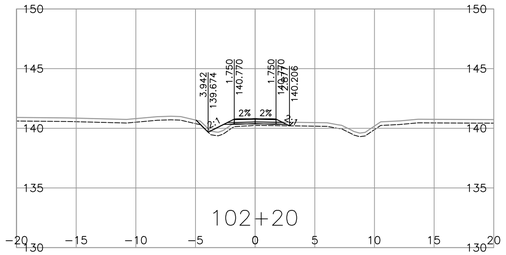
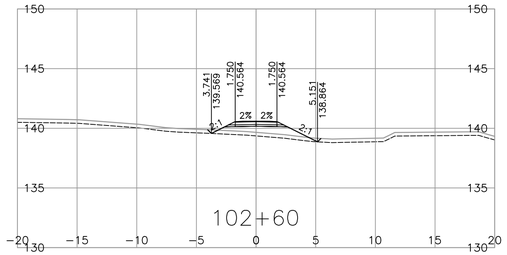
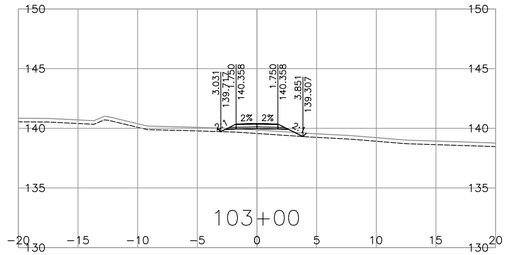
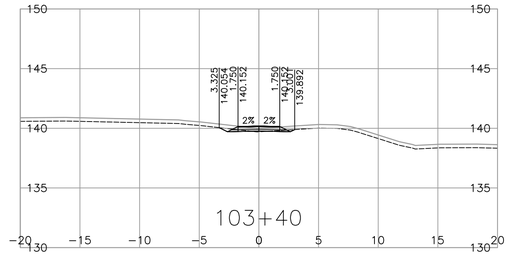
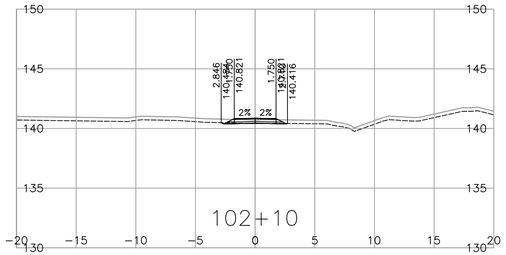
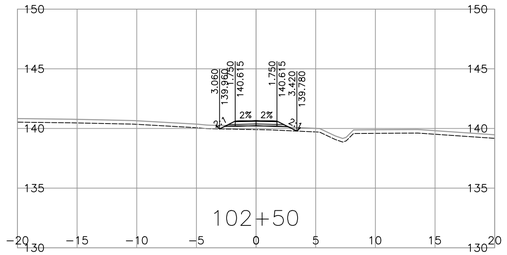


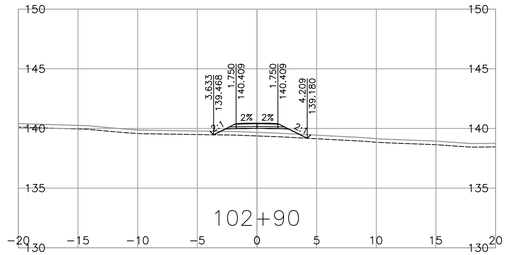


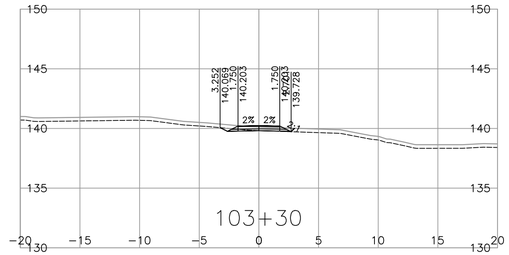


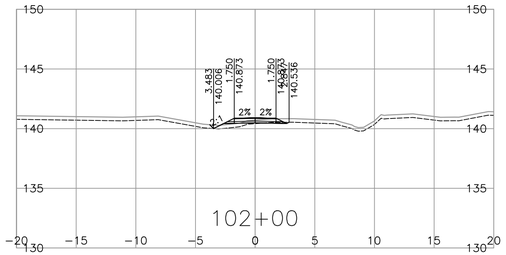


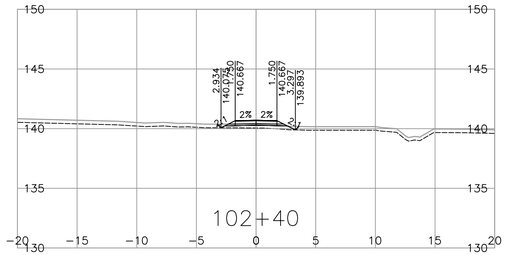


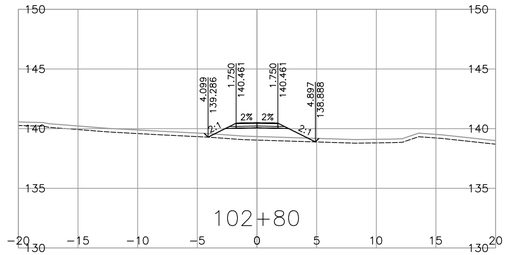


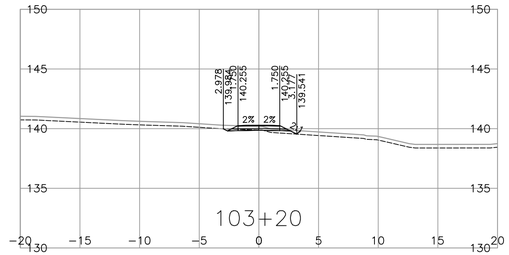


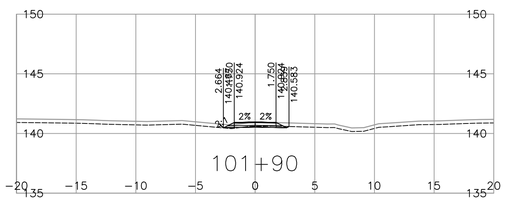


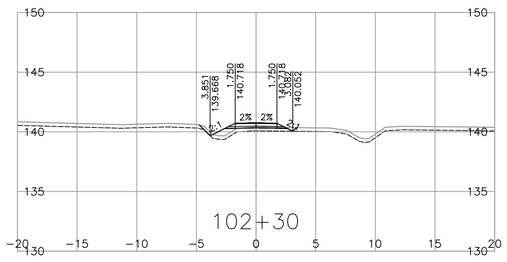


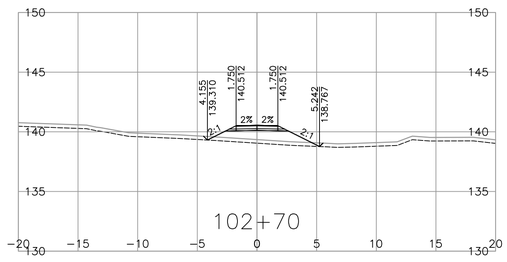


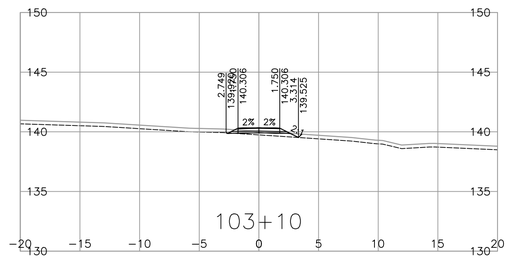












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1001
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 3 - NORTH

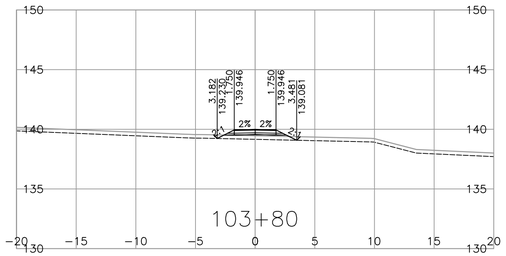
SHEET 1 OF 17

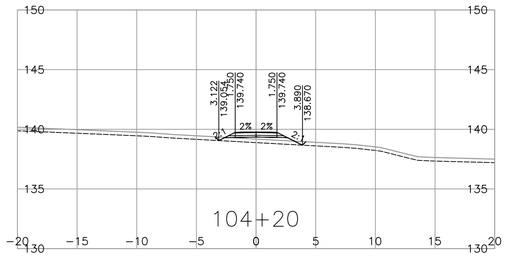
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

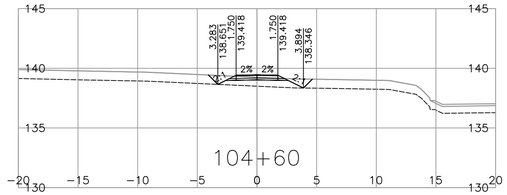
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

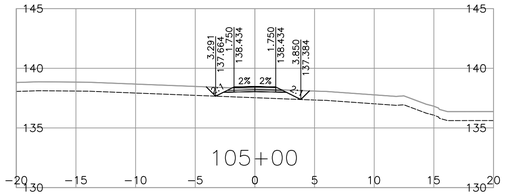
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1001	

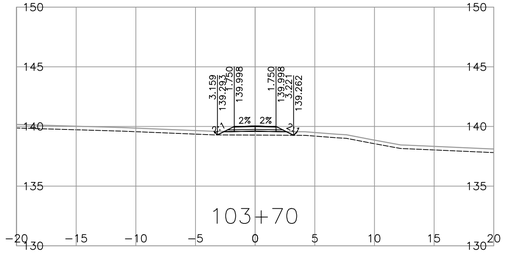
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

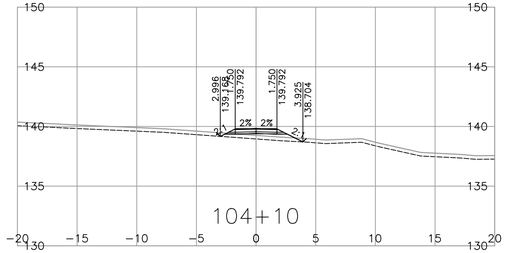


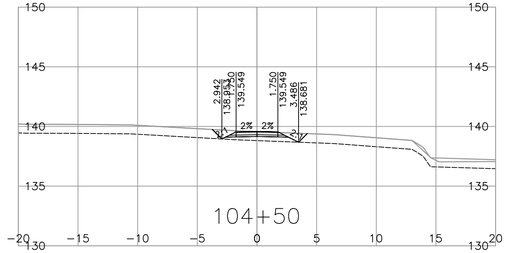


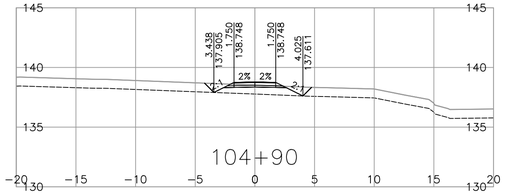


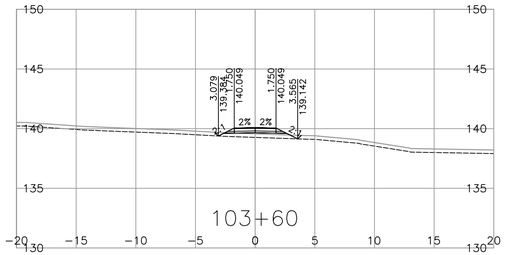


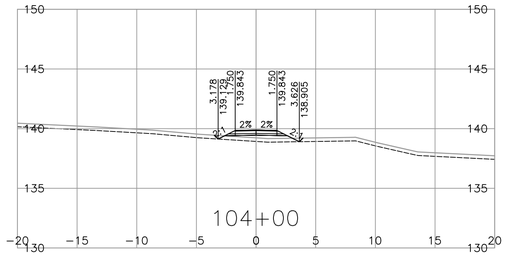


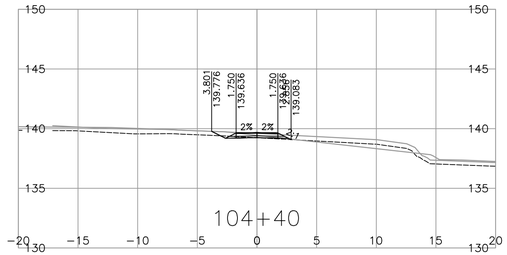


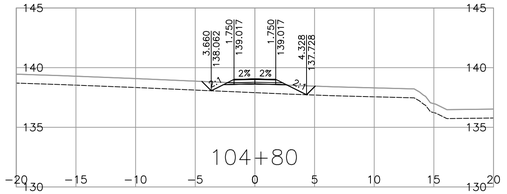


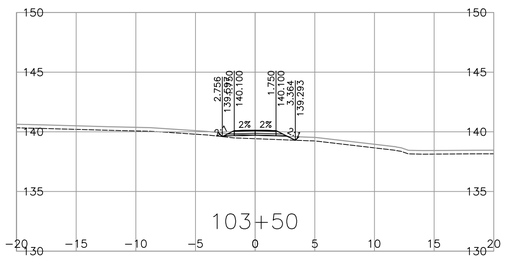


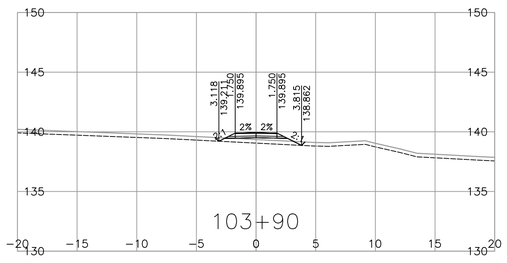


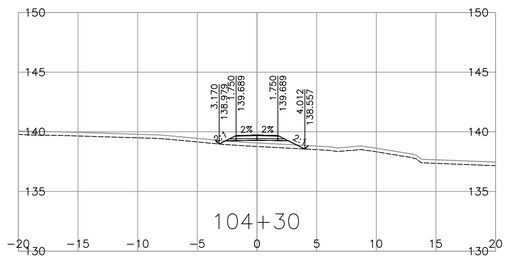


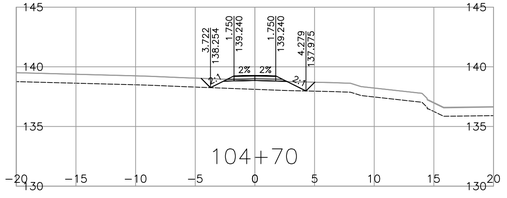












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1002
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 3 - NORTH

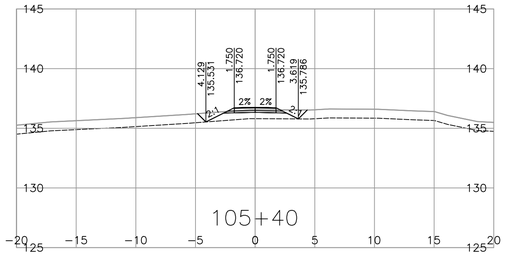
SHEET 2 OF 17

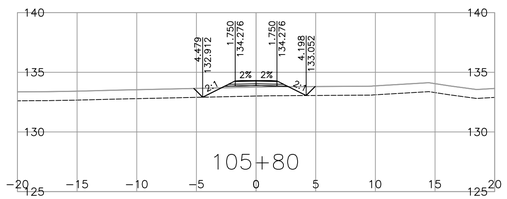
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

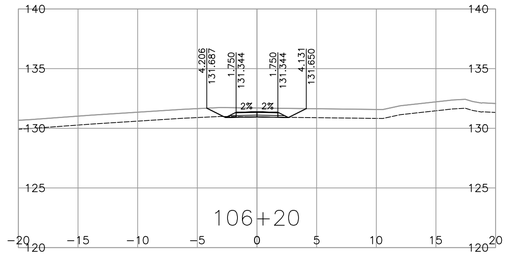
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

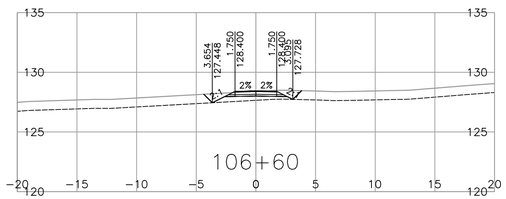
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1002	

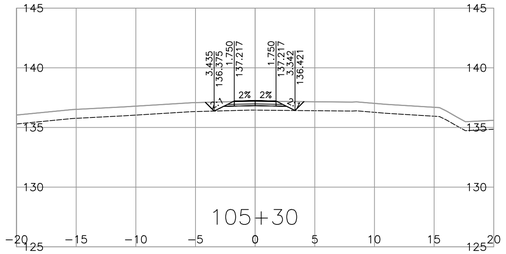
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

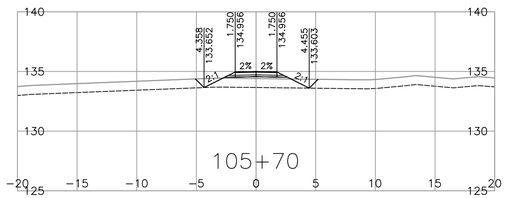


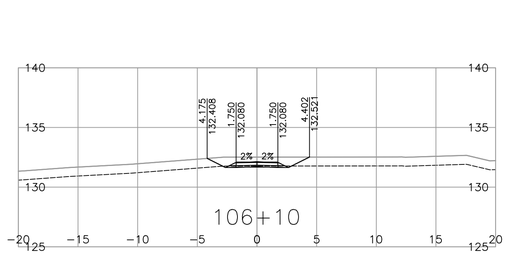


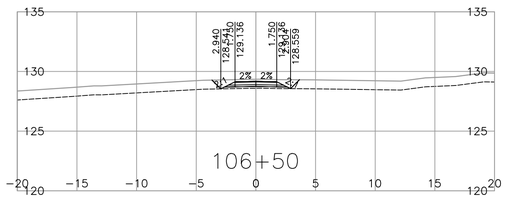


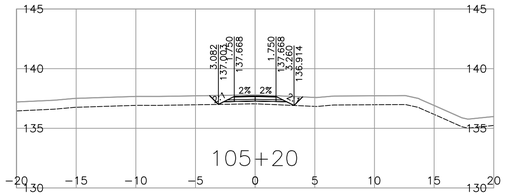


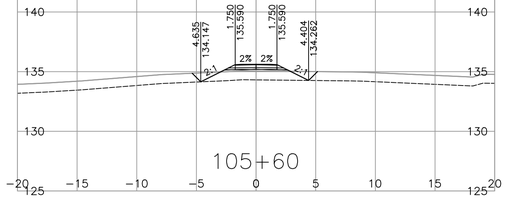


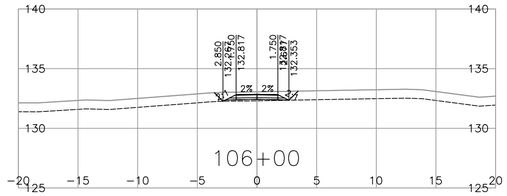


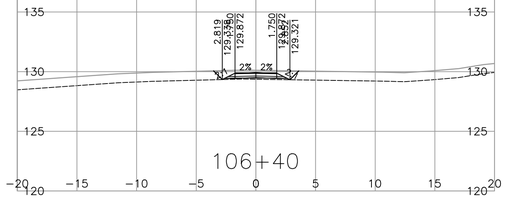


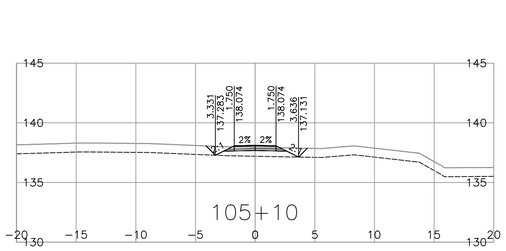


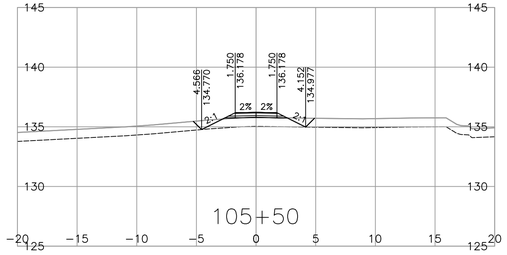


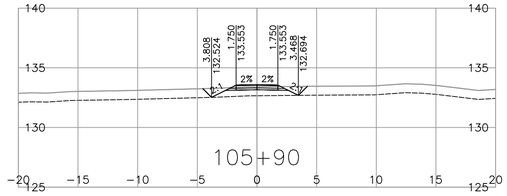


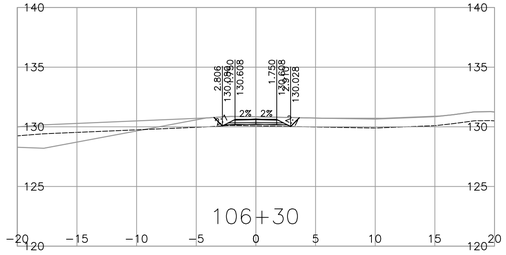












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1003
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

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SHEET 3 OF 17

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PROJECT NUMBER	REG	DRAWING NUMBER	REV
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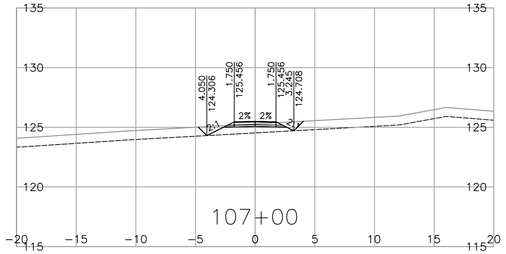
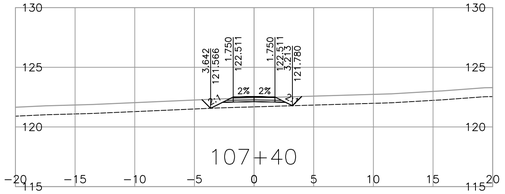
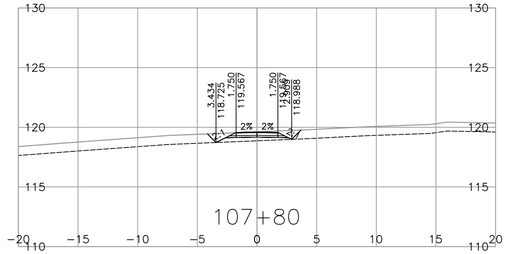
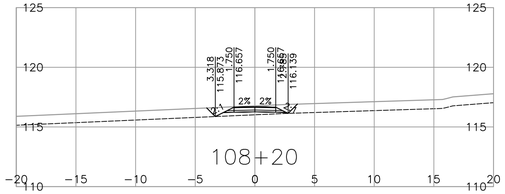
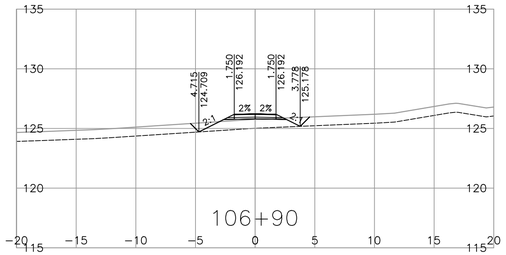
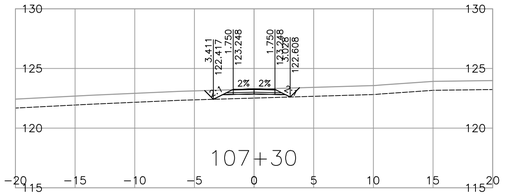


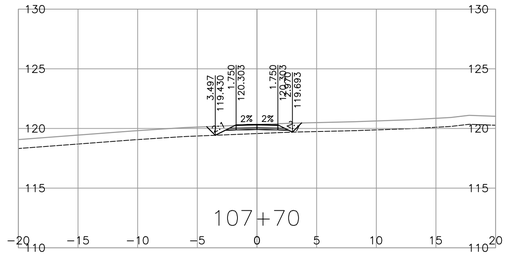


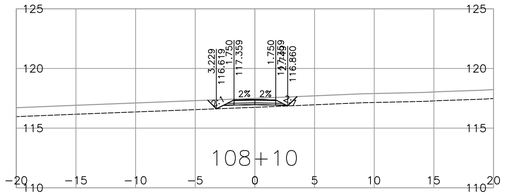


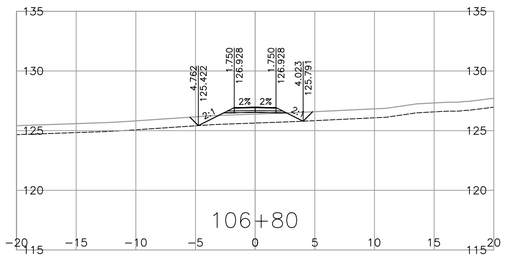


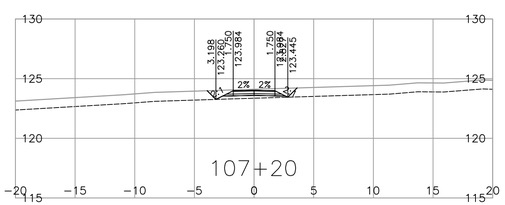


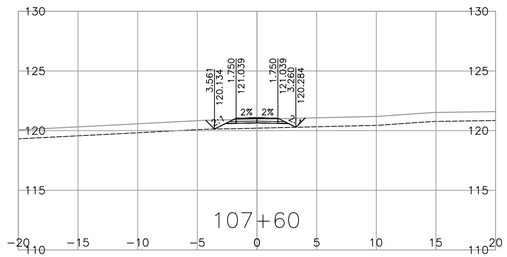


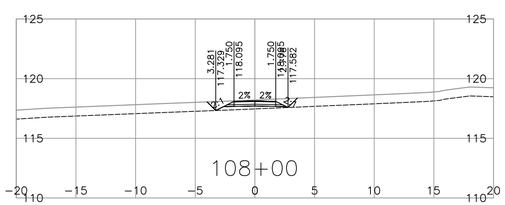


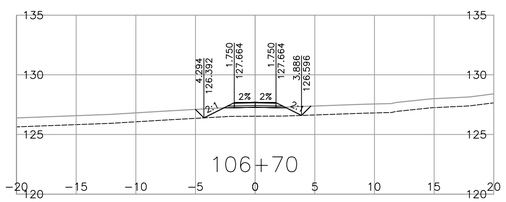


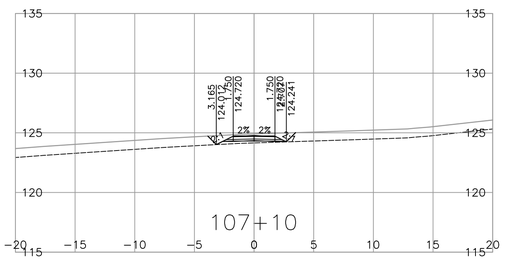


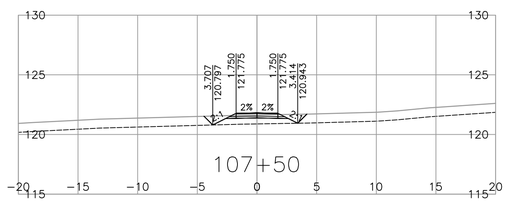


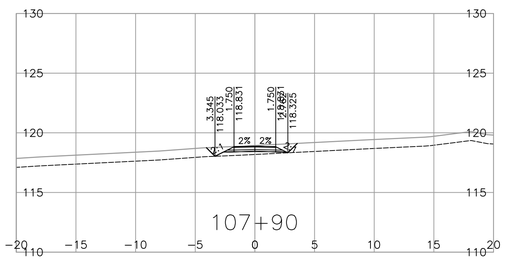












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1004
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 3 - NORTH

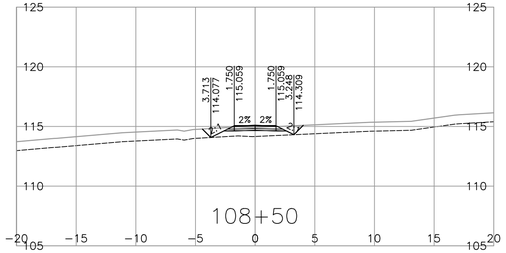
SHEET 4 OF 17

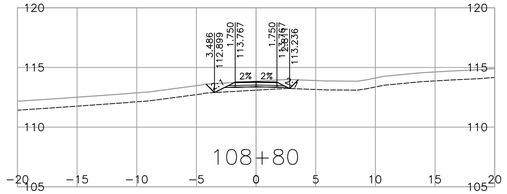
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

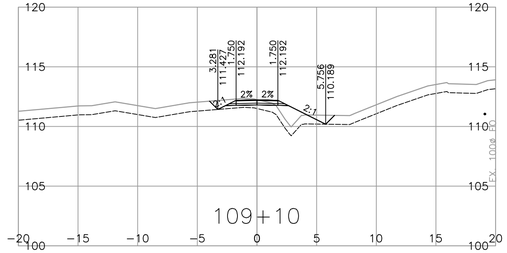
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

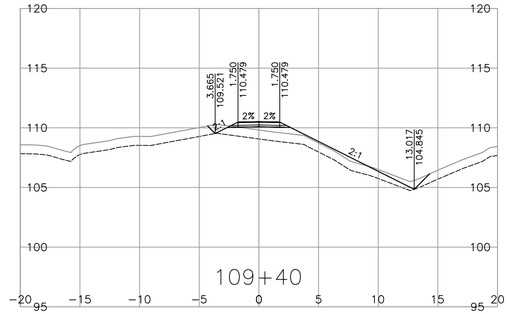
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1004	

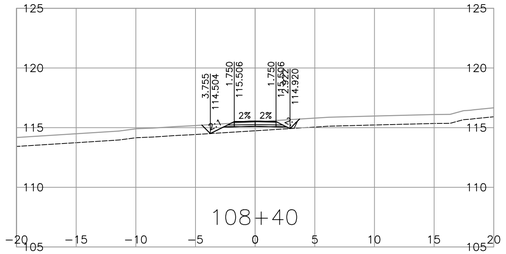
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

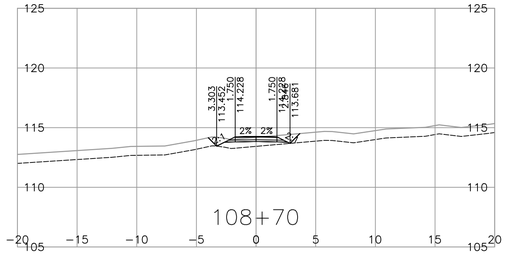


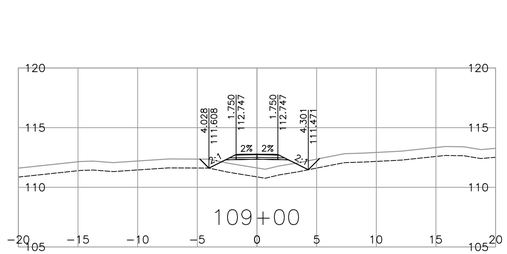


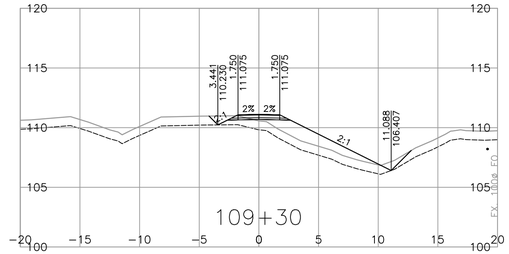


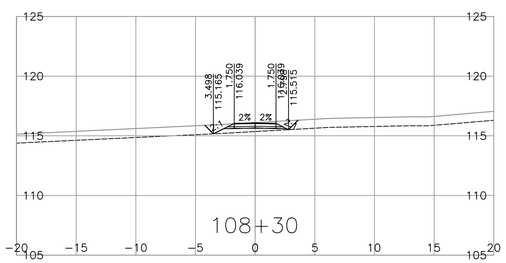


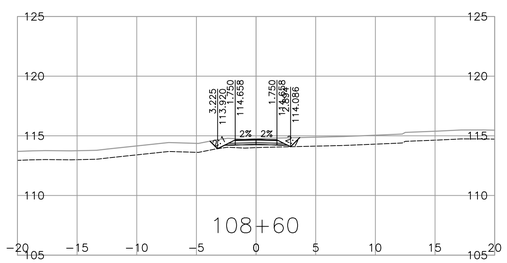


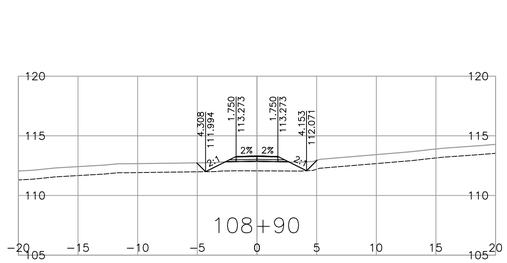


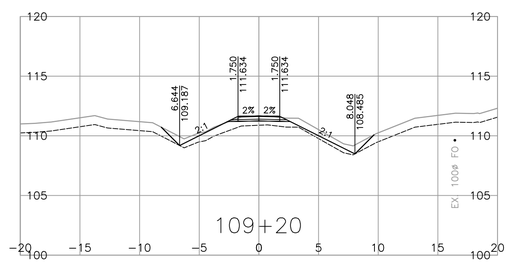












Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1005
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 3 - NORTH

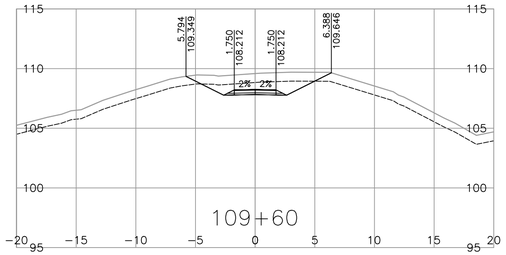
SHEET 5 OF 17

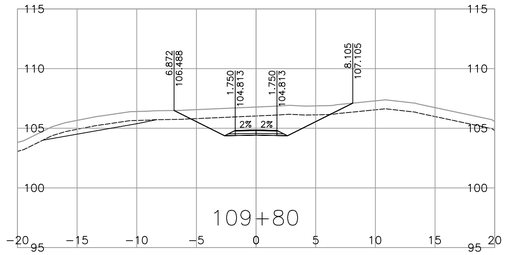
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

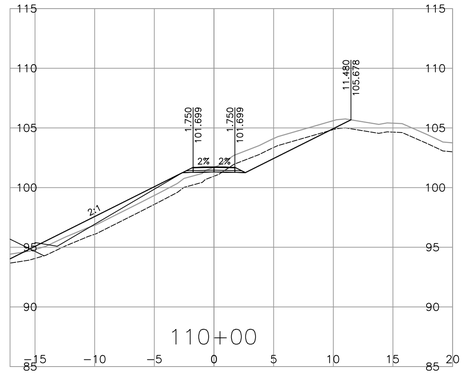
DESIGNED	S. BIDULKA	DATE 2026-02-20
QUALITY CONTROL	S. BIDULKA	DATE 2026-02-20
QUALITY ASSURANCE	P. TSANG	DATE 2026-02-20
DRAWN	H. LEE	DATE 2026-02-20

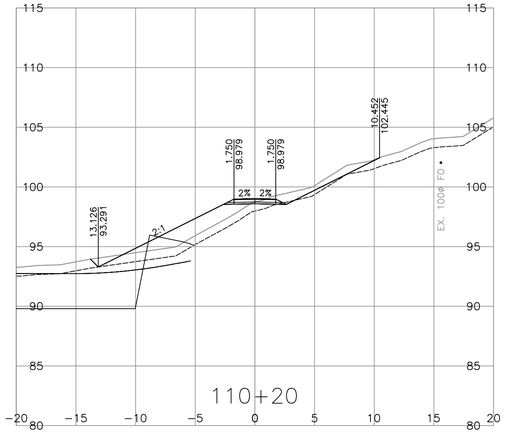
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1005	

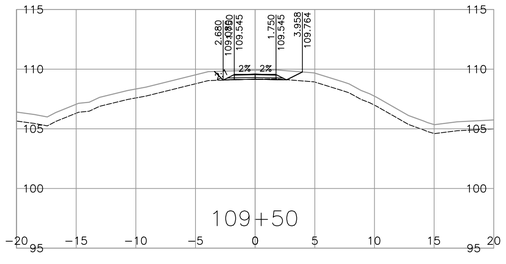
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

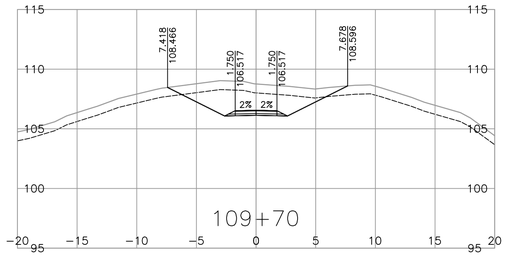


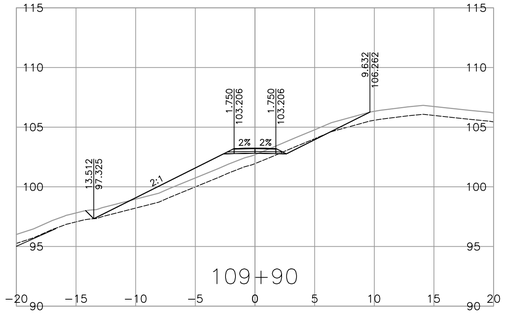


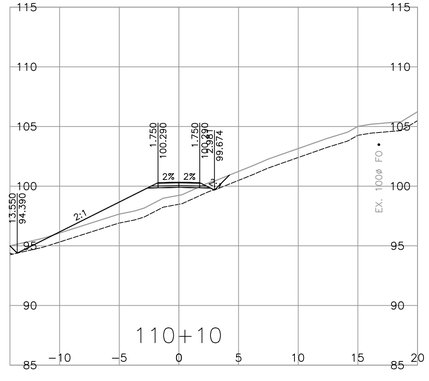












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1006
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 3 - NORTH

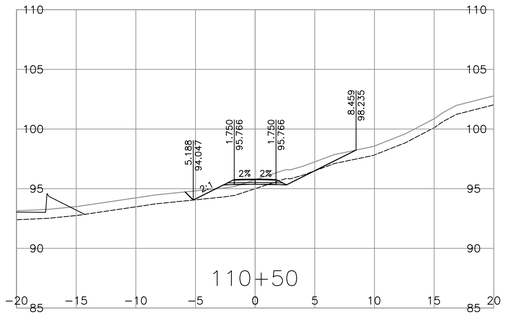
SHEET 6 OF 17

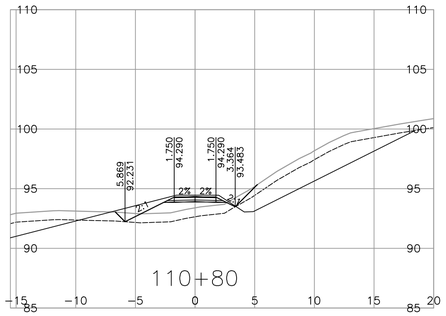
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

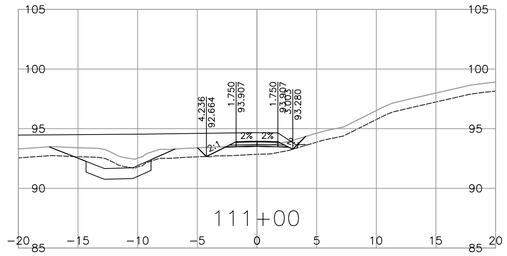
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

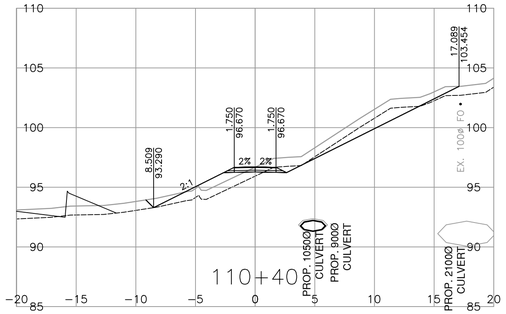
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1006	

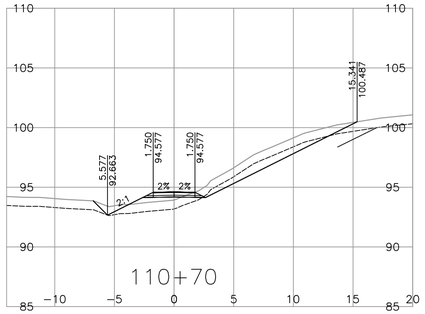
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

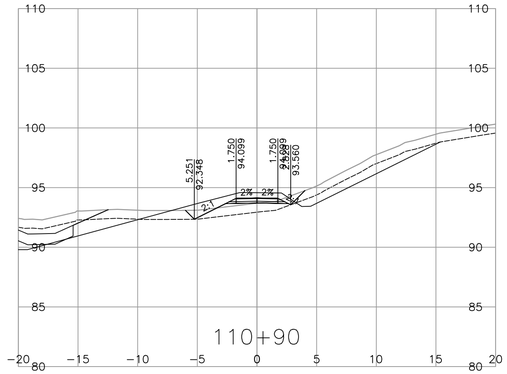


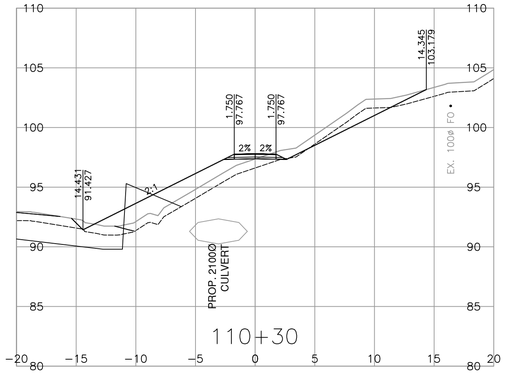


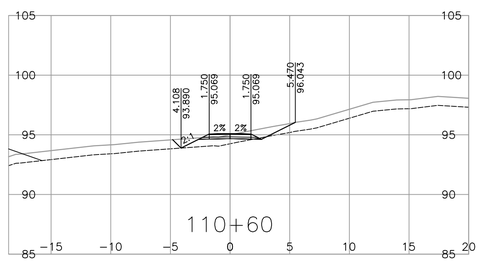


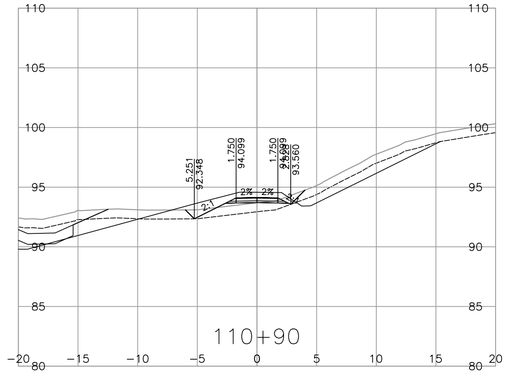












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1007
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 - FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 3 - NORTH

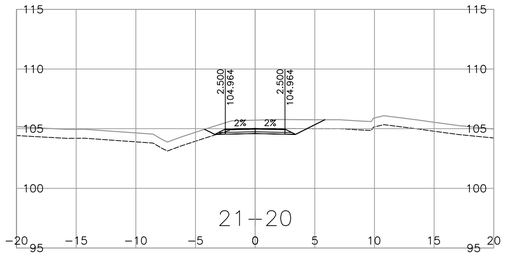
SHEET 7 OF 17

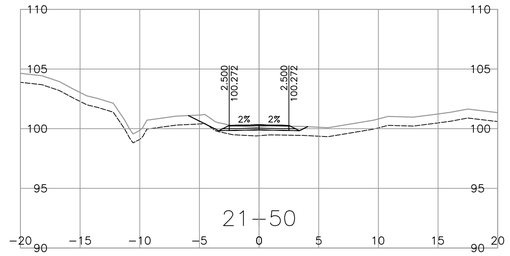
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

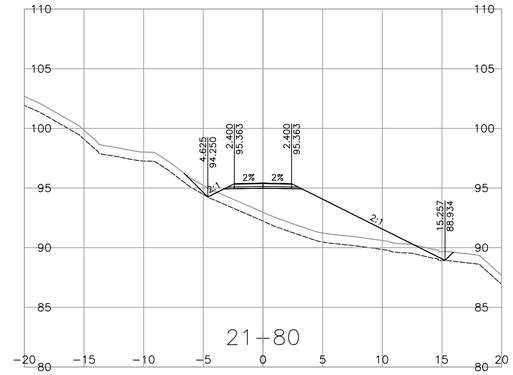
DESIGNED	S. BIDULKA	DATE	2026-02-20
QUALITY CONTROL	S. BIDULKA	DATE	2026-02-20
QUALITY ASSURANCE	P. TSANG	DATE	2026-02-20
DRAWN	H. LEE	DATE	2026-02-20

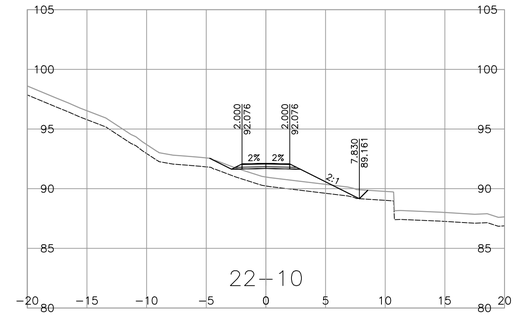
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1007	

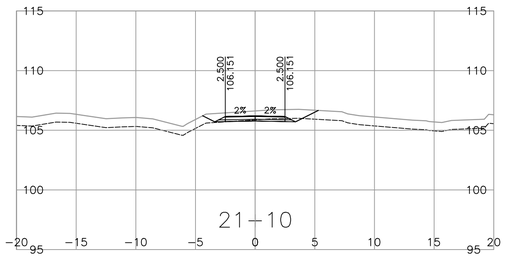
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L100A2-CUL3-ACCESS-N-RossRd.dwg

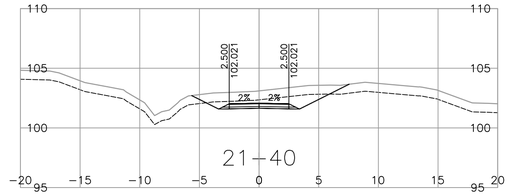


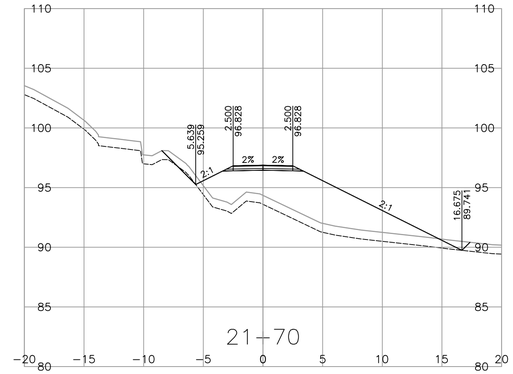


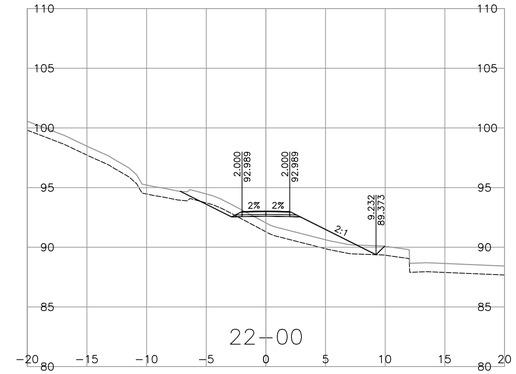


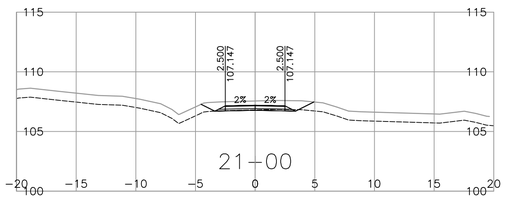


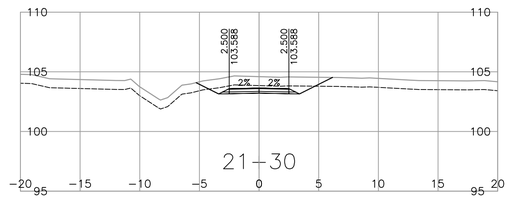


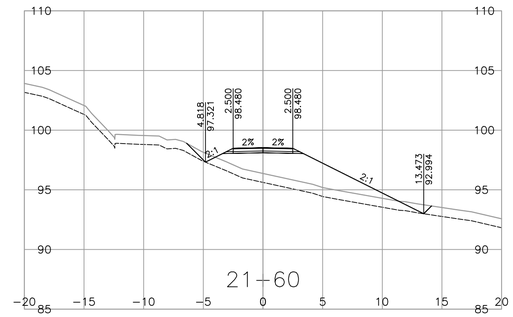


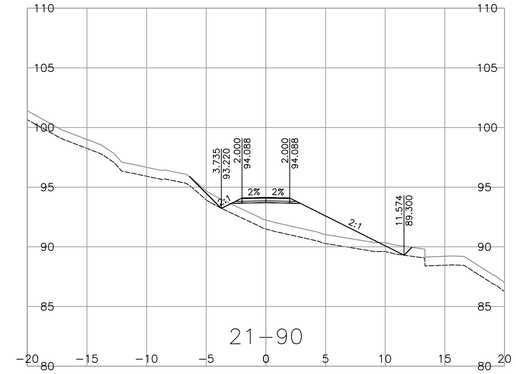












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1008
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 3 - SOUTH

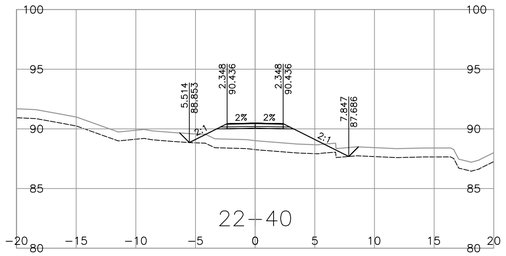
SHEET 8 OF 17

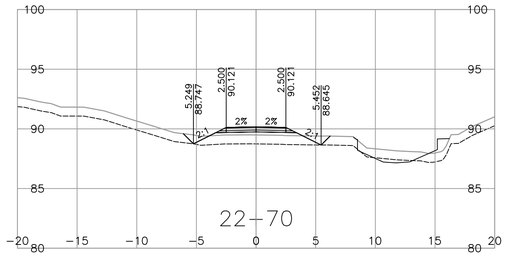
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

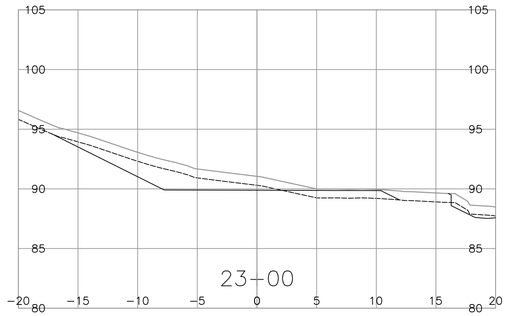
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

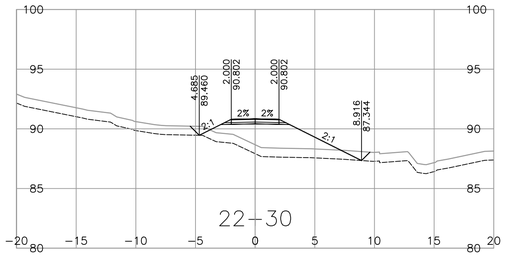
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1008	

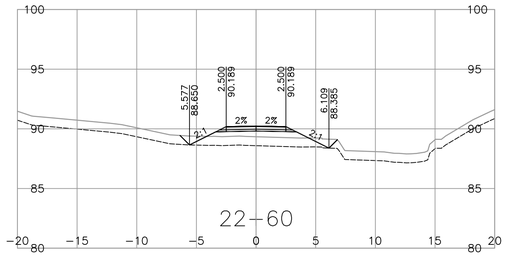
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L20-CUL3-ACCESS-S.dwg

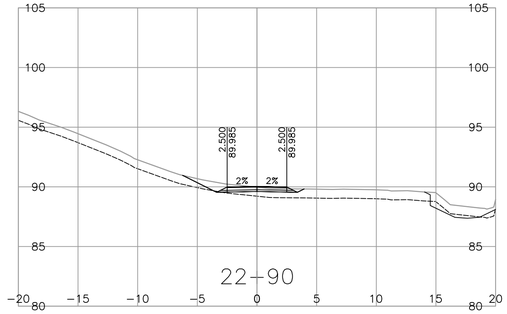


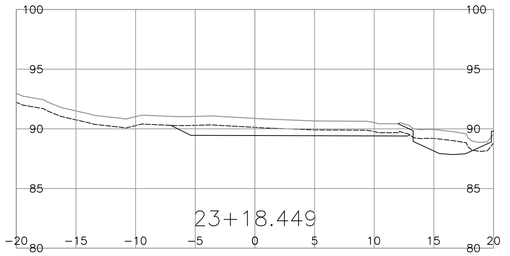


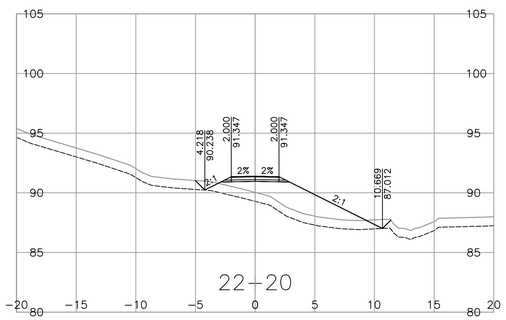


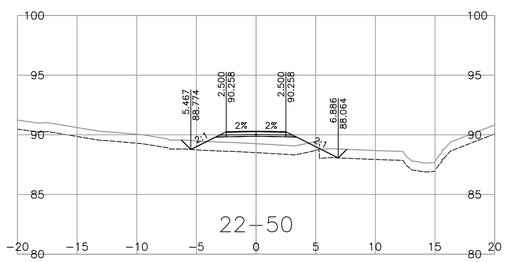


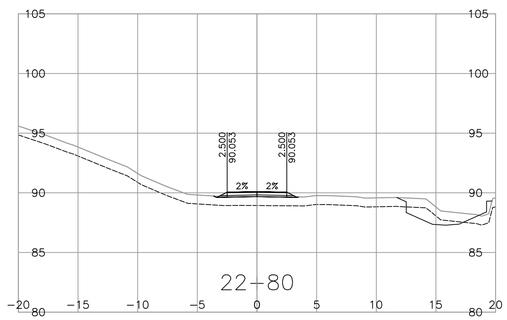


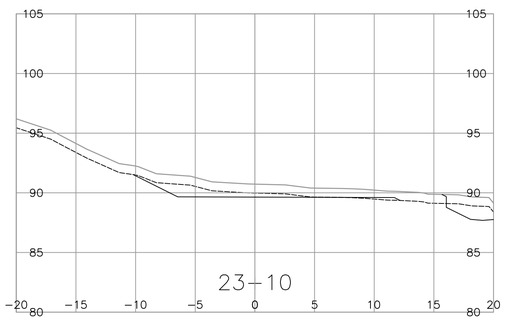












Associated Engineering

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1009
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 3 - SOUTH

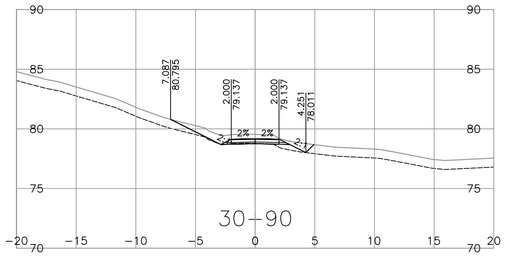
SHEET 9 OF 17

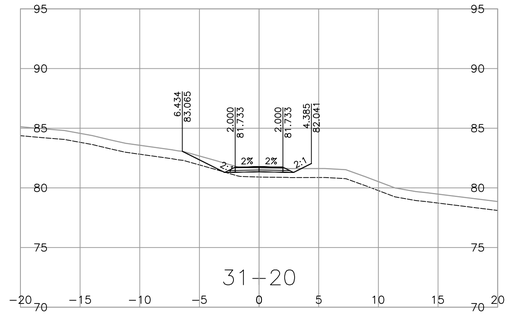
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

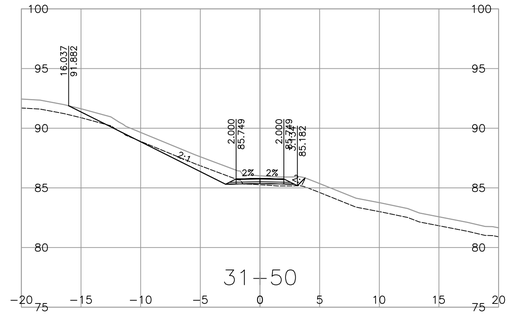
DESIGNED	S. BIDULKA	DATE	2026-02-20
QUALITY CONTROL	S. BIDULKA	DATE	2026-02-20
QUALITY ASSURANCE	P. TSANG	DATE	2026-02-20
DRAWN	H. LEE	DATE	2026-02-20

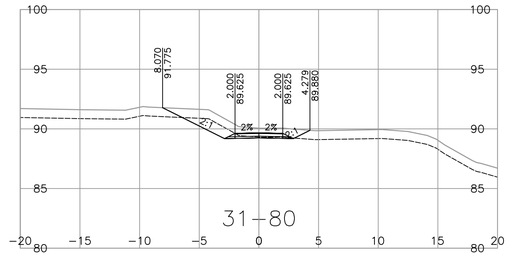
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1009	

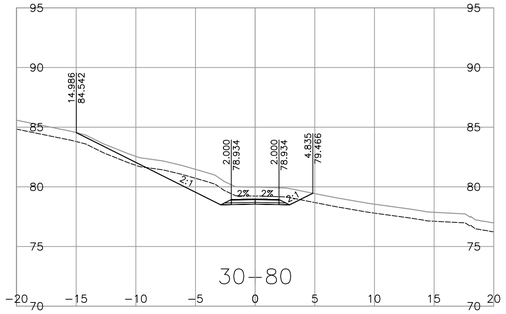
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L20-CUL3-ACCESS-S.dwg

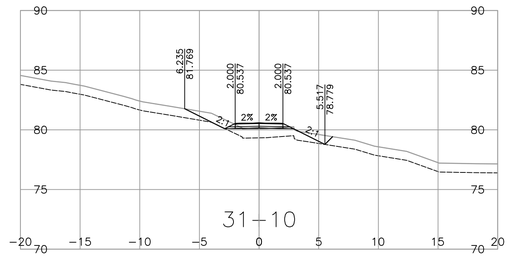


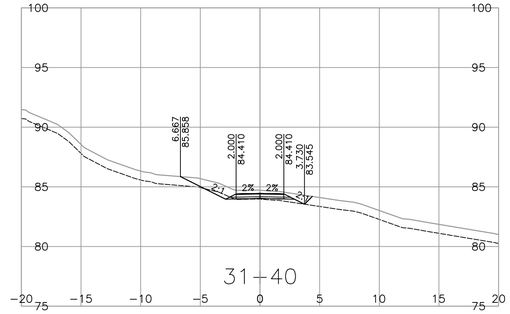


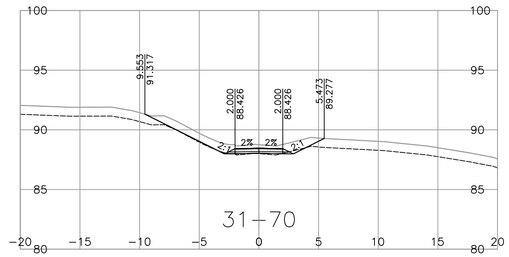


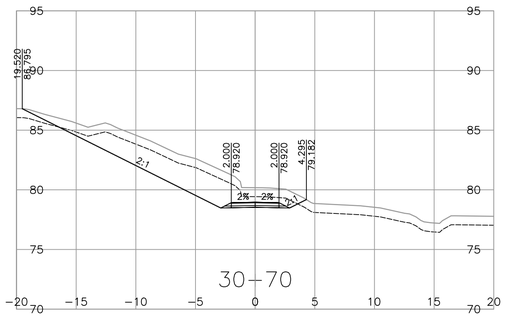


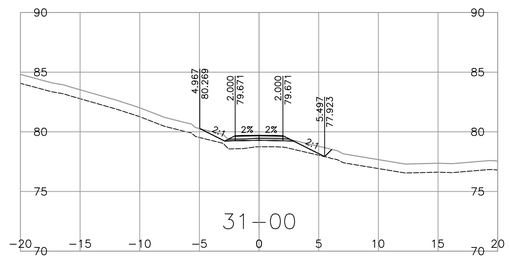


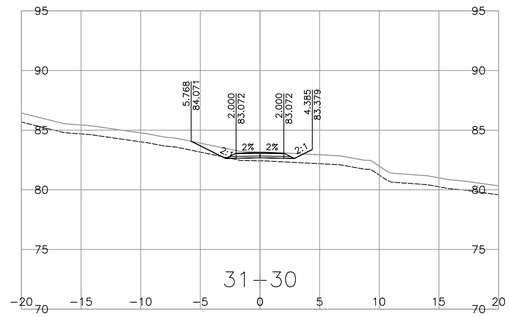


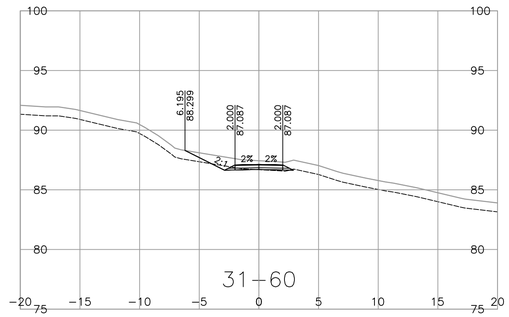












THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1010
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 7 - SOUTH

SHEET 10 OF 17

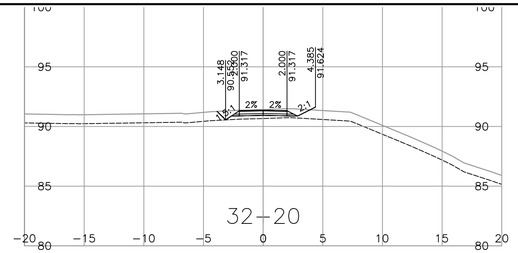
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

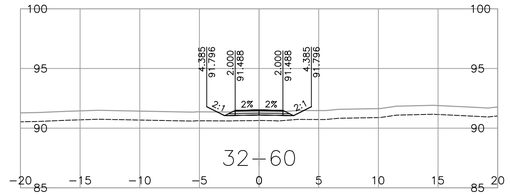
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

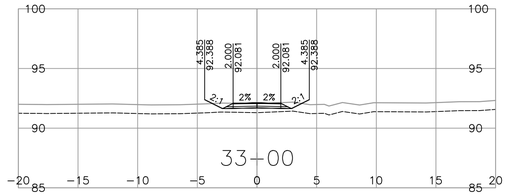
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

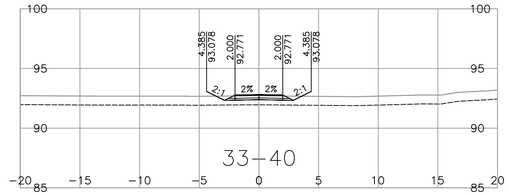
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1010	

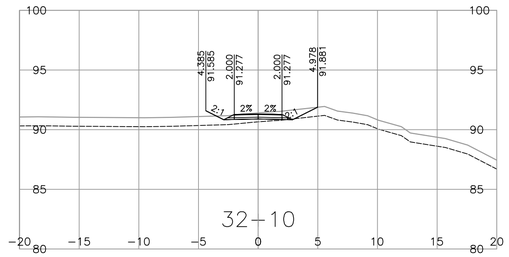
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L30-CUL7-ACCESS-S.dwg

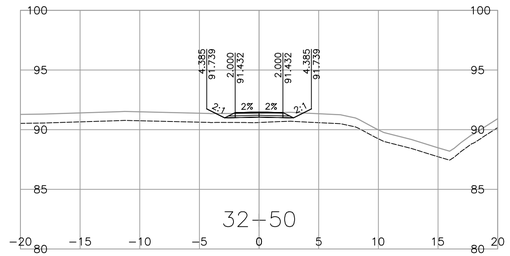


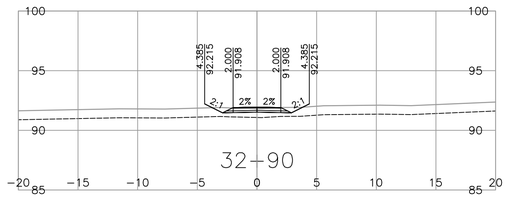


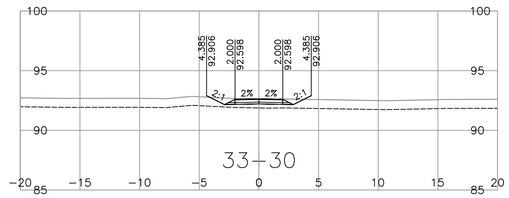


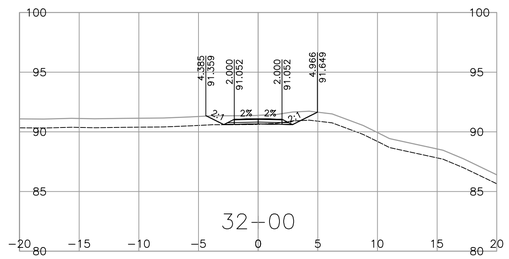


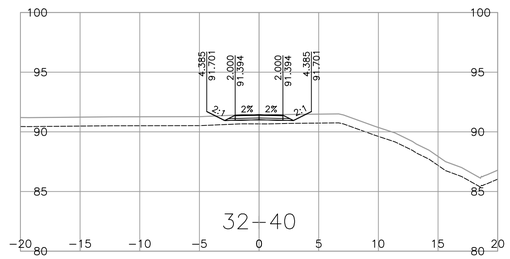


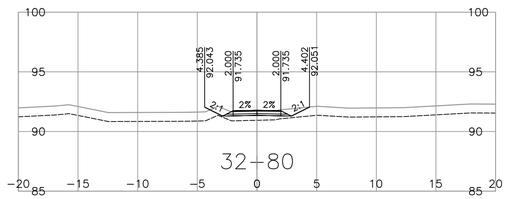


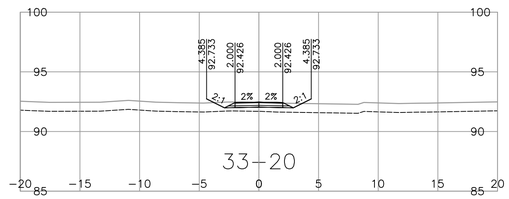


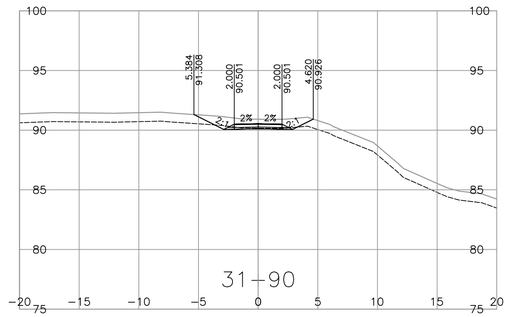


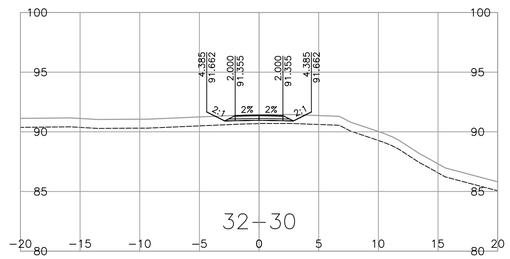


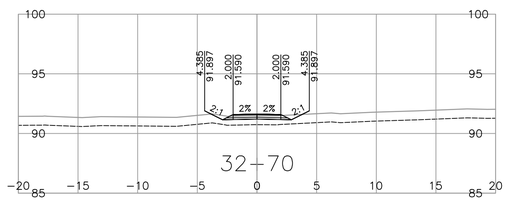


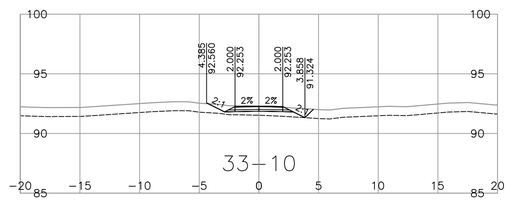












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THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1011
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 7 - SOUTH

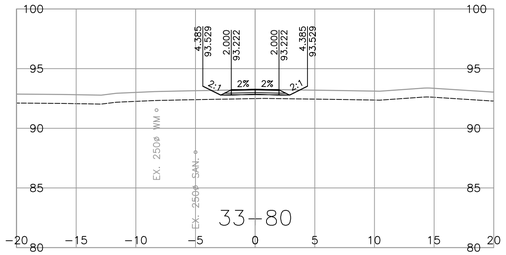
SHEET 11 OF 17

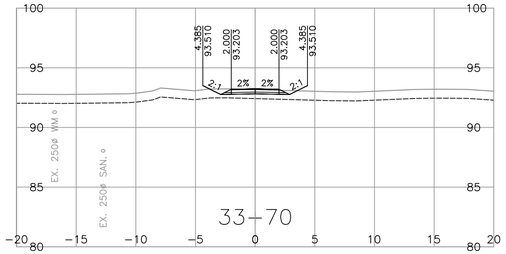
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

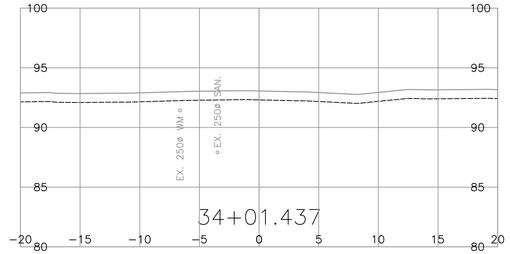
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

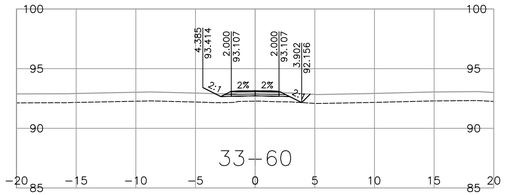
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

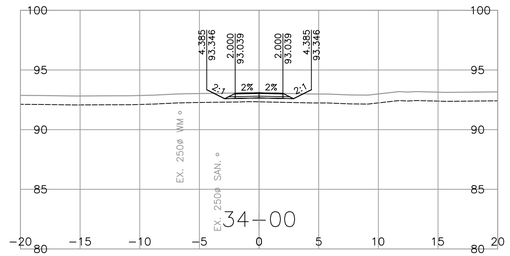
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1011	

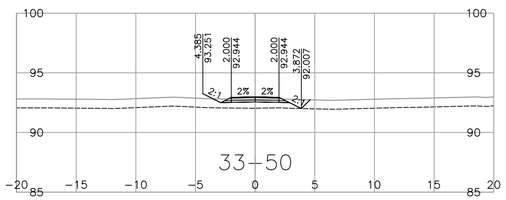


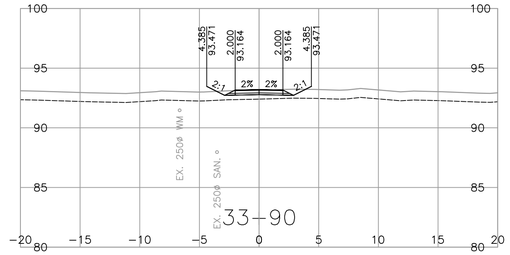












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THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1012
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 7 - SOUTH

SHEET 12 OF 17

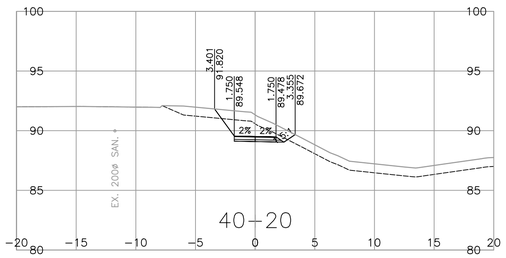
REV	DATE	REVISIONS	NAME

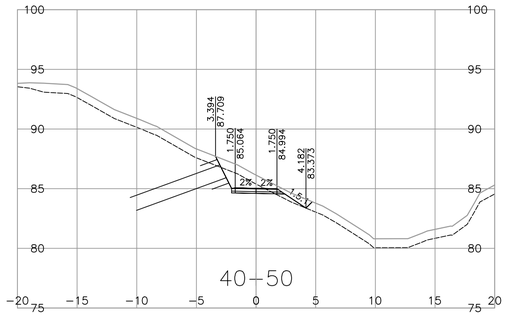
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

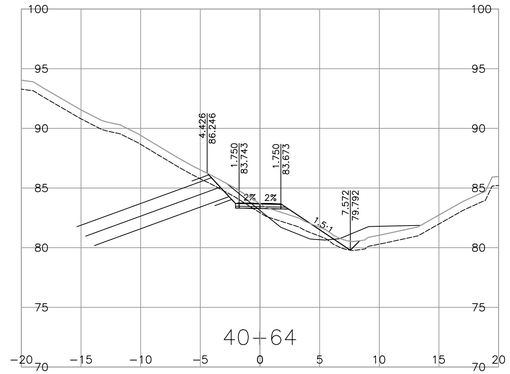
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

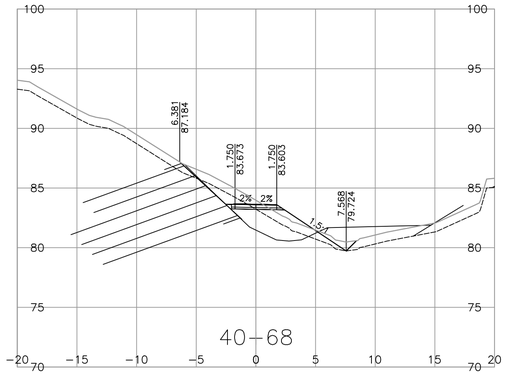
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

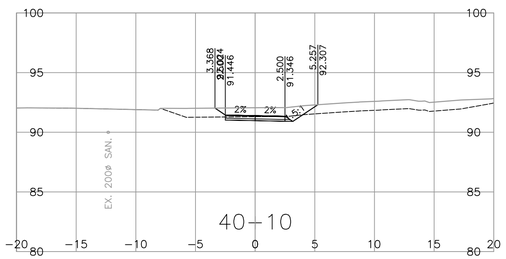
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1012	

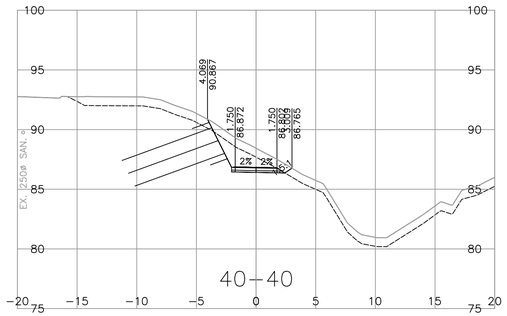


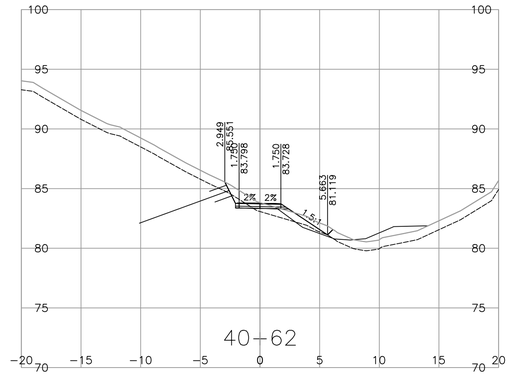


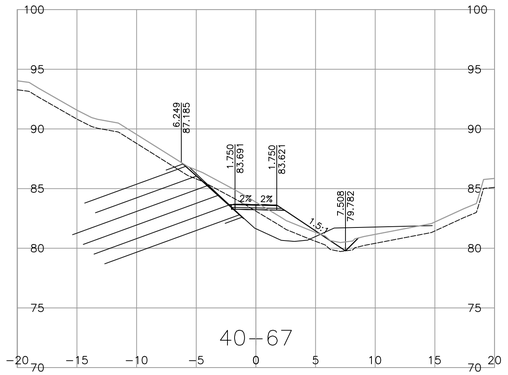


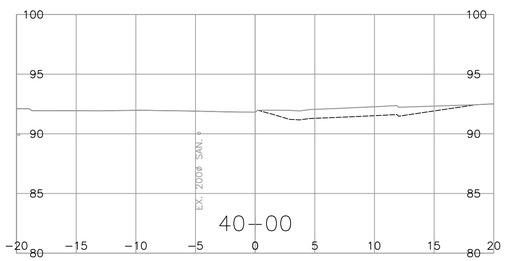


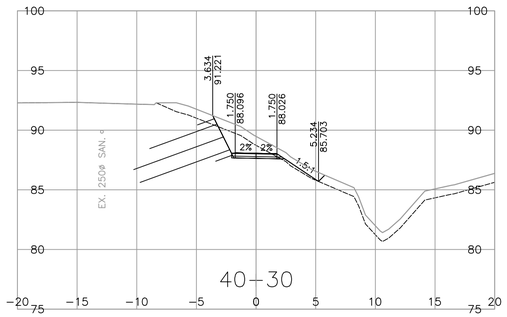


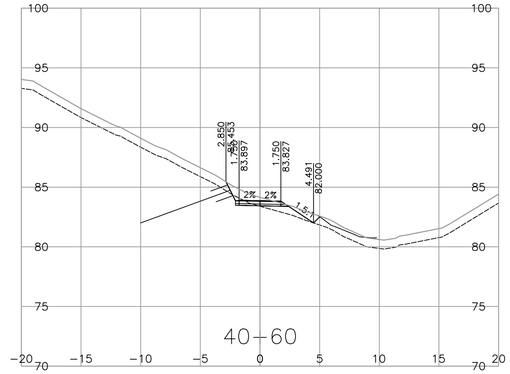


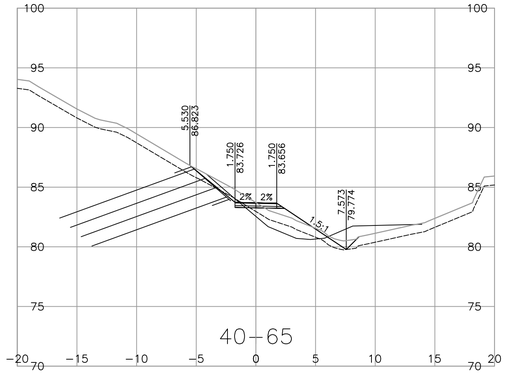












THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1013
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT CULVERT 7 - NORTH

SHEET 13 OF 17

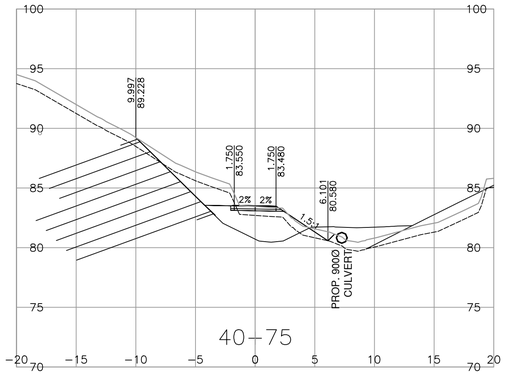
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

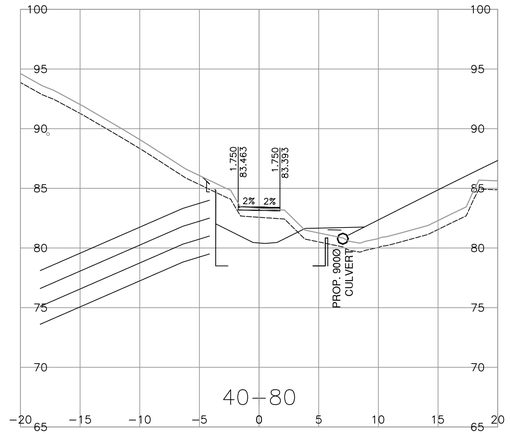
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

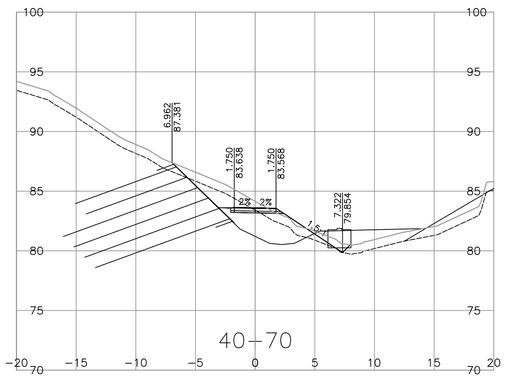
DESIGNED	S. BIDULKA	DATE 2026-02-20
QUALITY CONTROL	S. BIDULKA	DATE 2026-02-20
QUALITY ASSURANCE	P. TSANG	DATE 2026-02-20
DRAWN	H. LEE	DATE 2026-02-20

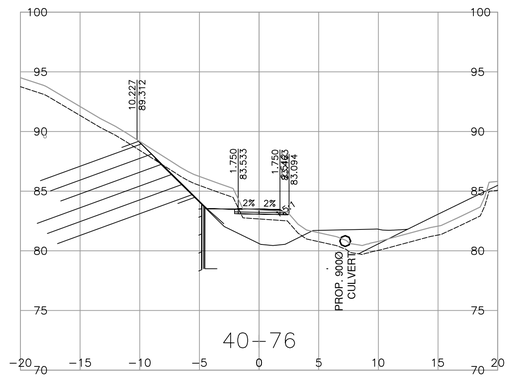
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1013	

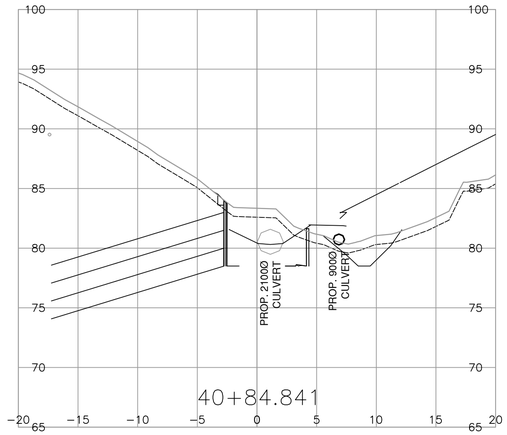
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L40-CUL7-N.dwg











THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1014
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 7 - NORTH

SHEET 14 OF 17

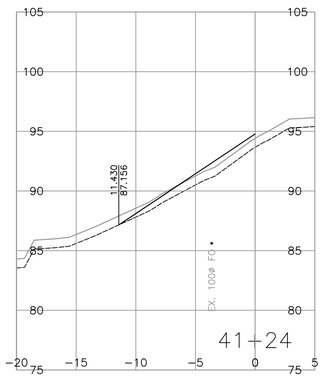
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

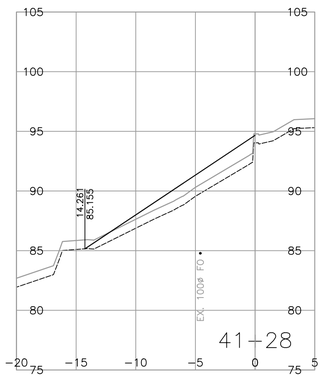
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

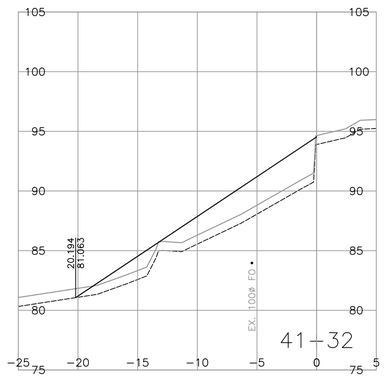
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

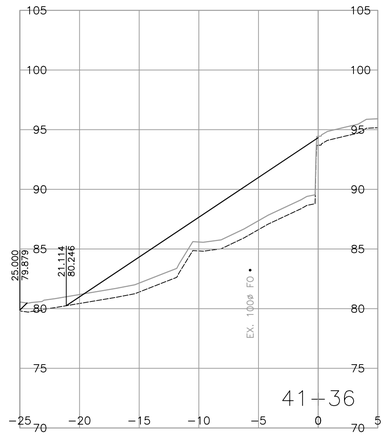
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1014	

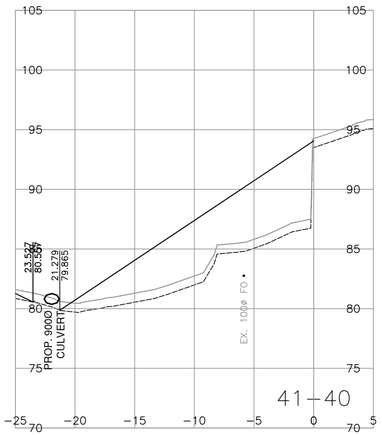
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-L40-CUL7-N.dwg

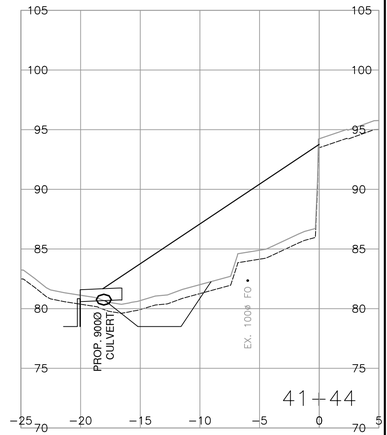


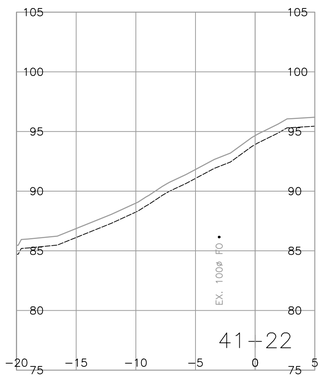


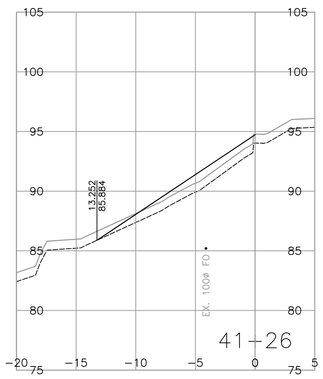


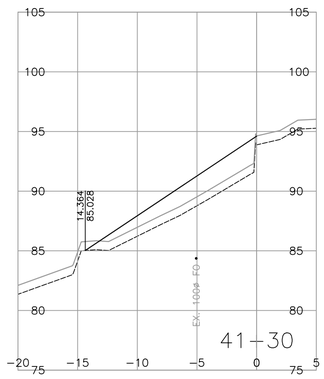


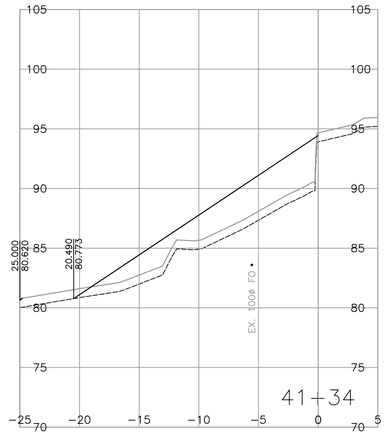


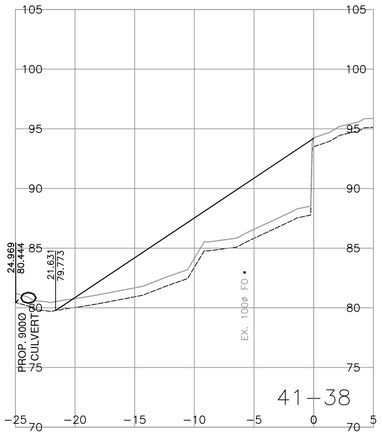


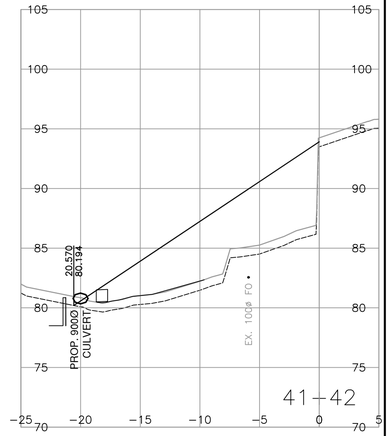












THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1015
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 7 - NORTH BUTTRESS SLOPE

SHEET 15 OF 17

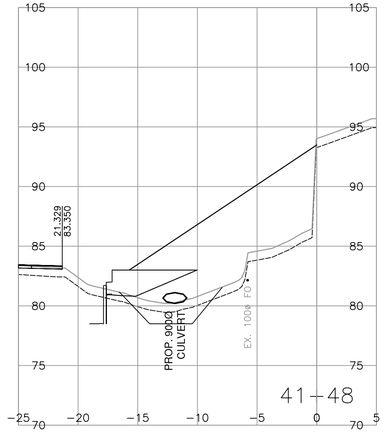
THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

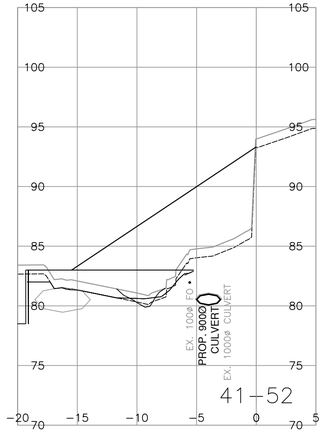
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

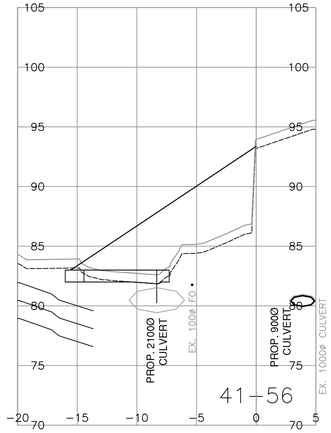
DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

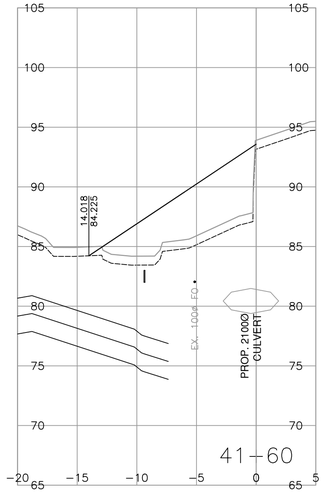
PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1015	

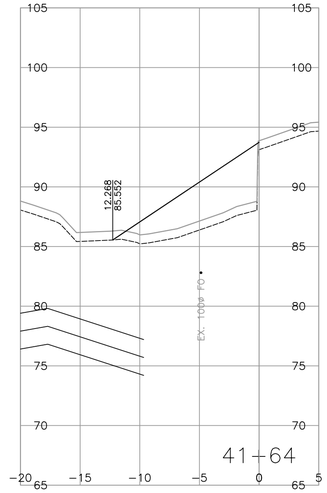
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-CUL7-BUTTRESS SLOPE-N.dwg

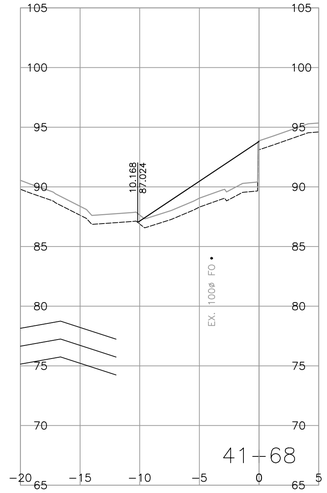


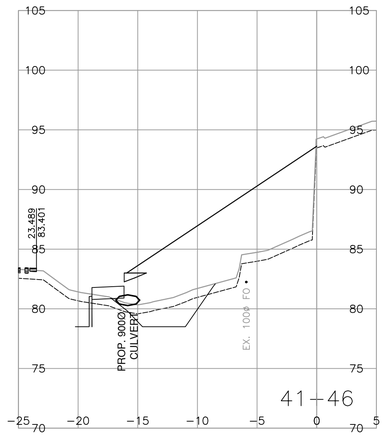


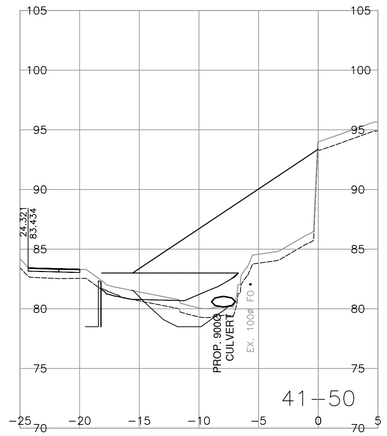


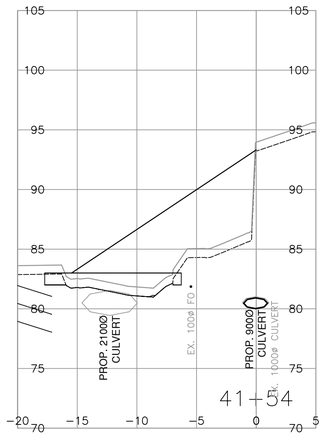


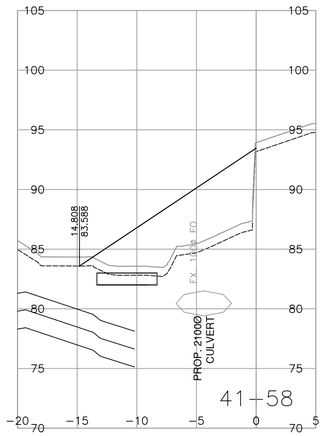


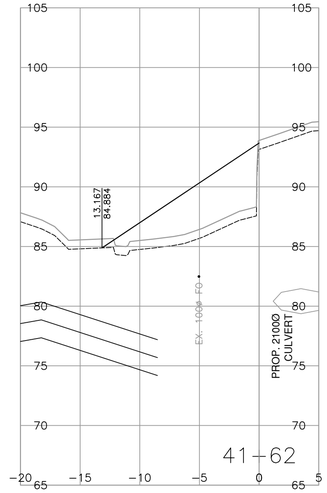


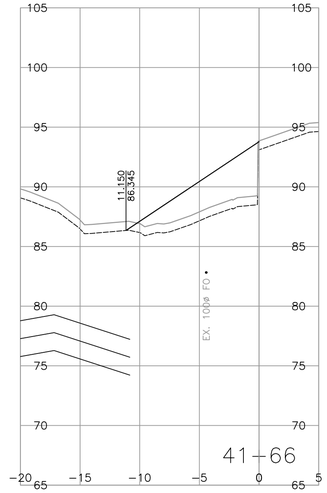












THURBER ENGINEERING LTD.

Associated Engineering

BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1016
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

CROSS SECTIONS

HIGHWAY 1 – FISHTRAP CREEK CULVERTS REPLACEMENT
CULVERT 7 - NORTH BUTTRESS SLOPE

SHEET 16 OF 17

THURBER ENGINEERING LTD.
PERMIT TO PRACTICE 1001319

ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT TO PRACTICE 1000163

DESIGNED S. BIDULKA DATE 2026-02-20
QUALITY CONTROL S. BIDULKA DATE 2026-02-20
QUALITY ASSURANCE P. TSANG DATE 2026-02-20
DRAWN H. LEE DATE 2026-02-20

PROJECT NUMBER	REG	DRAWING NUMBER	REV
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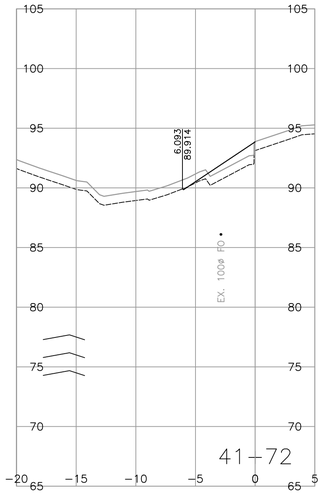
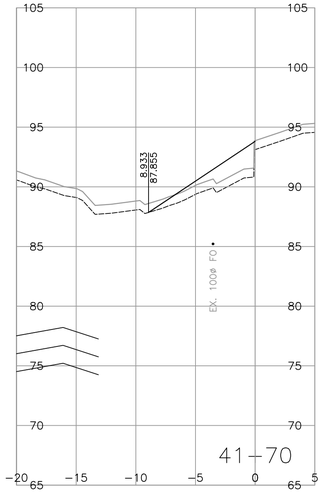
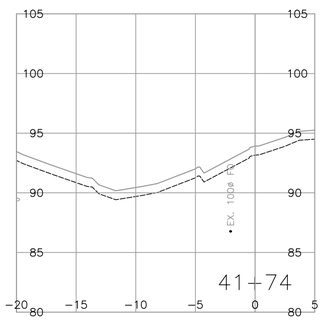
PLOT DATE: 2026/02/20 \\ae.ca\data\working\van\2021-2305-01\civil\model\MoTI_Deep_Culverts\DrawingProduction\1000_DesignSections\R1-1181-CUL7-BUTTRESS SLOPE-N.dwg







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SCALE 0 2 1:250 12m

CAD FILENAME R1-1181-1017
FILE NUMBER 2021-2305-01
PLOT DATE 2026-02-20

REV	DATE	REVISIONS	NAME

THURBER ENGINEERING LTD.
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MINISTRY OF TRANSPORTATION AND TRANSIT
SOUTH COAST REGION
HIGHWAY DESIGN AND GEOMATICS ENGINEERING

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CULVERT 7 - NORTH BUTTRESS SLOPE

SHEET 17 OF 17

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DRAWN H. LEE DATE 2026-02-20

PROJECT NUMBER	REG	DRAWING NUMBER	REV
13253-1002	1	R1-1181-1017	