

Landscape Addendum 02

Addendum #: 02

То:	Prospective Contractors	From:	Lindy Pruitt
Company Name:		Date:	2021-09-18
Phone:		Enclosures:	RFP Document Schedule B – Schedule of Quantities LM-100 Materials Plan LM-500 Pavement Details Specification Section 01.22.10 Specification Section 01.45.00 Specification Section 31.05.13 Specification Section 32.37.00
Project Name:	Drumheller Downtown Plaza	O2 Project No.:	210201
Addendum Name:	Deadline Extension, Text Clarifications and Specification Ammendments		

DESCRIPTION

Landscape addendum capturing RFP deliverable extension date, Municipal Stimulus Grant Funding structure timeline, LM-100 Materials Plan updates, LM-500 Curb Type requirement identification, as well as clarification around future stage and rammed earth feature design, sourcing, and installation. Landscape Addendum 02 also clarifies materials composition requirements for topsoil and clarification for poured concrete parking stall saw cuts. Important updates to the scope of electrical work have also been identified.

- 1. RFP Document
- 2. Schedule B Schedule of Quantities
- 3. LM-100 Materials Plan
- 4. LM-500 Pavement Details
- 5. Specification Section 01-22-10 Measurement Schedule
- 6. Specification Section 01-45-00 Quality Control
- 7. Specification Section 31-05-13 Soil Materials
- 8. Specification Section 32-37-00 Exterior Site Furnishings

RFP Deadline Extension

A deadline extension will be granted for the submission of the Drumheller Plaza RFP until 2:00pm on September 22nd, 2021 local time.

RFP Municipal Stimulus Funding Grant Structure - Text Highlights

As the Drumheller Plaza project is dependant on Municipal Stimulus Grant Funding, the bulk of materials, processes and fees should be spent and/or completed by no later than December 31st, 2021, as outlined in the highlighted RFP text in both "Section 1 - Scope of Work" and "Section 3 -Submission Requirements" of the attached "Landscape Addendum 02 - RFP" document

Schedule B - Schedule of Quantities

The Schedule of Quantities "Schedule 8 - Electrical" has been updated to reflect the increased scope of work by the Contractor for site electrical, as well as the removal of costs associated with moving existing electrical poles on site.

• The Schedule of Quantities "Schedule 3 - Softscape" has been updated with additional details for soil volume calculations with "Schedule 7 - Planting" now only containing plant counts.

LM-100 Materials Plan Clarification

• Labels on the LM-100 Materials plan have been updated to clarify the concrete parking area surface, with item 1-15 highlighting paving stall saw cut lines.

LM-500 Required Curb Type

• Item "1-05 Curb and Gutter" identified on LM-100 Materials Plan to be "150mm Barrier Curb" as called-out in sheet LM-500.

Specification Section 01.22.10 Item No. 21

• Item No.21 "Site Lighting" of the attached 01.22.00 Measurement Schedule document has been updated to include confirmation that the contractor is now responsible for the supply and installation of light fixtures, as well as coordinating all connections to on-site transformer with ATCO.

Specification Section 01.45.00 Materials Testing - Frequency and Quantity

 Section 1.6.1 of the attached 01.45.00 Quality Control document has been updated to include confirmation that all necessary tests that pertain to the General Contractor's scope of work are to remain the responsibility of the Contractor and will be coordinated with the Consultant as required. Testing procedures remain unchanged and are highlighted in section 1.8 of Specification 01.45.00.

Specification Section 31.05.13 Soil Materials Composition Amendment

 The soil composition section 2.1 of the attached Specification 31.05.13 has been updated to reflect a new 100% total for soil amendments.

Specification Section 32.37.00 Supply and Install of Stage

• The \$25,000.00 CDN cash allowance outlined in the Schedule B – Schedule of Quantities bid form is intended to cover the full scope of work, including the supply, installation and all other costs relating to the future stage as outlined in section 2.8 of Specification 32.37.00. Future details of stage construction will be coordinated with The Consultant, with the final size no greater than 10m x 5m, and final material selection based upon availability and budget.

Specification Section 32.37-00 Rammed Earth Scope of Work

 All rammed earth elements are to be supplied and installed by Innovative Earth, or equivalent supplier as outlined in sections 2.2, 2.3, and 2.4 in specification 32.37.00. No portion of the rammed earth design, construction, storage, delivery or installation will be the responsibility of the General Contractor for the Drumheller Plaza project.

END OF ADDENDUM

SCHEDULE 1 - GENERAL CONDITIONS

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
1.1	Contractor Use of Site + Mobilization / Demobilization	n/a	LS	1.00		
1.2	Work Permit Application including fencing and heating + hoarding drawings	n/a	LS	1.00		
Sub-Total Schedule 1						

Carry Forward the Sub-Total of Schedule 1 for calculation of Total Proposal Price

SCHEDULE 2 - SELECTIVE DEMOLITION AND RELOCATION

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est.
2.1	Existing tree to be removed	0-12	ea	13.00		
2.3	Demolish and remove existing asphalt surface and/or excavate to 600mm ± depth	0-01	m2	263.00		
2.4	Demolish and remove existing concrete planter curb	0-02	l.m	96.60		
2.5	Demolish and remove existing road curb and gutter	0-03	l.m	174.00		
2.6	Demolish and remove existing asphalt surface and/or excavate to 480mm ± depth	0-04	m2	537.90		
2.20	Demolish and remove existing concrete paving to 450mm ± depth	0-05	m2	95.60		
2.21	Demolish and remove existing asphalt surface and/or excavate to 150mm ± depth	0-06	m2	545.60		
2.28	Remove existing planting and planting soil to 600mm ± depth	0-07	m2	48.30		
2.30	Remove existing planting and planting soil to 300mm ± depth	0-08	m2	114.90		
2.31	Remove existing asphalt roadway to depth required for repair	0-09	m2	143.20		
				Sub	-Total Schedule 2	

Carry Forward the Sub-Total of Schedule 2 for calculation of Total Proposal Price

SCHEDULE 3 - SOFTSCAPE

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
3.1	Imported planting bed soil - with 30% compost ammendments	n/a	cu.m.	477.70		
3.2	Planting Soil (20m3 per tree)	n/a	cu.m.	240.00		
3.3	Premium bark mulch	n/a	cu.m.	20.50		
				Sub	-Total Schedule 3	

Carry Forward the Sub-Total of Schedule 3 for calculation of Total Proposal Price

SCHEDULE 4 - HARDSCAPE

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
4.1	Decorative aggregate fines surface	1-01	m2	589.30		
4.2	Concrete paving - light duty	1-02	m2	172.60		
4.3	Concrete paving - heavy duty	1-03	m2	568.40		
4.4	Asphalt paving repair	1-04	m2	80.30		
4.5	Concrete curb and gutter	1-05	l.m	49.40		
4.6	Planting bed weathering steel edging and stakes - minimum 203.2mm width	1-06	l.m	124.50		
				Sub	-Total Schedule 4	

Carry Forward the Sub-Total of Schedule 4 for calculation of Total Proposal Price

SCHEDULE 5 - FENCE AND GATES

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
5.1	Laneway traffic barrier gate	1-08	l.m.	579.60		
5.2	Waste bin fence enclosure	1-07	ea/lump sum	29.90		
				Sub	-Total Schedule 6	

Carry Forward the Sub-Total of Schedule 6 for calculation of Total Proposal Price

SCHEDULE 6 - SITE FURNISHING AND SITE FEATURES

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
6.1	Custom rammed earth seat - small	1-14	ea	7.00		
6.2	Custom rammed earth seat - medium	1-13	ea	1.00		
6.3	Custom rammed earth seat - large	1-12	ea	18.00		
6.4	Custom rammed earth planter benches (Area A)	5-01	ea	8.00		
6.5	Custom rammed earth planter benches (Area B)	5-02	ea	28.00		
6.6	Custom rammed earth planter benches (Area C)	5-03	ea	1.00		
6.7	Washroom pre-fabricated building unit including:stainless steel fixtures, electronic flush, 2 Baby change tables, engineer stamped drawings and shipping	n/a	ea	1.00		
6.8	Washroom installation including: Site prep, compacted road crush, lifting building in place, electrical and plumbing permits, hook up utilities, clean up site	n/a	ea	1.00		
6.9	Stage reuse or relocate	n/a	allowance	1.00	\$25,000.00	
6.11	Waste receptacle (public use)	1-11	ea	4.00		
				Sub	-Total Schedule 7	

Carry Forward the Sub-Total of Schedule 7 for calculation of Total Proposal Price

SCHEDULE 7 - PLANTING

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
7.1	Deciduous Tree 80mm Cal Malus x 'Spring Snow' / Spring Snow Crabapple	MS	ea	12.00		
7.2	Arenaria x 'Wallowa Mountains' / Wallowa Mountains Sandwort	AX	ea	74.00		
7.3	Aruncus aethusifolius / Dwarf Goatsbeard	AA2	ea	117.00		
7.4	Astilbe x 'Cappuccino' / Cappuccino Astilbe	AC	ea	101.00		
7.5	Cimicifuga simplex 'Hillside Black Beauty' / Black Beauty Bugbane	СН	ea	225.00		
7.6	Echium amoenum / Red Feathers	ER	ea	90.00		
7.7	Geum triflorum / Prairie Smoke	GT	ea	441.00		
7.8	Hemerocallis x 'Night Embers' / Night Embers Daylily	HN	ea	37.00		
7.9	Lupinus x 'Noble Maiden' / Noble Maiden white lupine	LX	ea	44.00		
7.10	Landscape Maintenance	n/a	year	2.00		
				Sub	-Total Schedule 8	

Carry Forward the Sub-Total of Schedule 8 for calculation of Total Proposal Price

SCHEDULE 8 - ELECTRICAL

Item	Description	Drawing Reference	Unit of Measure	Estimated Quantity	Unit Price	Estimated Price = (Unit Price x Est. Quantity)
8.1	LUMINIS SC655 pedestrain lights - supply and install	1-09	ea	10.00		
8.2	LUMINIS SC655 Light Pole - supply and install	1-09	ea	10.00		
8.4	Electrical outlets	n/a	ea	11.00		
8.4	Electrical connection	n/a	allowance	1.00	\$30,000.00	
				Sub	-Total Schedule 9	_

Carry Forward the Sub-Total of Schedule 9 for calculation of Total Proposal Price

	SCHEDULE 9 - IRRIGATION					Estimated Price = (Unit Price x Est. Quantity)
	Baradatlan	Drawing	Unit of	Estimated	Helt Belon	
Item	Description	Reference	Measure	Quantity	Unit Price	
	Meter/Master Valve, Flow Sensor, (2) Drain Valve, Blow Out & Isolation Valve (Copper Pipe					
	& DCVA Inside Building Priced and Installed By Mechanical)	n/a	ea	1.00		
9.2	Hunter ACC2 Irrigation Controller w /Outdoor Steel Wall Mount	n/a	ea	1.00		
9.3	Hunter Solar Sync	n/a	ea	1.00		
9.4	14 gauge control wire, 12 gauge common	n/a	ea	1.00		
9.5	38mm SDR 17.0 HDPE Mainline	n/a	ea	30.00		
9.6	38mm CSA Series 160 PVC SW Lateral	n/a	ea	140.00		
9.7	38mm Hunter ICV-151G Electric Control Valve	n/a	ea	2.00		
9.8	Hunter PROS-12-PRS30-CV Spray Sprinkler c/w Pro-Spray Fixed Nozzle	n/a	ea	30.00		
9.9	25mm Quick Coupler Valve /w Valve Box	n/a	ea	1.00		

	•			Cub.	Total Cabadula 10	
9.10	One-year maintenance and warrenty	n/a	ea	1.00		

	SCHEDULE 10 - SITE SERVICING					(Unit Price x Est.
Item	Description	Reference	Measure	Quantity	Unit Price	
10.1	Type "K3" Catch Basin	n/a	ea	1.00		
10.2	ST 300 PVC Pipe	n/a	I.m.	30.15		
10.3	Stormwater Manhole Type 5A	n/a	ea	2.00		
10.4	S 100PVC SDR 28 Pipe	n/a	l.m.	5.79		
10.5	Hot Tap 25mm PEX into Existing 300mm Pipe	n/a	ea	1.00		
10.6	Catch Basin Type "C"	n/a	ea	1.00		
Sub-Total Schedule 10						



REQUEST FOR PROPOSAL

PROPOSAL: Drumheller Downtown Plaza

DATE: September 8th, 2021

INITIATOR: First Name Last Name, Title

DATE PROPOSAL REQUIRED:

YEAR: 2021 MONTH: September DAY: 22nd TIME: 2:00 PM Local Time

Submit Proposal in a clearly marked and sealed envelope to the attention of:

Procurement Department:

Town of Drumheller 224 Centre Street

Drumheller, Alberta T0J0Y4

"2021-09-08- Drumheller Downtown Plaza "

This Request for Proposal document is comprised of:

- RFP General Instructions
- Schedule A Evaluation Criteria
- Schedule B Schedule of Quantities
- Schedule C Technical Specifications

If you do not have all these components the RFP package is incomplete - please contact the Initiator.

The Town of Drumheller will NOT accept electronic submissions.

Your firm is invited to submit a Proposal, pursuant to the general conditions for the scope of work as described. This Proposal shall not be considered authorization to proceed with work herein described. All Procurement processes must comply with Town of Drumheller Purchasing Policy C-09-20.

SECTION #1 - SCOPE OF WORK:

The Town of Drumheller invites Proposals for contractors to submit a bid to furnish labour, professional services, materials, and equipment for the Drumheller Downtown Plaza, in accordance with the below project description:

Construction organization and start-up, selective demolition and relocation of existing site features, earthworks, hardscape, softscape, irrigation, supply and install of site furnishings, as well as coordination with ATCO for electrical with the Contractor performing all site servicing work and electrical connections related to pedestrian pole lights and washroom. The contractor shall also be responsible for acquiring all necessary work permit applications, submitting regular site logs for review, protective fencing, and heating and hording during winter construction to accommodate the fast-tracked schedule necessitated by the project Stimulus Grant funding structure, with the majority of funds and work spent and/or completed by no later than December 31st, 2021.

The supplier is required to complete all necessary sections of this Request for Proposal.

Alternative methodologies or equipment will only be evaluated if submitted by the successful Proposer, no other work alternatives will be reviewed.

SECTION #2 - PROPOSAL AMOUNT:

All Proposals must be in Canadian Fund	s, excl	uding GST.
Total Cost \$		
Proposal submission price in effect for from the Town of Drumheller.	30	days from date of acceptance

SECTION #3 - SUBMISSION REQUIREMENTS:

The Town of Drumheller requires that all submissions shall include the following:

- 1. All pages of this Request for Proposal;
- 2. All issued Addendums:
- 3. Certificate of Recognition (COR) or Small Employer Certificate of Recognition (SECOR);
- 4. List of applicable Safe Work Procedures (SWP),
- 5. Table of Contents of the Corporate Safety Manual;
- 6. Workers Compensation Board (WCB) Coverage Letter;
- 7. Proof of Commercial Liability Insurance;
- 8. Town of Drumheller Business License to be obtained within three (3) business days upon award of project;
- 9. Written confirmation that the contractor can expend the majority of the work by December 31st, 2021 to satisfy the Municipal Stimulus Program funding requirements.

SECTION #4 - INELIGIBILITY:

The Town of Drumheller shall deem a submission to be ineligible under the following situations:

- a) Submissions that are unsigned, incomplete, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations or irregularities of any kind shall be considered ineligible.
- b) Submissions that do not include the items listed in Section #3 Submission Requirements, and;
- c) Submissions that are not received prior to the closing date and time, as determined by the time keeping of the Town of Drumheller computer system.

SECTION #5 - INSURANCE AND BONDING:

Insurance

The Town of Drumheller requires that all Proposals include proof of \$5,000,000.00 Commercial Liability Insurance.

Bid Bond

- a) Each submission must include a *Consent of Surety* and *Bid Bond* totaling to 10% of the total amount calculated in Schedule B, or in a form containing equivalent obligations on the part of the surety company and the submitter, executed under seal by a surety company satisfactory to *The Town* and authorized by the laws of Alberta to issue bonds in Alberta. In lieu of a *Consent of Surety* or *Bid Bond*, *The Town* may, in its sole discretion, accept from a financial institution acceptable to *The Town*, one of the following:
 - i. a bank draft, certified cheque, irrevocable letter of credit, or guarantee, along with any additional documentation *The Town* may require; or
 - ii. a letter that a bank draft, certified cheque, irrevocable letter of credit, or guarantee, will be provided upon the request of *The Town*.
- b) Failure to include in the submission the required documentation will result in *The Town*, in its sole discretion, electing to discontinue consideration of the submission.

Performance Security

- a) No later than five *Days* following execution of the *Agreement*, the *Contractor* must deliver to *The Town Performance Security* as specified in the *Agreement*. The *Performance Security* must be in the form required by *The Town* or in a form that is acceptable to *The Town*, and must be enforceable in the Province of Alberta.
- b) If the Agreement is amended or a Change Order is issued that increases the Project Price, the Contractor must also increase the Performance Security provided under the Agreement to an amount not less than 50% of the increased Project Price by obtaining and providing additional Performance Security, or a satisfactory rider or extension to the existing Performance Security, from the surety company. If the surety company declines consent or coverage for any amendment to the Agreement or for

a Change Order, the Contractor must obtain and provide The Town with valid Performance Security, satisfactory to The Town, covering the Work specified in the amendment to the Agreement or in the Change Order. The Contractor will be compensated for the additional cost of such Performance Security.

c) If there is a Labour and Material Payment Bond required by The Town, the Contractor must ensure that all Subcontractors have notice of the Labour and Material Payment Bond. The Contractor must post and maintain in a conspicuous location or locations on the Project Site, a copy of the Labour and Material Payment Bond. The agenda for the meetings held by the Contractor will include notice of the Labour and Material Payment Bond.

SECTION #6 - EVALUATION CRITERIA:

The lowest, or any evaluated Proposal, may not necessarily be accepted. The Town of Drumheller reserves the right to reject any or all Proposals or to accept the Proposal evaluated to be in the best interest of the Town of Drumheller.

The Town's evaluator shall score each submission on the basis stated in Schedule A: Evaluation Criteria. The Town of Drumheller will have the sole and unfettered discretion to award up to the maximum number of points for each criterion listed in Schedule A: Evaluation Criteria.

By submitting a Proposal, you acknowledge and agree to waive any right to contest through legal proceedings. The decision to award points in respect to the criteria noted below will be at the sole discretion of the Town of Drumheller.

By submitting a Proposal, you acknowledge that you have reviewed the Ineligibility Criteria contained herein and you confirm that your Proposal meets all requirements of *the Town*.

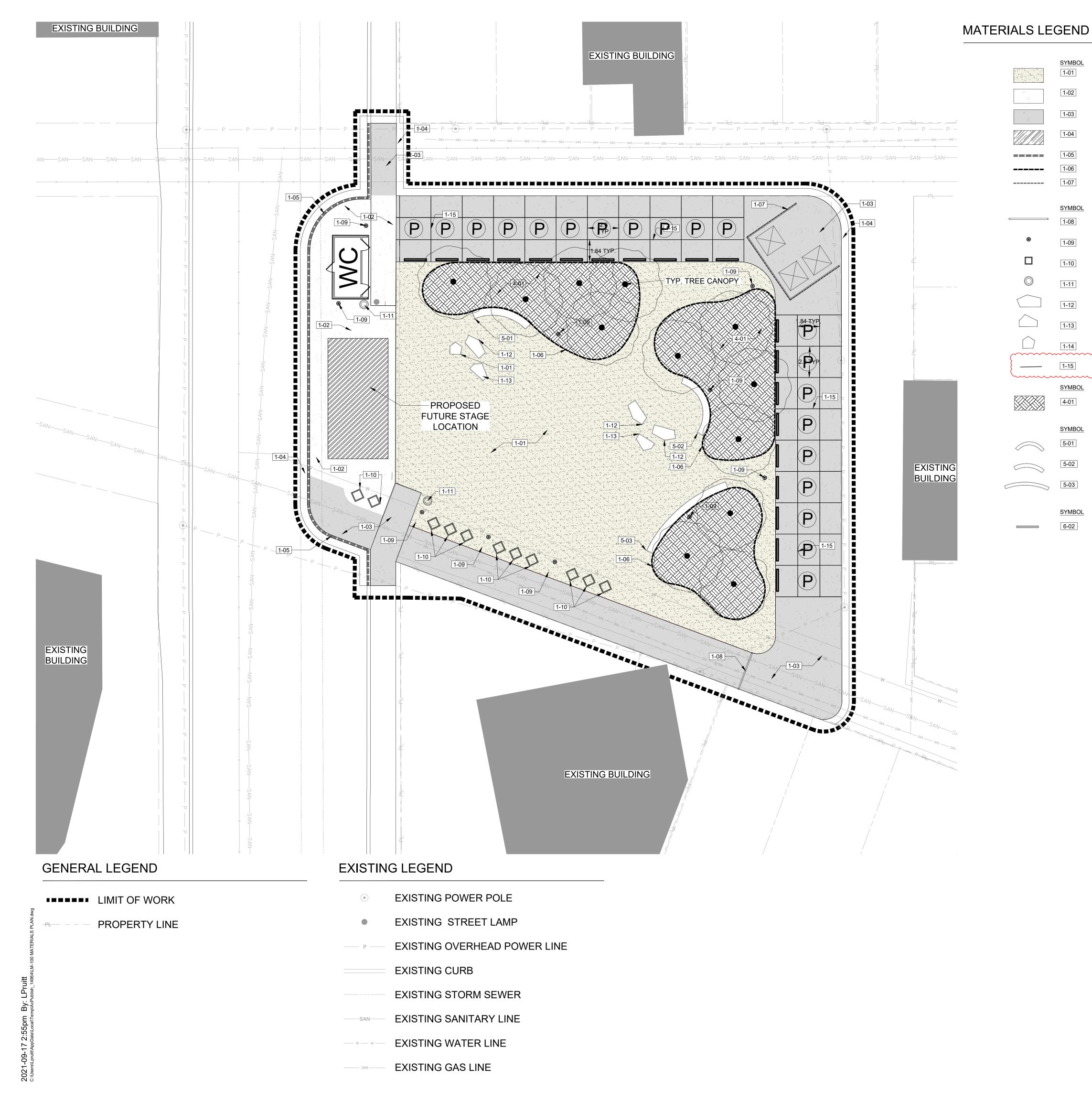
SECTION #7 - REFERENCES:

Reference #1

Company Name:	
Contact Title:	
Reference #2	
Company Name:	
Contact Name:	
	·····
Contact Email:	
Reference #3	
Company Name:	
Contact Name:	
Contact Email:	
SECTION #8 - INTENT:	
The undersigned contractor herebodies described herein in its entirety for t	y provides a Proposal to supply the services as the cost as described in Section 2.
COMPANY:	
Print name of authorized personnel:	
Signature:	Corporate Seal:

Email Address:			
Telephone numb	er:		
TOWN OF DRUMHELLER:			
Print name of authorized personnel:			
Signature:			
DATE: YEAR	2021	MONTH	DAY

Upon completion of signatures above, this document will represent a contract agreement between the contractor and the Town of Drumheller.





1 - PAVEMENT, RAMPS, CURBS

DECORATIVE AGGREGATE FINES

CONCRETE PAVING - LIGHT DUTY

CONCRETE PAVING - HEAVY DUTY

ASPHALT PAVING REPAIR

CURB AND GUTTER

EDGE RESTRAINT

PEDESTRIAN LIGHT

WASTE RECEPTACLE

WASTE BIN ENCLOSURE

1 - PAVEMENT, RAMPS, CURBS

CUSTOM RAMMED EARTH PLANTER

CUSTOM RAMMED EARTH SEAT - LARGE

CUSTOM RAMMED EARTH SEAT - MEDIUM

CUSTOM RAMMED EARTH SEAT - SMALL

CONCRETE PARKING AREA SAW CUTS

4 - SITE WALLS / EMBANKMENTS

PLANTING SOIL - 900MM DEPTH

RAMMED EARTH BENCH AREA A

RAMMED EARTH BENCH AREA B

RAMMED EARTH BENCH ARE C

GREY RUBBER WHEELSTOP.

6 - RAILINGS, BARRIERS, FENCING

DESCRIPTION

589.3 m² 1/LM-500

172.6 m² 2/LM-500

568.4 m² 3/LM-500

49.4 m 8/LM-500

DETAIL

2/LM-502

5/LM-501

1/LM-503

6/LM-501

8/LM-503

7/LM-503

QTY <u>DETAIL</u>

477.7 m³ 6/LP-500

QTY

DETAIL

9/LM-503

9/LM-503

9/LM-503

DETAIL

SCALE: 1:150

80.3 m²

QTY

DESCRIPTION

510 255 17th AVE SW CALGARY ALBERTA CANADA T 403.228.1336 F 403.228.1320 www.o2design.com

DRUMHELLER
DOWNTOWN PLAZA

MUNICIPALITY OF DRUMHELLER



ISSUED FOR: TENDER DATE: 2021-09-08

REVISIONS:
NO. DESCRIPTION. DATE. B

1 ISSUED FOR TENDER 2021-09-08

1 ISSUED FOR ADDENDUM 01 2021-09-14

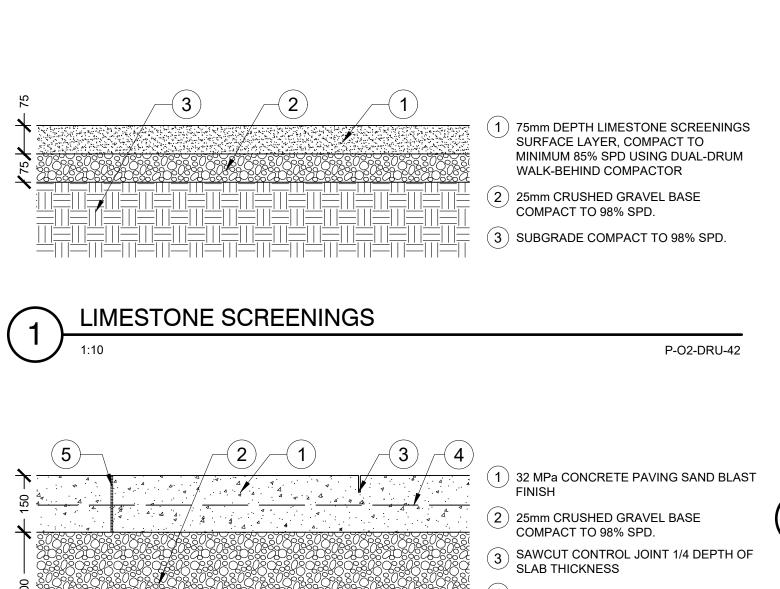
DESIGNED BY: MW/LP CHECKED BY: MW

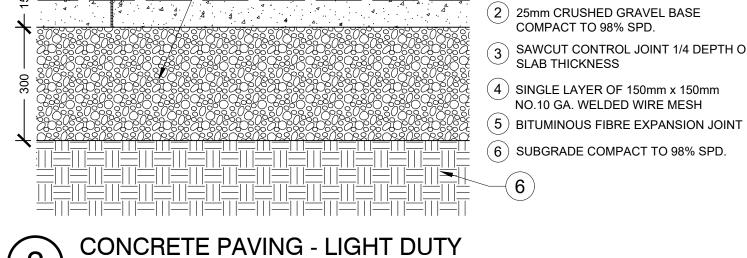
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DRAWING TITLE :
MATERIALS PLAN

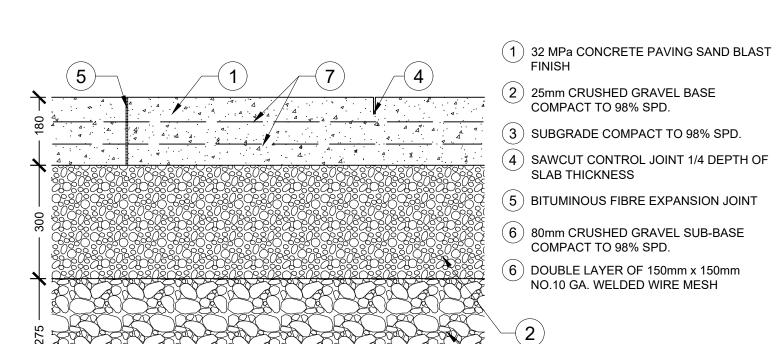
LM-100

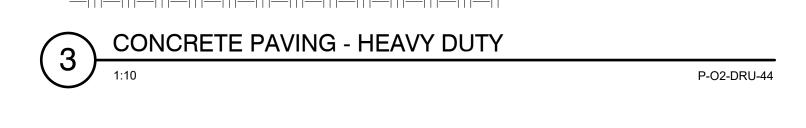
DRUMHELLER DOWNTOWN PLAZA 210201

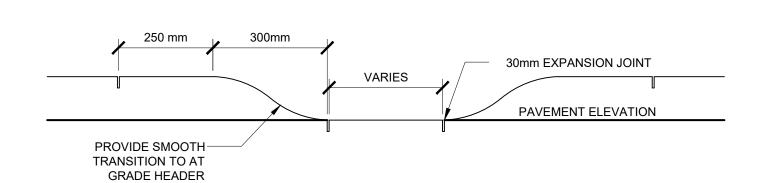


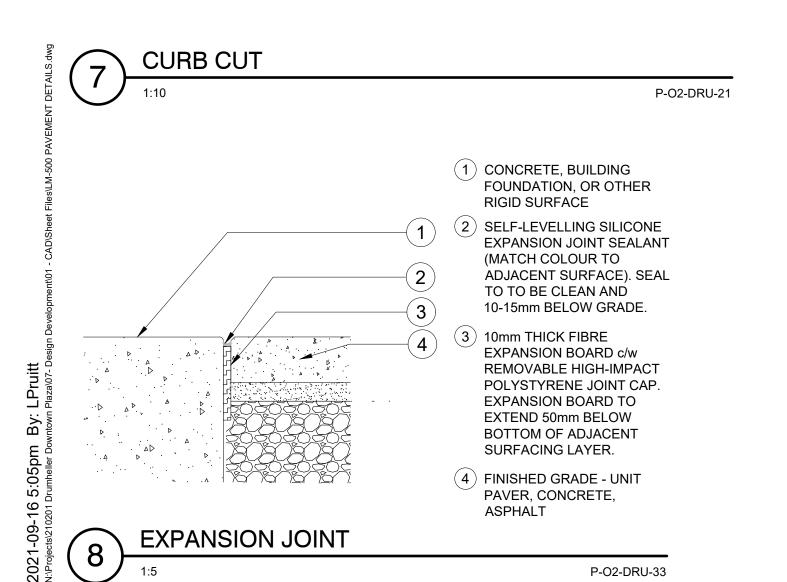


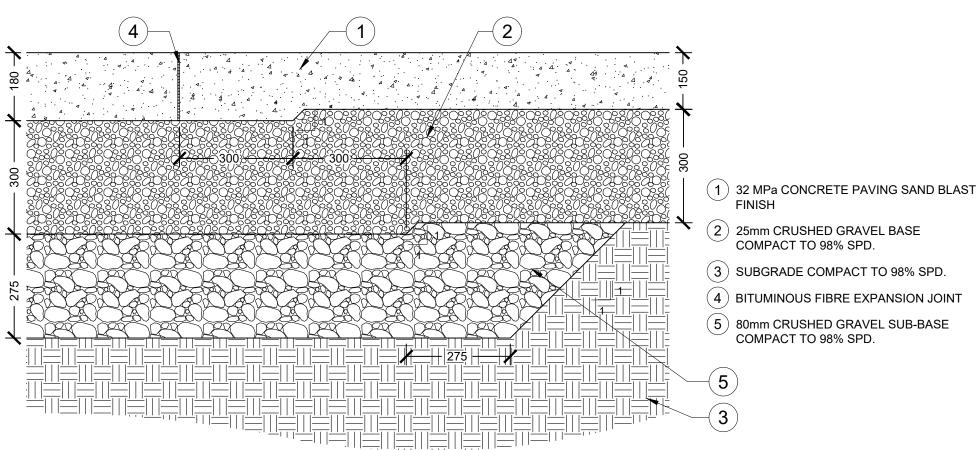
P-02-DRU-43











TRANSITION - LIGHT DUTY TO HEAVY DUTY CONCRETE

1:10

P-02-DRU-45

1:10

75mm DEPTH LIMESTONE SCREENINGS SURFACE LAYER, COMPACT TO MINIMUM 85% SPD USING DUAL-DRUM WALK-BEHIND COMPACT TO 98% SPD.

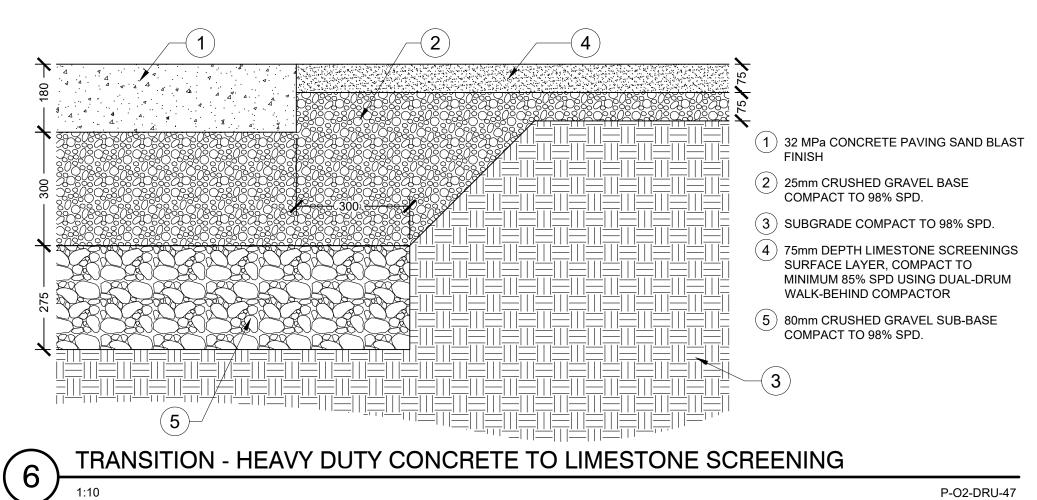
2 25mm CRUSHED GRAVEL BASE COMPACT TO 98% SPD.

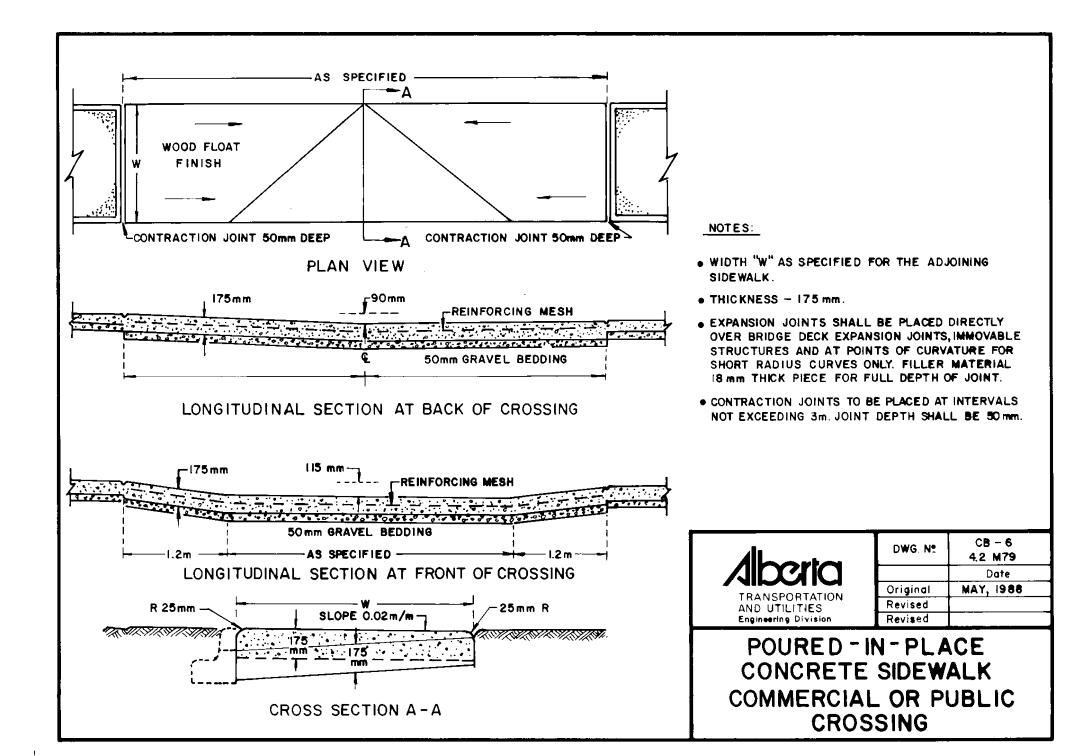
3 32 MPa CONCRETE PAVING SAND BLAST

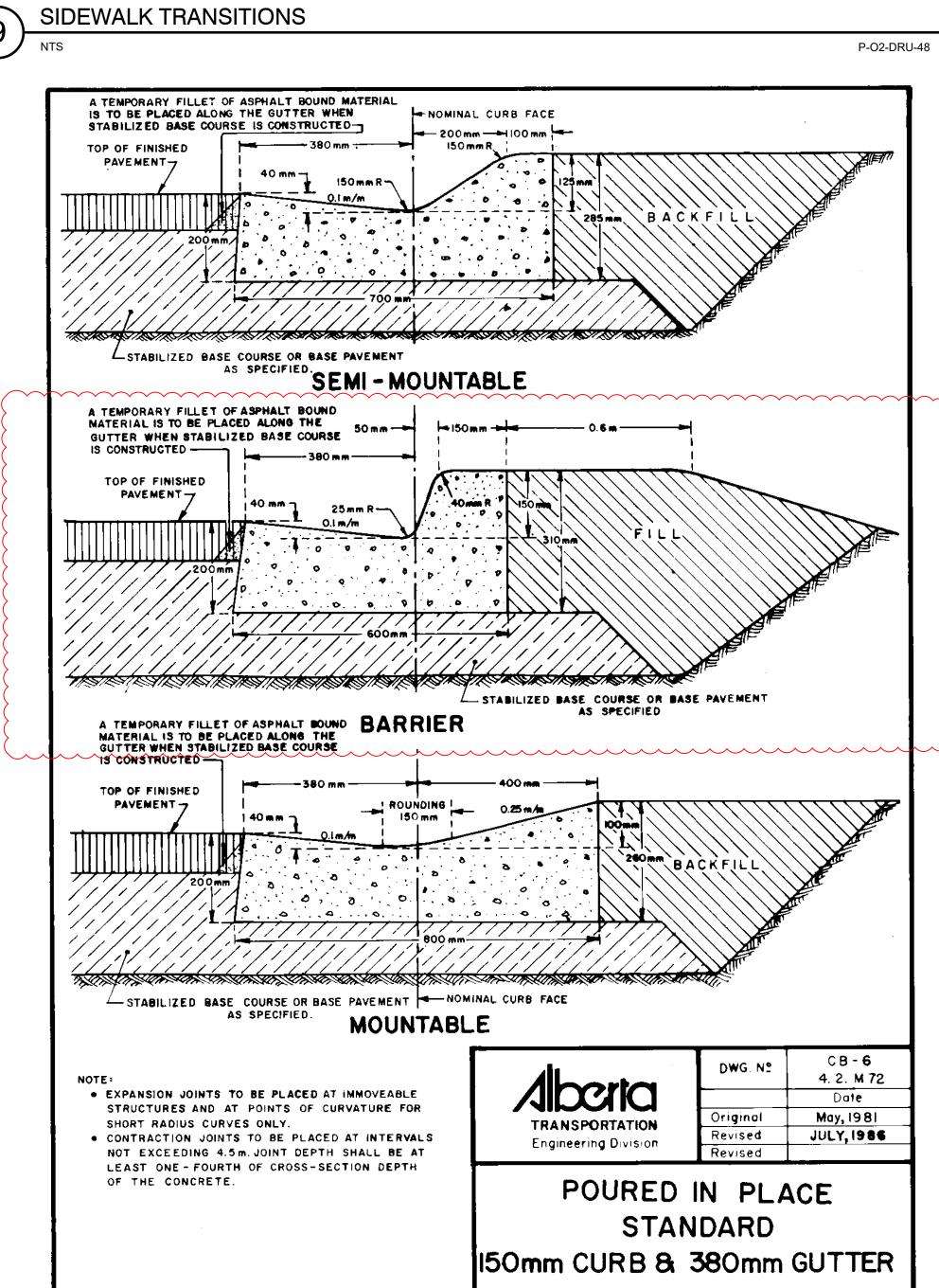
TRANSITION - LIGHT DUTY CONCRETE TO LIMESTONE SCREENING

1:10
P-O2-DRU-46

(4) SUBGRADE COMPACT TO 98% SPD.









DRUMHELLER DOWNTOWN PLAZA

MUNICIPALITY OF DRUMHELLER



ISSUED FOR: TENDER DATE: 2021-09-08

REVISIONS:
NO. DESCRIPTION. DATE. BY.

1 ISSUED FOR TENDER 2021-09-08

DESIGNED BY: MW/LP
PLOT DATE: 2021-09-16

DRAWING FILE NAME: LM-500 PAVEMENT DETAILS.dwg

PAVEMENT DETAILS

LM-500

CHECKED BY: MW

CURB AND GUTTER

ITS

DRUMHEL

P-O2-DRU-49

DRUMHELLER DOWNTOWN PLAZA

Part 1 General

1.1 SECTION INCLUDES

- .1 Measurement schedule.
- .2 Quantity calculations.

1.2 GENERAL REQUIREMENTS

- .1 The conditions contained in this document are supplemental to, and should be read in conjunction with, the Standard General Conditions (the "SGCs"). Where any condition herein deletes, modifies, or adds to a special general condition set forth in the SGCs or part thereof, the unaltered portion shall remain in effect.
- .2 Where in these special conditions, the letters "SGC." followed by a number appears, the reference is to a clause by that number in the Standard General Condition.

1.3 UNIT PRICES

- .1 Refer to Schedule 3, Part E Project Specific Requirements.
- .2 If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit sum/prices contracted.
- .3 All unit price Work performed without notifying The Consultant to establish measurement and payment shall not be considered for payment.
- .4 The prices bid for various items of work, unless specifically noted otherwise, shall include the supply of all labour, material, and product equipment necessary to construct the work in accordance with the specifications.
- .5 The prices bid for supply and installation shall be full compensation for supplying, hauling, installing, cleaning, testing, and placing in service together with all other work subsidiary and incidental thereto for which separate payment is not provided elsewhere.
- .6 Measurement unit prices
 - .1 Measurement units are delineated in the Schedule of Quantities for conditions specified in the Contract.
 - .2 Measurement methods and unit prices are determined by The Municipality of Drumheller for conditions that have been changed since the creation of this Contract.
 - .3 Take measurements and compute quantities. The Municipality of Drumheller will verify measurements and quantities.
- .7 Includes full compensation for required labour, Products, tools, equipment, plant and facilities, transportation, storage, services, and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.4 MEASUREMENT SCHEDULE

- .1 Schedule: See following pages.
- .2 Quantity Calculations Scheduled Lump Sum items.
 - .1 When an interim payment is to be a specified percentage of a lump sum item and is calculated based on the ratio of the value of Work completed to the interim date, and the Project Price, that specified percentage will be included in the calculation of the value of the Work completed to that interim date.
- .3 Breakdown of Lump Sum items
 - .1 Submit a breakdown of each lump sum item included in the Schedule of Prices, within 15 days after the commencement date of the Agreement.
 - .2 Provide sufficient details as required to identify the principal components of the work and to permit ready valuation of the work performed.
- .4 Lump Sum items paid in accordance with the following schedule. The total amount of such payments shall not exceed the amount bid for this item.
 - .1 Payment of 25% of the Lump Sum amount after completion of Work for 5% of the bid amount.
 - .2 Payment of another 25% of the Lump Sum amount after completion of Work for 25% of the bid amount.
 - .3 Payment of another 25% of the Lump Sum amount after completion of Work for 50% of the bid amount.
 - .4 Payment of the remaining 25% of the Lump Sum amount after completion of all Work of the Agreement.

ITEM No.	ITEM NAME	SCOPE, MEASUREMENT, AND PAYMENT
1	Mobilization and Demobilization	.1 Scope: Mobilization includes: Supplying and transporting to the Site, labour, equipment, products and incidentals; providing and maintaining temporary facilities and controls, including site offices and related utilities; providing, maintaining, and restoring roads, pathways, laydown areas, and parking areas including video survey; temporary relocation and reinstatement of existing facilities; supplying, installing, maintaining and removing construction materials necessary for the Contractor's methods carried out during performance of the Agreement and which does not remain as part of the Permanent Work; and all related work and materials for which payment is not included
		elsewhere. Demobilization includes: Removing and transporting from the Site, labour, equipment, products, and other items not required to remain upon Completion; cleaning of the Site; and all related work and materials for which payment is not included elsewhere. Mobilization and Demobilization includes: Interim and partial mobilization and demobilization activities required to perform the Work of the Agreement. 2 Payment: Lump Sum and shall be paid for as 80% once mobilization to the Project Site is complete and the subject work has been initiated and the remainder shall be paid upon completion of all work to the satisfaction of The Municipality of Drumheller.
2	Existing and Temporary Roads, Pathways and Signs	.1 Scope: Includes designing; providing earthwork materials; constructing, and removing when required, existing and temporary roads and pathways, and detours; providing materials including signs, barricades, signals, flashers, and other safety measures; removing snow, dirt and debris from existing and temporary roads and detours; dust control; preparing submittals and obtaining approvals, including paying all levies, from the Town of Drumheller; includes video surveys; and all related work and materials for which payment is not included elsewhere. Materials incorporated in these works will

		not be paid for under any other item.
		.2 Payment: Lump Sum paid in accordance with the schedule outlines in Article 1.4.4 above.
3	Temporary Construction Panel Fencing	.1 Scope: Includes supplying, storing, handling, installing, maintaining, and removing temporary wood or metal construction panel fencing; and all related work and materials for which payment is not included elsewhere.
		.2 Measurement: Shall be the installed length of temporary construction panel fencing measured along the fence at the ground surface.
		.3 Payment: Unit Price per metre in accordance with the following schedule:
		.1 Payment of 75% of the extended amount after installing the fence.
		.2 Payment of the balance of the extended amount after removing the fence.
4	Surveying	.1 Scope: Layout, grading, and as-built purposes
		.2 Payment: Lump Sum paid in accordance with the schedule outlines in Article 1.4.4 above.
5	Paving Preparation	.1 Scope:
		Clearing and Grubbing: Includes cutting, removing, grubbing, mulching, loading, hauling, and disposing of logs, trees, brush, stumps, roots, and other deleterious material at an off Site waste disposal facility; salvaging and protecting roots of cleared plants designated by the Consultant to be replanted; protecting and treating trees and shrubs that are to remain; levelling, grading, and finishing of cleared areas; and all related work and materials for which payment is not included elsewhere.
		Topsoil Stripping: Includes stripping, sorting, loading, hauling, dumping, and stockpiling of Topsoil in specified areas; and all related work and materials for which payment is not included elsewhere.
		Excavation: Includes excavating designated areas; shaping and trimming to finished excavation surfaces; temporary stockpiling and rehandling, if required; loading, hauling, and dumping excess in an appropriate off-Site waste disposal facility following approval by The Town of Drumheller; and all related work and materials for which payment is not included

		elsewhere. .2 Measurement: Shall be the area of Paving Preparation measured by survey.
		.3 Payment: Unit Price per square metre
6	Sidewalk Removal	.1 Scope: Includes saw cutting, demolishing, excavating, removing, temporary stockpiling, if required, rehandling, loading, hauling, and disposal of asphalt and gravel pavements and gravel subgrade materials off-site; and all related work for which payment is not included elsewhere.
		.2 Measurement: The area to be demolished shall be paint-marked prior to demolition and measured with the Consultant prior to starting the work. Shall be the surface area in square metres of the asphalt or gravel pathway removed as agreed with the Consultant.
		.3 Payment: Unit Price per square metre.
7	Tree Removal	.1 Scope: Includes cutting, removing, grubbed, mulching, loading, hauling and disposal at an off-site waste disposal facility; levelling, grading and finishing of area; and all related work and materials for which payment is not included elsewhere.
		.2 Payment: Unit Price per Each
8	Soil Type A	.1 Scope: Includes preparing submittals and obtaining approvals, quality control testing, supplying, paying royalties, excavating, sorting, loading, hauling, temporary stockpiling, if required, mixing native Topsoil and supplied compost to the satisfaction of The Town of Drumheller; preparing receiving surfaces; dumping, spreading, grading, rolling, cultivating, and raking Soil Type A; removing and disposing of rocks and deleterious materials; and all related work for which payment is not included elsewhere.
		.2 Measurement: Shall be the in-place volume of Soil Type A as determined from the top surface area of the Soil Type A measured by survey multiplied by the thickness specified in the contract documents or as adjusted by the Consultant.
		.3 Payment: Unit Price per cubic metre
9	Asphalt Repair	.1 Scope: Includes all labour, equipment, and material necessary to complete the construction of the Municipal Standard asphalt, including excavating,

	I	
		preparing the subgrade and base, side forms as required, supplying, storing, placing, spreading, trimming, joining, anchoring, installing root barrier, if required; protecting, paying royalties, any quality control testing as required by the approving authority, and any other work or material necessary to complete the structure that is not provided elsewhere.
		.2 Measurement: Shall be the installed area of asphalt pathway as determined by survey.
		.3 Payment: Unit Price per square metre
10	Surface Crush Paving	.1 Scope: Includes all labour, equipment, and material necessary to complete the construction of the Limestone Screenings, including excavating, preparing the subgrade and base, supplying, storing, placing, spreading, trimming, joining, protecting, paying royalties, any quality control testing as required by the approving authority, and any other work or material necessary to complete the structure that is not provided elsewhere.
		.2 Measurement: Shall be the installed area of Limestone Screenings as determined by survey.
		.3 Payment: Unit Price per square metre
11	Concrete Paving	.1 Scope: Includes all labour, equipment, and material necessary to complete the construction of the Cast in Place Concrete Paving, including excavating, preparing the subgrade and base, supplying, storing, placing, spreading, trimming, joining, protecting, paying royalties, any quality control testing as required by the approving authority, and any other work or material necessary to complete the structure that is not provided elsewhere.
		.2 Measurement: Shall be the installed area of Cast in Place Concrete as determined by survey.
		.3 Payment: Unit Price per square metre
12	Concrete Curb	.1 Scope: Includes all labour, equipment, and material necessary to complete the construction of the Concrete Curb, including excavating, preparing the subgrade and base, supplying, storing, placing, spreading, trimming, joining, protecting, paying royalties, any quality control testing as required by the approving authority, and any other work or material necessary to complete the structure that is not provided elsewhere.

		.2 Measurement: Shall be the installed area of Concrete Curb as determined by survey3 Payment: Unit Price per metre
13	Waste Bin Enclosure	.1 Scope: Includes supplying, storing, loading, hauling, handling, and installing Waste Bin Enclosure; and all related work and materials for which payment is not included elsewhere. .2 Measurement: Shall be the installed length of Waste Bin Enclosure measured along the fence at the ground surface. .2 Payment: Unit Price per metre
14	Barrier Gate	.1 Scope: Includes preparing submittals and obtaining approvals; fabricating, supplying, storing, loading, hauling, handling, and installing the Barrier Gate; and all related work and materials for which payment is not included elsewhere. .2 Payment: Lump Sum
15	Public Washroom	.1 Scope: Includes designing, engineering, obtaining approvals; fabricating, loading, hauling, handling and temporary stockpiling, if required; assembling and installing frame, plumbing, gate, support structure, foundations, coordination of electrical connection with ATCO, installing toilet, and all related work and materials for which payment is not listed elsewhere. .2 Payment: Lump Sum
16	Custom Rammed Earth Seat – Large, Medium, Small Custom Rammed Earth Elements	.1 Scope: Includes designing, obtaining approvals, fabricating, rammed earth fabricating, coating, supplying, loading, hauling, handling, preparing receiving surface and foundations; and all related work and materials for which payment is not listed elsewhere. .2 Measurement: Shall be the in-place number of seats. .3 Payment: Unit Price per seat.
17	Waste Receptacle	.1 Scope: Includes supplying, loading, hauling, handling, preparing receiving surface and installing foundations; and all related work and materials for which payment is not listed elsewhere. .2 Measurement: Shall be the in-place number of waste receptacles.

		.3 Payment: Unit Price per receptacle.
18	Custom Rammed Earth Planter	.1 Scope: Includes designing, obtaining approvals, fabricating, loading, hauling, protecting, temporary storing, and rehandling, if required, and installing the planter frame and liner; supplying, excavating, sorting, quality control testing, placing, and spreading of washed gravel drainage layer, geotextile and planting soil; and all related work and materials for which payment is not listed elsewhere. 2 Measurement: Shall be the in-place number of
		planters. .3 Payment: Unit Price per planter.
19	Edge Restraint	.1 Scope: Includes designing, obtaining approvals, fabricating, metal fabricating, coating, supplying, welding, loading, hauling, handling, and installing frames, signs, posts, and foundations; and all related work and materials for which payment is not listed elsewhere.
		.2 Measurement: Shall be the installed length of Edge Restraint measured along the planting beds
		.3 Payment: Unit Price per planter linear metre.
20	Trees	.1 Scope: Includes supplying nursery-grown container trees, protecting, hauling, offloading, and temporarily storing, if required; preparing receiving surfaces; excavation of pits and planting beds, placing planting soil; temporary stockpiling and rehandling, if required; planting, protecting, and watering; removing and disposing of deleterious materials; supplying, loading, hauling, and placing Hemp Squares; supplying and installing tree protection; and all related work and materials for which payment is not included elsewhere.
		.2 Measurement: Shall be the in-place number of trees.
		.3 Price: Unit Price per tree.
21	Site Lighting	1 Scope: Includes supplying, storing, loading, hauling, handling, and installing site pole lighting; and all related work and materials for which payment is not included elsewhere. Contractor will be responsible for performing all servicing work, coordinating with ATCO for on-site connections to transformer.

		.2 Measurement: Shall be the in-place number of pole lights.
		.3 Payment: Unit Price per pole light.
22	Perennials	.1 Scope: Includes supplying nursery-grown container perennials, protecting, hauling, offloading, and temporarily storing, if required; preparing receiving surfaces; excavation of pits and planting beds, placing planting soil; temporary stockpiling and rehandling, if required; planting, protecting, and watering; removing and disposing of deleterious materials; supplying, loading, hauling, and placing additional mulch if required; and all related work and materials for which payment is not included elsewhere.
		.2 Measurement: Shall be the in -place number of perennials.
		.3 Price: Unit Price per perennial1 Scope: Includes supplying nursery-grown container perennials, protecting, hauling, offloading, and temporarily storing, if required; preparing receiving surfaces; excavation of pits and planting beds, placing planting soil; temporary stockpiling and rehandling, if required; planting, protecting, and watering; removing and disposing of deleterious materials; supplying, loading, hauling and; supplying and installing plant protection; and all related work and materials for which payment is not included elsewhere.
		.2 Measurement: Shall be the in- place number of shrubs.
		.3 Price: Unit Price per perennial.
23	Vegetation Establishment – Watering Perennials	.1 Scope: Includes preparing and obtaining permits, if required, and obtaining approvals; soil moisture testing and recording; loading, hauling, and watering planted trees, shrubs, perennials; installing temporary irrigation systems if determined by the Contractor and approved by The Town of Drumheller; and all related work and materials for which payment is not included elsewhere.
		.2 Payment: Lump Sum per Year1 Scope: Includes supplying nursery-grown container perennials, protecting, hauling, offloading, and temporarily storing, if required; preparing receiving surfaces; excavation of pits and planting beds, placing planting soil; temporary stockpiling and rehandling, if required;

	planting, protecting, and watering; removing and disposing of deleterious materials; supplying, loading, hauling, and placing additional mulch if required; and all related work and materials for which payment is not included elsewhere.
	.2 Measurement: Shall be the in-place number of perennials.
	.3 Price: Unit Price per perennial
Vegetation Establishment - Establishment logs Vegetation Establishment - Watering	.1 Scope: Includes preparing and submitting Establishment logs; pruning trees, shrubs; protecting plants, replanting trees, shrubs, perennials; and all related work and materials for which payment is not included elsewhere.
	.2 Measurement: to be filled out whenever activities are performed and submitted monthly with the progress claims.
	.3 Payment: Lump Sum per Month.1 Scope: Includes preparing and obtaining permits, if required, and obtaining approvals; soil moisture testing and recording; loading, hauling, and watering planted trees, shrubs, perennials; installing temporary irrigation systems if determined by the Contractor and approved by The Town of Drumheller; and all related work and materials for which payment is not included elsewhere.
	.2 Payment: Lump Sum per Year
Vegetation Establishment - Establishment logs	.1 Scope: Includes preparing and submitting Establishment logs; pruning trees and perennials; protecting plants, replanting trees, perennials; and all related work and materials for which payment is not included elsewhere.
	.2 Measurement: to be filled out whenever activities are performed and submitted monthly with the progress claims.
	.3 Payment: Lump Sum per Month
Vegetation Establishment - Weed control Vegetation Establishment - Establishment logs	.1 Scope: Includes preparing submittals and obtaining approvals; supplying, loading, hauling, and applying chemical herbicides; eradicating or preventing weed growth through labour and mechanical methods as described in the Contract Documents or directed by The Town of Drumheller; and all related work and materials for which payment is not included elsewhere.
	Vegetation Establishment - Watering Vegetation Establishment - Establishment logs Vegetation Establishment - Wed control Vegetation Establishment -

		2: Payment: Lump Sum per Month. 1 Scope: Includes preparing and submitting Establishment logs; pruning trees, perennials; protecting plants, replanting trees, and perennials; and all related work and materials for which payment is not included elsewhere.
		.2 Measurement: to be filled out whenever activities are performed and submitted monthly with the progress claims..3 Payment: Lump Sum per Month
27	Stage	.1 Scope: Includes supplying, loading, hauling, handling, preparing receiving surface and installing foundations; and all related work and materials for which payment is not listed elsewhere. .2 Payment: Lump Sum

Part 2 Products - NOT USED

Part 3 Execution - NOT USED

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Inspection and testing, administrative and enforcement requirements.
- .2 Tests and mix designs.
- .3 Mock-ups.
- .4 Written and electronic reports.
- .5 Equipment and system adjust and balance.

1.2 RELATED SECTIONS

.1 This section describes requirements applicable to all Sections within Divisions 02 to 32.

1.3 REFERENCES

- .1 ISO/IEC 17025-2005 General Requirements for the Competence of Testing and Calibration Laboratories.
- .2 SCC (Standards Council of Canada).
- .3 Calgary Development Guidelines and Standard Specifications: Landscape Construction (current edition).

1.4 INSPECTION BY AUTHORITY

- .1 Allow Authorities Having Jurisdiction access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection whenever portions of the Work are designated for special tests, inspections, or approvals, either when described in the Agreement or when required by law in the Place of the Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections, or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.

1.5 REVIEW BY DESIGN PROFESSIONAL

- .1 Consultant may order any part of the Work to be reviewed or inspected if Work is suspected to be not in accordance with the Agreement.
- .2 If, upon review such work is found not in accordance with the Agreement, correct such Work and pay cost of additional review and correction.

1.6 TESTING

.1 The Contractor shall be responsible for securing qualified testing agencies to perform any required reports for sub-base preparation, materials, and quality of installed works as deemed necessary by the Consultant or required for the safe,

- efficient, and durable construction of all site features included within the General Contractor's scope of work.
- .2 The Municipality of Drumheller may employ an independent testing agency or employ their own forces to conduct test on the work for verification. The Municipality of Drumheller will pay for this extra testing if the Municipality of Drumheller choses to have the testing done. The contractor shall make work or materials available for testing.
- .3 Testing Organizations: As determined by the Municipality of Drumheller.
- .4 Provide equipment required for executing inspection and testing by appointed agencies.
- .5 Employment of inspection and testing agencies does not relax responsibility to perform Work in accordance with The Agreement.
- .6 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and testing to ascertain full degree of defect. Correct defect and irregularities as advised by Design Professional at no cost to Municipality of Drumheller. Pay costs for retesting and re-inspection.

1.7 ACCESS TO WORK

- .1 Allow inspection and testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Cooperate to provide reasonable access and facilities for such access.

1.8 PROCEDURES

- .1 Notify appropriate agency and Consultant in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit samples and materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.9 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Consultant as failing to conform to The Agreement. Replace or reexecute in accordance with The Agreement.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of the Consultant it is not expedient to correct defective Work or Work not performed in accordance with the Agreement, Municipality of Drumheller may deduct from Project Price the difference in value between Work performed and that called for the Agreement, amount of which shall be determined by the Consultant.

1.10 REPORTS

- .1 Submit one (1) electronic copy of signed inspection and test reports to Consultant.
- .2 Provide signed paper copies to manufacturer or fabricator of material being inspected or tested.

1.11 TESTS AND MIX DESIGNS

- .1 Furnish test results and mix designs as may be requested.
- .2 The cost of tests and mix designs beyond those called for in the Agreement or beyond those required by law of Place of Work shall be appraised by the Design Professional and may be authorized as recoverable.

1.12 MOCK-UP

- .1 Prepare mock-up for Work specifically requested in specifications. Include for Work of all Sections required to provide mock-ups.
- .2 Construct in all locations acceptable to the Consultant.
- .3 Prepare mock-ups for the Consultant's review with reasonable promptness and in an orderly sequence, so as not to cause any delay in Work.
- .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for an extension of the agreement and no claim for extension by reason of such default will be allowed.
- .5 If requested, the Consultant will assist in preparing a schedule fixing dates for preparation.
- .6 Approved mock-up may remain as part of Work if directed by the Consultant.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Soil materials.
- .2 Soil Amendments.
- .3 Placement of soil materials.
- .4 Finish grading.
- .5 Stockpile Cleanup.

1.2 RELATED SECTIONS

- .1 Section 01 22 00 Measurement Schedule.
- .2 Section 01 33 00 Submittal Procedures.
- .3 Section 32 93 10 Trees, Shrubs and Ground Cover Planting.

1.3 REFERENCES

- .1 Government of Alberta
 - .1 Design Guidelines for Erosion and Sediment Control, Appendix C –
 Erosion and Sedimentation Control, Best Management Practices (BMP) #34 (a-c)
 www.transportation.alberta.ca
- .2 AASHTO T 180-15 Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54 kg (10-lb) Rammer and a 457 mm (18 inch) Drop.
- .3 American Society for Testing and Materials (ASTM)
 - .1 ASTM D2487 17 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
 - .2 ASTM D698-12e2 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft3 (600 kN-m/m3)).
 - .3 ASTM D1557-12e1 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).
 - .4 ASTM D2167-15 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
 - .5 ASTM D6938-15 Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

1.4 SUBMITTALS FOR REVIEW

.1 Analysis of Planter Topsoil Material:

- .1 Provide intended use, type of mulches to be applied, type of topsoil, and the quality of drainage list to Consultant for approval, including all below listed features:
 - .1 Nitrate-nitrogen (total nitrogen maximum 0.33%)
 - .2 Available phosphorus (ranging from 20 to 60 mg/kg)
 - .3 Available potassium (ranging from 300 to 1000 mg/kg)
 - .4 pH (ranging from 6.0 to 7.5)
 - .5 Salinity (EC) (Salinity reading not exceeding 1.5 dS/m)
 - .6 Micronutrients (boron, chlorine, copper, iron, manganese and zinc)
 - .7 Organic matter (not less than 4% for clay loams and not less than 2% for sandy loams, to a maximum of 10%)
 - .8 Texture (Loam, Sandy loam, silt loam, sand clay loam are acceptable)
 - .9 Free of subsoil contamination, roots, and weeds.
 - .10 Free of rocks greater than 75 mm in diameter. Volume of rock (75mm dia. And under) not to exceed 20%..
- .2 Planting topsoil shall not be delivered to site until Consultant has approved soil type selection.

.2 Soil Amendments

- .1 Supply labels from all specified Soil Amendments and those recommended from testing of Soil Material.
- .2 Soil Amendment Type A:
 - .1 Prior to placement, prepare one (1) five-gallon bucket of Soil Amendment Type A onsite with the Consultant for inspection and approval. A scale is required for measurement of materials.
 - .2 Supply labels from all specified components of Soil Amendment Type A.
- .3 Compost
 - .1 Submit to the Consultant the source and type of compost.
- .3 The Municipality of Drumheller will provide testing on soil materials to be disposed off site. The Contractor shall not dispose of soil materials off-site until approval from The Municipality of Drumheller has been obtained.

1.5 QUALITY CONTROL

.1 Provide materials of each type from same approved source throughout the Work.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Place planting soil and mulch in dry weather.
- .2 Do not spread soil when ground is frozen, excessively wet, or otherwise in a condition detrimental to the Work, as determined by the Consultant.

Part 2 Products

2.1 SOIL MATERIALS

- .1 Planting Soil: Top Dress mixture.
 - .1 50mm thick of 70% topsoil and 30% compost amendments.
 - .2 Topsoil to meet identified values from the soil testing submittals.
 - .1 Soil amendments shall be added as determined by the results of the soil tests and as directed by the Consultant.
 - .2 30% Class A Compost that shall:
 - .1 Be approved by the Consultant prior to use.
 - .2 Commercially prepared compost shall meet the CCME Guidelines for Compost Quality.
 - .3 Be substantially free from coliform, pathogens, and chemical or organic contaminates that may be detrimental to plant or animal health.
 - .4 Contain less than 0.5% by volume of contaminants such as rocks, plastic, metal or glass.
 - .5 Not exceed a 25:1 to 30:1 total carbon to nitrogen ratio.
 - .6 Well rotted wood residuals are acceptable provided the total carbon to total nitrogen ratio above is not exceeded.
 - .7 5% Perlite
 - .3 120 g of Mycorrhizae fungi per cubic meter of mix (endo types, multiple species)

2.2 SOIL AMENDMENTS

- .1 Soil amendments shall be used only if recommended by the Consultant. The Consultant will recommend specific soil amendments based on soil testing results if soil does not meet specified requirements.
- .2 Supply and apply soil amendments at rate determined from topsoil analysis for all native topsoil as directed by the Consultant.
- .3 Soil Amendment Types:
 - .1 Soil Amendment Type A: Soil Amendment to be placed at the base of all potted plants per Section 32 93 10 Trees, Shrubs and Ground Cover Planting.
 - .1 Imported from off-site sources and mixed with the following materials (this mix will fill 11 5-gallon buckets, each bucket should cover 2.5 m2 and will cover approximately 28 m2 at approximately 10 mm depth):
 - .1 6.00 kg of organic fertilizer, 4-4-4 with: alfalfa meal, bone meal, blood meal, glacial rock dust, sulphate of potash, humate, rock phosphate, greensand, kelp meal, gypsum, (Gaia Green Products Ltd. All Purpose 4-4-4) or approved equivalent.

- .2 0.12 kg of Mycorrhizae fungi (endo types, multiple species).
- .3 0.80 kg of granular humate complexes (Gaia Green Products Ltd, Fossilized Carbon Complex) or approved equivalent.
- .4 7 Litres of quality worm castings.

.4 Water:

.1 Clean, fresh, and free of substances or matter which could inhibit vigorous growth of plants.

Part 3 Execution

3.1 TOPSOIL PLACEMENT

- .1 Verify the following prior to starting work:
 - .1 Existing conditions.
 - .2 Substrate base has been contoured and compacted, uneven area and low spots are eliminated, and debris, root, branches, stones in excess of 500mm in size are removed.
- .2 Scarify substrate surface to depth of 200 mm where topsoil is scheduled to be placed. Scarify in areas where equipment used for hauling and spreading topsoil has compacted subsoil.
- .3 Place topsoil after Consultant has accepted subgrade.
- .4 Wherever practical, Topsoil shall be transferred directly to placement.
- .5 Place topsoil in areas where planting, sodding, and seeding is required as shown on the drawings to thickness as scheduled. Place topsoil during dry weather.
- .6 Place topsoil and grade no more than 48 hours prior to seeding or sodding.
- .7 Fine grade topsoil to eliminate rough or low areas. Maintain profiles and contour of subgrade.
- .8 For Topsoil depths greater than 300mm, place Topsoil at no greater than 150 mm lifts and lightly compact.
- .9 Placed Topsoil shall be allowed to settle or shall be lightly compacted such that it is firm against deep footprints prior to planting, seeding or sodding. Compaction shall not be more than necessary to meet this requirement. Mechanical compactors are not permitted.
- .10 Topsoil shall be placed and spread manually to prevent damage to existing infrastructure.
- .11 Remove roots, weeds, rocks, and foreign material while spreading.
- .12 Consultant to inspect and approve placed Topsoil and finish grades prior to planting.
- .13 Install Plant Material immediately after placing Topsoil.

- .14 Protect Topsoil from disturbance and compaction during remainder of construction and maintenance period.
- .15 Lightly compact placed topsoil.
- .16 Stockpile as specified in Section 31 12 13 Site Clearing.

3.2 STOCKPILE CLEANUP

- .1 Remove stockpile, leave area completely free of excess material upon completion of the project.
- .2 Leave area in a clean and neat condition. Dispose of roots, debris and other deleterious materials at an off-site waste disposal facility.
- .3 Vegetate stockpile area per the Contract Documents. If needed, scarify compacted areas prior to planting.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Custom site furnishings.
- .2 Site furnishings.

1.2 RELATED SECTIONS

- .1 Section 01 22 00 Measurement Schedule.
- .2 Section 01 33 00 Submittal Procedures.
- .3 Refer to 06 10 00 Rough Carpentry.

1.3 SUBMITTALS FOR REVIEW

- .1 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for furniture and include product characteristics, performance criteria, physical size, finish and limitations.
- .2 Shop Drawings:
 - .1 Submit shop drawings indicating dimensions, sizes, assembly, anchorage and installation details for each furnishing specified.
 - .2 Installation procedures to be reviewed and approved by Consultant prior to installation, including timing and sequence of foundations and finishing.
 - .1 Stage footings and installation procedure.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect furnishings from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 WASTE RECEPTACLE

.1 Maglin 200 Trash Container Heavy Duty Steel Flat Bar 32 Gallon Liner Capacity (Gallons), no side ash receptacle, no side opening / side opening, bronze 14 matte finish or approved equivalent.

2.2 CUSTOM RAMMED EARTH PLANTER

- .1 Planter to be provided by Innovative Earth per contract drawings, or approved equivalent supplier.
- .2 Contractor to provide color options for review and approval by Consultant.
- .3 Final placement of planter to be determined on site by Consultant.

2.3 CUSTOM RAMMED EARTH SEAT – LARGE, MEDIUM, SMALL

- .1 Planter to be provided by Innovative Earth per contract drawings, or approved equivalent supplier.
- .2 Contractor to provide color options for review and approval by Consultant.
- .3 Final placement of seating to be determined on site by Consultant.

2.4 CUSTOM RAMMED EARTH FAÇADE FOR PUBLIC WASHROOM

- .1 Innovative Earth or approved equivalent to provide color options for review and approval by Consultant
- .2 Innovative Earth contractor or approved equivalent to provide shop drawings indicating connection of façade to the public washroom for review and approval by Consultant.
- .3 Innovative Earth contractor or approved equivalent to supply and install all parts of the rammed earth façade.

2.5 EDGE RESTRAINT

- .1 A606-4 11 Gauge, 203.2mm x 3048" weathering steel landscape edging or approved equivalent.
- .2 11 Gauge 304.8mm weathering steel landscape edging stakes and corners.
- .3 All weathering steel to arrive untreated, natural rusting will occur via weather exposure.

2.6 BARRIER GATE

.1 3.35m Round Barrier Gate from Gate Depot including post, lock, and hot dip galvanized fittings, or approved equivalent.

2.7 PEDESTRAIN LIGHT

.1 Luminus SC655 Series SCOPO-LED outdoor light and supporting HD 235.0-273.0 B.C.D (mm) pole base. QPPCDBZ – Dark Bronze (RAL-8019) finish. TT400 Mounting System and applicable fasteners.

.2 Contractor to coordinate installation with electrical contractor.

2.8 STAGE

- .1 Consultant will work with Contractor and Municipality of Drumheller to determine future stage materials and installation timing, with all necessary work and materials being determined by the \$25,000.00 cash allowance outlined in Schedule B Schedule of Quantities".
- .2 Stage to be provided by Contractor per contract drawings, or approved equivalent supplier.
- .3 Contractor to provide engineer stamped shop drawings for stage surface, cladding, footings and all accompanying support structures.

2.9 WASTE BIN ENCLOSURE FENCE

- .1 Waste bin enclosure fence to be provided by Contractor per contract drawings, or approved equivalent supplier.
- .2 Contractor to provide 2 x 300mm wood slat samples for review and approval by Consultant.

2.10 GREY RUBBER WHEEL STOP

.1 Product SKU # 06FY1770-GY 1828.8mm x 152.4mm x 101.6mm Grey Rubber Wheel Stop and accompanying HRDWR-3WS/WK 355.6mm rebar spikes.

2.11 PREFABRICATED WASHROOM FACILITY

- .1 CXT Standard Cortez Washroom Prefabricated unit including stainless steel fixtures, electronic flush, 2 Baby change tables, engineer stamped drawings and shipping, or approved equivalent supplier.
- .2 Contractor responsible for washroom site prep, lifting building in place, electrical and plumbing permits, hook up utilities, site clean-up during and post installation.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for exterior site furnishing installation in accordance with Shop Drawings and/or manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of the Consultant.
 - .2 Inform the Consultant of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from the Consultant.

3.2 PREPARATION

- .1 Locate and protect utility lines.
- .2 Notify and acquire written acknowledgment from utility authorities before beginning installation Work.

3.3 INSTALLATION

- .1 Assemble furnishings in accordance with Shop Drawings and/or manufacturer's written recommendations.
- .2 Fabricator is responsible for ensuring structural integrity of wood, metal, footings, and hardware connections for all site furniture.
- .3 Touch-up damaged finishes to approval of The Municipality of Drumheller and/or Consultant.

3.4 CLEANING

- .1 Progress Cleaning:
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion, remove surplus materials, rubbish, tools and equipment.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by site furnishings installation.

END OF SECTION