

SECTION 02220 – DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

- A. Demolition includes modification, removal, relocation, and/or disposal of items as shown on Drawings or as specified. This includes, but is not limited to, the following:
 - 1. Demolition of above-grade and below-grade portions of buildings as indicated on the drawings, including but not limited to the building superstructure, fixtures, utilities, base slab, footings, foundation walls, pile caps, grade beams, and any additional items associated with the building or contained within the building.
 - 2. Removal and replacement of utility mains, structures, and services, including storm sewers, sanitary sewers, water piping, and gas piping as required to accommodate new construction.
 - 3. Relocation of utility poles and overhead wires as identified in the drawings.
 - 4. Removal of existing exterior lighting as required.
 - 5. Removal and replacement of hot bituminous pavement as required to accommodate new construction.
 - 6. Removal of granite curbing within project area.
 - 7. Coring of holes of diameter required and at locations required to accommodate utilities and piping as necessary for new construction.
 - 8. All procedures required for the decommissioning of monitoring wells.
 - 9. All other demolition work required to allow complete installation of the Project.

- B. Street Opening, Street Occupancy, and Moratorium:
 - 1. See letter from City of Portland to Bayco LLC dated September 23, 2008, Attachment A

- C. Related Work Specified Elsewhere Includes:
 - 1. Site Preparation: Section 02200
 - 2. Earthwork: Section 02300
 - 3. Sewers and Drains 02600
 - 4. Drainage Structures 02630

1.02 SUBMITTALS:

- A. Submit proposed methods and disposal plans for demolition to OWNER and ENGINEER for review prior to start of work as specified.

- B. Submit schedule indicating proposed sequence of demolition to OWNER and ENGINEER and for review prior to start of work. Include coordination for shutoff, capping and continuation of utility services as required, together with details for dust and noise control protection.

- C. CONTRACTOR shall contact DigSafe as required.

- D. Submit letter to the ENGINEER and OWNER stating that all observation wells have been decommissioned in accordance with the requirements outlined herein. Letter shall include a site plan showing the locations of the decommissioned wells.

1.03 JOB CONDITIONS:

- A. Permits: CONTRACTOR shall obtain all required permits for demolition.
- B. Condition of Structures: The OWNER assumes no responsibility for actual condition of structures to be demolished.
 - 1. Conditions existing at time of inspection for bidding purposes will be maintained by OWNER in so far as practicable.
- C. Explosives: Use of explosives will not be permitted.
- D. Traffic: Conduct demolition operations and removal of debris to ensure no interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways.
- E. Protections: Provide temporary barricades and other forms of protection to ensure safe passage of personnel around area of demolition. Conduct operations to prevent injury to adjacent buildings, structures, other facilities, and persons.
 - 1. Provide protective measures as required to provide free and safe passage of people.
 - 2. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to the demolished and adjacent facilities or work to remain.
 - 3. Remove protections at completion of Work.
- F. Damages: Promptly repair damages caused to adjacent facilities by demolition operations at no cost to OWNER.
- G. Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations, permits, laws, ordinances, etc. pertaining to environmental protection.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION

3.01 PREPARATION:

- A. General: Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to the demolished and adjacent facilities or work to remain.
- B. Locate, identify, stub-off and disconnect utility services in accordance with City and private utility standards that are not indicated to remain in accordance with plans.

3.02 DEMOLITION:

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings or as specified in accordance with demolition schedule and applicable regulations.
- B. Provide services for effective air and water pollution controls (water sprinkling, temporary enclosures, and other suitable methods) to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations, permits, laws, and ordinances pertaining to environmental protection.
- C. Completely fill below grade areas and voids resulting from demolition work. Provide fill materials as shown on the Drawing or as specified in section 02300, Earthwork.
- D. Saw-cut asphalt and concrete paved surfaces before removal. Joint cut should be neat and straight.

3.03 SALVAGED MATERIALS:

- A. General: Where shown on the Drawings or specified as Salvage, Property of OWNER, or Deliver to OWNER, carefully remove indicated items, clean, store, and turn over to OWNER in area designated by ENGINEER or OWNER.
- B. Any unanticipated items of significant historic or commercial value discovered in the demolition work shall remain the property of OWNER. CONTRACTOR will have the option to take possession of all other demolition materials or to dispose of them suitably. No materials assigned to CONTRACTOR may remain on site without written authorization from ENGINEER or OWNER.
- C. All demolition work within the City right-of-way is to be completed in accordance with City standards. Curbing, street-signs and other items not proposed for reuse shall be transported to the City of Portland Outer Congress Street Stockyard at no cost to the OWNER.

3.04 PIPE CORING:

- A. General: Core holes for all pipe protrusions through existing structures to allow watertight installation of pipe and link seal or pipe sleeve as required. Double link seals shall be installed at all pipe protrusions through concrete walls containing liquid or saturated conditions on either side.

3.05 DECOMMISSIONING OF MONITORING WELLS:

- A. Flush monitoring wells with potable water to clear out and evacuate accumulated sediment, which will be verified by comparing the cleared well depth to the installed well depth record.
- B. Tremie grout the entire well screen and riser column. The monitoring well screen and riser shall be tremie-grouted starting at the well bottom to approximately one (1) ft below ground surface, or level of foundation excavation, whichever is deeper, using a thick, Portland cement and bentonite grout mix. The grout may not be placed by pouring. The volume of grout must be sufficient to compensate for settling. The grout will also be "topped-off" if settling of the grout occurs. The grout mixing is to be performed using a Moyno-type cavity pump or a portable "grout plant" equipped with an accessory pump.
- C. Remove the existing roadway boxes, surface seals, steel casing and PVC piping from the ground surface to approximately two (2) ft depth below surface grade, or level of foundation excavation if applicable, and the resulting void space backfilled and tamped with a manufactured sand/gravel concrete aggregate (such as Sakrete® gravel mix) to surface grade.
- D. Restore the ground surface and clear the work area of debris. As part of their site restoration services, the contractor will be responsible for disposal of debris generated by the well decommissioning process (roadway boxes, casings, broken surface seals, etc.).

3.06 DISPOSAL OF DEMOLISHED MATERIALS:

- A. General: Remove from Project site debris, rubbish, and other materials resulting from demolition operations. Do not remove from Project site without prior permission by OWNER or ENGINEER. Store all demolished materials that OWNER wishes to retain at location designated by OWNER or ENGINEER.
- B. Burning of removed materials from demolished structures will not be permitted on site.
- C. Dispose of demolition debris in a lawful manner.
- D. Management of hazardous materials not specifically identified in this specification shall be extra work. This provision does not relieve CONTRACTOR of his responsibility to respond promptly and appropriately to indications of hazardous material.
- E. In the event that unanticipated hazardous materials are discovered or suspected, contractor shall carry out suitable measures to minimize hazards and immediately report conditions to ENGINEER.

3.07 CLEAN-UP:

- A. General: CONTRACTOR shall remove from the site all debris resulting from the demolition operations as it accumulates. Upon completion of the Work, all materials, equipment, waste, and debris of every sort shall be removed and premises shall be left, clean, neat and orderly.

3.08 PORTLAND WATER DISTRICT:

- A. General: CONTRACTOR shall complete all work in accordance with the Portland Water District's Standard Specifications.

3.09 CITY OF PORTLAND SANITARY AND STORM SEWER:

- A. General: CONTRACTOR shall complete all work in accordance with the City of Portland Maine Technical and Design Standards and Guidelines, latest edition, and all other Ordinances and Requirements of the City of Portland.

3.10 NORTHERN UTILITIES GAS:

- A. General: CONTRACTOR shall complete all work in accordance with the requirements of Northern Utilities Gas Company.

Attachments:

Attachment A: Letter from City of Portland to BAYCO LLC, dated September 23, 2008

End of Section