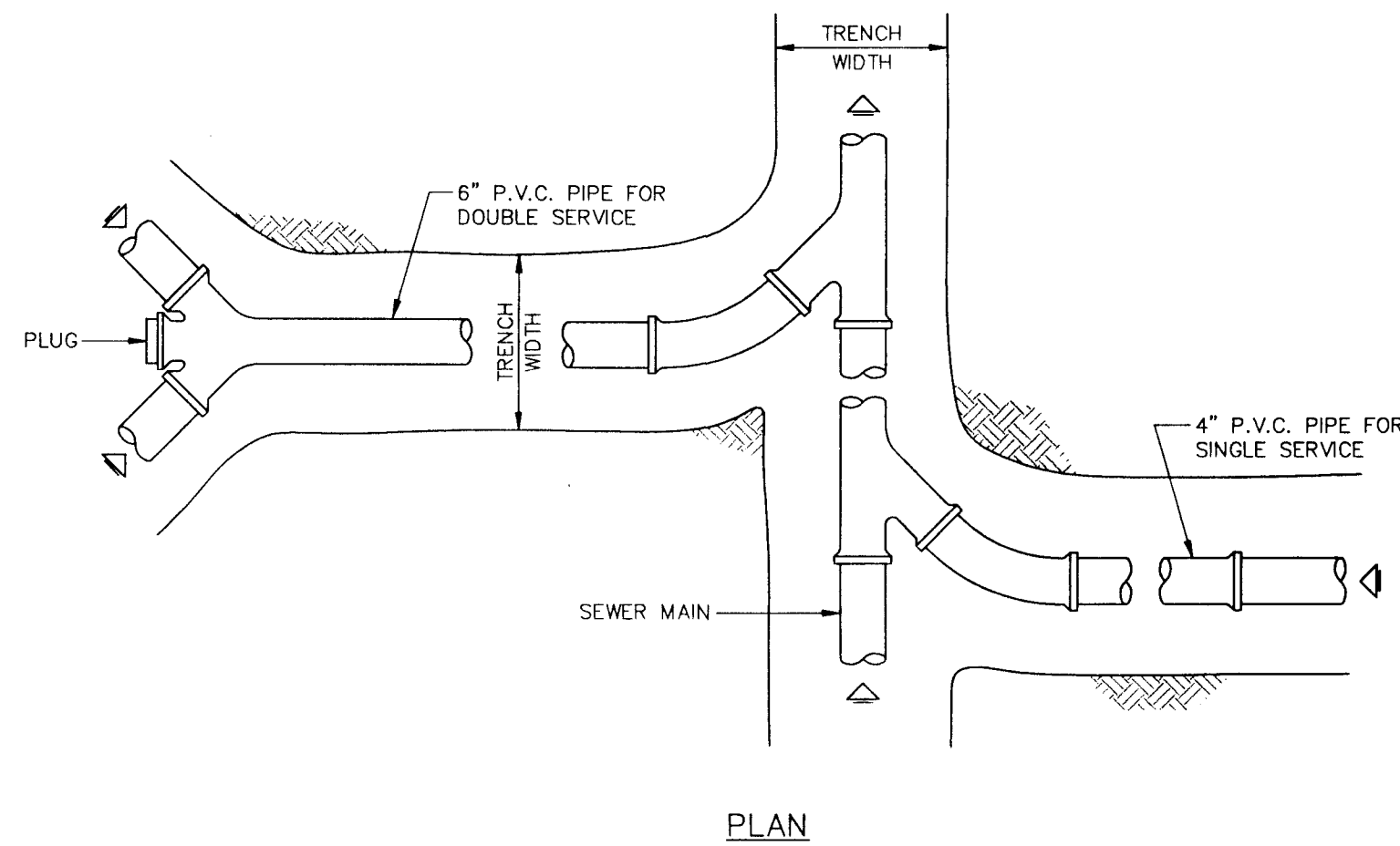
KEITH E. RIDDLE, P.E.
 FLA. REGIS. NO. 38800

DATE

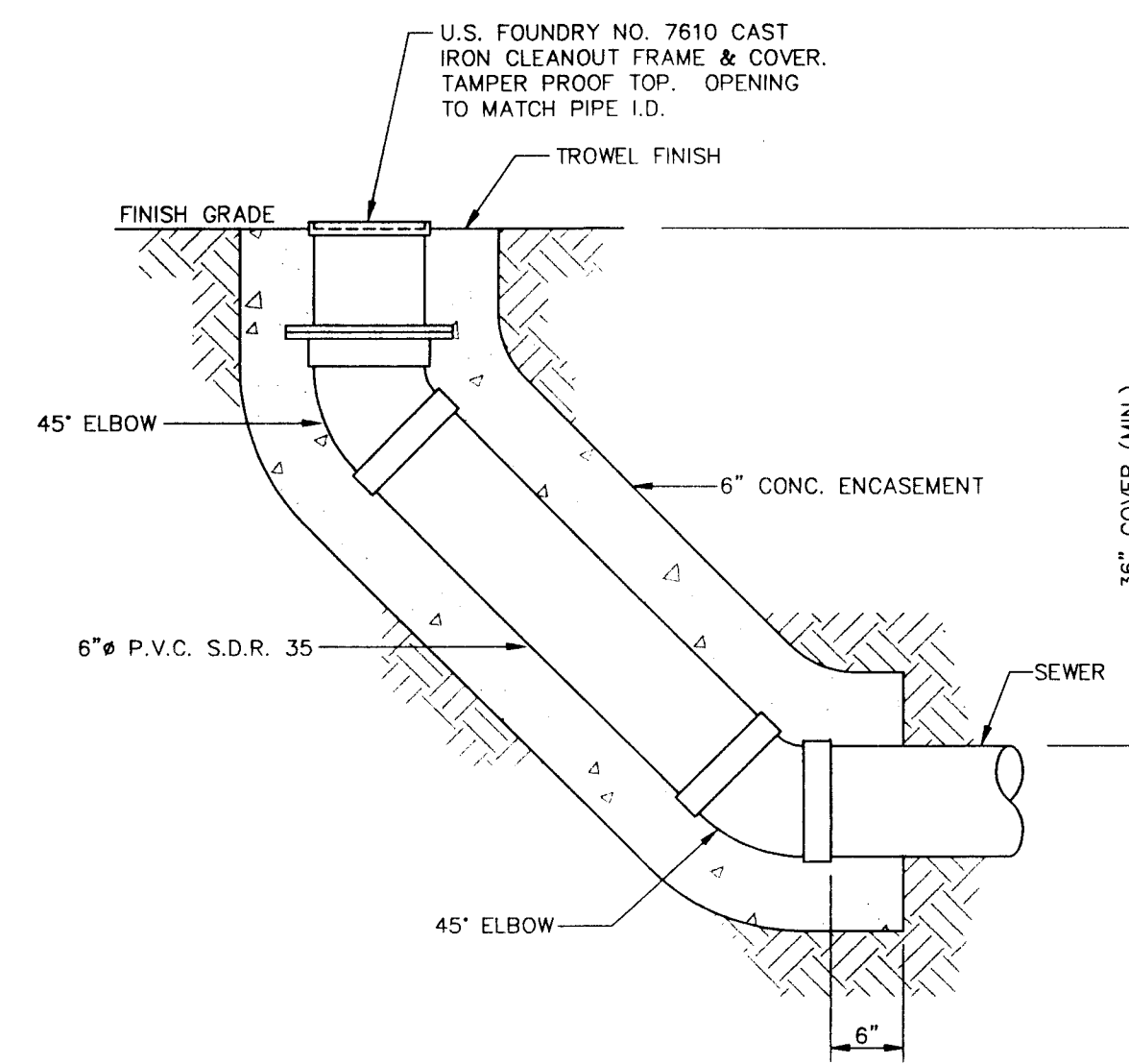
FILE: 93092\PH-1A\RH1A-09



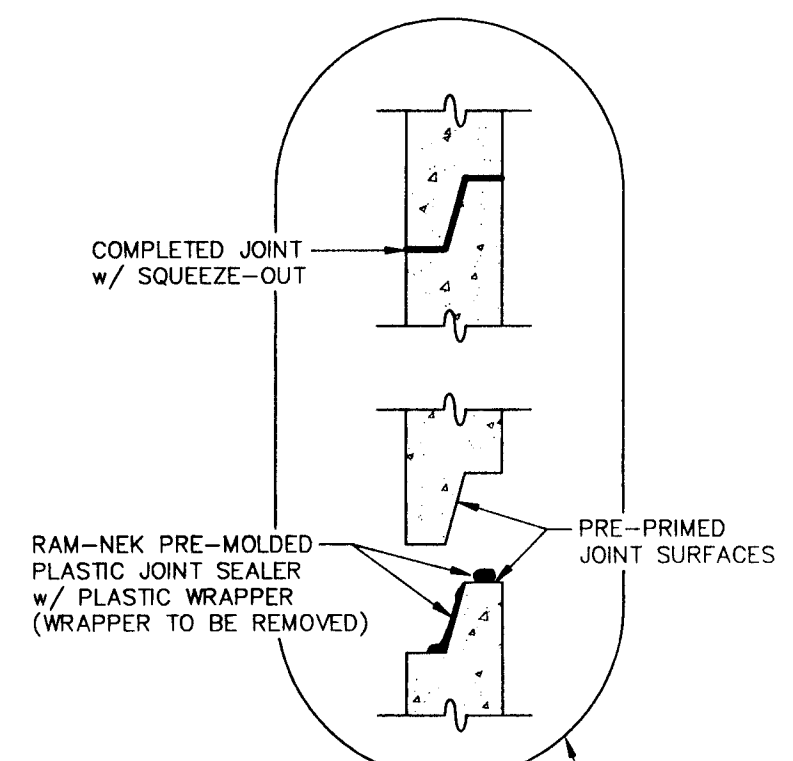
DETAIL - DEEP-TYPE SERVICE LATERAL



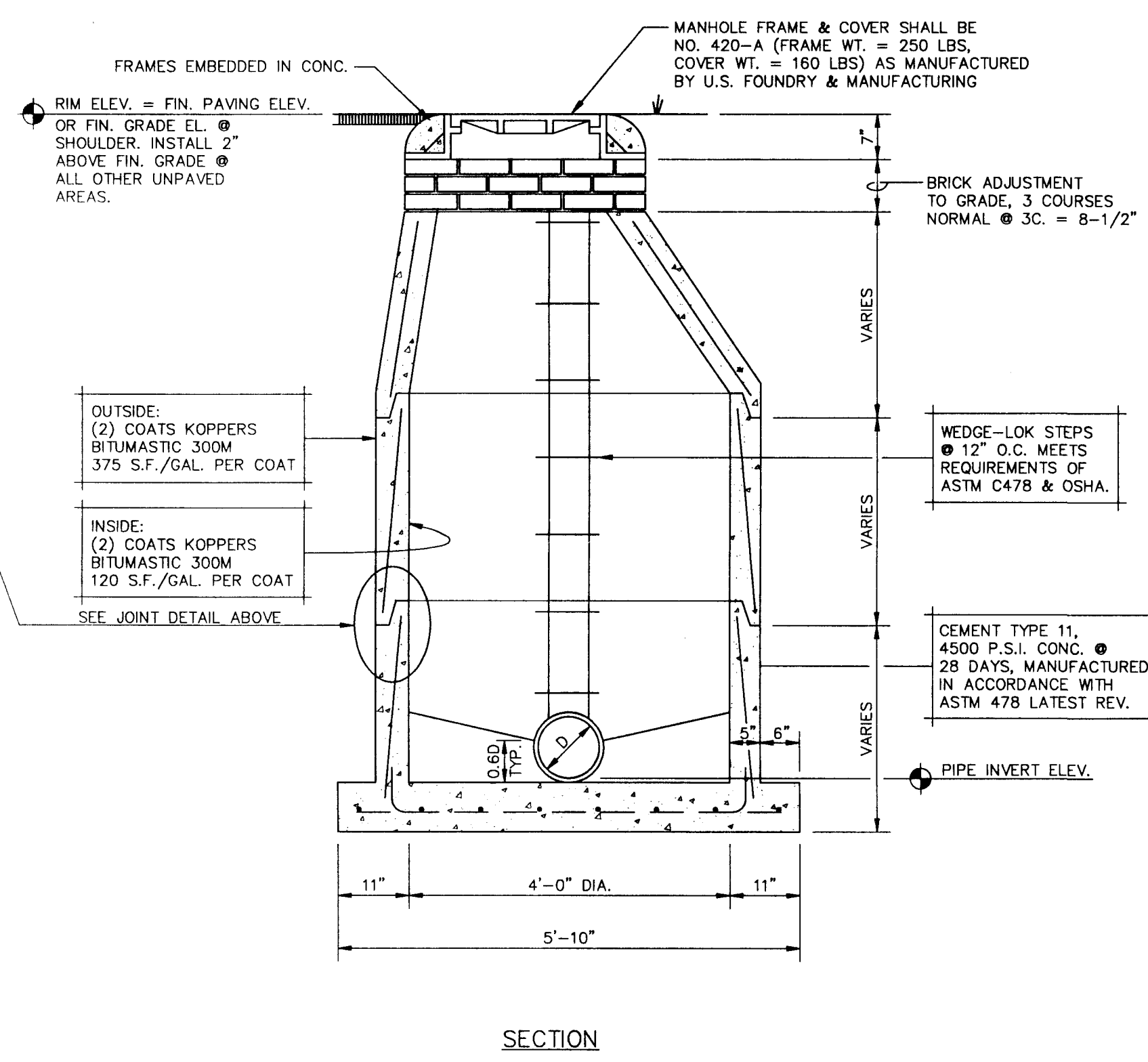
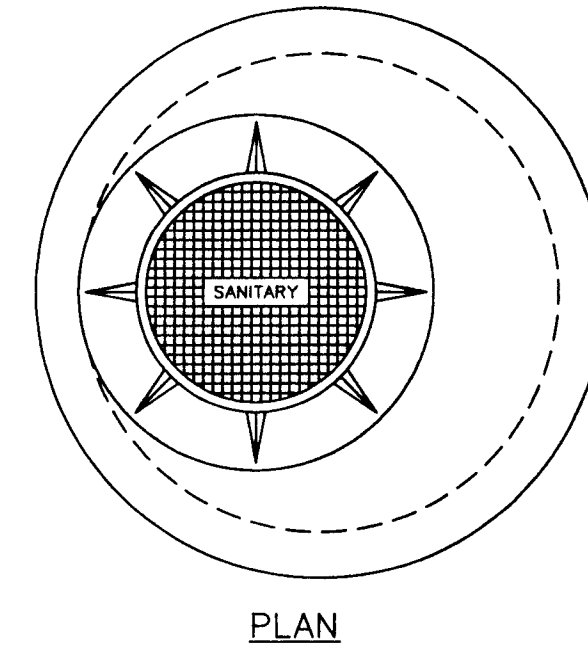
DETAIL - SERVICE LATERAL



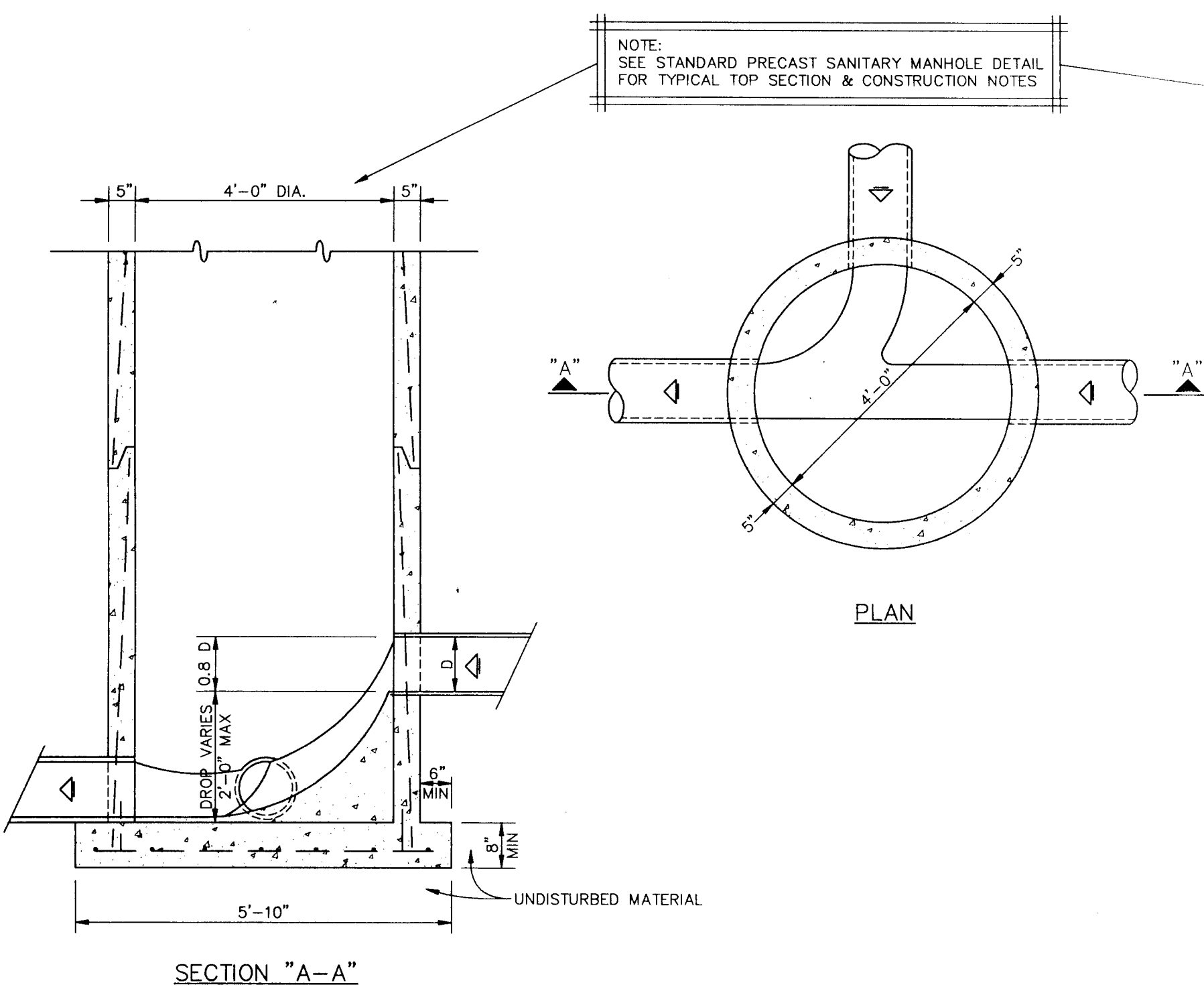
TRUNK LINE CLEAN - OUT DETAIL



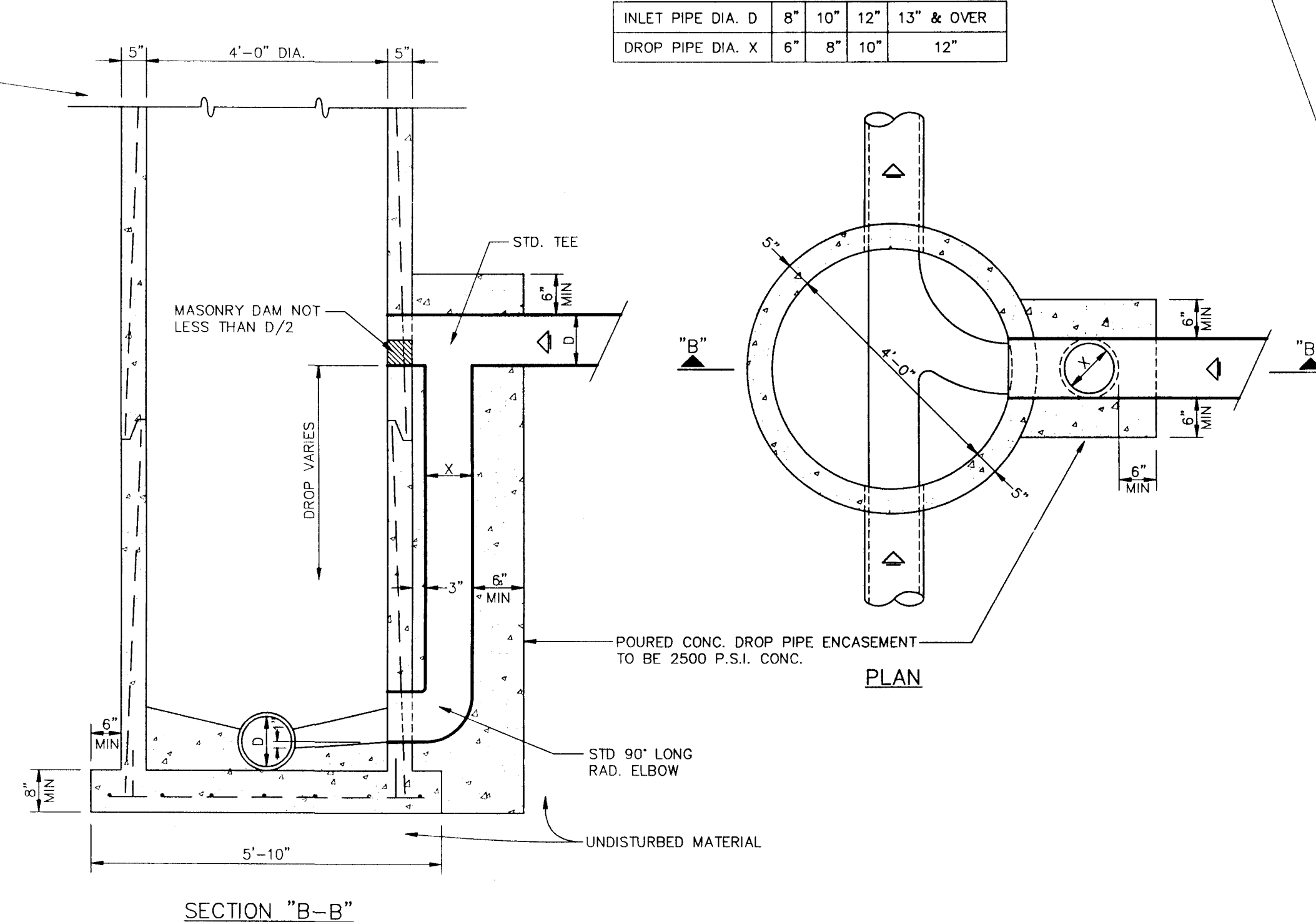
TYPICAL TONGUE & GROOVE JOINT DETAIL



PRECAST SANITARY MANHOLE DETAILS



DROP MANHOLE (DROP 2' OR LESS)



DROP MANHOLE (DROP GREATER THAN 2')

NOTES

- PRECAST MANHOLES:
 - SEAL ALL PIPE OPENINGS IN PRECAST MANHOLE WITH "EMBECO" NON-SHRINK GROUT OR APPROVED EQUAL.
 - DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE.
- ALL P.V.C. GRAVITY SEWER PIPE TO BE S.D.R. 35 MEETING A.S.T.M. SPECIFICATION D.3034-73 (OR LATEST REVISION THEREOF) OR APPROVED ALTERNATE.
- BACKFILL OF EARTH UNDER MANHOLES WILL NOT BE PERMITTED AND ANY EXCESS EXCAVATIONS FOR THESE STRUCTURES SHALL BE FILLED WITH 2500 PSI CONCRETE.
- UPON COMPLETION OF EACH SECTION OR BLOCK OF SEWER, OR SUCH OTHER TIMES AS THE ENGINEER MAY DIRECT, THE BLOCK OR SECTION IS TO BE CLEANED, TESTED AND INSPECTED. EACH SECTION OF SEWER IS TO SHOW, ON EXAMINATION FROM EITHER END, A FULL CIRCLE OF LIGHT BETWEEN MANHOLES. EACH MANHOLE, OR OTHER APPURTENANCE TO THE SYSTEM SHALL BE OF THE SPECIFIED SIZE AND FORM, BE WATER TIGHT, NEATLY AND SUBSTANTIALLY CONSTRUCTED. ALL REPAIRS SHOWN NECESSARY BY INSPECTION ARE TO BE MADE, BROKEN OR CRACKED PIPE REPLACED, ALL DEPOSITS REMOVED, AND THE SEWERS LEFT TRUE TO LINE AND GRADE, ENTIRELY CLEAN AND READY FOR USE.
- THE ALLOWABLE LIMITS OF INFILTRATION, OR EXFILTRATION, OR LEAKAGE FOR THE ENTIRE SYSTEM, OR ANY PORTION THEREOF, SHALL NOT EXCEED A RATE OF 200 GALLONS PER INCH OF DIA. PER MILE OF PIPE PER 24 HRS. THE ALLOWABLE LIMITS OF INFILTRATION OR EXFILTRATION OF MANHOLES SHALL NOT EXCEED A RATE OF 4 GALLONS PER MANHOLE PER 24 HRS.
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF LEESBURG WASTEWATER DEPARTMENT.

NE

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

DRAWN	R.S.H.	REV #5	REV #4	REV #3	REV #2	REV #1
CHECKED	K.E.R.	DATE	4/19/96	PROJECT NO.	93092	
SCALE	N.T.S.	DATE	2/18/97	PROJECT NO.	93092	
DATE	4/19/96	PROJECT NO.	93092	PROJECT NO.	93092	

TYPICAL SEWER DETAILS

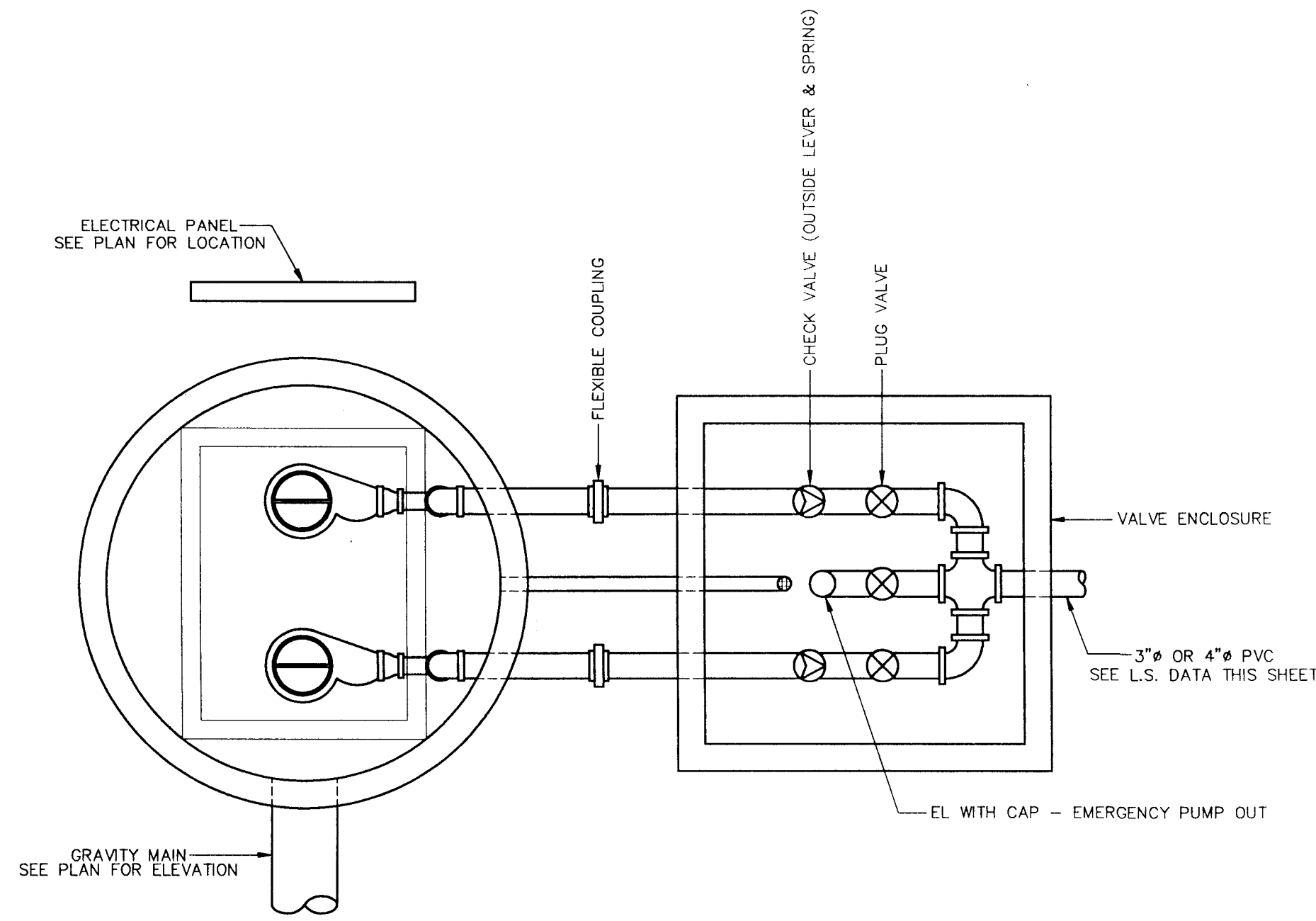
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY FLORIDA

SHEET NO. **10** / **22**

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

FILE: 93092 PH-1A RHA-10

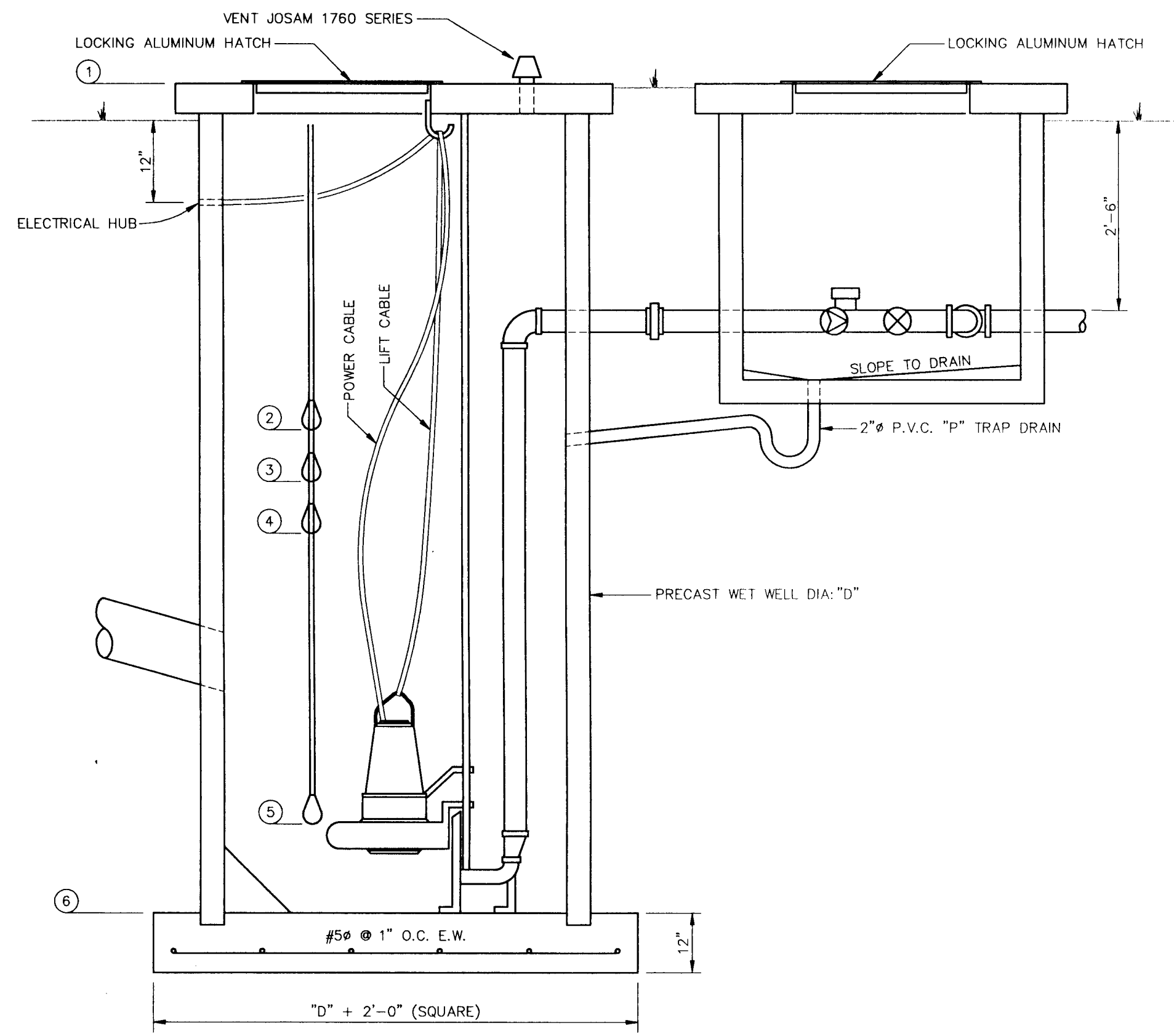


PLAN

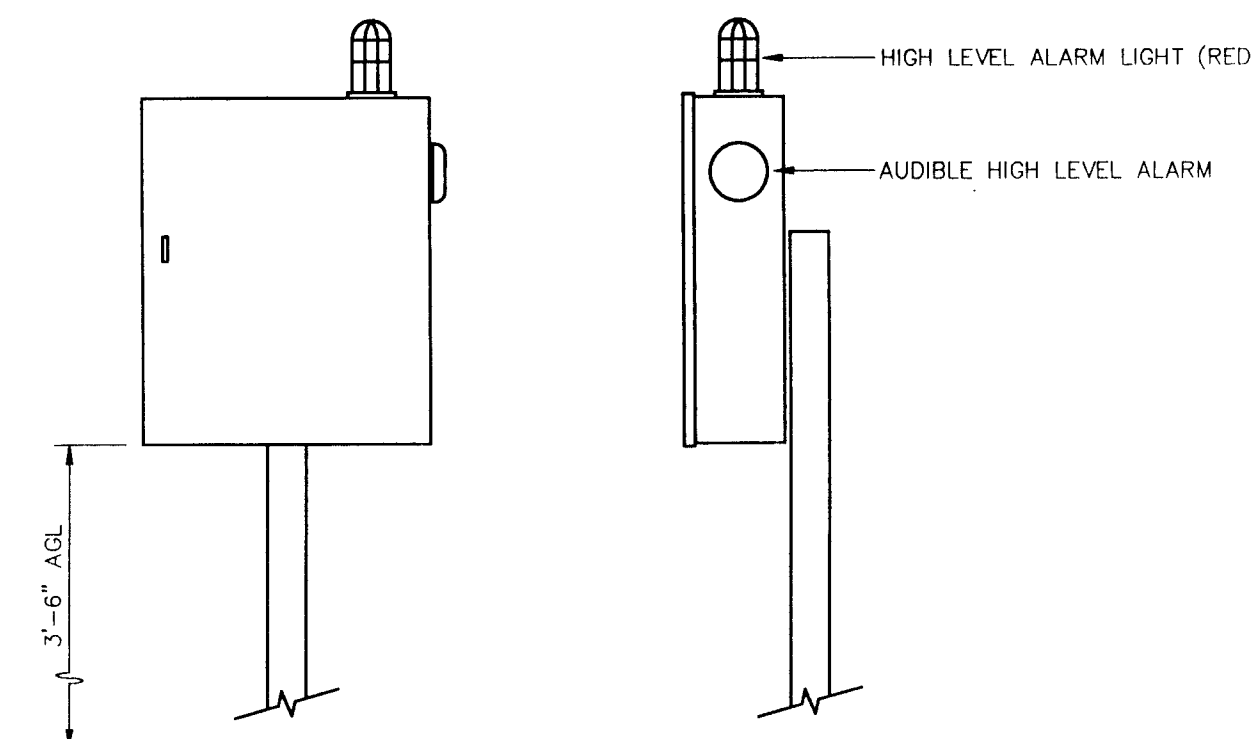
LIFT STATION DATA				
LIFT STATION		F	G	H
TOP OF LIFT STATION	1	96.00	92.00	94.50
HIGH LEVEL ALARM	2	82.5	83.9	81.7
LAG PUMP ON	3	82.0	83.4	80.7
LEAD PUMP ON	4	81.5	82.9	79.7
PUMP OFF	5	79.1	81.9	78.2
BOTTOM OF LIFT STATION	6	78.1	80.9	77.2
WET WELL DIAMETER	"D"	6'ø	6'ø	8'ø
H.P. OF PUMPS	-	2 H.P.	2 H.P.	7-1/2 H.P.

TYPICAL DUAL PUMP INSTALLATION
 PUMPS: L.S."F" - (2) HYDROMATIC S3HRC, 2 HP, 3.58" IMPELLER, 3450 RPM (50 GPM @ 27' TDH)
 L.S."G" - (2) HYDROMATIC S3HRC, 2 HP, 3.3" IMPELLER, 3450 RPM (50 GPM @ 25' TDH)
 L.S."H" - (2) HYDROMATIC S4HRC, 7-1/2 HP, 8.00" IMPELLER, 1750 RPM (200 GPM @ 40' TDH)
 PUMP SUPPLIER SHALL FURNISH SHOP DRAWINGS AND OPERATION MANUALS.

L.S. "F" - FORCE MAIN PIPING SHALL BE 3" PVC, SDR 26 (CLASS 160).
 L.S. "G" - FORCE MAIN PIPING SHALL BE 3" PVC, SDR 26 (CLASS 160).
 L.S. "H" - FORCE MAIN PIPING SHALL BE 4" PVC, SDR 26 (CLASS 160) AND SHALL BE CONNECTED TO THE 8" FM IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF LEEBSBURG WASTEWATER DEPARTMENT INCLUDING ALL NECESSARY CHECK VALVES AND GATE VALVES.



SECTION



ELECTRICAL PLAN

LIFT STATION DETAIL

- WET WELL: SHALL BE A MINIMUM 72"ø OR 96"ø (AS SPECIFIED) INSIDE DIAMETER PRECAST CONCRETE, MEETING "STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE" A.S.T.M. C-478-68, LATEST REVISION. CONCRETE SHALL BE MADE WITH TYPE II ACID RESISTANT CEMENT AND SHALL ATTAIN COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. JOINT SHALL BE SEALED WITH RAM-NEK, OR EQUAL, FLEXIBLE SEALER CONFORMING TO FEDERAL SPECIFICATION SS-00210.
- PUMPS: SEE INDIVIDUAL LIFT STATION DATA.
- THREE (3) CHECK VALVES, APCO OR EQUAL. (OUTSIDE LEVER AND SPRING).
- 3" ECCENTRIC PLUG VALVE, HAND OPERATED, BY DE ZURICK, OR EQUAL.
- LEVEL CONTROLS: SHALL BE MODEL 3900 LIQUID LEVEL REGULATORS, EACH PROVIDED WITH 30' ELECTRIC CABLE AND WEIGHTS AS MANUFACTURED BY HYDR-O-MATIC.
- WET WELL ACCESS COVER: SHALL HAVE CLEAR OPENING OF 30" X 36" AND DOUBLE DOOR ACCESS, AS MANUFACTURED BY HALLIDAY PRODUCTS, OR EQUAL. ACCESS FRAME AND COVERS SHALL BE FABRICATED OF ALUMINUM. FRAME SHALL SUPPORT GUIDE RAILS AND ELECTRICAL WIRING CHANNEL AS PER HYDR-O-MATIC SPECIFICATIONS. WIRING CHANNEL AND MOUNTING BRACKET FOR CHANNEL SHALL BE CONSTRUCTED OF STAINLESS STEEL. COVERS SHALL BE PROVIDED WITH LIFTING HANDLE AND SAFETY LATCH TO HOLD COVER IN OPEN POSITION. LOCKING HASPS SHALL BE FURNISHED FOR EACH COVER. STAINLESS STEEL HARDWARE SHALL BE USED THROUGHOUT. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOP COAT OF ZINC CHROMATIC PRIMER, APPROVED ALKALI RESISTANT PAINT, OR OTHER APPROVED PROTECTIVE COATING. COVER MUST BE COMPATIBLE WITH PUMPS.
- VALVE VAULT ACCESS COVER: SHALL HAVE CLEAR OPENING OF 48" X 60" AS MANUFACTURED BY HALLIDAY PRODUCTS, OR EQUAL. DOOR LEAF SHALL BE 1/4" ALUMINUM DIAMOND PATTERN PLATE, TO WITHSTAND A LIVE LOAD OF 150 p.s.f. CHANNEL FRAME SHALL BE 1/4" ALUMINUM WITH ANCHOR FLANGE AROUND THE PERIMETER. COVER SHALL BE PROVIDED WITH LIFTING HANDLE AND SAFETY LATCH TO HOLD COVER IN OPEN POSITION. A LOCKING HASP SHALL BE FURNISHED FOR EACH COVER. STAINLESS STEEL HARDWARE SHALL BE USED THROUGHOUT. ALL SURFACES IN CONTACT WITH CONCRETE SHALL HAVE A SHOT COAT OF ZINC CHROMATIC PRIMER, APPROVED ALKALI RESISTANT PAINT, OR OTHER APPROVED PROTECTIVE COATING.
- PADLOCK FOR ACCESS COVERS AND CONTROL PANEL DOOR: SHALL BE 3626 MASTER #4 BRASS PADLOCK, KEYED ALIKE. FURNISH TWO (2) KEYS PER LOCK. BOLTS IN LOCKING DEVICE SHALL BE STAINLESS STEEL.
- ELECTRICAL SERVICE ENTRANCE: PROVIDE METER SOCKET AND DISCONNECT, MEETING APPLICABLE ELECTRIC CODES AND REQUIREMENTS OF POWER COMPANY. LIGHTNING & VOLTAGE PROTECTION TO BE PROVIDED.
- CONTROL PANEL: SHALL BE EQUIPPED WITH INDIVIDUAL DISCONNECTS, ACROSS THE LINE MAGNETIC STARTERS, THREE POLE OVERHEAD PROTECTION, ELECTRICAL ALTERNATOR, AUTOMATIC TRANSFER TO NON-OPERATING PUMP, OVERLOAD RESETS, H.O.A. PUMP OPERATING SELECTOR SWITCH, ELAPSED TIME METERS FOR EACH PUMP, AND TERMINAL BOARD WITH CONNECTIONS FOR HIGH LEVEL ALARMS. ALL COMPONENTS SHALL BE HOUSED IN A NEMA 3R-304 STAINLESS STEEL ENCLOSURE WITH ALUMINUM DEAD FRONT INNER DOOR DESIGN. PROVISIONS FOR PADLOCKING PANEL SHALL BE PROVIDED.

OTHER REQUIRED EQUIPMENT:

- MAIN BREAKER.
- HIGH LEVEL ALARM LIGHT, FLASHER, PILOT LIGHT, HORN, PUSH TO TEST SWITCH AND SILENCING SWITCH.
- CONVENIENCE RECEPTACLE GROUND-FAULT INTERRUPTER TYPE.
- LIGHTNING ARRESTORS.
- 24 VOLT CONTROL CIRCUITRY.
- VOLTAGE MONITOR RELAY.
- SEAL FAILURE MODULE.
- LIQUID LEVEL LIGHTS.
- EMERGENCY GENERATOR RECEPTACLE - J.R.S.B. 1044FR.
- PAINT: INSIDE OF WET WELL & VALVE VAULT SHALL BE PAINTED WITH TWO (2) COATS OF "POXITAR" OR EQUAL, APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS.
- VALVE VAULT: PRECAST CONCRETE, 5' X 4' INSIDE DIMENSIONS.
- CONTRACTOR TO CONFIRM SERVICE ARRANGEMENTS WITH POWER COMPANY BEFORE COMMENCING WORK. CONTRACTOR TO RUN UNDERGROUND WIRING TO NEAREST TRANSFORMER OR HAND HOLE.
- ALL FASTENERS ON FLANGES AND ETC. INSIDE WET WELL SHALL BE STAINLESS STEEL.
- SHOP DRAWINGS OF ENTIRE INSTALLATION MUST BE APPROVED BY THE ENGINEER AND THE CITY OF LEEBSBURG PRIOR TO ORDERING MATERIALS.
- PIPING FROM THE LIFT STATION ON, SHALL BE AS SHOWN ON PLANS. THRUST RESTRAINT BLOCKING TO BE CONSTRUCTED AS REQUIRED ALONG THE FORCE MAIN IN ACCORDANCE WITH THE DETAILS SHOWN ON "WATER DETAIL SHEET".
- FORCE MAIN TO BE LAID LEVEL WHERE POSSIBLE. WHERE FORCE MAINS RISES TO FOLLOW PROPOSED FINISHED GRADE PROVIDING INTERMEDIATE "HIGH POINTS", INSTALL APPROPRIATE AIR RELEASE VALVE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL LIFT STATION MATERIAL AND CONSTRUCTION TECHNIQUES SHALL BE IN ACCORDANCE WITH CITY OF LEEBSBURG REQUIREMENTS. CITY MUST APPROVE ALL MATERIAL PRIOR TO INSTALLATION.
- POTABLE WATER SERVICE LOCATED AT LIFT STATION SHALL BE CONSTRUCTED WITH A REDUCED PRESSURE BACKFLOW PREVENTOR.

NEWMAN CONSULTING ENGINEERS, INC.
 P.O. BOX 480266 - LEEBSBURG, FLORIDA 34749-0264
 PHONE (352) 787-7482 - FAX (352) 787-7412

DRAWN	R.S.H.	CHECKED	K.E.R.	SCALE	N.T.S.	DATE	4/19/98	PROJECT NO	93092
REV #3		REV #4		REV #3		REV #2		REV #1	
								AS-BUILT	2/18/97
								AS-BUILT	2/18/97

LIFT STATION DETAILS

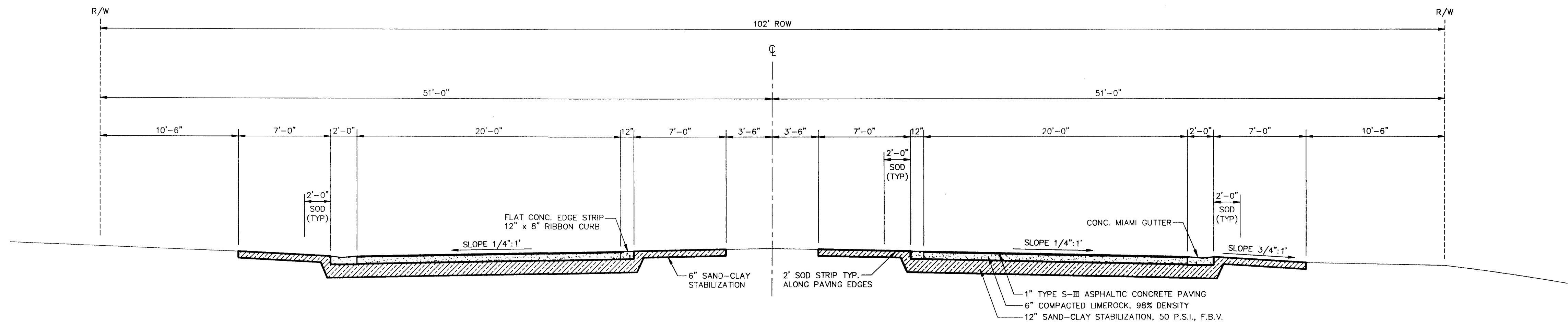
ROYAL HIGHLANDS - PHASE 1A

LAKE COUNTY FLORIDA

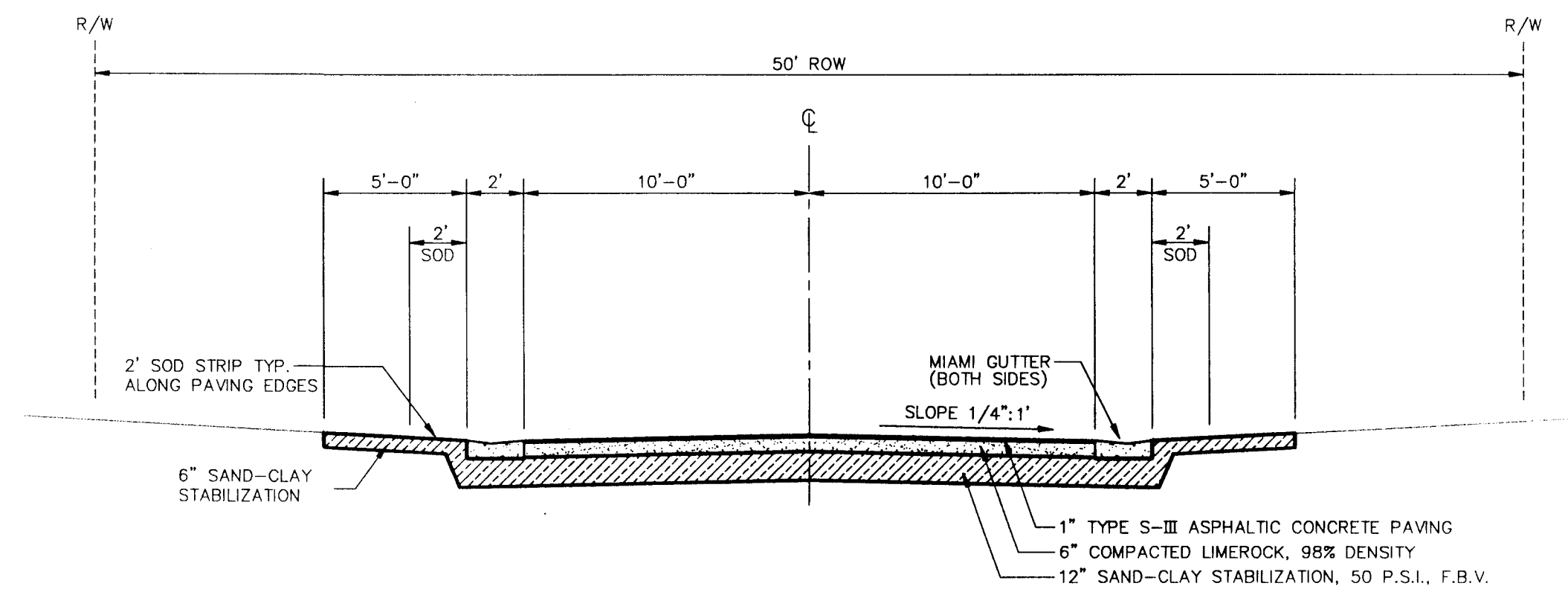
SHEET NO

11

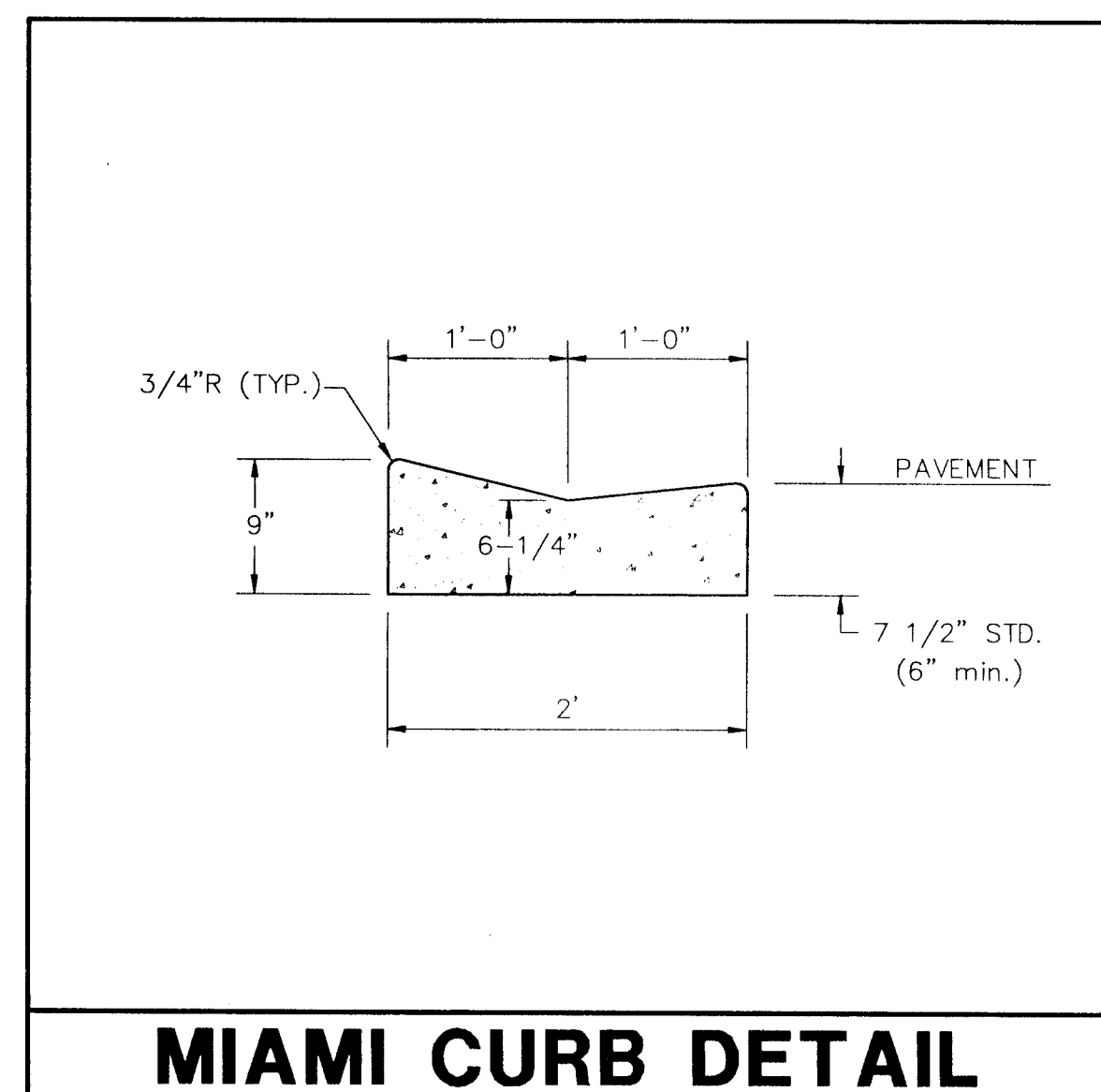
22



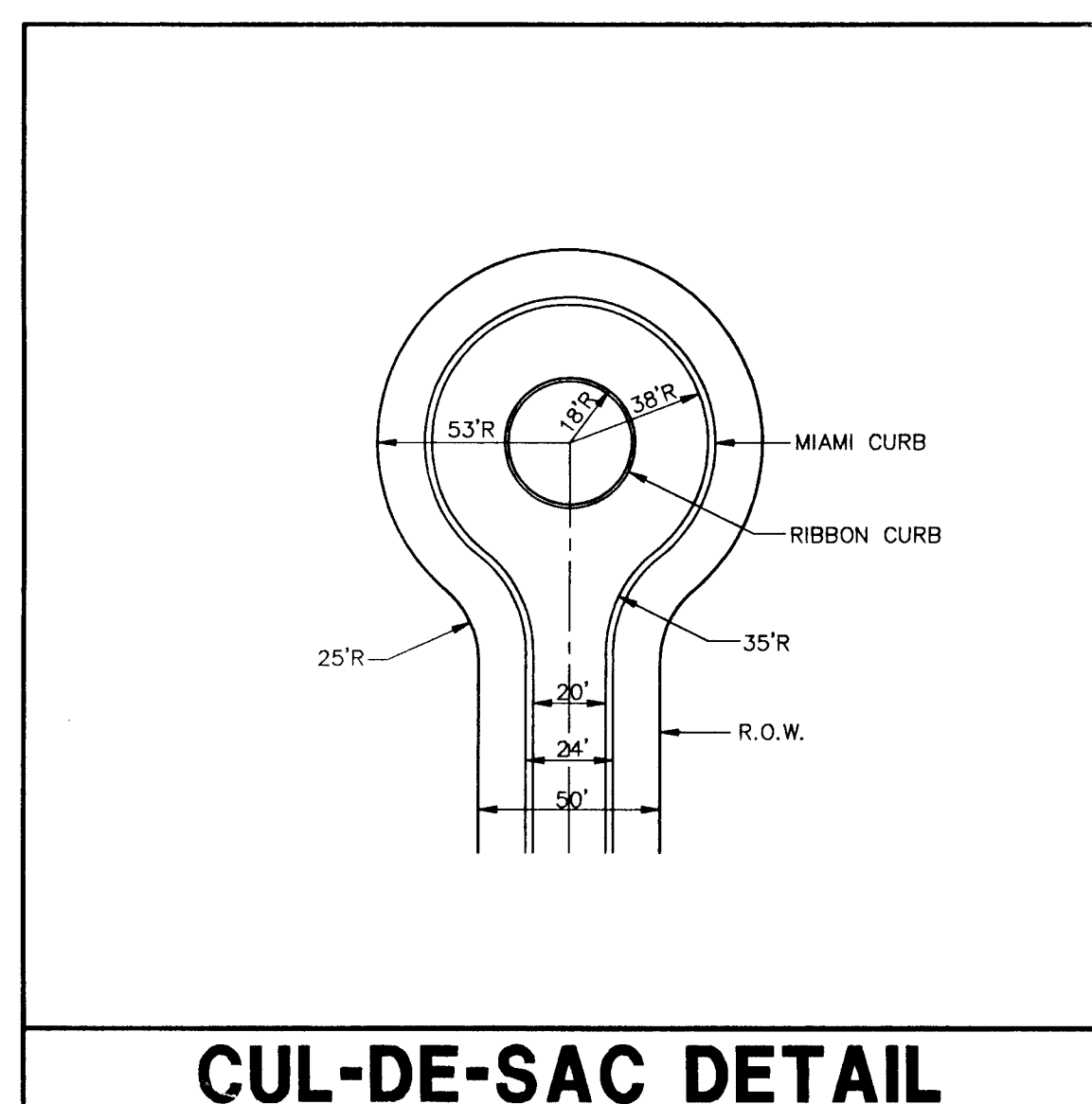
TYPICAL SECTION MONARCH BOULEVARD



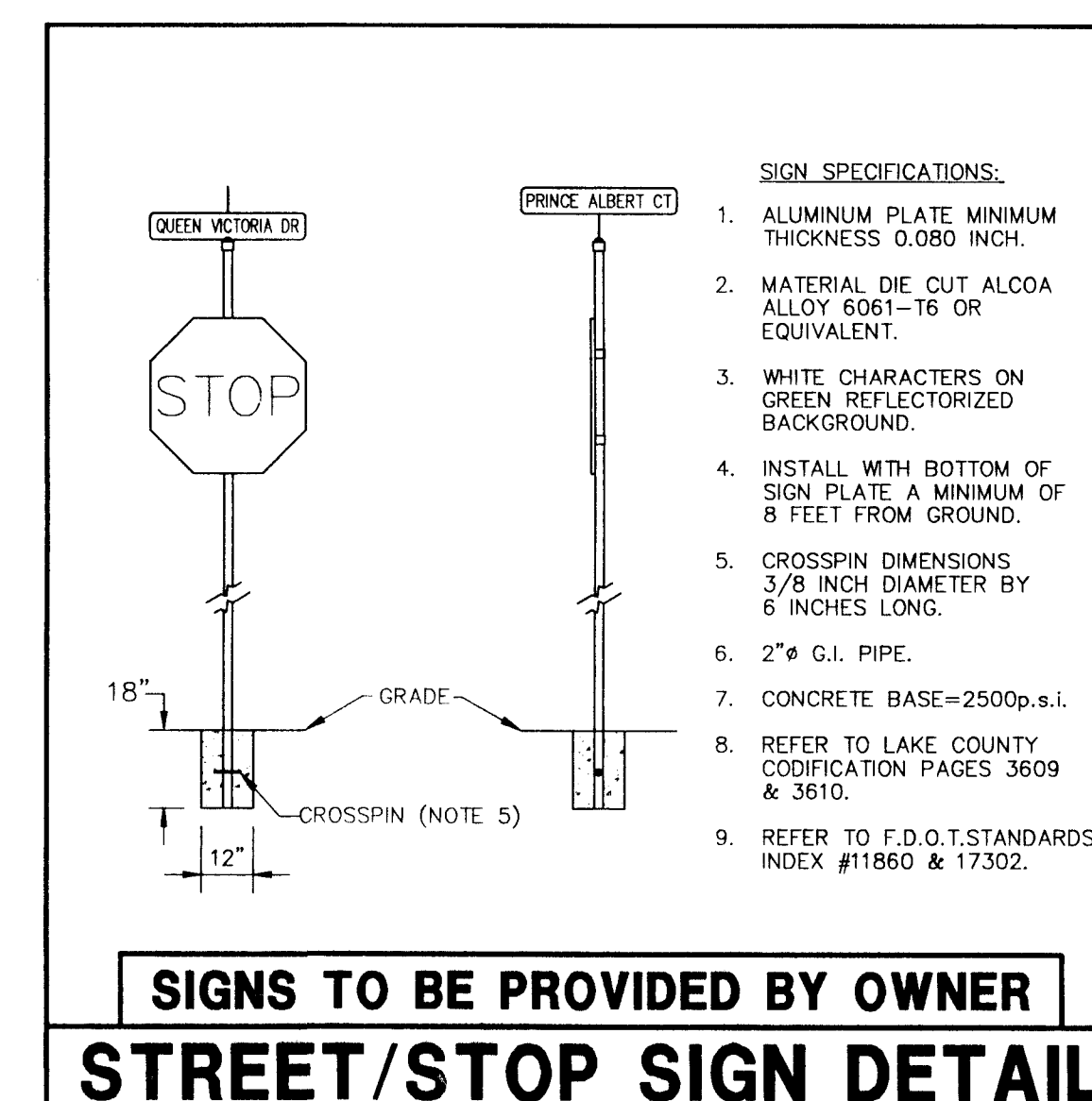
TYPICAL LOCAL STREET SECTION



MIAMI CURB DETAIL



CUL-DE-SAC DETAIL



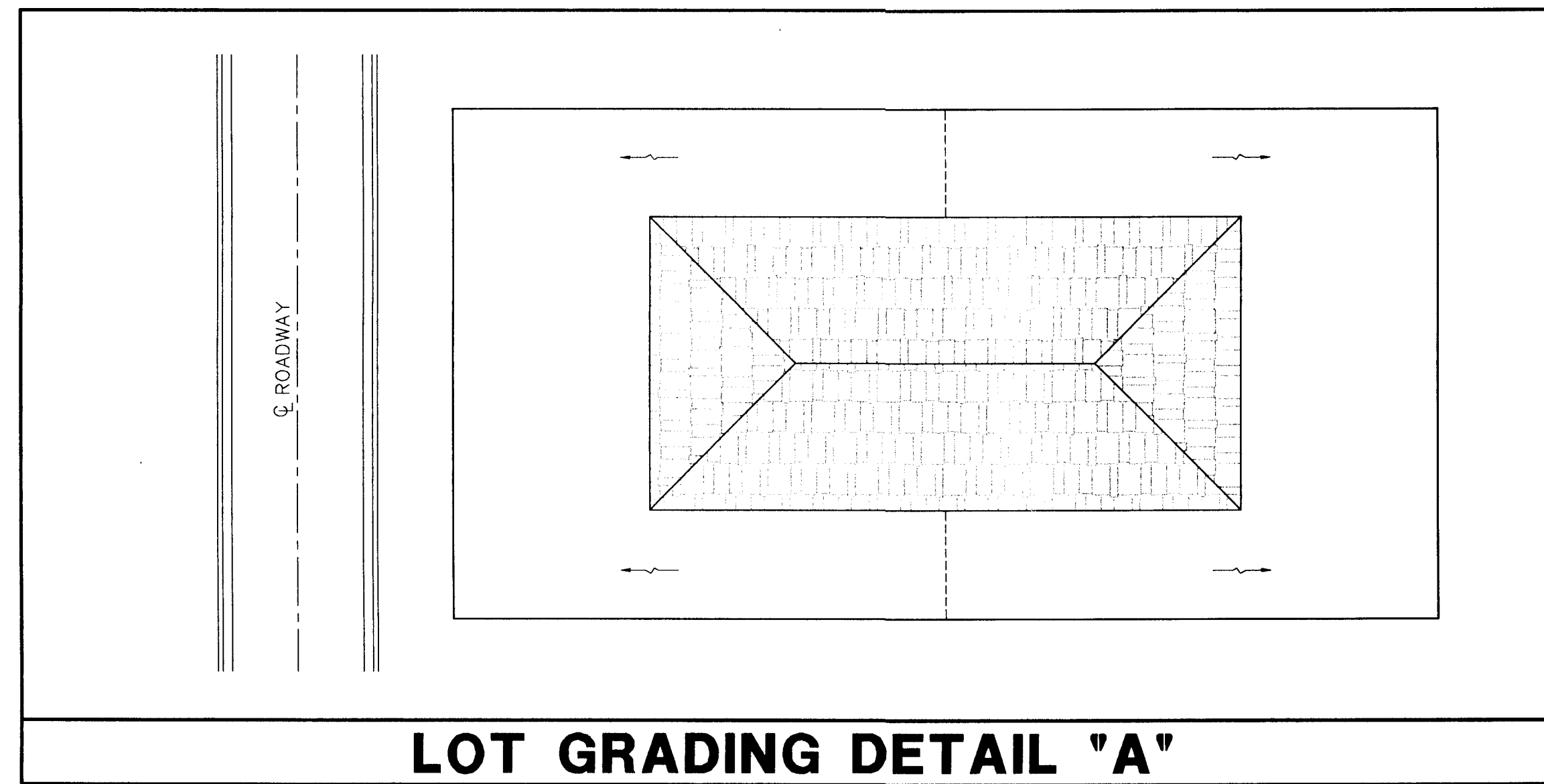
KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

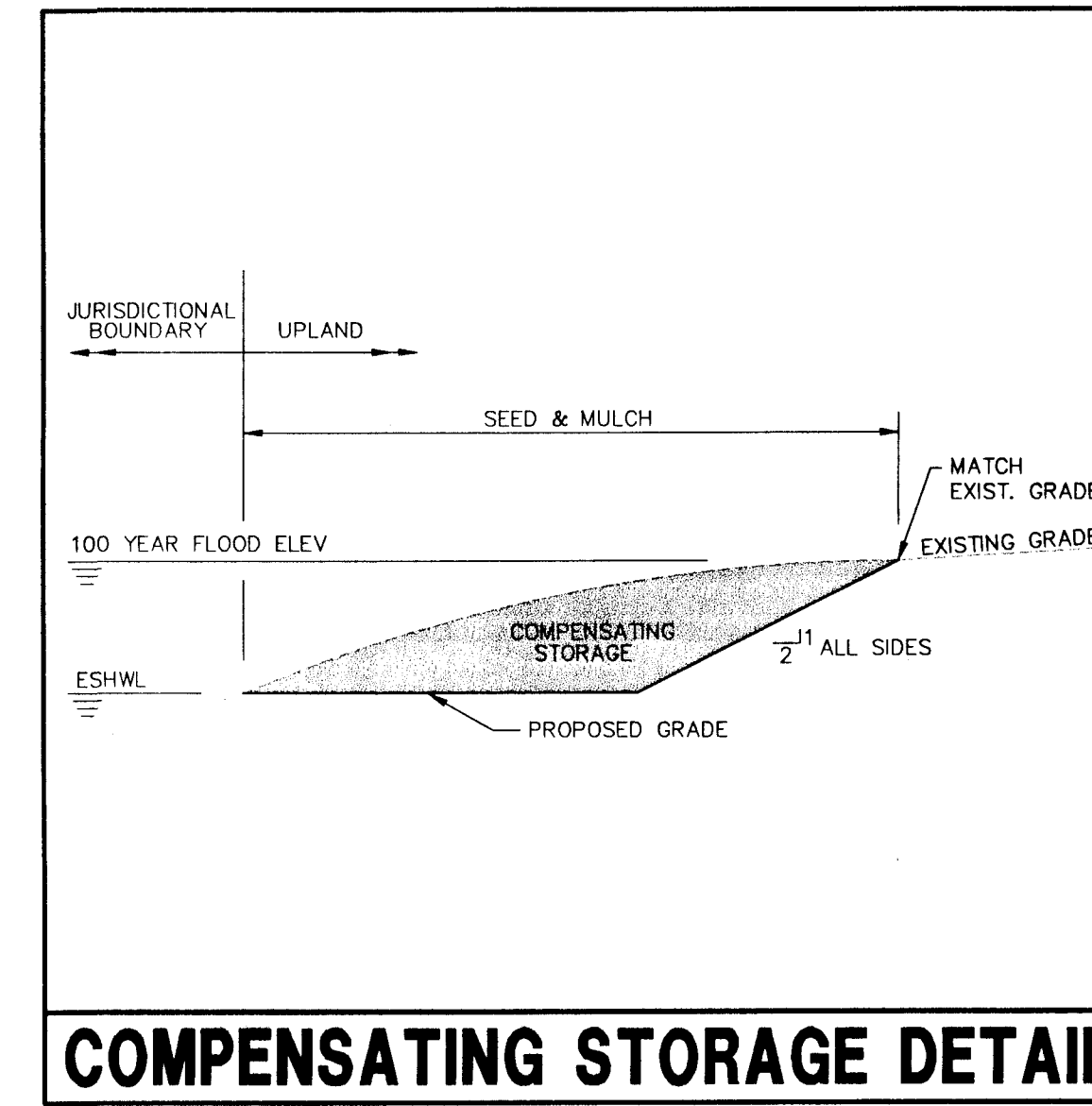
REV #	REV #	REV #	REV #
1	2	3	4
1/17/97	2/18/97	2/18/97	2/18/97
AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319	AS-BUILT LOTS 246-319

DETAIL SHEET
ROYAL HIGHLANDS - PHASE 1A
FLORIDA
LAKE COUNTY

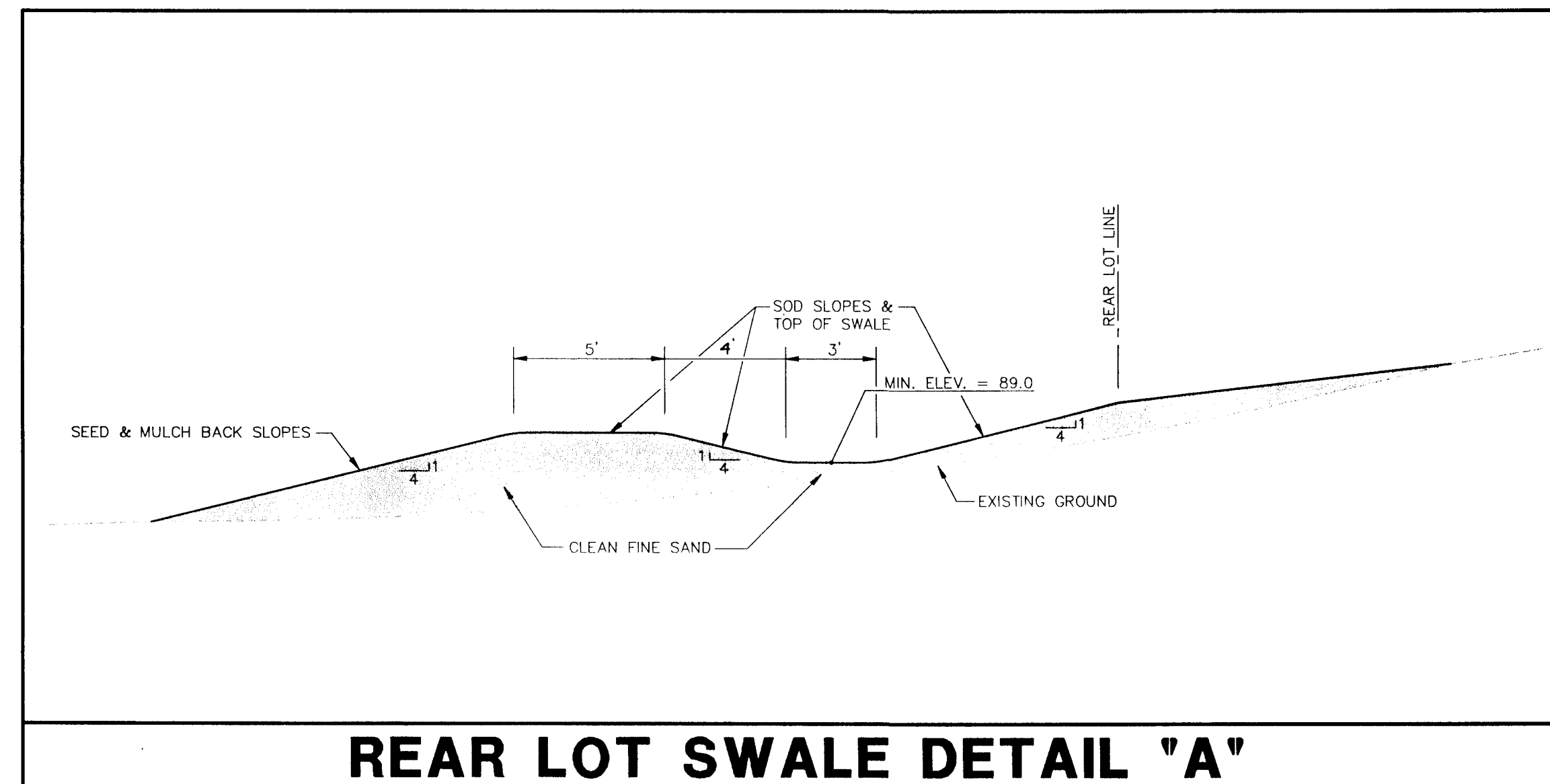
FILE: 93092\PH-1A\RH1A-12



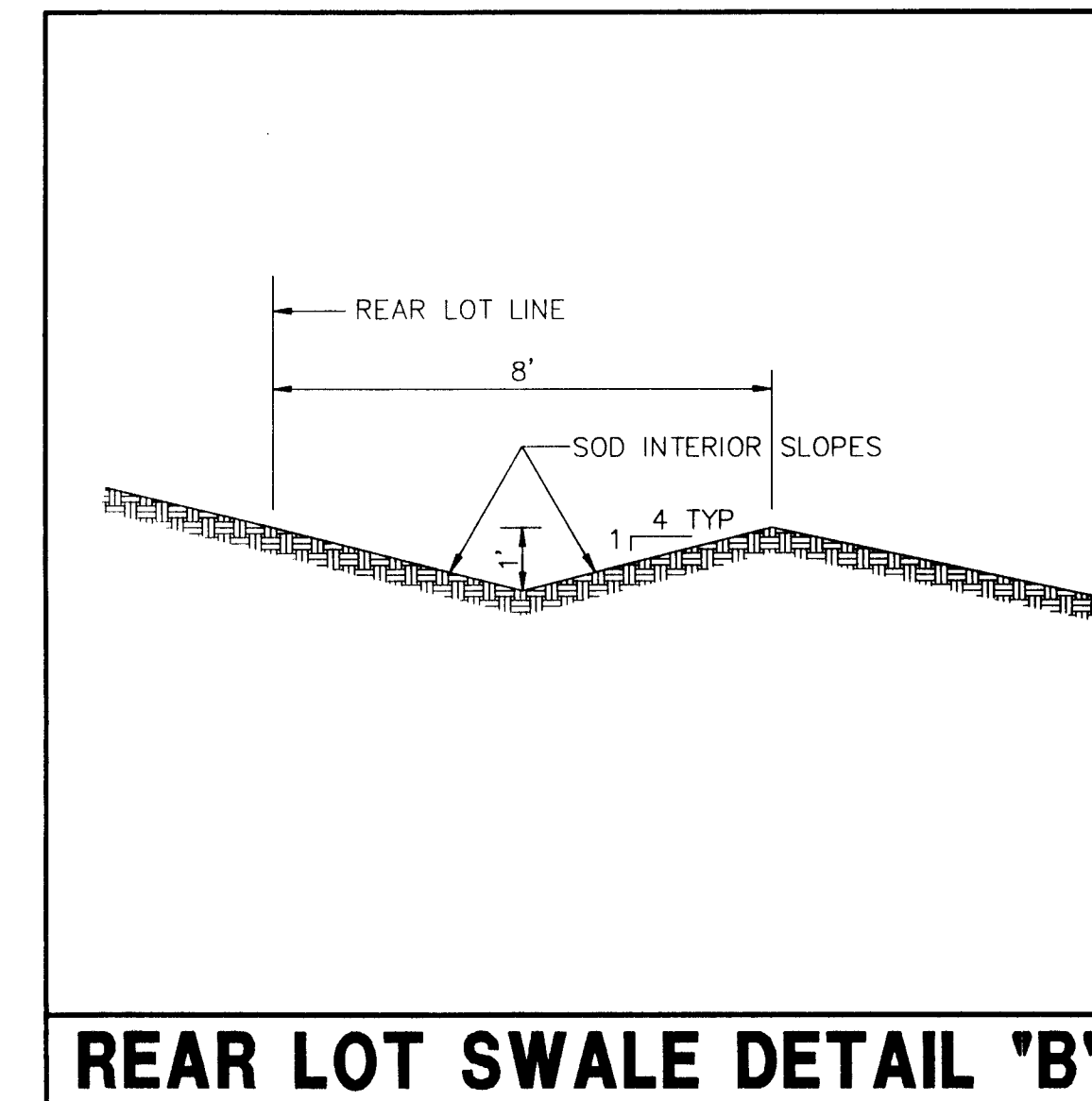
LOT GRADING DETAIL "A"



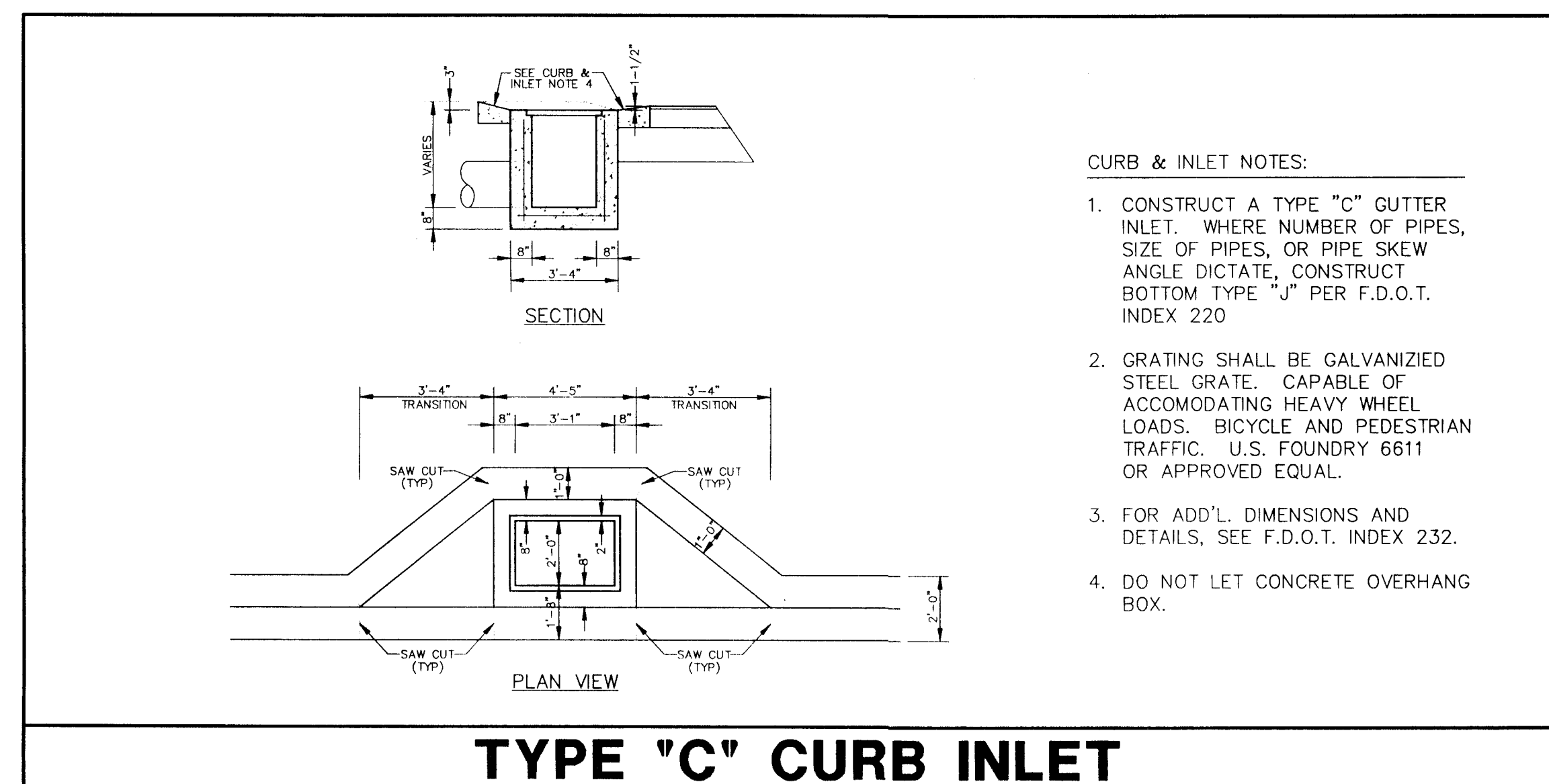
COMPENSATING STORAGE DETAIL



REAR LOT SWALE DETAIL "A"

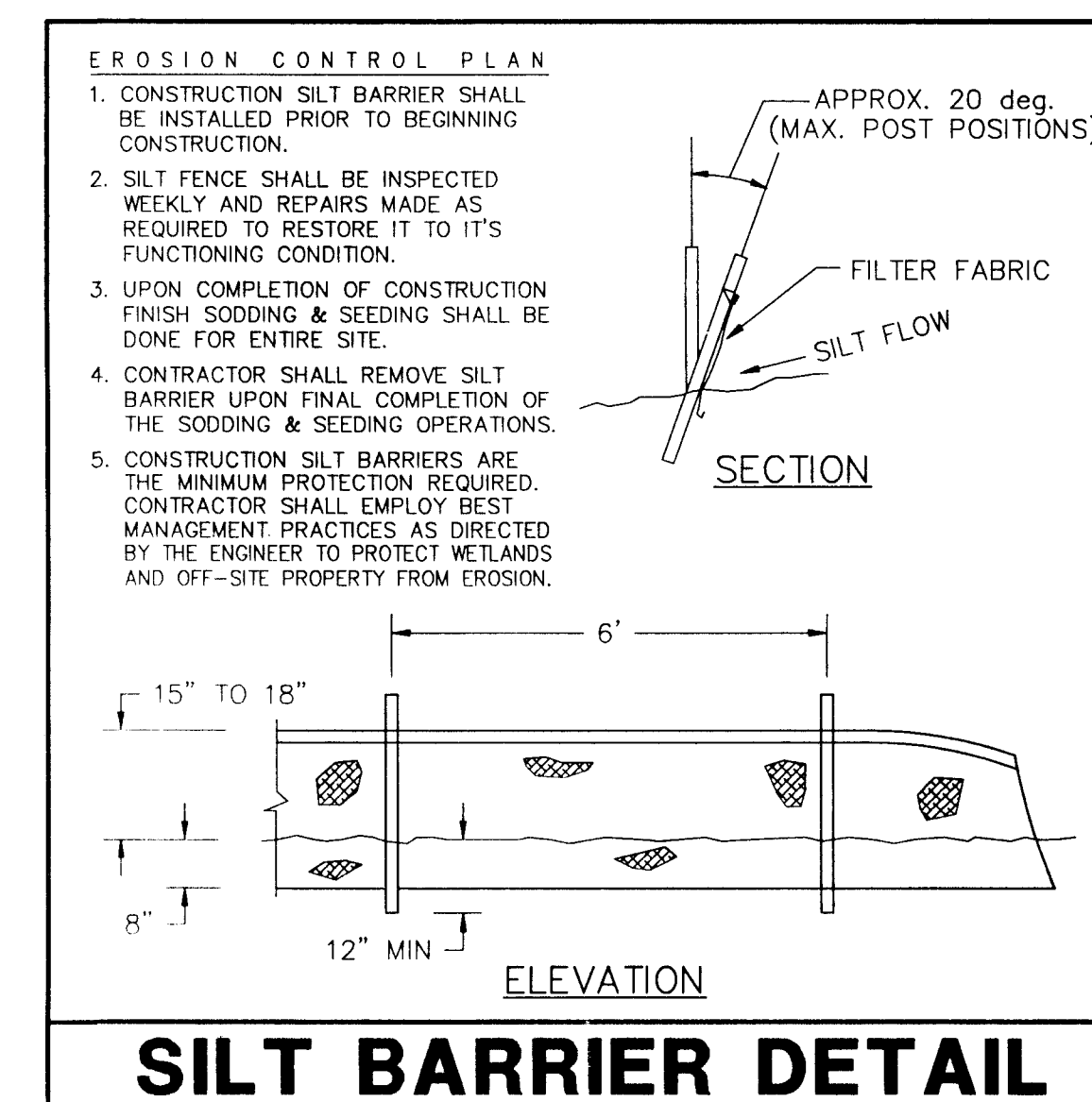


REAR LOT SWALE DETAIL "B"



TYPE "C" CURB INLET

- CURB & INLET NOTES:**
1. CONSTRUCT A TYPE "C" GUTTER INLET. WHERE NUMBER OF PIPES, SIZE OF PIPES, OR PIPE SKEW ANGLE DICTATE, CONSTRUCT BOTTOM TYPE "J" PER F.D.O.T. INDEX 220
 2. GRATING SHALL BE GALVANIZED STEEL GRATE. CAPABLE OF ACCOMODATING HEAVY WHEEL LOADS, BICYCLE AND PEDESTRIAN TRAFFIC. U.S. FOUNDRY 6611 OR APPROVED EQUAL.
 3. FOR ADD'L. DIMENSIONS AND DETAILS, SEE F.D.O.T. INDEX 232.
 4. DO NOT LET CONCRETE OVERHANG BOX.



SILT BARRIER DETAIL

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 450264 • LEESEBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

NE

DRAWN	R.S.H.	CHECKED	K.E.R.	SCALE	DATE	REV #1	REV #2	REV #3	REV #4
				N.T.S.	4/19/96	AS-BUILT Lots 246-319	AS-BUILT Lots 245 & 320-374	2/18/97	1/17/97
PROJECT NO. 93092						REV #1 REV PER SURVMD 6/20/96			

DETAIL SHEET

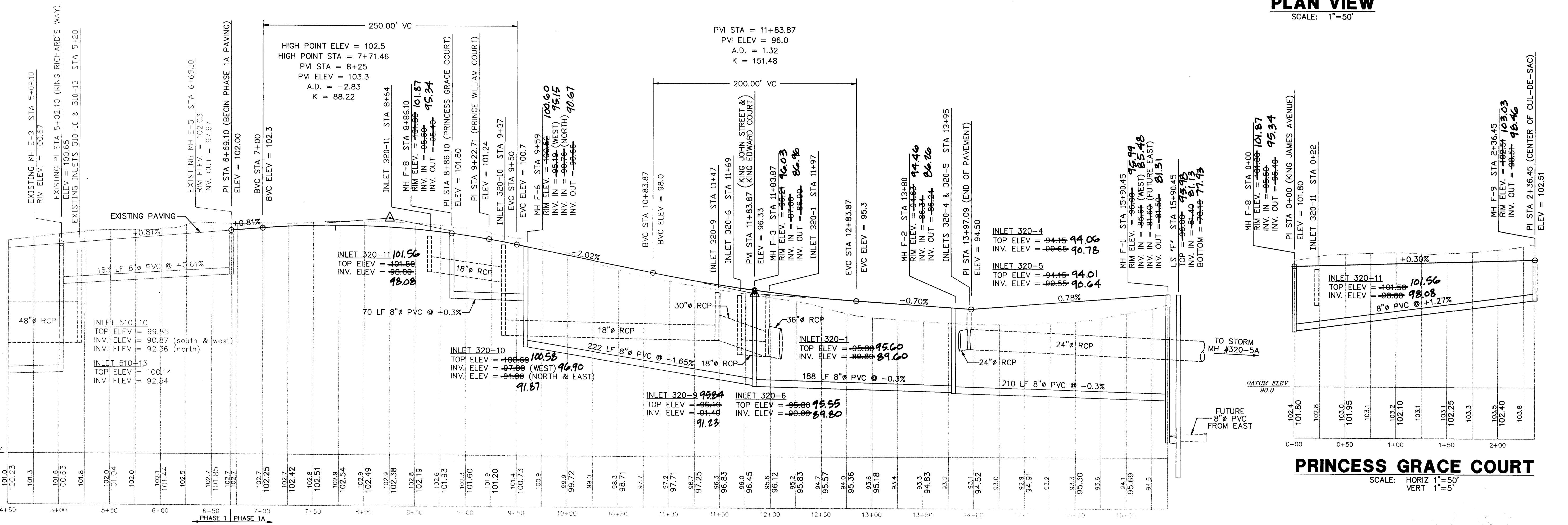
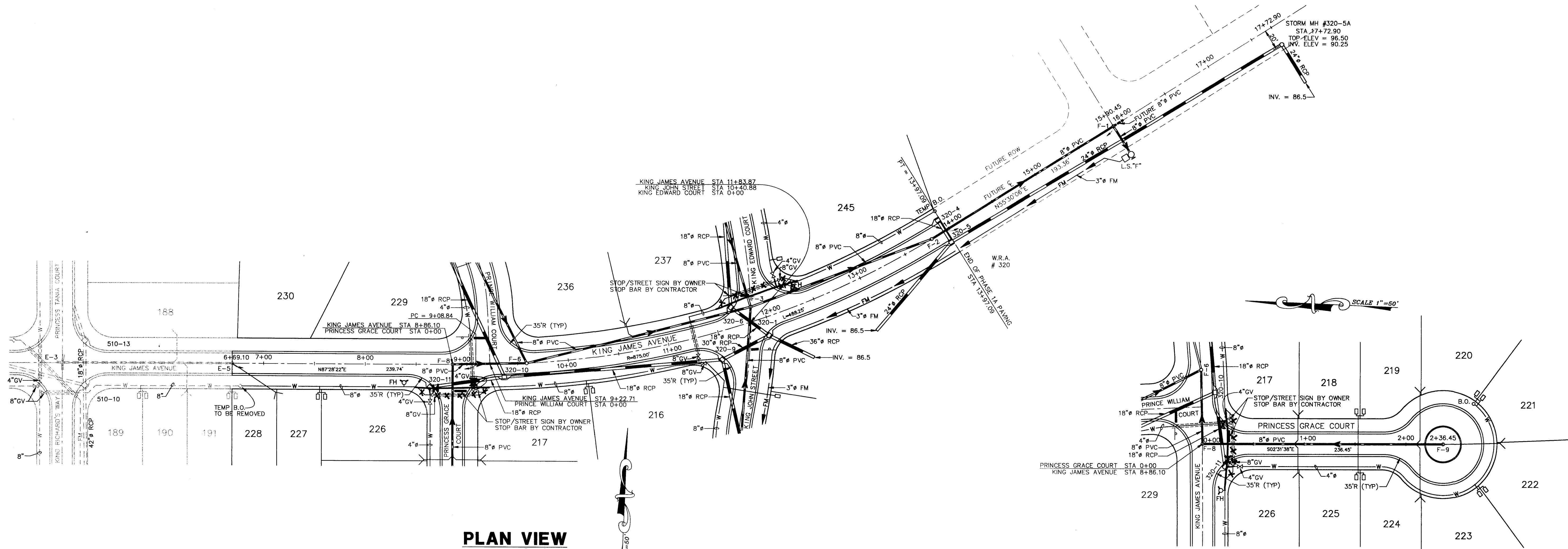
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY FLORIDA

SHEET NO. **13** OF **22**

FILE: 93092\PH-1A\RH1A-13

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE



NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

PLAN & PROFILE - KING JAMES AVE & PRINCESS GRACE CT
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY FLORIDA

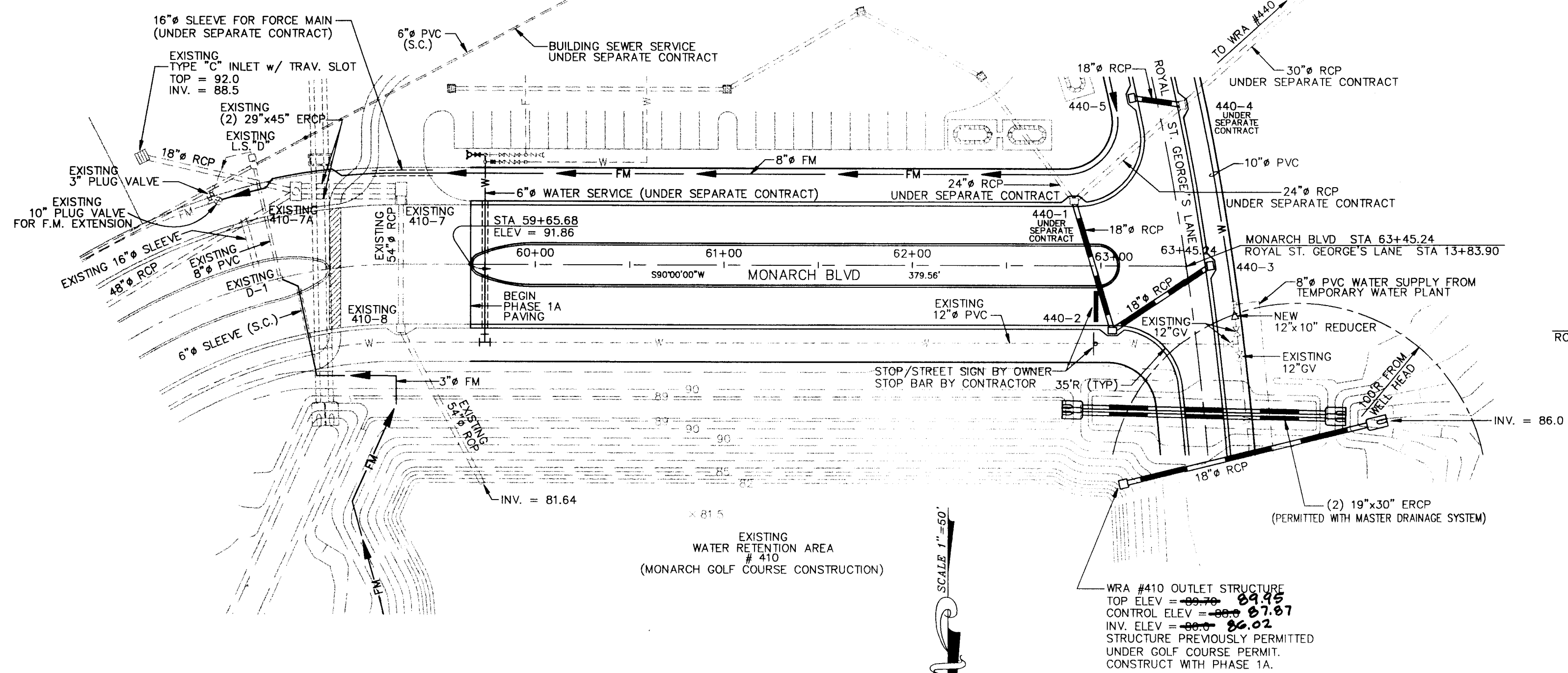
DESIGN	R.S.H.	REV #5	
CHECKED	K.E.R.	REV #4	
SCALE	1"=50'	REV #3	2/18/97
DATE	4/19/96	REV #2	AS-BUILT Lots 240-319 2/18/97
PROJECT NO.	93092	REV #1	AS-BUILT Lots 209-249 & 320-514 1/17/97

FILE: \93092\PH-1A\PH1A-14

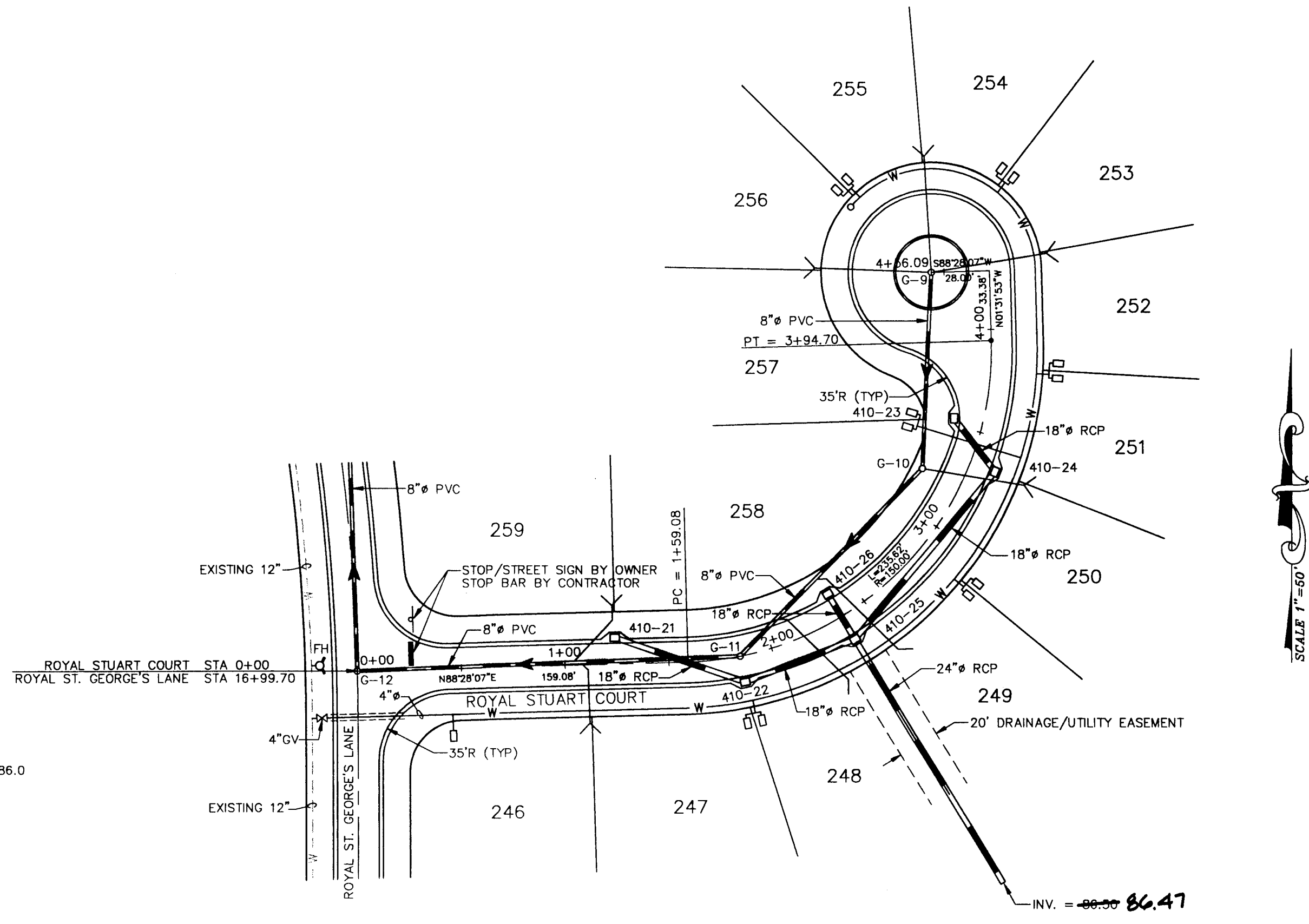
14
22

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

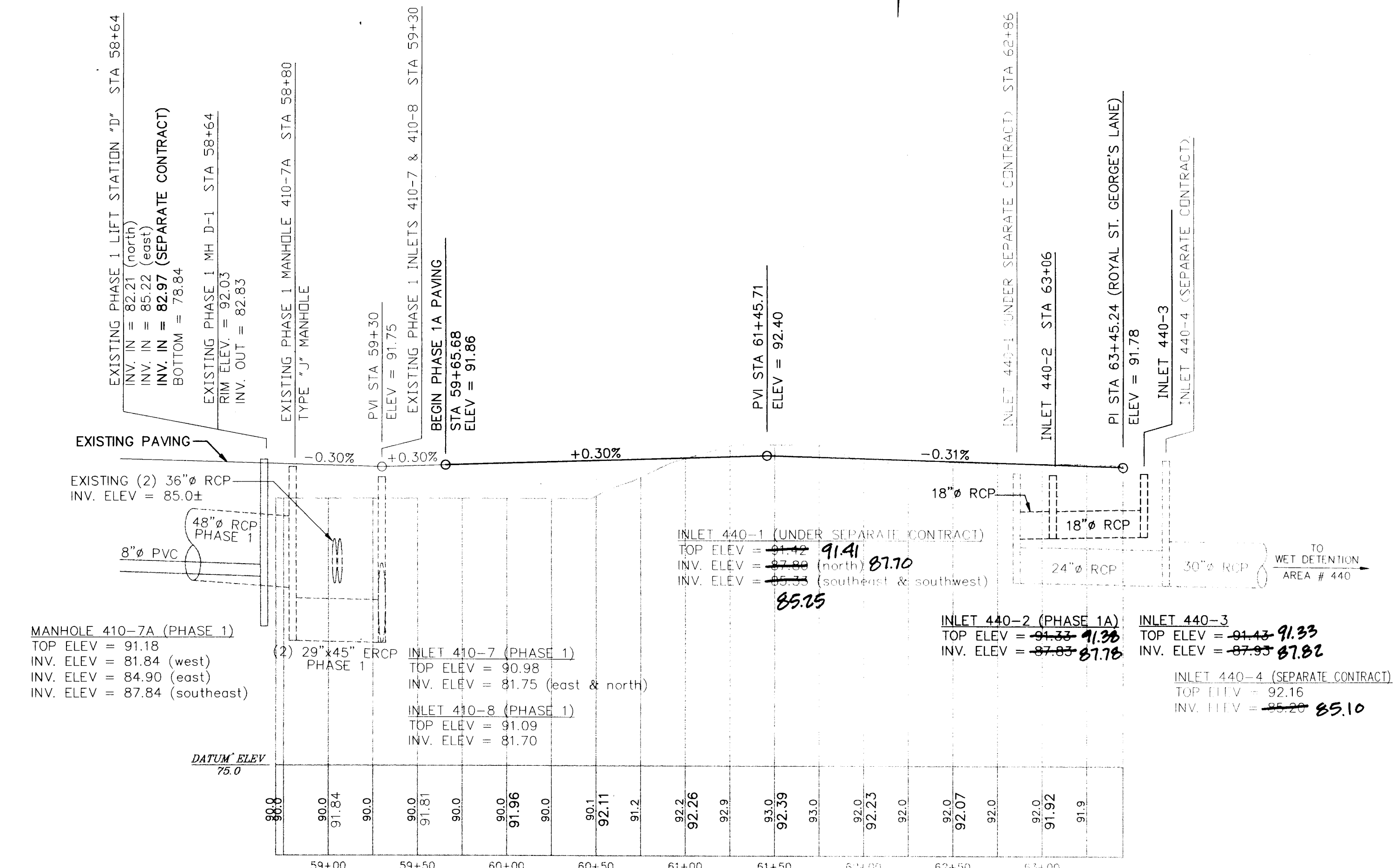
WATER NOTE
 8" WATER MAIN EXTENDING FROM EXISTING 12" MAIN TO NEW F.H. AT RECREATION CENTER SHALL BE PERMITTED THROUGH THIS SET OF PLANS, BUT SHALL BE CONSTRUCTED UNDER SEPARATE RECREATION CENTER CONTRACT (S.C.).



PLAN VIEW
 SCALE: 1"=50'

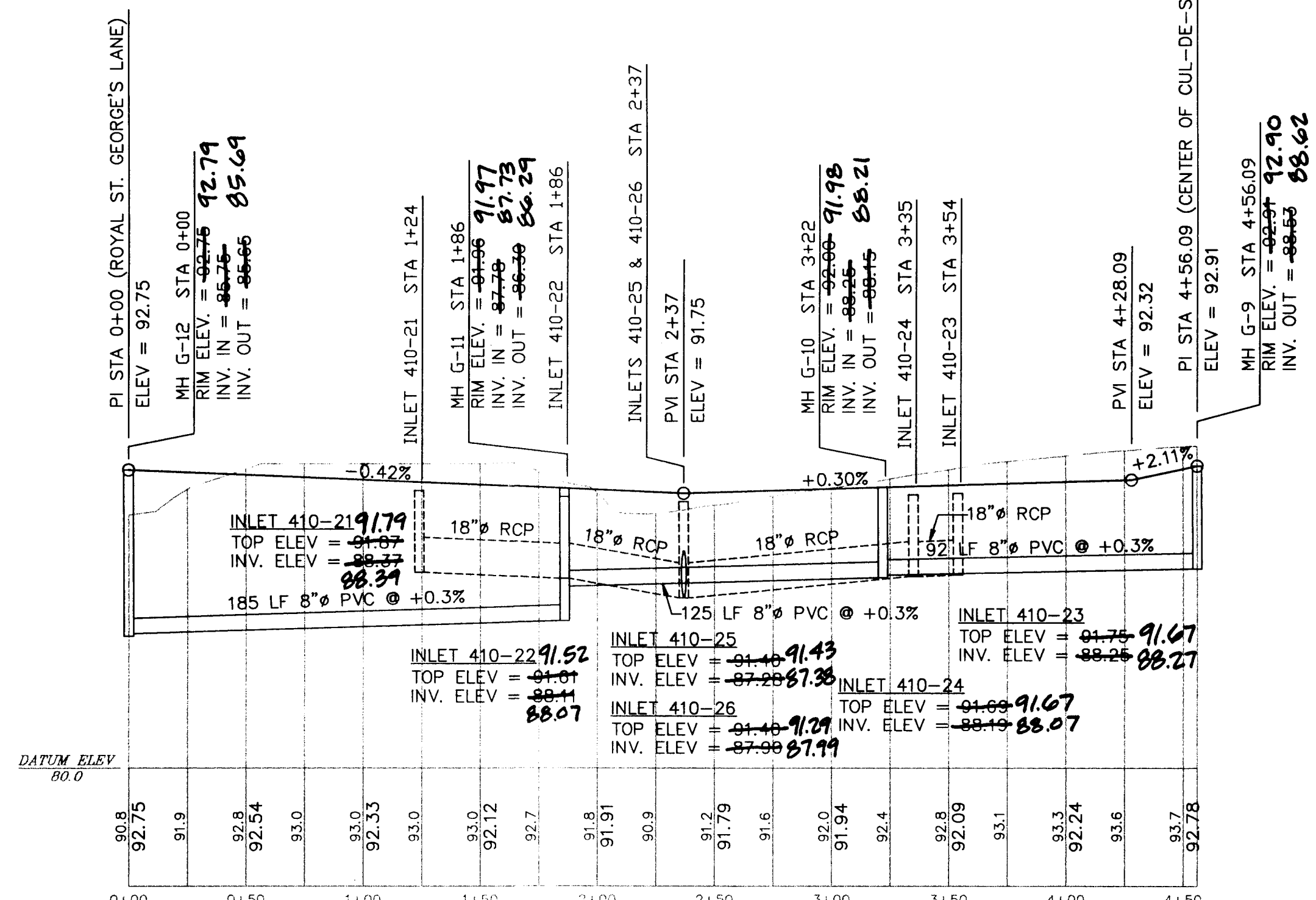


PLAN VIEW
 SCALE: 1"=50'



MONARCH BLVD STA 59+65.68 - 63+45.24

SCALE: HORIZ 1"=50'
 VERT 1"=5'



ROYAL STUART COURT

SCALE: HORIZ 1"=50'
 VERT 1"=5'

KEITH E. RIDDLE, P.E.
 FLA. REGIS. NO. 38800

DATE

NEWMAN CONSULTING ENGINEERS, INC.
 P.O. BOX 40366 LEEBURG, FLORIDA 34749-2664
 PHONE (352) 787-7482 • FAX (352) 787-7412

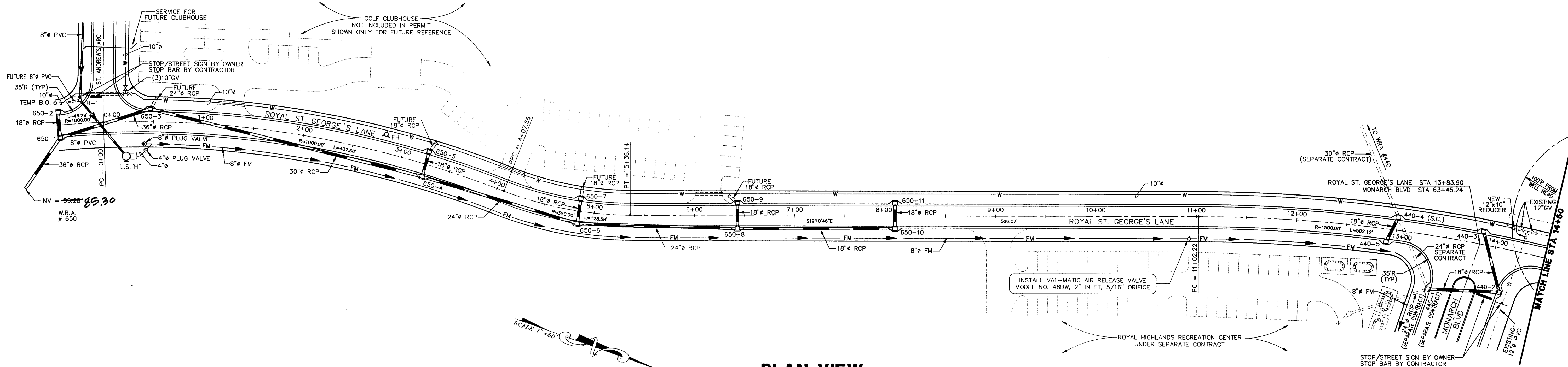
NE

DRAWN: R.S.H. REV #5
 CHECKED: K.E.R. REV #4
 SCALE: 1"=50'
 DATE: 4/19/98
 PROJECT NO: 93092
 REV #1: REV PER SURVAD 6/20/98

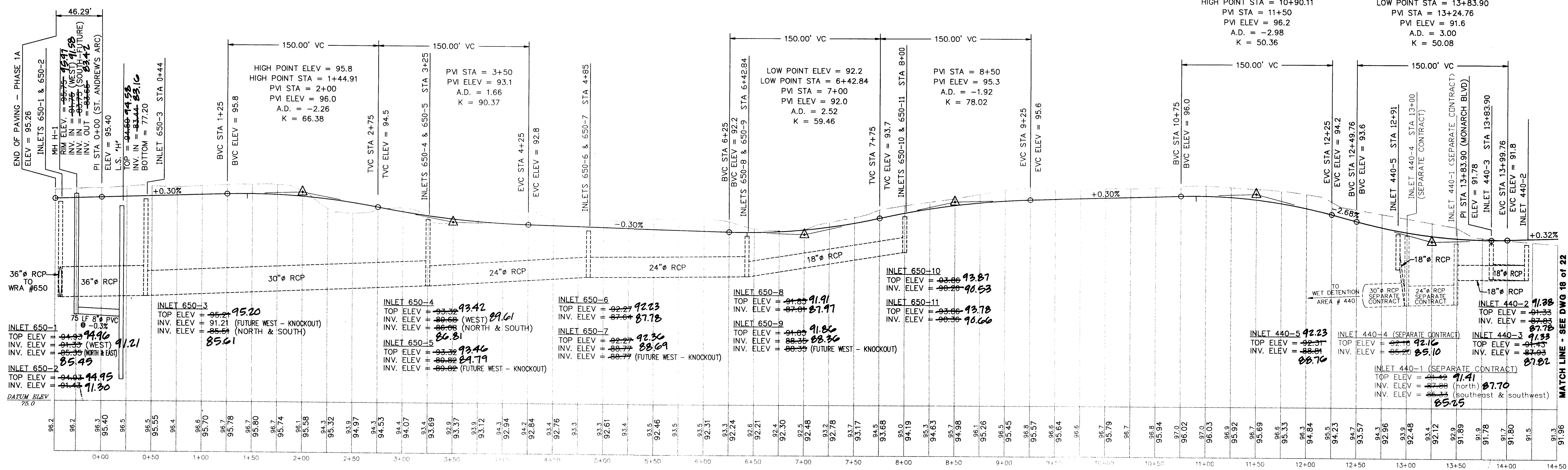
As-Built Lots 246-319 2/18/97
 As-Built Lots 243-245 & 320-374 1/17/97

PLAN & PROFILE - MONARCH BLVD & ROYAL STUART CT
 ROYAL HIGHLANDS - PHASE 1A
 LAKE COUNTY
 FLORIDA

16
 22



PLAN VIEW
SCALE: 1"=50'



ROYAL ST. GEORGE'S LANE STA 0+00 - 14+50

SCALE: HORIZ 1"=50'
VERT 1"=5'

KEITH E. RIDDLE, P.E.
FLA. REGS. NO. 38800

DATE

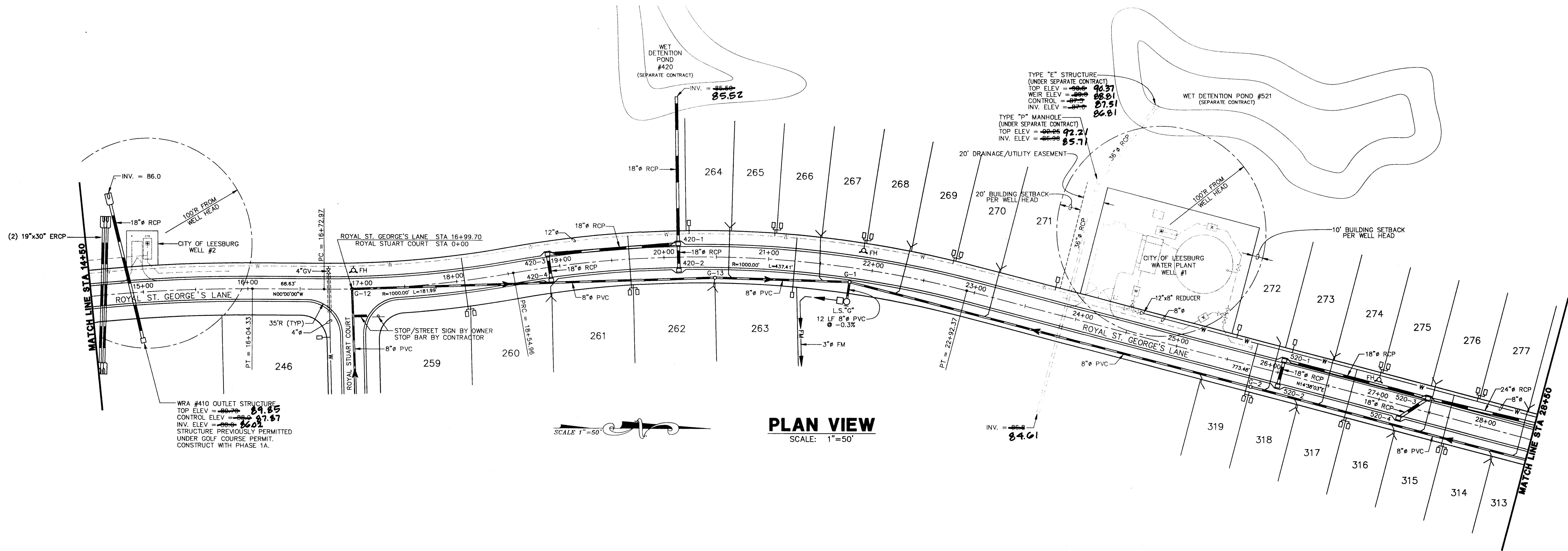
NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264, LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

DRAWN	R.S.H.	REV #3	2/18/97
CHECKED	K.E.R.	REV #4	1/11/97
SCALE	1"=50'	REV #5	2/18/97
DATE	4/19/96	REV #6	2/18/97
PROJECT NO.	93092	REV #7	2/18/97

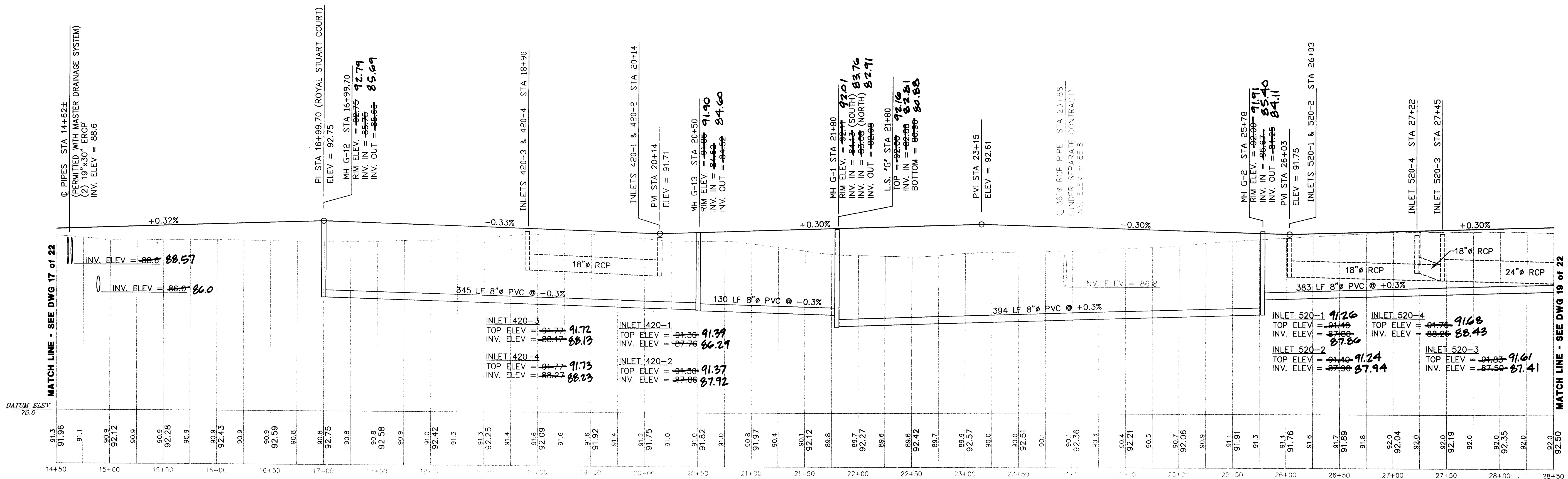
PLAN & PROFILE - ROYAL ST. GEORGE'S LANE
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY FLORIDA

SHEET # **17**
22

FILE: 93092\PH-1A\PH1A-17



PLAN VIEW
SCALE: 1"=50'



ROYAL ST. GEORGE'S LANE STA 14+50 - 28+50

SCALE: HORIZ 1"=50'
VERT 1"=5'

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

REV #5 AS-BUILT LOTS 240-319 2/18/17

REV #4 AS-BUILT LOTS 05-145-520-574 1/17/17

REV #3 REV PER SURVMD 7/24/96

REV #2 REV PER SURVMD 6/20/96

REV #1 REV LOT SIZES & NUMBERING PER OWNER 5/7/96

PROJECT NO. 93092

DATE: 4/19/96

SCALE: 1"=50'

CHECKED: K.E.R.

DRAWN: R.S.H.

PLAN & PROFILE - ROYAL ST. GEORGE'S LANE

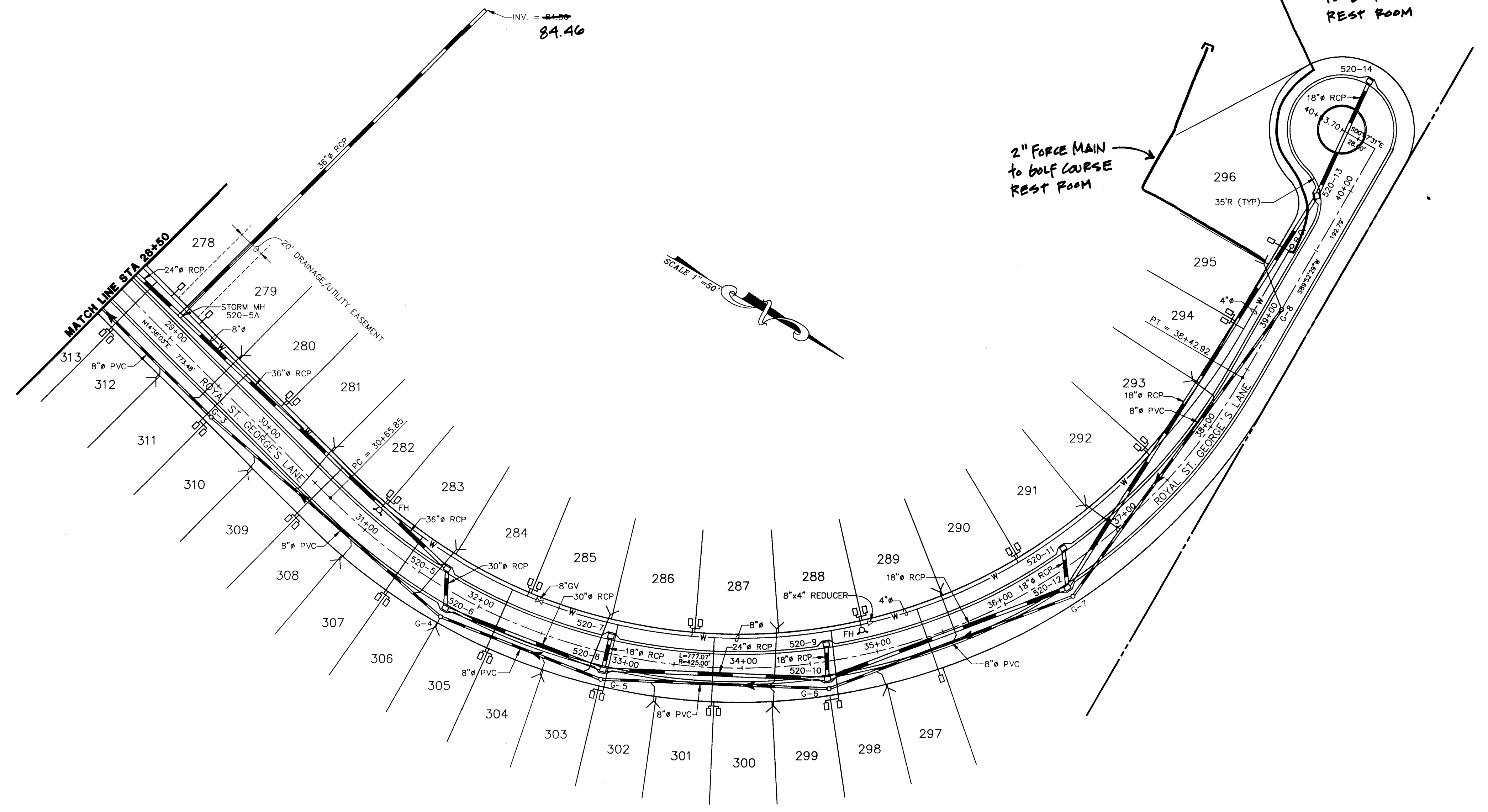
ROYAL HIGHLANDS - PHASE 1A

LAKE COUNTY FLORIDA

SHEET NO.

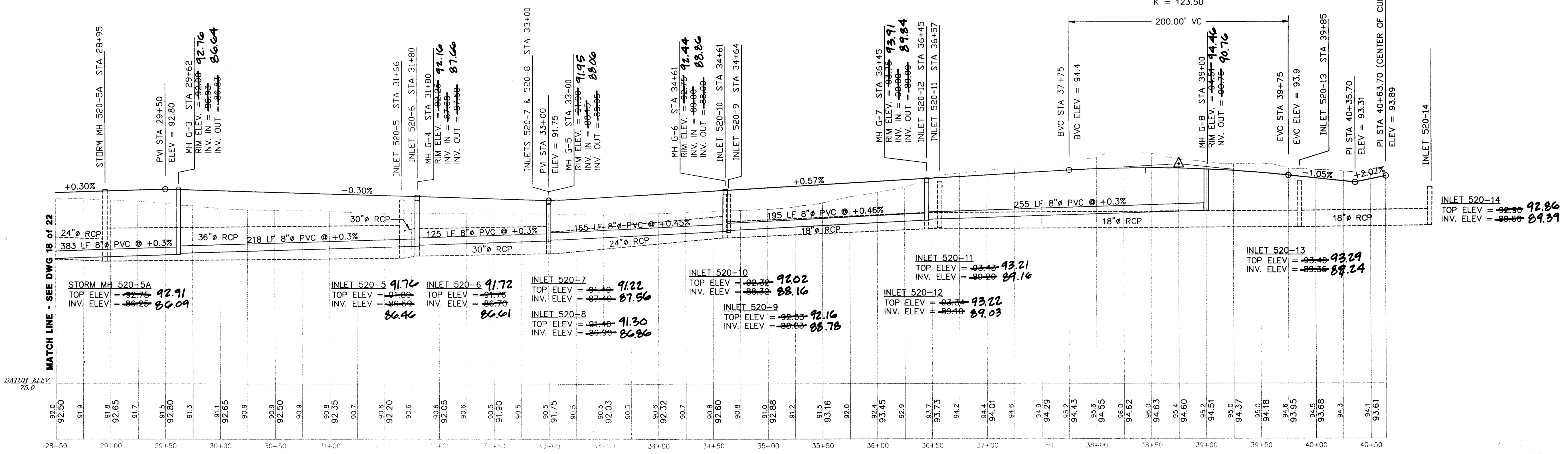
18

22



PLAN VIEW
SCALE: 1"=50'

HIGH POINT ELEV = 94.6
HIGH POINT STA = 38+44.80
PVI STA = 38+75
PVI ELEV = 95.0
A.D. = -1.62
K = 123.50



ROYAL ST. GEORGE'S LANE STA 28+50 - 40+63.70
SCALE: HORIZ 1"=50'
VERT 1"=5'

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

DATE

NE

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

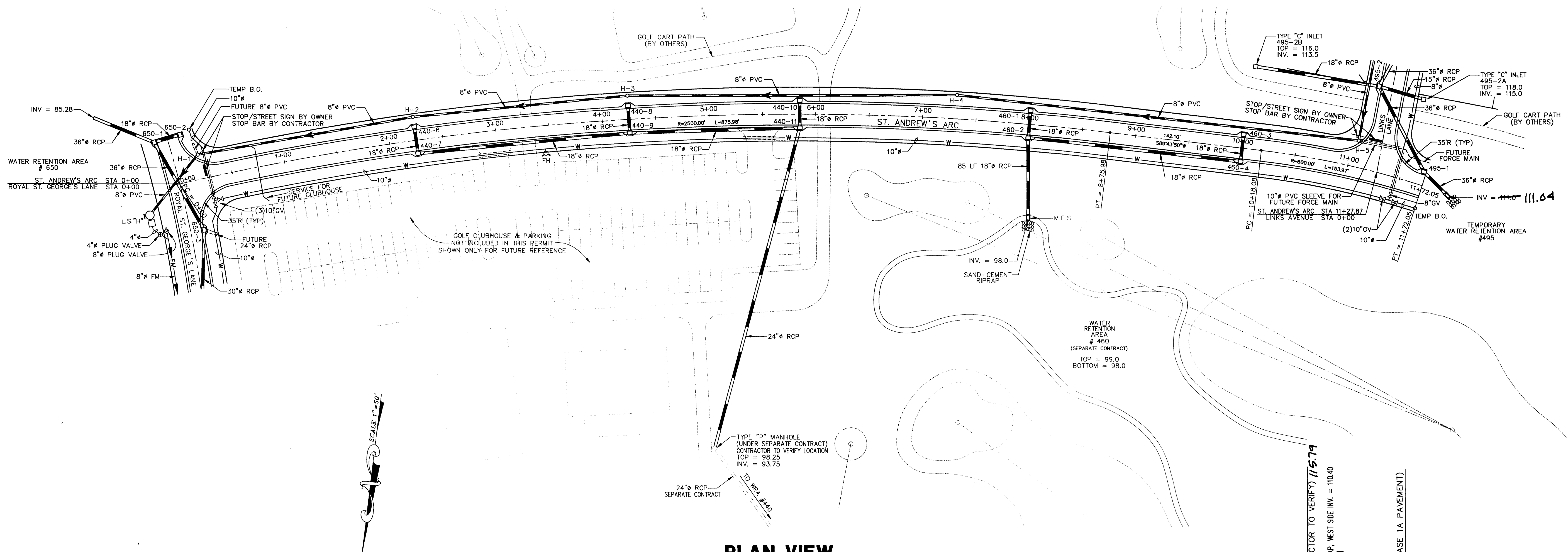
REV #1	AS-BUILT Lots 246-319	2/16/97
REV #2	AS-BUILT Lots 228-245 & 220-314	1/17/97
REV #3	REV PER SRMWD	7/24/96
REV #4	REV LOT SIZES & NUMBERING PER OWNER	5/7/96

PLAN & PROFILE - ROYAL ST. GEORGE'S LANE
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY
FLORIDA

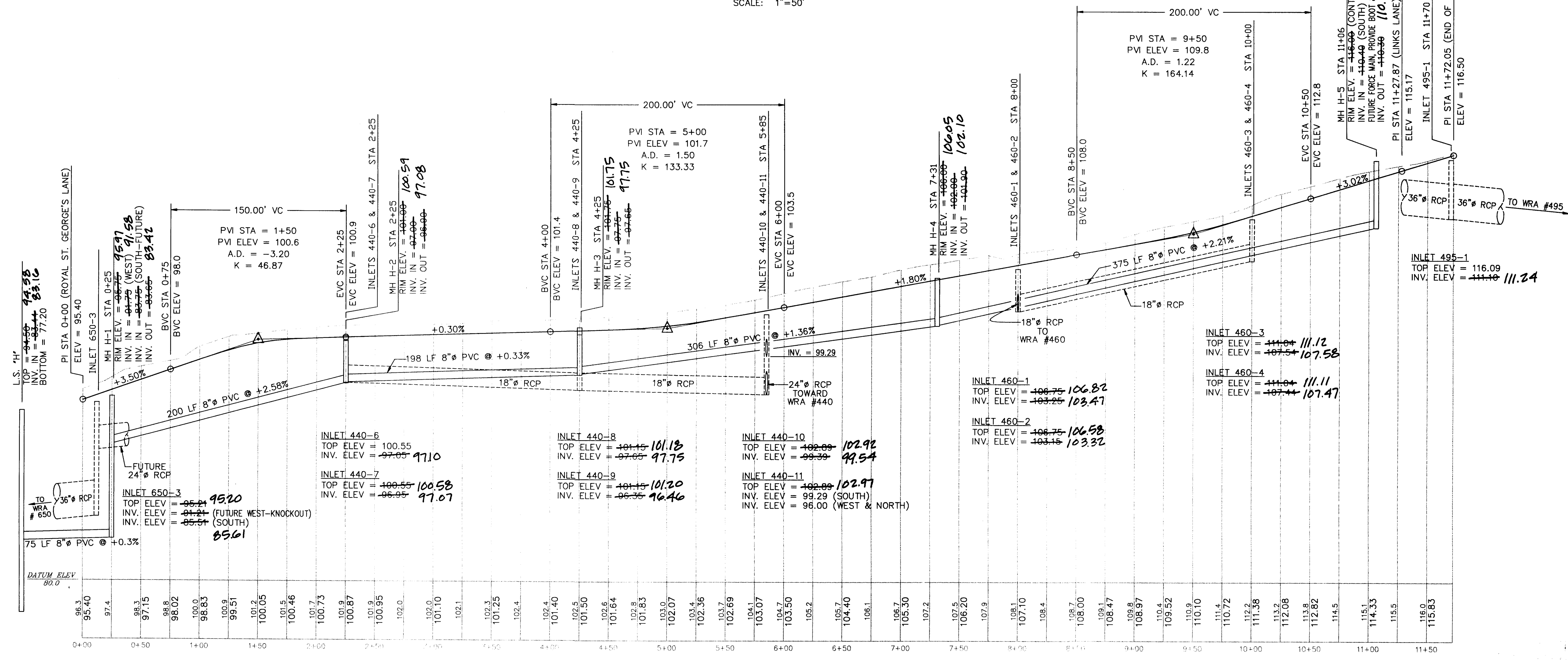
19

22

FILE: 93092\PH-1A\PH1A-19



PLAN VIEW
SCALE: 1"=50'



ST. ANDREW'S ARC
SCALE: HORIZ 1"=50'
VERT 1"=5'

NE
NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 490264 • LEESBURG, FLORIDA 34749-0264
PHONE (352) 787-7482 • FAX (352) 787-7412

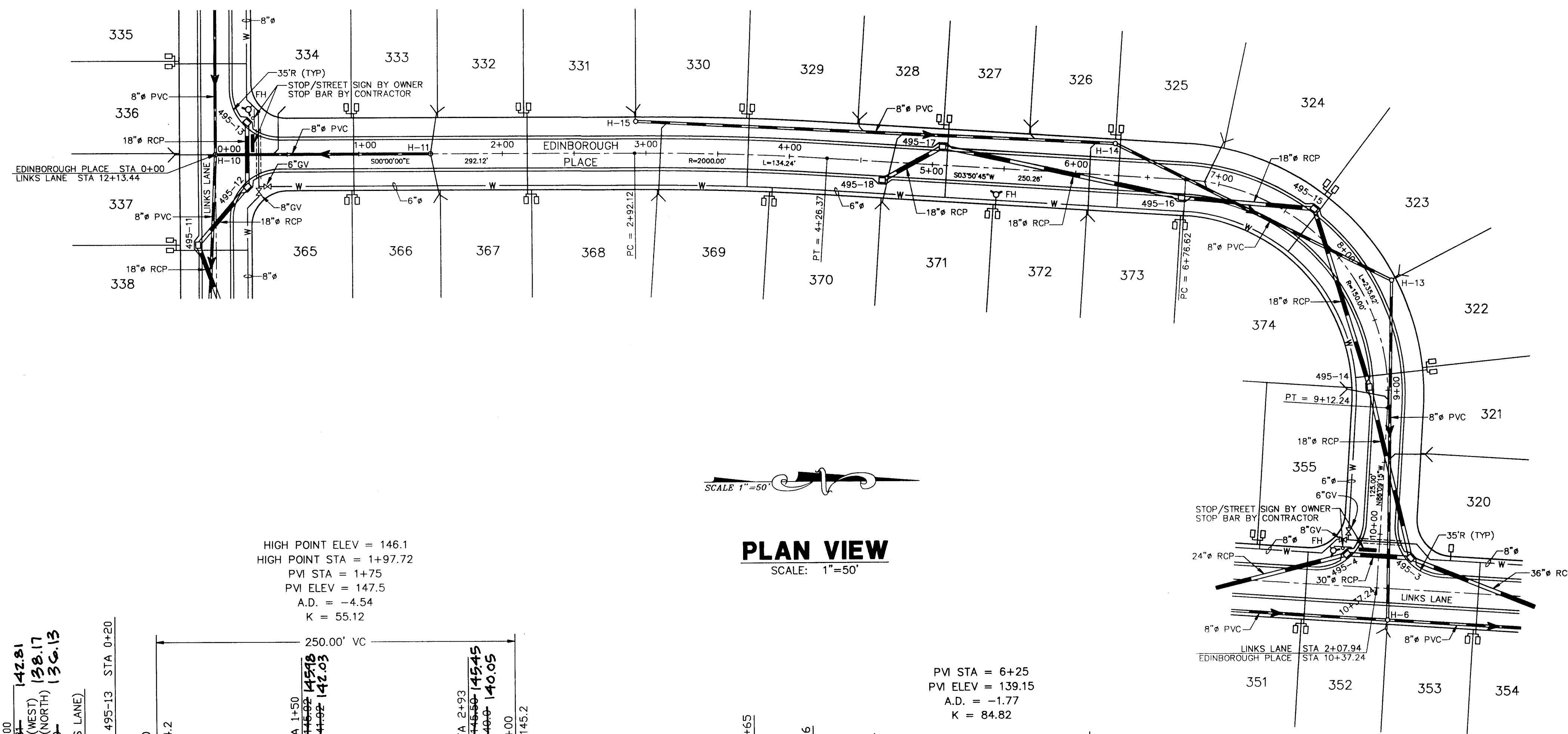
REV #5	REV #5	REV #5	REV #5
AS-BUILT	AS-BUILT	AS-BUILT	AS-BUILT
246-319	246-319	246-319	246-319
9/18/97	9/18/97	9/18/97	9/18/97

PLAN & PROFILE - ST. ANDREW'S ARC
ROYAL HIGHLANDS - PHASE 1A
LAKE COUNTY
FLORIDA

SHEET NO.
20
22

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800
DATE

FILE: \94092\PH-1A\PH1A-20

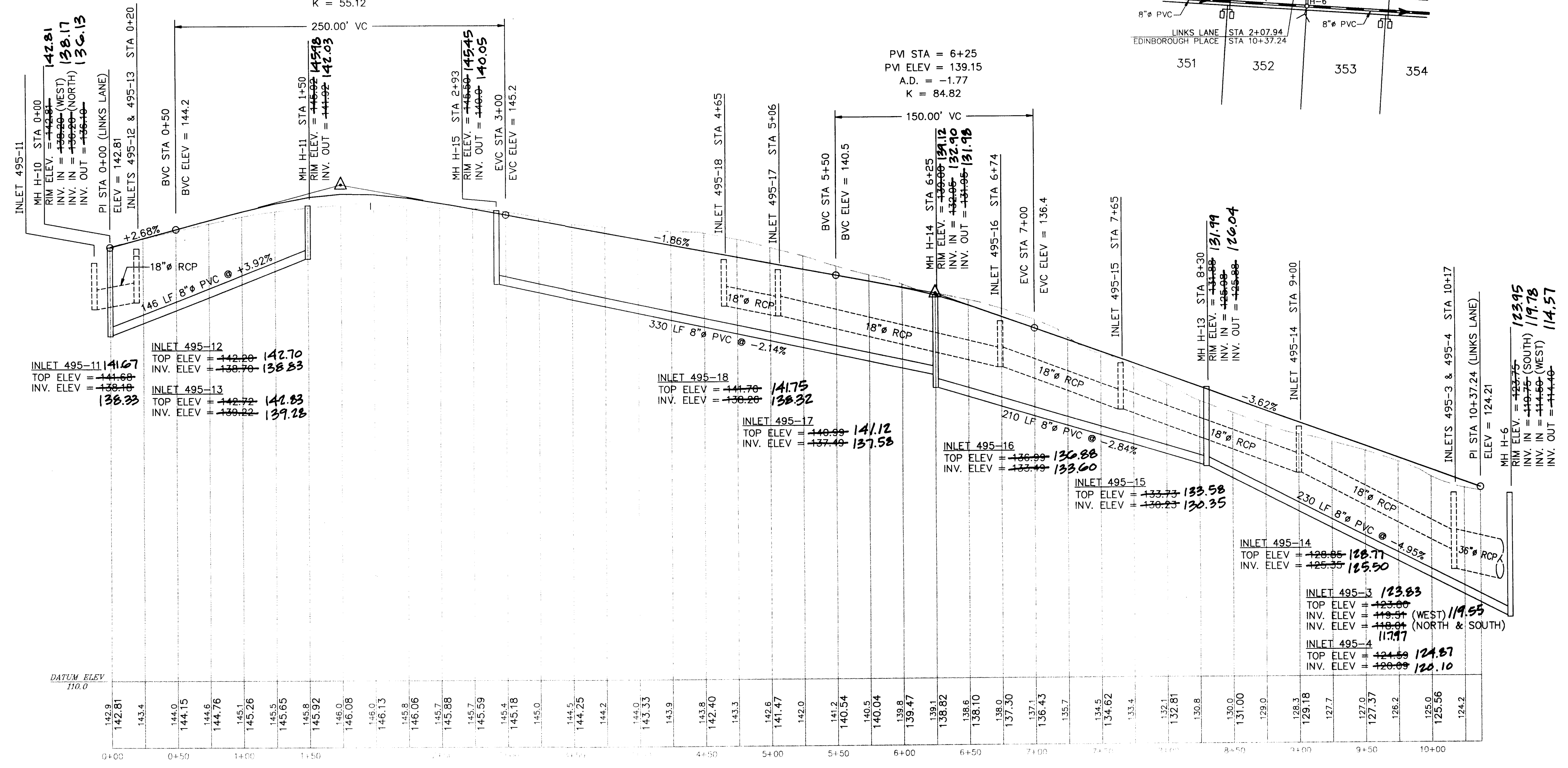


PLAN VIEW
SCALE: 1"=50'

NOTE: WATER INSTALLED AS PER PLAN.

HIGH POINT ELEV = 146.1
HIGH POINT STA = 1+97.72
PVI STA = 1+75
PVI ELEV = 147.5
A.D. = -4.54
K = 55.12

PVI STA = 6+25
PVI ELEV = 139.15
A.D. = -1.77
K = 84.82



EDINBOROUGH PLACE
SCALE: HORIZ 1"=50'
VERT 1"=5'

DATUM ELEV
110.0

KEITH E. RIDDLE, P.E.
FLA. REGIS. NO. 38800

NEWMAN CONSULTING ENGINEERS, INC.
P.O. BOX 990264, LEESBURG, FLORIDA 34745-0264
PHONE (352) 787-7462 • FAX (352) 787-7412

22
22

PLAN & PROFILE - EDINBOROUGH PLACE

ROYAL HIGHLANDS - PHASE 1A

FLORIDA

DATE: 4/19/96

SCALE: 1"=50'

PROJECT NO: 93092

DESIGNED BY: R.S.H.

CHECKED BY: K.E.R.

DATE: 2/18/97

REV #1: 5/7/96

REV #2: 1/17/97

REV #3: 1/17/97

REV #4: 2/18/97

REV #5: 2/18/97

REV #6: 2/18/97

REV #7: 2/18/97

REV #8: 2/18/97

REV #9: 2/18/97

REV #10: 2/18/97

REV #11: 2/18/97

REV #12: 2/18/97

REV #13: 2/18/97

REV #14: 2/18/97

REV #15: 2/18/97

REV #16: 2/18/97

REV #17: 2/18/97

REV #18: 2/18/97

REV #19: 2/18/97

REV #20: 2/18/97

REV #21: 2/18/97

REV #22: 2/18/97

REV #23: 2/18/97

REV #24: 2/18/97

REV #25: 2/18/97

REV #26: 2/18/97

REV #27: 2/18/97

REV #28: 2/18/97

REV #29: 2/18/97

REV #30: 2/18/97

REV #31: 2/18/97

REV #32: 2/18/97

REV #33: 2/18/97

REV #34: 2/18/97

REV #35: 2/18/97

REV #36: 2/18/97

REV #37: 2/18/97

REV #38: 2/18/97

REV #39: 2/18/97

REV #40: 2/18/97

REV #41: 2/18/97

REV #42: 2/18/97

REV #43: 2/18/97

REV #44: 2/18/97

REV #45: 2/18/97

REV #46: 2/18/97

REV #47: 2/18/97

REV #48: 2/18/97

REV #49: 2/18/97

REV #50: 2/18/97

REV #51: 2/18/97

REV #52: 2/18/97

REV #53: 2/18/97

REV #54: 2/18/97

REV #55: 2/18/97

REV #56: 2/18/97

REV #57: 2/18/97

REV #58: 2/18/97

REV #59: 2/18/97

REV #60: 2/18/97

REV #61: 2/18/97

REV #62: 2/18/97

REV #63: 2/18/97

REV #64: 2/18/97

REV #65: 2/18/97

REV #66: 2/18/97

REV #67: 2/18/97

REV #68: 2/18/97

REV #69: 2/18/97

REV #70: 2/18/97

REV #71: 2/18/97

REV #72: 2/18/97

REV #73: 2/18/97

REV #74: 2/18/97

REV #75: 2/18/97

REV #76: 2/18/97

REV #77: 2/18/97

REV #78: 2/18/97

REV #79: 2/18/97

REV #80: 2/18/97

REV #81: 2/18/97

REV #82: 2/18/97

REV #83: 2/18/97

REV #84: 2/18/97

REV #85: 2/18/97

REV #86: 2/18/97

REV #87: 2/18/97

REV #88: 2/18/97

REV #89: 2/18/97

REV #90: 2/18/97

REV #91: 2/18/97

REV #92: 2/18/97

REV #93: 2/18/97

REV #94: 2/18/97

REV #95: 2/18/97

REV #96: 2/18/97

REV #97: 2/18/97

REV #98: 2/18/97

REV #99: 2/18/97

REV #100: 2/18/97

REV #101: 2/18/97

REV #102: 2/18/97

REV #103: 2/18/97

REV #104: 2/18/97

REV #105: 2/18/97

REV #106: 2/18/97

REV #107: 2/18/97

REV #108: 2/18/97

REV #109: 2/18/97

REV #110: 2/18/97

REV #111: 2/18/97

REV #112: 2/18/97

REV #113: 2/18/97

REV #114: 2/18/97

REV #115: 2/18/97

REV #116: 2/18/97

REV #117: 2/18/97

REV #118: 2/18/97

REV #119: 2/18/97

REV #120: 2/18/97

REV #121: 2/18/97

REV #122: 2/18/97

REV #123: 2/18/97

REV #124: 2/18/97

REV #125: 2/18/97

REV #126: 2/18/97

REV #127: 2/18/97

REV #128: 2/18/97

REV #129: 2/18/97

REV #130: 2/18/97

REV #131: 2/18/97

REV #132: 2/18/97

REV #133: 2/18/97

REV #134: 2/18/97

REV #135: 2/18/97

REV #136: 2/18/97

REV #137: 2/18/97

REV #138: 2/18/97

REV #139: 2/18/97

REV #140: 2/18/97

REV #141: 2/18/97

REV #142: 2/18/97

REV #143: 2/18/97

REV #144: 2/18/97

REV #145: 2/18/97

REV #146: 2/18/97

REV #147: 2/18/97

REV #148: 2/18/97

REV #149: 2/18/97

REV #150: 2/18/97

REV #151: 2/18/97

REV #152: 2/18/97

REV #153: 2/18/97

REV #154: 2/18/97

REV #155: 2/18/97

REV #156: 2/18/97

REV #157: 2/18/97

REV #158: 2/18/97

REV #159: 2/18/97

REV #160: 2/18/97

REV #161: 2/18/97

REV #162: 2/18/97

REV #163: 2/18/97

REV #164: 2/18/97

REV #165: 2/18/97

REV #166: 2/18/97

REV #167: 2/18/97

REV #168: 2/18/97

REV #169: 2/18/97

REV #170: 2/18/97

REV #171: 2/18/97

REV #172: 2/18/97

REV #173: 2/18/97

REV #174: 2/18/97

REV #175: 2/18/97

REV #176: 2/18/97

REV #177: 2/18/97

REV #178: 2/18/97

REV #179: 2/18/97

REV #180: 2/18/97

REV #181: 2/18/97

REV #182: 2/18/97

REV #183: 2/18/97

REV #184: 2/18/97

REV #185: 2/18/97

REV #186: 2/18/97

REV #187: 2/18/97

REV #188: 2/18/97

REV #189: 2/18/97

REV #190: 2/18/97

REV #191: 2/18/97

REV #192: 2/18/97

REV #193: 2/18/97

REV #194: 2/18/97

REV #195: 2/18/97

REV #196: 2/18/97

REV #197: 2/18/97

REV #198: 2/18/97

REV #199: 2/18/97

REV #200: 2/18/97

REV #201: 2/18/97

REV #202: 2/18/97

REV #203: 2/18/97

REV #204: 2/18/97

REV #205: 2/18/97

REV #206: 2/18/97

REV #207: 2/18/97

REV #208: 2/18/97

REV #209: 2/18/97

REV #210: 2/18/97

REV #211: 2/18/97

REV #212: 2/18/97

REV #213: 2/18/97

REV #214: 2/18/97