

PART 1 GENERAL

1.1 UNIT OR LUMP SUM PRICES

- .1 Each unit or global price is for lump sum payment. The Contractor agrees to carry out the work for the unit price for a gain or a loss. The unit or or global price for work must compensate for all expense, work, disbursements, payments, direct and indirect expenses, mobilizations, demobilizations and all acts, deeds, facts, responsibilities, obligations, omissions and errors on the Contractor' part during the course of this work.
- .2 For the same unit or global price, the Contractor provides the materials, personnel and accessories necessary for execution of the work, unless otherwise indicated.
- .3 The unit or global price also includes the transportation and installation of materials, and the company's general expenses including administration, insurance, contributions and fees, interest, taxes and other incidental expenses. It must include losses and damages that may result from the work, fluctuations in prices and salaries, risks to the company, strikes, delays unattributable to the Departmental Representative, transportation restrictions, accidents and acts of God.

1.2 LUMP SUM PAYMENT: Definition

- .1 Where work is determined accurately and detailed fashion and a comprehensive price is agreed upon and accepted by the two parties.

1.3 UNIT PRICE: Definition

- .1 Where specifications associated with the work are determined in a precise and detailed fashion and all quantities or certain quantities on the schedule are provided for estimation purposes.

1.4 MEASUREMENT FOR PAYMENT PURPOSES

- .1 Site organization:
 - .1 Item – All work shown and described on Demolition/Existing Conditions and in specifications – includes all requirements described in Division 01 – General Requirements of these specifications and Sections 01 41 13 – Selective Site Demolition, 31 11 00 – Clearing and Grubbing, part of 32 01 90.33 – Tree and Shrub Preservation and also included in other work that do not form an integral part of the schedule items.
 - .2 Payment for this item as follows:
 - .1 25% with first monthly payment.
 - .2 50% divided equally among subsequent payments.
 - .3 25% with payment issued with Substantial Completion certificate.
 - .4 Site organization position can not exceed 15% of the total value of the bid

1.5 APPLICATIONS FOR PROGRESS PAYMENT

- .1 Make applications for payment on account as monthly as Work progresses.
- .2 Date applications for payment last day of agreed monthly payment period and ensure amount claimed is for value, proportionate to amount of Contract, of Work performed and Products delivered to Place of Work at that date.
- .3 Submit to the Department Representative, at least 14 days before first application for payment. Schedule of values for parts of Work, aggregating total amount of Contract Price, to facilitate evaluation of applications for payment.

1.6 SCHEDULE OF VALUES

- .1 Provide schedule of values supported by evidence as the Department Representative may reasonably direct and when accepted by the Department Representative, be used as basis for applications for payment.
- .2 Include statement based on schedule of values with each application for payment.
- .3 Support claims for products delivered to Place of Work but not yet incorporated into Work by such evidence as the Department Representative may reasonably require to establish value and delivery of products.

1.7 COST BREAKDOWN SCHEDULE

- .1 Before requesting payment of the first installment, present a detailed breakdown of costs as required by the Representative of the Ministry for the lots at fixed price. Once approved by the Departmental Representative, the breakdown of costs as a basis for calculating interim payments.

1.8 MEASUREMENT FOR PAYMENT PURPOSES

.1 Demolition selective

- .1 Demolition work is payable in a lump sum.
- .2 Dismantling, recovery and relocation of the cliff fence is not measured for payment purposes. Wood components in poor condition, identified on site by the Departmental Representative, to be replaced is payable by unit cost.

.2 Tree And Shrub Preservation

- .1 Pruning and treatment of injuries to trees are paid in hour units worked and validated by Departmental Representative. One hour of work corresponds to: one certified pruner with 10 years' experience and two apprentices. All material and work is included. Only time worked on site is considered and not time spent disposing of waste off site.
- .2 Protective fencing for plants is not measured for payment.
- .3 Trunk protection is not measured for payment.

.3 Clearing and Grubbing

- .1 Measure selected trees to be cleared, by selective cutting, and grubbing isolated tree stumps as number of isolated trees cleared.
 - .1 Work under this section will be paid on a fixed price basis.
 - .2 Clearing of isolated trees including grubbing or ground level cutting as directed by Departmental Representative.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

- .1 Gauge 0 at 20 cm DBH.
- .2 Gauge 21 at 40 cm DBH.
- .3 Gauge 41 and more at DBH.
- .2 Complete grubbing of selected trees, to be measured in units based on number of trees removed.
 - .1 Work listed below will be paid on a unit cost basis.
 - .1 Gauge 0 at 20 cm DBH.
 - .2 Gauge 21 at 40 cm DBH.
 - .3 Gauge 41 and more at DBH.
 - .3 Partial grubbing of selected trees, to be measured in units based on number of trees removed.
 - .1 Work listed below will be paid on a unit cost basis.
 - .1 Gauge 0 at 20 cm DBH.
 - .2 Gauge 21 at 40 cm DBH.
 - .3 Gauge 41 and more at DBH.
 - .4 The Contractor may not claim costs for work conducted outside the site, nor costs for repairs incurred for storage requirements, vehicle circulation or other management oversights under the Contractor's responsibility.

.4 Earthwork - Short Form

- .1 Cost of landscaping and levelling including removal of material and fill must be itemized in the schedule and include cost of labour, all materials required for complete execution of work including without being limited to removal of topsoil where required, excavation down to rock and projected elevations, transition areas, disposal of waste material, backfilling, loading, transportation, placement and compaction of fill material, as stipulated in the plans and specifications and rules and best practices of the trade.

.5 Wood Treatment

- .1 The cliff fence, to be recovered and relocated, is payable based on a lump sum including excavation, dismantling, re-installation and all new hardware.
- .2 Replacement parts (posts, crosspieces and other) for the cliff fence are payable by unit price including hardware.
- .3 Wood stairs are payable based on a lump sum including granular foundation and all metal attachments and fastenings.

.6 Geotextile

- .1 Geotextiles will not be measured for payment and must be included in the price of different items of bid.

.7 Precast Concrete Unit Paving

- .1 Measure concrete paving including bedding, joint filler and PVC edging for lump-sum payment.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

.8 Excavation, Trenching and Backfilling

- .1 The cost of second class cuttings must be included in the prices of various articles of bid includes the cost of all manpower, materials and services necessary for full execution of work including without being limited stripping all topsoil, excavation to bedrock or projected elevations, transitions, filling, loading, transport, placement and compaction backfill, as stipulated in the plans and drawings as well as the rules and best practices of the trades.
- .2 First class cuttings are paid according to measurement procedures of section 23 16.26 – Rock removal.

.9 Topsoil Placement and Grading

- .1 Preparation of bedding soil for placement of topsoil is not measured for payment.
- .2 Stripping of existing topsoil is not measured for payment.
- .3 Spreading and filling trenches with soil is not measured for payment.

.10 Steel Fencing

- .1 The guard rails attached to the retaining walls are payable in a lump sum including hardware.
- .2 The handrails attached to stairs are payable in a lump sum including hardware.
- .3 The chainlink fence, to be recovered, cleaned and repainted, is payable in a lump sum including new hardware.
- .4 The new type of chain fence section is subject to a unit amount, including hardware.

.11 Threes, Shrubs and Groud Cover Planting

- .1 Payment for planting of trees, shrubs, ground cover will be a unit cost, including excavation, topsoil, mulch, maintenance and warranty.

.12 Sodding

- .1 Grass sod measured based on unit cost, including excavation, soil and maintenance based on grassed surface area, measured and calculated by the Departmental Representative.
- .2 Commercial Grade Turf Grass Nursery Sod per square metre.
- .3 Square metre price of sod must include preparation of surface including excavation and placement of materials, regardless of type, supply and spreading of planting soil 150 mm thick after compaction; supply and installation of sod; spreading of rooting fertilizer; rolling and watering sod until rooted.
- .4 Stripping of topsoil will not be measured for payment. It must be included in fill.
- .5 The Contractor may not claim costs for work conducted outside the site, nor costs for repairs incurred for storage requirements, vehicle circulation or other management oversights under the Contractor's responsibility.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

.13 Hydraulic Seeding

- .1 Measure hydraulic seeding for unit cost payment, of actual surface area calculated by Departmental Representative.
 - .1 Measurement of hydraulic seeding by square metre must include preparation of surface to be seeded including excavation and placement of material in place, regardless of type, supply and spreading of topsoil 150 mm thick after compaction; uniform seeding of mix over surface to cover.
- .2 The Contractor may not claim costs for work conducted outside the site, nor costs for repairs incurred for storage requirements, vehicle circulation or other management oversights under the Contractor's responsibility.

.14 Architecture Service Building

- .1 The price submitted for this item includes, but is not limited to, all equipment, tools, labor, and the provision and installation of temporary equipment for the selective demolition required for the work.
- .2 The price submitted includes, but is not limited to, all equipment, tools, labor, and the provision of materials in order to replace the exterior wall and roof cladding. This article includes the supply and installation required for all interior and exterior finishes (walls, doors, floors and ceilings). The price for this item must also include all accessories and appliances, as well as the materials, transportation and installation of the windows.

.15 Excavation and Backfill

- .1 Excavation and backfill of the east entrance
 - .1 Excavation and disposition of the east entrance excavation materials. Supply and placement of MG 20 support cushions. Supply and placement of MG 112 as backfill material.
- .2 Excavation and backfill of the west entrance
 - .1 Excavation and disposition of the west entrance excavation materials. Supply and placement of MG 20 support cushions. Supply and placement of MG 112 as backfill material.

.16 Concrete

- .1 Concreting of the east entrance
 - .1 Supply and placement of concrete for new footings including the dispositions necessary for adequate concrete curing. Placement and dismantling of formwork.
- .2 Concreting of the west entrance
 - .1 Supply and placement of concrete for new footings including the dispositions necessary for adequate concrete curing. Placement and dismantling of formwork.

.17 Crack Injection—Chimneys

- .1 Preparation of cracks in chimneys and lintels indicated on plans. Supply and placement of SikaFix PU injection grout.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

- .18 Concrete Repair—Chimneys
 - .1 Preparation of concrete surfaces to repair on the chimneys. Supply and placement of reinforcing steel. Placement and dismantling of formwork. Supply and placement of concrete including the dispositions necessary for adequate concrete curing.
- .19 Concrete Bushhammering—East Battery
 - .1 Bushhammer concrete surfaces to repair in the east battery room. Provide the necessary equipment for bushhammering of concrete surfaces. Disposition of scrap generated during the bushhammering.
- .20 Concrete Repair—East Battery
 - .1 Preparation of concrete surfaces to repair in the east battery room. Supply and placement of galvanized reinforcing steel. Placement and dismantling of formwork. Supply and placement of concrete including the dispositions necessary for adequate concrete curing.
- .21 Concrete Bushhammering—West Battery
 - .1 Bushhammer concrete surfaces to repair in the west battery room. Provide the necessary equipment for bushhammering of concrete surfaces. Disposition of scrap generated during the bushhammering.
- .22 Concrete Repair—West Battery
 - .1 Preparation of concrete surfaces to repair in the west battery room. Supply and placement of galvanized reinforcing steel. Placement and dismantling of formwork. Supply and placement of concrete including the dispositions necessary for adequate concrete curing.
- .23 Steel**
 - .1 Production and installation of posts (W) and shoring (HSS)
 - .1 Supply and placement of posts and galvanized shoring including the hardware necessary for their placement.
 - .2 Galvanization of posts (W) and shoring (HSS)
 - .1 Proceed with the galvanization of posts and shoring.
 - .3 Rods and concrete anchors
 - .1 Supply and placement of shoring system rods. Supply and placement of concrete anchor rods including the hardware necessary for their placement.
 - .4 Surface preparation and treatment of lead-containing paint (doors and frames)
 - .1 Treatment of lead-containing paint surfaces of doors and door frames. Provide the equipment necessary for the treatment of lead paint. Disposition of scrap generated during the treatment. Preparation of door and door frame surfaces for a new painting.
 - .5 Metalwork painting (doors and frames)
 - .1 Supply and placement of paint on the door and door frame surfaces.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

.24 Wood

- .1 Supply of wood pieces
 - .1 Provide stringers and spacers required for the implementation of the project including the hardware necessary for their placement. The stringers and spacers must be Douglas fir 6x6 in raw, processed, and incised.
- .2 Installation of wood pieces
 - .1 Placement of wood stringers and spacers (Douglas fir 6x6 in raw, processed, and incised) at the west entrance, at the east entrance, and on places indicated on the plans where the wood pieces are damaged.
- .3 Partial demolition
 - .1 Extraction of spacers damaged by rot on places indicated on the plans. Disposition of scrap during the demolition of the east and west entrances such as wood stringers, concrete slab, and steel frames.

.25 Service Building Plumbing

- .1 The work listed hereafter is subject to lump sum prices:
 - .1 Plumbing tests.
 - .2 Connections to existing networks.
 - .3 Piping of water supply, drainage, and venting.
 - .4 Water heater.
 - .5 Tank.
 - .6 Funnel floor drain.
 - .7 Water inlet.
 - .8 Lavatories.
 - .9 Sinks.
 - .10 Urinal.

.26 Service Building Ventilation

- .1 The work listed hereafter is subject to lump sum prices:
 - .1 Ventilation ducts.
 - .2 Exhaust fan.
 - .3 Exhaust grilles.
 - .4 Exit to the roof.

.27 Service Building Insulation

- .1 The work listed hereafter is subject to lump sum prices:
 - .1 Ventilation duct insulation.

.28 Underground Electrical Conduits

- .1 The underground conduit prices must be, without limitation, subject to the excavation, conduits, TTOG pipes, termination boxes, tunneling, backfilling, surface finishes, and labor.

1.8 MEASUREMENT FOR PAYMENT PURPOSES (cont'd)

.29 Service Building Electricity

- .1 The price for service building must include, without limitation, the electrical distribution, indoor/outdoor lightning, as well as labor.

PART 2 PRODUCT

2.1 NOT USED.

- .1 Not used.

PART 3 EXECUTION

3.1 NOT USED.

- .1 Not used.

END OF SECTION