ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS GRMP NORTH CENTRAL (ATHABASCA AND FORT McMURRAY DISTRICTS) INSTRUMENTATION MONITORING – FALL 2025

THURBER

Site Number	Location	Name	Hwy	km
NC097	HWY 63:12 L1 0.093	Parsons Creek Interchange	63:12	km 0.09
Legal Description: 12-5-87-10 W6		**UTM Co-ordinates**		
		12V E 473714	N 6293608	

Current Monitoring:	19-Sep-2025	**Previous Monitoring**	27-May-2025
Instruments Read By:	Mr. Niraj Regmi, G.I.T and Mr. Angelo Castillo, of Thurber		

Instruments Read During This Site Visit			
Slope Inclinometers (SIs): SI14-05	**Pneumatic Piezometers (PN):** N/A	**Vibration Wire Piezometers (VW):** PZ14-15, PZ14-19, PZ14-20	**Standpipe Piezometers (SP):** N/A
Load Cell (LC): N/A	**Strain Gauges:** N/A	**SAAs:** N/A	**Others:** **Settlement Cells:** (SC14-09, SC14-12)

Readout Equipment Used			
Slope Inclinometers: RST Digital Inclinometer probe with a 2 ft. wheelbase and an RST Pocket PC readout	**Pneumatic Piezometers:**	**Vibration Wire Piezometers:** RST VW2106 and a GEOKON GK-404 vibrating wire readout	**Standpipe Piezometers:**
Load Cell:	**Strain Gauges:**	**SAAs:**	**Others:** RST VW2106 and a GEOKON GK-404 vibrating wire readout
Notes:			

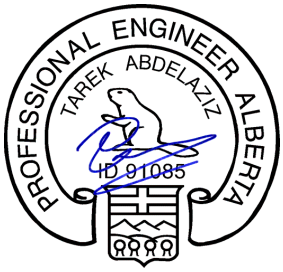
Discussion	
Zones of New Movement:	None
Interpretation of Monitoring Results:	***Parsons Interchange:*** Slope inclinometer SI14-05, installed near the west headslope of the bridge, showed no discernable movement over 1.5 m to 4.6 m depth and a rate of movement of 0.2 mm/yr over 4.6 m to 9.4 m depth since the spring of 2025 readings. PZ14-15, PZ14-19, and PZ14-20 showed increases in groundwater level of 1.41 m, 0.13 m, and 0.01 m respectively since respectively, since they were last read in the spring of 2025. Settlement cells SC14-09 and SC14-12 showed increases in settlement by 3.57 mm and 12.54 mm respectively, compared to the spring of 2025 readings.
Future Work:	The operational instruments at this site should be read again in the spring of 2026.
Instrumentation Repairs:	Consideration should be given to replacing the sheared slope indicators along the HWY 686 Cut slope, allowing for continued monitoring in those locations. Additional instruments should also be installed at the west headslope location to assess the reasons for the ongoing slope movement.
Additional Comments:	

Attachments:	▪ Table NC097-1 Fall 2025 – HWY 63:12 Parsons Creek Interchange, Slope Inclinometer Instrumentation Reading Summary ▪ Table NC097-2 Fall 2025 – HWY 63:12 Parsons Creek Interchange, Vibrating Wire Piezometer Instrumentation Reading Summary ▪ Table NC097-3 Fall 2025 – HWY 63:12 Parsons Creek Interchange, Settlement Gauge Instrumentation Reading Summary ▪ Statement for Use and Interpretation of Report ▪ APPENDIX A – NC097-1 FALL 2025 □ Field Inspector's report □ Site Plan Showing Approximate Instrument Locations (Drawing No. 32122-NC097) □ Parsons Interchange Instruments • SI Reading Plot(s) • Vibrating Wire Piezometer Plots (Figures PZ1 through PZ2) • Vibrating Wire Settlement Cell Plots (Figures SC1 through SC2)

We trust this report meets your requirements at present. If you have any questions, please contact the undersigned at your convenience.

Yours very truly,
Thurber Engineering Ltd.
Tarek Abdelaziz, Ph.D., P. Eng.
Partner | Senior Geotechnical Engineer

November 12, 2025



November 12 2025

PERMIT TO PRACTICE
THURBER ENGINEERING LTD.
RM SIGNATURE: _____
RM APEGA ID #: 91085
DATE: November 12, 2025
PERMIT NUMBER: P005186
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Yasir Khan, E.I.T.
Geotechnical Engineer-In-Training

Table NC097-1: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Slope Inclinometer Instrumentation Reading Summary

Date Monitored: September 19, 2025

INSTRUMENT #	DATE INITIALIZED	TOTAL CUMULATIVE RESULTANT MOVEMENT AND DEPTH OF MOVEMENT TO DATE (mm)	MAXIMUM RATE OF MOVEMENT (mm/yr)	CURRENT STATUS OF SI	DATE OF PREVIOUS READING	INCREMENTAL MOVEMENT SINCE PREVIOUS READING (mm)	CURRENT RATE OF MOVEMENT (mm/yr)	CHANGE IN RATE OF MOVEMENT SINCE PREVIOUS READING (mm/yr)
Parsons Interchange								
SI14-05	August 27, 2014	75.0 mm over 1.5 m to 4.6 m in 98° direction	99.0 on May 28, 2015	Operational	May 27, 2025	*No Discernable Movement*	*N/A*	-3.5
		103.4 mm over 4.6 m to 9.4 m in 98° direction	66.2 on October 15, 2014			0.1	0.2	-0.8
SI15-14	May 16, 2015	89.5 over 3.4 m to 12.5 m in 355° direction	877.9 June 22, 2015	Operational	May 27, 2025	*N/A*	*N/A*	*N/A*
HWY 686 Cut Slope								
SI14-09A	May 6, 2014	19.2 over 19.5 m to 22.6 m in 130° direction	26.9 on October 27, 2014	Operational	May 27, 2025	*N/A*	*N/A*	*N/A*
SI14-11	*August 27, 2014*	*41.9 over 4.6 m to 5.8 m in 145° direction*	*34.4 on September 19, 2014*	*Sheared at 4.9 m below top of casing*	*June 26, 2021*	*N/A*	*N/A*	*N/A*
SI14-13	*August 24, 2014*	*45.3 over 10.1 m to 11.3 m in 28° direction*	*25.4 on October 9, 2014*	*Sheared at 10.4 m below top of casing*	*June 9, 2024*	*N/A*	*N/A*	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-1 – Continued: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Slope Inclinometer Instrumentation Reading Summary

Date Monitored: Not Monitored.

INSTRUMENT #	DATE INITIALIZED	TOTAL CUMULATIVE RESULTANT MOVEMENT AND DEPTH OF MOVEMENT TO DATE (mm)	MAXIMUM RATE OF MOVEMENT (mm/yr)	CURRENT STATUS OF SI	DATE OF PREVIOUS READING	INCREMENTAL MOVEMENT SINCE PREVIOUS READING (mm)	CURRENT RATE OF MOVEMENT (mm/yr)	CHANGE IN RATE OF MOVEMENT SINCE PREVIOUS READING (mm/yr)
HWY 686 Cut Slope - Continued								
SI14-14	*August 24, 2014*	*49.4 over 4.0 m to 5.8 m in 354° direction*	*35.6 on September 19, 2014*	*Sheared at 4.9 m below top of casing*	*June 9, 2024*	*N/A*	*N/A*	*N/A*
		23.4 over 9.4 m to 11.3 m in 354° direction	*12.1 on September 19, 2014*			*N/A*	*N/A*	*N/A*
SI14-16	*August 25, 2014*	*48.8 over 11.9 m to 13.7 m in 138° direction*	*46.9 on September 19, 2014*	*Sheared at 12.8 m below top of casing*	*September 24, 2020*	*N/A*	*N/A*	*N/A*
SI14-18	*April 4, 2014*	*16.2 over 13.1 m to 14.3 m in 26° direction*	*13.0 on September 24, 2020*	*Sheared at 2.7 m below top of casing*	*June 26, 2021*	*N/A*	*N/A*	*N/A*
		13.0 over 27.7 m to 29.6 m in 26° direction	*14.3 on July 16, 2015*			*N/A*	*N/A*	*N/A*
SI14-19	*April 2, 2014*	*63.8 over 5.8 m to 7.6 m in 32° direction*	*32.0 on August 24, 2014*	*Sheared at 6.7 m below top of casing*	*June 9, 2024*	*N/A*	*N/A*	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-1 – Continued: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Slope Inclinometer Instrumentation Reading Summary

Date Monitored: Not Monitored.

INSTRUMENT #	DATE INITIALIZED	TOTAL CUMULATIVE RESULTANT MOVEMENT AND DEPTH OF MOVEMENT TO DATE (mm)	MAXIMUM RATE OF MOVEMENT (mm/yr)	CURRENT STATUS OF SI	DATE OF PREVIOUS READING	INCREMENTAL MOVEMENT SINCE PREVIOUS READING (mm)	CURRENT RATE OF MOVEMENT (mm/yr)	CHANGE IN RATE OF MOVEMENT SINCE PREVIOUS READING (mm/yr)
HWY 686 Cut Slope - Continued								
SI15-21	*October 1, 2015*	*87.9 over 2.7 m to 5.2 m in 12° direction*	*82.5 on September 25, 2020*	*Sheared at 3.0 m below top of casing*	*September 25, 2020*	*N/A*	*N/A*	*N/A*
		21.3 over 6.4 m to 8.2 m in 12° direction	*30.9 on October 9, 2015*			*N/A*	*N/A*	*N/A*
		3.6 over 9.4 m to 11.3 m in 12° direction	*8.0 on October 9, 2015*			*N/A*	*N/A*	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

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Table NC097-2: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Vibrating Wire Piezometer Instrumentation Reading Summary

Date Monitored: September 19, 2025

INSTRUMENT #	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEV. (m)	CURRENT GROUNDWATER ELEV. (m)	PREVIOUS GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
Parsons Interchange								
PZ14-15 (30825)	December 1, 2014	247.78	258.75	Operational	260.92 on June 28, 2015	254.18	252.77	1.41
PZ14-19 (30827)	November 27, 2014	246.35	258.24	Operational	260.97 on June 28, 2015	252.65	252.52	0.13
PZ14-20 (30828)	November 27, 2014	253.67	258.24	Operational	262.41 on August 15, 2015	253.76	253.75	0.01
PZ15-03 (31641)	February 6, 2015	256.83	259.35	Operational	261.31 on June 29, 2015	*N/A*	DRY	*N/A*
PZ15-04 (31642)	February 6, 2015	247.08	259.35	Operational	260.58 on June 29, 2015	*N/A*	251.93	*N/A*
PZ15-05 (30959)	January 25,2015	258.61	262.27	Operational	268.65 on August 28, 2015	*N/A*	262.21	*N/A*
PZ15-06 (30960)	January 25, 2015	251.60	262.27	Operational	267.25 on August 28, 2015	*N/A*	259.31	*N/A*
PZ15-07 (30961)	January 22, 2015	257.73	262.30	Operational	269.68 on August 23, 2015	*N/A*	262.26	*N/A*
PZ15-09 (30855)	January 21, 2015	257.72	260.16	Operational	269.03 on June 28, 2015	*N/A*	DRY	*N/A*
PZ15-10 (30956)	January 21, 2017	254.06	260.16	Operational	272.21 on August 18, 2015	*N/A*	255.87	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-2 – Continued: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Vibrating Wire Piezometer Instrumentation Reading Summary

Date Monitored: Not Monitored.

INSTRUMENT #	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEV. (m)	CURRENT GROUNDWATER ELEV. (m)	PREVIOUS GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
HWY 686 Cut Slope								
PZ14-28a (28239)	April 29, 2014	323.28	333.43	Operational	325.05 on November 11, 2014	*N/A*	324.06	*N/A*
PZ14-29a (28240)	April 29, 2014	313.62	333.43	Operational	315.24 on August 29, 2014	*N/A*	314.37	*N/A*
PZ14-30a (28241)	April 29, 2014	307.06	333.43	Operational	310.70 on June 9, 2024	*N/A*	310.69	*N/A*
PZ14-31 (29840)	*August 25, 2014*	*307.96*	*324.11*	*Damaged*	*315.24 on February 15, 2015*	*N/A*	*N/A*	*N/A*
PZ14-32 (29847)	*August 25, 2014*	*314.06*	*324.11*	*Damaged*	*316.44 on October 8, 2014*	*N/A*	*N/A*	*N/A*
PZ14-33 (29841)	August 25, 2014	307.03	314.03	Operational	310.75 on June 9, 2024	*N/A*	310.25	*N/A*
PZ14-34 (21878)	April 2, 2014	326.35	335.86	Operational	328.43 on October 8, 2014	*N/A*	326.18	*N/A*
PZ14-35 (21879)	April 2, 2014	316.23	335.86	Operational	322.26 on May 28, 2023	*N/A*	319.74	*N/A*
PZ14-36 (28235)	April 2, 2014	306.78	335.86	Operational	322.18 on May 28, 2023	*N/A*	319.66	*N/A*
PZ14-37 (29842)	August 23, 2014	314.33	324.33	Operational	318.17 on September 25, 2020	*N/A*	314.69	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-2 – Continued: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Vibrating Wire Piezometer Instrumentation Reading Summary

Date Monitored: Not Monitored.

INSTRUMENT #	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEV. (m)	CURRENT GROUNDWATER ELEV. (m)	PREVIOUS GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
HWY 686 Cut Slope - Continued								
PZ14-38 (29848)	August 23, 2014	308.23	324.33	Operational	311.62 on May 29, 2020	*N/A*	307.98	*N/A*
PZ14-39 (29843)	August 24, 2014	304.29	314.29	Operational	308.30 on October 8, 2014	*N/A*	304.38	*N/A*
PZ14-40 (18140)	April 3, 2014	321.72	331.90	Operational	331.26 on June 9, 2024	*N/A*	330.29	*N/A*
PZ14-41 (21880)	April 3, 2014	314.10	331.90	Operational	322.24 on June 28, 2015	*N/A*	314.22	*N/A*
PZ14-42 (28244)	April 3, 2014	296.42	331.90	Operational	296.35 on March 16, 2017	*N/A*	DRY	*N/A*
PZ14-43 (29844)	August 25, 2014	303.99	313.99	Operational	304.48 on September 25, 2020	*N/A*	DRY	*N/A*
PZ14-45 (29845)	*August 25, 2014*	*296.03*	*304.03*	*Damaged*	*296.82 on September 25, 2020*	*N/A*	*N/A*	*N/A*
PZ14-46 (28236)	April 3, 2014	317.46	330.67	Operational	318.83 on September 24, 2020	*N/A*	317.71	*N/A*
PZ14-47 (28237)	April 3, 2014	311.36	330.67	Operational	313.26 on September 24, 2020	*N/A*	312.29	*N/A*
PZ14-48 (28238)	April 3, 2014	295.81	330.67	Operational	300.15 on August 29, 2014	*N/A*	DRY	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-2 – Continued: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Vibrating Wire Piezometer Instrumentation Reading Summary

Date Monitored: Not Monitored.

INSTRUMENT #	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEV. (m)	CURRENT GROUNDWATER ELEV. (m)	PREVIOUS GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
HWY 686 Cut Slope - Continued								
PZ14-49 (17575)	April 1, 2014	300.40	308.45	Operational	305.57 on May 27, 2025	*N/A*	305.57	*N/A*
PZ14-50 (18817)	April 1, 2014	294.61	308.45	Operational	297.86 May 27, 2025	*N/A*	297.86	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

Table NC097-3: Fall 2025 – Hwy 63:12 Parsons Creek Interchange Settlement Gauge Instrumentation Reading Summary

Date Monitored: September 19, 2025

INSTRUMENT #	DATE INITIALIZED	CURRENT STATUS	CURRENT SETTLEMENT (mm)	PREVIOUS SETTLEMENT (mm)	CHANGE IN SETTLEMENT (mm) (1)
Parsons Interchange					
SC14-09	November 27, 2014	Operational	-903.88	-900.31	3.57
SC14-12	November 27, 2014	Operational	-1237.96	-1225.42	12.54
SC15-04	January 25, 2015	Operational	*N/A*	-942.44	*N/A*
SC15-06	January 22, 2015	Operational	*N/A*	-1425.10	*N/A*

Drawing 32122-NC097 in Appendix A provides a sketch of the approximate location of the monitoring instrumentation for this site.

(1) Negative (-) change in settlement indicates upward movement (heave) of the ground surface and positive (+) change in settlement indicates downward movement (settlement) of the ground surface.

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THURBER

STATEMENT FOR USE AND INTERPRETATION OF REPORT

1. STANDARD OF CARE

This Report has been prepared in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality and in compliance with all applicable laws.

2. COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment, including this Statement For Use and Interpretation of Report, are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to Thurber by the Client, communications between Thurber and the Client, and any other reports, proposals or documents prepared by Thurber for the Client relative to the specific site described herein, all of which together constitute the Report.

IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT, AS DESCRIBED ABOVE. THURBER IS NOT RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TOTHE WHOLE OF THE REPORT.

3. BASIS OF REPORT

The Report has been prepared for the specific site, development, design objectives, and purposes that were described to Thurber by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the Report, subject to the limitations provided herein, are only valid to the extent that the Report expressly addresses proposed development, design objectives and purposes, and then only to the extent that there has been no material alteration to or variation from any of the said descriptions provided to Thurber, unless Thurber is specifically requested by the Client to review and revise the Report in light of such alteration or variation.

4. USE OF THE REPORT

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client for the development, design objectives, and/or purposes described to Thurber by the Client. **NO OTHER PARTY MAY USE OR RELY ON THE REPORT OR ANY PORTION THEREOF FOR OTHER THAN THE CLIENT'S BENEFIT IN CONNECTION WITH THE PURPOSES DESCRIBED IN THE REPORT**. Any use which a third party makes of the Report is the sole responsibility of such third party and is always subject to this Statement for Use and Interpretation of Report. Thurber accepts no liability or responsibility for damages suffered by any third party resulting from use of the Report for purposes outside the reasonable contemplation of Thurber at the time it was prepared or in any manner unintended by Thurber.

5. INTERPRETATION OF THE REPORT

a) **Nature and Exactness of Soil and Contaminant Description:** Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors is inherently judgement-based. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled. Actual conditions may vary significantly between the points investigated and the Client and all other parties making use of such documents or records with or without our express written consent need to be aware of this risk and the Report is delivered subject to the express condition that such risk is accepted by the Client and such other parties. Some conditions are subject to change over time and those making use of the Report need to be aware of this possibility and understand that the Report only presents the interpreted conditions at the sampled points at the time of sampling. If special concerns exist, or the Client has special considerations or requirements, the Client must disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.

b) **Reliance on Provided Information:** The evaluation and conclusions contained in the Report have been prepared based on conditions in evidence at the time of site inspections and based on information provided to Thurber. Thurber has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, Thurber does not accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report resulting from misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other parties providing information relied on by Thurber. Thurber is entitled to rely on such representations, information and instructions and is not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.

c) **Design Services:** The Report may form part of design and construction documents for information purposes even though it may have been issued prior to final design being completed. Thurber is recommended to be retained to review final design, project plans and related documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the Report's recommendations and the final design need to be reported to Thurber immediately so that Thurber can address potential conflicts.

d) **Construction Services:** During construction Thurber should be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions to confirm and document that the site conditions do not materially differ from those conditions considered in the preparation of the report. Adequate field reviews are necessary for Thurber to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

6. INDEPENDENT JUDGEMENTS OF CLIENT

The information, interpretations and conclusions in the Report are based on Thurber's interpretation of conditions revealed through limited investigation conducted within a defined scope of services. Thurber does not accept responsibility for independent conclusions, interpretations, interpolations and/or decisions of the Client, or other parties who may come into possession of the Report, or any part thereof, which may be based on information contained in the Report. This restriction of liability includes, but is not limited to, decisions made to develop, purchase, or sell land, unless such decisions expressly form part of the stated purpose of the Report as described in Paragraph 3.

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ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS GRMP (CON0022163)
NORTH CENTRAL (ATHABASCA AND FORT McMURRAY DISTRICTS)
INSTRUMENTATION MONITORING RESULTS

FALL 2025

APPENDIX A
DATA PRESENTATION

SITE NC097: HWY 63:12 PARSONS CREEK INTERCHANGE

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS
NORTH CENTRAL REGION - ATHABASCA AND FORT McMURRAY DISTRICTS
INSTRUMENTATION MONITORING FIELD SUMMARY (NC097)
FALL 2025

Location:	Parsons Creek Interchange (Hwy 63:12 L1 0.093)	**Readout:**	
File Number:	32122	**Diameter**	2.75"/3.34"
Probe:	RST SET 8R	**Temp:**	
Cable:	RST SET 8R	**Read by:**	NKR/AFC

SLOPE INCLINOMETER (SI) READINGS

SI#	GPS Location 3TM EBA Scaled		Date	Stickup (m)	Depth from top of Casing (ft)	Azimuth of A+ Groove	Current Bottom Depth Readings				Probe/ Reel #	Size (")	Remarks
	Northing	Easting					A+	A-	B+	B-			
Parsons Interchange													
SI14-05	6296408	-26266	19-Sep-25	1.1	30 to 6	85	-91	101	-492	500	8R/8R	3.34	
SI15-14	6296510	-26349		1.15	46 to 4	322	1672	-1704	-323	328	8R/8R	2.75	Do not read Fall 2025
HWY 686 Cut Slope													
SI14-09A	6296436	-27145		0.91	89 to 5	132	-151	158	297	-298	8R/8R	3.34	Do not read Fall 2025
SI14-13	6296181	-27073		1.04	54 to 6	30	-414	425	467	-491	8R/8R	3.34	Sheared off at 34.0ft
SI14-14	6296236	-27082		1	36 to 6	356	819	-809	198	207	8R/8R	3.34	Sheared off at 16.0ft
SI14-19	6296200	-26857		2.23	52 to 6	349	9	9	96	-100	8R/8R	3.34	Sheared off at 22 ft

INSPECTOR REPORT

SI14-13 Probe does not go down past 34.0ft
SI14-14 Sheared off at 16.0 ft, first pass was ok , second pass probe did not go past 16 ft.
SI 14-19 Probe does not go past 22 ft. Sheared off at 22 ft.

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS
NORTH CENTRAL REGION - ATHABASCA AND FORT McMURRAY DISTRICTS
INSTRUMENTATION MONITORING FIELD SUMMARY (NC097)
FALL 2025

Location: Parsons Creek Interchange (Hwy 63:12 L1 0.093)
File Number: 32122

Readout: GK404, SN 364
Temp:
Read by: NKR/AFC

VIBRATING WIRE PIEZOMETER (VW) READINGS

VW#	Date	Reading		Identification	Monitoring	Datalogger	3TM EBA Scaled		Comment
		B Unit	Temp.	Number	Station	Serial	Northing	Easting	
Parsons Interchange									
PZ14-15	19-Sep-25	8351.1	7.6	30825	MS-09	4123	6296421	-26343	Read fall 2025
PZ14-19	19-Sep-25	8424.9	-	30827	MS-09	4123	6296421	-26343	Read fall 2025
PZ14-20	19-Sep-25	8892.4	4.2	30828	MS-09	4123	6296421	-26343	Read fall 2025
PZ15-03		8902.6	4.3	31641	MS-08	3881	6296343	-26371	Do not read Fall 2025
PZ15-04		8428.1	5.4	31642	MS-08	3881	6296343	-26371	Do not read Fall 2025
PZ15-05		8522.0	5.7	30959	MS-08	3881	6296365	-26435	Do not read Fall 2025
PZ15-06		8203.6	5.0	30960	MS-08	3882	6296365	-36435	Do not read Fall 2025
PZ15-07		8413.7	5.0	30961	MS-08	3882	6296365	-26435	Do not read Fall 2025
PZ15-09		8902.6	4.3	30955	MS-09	4002	6296443	-26415	Do not read Fall 2025
PZ15-10		8827.6	-	30956	MS-09	4002	6296443	-26415	Do not read Fall 2025

INSPECTOR REPORT

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS
NORTH CENTRAL REGION - ATHABASCA AND FORT McMURRAY DISTRICTS
INSTRUMENTATION MONITORING FIELD SUMMARY (NC097)
FALL 2025

Location: Parsons Creek Interchange (Hwy 63:12 L1 0.093)
File Number: 32122
Readout: GK404, SN 364
Temp (deg C):
Read by: NKR/AFC

VIBRATING WIRE PIEZOMETER (VW) READINGS

VW#	Date	Reading		Identification	3TM EBA Scaled		Comment
		B Unit	Temp.	Number	Northing	Easting	
HWY 686 Cut Slope							
PZ14-28a		8949.3	4.1	28239	6296436	-27145	Do not read Fall 2025
PZ14-29a		8801.4	3.4	28240	6296436	-27145	Do not read Fall 2025
PZ14-30a		8757.2	3.3	28241	6296436	-27145	Do not read Fall 2025
PZ14-33		8737.1	4.6	29841	6296338	-27090	Do not read Fall 2025
PZ14-34		8783.7	4.1	21878	6296113	-27056	Do not read Fall 2025
PZ14-35		8468.5	3.8	21879	6296113	-27056	Do not read Fall 2025
PZ14-36		7789.8	3.7	28235	6296113	-27056	Do not read Fall 2025
PZ14-37		8859.6	3.7	29842	6296181	-27073	Do not read Fall 2025
PZ14-38		8910.8	3.8	29848	6296181	-27073	Do not read Fall 2025
PZ14-39		9010.9	3.8	29843	6296236	-27082	Do not read Fall 2025
PZ14-40		8307.7	4.6	18140	6296538	-26935	Do not read Fall 2025
PZ14-41		8608.6	3.9	21880	6296538	-26935	Do not read Fall 2025
PZ14-42		8857.6	3.7	28244	6296538	-26935	Do not read Fall 2025
PZ14-43		8938.1	4.9	29844	6296434	-26914	Do not read Fall 2025
PZ14-46		8926.6	3.8	28236	6296077	-26851	Do not read Fall 2025
PZ14-47		8654.4	3.3	28237	6296077	-26851	Do not read Fall 2025
PZ14-48		9086.1	3.1	28238	6296077	-26851	Do not read Fall 2025
PZ14-49		8309.2	5.8	17575	6296200	-26857	Do not read Fall 2025
PZ14-50		8495.6	4	18817	6296200	-26857	Do not read Fall 2025

INSPECTOR REPORT

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS
NORTH CENTRAL REGION - ATHABASCA AND FORT McMURRAY DISTRICTS
INSTRUMENTATION MONITORING FIELD SUMMARY (NC097)
FALL 2025

Location: Parsons Creek Interchange (Hwy 63:12 L1 0.093)
File Number: 32122

Readout: GK404, SN 364
Temp:
Read by: NKR/AFC

SETTLEMENT CELL READINGS

SC#	Date	Reading		Identification Number	Monitoring Station	Datalogger Serial	3TM EBA Scaled		Comment
		B Unit	Temp.				Northing	Easting	
Parsons Interchange									
SC14-09	19-Sep-25	7642.7	4.9	1426083	MS-09	4002	6296382	-26336	Read fall 2025
SC14-12	19-Sep-25	7452.7	4.9	1426084	MS-09	4001	6296421	-26343	Read fall 2025
SC15-04		7496.7	4.7	1426091	MS-08	3881	6296365	-26435	Do not read Fall 2025
SC15-06		7384.8	4.0	1426092	MS-08	3882	6296404	-26442	Do not read Fall 2025

INSPECTOR REPORT

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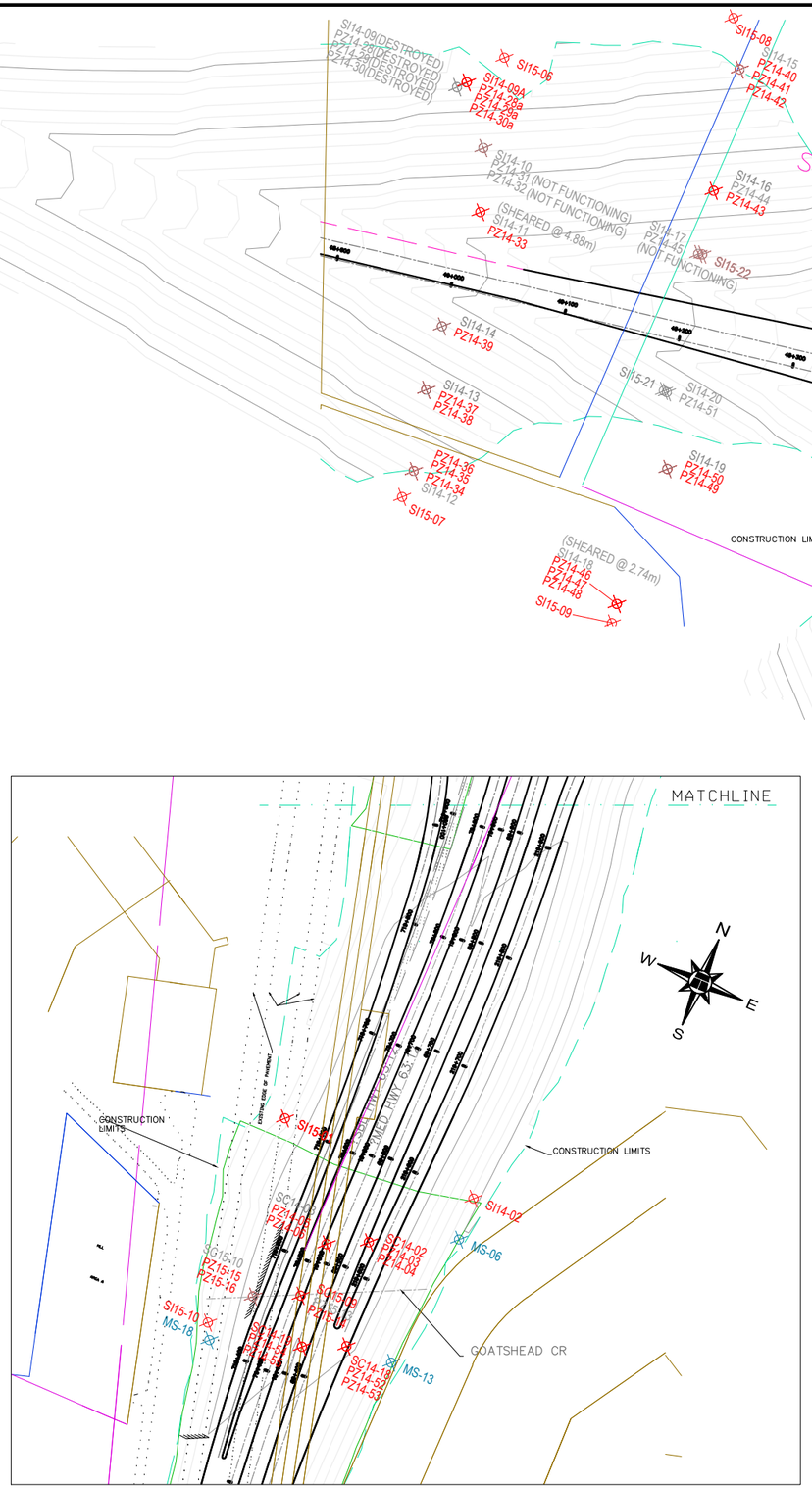
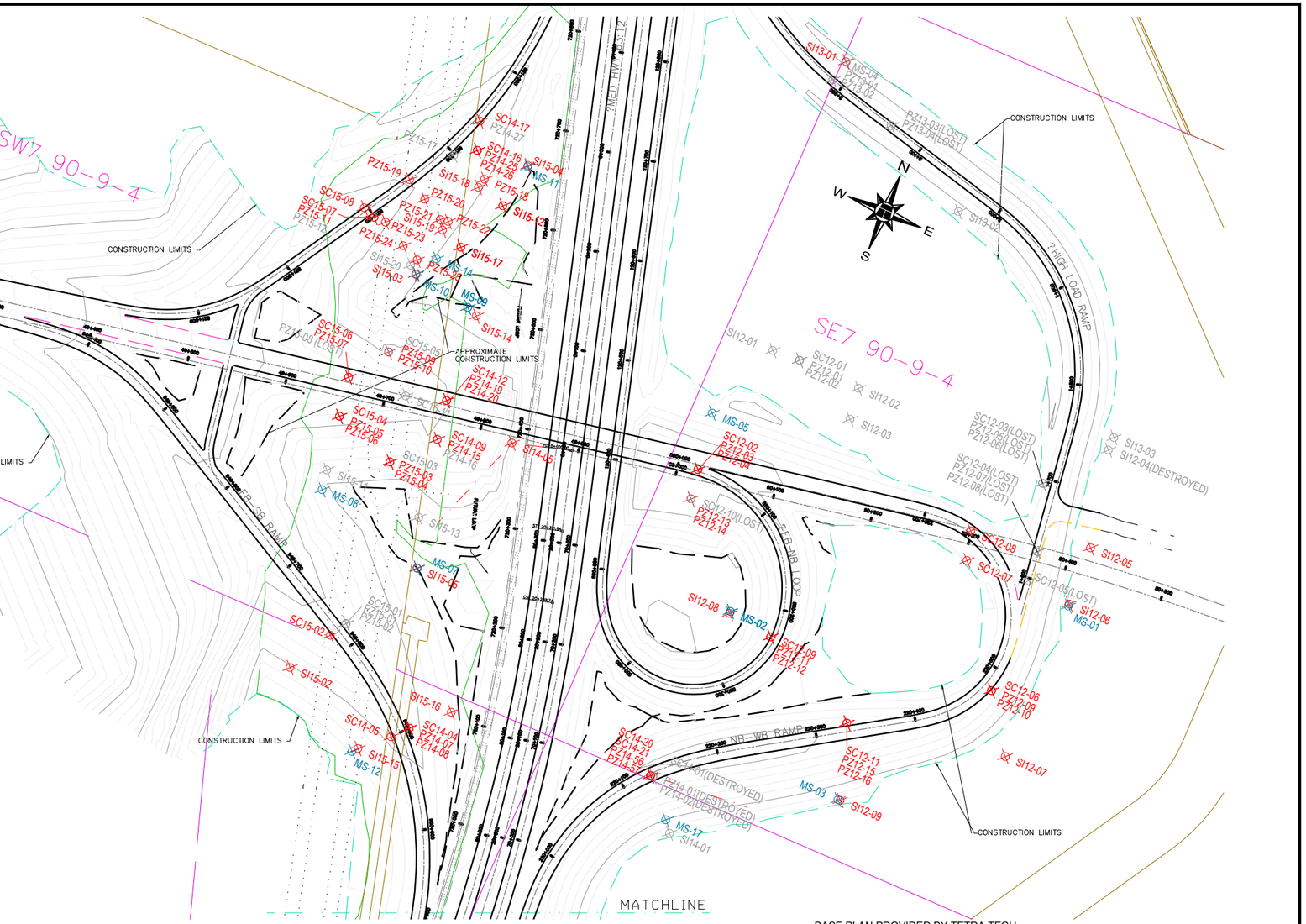




LEGEND

⊠	APPROXIMATE INSTRUMENT LOCATION
SI	STANDPIPE PIEZOMETER
SC	SETTLEMENT CELL
PZ	VIBRATING WIRE PIEZOMETER
MS	MONITORING STATION

0 50 100 150 200 250 300m

SCALE 1:5000

BASE PLAN PROVIDED BY TETRA TECH

Alberta Transportation

NORTH CENTRAL (ATHABASCA AND FORT MCMURRAY DISTRICTS)

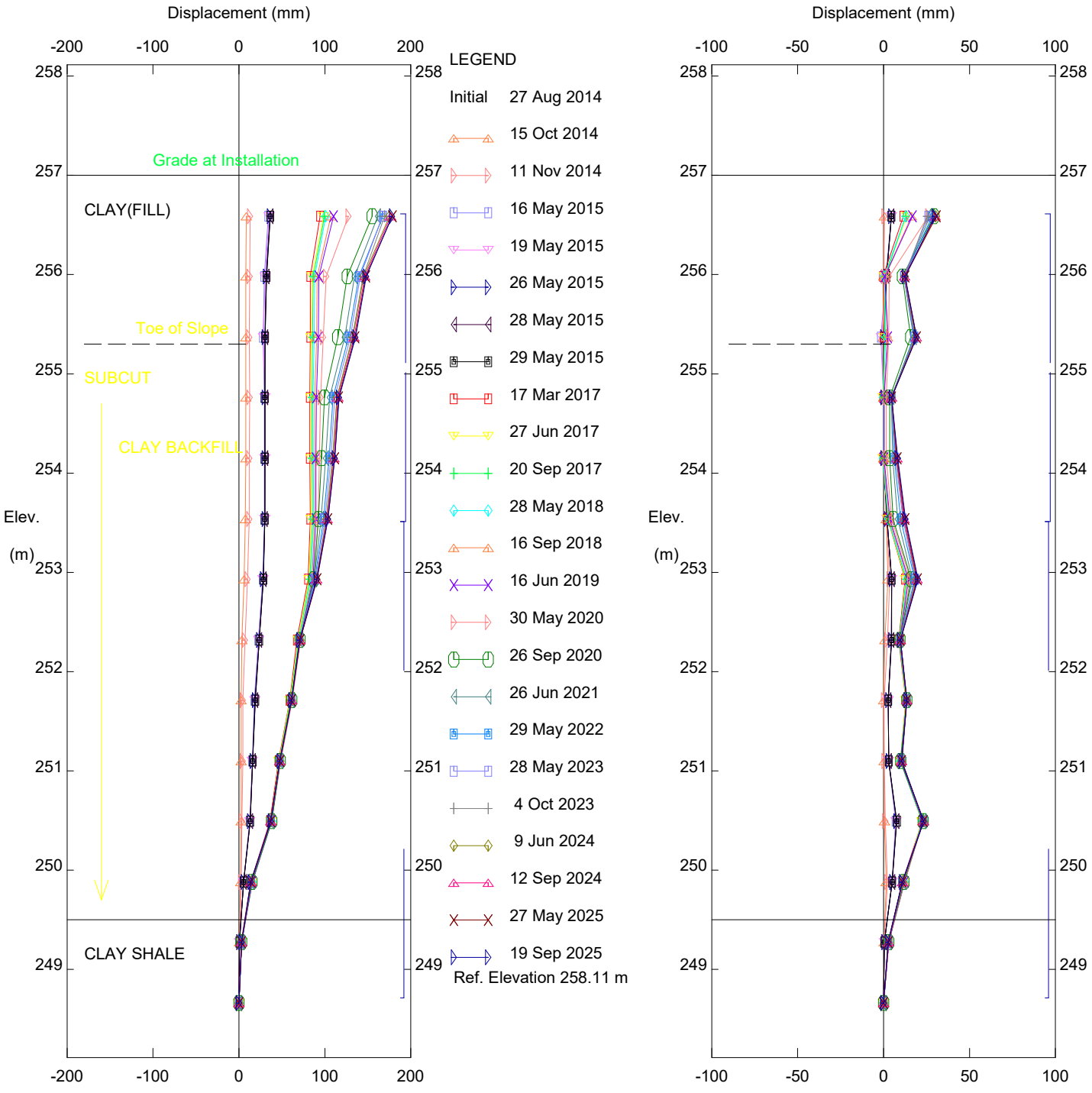
NC097: HWY 63:12 PARSONS CREEK INTERCHANGE SITE PLAN SHOWING INSTRUMENT LOCATIONS

DWG No. 32122-NC097

DRAWN BY	CF
DESIGNED BY	BWN
APPROVED BY	TSA
SCALE	1:5000
DATE	JUNE 2025
FILE No.	32122

THURBER

Thurber Engineering - Edmonton



Cumulative Displacement

Direction A

Incremental Displacement

Direction A

Hwy 686, 49+833.7 o/s +6.6m, Inclinometer SI14-05

Alberta Transportation

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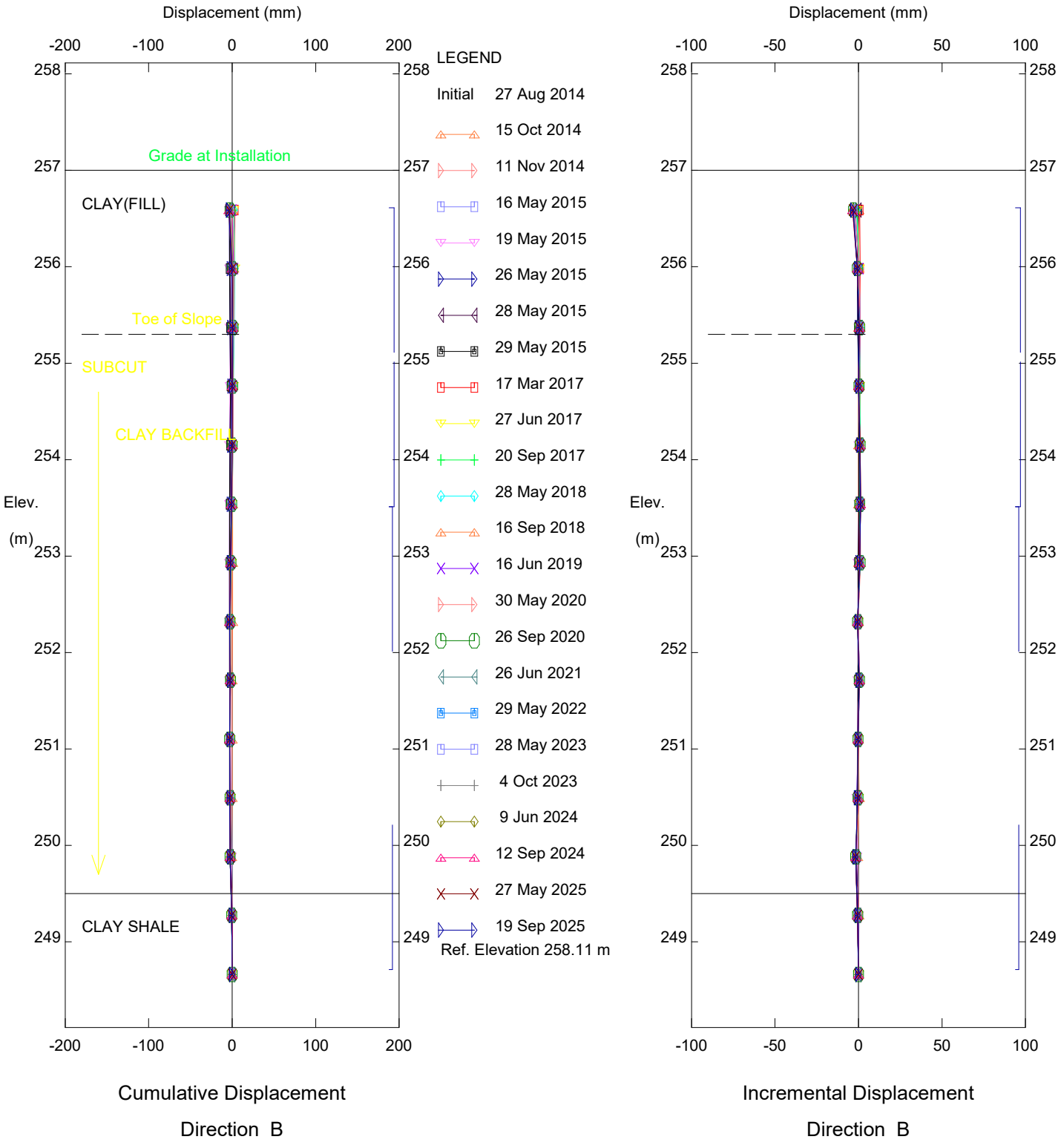
Thurber Engineering - Edmonton



Cumulative Displacement

Direction B

Incremental Displacement

Direction B

Hwy 686, 49+833.7 o/s +6.6m, Inclinometer SI14-05

Alberta Transportation

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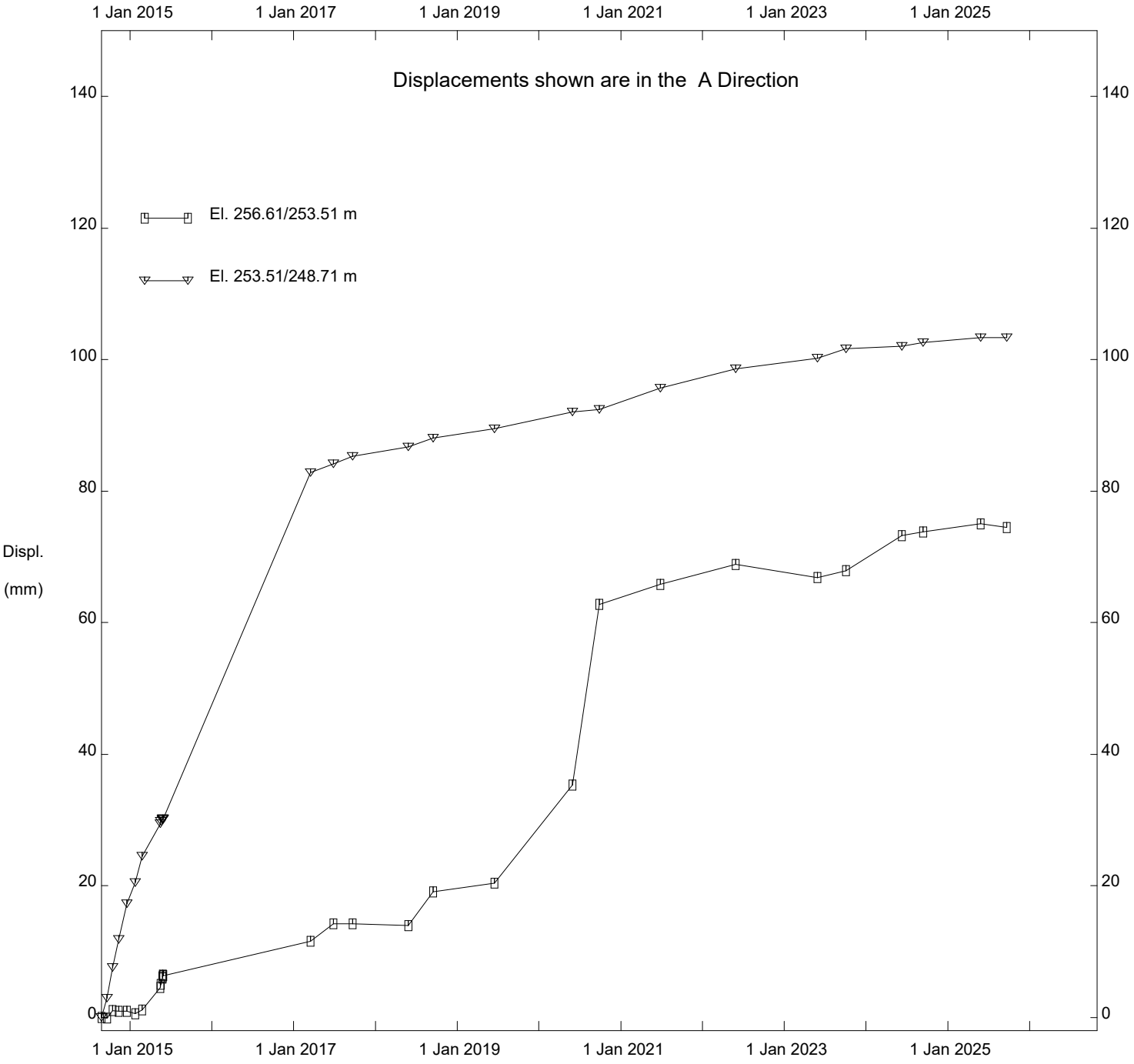
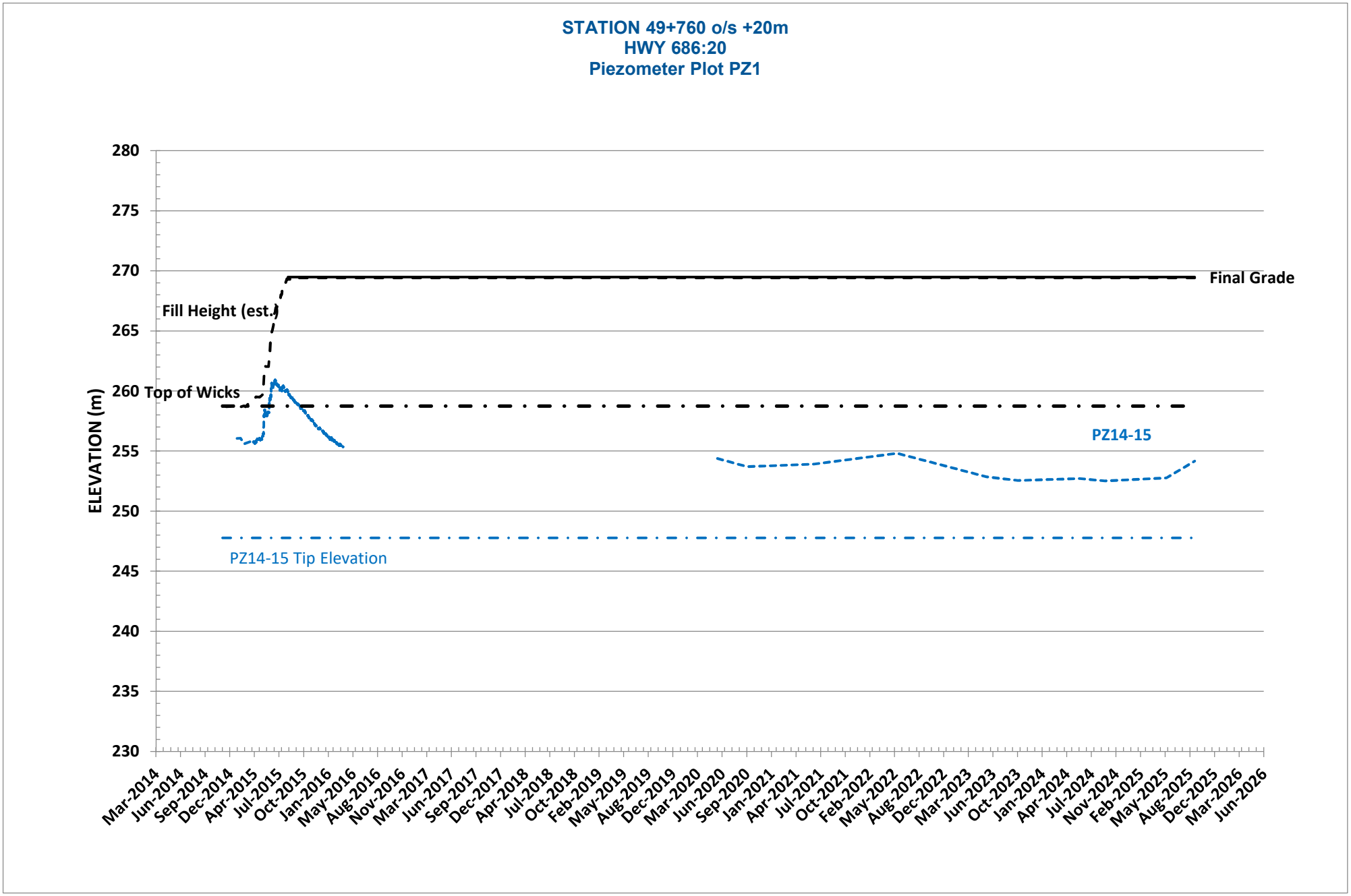
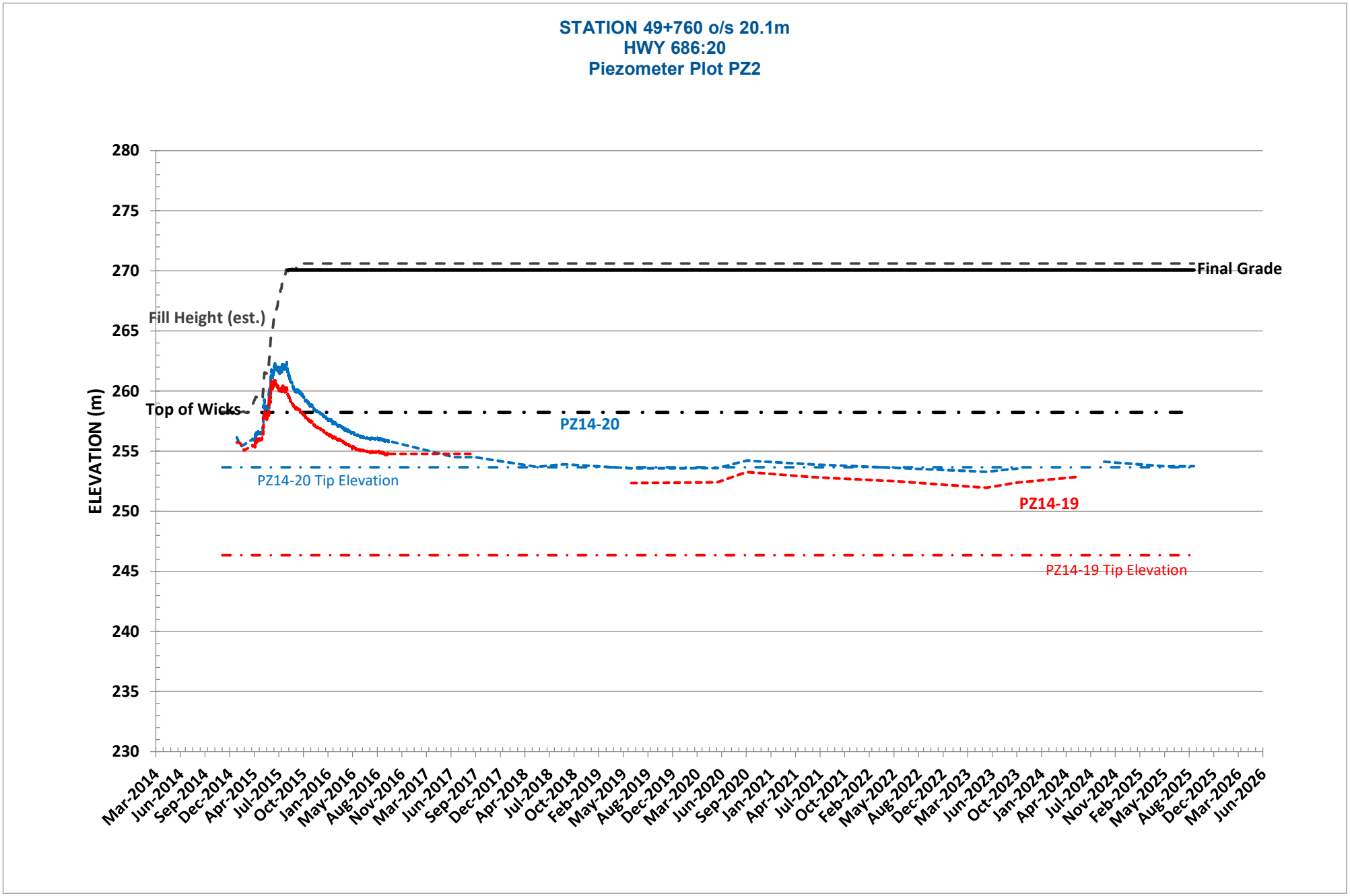
Thurber Engineering - Edmonton



Hwy 686, 49+833.7 o/s +6.6m, Inclinometer SI14-05

Alberta Transportation


STATION 49+760 o/s +20m
HWY 686:20
Piezometer Plot PZ1
ELEVATION (m)
280
275
270
265
260
255
250
245
240
235
230
Final Grade
Fill Height (est.)
Top of Wicks
PZ14-15
PZ14-15 Tip Elevation
Mar-2014
Jun-2014
Sep-2014
Dec-2014
Apr-2015
Jul-2015
Oct-2015
Jan-2016
May-2016
Aug-2016
Nov-2016
Mar-2017
Jun-2017
Sep-2017
Dec-2017
Apr-2018
Jul-2018
Oct-2018
Feb-2019
May-2019
Aug-2019
Dec-2019
Mar-2020
Jun-2020
Sep-2020
Jan-2021
Apr-2021
Jul-2021
Oct-2021
Feb-2022
May-2022
Aug-2022
Dec-2022
Mar-2023
Jun-2023
Oct-2023
Jan-2024
Apr-2024
Jul-2024
Nov-2024
Feb-2025
May-2025
Aug-2025
Dec-2025
Mar-2026
Jun-2026


STATION 49+760 o/s 20.1m
HWY 686:20
Piezometer Plot PZ2
ELEVATION (m)
280
275
270
265
260
255
250
245
240
235
230
Final Grade
Fill Height (est.)
Top of Wicks
PZ14-20
PZ14-20 Tip Elevation
PZ14-19
PZ14-19 Tip Elevation
Mar-2014
Jun-2014
Sep-2014
Dec-2014
Apr-2015
Jul-2015
Oct-2015
Jan-2016
May-2016
Aug-2016
Nov-2016
Mar-2017
Jun-2017
Sep-2017
Dec-2017
Apr-2018
Jul-2018
Oct-2018
Feb-2019
May-2019
Aug-2019
Dec-2019
Mar-2020
Jun-2020
Sep-2020
Jan-2021
Apr-2021
Jul-2021
Oct-2021
Feb-2022
May-2022
Aug-2022
Dec-2022
Mar-2023
Jun-2023
Oct-2023
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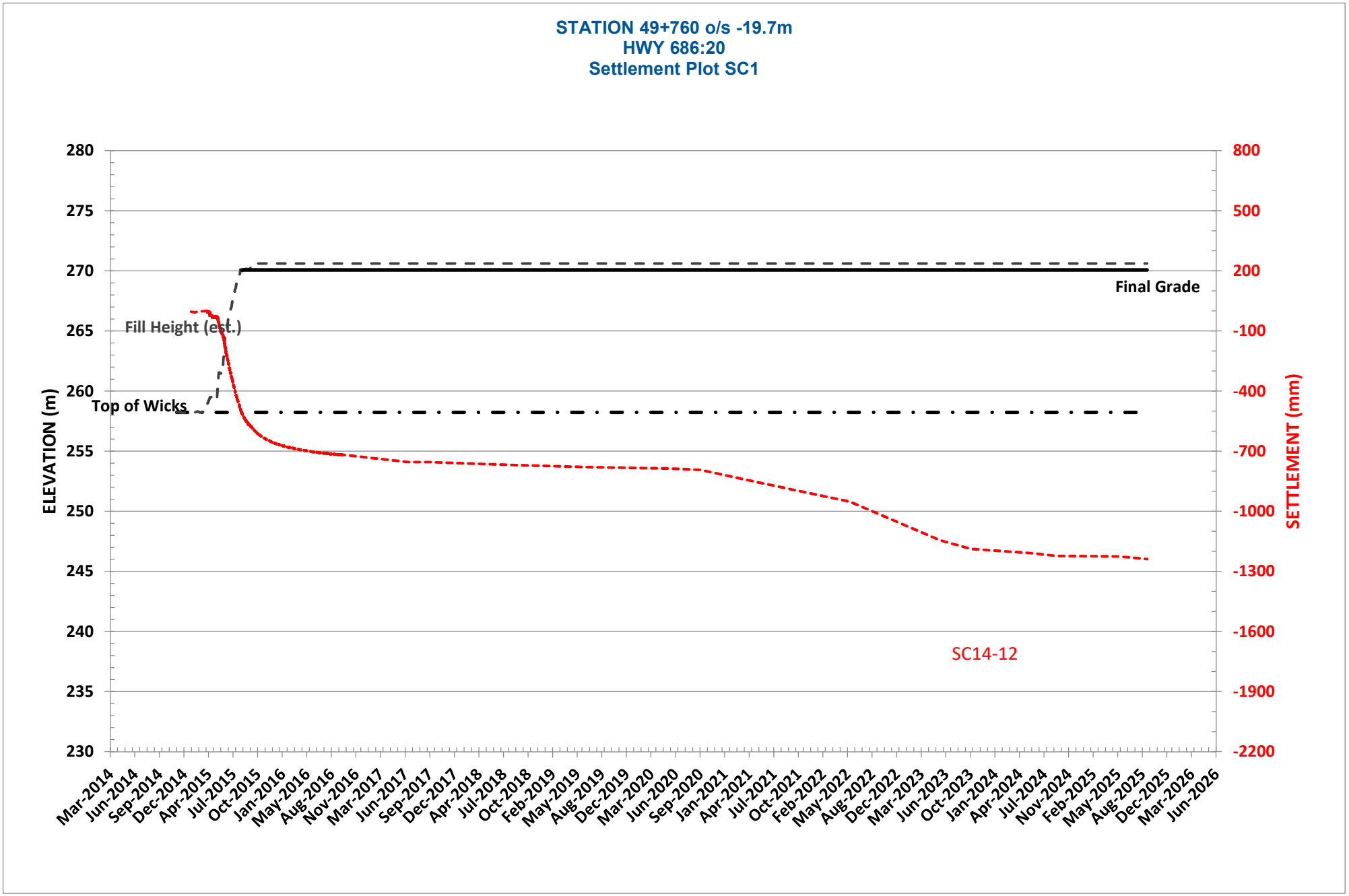
May-2025
Aug-2025
Dec-2025
Mar-2026
Jun-2026


STATION 49+760 o/s -19.7m
HWY 686:20
Settlement Plot SC1
ELEVATION (m)
SETTLEMENT (mm)
280
275
270
265
260
255
250
245
240
235
230
800
500
200
-100
-400
-700
-1000
-1300
-1600
-1900
-2200
Final Grade
Fill Height (est.)
Top of Wicks
SC14-12
Mar-2014
Jun-2014
Sep-2014
Dec-2014
Apr-2015
Jul-2015
Oct-2015
Jan-2016
May-2016
Aug-2016
Nov-2016
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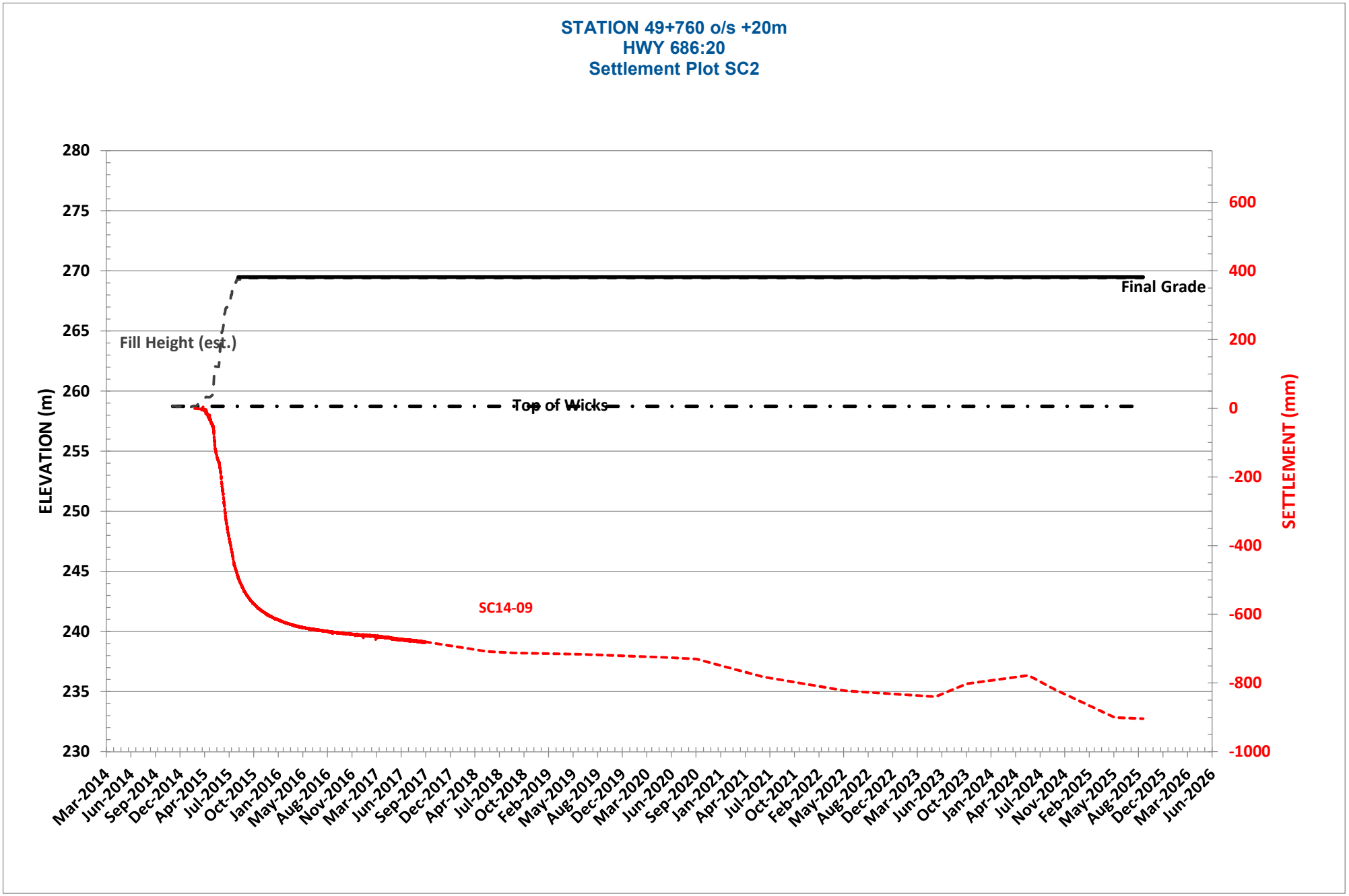
Jun-2026


STATION 49+760 o/s +20m
HWY 686:20
Settlement Plot SC2
ELEVATION (m)
SETTLEMENT (mm)
280
275
270
265
260
255
250
245
240
235
230
600
400
200
0
-200
-400
-600
-800
-1000
Final Grade
Fill Height (est.)
Top of Wicks
SC14-09
Mar-2014
Jun-2014
Sep-2014
Dec-2014
Apr-2015
Jul-2015
Oct-2015
Jan-2016
May-2016
Aug-2016
Nov-2016
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