VAST File: 18.0024.00

April 3, 2020

Mike Shepard
Executive Project Director
Environmental Assessment Office
Victoria, British Columbia

Re: Request to amend the KWM Environmental Assessment Certificate M18-01 CPD

Dear Mr. Shepard:

On behalf of CertainTeed Canada Inc. (CertainTeed), VAST Resource Solutions (VAST) has prepared this official request to amend the Kootenay West Mine (KWM) Environmental Assessment Certificate (EAC) M18-01, Certified Project Description (CPD), specifically to replace Figure 2 and Figure 3. This document describes the background and rationale around the necessity for the amendment. A revised CPD, which includes the proposed new Figure 2 and Figure 3 is attached for your consideration.

1. INTRODUCTION

The KWM Project received an Environmental Assessment Certificate (EAC) on January 24th, 2018. Schedule A of the KWM EAC is the CPD, which contains a brief description of the KWM Project along with three figures. Figure 1 represents an overview of the mine site location, Figure 2 shows the Mine Disturbance Limit (MDL) and an approximate mine footprint General Arrangement (GA), and Figure 3 shows the mine components within the approximate GA of the mine site at the time of the CPD development.

Recently, it has come to light that the Environmental Assessment Office Compliance and Enforcement (EAO C&E) is using Figure 3 of the CPD as the basis for evaluating compliance around mine site disturbance limits during construction and operations. That is to say, the individual mine component footprints shown on Figure 3 are being interpreted as the maximum expected disturbance extent of the KWM Project, and therefore the maximum allowable disturbance area. Using the mine component map in this way will result in non-compliances to the KWM Project (as described below). Therefore, CertainTeed requests that Figure 2 and Figure 3 of the CPD be replaced with updated maps showing the appropriate disturbance boundary that was used throughout the development of the Environmental Assessment Application.

2. RATIONALE FOR THE AMENDMENT

There are two (2) reasons that support the replacement of Figure 2 and Figure 3 of the CPD:

1) The Valued Components (VCs) used in the EA for the KWM Project were assessed based on larger disturbance area limits (i.e. the Mine Disturbance Limit shown in Figure 2, or larger areas depending on the specific VC), not on approximate individual mine component footprints.

2) Figure 3 is a Mine Components Map that shows the approximate GA of the mine site. It is not a mine disturbance area or limits map.

2.1. CPD – Figure 2 – Project Overview Map

At the time of development of the KWM CPD, the intention of including Figure 2, Project Overview, was to show the MDL that represented the minimum area assessed for any of the VCs during the EA process. The approximate mine footprint GA was included to provide a visual reference of the mine components within the MDL.

2.2. CPD – Figure 3 - Mine Components Map

At the time of development of the KWM CPD, the intention of including Figure 3, Mine Components, was to show the conceptual layout (i.e. the GA) of the proposed KWM infrastructure. This is noted in the map legend. This map does not show expected disturbance limits nor the full extent of ground to be worked during mine construction and operations.

2.3. EA VC Impact Studies and Mitigations

The KWM EA Application included an assessment of several VCs. The EA for each VC occurred within the Local Study Area (LSA) and Regional Study Area (RSA), and the boundaries for these study areas varied depending on the VC. For some VCs, the LSA was identified as the Mine Disturbance Limit (as shown in Figure 2 of the CPD). For other VCs, the LSA was larger than the Mine Disturbance Limit.

To clarify, the Mine Disturbance Limit represents the maximum extent of the mine footprint as well as a buffer surrounding it. The Mine Disturbance Limit also included any undisturbed lands enveloped by the mine footprint, and adjacent to it.

Figure 2 of the CPD shows the minimum mine disturbance limits that were used in all VC assessments during the EA. The VCs for the KWM EA were:

1) Aquatic Resources;
2) Rocky Mountain Bighorn Sheep;
3) Ungulate Winter Range;
4) Birds of Prey;
5) Commercial Land Use;
6) Non-commercial Land Use;
7) Archaeology; and,
8) Air Quality.

A summary of each VC assessment, including the assessment boundary used to evaluate impacts and mitigative efforts is provided below.

2.3.1. Summary of the KWM Valued Component Assessments

2.3.1.1. Aquatic Resources

Assessment Boundary: See Figure 4-1.1 of the KWM EA Application (also shown below). The LSA is defined as the section of the Kootenay watershed in which the proposed Project will occur. This drainage is bounded by the height of the land to the north, west and south of the proposed Project site. To the east, the LSA includes the Kootenay River, including its eastern bank. The LSA boundary was selected because it represents a natural drainage basin and includes all ephemeral surface water courses that run through the proposed Project site.

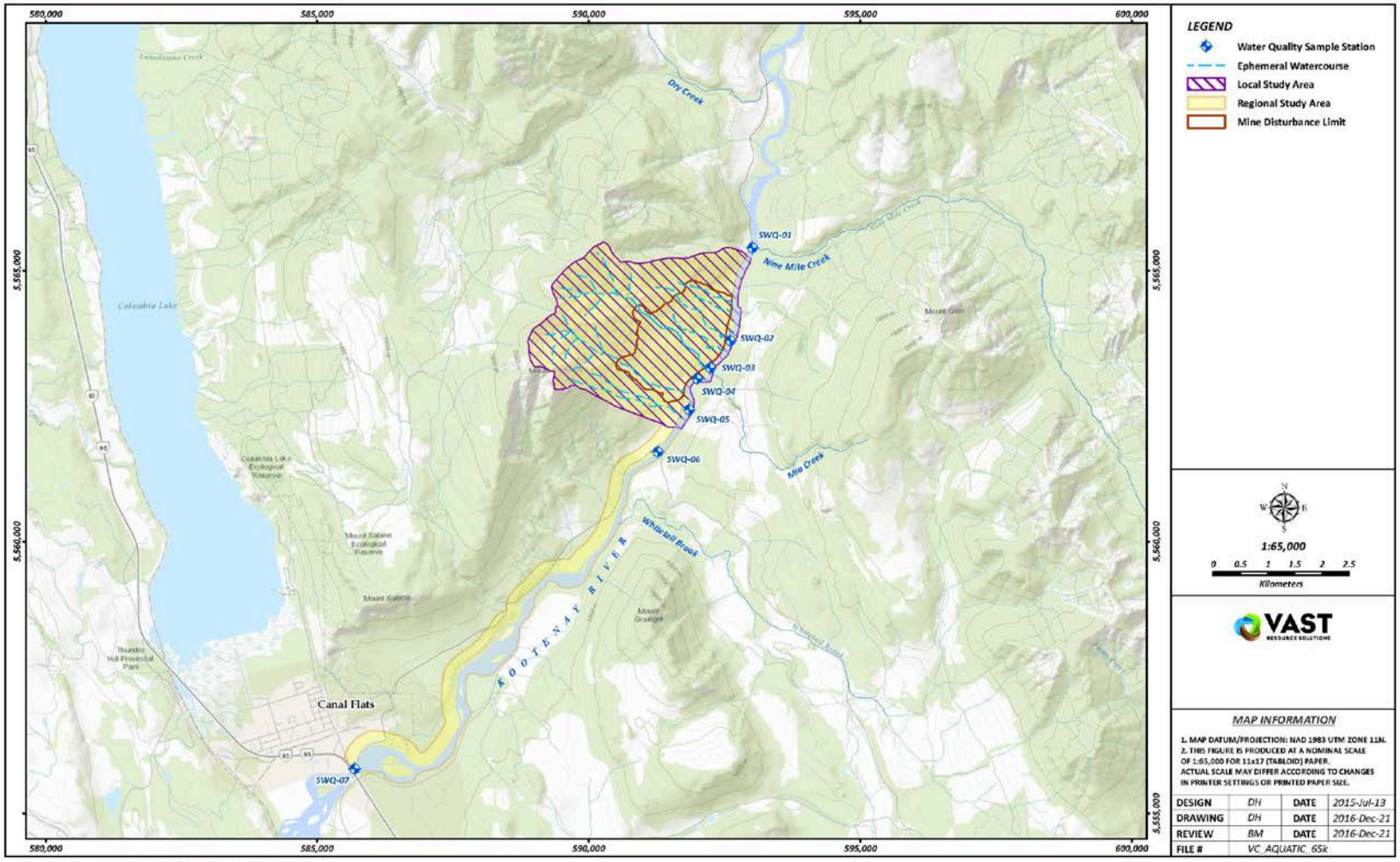
Assessment - Potential effects: Potential adverse effects of the proposed Project on aquatic resources may include changes to surface and groundwater quality as a consequence of re-routing of non-contact

water around the mine site (construction phase) and interaction of contact water with the mineral deposit and host lithology during or following mine disturbance (operations phase). Impacts to fish and fish habitat may occur via 1) Changes in loading of deleterious materials (i.e., dissolved metals, ions) that effect aquatic productivity or fish survival. Toxic effects to aquatic biota that result from changes to surface and groundwater quality consider both potential effects from mining as well as haul truck accidents along the Kootenay FSR that lead to accidental spills of contaminants; and, 2) Increased sediment loading where fine sediment may enter the Kootenay River from interceptor ditches that provide connectivity and support surface flow for extended periods or during direct discharge of sediment ponds under extreme snowmelt or storm events. The possibility of increased suspended particle loading (TSS) and fine sediment deposition caused by a breach of the engineered sedimentation ponds due to a catastrophic event (e.g. avalanche, major storm) during the operation phase is also considered.

Mitigations: Mitigation measures to address the above mentioned potential effects on aquatic resources will focus on minimizing fine and coarse sediment delivery to the Kootenay River and monitoring of water quality in groundwater wells within the proposed Project area as well as the Kootenay River to document any variances that exceed guideline levels. Preventative measures to minimize mine-related traffic accidents along the Kootenay FSR will also be included.

Residual effects: 1. Altered coarse and fine sediment delivery to the Kootenay River. 2. Change in water quality variables in the Kootenay River associated with mining activities. 3. Contaminant release to the Kootenay River associated with mine haul truck accident.

Significance of residual effects: Residual effects to aquatic resources are expected to be low in consideration of the magnitude of sediment inputs or water quality variable changes that are balanced by large differences in drainage basin areas between the LSA and the upper Kootenay River watershed, river dynamics that operate over landscape level scales and the dilution effects of the receiving environment. Downstream impacts to key indicators such as surface water (domestic, irrigation or recreational use), groundwater (domestic use) and fish habitat (embeddedness, changes in particle size distribution) are not expected to be significant since effects will likely occur within a short longitudinal distance of the river environment and adverse effects will be reversible following mine reclamation. The chance occurrence of mine haul traffic incidents are expected to be few in light of mitigation measures that include road surface upgrades and speed restrictions.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Columbia Lake Ecological Reserve
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DRAWING DH DATE 2016-Dec-21
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2.3.1.2. Rocky Mountain Bighorn Sheep

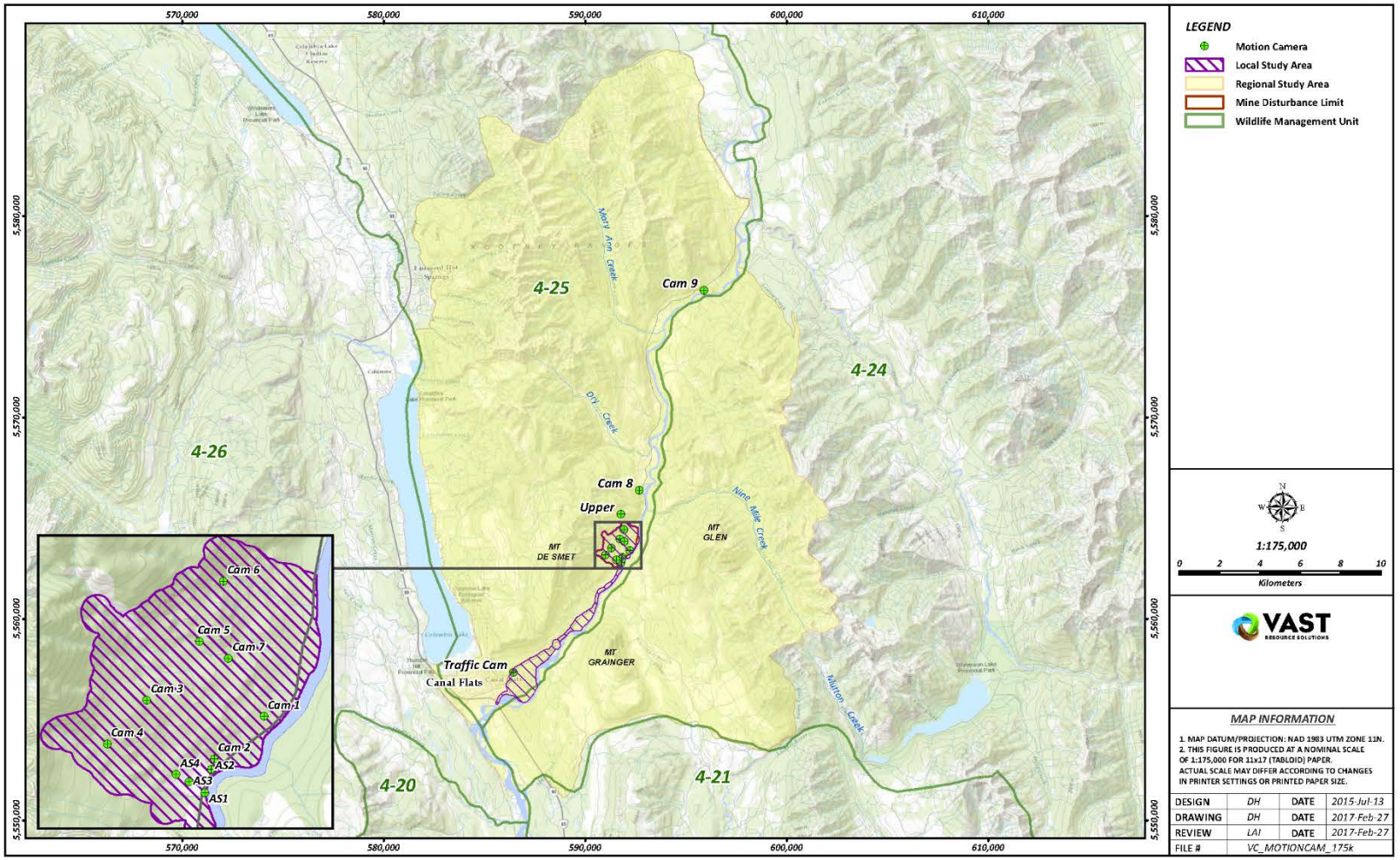
Boundary: See Figure 4.2-1 of the EA Application (and below). The LSA for bighorn sheep is defined as the proposed Project footprint and the section of the Kootenay FSR from the proposed Project site to the Village of Canal Flats at the 'Backdoor' turnoff (approximately 3.5 km on the Kootenay FSR; Figure 4.2-1). The LSA is buffered 100 m from the FSR centre line to the west and the Kootenay River bank to the east. The LSA was selected to encompass the area where the impact to movement and road mortality will be experienced- along the Kootenay FSR. The Kootenay River was not included in the LSA because the focus is on transitional movements in the terrestrial environment.

Assessment- Potential Effects: Adverse impacts to bighorn sheep are anticipated to include potential road mortality due to an increase in traffic during the construction and operation phase, potential shifts in traditional migration routes due to abundant forage and lack of predators on the mine site, and potential mortality due to exposure to chemicals, antifreeze, etc. after animals have been attracted into the site.

Mitigations: The mitigation measures determined for bighorn sheep focus on minimizing mortality risk and reducing the likelihood of attracting sheep into the mine site.

Residual effects: 1. Increased road mortality due to mine-related traffic. (NOTE: This residual effect includes road mortality associated with the transport of equipment and workers to site, product, and operation/maintenance materials.), 2. Alteration of traditional movement corridors due to reclamation activities.

Significance of residual effects: Overall, the residual effects of the proposed Project on Rocky Mountain Bighorn Sheep were determined not to be significant.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2.3.1.3. Ungulate Winter Range

Boundary: See Figure 1 of the Kootenay West Mine Ungulate Winter Range Technical Report ((and below; see Note 1 below). The LSA was selected to encompass the area where direct loss to UWR will be experienced because of the proposed Project footprint. The footprint includes pits, stockpiles, access roads, and related infrastructure. The LSA is buffered by 100m to include any potential impact that may occur at the footprint borders (i.e. 100m buffer was applied to water course 2 (to the south of the Project) and to water course 7 (to the north of the Project), the North and West Diversion Ditches (to the west of the Project). This is the MDL as shown in Figure 2 of the CPD.). The Kootenay River was not included in the LSA because the impacts will occur on the terrestrial environment.

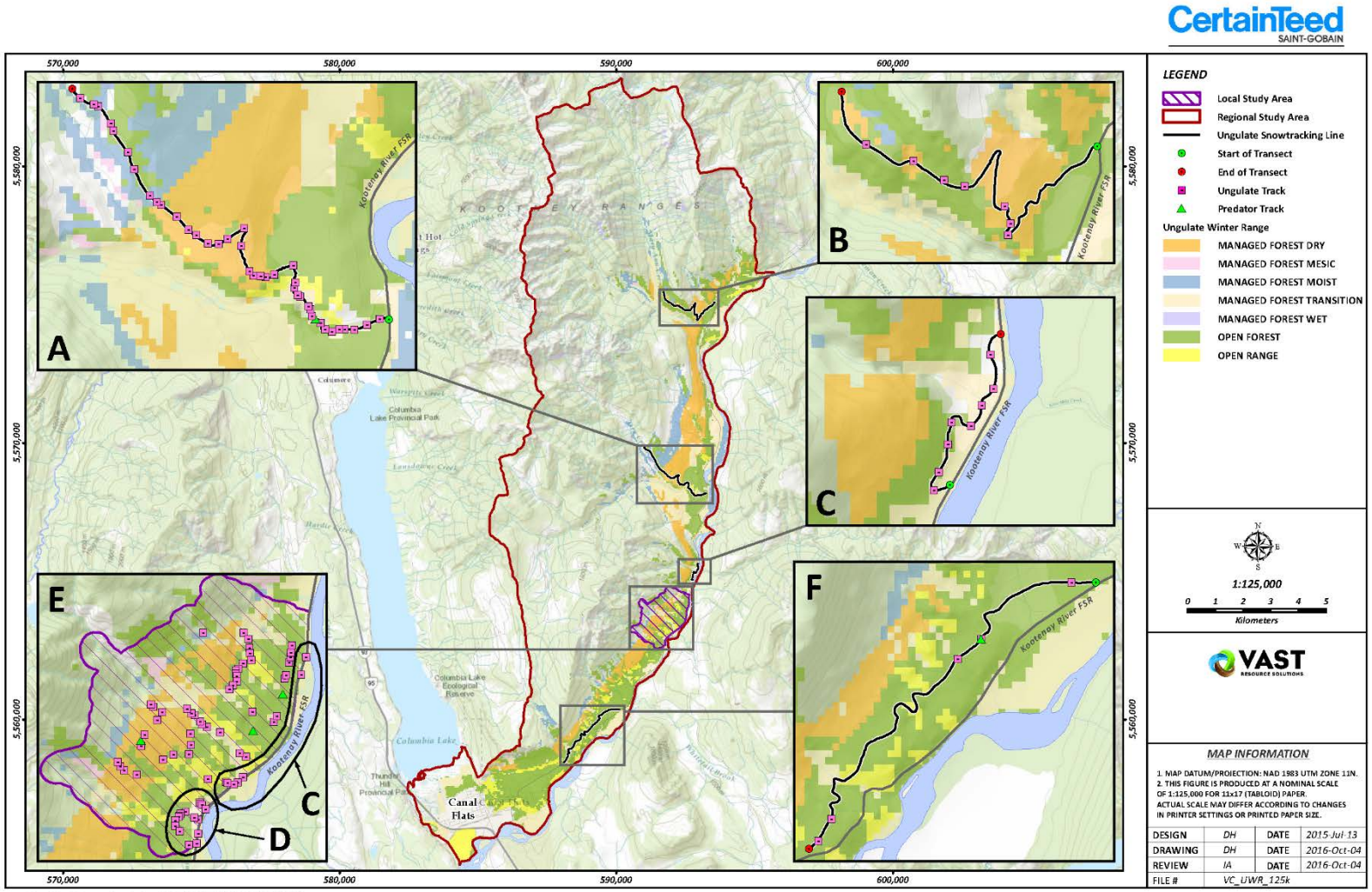
Assessment - Potential effects: Adverse impacts to UWR are anticipated to include the loss of UWR due to vegetation and overburden clearing during the construction phase. Related to this habitat loss are potential impacts to the occurrence and movement of ungulates because of the bisection of remaining UWR due to site clearing activities during the construction phase. Furthermore, ungulates could be adversely impacted from road mortality due to increased traffic during the construction and operations phase

Mitigations: The mitigation measures determined for UWR focus on reducing road mortality, minimizing the loss of winter habitat where possible, minimizing the disruption to potential migration routes, and reducing the likelihood of attracting ungulates to the mine site.

Residual effects: 1: Increased road mortality. **2:** Loss of ungulate winter range. **3:** Disruption to natural ungulate movement patterns.

Significance of residual effects: 1. The risk of ungulate road mortality due to mine-related traffic is considered not to be significant. **#2:** The loss of UWR is considered not to be significant. **3:** Disruption to natural ungulate movement patterns is considered not be significant.

Note 1: The incorrect figure (older version) is shown in the main KWM EA document (Figure 4.3-1). The correct figure is shown in the Ungulate Winter Range Technical Report which was appended to the main EA document (see below).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DRAWING DH DATE 2016-Oct-04
REVIEW IA DATE 2016-Oct-04
FILE # VC_UWR_125k
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2.3.1.4. Birds of Prey

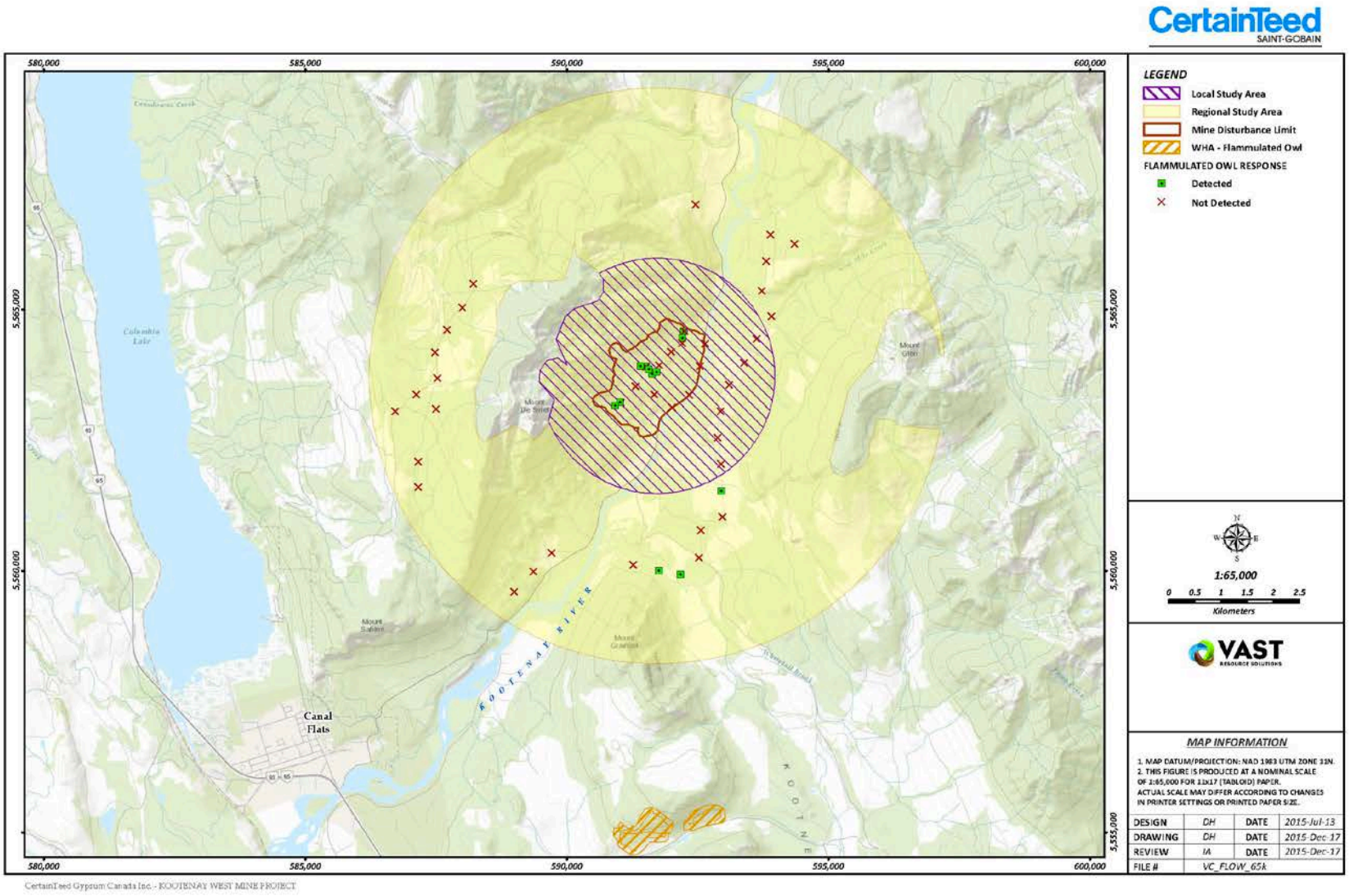
Boundary: See Figure Section 4.4-4 of the KWM EA Application (and below). The LSA is defined as a 2.25 km radius centered on the portion of the proposed Project footprint where the most land disturbance will occur – the two pits. The upper elevations are bounded by 1,800 m (Figure 4.4-1).

Assessment – potential effect: It is anticipated that the greatest potential adverse impact to birds of prey would be caused by vegetation clearing and overburden material removal during the construction phase.

Mitigations: The mitigation measures determined for birds of prey focus on avoiding potential effects where possible. Focus is on adjusting the site design in suitable areas (i.e. periphery of South and North Pit) to avoid nest trees thereby leaving them intact. Where avoidance is not possible, measures will focus on minimizing the potential effects of the proposed Project by adjusting the timing of operations in suitable sites (i.e. periphery of South and North Pit) to reflect nesting windows. Restoration activities will be designed to encourage the growth of important habitat features (i.e. nest trees) so that they can become available towards the closure/post-closure phase. Offsetting or compensation measures have not been proposed for birds of prey because the avoidance, minimization and on-site restoration measures are expected to mitigate potential effects to an acceptable level.

Residual effect: Loss of nesting habitat for Flammulated owl. Birds of prey were rated as exhibiting high sensitivity (and therefore low resilience) because potential Flammulated Owl nesting habitat within the LSA would be destroyed during construction activities. The magnitude of the residual effect is expected to be moderate but it is unlikely to affect sustainability of regional population. **T**he extent of the residual effect will be restricted to the LSA. The duration of the residual effect will be long-term, since following reclamation the re-establishment and maturation of forest communities will extend beyond the operation phase. The residual effect is expected to be partially reversible following reclamation. The residual effect is not considered fully reversible since following reclamation, habitat conditions at the proposed Project site will be modified from baseline conditions. The frequency of the residual effect on birds of prey will be single and regular. Clearing of the mine footprint will proceed gradually over the lifetime of the proposed Project. Ultimately, all FLOW habitat on the mine site will be lost and this will occur once.

Significance of residual effect: The residual effect of changes to nesting habitat for birds of prey is considered significant because the VC is highly sensitive to change and the residual effect is expected to be moderate but unlikely to affect the sustainability of regional population.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REVIEW IA DATE 2015-Dec-17
FILE # VC_FLOW_65k
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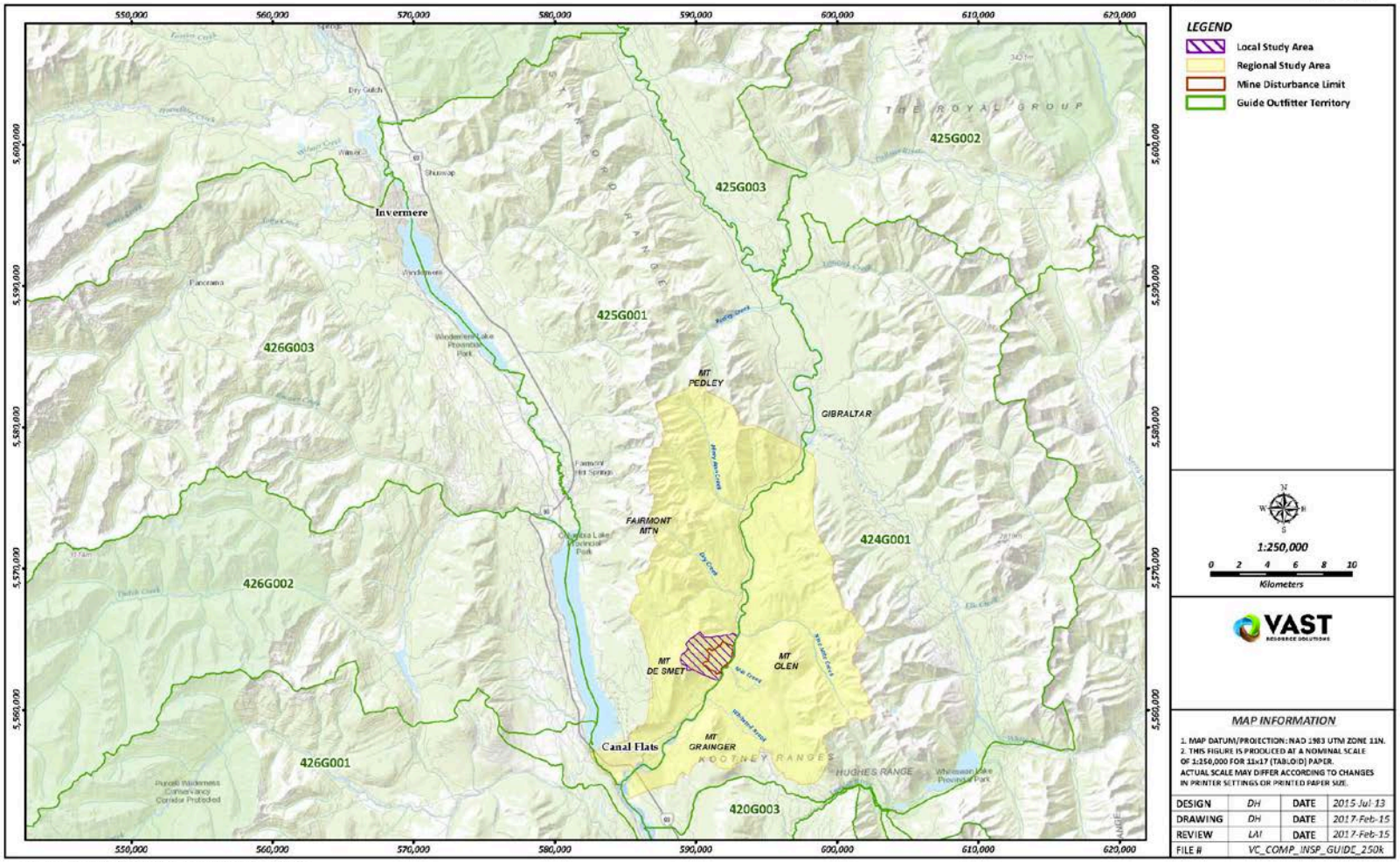
2.3.1.5. Commercial Land Use

Assessment Boundary: See Figure 6.1-1 of the KWM EA Application (and below). The LSA is defined as a subsection of the Kootenay watershed in which the proposed Project will occur. This drainage is bounded by the height of the land to the north, west and south of the proposed Project site. To the east, the LSA is bounded by the western bank of the Kootenay River. This boundary was selected because it represents a natural drainage basin and includes all ephemeral surface water courses that run through the site of the proposed Project.

Assessment – Potential effects: Potential adverse effects of the proposed Project on commercial land uses during mine construction and operations phases may include disruption of guide outfitting operations resulting from altered wildlife movements due to mine activities, and disruption of guide outfitting operations resulting from reduced wildlife populations due to road mortality. During the closure/post-closure phase, potential effects are related to alteration of traditional wildlife movement patterns due to reclamation activities.

Mitigations: The mitigation measures determined for commercial land use focus on minimizing the disruption to potential migration routes of species by conserving, where possible, land components and features that provide forage and shelter for guided species, minimizing road mortality by instituting speed controls and yield to wildlife policies, and reducing the likelihood of attracting guided wildlife species to the mine site during closure and post-closure through appropriate design of reclamation activities and vegetation species.

Residual effects and (*Significance*): 1) Disruption to natural movement patterns of guided wildlife species causing a decrease in successful guide outcomes (*Unknown*); 2) Increased road mortality of guided wildlife species causing a decrease in successful guide outcomes *(Not Significant)*; 3) Attracting guided wildlife species into the proposed Project site causing a decrease in successful guide outcomes *(Not Significant)*.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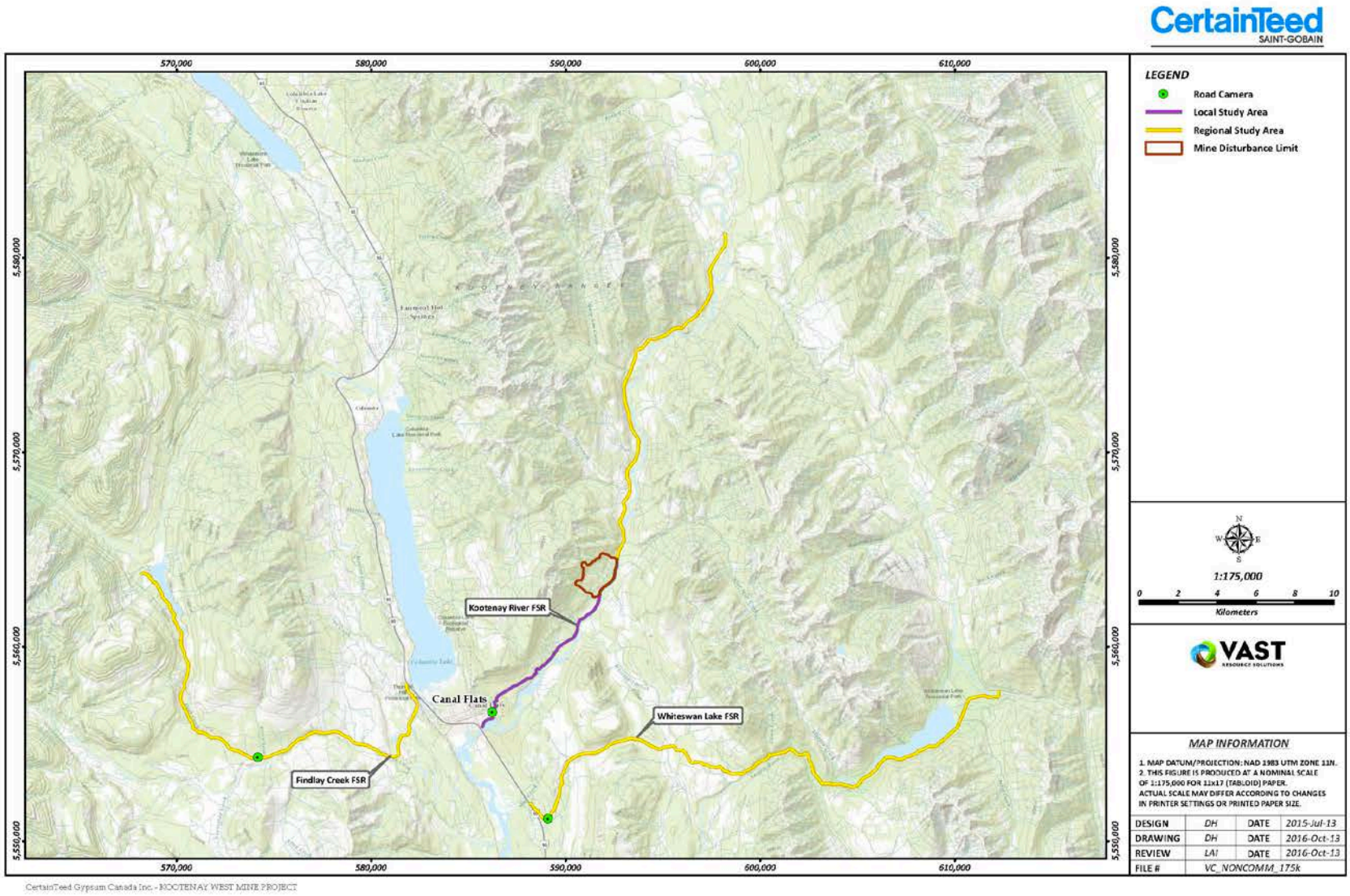
2.3.1.6. Non-Commercial Land Use

Assessment Boundary: See Figure 6.2-1 of the KWM EA Application (and below). The Local Study Area (LSA) is defined as the section of Kootenay FSR where traffic volume impacts to recreation are anticipated. This section extends from 3 km to 12 km along the Kootenay FSR. From the 3 km point to Highway 93/95, gypsum will be hauled along a resource road that is restricted to industrial traffic only and passes through the inactive sawmill at Canal Flats (owned by Canfor, called "The Back Door"). Interactions with public vehicles, including recreationalists, are not expected to occur along this stretch of road.

Assessment – Potential effects: Potential adverse effects of the proposed Project on non-commercial land uses may include: 1) Disruption of recreational opportunities resulting from altered wildlife movements due to mine construction/development activities including physical presence of materials and equipment, vegetation clearing and overburden removal, haul road construction, infrastructure development and the construction of ancillary services and sedimentation structures; 2) Disruption of recreational opportunities resulting from altered wildlife movements due to mine operations activities including drilling, blasting, crushing, loading and hauling; 3) Vehicle interactions with recreationalists due to product transportation (offsite); and 4) Dust generation due to product transportation (offsite).

Mitigations: The mitigation measures determined for non-commercial land use focus on facilitating wildlife movement around the site by adjusting mine design to limit habitat disturbance which will then in turn support recreation activities such as hunting and wildlife viewing, minimizing acoustic disturbance, minimizing vehicular interactions on the haul route by instituting speed limits and yield to wildlife policies, minimizing dust generation by using dust control products on haul routes and covered transport trailers when required, and reducing the likelihood of attracting ungulate wildlife species to the mine site during closure and post-closure through appropriate design of reclamation activities and vegetation species.

Residual effects and (*Significance*): 1) Disruption of wildlife movements causing a decrease in related recreation activities (*Unknown*); 2) Increased road mortality of wildlife species causing a decrease in related recreation activities (hunting and viewing) (*Not Significant*); 3) Attracting ungulates to the proposed Project site causing a decrease in related recreation activities (*Not Significant*).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2.3.1.7. Archaeology

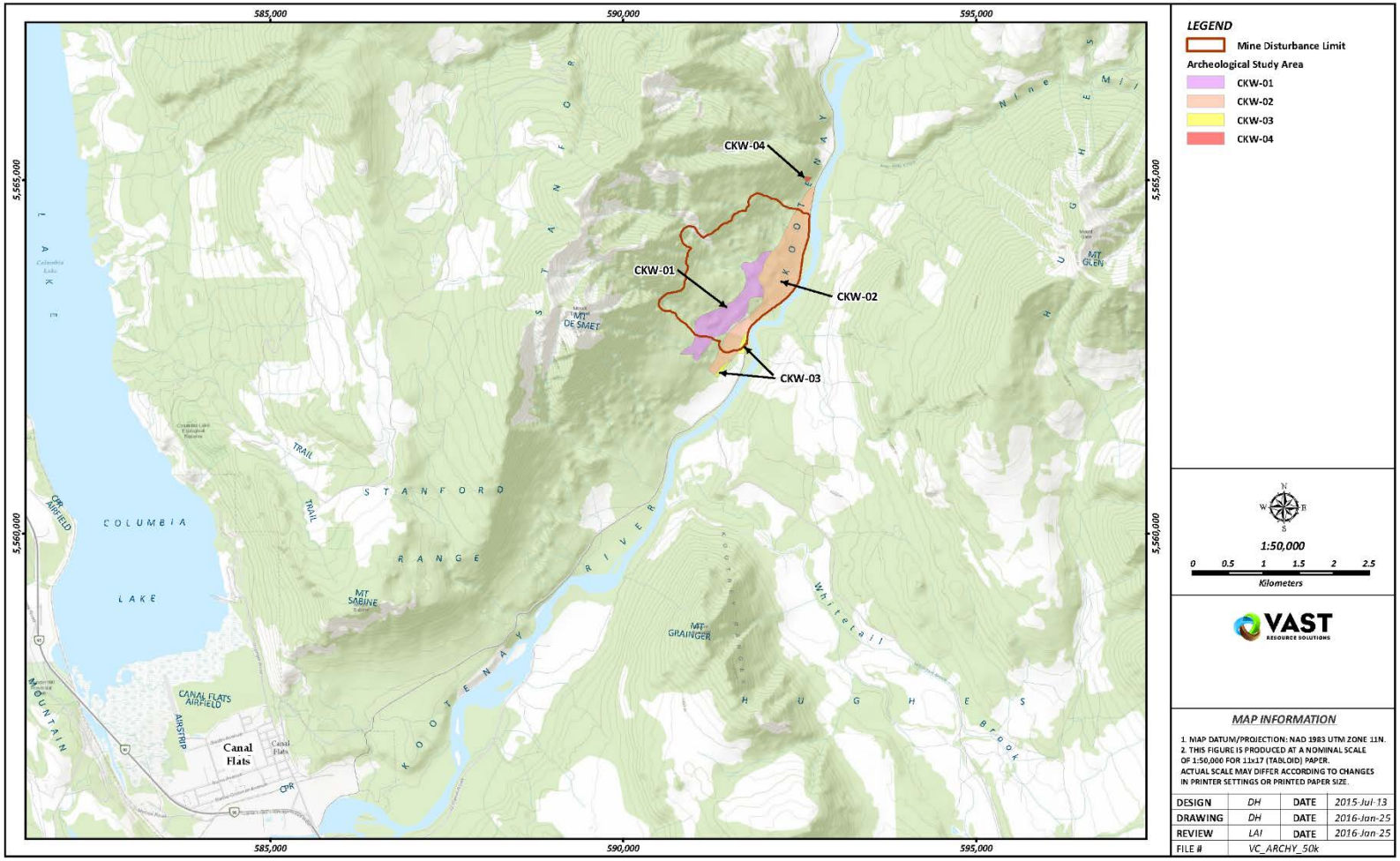
Assessment Boundary: See Figure 6.2-1 of the KWM EA Application (and below). The Local Study Area (LSA) for the Archaeology VC is defined as the Archaeological Overview Assessment (AOA) polygons that overlapped the mineral tenure of the proposed Project (Choquette 2012). The resulting LSA includes four areas, identified as CKW-01, 02, 03, and 04.

Assessment – Potential effects: Potential adverse effects of the proposed Project on archaeological resources may include disturbance from vegetation clearing and overburden removal during construction, and disturbance from drilling and blasting activities during mine operations.

Mitigations: Avoiding mining activity around site EbPw-21, limiting damage from drilling and blasting vibrations by altering blasting design when working in proximity to known archaeology sites, and preventing damage to undiscovered archaeological sites following the 'Chance Find Procedure' if suspected archaeological sites are encountered.

Residual effects and (*Significance*): Archaeological site EbPw-21 is considered to have a *high* ranking for ethnic and public significance, *moderate* to *low* significance for scientific value, and *low* significance for economic value. Significance for any unknown sites cannot be evaluated using the British Columbia Archaeological Impact Assessment Guidelines (BC Archaeology Branch 1998) until after the discovery of the site.

Figure 8. Archaeological Sites Valued Component



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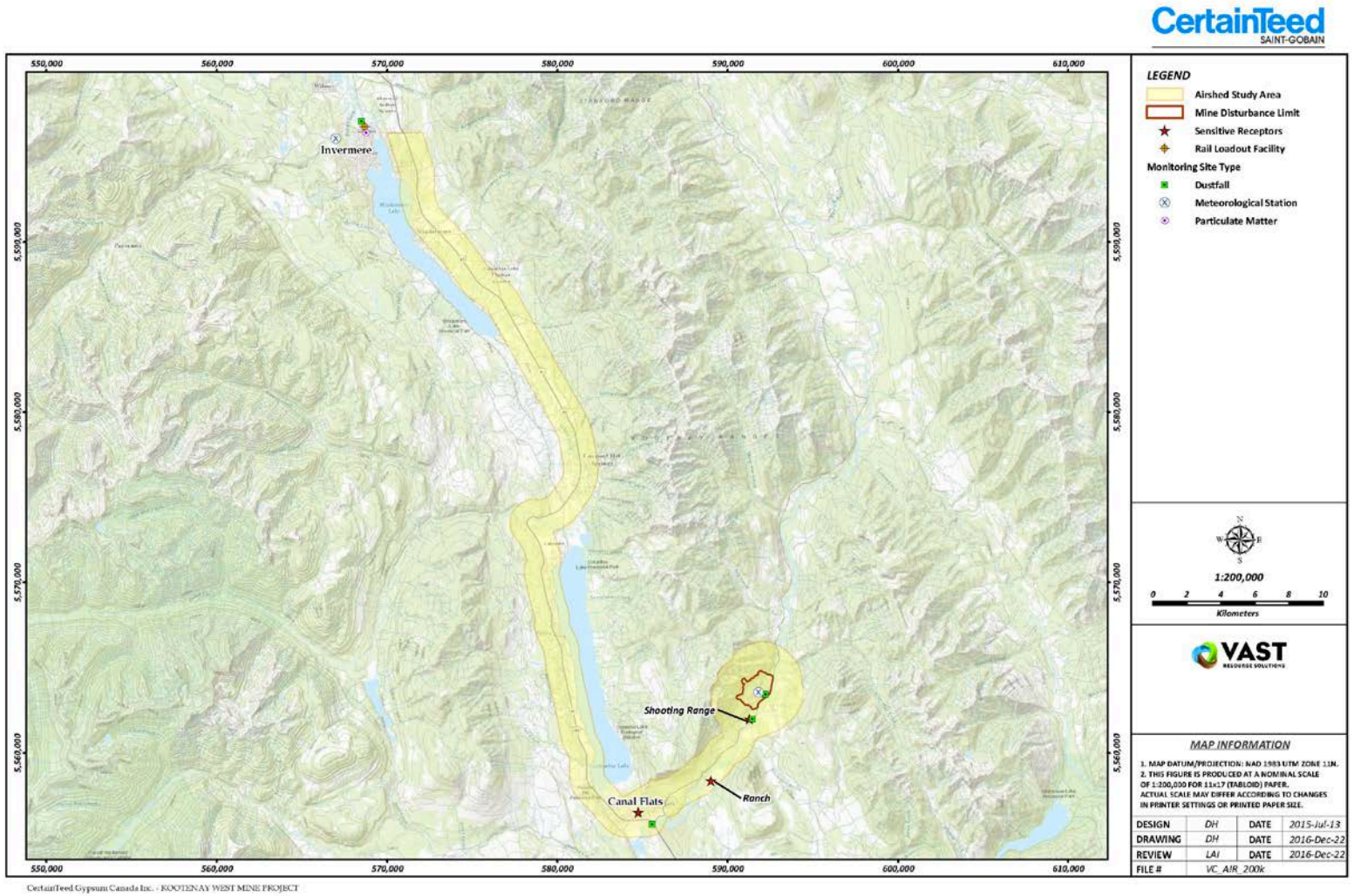
2.3.1.8. Air Quality

Assessment Boundary: See Figure 8.1-1 of the KWM EA Application (and below). The Local Study Area (LSA) for the Air Quality VC is defined by the ridgeline to the north of the proposed Project and extends southwest to, and including, Canal Flats. To the east, the LSA is bounded by the height of land on the east side of the Kootenay River. The LSA is also expanded to account for the potential impacts from dust and exhaust as vehicles move along parts of roadways leading from the mine site to the rail load-out facility in Invermere, BC.

Assessment – Potential effects: Potential adverse effects of the proposed Project on air quality may include creation of total suspended particulate matter (TSP), particulate matter (PM10, PM2.5), dustfall, and combustion exhaust due to: 1) the transport of equipment, workers and ore; 2) construction activities; 3) mining operations; and 4) reclamation activities.

Mitigations: The mitigation measures focus on the air quality key indicators (e.g. TSP, PM10, PM2.5, dustfall and combustion exhaust emissions) and include: 1) optimizing timber salvage and re-vegetation of disturbed areas as soon as possible to reduce the area of disturbance that will be subject to potential wind erosion; 2) complying with the Canadian Off-road Compression-ignition Engine Emissions Regulation (Minister of Justice 2012) applicable to the proposed Project's off-road and on-road vehicles and equipment; 3) implementing an engine maintenance program to conduct regular equipment inspection and maintenance; 4) implementing idling restrictions for haul and delivery trucks, employee/service vehicles and mobile equipment; 5) operating vehicles within the posted maximum speed limits, minimizing rapid starts and stops and use multi-passenger vehicles to transport crews to and from job site, where possible; 6) incorporating best achievable technology (BAT) when procuring mobile and stationary combustion equipment; 7) covering or enclosing loaded gypsum haul vehicles; 8) applying dust suppression agents on roads; 9) Adjust stockpile location and configuration to reduce wind exposure; and 10) adjusting the blast schedule to avoid blasting when wind speeds and wind direction are expected to negatively impact the environment and human health.

Residual effects and (*Significance*): 1) Damage to human health from elevated TSP, PM10, and PM2.5 concentrations in ambient air that could potentially be aspirated into the lungs (*Not Significant*); 2) Elevated dustfall deposition on soil, vegetation and surface water (*Not Significant*); 3) Change to baseline ambient air quality concentrations from increase proposed Project exhaust (*Not Significant*).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Sensitive Receptors
Rail Loadout Facility
Monitoring Site Type
Dustfall
Meteorological Station
Particulate Matter
1:200,000
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MAP INFORMATION
1. MAP DATUM/PROJECTION: NAD 1983 UTM ZONE 11N.
2. THIS FIGURE IS PRODUCED AT A NOMINAL SCALE OF 1:200,000 FOR 11x17 (TABLOID) PAPER. ACTUAL SCALE MAY DIFFER ACCORDING TO CHANGES IN PRINTER SETTINGS OR PRINTED PAPER SIZE.
DESIGN DH DATE 2015-Jul-13
DRAWING DH DATE 2016-Dec-22
REVIEW LAI DATE 2016-Dec-22
FILE # VC_AIR_200k
CertainTeed Gypsum Canada Inc. - KOOTENAY WEST MINE PROJECT

2.3.1.9. Summary

After reviewing the assessment boundaries, potential effects, mitigations and residual effects in the sections above, all assessments forming the basis of the KWM EAC were completed on the area encompassed by the Mine Disturbance Limit shown in CPD Figure 2, or in many instances, an area larger than the MDL. Individual mine components and their approximate footprint did not factor into any of the VC assessments or the issuance of the EAC.

3. MITIGATIONS

From the project outset, it has been the Proponent's (i.e. CertainTeed) intention to minimize the amount of ground disturbed throughout the construction, development and operation of the KWM. This commitment was reflected throughout the EA Application as it relates to the applicable Valued Components. This commitment was also reflected in the relevant management plans. Furthermore, mine re-design work has already been completed during construction to minimize the amount of ground disturbed.

One mitigation measure that will be updated within the management plans pertains to Green Areas. Green Areas are portions of the natural habitat that occur within and adjacent to the mine footprint. Green Areas are beneficial within the KWM for the following reasons:

1. Provide contiguous portions of natural habitat within the KWM to be used by ungulates and other wildlife for foraging, thermal cover, and as a movement corridor.
2. Provide a source of seed stock for natural regeneration of vegetation on disturbed portions of the mine site located adjacent to them for reclamation.

The Green Areas boundaries may be altered to facilitate operational challenges, both while logging and constructing the mine; however, no Green Areas will be lost in their entirety. Any losses will be compensated within the MDL. Coarse Woody Debris (CWD) allocations within Green Areas will only occur along existing old roads located within them. Care will be taken with CWD placement within the Green Areas to still facilitate wildlife movement through the area.

CertainTeed fully acknowledges mitigations related to minimizing ground disturbance to support applicable VCs and is committed to carrying these mitigations throughout the project lifespan.

4. PROPOSED CHANGES

CertainTeed respectfully submits the attached amended Kootenay West Mine Project Environmental Assessment Certificate (EAC) M18-01 Certified Project Description (CPD). The proposed changes to the original CPD are as follows:

- At the request of the EAO, the MDL has been expanded to include culvert crossings across the Kootenay FSR and maintain consistency with the Ministry of Energy, Mines and Petroleum Resources (EMPR), Mines Act Permit Boundary;
- A section defining 'Green Areas' and how they are managed has been included in the CPD;
- Figure 2, Project Overview – the MDL has been updated as above, and to maintain consistency with the revised Figure 3;
- Figure 3, Mine Disturbance Limits – The MDL has been updated as above, and the maximum expected extent of mine component disturbances (i.e. Mine Component Outer Boundary) has

been added. (NOTE: A supplemental map has been provided in Appendix 1 of this memo, to provide clarity on the Mine Component Outer Boundary polygons);

- A Note has been added to Figure 3 of the CPD to describe temporary storage within the mine component outer boundaries; and,
- The title of Figure 3, on page 4 of the CPD, has been changed to reflect the revised Figure 3.

CertainTeed requests Environmental Assessment Office approval of the amended CPD at your earliest convenience such that CertainTeed and EAO C&E staff have appropriate direction for evaluating compliance around mine site disturbance limits during construction and operations.

Please let us know if you have any questions about this material.

CLOSURE

VAST Resource Solutions Inc. verifies the information provided herein is factual and identifies the necessary changes needed to clarify the KWM Certified Project Description. Please contact the undersigned if you have any questions or require further clarification.

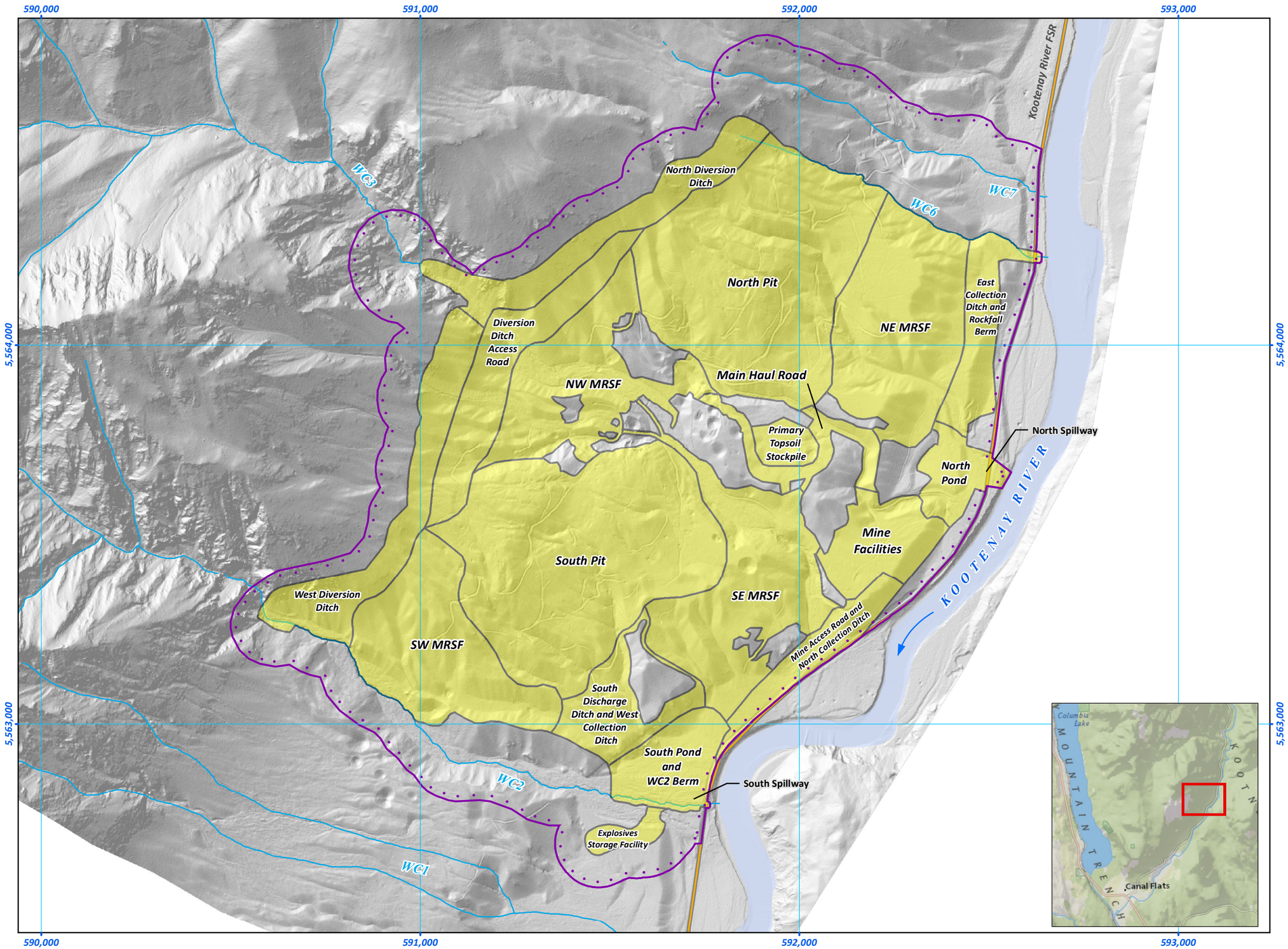
Authored by:

Darin Lindsay, P.Eng.
Senior Environmental Engineer
VAST Resource Solutions Inc.

LeighAnne Isaac, Ph.D., RPBio
Senior Wildlife Biologist
VAST Resource Solutions Inc.

cc. Greg Ashcroft

Appendix 1 – Supplementary CPD Map



PROJECT

KOOTENAY WEST MINE PROJECT

TITLE

MINE DISTURBANCE LIMIT

LEGEND

- Mine Disturbance Limit
- Mine Component Outer Boundary
- Kootenay River FSR
- Ephemeral Watercourse (WC)

N W E S

1:10,000

0 100 200 300 400 500

Meters

DATA SOURCES

BASE MAP PROVIDED BY ARCGIS ONLINE LICENSE
PROJECT/MINE DATA - CERTAINTEED GYPSUM CANADA
HILLSHADE MODEL - CERTAINTEED GYPSUM CANADA

MAP INFORMATION

1. MAP PRODUCED BY VAST RESOURCE SOLUTIONS.
2. MAP DATUM/PROJECTION: NAD 1983 UTM ZONE 11N.
3. THIS FIGURE IS PRODUCED AT A NOMINAL SCALE OF 1:10,000 FOR 11x17 (TABLOID) PAPER.
4. TEMPORARY STORAGE (I.E. SOIL, ROCK, EQUIPMENT ETC.) MAY OCCUR WITHIN THE MINE COMPONENT OUTER BOUNDARIES.

DESIGN	*DH*	**DATE**	*2015-Jul-13*
DRAWING	*DH/DM*	**DATE**	*2020-Apr-03*
REVIEW	*DL*	**DATE**	*2020-Apr-03*
FILE #	*CPD_DIST_LIMIT*		

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Appendix 2 - Revised KWM CPD

KOOTENAY WEST MINE PROJECT

SCHEDULE A

CERTIFIED PROJECT DESCRIPTION
FOR
AN ENVIRONMENTAL ASSESSMENT CERTIFICATE

April 2020

INTERPRETATION

In this Certified Project Description, terms that are capitalized but not defined have the same meaning as those terms defined elsewhere in this Certificate, including in the Table of Conditions.

This Certified Project Description describes the Project authorized by this Certificate, but does not obligate the Holder to construct or operate any aspect of the Project unless otherwise stated.

DEFINITIONS

Holder	The Proponent or, if this Certificate has been transferred in accordance with the conditions below, the person to whom this Certificate has been transferred in accordance with such conditions.
Green Areas	Portions of the natural habitat that occur within and adjacent to the mine footprint. Green Areas are beneficial within the KWM for the following reasons: 1. Provide contiguous portions of natural habitat within the KWM to be used by ungulates and other wildlife for foraging, thermal cover, and as a movement corridor. 2. Provide a source of seed stock for natural regeneration of vegetation on disturbed portions of the mine site located adjacent to them for reclamation. The Green Areas boundaries may be altered to facilitate operational challenges, both while logging and constructing the mine; however, no Green Areas will be lost in their entirety. Any losses will be compensated within the MDL. Coarse Woody Debris (CWD) allocations within Green Areas will only occur along existing old roads located within them. Care will be taken with CWD placement within the Green Areas to still facilitate wildlife movement through the area.

ABBREVIATIONS

BC	British Columbia
Certificate	Environmental Assessment Certificate
FSR	Forest Service Road
km	kilometres

1. PROJECT LOCATION

Kootenay West is located in the East Kootenay region of southeastern British Columbia (BC), approximately 12 kilometers (km) northeast of Canal Flats BC within the Regional District of East Kootenay. The Kootenay West site is located on Crown land, adjacent to the Kootenay Forest Service Road (FSR) (Figure 1). Unless otherwise specified in this Certified Project Description, all Project Components and Activities are located within areas identified in Figures 2 and 3.

2. PROJECT DESCRIPTION

Kootenay West is a new open pit gypsum quarry that will produce an average of 400,000 tonnes of gypsum per year over a 43-year mine life. The mine disturbance area/project footprint is 135 hectares and includes quarries, mine site access, rock storage, water management structures and other on-site infrastructure. On-site operations will be powered by diesel-fueled generators.

After gypsum is drilled, blasted and crushed, it will be hauled via trucks along the Kootenay FSR to approximately the 3.5 km mark on the FSR, then on the road through private land described as Lot 1, District Lot 11, Kootenay District, Plan: 14705, (known locally as the ‘Back Door’) to highway 95 and on to various locations on the highway system, including the existing rail load out facility located in Invermere, BC.

Kootenay West includes the following components:

- Mine site access roads;
- Open pit gypsum quarries;
- Mine rock storage facilities;
- Water diversion ditches;
- Water collection and discharge ditches;
- Pit drainage structures;
- Engineered sedimentation ponds with emergency spillways and outlet channels;
- Production stockpiles;
- Top soil stockpiles;
- Explosives storage facilities;
- Crusher facility with primary and secondary crushers;
- Mining and auxiliary equipment;
- Weigh scale;
- Generator building, generators, and mine site power supply lines;

- Fuel storage;
- Office, training room and maintenance facility;
- Mine dry; and
- Cold Storage.

APPENDIX A - CERTIFIED PROJECT DESCRIPTION MAPS

Figure 1: General Location of the Kootenay West Mine Project

Figure 2: Project Overview of the Kootenay West Mine Project

Figure 3: Mine Disturbance Limit for the Kootenay West Mine Project

APPENDIX A CERTIFIED PROJECT DESCRIPTION MAPS

Figure 1 General Location of the Kootenay West Mine Project

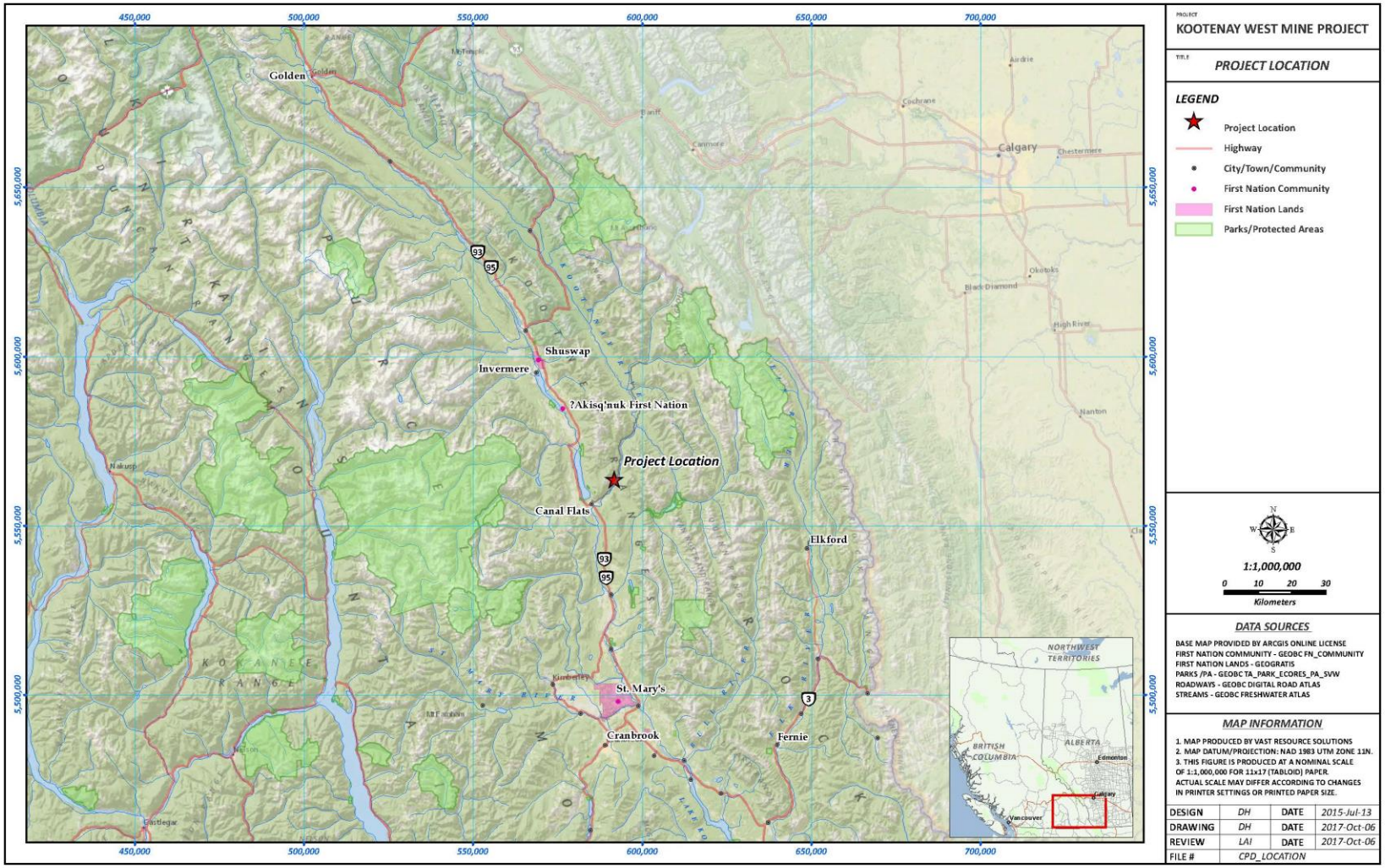
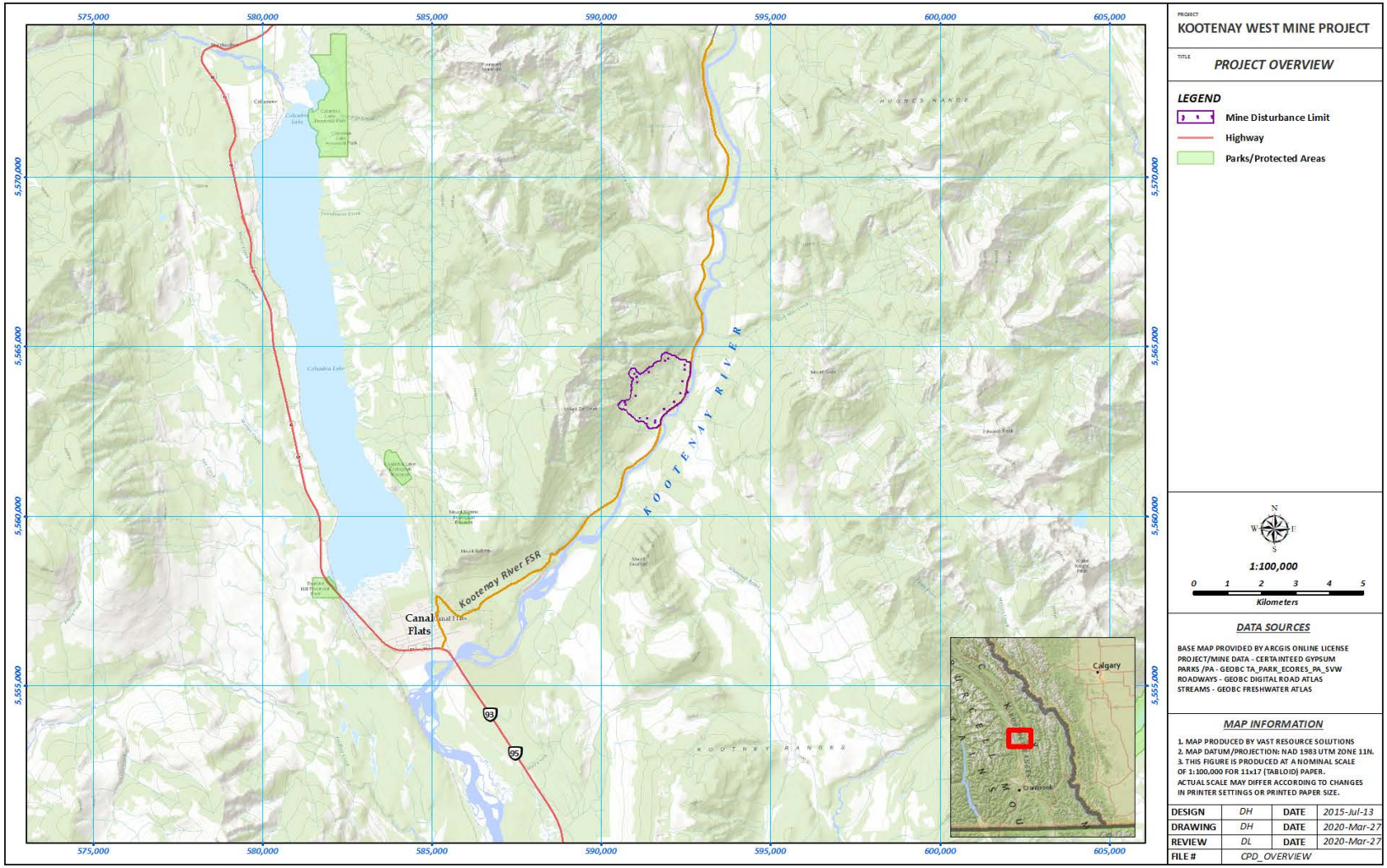


Figure 2 Project Overview of the Kootenay West Mine Project



CertainTeed Gypsum Canada Inc. - KOOTENAY WEST MINE PROJECT

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Figure 3 **Mine Disturbance Limit for the Kootenay West Mine Project**