### **SECTION 31 23 16 - EXCAVATION**

# **PART 1 GENERAL**

# 1.01 SECTION INCLUDES

A. Excavating for footings, slabs-on-grade, paving, site structures, utilities within the building, and stormwater management facilities.

### 1.02 RELATED REQUIREMENTS

- Section 00 91 14: Geotechnical report; bore hole locations and findings of subsurface materials.
- B. Section 31 22 00 Grading: Soil removal from surface of site.
- C. Section 31 22 00 Grading: Grading.
- D. Section 31 23 16.13 Trenching: Excavating for utility trenches outside the building to utility main connections.

### 1.03 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Field Quality Control Submittals: Document visual inspection of load-bearing excavated surfaces.

### 1.04 PROJECT CONDITIONS

Verify that survey bench mark and intended elevations for the Work are as indicated.

## **PART 2 PRODUCTS - NOT USED**

## PART 3 EXECUTION

## 3.01 EXAMINATION

A. Verify that survey bench mark and intended elevations for the work are as indicated.

### 3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. See Section 31 22 00 for additional requirements.

# 3.03 EXCAVATING

- A. Underpin adjacent structures that could be damaged by excavating work.
- B. Excavate to accommodate new structures, construction operations, and site improvements.
- C. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- D. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored.
- E. Do not interfere with 45 degree bearing splay of foundations.
- F. Cut utility trenches wide enough to allow inspection of installed utilities.
- G. Hand trim excavations. Remove loose matter.
- H. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- I. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 31 23 23.
- J. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- K. Remove excavated material that is unsuitable for re-use from site.
- L. Stockpile excavated material to be re-used in area designated on site in accordance with Section 31 22 00.

M. Remove excess excavated material from site.

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# 3.04 FIELD QUALITY CONTROL

- A. See Section 01 40 00 Quality Requirements, for general requirements for field inspection and testing.
- B. Provide for visual inspection of load-bearing excavated surfaces before placement of foundations.

# 3.05 PROTECTION

- A. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.

# **END OF SECTION**

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