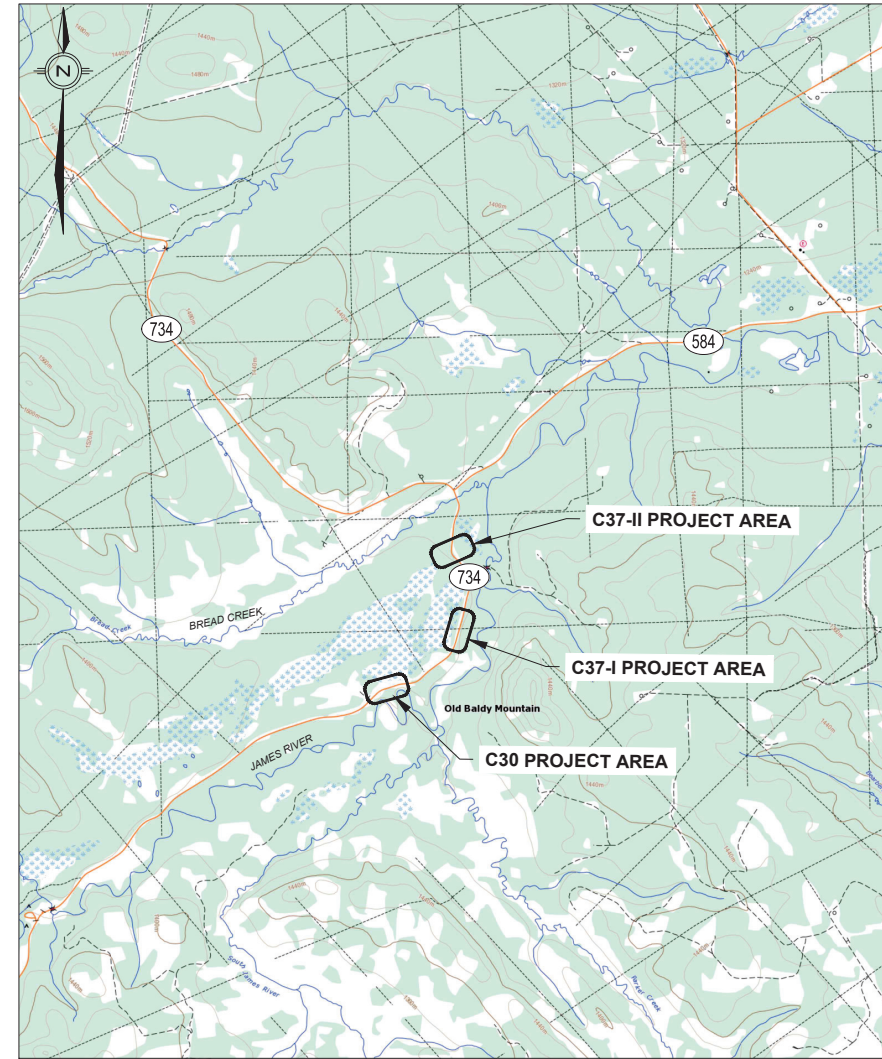
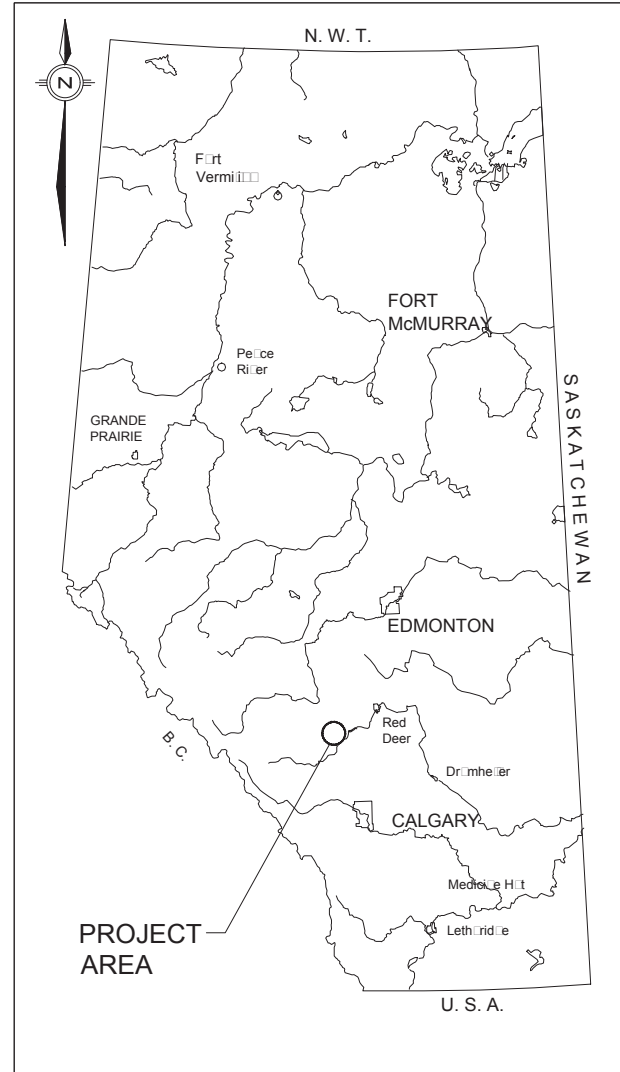


HIGH WATER RELATED MITIGATION WORKS

H734:12 - SITES C30 40.5 km, C37-I 41.8 km , AND C37-II 42.9 km

ISSUED FOR TENDER, TENDER NO. 17035



SITE LOCATION PLAN
1:50,000

DRAWING INDEX

| SHEET | DRAWING NO. | TITLE |
|-------|-------------|---|
| 1 | RD-19281-P | SITE LOCATION PLAN AND DRAWING INDEX |
| 2 | RD-19282-P | H734:12 - SITE C30 40.5 KM: EXISTING CONDITIONS |
| 3 | RD-19283-P | H734:12 - SITE C30 40.5 KM: OVERALL SITE LAYOUT AND CONTRACT LIMITS |
| 4 | RD-19284-P | H734:12 - SITE C30 40.5 KM: ROAD ALIGNMENT AND DRAINAGE - PLAN AND PROFILE |
| 5 | RD-19285-P | H734:12 - SITE C30 40.5 KM: BF83183 CULVERT CROSSING - PLAN |
| 6 | RD-19286-P | H734:12 - SITE C30 40.5 KM: BF83183 CULVERT CROSSING - CROSS-SECTIONS |
| 7 | RD-19287-P | H734:12 - SITE C30 40.5 KM: PRIMARY CHANNEL - PLAN, PROFILE AND SECTION |
| 8 | RD-19287A-P | H734:12 - SITE C37-I 41.8 KM: CULVERT CROSSING - PLAN AND SECTIONS |
| 9 | RD-19287B-P | H734:12 - SITE C37-II 42.9 KM: BF83184 CULVERT CROSSING - PLAN AND SECTIONS |



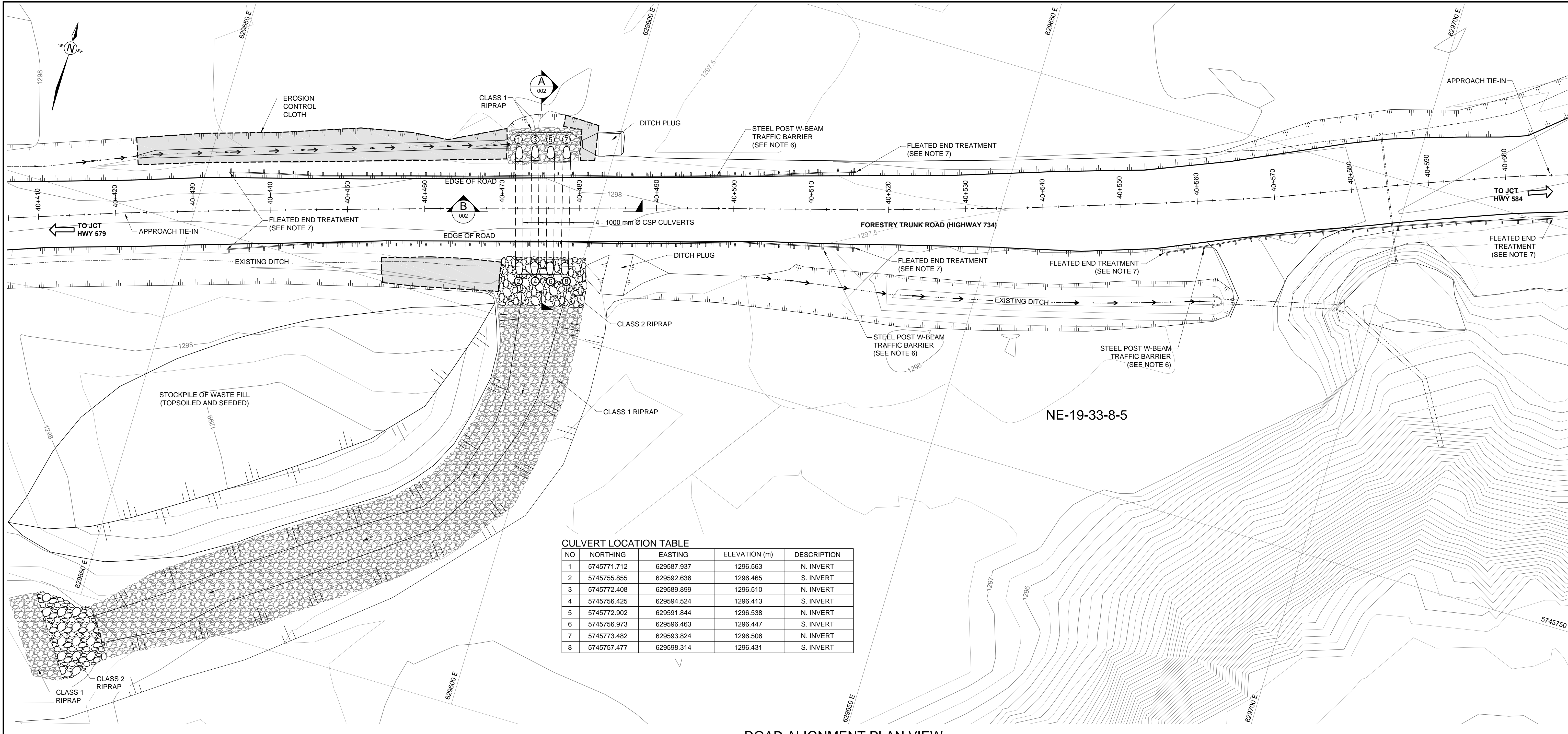
THIS DRAWING MAY HAVE BEEN REDUCED.
ALL SCALE NOTATIONS INDICATED (i.e. 1:1000 etc)
ARE BASED ON 22" X 34" FORMAT DRAWINGS

| | | | | | | |
|-------------------|---|--|--|--|------------------------------|----------------------------------|
| <p>CONSULTANT</p> | <p>PERMIT TO PRACTICE KLOHN CRIPPEN BERGER LTD. PERMIT NUMBER: P 9196</p> <p>The Association of Professional Engineers, Geologists and Geophysicists of Alberta</p> | <p>DESIGNER</p> <p>DATE: September 2, 2015</p> | <p>CHECKER</p> <p>DATE: Sept 2, 2015</p> | <p>2015-09-02</p> | <p>ISSUED FOR TENDER</p> | <p>FD</p> |
| | | | | <p>2015-05-15</p> | <p>ISSUED FOR 95% REVIEW</p> | <p>EC</p> |
| | | | <p>2015-04-07</p> | <p>ISSUED FOR 70% REVIEW</p> | <p>EL</p> | |
| | | | <p>REV</p> | <p>DATE</p> | <p>REVISION</p> | <p>BY</p> |
| | | | <p>DATE</p> <p>2015-09-01</p> | <p>LOCATION</p> <p>NW-29-33-8-5 & NW-19-33-8-5</p> | <p>SITE</p> <p>-</p> | <p>CONTRACT</p> <p>17035</p> |
| | | | | <p>HIGHWAY</p> <p>734:12</p> | <p>SHEET</p> <p>1 OF 9</p> | <p>DRAWING</p> <p>RD-19281-P</p> |



SITE LOCATION PLAN AND DRAWING INDEX

DRAWING 001
 HIGHWAY 734:12
 CONTRACT 17035
 DESCRIPTION H734:12 - SITE C30 40.5 KM: ROAD ALIGNMENT AND DRAINAGE PLAN AND PROFILE
 PHOTO
 DATE
 BY
 SURVEYED
 DEPARTMENT BAR CODE



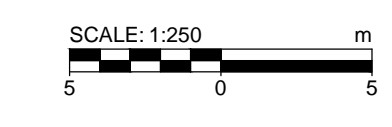
CULVERT LOCATION TABLE

| NO | NORTHING | EASTING | ELEVATION (m) | DESCRIPTION |
|----|-------------|------------|---------------|-------------|
| 1 | 5745771.712 | 629587.937 | 1296.563 | N. INVERT |
| 2 | 5745755.855 | 629592.636 | 1296.465 | S. INVERT |
| 3 | 5745772.408 | 629589.899 | 1296.510 | N. INVERT |
| 4 | 5745756.425 | 629594.524 | 1296.413 | S. INVERT |
| 5 | 5745772.902 | 629591.844 | 1296.538 | N. INVERT |
| 6 | 5745756.973 | 629596.463 | 1296.447 | S. INVERT |
| 7 | 5745773.482 | 629593.824 | 1296.506 | N. INVERT |
| 8 | 5745757.477 | 629598.314 | 1296.431 | S. INVERT |

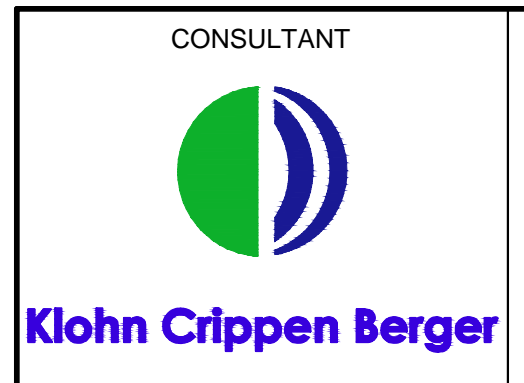
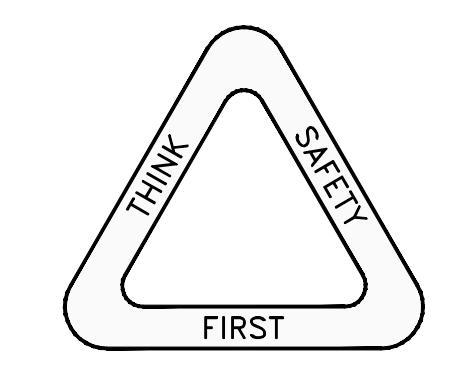
ROAD ALIGNMENT PLAN VIEW
 SCALE 1:250

- NOTES**
- AS CONSTRUCTED SURVEY CONDUCTED BY HAMILTON & OLSEN SURVEYS LTD. IN SEPTEMBER 27, 2016.
 - DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
 - CONTOURS SHOWN GENERATED FROM THE COMBINATION OF LIDAR AND TOPOGRAPHIC SITE SURVEY.
 - COORDINATES IS IN UTM PROJECTION WITH NAD83 DATUM, ZONE 11; CENTRAL MERIDIAN 117d W.
 - CHAINAGE BASED ON SITE LOCATION DISTANCE ALONG HWY 734.
 - TRAFFIC BARRIERS FOR SLIDE 2 HAZARD MITIGATION CONSIST OF STEEL POST W-BEAM SYSTEM (ALBERTA TRANSPORTATION DRAWING TEB 3.09).
 - TRAFFIC BARRIER SYSTEM INCLUDES FLARED ENERGY ABSORBING TERMINAL (FLEAT) END TREATMENT (ALBERTA TRANSPORTATION DRAWING RDG-B1.5).

- LEGEND**
- CONTOUR (0.5 m INTERVAL)
 - CULVERT
 - CLASS 1 RIPRAP
 - CLASS 2 RIPRAP
 - EXTENT OF EROSION CONTROL CLOTH
 - FLOW DIRECTION
 - TRAFFIC BARRIER



THIS DRAWING MAY HAVE BEEN REDUCED.
 ALL SCALE NOTATIONS INDICATED (i.e. 1:1000 etc)
 ARE BASED ON 22" X 34" FORMAT DRAWINGS



DESIGNER
 CHECKER
 DATE
 DATE

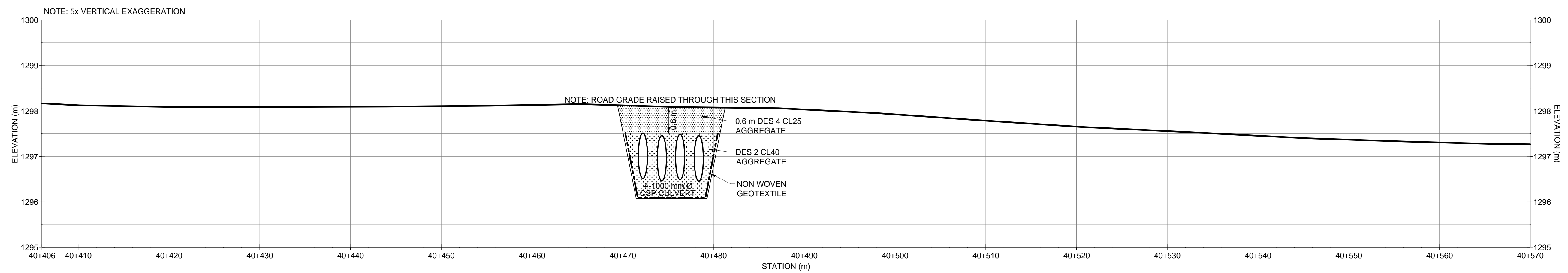
| REV | DATE | REVISION | FD BY |
|-----|------------|-------------------|-------|
| 1 | 2017-01-02 | ISSUED FOR REVIEW | FD |
| | 2015-09-01 | NE-19-33-8-5 | C30 |

Alberta Transportation

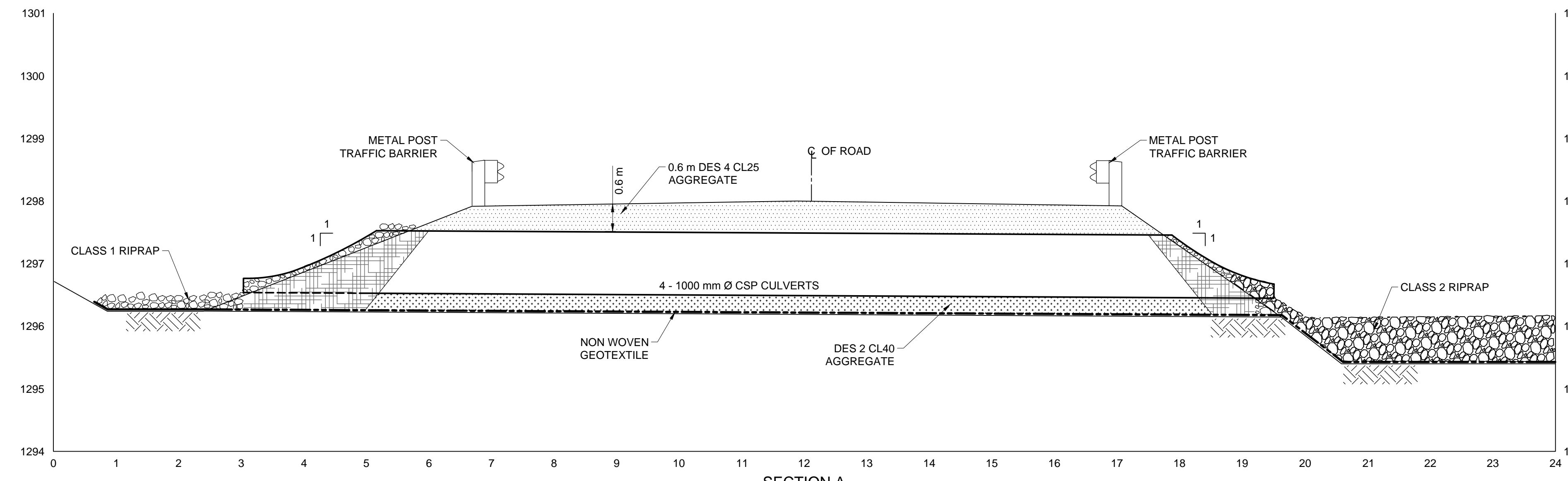
H734:12 - SITE C30 40.5 KM
 BF 83183 ROAD ALIGNMENT AND DRAINAGE PLAN
 RECORD DRAWING

| | | | |
|----------|---------|--------|---------|
| CONTRACT | HIGHWAY | SHEET | DRAWING |
| 17035 | 734:12 | 1 OF 2 | 001 |

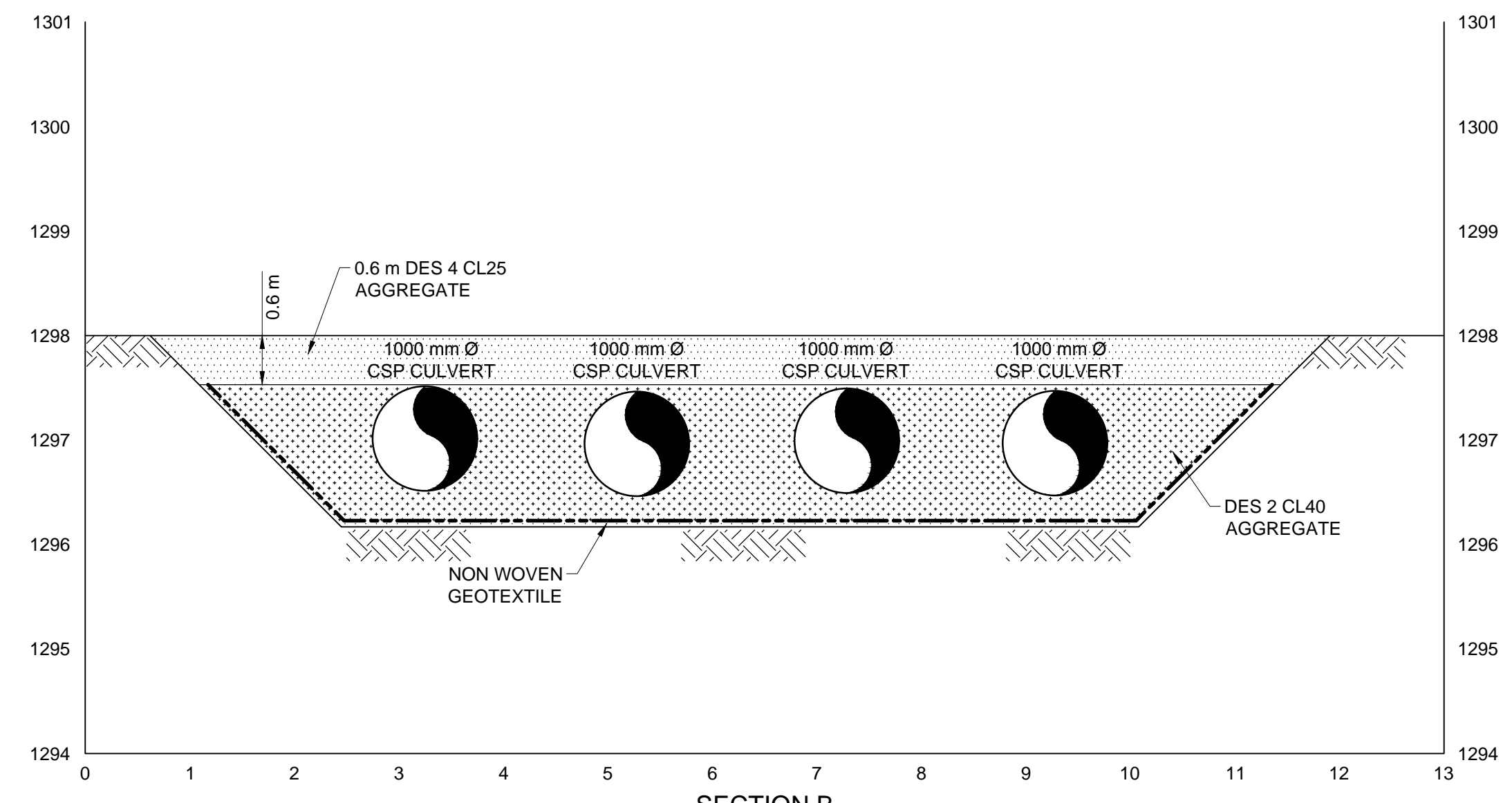
DRAWING 002
 HIGHWAY 734:12
 CONTRACT 17035
 DESCRIPTION H734:12 - SITE C30 40.5 KM: ROAD ALIGNMENT AND DRAINAGE PLAN AND PROFILE
 PHOTO
 DATE
 BY
 SURVEYED
 DEPARTMENT BAR CODE



ROAD ALIGNMENT PROFILE
 SCALE 1:250 (HORIZONTAL)
 1:50 (VERTICAL)

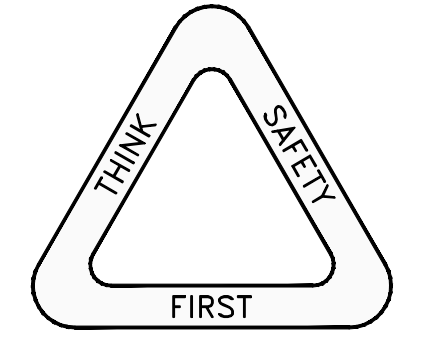
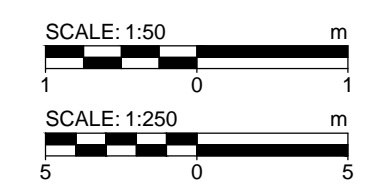


SECTION A
SECTION A
 1:50



SECTION B
SECTION B
 1:50

- NOTES**
1. CONSTRUCTED SURVEY CONDUCTED BY HAMILTON & OLSEN SURVEYS LTD. IN SEPTEMBER 27, 2016.
 2. DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.



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 ARE BASED ON 22" X 34" FORMAT DRAWINGS

| | | | | | | | | | |
|---|----------|---------|----------------------------------|---|----------|---|---------|--------|---------|
| CONSULTANT Klohn Crippen Berger | DESIGNER | CHECKER | 2017-01-02 DATE 2015-09-01 | ISSUED FOR REVIEW REVISION 2015-09-01 | FD BY | Alberta Transportation H734:12 - SITE C30 40.5 KM BF 83183 ROAD ALIGNMENT AND DRAINAGE PROFILE AND CROSS SECTION AS CONSTRUCTED | | | |
| | DATE | DATE | DATE | LOCATION | SITE | CONTRACT | HIGHWAY | SHEET | DRAWING |
| | | | 2015-09-01 | NE-19-33-8-5 | C30 | 17035 | 734:12 | 2 OF 2 | 002 |