



**Stantec Consulting Services Inc.**  
61 Commercial Street  
Rochester NY 14614  
Tel: (585) 475-1440  
Fax: (585) 272-1814

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**Stantec**

May 24, 2013  
File: 190500751

Mr. Todd Caffoe, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
6274 East Avon-Lima Road  
Avon NY 14414-9519

**Reference: Interim Remedial Measures Work Plan  
Carriage Factory, BCP Site No. C828184  
Rochester, New York**

Dear Todd:

On behalf of Carriage Factory Special Needs Apartments, L.P., (Carriage Factory) and as a follow-up to our conversations, Stantec Consulting Services Inc. (Stantec) has prepared this Interim Remedial Measures Work Plan (IRMWP) which describes the interim remedial measures (IRMs) that are being undertaken in conjunction with the ongoing construction activities and the IRMs that are proposed at the Brownfield Cleanup Program (BCP) Carriage Factory Site #C828184, located at 33 Litchfield Street, City of Rochester, Monroe County, New York (Site).

As previously identified in our Department-approved Change of Use Notice, in order to redevelop the site into housing for special needs and low income individuals, Carriage Factory has begun building-related and site-related improvements, concurrent with the performance of the Remedial Investigation (RI). As a result of the ongoing construction, and our ongoing environmental monitoring during construction, and with Department concurrence, IRMs have become necessary to address areas with environmental impacts to soil.

### **Basement Excavation**

Within the first floor (aka basement) of the building, buried piping and associated impacted soil was identified in conjunction with the construction of the two new stair tower foundations. As a result it was decided, with consent from the Department, to remove all known piping within the basement and remove significantly-affected soil found in association with the piping. To date the IRMs have resulted in an estimated 100 cy of material which has been stockpiled on and under poly for proper off-site disposal pending the completion of a Contained In Demonstration per NYSDEC TAGM 3028. As discussed with you at the May 22, 2013 site walkthrough, two additional areas which have been documented to still contain soil impacted at levels above Restricted Residential Soil Cleanup Objectives will be excavated from this basement area and confirmatory soil samples collected similar to the prior samples for which preliminary results have been provided.

### **In-Situ Groundwater Treatment Piping**

Following completion of those excavations, it is proposed to dig narrow trenches and install a series of 2 inch diameter perforated PVC pipes along the top of bedrock to facilitate in-situ treatment of groundwater from outside the building on the south side as shown on the attached drawing and associated details. It is proposed to install these pipes beginning the week of May 28. At present, bench scale testing of soil and groundwater samples is being performed to assist in determining the most appropriate groundwater treatment remedial approach. We will provide those results and further details on our proposed IRM to address groundwater impacts as they become available.

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### **Sub-Slab Depressurization System**

Prior to installing the basement floor slab, the proposed sub-slab depressurization system (SSDS) including Geovent and a Liquid Boot vapor barrier will be installed as per the prior revised design submission to the Department. Any substantive revisions to the proposed SSDS design will be submitted to the Department for review.

### **Water Management**

Rainwater and groundwater that have been encountered during construction and during RI groundwater sampling have been pumped to 55 gallon drums. Carriage Factory has applied for a permit from Monroe County Department of Environmental Services to discharge the water to the sanitary sewer system. Testing of the accumulated water as well water that is present in the elevator sump is ongoing. Following receipt of the permit, the water will be discharged to the sanitary sewer system in accordance with the permit conditions. A tank will be brought to the site in the near future to containerize additional water. Discharge of that water will also be performed in accordance with the permit conditions.

### **Site Grading**

As anticipated and previously discussed with the Department, outside the building, site grading activities beginning at the south end of the proposed parking lot have resulted in the stockpiling of urban fill material. Sample data, both from prior investigations and the ongoing RI and IRM activities are being provided to Waste Management to arrange for the disposal of the urban fill at Mill Seat Landfill in Riga, NY. The first two stockpiles of soil are scheduled for transportation and disposal beginning May 24. As described in the Department-approved RI Work Plan, six confirmatory soil samples are proposed from within the exterior portion of the site to document residual impacts at the depths of the design cuts for construction of the parking lot which will involve placement of 12 inches of stone and four inches of impervious asphalt cover. In those areas that will be landscaped, two feet of clean soil will be placed atop remaining urban fill.

### **Soil Management**

As previously discussed, Stantec will continue to provide full time environmental monitoring of the subsurface disturbances that will be required to facilitate construction. We will continue to visually assess and screen the excavations and the soil and concrete that is removed with a photoionization detector (PID). The excavated materials from within the building will be staged on poly, covered with the same, and tested per DER-10 and/or landfill requirements to determine if the material requires disposal off-site at an approved facility, if it can be reused on-site, or if it can be used at a clean fill site. Stockpiling of urban fill will be performed atop existing urban fill; hence underlying poly is not being used, as previously approved by the Department. Should urban fill be placed atop a portion of the site that will not be cut further, poly will be placed beneath this material. In areas with no apparent visual or PID related issues, asphalt and concrete that appears to be clean will be sent off-site to a permitted C&D recycling facility. If apparent impacts to concrete or asphalt are observed, the Department will be contacted to discuss the impacts and determine the appropriate disposal facility.

Based on the available data from the Site, soil removed from beneath the building is being analyzed for VOCs and in most cases SVOCs. Urban fill removed from the site is being analyzed for metals and SVOCs, and in some cases PCBs and VOCs. Additional analysis will be conducted if indications of other potential impacts are observed. Sampling will be performed in accordance with the Quality Assurance Project Plan submitted to the Department as an Appendix to the approved RI Work Plan.

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Carriage Factory, BCP Site No. C828184  
Rochester, New York**

**Community Air Monitoring Program**

Concurrent with our construction monitoring, Stantec will continue to implement the NYSDOH's generic CAMP for outdoor excavation activities. Indoor CAMP air monitoring will continue to be limited to VOC screening at excavation faces. The contractor will continue to be required to provide documentation for any proposed imported fill material to satisfy the requirements of DER-10.

**Well Abandonment**

As previously authorized by the Department, following RI sampling, monitoring well RW-8 which was in the way of proposed construction of utilities was properly closed in accordance with Department guidance. Contingent on sample results, it is understood that this well may need to be reinstalled. If any additional existing groundwater monitoring wells are scheduled for disturbance by construction, we will notify the Department and following approval, they will be properly closed in accordance with Department guidance.

**Reporting and Meetings**

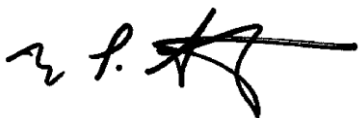
All IRM activities will continue to be coordinated with the Department, including weekly site meetings, and the IRM activities will continue to be summarized in Monthly Progress Reports. An IRM completion report will be prepared that includes documentation of the installation of the groundwater treatment system, a summary of soil removal and confirmatory samples, and documentation of the installation of the SSDS.

**Closing**

Please contact me should you have any questions or require further information regarding this proposed IRMWP. We look forward to you review and input regarding this IRMWP.

Sincerely,

**STANTEC CONSULTING SERVICES INC.**



<p>Michael P. Storonsky          Managing Principal          Tel: (585) 413-5266          Cell: (585) 298-2386  <a href="mailto:mike.storonsky@stantec.com">mike.storonsky@stantec.com</a></p>	<p>Robert J. Mahoney, P.G.          Senior Environ. Geologist          Tel: (585) 413-5301          Cell (585) 647-2567  <a href="mailto:Robert.Mahoney@stantec.com">Robert.Mahoney@stantec.com</a></p>	<p>Peter Nielsen, PE          Senior Associate          Tel: (585) 413-5280          Cell (585)729-0848  <a href="mailto:peter.nielsen@stantec.com">peter.nielsen@stantec.com</a></p>
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Attachments: Groundwater Treatment System Piping Plan and Details

- ec. Bart Putzig, P.E. (NYSDEC)
- Justin Deming (NYSDOH)
- Mark Gregor (City of Rochester)
- Mark Fuller (Carriage Factory)
- James Whalen (Carriage Factory)
- Mike Seaman (Christa Construction)
- Joe Gibbons (SWBR Architects)



Stantec  
 61 COMMERCIAL STREET  
 ROCHESTER, NY  
 14641  
 Tel. 585-475-1440  
 Fax. 585-424-5951  
 www.stantec.com

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Legend

- LI-B-11S SOIL SAMPLE LOCATION
- LI-B-107-S1 TEST BORINGS AND/OR MONITORING WELLS
- FIELD LOCATED UNDERGROUND PIPE LOCATION
- FIELD LOCATED AREA OF EXCAVATION

Notes

1. PLAN ADAPTED FROM BASE PLAN BY PARRONE ENGINEERING.
2. GROUND SURFACE ELEVATION CONTOURS OBTAINED FROM DRAWING ENTITLED "BORING LOCATION PLAN" BY FOUNDATION DESIGN, P.C., DATED JANUARY 26, 2011

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

File Name:	Den.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal	Den.	Chkd.	Dsgn.	YY.MM.DD

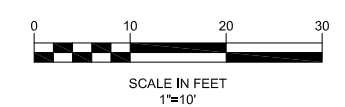
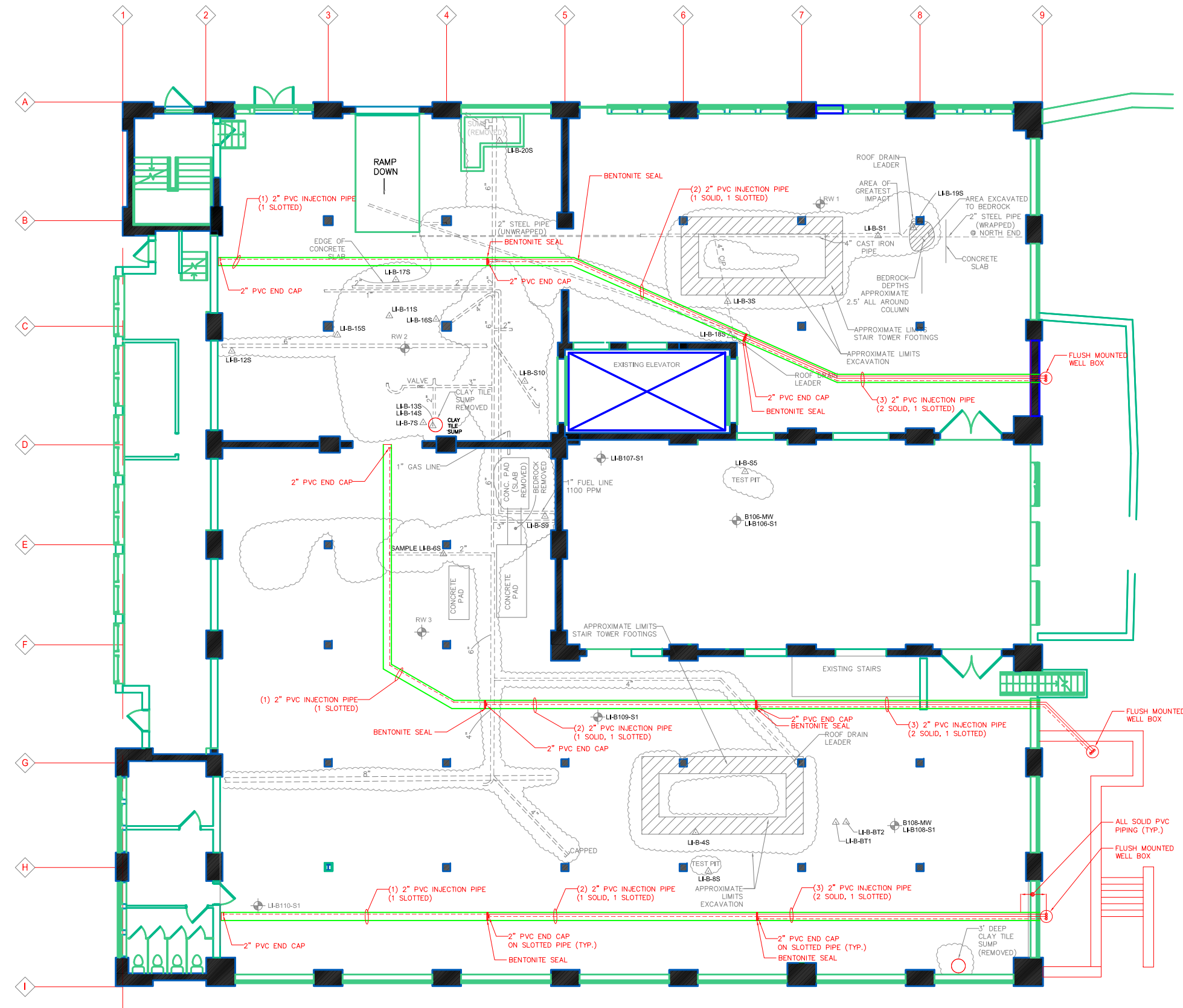
Client/Project  
 CARRIAGE FACTORY SPECIAL NEEDS APARTMENTS, L.P.  
 REMEDIAL INVESTIGATION WORK PLAN  
 BROWNFIELD CLEANUP PROGRAM  
 FORMER CARRIAGE FACTORY  
 33 LITCHFIELD STREET, ROCHESTER, NY

Title  
 GROUNDWATER TREATMENT  
 SYSTEM PIPING PLAN

Project No.	Scale
190500751	AS SHOWN

Drawing No.	Sheet	Revision

FIGURE 1 of 0



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 2013/05/24 10:37 AM By: F. Chan, P. Chan



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 61 COMMERCIAL STREET  
 ROCHESTER, NY  
 14641  
 Tel. 585-475-1440  
 Fax. 585-424-5951  
 www.stantec.com

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Notes

Revision By Appd. YY.MM.DD

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Permit-Seal

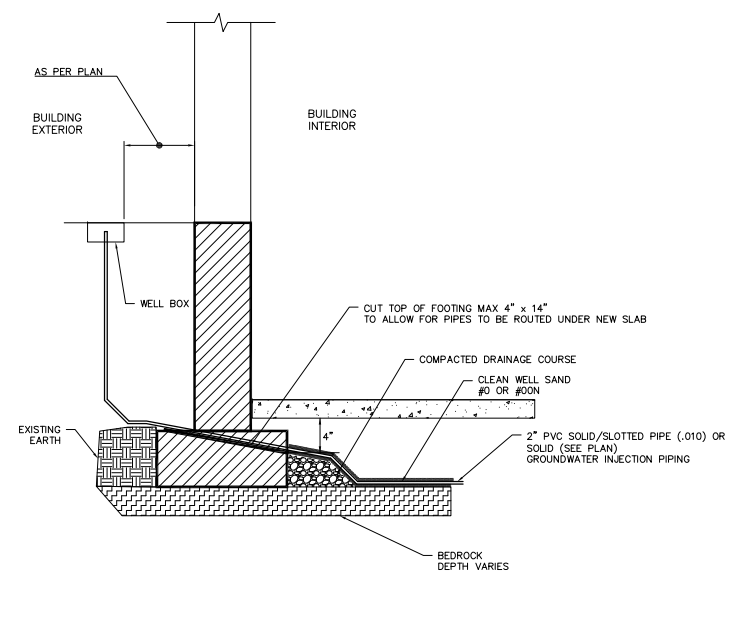
Client/Project  
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 FORMER CARRIAGE FACTORY  
 33 LITCHFIELD STREET, ROCHESTER, NY

Title  
 GROUNDWATER TREATMENT  
 SYSTEM PIPING DETAILS

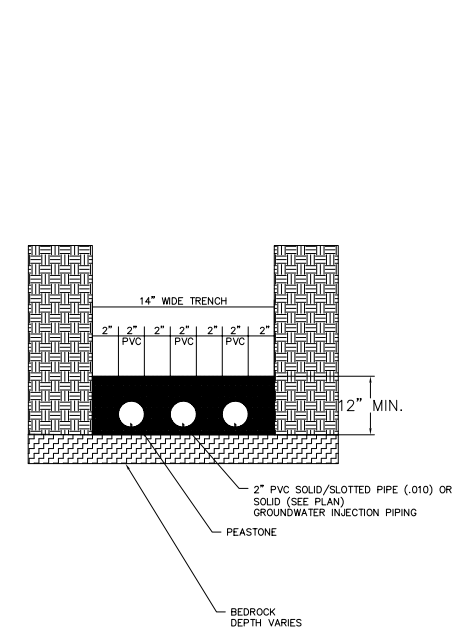
Project No. 190500751 Scale AS SHOWN

Drawing No. Sheet Revision

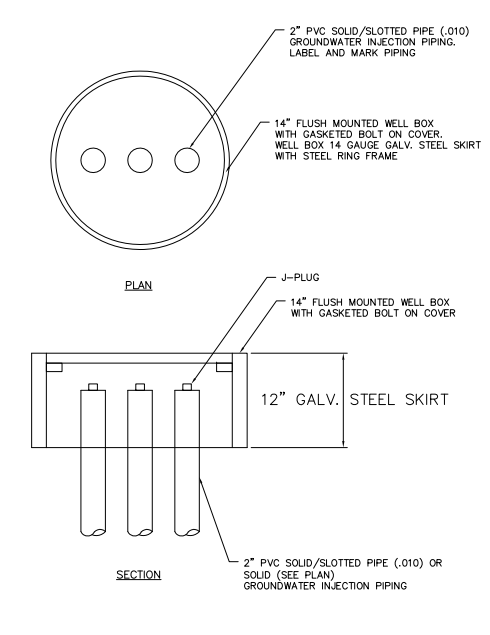
FIGURE 2 of 0



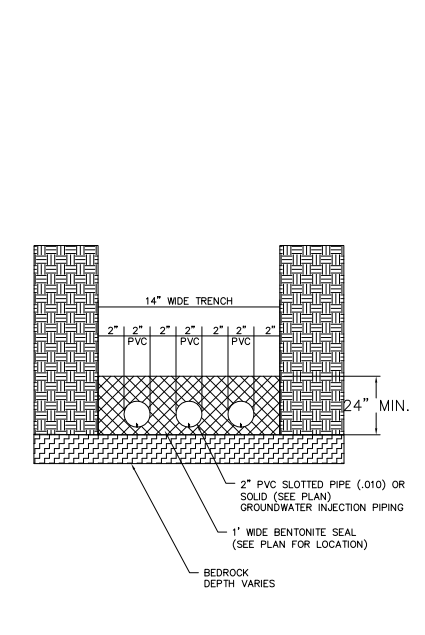
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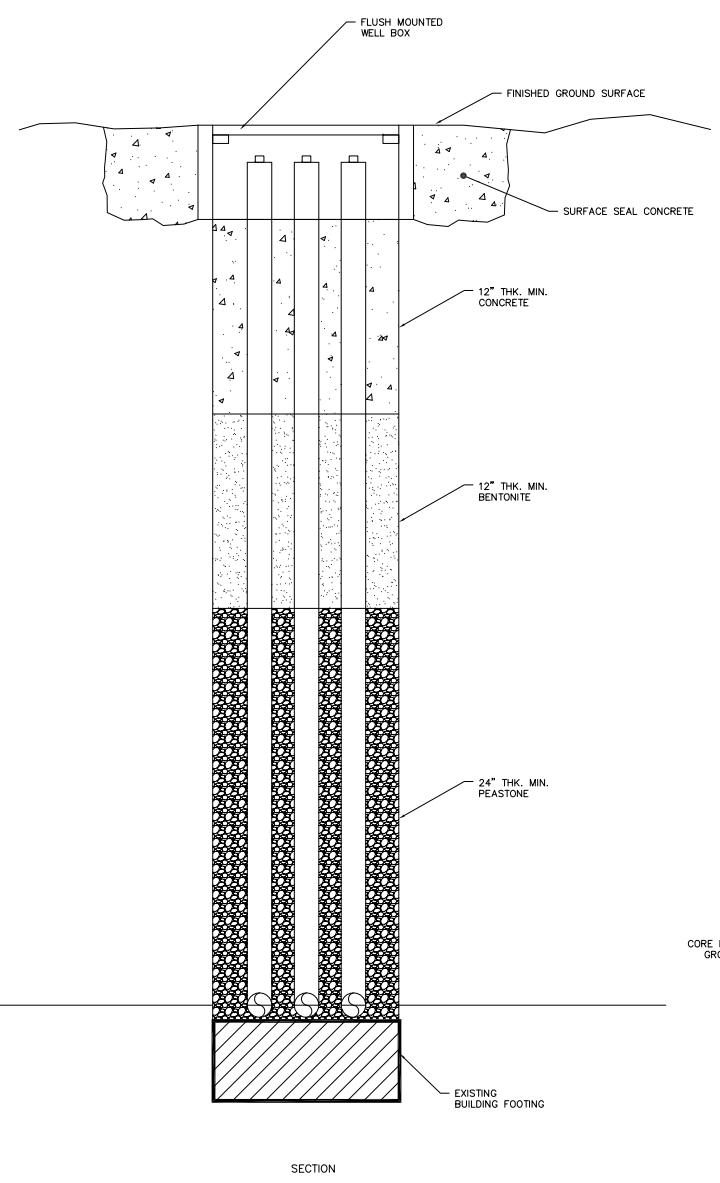
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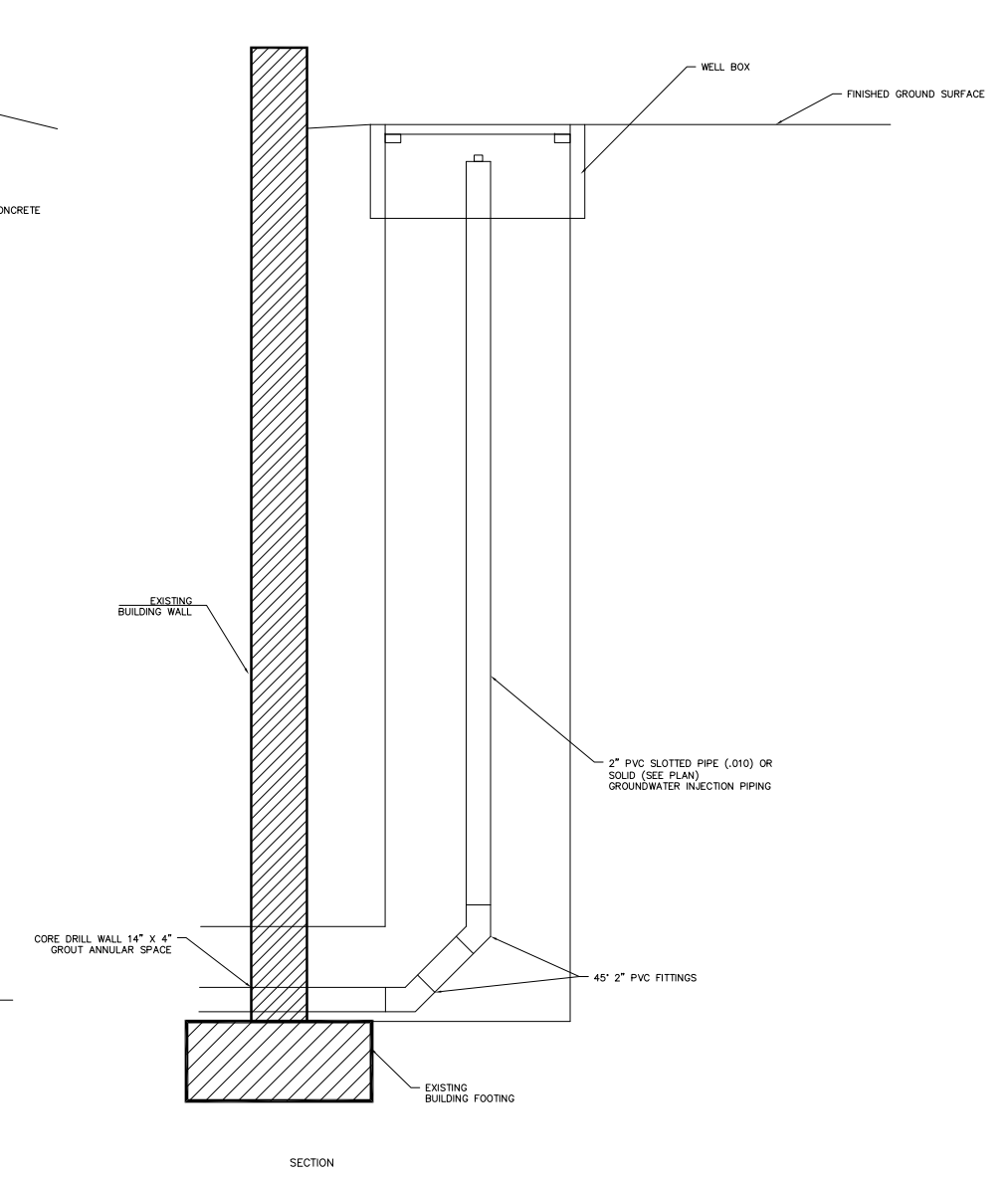
3 WELL BOX DETAIL  
 NOT TO SCALE



4 BENTONITE SEAL  
 NOT TO SCALE



SECTION



SECTION

3 EXTERIOR DETAIL  
 NOT TO SCALE

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 2013/05/24 1:57 PM By: Fuser, Andy