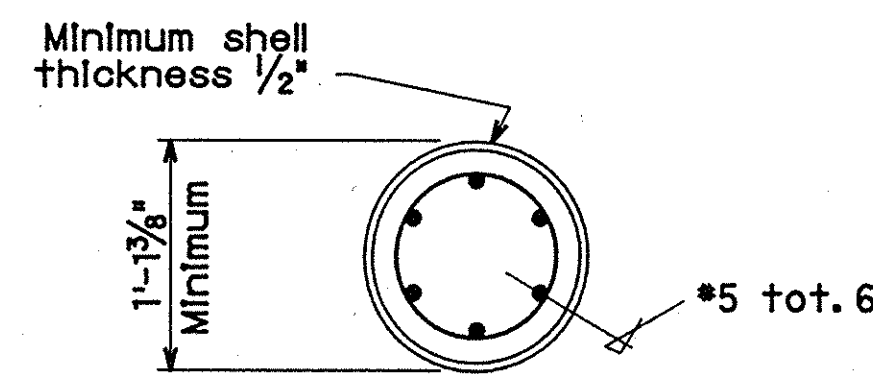
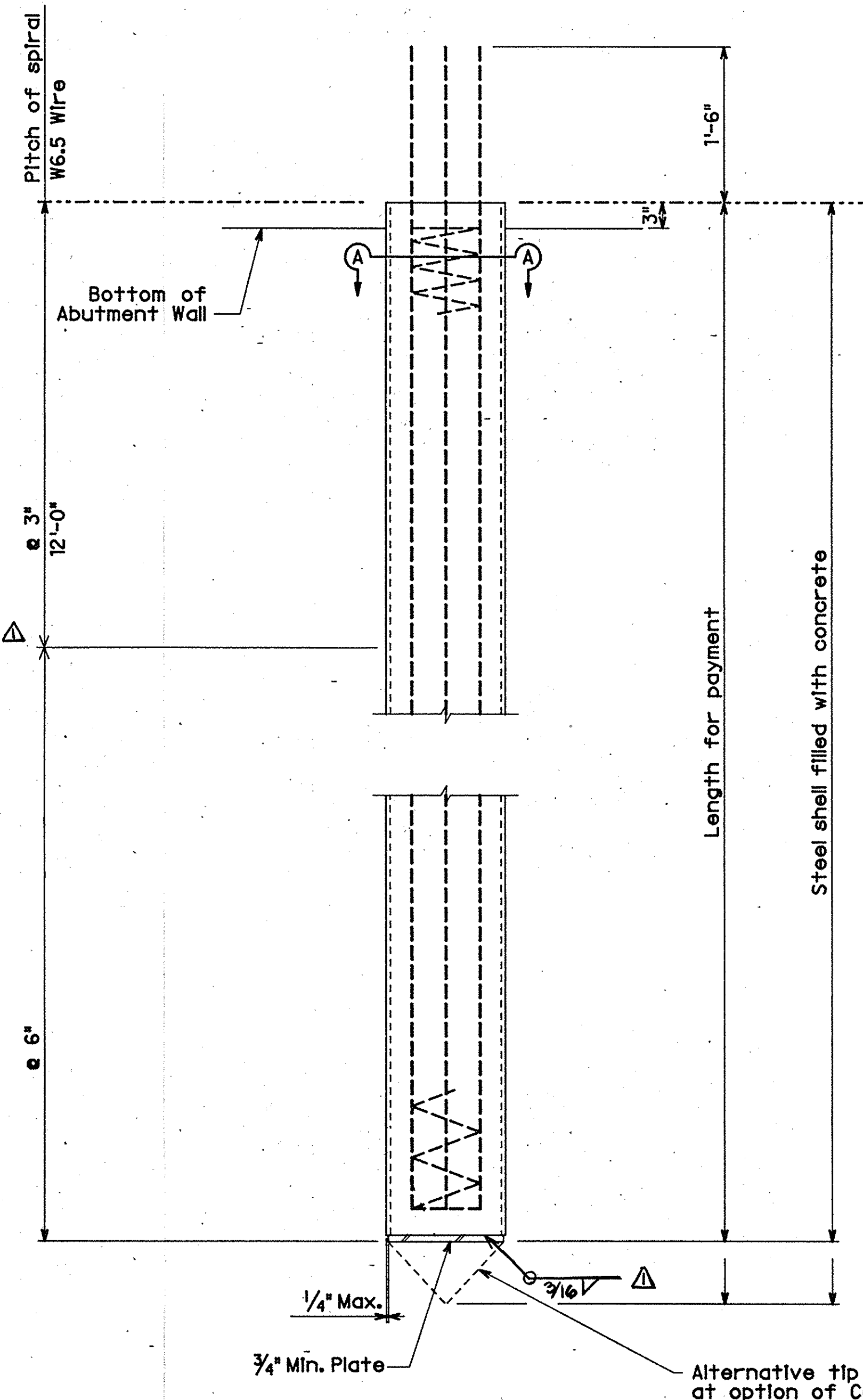




SECTION A - A



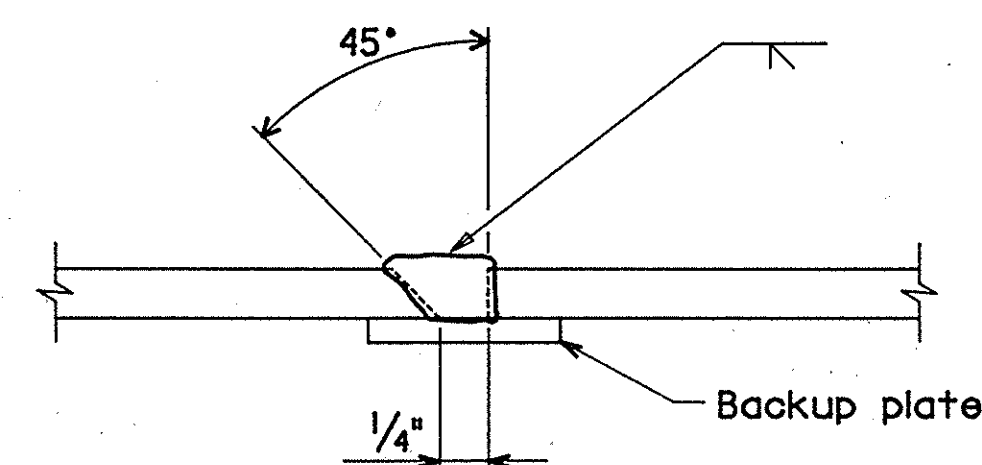
SECTION A
1" = 1'-0"

DESIGN LOADING

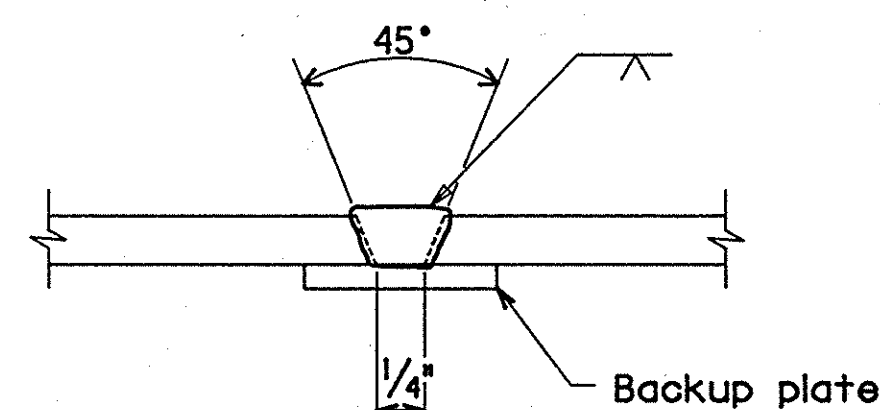
Class 100 = 100 tons

NOTES:

- Lapped splices in spiral pile reinforcement shall be lapped 80 wire diameters minimum. Spiral pile reinforcement at splices and at ends shall be terminated by a 135° hook with a 6" tail hooked around a longitudinal bar or strand.
- Two inch clearance to spiral reinforcement shall be maintained if section used is larger than the minimum section shown.
- All concrete in piles and pile extensions shall contain not less than 192 pounds of cement per cubic yard, $f'_c = 5000$ psi. min.
- The steel pile shell shall conform to ASTM A252-89 with a minimum $F_y = 45,000$ psi.



Single Bevel-Groove
FULL SIZE

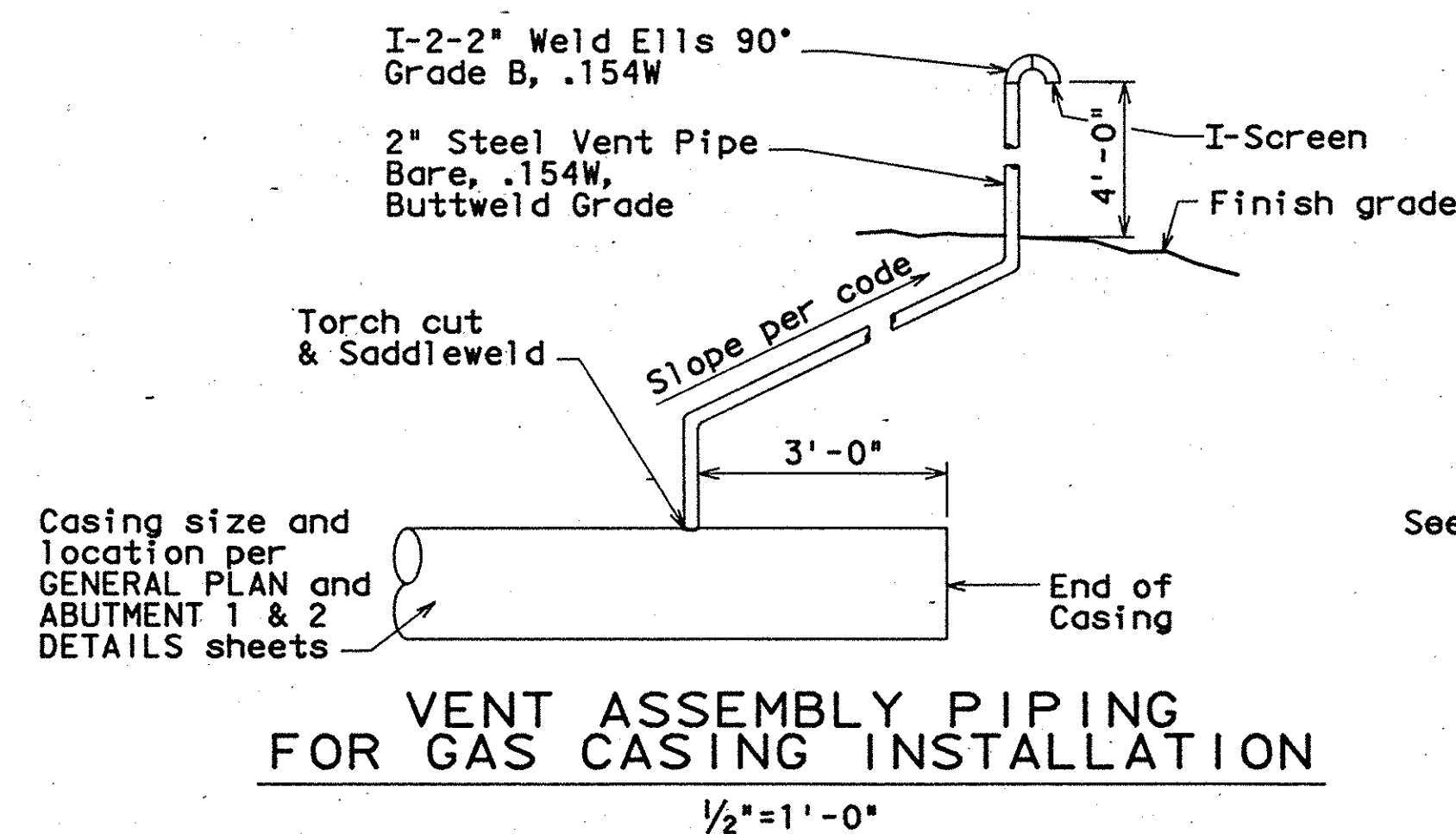


Single Vee-Groove
FULL SIZE

NOTES:

- Single Vee-Groove permitted for all positions.
- Single Bevel-Groove permitted for horizontal joints only.

PILE SHELL WELDING DETAIL - BUTT JOINTS



VENT ASSEMBLY PIPING
FOR GAS CASING INSTALLATION
1/2" = 1'-0"

Sleeve Diameter (Inches)	A (Inches)
30	20
42	25

Steel Strap
3/8x4 for 30" Casing
1/2x4 for 42" Casing

3/8" Threaded Anchor Bolts (2 total)
Leveling Nut
1'-6" ±
1'-4 1/2" ±

90° for 42" Casing
105° for 30" Casing
12" Min
1/2" O.D.

4" ±
A
A
4"

1/2" Expansion Joint Material
Cement Mortar Lined & Coated Steel Pipe
Non-Shrink Drypack
Concrete Saddle @ 10' c.c. approximate
#3 Ties
#5 L (7 total) Each Face. Cut or Lap to Suit as Needed

For Typical Reinforcing See Typical Section Sheet
#4 Stirrups (2 total)
Roughen Concrete Surface
#3 Tie @ Mid Height

CROSS SECTION
NOTE: WATER UTILITY CASINGS SHALL RUN STRAIGHT & NOT CURVE WITH THE BRIDGE.

RECLAIMED WATER & WATER UTILITY SUPPORT DETAILS
1" = 1'-0"

2'-3" ±
1/2" ±
2'-0" ±
4" ±
1'-4" ±
4" ±
1/2" ±
16" Casing
1/4x4x2'-0" Steel Strap w/ 2-1" Holes Galvanized
1/2" ±
1/2" ±
3/8x3x4'-0" Steel Strap w/ 2-1"x2 1/2" Slots Galvanized
Concrete Saddle @ 10' c.c. Max
3/8" Threaded Anchor Bolts w/ Heavy Hex Nut w/ Matching Lock Washers Galvanized (2 total)
Clean and Abrasive Blast Concrete Surface
For Typical Reinforcing See Typical Section Sheet
CROSS SECTION
GAS UTILITY CASING SUPPORT DETAILS
1" = 1'-0"

1'-0" ±
6" ±
3" ±
Pipe Support
Casing
Bridge Deck
Silkador 31, Hi-Mod Gel or equal
LONGITUDINAL SECTION

1'-0" ±
6" ±
3" ±
Pipe Support
Casing
Bridge Deck
Silkador 31, Hi-Mod Gel or equal
LONGITUDINAL SECTION

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Casing
Bridge Deck
Silkador 31, Hi-Mod Gel or equal
LONGITUDINAL SECTION

REFER TO DWG. No. UG-D-5-412 OF SOUTHERN CALIFORNIA EDISON COMPANY DRAWINGS FOR ELECTRICAL CONDUIT SUPPORT PLANS AND DETAILS, AND CONDUIT SPECIFICATIONS.

ELECTRICAL CONDUIT SUPPORT DETAIL

(619) 283-5424
LIBBY
STRUCTURAL ENGINEERS
4452 GLACIER AVENUE
SAN DIEGO, CALIFORNIA 92120

Donald R. Libby
No. 2878
STRUCTURAL ENGINEER
Exp. 12-31-91
STATE OF CALIFORNIA

MISSION VIEJO COMPANY
26137 LA PAZ ROAD • MISSION VIEJO • CALIFORNIA 92691

DATE	BY	REVISION DESCRIPTION	APP'D	DATE	CHK	MC	DATE 3-19-92
11/92	NM	AS NOTED			DES	BC	DWN NM

PACIFIC PARK DRIVE BRIDGE
OVER
BICYCLE AND EQUESTRIAN TRAILS, AND AUMA EASEMENT
1300 ft. WEST OF ALICIA PARKWAY
PILE AND MISCELLANEOUS DETAILS

SHEET
8
OF
10
2721

DR3 15719