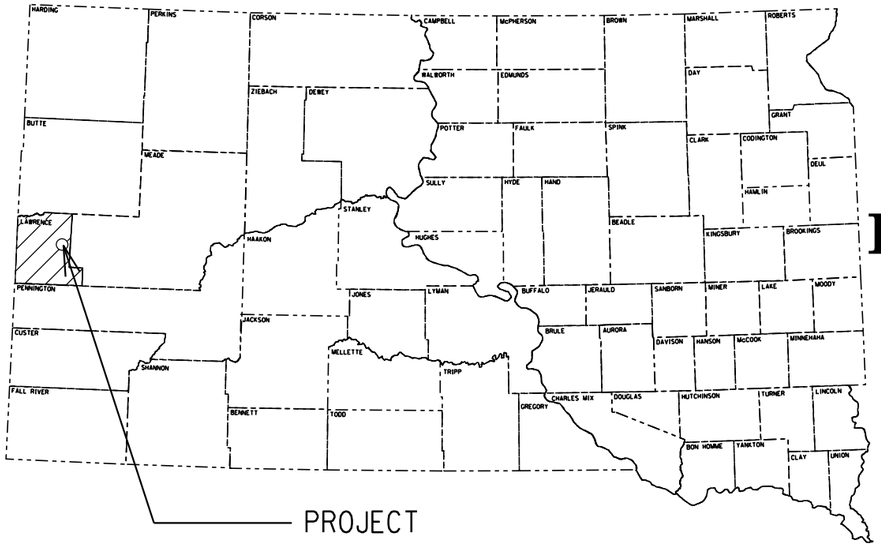


STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT NO. 410D204
DEADWOOD MAINTENANCE
LAWRENCE COUNTY

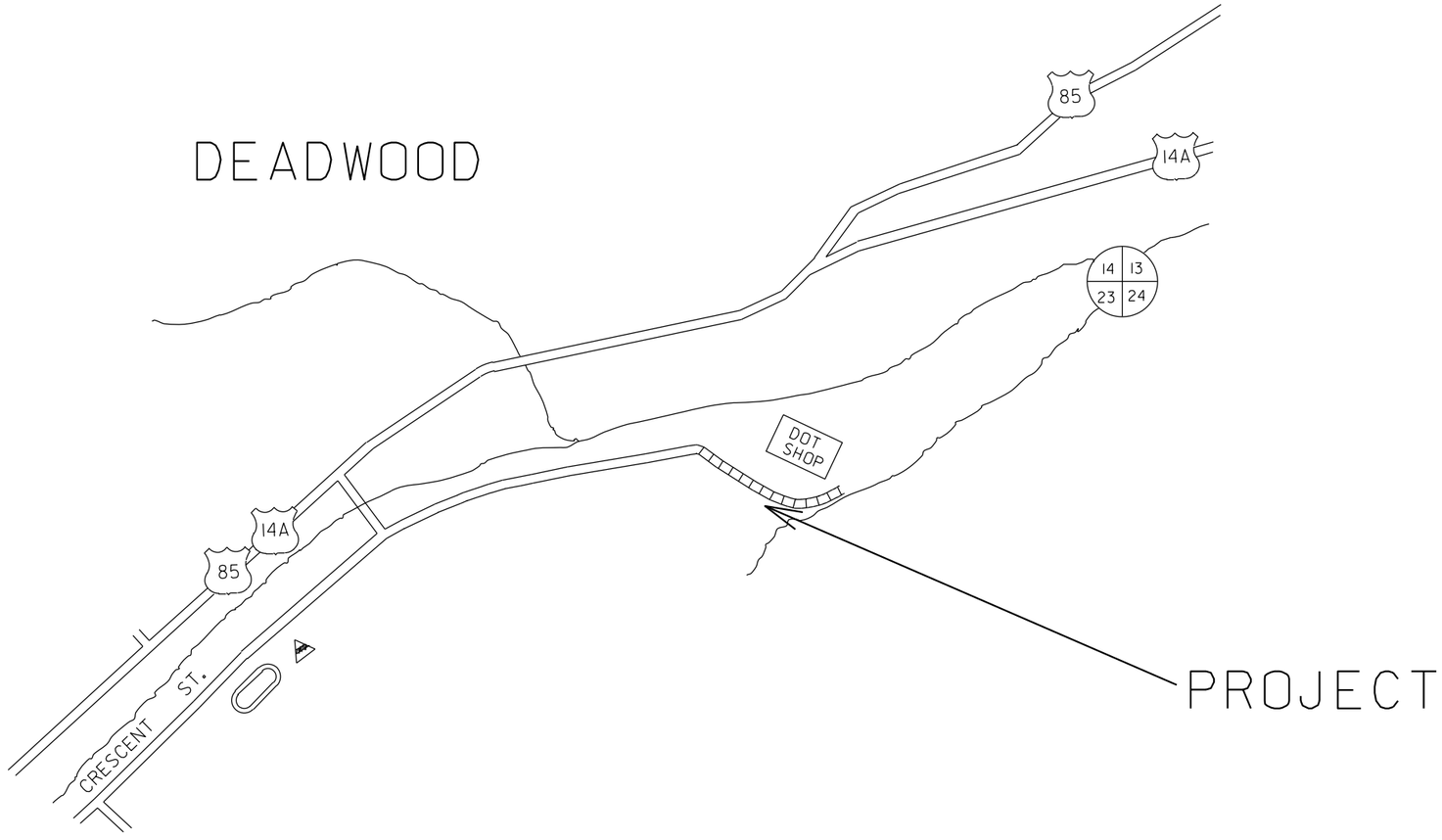
RELOCATE WATER LINE

PCN 12GW

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D204	1	4

Plotting Date: 02/28/2012

INDEX OF SHEETS



PLOT SCALE - 1:200

PLOT NAME - 1

FILE ...\TITLE.DGN

PLOTTED FROM - TRRC11640

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
451E0604	4" PVC Water Main	480	Ft
451E3004	4" Pipe Bend	8	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal. In addition, the technical specifications for the waterline work shall be done in accordance with the City of Rapid City Standard Specifications for Public Works Construction, 2007.

UTILITIES

The Contractor will be responsible for locating (SD One-Call 1-800-781-7474) and protecting all utilities within the project limits. Any damage done to a utility will be the Contractor's responsibility to repair at no cost to the State.

The Contractor shall contact the City of Deadwood, Public Works Department prior to starting work. The Contractor shall also coordinate work operations with the Public Works Department.

WORK DESCRIPTION

Work on this project includes the relocation of a waterline service.

The overall completion date for this project is May 11, 2012.

The 4" water main shall only be shut off for no more than 24 hours. A 48 hour advance notice shall be required prior to shutting off the water main.

TRAFFIC CONTROL

Work activities during non-daylight hours are subject to prior approval. Daylight hours are considered to be ½ hour before sunrise until ½ hour after sunset.

A 48 hour advanced notice of work is required.

SDDOT will provide any required traffic control.

4" PVC WATER MAIN

4" water mains shall be PVC pressure pipe conforming to the requirements of AWWA Specification C-900. DR-18 pipe will be considered replacement for Class-150 pipe called for in the Rapid City Standard Specifications.

4" water main tie-ins, bends, and alignment may be adjusted by the Engineer to best fit field conditions. No additional payment will be made for field adjustments.

The existing 4" DIP water line is estimated to be 6' deep. No additional payment will be made if it is found to be a different depth.

The new 4" water main shall be a minimum of 6' deep.

Payment will be at the unit price bid for the appropriate size of water pipe, furnished and installed, including trenching, excavation, Type 1 bedding material, compacting, backfilling, dewatering, sheeting or shoring, pressure and leakage testing, disinfection, and for polyethylene encasement. Unless otherwise specified, no extra payment will be made for excavation deeper than that required to provide minimum specified cover. The cost of providing temporary water service and plugging abandoned water mains shall be incidental to the project.

THRUST BLOCKS

Concrete thrust blocks shall be provided at tees, crosses, horizontal bends, plugs, caps, fire hydrants, and similar locations whether specifically indicated on the Drawings or not. Concrete thrust blocks shall have a thickness at the fitting equal to at least half the diameter of the pipe being installed but shall not be less than six (6) inches thick under any circumstances. They shall extend from the fitting to the undisturbed wall of the excavation. The Contractor shall insure that the concrete does not cover or render inoperable nuts or bolts on the fittings. All metal fittings, valves, or appurtenances shall be wrapped in polyethylene prior to pouring thrust blocks. Concrete Thrust blocks shall be allowed to cure for 48 hours prior to activating the water main. If the water main needs to be activated prior to the concrete curing (48 hours) then the water main shall be restrained using joint restraining devices. Prior to backfilling, thrust blocks shall cure for a minimum of four hours. In muck, peat, or similar weak soils, thrust loads shall be resisted by using joint restraining devices or by removal of the soil and replacement with a material of sufficient stability to resist thrust loads as determined by the Engineer. The use of Thrust Blocks, as specified above, is required when using Certa-Lok C900/RJ pipe and couplings. Where prior approval of the Engineer is obtained, the Contractor may be able to substitute acceptable joint restraining devices for concrete thrust blocking. A condition of approval will be to address the potential corrosion issues associated with the use of joint restraints. The approval to substitute joint restraints is the Engineers decision and approval may or may not necessarily be granted even if the potential corrosion issues are addressed. Concrete Thrust Blocks or approved joint restraints shall be incidental to the related contract items.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D204	3	4

Plotting Date: 02/28/2012

WATERLINE RELOCATION

PLOT SCALE - 1:50

PLOT NAME - 1

FILE - ...\DEADWOOD WATER LINE.DGN

PLOTTED FROM - TRRC11640

INSTALL 4" PVC - 480 LF

STA. 1+25 TO STA 5+80 AND

8 - 4" PIPE BENDS

CRESCENT ST.

DOT SHOP

EXISTING 4" DIP

PROPOSED DOT BUILDING

4" PIPE BENDS
1- 45°
1- 11.25°

120.00'

ABANDON EXISTING 4" DIP
(LEAVE IN PLACE)

INSTALL 4" PVC WATERLINE

260.00'

40.00'

4" PIPE BEND
1- 22.5°

20.00'

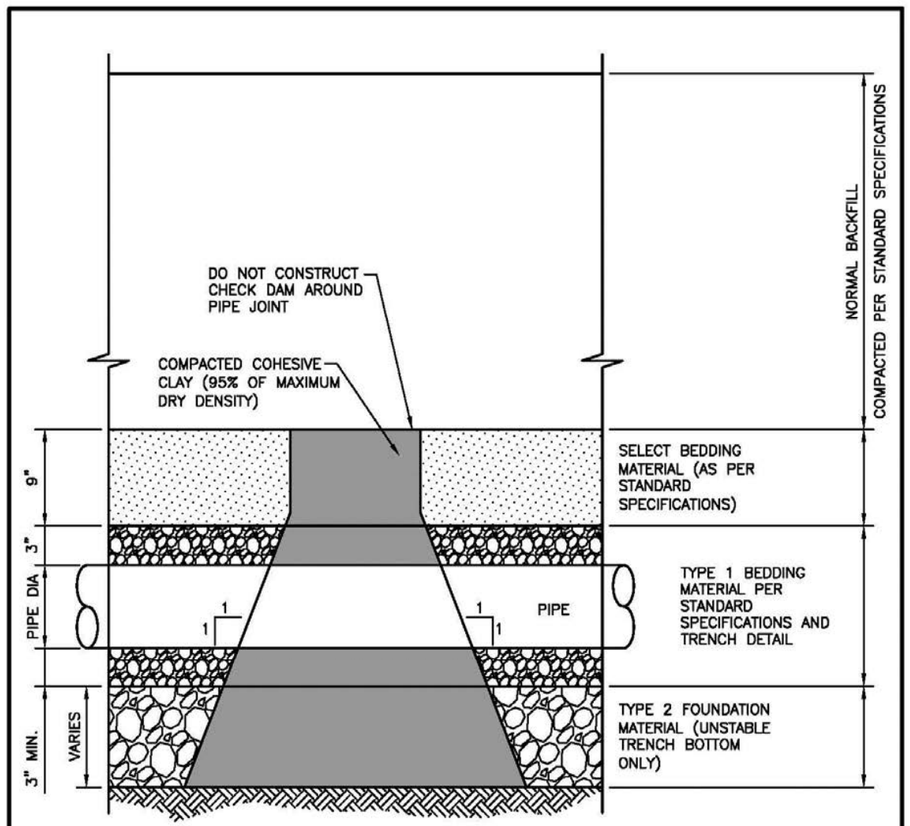
40.00'

4" PIPE BEND
1- 22.5°

5+00

4" PIPE BENDS
1- 22.5°
1- 11.25°

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	410D204	4	4



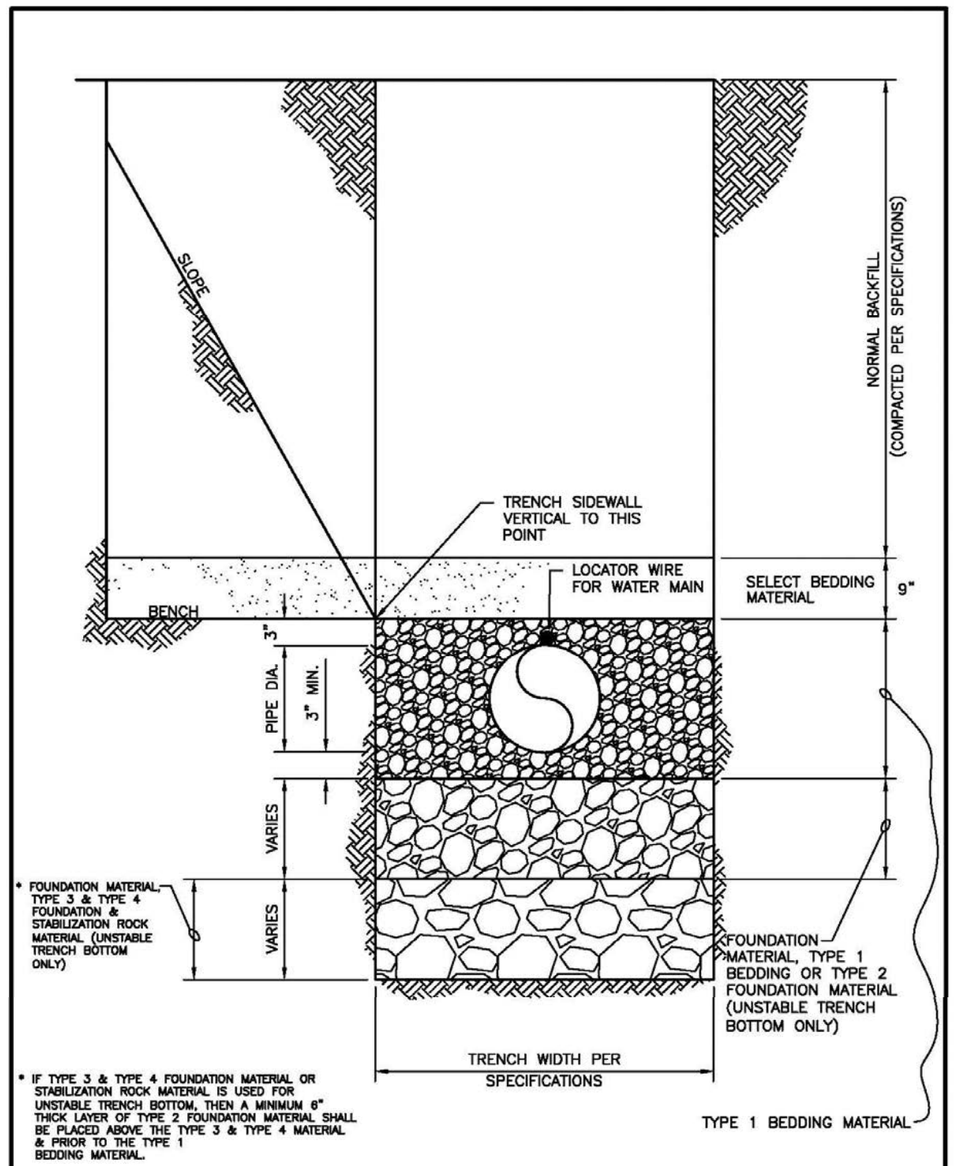
ELEVATION

NOTE:

CHECK DAM INSTALLATION LOCATIONS SHALL BE AS INDICATED ON THE PLANS. HOWEVER DURING CONSTRUCTION, CHECK DAM INSTALLATION LOCATIONS MAY BE MOVED DUE TO FIELD CONDITIONS.

THE CHECK DAM SHALL EXTEND FROM THE BOTTOM OF THE EXCAVATION THROUGH THE BEDDING MATERIAL TO THE "NORMAL BACKFILL" AND SHALL EXTEND COMPLETELY TO EACH TRENCH SIDEWALL. CHECK DAM MATERIAL SHALL BE COMPACTED COHESIVE CLAY THAT CONTAINS A MINIMUM OF 25% MINUS NO. 200 SIEVE MATERIAL, WITH 70% PASSING A 3/4 INCH SIEVE. IF THE NORMAL EXCAVATED MATERIAL IS NOT SUITABLE FOR CONSTRUCTION OF THE CHECK DAM, THEN THE CONTRACTOR SHALL OBTAIN MATERIAL FROM OUTSIDE SOURCES. CHECK DAM INSTALLATION AND MATERIAL SHALL BE CONSIDERED AS INCIDENTAL TO THE PIPE INSTALLATION.

CITY OF RAPID CITY	PUBLIC WORKS DEPARTMENT
TYPICAL TRENCH CHECK DAM DETAIL FOR WATER & SEWER MAINS	DATE: 5-1-07 SEC. 11-2 SHT.



* IF TYPE 3 & TYPE 4 FOUNDATION MATERIAL OR STABILIZATION ROCK MATERIAL IS USED FOR UNSTABLE TRENCH BOTTOM, THEN A MINIMUM 6" THICK LAYER OF TYPE 2 FOUNDATION MATERIAL SHALL BE PLACED ABOVE THE TYPE 3 & TYPE 4 MATERIAL & PRIOR TO THE TYPE 1 BEDDING MATERIAL.

CITY OF RAPID CITY	PUBLIC WORKS DEPARTMENT
TRENCH DETAIL FOR WATER & SEWER MAIN	DATE: 5-1-07 SEC. 11-3 SHT.