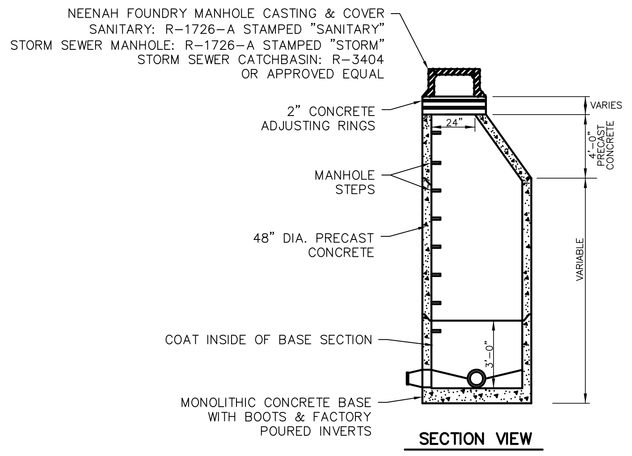
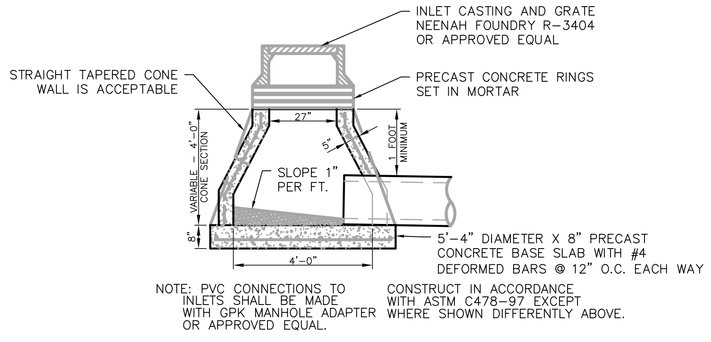


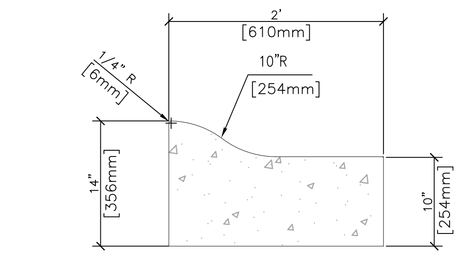
1 C501 SANITARY/STORM MANHOLE (TYP)

NOT TO SCALE



2 C501 SHALLOW CATCH BASIN STRUCTURE

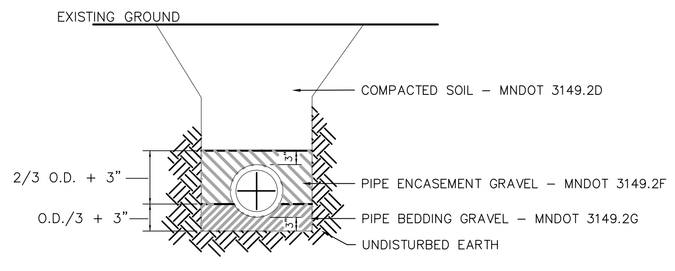
NOT TO SCALE



NOTE: CROSS SLOPE OF GUTTER SAME AS PAVEMENT.

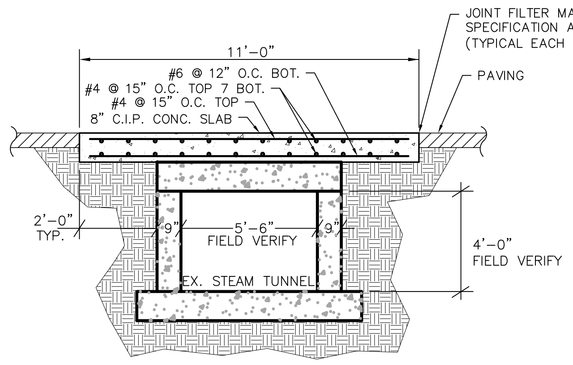
3 C501 MOUNTABLE CONCRETE CURB AND GUTTER

NOT TO SCALE



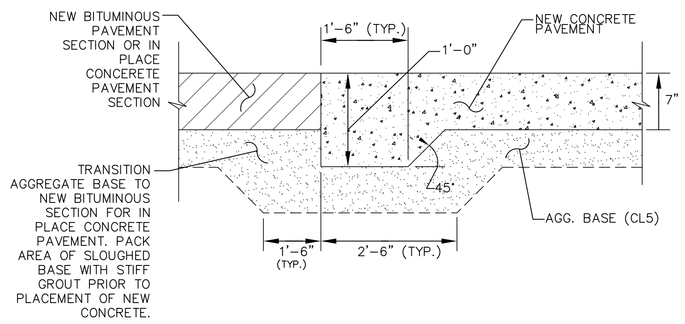
4 C501 TRENCH BACKFILL

NOT TO SCALE



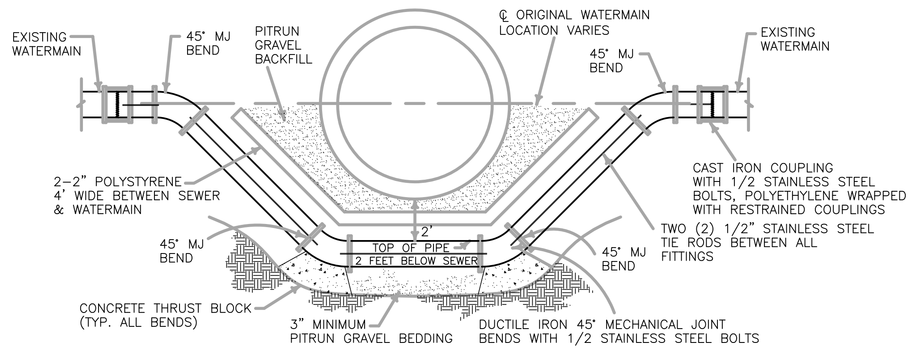
5 C501 STEAM TUNNEL CROSS SECTION AT PAVING AREAS (TYP)

NOT TO SCALE



6 C501 TERMINAL HEADER

NOT TO SCALE

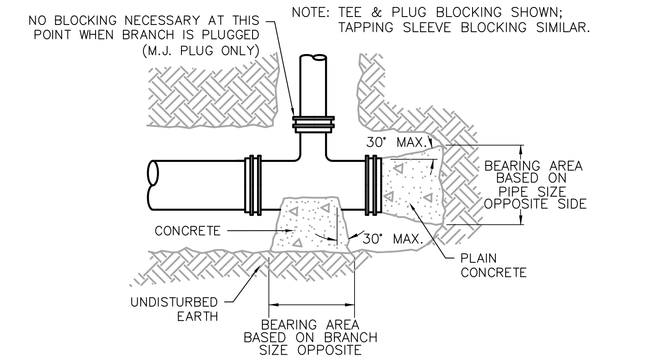


7 C501 WATERMAIN LOWERING DETAIL

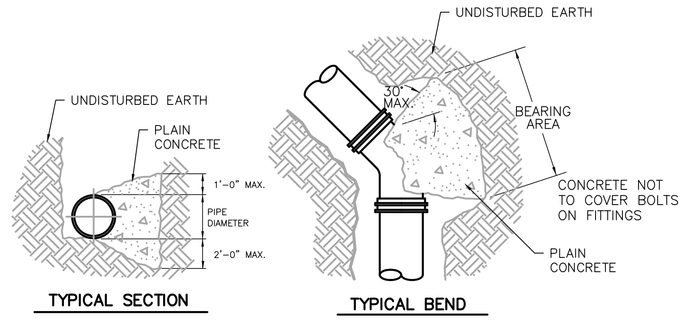
NOT TO SCALE

NOTE:

THE INSULATION SHALL BE VERY HIGH DENSITY HORIZONTAL RIGID EXTRUDED POLYSTYRENE CONFORMING TO ASTM C578–85, TYPE VII.
THE JOINTS IN THE INSULATION SHALL BE STAGGERED A MINIMUM OF 1' AND SHALL BE LAID IN THREE PIECES.



TEE, PLUG, & TAPPING SLEEVE



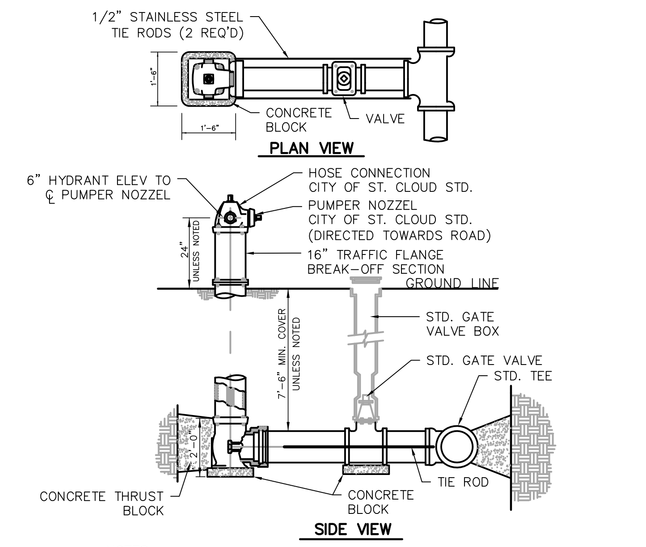
SIZE OF PIPE	90° BEND	45° BEND	22.5° BEND	11.25° BEND	TEES, PLUGS & TAPPING SLEEVE
4"	2' SQ.	2' SQ.	2' SQ.	2' SQ.	2' SQ.
6"	3' SQ.	2' SQ.	2' SQ.	2' SQ.	3' SQ.
8"	5' SQ.	3' SQ.	2' SQ.	2' SQ.	4' SQ.
10"	8' SQ.	4' SQ.	3' SQ.	2' SQ.	6' SQ.
12"	11' SQ.	6' SQ.	3' SQ.	2' SQ.	8' SQ.

NOTE: CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH. KEEP BELLS AND BOLTS FREE OF CONCRETE.

IF APPROVED BY THE ENGINEER, SOLID CONCRETE BLOCKS MAY BE USED FOR BLOCKING ON 8" SIZES AND BELOW. 10" SIZE AND ABOVE WILL CONFORM TO CONCRETE POURED IN PLACE AREAS SHOWN ABOVE.

8 C501 WATERMAIN THRUST BLOCK

NOT TO SCALE



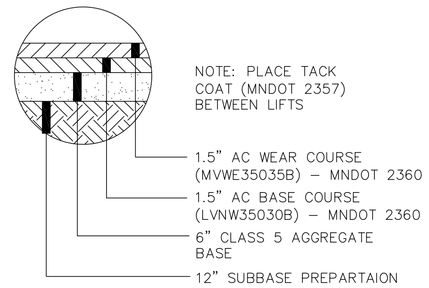
NOTES:
1. TIE FIRE HYDRANT THROUGH VALVE TO TEE BY MEANS OF TWO 1/2" DIA. STAINLESS STEEL RODS AT 180° TO EACH OTHER
2. OPERATING AND CAP NUTS: CITY OF ST. CLOUD STANDARDS
3. BOLTS BELOW GROUND TO BE STAINLESS STEEL

9 C501 FIRE HYDRANT

NOT TO SCALE

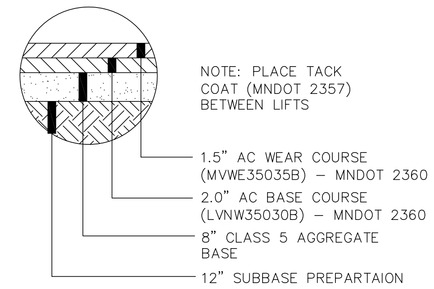
NOTES:

1. IN PARKING AREAS PROVIDE: PAVEMENT SECTION SHOWN ON SHEET C301.
2. ALL BITUMINOUS MIXES WILL BE COMPACTED USING THE MAXIMUM DENSITY COMPACTION METHOD.
3. MATERIAL DESIGNATION, REFERENCE THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR CONSTRUCTION 2005 EDITION.
4. PAVEMENT MARKING – THE WHITE AND ORGANIC PIGMENTED YELLOW PAINTS SHALL BE FREE OF TOXIC HEAVY METALS. THE CONTRACTOR MAY FURNISH AND PLACE EITHER THE 3-MINUTE ALKYD OR THE WATER-BASE MATERIAL (THE LATTER REQUIRES STAINLESS STEEL COMPONENTS IN THE DELIVERY SYSTEM.)
5. SELECT GRANULAR MATERIAL TO BE MNDOT SPECIFICATION 3149.2B2 MODIFIED SO THAT THE RATIO OF THE PORTION PASSING THE #200 SIEVE DIVIDED BY THE PORTION PASSING THE 1 INCH SIEVE MAY NOT EXCEED 8% MAXIMUM PERCENT BY MASS.



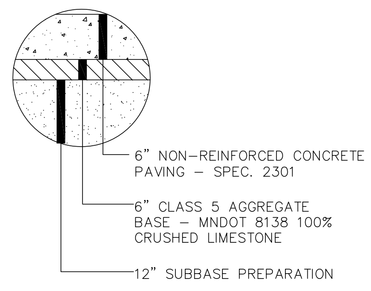
10 C501 BITUMINOUS PAVEMENT- PARKING LOT

NOT TO SCALE



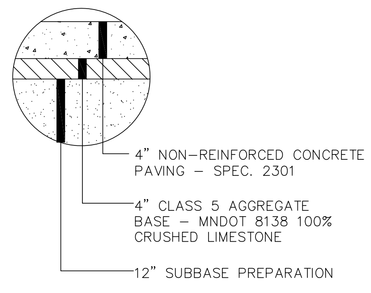
11 C501 BITUMINOUS PAVEMENT- STREETS

NOT TO SCALE



12 C501 CONCRETE PAVEMENT & APRON

NOT TO SCALE



13 C501 CONCRETE SIDEWALK

NOT TO SCALE

No	REVISION	DATE
	100% OWNER REVIEW ESTIMATE NOT FOR CONSTRUCTION	12/16/11

RSP Architects
1220 Marshall Street NE
Minneapolis
MN 55413-1036
612.677.7100
612.677.7499 fax
www.rsparch.com

NOTICE: The designs shown and described herein including all technical drawings, graphics, and models thereof, are proprietary and cannot be copied, duplicated or commercially exploited, in whole or in part, without express written permission of RSP Architects. These are available for limited review and evaluation by clients, consultants, contractors, government agencies, vendors and office personnel only in accordance with this Notice.

© Copyright RSP Architects 2006, All rights reserved.

ENGINEERING SURVEYING ENVIRONMENTAL PLANNING

CIVIL ENGINEER
EVS, INC.
10250 Valley View Road, Suite 123
Eden Prairie, Minnesota 55344
Ph: 952-646-0236 Fax: 952-646-0290
www.evs-eng.com

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Registration No.

Date

APPROVED: SERVICE LINE DIRECTOR DATE:
APPROVED: INFECTION CONTROL NURSE DATE:
APPROVED: GEMS COORDINATOR DATE:
APPROVED: PATIENT SAFETY DATE:
APPROVED: PROJECTS SECTION MANAGER DATE:
APPROVED: CHIEF OF POLICE DATE:
APPROVED: DIRECTOR TWG DATE:
APPROVED: SAFETY MANAGER DATE:
APPROVED: CHIEF OF STAFF DATE:
APPROVED: MEDICAL CENTER DIRECTOR DATE:

DRAWING TITLE: UTILITY/SITE DETAILS

PROJECT TITLE: VA MEDICAL CENTER ADDITION ST CLOUD, MN – LONG TERM/ INTERMEDIATE PSYCHIATRIC UNIT

LOCATION: VA MEDICAL CENTER ST.CLOUD, MN 56303

BUILDING No: SITE
CHECKED BY: WTS
DRAWN: PRF

DATE: 12/16/2011
PLOT SCALE: 1" = 20'-0"
PROJECT NO.: 656-329
CAD FILE:
DRAWING NO.: C501 DWG. OF

VAMC SAINT CLOUD MN