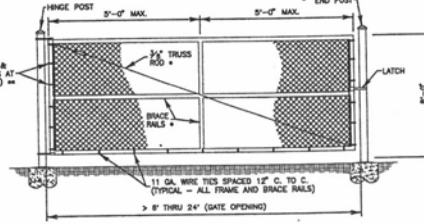


* TENSION BANDS SHALL BE SPACED 12" C. TO C.
 ** ARE NOT REQUIRED FOR 3" THRU 9" FENCES.

COMPONENT	END CORNER & PULL POST	LINE POST	TOP & BRACE RAIL
WIRE OF FABRICATION	11 GA. WIRE NOMINAL	11 GA. WIRE NOMINAL	11 GA. WIRE NOMINAL
WIRE	3.00 DIA.	3.00 DIA.	3.00 DIA.
WIRE	8.75 DIA.	8.75 DIA.	8.75 DIA.
WIRE	2.84	5.12	1.84

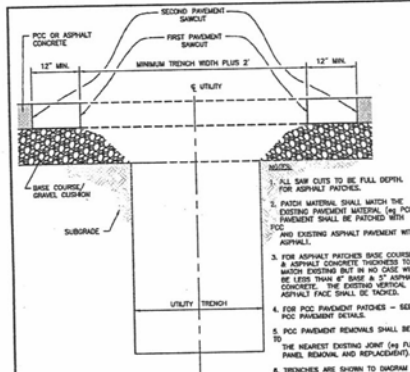


2 SINGLE VEHICULAR GATE
 C-7 NOT TO SCALE

1 CHAIN LINK FENCE WITH RAILED TOP
 C-7 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. COMMERCIALLY AVAILABLE ITEMS PRODUCED SPECIFICALLY FOR THE USE INTENDED SHALL BE USED WHENEVER POSSIBLE IN THE CONSTRUCTION OF THE FENCE.
- 1" HEIGHT OF FABRIC SHALL BE 8" FABRIC SHALL BE KNOCKED AT ONE SELVAJE AND TWISTED AT THE OTHER SELVAJE.
- 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 POLYESTER, 10 MILS MINIMUM THICKNESS OVER GALVANIZED STEEL PIPE ASTM F443, GROUP 1A. GALVANIZING SHALL BE 1.8 OZ./SQ. FT. OF ZINC COATED AREA.
- CHAIN LINK FABRIC SHALL BE COLOR COATED WITH POLYESTER, FUSED AND ADHERED TO ZINC COATED STEEL BARE PEEB ASTM F835.
- ACCESSORY FITTINGS INCLUDING TENSION AND BRACE WIRES, CAPS, TOPS, RAIL ENDS, SLIDERS AND TIES SHALL BE COLOR COATED WITH POLYESTER, 8 MIL THICKNESS AND COLOR COATED WITH POLYESTER, 8 MIL THICKNESS AND COLOR SHALL BE BLACK COLOR COATING SHALL BE MATCHING THE COLOR OF THE FRAMEWORK AND FABRIC. WARRANTY BY THE MANUFACTURER AGAINST CHALKING, FADING, PEELING OR OTHER DEFECTS FOR NOT LESS THAN 15 YEARS.



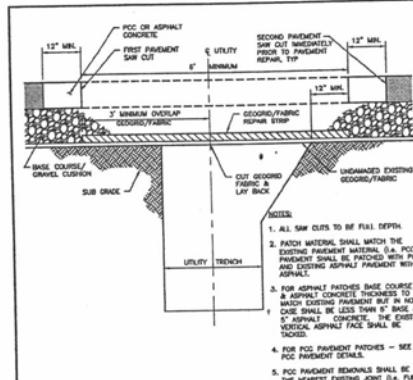
- ALL SAW CUTS TO BE FULL DEPTH FOR ASPHALT PATCHES.
- PATCH MATERIAL SHALL MATCH THE EXISTING PAVEMENT MATERIAL (i.e. PCC EXISTING PAVEMENT SHALL BE PATCHED WITH PCC. THE EXISTING ASPHALT PAVEMENT WITH ASPHALT).
- FOR ASPHALT PATCHES BASE COURSE & ASPHALT CONCRETE THICKNESS TO MATCH EXISTING BUT IN NO CASE WILL BE LESS THAN 6" BASE & 3" ASPHALT CONCRETE. THE EXISTING VERTICAL ASPHALT FACE SHALL BE TROCKED.
- FOR PCC PAVEMENT PATCHES - SEE PCC PAVEMENT DETAILS.
- PCC PAVEMENT REMOVALS SHALL BE TO THE NEAREST EXISTING JOINT (i.e. FULL PANEL REMOVAL AND REPLACEMENT).
- TRENCHES ARE SHOWN TO DIAGRAM PATCHING REQUIREMENTS. TRENCHES SHALL BE CONSTRUCTED TO MEET OSHA REQUIREMENTS.
- PAVEMENT REMOVAL BETWEEN FIRST AND SECOND SAW CUT SHALL BE REMOVED AT TIME OF PATCHING.

TABLE 11-1 MINIMUM TRENCH WIDTH TABLE

PIPE DIAMETER	MINIMUM WIDTH		MINIMUM DEPTH	MINIMUM SPACING BETWEEN JOINTS	PCC PAVEMENT
	FIRST SAW CUTS	SECOND SAW CUTS			
48 in. - 120 in.	36"	48"	8'-0"	8'-0"	SECOND SAW CUTS SHALL BE AT EXISTING JOINTS SEE NOTE #8
36 in. - 48 in.	30"	36"	6'-0"	6'-0"	
24 in. - 36 in.	24"	30"	5'-0"	5'-0"	
18 in. - 24 in.	18"	24"	4'-0"	4'-0"	
12 in. - 18 in.	12"	18"	3'-0"	3'-0"	

1.25 (OPEN) PLUS 15% MIN. WIDTH PLUS 2" MIN. WIDTH PLUS 1" PER PLANT

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
 DATE: 5-1-07
 SEC. SHT. 41-1
 UTILITY TRENCH PATCH DETAIL



- ALL SAW CUTS TO BE FULL DEPTH.
- PATCH MATERIAL SHALL MATCH THE EXISTING PAVEMENT MATERIAL (i.e. PCC EXISTING PAVEMENT SHALL BE PATCHED WITH PCC AND EXISTING ASPHALT PAVEMENT WITH ASPHALT).
- FOR ASPHALT PATCHES BASE COURSE & ASPHALT CONCRETE THICKNESS TO MATCH EXISTING PAVEMENT BUT IN NO CASE SHALL BE LESS THAN 6" BASE & 3" ASPHALT CONCRETE. THE EXISTING VERTICAL ASPHALT FACE SHALL BE TROCKED.
- FOR PCC PAVEMENT PATCHES - SEE PCC PAVEMENT DETAILS.
- PCC PAVEMENT REMOVALS SHALL BE TO THE NEAREST EXISTING JOINT (i.e. FULL PANEL REMOVAL AND REPLACEMENT).
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1.25 (OPEN) PLUS 15% MIN. WIDTH PLUS 2" MIN. WIDTH PLUS 1" PER PLANT

CITY OF RAPID CITY PUBLIC WORKS DEPARTMENT
 DATE: 5-1-07
 SEC. SHT. 41-2
 GEOGRID/FABRIC UTILITY TRENCH PATCH DETAIL

February 15, 2011 1:52:30 PM
 1845 Piping Detail.dwg (P01) \\MAN-DATA\ETEC\PROJECTS & PROPOSALS\030300 - KOPPS WATERMAIN EXTENSION & CONTROL VALVE STATIONS\1845 CONTROL VALVE PLANTS\

Gregory M. Wielecka
 2780
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 STATE OF MICHIGAN

cetec
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Designed By: **DM** Drawn By: **MDG**
 Design Date: **04/20/10** Print Date:
 Interim Job No: **08130.00**
 Reviewed By: **KP/CH** Survey Date: **777**
 Revision:

KEPPS RESERVOIR CONTROL VALVE STATION

Sheet Title:
PROJECT DETAILS
 Sheet: **C-7**