

TECHNICAL SPECIFICATION

ITEM 00120 CHANNEL EXCAVATION

120.1 Description. Channel excavation shall consist of required excavation for all channels, channel changes and ditches as shown on the plans and to the lines and grades established by the Engineer and satisfactorily disposing of all materials taken therefrom. Roadside ditches are specifically excluded. Ditches shall include inlet and outlet ditches to structures, and all ditches outside the confines of the roadway slopes. The method of constructing embankment for channels and ditches shall be as outlined under the Item, "Embankment".

120.2 Construction Methods. All suitable materials removed from the excavation shall be used, insofar as practicable in the formation of embankments as required by the Item, "Embankment". Excavated material shall not be either permanently or temporarily placed on the channel top-of-bank, nor will temporary shelves be cut into the channel side slopes, without the approval of the Engineer. All channel excavation utilized as embankment shall be placed in accordance with Item 00132, "Embankment".

Unsuitable channel excavation in excess of that needed for construction shall become the property of the Contractor and shall be disposed of by the Contractor outside of the limits of the right of way.

Cut-off channel meanders shall not be backfilled unless so indicated on the plans. The Contractor will be responsible for obtaining all applicable State, City, County, and/or Federal permits for construction.

Any temporary construction access that crosses a channel will be constructed so as to allow a continuous flow at all times. The channel flow line will not be blocked or raised at any temporary construction access.

When the plans indicate the fill of a channel side slope, the earthfill material shall be placed in layers not to exceed eight (8) inches and shall be benched or notched into existing slopes and compacted by suitable rolling equipment to ninety (90) percent of Standard Proctor Density (ASTM Method D698) at a moisture content of between optimum and plus 3 percent optimum.

The imported earthfill material shall be free from roots, trash, silt and objectionable debris. Soils classified by ASTM Method D2487 as clayey sands, sand clay mixtures, or inorganic clays with a plasticity index of from 15 to 40 are approved as fill materials. Each layer shall be compacted to 90% of standard proctor density (ASTM Method D698), at a moisture content of optimum to plus 3 percent of optimum. Soils shall not be compacted at less than the optimum moisture content. The channel side slopes, in fill areas, shall be cut to the finished dimensions after completion of the fill process. The Contractor shall notify the City of La Porte of the borrow site location so that the City shall have the option of making any soil test on borrow material being transported to the project site.

At the location of pipeline crossings, the Contractor shall suspend machine excavation to within 5 feet of any pipeline right of way, until a company representative is present to identify pipe location and to further direct excavation operations. The notification to the pipeline company of the Contractor's operations and the request for their representatives attendance shall be the responsibility of the Contractor. The Contractor shall not be reimbursed directly for any work or expenditure as a result of intersecting any pipeline operation. Any contingent costs therefore shall be anticipated in the preparation of the bid and included as distributed items of cost in the price for unclassified channel excavation.

The Contractor shall be responsible for disposal of all excavated material not used for backfill or grading berm areas. The disposal site shall not be a wetland, environmentally sensitive area, or floodway. It is the responsibility of the Contractor to contact the proper authorities to determine land use classification and to obtain any necessary permits.

At locations where lateral ditches enter the channel, the Contractor shall perform grading as may be required to maintain lateral ditch side slopes within the easement area. The cost of all grading shall be considered incidental to the unit price bid and no extra payment will be made.

Prior to final inspection by the Engineer, the Contractor shall remove all sediment from the bottom of the channel and dispose of this material off site. The cost of sediment removal and grading shall be incidental to the unit price bid, and no extra payment will be made.

120.3 Measurement & Payment. The quantity of channel excavation to be paid for shall be the number of cubic yards of material computed by theoretical cross-sections, obtained from the drawings and natural ground lines using the method of average end areas. Field cross-sections will not be performed after construction has begun.

After bidding, if the successful contractor feels there is an error in the estimated quantities for channel excavation, as shown on the bid sheet, he shall provide at no expense to the City of La Porte, sufficient documentation in the form of recoverable cross-sections and supporting computations. This documentation shall be provided prior to proceeding with any channel excavation work. No adjustments to the channel excavation quantities will be allowed once excavation work has begun.

If the documentation provided by the contractor is deemed by the City of La Porte to be insufficient, additional supporting information may be required, at no expense to the City of La Porte.

If the documentation, provided by the contractor, is deemed by the City of La Porte to be correct and is representative of actual field conditions, then the derived quantities shall be the basis of payment for channel excavation.

The Contractor must submit all required documentation within fourteen (14) calendar days of the project start date, or within fourteen (14) calendar days of horizontal and vertical control information being provided, whichever occurs last. Requests to evaluate the channel excavation quantities will not be considered after this time.

All work performed as required by this Item and measured as provided above, will be paid for at the unit price bid for "Channel Excavation – Wet or Dry", which price shall be full compensation for preparation, trimming of slopes, disposal of surplus materials (wastage), any necessary hauling and the furnishing of all labor, tools, equipment and incidentals necessary to complete the work.