

DIVISION 01

1.0 GENERAL

The Work covered by this Contract shall include, but shall not be limited to the furnishing of all materials, plant, equipment, tools, implements, machinery, supplies, transportation, labour and supervision necessary for the construction of the work as herein specified and shown on the drawings.

The complete Work under this Contract shall be governed by the dictates of good practice and shall be complete in all details of materials and methods even if not minutely specified. The Work shall be properly coordinated with the requirements of all work specified in other sections. The Work includes testing as specified and assistance with start-up and placing of the work in operation, ready for use by the Departmental Representative.

2.0 SCOPE OF WORK

This Contract is for the West Gate Access Road within Elk Island National Park, located in the province of Alberta. The work covered by this Contract shall include mobilization and demobilization, the furnishing of all materials, labour, equipment, tools, supplies, and supervision necessary for the construction of the work as herein specified and shown on the Drawings.

.1 Description

- .1 Work in this Contract includes: traffic sign removal and re-installation on roads and parking lots, site preparation, garbage container removal and re-location, clearing and grubbing, stripping of topsoil and other organics, installation of geotextile fence barriers, culvert removal and disposal, new culvert and riprap installation, guardrail removal and disposal, new guardrail installation, saw-cutting and milling of asphalt surfaces, removal and disposal of asphalt, concrete and other materials, grading of roadways, drainage channels, parking lots, haul, placing and compacting of granular base course and asphalt concrete pavement for designated road surfaces and parking lots, line painting of yellow centerline and white shoulders lines, pavement marking for parking lots and turnouts, topsoil placement, seeding, survey services, quality control, traffic accommodation and other work in Elk Island National Park.
- .2 Supply according to specifications of the following: woven geotextile, geotextile for fence barriers, culverts, riprap, guardrail, granular base course and asphalt concrete pavement, paint and other incidental materials.

.2 Interpretation

If a Contractor finds discrepancies in or omissions from the drawings, specifications or other documents or has any doubt as to the meaning or intent of any part thereof, he shall at once inform Departmental Representative, who may send a written instruction or explanation. Every request for an interpretation shall be made in writing.

Discussions at Bid briefings or other oral discussions shall not become part of the Bid Documents unless confirmed by Amendment.

.3 Location of Work

The Work is located in Elk Island National Park, 35 km east of the City of Edmonton, Alberta. The work will be completed on the following roads and parking areas (as shown on the plans):

1. West Gate Access Road (approx. 4.47 km length) including:
 - a. Main Alignment sta. 0+000 to sta. 0+640 (Sheet C1)
 - b. Main Alignment sta. 0+600 to sta. 1+840 (Sheet C2)
 - c. Main Alignment sta. 1+200 to sta. 1+840 (Sheet C3)
 - d. Main Alignment sta. 1+800 to sta. 2+440 (Sheet C4)
 - e. Main Alignment sta. 2+400 to sta. 3+040 (Sheet C5)
 - f. Main Alignment sta. 3+000 to sta. 3+640 (Sheet C6)
 - g. Main Alignment sta. 3+600 to sta. 4+240 (Sheet C7)
 - h. Main Alignment sta. 4+200 to sta. 4+470 (Sheet C8)
2. Administration Building Access Road at sta. 3+572 (Sheet C9)

3.0 MATERIAL SUPPLY

The Contractor shall supply all new materials necessary for the construction of the work as herein specified or shown on the drawings.

4.0 CONTRACT SCHEDULE AND COMPLETION

- .1 Provide within five working days after Contract award, a construction bar chart schedule in weekly increments showing anticipated progress stages, significant milestones, inspections by outside parties and final completion of Work within time period required by Contract and Bid documents.
- .2 The Contractor shall commence the Work and proceed with diligence to perform the Work in accordance with the agreed upon schedule in sufficient time to complete the Work on or before the completion date specified in the contract.
- .3 Interim reviews of work progress based on work schedule will be conducted as decided by Departmental Representative and schedule updated by Contractor in conjunction with and to approval of Departmental Representative.
- .4 Scheduling shall be in accordance with the General Conditions, Supplementary Conditions and General Requirements.

5.0 DOCUMENTS REQUIRED

Maintain at job site, one copy each of following:

- .1 Latest "Construction Issue" of Contract Drawings.
- .2 Specifications.
- .3 Addenda.
- .4 Reviewed shop drawings.
- .5 Change orders.
- .6 Other modifications to Contract.
- .7 Field test reports.

- .8 Copy of latest approved Work Schedule.
- .9 Manufacturers' installation and application instructions.
- .10 Permits, licenses and land use regulations.
- .11 Up-to-date Record Drawings.

6.0 SITE CONDITIONS

The Contractor shall thoroughly examine the site of the work before submitting his Bid, to satisfy himself as to the local conditions and location of existing site conditions, utilities and nature of work. The Contractor shall not seek nor receive any compensation for failing to thoroughly investigate the site conditions and their effect on the tendered unit rates.

Prior to commencing actual construction, check field conditions to obtain actual dimensions required to ensure correct execution of the Work, and notify Departmental Representative, in writing, of all matters which could prejudice proper execution of the work.

Commencement of construction shall constitute acceptance of existing conditions and verification of dimensions.

No extra charges will be allowed for Work resulting from conditions which would have been evident upon a thorough examination of the site.

7.0 CONSTRUCTION LAYOUT

All Work is to be laid out by the Contractor. This shall include, but not be limited to, batter boards, sight rails, stakes and marks, and bench marks as required.

8.0 RESPONSIBILITY FOR WORK

Departmental Representative will not be responsible for the Contractor's means, methods, techniques, sequences or procedures of construction, or for the supervision of the Contractor's performance of this Contract, or for the Contractor's failure to perform the work in accordance with the Contract. However, if at any time Departmental Representative is of the opinion that the number of workmen, pieces of equipment or quality of machinery, tools, plant and equipment or articles is insufficient to meet the schedule, he may so advise the Contractor in writing. The Contractor shall promptly make the necessary changes to ensure that the schedule is adhered to.

Pursuant to the provisions of the General Conditions of the Contract, while it is intended that the Contractor shall be allowed in general to carry out the Contract in such manner that may appear to him to be the most desirable, Departmental Representative at his discretion may direct the order in which and points at which the work shall be undertaken. This control shall be exercised in the interest of the Departmental Representative and it is intended that an agreement be reached between all of the parties prior to the commencement of the Contract. A schedule of work shall be drawn up for this purpose by the Contractor.

Whenever in the Contract the terms "as ordered", "as directed", "as required", "as allowed" or terms of the like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of the like effect or import are used to describe requirement, direction, review or judgement of Departmental Representative as to the work, it is intended that such requirement, direction, review or judgement will be solely

to evaluate the work for compliance with the Contract unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be construed to indicate that Departmental Representative shall have authority to supervise or direct performance of the work.

9.0 MOBILIZATION / DEMOBILIZATION

- .1 Mobilization shall include the necessary work and operation including, but not limited to, the movement of personnel, equipment, supplies and incidentals to the Work, the establishment of offices, camps and other facilities necessary to undertake the Work and for expenses incurred for other work and operations which must be performed prior to the commencement of the Work.
- .2 Demobilization shall include the dismantling and removal from the site of all of the Contractor's equipment and materials, clean-up of the site, and transportation of labour from the site.
- .3 There will be no separate payment made for mobilization and demobilization. The cost to be included in Lump sum.

10.0 CONTRACTOR'S USE OF SITE

- .1 Use of site: The Contractor does not have exclusive use of the site during execution of work in accordance with General Conditions and Special Provisions, except as follows:
 - .1 The Contractor shall maintain access through the work area at all times for the travelling public, staff and other contractors using the road to access park facilities.
 - .2 The Contractor and stored materials shall not interfere with the Departmental Representative's access to the site for operation, maintenance and repair of existing facilities. Provide temporary access to existing facilities as may be required and move materials as requested by the Departmental Representative.
 - .3 The Contractor shall not operate any of the existing facilities without a representative of the Departmental Representative present.
 - .4 At all times cooperate with the Departmental Representative
- .2 The Contractor shall be responsible for site security for the duration of the Contract. Where security is reduced by work of Contract, provide temporary means to maintain security.
- .3 Provide temporary dust screens and barriers to prevent contamination of new or existing facilities.
- .4 Obtain and pay for use of additional storage or work areas as required.

11.0 PROJECT MEETINGS

- .1 Departmental Representative will arrange and set times for project meetings and will record and distribute minutes.
- .2 The Contractor's site superintendent and representatives of the subcontractors shall attend the meetings at the request of Departmental Representative.

12.0 PERMITS, LICENSES, CERTIFICATES AND FEES

- .1 Contractor shall pay for all permits, licenses and all fees required for performance of the Work in accordance with General Conditions and Supplementary Conditions.

13.0 LOCATION OF EQUIPMENT AND FIXTURES

- .1 Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Departmental Representative of impending installation and obtain Departmental Representative's approval for actual location.
- .4 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

14.0 HAUL ROADS

- .1 The Contractor shall be responsible for damage and/or spillage on all roads used for hauling materials and equipment to and from the site subject to Departmental Representative being satisfied such damage or spillage was a direct result of the actions of the Contractor or one of the Contractor's agents in the performance of the work required under this Contract.
- .2 Upon notification by Departmental Representative that the remedial work is necessary, immediately clean and/or restore the affected areas designated by Departmental Representative.
- .3 Obtain approval from the Departmental Representative and Departmental Representative prior to using any road as a haul road.

15.0 CONSTRUCTION SIGNAGE AND SAFETY

- .1 The Contractor shall supply and maintain, at his own expense, all barriers, fences, warning signs and other precautions to protect the workmen and general public against accident or injury. All excavations or obstructions shall be clearly marked between sunset and sunrise with proper warning flares or lights. Local or Municipal bylaws governing warning flares or lights shall be strictly observed.
- .2 All signs, barricades, and warning devices shall meet Alberta Transportation and/or Regional Transportation Advisory Committee (RTAC) requirements and satisfaction of Departmental Representative. The Contractor shall obtain any permits required by the Departmental Representative with respect to this work.
- .3 Upon notification by Departmental Representative, the Contractor shall remove the construction sign to a location designated by Departmental Representative.

16.0 WORK DURATION

- .1 Work is to commence as soon as possible in the spring of 2017 once weather and site conditions permit. Work will be allowed Monday to Friday from 7 a.m. to 7 p.m. Written permission is required from the Departmental Representative for any alterations to this schedule.
- .2 The Contractor shall observe all local regulations regarding hours of work. The Contractor shall not work on any day normally observed as a holiday, without the approval of the Departmental Representative.

17.0 EMERGENCY SITUATIONS

- .1 In emergency situations, endangering life or public property, the Departmental Representative shall proceed with repairs and thereupon advise the Contractor of the failure, and resulting costs shall be paid by the Contractor.

18.0 TRAFFIC ACCOMMODATION

- .1 Prior to construction, provide a Traffic Accommodation Strategy and Work Safety Plan indicating all proposed detour routes and schedules. The plan must be approved by the governing authority and Departmental Representative prior to construction.
- .2 Traffic control shall be in accordance with the provisions of the Uniform Traffic Control Devices of Departmental Representative.
- .3 Supply and maintain all barriers, fences, warning signs and other precautions to protect the workmen and general public against accident or injury.
- .4 All excavations or obstructions shall be clearly marked between sunset and sunrise with proper warning flares or lights.
- .5 Local or Municipal Bylaws governing warning flares or lights shall be strictly observed.
- .6 Should any of the Contractor's work cause interference with any existing public roads, lanes or pedestrian accesses, the Contractor shall provide and maintain detour roads and shall post such signs, lights, barriers, etc., as may be required for public convenience in accordance with governing local or municipal standards.
- .7 Where construction occurs within the right-of-way of Provincial Highways, provide and maintain warning and/or detour signs as required by Alberta Transportation.
- .8 As construction proceeds, clean up all roads and parking lots and make them passable and useable.
- .9 Maintain all detour roads during construction and restore to their original condition at the end of the project.

19.0 NOISE AND DUST CONTROL

- .1 The Contractor shall be responsible for controlling objectionable dust conditions in areas of construction as a result of traffic, construction equipment, or wind.
- .2 All equipment shall be equipped with suitable muffling systems.
- .3 The Contractor shall be cognizant of and abide by Noise Bylaws which affect any work in the area.

20.0 REMOVE AND DISPOSE OF MATERIALS

- .1 Materials to be removed and disposed shall be removed, hauled and disposed of at the Contractor's expense.
- .2 Obtain all necessary approvals and/or permits, from the Departmental Representative of the disposal site, and any governing authority prior to dumping any materials.
- .3 Departmental Representative reserves the right to obtain evidence that disposed materials have been properly disposed of.

21.0 RELICS AND ANTIQUITIES

- .1 Give immediate notice to the Departmental Representative if evidence of historical or archaeological finds are encountered during construction, and await the Departmental Representative's written instructions before proceeding with the Work in this area.

22.0 EASEMENTS

- .1 This project is located in the National Park. There will be less temporary workspace due to trees on both sides of the gravel roads at certain places. The Contractor shall manage the construction with limited workspace.

23.0 EXISTING UTILITIES AND PIPELINES

- .1 The Contractor shall assume full responsibility for safeguarding all existing and relocated utility installations during the progress of the Work. While Departmental Representative has made every effort to collect and present details concerning utility installations, no responsibility will be assumed by Departmental Representative for the correctness and completeness of the information, and the Contractor shall have no claim on that account. The existence, location, elevation, and condition of existing underground utilities or pipelines is not guaranteed, and notwithstanding any other provisions in the Contract, the Contractor shall be responsible for determining the location and elevation of all sewer, water and gas mains or lines, electric light, power or telephone conduits, or other structures or utilities or pipelines, by non-destructive means acceptable to the Departmental Representative.
- .2 There will be no separate payment made for all incidental work related to utility or pipeline coordination or temporary protection or protection required during the course of the contract (including warranty period) or repair of existing services damaged in the course of the Works.

24.0 DRAINAGE

- .1 Keep all portions of the Work properly drained during the construction and until completion.
- .2 The Contractor will be held responsible for all damage, directly resultant from his operations, which may be caused by or which may result from water backing up or overflowing through, from or along any part of the work.
- .3 Keep all drainage channels and culverts free of silt, sand, debris and gravel and remove such deposits as required by Departmental Representative or any other Authority having jurisdiction.

25.0 FINAL CLEAN-UP

- .1 At the completion of the construction work, all areas on which work has been done shall be left in a neat and presentable condition.
- .2 All culverts and drainage ditches which have been blocked as a result of the work shall be repaired or restored to their original condition or better.
- .3 The Contractor, at his own expense, shall dispose of all surplus excavated material, trees, brush, rock, boulders and debris, including those less than 0.5 m³ in volume, at a location off site.
- .4 Inspect all valve boxes, hydrants, manholes and catch basin tops, and permanent survey markers with Departmental Representative, and operate all valves to ensure that no damage has occurred during the construction and clean-up operations.

26.0 NATIONAL PARKS ACT

- 1 Perform Work in accordance with the National Parks Act when projects are located within boundaries of National Park.

END OF SECTION

1.0 GENERAL

1.1 Aggregate Materials

- .1 Production of aggregate materials will be considered incidental to the work and no separate or additional payment will be made.

1.2 Surface Works

- .1 The unit prices bid for “Subgrade Preparation,” either of 150 or 300 mm depth, shall be considered full compensation for all materials, labour and equipment, required for preparing the subgrade surface for surfacing, including scarifying, placing, blading, mixing, shaping, grading, moisture conditioning, compacting, maintaining, proof rolling, associated clean up and all work incidental to complete the work for the applicable depth of layer. This shall include the undercut and subsequent prep of minor “soft spots” to ensure an approved subgrade surface.
 - .1 Each area of approved prepared subgrade will be measured by length and average width to produce an area in square metres.
 - .2 Payment will be made for each square metre of approved prepared subgrade surface.
 - .3 Areas for subgrade preparation include but are not limited to:
 - .1 West Gate Access Road.
 - .2 Administration Building Access Road and Parking Lots.
- .2 The unit price bid for “Asphalt Concrete Pavement” shall be considered full compensation for all materials, labour and equipment required for preparation of the job mix design and job mix formula, supply and placement of prime coat and tack coat where required, supply of aggregates and asphalt cement, mixing, transporting, placing, spreading, shaping, raking, ramping around appurtenances and compacting the asphalt to the specified thickness and density, associated clean up and all work incidental to complete the work.
 - .1 Payment will be made based on weigh-scale measurements accurately recorded on scale house sheets, in a format satisfactory to the Departmental Representative.
 - .2 Saw-cutting of existing Asphalt Surfaces will be required to tie in new asphalt concrete pavement with existing or to facilitate removal of culverts. Saw-cutting will be considered as incidental to the work of “Asphalt Concrete Pavement” and no separate or additional payment will be made. The areas required for saw-cutting but not limited to, are:
 - .1 South end tie on West Gate Access Road – 9 m.
 - .3 Milling of Asphalt Surfaces will be required to tie in new asphalt concrete pavement with existing. Milling as shown on the Drawings will be considered as incidental to the work of “Asphalt Concrete Pavement” and no separate or additional payment will be made. The areas required for milling but not limited to, are:
 - .1 South end tie on West Gate Access Road – 60 m².

- .3 The unit price bid for “Granular Base Course” shall be considered full compensation for all materials, labour and equipment required for the supply, placement and compaction of granular base course in accordance with limit lines, compacted depths, densities, moisture content and grades specified, including: procurement, loading, processing, hauling, placing, shaping, grading, compacting, applying blotting sand when required, moisture conditioning, proof rolling, maintaining, interim lane marking, material certification, quality control, associated clean up and all items incidental to complete the work.
 - .1 Payment will be made based on weigh-scale measurements accurately recorded on scale house sheets, in a format satisfactory to the Departmental Representative.
- .4 The unit price bid for “Granular Subbase” shall be considered full compensation for all materials, labour and equipment required for the supply, placement and compaction of granular subbase in accordance with limit lines, compacted depths, densities, moisture content and grades specified, including: procurement, loading, processing, hauling, placing, shaping, grading, compacting, applying blotting sand when required, moisture conditioning, proof rolling, maintaining, interim lane marking, material certification, quality control, associated clean up and all items incidental to complete the work.
 - .1 Payment will be made based on weigh-scale measurements accurately recorded on scale house sheets, in a format satisfactory to the Departmental Representative.
- .5 All work associated with “Asphalt Tack Coat” will be considered incidental to the work and no separate or additional payment will be made.
- .6 All work associated with “Asphalt Prime Coat” will be considered incidental to the work and no separate or additional payment will be made.

1.3 Grading

- .1 Common Excavation will be paid for at the unit price bid for "Common Excavation". The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
 - .1 The excavation and utilization or disposal of existing gravel surfacing and subgrade materials resulting from obliteration operations will be classified and paid for as “Common Excavation”. Conditioning of the material required for its satisfactory incorporation into embankment construction, and work required to complete the restoration of the obliterated areas will be considered incidental to the work, and no separate payment will be made.
 - .2 Common Excavation will not include stripping, defined as excavation of organic material covering original ground. Stripping Excavation will be paid for at the unit price bid for "Stripping Excavation". The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .2 Borrow Excavation will be paid for at the unit price bid for "Borrow Excavation – Contractor Supply from Offsite". The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .3 The placement of topsoil will be measured in square meters and will be paid for at the unit price bid for "Topsoil Placement and Grading". The price bid will be

considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.

- .1 Preparation of subgrade for placing of topsoil will not be measured for payment.
- .2 Topsoil stripping will be measured by Departmental Representative in cubic metres of stockpiled topsoil and volume will be determined by average end area method.
- .3 Measure placing of topsoil in square metres, even if removed from stockpile.
- .4 Salvaged topsoil to be placed neatly on disturbed areas and to a uniform depth of 0.10 m.

- .4 Pipe Culverts will be paid for at the unit prices bid for the Supply and Installation of applicable sizes of culvert required. The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.

- .1 Measure excavation for culverts in accordance with Section 31 24 13 - Roadway Embankments.
- .2 Measure supply of pipe culvert in metres for each size, type and class of pipe supplied.
 - .1 No separate measurement will be made for couplings and fittings or end sections for steel pipe culverts.
- .3 Cost of supply and installation will include riprap and any necessary dewatering prior to placing of bedding, construction and removal of temporary diversions and/or ditch blocks and construction maintenance and removal of any temporary bypass roads.

1.4 Miscellaneous

- .1 Clearing and Grubbing will be measured in square metres and paid for at the unit price bid for "Clearing and Grubbing". The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .2 Removal and re-installation of any traffic signs within the work limits, including work associated with carefully removing, placing into temporary storage, and reinstallation of traffic signs will be considered incidental to the work and no separate or additional payment will be made.
- .3 Woven Geotextiles will be measured in square metres of surface covered by material and paid for at the unit price bid for "Woven Geotextile". The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative. No allowance will be made for seams and overlaps. The areas required for geotextile include, but are not limited to, are:

Start	End	Width (m)	Offset	Area (m²)
West Gate Access Road				
0+350	0+600	10.0	LT/RT	2,500
1+320	1+440	5.0	LT	600
1+360	1+470	5.0	RT	550

- .4 Supply and Install Guardrail and Supports on Texas Gate will be measured in lineal metres and will include the fabrication and installation of connectors, bases, posts, and double layer of W-Beam Guardrail to the existing Texas Gate as shown on Plans C-13 and C-14; and paid for at the unit price bid. The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .5 Supply and Install Strong Post W-Beam Guardrail will be measured in lineal metres and will include the connection to the guardrail on the Texas Gate as well as the turndown rail as shown on Plans C13 and C-14; and paid for at the unit price bid. The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .6 Hydro-seeding will be measured in square metres and paid for at the unit price bid. The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .7 Supply and Installation of Geotextile Fence Barrier (Silt Fence) will be required. The estimated quantity is 1,120 lineal metres.
- .1 The geotextile used in the fence construction shall be self-edged at the top and shall be buried at the lower end in a shallow trench on the upstream side of the fence line as per Best Management Practices published by Alberta Transportation.
- .2 The geotextile used in the fence construction shall meet the technical requirements of Section 01 35 43 Environmental Procedures.
- .3 Geotextile fence barriers shall be constructed as early as practicable to maximize the entrapment of silt, and shall be installed along the outer edges of the limits of work in the following locations or as directed by the Departmental Representative:

Start	End	Offset	Length (m)
West Gate Access Road			
0+170	0+220	RT	50
0+410	0+600	RT	190
0+940	1+030	RT	90
1+320	1+440	LT	120
1+380	1+480	RT	100
1+800	1+830	LT/RT	60
1+960	2+010	RT	50
2+120	2+170	LT/RT	100
2+460	2+500	LT/RT	80
2+700	2+750	LT/RT	100
3+050	3+100	LT/RT	100
3+590	3+630	LT/RT	80

1.5 Lump Sum Amount

- .1 The lump sum amount bid shall be for work not included in the unit price table. This shall include, but is not limited to, the following:

- .1 Mobilization and de-mobilization.

- .2 Removal and Disposal of Concrete Curbs shall include saw-cutting the perimeter, excavating, removing, breaking, loading, hauling, disposal off-site, associated clean-up and all other work incidental to concrete curb removal and disposal. Estimated quantity of lineal metres is:

- | | | |
|----|----------------------------|---------------|
| .1 | West Gate Access Road | approx. 140 m |
| .2 | Admin Building Access Road | approx. 180 m |

- .3 Removal and Disposal of Existing Culverts. This work will include excavation of earth material overtop all culverts, removal and disposal of removed culvert material off-site. The estimated quantity is 148 lineal metres and includes, but is not limited to:

Station	Size (mm)	Length (m)
West Gate Access Road		
0+185	400	8.8
0+538	300	9.8
0+679	400	19.5
1+398	1220	12.8
1+821	300	10.5
2+154	400	10.6
2+490	400	12.8
2+727	500	9.3
3+077	500	9.3
3+244	400	12
3+613	400	9.4
3+918	500	7.7
Admin Building Access		
9+378	300	11

The price bid will be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.

- .4 Removal, temporary storage, and replacement after construction of Garbage Containers will include all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative. The garbage containers are located at Sta.1+543 and Sta. 2+371.

- .5 Roadway painted lines to be applied as per the Drawings. Area required for line painting:
 - .1 West Gate Access Road - painting of directional dividing line (yellow centerline) and 2 edge lines (white shoulder lines) on the roadway. The estimated length of road is 4.47 km.
 - .2 Administration Building Parking Access Road - painting of directional dividing line (yellow centerline) and 2 edge lines (white shoulder lines) on the roadway. The estimated length of road is 0.15 km.
- .6 Pavement Markings to be applied as per the Drawings. The areas required for pavement marking include:
 - .1 Administration Building Parking Lot – painting of parking lot markings (stalls and perimeter).
 - .2 Roadside Turnouts – painting of shoulder lines as shown on Detail Drawing C11.
- .7 Payment to “Remove and Dispose Asphalt Concrete” will be made as lump sum and shall include saw-cutting, removing, breaking, loading, hauling, disposal off-site, associated clean-up and all work incidental to asphalt concrete removal and disposal. The approximate area of required removal is approximately 500m² at the Admin Building Parking Lots.
- .8 Remove and Dispose Guardrail between Sta. 4+274 and Sta. 4+297 on West Gate Access Road, right and left of centerline. Approximate length is 46 m.
- .9 The area under the Texas Gate at Sta. 4+285 on West Gate Access Road shall be cleaned out of all existing debris. This work will include all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .10 Supply and Installation of 150mm Concrete Curb and Gutter. The scope of work shall include all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative. 150mm Concrete Curb and Gutter to be installed as indicated on Drawings:
 - .1 West Gate Access Road – Sheet C10 – approx. 40m.
 - .2 Admin Building Access Road – Sheet C10 – approx. 180m.
- .11 Supply and Install 6” x 12” Treated Timbers. At each end of the Texas Gate on the West Gate Access Road at Sta. 4+285, there are existing timber flashing that shall be removed and disposed. Two new 6” x 12” treated timber members 6.7 m in length each, shall be fitted and secured to the Texas Gate by the Contractor. The work shall include removal and disposal of existing timbers, supply, install and secure with appropriate hardware the new treated timbers and will include labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.
- .12 Supply and Install Underground Electrical Conduit - Trench Excavation, (50 mm dia.). The Contractor shall supply 50 mm underground electrical conduit, complete with all necessary incidentals as follows:
 - .1 West Gate Access Road, Sta. 4+369, 30 m length.
 - .2 Administration Building Access Road, Sta. 9+290, 20 m length.

Underground electrical conduit shall be either Polyvinyl Chloride (PVC), type DB2 or Reinforced Thermosetting Resin Conduit meeting CSA Standards C22.2 No. 211.1 and C22.2 No. 211.3 respectively.

- .13 Install 1 Handicap-Friendly Concrete Ramp at the Admin Building Parking Lots.

.1 The Contractor shall install 1 Handicap-Friendly Concrete Ramp of approx. 15 sq.m. area. The ramp shall have a 250mm base concrete thickness and be installed as shown on Plan C10.

- .14 Remove and backfill two abandoned manholes along the West Gate Access Road at Sta. 3+833 and Sta. 3+903. Current barrels, rings, and covers shall be removed and disposed. The bottom of the manhole shall be sealed and the excavation backfilled to the satisfaction of the Departmental Representative. The approximate depth of the manhole at sta. 3+833 is 3.2m and at sta. 3+903 is 2.8m. This work will be included in the lump sum costs, and shall be considered full compensation for all labour, materials, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Departmental Representative.

- .2 The Contractor shall supply all materials. A complete job is called for, therefore any labour, material, equipment, tool or incidental item not specifically mentioned, but necessary for completeness, will be considered incidental to the work and no separate or additional payment will be made.

1.6 Cash Allowance

- .1 A cash allowance has been provided for Franchise Utility costs, should any adjustment be required as a result of the construction. Authorization for use of the cash allowance shall be subject to approval by the Departmental Representative as required. **A cash allowance of \$20,000 is to be included with the lump sum costs bid by the Contractor.**

1.7 Applications for Progress Payment

- .1 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.
- .2 The Contractor shall supply in a timely manner, copies of the scale tickets/sheets to the Departmental Representative for payment of those bid items measured by weight and incorporated into the work.

END OF SECTION

1.0 GENERAL

1.1 General Requirements

- .1 Submittals shall conform to the provisions of this section to demonstrate that the specified products, materials, and equipment are furnished and installed in accordance with design intent as expressed in the Contract Documents.
- .2 Individual submittals are required as detailed in other sections of the specifications.
- .3 Until submissions are reviewed, work involving relevant products, materials, and equipment may not proceed.
- .4 At the time of submission the Contractor shall notify Departmental Representative in writing of any deviations in the shop drawings, product data, or samples from the requirements of the Contract Documents.
- .5 Departmental Representative will review and return submittals in accordance with a schedule agreed upon or otherwise with reasonable promptness.
- .6 Departmental Representative's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents. A specific deviation on the shop drawings from the design concept requested by the Contractor may be approved or rejected in writing by Departmental Representative.

1.2 Identification of Submittals

- .1 Identify each submittal and resubmittal by showing at least the following information:
 - .1 Name, address and telephone number of the submitter, and a name of an individual for contact.
 - .2 Drawing number and specification number to which the submittal applies.
 - .3 Whether an original submittal or resubmittal.
 - .4 Confirmation of prior review by the Contractor.
 - .5 Date of submittal or resubmittal.
 - .6 Authorized signature of the Submitter.

1.3 Coordination of Submittals

- .1 Prior to submittal for Departmental Representative's review, coordinate all material:
 - .1 Determine and verify field dimensions and conditions and conformance with specifications, including Material, catalogue numbers, type numbers and similar data.
 - .2 Coordinate requirements between trades.
 - .3 Coordinate with requirements under laws, regulations, etc.
 - .4 Secure required approvals of public agencies, inspection agencies and standards agencies and show proof of approvals acquisition
 - .5 Indicate any deviations from the intent of design as expressed in the Contract Documents and request specific review of these deviations.

1.4 Review of Submittals

- .1 Departmental Representative's review shall be for conformity to the design concept and for general arrangement only and such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the Contract Documents. A specific deviation on the shop drawings from the design concept requested by the Contractor may be approved or rejected in writing by Departmental Representative.
- .2 Each reviewed shop drawing will be stamped by Departmental Representative with the following form of stamp, or similar:

REVIEWED	()
REVIEWED AS MODIFIED	()
REVISE AND RESUBMIT	()
NOT REVIEWED	()

This review by Departmental Representative is for the sole purpose of ascertaining conformance with the general design concept. This review shall not constitute approval of the detail design inherent in the submittal, responsibility for which shall remain with the Contractor submitting same. Review by Departmental Representative shall not relieve the Contractor of responsibility for errors or omissions in the submittal or of responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction, for installation, and for coordination of the work of all sub-trades.

- .3 The Contractor shall make any changes in shop drawings which Departmental Representative may require, consistent with the Contract Documents, and resubmit unless otherwise directed by Departmental Representative. When resubmitting, the Contractor shall notify Departmental Representative in writing of any revisions made by the Contractor other than those requested by Departmental Representative, in Departmental Representative's previous review.

END OF SECTION

1.0 GENERAL

1.1 Measurement Procedures

- .1 This work shall be incidental to contract and will not be measured for payment.

1.2 References

- .1 The Contractor shall provide traffic control in accordance with the current edition of:
 - .1 Alberta Transportation Standard - Traffic Accommodation in Work Zones latest edition.

1.3 General

- .1 Emergency Park Contact: In the event of emergency call Mark McIntyre (780) 721-1193.
- .2 The Contractor shall develop and implement a Traffic Accommodation Strategy (TAS) prior to commencement of the Work in accordance with the requirements of the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones, except where specified otherwise.
- .3 The Contractor shall submit the TAS to the Departmental Representative for review within five days of Contract award and prior to commencement of any work. The Departmental Representative shall provide review comments to the Contractor within two days. If revisions to the TAS are requested, the Contractor shall resubmit the TAS to the Departmental Representative within two days of receipt of comments.
- .4 During execution of the Work, the Contractor will be required to update the TAS if dictated by changes in site or working conditions, or if requested by the Departmental Representative.
- .5 The Contractor shall design, supply, erect, move and maintain all traffic control devices, signs, temporary pavement markings, other safety measures and provide staff to ensure safe passage of all traffic from commencement of site work to date of acceptance by the Departmental Representative.
- .6 The Contractor shall coordinate traffic management procedures with other Contractors working in the area.

1.4 Protection of Public Traffic

- .1 Comply with requirements of Acts, Regulations and By Laws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.
- .2 When working on existing travelled way:
 - .1 Place equipment in a position presenting a minimum of interference and hazard to traveling public.
 - .2 Keep equipment units as close together as working conditions permit and preferably on same side of travelled way.
 - .3 Do not leave equipment on travelled way overnight.
 - .4 Do not close any lanes of road without approval of Departmental Representative.
 - .5 Keep travelled way clean and of sufficient width to accommodate one 3.0 m wide lane for traffic.

- .3 The traffic control measures will be monitored by the Departmental Representative, who may require modifications of these measures from time to time to achieve satisfactory traffic flow, safety of traveling public and coordination with adjacent contracts.

1.5 Informational and Warning Devices

- .1 Provide and maintain signs, flashing warning lights and other devices required to indicate construction activities or other temporary and unusual conditions resulting from Project Work which requires road user response.
- .2 Supply and erect signs, delineators, barricades and miscellaneous warning devices as specified in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones.
- .3 Place signs and other devices in locations recommended in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones.
- .4 Continually maintain traffic control devices in use:
 - .1 Check signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.
 - .2 Remove or cover signs which do not apply to existing conditions.

1.6 Control of Public Traffic

- .1 Provide competent flag personnel, trained in accordance with, and properly equipped as specified in the current edition of the Alberta Transportation Standard – Traffic Accommodation in Work Zones, for situations as follows:
 - .1 When public traffic is required to pass working vehicles or equipment that block all or part of travelled roadway.
 - .2 When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use.
 - .3 Where temporary protection is required while other traffic control devices are being erected or taken down.
 - .4 For emergency protection when other traffic control devices are not readily available.
 - .5 In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices.

2.0 PRODUCTS

2.1 Not Used

- .1 Not Used.

3.0 EXECUTION

3.1 Not Used

- .1 Not Used.

END OF SECTION

1.0 GENERAL

1.1 References

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Alberta
 - .1 Occupational Health and Safety Act, R.S.A. - Updated 2013.

1.2 Action and Informational Submittals

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation.
- .3 Submit 1 copy of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative weekly, including minutes of safety toolbox meetings.
- .4 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Submit WHMIS MSDS - Material Safety Data Sheets to Departmental Representative.
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 3 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 3 days after receipt of comments from Departmental Representative.
- .8 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
- .10 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.
 - .1 Emergency Park Contact: In the event of emergency call Mark McIntyre (780) 721-1193.

1.3 Safety Assessment

- .1 Perform site specific safety hazard assessment related to project.

1.4 Meetings

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

1.5 General Requirements

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.

- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.6 Responsibility

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.

1.7 Compliance Requirements

- .1 Comply with Occupational Health and Safety Act, General Safety Regulation, Alberta Reg.

1.8 Unforeseen Hazards

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

1.9 Posting Of Documents

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Departmental Representative.

1.10 Correction Of Non-Compliance

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

1.11 Work Stoppage

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

2.0 PRODUCTS

2.1 Not Used

- .1 Not used.

3.0 EXECUTION

3.1 Not Used

- .1 Not used.

END OF SECTION

1.0 GENERAL

1.1 Toxic and Hazardous Substances and Materials

- .1 Refer to General Conditions – Toxic and Hazardous Substances and Materials.

1.2 Fires

- .1 Fires and burning of rubbish on site is not permitted.

1.3 Disposal of Wastes

- .1 Do not bury rubbish and waste materials on site unless approved by Departmental Representative.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner onto ground or into waterways, storm or sanitary sewers.

1.4 Drainage

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.5 Site Clearing and Plant Protection

- .1 Protect grass, trees, shrubbery, plants, fences, poles and other surface structures on site and adjacent properties unless their removal is shown on the drawings or authorized by Departmental Representative.
- .2 Do not cut any trees without the written permission of Departmental Representative.
- .3 All existing grass, trees and shrubbery disturbed by the work shall be restored to equal or better condition than prior to construction. No extra payment will be provided for this work.
- .4 Minimize stripping of topsoil and vegetation.

1.6 Pollution Control

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and plant to local authority's emission requirements.
- .3 Cover dry materials and rubbish to prevent blowing dust and debris and install silt fences around stockpiles to prevent siltation.

- .4 Tightly seal against corrosion and rust all containers of fuel, hazardous or toxic chemicals.
- .5 Vehicle and equipment maintenance shall occur in designated areas. Contain and handle all maintenance fluids in accordance with the current National Fire Code of Departmental Representative. Spillage on the ground is prohibited.
- .6 Hoses and equipment for transfer of fuels and other hazardous fluids shall be in good condition, properly functioning with approved check valves and shall be attended by a qualified person for the duration of transfer of fuels or hazardous fluids.
- .7 Greasy and oily rags and oil waste shall be contained in approved, sealed containers.

Remove from the worksite and dispose of this material in accordance with the most stringent of applicable Federal, Provincial and Municipal Regulations.
- .8 Abide by the Alberta Board of Health Regulations 572-57-5 as amended 262-61 regarding air pollution.
- .9 The use of oil for dust control is prohibited. Use only fresh water.
- .10 Comply with any Local, Provincial or Federal Noise Bylaws or Regulations.

1.7 Spillages

- .1 Report immediately to Departmental Representative any accidental spill of chemicals, liquid or dry.
- .2 Report immediately to Departmental Representative all spills of fuel whether contained in a dyke or otherwise.
- .3 Identify the spill, take all safety precautions before approaching it, determine the source of the leak, attempt to stop the flow, and contain the escaped material.
- .4 Report the spill to the appropriate environmental authority if required.

1.8 Inspection

- .1 Provide required facilities and services to assist environmental inspection of the Contractor's construction site.

1.9 Work Adjacent to Waterways

- .1 Do not fuel, lubricate or otherwise service equipment where spillage may enter waterways.
- .2 Do not operate construction equipment in waterways.
- .3 Do not use waterway bed for borrow material unless approved by Departmental Representative.
- .4 Do not dump excavated fill, waste material or debris in waterways.

2.0 PRODUCTS

.1 Silt Fence

.1 Geotextile Fence Barrier shall comprise a low fence made from geotextile material and place at locations to retain silt and preventing silt contamination during construction. Minimum height of silt fence shall be 750 mm. Minimum embedment depth of the fabric shall be 150 mm.

.2 Any product that meets the requirements of the Alberta Transportation Design Guidelines for Erosion and Sediment Control, Best Management Practices, BMP #1, qualifies under this section.

.3 Material: Woven or non-woven Geotextile with the following properties:

Property	Test Method	Geotextile Requirements
Maximum post spacing (m)	ASTM D 4632	2
Elongation	ASTM D 4632	<50%
Grab Strength (N)	ASTM D 4632	
Machine direction		550
X-Machine direction		450
Permittivity (sec-1)	ASTM D 4491	0.05
Apparent Opening Size (mm)	ASTM D 4751	0.60 max. avg. roll value
Ultraviolet stability (% retained strength)	ASTM D 4355	70% after 500 hrs. of exposure

Note: All numeric values represent MARV (Minimum Average Roll Value) in the weaker principal direction.

3.0 EXECUTION

.1 Contractor to obtain and pay for any necessary permits.

END OF SECTION

1.0 GENERAL

1.1 Related Documents

- .1 Particular requirements for testing to be carried out by local testing laboratory designated by the Departmental Representative are specified under various Sections.

1.2 Inspection and Testing of Work

- .1 Work included: From time to time during progress of the work, the Departmental Representative may require that Quality Assurance Testing be performed to determine that materials and workmanship provided for the work meet the specified requirements. This Quality Assurance work is in addition to and does not replace the Contractor's responsibility for Quality Control.
- .2 Related Work Specified Elsewhere: Requirements for testing may be described in various sections of these specifications. Where no testing requirements are described, but if Departmental Representative decides that testing is required, Departmental Representative may require testing to be performed under current pertinent standards for testing.

1.3 Independent Quality Assurance

- .1 The Departmental Representative has retained the services of an Independent Testing Laboratory or Agency to perform whatever Quality Assurance Testing is deemed necessary by the Departmental Representative to confirm the compliance of the work within the Contract Documents. The Contractor shall correct all work that does not meet the Quality Assurance Testing specifications at his own expense.

1.4 Laboratories/Agencies

- .1 The Contractor shall pay the full cost of all testing required for the approval of materials such as aggregates.

1.5 Contractor Responsibility for Quality Control

- .1 It is the Contractor's responsibility to carry out whatever quality control, inspections, and testing he feels is required to ensure that the work is in conformance with the Contract Documents and its associated costs.
- .2 The Contractor cannot rely on the testing that will be carried out by the Independent Survey or Testing Agency for quality assurance by the Departmental Representative; the intention of this testing is for determination by the Departmental Representative of satisfactory completed work for Progress Payment.
- .3 All costs required to ensure Quality Control shall be borne by the Contractor.

1.6 Access to Work and Plant

- .1 Allow the Testing Agencies access to all portions of work on site and manufacturing and fabrication plants, as may be necessary to carry out their work. Cooperate to provide reasonable facilities for such access.

1.7 Procedures for Inspection and Testing

- .1 If work is designated for special tests, inspections, or approvals in the Contract Documents, or by the Departmental Representative's instructions or the laws or ordinances of the Place of the Work, give the Independent Testing Agency timely notice requesting inspection. Inspection by the Independent Testing Agency will be made promptly. Arrange for inspections by other authorities and give the Departmental Representative timely notice of the date and time.
- .2 Submit necessary samples and/or materials required for testing, as specifically requested in the Specifications. Submit with reasonable promptness and in an orderly sequence, so as to cause no delay in Work.
- .3 Provide workers and facilities to obtain and handle samples and/or materials on-site.
- .4 If defects are revealed during testing, the appointed agency will request additional testing to ascertain full degree of defects. Correct defects and irregularities as advised by the Departmental Representative. Pay costs for retesting.
- .5 The Contractor shall correct defects and irregularities and pay all costs for all additional testing.

1.8 Covered Work

- .1 If the Contractor covers or permits to be covered work that has been designated for inspections or approvals before they are made, uncover such work, have the inspections or tests satisfactorily completed, and make good such work.
- .2 The Departmental Representative may order any part of the work to be examined if such work is suspected to be not in accordance with the Contract Documents. If, upon examination, such work is found not in accordance with the Contract Documents, correct such work and pay for cost of examination and correction. If such work is found in accordance with the Contract Documents, the Departmental Representative shall pay the cost of examination and replacement.

1.9 Rejected Work

- .1 Defective work, whether the result of poor workmanship, use of defective products or damage through carelessness or other acts of omission of the Contractor, and whether incorporated in the work or not, which has been rejected by the Departmental Representative as failing to conform to the Contract Documents shall be removed promptly from the work and replaced or re-executed by the Contractor in accordance with the Contract Documents at the Contractor's expense.

- .2 Other work destroyed or damaged by such removals, replacement or re-execution shall be made good promptly at the Contractor's expense.

1.10 Reference Standards

- .1 Within the test of the Specifications, reference may be made to the following standards:

ACI	- American Concrete Institute
AISC	- American Institute of Steel Construction
ANSI	- American National Standards Institute
ASTM	- American Society of Testing and Materials
AWWA	- American Water Works Association
CAN	- National Standard of Canada
CEC	- Canadian Electric Code (published by CSA)
CGA	- Canadian Gas Association
CGSB	- Canadian Government Specification
Board CISC	- Canadian Institute of Steel Construction
CLA	- Canadian Lumberman's Association
CPCA	- Canadian Painting Contractors Association
CPCI	- Canadian Prestressed Concrete Institute
CRCA	- Canadian Roofing Contractors Association
CSA	- Canadian Standards Association
DIN	- Deutsches Institut Normung
EEMAC	- Electrical and Electronic Manufacturer's Association of Canada
EIB	- Electrical Inspection Branch
FMEC	- Factory Manual Engineering Corporation
IEEE	- Institute of Electrical and Electronic Engineers
IPCEA	- Insulated Power Cable Engineers Association
NAAMM	- National Association of Architectural Metal Manufacturers
NACE	- National Association of Corrosion Engineers
NBC	- National Building Code
NEMA	- National Electrical Manufacturers Association
NFPA	- National Fire Protection Association
NWTI	- National Wood Tank Institute of the USA
TTMAC	- Terrazzo, Tile and Marble Association of Canada
ULC	- Underwriters Laboratories of Canada

Conform to the latest version of such standards available at the time of bidding, in whole or in part, as specified.

- .2 If there are questions as to whether any product of system is in conformance with applicable standards, the Departmental Representative reserves the right to have such products or systems tested to prove or disprove conformance with the Contract Documents, or by the Contractor in the event of non-conformance.

2.0 PRODUCTS

- .1 Not Applicable.

3.0 EXECUTION

- .1 Not Applicable.

END OF SECTION

Part 1 GENERAL

1.1 Measurements Procedures

- .1 This work shall be incidental to contract and will not be measured for payment.

1.2 Project Cleanliness

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris.
- .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
- .3 Clear snow and ice as required, Pile snow in designated areas only.
- .4 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .5 Provide on-site containers for collection of waste materials and debris.
- .6 Provide and use marked separate bins for recycling.
- .7 Dispose of waste materials and debris outside of the Park.

1.3 Final Cleaning

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .5 Remove dirt and other disfiguration from exterior surfaces.
- .6 Sweep and wash clean paved areas.

1.4 Waste Management and Disposal

- .1 Separate waste materials for reuse and recycling.

Part 2 PRODUCTS

2.1 Not Used

Part 3 EXECUTION

3.1 Not Used

END OF SECTION

1.0 GENERAL

1.1 Requirements Included

- .1 Final cleaning.
- .2 Document submission.

1.2 Final Cleaning

- .1 In preparation for partial or final acceptance of the project perform final cleaning.
- .2 Remove debris and surplus materials from site.
- .3 Inspect valve boxes, manholes and hydrants to check for debris and proper operation.

1.3 Record Drawings

- .1 Contractor shall have two sets of clean white prints for recording and maintaining record drawing purposes.
- .2 Identify drawings as "Project Record Copy".
- .3 Maintain record drawings in new condition.
- .4 Make record drawings available for inspection on-site by Departmental Representative.
- .5 Record neatly and accurately the locations of all asphalt repairs, cold milling and crack repairs, pavement markings , as well as deviations from Contract Documents.
- .6 Mark changes in red.
- .7 Record following information on one set of prints:
 - .1 Horizontal and vertical location of underground utilities and appurtenances, if any, referenced to permanent surface improvement.
 - .2 Field changes of dimension and detail.
 - .3 Changes made by Change Order or field direction.
- .8 At completion of project and prior to final inspection, neatly transfer notations to second set of prints and submit both sets of record drawings to Departmental Representative.
- .9 Provide as-built survey of all installed Manhole centers, Manhole rims, pipe inverts, spot repair extents, water valves, yard hydrants, water main vertical and horizontal bends, water and sanitary services at the main and at property line.

2.0 PRODUCTS

- .1 Not used.

3.0 EXECUTION

.1 Not used.

END OF SECTION