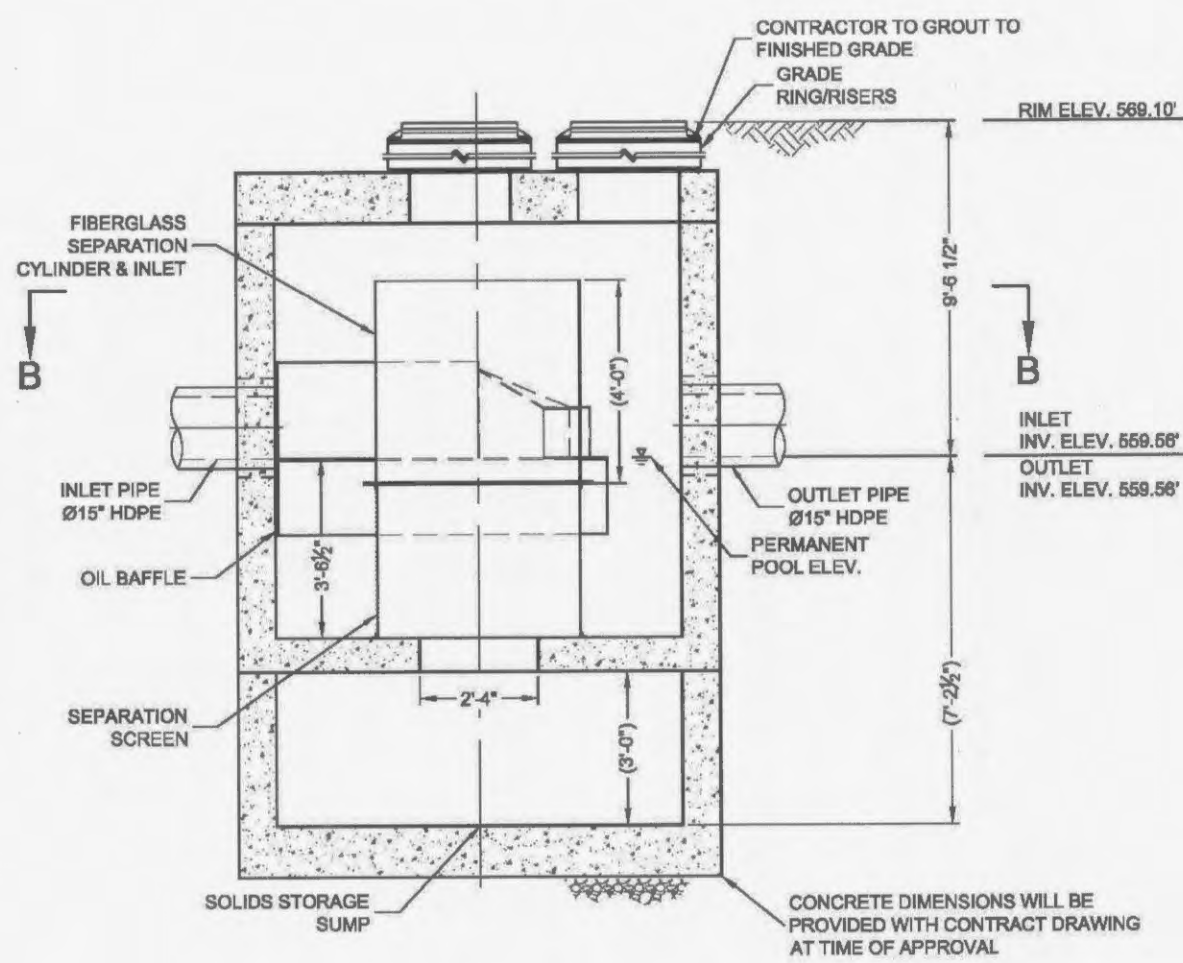


PLAN VIEW

SECTION B-B



SECTION A-A

MATERIALS LIST - PROVIDED BY CONTECH

QTY	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET & CYLINDER	CONTECH
1	2400 MICRON SEP. SCREEN	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	GRADE RINGS/ RISERS	CONTRACTOR
2	24" FRAME AND COVER	CONTRACTOR

SITE DESIGN DATA

WATER QUALITY	4.21 CFS
PEAK FLOW RATE	XX CFS
RETURN PERIOD OF PEAK FLOW	XX YRS

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET ASH-TO H202 AND CASTINGS SHALL MEET ASH-TO M300 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- ANY SUB-BASE BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT APPROXIMATE HEAVIEST PICK = 25,000 LBS.

CONTECH PROPOSAL DRAWING

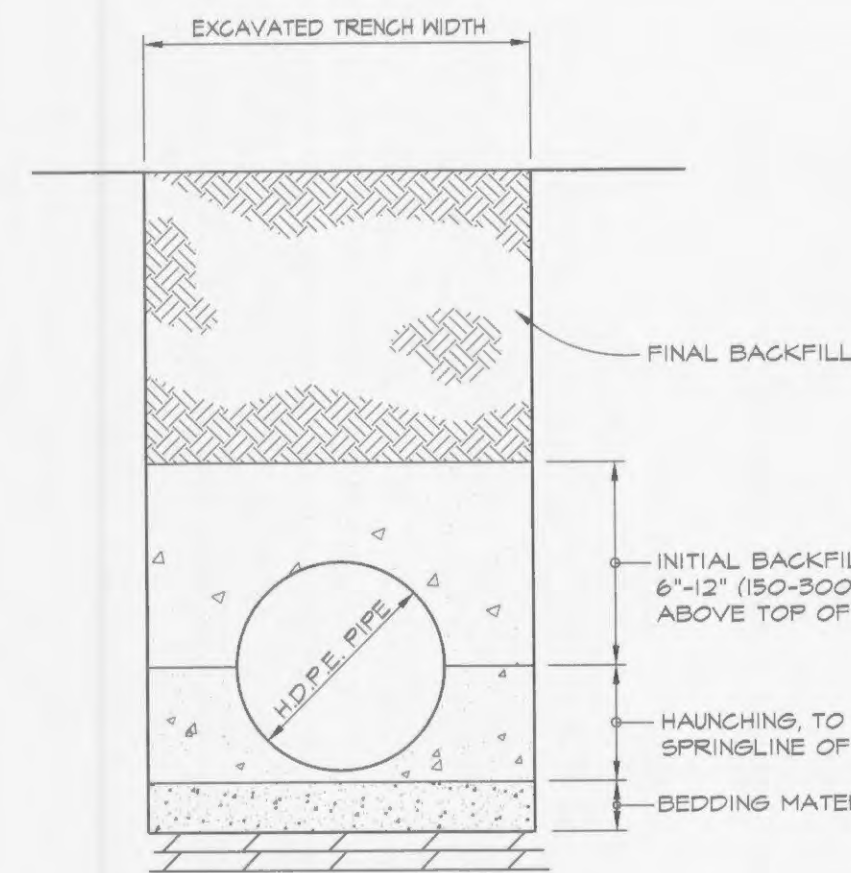
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DATE: 09/20/2012
DRAWN: HES
CHECKED: XXX
APPROVED: XXX
PROJECT NO: 469795
REVISION NO: 10
SHEET: 1 OF 2

CDS4030-B-C-469795-01
MERCY CLINIC WINGHAVEN
OF FALLON, MO
SITE DESIGNATION: WQ-3

**STRUCTURE WQ-3
CONTECH CDS 4030 WATER QUALITY UNIT**
N.T.S.



BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-10" (100mm-250mm) PIPE, 5" (125mm) FOR 12"-15" (300mm-375mm) PIPE AND 6" (150mm) FOR 18"-60" (450mm-1500mm) G.P.P. PIPE

HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL DIA. Inches (mm)	MIN. RECOMMENDED TRENCH WIDTH Inches (mm)
4 (100)	21 (530)
6 (150)	23 (590)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	38 (960)
24 (600)	46 (1160)
30 (750)	56 (1410)
36 (900)	70 (1780)
42 (1050)	83 (2110)
48 (1200)	94 (2380)
60 (1500)	102 (2590)

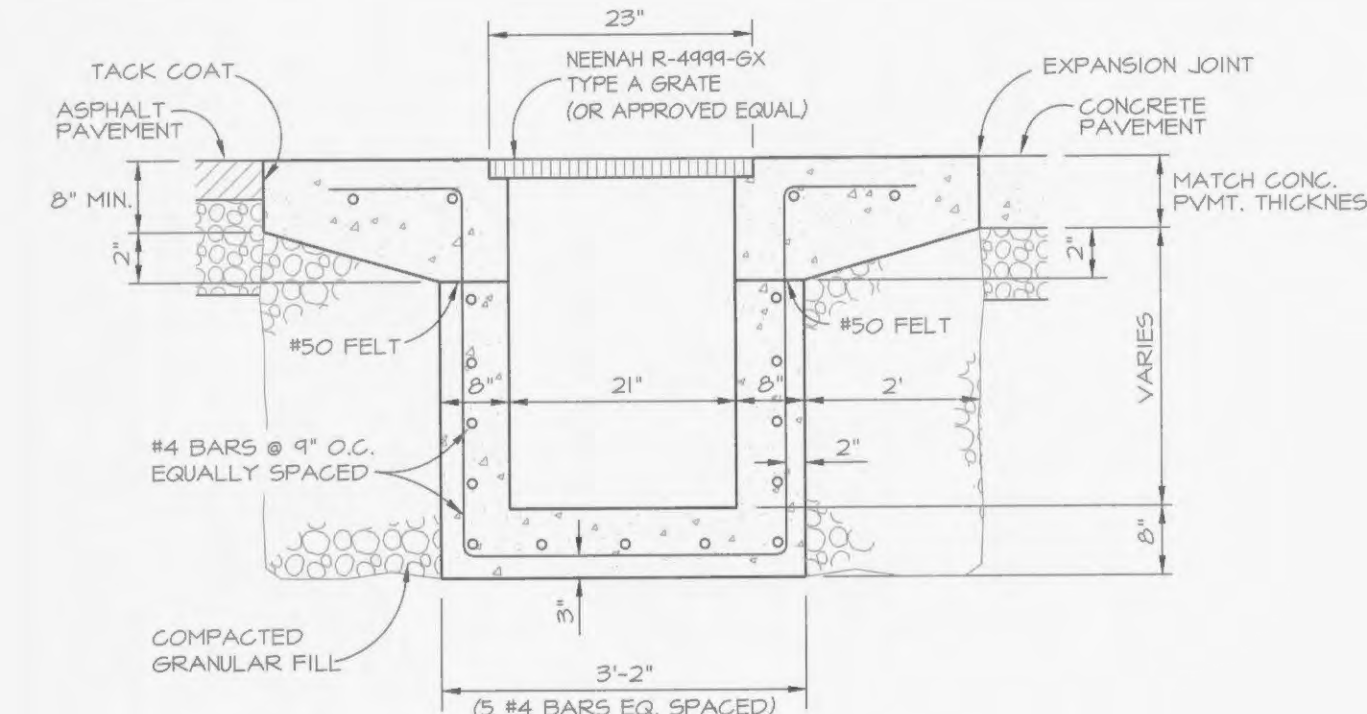
MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE LOADING CONDITION	MIN. RECOMMENDED COVER Inches (mm)
H25 (FLEXIBLE PAVEMENT)	12 (300) *
H25 (RIGID PAVEMENT)	12 (300)
E80 (RAILWAY)	24 (610)
HEAVY CONSTRUCTION	48 (1200)

* TOP OF PIPE TO BOTTOM OF PAVEMENT SECTION

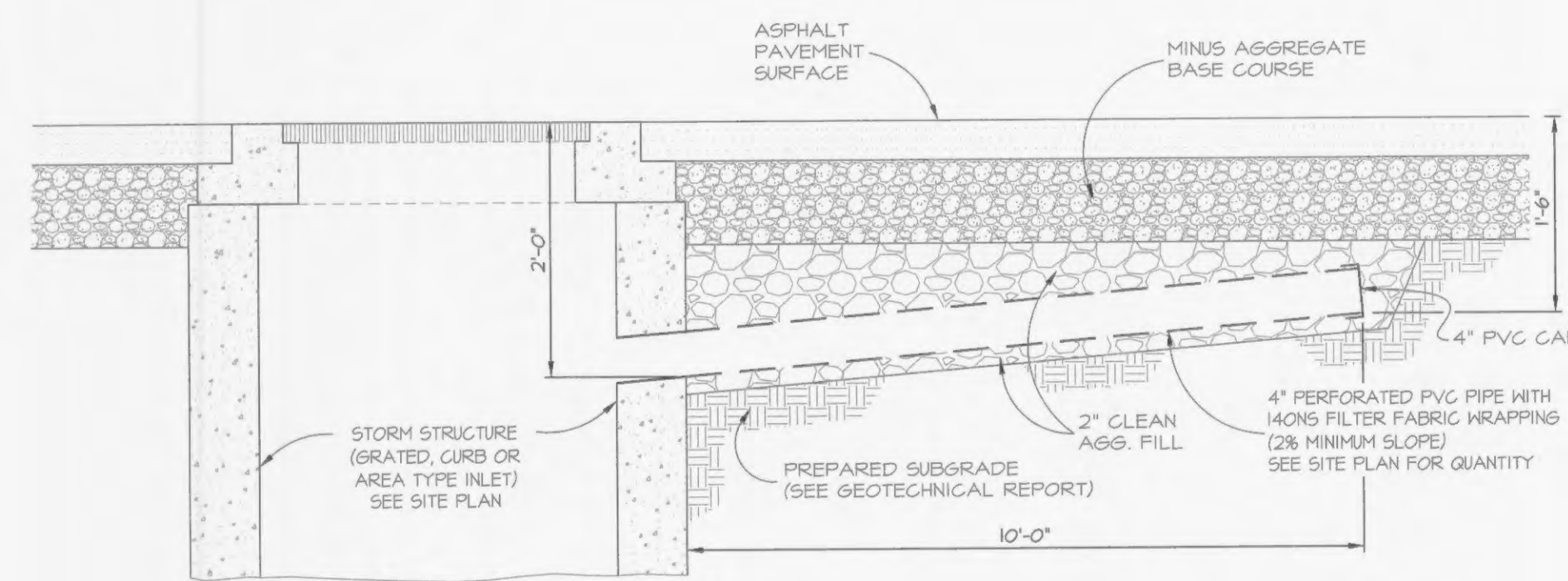
NOTES:
FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS, LATEST EDITION AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A NOVEN GEOTEXTILE FABRIC.

H.D.P.E. PIPE BEDDING
N.T.S.

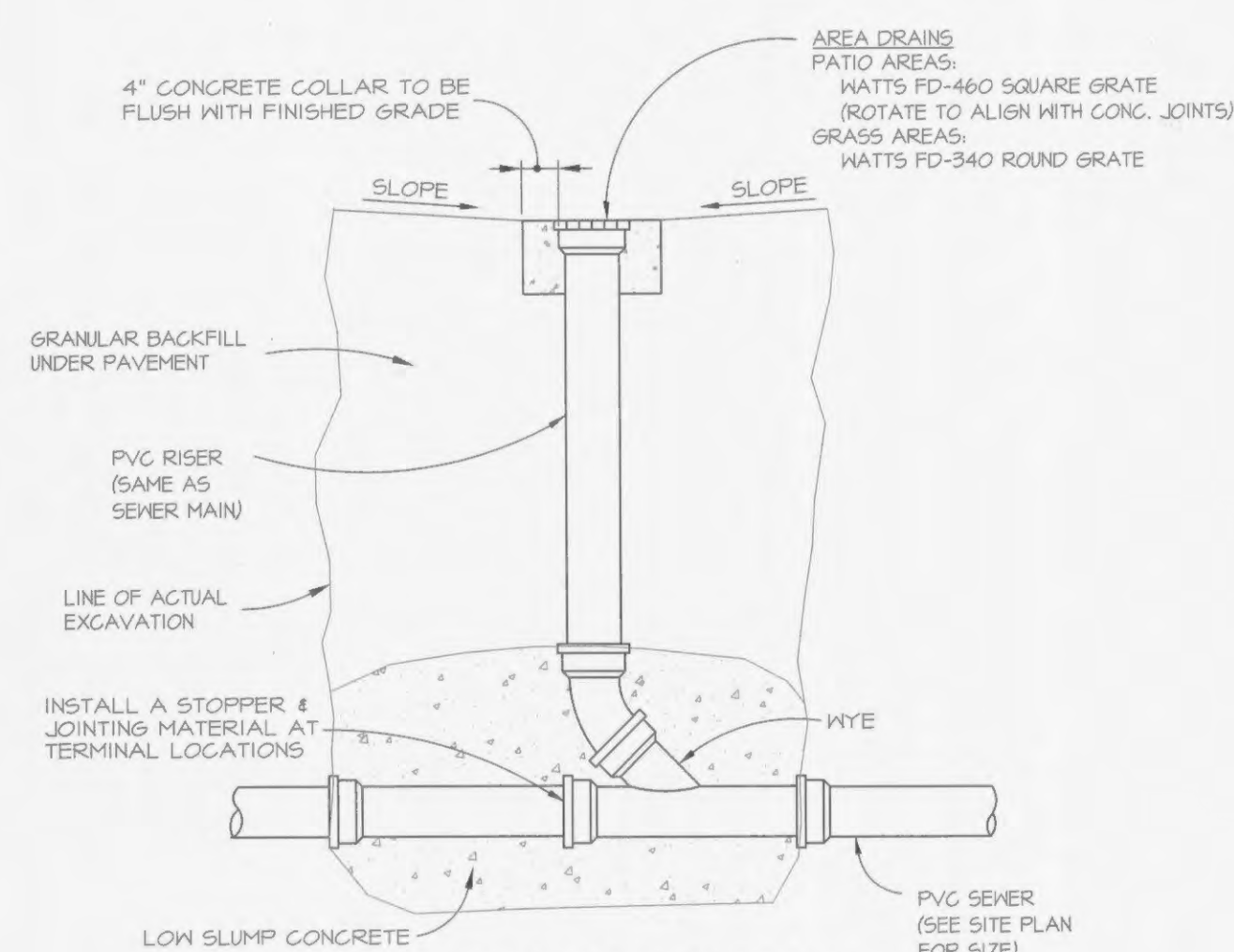


NOTES:
- MINIMUM 2% LONGITUDINAL SLOPE
- NEW CONC. PAVEMENT SHALL BE 4000 PSI,
MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.

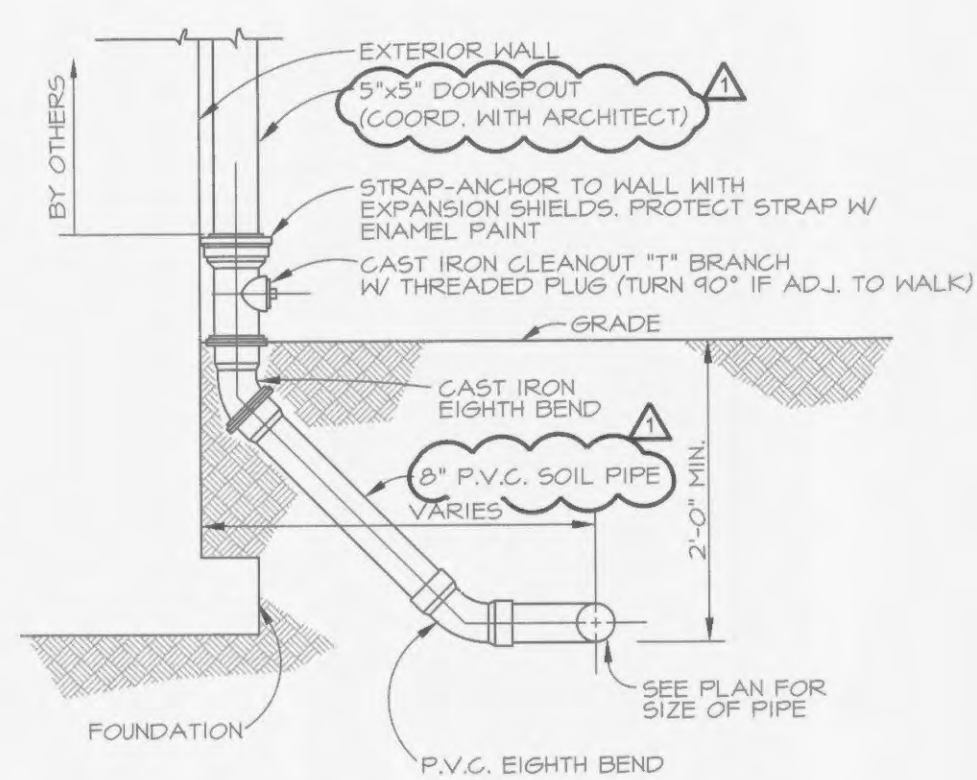
TRENCH DRAIN
N.T.S.



FINGER DRAIN DETAIL
N.T.S.



AREA DRAIN DETAIL
N.T.S.



DOWNSPOUT SHOE DETAIL
N.T.S.

No. Date Revision

No.	Date	Revision
1	10/24/2012	CITY COMMENTS / ADDENDUM #1
-	-	-
-	-	-
-	-	-
-	-	-

**MERCY CLINIC -
WINGHAVEN BLVD.**

2223 Technology Dr.
O'Fallon, Missouri 63366

PROJECT TITLE

Consulting Engineers



HEIDEMAN ASSOCIATES, INC.

13545 Barrett Parkway Drive
St. Louis, Missouri 63021
Contact: Dennis Pruitt
e-mail: ddpruitt@zakcompanies.com

SIGN & SEAL

NAME: MICHAEL J. VELLOFF
LICENSE NUMBER: E-2000161862
EXPIRES: 12/31/2014
DISCIPLINE: CIVIL ENGINEER

THE SEAL OF MICHAEL J. VELLOFF ON THIS DRAWING APPLIES ONLY TO THE CIVIL ENGINEERING WORK. IT DOES NOT APPLY TO ANY OTHER PROFESSIONAL SERVICES PROVIDED BY HEIDEMAN ASSOCIATES, INC. OR HEIDEMAN ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS, ELECTRICAL, FIRE PROTECTION, MECHANICAL, SANITARY, STRUCTURAL AND TOPOGRAPHIC, OR ARCHITECTURAL (BUILDINGS OR LANDSCAPE).



Mercy
SMIS JOB NUMBER
1510-153209-0521

DATE: 2012-10-05
SCALE: NOTED

Developer / Owner Information

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P+Z No. 9831.62

Approved Sept. 6, 2012

Page No.

C11