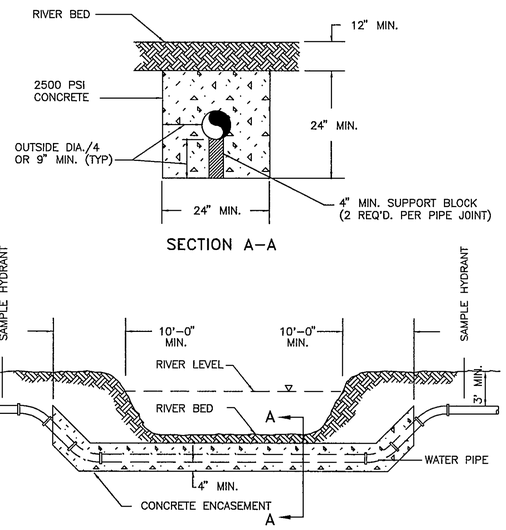
MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
Coarse Grained Soils More than 50% of Material by Weight is Coarser than No. 200 Sieve Size	Gravel and Gravelly Soils More than 50% of Coarse Fraction Retained on No. 4 Sieve	Clean Gravels 0–5% Fines*	GW	Fully–Graded Gravels, Gravel–Sand Mixtures, Little or No Fines
			GP	Gap or Uniform–Graded Gravels, Gravel–Sand Mixtures, Little or No Fines
		Gravels with Fines >12% Fines*	GM	Silty Gravels, Gravel–Sand Silt Mixtures
			GC	Clayey Gravels, Gravel–Sand–Clay Mixtures
	Sand and Sandy Soils More than 50% of Coarse Fraction Passing No. 4 Sieve	Clean Sand 0–5% fines*	SW	Well–Graded Sands, Gravelly Sands, Little or No Fines
			SP	Gap or Uniform Graded Sands, Gravelly Sands, Little or No Fines
		Sands with Fines >12% Fines	SM	Silty Sands, Sand–Silt Mixtures
			SC	Clayey Sands, Sand–Clay Mixtures
Fine Gravels Soils More than 50% of Material by Weight is Finer than No. 200 Sieve Size	Silts and Clays Low Compressibility Liquid Limit Less than 50%		ML	Inorganic Silts and Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity
			CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays
			OL	Organic Silts and Organic Silty Clays of Low Plasticity
	Silts and Clays High Compressibility Liquid Limit Greater than 50%		MH	Inorganic Silts, Micaceous or Diatomaceous Fine Sands or Silty Soils
			CH	Inorganic Clays of High Plasticity
			OH	Organic Clays of Medium to High Plasticity, Organic Silts
Highly Organic Soils			PT	Peat, Humus, Swamp Soils with High Organic Contents

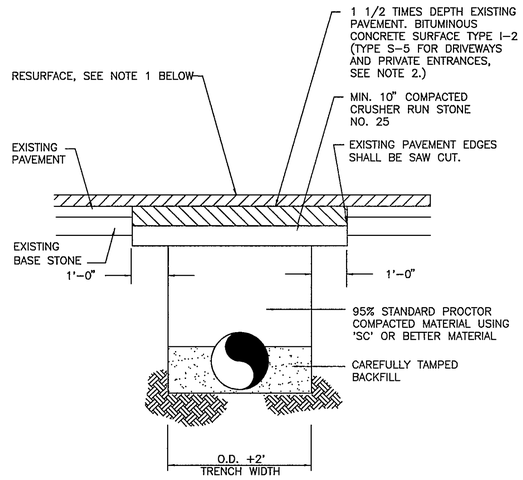
* For soils having 5 to 12% fines, use dual symbol such as SP–SM.

UNIFIED SOIL CLASSIFICATION SYSTEM



RIVER CROSSING DETAIL

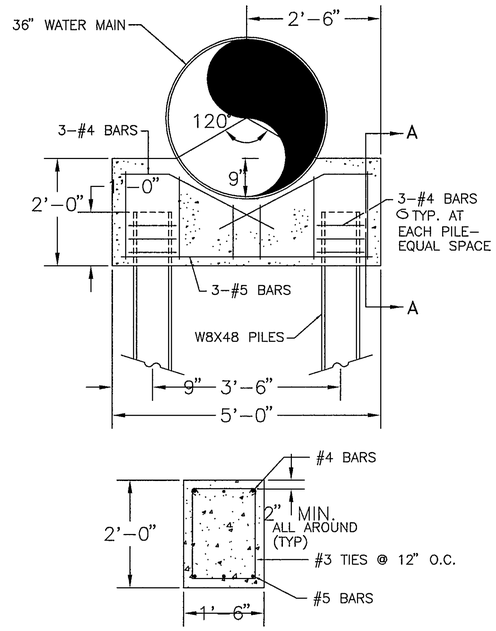
NTS



OPEN CUT ROAD and CROSSING DETAIL

NTS

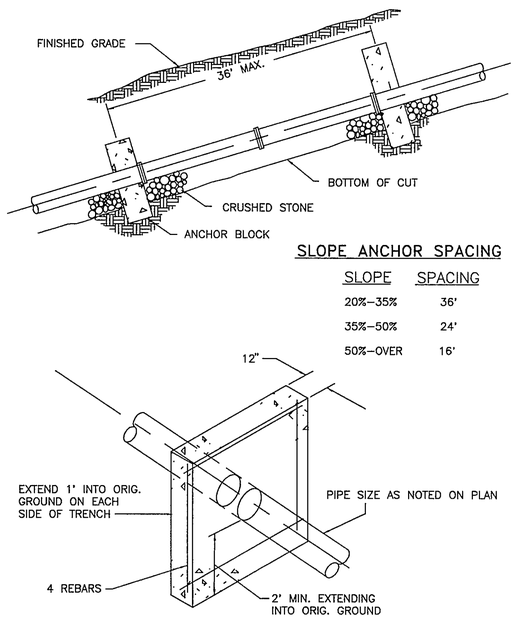
NOTES:
1) ALLPAVED SURFACES OWNED BY THE STATE SHALL BE RESURFACED 25' EACH SIDE OF CUT, AS PER V.D.O.T. SPECIFICATIONS. ALL PAVED ROADWAYS OWNED BY THE CITY OF ROANOKE, AND CUT BY THE CONTRACTOR SHALL HAVE THE TRENCH WIDTH PLUS FIVE FEET ON EACH SIDE OF THE CUT RESURFACED TO A COMPACTED THICKNESS OF 1.5"
2) THIS DETAIL ALSO APPLIES TO ALL PAVED DRIVEWAYS AND ENTRANCES–EXCLUDING 25' RESURFACING EACH WAY.
3) WHERE EXISTING SURFACE IS GRAVEL, REPLACEMENT SURFACE TO BE CRUSHER RUN STONE NO. 25.
4) MAXIMUM DEPTH OF ASPHALT TRENCH PATCH IS 6 INCHES COMPACTED.



SECTION A–A

PILE CAP DETAIL

NTS

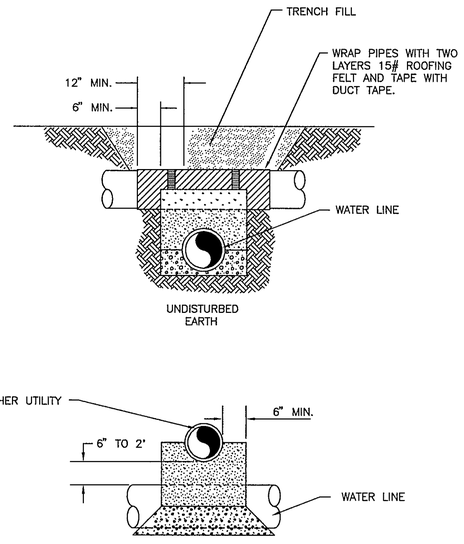


SLOPE ANCHOR SPACING

SLOPE	SPACING
20%–35%	36'
35%–50%	24'
50%–OVER	16'

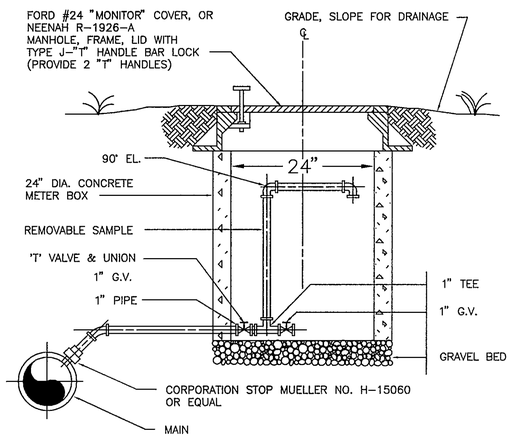
ANCHOR BLOCK DETAIL

NTS



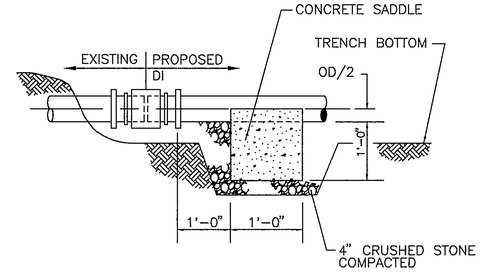
PIPE CROSSING OTHER THAN SANITARY SEWER

NTS



TYPICAL SAMPLE HYDRANT

NTS



COUPLING EQUAL TO FERNCO:

SERIES 1051 WHEN EXISTING IS ASBESTOS CEMENT

SERIES 1002 WHEN EXISTING IS VITRIFIED CLAY

SERIES 1006 WHEN EXISTING IS CONCRETE

TYPICAL SEWER LINE COUPLING DETAIL

NTS

AS BUILT

COMMONWEALTH OF VIRGINIA
STEVE E. HIVELY
NO. 9580
PROFESSIONAL ENGINEER

ENGINEER'S SEAL

COMMONWEALTH OF VIRGINIA
RONALD B. SMITH
16774
PROFESSIONAL ENGINEER

ENGINEER'S SEAL

Architects
Engineers
Planners
Surveyors

Dewberry & Davis

5238 Valleypointe Parkway, Suite One–B
Roanoke, Virginia 24019
☎ 703 362–7725

Carvins Cove, Phase II
City of Roanoke
Roanoke, Virginia

CONTRACT "B2"

DETAILS

Drawn By	ACF
Designed By	RBS
Checked By	SEH
Date	APRIL 93
Scale	AS SHOWN
Plan Number	B2DTRWL2
Zoned	NONE
Sheet	21 of 22
File Number	C1160