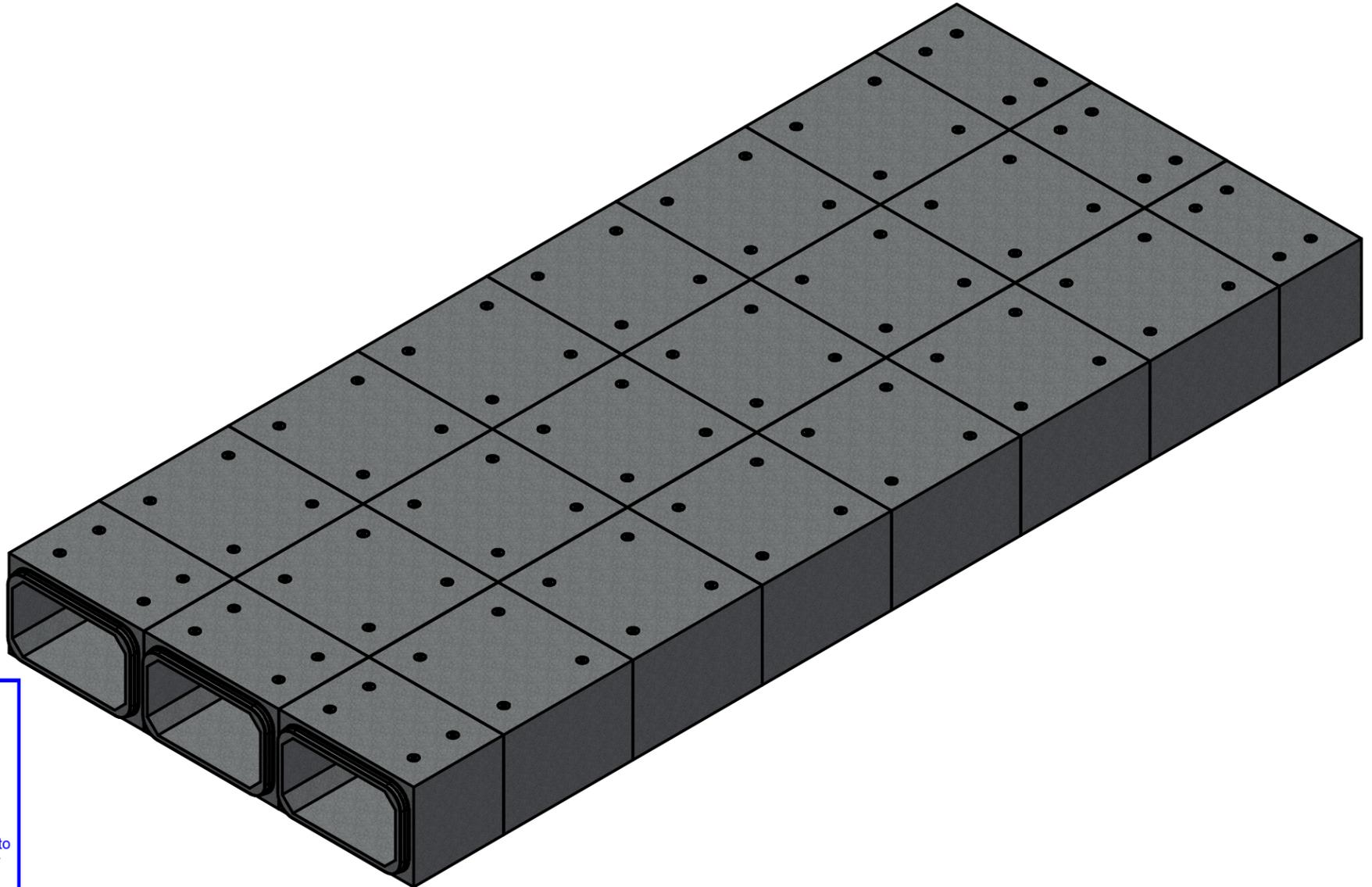


***Appendix B -  
Concrete Culvert  
Shop Drawings***

PART LIST				
ITEM	QTY	JOB NUMBER	PART NUMBER	MASS
1	18		2134 x 1219 x 2438	9591.756 kg
2	3		2134 x 1219 x 1700	6679.723 kg
3	3		2134 x 1219 x 1550	6087.846 kg
4	96		7.5T x 120mm Lifting Insert	0.720 kg
5	27		TSS Gasket	



Isometric View

Notes:

- 2.134 x 1.219 x 53.634 m Box culvert to be built as shown.
- Unit designed to withstand HS20 live loading. Designed for 0.7 - 1.2 m depth of cover.
- Box dimensions and specifications to be in accordance with ASTM C1433M.
- All reinforcing has a minimum of 25.4 mm of concrete cover.
- Unit c/w lifting insert as required. Starcon style min. 7.5T/120 mm lifting inserts to be used.  
Note: Sling angle to the vertical no more than 15°.
- Minimum concrete strength: 35 MPa.
- Minimum rebar yield strength: 400 MPa. (Steel grade: CSA G30.18-400 weldable)
- Minimum WWF yield strength: 485 MPa.
- Installation & backfilling is the responsibility of others. For more details see ASTM C1675.
- Boxes supplied with TSS Gasketed Joint for water & Silt tight. For more details see ASTM C1677.
- Apply Adeka P-201 Hydrophilic waterstop or an approved equivalent to the secondary pour as necessary.
- All dimensions are in millimeters unless otherwise specified.

By accepting and returning an approved shop drawing provided by the Langley Concrete Group for a specific product or project, the responsibility for the final product manufactured and provided in accordance with the drawings shall be borne by the customer. The Langley Concrete Group bears no responsibility, financial or otherwise, for errors in the finished product received unless proven it differs from the approved shop drawing. Langley Concrete Group responsibility is limited to the structural design and fabrication of the product to required engineering and relevant specifications related to the product and/or project.

**DRAWING REVIEW**

- Reviewed
- Exceptions Noted
- Revise and Resubmit
- Rejected - see remarks

This review is for general conformance to the design intent only. It does not in any way relieve the Contractor of responsibility for its accuracy or for compliance with the Contract Documents.

Submission No. 3

Project No. 33527

By cbruggeman

Date 05/26/2025

**ISL Engineering and Land Services**

REVISION HISTORY				
REV	DRAWN BY	DESCRIPTION	DATE	CHECKED BY
A	SRA	Adjusted the Length	25-Apr-25	SR
B	SRA	Updated the Depth of Cover	01-May-25	SR
C	SRA	Removed the Baffle	21-May-25	MP

Langley Concrete Group is a certified Q-Cast Plant, an American Concrete Pipe Association Third Party Certification for the manufacture of Pipe, Manhole, Box Culvert & Precast Items.



All Dimensions are in Millimeters. Unless otherwise Stated

Quality Assurance of products manufactured by The Langley Concrete Group has been verified by the following third party certification programs



Projection Method: THIRD ANGLE



**THE Langley CONCRETE GROUP**

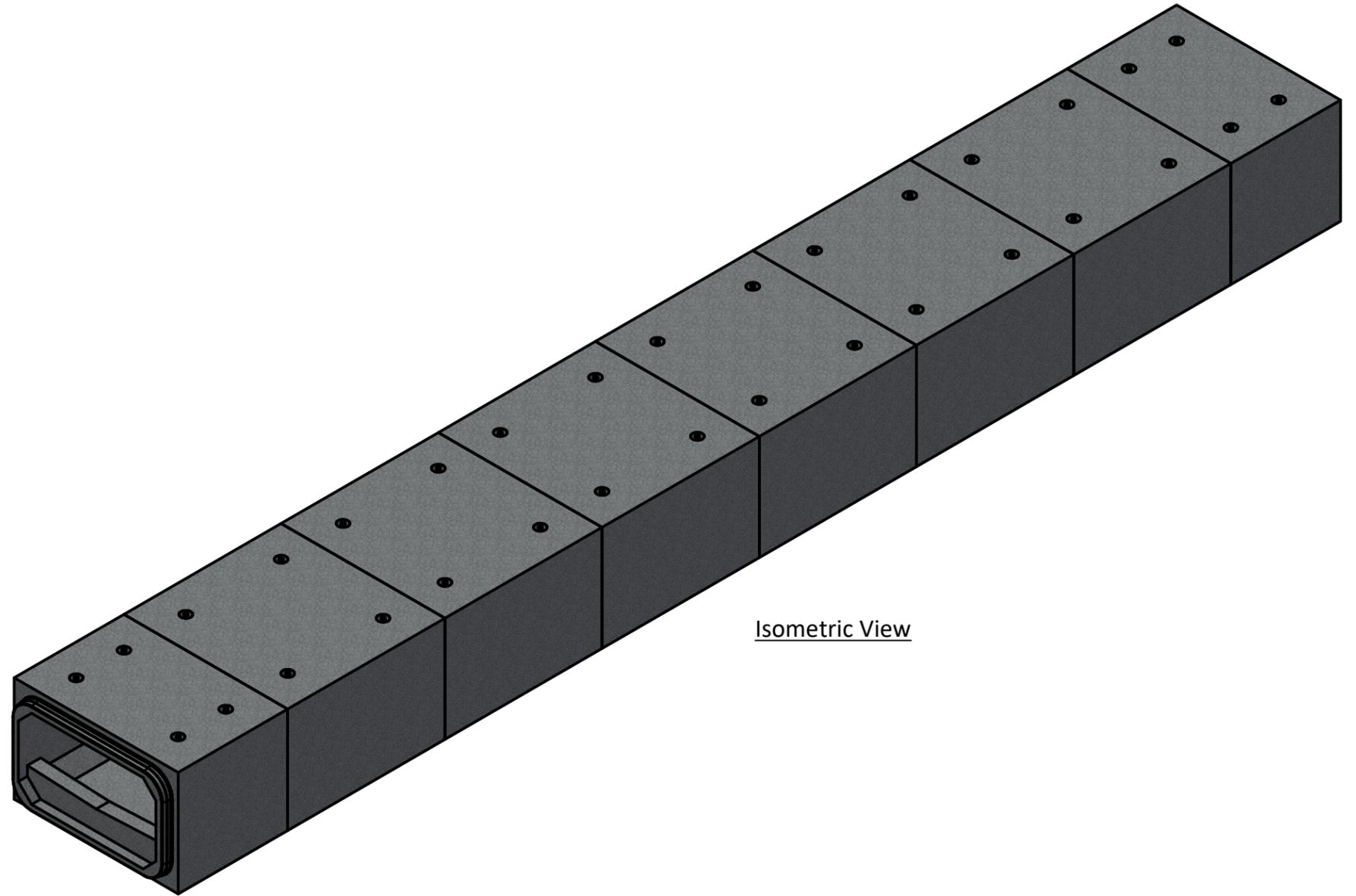
The LANGLEY CONCRETE Group of Companies

www.langleyconcretegroup.com  
 LANGLEY (604) 533-1656  
 DUNCAN (250) 478-9581  
 CHILLIWACK 1-800 667-9600

This drawing is the property of the Langley Concrete Group of Companies. All information contained herein is confidential and may not be used in whole or in part without written permission from the owner

DESCRIPTION:  <b>2.1 x 1.2 x 53.634 m Box Culvert                  South Culvert                  City Of Coquitlam</b>	DRAWN BY:	SRA	DWG NO.:	DWG25-421
	CHK BY:	MP	JOB NO.:	
	DATE:	22-Apr-25	SO NO.:	
	SCALE:	1:75	REV.:	C
	SIZE:	11 x 17	SHEET	1 OF 2

PART LIST				
ITEM	QTY	JOB NUMBER	PART NUMBER	MASS
1	6		2134 x 1219 x 2438	9591.756 kg
2	1		2134 x 1219 x 1700 With Baffle	7004.455 kg
3	1		2134 x 1219 x 1700 With Baffle	7004.154 kg
4	32		7.5T x 120mm Lifting Insert	0.720 kg
5	8		TSS Gasket	



Isometric View

Notes:

- 2.134 x 1.219 x 18.028 lm Box culvert to be built as shown.
- Unit designed to withstand HS20 live loading. Designed for 0.7 - 1.2 m depth of cover.
- Box dimensions and specifications to be in accordance with ASTM C1433M.
- All reinforcing has a minimum of 25.4 mm of concrete cover.
- Unit c/w lifting insert as required. Starcon style min. 7.5T/140 mm lifting inserts to be used.  
Note: Sling angle to the vertical no more than 15°.
- Minimum concrete strength: 35 MPa.
- Minimum rebar yield strength: 400 MPa. (Steel grade: CSA G30.18-400 weldable)
- Minimum WWF yield strength: 485 MPa.
- Installation & backfilling is the responsibility of others. For more details see ASTM C1675.
- Boxes supplied with TSS Gasketed Joint for water & Silt tight. For more details see ASTM C1677.
- Apply Adeka P-201 Hydrophilic waterstop or an approved equivalent to the secondary pour as necessary.
- All dimensions are in millimeters unless otherwise specified.

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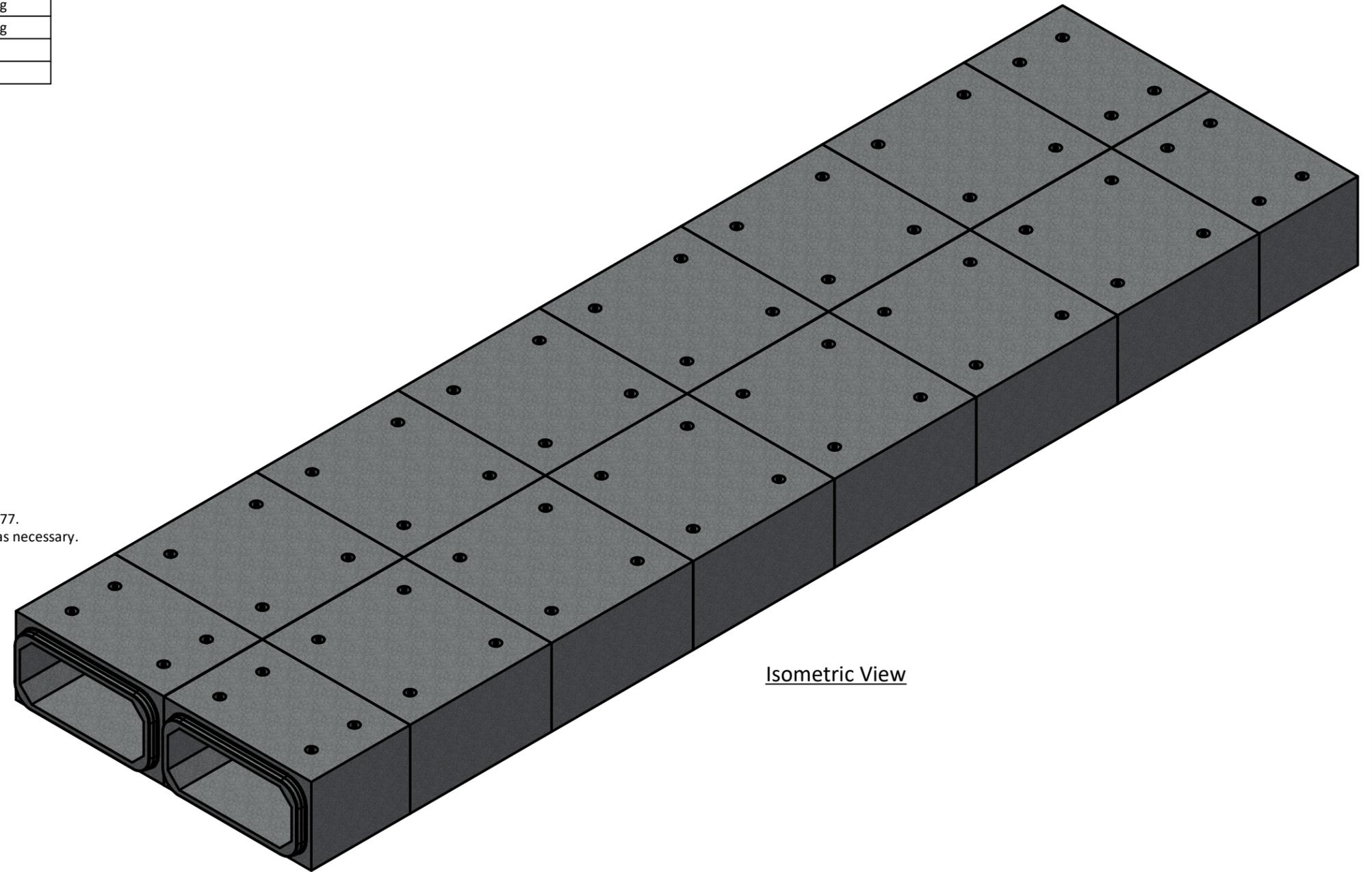
REVISION HISTORY				
REV	DRAWN BY	DESCRIPTION	DATE	CHECKED BY
A	SRA	Adjusted the Length	25-Apr-25	SR
B	SRA	Updated the Depth of Cover	01-May-25	SR
C	SRA	Revised the Table	23-May-25	SR

Langley Concrete Group is a certified Q-Cast Plant, an American Concrete Pipe Association Third Party Certification for the manufacture of Pipe, Manhole, Box Culvert & Precast Items.		All Dimensions are in Millimeters. Unless otherwise Stated	The <b>LANGLEY CONCRETE</b> Group of Companies www.langleyconcretegroup.com LANGLEY (604) 533-1656 DUNCAN (250) 478-9581 CHILLIWACK 1-800 667-9600	This drawing is the property of the Langley Concrete Group of Companies. All information contained herein is confidential and may not be used in whole or in part without written permission from the owner	DESCRIPTION:  <b>2.1 x 1.2 x 18.028 lm Box Culvert</b> North Culvert City Of Coquitlam	DRAWN BY: SRA	DWG NO.: DWG25-422
						CHK BY: MP	JOB NO.:
Quality Assurance of products manufactured by The Langley Concrete Group has been verified by the following third party certification programs		Projection Method: THIRD ANGLE 				DATE: 23-Apr-25	SO NO.:
						SCALE: 1:60	REV.: C
						SIZE: 11 x 17	SHEET 1 OF 3

PART LIST				
ITEM	QTY	JOB NUMBER	PART NUMBER	MASS
1	12		2134 x 914 x 2438	8852.945 kg
2	4		2134 x 914 x 1700 With Baffle	6305.137 kg
3	64		7.5T x 120mm Lifting Insert	0.720 kg
4	16		TSS Gasket	

Notes:

- 2.134 x 0.914 x 36.056 lm Box culvert to be built as shown.
- Unit designed to withstand HS20 live loading. Designed for 0.7 - 1.2 m depth of cover.
- Box dimensions and specifications to be in accordance with ASTM C1433M.
- All reinforcing has a minimum of 25.4 mm of concrete cover.
- Unit c/w lifting insert as required. Starcon style min. 7.5T/120 mm lifting inserts to be used.  
Note: Sling angle to the vertical no more than 15°.
- Minimum concrete strength: 35 MPa.
- Minimum rebar yield strength: 400 MPa. (Steel grade: CSA G30.18-400 weldable)
- Minimum WWF yield strength: 485 MPa.
- Installation & backfilling is the responsibility of others. For more details see ASTM C1675.
- Boxes supplied with TSS Gasketed Joint for water & Silt tight. For more details see ASTM C1677.
- Apply Adeka P-201 Hydrophilic waterstop or an approved equivalent to the secondary pour as necessary.
- All dimensions are in millimeters unless otherwise specified.



Isometric View

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REVISION HISTORY				
REV	DRAWN BY	DESCRIPTION	DATE	CHECKED BY
A	SRA	Adjusted the Length	25-Apr-25	SR
B	SRA	Updated the Depth of Cover	01-May-25	SR
C	SRA	Added the Note	23-May-25	SR

Langley Concrete Group is a certified Q-Cast Plant, an American Concrete Pipe Association Third Party Certification for the manufacture of Pipe, Manhole, Box Culvert & Precast Items.		All Dimensions are in Millimeters. Unless otherwise Stated	 <p>The <b>LANGLEY CONCRETE</b> Group of Companies                  www.langleyconcretegroup.com                  LANGLEY (604) 533-1656                  DUNCAN (250) 478-9581                  CHILLIWACK 1-800 667-9600</p>	This drawing is the property of the Langley Concrete Group of Companies. All information contained herein is confidential and may not be used in whole or in part without written permission from the owner	DESCRIPTION:  2.1 x 0.9 x 36.056 lm Box Culvert North Culvert City Of Coquitlam	DRAWN BY: SRA	DWG NO.: DWG25-423
						CHK BY: MP	JOB NO.:
Quality Assurance of products manufactured by The Langley Concrete Group has been verified by the following third party certification programs		Projection Method: THIRD ANGLE 				DATE: 23-Apr-25	SO NO.:
						SCALE: 1:60	REV.: C
						SIZE: 11 x 17	SHEET 1 OF 2