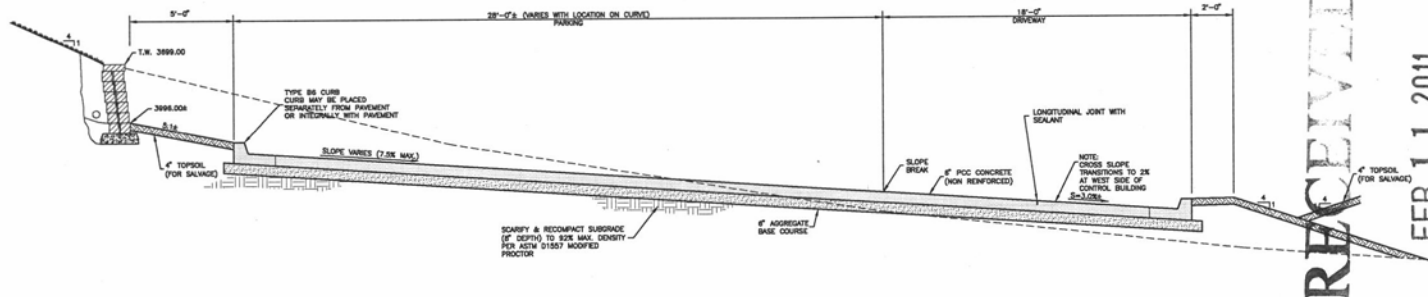
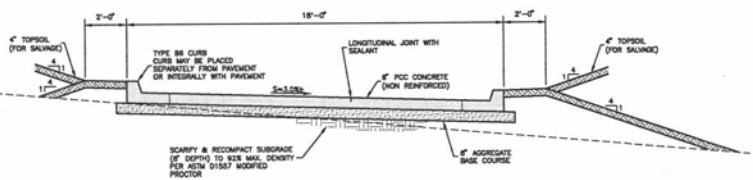


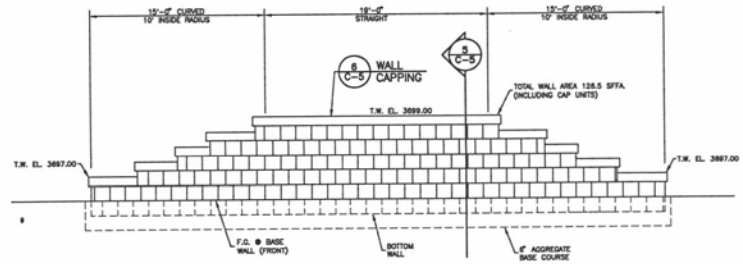
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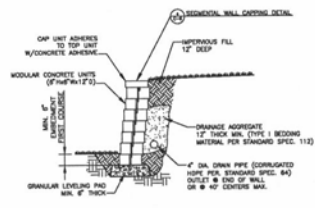
1 TYPICAL SECTION - PARKING LOT  
C-5 NOT TO SCALE



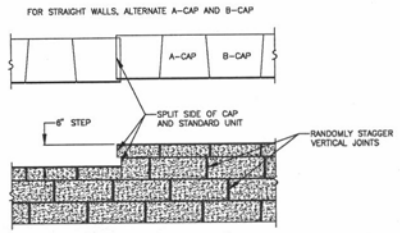
2 TYPICAL SECTION - ACCESS DRIVEWAY (PCC)  
C-5 NOT TO SCALE



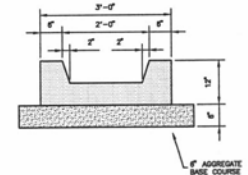
3 SEGMENTAL RETAINING WALL  
C-5 SCALE: 1" = 5' HORIZ.  
1" = 2' VERT.



5 TYPICAL SECTION - UNREINFORCED SEGMENTAL RETAINING WALL  
C-5 NOT TO SCALE



6 SEGMENTAL WALL CAPPING DETAIL - PROFILE  
C-5 STEP AT TOP OF WALL  
NOT TO SCALE



4 DRAIN GUTTER  
C-5 SCALE: 3/4" = 1'-0"

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Rapid City Growth Management Department

Project for: Public Works Department

1500 Commercial Drive  
Rapid City, SD 57702  
Phone: (605) 341-7000  
Fax: (605) 341-7064  
www.rapidcitygrowth.com

celec

REGISTERED PROFESSIONAL ENGINEER  
S.D. NO. 2780  
GREGORY M. WIERENGA  
Rapid, SD

Scale: AS NOTED

Designed By: MCB  
Design Date: 04/2010  
Issued: Job No. 09130.00  
Reviewed By: KJCHM  
Survey Date: 7/2

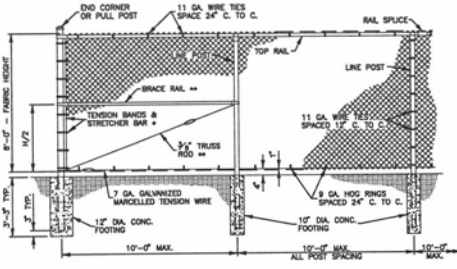
KEPPS RESERVOIR CONTROL VALVE STATION

CITY OF RAPID CITY PROJECT NO. W10-1845

Sheet Title: SITE DETAILS

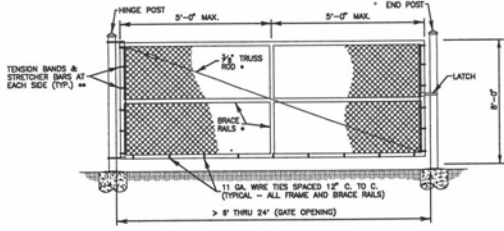
Sheet: C-5

February 10, 2011 1:58:30 P.M.  
Drawing: 1945 SPRING DETAIL.DWG (FROM \\V:\MINI-DATA\CEC\PROJECTS & PROPOSALS\101010300 - KEPPS WATERMAIN EXTENSION & CONTROL VALVE STATIONS\1010-1945 CONTROL VALVE PLANS)



\* TENSION BANDS SHALL BE SPACED 12" C. TO C. ARE NOT REQUIRED FOR 3' THRU 5' FENCES.

COMPONENT	END CORNER OR RAIL POST	LINE POST	TOP & BRACE RAIL
TYPE OF FABRICATION	ROUND PIPE NOMINAL	ROUND PIPE NOMINAL	ROUND PIPE NOMINAL
SIZE	3.00 O.D. 2.86 O.D.	1.667 O.D.	1.667 O.D.
WEIGHT (LB. / FT.)	8.75 OR 8.44	3.85 OR 3.72	3.27 OR 3.04



2 SINGLE VEHICULAR GATE  
NOT TO SCALE

1 CHAIN LINK FENCE WITH RAILED TOP  
NOT TO SCALE

- CHAIN LINK FENCE NOTES:
- SPECIFIC DETAILS OF MANUFACTURE OF THE COMPLETE FENCE CONSTRUCTION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. COMMERCIALY AVAILABLE ITEMS PRODUCED SPECIFICALLY FOR THE USE INTENDED SHALL BE USED WHENEVER POSSIBLE IN THE CONSTRUCTION OF THE FENCE.
  - 1/4" (WEIGHT OF FABRIC) SHALL BE 9/8" FABRIC SHALL BE UNCOILED AT ONE SELVAGE AND TWISTED AT THE OTHER SELVAGE.
  - CHAIN LINK FABRIC SHALL BE 2" MESH, NO. 9 GAGE GALVANIZED WIRE SECURELY FASTENED TO TENSION WIRE, LINE POST, RAILS, BRACES AND STRETCHER BARS SPACED AS SHOWN HEREON.
  - FENCE SHALL BE CONSTRUCTED WITH ROUND PIPE. THE CORNER POST AND RAILS SHALL BE ROUND PIPE. THE TYPE OF COMPONENTS USED SHALL HAVE PRIOR APPROVAL BY THE ENGINEER BEFORE CONSTRUCTION.
  - A SUITABLE METHOD OF RAIL SPACING SHALL BE USED TO ALLOW FOR EXPANSION AND CONTRACTION WHILE MAINTAINING PROPER POSITION OF THE TOP RAIL.
  - GATE SHALL BE FABRICATED FROM SAME MESH AND GAUGE AS FENCING.
  - FENCE FRAMEWORK SHALL BE COLOR COATED WITH POLYURETHAN, TO MEET MINIMUM THICKNESS OVER GALVANIZED STEEL, PER ASTM F143, GROUP 1A. GALVANIZING SHALL BE 1.6 OZ./SQ. FT. OF ZINC COATED AREA.
  - CHAIN LINK FABRIC SHALL BE COLOR COATED WITH POLYURETHAN, FUSED AND ADHERED TO ZINC COATED STEEL. PER ASTM F888.
  - ACCESSORY FITTINGS INCLUDING TENSION AND BRACE WIRES, CAPS, TOPS, RAIL ENDS, SLEEVES AND TIES SHALL BE COLOR COATED WITH POLYURETHAN, 6 MIL. THICKNESS AND MATCHING THE COLOR OF THE FRAMEWORK AND FABRIC. COLOR SHALL BE BLACK. COLOR COATING SHALL BE WARRANTED BY THE MANUFACTURE AGAINST CHALKING, FADING, PEELING OR OTHER DEFECTS FOR NOT LESS THAN 15 YEARS.

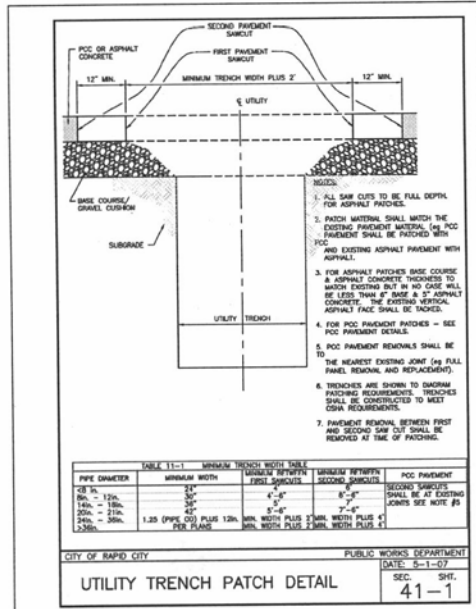


TABLE 11-1 MINIMUM TRENCH WIDTH TABLE

PIPE DIAMETER	MINIMUM WIDTH	WIDTH BETWEEN FIRST SAW CUTS	WIDTH BETWEEN SECOND SAW CUTS	PCC PAVEMENT SECOND SAW CUTS SHALL BE AT EXISTING JOINTS SEE NOTE #3
48 IN.	24"	4'-0"	4'-0"	
36 - 42 IN.	24"	4'-0"	4'-0"	
24 - 36 IN.	24"	4'-0"	4'-0"	
18 - 24 IN.	24"	4'-0"	4'-0"	
12 - 18 IN.	24"	4'-0"	4'-0"	
6 - 12 IN.	1.25 (PIPE O.D.) PLUS 12IN. MIN. WIDTH PLUS 2\"/>			

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT  
DATE: 5-1-07  
SEC. SHEET: 41-1

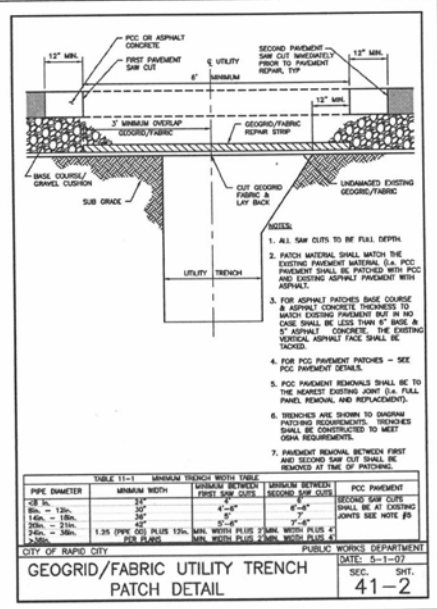


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CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT  
DATE: 5-1-07  
SEC. SHEET: 41-2

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FEB 11 2011

Rapid City Growth Management Department



Drawn By: MCH  
Design Date: 04/2010  
Internal Job No: 08130.00  
Survey Date: 7/7

KEPPS RESERVOIR CONTROL VALVE STATION

PROJECT DETAILS

C-7