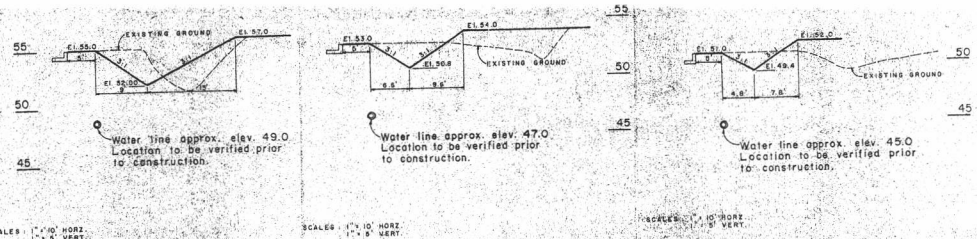


Proposed Ditch Capacity

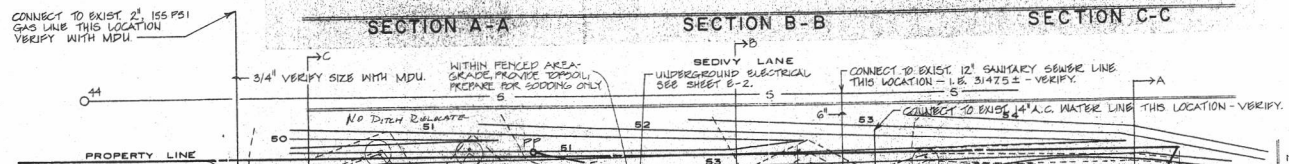
Grass lined "V" bottom, open channel
 Manning's Roughness Coefficient = 0.070
 (from Rapid City Drainage Criteria Manual for a straight channel, without shrubs or trees, and with a good stand of grass 12 inches high. Depth of flow 0.7 to 1.5 feet.)
 Ditch is 340' long at 0.91%
 Side slopes are 3:1
 During irrigation, the ditch must carry 3.5 cfs.
 When Q = 3.70 cfs., Depth = 1.00 feet
 V = 1.2 f.p.s.
 When Q = 23.46 cfs., Depth = 2.00 feet
 V = 2.0 f.p.s.



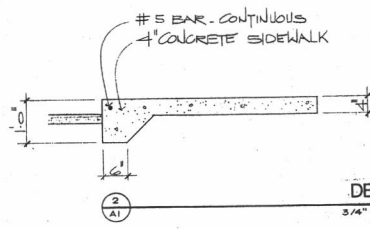
SCALE: 1" = 10' HORIZ. 1" = 5' VERT.

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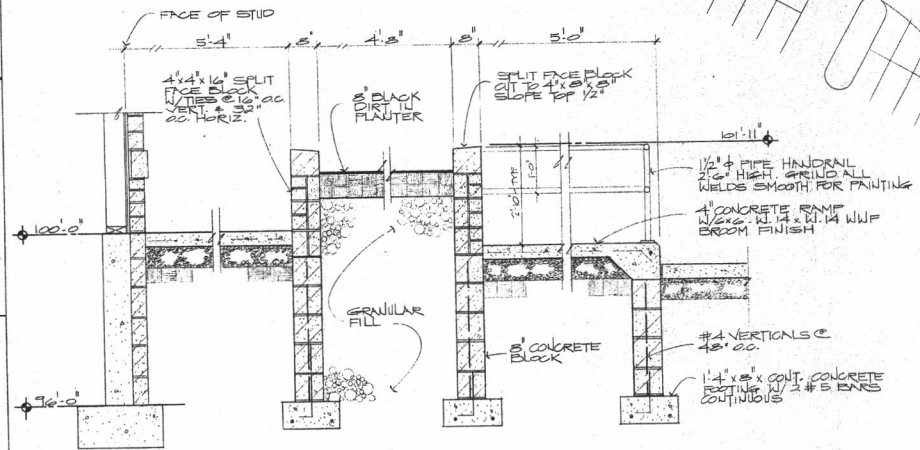
SCALE: 1" = 10' HORIZ. 1" = 5' VERT.



NOTE: THE CONTRACTOR SHALL CONTACT CHARLES JOHNSON 624-1161 FOR PERMISSION & TO VERIFY INTENT TO MODIFY THE IRRIGATION DITCH.



DETAIL 3/4" x 1'-0"



SECTION 3/4" x 1'-0"

- NOTES:
1. INFORMATION ON THIS DRAWING WAS OBTAINED FROM A TOPOGRAPHIC SURVEY WHICH WAS PREPARED BY RENNER & SPERLICH ENGINEERING CO.
 2. SURVEY FLOOR LINE ELEVATION 5188.842 IS EQUAL TO ARCHITECTURAL FLOOR LINE ELEVATION 100.00.

RAPID CITY COMMUNITY PLANNING & DEVELOPMENT SERVICES

OCT 10 2014

RECEIVED



SITE PLAN 1" = 20'

WESTERN DAKOTA, VO-TECH DAY CARE
 RAPID CITY, SOUTH DAKOTA
 DATE: MAY 30, 1990
 COMM. NO. 9003
 SITE PLAN & DETAILS

1621 Sheridan Lake Road
 Rapid City, SD 57702-3423
 605-348-3535
 Architecture - Engineering - Planning

LUND & ASSOCIATES
 INC.

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