

(b) (6)

From: LarryEvans@bcpeabody.com
Sent: Thursday, June 02, 2011 7:21 AM
To: (b) (6)
Cc: andrewgoetz@bcpeabody.com; (b) (6) SAJ; daniel_paganrosa@yahoo.com; johnhall@bcpeabody.com; KenCaraccia@bcpeabody.com
Subject: Files downloaded to ftp site
Importance: High

Good morning (b) (6)

We have downloaded 34 files to the ftp site link you provided. The files are labeled as follows:

Via Verde HDD ... (3 files)
MLV #6 ... (5 files)
MLV #7 ... (5 files)
MLV #10 ... (5 files)
MLV #11 ... (5 files)
MLV #12 ... (5 files)
MLV #13-14 ... (6 files)

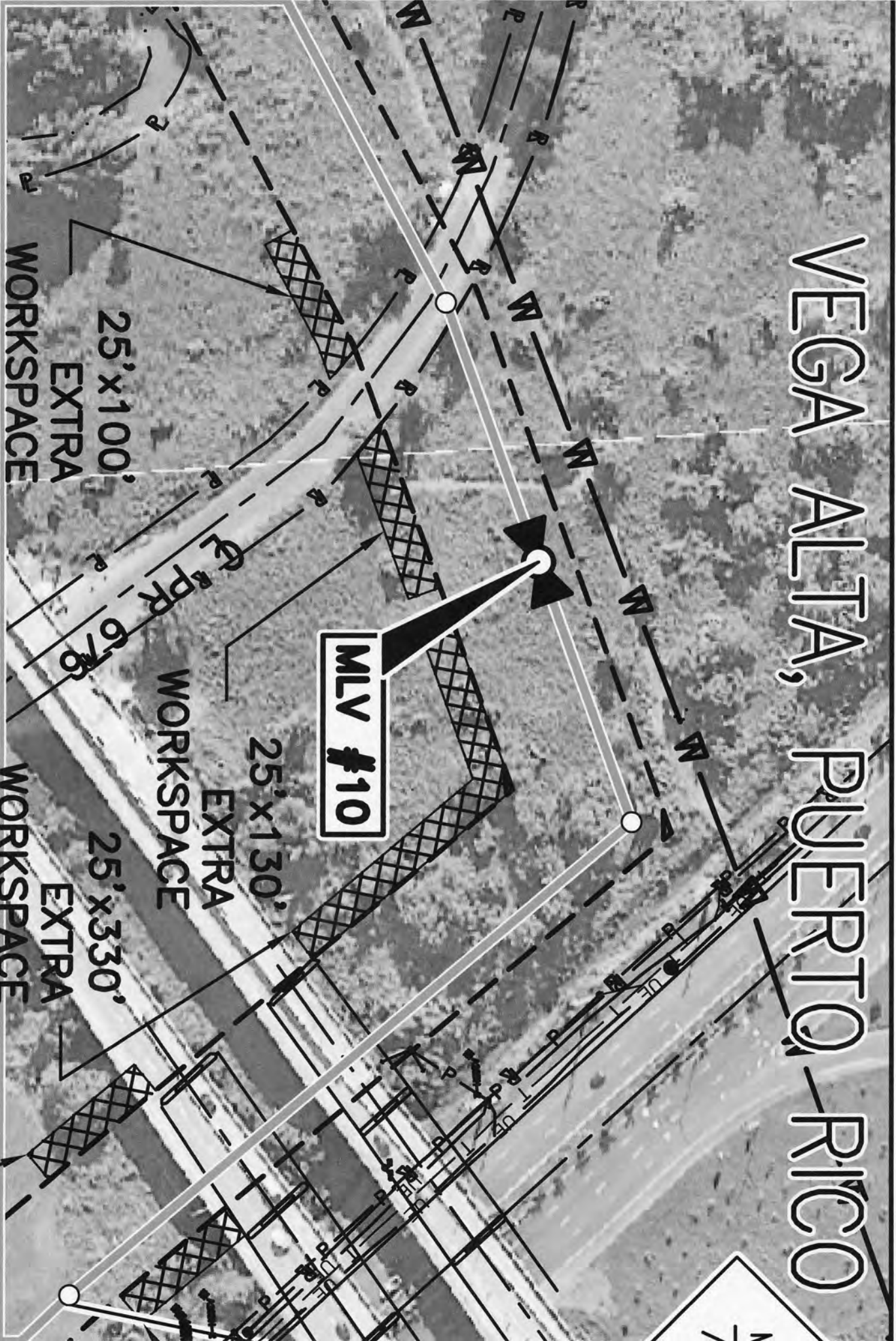
These drawings depict the MLV sites (6 of them) that are located in wetlands and the typical HDD workpad representation that depicts the perimeter berm and silt screen actions to be taken. The drawings provide the fill footprint dimensions and specs, etc. for each site. Total fill for the 6 MLV sites is approximately 1.15 AC and we will incorporate this impact into the compensatory mitigation plan we are collaborating on with the Corps. The HDD workpad sites are temporary impacts. Specific operational details at each site will vary, i.e. equipment placement, pit locations, drill equipment placement, etc., depending on the site requirements but these actions will all occur within the parameters of the workpad dimensions. Again, every pit will be lined to ensure NO migration of drilling mud will occur.

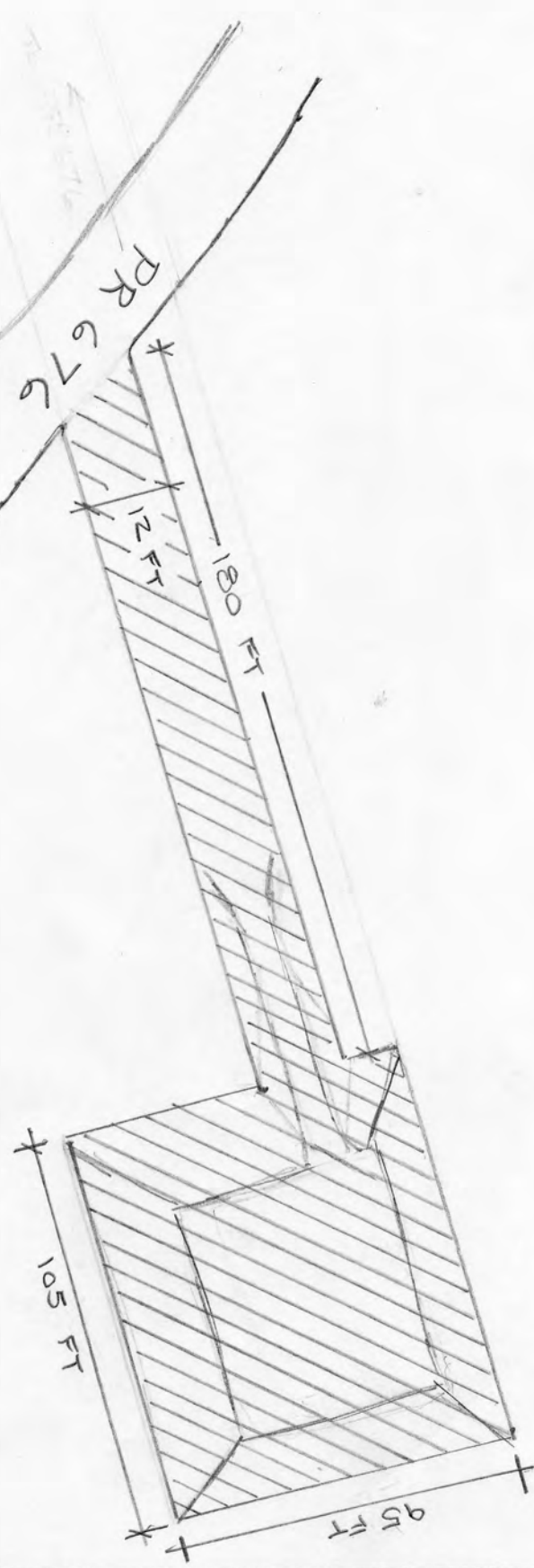
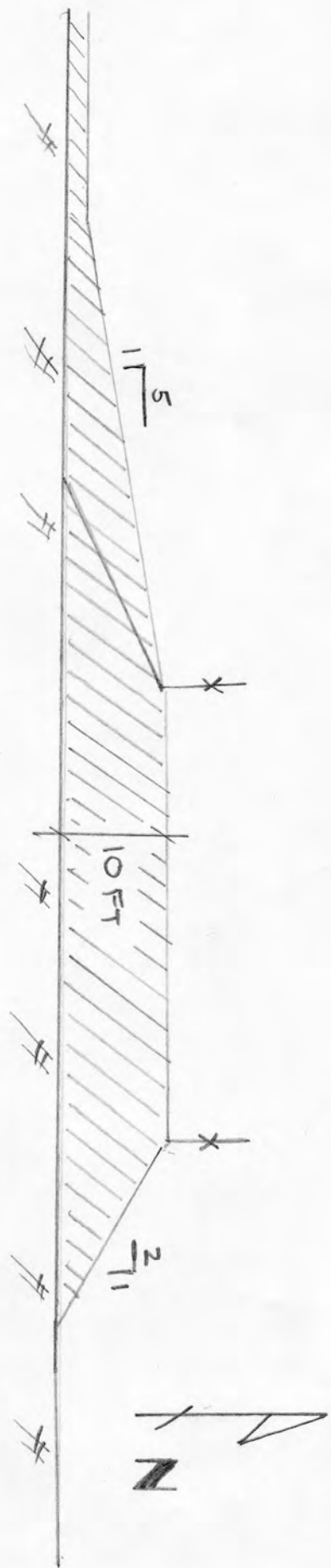
Within the HDD pullback zones there will be no fill placed (either permanent or temporary). We are prepared to incorporate secondary impacts from any clearing that may be required, i.e. hand cutting larger trees or shrubs, into the compensatory mitigation plan.

If you have any Qs, please do not hesitate to contact us by phone or email.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

VEGA ALTA, PUERTO RICO





MAINLINE VALVE SITE NO. 10

/// = 0.12 AC FILL

N.T.S.



Waters of the United States
Impact Maps
Sheet # 67
 Via Verde Project
 (SAI-2010-02881(IP-EWG))

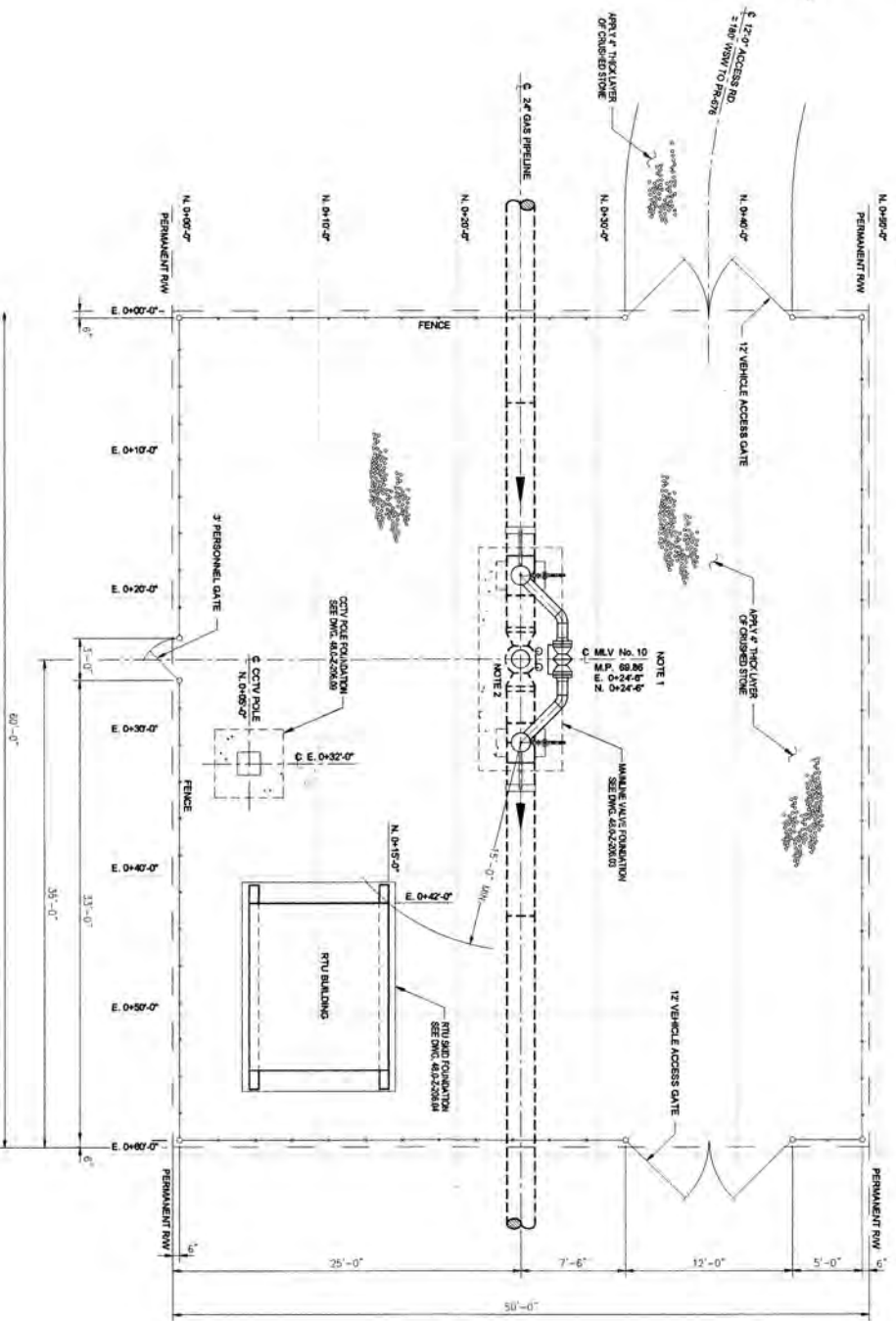
Source: 2011, Call Rivera Environmental Via Verde, JD
 1985-89, USGS Topographic Maps of the Puerto Rico Quadrangles
 1987, USFWS National Wetland Inventory Maps
 2010, Puerto Rico Planning Board Aerial Photographs

Legend

- | | | | |
|--|-------------------|--|-----------------|
| | 2+ inch Pipe | | Wetland No Fill |
| | Workspace | | Temporary Fill |
| | HDD Crossing | | Permanent Fill |
| | Open Cut Crossing | | Total |
| | Drill Crossing | | |



Acres
 16:01
 0.12
 16.13



PLAN
SCALE 1/4" = 1'-0"

NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND INTEREST HEADINGS ARE APPROXIMATE, ACTUAL HEADINGS TO BE DETERMINED BY FIELD SURVEY.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 4632-20823C.

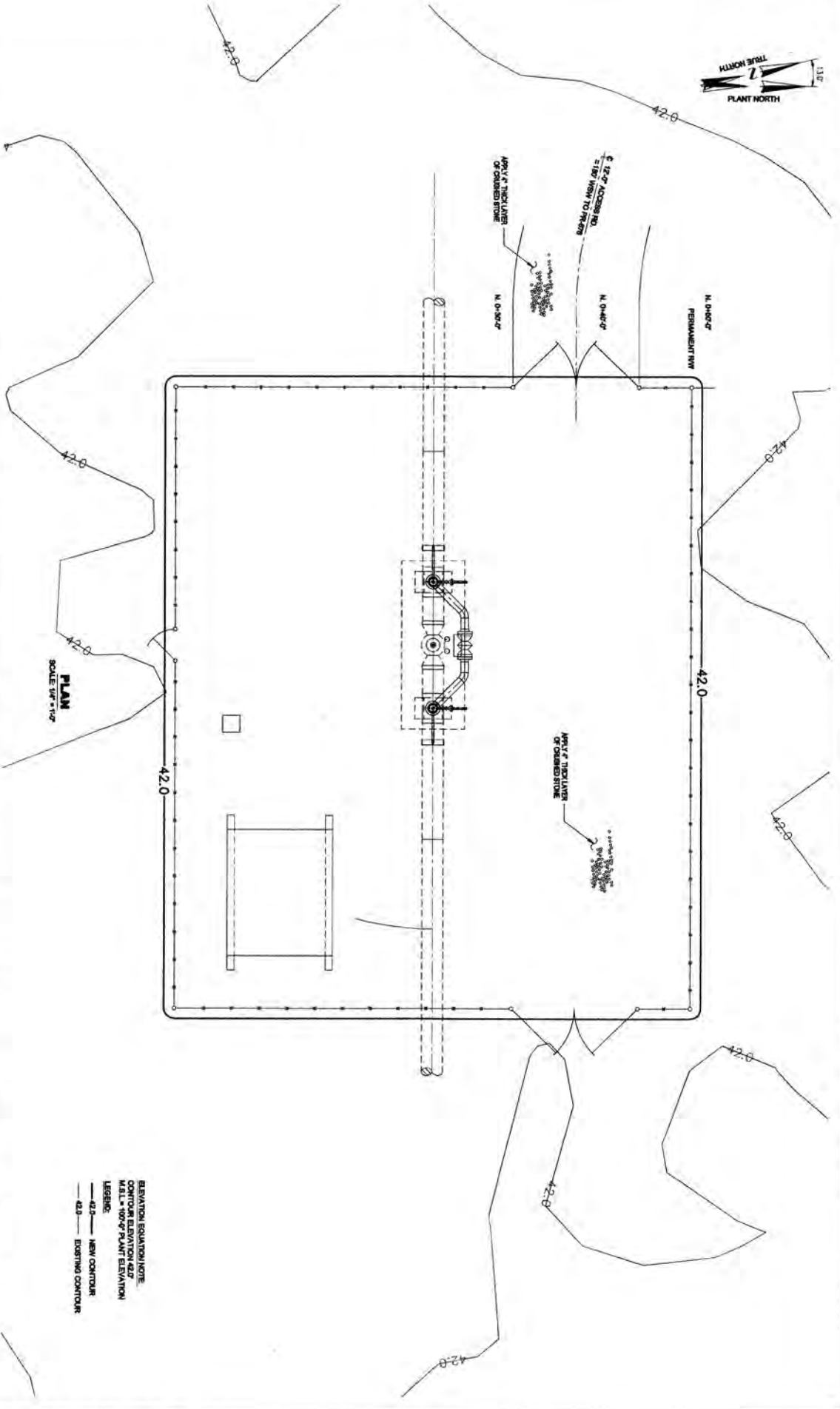
NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR BID	11/22/18	MS	MS
2	REVISION			

NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR BID	11/22/18	MS	MS
2	REVISION			

NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR BID	11/22/18	MS	MS
2	REVISION			

VIA VERDE
PIPELINE PROJECT
 PIPING PLOT PLAN
 MAINLINE VALVE SITE NO. 10
 M.P. 69.98
 VEGA ALTA, PUERTO RICO

DWG. NO. 4632-2085.39
 SHEET NO. 1 OF 1



PLAN
SCALE 1/8" = 1'-0"

ELEVATION EQUATION NOTE:
 CONTOUR ELEVATION 42.7
 M.F.L. = 100.0' PLANT ELEVATION
LEGEND:
 — 42.0 — NEW CONTOUR
 - - - 42.0 - - - EXISTING CONTOUR

NOTES:
 1) MAINLINE BLOCK VALVE LOCATION AND SUPPORT FOUNDATIONS ARE APPROXIMATE ACTUAL LOCATION AS SHOWN ON ALIGNMENT SHEETS.

REVISION NO.	DATE	BY	CHKD	APP'D	DESCRIPTION
1	02/20/21	YFB	YFB		ISSUED FOR BIDDING

PIPELINE PROJECT					
SITE GRADING PLAN					
MAINLINE VALVE SITE NO. 10					
M.P. 09.80					
VEGA ALTA, PUERTO RICO					
DATE	11-13-10	DATE	11-17-10	DATE	
DESIGNED BY	AC	CHECKED BY	YFB	DATE	
DRAWN BY	YFB	DATE		DATE	
SCALE	AS SHOWN	SCALE		SCALE	
DRAWN NO.	48.0-Z-206.18	SHEET NO.	1	TOTAL SHEETS	1

SEE DWG. NO.
MATCH LINE

25'x100'
EXTRA WORKSPACE

STA. 48.0+7-395.7+0.00
321.8'

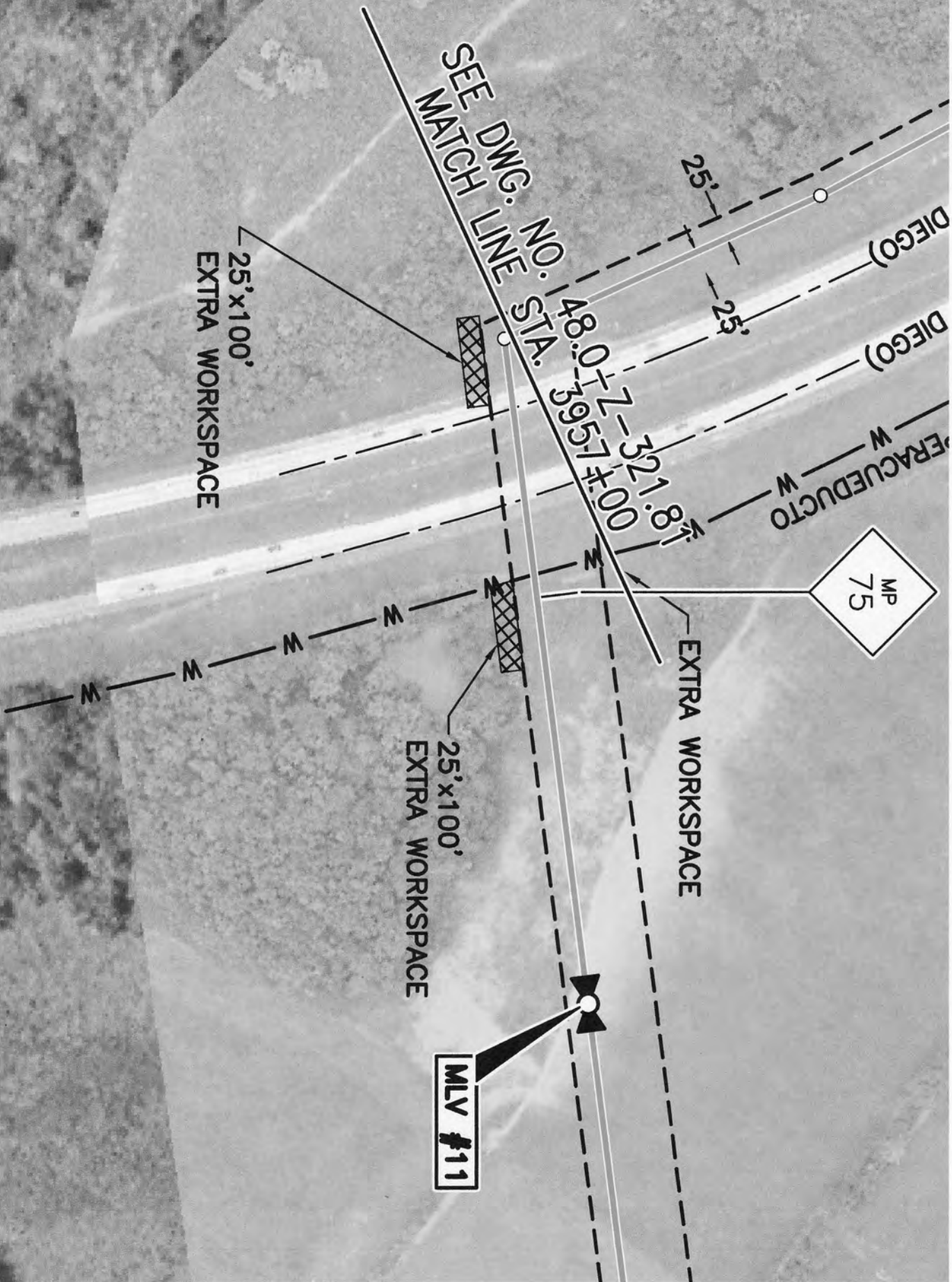
DIEGO)
DIEGO)
W W
ERACUEDUCTO

MP
75

EXTRA WORKSPACE

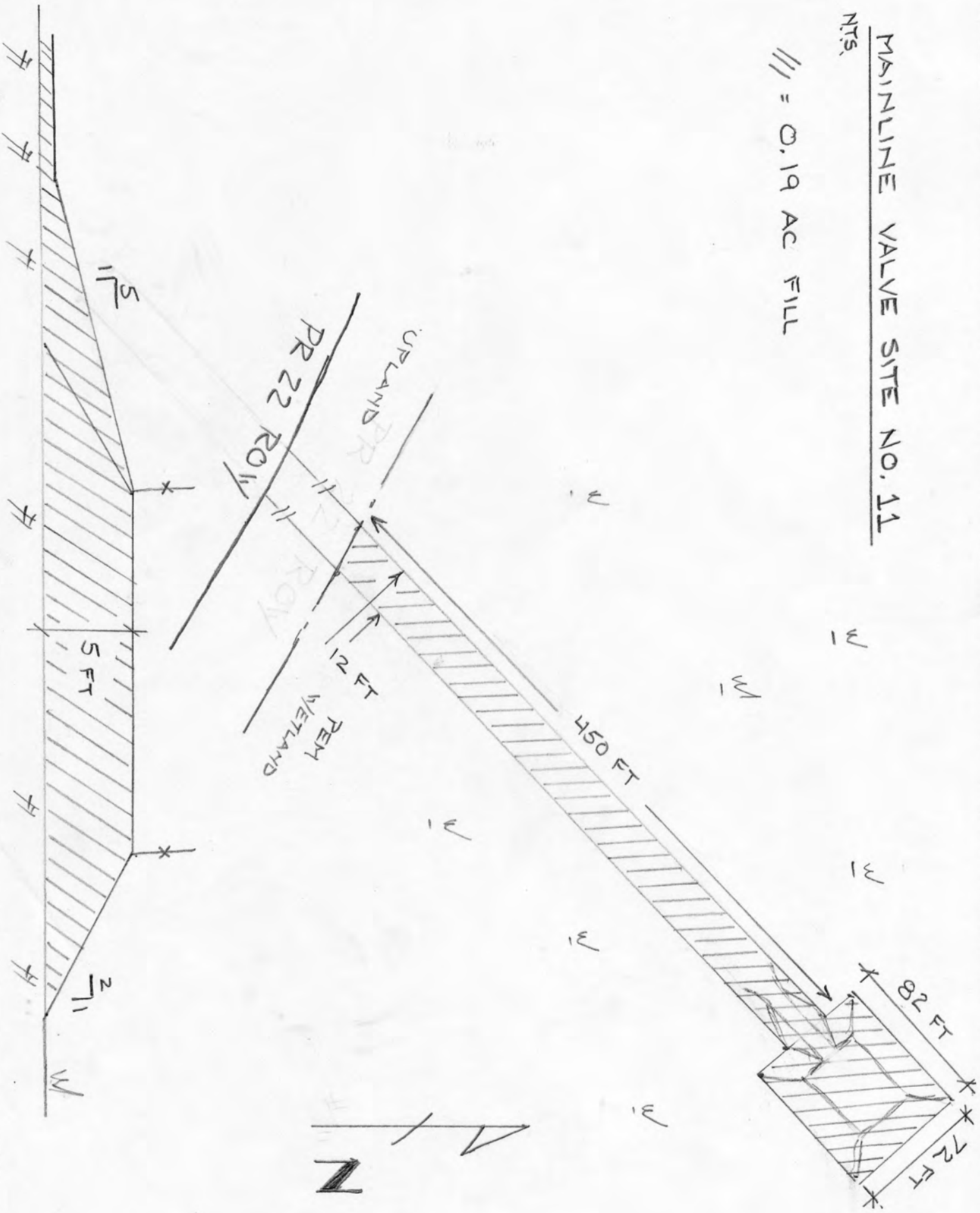
25'x100'
EXTRA WORKSPACE

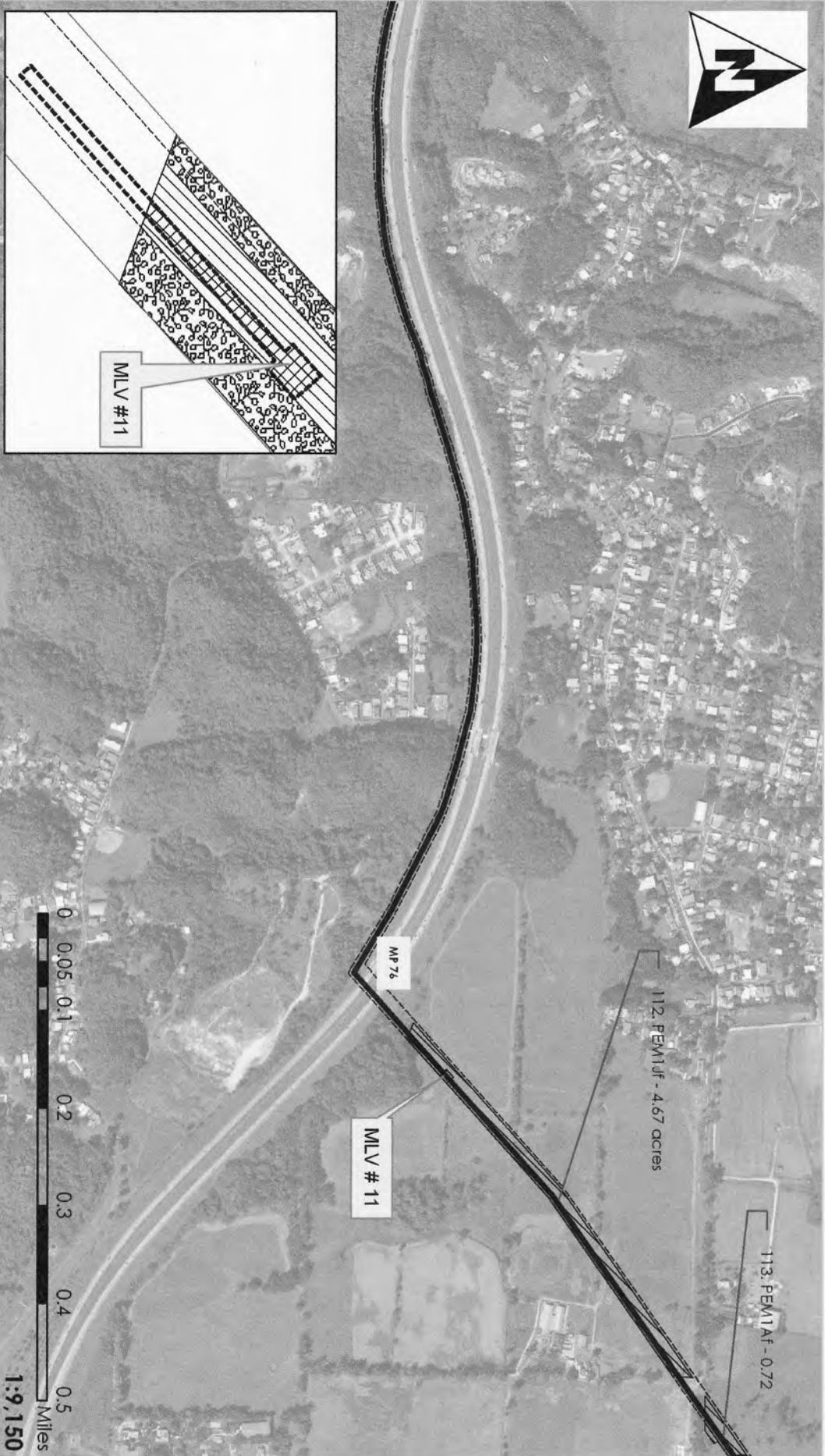
MLV #11



MAINLINE VALVE SITE NO. 11
NTS.

/// = 0.19 AC FILL





Waters of the United States

Impact Maps
Sheet # 70

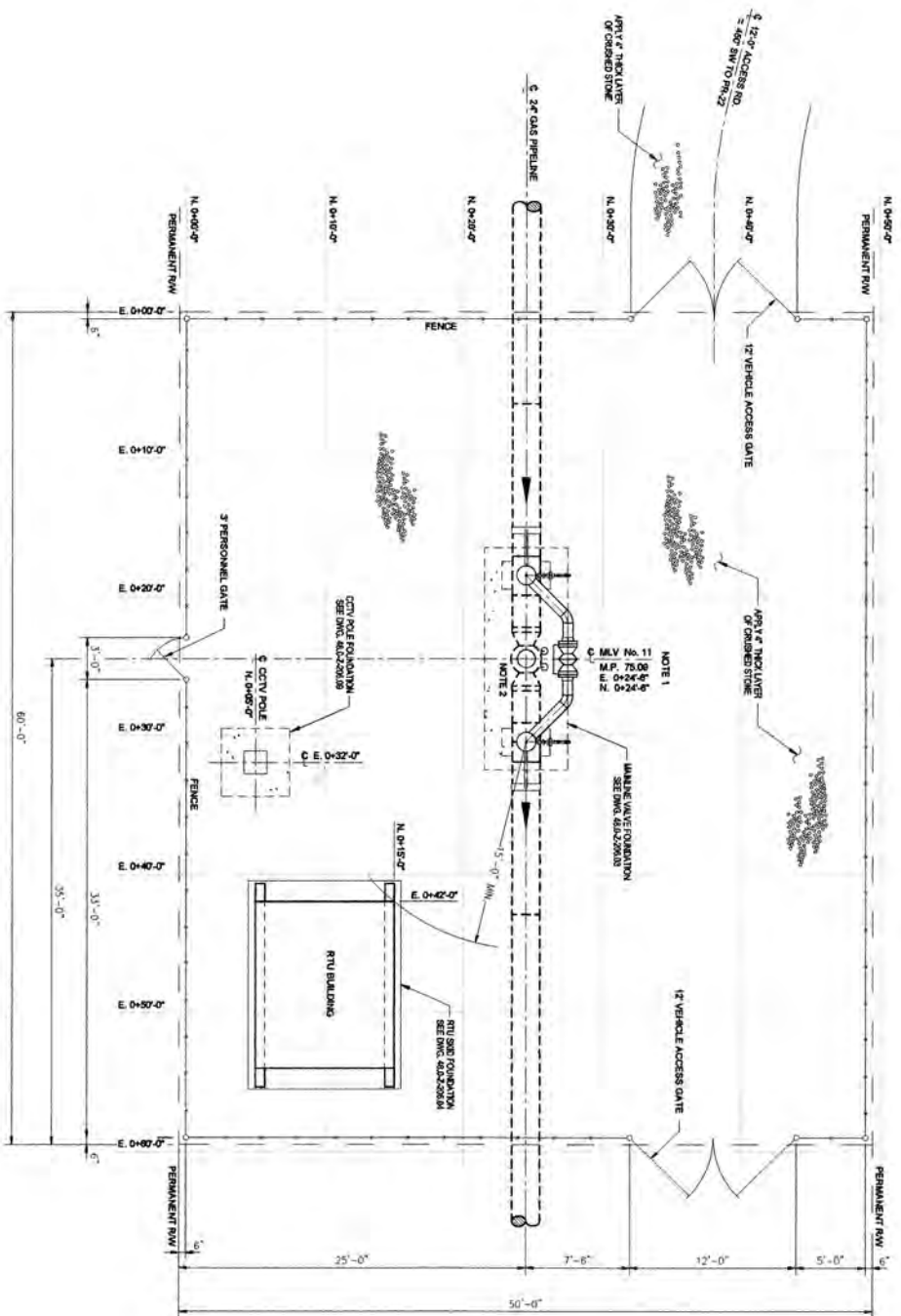
Via Verde Project
(SAI-2010-02881 (IP-EWG))

Legend

	24" Pipe		Wetland No Fill		
	Workspace		Wetland Impacts	Acres	
	HDD Crossing		Temporary Fill	5.19	
	Open Cut Crossing		Permanent Fill	0.19	
	Drill Crossing		Total	5.39	



Source: 2011 Coll Rivera Environmental Via Verde JD
1957-82 USGS Topographic Maps of the Puerto Rico Quadrangles
1987 USFWS National Wetland Inventory Maps
2010 Puerto Rico Planning Board Aerial Photographs



PLAN
SCALE: 1/8" = 1'-0"

NOTES:
 1) MAINLINE VALVE LOCATION AND HEIGHT REVERENCES ARE APPROXIMATE ACTUAL
 LOCATION AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48.0-Z-306.3A.

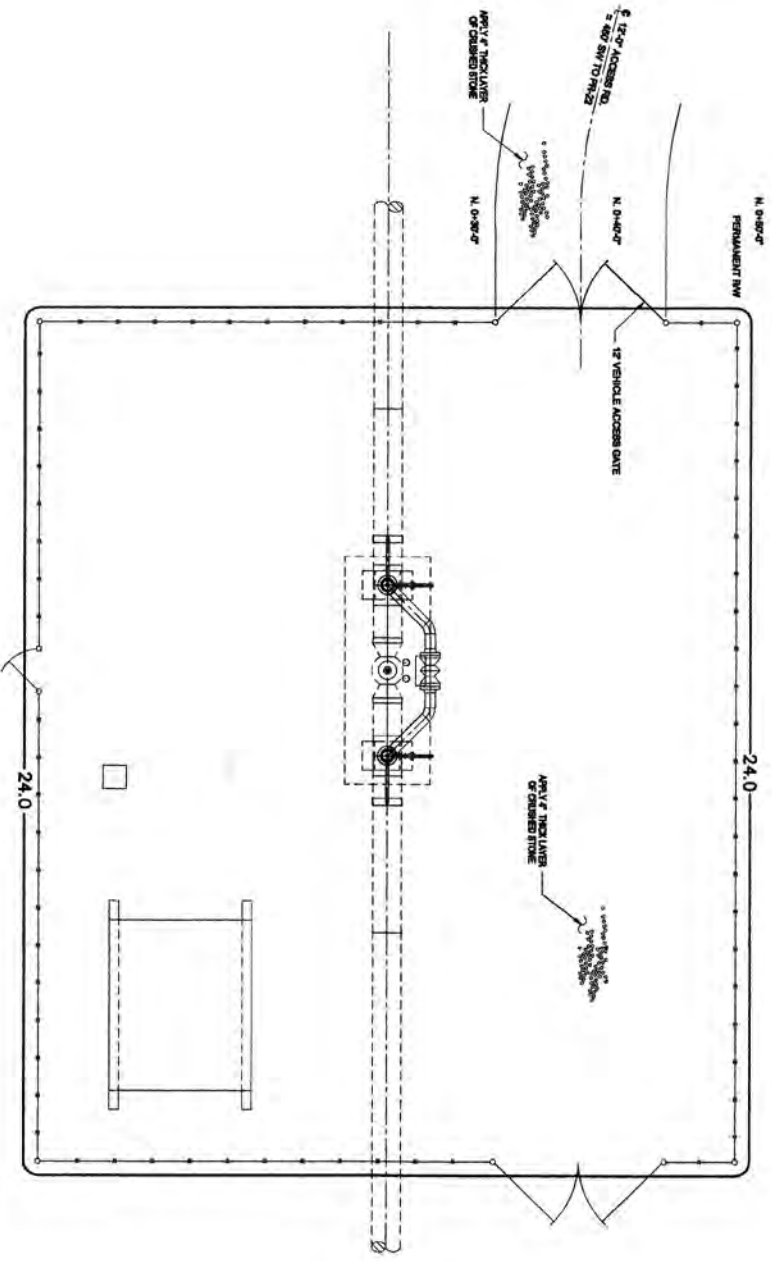
REVISION NO.	DATE	BY	CHKD.	DESCRIPTION
1	1/25/10	ML	ML	ISSUED FOR BIDDING

REVISION NO.	DATE	BY	CHKD.	DESCRIPTION
1	1/25/10	ML	ML	ISSUED FOR BIDDING

VIA VERDE
PIPELINE PROJECT

PIPING PLAN
MAINLINE VALVE SITE NO. 11
M.P. 75.09
DORNAO, PUERTO RICO

DRAWING NO. **48.0-Z-306.40** SHEET NO. **1 OF 1**



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

ELEVATION EQUATION NOTE:
CONTOUR ELEVATION = 24.0
M.S.L. = 100% OF PLANT ELEVATION
LEGEND:
—— 24.0 — NEW CONTOUR
—— 24.0 — EXISTING CONTOUR

NOTES:
1) MAINLINE VALVE LOCATION AND SUPPORT FOUNDATION ARE APPROXIMATE ACTUAL
LOCATION AS SHOWN ON ALIGNMENT SHEETS

NO.	DATE	DESCRIPTION	BY	CHKD.
1	15/02/19	ISSUED FOR BID	ST	ST

DATE	17/02/19
BY	ST
CHKD.	ST
SCALE	AS SHOWN

VIA VERDE
PIPELINE PROJECT
SITE GRADING PLAN
MAINLINE VALVE SITE NO.11
M.P. 78.69
DORADO, PUERTO RICO

NO.	DATE	BY	CHKD.
1	15/02/19	ST	ST

SEE DWG. NO. 48.0-7-321.83
MATCH LINE STA. 4057+04

MLV #12

MP
77

PR 165

2)

3)

650 FT

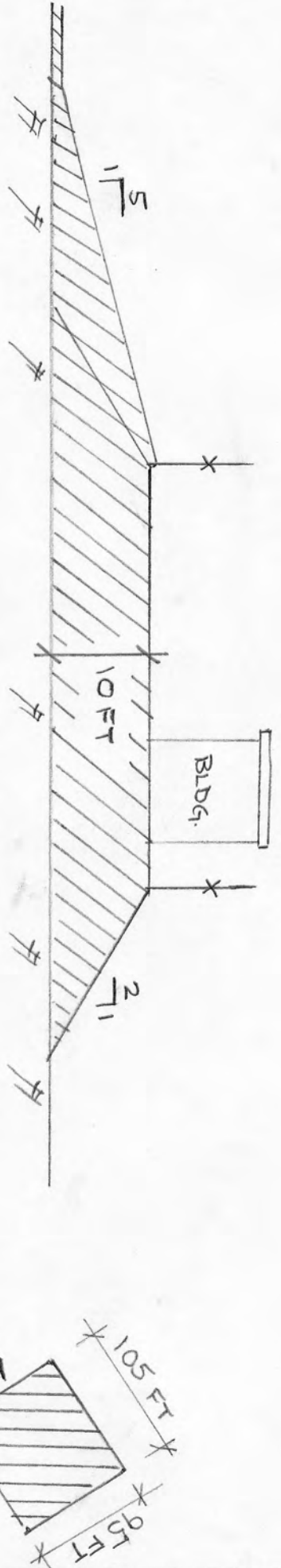
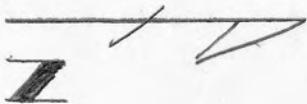
12 FT

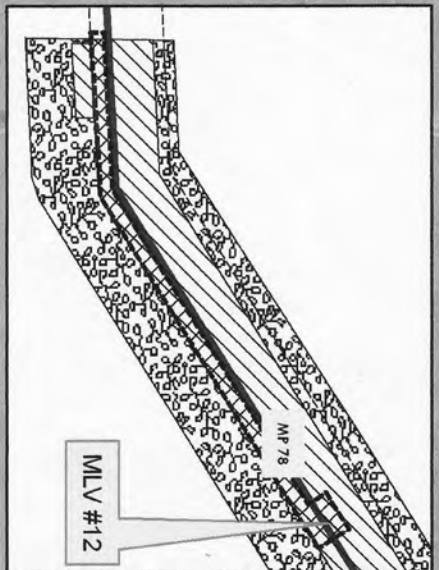
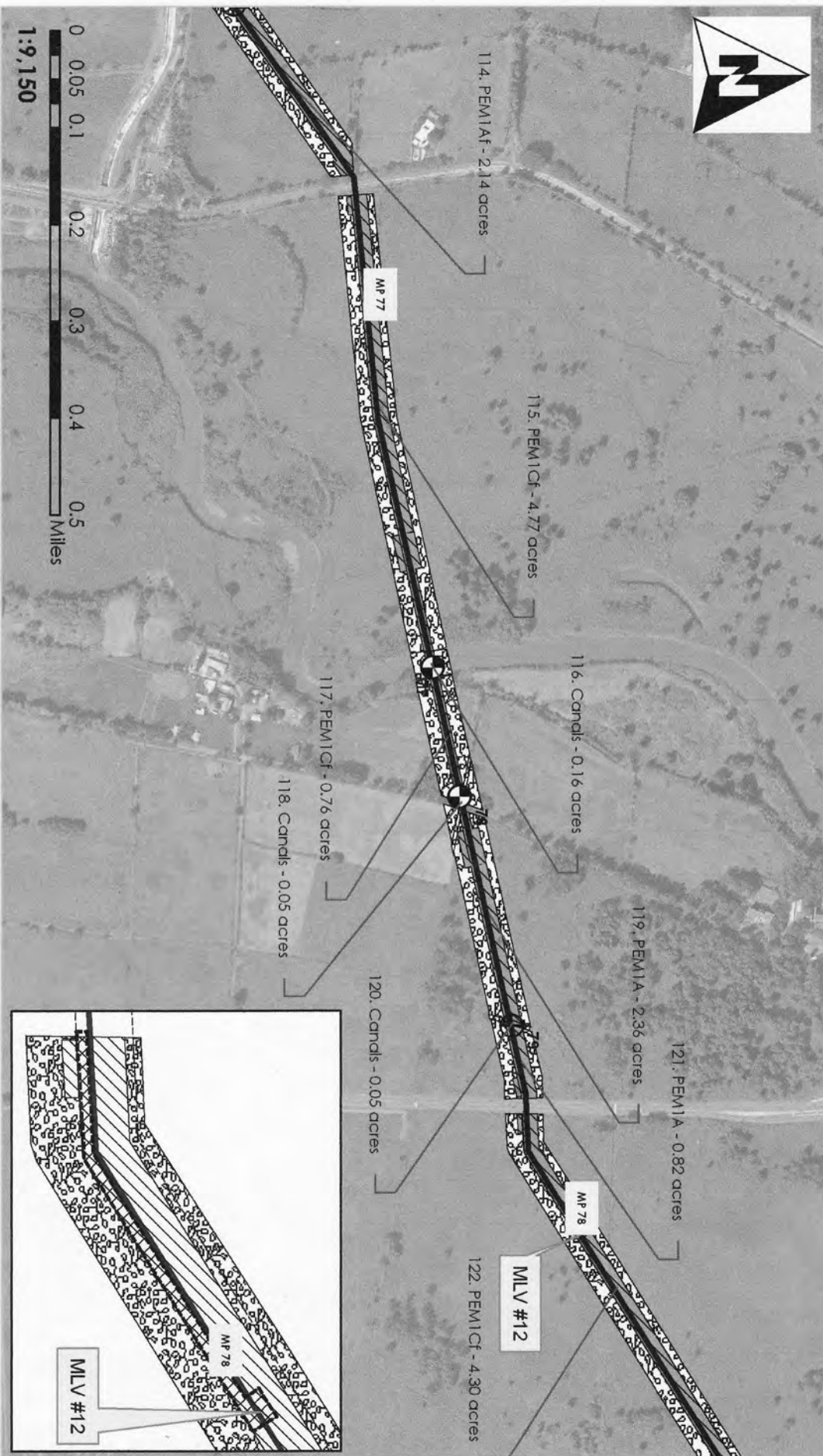
3)

MAINLINE VALVE SITE NO. 12

/// = 0.38 AC FILL

N.T.S.





Waters of the United States

**Impact Maps
Sheet # 71**

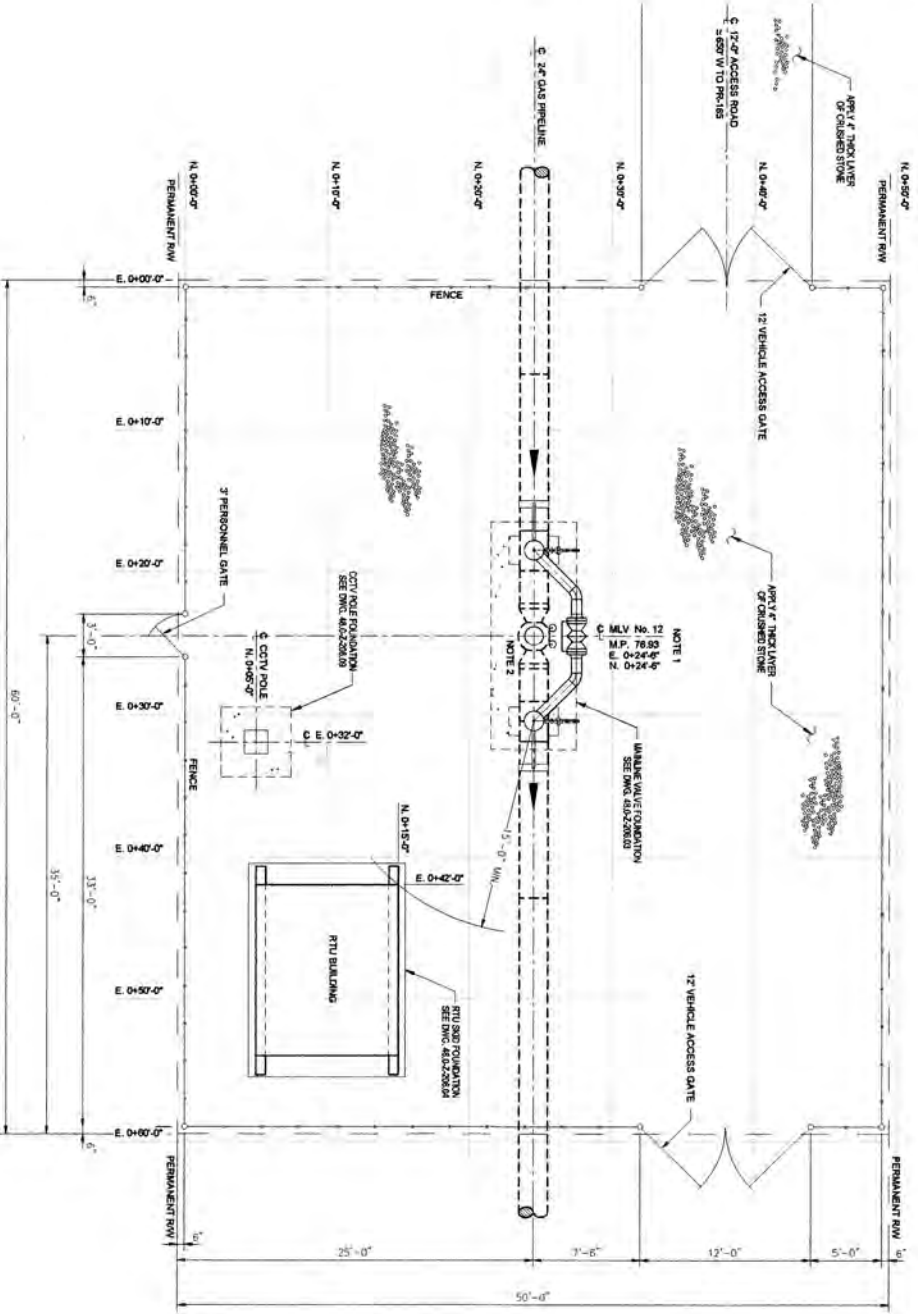
Via Verde Project
(SAI-2010-02881(IP-EWG))

Legend

	24" Pipe		Wetland No Fill
	Workspace		Wetland Impacts
	HDD Crossing		Temporary Fill
	Open Cut Crossing		Permanent Fill
	Drill Crossing		Total
			15.45



Source: 2011 Call River Environmental Via Verde ID
193-5-52 18GS Topographic Maps of the Puerto Rico Quadrangles
1987 18FWS National Wetland Inventory Maps
2010 Puerto Rico Planning Board Aerial Photographs

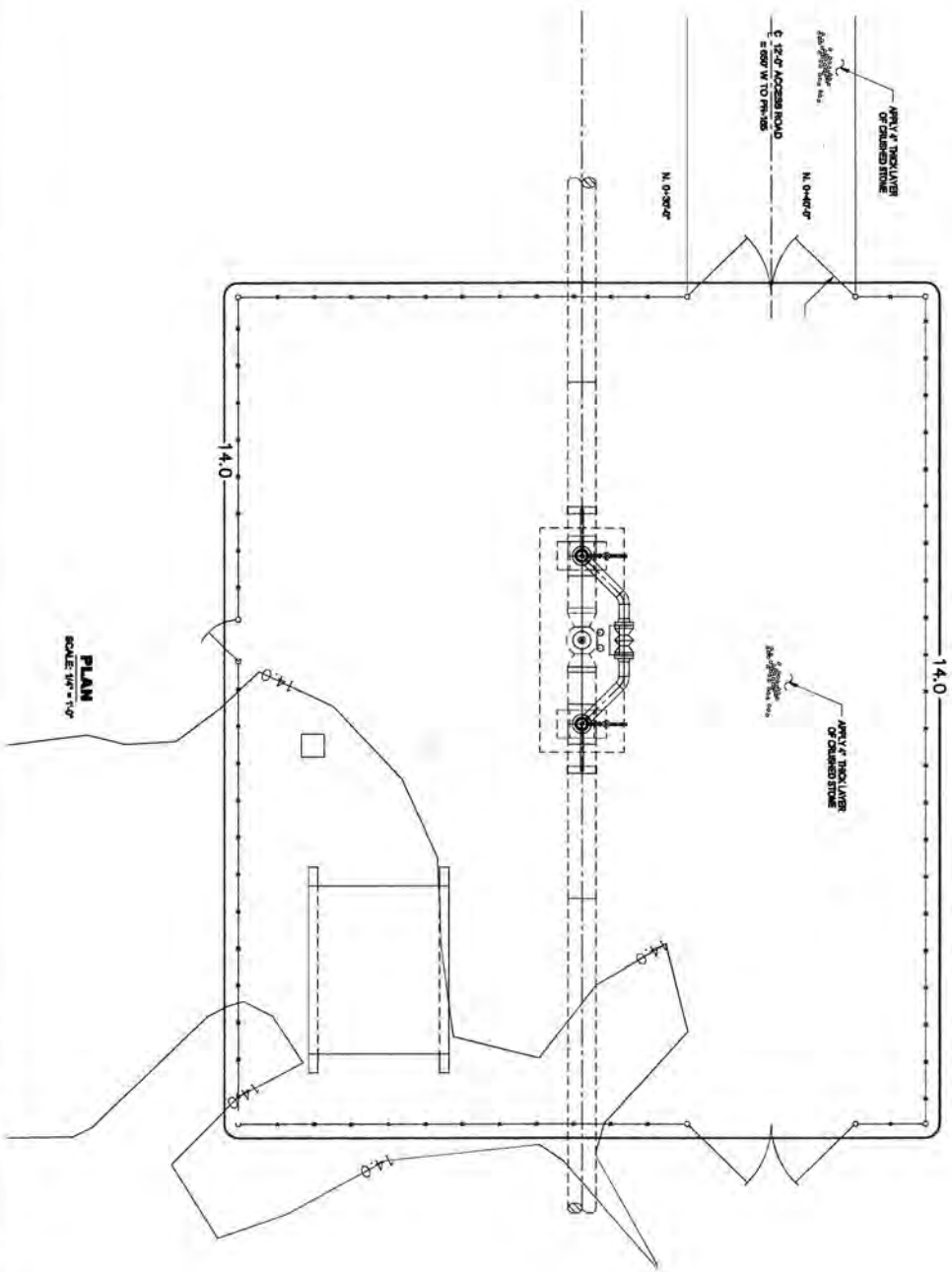


PLAN
SCALE 1/8" = 1'-0"

NOTES:
 1) MANLINE VALVE LOCATION AND UTILITY READINGS ARE APPROXIMATE ACTUAL LOCATION AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MANLINE VALVE DETAILS SEE DRAWING NO. 48.0-2-306.30.

NO.	DATE	BY	CHKD.	DESCRIPTION
1	1/22/15	MA	MA	ISSUED FOR BIDDING
2	1/22/15	MA	MA	REVISED DRAWING

VIA VERDE PIPELINE PROJECT			
PIPING FLOOR PLAN MANLINE VALVE SITE NO. 12 M.P. 76.83 DORADO, PUERTO RICO			
DRAWN BY	DATE	CHECKED BY	DATE
MA	11/20/15	MA	11/20/15
SCALE	1 OF 1		
DRAWING NO.	48.0-2-306.41		



ELEVATION EQUALIZATION NOTE:
 CONTOUR ELEVATION 44.0'
 M.S.L. = 100' PLANT ELEVATION

LEGEND:

— 44.0 — NEW CONTOUR

— 44.0 — EXISTING CONTOUR

NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND WELDEPORT REMAINING ARE APPROXIMATE. ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.

48.0-2-200.20	3RD EDITION PLANNING PLAN	REVISION																	
48.0-2-200.07	STANDARD FIELD SKETCH	GENERAL NOTES																	
48.0-2-200.01	GENERAL NOTES																		
48.0-2-200.02																			
48.0-2-200.03																			
48.0-2-200.04																			
48.0-2-200.05																			
48.0-2-200.06																			
48.0-2-200.07																			
48.0-2-200.08																			
48.0-2-200.09																			
48.0-2-200.10																			
48.0-2-200.11																			
48.0-2-200.12																			
48.0-2-200.13																			
48.0-2-200.14																			
48.0-2-200.15																			
48.0-2-200.16																			
48.0-2-200.17																			
48.0-2-200.18																			
48.0-2-200.19																			
48.0-2-200.20																			

DATE:	11-08-11
CONV. BY:	AC
PROJ. ENGINEER:	DATE:
CLIENT:	DATE:
SCALE:	AS SHOWN

PROJECT NO.	48.0-2-200.20
PROJECT NAME	VIA VERDE PIPELINE PROJECT
CLIENT	DONADO, PUERTO RICO
DATE	11-08-11
SCALE	AS SHOWN

PROPOSED PALO
SECO LATERAL
SEE DWG. 48.0-Z-322.41

TOA_BAJA, PUERTO RICO
CATAÑO, PUERTO RICO

HDD PULL
BACK AREA

HDD EXIT POINT

MLV #14

MLV #13

SEE MATCH LINE
DWG. NO. 48.0-Z-321.97
STA. 4451+61
STA. 4451+97

AVE. MARGINAL RIO HONDO

RIO BAYAMON

TO MARGINAL
RIO HONDO

MAINLINE VALVE SITE NOS. 13 & 14

/// = 0.04 AC FILL

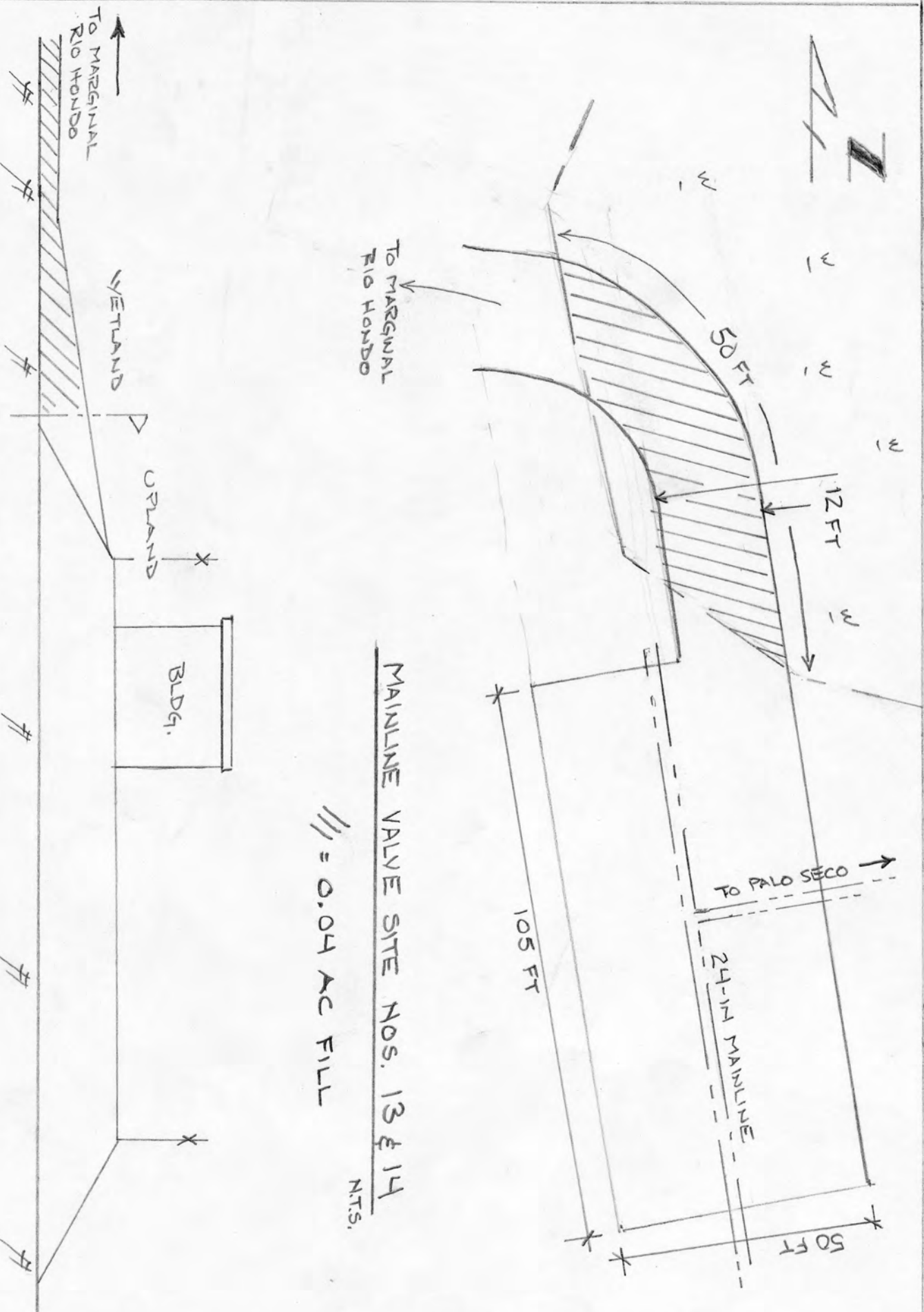
N.T.S.

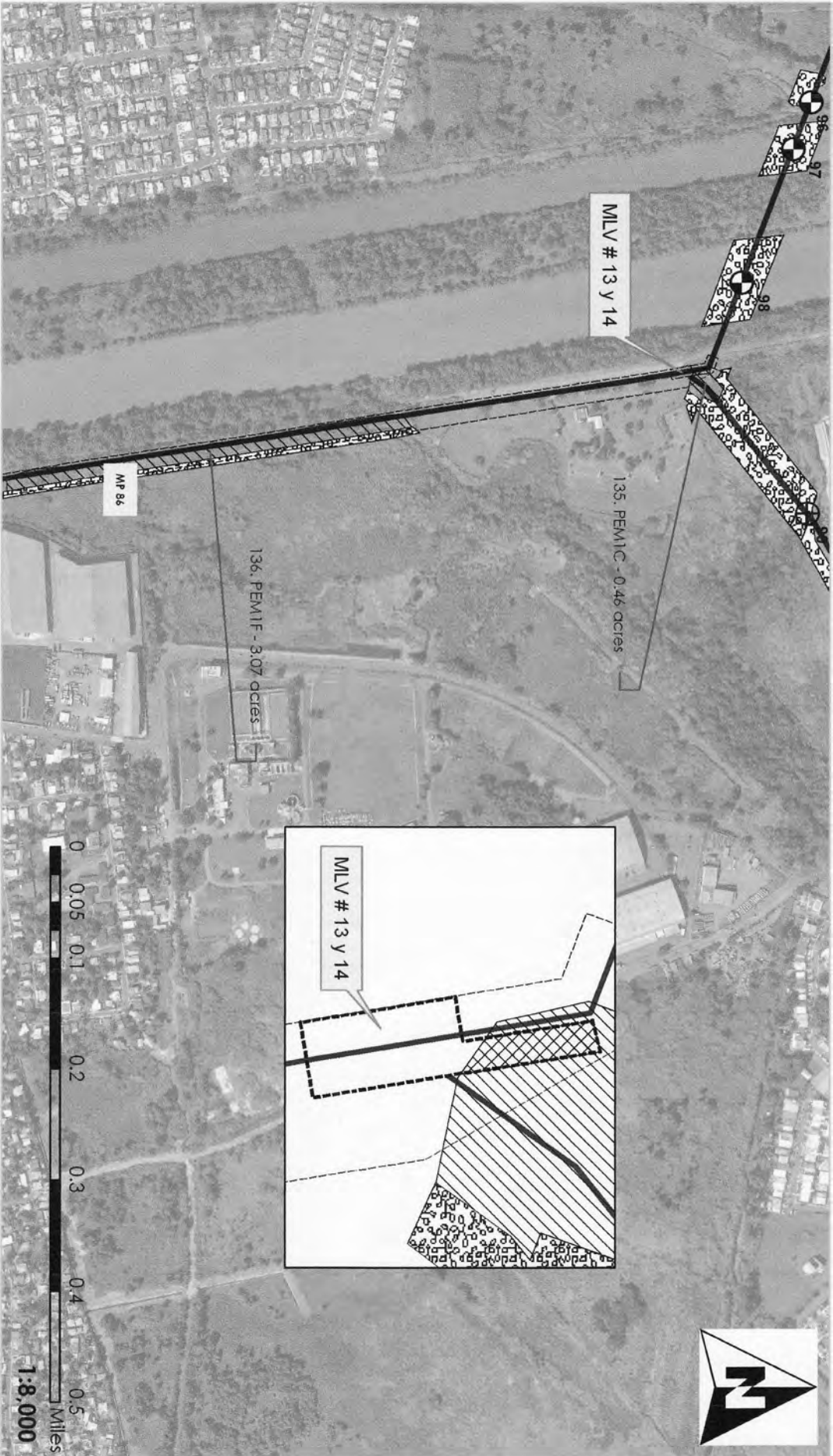
TO MARGINAL
RIO HONDO

WETLAND

UPLAND

BLDG.





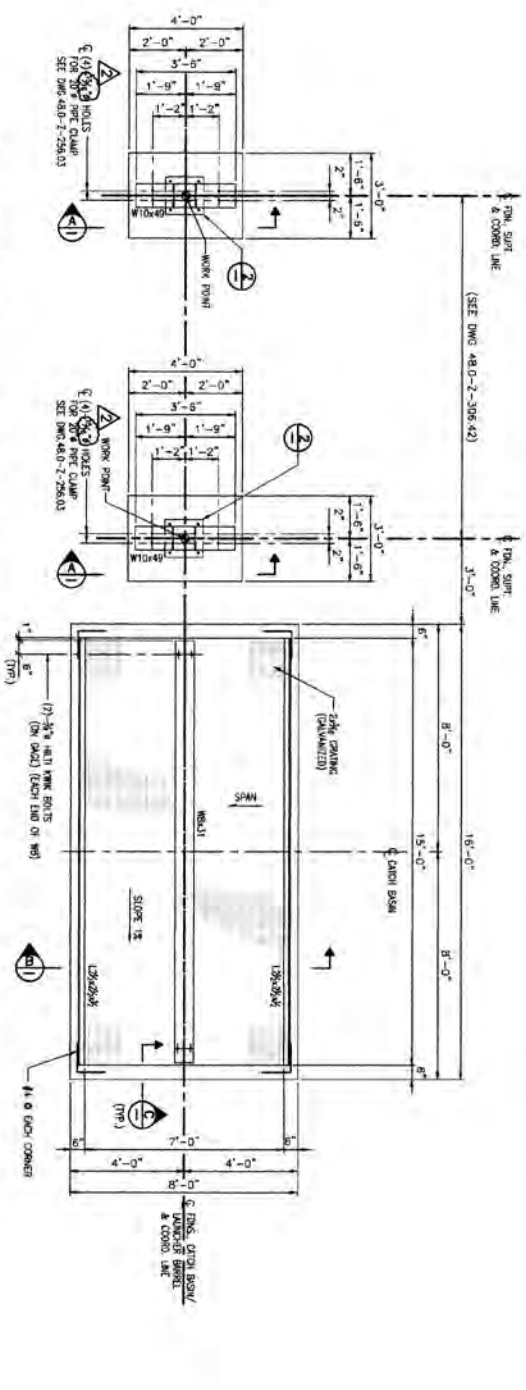
Waters of the United States
Impact Maps
Sheet # 77
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

Source: 2011 Call Rivera Environmental Via Verde, JD
 1967-82 1:50,000 Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs

Legend

- 24" Pipe
 - - - Workspace
 - ⊕ HDD Crossing
 - ⊕ Open Cut Crossing
 - ⊙ Drill Crossing
 - ▨ Wetland No Fill
 - ▧ Wetland Impacts
 - ▩ Temporary Fill
 - ▩ Permanent Fill
 - ▩ Total
- | | |
|-------|------|
| Acres | 3.50 |
| Acres | 0.04 |
| Acres | 3.54 |

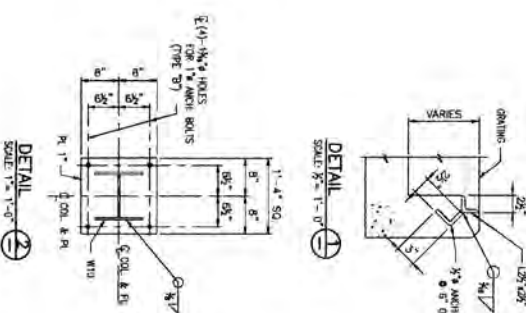
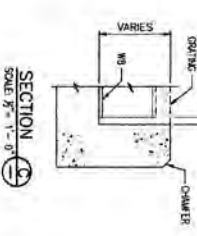
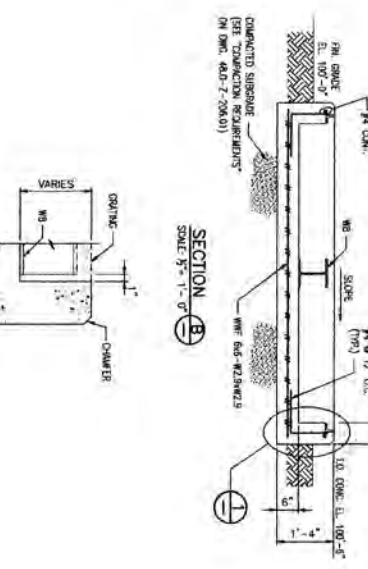
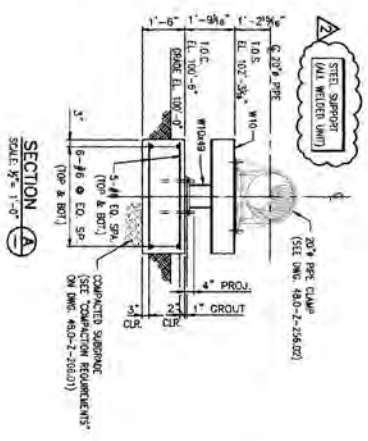




PLAN PS-20-2 FOUNDATION
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 1/4" = 1'-0"

PLAN PS-20-1 FOUNDATION
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 1/4" = 1'-0"

PLAN-LAUNCHER & CATCH BASIN FOUNDATIONS
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 1/4" = 1'-0"



NOTES:

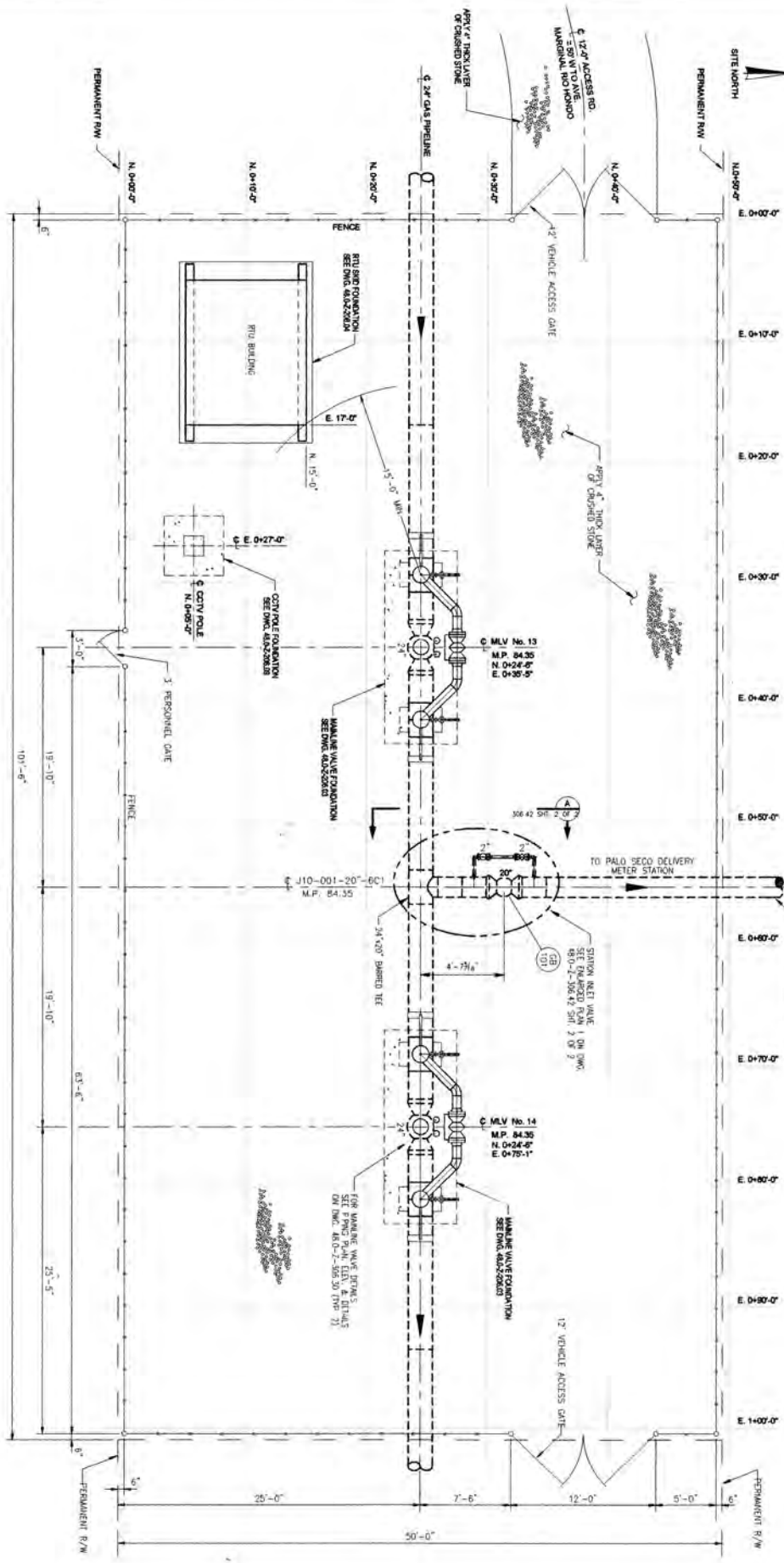
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4

48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4

48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
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48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4
48.0-2-206.4	48.0-2-206.4	48.0-2-206.4	48.0-2-206.4

VIA VERDE
PIPELINE PROJECT
LAUNCHER & CATCH BASIN
MANHOLE VALVE SITE NO. 13 & 14
TEAM TO PALO VERDE METER STATION
CANTANO, RICARDO

DATE	12-20-15
SCALE	1/4" = 1'-0"
PROJECT	48.0-2-206.4
CLIENT	VA
SCALE	1/4" = 1'-0"
DATE	12-21-15
SCALE	1/4" = 1'-0"
DATE	12-21-15
SCALE	1/4" = 1'-0"
DATE	12-21-15
SCALE	1/4" = 1'-0"



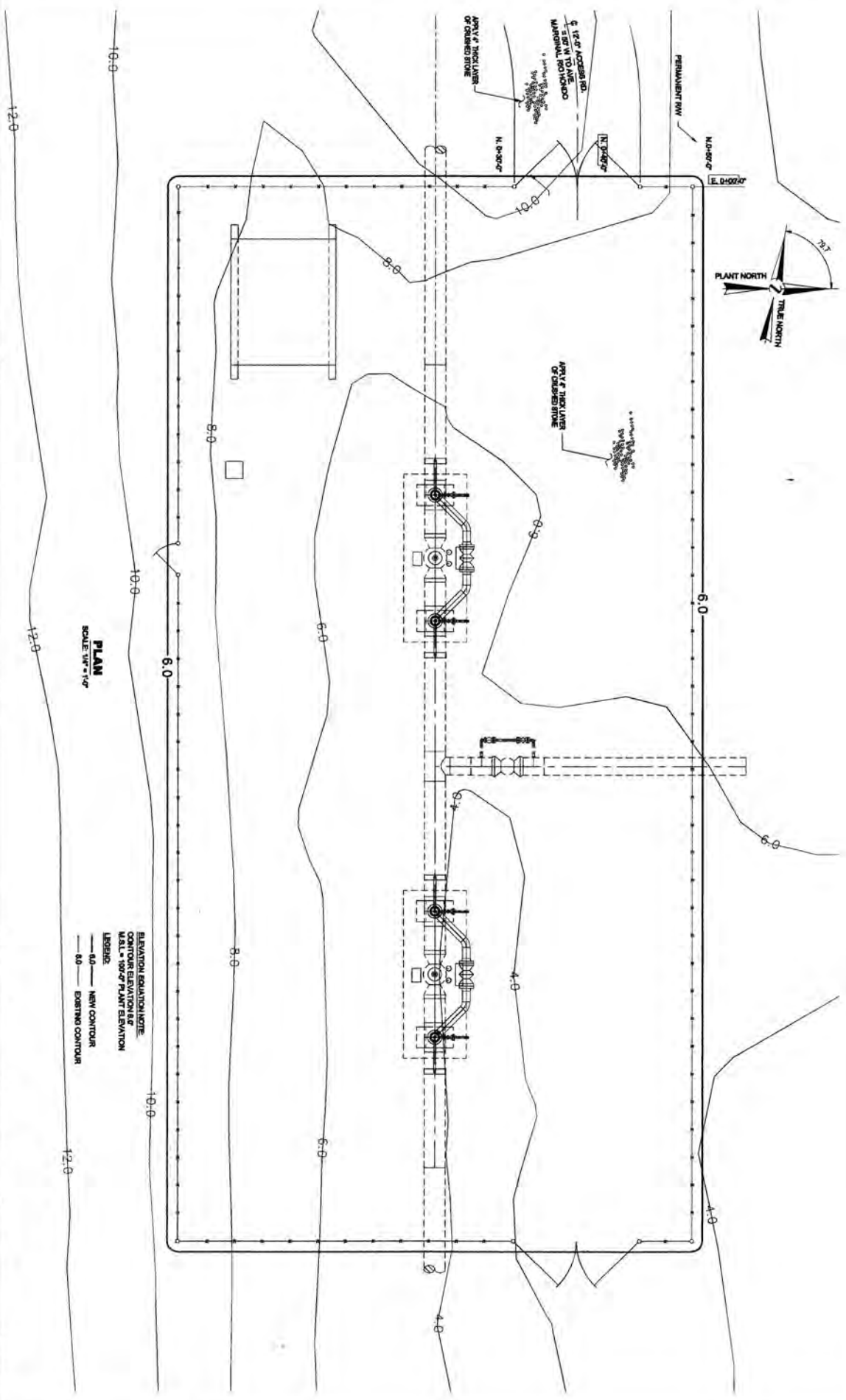
NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND HEIGHTS ARE APPROXIMATE, ACTUAL HEIGHTS TO BE PROVIDED BY MANUFACTURER.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48.0-2-206.30.

DATE	DESCRIPTION	BY	CHKD
48.0-2-206.42 SHEET 2 OF 2	FINAL PLAN AND SECTION - MAINLINE VALVE SITE NO. 13 AND 14		
48.0-2-206.15	BRING & INSTRUMENTATION DRAWING - MAINLINE VALVES 13 AND 14		
48.0-2-206.05	FLOOR PLAN AND ELEVATIONS - RIG BUILDING		
48.0-2-206.10	PIPELINE SYSTEM SCHEMATIC - ELECTRICAL TO SAN JUAN		
48.0-2-206.30	FRINGE PLAN, ELEVATION & DETAILS - VEHICLE ACCESS VALVE		

NO.	REVISION	DATE	BY	CHKD
1	ISSUED FOR BID	11/29/10	TR	JA

AVE
PR

VA VERDE
PIPELINE PROJECT
 PIPING BLOCK PLAN
 MAINLINE VALVE SITE NO. 13 & 14
 TIE-IN TO PALO SECO METER STATION
 AT PALO SECO
 CATALINA / BENTON BICO
 DRAWING NO. 48.0-2-206.42
 SHEET NO. 1 OF 2



PLAN
 SCALE 1/4" = 1'-0"

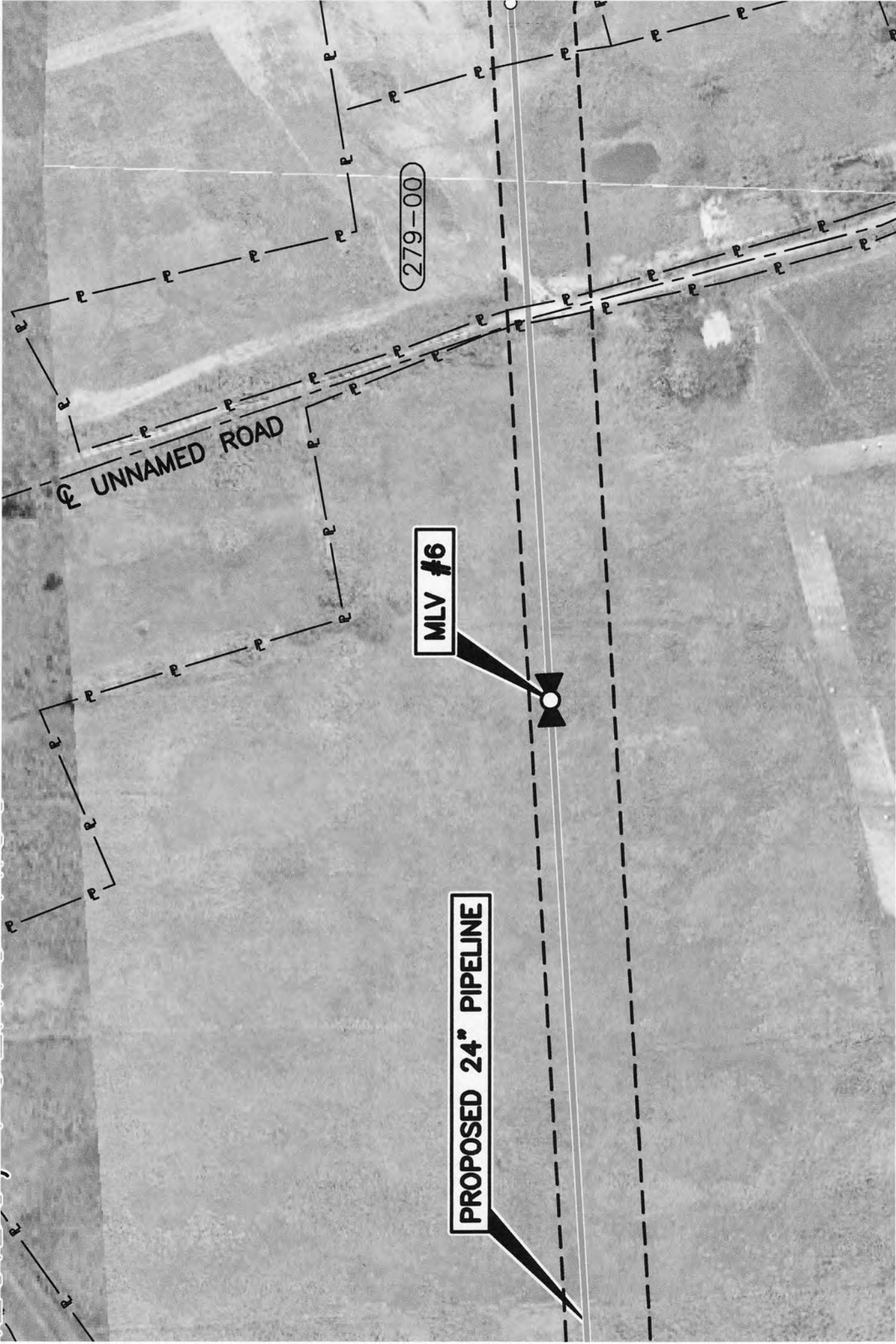
NOTES

1. 12'-0" ACCESS RD. 4'-12" W TO AVE. MATERIAL STOCKPIL
2. 12'-0" ACCESS RD. 4'-12" W TO AVE. MATERIAL STOCKPIL
3. 12'-0" ACCESS RD. 4'-12" W TO AVE. MATERIAL STOCKPIL

NO.	DATE	DESCRIPTION
1	11-23-16	AS BUILT

NO.	DATE	DESCRIPTION
1	11-23-16	AS BUILT

VIA VERDE
 PIPELINE PROJECT
 SITE GRADING PLAN
 MAINLINE VALVE SITE NO. 18 & 14
 TIE-IN TO PALO VERDE METER STATION
 CATAMNO, ALBERTO RICO
 DRAW NO. 48-D-200-21

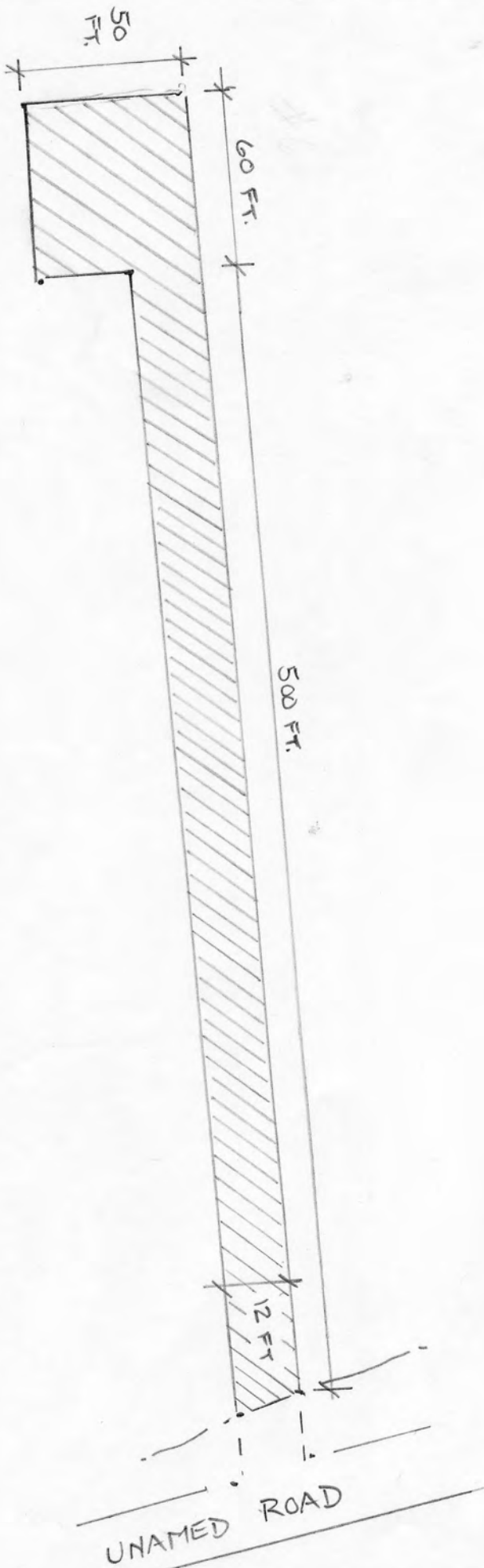


279-00

UNNAMED ROAD

MLV #6

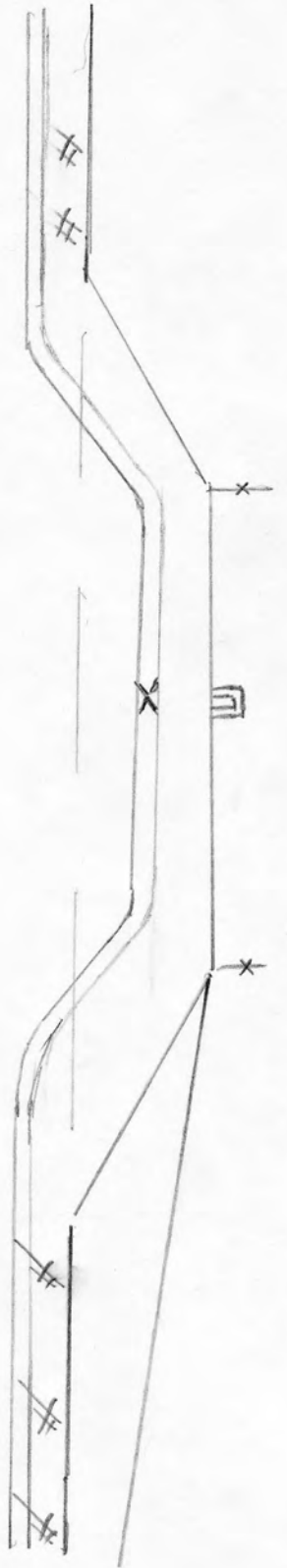
PROPOSED 24" PIPELINE

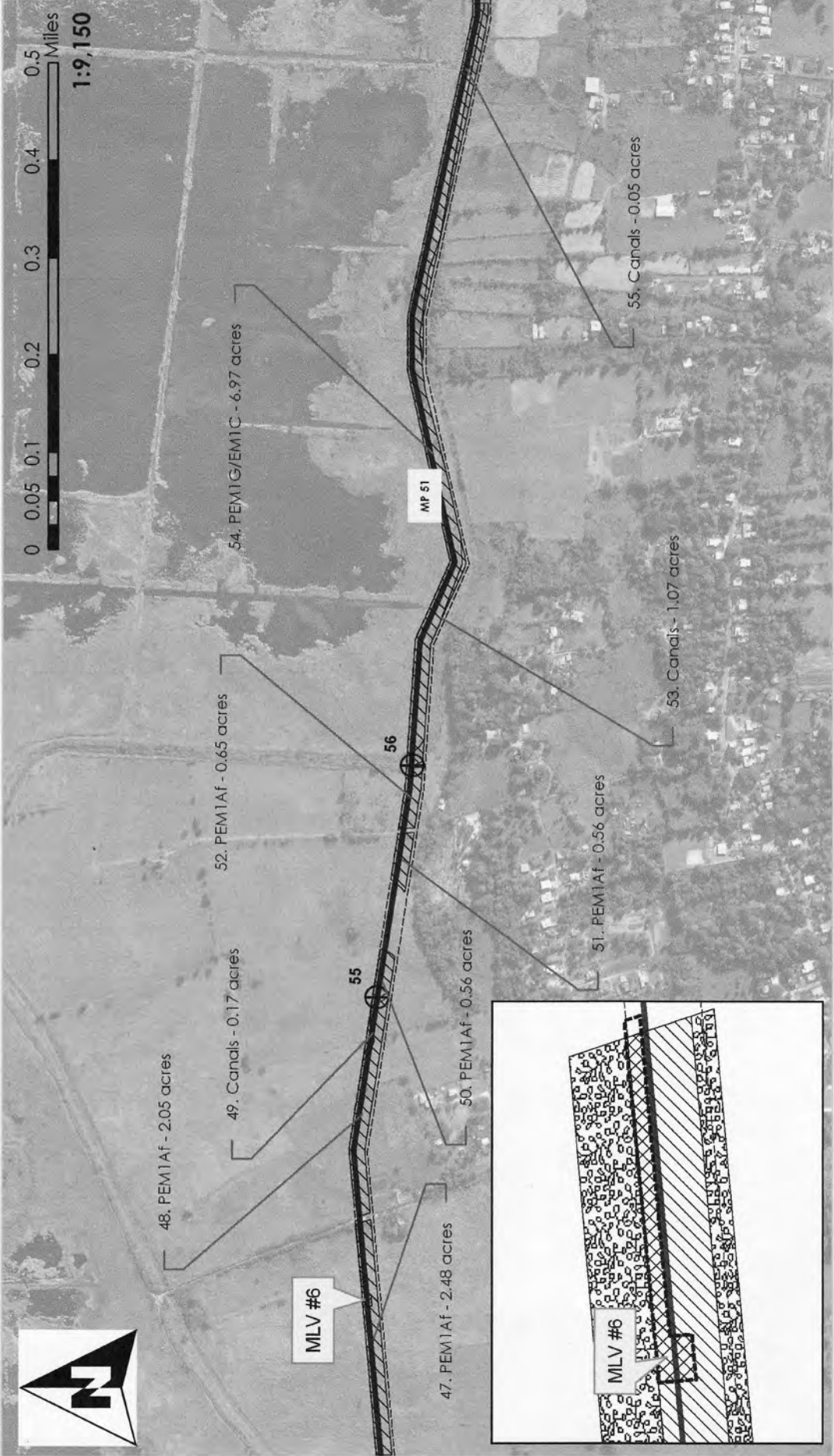


MAINLINE VALVE SITE NO. 6

NTS

/// = 0.26 AC FILL





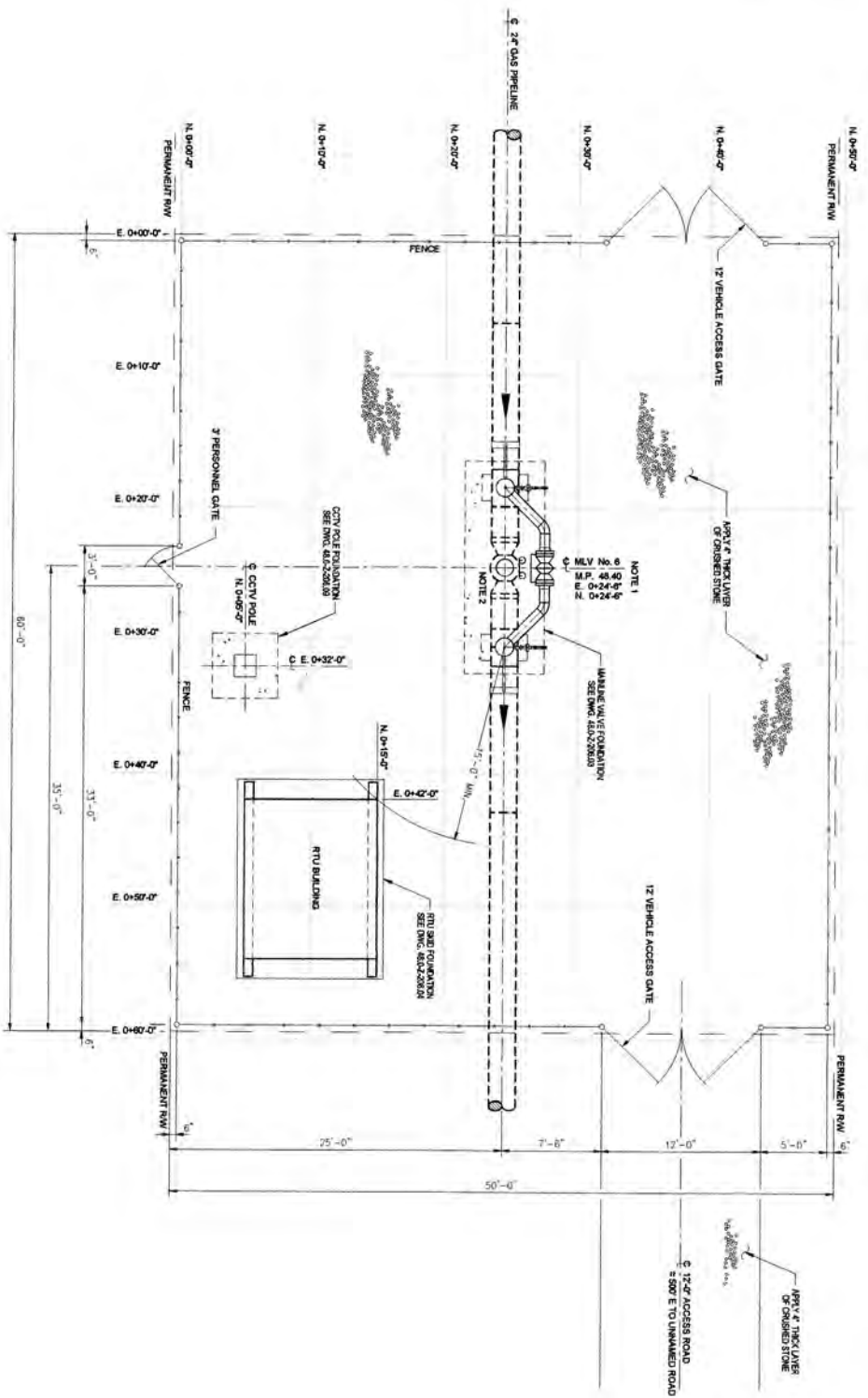
Legend

	24" Pipe		Wetland No Fill
	Workspace		Wetland Impacts
	HDD Crossing		Temporary Fill
	Open Cut Crossing		Permanent Fill
	Drill Crossing		Total

	Acres
Temporary Fill	14.30
Permanent Fill	0.26
Total	14.56

Waters of the United States
Impact Maps
Sheet # 52
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

Source: 2011 Coll Rivera Environmental Via Verde ID
 1987-52 USGS Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs



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

NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND RELIEF/T RELOADING ARE APPROXIMATE, ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48.0-Z-306.30.

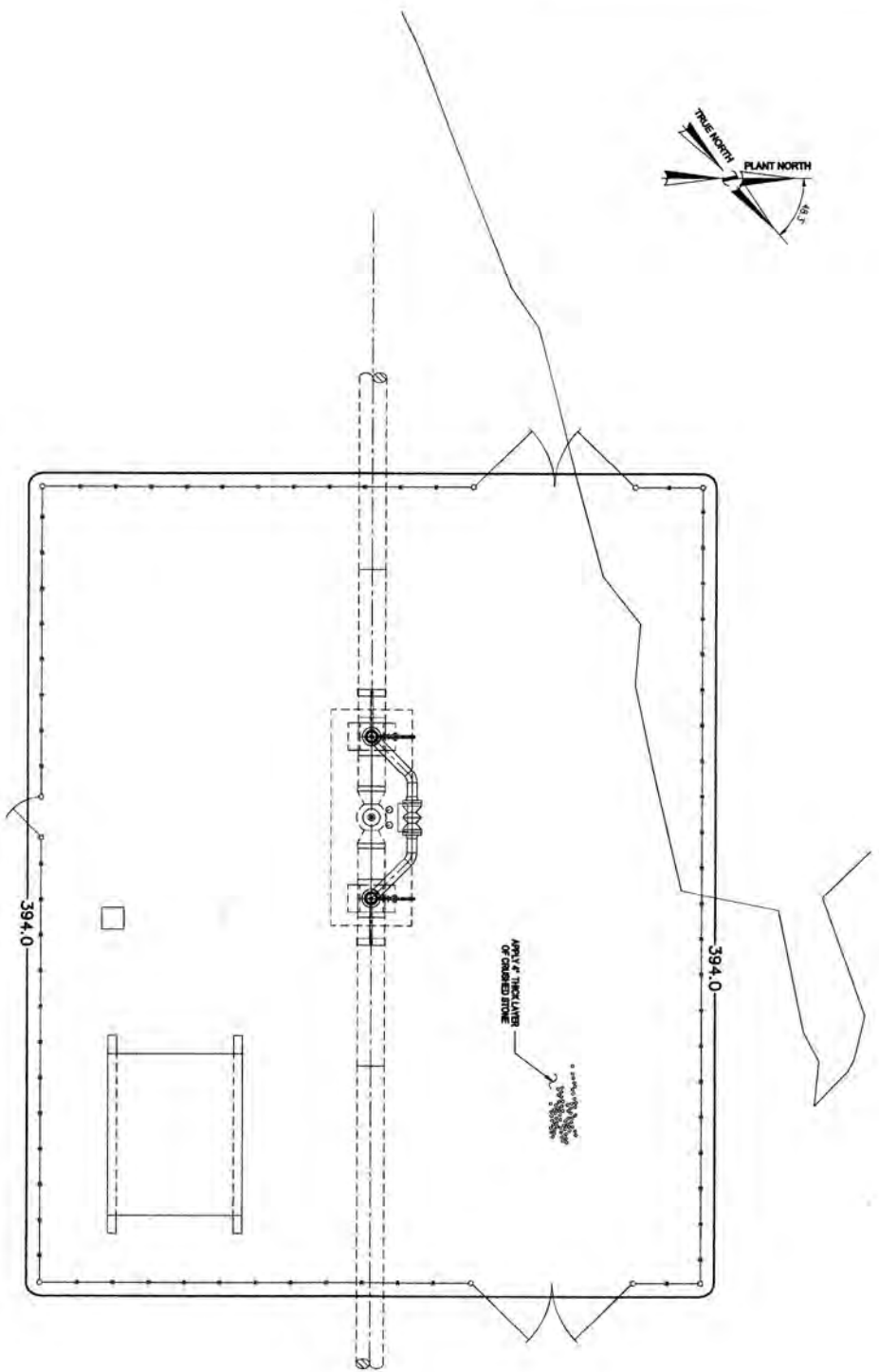
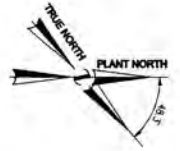
DRAWING NO.	REVISIONS	NO.	DESCRIPTION	DATE	BY	CHECKED	APP.
48.0-Z-306.30		1	ISSUED FOR BID	11/20/10	ML	ML	

--	--

VIA VERDE
 PIPELINE PROJECT
 PIPING PLOT PLAN
 MAINLINE VALVE SITE NO.5
 M.P. 48.40
 ARECIBO, PUERTO RICO

DATE: 11/20/10
 DRAWN BY: ML
 CHECKED BY: ML
 SCALE: AS SHOWN

SHEET NO. 1 OF 1



PLAN
SCALE 1/4" = 1'-0"

ELEVATION EDITION NOTE:
CONTOUR ELEVATION 394.0'
M.S.L. = 100' PLANT ELEVATION

LEGEND:
—— 394.0 — NEW CONTOUR
—— 394.0 — EXISTING CONTOUR

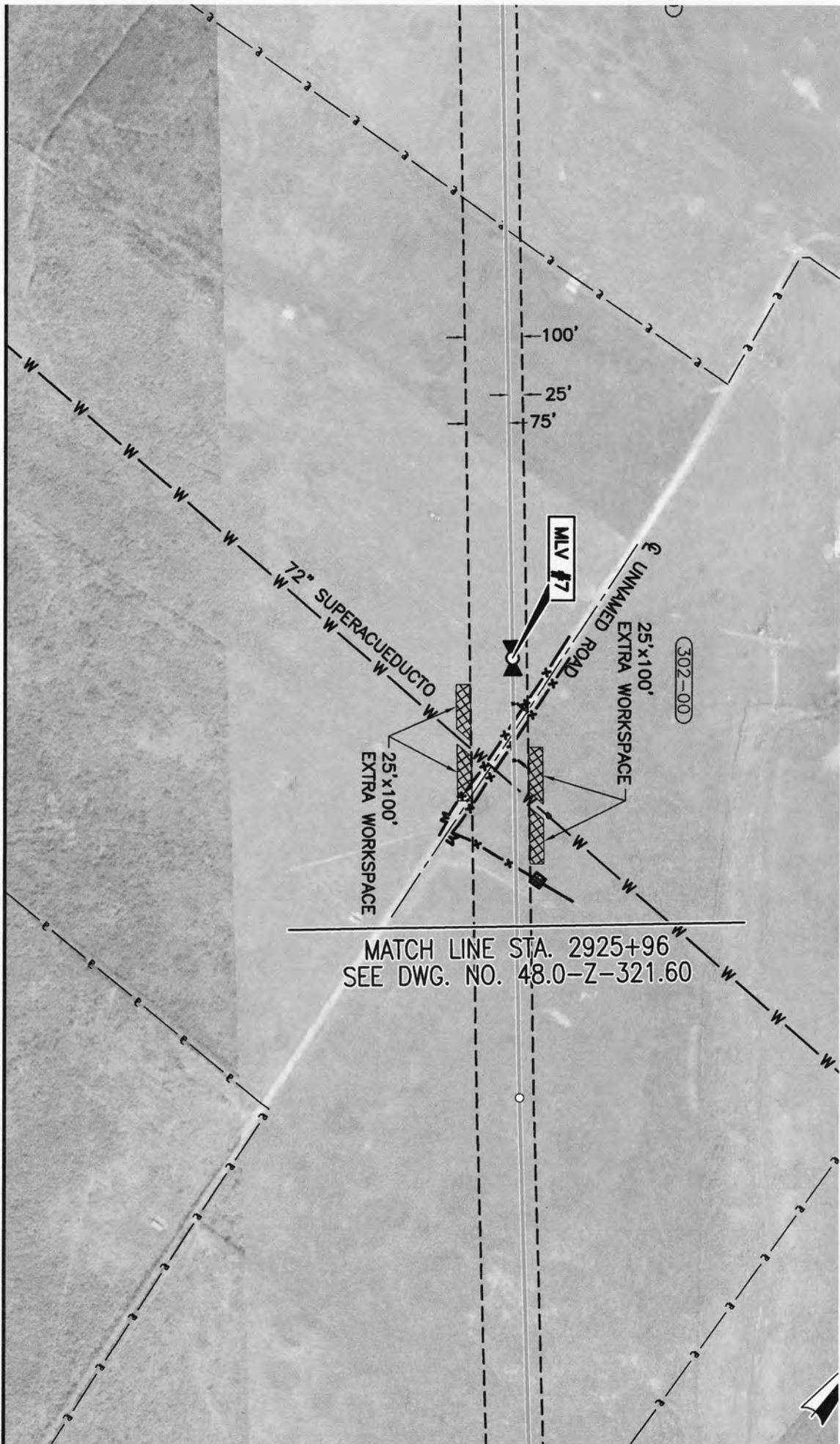
NOTES:
1) MAINLINE BLOCK VALVE LOCATION AND MILEPOST BEHAVIOR ARE APPROXIMATE ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.

REVISION NO.	DATE	BY	DESCRIPTION
1	10/20/16	MB	ISSUED FOR BID

VIA VERDE
PIPELINE PROJECT
SITE GRADING PLAN
MANLINE VALVE SITE NO. 8
M.P. 80.16
MANAAT, PUERTO RICO

DATE	11-14-10
DATE	11-17-10
DATE	-
DATE	-
DATE	-
DATE	-

DRAWN BY: 48.0-2-208.16
SHEET NO. 1 OF 1



MATCH LINE STA. 2925+96
 SEE DWG. NO. 48.0-Z-321.60

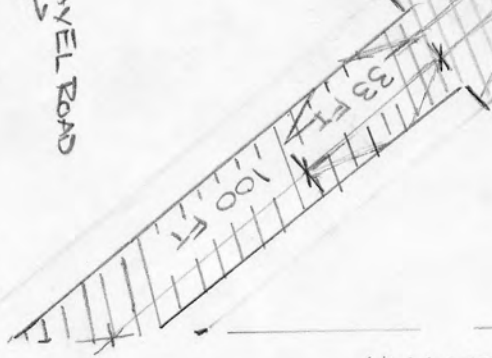
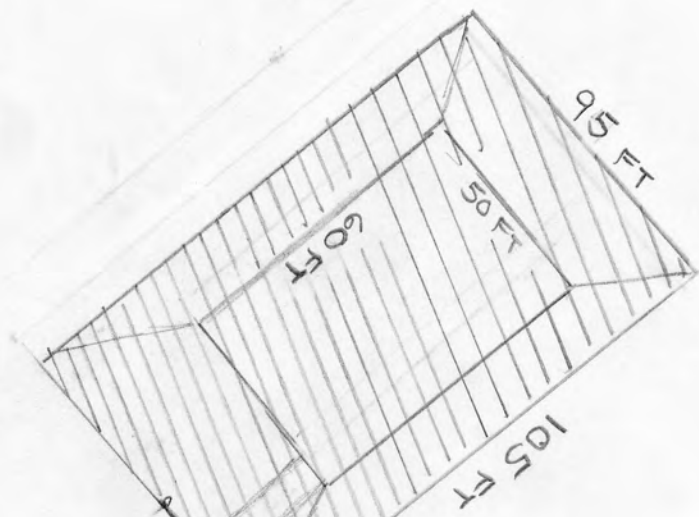
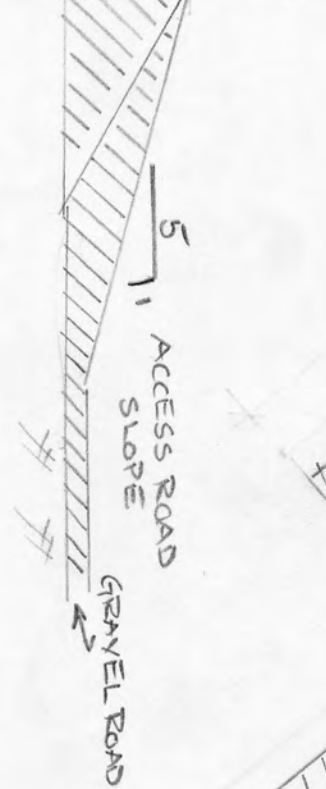
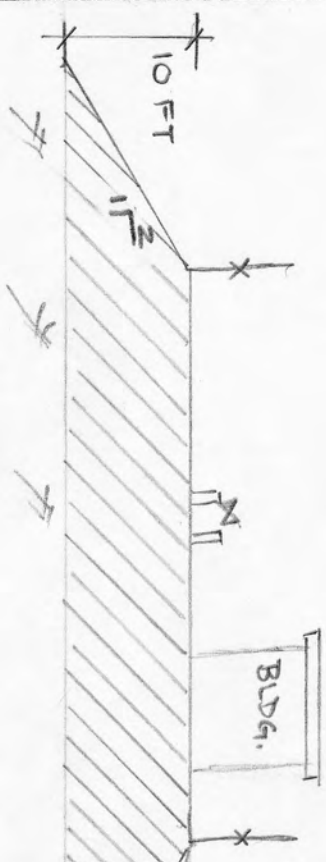
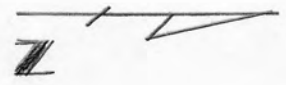
MLV #7	3' COVER	72" SUPERACQUEDUCTO	3' COVER
48.0-Z-306.36		48.0-Z-324.11	

200
180

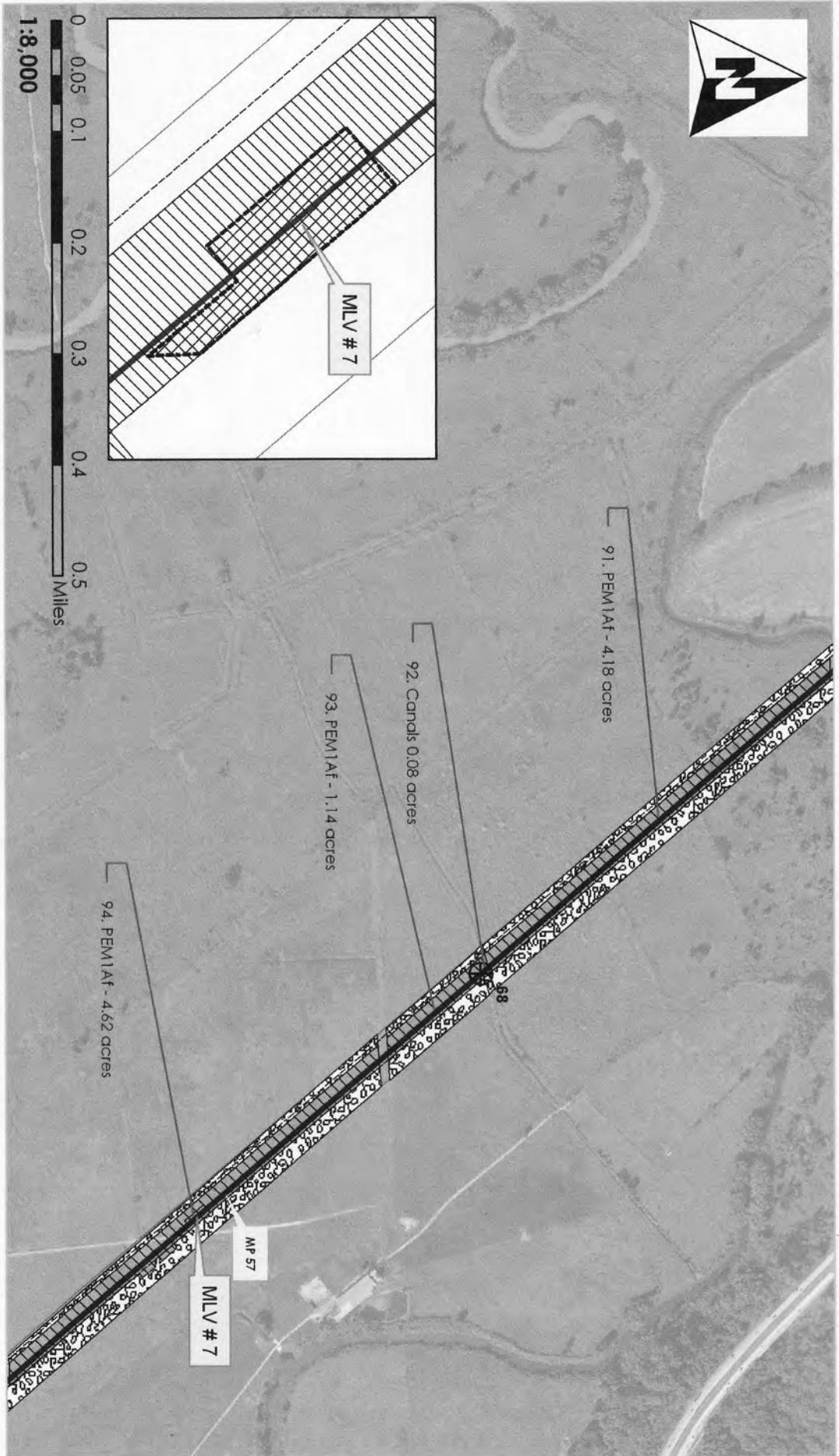
MAIN LINE VALVE SITE NO. 7

NTS.

/// = 0.16 AC FILL



UNAMED ROAD



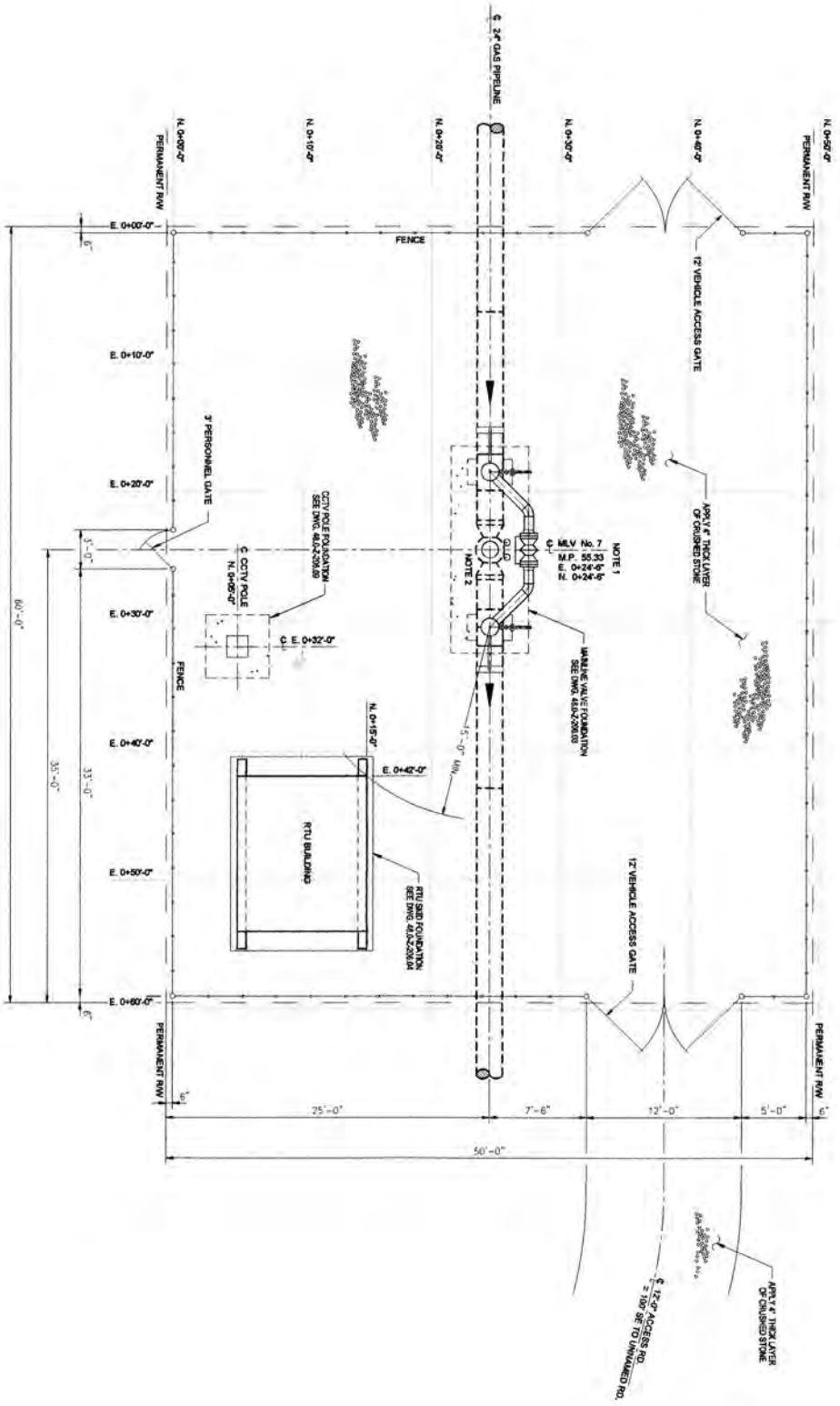
Waters of the United States
Impact Maps
Sheet # 57
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

Source: 2011, Coll Rivera Environmental Via Verde, JD
 1987-82, USGS, Topographic Maps of the Puerto Rico Quadrangles
 1987, USFWS, National Wetland Inventory, Maps
 2010, Puerto Rico Planning Board, Aerial Photographs

Legend

	2.4" Pipe		Wetland No Fill
	Workspace		Temporary Fill
	HDD Crossing		Permanent Fill
	Open Cut Crossing		Total
	Drill Crossing		
			Acres
			9.86
			0.16
			10.02





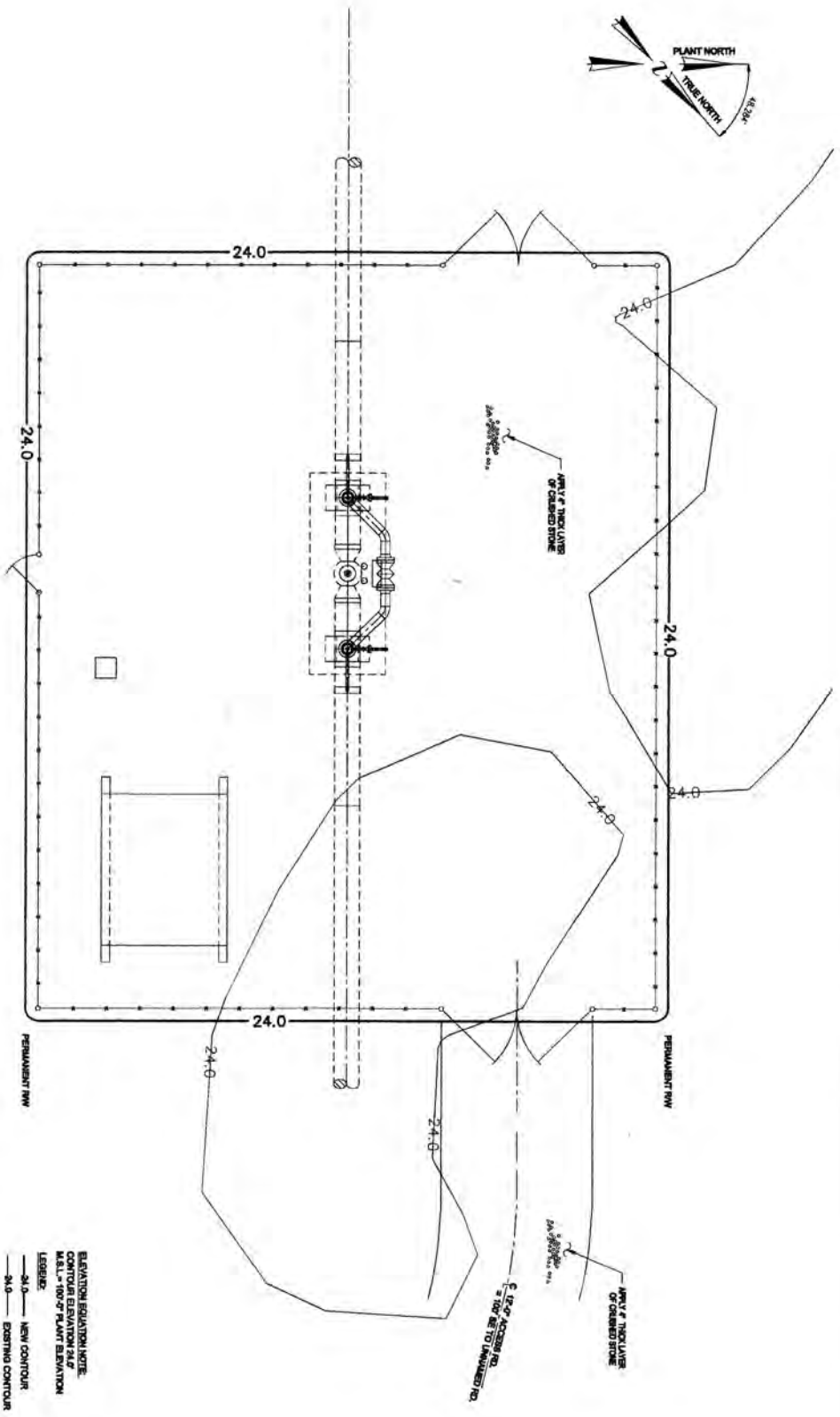
PLAN
SCALE: 1/4" = 1'-0"

NOTES:
 1) ALL MAJOR VALVE LOCATIONS AND HANGOFF LOCATIONS ARE APPROXIMATE ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MANHOLE VALVE DETAILS SEE DRAWING NO. 48-0-2-306-30.

68-0-2-201-25	ADJUNCT SHEET	NO.	1	DATE	11/25/15	BY	MM
48-0-2-306-11	PIPE & REINFORCEMENT SCHEDULE - MANHOLE VALVE (TYPICAL)	NO.		DATE		BY	
48-0-2-306-10	PIPE MAN AND ELEVATIONS - 8" BY 8" MANHOLE	NO.		DATE		BY	
48-0-2-306-10	PIPE SCHEDULE SYSTEMS - COLLECTION TO SAN MAN	NO.		DATE		BY	
48-0-2-306-10	PIPE MAN, ELEVATION & SIZES - TYPICAL MANHOLE VALVE	NO.		DATE		BY	

VIA VERDE
PIPELINE PROJECT
PIPING PLAN PLAN
MANHOLE VALVE SITE NO. 7
M.P. 55.33
MANATI, PUERTO RICO

CHG NO.	48-0-2-306-36	SHEET NO.	1 OF 1
---------	---------------	-----------	--------



PLAN
SCALE 1/8" = 1'-0"

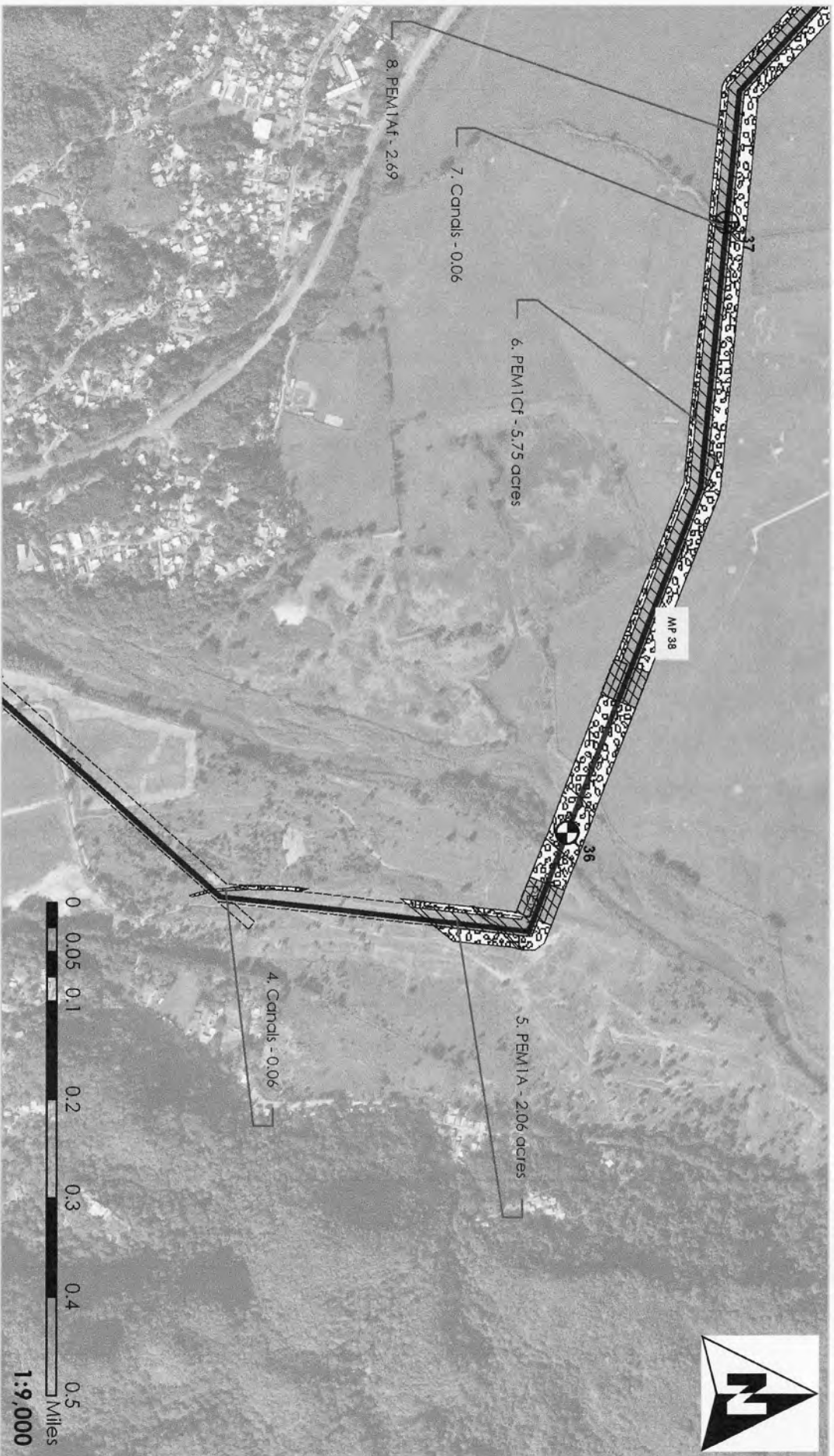
ELEVATION ELEVATION NOTE
 CONTIGUOUS ELEVATION 24.0'
 MLL - 10.0' PLANT ELEVATION
 LEGENDE
 — 24.0 — NEW CONTOUR
 — 24.0 — EXISTING CONTOUR

NOTES:
 1) DIMENSIONS AND VALUES LOCATIONS AND HEIGHTS REPORTED ARE APPROXIMATE ACTUAL.
 2) LOCATIONS ARE SHOWN ON ADJACENT SHEETS.

NO.	DESCRIPTION	DATE	BY	CHK.	REV.
1	ISSUED FOR BID	11-25-10	AC	IK	

REV.	DATE	BY	CHK.
01	11-14-10	AC	IK
02	11-17-10	AC	IK

VIA VERDE
 PIPELINE PROJECT
 SITE GRADING PLAN
 MANHOLE VALVE SITE NO. 7
 M.P. 06.23
 MANHOLE PIQUERO BRQO.
 SHEET NO. 1
 OF 1



Waters of the United States
Impact Maps
Sheet # 41
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

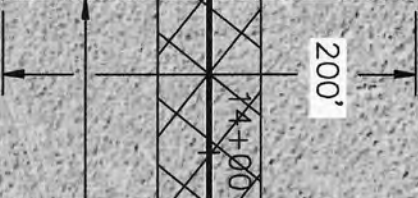
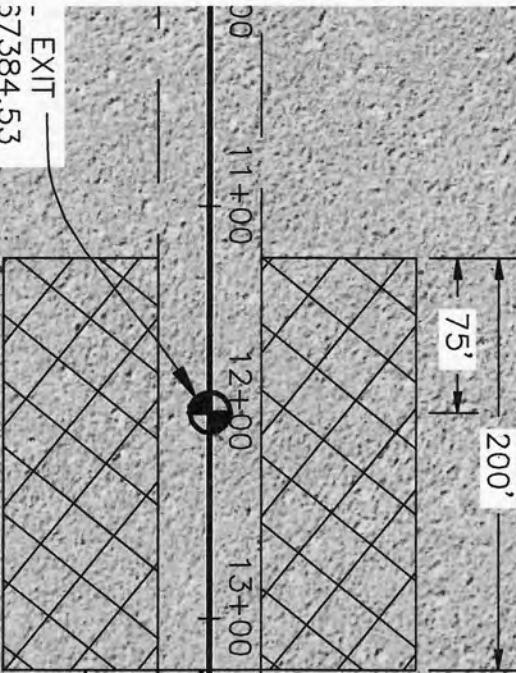
Source: 2011 Call Rivera Environmental Via Verde JD
 1947-52 USGS Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs

Legend

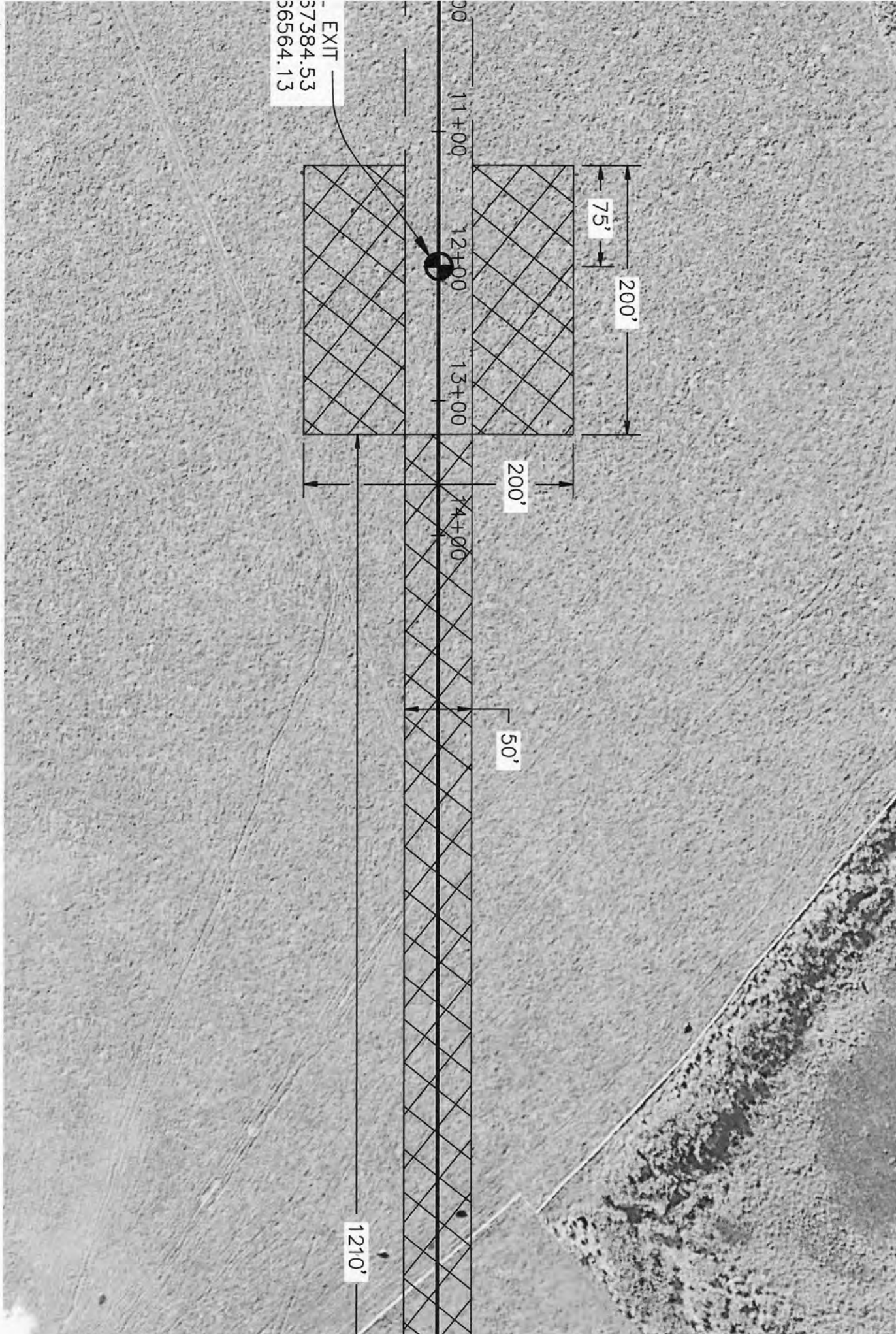
	24" Pipe		Wetland No Fill
	Workspace		Temporary Fill
	HDD Crossing		Remnant Fill
	Open Cut Crossing		Total
	Drill Crossing		
			Acres
			10.62
			0.00
			10.62



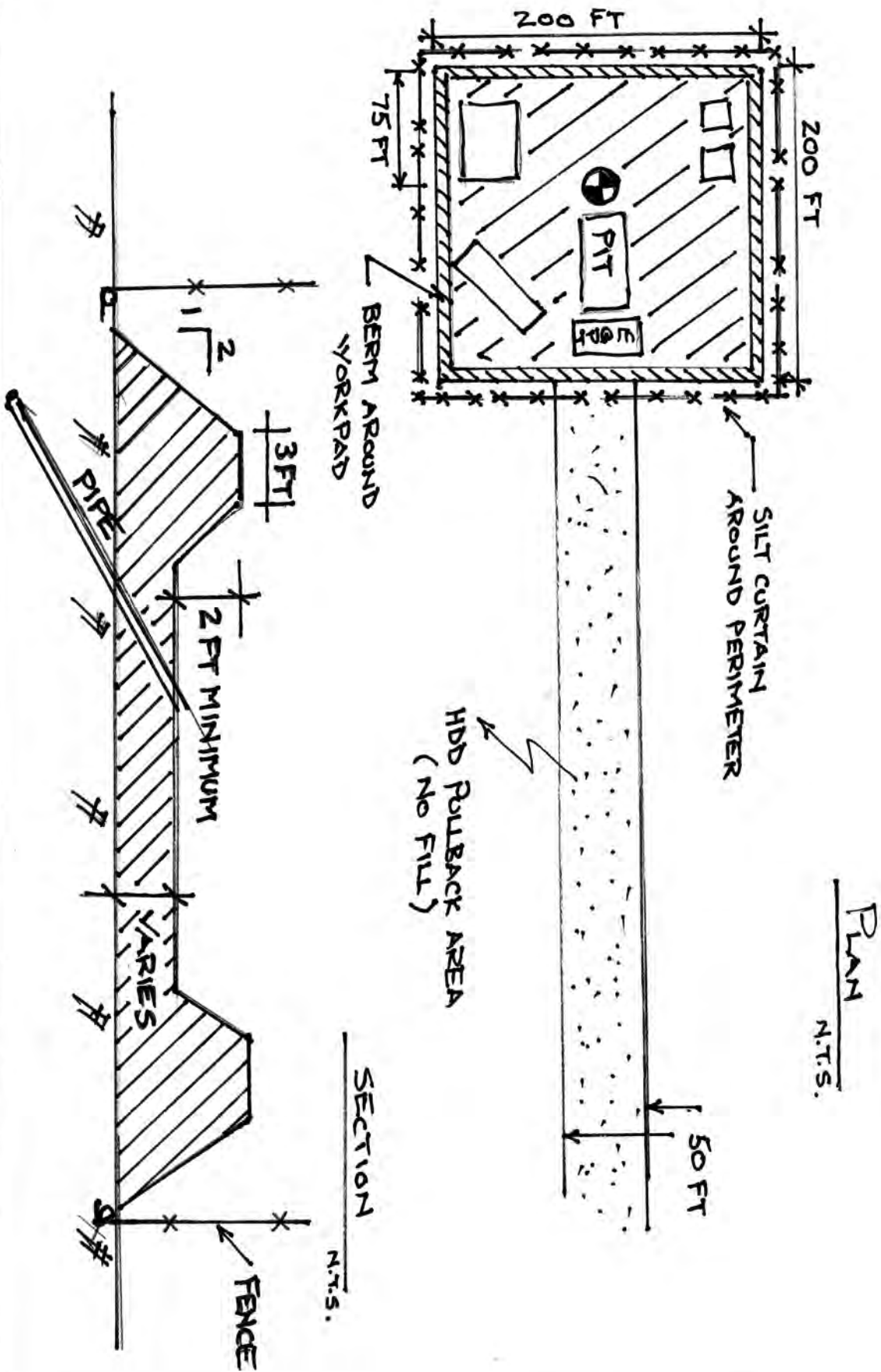
- EXIT -
57384.53
56564.13



1210'



HORIZONTAL DIRECTIONAL DRILL WORK PAD



(b) (6)

From: LarryEvans@bcpeabody.com
Sent: Thursday, June 02, 2011 7:21 AM
To: (b) (6)
Cc: andrewgoetz@bcpeabody.com; (b) (6) SAJ; daniel_paganrosa@yahoo.com; johnhall@bcpeabody.com; KenCaraccia@bcpeabody.com
Subject: Files downloaded to ftp site
Importance: High

Good morning Bob -

We have downloaded 34 files to the ftp site link you provided. The files are labeled as follows:

Via Verde HDD ... (3 files)
MLV #6 ... (5 files)
MLV #7 ... (5 files)
MLV #10 ... (5 files)
MLV #11 ... (5 files)
MLV #12 ... (5 files)
MLV #13-14 ... (6 files)

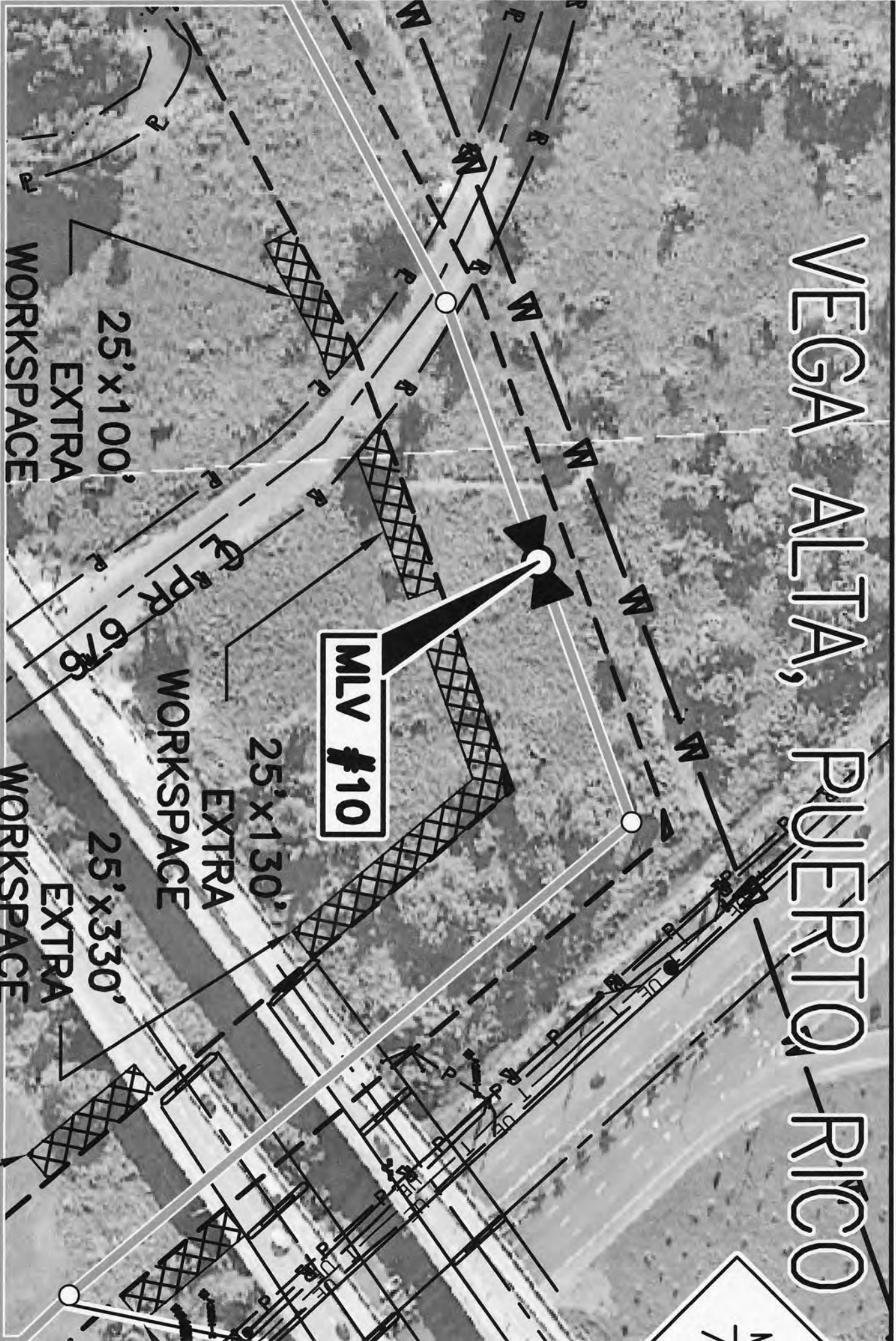
These drawings depict the MLV sites (6 of them) that are located in wetlands and the typical HDD workpad representation that depicts the perimeter berm and silt screen actions to be taken. The drawings provide the fill footprint dimensions and specs, etc. for each site. Total fill for the 6 MLV sites is approximately 1.15 AC and we will incorporate this impact into the compensatory mitigation plan we are collaborating on with the Corps. The HDD workpad sites are temporary impacts. Specific operational details at each site will vary, i.e. equipment placement, pit locations, drill equipment placement, etc., depending on the site requirements but these actions will all occur within the parameters of the workpad dimensions. Again, every pit will be lined to ensure NO migration of drilling mud will occur.

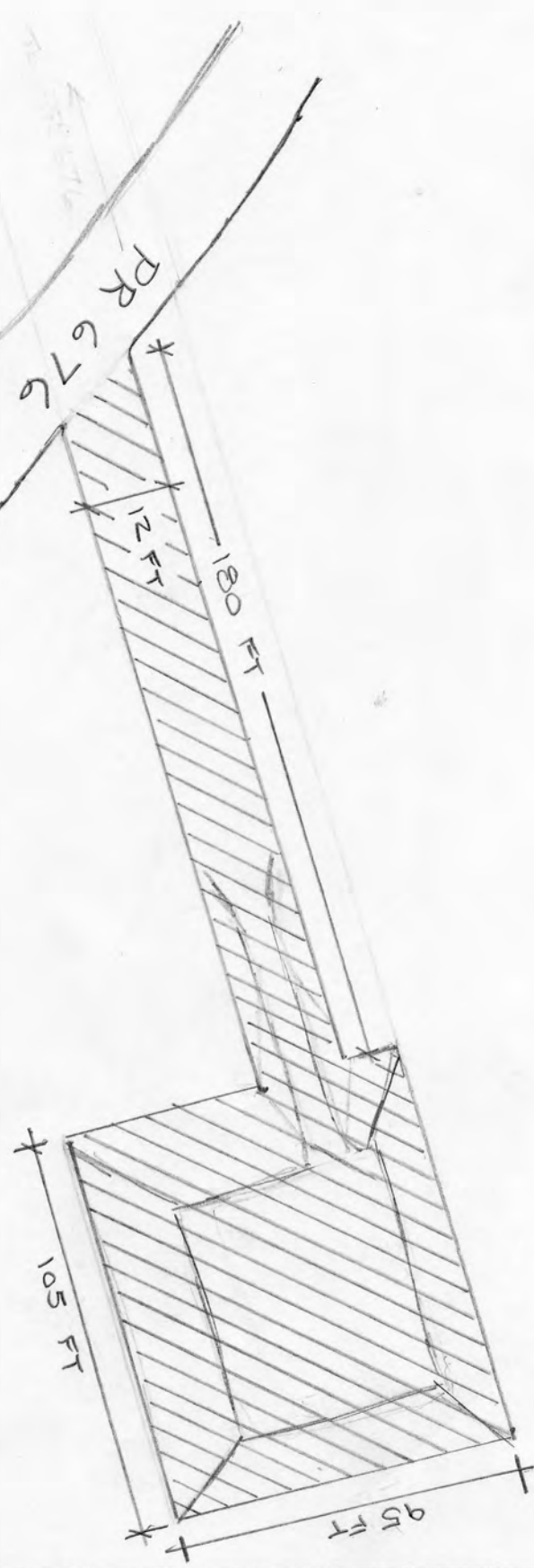
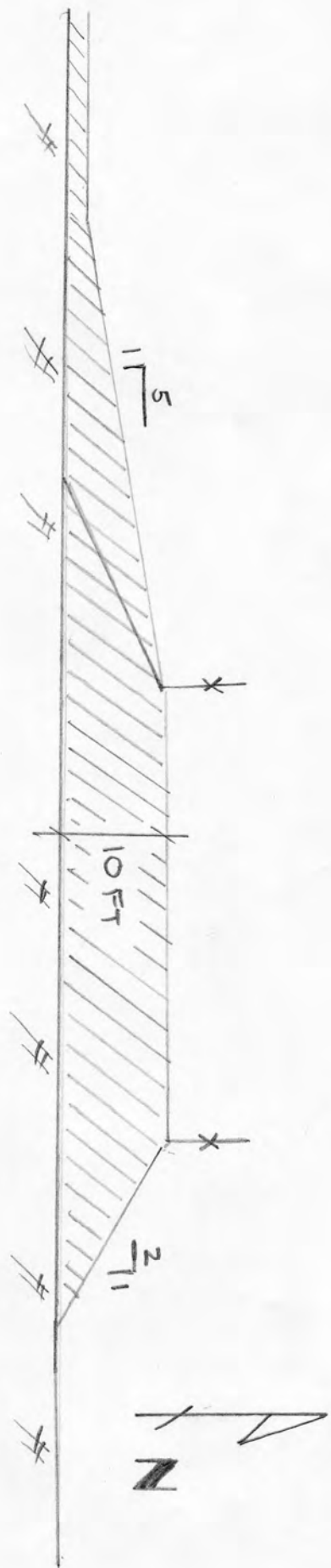
Within the HDD pullback zones there will be no fill placed (either permanent or temporary). We are prepared to incorporate secondary impacts from any clearing that may be required, i.e. hand cutting larger trees or shrubs, into the compensatory mitigation plan.

If you have any Qs, please do not hesitate to contact us by phone or email.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

VEGA ALTA, PUERTO RICO





MAINLINE VALVE SITE NO. 10

/// = 0.12 AC FILL

N.T.S.



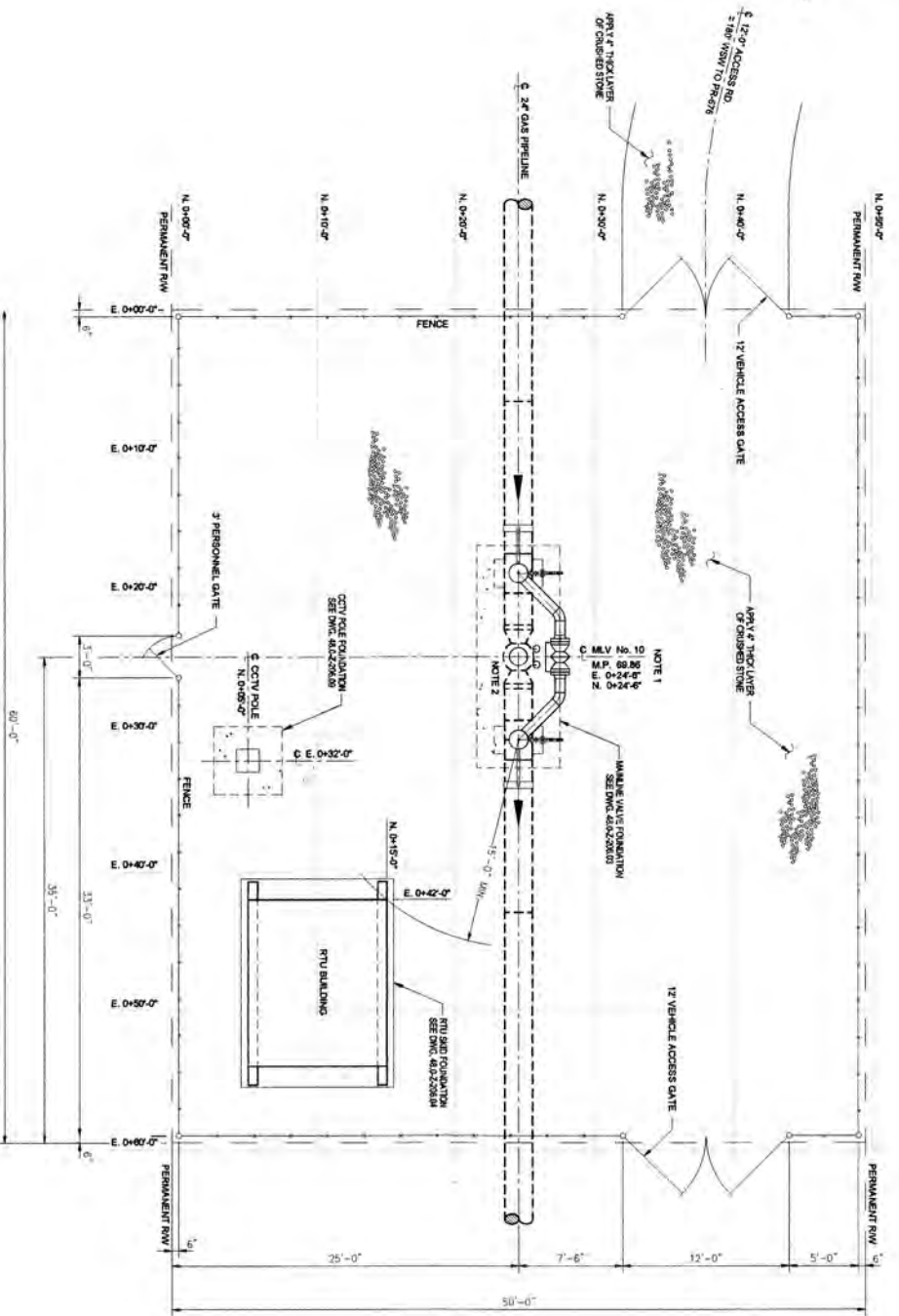
Waters of the United States
Impact Maps
Sheet # 67
 Via Verde Project
 (SAI-2010-02881(IP-EWG))

Source: 2011, Call Rivera Environmental Via Verde, JD
 1985-89, USGS Topographic Maps of the Puerto Rico Quadrangles
 1987, USFWS National Wetland Inventory Maps
 2010, Puerto Rico Planning Board Aerial Photographs

Legend

- | | | | |
|--|-------------------|--------------|-----------------|
| | 2+ inch Pipe | | Wetland No Fill |
| | Workspace | | Temporary Fill |
| | HDD Crossing | | Permanent Fill |
| | Open Cut Crossing | Total | 16.13 |
| | Drill Crossing | | |





PLAN
SCALE 1/4" = 1'-0"

NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND UTILITY HEADINGS ARE APPROXIMATE, ACTUAL
 HEADINGS TO BE DETERMINED BY FIELD SURVEY.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48-0-2-308-3C.

48-0-2-308-3C	NO. OF SHEETS	1
48-0-2-308-3C	NO. OF SHEETS USED	1
48-0-2-308-3C	NO. OF SHEETS CHECKED	1
48-0-2-308-3C	NO. OF SHEETS APPROVED	1
48-0-2-308-3C	NO. OF SHEETS REVISIONS	0
48-0-2-308-3C	NO. OF SHEETS TOTAL	1
48-0-2-308-3C	NO. OF SHEETS USED	1
48-0-2-308-3C	NO. OF SHEETS CHECKED	1
48-0-2-308-3C	NO. OF SHEETS APPROVED	1
48-0-2-308-3C	NO. OF SHEETS REVISIONS	0
48-0-2-308-3C	NO. OF SHEETS TOTAL	1
48-0-2-308-3C	NO. OF SHEETS USED	1
48-0-2-308-3C	NO. OF SHEETS CHECKED	1
48-0-2-308-3C	NO. OF SHEETS APPROVED	1
48-0-2-308-3C	NO. OF SHEETS REVISIONS	0
48-0-2-308-3C	NO. OF SHEETS TOTAL	1

DATE	BY	CHKD	APP'D
11/27/18	MS	MS	MS
12/12/18	MS	MS	MS
01/09/19	MS	MS	MS
02/06/19	MS	MS	MS
03/06/19	MS	MS	MS
04/02/19	MS	MS	MS
05/01/19	MS	MS	MS
06/04/19	MS	MS	MS
07/02/19	MS	MS	MS
08/01/19	MS	MS	MS
09/04/19	MS	MS	MS
10/01/19	MS	MS	MS
11/01/19	MS	MS	MS
12/01/19	MS	MS	MS
01/01/20	MS	MS	MS
02/01/20	MS	MS	MS
03/01/20	MS	MS	MS
04/01/20	MS	MS	MS
05/01/20	MS	MS	MS
06/01/20	MS	MS	MS
07/01/20	MS	MS	MS
08/01/20	MS	MS	MS
09/01/20	MS	MS	MS
10/01/20	MS	MS	MS
11/01/20	MS	MS	MS
12/01/20	MS	MS	MS

DATE	BY	CHKD	APP'D
11/27/18	MS	MS	MS
12/12/18	MS	MS	MS
01/09/19	MS	MS	MS
02/06/19	MS	MS	MS
03/06/19	MS	MS	MS
04/02/19	MS	MS	MS
05/01/19	MS	MS	MS
06/04/19	MS	MS	MS
07/02/19	MS	MS	MS
08/01/19	MS	MS	MS
09/04/19	MS	MS	MS
10/01/19	MS	MS	MS
11/01/19	MS	MS	MS
12/01/19	MS	MS	MS
01/01/20	MS	MS	MS
02/01/20	MS	MS	MS
03/01/20	MS	MS	MS
04/01/20	MS	MS	MS
05/01/20	MS	MS	MS
06/01/20	MS	MS	MS
07/01/20	MS	MS	MS
08/01/20	MS	MS	MS
09/01/20	MS	MS	MS
10/01/20	MS	MS	MS
11/01/20	MS	MS	MS
12/01/20	MS	MS	MS

VIA VERDE
PIPELINE PROJECT
 PIPING PLOT PLAN
 MAINLINE VALVE SITE NO. 10
 M.P. 69.98
 VEGA ALTA, PUERTO RICO

DATE: 11/27/18
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 12/12/18
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 01/09/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 02/06/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 03/06/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 04/02/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 05/01/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 06/04/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 07/02/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 08/01/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 09/04/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 10/01/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 11/01/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 12/01/19
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 01/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 02/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 03/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 04/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 05/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 06/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 07/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

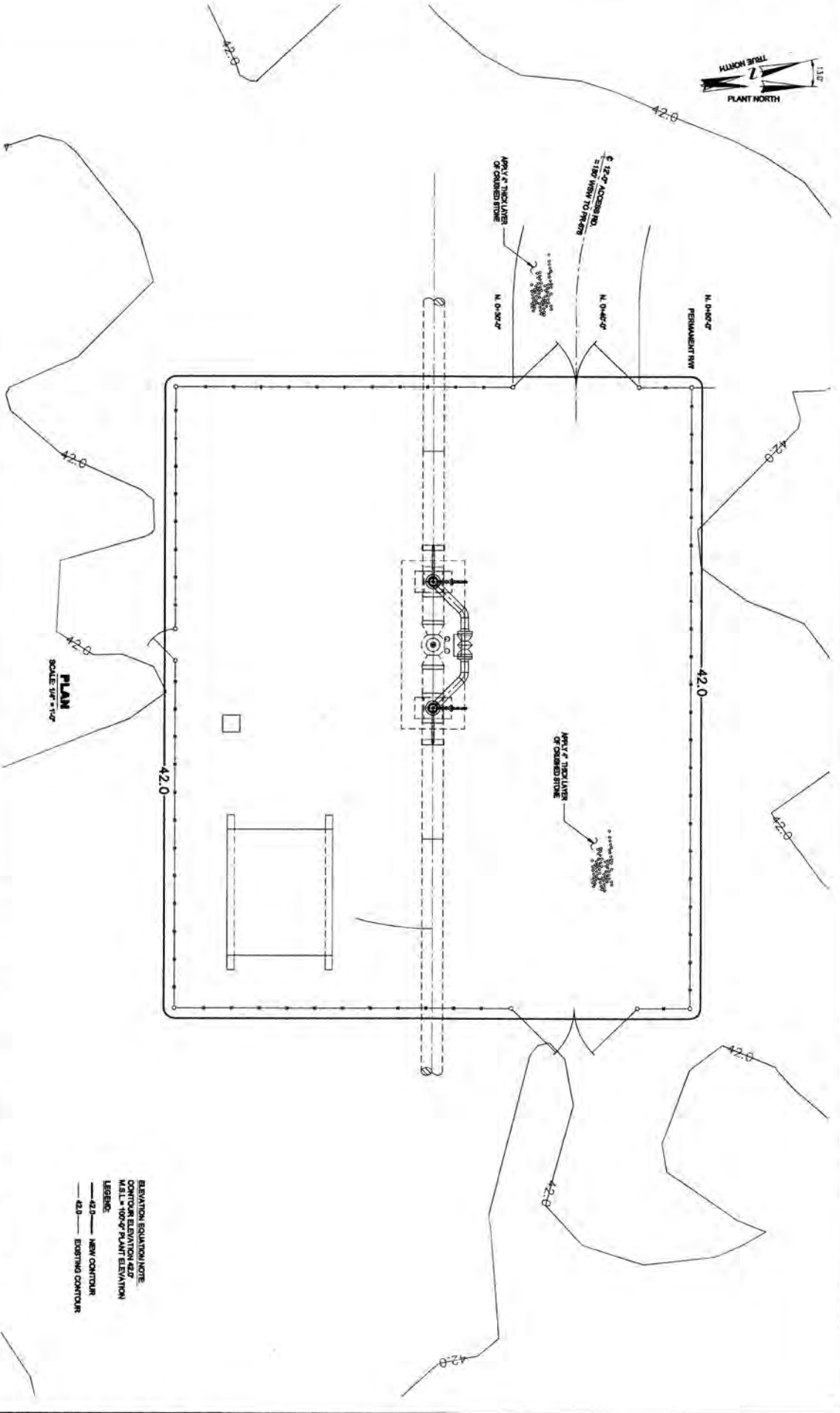
DATE: 08/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

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 BY: MS
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 APP'D: MS

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 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 11/01/20
 BY: MS
 CHKD: MS
 APP'D: MS

DATE: 12/01/20
 BY: MS
 CHKD: MS
 APP'D: MS



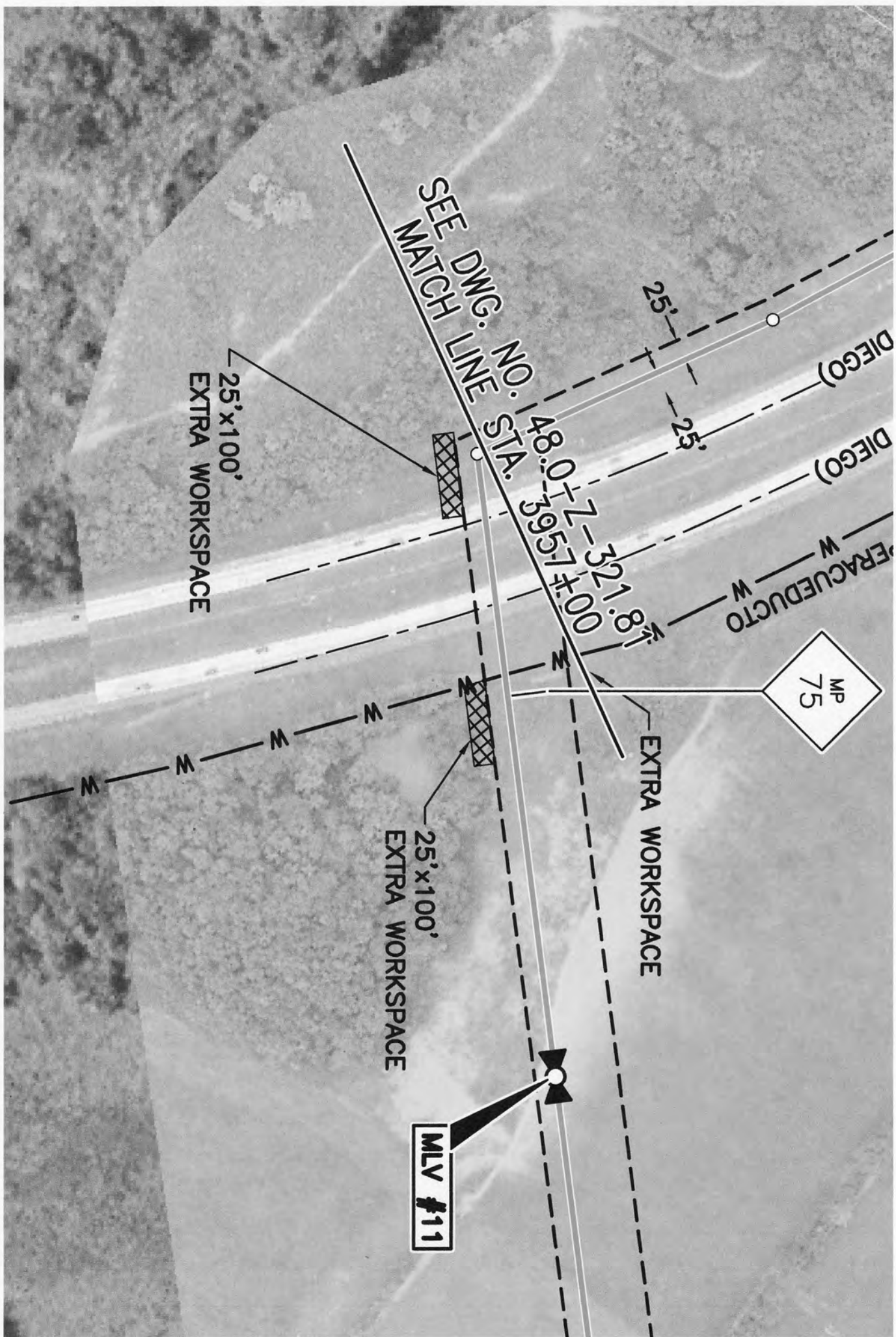
NOTES:
 1) MAINLINE BLOCK VALVE LOCATION AND SUPPORT BEARINGS ARE APPROXIMATE ACTUAL LOCATION AS SHOWN ON ALIGNMENT SHEETS.

REVISION NO.	DATE	BY	CHKD	APP'D	DESCRIPTION
1	05/20/18	JOB	JOB	JOB	ISSUED FOR BIDDING

VIA VERDE PIPELINE PROJECT					
SITE GRADING PLAN					
MAINLINE VALVE SITE NO. 10					
M.P. 69.80					
VEGA ALTA, PUERTO RICO					
DATE	11-13-10	DATE	11-17-10	DATE	
BY	JOB	BY	JOB	BY	JOB
CHKD	JOB	CHKD	JOB	CHKD	JOB
APP'D	JOB	APP'D	JOB	APP'D	JOB
DRAWING NO. 48.0-Z-206.18			SHEET NO. 1		

ELEVATION EQUATION NOTE:
 CONTOUR ELEVATION 42.2
 M.F.L. = 100.0' PLANT ELEVATION
LEGBND:
 — 42.0 — NEW CONTOUR
 — 42.2 — EXISTING CONTOUR

PLAN
 SCALE 1/4" = 1'-0"



SEE DWG. NO.
MATCH LINE

25'x100'
EXTRA WORKSPACE

48.0+2-395.7+0.00
321.8

DIEGO)

DIEGO)

W W
ERACUEDUCTO

MP
75

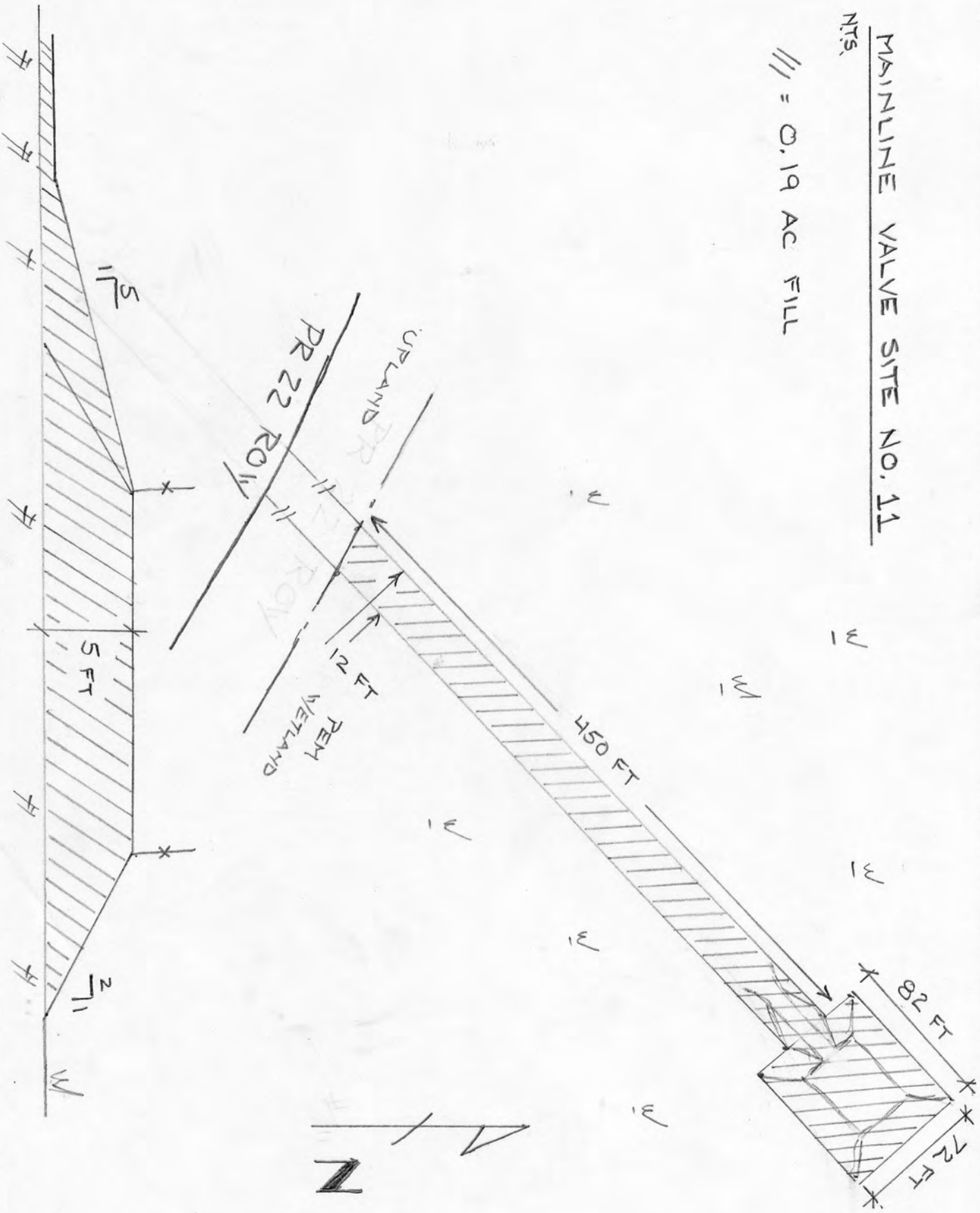
EXTRA WORKSPACE

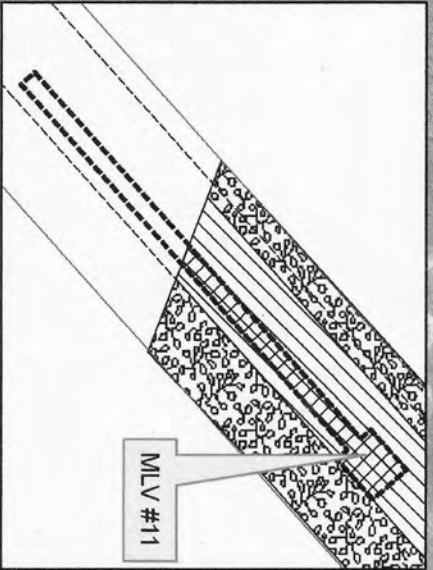
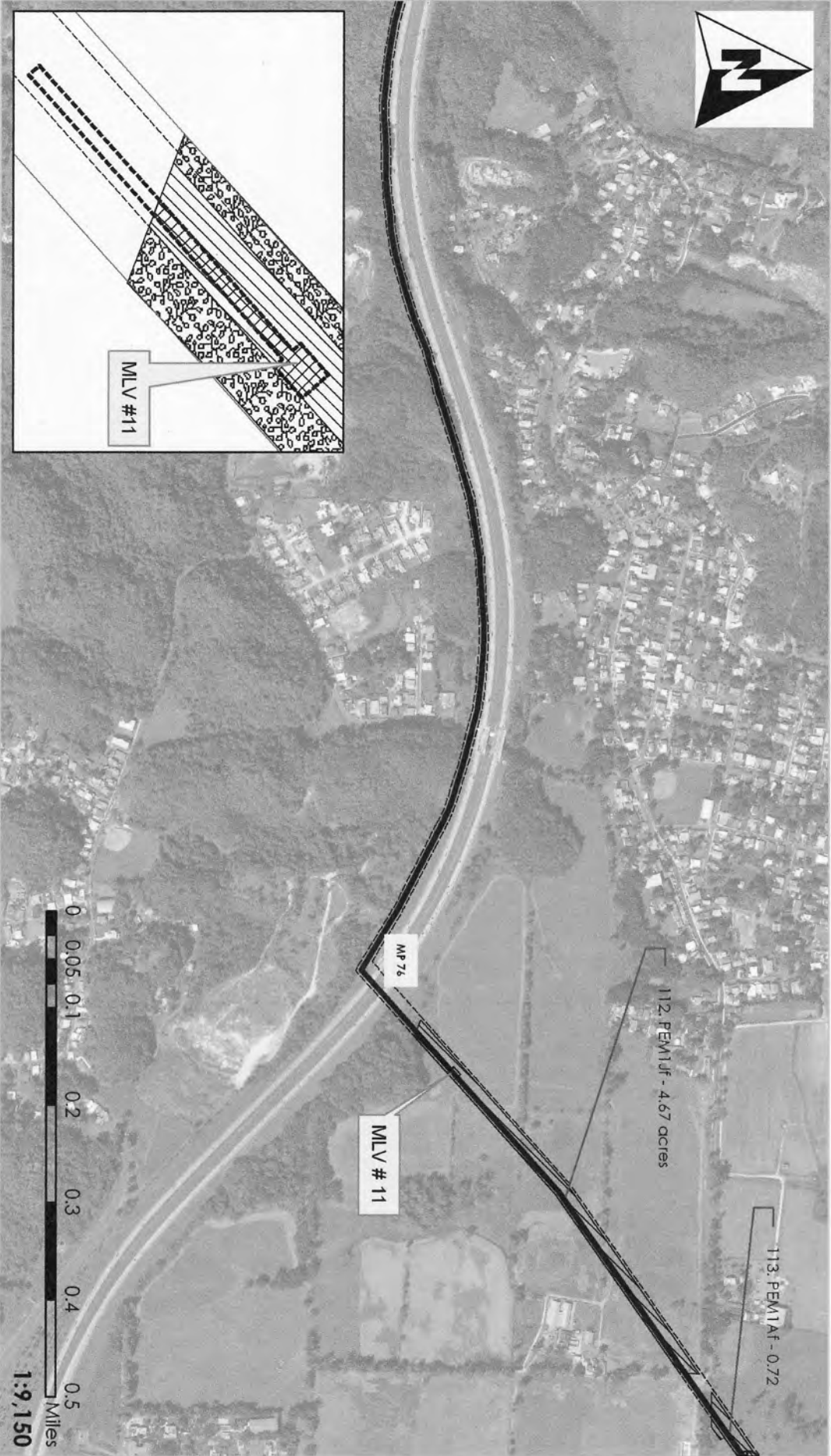
25'x100'
EXTRA WORKSPACE

MLV #11

MAINLINE VALVE SITE NO. 11
NTS.

/// = 0.19 AC FILL





Waters of the United States

Impact Maps
Sheet # 70

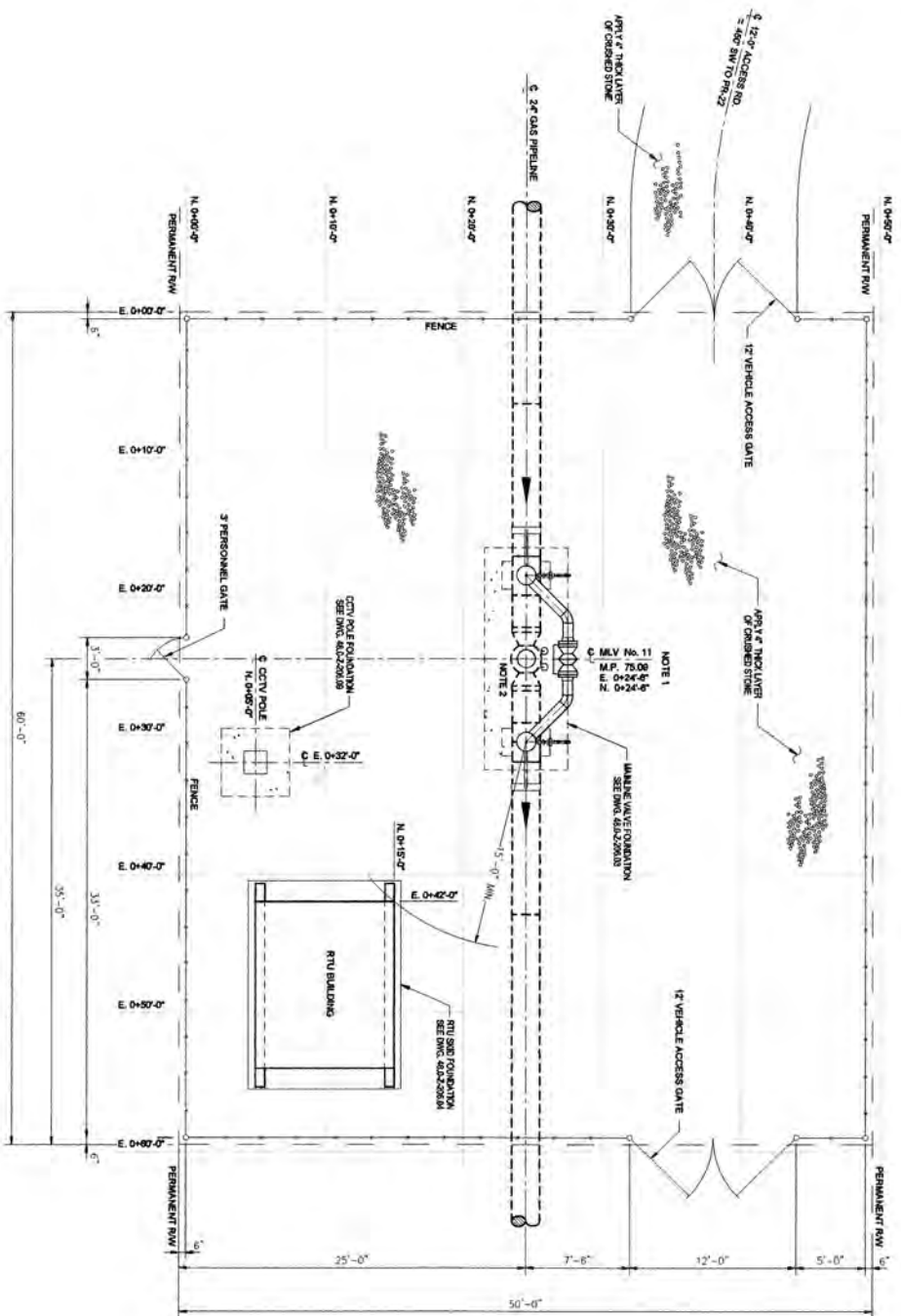
Via Verde Project
(SAI-2010-02881 (IP-EWG))

Source: 2011 Call Rivera Environmental Via Verde JD
1957-82 USGS Topographic Maps of the Puerto Rico Quadrangles
1987 USFWS National Wetland Inventory Maps
2010 Puerto Rico Planning Board Aerial Photographs

Legend

	24" Pipe		Wetland No Fill	Acres
	Workspace		Wetland Impacts	
	HDD Crossing		Temporary Fill	5.19
	Open Cut Crossing		Permanent Fill	0.19
	Drill Crossing		Total	5.39





PLAN
SCALE: 1/8" = 1'-0"

NOTES:
 1) MAINLINE VALVE LOCATION AND HEIGHT REVERSED ARE APPROXIMATE ACTUAL
 LOCATION AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48.0-Z-306.3A.

REVISION NO.	DATE	DESCRIPTION
1	1/25/10	ISSUED FOR BID

NO.	DATE	BY	CHKD.	APP.

AVE

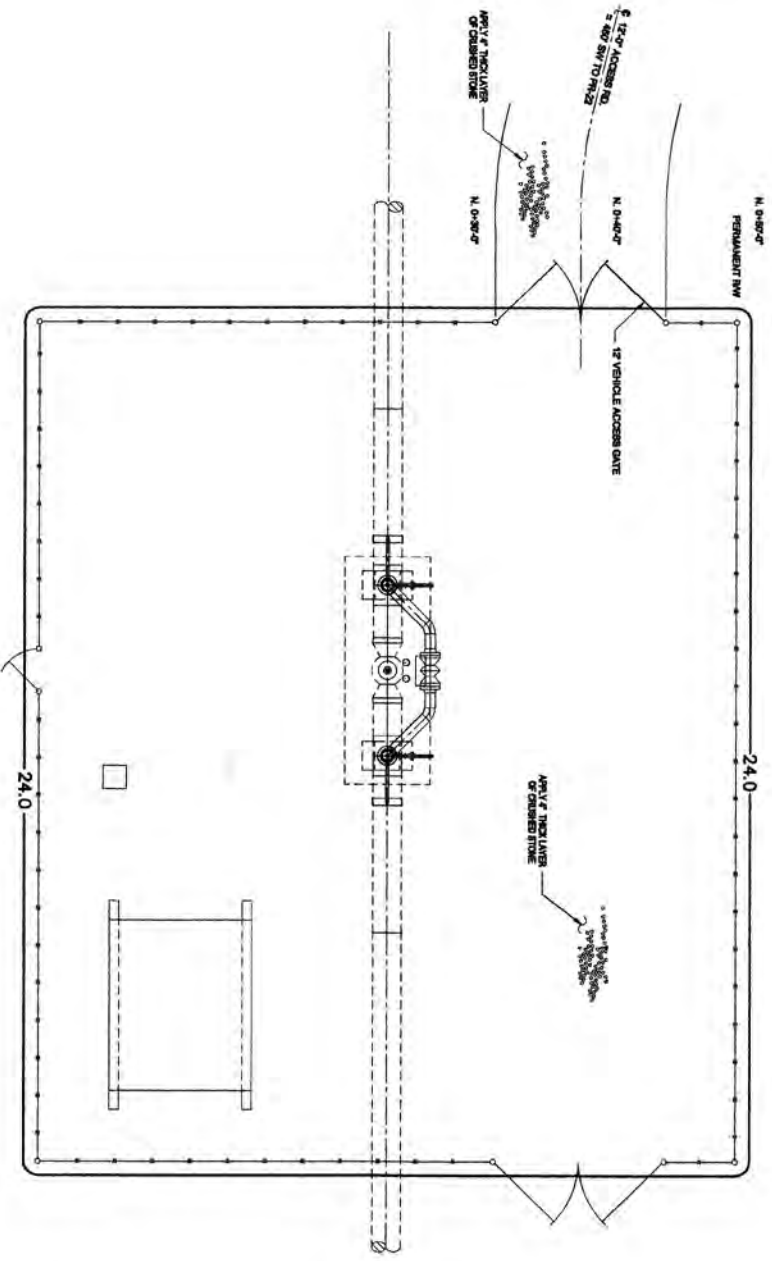
21

VIA VERDE
PIPELINE PROJECT

PIPING PLAN
 MAINLINE VALVE SITE NO. 11
 M.P. 75.09
 DONNAO, PUERTO RICO

DATE: 1/25/10
 DRAWN BY: [blank]
 CHECKED BY: [blank]
 SCALE: 1 OF 1

DWG. NO. 48.0-Z-306.40



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

ELEVATION EQUATION NOTE:
CONTOUR ELEVATION=24.0
M.S.L. = 100% OF PLANT ELEVATION
LEGEND:
—— 24.0 — NEW CONTOUR
—— 24.0 — EXISTING CONTOUR

NOTES:
1) MAINLINE VALVE LOCATION AND LAYOUT REVISIONS ARE APPROXIMATE ACTUAL
LOCATIONS AS SHOWN ON ALIGNMENT SHEETS

NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR BID	11-17-2019	ST	ST

DATE: 11/17/19	SCALE: AS SHOWN
PROJECT: 48.0-Z-2006.19	

VIA VERDE
PIPELINE PROJECT
SITE GRADING PLAN
MAINLINE VALVE SITE NO.11
M.P. 78.69
DORADO, PUERTO RICO

NO.	REV.
1	1

SEE DWG. NO. 48.0-7-321.83
MATCH LINE STA. 4057+04

MLV
#12

MP
77

PR 165

2)

3)

2)

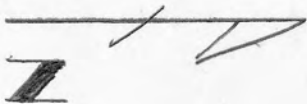
3)

3)

MAINLINE VALVE SITE NO. 12

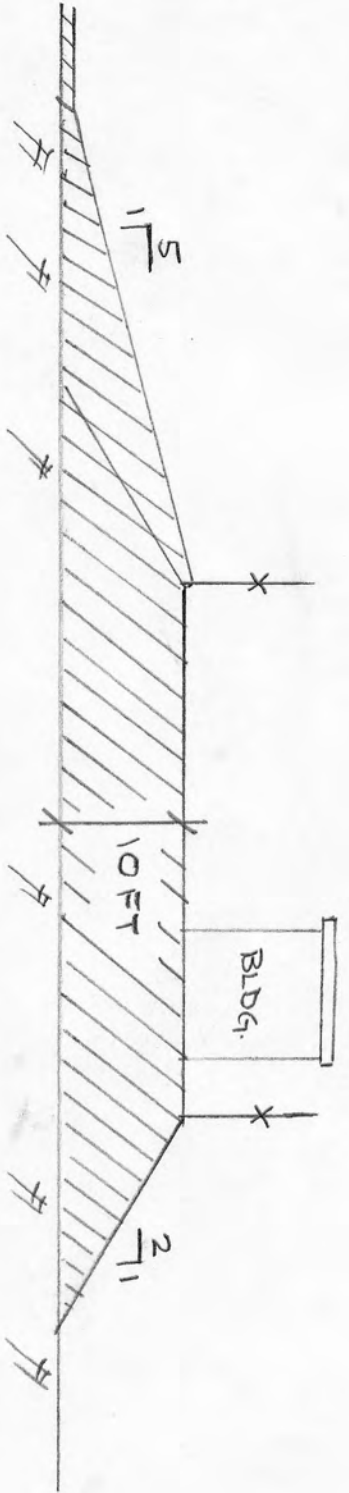
/// = 0.38 AC FILL

N.T.S.



650 FT

12 FT



1/5

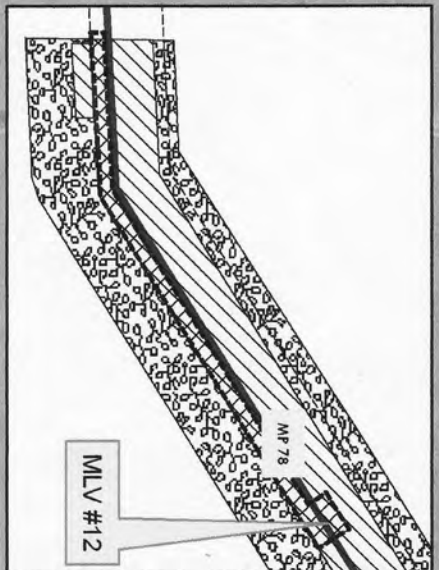
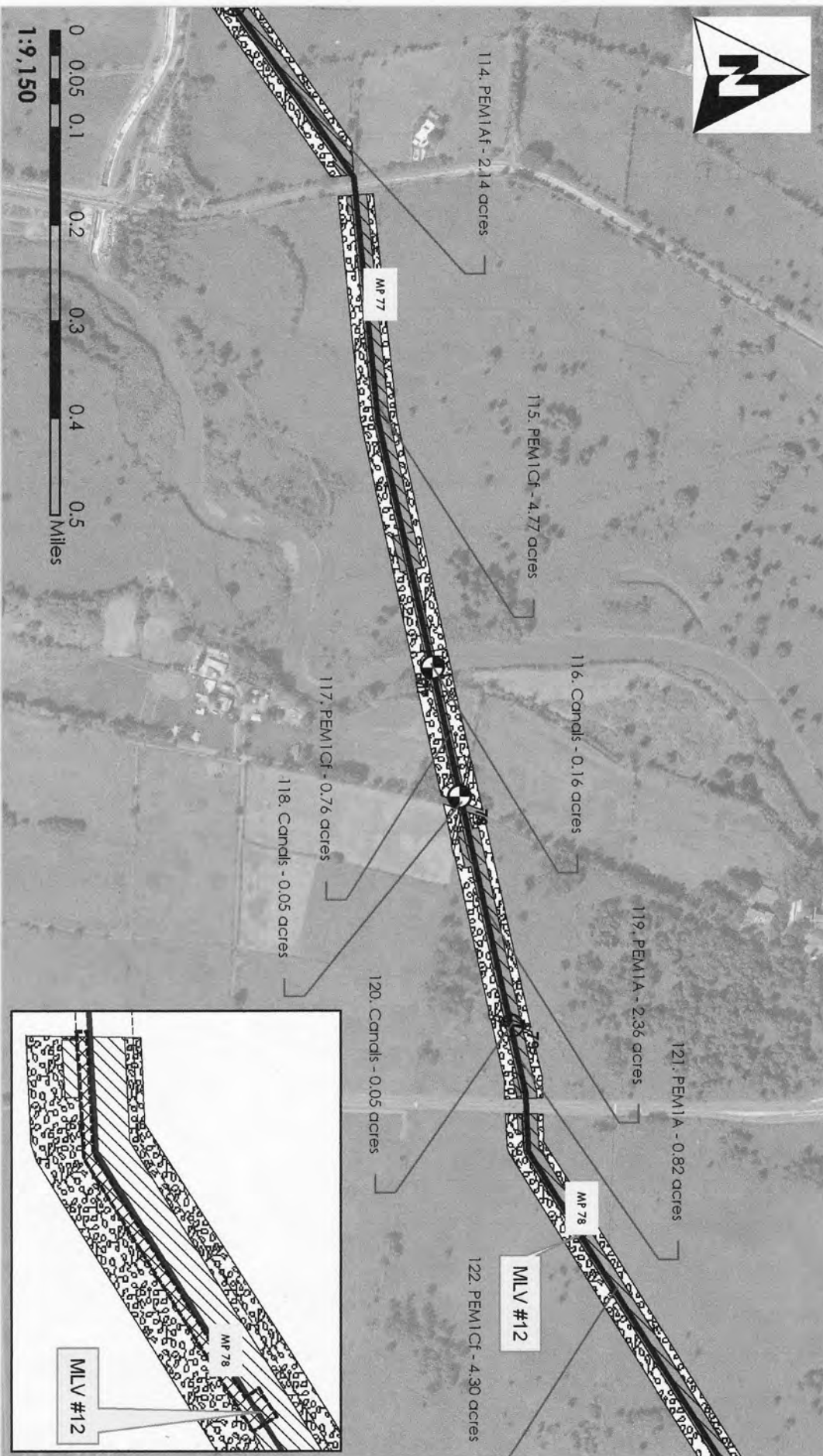
10 FT

Bldg.

2/1

105 FT

95 FT



Waters of the United States

Impact Maps
Sheet # 71

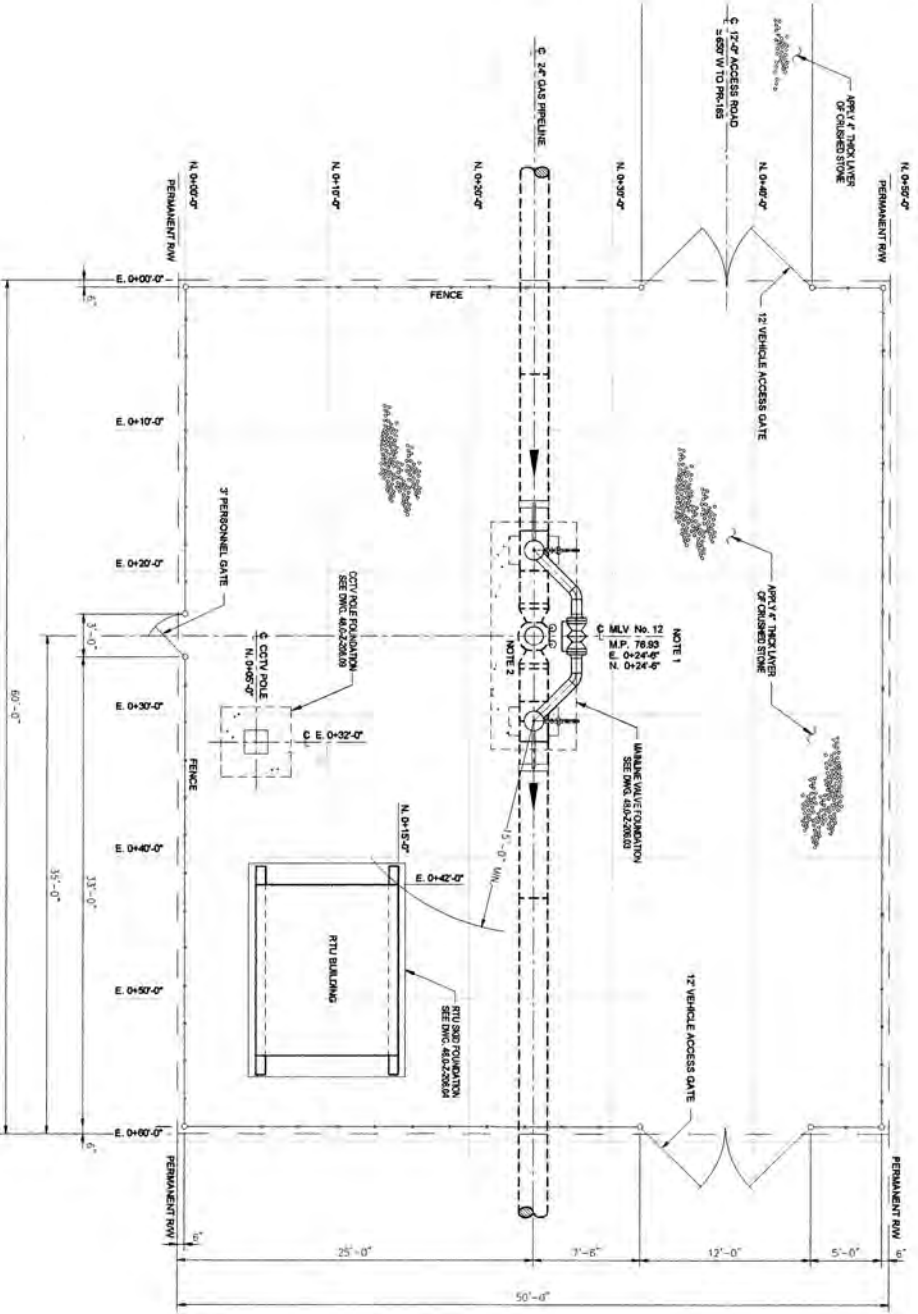
Via Verde Project
(SAI-2010-02881(IP-EWG))

Legend

	24" Pipe		Wetland No Fill
	Workspace		Wetland Impacts
	HDD Crossing		Temporary Fill
	Open Cut Crossing		Permanent Fill
	Drill Crossing		Total
			15.45



Source: 2011 Call River Environmental Via Verde ID
193-5-52 18GS Topographic Maps of the Puerto Rico Quadrangles
1987 18FWS National Wetland Inventory Maps
2010 Puerto Rico Planning Board Aerial Photographs



PLAN
SCALE: 1/8" = 1'-0"

- NOTES:
- 1) MANLINE VALVE LOCATION AND MANHOLES/REINFORCING ARE APPROXIMATE ACTUAL LOCATION AS SHOWN ON ALIGNMENT SHEETS.
 - 2) FOR MANLINE VALVE DETAILS SEE DRAWING NO. 48.0-2-306.30.

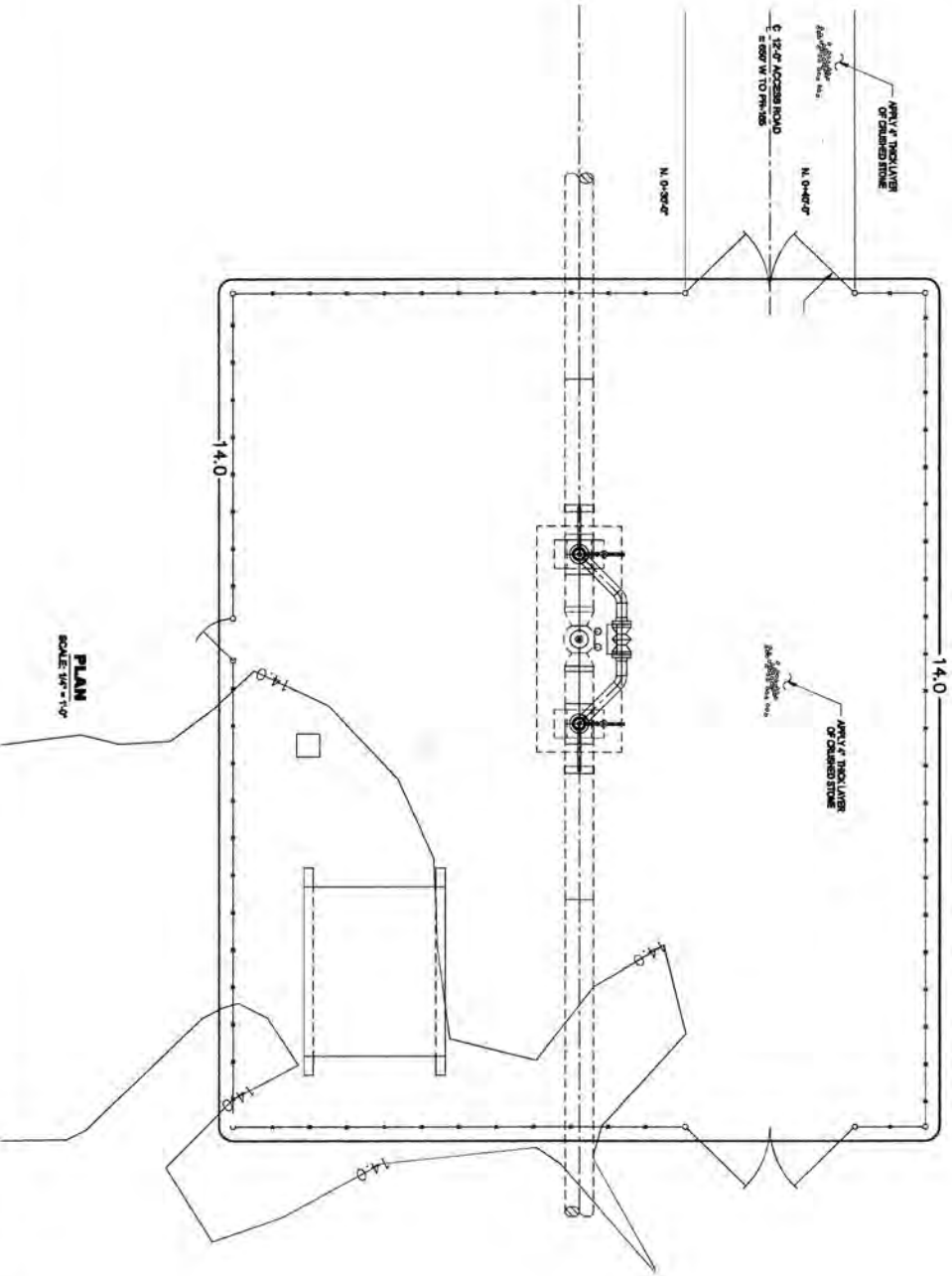
DATE	DESCRIPTION	BY	CHKD
05-02-2018	ALIGNMENT SHEET	MM	MM
05-02-2018	PIPELINE AND ELEVATION DESIGN - WATER TREAT PLANT	MM	MM
05-02-2018	FLOOR PLAN AND ELEVATION - RTU BUILDING	MM	MM
05-02-2018	TRUCK SYSTEM STANDARD - CONNECTION TO SAN MAIN	MM	MM
05-02-2018	TRUCK PLAN, ELEVATION & DETAIL - TRUCK MANHOLE VALVE	MM	MM
05-02-2018	PROPOSED ELEVATION	MM	MM

NO.	ISSUED FOR NO.	REVISION	DATE	BY	CHKD
1	ISSUED FOR NO.	REVISION	10/22/18	MM	MM

--	--

VIA VERDE
PIPELINE PROJECT
PILING PLOT PLAN
MANLINE VALVE SITE NO. 12
M.P. 76.83
DORADO, PUERTO RICO

DWG. NO. 48.0-2-306.41
SHEET NO. 1 OF 1



PLAN
SCALE 1/4" = 1'-0"

ELEVATION EQUATION NOTE:
CONTOUR ELEVATION 14.0'
M.S.L. = 100.0' PLANT ELEVATION

LEGEND:
— 14.0 — NEW CONTOUR
— 14.0 — EXISTING CONTOUR

NOTES:
1) MAINLINE BLOCK VALVE LOCATIONS AND WELDEPORT REMAINING ARE APPROXIMATE ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.

NO.	REVISED BY	DATE	REVISION
1	SCHEIDT, R. B.	11-20-10	AC
REVISIONS:			
APPROVED BY:			
SPECIAL NOTES:			
STANDARD FIELD SKETCH:			
SPECIAL EQUIPMENT PLAN:			
48.0-2-200.20			
48.0-2-200.07			
48.0-2-200.01			

		VIA VERDE PIPELINE PROJECT	
SHEET NO. 1 TOTAL SHEETS 1		PROJECT NO. 48.0-2-200.20	
DATE: 11-17-10 DRAWN BY: [Name] CHECKED BY: [Name]		SITE GRADING PLAN MAINLINE M.P. 75.80 DONOSO, PUERTO RICO	

PROPOSED PALO
SECO LATERAL
SEE DWG. 48.0-Z-322.41

TOA_BAJA, PUERTO RICO
CATAÑO, PUERTO RICO

HDD PULL
BACK AREA

HDD EXIT POINT

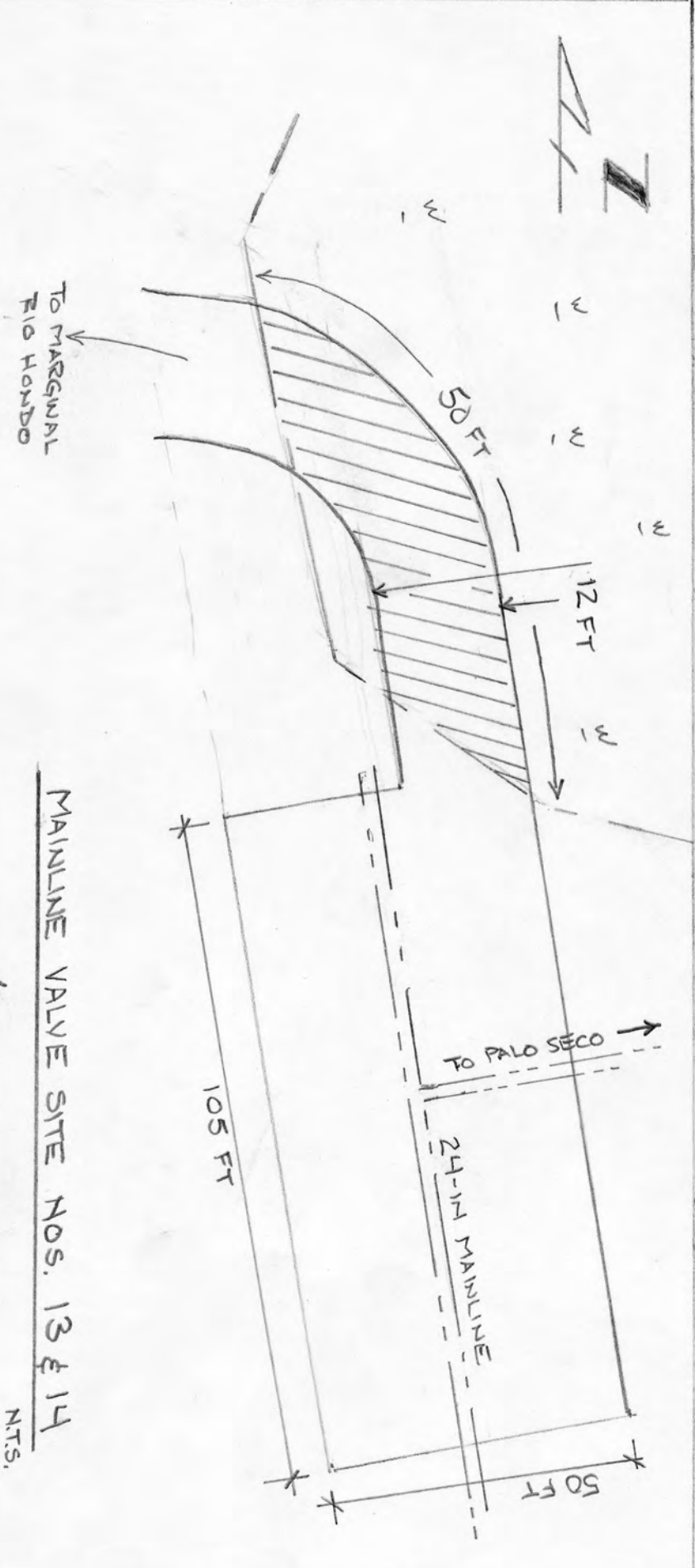
MLV #14

MLV #13

SEE MATCH LINE
DWG. NO. 48.0-Z-321.97
STA. 4451+61
STA. 4451+97

AVE. MARGINAL RIO HONDO

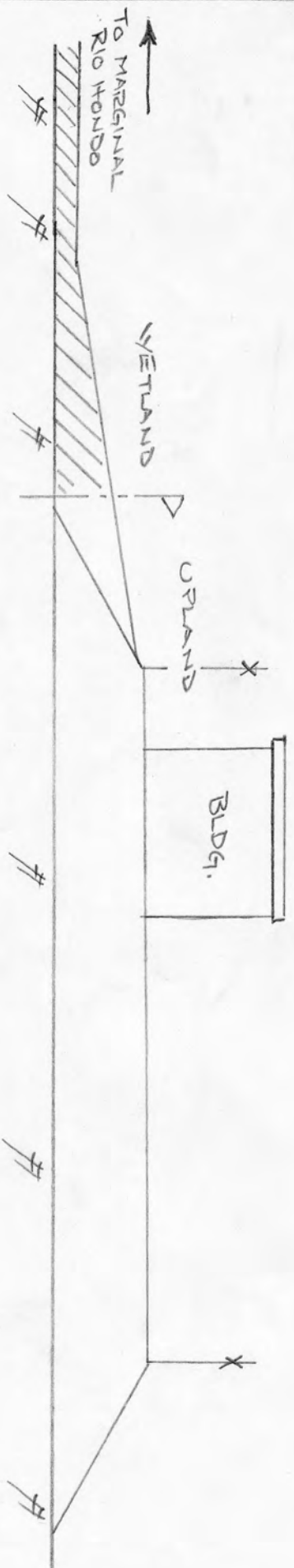
RIO BAYAMON

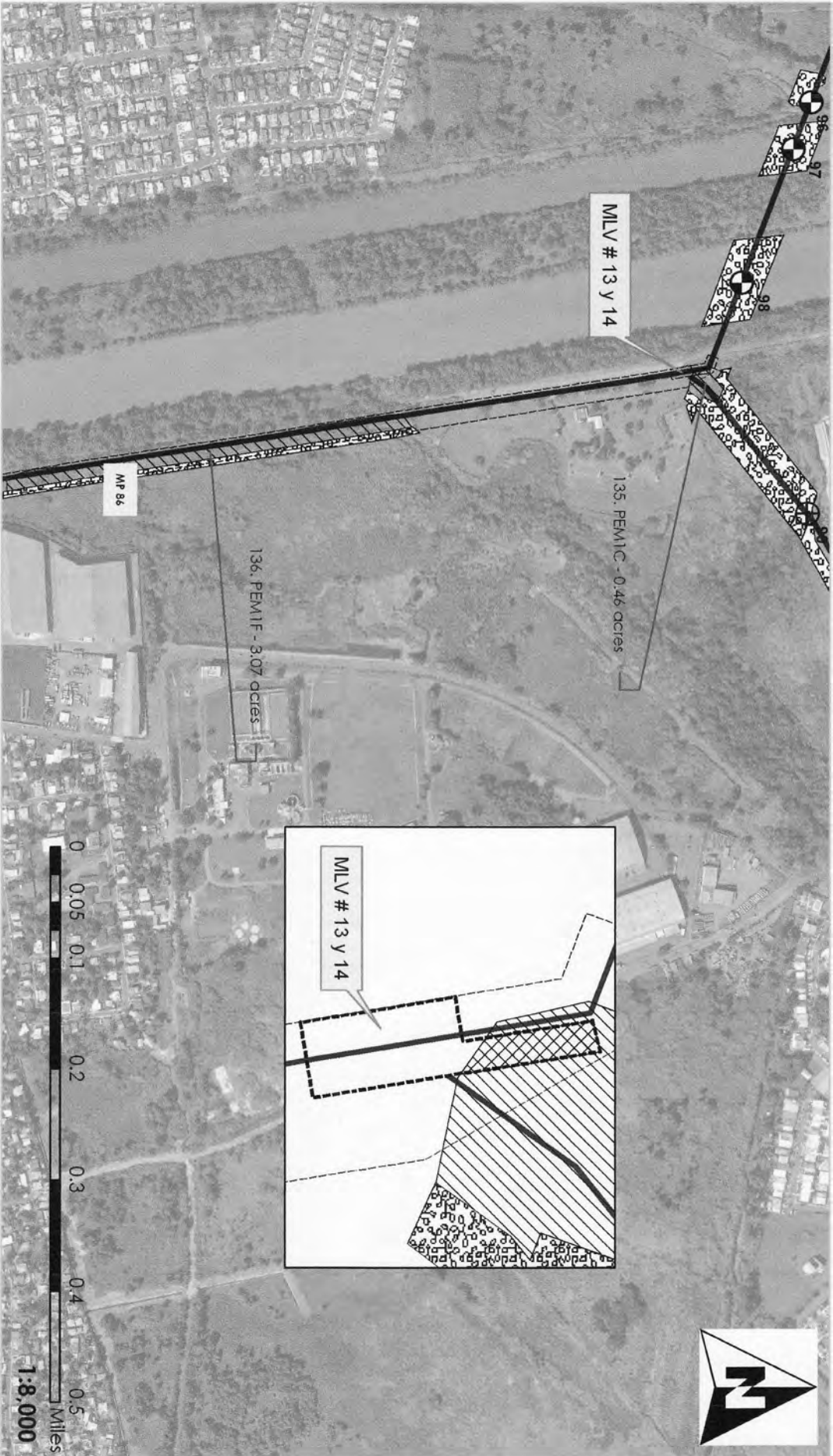


MAINLINE VALVE SITE NOS. 13 & 14

/// = 0.04 AC FILL

N.T.S.





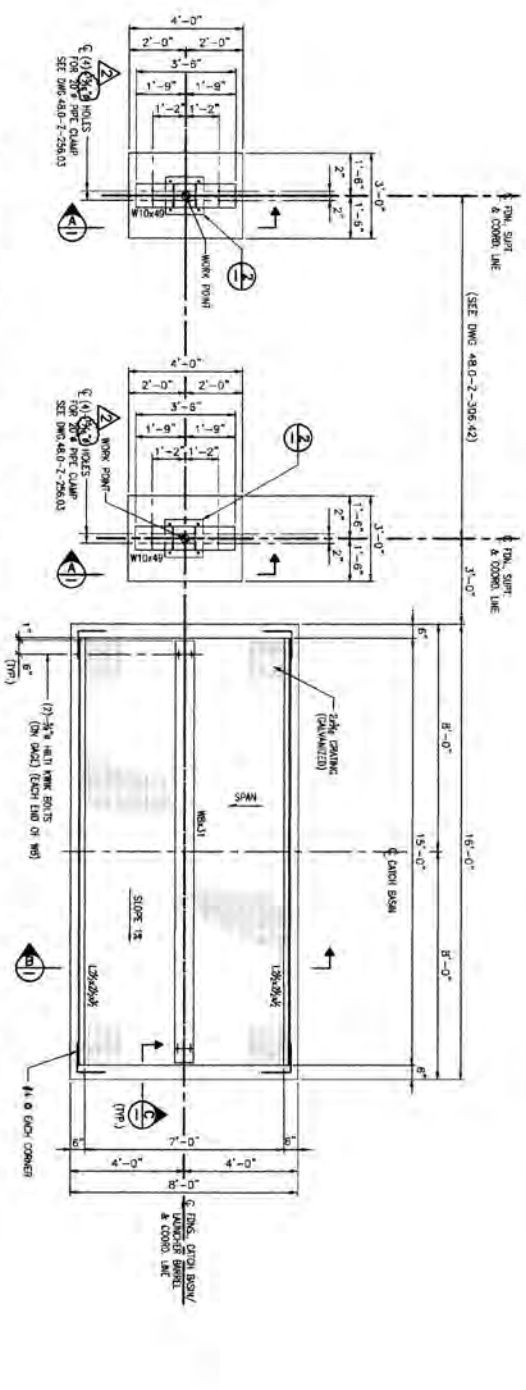
Waters of the United States
Impact Maps
Sheet # 77
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

Source: 2011 Call River Environmental Via Verde ID
 1967-82 1:50,000 Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs

Legend

- 24" Pipe
 - Workspace
 - Wetland No Fill
 - HDD Crossing
 - Open Cut Crossing
 - Drill Crossing
 - Wetland Impacts
 - Temporary Fill
 - Permanent Fill
 - Total
- | Acres |
|-------------|
| 3.50 |
| 0.04 |
| 3.54 |

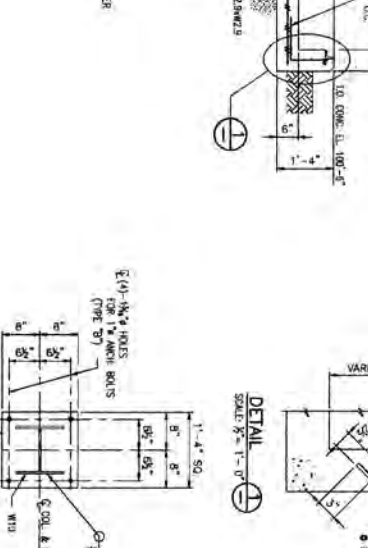
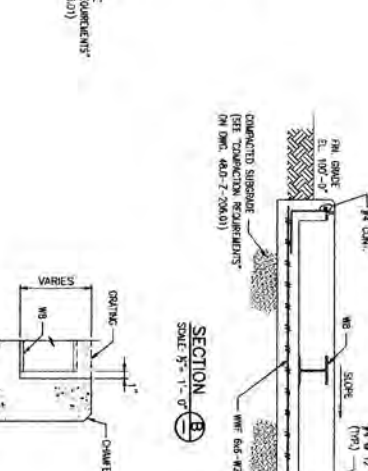
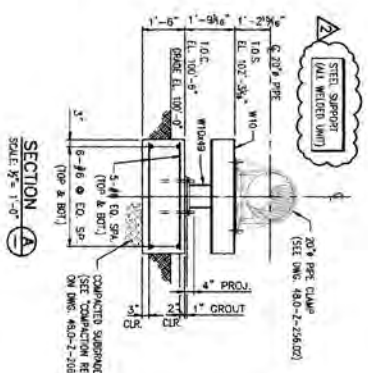




PLAN PS-20-2 FOUNDATION
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 3/8" = 1'-0"

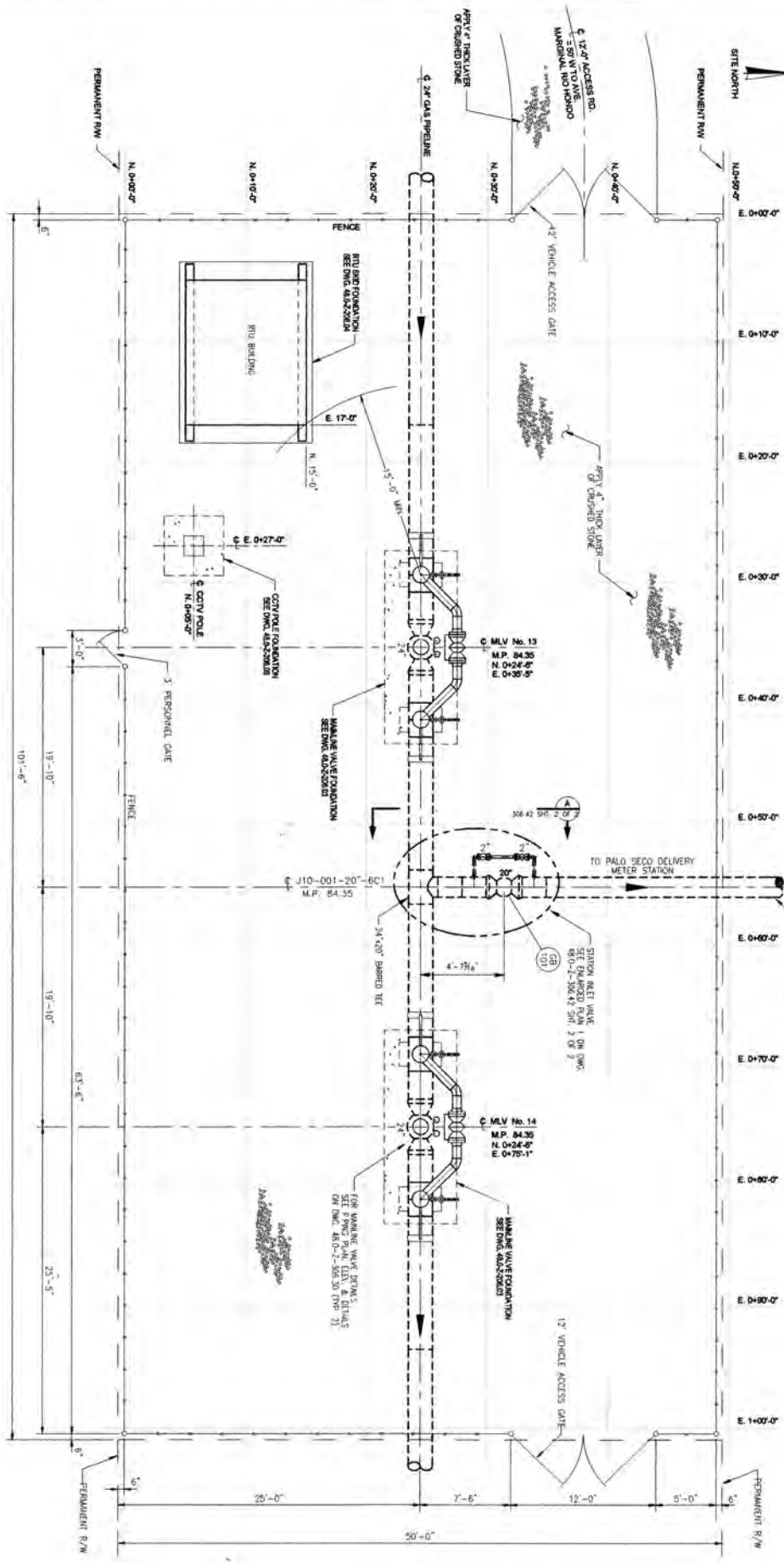
PLAN PS-20-1 FOUNDATION
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 3/8" = 1'-0"

PLAN-LAUNCHER & CATCH BASIN FOUNDATIONS
(FOR LOCATION AND ORIENTATION SEE DMC 48.0-2-206.4.)
SCALE: 3/8" = 1'-0"



NOTES:

48.0-2-206.4	PIPELINE PROJECT	LAUNCHER & CATCH BASIN
48.0-2-206.4	MANHOLE VALVE SITE NO. 13 & 14	TEAN TO PALO SECO METER STATION
48.0-2-206.4	TYPICAL PIPE CLAMP DETAILS-PIPE SUPPORTS	CATLAND, PLANTS, BASINS
48.0-2-206.4	STANDARD ANCHOR BOLT DETAILS	
48.0-2-206.4	CONCRETE WALLS	
48.0-2-206.4	REINFORCED CONCRETE	
48.0-2-206.4	1. INSULATED PIPE	
48.0-2-206.4	2. INSULATED PIPE	
48.0-2-206.4	3. INSULATED PIPE	
48.0-2-206.4	4. INSULATED PIPE	
48.0-2-206.4	5. INSULATED PIPE	
48.0-2-206.4	6. INSULATED PIPE	
48.0-2-206.4	7. INSULATED PIPE	
48.0-2-206.4	8. INSULATED PIPE	
48.0-2-206.4	9. INSULATED PIPE	
48.0-2-206.4	10. INSULATED PIPE	
48.0-2-206.4	11. INSULATED PIPE	
48.0-2-206.4	12. INSULATED PIPE	
48.0-2-206.4	13. INSULATED PIPE	
48.0-2-206.4	14. INSULATED PIPE	
48.0-2-206.4	15. INSULATED PIPE	
48.0-2-206.4	16. INSULATED PIPE	
48.0-2-206.4	17. INSULATED PIPE	
48.0-2-206.4	18. INSULATED PIPE	
48.0-2-206.4	19. INSULATED PIPE	
48.0-2-206.4	20. INSULATED PIPE	
48.0-2-206.4	21. INSULATED PIPE	
48.0-2-206.4	22. INSULATED PIPE	
48.0-2-206.4	23. INSULATED PIPE	
48.0-2-206.4	24. INSULATED PIPE	
48.0-2-206.4	25. INSULATED PIPE	
48.0-2-206.4	26. INSULATED PIPE	
48.0-2-206.4	27. INSULATED PIPE	
48.0-2-206.4	28. INSULATED PIPE	
48.0-2-206.4	29. INSULATED PIPE	
48.0-2-206.4	30. INSULATED PIPE	
48.0-2-206.4	31. INSULATED PIPE	
48.0-2-206.4	32. INSULATED PIPE	
48.0-2-206.4	33. INSULATED PIPE	
48.0-2-206.4	34. INSULATED PIPE	
48.0-2-206.4	35. INSULATED PIPE	
48.0-2-206.4	36. INSULATED PIPE	
48.0-2-206.4	37. INSULATED PIPE	
48.0-2-206.4	38. INSULATED PIPE	
48.0-2-206.4	39. INSULATED PIPE	
48.0-2-206.4	40. INSULATED PIPE	
48.0-2-206.4	41. INSULATED PIPE	
48.0-2-206.4	42. INSULATED PIPE	
48.0-2-206.4	43. INSULATED PIPE	
48.0-2-206.4	44. INSULATED PIPE	
48.0-2-206.4	45. INSULATED PIPE	
48.0-2-206.4	46. INSULATED PIPE	
48.0-2-206.4	47. INSULATED PIPE	
48.0-2-206.4	48. INSULATED PIPE	
48.0-2-206.4	49. INSULATED PIPE	
48.0-2-206.4	50. INSULATED PIPE	
48.0-2-206.4	51. INSULATED PIPE	
48.0-2-206.4	52. INSULATED PIPE	
48.0-2-206.4	53. INSULATED PIPE	
48.0-2-206.4	54. INSULATED PIPE	
48.0-2-206.4	55. INSULATED PIPE	
48.0-2-206.4	56. INSULATED PIPE	
48.0-2-206.4	57. INSULATED PIPE	
48.0-2-206.4	58. INSULATED PIPE	
48.0-2-206.4	59. INSULATED PIPE	
48.0-2-206.4	60. INSULATED PIPE	
48.0-2-206.4	61. INSULATED PIPE	
48.0-2-206.4	62. INSULATED PIPE	
48.0-2-206.4	63. INSULATED PIPE	
48.0-2-206.4	64. INSULATED PIPE	
48.0-2-206.4	65. INSULATED PIPE	
48.0-2-206.4	66. INSULATED PIPE	
48.0-2-206.4	67. INSULATED PIPE	
48.0-2-206.4	68. INSULATED PIPE	
48.0-2-206.4	69. INSULATED PIPE	
48.0-2-206.4	70. INSULATED PIPE	
48.0-2-206.4	71. INSULATED PIPE	
48.0-2-206.4	72. INSULATED PIPE	
48.0-2-206.4	73. INSULATED PIPE	
48.0-2-206.4	74. INSULATED PIPE	
48.0-2-206.4	75. INSULATED PIPE	
48.0-2-206.4	76. INSULATED PIPE	
48.0-2-206.4	77. INSULATED PIPE	
48.0-2-206.4	78. INSULATED PIPE	
48.0-2-206.4	79. INSULATED PIPE	
48.0-2-206.4	80. INSULATED PIPE	
48.0-2-206.4	81. INSULATED PIPE	
48.0-2-206.4	82. INSULATED PIPE	
48.0-2-206.4	83. INSULATED PIPE	
48.0-2-206.4	84. INSULATED PIPE	
48.0-2-206.4	85. INSULATED PIPE	
48.0-2-206.4	86. INSULATED PIPE	
48.0-2-206.4	87. INSULATED PIPE	
48.0-2-206.4	88. INSULATED PIPE	
48.0-2-206.4	89. INSULATED PIPE	
48.0-2-206.4	90. INSULATED PIPE	
48.0-2-206.4	91. INSULATED PIPE	
48.0-2-206.4	92. INSULATED PIPE	
48.0-2-206.4	93. INSULATED PIPE	
48.0-2-206.4	94. INSULATED PIPE	
48.0-2-206.4	95. INSULATED PIPE	
48.0-2-206.4	96. INSULATED PIPE	
48.0-2-206.4	97. INSULATED PIPE	
48.0-2-206.4	98. INSULATED PIPE	
48.0-2-206.4	99. INSULATED PIPE	
48.0-2-206.4	100. INSULATED PIPE	



PLAN
SCALE: 1/8" = 1'-0"

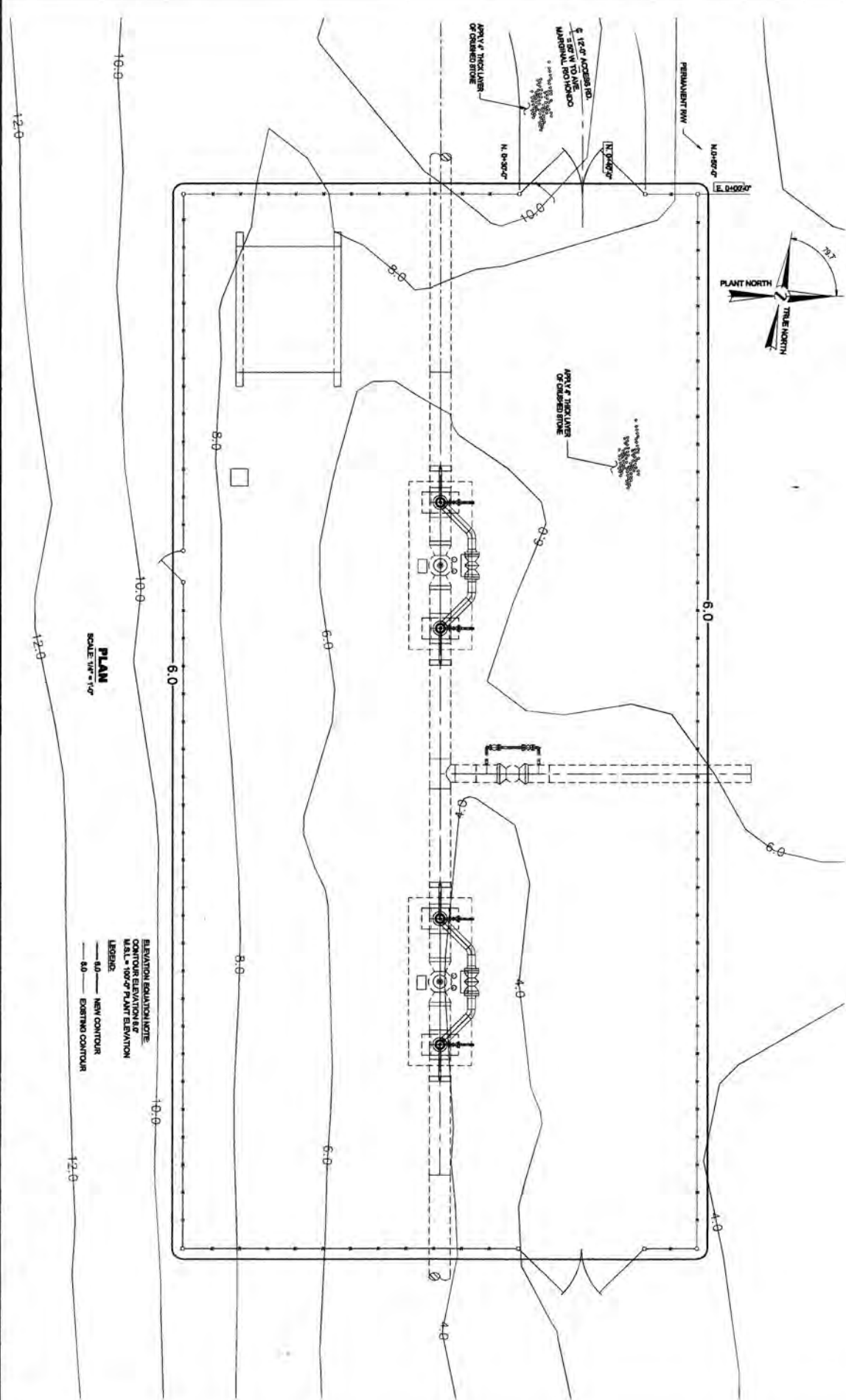
NOTES:
 1) MAINLINE VALVE LOCATIONS AND HEIGHTS ARE APPROXIMATE, ACTUAL HEIGHTS TO BE PROVIDED BY THE MANUFACTURER.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48-0-2-308.33.

DATE	DESCRIPTION
48-0-2-308.02 SHEET 2 OF 3	FINAL PLAN AND SECTION - MAINLINE VALVE SITE NO. 13 AND 14
48-0-2-308.13	BRING & INSTRUMENTATION DRAWING - MAINLINE VALVES 13 AND 14
48-0-2-308.18	MECHANICAL SHEET
48-0-2-308.05	FLOOR PLAN AND ELEVATIONS - RIG BUILDING
48-0-2-308.10	PIPELINE SYSTEM DRAWING - ELECTRICAL TO SAN JUAN
48-0-2-308.30	FINAL PLAN, ELEVATION & DETAILS - SPECIAL MAINLINE VALVE

NO.	REVISION
1	ISSUED FOR BID

AVE
PR

VA VERDE
PIPELINE PROJECT
 PIPING ELEVATION PLAN
 MAINLINE VALVE SITE NO. 13 & 14
 TIE-IN TO PALO VERDE METER STATION
 AT PALO VERDE
 CATALINA / BENTON BICO
 DRAWING NO. 48-0-2-308.42
 SHEET NO. 1 OF 2



PLAN
SCALE: 1/8" = 1'-0"

ELEVATION EQUIVALENCE
CONTOUR ELEVATION & OF
M.S.L. = 100'-0" PLANT ELEVATION

LEGEND:
 — 6.0 — NEW CONTOUR
 — 6.0 — EXISTING CONTOUR

NOTES

1. 12'-0" ACCESS RD. 4'-1.5" W TO AVE. MATERIAL STOCKPIL
2. 12'-0" ACCESS RD. 4'-1.5" W TO AVE. MATERIAL STOCKPIL
3. 12'-0" ACCESS RD. 4'-1.5" W TO AVE. MATERIAL STOCKPIL

NO.	DATE	DESCRIPTION
1	11-23-16	AS BUILT

NO.	DATE	DESCRIPTION
1	11-23-16	AS BUILT

VIA VERDE
PIPELINE PROJECT

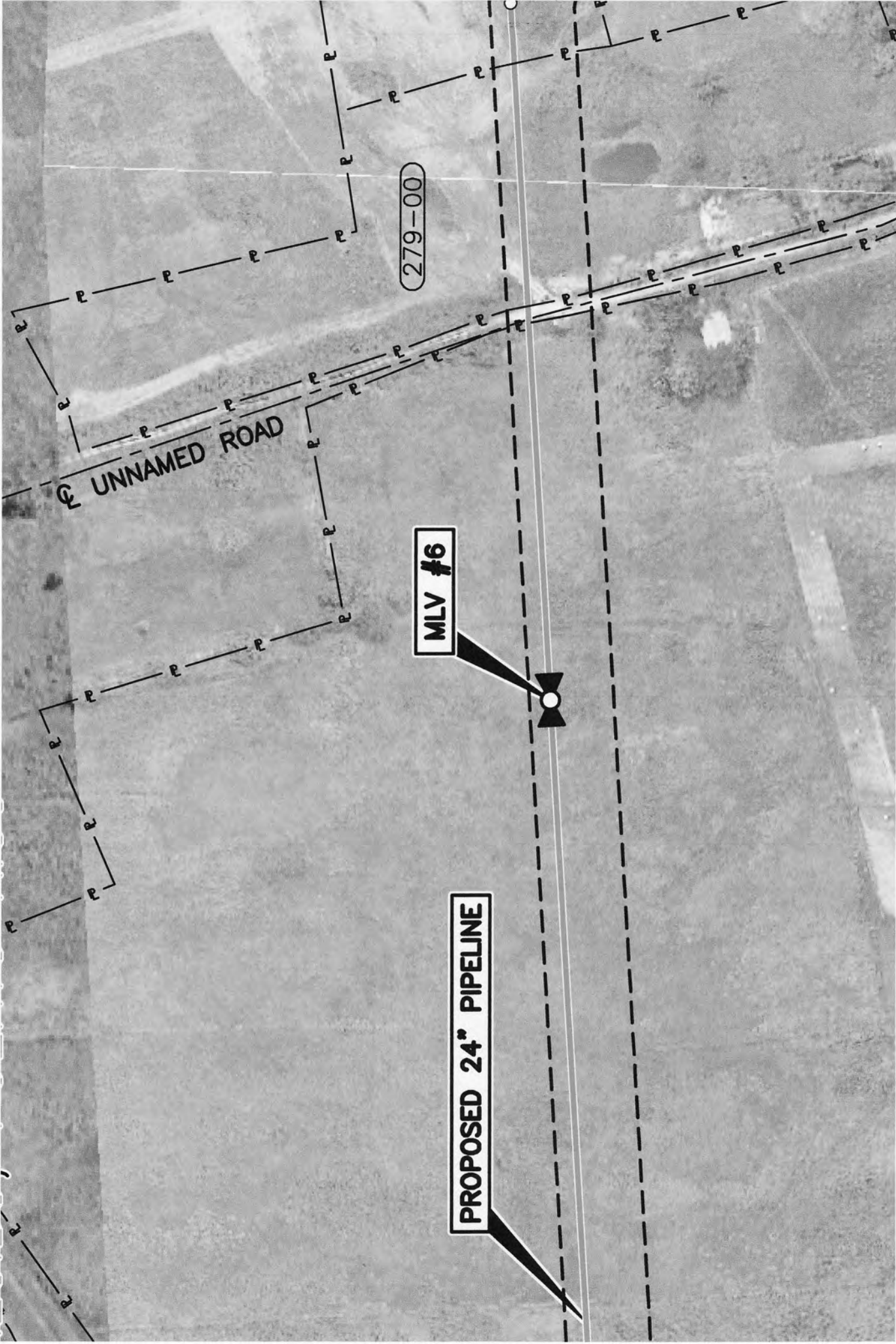
AEI
ENGINEERING

PR
PROJECT

48.0-Z-200.21
SITE GRADING PLAN
MAINLINE VALVE SITE NO. 18 & 14
TEAM TO PALO VERDE METER STATION
CATAMNO, ALBERTO RICO

DATE: 11-16-16
DRAWN BY: [Name]
CHECKED BY: [Name]

NO. 1

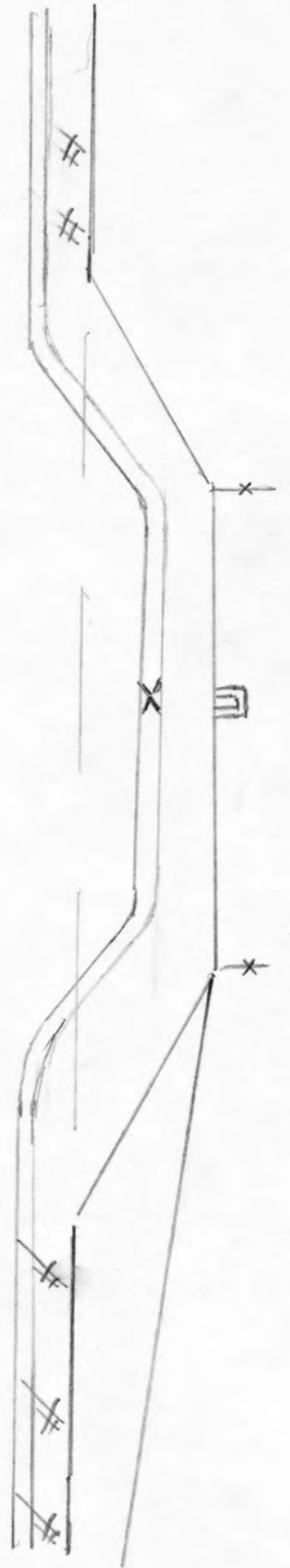
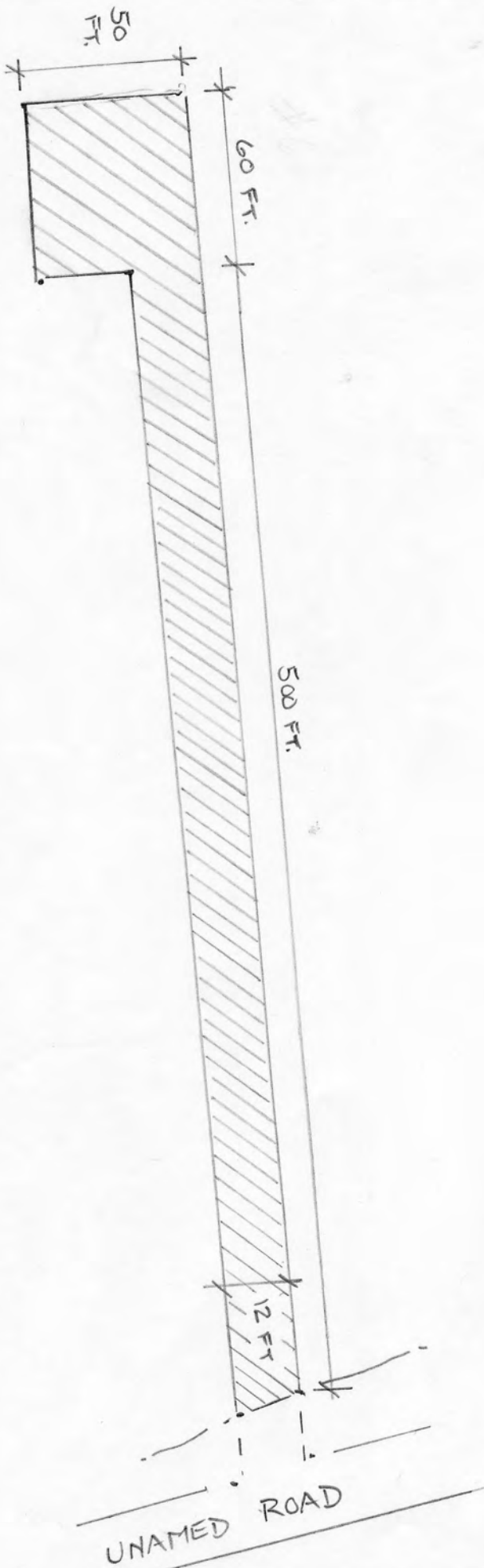


279-00

UNNAMED ROAD

MLV #6

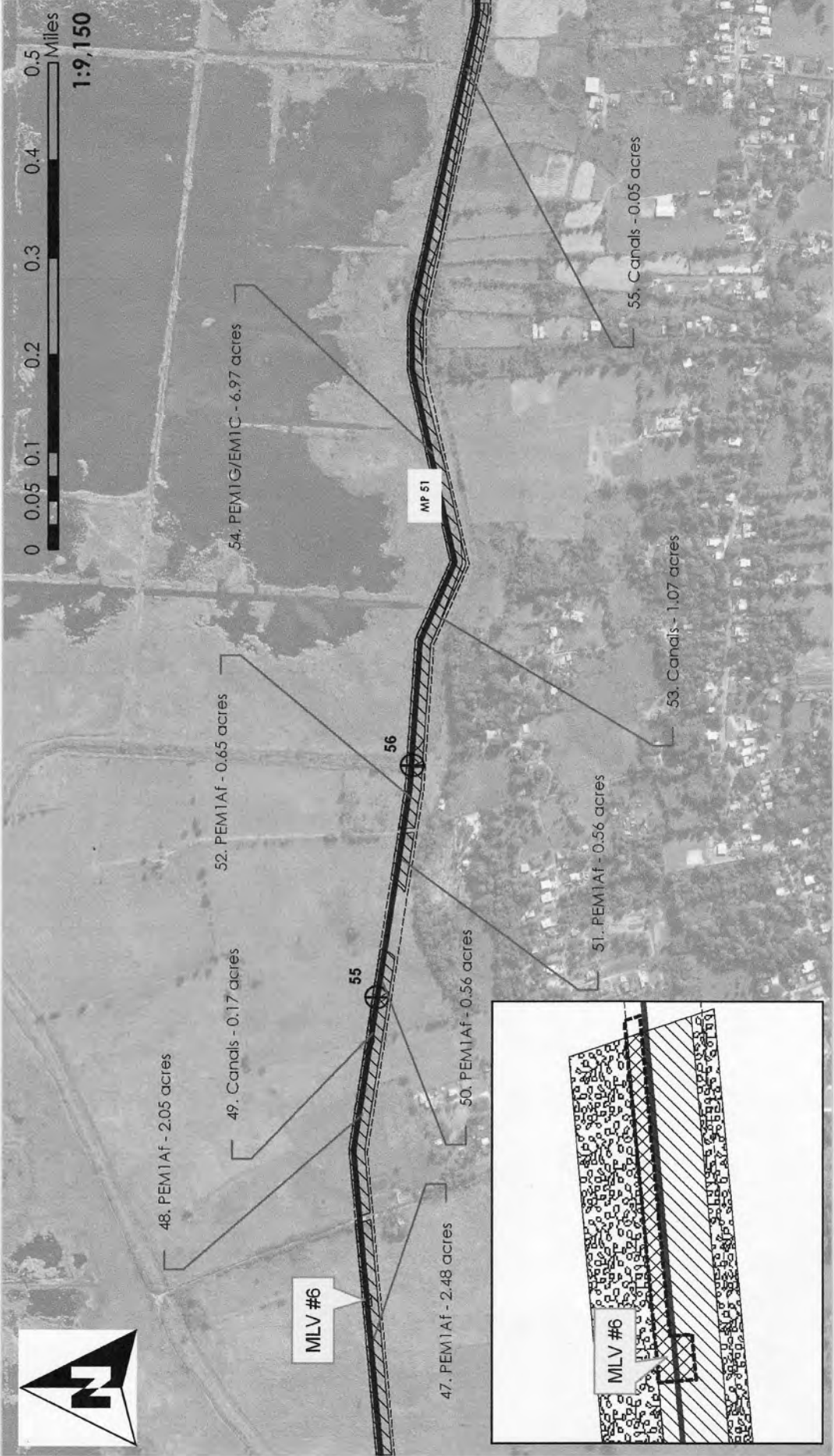
PROPOSED 24" PIPELINE



MAINLINE VALVE SITE NO. 6

NTS

/// = 0.26 AC FILL



Waters of the United States
Impact Maps
Sheet # 52
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

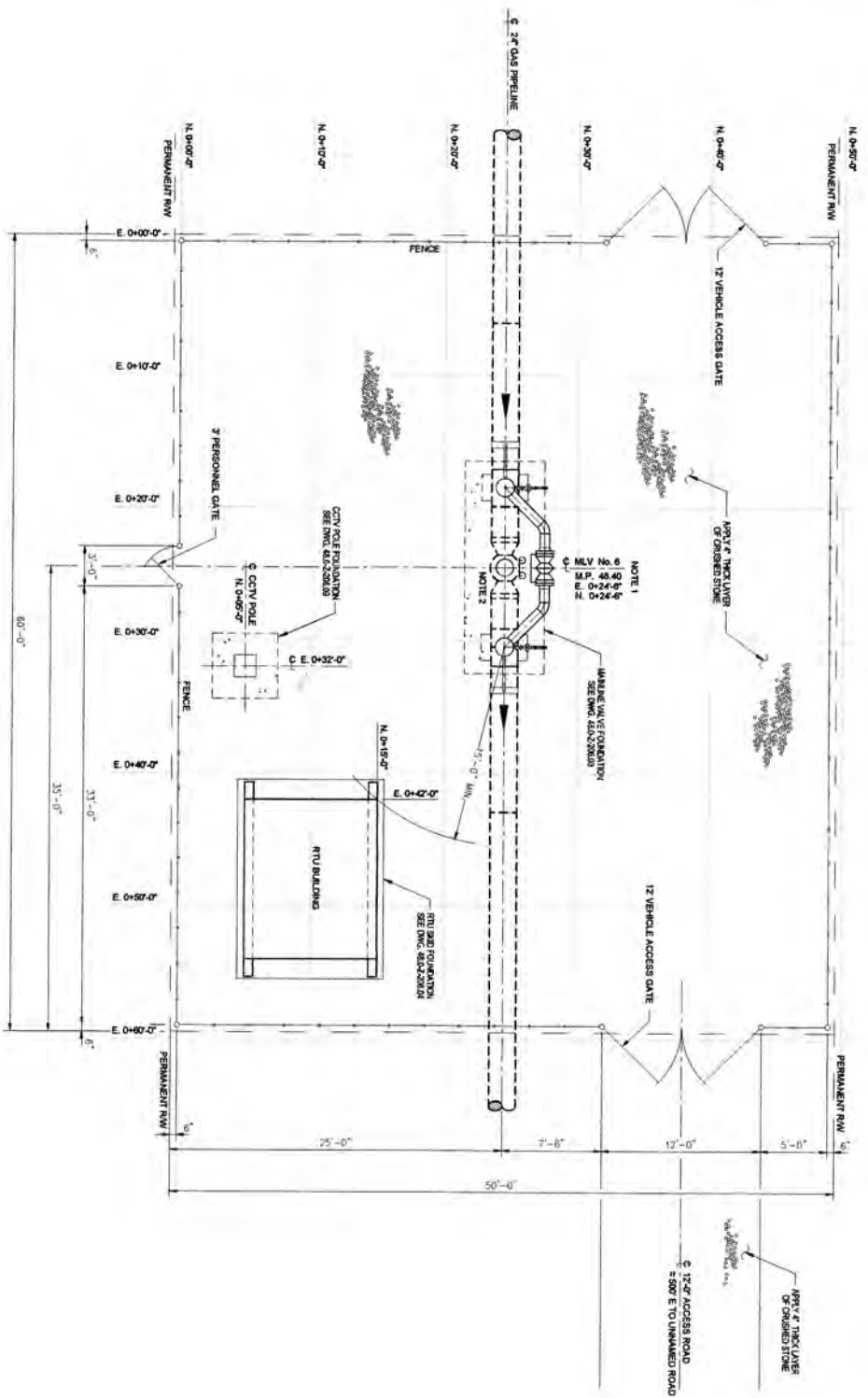
Source: 2011 Coll Rivera Environmental Via Verde ID
 103-532 USGS Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs

Legend

- 24" Pipe
- Workspace
- HDD Crossing
- Open Cut Crossing
- Drill Crossing
- Wetland No Fill
- Temporary Fill
- Permanent Fill
- Wetland Impacts**
- Acres**
- Temporary Fill 14.30
- Permanent Fill 0.26
- Total** 14.56



Sheet # 52



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

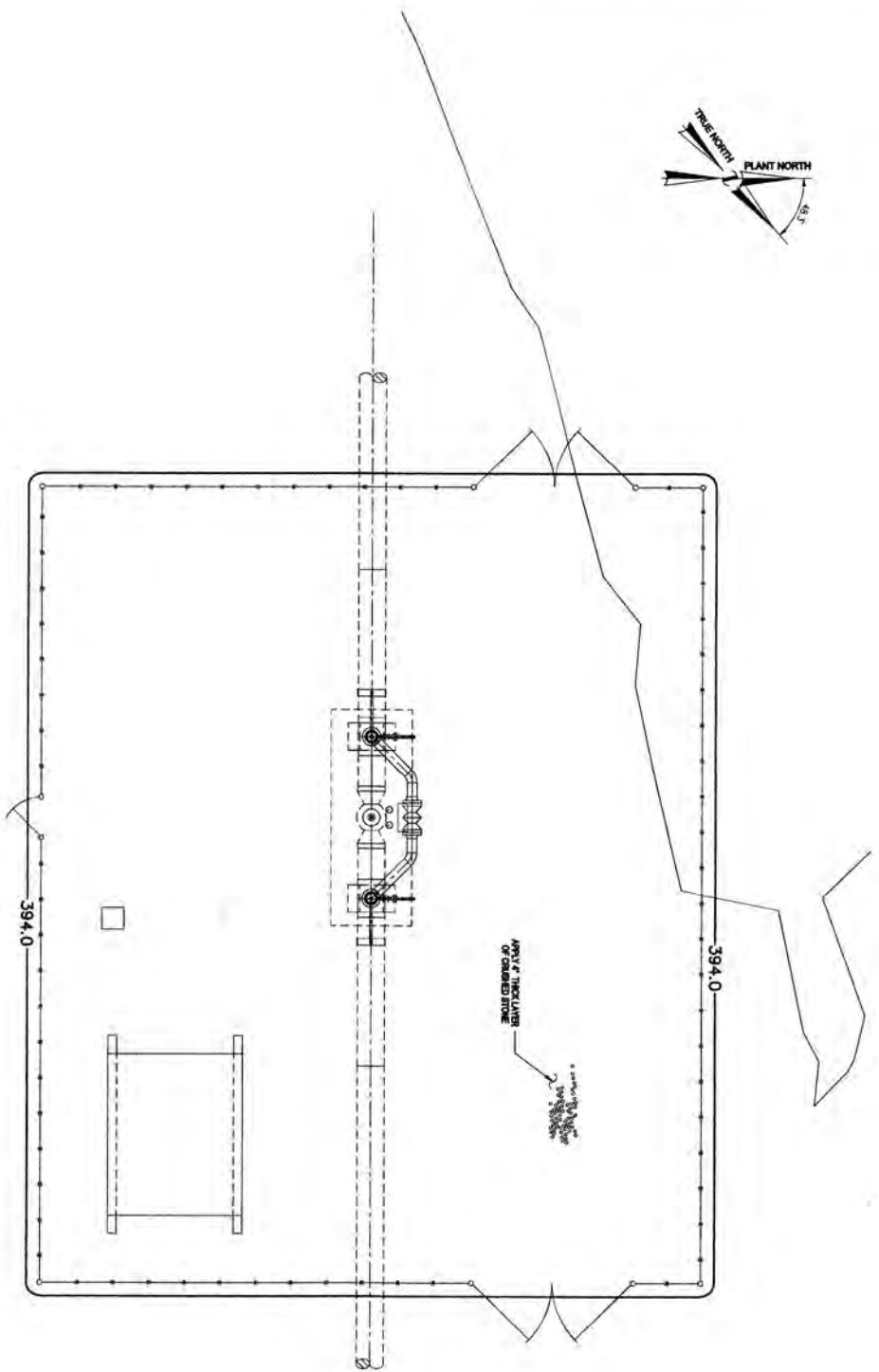
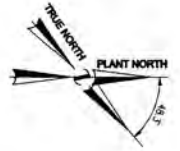
NOTES:
 1) MAINLINE BLOCK VALVE LOCATIONS AND RELIEF/T RELOADING ARE APPROXIMATE, ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MAINLINE VALVE DETAILS SEE DRAWING NO. 48.0-Z-306.30.

DRAWING NO.	NO.	REVISION	DATE	BY	CHKD	APP'D
48.0-Z-306.30	1	ISSUED FOR BID	11/20/10	ML	ML	ML

DATE: 11/20/10	SCALE: 1/4" = 1'-0"
----------------	---------------------

VIA VERDE
 PIPELINE PROJECT
 PIPING PLOT PLAN
 MAINLINE VALVE SITE NO.5
 M.P. 48.40
 ARECIBO, PUERTO RICO

DRAW. NO. 48.0-Z-306.35
 SHEET NO. 1 OF 1



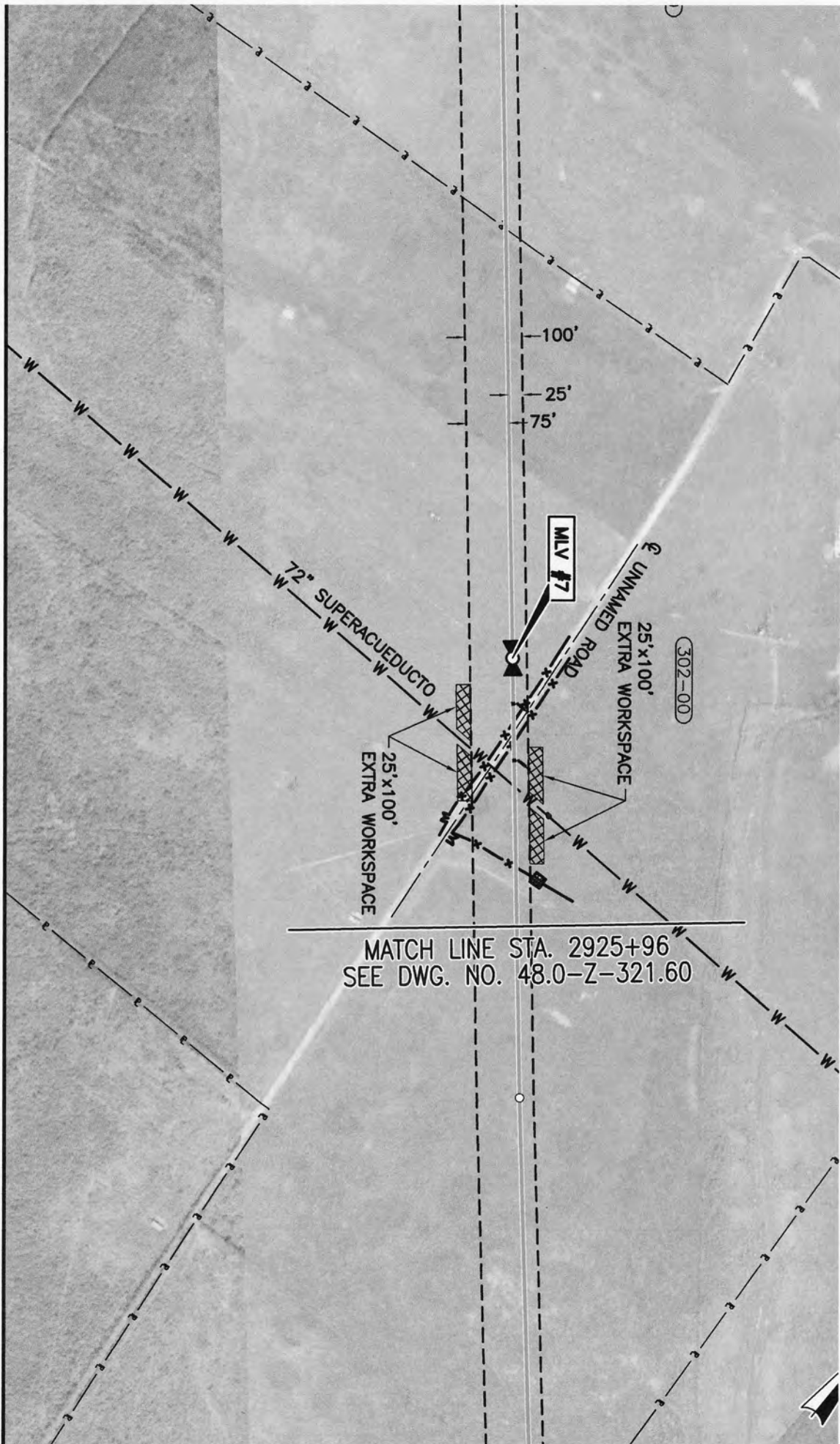
PLAN
SCALE 1/4" = 1'-0"

ELEVATION ELEVATION NOTE:
CONTOUR ELEVATION 394.0'
M.S.L. = 100' PLANT ELEVATION
LEGEND:
— 394.0 — NEW CONTOUR
— 394.0 — EXISTING CONTOUR

NOTES:
1) MAINLINE BLOCK VALVE LOCATION AND MILEPOST BEHAVIOR ARE APPROXIMATE ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.

REVISION NO.	DATE	BY	DESCRIPTION
1	10/20/16	MB	ISSUED FOR BID

PIPELINE PROJECT SITE GRADING PLAN MANLINE VALVE SITE NO. 8 M.P. 80.16 MANNAT, PUERTO RICO					
DATE	11-14-10	DATE	11-14-10	DATE	11-14-10
BY	MB	BY	MB	BY	MB
SCALE	1/4" = 1'-0"	SCALE	1/4" = 1'-0"	SCALE	1/4" = 1'-0"
PROJECT NO.	48.0-2-208.16	SHEET NO.	1	TOTAL SHEETS	1



MATCH LINE STA. 2925+96
 SEE DWG. NO. 48.0-Z-321.60

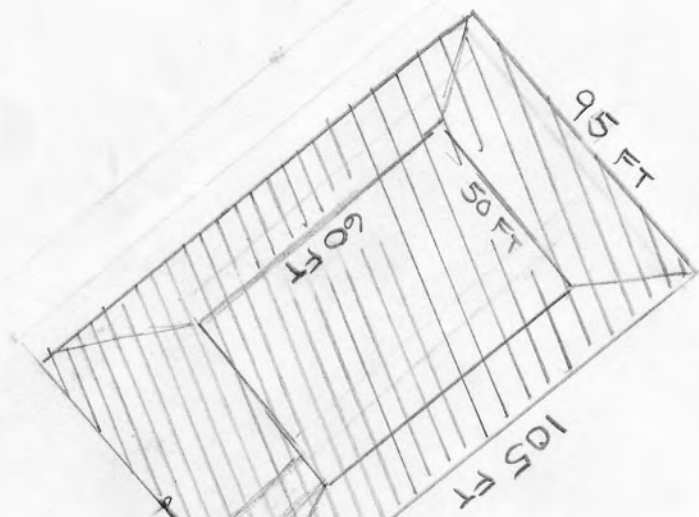
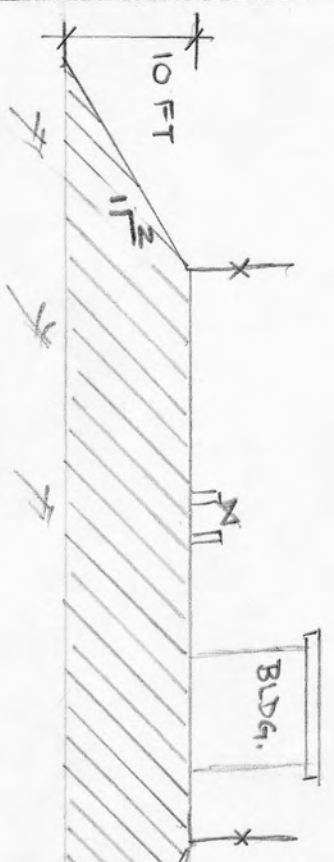
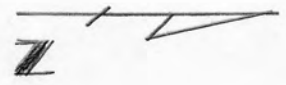
MLV #7	3' COVER	72" SUPERACUEDUCTO	3' COVER
48.0-Z-306.36		48.0-Z-324.11	

200
180

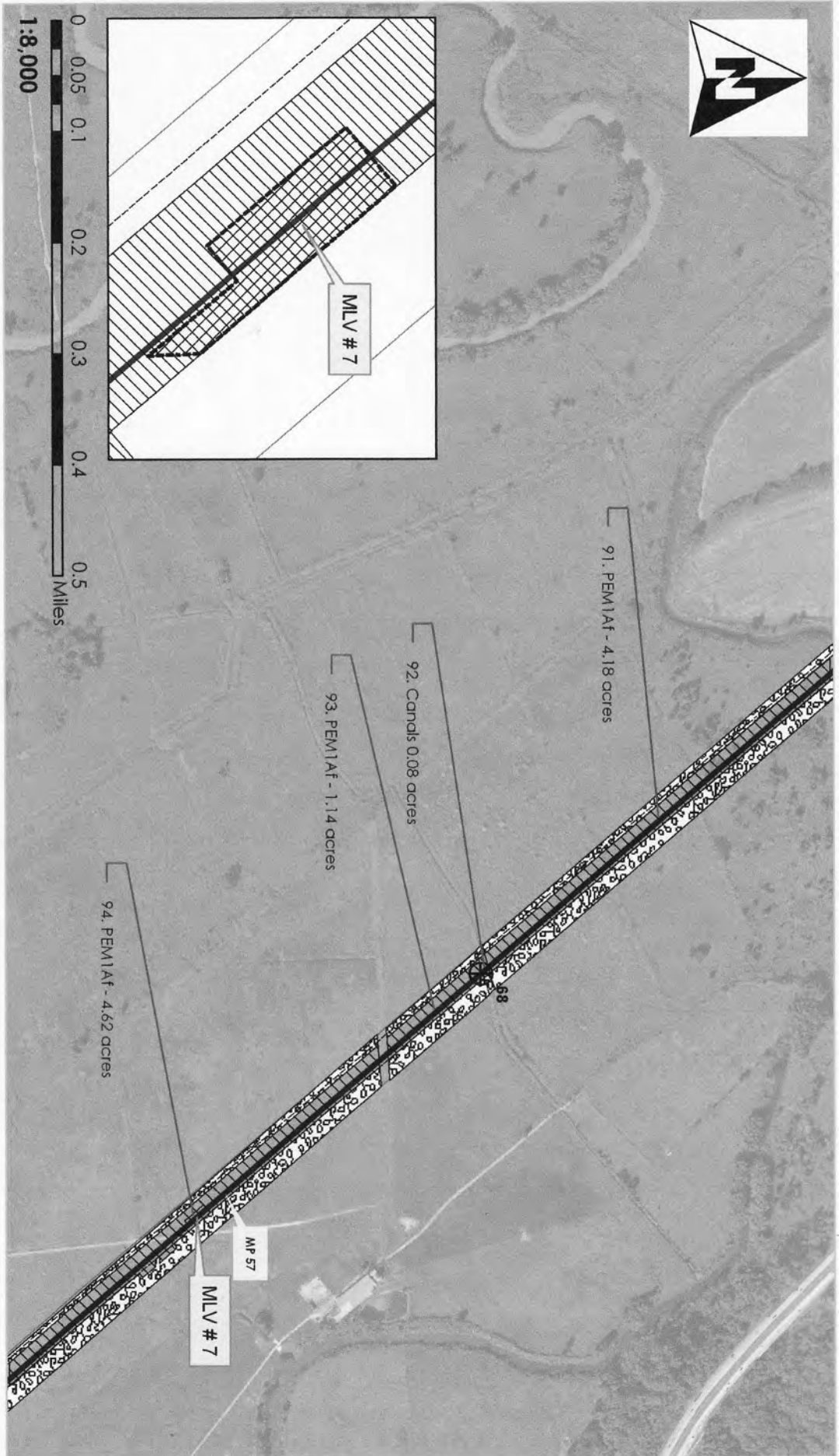
MAIN LINE VALVE SITE NO. 7

NTS.

/// = 0.16 AC FILL



UNAMED ROAD



Waters of the United States
Impact Maps
Sheet # 57
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

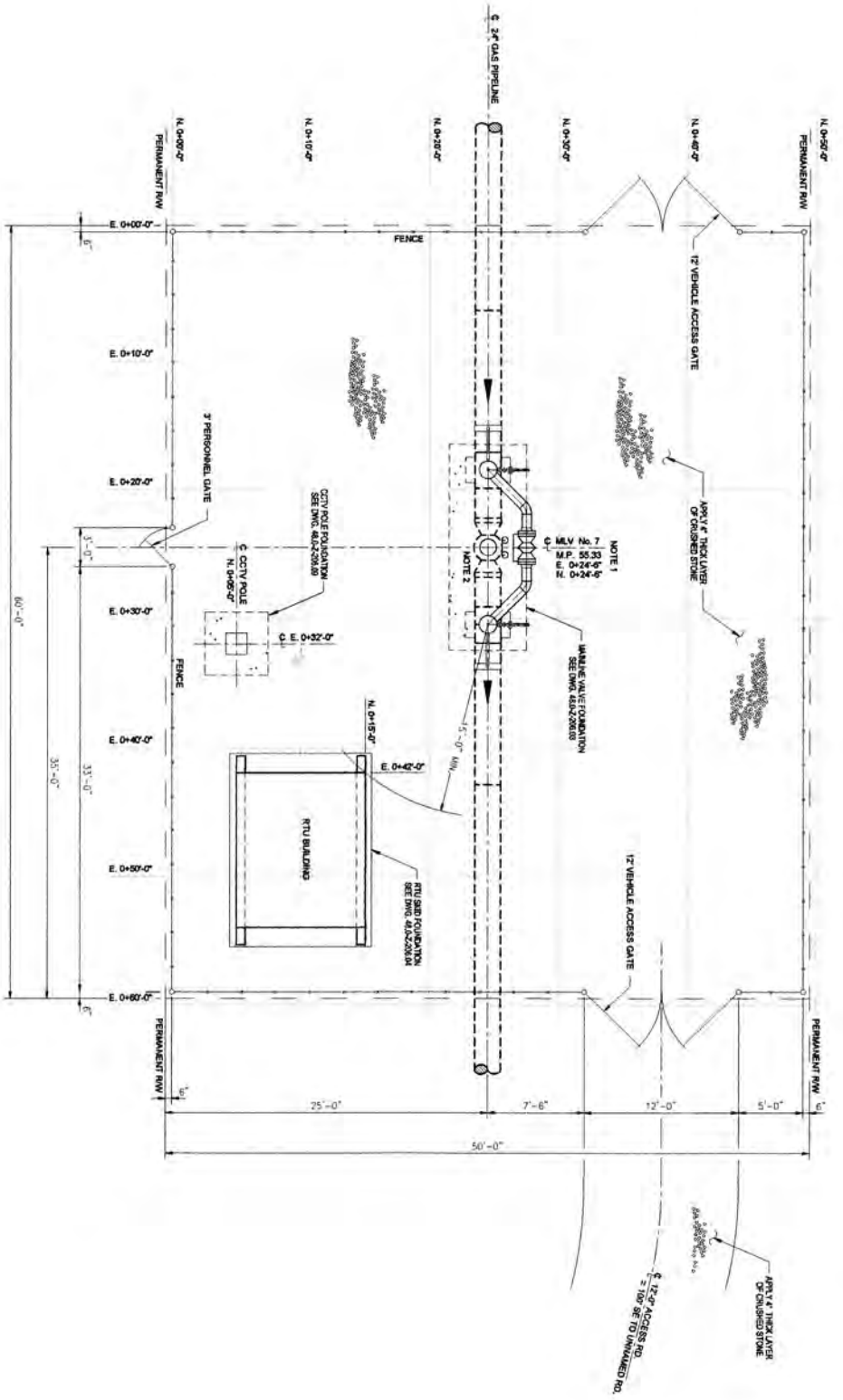
Source: 2011, Coll Rivera Environmental Via Verde, JD
 1987-82, USGS, Topographic Maps of the Puerto Rico Quadrangles
 1987, USFWS, National Wetland Inventory, Maps
 2010, Puerto Rico Planning Board, Aerial Photographs

Legend

	2.4" Pipe		Wetland No Fill
	Workspace		Temporary Fill
	HDD Crossing		Permanent Fill
	Open Cut Crossing		Total
	Drill Crossing		

	Acres
	9.86
	0.16
	10.02





PLAN
SCALE: 1/8\"/>

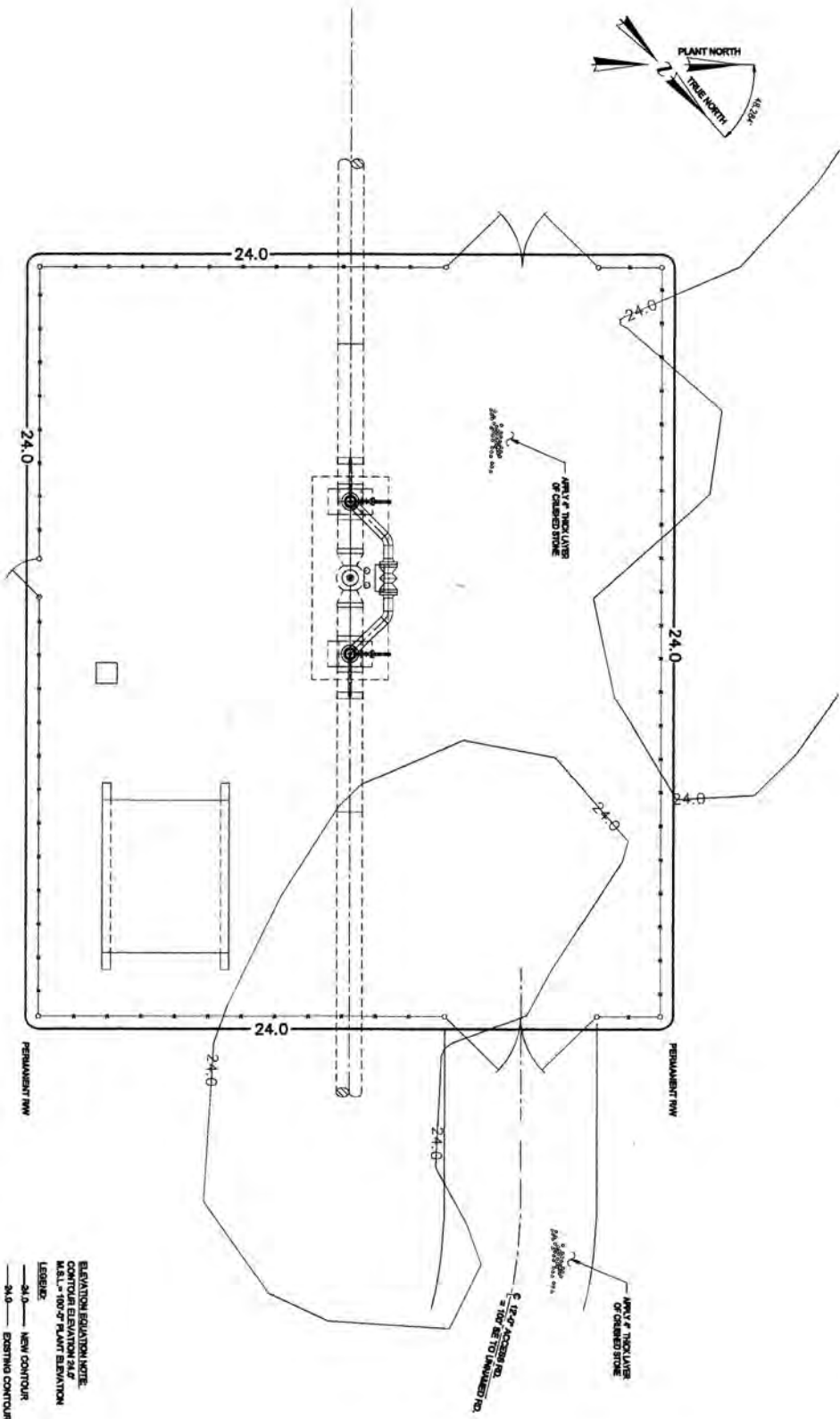
NOTES:
 1) MAJOR GAS VALVE LOCATIONS AND HANGOFF LOCATIONS ARE APPROXIMATE. ACTUAL LOCATIONS AS SHOWN ON ALIGNMENT SHEETS.
 2) FOR MANHOLE VALVE DETAILS SEE DRAWING NO. 48-2-206-36.

NO.	DESCRIPTION	DATE	BY	CHKD
1	ISSUED FOR BID	11/25/15	MM	MM
2	REVISION			
3				
4				
5				
6				
7				
8				
9				
10				

VIA VERDE
PIPELINE PROJECT
PIPING PILOT PLAN
MANHOLE VALVE SITE NO. 7
M.P. 55.33
MANATI, PUERTO RICO

DATE: 11/25/15
 DRAWN BY: MM
 CHECKED BY: MM

48-2-206-36 1 OF 1



PLAN
SCALE 1/8" = 1'-0"

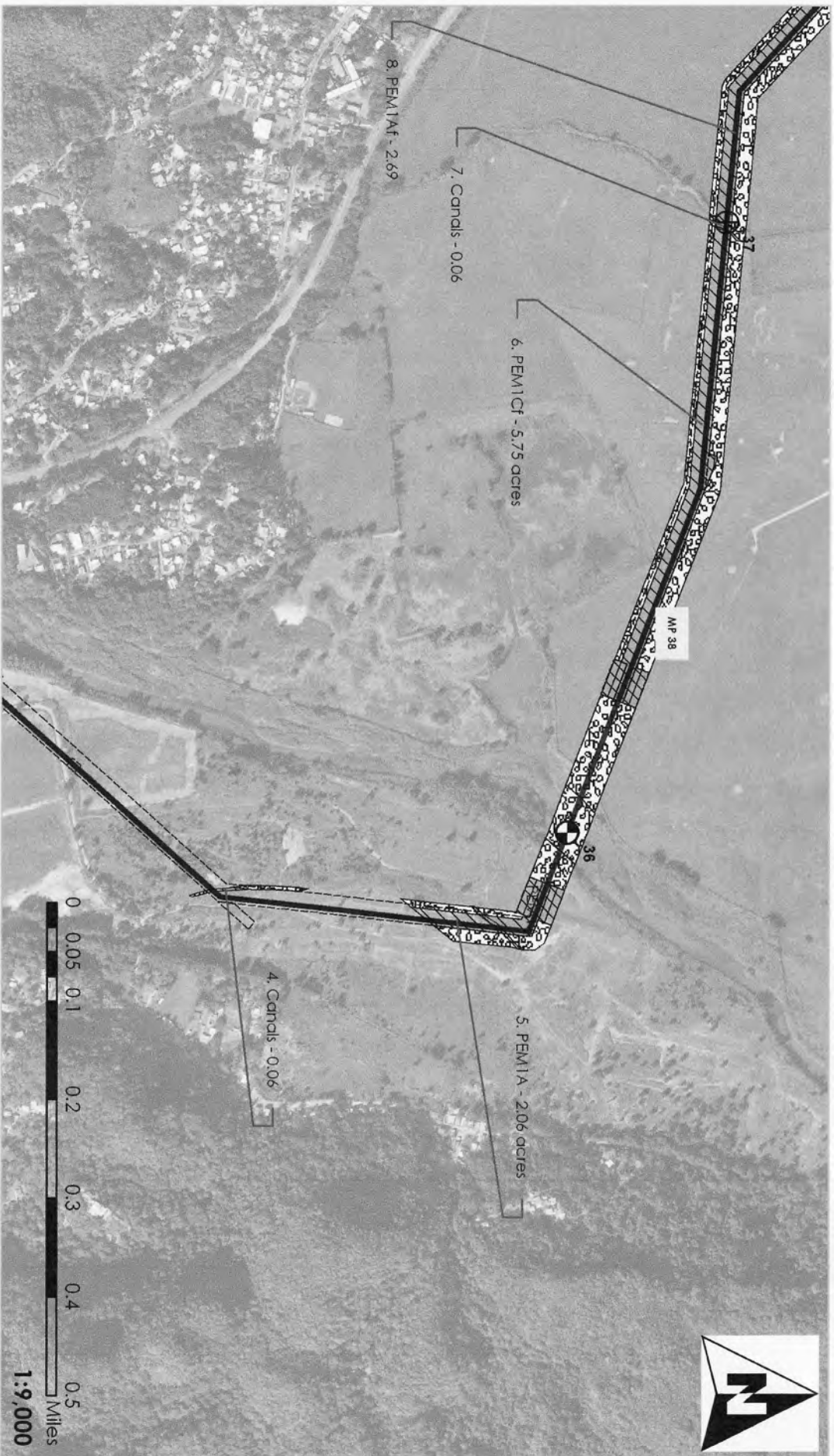
ELEVATION ELEVATION NOTE.
CONTOUR ELEVATION 24.0
M.S.L. = 100'-0" PLANT ELEVATION
LEGEND:
— 24.0 — NEW CONTOUR.
— 24.0 — EXISTING CONTOUR.

NOTES:
1) DIMENSIONS SHOWN UNLESS OTHERWISE NOTED ARE APPROXIMATE ACTUAL.
2) LOCATION OF ALL STRUCTURE ON ADJACENT SHEETS.

NO.	DESCRIPTION	DATE	BY	CHK.	REV.
1	ISSUED FOR BID	11-23-10	AC	IK	

DATE	BY	DATE	BY
11-14-10	AC	11-17-10	AC

VIA VERDE
PIPELINE PROJECT
SITE GRADING PLAN
MANHOLE VALVE SITE NO. 7
M.P. 06.23
MANHOLE PIQUERO BRQ.
SHEET NO. 1
REV. 1



Waters of the United States
Impact Maps
Sheet # 41
 Via Verde Project
 (SAJ-2010-02881(IP-EWG))

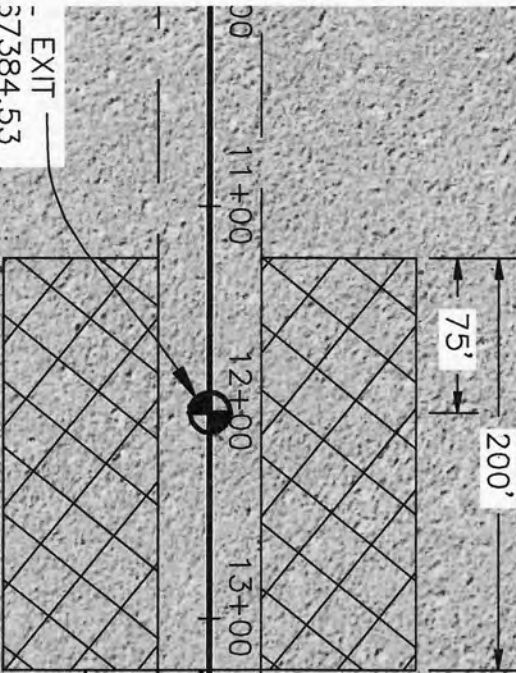
Source: 2011 Call Rivera Environmental Via Verde JD
 1947-52 USGS Topographic Maps of the Puerto Rico Quadrangles
 1987 USFWS National Wetland Inventory Maps
 2010 Puerto Rico Planning Board Aerial Photographs

Legend

	24" Pipe		Wetland No Fill
	Workspace		Temporary Fill
	HDD Crossing		Remnant Fill
	Open Cut Crossing		Total
	Drill Crossing		
			Acres
			10.62
			0.00
			10.62



- EXIT -
57384.53
56564.13



11+00
12+00
13+00

75'
200'



14+00

200'

50'

1210'

HORIZONTAL DIRECTIONAL DRILL WORK PAD

