

546

F. L. A. N.

Field Book

64.8x4

546

20  
54  
42

6-1-09  
Berrios  
Ramos  
Poldos

Job # 14481  
- Physical monitoring  
Survey, Dept of  
Environmental  
Beach erosion control  
Projects @ Virginia Key.  
Ref BK 504 Pg 53-66  
BK 506 Pg 29-30

TRAV PT  
S.I.P  
R-86

TRAV PT  
S.I.P.  
R-87

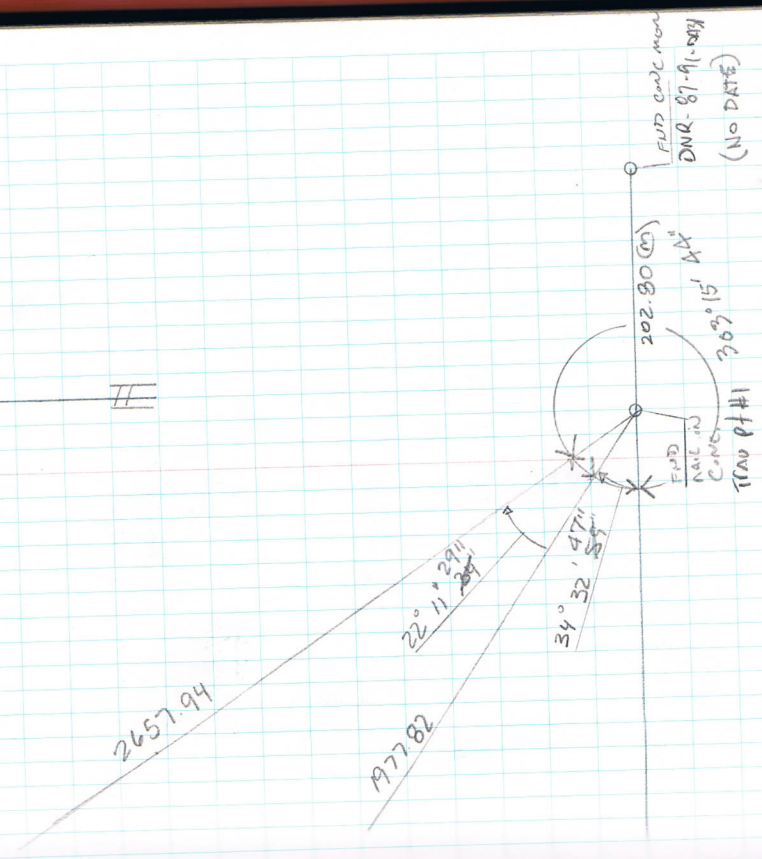
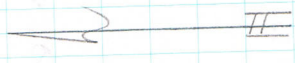
FUD CONC  
MON.  
Dip mon  
87-91-DA-3102-MK  
(NO DATE)

2375.98 (m)

1

546

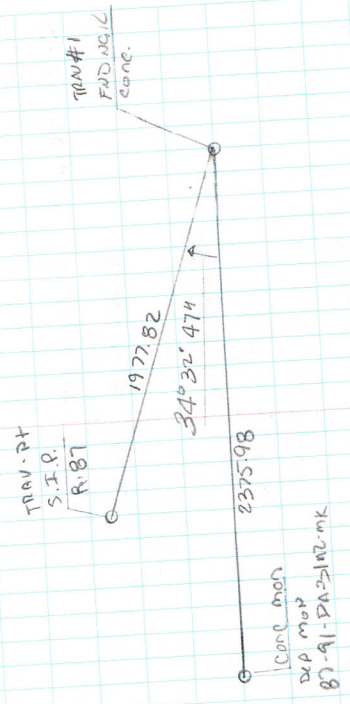
Check At Date 06-09-09  
Notes \_\_\_\_\_  
Plot \_\_\_\_\_  
Notes \_\_\_\_\_  
Check \_\_\_\_\_  
Plot \_\_\_\_\_



FUD CONC MON  
DNR-87-91-007  
(NO DATE)

546 2  
 Check AT Date 06-03-09

Plot \_\_\_\_\_ Date \_\_\_\_\_  
 Notes \_\_\_\_\_ Date \_\_\_\_\_  
 Check \_\_\_\_\_ Date \_\_\_\_\_  
 Plot \_\_\_\_\_ Date \_\_\_\_\_



HORIZON CLOSURE  
 34° 32' 46.150"

6-1-09  
 Barrios  
 Ramos  
 Roldan

Job # 14481  
 TRAVERSE ANGLES @ STA TRAV. PT. 1

TRAV #	ES @	→	R	DIST	DESC.
FUD NAIL	TRAV. PT S.I.P. R.87			2375.98	TRAV. PT S.I.P. - R.87
DA-31, AZ MK	CONC. MON DEP. MON 87-91-DA-3112-MK	0° 00' 00"		1977.82	
R-87, TRAV PT		179° 59' 57"		46.150"	47.50"
		34° 32' 48"		<del>44.50"</del>	
		214° 32' 44"		46.00"	
		0° 00' 00"			
		179° 59' 56"		57.00"	
		359° 59' 58"			
		214° 32' 38"			
		34° 32' 47"		42.50"	45.50"
				46.150"	
				<del>45.50"</del>	
				45.50"	
				46.150"	
				<del>45.50"</del>	

20  
54  
42

Job #14481

6-1-09 TRAVERSE ANGLES @ STA TRAV PT 4

Berrios  
Ramos  
Ro Diaz

T @  
END NAIL  
TRAV # 1

OS @  
TRAV #  
R-87

+ R Dist Desc.  
197782 TRAV # 1  
2657.94 SJP-R86

DAB1, AZ MK.

D 0° 00' 00"

R 180° 00' 00"

R-86, TRAV # 1

D 22° 11' 34"

R 202° 11' 28"

R 180° 00' 00"

D 0° 00' 06"

R 202° 11' 26"

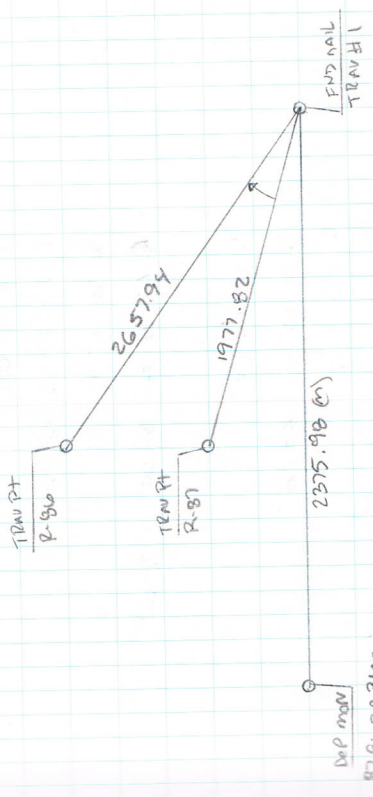
D 22° 11' 34"

R 30.00' 27.00' 29.00'

+ 22° 11' 29.00"

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Check AT Date 06-03-09  
Notes  
Plot  
Notes Date  
Check Date  
Plot Date



20  
34  
42

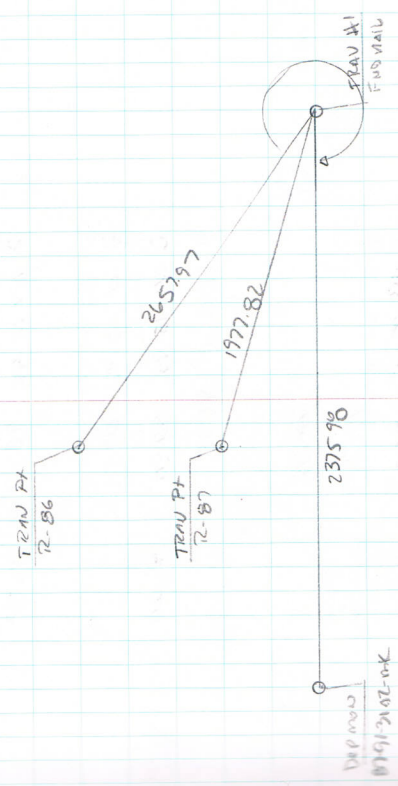
6-2-09  
Bernios  
Ramos  
Roldan

Job # 11481

TRAV PT-1

↑ @	BS @	↑ R	Dist	Desc.
TRAV #1 / FWD NAIL	TRAV #1 / R-86 ✓		2657.94	Dep mon 87-91-24-242-MK ✓
			2375.98	
		D 0° 00' 00"		
		L 179° 59' 53"	56.50"	
		D 303° 15' 41"		
		R 123° 15' 36"	38.50"	42.00" ✓
		L 179° 59' 55"		
		D 0° 00' 06"	00.50"	
		L 123° 15' 42"		
		D 303° 15' 49"	45.50"	45.00" ✓
		↑ 303° 15' 43.50"		

Check At Date 06-03-09  
Notes  
Plot  
Notes Date  
Check  
Plot Date

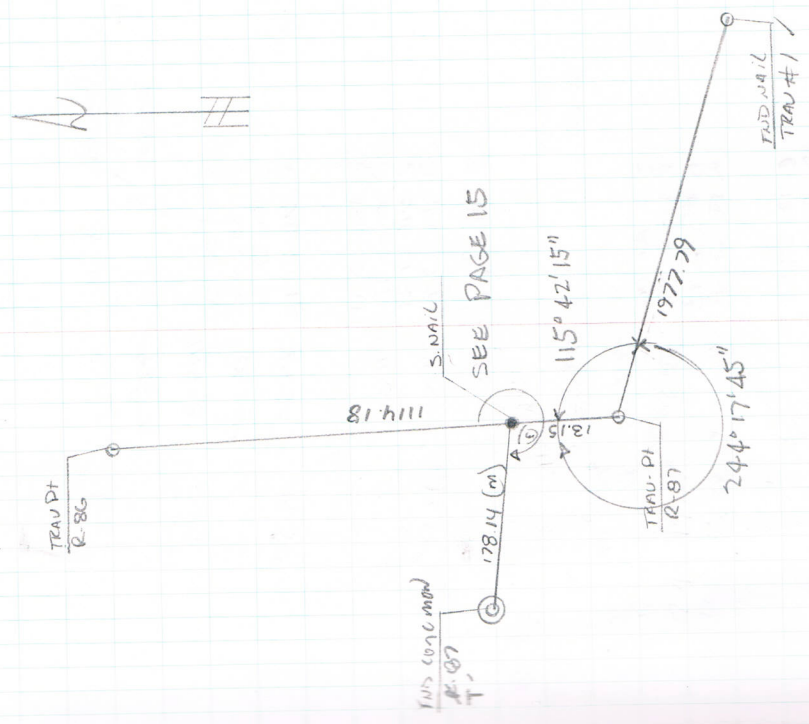


HORIZONTAL CLOSURE

34° 32' 46.50" P2 47"  
22° 11' 29.00" P3 29"  
303° 15' 43.50"  
359° 59' 59.00"

Check 546 5  
 Notes AT Date 06-03-09  
 Plot Date 06-27-09

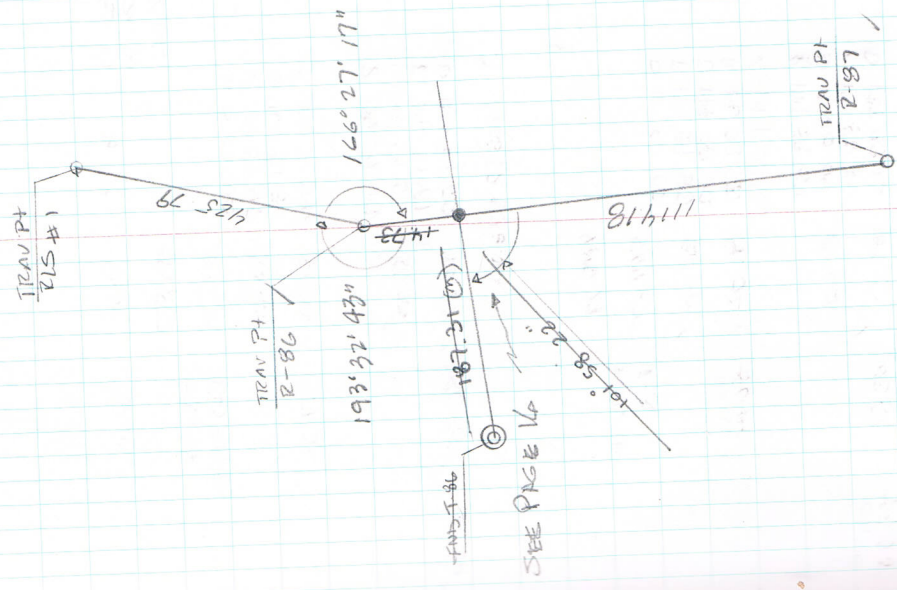
Notes ..... Date .....  
 Check ..... Date .....  
 Plot ..... Date .....



Job #	TRAV PT	TRAV #	Dist	Desc
14181	R-87		1977.79	TRAV PT R-86
		0 00 00	114.18	46.50"
		R 180 00 04	02.00	
		R 244 17 49	48.50	45.00"
		R 64 17 48		45.75"
		R 180 00 09	04.50	
		R 0 00 00		
		R 64 17 50	49.50	
		R 244 17 49		
		R 244 17 45.75		
			114.18	TRAV #1 FUS NAIL
			1977.79	
		0 00 00	00.00	17.00"
		R 180 00 00		
		R 115 42 17	17.00	
		R 295 42 17		
		R 179 59 58		
		D 0 00 04	01.00	
		R 295 42 18		
		D 115 42 15	16.50	15.50"
		R 115° 42' 16.25"		16.25"
		HORIZON CLOSURE		45"
		244 17 45.75		15"
		115 42 16.25		
		360 00 02.00		

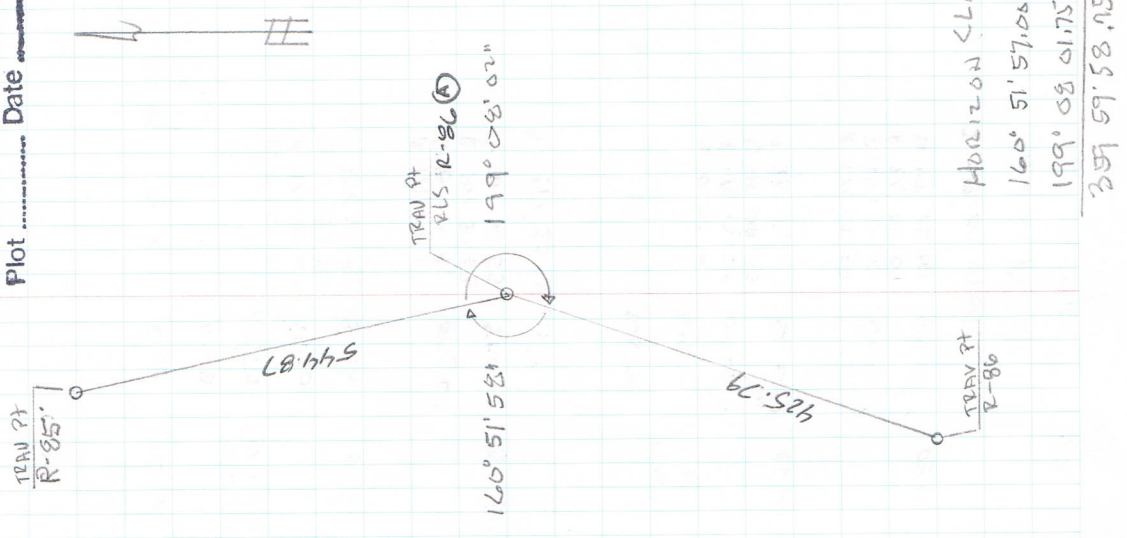
Check AT Date 06-03-09  
 Notes Plot Date  
 Notes Check Date  
 Plot Date

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TRAV PT R-86	TRAV PT R-87	TRAV PT RLS	TRAV PT R-86	TRAV PT R-87	TRAV PT RLS
6-2-09					
Barrios					
Ramos					
Roldan					
T @					
TRAN PT					
R-86					
RLS #1					
Dist					
425.79					
114.18					
42.50					
19.50					
16.50					
11.00					
24.50					
13.50					
16.50					
166° 27' 17"					
TRAN PT					
R-86					
114.18					
TRAN PT					
R-87					
425.79					
RLS					
58.50					
42.50					
41.00					
42.50					
01.00					
42.50					
43.50					
42.50					
42.50					
Apr 12 04 Closure					
17"					
166° 27' 16.50"					
43"					
193° 32' 42.50"					
359° 59' 59.00"					

Check At Date 06-03-09  
 Notes.....  
 Plot.....  
 Notes..... Date.....  
 Check.....  
 Plot..... Date.....



Job #14901  
 TRN PT R-86A

20  
 54  
 42  
 6-3-09  
 Berrios  
 Ramos  
 Roldan

TS	→ R	DIST	DESC.
TRN PT R-86		544.87	TRN PT R-85
D 0 00 00		425.79	
R 179 59 47		53.50"	
D 160 51 51		51.00"	57.50"
R 340 51 51			
D 179 59 47		52.00"	
R 359 59 57		48.50"	56.50"
D 160 51 50			57.00"
R 160 51 57.00"			

TRN PT R-86	TRN PT R-85
D 0 00 00	
R 179 59 52	
D 199 08 00	
R 19 07 52	
A 199 08 10	
R 179 59 59	
D 0 00 04	
R 19 08 00	
D 199 08 10	
A 199 08 29.75"	
	01.75"
	<del>57.75</del>

HORIZON CLOSURE  
 160° 51' 57.00" 58"  
 199° 08' 01.75" 02"  
 299 59' 58.75"



20  
54  
42

Job # 14481  
TRAN PT R-86

6309  
BERRIOS  
RAMOS  
BOLDAN

T @  
TRAN PT  
R-86

T @  
TRAN PT  
R-87

Dist

Desc.

TRAN #1  
FWD NAIL

D 0 00 00  
R 180 00 00  
D 317 53 50  
R 137 53 52

R 179 59 59  
D 0 00 02  
R 137 53 53  
D 317 53 55  
T 317 53 5225" ✓

TRAN PT  
R-86

TRAN #1  
FWD NAIL

Dist

Desc.

TRAN #1  
R-87

D 0 00 00  
R 180 00 00  
D 42 06 05  
R 222 06 07

R 179 59 59  
D 359 59 55  
R 222 06 04  
D 42 06 06  
T 42 06 0700"

HORIZON CLOSURE

317 53 5225" ✓  
42 06 0700" ✓  
359 59 5925" ✓

Check 546 8

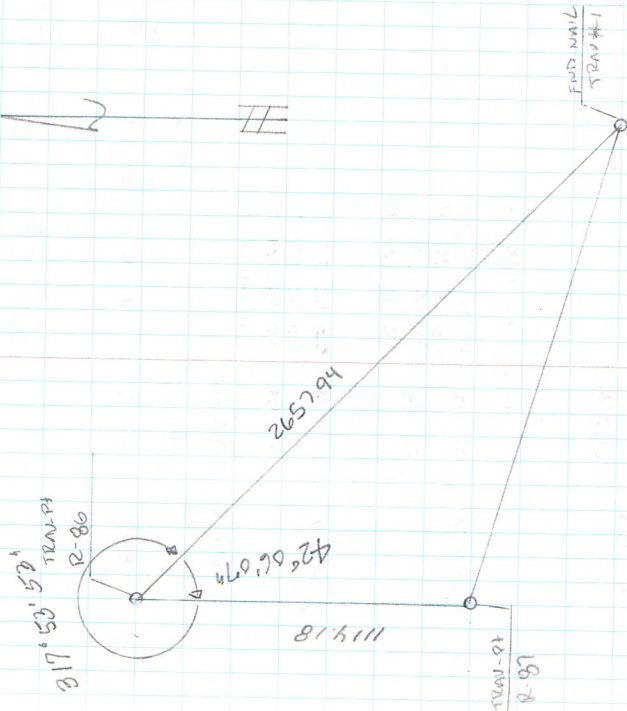
Notes At Date 06/03/09

Plot

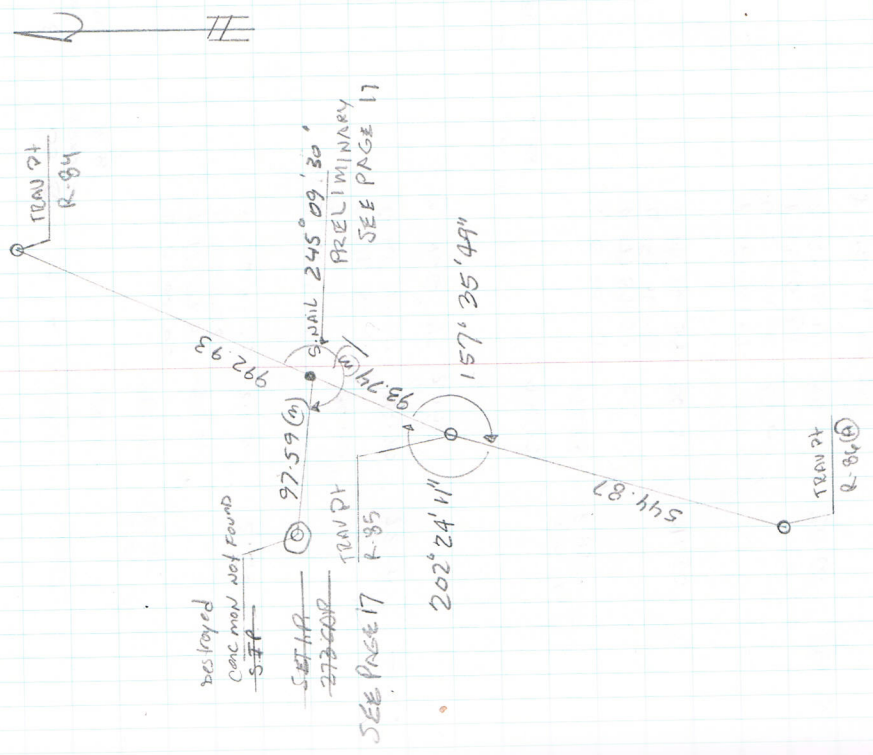
Notes Date

Check

Plot Date



Check AT Date 06/03/09  
 Notes \_\_\_\_\_  
 Plot \_\_\_\_\_  
 Notes \_\_\_\_\_  
 Check \_\_\_\_\_  
 Plot \_\_\_\_\_



20  
54  
42  
6-3-09  
Carnos  
Poldau

Job #14481  
TRAV PT R-85

BS	TRAV PT	R-86	+	R	DIST	DESC
D 0 00 00					992.93	TRAV PT R-84
R 179 59 51					55.50	
D 202 24 08					07.00	11.50
R 22 24 06						
R 179 59 52					54.00	
D 359 59 56					07.00	13.00
R 22 24 04						12.25
D 202 24 10						
+ 202° 24' 12.25"						
TRAV PT R-84					992.93	TRAV PT R-86
D 0 00 00					544.87	
R 179 59 54					57.00	
D 157 35 53					43.50	46.50
R 337 35 34						
R 179 59 50					51.00	
D 359 59 52					44.00	53.00
R 337 35 39						49.75
D 157 35 49					49.75	
+ 157° 35'						
HORIZONTAL CLOSURE						
					202° 24'	11"
					157° 35'	49"
					360 00	0200"

20  
54  
42

6-3-09

Bearros  
Ramos  
Roldan

Job # 14481  
TRAV PT R-84

1 @  
TRAV PT  
R-84

BS @  
TRAV PT  
R-85

3 R

POST

DESC.

D 0 00 00  
R 179 59 57  
D 166 43 20  
R 346 43 20

99293  
98029  
58.50"  
20.00"

TRAV-PT  
R-83  
21.50"

R 179 59 52  
D 0 00 00  
R 346 43 16  
D 166 43 20  
3 166° 43'

56.00"  
18.00"  
21.75"  
20.75"

22.00"  
21.75"  
20.75"

TRAV-PT  
R-84

TRAV-PT  
R-83

D 0 00 00  
R 179 59 50  
D 193 16 39  
R 13 16 34

98029  
99293  
55.00"  
36.50"

TRAV-PT  
R-85  
41.50"

R 180 00 02  
D 0 00 00  
R 13 16 39  
D 193 16 41  
3 193 16' 40.25"

01.00"  
40.00"  
39.00"

40.25"

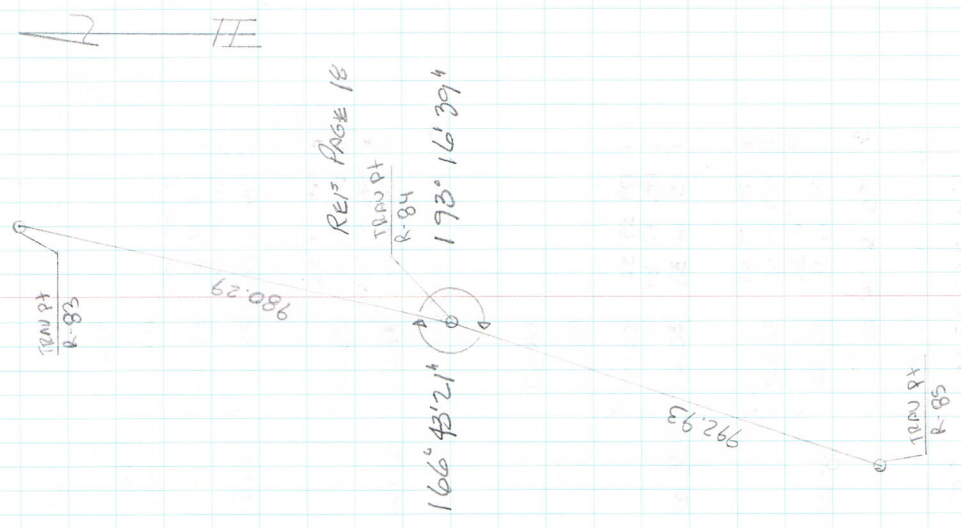
166° 43'  
193° 16'  
360° 00'

21.75"  
~~20.75~~  
40.25  
39"

21"  
39"

546 10

Check Notes AF Date 5/5/09  
Plot Notes Date  
Check Notes Date  
Plot Notes Date



20  
54  
42

Job #14481  
TRAN PT R-83

Bernios  
Ramos  
Bolchav

TRAV PT  
R-82

TS  
TRAV PT  
R-84

Desc

Dist

±

R

TRAV PT  
R-82

TRAV PT  
R-83

D 0 00 00  
R 179 59 59  
D 164 29 30  
R 344 29 23  
27.00" ✓  
R 180 00 06  
D 0 00 08  
R 344 29 30  
D 164 29 39  
± 164 29' 27.25"  
27.25" ✓

TRAV PT  
R-83

TRAV PT  
R-82

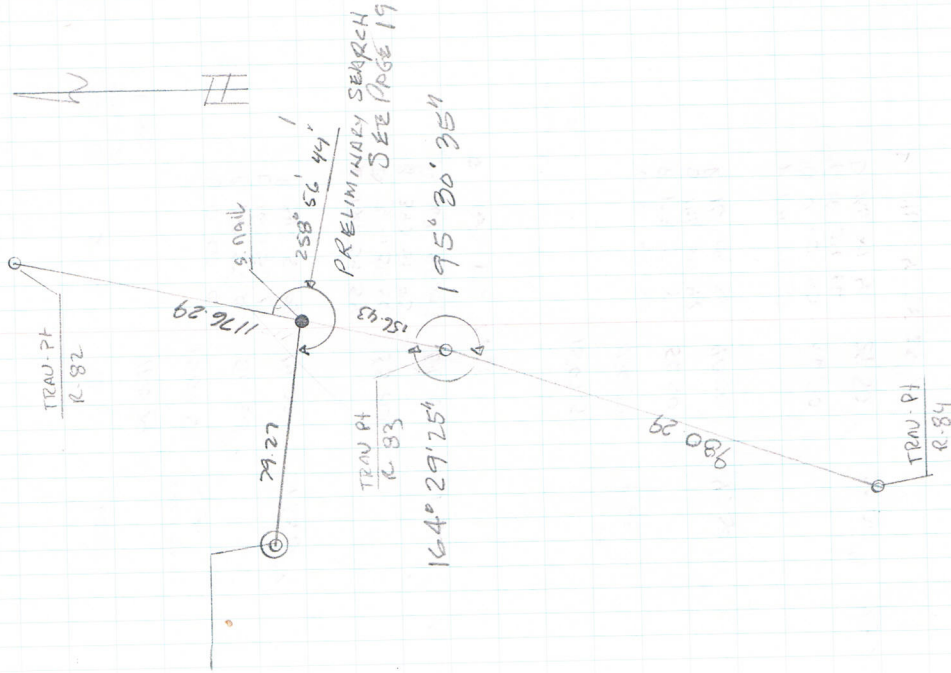
TRAV PT  
R-82

D 0 00 00  
R 179 59 50  
D 195 20 31  
R 15 30 35  
38.00" ✓  
R 179 59 55  
D 359 59 58  
R 15 30 30  
D 195 30 35  
36.00" ✓  
± 195 30' 37.00"  
37.00" ✓

HORIZON CLOSURE

164 29' 27.25"  
195 20' 37.00"  
360 00' 04.25"  
25"  
35"

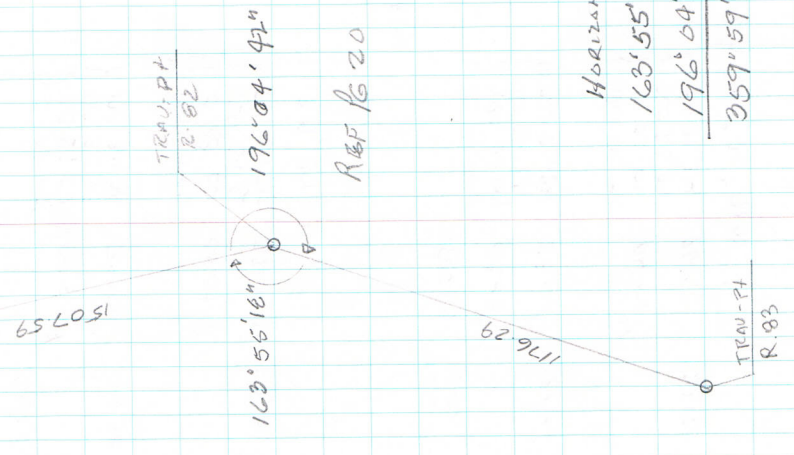
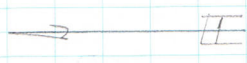
54G  
CheckR  
Notes AT Date 06-03-09  
Plot Notes Date  
Check Plot Date



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Check At Date 06-05-89  
 Notes \_\_\_\_\_  
 Plot \_\_\_\_\_  
 Notes \_\_\_\_\_  
 Check \_\_\_\_\_  
 Plot \_\_\_\_\_  
 Date \_\_\_\_\_

Exc conc man  
 87-91-DA-28  
 TRAU-P1  
 R-81



HORIZONTAL CLOSURE  
 163° 55' 18" 18"  
 196° 04' 38.25" 42"  
 359° 59' 52.75" 1

Job #	TRAV PT	R	Dist	Desc.
14481	R-82		1176.29	TRAU P1 R-81
		0 00 00	1507.59	
		R 179 59 53	56.50"	
		D 163 55 19	14.00"	17.50" ✓
		R 343 55 09		
		0 179 59 54	55.00"	
		D 359 59 56	06.50"	11.50" / 14.50" ✓
		R 343 55 05		
		D 163 55 08	14.50"	
		R 163 55 08		
		0 163 55 14.50"		
			1507.59	TRAU-P4 R-83
		0 00 00	1176.29	
		R 179 59 53	56.50"	
		D 196 04 42	40.00"	43.50" /
		R 16 04 38		
		0 179 59 53	56.50"	
		D 0 00 00	29.50"	33.00" / 38.25" ✓
		R 16 04 16		
		D 196 04 43		
		R 196 04 38.25"		

20  
 54  
 42  
 6-4-09  
 Becaus  
 Ramos  
 Boldau

TRAU-P4  
 R-82

20  
54  
42

6-4-09

Bearus

Ramos

Roldan

Job # 14481

DEP 87-91-DA-28

T @

TRAV-PT

R-81

DEP 87-91-DA28

BS @

TRAV-PT

R-82

Desc.

Light house

D 0 00 00  
R 179 59 57  
D 319 34 39  
R 129 34 39

R 180 00 08  
D 0 00 00  
R 139 34 36  
D 319 34 38  
T 319 34 36.75

Light house

R 180 00 04  
D 0 00 04  
R 220 25 24  
D 40 25 24  
T 40 25 21.75

TRAV-PT

R-81

DEP 87-91-DA28

Light house

TRAV-PT

R-82

D 0 00 00  
R 180 00 04  
D 40 25 22  
R 220 25 24

R 180 00 04  
D 0 00 04  
R 220 25 24  
D 40 25 24  
T 40 25 21.75

546 13

Check

Notes

Plot

Notes

Check

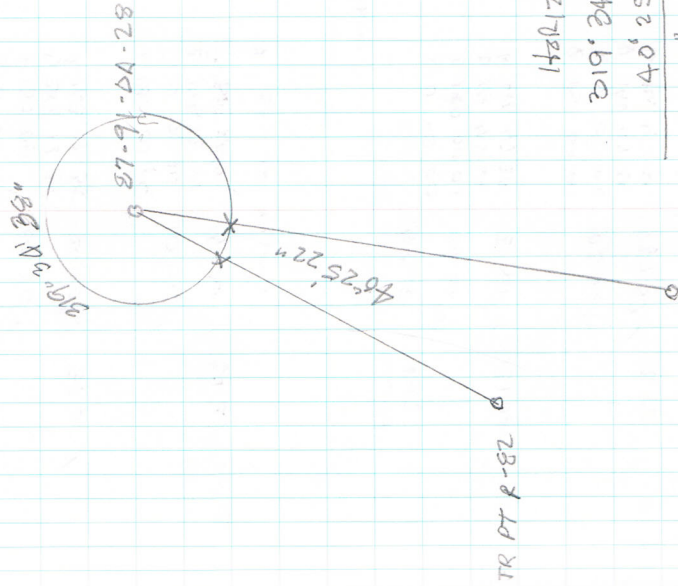
Plot

AT

Date 06/06/09

Date

Date



20  
54  
42

6-8-09  
Bereios  
Ramos  
Kulchaw

T @ BS @  
TRANS. PT  
R-82

DEP 87-91-DAB

	T R	DIST	DESC.
		1507.59	Key Biscayne Light House.
D	00 00	02.50"	
R	180 00 05		
D	243 12 34	34.50"	32.00"
R	163 12 35		
R	180 00 10	10.00"	
D	0 00 10		
R	163 12 41	41.00"	31.00"
D	543 12 41		
T	343 12 31.50"		31.50"

Key Biscayne Light house

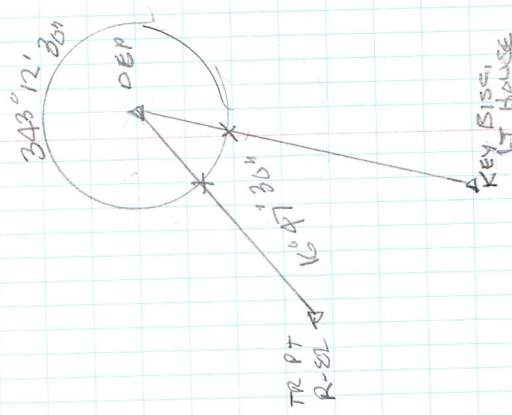
DEP 87-91-DAB

TRANS. PT  
R-82

	D	R	DIST	DESC.
			1507.59	TRANS. PT R-82
D	00 00		00.50"	
R	180 00 01			
D	16 47 23	31.50"	31.00"	
R	196 47 30			
R	180 00 01	02.50"		
D	0 00 04			
R	146 47 35	34.50"	32.00"	
D	16 47 34			
T	16 47 34.50"		31.50"	

546 14

Check AT Date  
Notes AT Date  
Plot Notes Date  
Check Notes Date  
Plot Notes Date



HORIZONTAL CLOSURE  
343° 12' 31.50" 30"  
16° 47' 31.50" 30"  
360° 00' 03.00"

20  
54  
42

6-8-09  
Berrios  
(Lamo)  
Polo/Day

Job # 14481

Conc man T-87 Oade Co

T @ BS @  
TRAV-Pt  
R-86

→ R

DESC.

11/4.18  
178.27 M  
T-87  
conc man

D 0 00 00  
R 180 00 08  
D 281 54 27  
R 101 54 25

04.00"  
26.00" / 22.00" /

→ 281° 54' 21.00" /

07.00"  
27.00" / 20.00" / 21.00"

S.NAIL  
CONC MAN  
T-87

178.27

TRAV-Pt  
R-86

D 0 00 00  
R 179 59 59  
D 78 05 32  
R 258 05 33

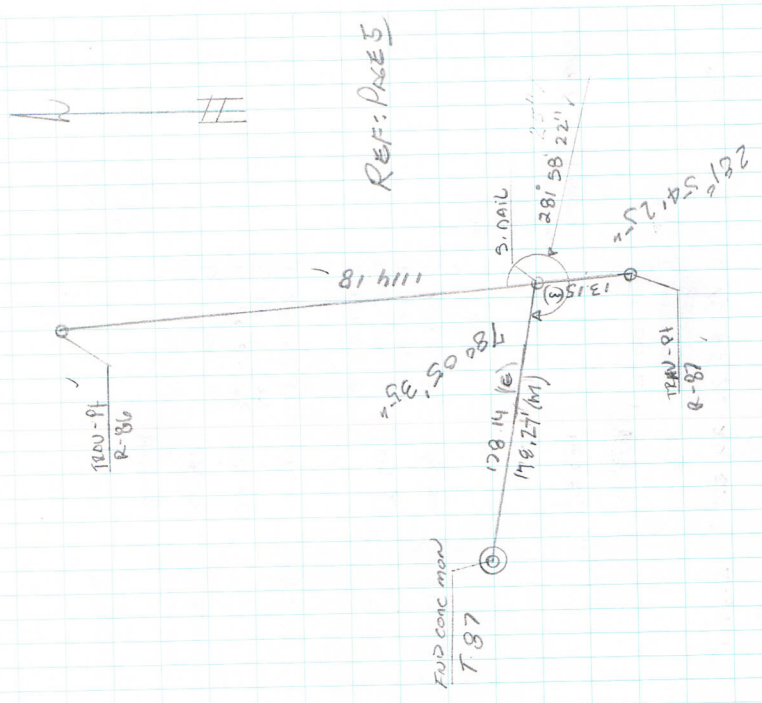
114.18  
59.50"  
32.50" / 33.00"

R 179 59 56  
D 0 00 02  
R 258 05 34  
D 78 05 25  
→ 78° 05' 31.75"

59.00"  
29.50" / 30.50" / 31.75"

546 15

Check AT 06-14-09  
Notes Date  
Plot Date  
Notes Date  
Check Date  
Plot Date



HORIZON CLOSURE  
 $281^{\circ} 54' 21.00'' = 25''$   
 $78^{\circ} 05' 31.75'' = 35''$   
 $359^{\circ} 59' 52.75''$



20  
54  
42

Job #14481

6.8.09 Conc man T-86 Dede Co.

Barrios  
Ramos  
Walden

T.C.  
S.N.M.I.C.

BS @  
TRAN-PI  
R-87

X R  
Dist

Desc.

Conc man,  
T-86 Dede Co.

D	0 00 00	1114.18	187.52	
R	179 59 58		59.00"	
D	101 54 45		46.00"	47.00"
R	281 54 47		05.50"	
D	179 59 57		46.00"	40.50"
R	0 00 14			43.75"
D	281 54 45			
R	101 54 47			

S.N.G.I.L.  
Conc man  
T-86 Dede Co.

X R  
Dist

Desc.

TRAN-PI  
R-87

D	0 00 00	187.52	1114.18	
R	130 00 07		02.50"	
D	258 05 28		25.50"	22.00"
R	78 05 23		02.50"	
D	130 00 03		21.00"	18.50"
R	0 00 02			20.25"
D	78 05 18			
R	258 05 24			

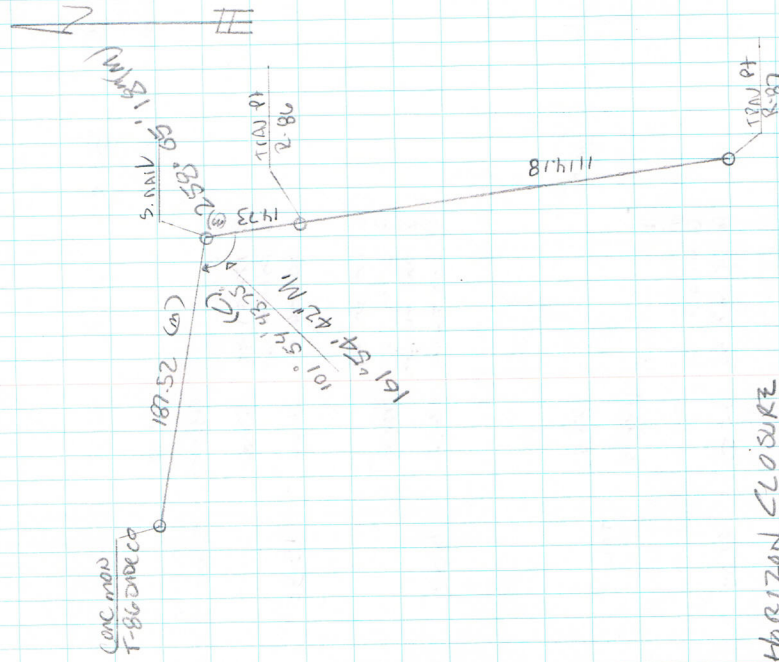
546 16

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Plot Notes Date

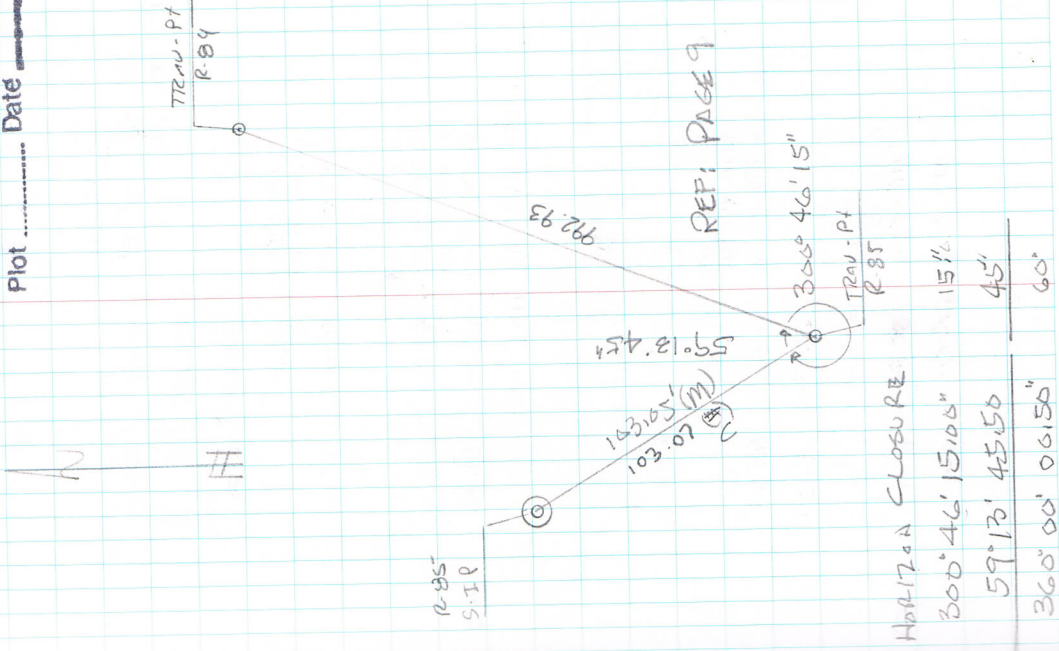
Check Notes Date

Plot Notes Date



HORIZON CLOSURE  
 101° 54' 43.75"  
 258° 05' 20.25"  
 360° 00' 04.00"

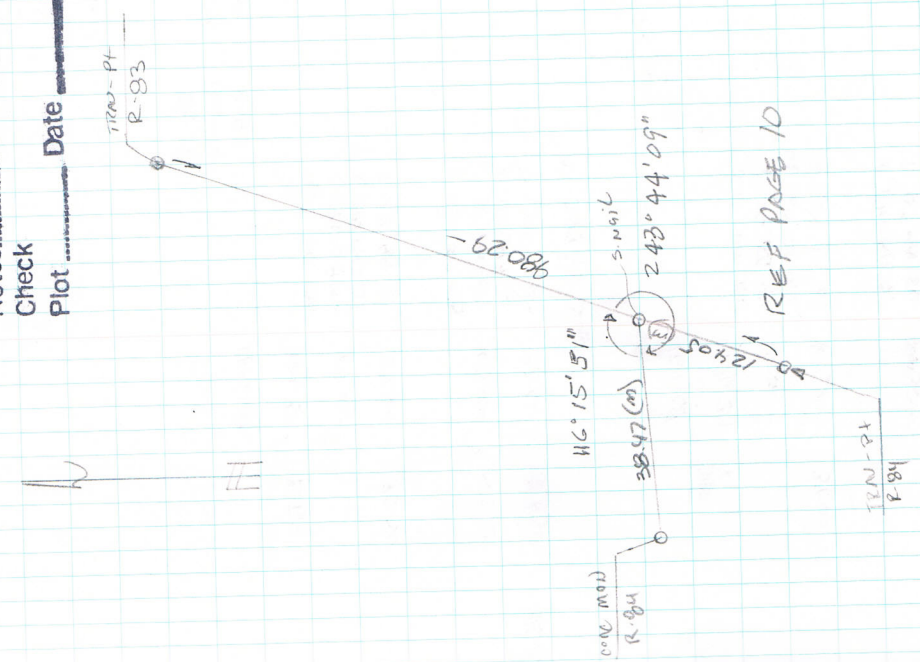
**Check**  
 Notes... AI Date 06/28/09  
 Plot \_\_\_\_\_ Date \_\_\_\_\_  
 Notes... \_\_\_\_\_ Date \_\_\_\_\_  
 Check \_\_\_\_\_ Date \_\_\_\_\_  
 Plot \_\_\_\_\_ Date \_\_\_\_\_



Job #	Dist	DATE
20	10305	S.T.P. - R-85
54	5550"	
42	11.00"	15.50"
6-9-09	5200"	14.50"
Berrios	0650"	15100
Ramos	360°46'15.00"	
Goldman		
1 @ TRAV-PT R-85		
7-85 S.T.P.		
	10305	
	5150"	
	34.00"	42.50"
	4900"	
	3750"	48.50"
	45.50"	

546 18

Check Notes At 06-28-09  
 Plot Notes Date  
 Check Plot Date

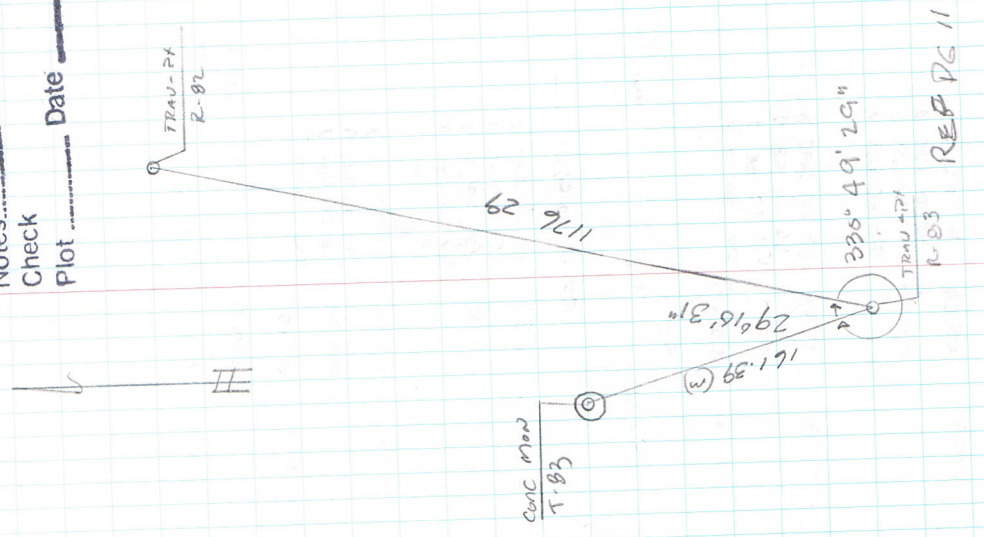


HORIZON CLOSURE  
 243° 44' 11.25" 09"  
 116° 15' 52.50" 51"  
 360° 00' 03.75"

20 6-9-09 Job # 14481  
 54 Berrios  
 42 Ramos  
 Polanco

Station	BS	IP	Dist	PISC
S.NAIL	TRANS-PT R-83	R	856.24	CONC MON R-84
		D 0° 00' 00"	38.47'	
		R 179° 59' 58"	59.00"	
		D 243° 44' 20"	11.00'	12.00'
		R 63° 44' 02"	11.00'	
		D 179° 59' 58"	58.50"	
		R 359° 59' 59"	09.00'	10.50'
		D 63° 44' 15"	09.00'	11.25"
		R 243° 44' 03"	09.00'	
		D 243° 44' 11.25"	11.25"	
S.NAIL	CONC MON R-84	R	49.50"	TRANS-PT R-83
		D 0° 00' 00"	02.00"	
		R 180° 00' 04"	02.00"	
		D 116° 15' 51"	51.50"	49.50"
		R 296° 15' 52"	51.50"	
		D 180° 00' 01"	00.50'	
		R 0° 00' 00"	54.00'	55.50'
		D 296° 15' 56"	54.00'	52.50'
		R 116° 15' 56"	52.50"	

Check At \_\_\_\_\_ Date 06-28-09  
 Notes \_\_\_\_\_  
 Plot \_\_\_\_\_ Date \_\_\_\_\_  
 Notes \_\_\_\_\_ Date \_\_\_\_\_  
 Check \_\_\_\_\_ Date \_\_\_\_\_  
 Plot \_\_\_\_\_ Date \_\_\_\_\_



HORIZON CLOSURE  
 330° 49' 30.50" 29"  
 29° 10' 33.50" 31"  
 360° 00' 04.00"

29  
54  
42

Job # 14481

6-9-09

Berrios

Ramos

Porland

Core man T-83

BS	± R	Dist	Desc.
TRANS PT R-82		1176.29 ✓	
		161.39 ✓	conc man T-83 ✓
		01.00 ✓	
		34.50 ✓	33.50 ✓
		05.00 ✓	
		32.50 ✓	27.50 ✓
		330.49 ✓	30.50 ✓
		330.49 ✓	
		161.39	
		1176.29	TRANS PT R-82
		56.50 ✓	
		30.50 ✓	31.00 ✓
		54.50 ✓	
		27.50 ✓	33.00 ✓
		29° 10' 33.50 ✓	33.50 ✓

TRANS PT CONC MAN T-83

33.50 ✓

20  
54  
42

Job # 14481

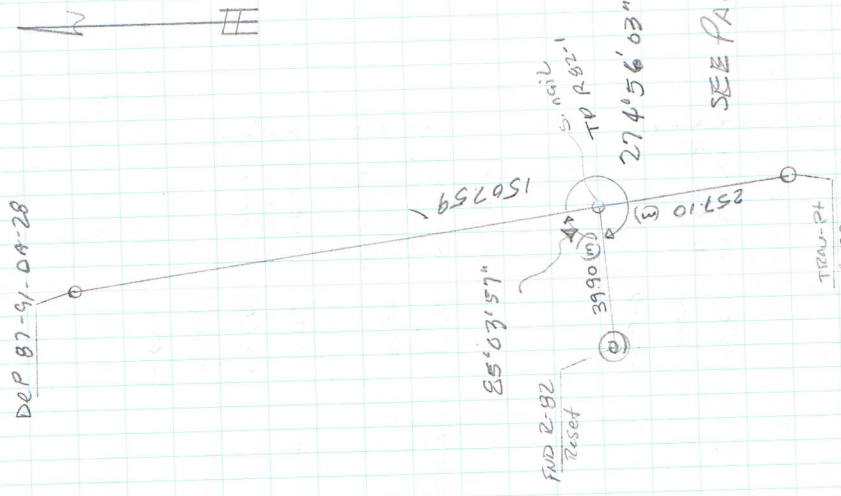
R-82-2504

Berrios  
Ramos  
Foldaw

Station	Dist	Desc.
DS @ conc man DEP-87-91-DA-28	1250.39	
D 0 00 00	39.90	R-82 Reset
L 180 00 04	02.00	"
D 274 56 11	06.50	04.50
R 94 56 02	06.50	04.50
R 180 00 06	04.50	"
D 0 00 03	04.50	"
L 94 55 57	03.50	59.00
D 274 56 10	03.50	59.00
A = 274° 56' 02.25"		<del>34.75</del>
S Nail R-82 Reset	3990	conc man
D 0 00 00	1250.39	DEP-87-91-DA-28
L 179 59 46	53.00	"
D 85 03 49	53.00	"
R 265 03 41	48.00	55.00
D 0 00 00	45.50	"
L 179 59 40	45.50	"
D 359 59 51	42.50	57.00
R 265 03 41	42.50	57.00
D 85 03 44	56.00	56.00
A = 274° 56' 02.25"		

546 20

Check AT Date 06-28-09  
Notes  
Plot Date  
Notes Date  
Check Date  
Plot Date



SEE PAGE 17

Horizontal Closure  
274° 56' 02.25" 0.31  
25' 03' 56.00 57"  
359' 59' 58.25"

20  
54  
42

6-10-09  
Berrios  
Ramos  
Roldan

TRAIN PT  
R-82-1

S.I.P

Sob # 14481

TRANSVERSE TO FDEP R-81

1 @  
conc mon  
dep 87-91-DA28

BS @  
TRAV. PT  
R-82

→ R

DESC.

D 0 00 00  
R 179 59 35  
D 18 40 00  
R 198 39 52

DIST  
1507.59'  
64668'  
47.50'  
56.00'

S.I.P  
08.50"

R 179 59 40  
D 359 59 58  
R 178 29 50  
D 18 40 04

49.00'  
57.00'

08.00"

08.25"

18° 46' 08.25"

conc mon  
dep 87-91-DA28

S.I.P

TRAV. PT  
R-82

D 0 00 00  
R 179 59 47  
D 341 19 50  
R 161 19 40

64668  
1507.59'  
53.50'  
45.00"

51.50"

R 179 59 42  
D 359 59 59  
R 161 19 35  
D 341 19 56

50.50'  
45.50'

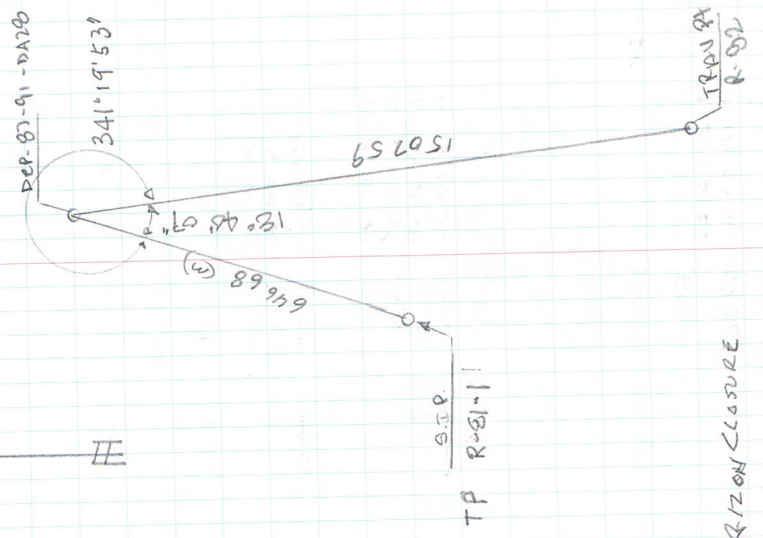
55.00"

53.25"

341° 19' 53.25"

546 21

Check A  
Notes Date 06-28-09  
Plot Date  
Notes Date  
Check Date  
Plot Date



HORIZON CLOSURE

18° 46' 08.25" 47"

341° 19' 53.25" 53"

366° 00' 01.58"

20  
54  
42

Job # 14481

6-10-09

Berrios

Ramos

Robles

R-81 DINO CO

BS @

DEP-87-91-DINO

DESC

CONC MAN  
R-81

D 0 00 00  
R 180 00 03  
D 75 00 00  
R 254 59 00

R 180 00 10  
D 359 59 59  
R 254 59 01  
D 75 00 04  
X = 74° 59' 28.25"

CONC MAN  
R-81

DEP-87-91-DINO

D 0 00 00  
R 179 59 40  
D 284 59 54  
R 105 00 00

R 179 59 37  
D 0 00 05  
R 105 00 02  
D 285 00 00

X = 285° 00' 08.50"

→ R

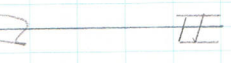
DIST  
646.68  
5.14

01.50  
201.00  
-00.02

04.50  
34.50  
-02.50

5.14  
646.68  
50.00  
57.00

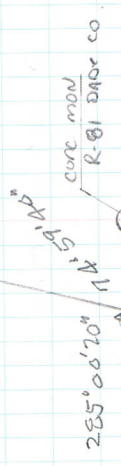
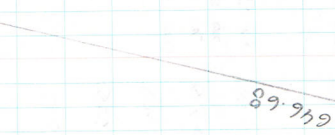
51.00  
01.00  
10.00



Check Notes At Date  
Plot Notes Date  
Check Notes Date  
Plot Notes Date

CONC MAN  
DEP-87-91-DINO

○



285° 00' 20"  
S.I.P.  
TP R-81-1  
HORIZON CLOSURE  
74° 59' 28.25" 40"  
285° 00' 08.50" 20"  
359° 59' 36.75"

20  
54  
72

6.10.09  
Barrios  
Ramos  
Roldan

Job # 14481  
R-80 - MON

1 @ BS @  
TRAN PT  
R-82

→ R D.S.T

D 0 00 00  
R 179 59 46  
D 149 08 45  
R 329 08 34

MON.  
R-80

R 179 59 45  
D 359 59 55  
R 329 08 42  
D 149 08 52  
X 149'08" 47.50"

48.56"  
57.22"  
47.50"  
51.75"

Dep 87-91-DAT8  
MON  
R-80

→ R D.S.T

D 0 00 00  
R 179 59 40  
D 210 50 56  
R 30 50 53

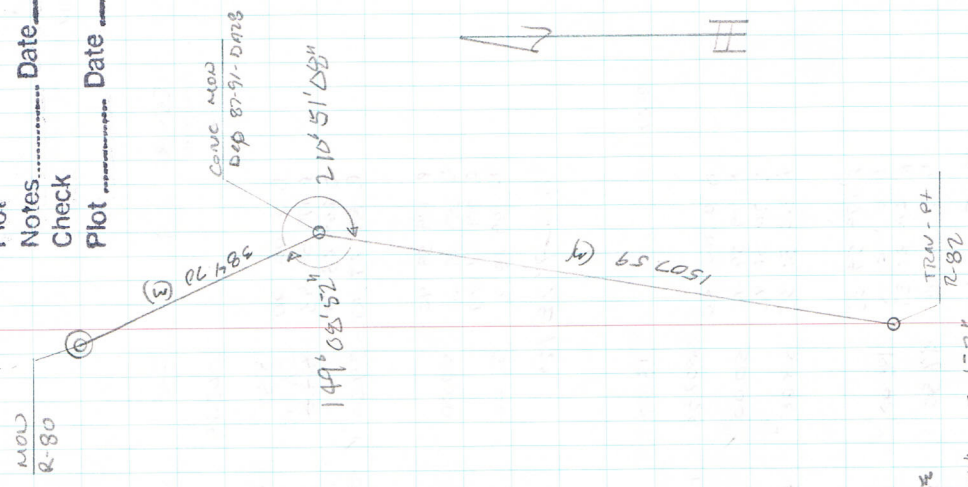
TRAN-PT  
R-82

R 179 59 53  
D 359 59 55  
R 30 50 59  
D 210 50 50  
X 210'51'02.50"

00.50"  
00.50"  
02.50"

546 23

Check Notes AT 06/28/09  
Plot Notes Date  
Check Notes Date  
Plot Notes Date



NO. OF POINTS CLOSURE  
149° 08' 47.50" = 572"  
210° 51' 02.50" = 0.50"  
359° 59' 50.00"



20  
54  
42

Job #14481

Dade Co R-88

6-10-09  
Berrios  
Ramos  
Roldan

X (C) BS (C)  
FMS MAIL  
TRAU #1

→ R

DIST

DESC.

2062.25

13.52' Dade Co - R-88

D 0 00 00  
R 179 59 43  
D 269 28 09  
R 89 27 40

51.50"  
~~46.50~~  
54.50" ✓  
03,00 X  
~~08.00~~

R 179 59 40  
D 359 59 40  
R 89 27 43  
D 269 28 01

40.00"  
52.00" ✓  
12 00 ✓  
07,50"  
~~10.00~~

X 269° 28' 17"

S. D.H.

Dade Co. R-88

FMS MAIL  
TRAU #1

D 0 00 00  
R 179 59 40  
D 90 31 42  
R 270 31 35

13.52'  
2062.25  
50.00"  
38.50"  
48.50

R 179 59 35  
D 0 00 01  
R 270 31 37  
D 90 31 48

48.00"  
42.50" ✓  
54.50" ✓  
51.50"

X 90° 31' 51.50"

Check Notes At Date 06-29-09 546 24

Plot Notes Date  
Check Notes Date  
Plot Notes Date



HORIZON CLOSURE

269° 28' 12,00" 10"  
90° 31' 51.50" 50"  
360° 00' 03,50"

Check At Date 6/11/09  
 Notes.....  
 Plot.....  
 Notes..... Date.....  
 Check.....  
 Plot..... Date.....

6/11/09

TOUSSAINT  
BERNARD  
RAMOS  
ROLDAN

VIRGINIA KEY BEACH PARK

PEG CHECK LEVEL NA-2 # 114083

"A" 5.212  
 SET 1 100 ✓  
 "B" 5.219 0.147 ✓  
 "B" DIFF 5.238 + 0.126 ✓

"A" 5.072

SET 2 ✓  
K

"B" 5.219 0.147 ✓

"A" 4.924

3<sup>RD</sup> SET ✓  
K

"B" 5.056 0.132 ✓

07/13/09

5.042  
4.903

5.182  
5.039

0.140  
0.136

30  
54  
42

Job #14401

Elev. RUN, BENCH MARK CHECK

3214-B to MI-GR

(yr 1994)

Checked Notes Check

Check

Notes

Plot

Notes

Check

Plot

AT 05/13/09  
Date

Date

Date

(yr 1994) 4272  
BM-3214-B (1910) (4) by satellite @ LAB.

T.P

Elev. on BM-MI-GR (9.491)

TP

Closing of run @ 3214-B (1910)

FORWARD RUN  
NADEB  
Elev. 4272

HI - Rod  
6.391 ✓  
4.182 ✓

2.119 ✓  
5.943 ✓  
12.125 ✓  
0.209 ✓  
2.641 ✓  
9.484 ✓

8062 ✓  
2.500 ✓  
11.984 ✓  
2,850 ✓  
CHECK RUN

5807 ✓  
6.177 ✓  
2.469 ✓  
8.276 ✓

CHECK

3,059 ✓

8,276 ✓

5,177 ✓

DIFF = 6,065 ✓

MEAN = + 5,215 ✓

FORWARD

+ 8,062 ✓

- 2,850 ✓

+ 5,212 ✓

5,177 ✓

DIFF = 6,065 ✓

MEAN = + 5,215 ✓

6-11-09

Berrios

Ramos

Roldan

STA

BM 3214-B

T.P.

Bm. MI-GR

TP

BM

20  
54  
42

Job # 14481

6-11-09

Bellios

Ramos

Goldan

STA

BM MI-6R

BM  
87-91-DA-31A2-MK

+

4.256

4.256

6.642

6.642

FORWARD

+4.256

-6.822

=-2.566

Forwarded Run

H<sub>i</sub>

13.740

6.822

6.822

CHECK RUN

13.560

4.059

4.059

CHECK

6.642

4.059

2.583

DIFF=0.017

MEAN= -2.575

Elev

9.484

6.918

9.501

Elev Run BENCH MARK LEVELS

MI-6R to DEP 87-91-DA-31A2-MK

546 27

Check

Notes

Plot

Notes

Check

Plot

AT

Date

Date

Date

06-13-09

BM - MI-6R @ Bridge

Elev @ 87-91-DA-31A2-MK no year stamped

closing of Run @ bridge (11.486)

20  
54  
42

Job # 14481  
Elev Run BENCH MARK LEVELS  
MI-GR to R-88 - (yr 1974)

6-11-09  
Gertios  
Ramos  
Polban  
STA + HI - ROD Elev.  
BM MI-GR 4.095 13.579 3.473 ✓  
R-88 10.106 ✓  
4.095 10.106

R-88  
CHECK RUN  
MI-GR 4.012 ✓  
10.022 13.495 3.473 ✓  
10.022 4.012 9.483 ✓

FORWARD  
+ 4.095 ✓  
- 10.106 ✓  
- 6.011 ✓  
CHECK  
10.022 ✓  
4.012 ✓  
6.010 ✓

DIFF = 0.001 ✓  
MEAN = -6.011 ✓

Check Notes Plot  
AT 06/13/09  
Date  
Check Notes Plot  
Date  
Check Notes Plot  
Date

RE-RUN, FREE COZ

PG-26  
BM @ Bridge MI-GR

conc man TRADE CO R-88 (yr 1974)

CLOSING OF RUN (11486)

20  
54  
92

Job #18481	Run Elev.	BENCH MARK LEVELS
6-11-09	R-88 to	T-87 (yr 1978)
Berrios		
Ramos		
Boldau		
sta	+	Hi
BM-898	2.459	5.932 ✓
TP	6.459	7.786 ✓
BM-T-87	8.918 ✓	4.605 ✓
		4.154 ✓
		8.759 ✓
T-87		CHECK RUN
	4.402	8.034 ✓
TP	4.605	5.927 ✓
R-88	9.007 ✓	2.459 ✓
		9.171 ✓
	Forward	CHECK
	+ 8.918 ✓	9.007 ✓
	- 8.759 ✓	9.171 ✓
	+ 0.159 ✓	0.164
		DIFF = 0.005
		MEAN = +0.162

546. 29

Check AT 06-13-09  
Notes Date  
Plot  
Notes Date  
Check  
Plot Date

RERUN PAGE 6461

BM - R-88 conc mon

T.P. s. nail

Elev. @ conc mon T-87 (yr 1978)

closing of run back to R-88

20  
54  
42

Job #14481

6-12-09 Run Elev BENCH MARK LEVEL  
Berrios T-87 to T-86 (yr 1978)

Ramos

Boldan

FORWARD RUN

STA	+	HI'	-	ROD	Elev'
BM-T87	5.322	8.954'			3632

T.P.	4.049	7.918'	5.085		3869
------	-------	--------	-------	--	------

T.P.	5.208	7.771'	5.355		2563
------	-------	--------	-------	--	------

BM T-86	14.579		6.065		1706
---------	--------	--	-------	--	------

16.505

BM T-86	CHECK RUN		
	6.185	7.891'	5.309

T.P.	5.305	7.887'	4.019		2582
------	-------	--------	-------	--	------

T.P.	5.159	9.027'	5.405		3868
------	-------	--------	-------	--	------

BM, T-87	16.649		14.733		3622
----------	--------	--	--------	--	------

FORWARD

+14,579

-16,505

-1,926

1,916

CHECK

16,649

14,733

DIFF = 0.010  
MEAN = 1.921

546 - 30

Check AT 06.13.09  
Notes..... Date.....

Plot.....

Notes..... Date.....

Check.....

Plot..... Date.....

RE-RUN PAGE 59

BM. conc men T-87

T.P.

T.P.

BM. @ conc men T-86 (yr. 1978)

T.P.

T.P.

closing of run back to T-87 (3.632)

20  
54  
42

Job # 14481

Elev. Run, Bench MARK LEVELS

T-86 - S.I.P. - PG-17

Berrios

Ramos

Colchu

FORWARD RUN

sta + HI - Rod Elev. ✓  
BM-786 6.765 8.471 ✓ 1.706

T.P. 4.609 8.541 ✓ 3.932

R-85  
BM S.I.P. 11.374 ✓ 5.919 10.458 ✓ 2.622

P-85 6.269 8.891 ✓ 2.622

T.P. 4.452 8.387 ✓ 3.935

T-86 10.721 ✓ 6.675 ✓ 1.712  
11.681

FORWARD

+11.374 ✓

-10.458 ✓

+0.916 ✓

CHECK

10.721 ✓

11.631 ✓

0.910 ✓

DIFF = 0.086 ✓

MEAN DIFF = 0.913 ✓

546 31

CHECK AT Date 06/13/09  
Notes  
Plot  
Notes  
Check  
Plot Date

RE Run Area 57-58

TBM @ conc man T-86

T.P. TUD IP

BM @ S.I.P From PG-17

T.P.

closing of Run @ conc man T-86 (1706)



20  
54  
42

Job # 14481

ELU RUN, BENCH MARK LEVELS  
R-85  
S.I.P. to R-84 (yr. 1991)

6-15-09  
Berrios  
Ramus  
Reidhu

FORWARD RUN

S/A + HI. - Rod ELU  
R-85  
BM SEP 2.622'

7.222 9.844' 5.429 4.915'

T.P. 3.672 8.087' 4.235 3.852'

T.P. 3.902 7.754 4.439 3.315'  
14.796' 14.103

BM, R-84 14.796' 4.439 3.315'

BM, R-84 CHECK RUN 3.315'  
4.725 8.040' 4.175 3.865'

T.P. 4.455 8.320' 3.932 4.388'

BM-R-85, I.P. 5.819 9.907' 7.305' 2.602'  
14.699' 15.412'

FORWARD CHECK  
+ 14.796  
- 14.103  
+ 0.693

0.713 DIFF = 0.1020  
MEAN DIFF = +0.7103

596 32

Check Notes AI Date 07/09/09  
Plot  
Notes..... Date.....  
Check  
Plot ..... Date .....

RE RUN PAGE 57-58

BM @ S.I.P. - R-85

T.P.

T.P.

BM @ CONC MON R-84 (yr. 1991)

T.P.

T.P.

Closing of RUN

20  
54  
42

Job #14481

Elev Run  
R84 to R-83 (yr 1991)

6-15-09.  
Bellios  
Ramos  
Roldan

Forward Run

Sta +  
BM R-84 5.155  
TP 7.839  
BM R-83 12.994

Backs

Elev.  
3.315  
2.025  
6.025  
6.025

BM, R-83

CHECK RUN

4.049  
6.305

10.074  
8.327

10.224

2.022

T.P.

BM, R-84

5.030

3.297

Closing of Run

FORWARD

+ 12.994  
- 10.284  
+ 2.710

CHECK

10.354  
13.082  
2.728

DIFF = 0.018  
MEAN DIFF = +2.719

Check Notes AT Date 06/16/09

Plot RE Run Page 56

Notes Date

Check Date

Plot Date

BM conc men R-84

TP @ R-83 TRAMP STP

BM @ conc men R-83 (yr 1991)



20  
54  
Y2

6-16-09  
Barros  
Pinos  
Polchu

Job #14481

Elev Run

R-82 to R-81 - (Yr 1991)

FORWARD RUN

Sta + H<sub>i</sub> - Rod Elev. /

BM R-82 4.615 9.901' 3.905 5.286 /

TP 2.645 8.641' 3.904 5.996 /

BM R-81 7.266 / 7.209 / 4.737 /

4.216 8.953' 2.975 4.737 /

3.305 9.283' 4.015 5.978 /

7.521 / 6.990' 5.268 /

FORWARD CHECK

+7.260 / 7.521 /

-7.869 / 6.990 /

- 0.549 / 0.531 /

DIFF = 0.018 /

MEAN DIFF = -0.540 /

546 35

Check

Notes At Date 06-17-09

Plot

Notes Date

Check

Plot Date

RERUN PAGE 54

BM R-82

T.P.

BM R-81 (Yr 1991)

T.P.

CLOSING OF RUN

20  
54  
42

Job #14481

6-16-09

chk. run

Because R-81 to R-80 (yr 1991)

Pennos

No. 1 day

FORWARD RUN

Sta +

Hi

-

ROD

chk

BM-R-81

5265

10002 ✓

T.P

4.555

5447 ✓

T.P

4.355

9802 ✓

1.555

8.247 ✓

BM R-80

11.135 ✓

11,005 ✓

BM-R-80

5.355

10.222 ✓

T.P

4.805

5417 ✓

BM, R-81

5.225

10642 ✓

5924

4718 ✓

FORWARD

CHECK

+

11.135 ✓

10.580 ✓

DIFF: 0.09 ✓

-

11.005 ✓

10.729 ✓

MEAN DIFF

+

0.130 ✓

0.149 ✓

= 0.140 ✓

596 36

RERUN PAGE 53

Check

Notes

Plot

At

Date

06-17-09

Notes

Check

Plot

Date

Date

Date

BM. 2-81

T.P.

TP

BM-A-80 (yr 1991)

T.P.

Closing of Run

20  
54  
42

6-16-09

Berrios

Ramos

Poldau

Sta

BM R-81

BM  
87-91-DA28

BM, 87-91-DA<sup>28</sup>

BM, R-81

Job # 14481

R-81 to DEP 87-91-DA28

no year stamped

FORWARD

Hi

Rd

Elev.

5865

10.602

9.055

9.055 ✓

CHECK RUN

10.952 ✓

1.547 ✓

6.205

6.205 ✓

FORWARD

+ 5,865 ✓

- 9,055 ✓

- 3,190 ✓

CHECK

9,405 ✓

6,205 ✓

3,200 ✓

DIFF = 0.010 ✓

MEAN DIFF = -3.195 ✓

BM R-81

BM @ 87-91-DA28 conc mod

closing of run

Check

Notes

Plot

AT

Date

Date

Check

Notes

Plot

Date

Date

Date

26  
54  
42

Job # 19481

G-16-09

Block Run

Berrios

Dep 87-91-D128 to KB-21

Ramos

Colado

FORWARD RUN

Sta

+

H.

-

ROD

1/2 in

BM

87-91-D128

1.547

9.481

11.028

T.P.

5.721

5.307

KB-21

12.781

3.215

5.392

KB-21

CHECK RUN

8.936

5.392

T.P.

3045

3.132

5.305

BM

87-91-D128

11.170

9.625

1.545

2,916

12,757

FORWARD

CHECK

+ 12,781

8,916

- 8,366

12,757

+ 8,845

3,247

DIFF = 0.002

MEAN DIFF = 3.246

546 37(A)

PERUN PAGE 52

CHECK

Notes

Plot

AT

Date

06.17.09

Notes

Check

Plot

Date

Date

Date

BM @ Dep 87-91-D128

T.P.

KB-21

T.P.

closing of RUN

20  
54  
72

Job # 14491  
X-Sections - R-80 (r. 1991)

6-17-09  
Berrios  
Ramos  
Roldan

S/A  
(81991)  
BM R-80

+

H: 10.20  
~~10.067~~

R-80

Elev  
5.10  
4.867

Tree Line  
- 0+45.0  
R-80-Sand  
0+0  
E.O.P  
0+02.4  
E.O.P.  
0+15.0  
Sand  
0+25.0  
Sand  
0+45.0  
Sand  
0+50.0  
Sea O.dns  
0+75.0  
Sand  
1+00'  
E.O. Water  
1+02'  
Water  
1+07'

5.20  
MOW

5.0  
5.4  
5.51  
5.26  
5.3  
6.4  
7.3  
8.8  
11.6  
11.8  
12.3  
4.78

3  
5.7  
4.9  
4.79  
4.557  
5.04  
4.807  
5.0  
4.8  
3.7  
3.0  
2.8  
1.5  
1.3  
-1.3  
-1.7  
-2.2  
1.52  
5.287

4.60  
10.12  
9.887

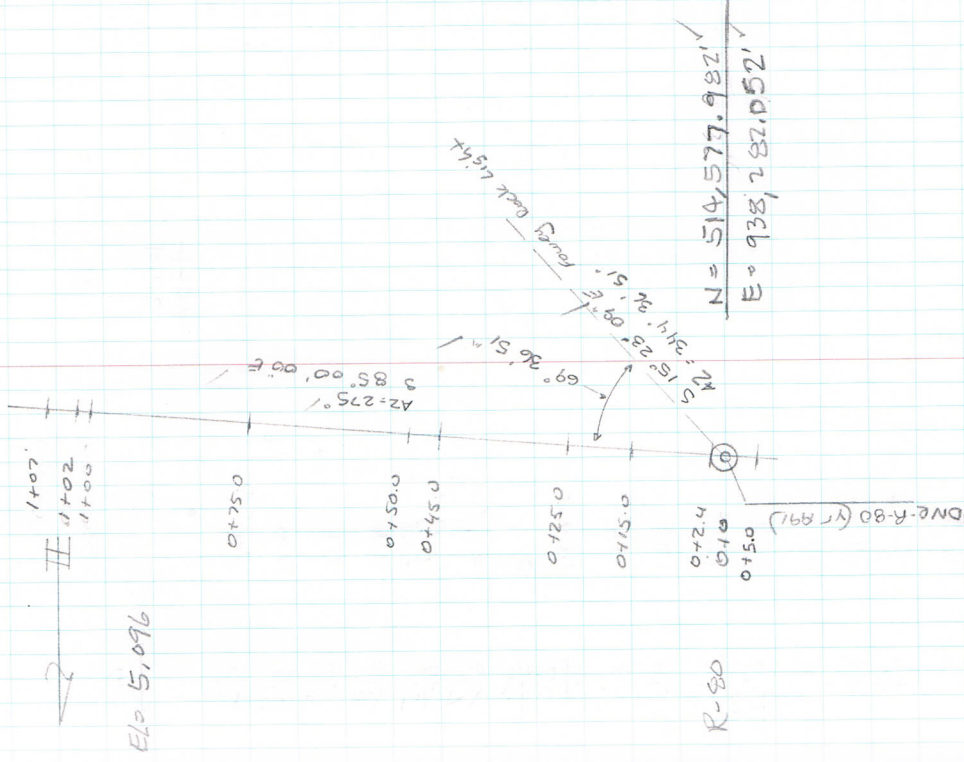
BM, R-80  
closing

5.11  
4.887

546 38

FILE 14481NK2, CRD  
14481NK3, CRD

Check AT Date 5/22/69  
Notes Plot  
Check Date  
Plot Date





20  
54  
42

Job # 14401

X-Section R-81 (yr 1991)

6-17-09  
Berrios  
Ramos  
Roldan

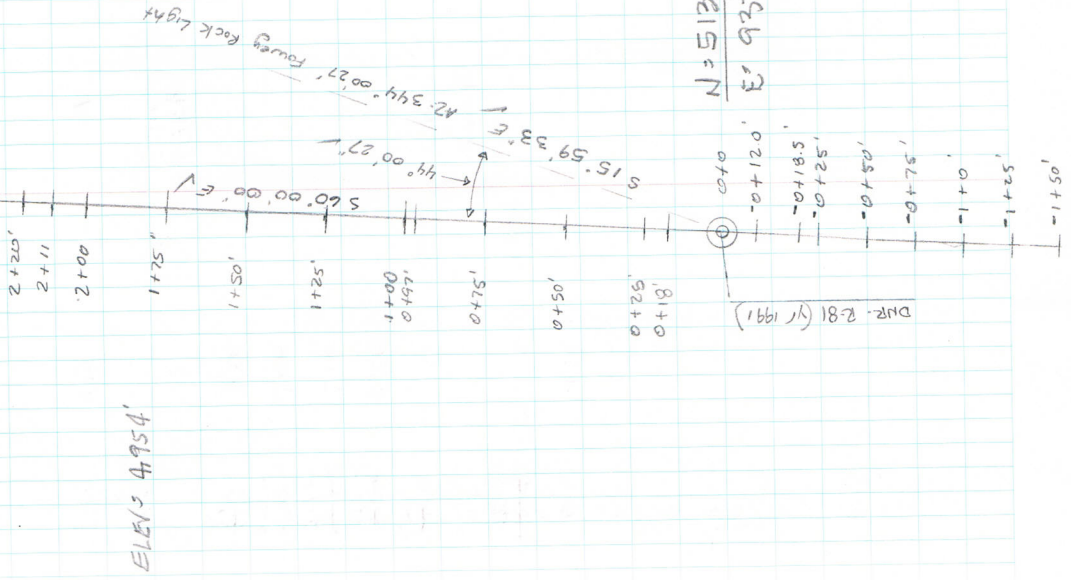
Sta	+	Hi	+	ROD	Elev.
BM R-81		10.15			4.95
	5.20	4.937			<del>4.727</del>
- SAND					
- 1+50'				4.7	5.5
- SAND					
- 1+25'				4.6	5.2
- SAND					
- 1+00'				4.7	5.2
- SAND					
- 0+75'				4.9	6.2
- SAND					
- 0+50'				4.7	5.2
- SAND					
- 0+25'				4.5	5.4
- EOP					
- 0+185'				4.80	5.25
- EOP					
- 0+12'				4.94	5.21
- (R-81) MON					4.997
- 0+0					5.4
- ASP				4.8	5.1
- 0+18'					
- ASPH				5.41	4.527
- 0+25'					
- ASPH				5.31	4.627
- 0+50'					
- ASPH				5.20	4.737
- 0+75'					
- EOP				5.20	4.737
- 0+97'					
- SAND				5.65	4.287
- 1+00'					
- SAND				5.7	4.2
- 1+25'					
- SAND				6.3	3.6
- 1+50'					
- SAND				6.9	3.2
- 1+50'					

Cont on next pg (40)

39

546

Check At 07-22-09  
Notes \_\_\_\_\_  
Plot \_\_\_\_\_  
Notes \_\_\_\_\_  
Check \_\_\_\_\_  
Plot \_\_\_\_\_



20  
54  
72

6-17-09

Berrios

Ramos

Roldan

STA  
(yr 1991)  
BM R-81

sands  
1+75'

sands  
2+00'  
E.O. water  
2+11'

water  
2+20'

T.P

BM 4,81  
closing

Job # 14481

X-SECTION - R-81 (yr 1991)

cont from pg 39

f Hi - Rod

520  
10.15  
4.937

75

10.7

11.7

12.3

3.46

9.78'  
9.562

4.83

Elev  
4.737 ✓

2.7  
-0.6'

-0.763

-1.6

-1.763

-2.12

-2.3

6.69  
6.477

4.95  
4.787

546

40

Check

Notes

Plot

Notes

Check

Plot

Date 07/22/09

Date

Date

EL = 4.954

20  
54  
42

Job # 14481

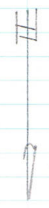
X-Section R-82 (yr 1998)

6-17-09  
Berrios  
Ramos  
Roldan

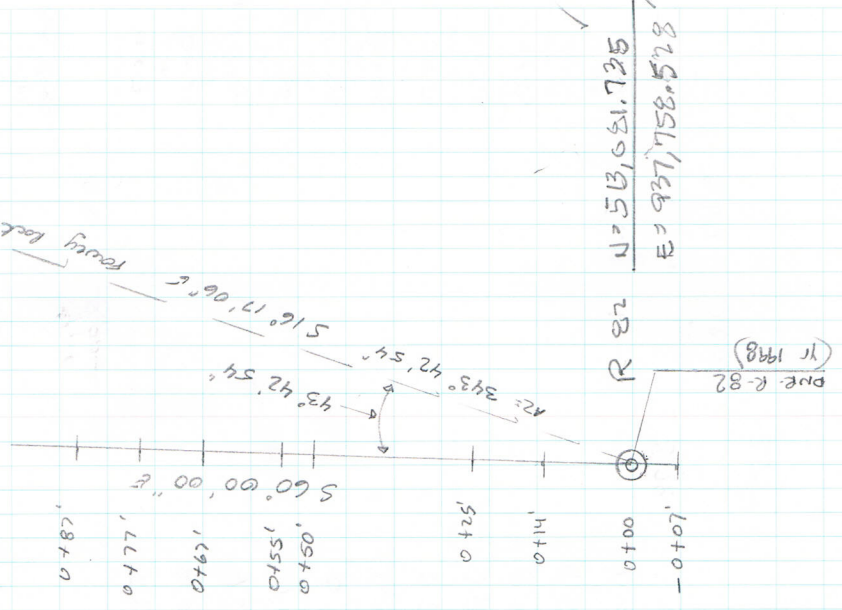
Sta	+	H.	-	ROD	Elev.
BM R-82	410	9.57			5.47
		<del>9.386</del>			<del>5.286</del>
Tree Line					
0+07'					
SAND			4.3		5.7
0+0			4.7		4.9
SANDS			4.7		4.9
0+14'			4.9		2.7
SAND					4.5
0+25'			8.5		1.1
Sea Grass					0.84
0+50'			8.4		1.2
SAND			9.8		0.97
0+55'					0.12
E.O. WATER					0.47
0+67					1.5
WATER			11.1		1.71
0+77					2.1
WATER					2.9
0+87			11.7		1.79
T.P	7.52	9.726	7.78		1.66
			3.84'		5.47
					5.286

596 41

Check Notes AT Date 07/22/69  
Plot Notes Date  
Check Notes Date  
Plot Notes Date



EL = 5.474



R 82 N = 53,681.725  
E = 937,758.528

PR. R-82 (yr 1998)

20  
54  
42

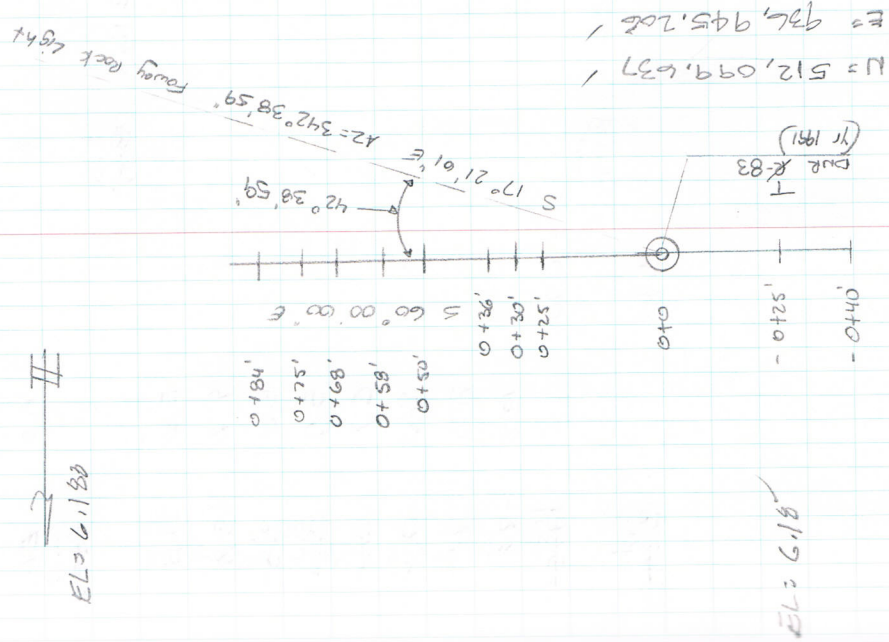
Job # 14481  
X-Section R-83 (yr 1991)

6-17-09  
Berrios  
Ramos  
Roldan

Sta	+	Hi	-	I.O.D	Elev.
BM R-83		9.16			6.18
	2.92	<del>8.945</del>			<del>6.025</del>
Tree Limb				5.8	3.7
- 0+40				5.3	3.6
sand				4.6	4.5
- 0+25				4.4	4.5
sand				3.9	5.2
0+0				6.5	2.4
sand				7.7	1.2
0+25'				7.8	1.7
0+30'				9.3	<del>0.25</del>
sand				9.8	<del>0.17</del>
0+36'				11.0	<del>1.19</del>
sand					<del>2.05</del>
0+50'					5.165
sec. grass			3.78		
0+58'					
E.O. water					
0+68					
water					
0+75					
water					
0+84					
T.P.	3.64	9.6	3.78		
		8.805	2.79		
closing					

546  
42

Check Notes: AT Date 07/22/09  
Plot Notes: Date  
Check Notes: Date  
Plot Notes: Date



20  
54  
92

Job # 14481

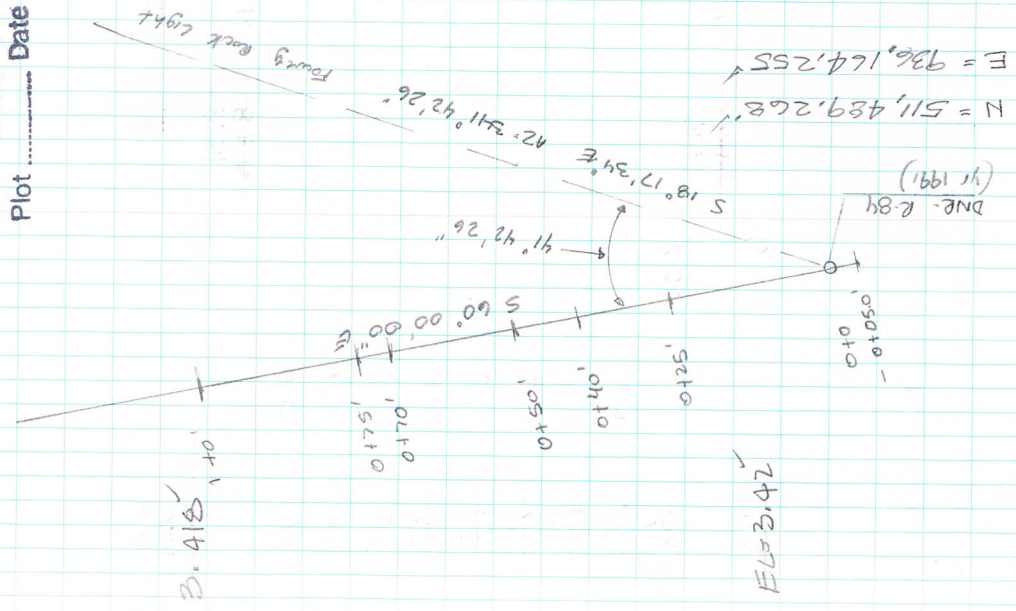
X-Section R-84 (yr 1992)

6-23-09  
Berrios  
Ramos  
Roldan

S/A	+	Hi	-	ROD	ELW
S/A (yr 1992)					3.42
BM. R-84		8.58			3.315
	5.16	8.475			
- 0+050'				5.0	6
SAND				4.7	3.8
0+0				5.0	3.8
SAND				5.6	3.0
0+25.0'				6.1	2.9
SAND				8.0	2.4
0+40.0'				8.3	0.8
SEC. GESS				10.8	0.2
0+50.0					-2.8
E.O. WATER					1.88
0+70.0'					1.775
WATER					
0+75.0'					
WATER					
1+0					
T.P.	6.32	8.095	6.70		3.46
					3.295
Closing			4.80		

546 93

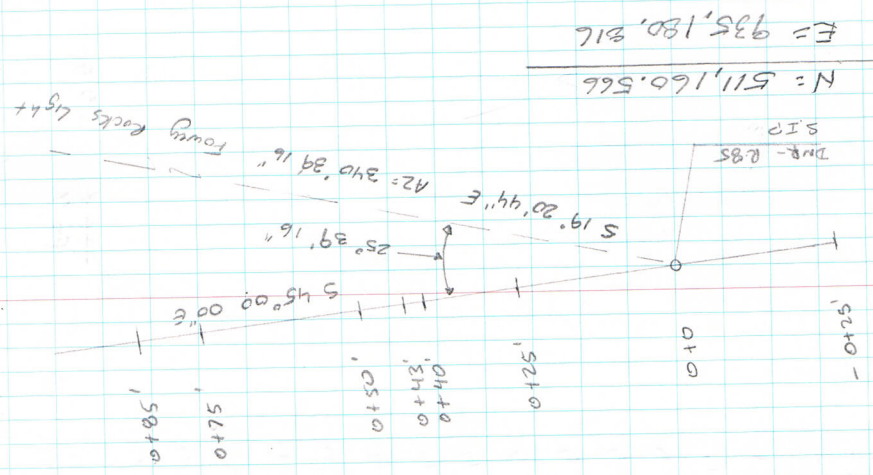
Check AT Date 07/22/09  
Notes.....  
Plot.....  
Notes..... Date.....  
Check.....  
Plot..... Date.....



Check Notes... Date 07/22/09  
 Plot Notes... Date  
 Check Notes... Date  
 Plot Notes... Date



PAGE 21  
 EL = 4.043



EL = 4.043

20	Job # 14481		
54	X-Section R-85 - S.I.P		
42			
6-23-09			
Berrios			
Ramos			
Re/dan			
Sta			EL
PG. 21			4.04
T.P. FUDIP			<del>2.932</del>
sand pile			
- 0+25'		4.0	4.2
sand		4.5	3.7
0+0		4.8	3.4
sand		5.3	3.0
sand		6.5	2.9
0+40'		6.7	1.8
sand		9.7	1.6
0+43'		10.7	1.5
E. o. water			1.4
0+50'			1.5
water			2.4
0+75'			2.5
water			1.04
0+85'			<del>0.732</del>
T.P.		7.97	4.04
		<del>7.862</del>	<del>3.932</del>
closing		6.93	
		7.30	
		3.93	

\* point R-85 was disturbed by dump tracks  
 ELEV. was used from T.P. FUDIP PG. 31

20  
54  
42

6-24-09  
Berrios  
Ramos  
Roldan

Job # 14481 T  
X-Section - K-86 (yr 1978)

Sta  
(yr 1978)  
BM - 286

5.61  
H. 11.  
7.43  
7.316

Rod

Elev.  
1.82  
1.796

Tree Line	- 110	4.3	3.1
Ground	- 0+75'	4.4	2.9310
RBT	- 0+62'	4.03	3.2863.40
RBT	- 0+59'	4.02	3.2963.41
EOP	- 0+57'	4.20	3.123
ASPH	- 0+50'	4.02	3.116
EOP	- 0+45'	4.66	3.41
Ground	- 0+25'	4.9	2.77
		5.4	2.4 2.5
		4.5	1.9 2.0
		4.8	2.8 2.9
		4.8	2.5 2.6
		4.3	3.0 3.1
		1.8	5.5 5.6
		3.5	3.8 3.9
		3.9	3.4 3.5
		3.8	3.5 3.6

cont next pg 46

546 45

Check  
Notes..... Date 07/22/09  
Plot

Check  
Notes..... Date  
Plot

3710'  
310

2782'  
2772'

III

III

2745.0'  
2701'

EL=1.817

1775'

1750'

1735'

1712'

1701'

0775'

0750'

0725'

070

0725'

0745'

0750'

0755'

0775'

- 170

TRAV PT. 1  
E. BEIT IN CONC

60' 00' E

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

36° 18' 29"

N = 510.025.679  
700.141  
DIR. K-86

E = 933.114.660  
934.302.164

20  
54  
92

C. 24-09  
Berrios  
Ramos  
Roldan  
Sta  
BM R. 86  
SAND  
2+0  
SAND  
2+05.0'  
SEA GRAVEL  
2+72  
E.O. WATER  
2+82  
WATER  
3+0  
WATER  
3+10'  
T.P.

Job # 14481  
X-Section - R-86  
- Cont From pg 45

	+	HI	-	LOS	ELm
	5.61	7.43 <del>7.316</del>			1.706
				4.1	2.3 <del>3.2</del>
				5.4	1.9 2.0
				6.3	1.0 1.1
				6.1	1.3 1.3
				9.3	<del>1.9</del>
				9.9	-2.5 <del>2.6</del> 4.52 <del>4.406</del>
		7.68 <del>7.566</del>	2.91		
	3.16		5.86		1.82 <del>1.706</del>
Closing					

EL = 1.817 ✓

Check Notes At 596 46  
Plot Notes At Date 07/22/09

Check Notes \_\_\_\_\_ Date \_\_\_\_\_  
Plot Notes \_\_\_\_\_ Date \_\_\_\_\_



20  
54  
42

Job # 1448  
X-Section R-87 (yr 1970)

C-24-09  
Berrios  
Ramos  
Baldan

Stg + 473  
BM R87  
8.44  
~~8.56~~

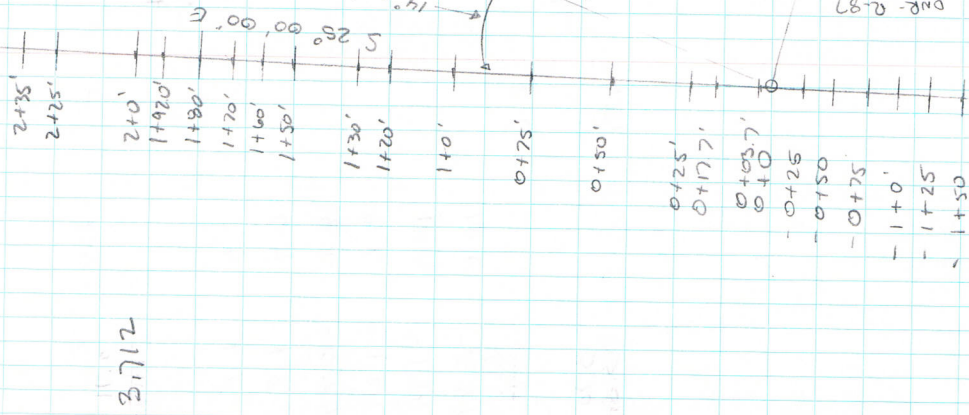
11. R00

Ground, -1+50'	5.5	2.9	✓
Ground, -1+25'	5.7	2.7	✓
Ground, -1+0'	5.8	2.6	✓
Ground, -0+75'	5.4	3.0	✓
Ground, -0+50'	5.1	3.3	✓
Ground, -0+25'	5.0	3.4	✓
Ground, 0+0'	4.8	3.6	✓
EGP 0+037'	4.71	3.73	✓
EGP 0+17.7'	4.55	3.63	✓
Ground, 0+25'	4.6	3.89	✓
Ground, 0+50'	4.6	3.81	✓
Ground, 0+75'	4.7	3.8	✓
Ground, 1+0'	4.7	3.7	✓
Sand, 1+20'	4.4	4.0	✓
Sand, 1+30'	4.7	3.7	✓
Sand, 1+50'	3.1	5.3	✓
Sand, 1+60'	4.0	4.4	✓
Sand, 1+70'	4.0	4.4	✓
Sand, 1+80'	4.0	4.4	✓
Sand, 1+90'	6.3	2.1	✓

cont on pg 48

Check Notes Plot  
Date 07-22-09  
546 47

Notes Check Plot  
Date  
Date



3.712

TRAV Pt-1  
5. mile in cont

N = 570, 020, 679  
E = 922, 414, 660

D.R. - R-87

20  
54  
42

G-24-09  
Berrius  
Lames  
Roldan

Stg

BM 2-87

SEA LEVEL,  
1 + 70'  
SAND  
1 + 80'  
F.O. WATER  
1 + 92'  
WATER  
2 + 10'  
WATER  
2 + 25'  
WATER  
2 + 35'

T.P.

Closing

Job #14481

X-Section - R-87 (yr 1978)  
cont From pg 47

Hi.

8.44  
~~8.36~~

ROD

Elev.  
3.71  
~~3.632~~

4.73

2.3  
6.9  
8.6  
9.6  
10.3  
10.6

1.1'  
1.5'  
-0.2'  
~~-0.24~~  
-1.24'  
-1.94'  
-2.24'  
5.84  
~~5.76~~

2.60

<sup>1.51</sup>  
~~8.43~~

2.67

4.81

3.70  
~~3.622~~

EL = 3.712

Check  
Notes  
Plot

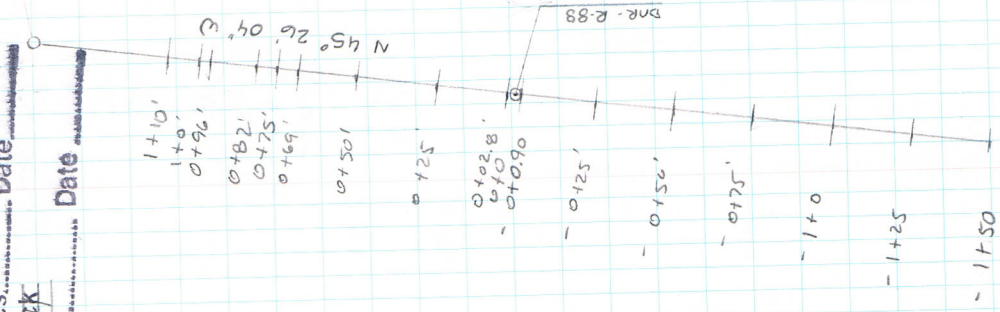
At  
Date

546 48  
07/22/09

Notes  
Check  
Plot

Date  
Date  
Date

Check AT Date 3/29/05  
 Notes  
 Plot  
 Notes  
 Check  
 Plot Date



N = 589,358.773  
 E = 932,396.634

EL = 3.523

Job #14401  
 X Section R-88 (4/1974)

20				
54				
42				
C-24-09				
Barnes				
Ramus				
Puldan				
Sta	+	HI	-	ROD
BM. R-88	4.20	7.72	7.673	
conc				
- 1750'				4.29
conc				
- 1725'				4.17
conc				
- 170'				4.12
conc				
- 075'				4.11
conc				
- 0750'				4.09
conc				
- 0725'				4.13
conc				
- 070.90'				4.21
conc				
070'				4.22
conc				
0702.8'				4.23
Sand				
0725'				4.5
Sand				
0750'				4.4
Sand				
0769'				4.9
Sand				
0775'				5.9
Sea Grass				
0787'				6.2
E.O. water				
0796'				8.3
Water				
170'				9.2
Water				
1710'				10.1

EL = 3.523

3.43  
~~3.38~~  
 3.55  
~~3.50~~  
 2.60  
 3.55  
 3.61  
~~3.56~~  
 3.63  
~~3.50~~  
 3.59  
~~3.54~~  
 3.51  
~~3.46~~  
 3.56  
~~3.45~~  
 3.49  
~~3.44~~  
 3.2 ✓  
 3.3 ✓  
 2.8 ✓  
 1.8 ✓  
 1.5 ✓  
~~- 0.68~~  
~~- 1.53~~ ✓  
~~- 2.48~~ ✓

20  
54  
42

Job # 14481

x-Section R-88 (1/1974)  
CONT From pg. 49

6-24-09  
Barros  
Ramos  
Roldan

519	+	Hi	-	R20	ELen 3.51 <del>3.473</del>
BM-R-88	4.20	7.72 <del>7.673</del>			1.90 4.85
T.P.	2.18	7.08 7.03	2.82		1.52 3.47
BM, R-88 Closing			3.56		

EL= 3.523

Check  
Notes: A Date: 07/29/09  
Plot  
Notes: Date  
Check  
Plot Date

20  
54  
42

Job #1448 BM. LEVEL RUN  
DEP-87-91-0128 to R-80 (yr 1991)

7-13-09

Berrios

Ramos

Coltin

From Page 52

Forward Run

Sta	+	HI	-	R.O.D	Elev
B.M.-DA-28	8.750	10.508'			1.758
		10.297			1.547
R-80	8.750		5.400		5.102'
			5.900		14.897

R-80

Check Run

5.600	10.708
	10.497

B.M DA-28  
Closing

8.940

8.940

5.108  
4.897

1.768  
1.557

FORWARD RUN

+ 8.750

- 5.400

+ 3.350'

CHECK RUN

5.600

8.940

3.240

MEAN DIFF: +3.345

DIFF = 0.016

To Page 53

18.01.5655

CheckR At 07-21-09

Notes Plot Date

Notes Plot Date

Check Plot Date

Plot Date

B.M @ conc mon DEP-87-91-0128 on conc Breg Lee

R-80 Mon on top of PVC 1.50 of the ground

Closing of RUN 1.758

20  
54  
42

- Job # 14481 BM. LEVEL RUN

KB-21 to DEP 87-91-D428

7-13-09  
Berrios  
Ramos  
Roldan

Forward Run

STA + HI - ELEV /  
KB-21 2.905 8.500 / 5.655

T.P. 5768 8.290 / 2.522

T.P. 5.302 10.177 / 4.875

DEP 87-91-D428  
BM

8.419 / 1.758

13,975 / 17.872

DEP 87-91-D428

Check Run 1758 /

8.505 10.263 /

5365 /

3.605 8.503 /

5958 /

6143 8.688 /

3025 /

14,253 / 14,348

TO PAGE 51

546 52

Check AT 07/21/09  
Notes Date  
Plot  
Notes Date  
Check  
Plot Date

KB-21 3M on conc slp

Check Run

18,253

19,248

3,905 DIFF = 0.008

MEAN DIFF = -3.901

BM @ DEP 87-91-D428 on conc Bracket

Closing KB-21 ELEV = 5.655

Check \_\_\_\_\_  
 Notes \_\_\_\_\_  
 Plot \_\_\_\_\_  
 Notes \_\_\_\_\_  
 Check \_\_\_\_\_  
 Plot \_\_\_\_\_

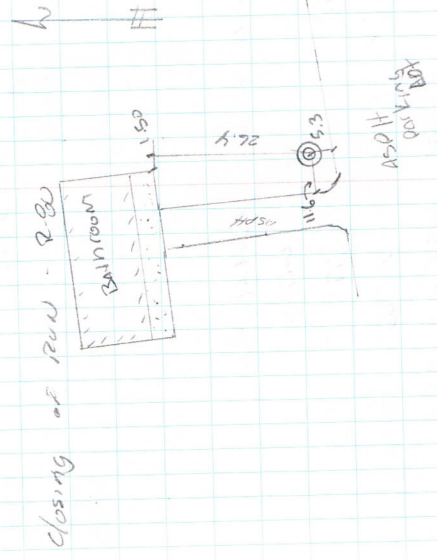
Date 07/2/09

Date \_\_\_\_\_

Date \_\_\_\_\_

BM @ R-81 on conc  
 T.P.  
 R-80 on top of pvc.

PAGE 51



20  
 54  
 42

Job # 14481

R-81 to R-80

7-13-09

Berrios

Ramos

Roldan

S/A

R-81-BM

T.P.

DEP R-80

DEP R-80

DEP R-81  
 Closing top

CHECK	Forward	Run	rod	Elev
+	11.280	-		4965
	11.052			4737
	6.315	2.918		8.362
				8.134
	1.628	4.888		5.162
		7.806		4.874
	7.943			5.108
	FORWARD-CHECK	Run		4.874
	9.859			5.028
	4.751	4.831		4.794
				4.965
	6.122	6.185		4.751
	+ 10.878	- 11.016		
	FORWARD	CHECK		
	+ 10.878	7.943		
	- 11.016	7.806		
	- 0.143	0.137		

MEAN DIFF = -0.140

DIFF = 0.006

20  
54  
42

546 54

Job #	14481	2-81-40	R-82			
Barrios		Forward Run				
Renos	Hi	-				Elm 4.965 -4.737
Polden						5.754 -5.526
S/A	+					5.481 -5.253
R.O.B.M	4125	9.090 -8.862				
T.P	3.135	8.889 -8.661	3.330			
R-82			3.408			
	7.260	check	6.747			
R-82	3.565	9.046 -8.818				
	3.195	8.920 -8.692	3.321			
closing R-81	6.760		3.965			
			7.286			
	Forward Run		CHECK RUN			
	+7.260		6.760			
	-6.744		7.286			
	40.516		0.526			
			MEAN DIFF = 70.524			
						DIFF = 0.010

Check AT 07-21-07  
Notes..... Date.....  
Plot.....  
Notes..... Date.....  
Check.....  
Plot..... Date.....

B4 @ R-81 on enc.

T.P.

R-82 ON TOP OF POC About .50 of ground

closing of Run R-81 EL 4.965



Job # 14481

7-14-09

R-82 to R-83

Berrios

Ramos

Roldan

Forward Run

S/O

Run

Hi

414.0

R-82 B.M.

2823

8.304  
8.109

5.481  
5.286

T.P.

3415

7.938  
7.743

4.523  
4.328

T.P.

2685

7.578  
7.383

4.843  
4.648

T.P.

1469

6.572  
6.377

5.103  
4.908

R-83

10.3921

0.375  
9.167

6.197  
6.002

R-83

1.005

Check Run  
7.202  
7.007

6.197  
6.002

3.445

8.322  
8.127

4.677  
4.482

4.583

8.555  
8.360

3.972  
3.777

Closing R-82

9.1233

3.065  
9.940

5.496  
5.295

Check

Notes AT

07/22/09

Plot

Notes

Check

Plot

Date

Pg. 54

R-82 About .50 of Ground now on top of PVC.

T.P.

T.P.

T.P.

R-83 ON TOP OF PVC About 2' of Ground

FORWARD RUN

+ 10.3921

- 9.167

+ 0.716

CHECK RUN

9.233

9.940

0.767

MEAN DIFF ± 0.712

Closing of Run R-82

20  
54  
42

Job H14491

7-11-09

R-83 to R-84

Burns

Romas

Ralden

Forward

Run

S/A

+

rod

Elev.

R-83 B.M.

2505

8.702  
8.530

6.197  
6.025

T.P.

4125

7.772  
7.600

3.647  
3.475

T.P.

4831

8.250  
8.086

3.427  
3.255

R-84

11,461 ✓

4.823  
14,223 ✓

3.435  
3.263

Check

Run

R-84

4125

7.560  
7.388

3.435  
3.263

T.P.

2495

6.293  
6.061

3.708  
3.566

closing R-83

5862

3.765

2.468  
2.294

12,482 ✓

2.132  
9,719 ✓

6.198  
6.026

546 56

Check

Notes

Plot

Notes

Check

Plot

At Date 01/22/09

Date

Date

B.M. - R-83 on top of PVC About 2'± of ground

T.P.

T.P.

R-84 on conc.

FORWARDED

11,461 ✓

14,223 ✓

-2,762 ✓

MEAN DIFF = -2,763 ✓

CHECK

12,482 ✓

19,719 ✓

2,763 / DIFF = 0.001 ✓

closing of Run - R-83

EL = 6.198

Check At 5/22/09  
 Notes Date  
 Plot  
 Notes Date  
 Check  
 Plot Date

R. 84 B.M on conc.

T.P.

T.P.

T.P. HEAVY EQUIPMENT WORK IN AREA OF  
 DEP R-85 NO ACCESS TO POINT

T.P.

T.P.

T.P.

R. 86 on conc.

FORWARD  
 + 33,010 ✓  
 - 34,597 ✓  
 - 1,587 ✓  
 CHECK, 31,804 ✓  
 - 30,197 ✓

1,667 DIFF = 0.020  
 MEAN DIFF = -1,597

20  
 54  
 42

Job # 14481

R. 84 - to R. 86

7-14-09

Bernos

Ramos

Roldan

Forward Run

R. 80

S/A

R. 84 B.M

4.732

8.167

~~8.047~~

~~3.435~~  
~~3.315~~

T.P.

6.045

1.169

~~9.044~~

3.124  
~~3.004~~

T.P.

2.275

4.69

~~6.344~~

7.94  
~~3.674~~

T.P.

4.462

5.921

~~5.864~~

1.019  
~~0.897~~

T.P.

3.238

8.390

~~8.270~~

5.152  
~~5.032~~

T.P.

6.723

10.426

~~10.306~~

3.763  
~~3.583~~

T.P.

4.635

8.058

~~7.938~~

3.423  
~~3.303~~

R. 86

33,010 ✓

6.210

~~34,597~~

1.848  
~~1.728~~

R. 86 B.M

6.365

Check Run

8.210

~~8.095~~

1.848  
~~1.728~~

20  
54  
42

7-14-09

Berrios

Ramos

Roldan

Sta

BM R-86

Job # 14481

R-84 to R-86

check

RUN

LOD

Flow

1.848

~~1.728~~

~~3.428~~

~~3.308~~

7,200

~~7,680~~

8,685

~~8,565~~

6,565

~~6,445~~

6,155

~~6,035~~

8,160

~~8,040~~

8,357

~~8,237~~

3,715

~~3,595~~

5,160

~~5,040~~

1,030

~~9,910~~

2,815

~~3,695~~

3,135

~~3,015~~

3,455

~~3,335~~

-

4,785

4,085

3,525

5,535

2,340

5,025

4,902

30,197

+

6,365

4,372

4,170

1,405

5,125

7,345

5,222

31,804

Closing R-84

30,197

TEM R-86

Closing of Run - R-84

Check AT 07/22/09  
Notes Date

Plot Date

Notes Date

Check Date

Plot Date

20  
34  
42

Sub # 14481

7-14-09

Berrios

Remus

Roldan

Sta +

BM-R-86

5.570

4.875

4.723

2.695

T.P.

5.205

3.599

3.971

BM  
R-87

15.650

5435  
13,757

3.741

SM, R-57

5.615

Check Run  
9.356  
9.214

3.741

4.015

5.365

3.991

4.982

5.315

2.691

BM, R-86  
closing

14.612

5832  
16,512

1.841

4.699

546 59

Check AT 57-22-09  
Notes \_\_\_\_\_  
Plot \_\_\_\_\_  
Notes \_\_\_\_\_  
Check \_\_\_\_\_  
Plot \_\_\_\_\_

PG-57  
T.B.M R-86 on conc

T.P.

T.P.

R-87 on conc

FORWARD  
+ 15.650 ✓  
- 13.757 ✓  
+ 1,893 ✓

CHECK ✓  
14.612 ✓  
16.512 ✓  
1.900 DIFF = 1.897 ✓

MEAN DIFF = +1,897 ✓

closing of Run EL = 1.848

20  
54  
92

- Job # 14481

R-87 to R-88

7-15-09

BANDOS

Ramos

Ro/dan

Forward  
Hi: - Rod

Elcu  
~~3.741~~  
~~3.532~~

ROD

STA BM

4625

<sup>.366</sup>  
8.257

5425

<sup>.191</sup>  
~~2.832~~

T.P.

6.040

<sup>.981</sup>  
~~8.722~~

5975

3.006  
~~2.897~~

T.P.

5.445

<sup>.451</sup>  
8.342

4.530

<sup>.191</sup>  
3.872

T.P.

4.080

<sup>8.061</sup>  
7.892

4.810

<sup>.191</sup>  
3.882

T.P.

4.270

<sup>.461</sup>  
7.352

3.900

<sup>561</sup>  
~~2.452~~

R-88

24.460 / Check Rod 24.440

R-88

4.134

<sup>.695</sup>  
7.584

4.500

<sup>.195</sup>  
~~3.886~~

4.910

<sup>8.105</sup>  
7.996

4.160

<sup>.945</sup>  
~~3.836~~

4.290

<sup>1.235</sup>  
8.126

546 60

Check AT 07-22-09  
Notes Date  
Plot  
Notes Date  
Check  
Plot Date

BM @ R-87 on cane

T.P. FORWARD CHECK

24.460 ✓  
24.361 ✓

24.640 ✓  
24.174 ✓

0.180 ✓  
0.193 ✓

MEAN DIFF = 0.187

DIFF = 0.013

T.P. BM @ R-88 on cane by bridge

R-88

20  
54  
42

Job H/4481

7-15-09

R-87 to R-88

Berrios

Ramos

Roldan

check run

Sta +

Hi

Rod

Elav

T.P.

4290  
~~8726~~

~~8835~~ ✓

3,070  
~~2,911~~

5,215

1,740  
~~8,631~~

1,965  
~~2,856~~

5,775

1,276  
~~8,769~~

1,754  
~~3,645~~

4,524

B'87 closing

24,367 /

24,174 /

546 E1

Check Notes At Date  
 Plot Notes Date  
 Check Notes Date  
 Plot Notes Date

closing of JUN R-87 (3,632)

20  
54  
42

Job # 19481

R-88 to MI-6R

7-15-09

Bernis

Ramos

Bo/daw

SLA

R-88 B.M.

BM-MIGR

BM-

Closing 0-886

LEWARD RUN

HI

8.785  
+ 8.785 ✓  
- 2.775 ✓  
+ 6.010 ✓

8.785 ✓  
2.775 ✓  
8.735 ✓  
8.735 ✓

check and FORWARD

286

2.715 ✓  
2.715 ✓  
8.735 ✓  
8.735 ✓

FORWARD

+ 8.785 ✓  
- 2.775 ✓  
+ 6.010 ✓

CHECK

2.715 ✓  
8.735 ✓  
6.020 ✓

MEAN DIFF = +6.015

ELW  
2,561  
3,473

1,571 ✓  
9,483

9,571

.551  
3,463

6,020 ✓ DIFF = 0.010

546 62

Check A

Notes

Plot

Notes

Check

Plot

07/24/09

Date

Date

Date

BM @ R-88 on curve by bridge

BM. MI-6R. on curve w/k

closing of RUN -R-88