



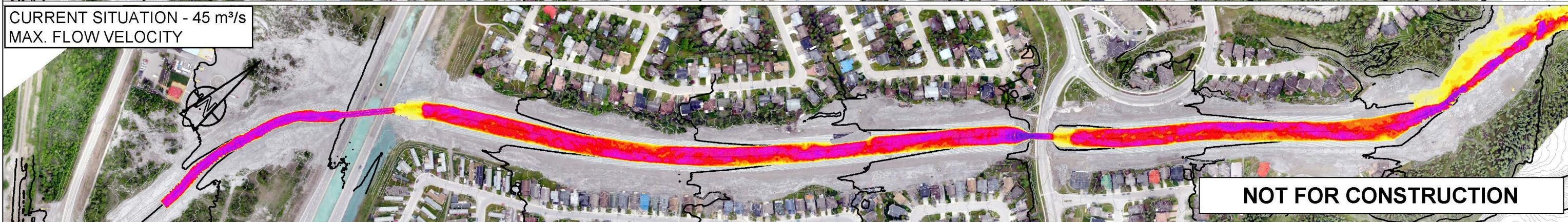
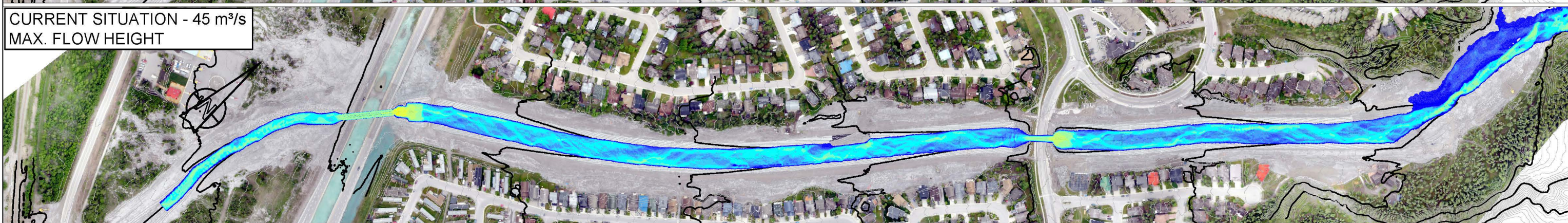
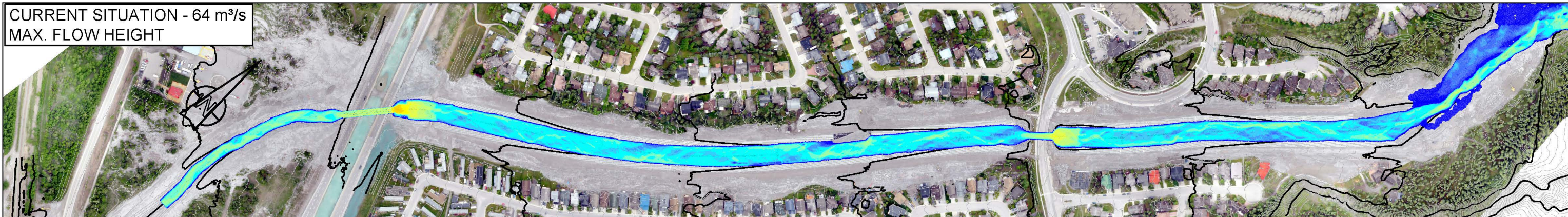
· LEGEND FOR HYDRAULIC CALCULATION RESULTS

FLOW DEPTH [m]	FLOW VELOCITY [m/s]	MAX. EROSION [m]	MAX. AGGRADATION [m]
0.00 to 0.10	0.0 to 0.5	-3.00 to -2.50	0.00 to 0.25
0.10 to 0.20	0.5 to 1.0	-2.50 to -2.00	0.25 to 0.50
0.20 to 0.30	1.0 to 1.5	-2.00 to -1.50	0.50 to 0.75
0.40 to 0.50	1.5 to 2.0	-1.50 to -1.00	0.75 to 1.00
0.50 to 0.75	2.0 to 2.5	-1.00 to -0.75	1.00 to 1.50
0.75 to 1.00	2.5 to 3.0	-0.75 to -0.50	1.50 to 2.00
1.00 to 1.50	3.0 to 3.5	-0.50 to -0.25	2.00 to 2.50
1.50 to 2.00	3.5 to 4.0	-0.25 to 0.00	2.50 to 3.00
2.00 to 2.50	4.0 to 4.5		3.00 to 3.50
2.50 to 3.00	4.5 to 5.0		
3.00 to 3.50	5.0 to 6.0		
3.50 to 4.00	6.0 to 7.0		
4.00 to 4.50	7.0 to 8.0		
4.50 to 5.00	8.0 to 9.0		
5.00 to 7.50	9.0 to 10.0		

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SCALE: 1:5,000 DATE: 2016/05/03 DRAWING: DPo DESIGN: MSc/DPo REVIEW: MSc APPROVED: MM			PROFESSIONAL SEAL:  APEGA PERMIT NUMBER: 13440	CLIENT:  <b>CANADIAN HYDROTECH CORPORATION</b>	PROJECT: UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b> CONTENT: PLAN VIEW <b>2D FLOW CONDITIONS OVERVIEW MAP, LEGEND</b> PROJECT No.: 16494 DRAWING No.: LTMM CC-CHU-HYD-000 R00 REV: 00
REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED



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SCALE: 1:5,000 DATE: 2016/05/03 DRAWING: DPo DESIGN: MSc/DPo REVIEW: MSc APPROVED: MM			PROFESSIONAL SEAL:  APEGA PERMIT NUMBER: 13440	CLIENT:  <b>Town of CANMORE</b>	PROJECT: UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>
REVISION NOTES DRAWN REVIEW APPROVED			ENGINEERING: <b>CANADIAN HYDROTECH CORPORATION</b>	CONTENT: <b>2D FLOW CONDITIONS - CURRENT SITUATION          CLEAR WATER CALCULATION RESULTS</b>	
REV.	DATE			PROJECT No.: 16494 DRAWING No.: LTMM CC-CHU-HYD-001 R00 REV: 00	

DESIGN - 64 m<sup>3</sup>/s  
MAX. FLOW HEIGHT

DESIGN - 64 m<sup>3</sup>/s  
MAX. FLOW VELOCITY

DESIGN - 45 m<sup>3</sup>/s  
MAX. FLOW HEIGHT

DESIGN - 45 m<sup>3</sup>/s  
MAX. FLOW VELOCITY

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REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED

SCALE:	1:5,000
DATE:	2016/05/03
DRAWING:	DPo
DESIGN:	MSc/DPo
REVIEW:	MSc
APPROVED:	MM

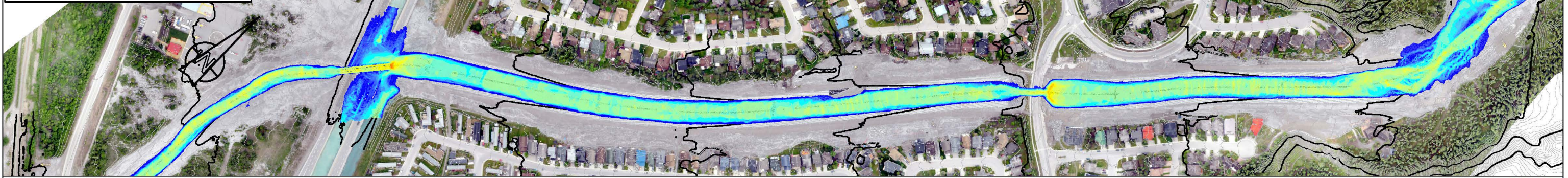
PROFESSIONAL SEAL:  
11/21/2016  
PROFESSIONAL ENGINEER ALBERTA  
MINE INDUSTRY  
APPROVED PERMIT NUMBER:  
13440

CLIENT:  
Town of CANMORE

ENGINEERING:  
**CANADIAN HYDROTECH CORPORATION**

PROJECT:	UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>		
CONTENT:	PLAN VIEW <b>2D FLOW CONDITIONS - DESIGN CLEAR WATER CALCULATION RESULTS</b>		
PROJECT No.:	16494	DRAWING No.:	LTMM CC-CHU-HYD-002 R00
REV:	00		

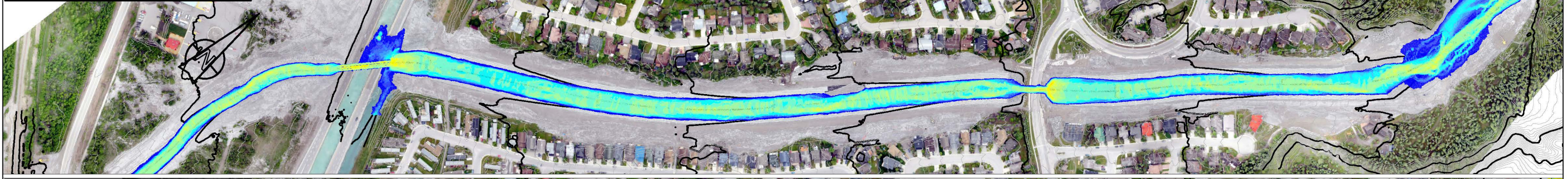
CURRENT SITUATION - 64 m<sup>3</sup>/s  
MAX. FLOW HEIGHT



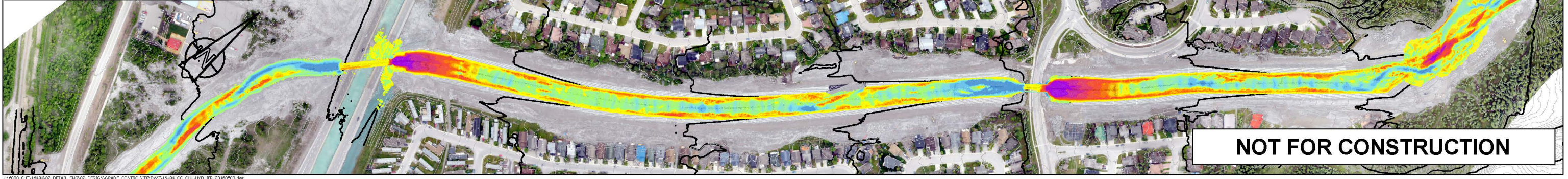
CURRENT SITUATION - 64 m<sup>3</sup>/s  
EROSION AND AGGRADATION



CURRENT SITUATION - 45 m<sup>3</sup>/s  
MAX. FLOW HEIGHT



CURRENT SITUATION - 45 m<sup>3</sup>/s  
EROSION AND AGGRADATION



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			SCALE:	1:5,000		CLIENT:	 <b>Town of CANMORE</b>	PROJECT:	UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>				
			DATE:	2016/05/03		ENGINEERING:		<b>CANADIAN HYDROTECH CORPORATION</b>	CONTENT:	2D FLOW CONDITIONS - CURRENT SITUATION BEDLOAD CALCULATION RESULTS			
			DRAWING:	DPo		PROJECT No.:			16494	DRAWING No.:	LTMM CC-CHU-HYD-003 R00	REV:	00
			DESIGN:	MSc/DPo									
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REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED	APPROVED:	MM						

DESIGN - 64 m<sup>3</sup>/s  
MAX. FLOW HEIGHT

DESIGN - 64 m<sup>3</sup>/s  
EROSION AND AGGRADATION

DESIGN - 45 m<sup>3</sup>/s  
MAX. FLOW HEIGHT

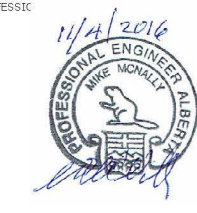
DESIGN - 45 m<sup>3</sup>/s  
EROSION AND AGGRADATION


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REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED

SCALE:	1:5,000
DATE:	2016/05/03
DRAWING:	DPo
DESIGN:	MSc/DPo
REVIEW:	MSc
APPROVED:	MM

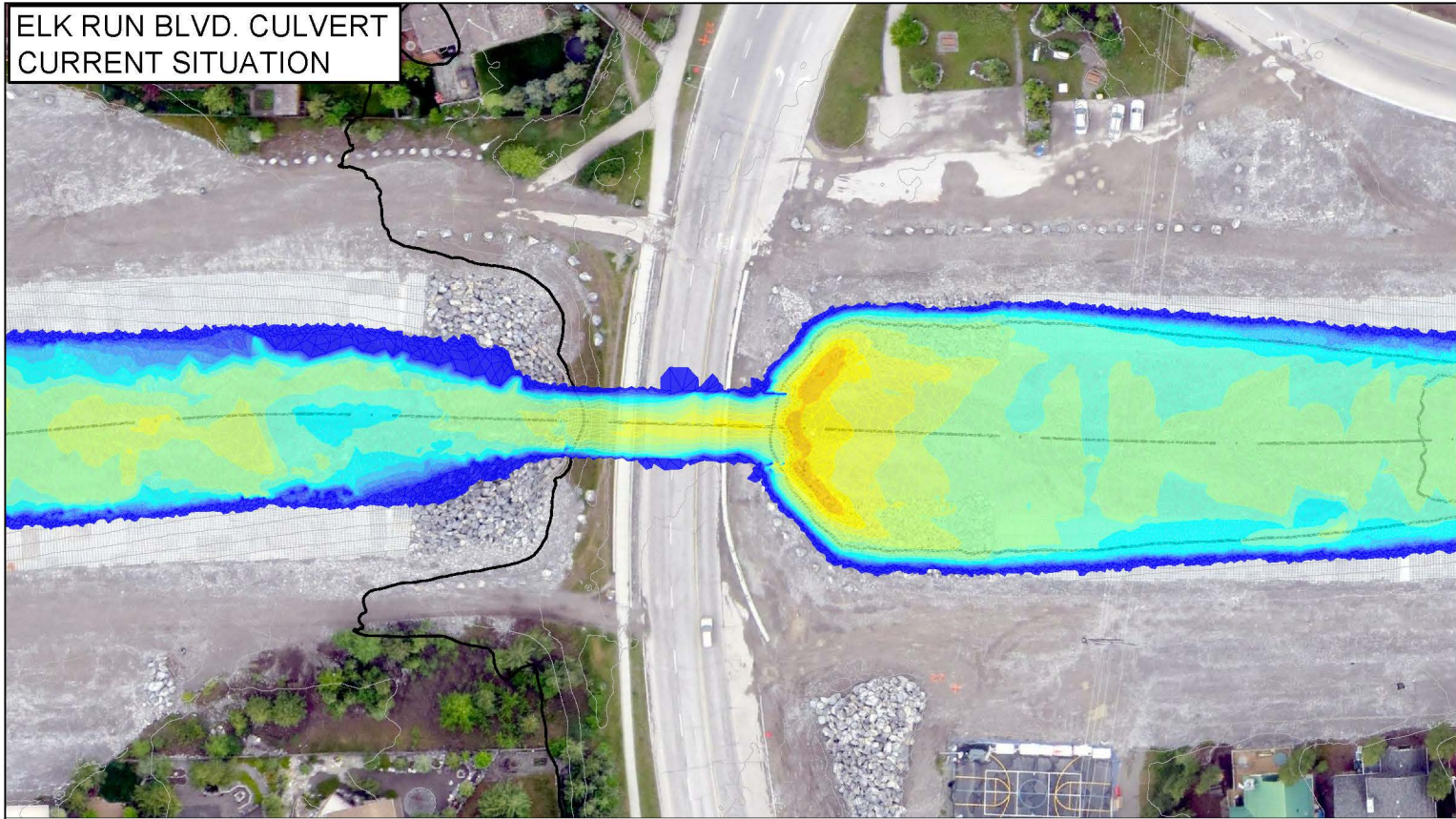
PROFESSIONAL ENGINEER  
  
 APEGA PERMIT NUMBER:  
 13440

CLIENT:  
  
 ENGINEERING:  
**CANADIAN HYDROTECH CORPORATION**

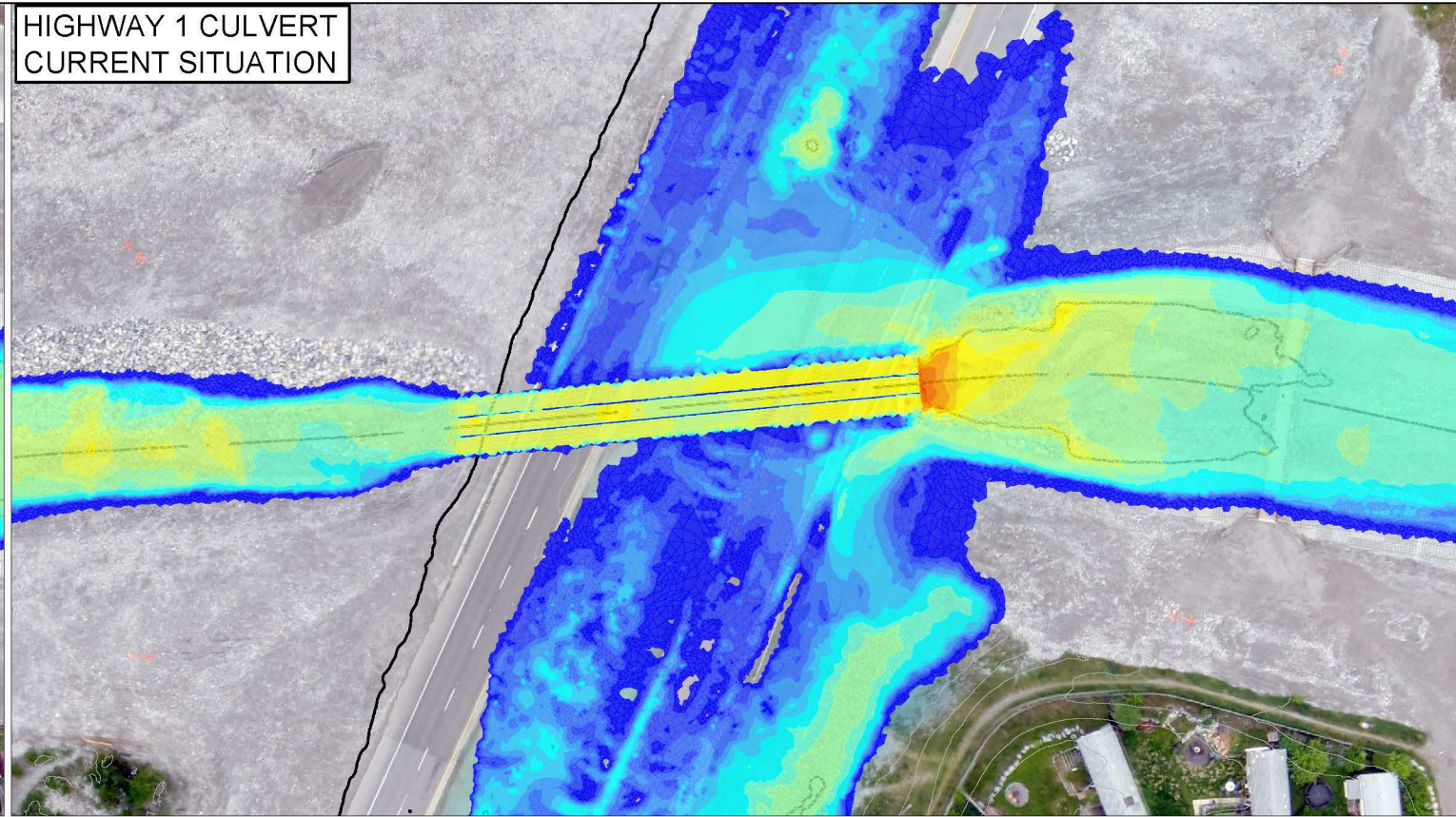
PROJECT:	UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>	
CONTENT:	PLAN VIEW <b>2D FLOW CONDITIONS - DESIGN BEDLOAD CALCULATION RESULTS</b>	
PROJECT No.:	16494	DRAWING No.:
		LTMM CC-CHU-HYD-004 R00
REV:	00	

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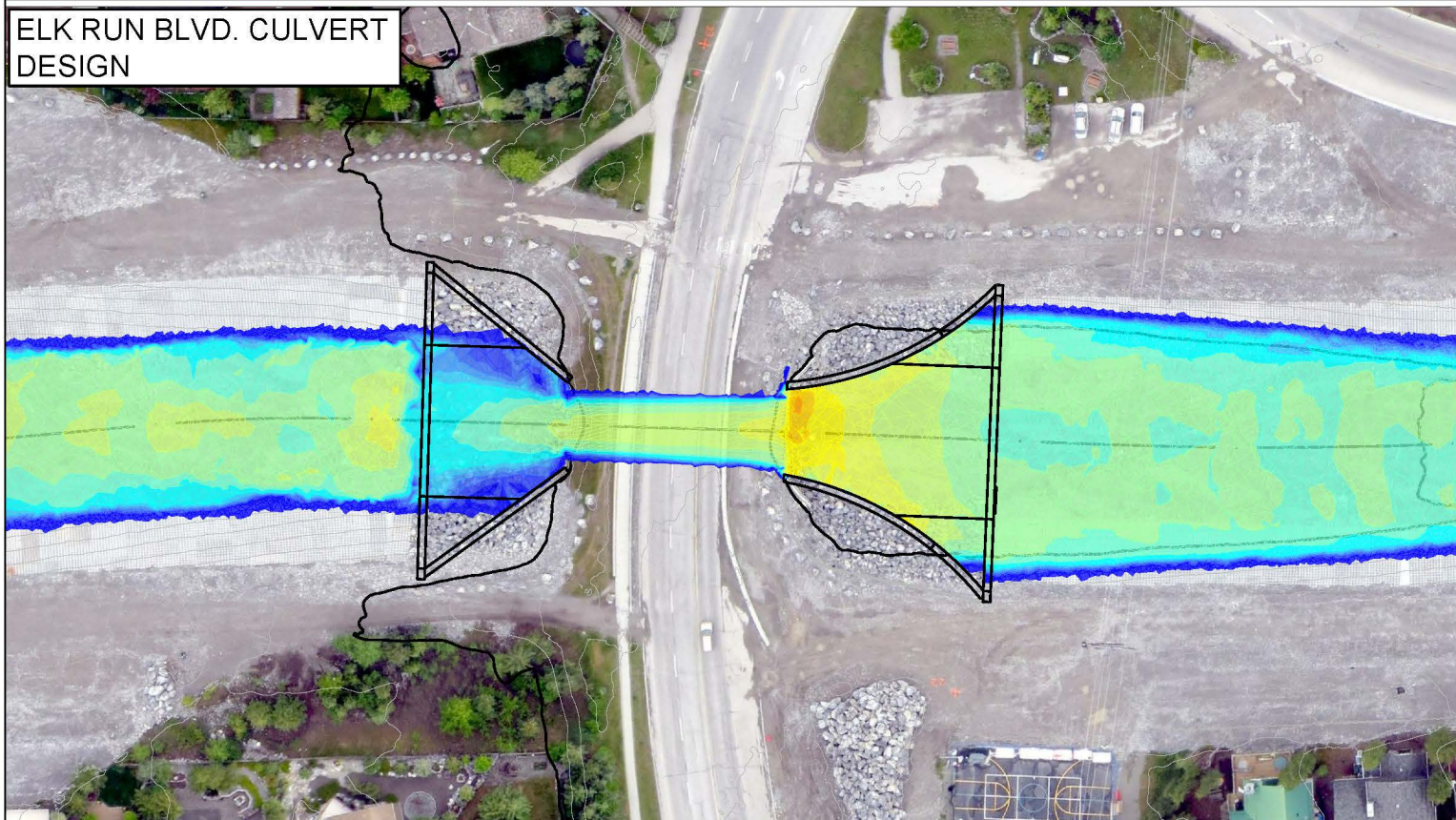
ELK RUN BLVD. CULVERT  
CURRENT SITUATION



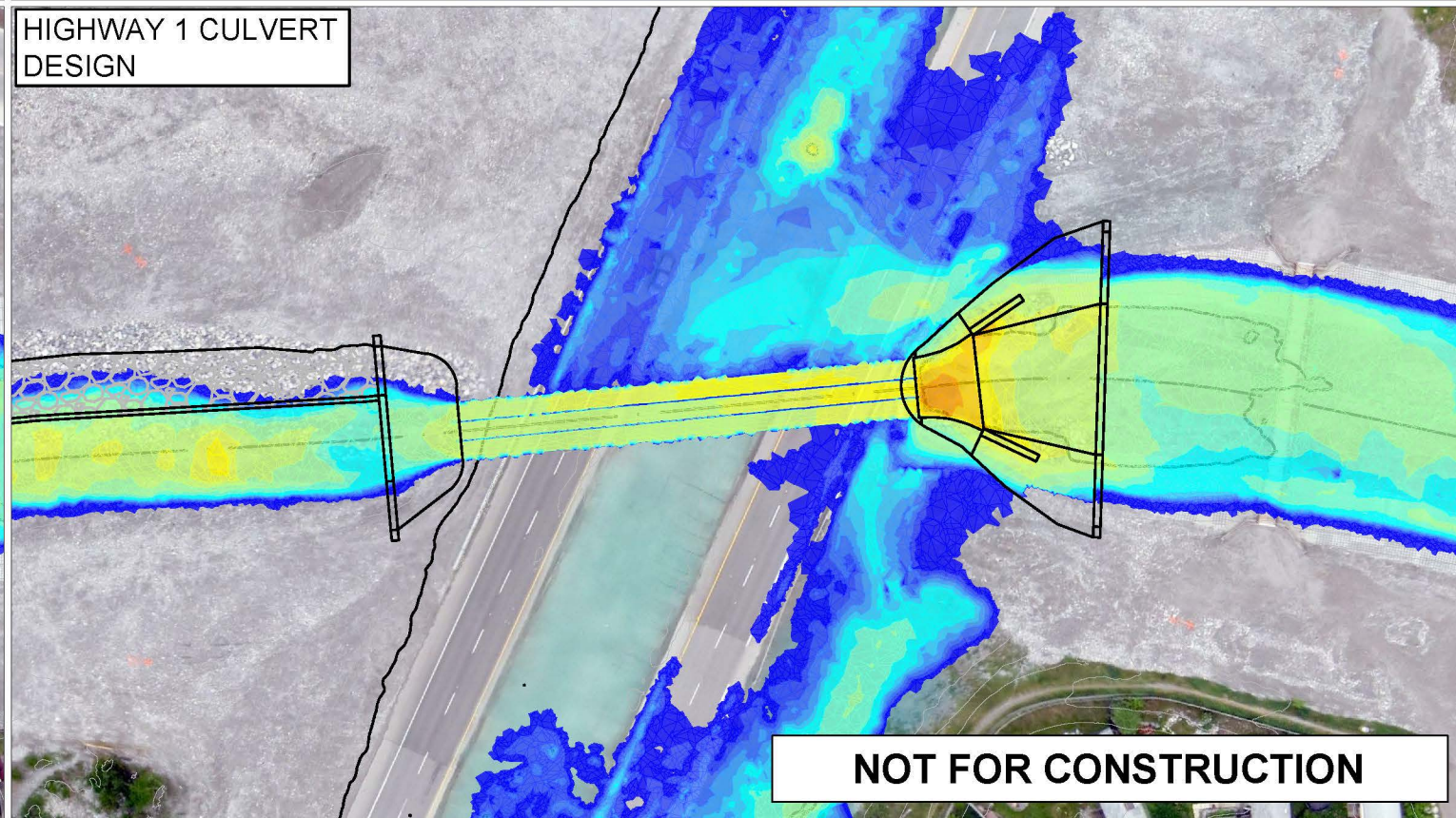
HIGHWAY 1 CULVERT  
CURRENT SITUATION



ELK RUN BLVD. CULVERT  
DESIGN

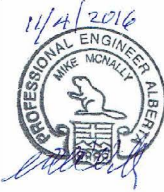



HIGHWAY 1 CULVERT  
DESIGN

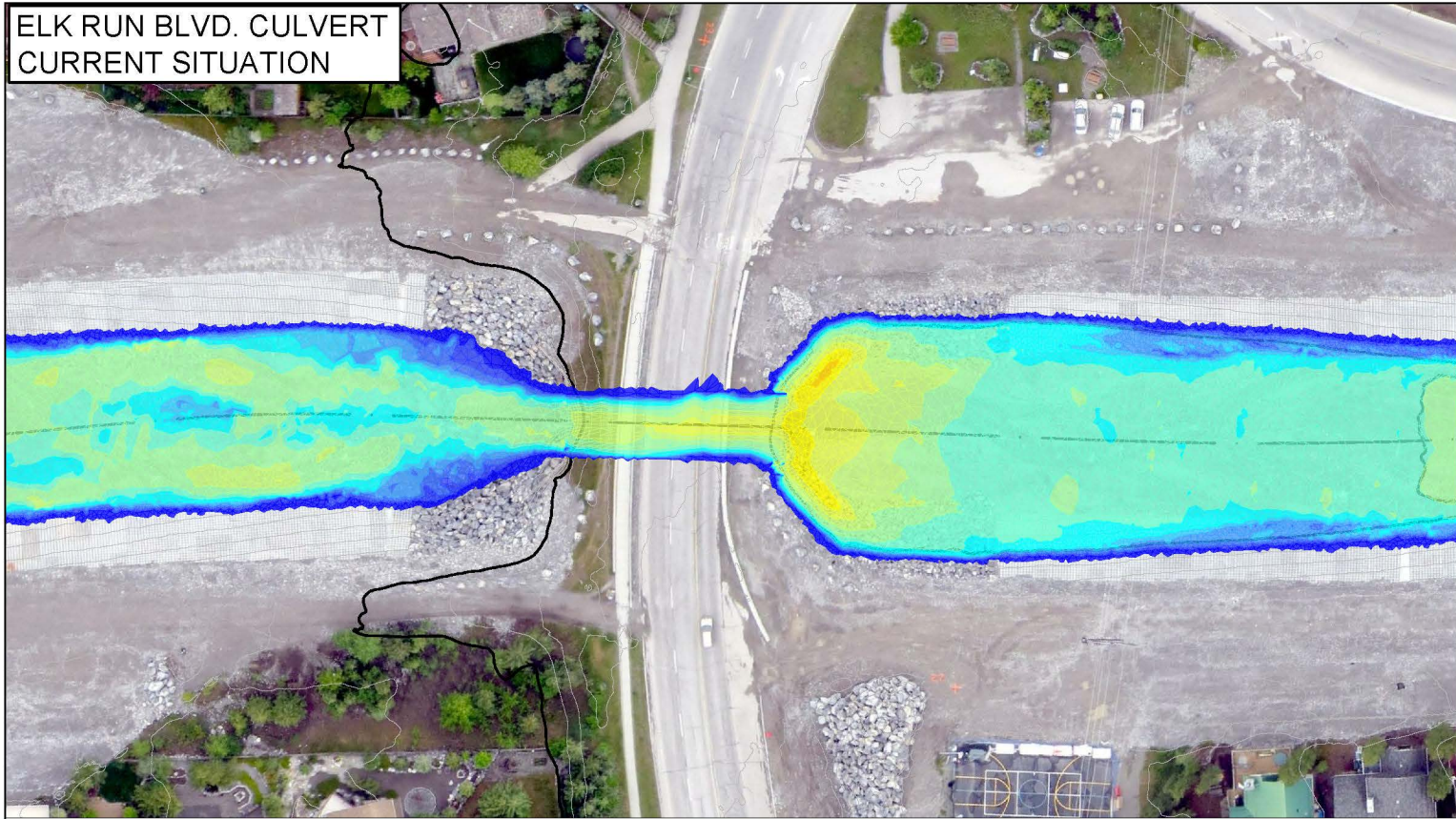


**NOT FOR CONSTRUCTION**

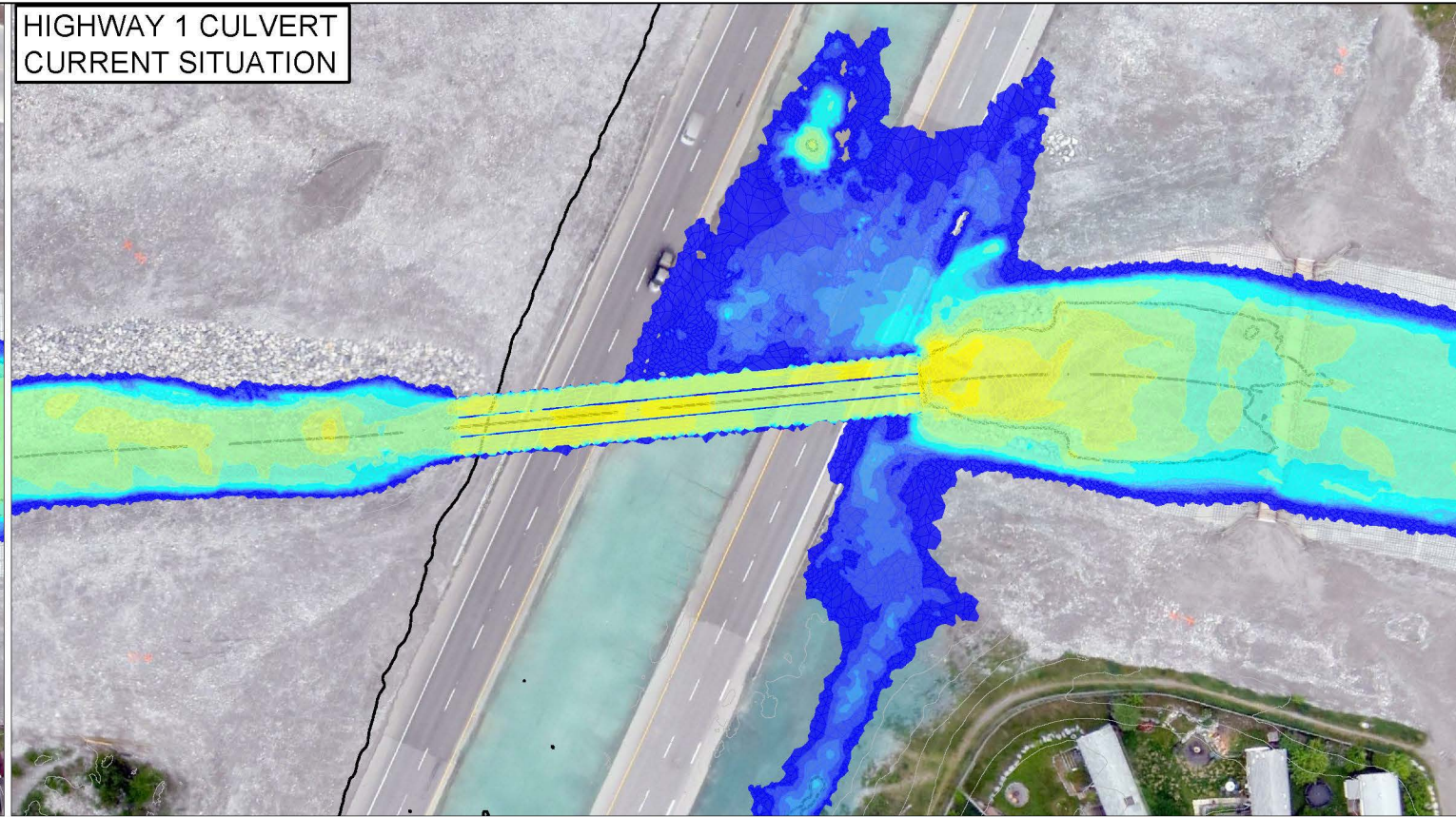
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			SCALE:	1:1,000	PROFESSIONAL ENGINEER  MIKE MCNALLY	CLIENT:	 Town of <b>CANMORE</b>		PROJECT:	UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>					
			DATE:	2016/05/03		ENGINEERING:	<b>CANADIAN HYDROTECH                  CORPORATION</b>		CONTENT:	PLAN VIEW <b>2D FLOW CONDITIONS - CULVERT DETAILS                  BEDLOAD CALCULATION RESULTS - 64 m³/s</b>					
			DRAWING:	DPo		APPROVED:	MM	APEGA PERMIT NUMBER:	13440	PROJECT No.:	16494	DRAWING No.:	LTMM CC-CHU-HYD-005 R00	REV:	00
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			REVIEW:	MSc											
REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED										

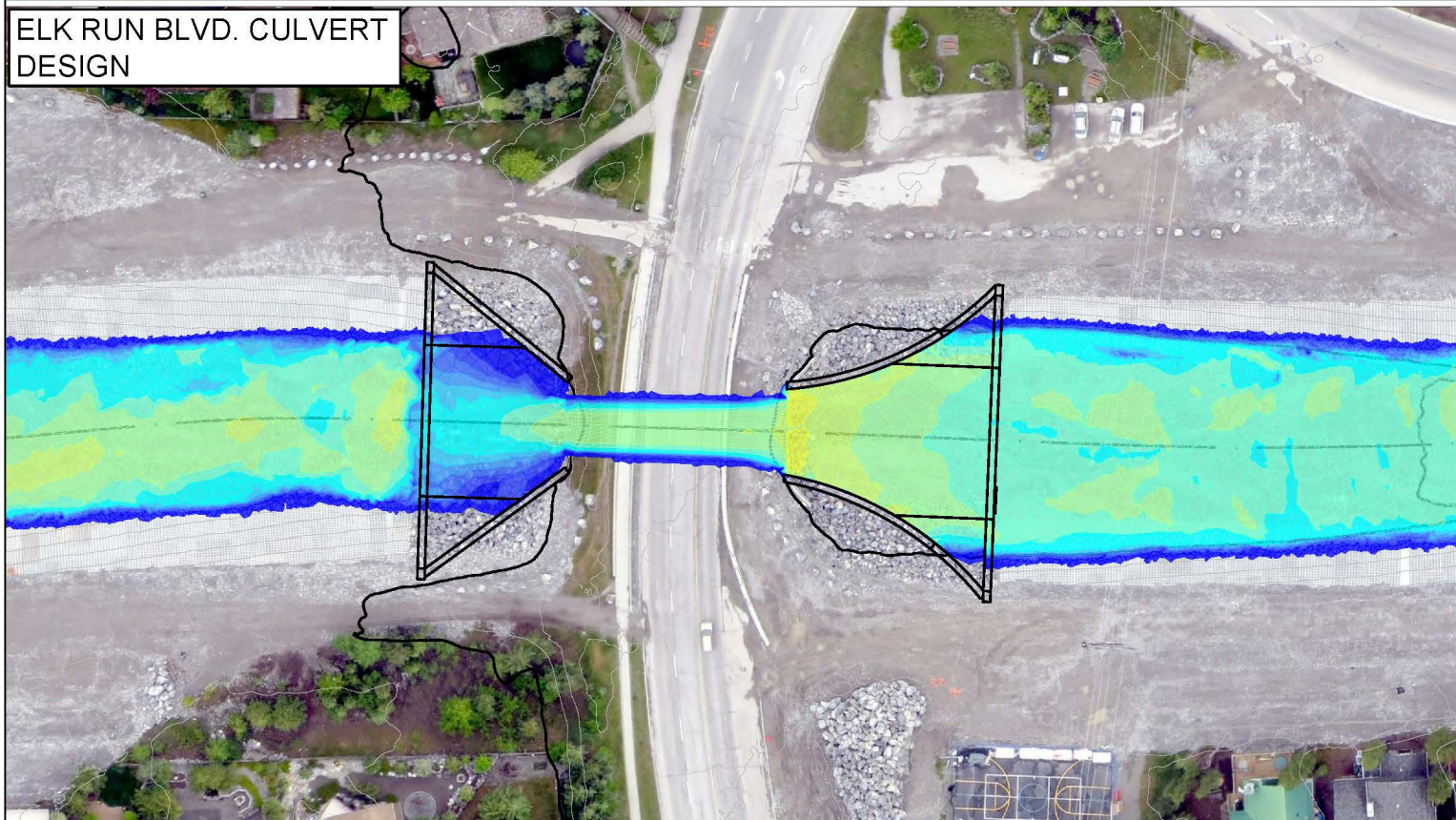
ELK RUN BLVD. CULVERT  
CURRENT SITUATION



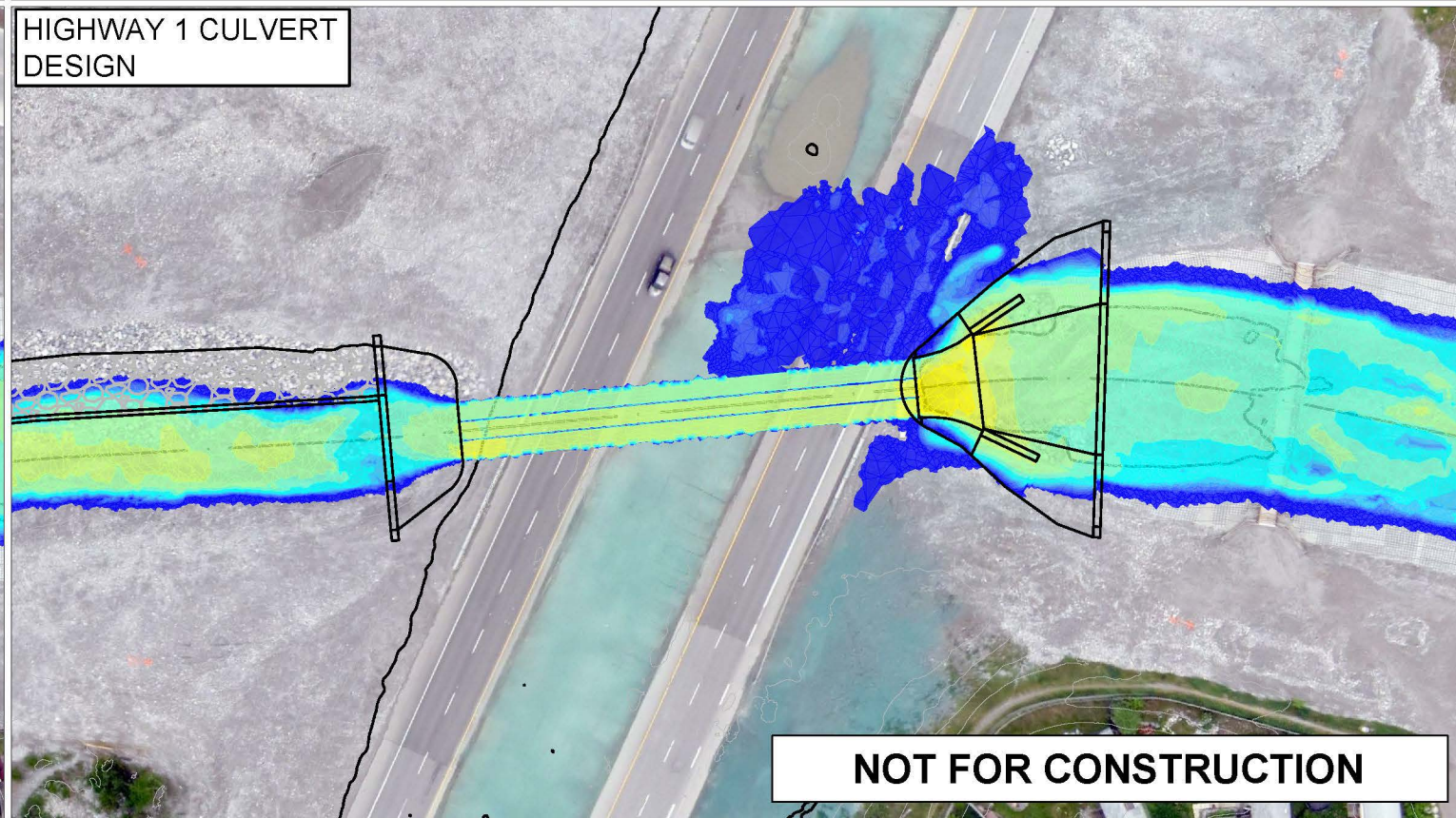
HIGHWAY 1 CULVERT  
CURRENT SITUATION



ELK RUN BLVD. CULVERT  
DESIGN

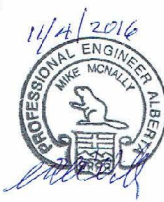



HIGHWAY 1 CULVERT  
DESIGN



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			SCALE:	1:1,000	PROFESSIONAL ENGINEER  11/4/2016 MIKE MONALTY PROFESSIONAL ENGINEER ALBERTA	CLIENT:	 Town of <b>CANMORE</b>		PROJECT:	UPDATE GRADE CONTROL COUGAR CREEK CHANNEL <b>ISSUED FOR PERMIT</b>				
			DATE:	2016/05/03		ENGINEERING:	<b>CANADIAN HYDROTECH</b> CORPORATION		CONTENT:	2D FLOW CONDITIONS - CULVERT DETAILS BEDLOAD CALCULATION RESULTS - 45 m <sup>3</sup> /s				
			DRAWING:	DPo		APPROVED:	MM		PROJECT No.:	16494	DRAWING No.:	LTMM CC-CHU-HYD-006 R00	REV:	00
			DESIGN:	MSc/DPo										
			REVIEW:	MSc										
REV.	DATE	REVISION NOTES	DRAWN	REVIEW	APPROVED									