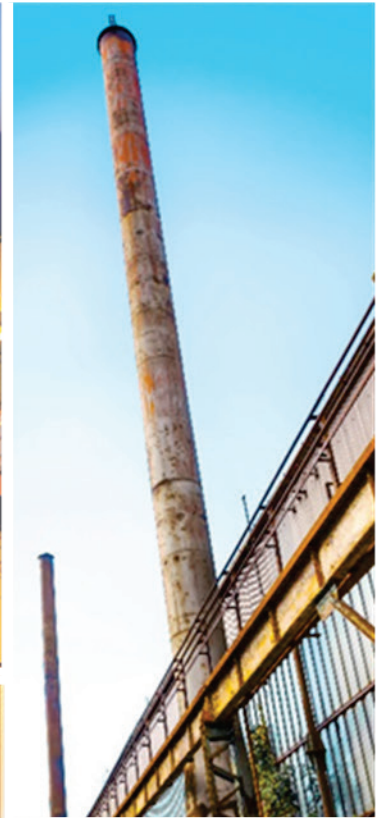




# Environmental Impact Assessment

Closure of the CertainTeed Canada, Inc.  
McAdam Gypsum Wallboard Plant  
McAdam, NB

Saint-Gobain





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## Glossary of Terms, Abbreviations and Units

ACCDC	Atlantic Canada Conservation Data Centre
ACMs	Asbestos-containing Materials
AST	Above-ground Storage Tank
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
°C	Degrees Celsius
C&D	Construction & Demolition
cm	Centimetre
CO	Carbon monoxide
CO <sub>2e</sub>	Carbon dioxide equivalent
CNG	Compressed Natural Gas
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CRA	Conestoga-Rovers and Associates
Dfb	Köppen climatic classification
ECA	Environmental Compliance Audit
ECCC	Environment and Climate Change Canada
EIA	Environmental Impact Assessment
EPP	Environmental Protection Plan
EPSG	European Petroleum Survey Group
GHG	Greenhouse Gas
GNB	Government of New Brunswick
ha	Hectare
kg	Kilogram
km	Kilometre
L	Litre
LBP	Lead-based Paint
m	Metre
m <sup>3</sup>	Cubic metre
mm	Millimetre
min	Minutes
MGWP	McAdam Gypsum Wallboard Plant
NAD	North American Datum
NBDAA	New Brunswick Department of Aboriginal Affairs
NBDNR	New Brunswick Department of Natural Resources



## **Glossary of Terms, Abbreviations and Units**

NBDELG	New Brunswick Department of Environment and Local Government
NB Power	NB Power Generation Corporation
NOAA	National Oceanic and Atmosphere Administration
NO <sub>x</sub>	Nitrogen oxides
ODS	Ozone-depleting Substances
O&M	Operations and Maintenance
PCBs	Polychlorinated Biphenyls
PDD	Peripheral Drainage Ditch
PID	Parcel Identifier
PM	Particulate Matter
PPM	Parts Per Million
s	Second
SAR	Species at Risk
SARA	Species at Risk Act
SNB	Service New Brunswick
SO <sub>2</sub>	Sulphur dioxide
t	Tonne
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
UTM	Universal Transverse Mercator
VEF	Valued Environmental Feature
Village	Village of McAdam
XRF	X-Ray Fluorescence Analyzer



# 1. Introduction

GHD was retained by Saint-Gobain to prepare an Environmental Impact Assessment (EIA) Registration document for the closure of the CertainTeed Canada, Inc. (hereafter referred to as “CertainTeed”) McAdam Gypsum Wallboard Plant (MGWP), located at 57 Quality Way, McAdam, New Brunswick. A Site location map is provided on Figure 1.1.

## 1.1 Proponent Information

The Proponent is Saint-Gobain, which owns CertainTeed. CertainTeed manages the MGWP.

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## 1.2 Property Ownership

The MGWP is located on property identified by Service New Brunswick (SNB) as Parcel Identifier (PID) 01534668, which is owned by CertainTeed Canada, Inc. and covers a total area of 30.14 hectares (ha). Three other properties are also located within the boundaries of PID 01534668 and labeled with PIDs 01535053, 75013094 and 75235754; they are described by SNB as being owned by Nova Gypsum Inc. or Westroc Inc., as shown on Figure 1.2. A production water supply well (#6) is located on a small (40 m<sup>2</sup>) CertainTeed property (PID 75416263) within the crown property west of the rail corridor; approximately 400 m off-Site (Figures 1.2 and 1.3a).

An NB Power-owned property, PID 75013102 encompassing an area of 1,067 m<sup>2</sup>, is also located within the CertainTeed property (PID 01534668) and houses an electrical substation with three pole-mounted transformers (Figure 1.2). Decommissioning of the NB Power-owned substation is not planned as part of the MGWP decommissioning activities; therefore, the NB Power property and associated infrastructure is excluded from the Closure Project.



The CertainTeed property is surrounded by crown-owned woodland (PID 75416263) to the south and east. It is bordered by the NB Southern Railway (PID 01535368) to the west followed by crown woodland (PID 75416263) and multiple residential properties to the north (Figure 1.2).

The MGWP was originally used as the Georgia-Pacific Plywood Mill in 1976, which closed in 1981. That mill re-opened as Eastern Veneer from 1982 to 1987, after which it remained vacant for two years before being converted to a gypsum plant in 1989. The plant closed again in 1991. It was operated as Nova Gypsum from 1992 to 1993, and was acquired by BPB (Westroc) in 1994. CertainTeed later acquired the Site and operated the facility as a wallboard production facility until August 2020.

The main facilities of the MGWP include the gypsum rock pile and associated domes, the primary crusher, the rock dryer, the calcine mill, the fabrication line and their associated buildings, the waste wallboard and waste paper stockpiles and the peripheral drainage ditch (PDD). The infrastructure associated with MGWP are further described in Section 2.2 and will be collectively referred to as the “Plant” or “Site” throughout this report.

## 2. The Undertaking

### 2.1 Name of the Undertaking

The name of the undertaking is **Closure of the McAdam Gypsum Wallboard Plant**.

The MGWP has an annual production capacity of 23 million square metres of gypsum wallboard panels. It has one fabrication line, which consisted of grinding and drying the rock, calcination, extruding into boards and drying. Its raw material of processed gypsum rock was supplied from outside of New Brunswick (primarily Nova Scotia). On July 16, 2020, CertainTeed formally announced the pending closure of the MGWP. Between July and August 2020, CertainTeed continued to operate the Plant under Approval to Operate I-10064 of the Clean Air Act (expires on March 31, 2023) and Approval to Operate I-10537 of the Clean Environment Act (expires on December 7, 2022). Production of wallboard product ceased at the Plant in August 2020, with ongoing operations limited to the distribution (export) of wallboard panels from the warehouses and the trucking of waste wallboard to the Envirem Organics recycling facility in Fredericton, NB. The distribution of wallboard panels is anticipated to cease at the Plant in March 2021. Both current Approvals to Operate the Plant are provided in Appendix A.

The New Brunswick Department of Environment and Local Government (NBDELG) has classified the MGWP as a Class 4 Facility pursuant to the Fees for Industrial Approvals Regulation 93-201 filed under the Clean Water Act, and as a Class 2 Facility under the Air Quality Regulation 97-133 filed under the Clean Air Act. Together, the Approvals to Operate provide conditions involving: emergency reporting; chemical storage and handling; solid waste management; wastewater management; discharge and emissions limits; fugitive particulate matter (PM) control; noise control; and testing, monitoring and reporting requirements.

As a condition of the Approval to Operate under the Clean Air Act (I-10064), CertainTeed is required to notify the NBDELG Minister of an anticipated date for closure, which CertainTeed did on July 16, 2020. The present EIA Registration document is intended to meet the requirements of the



Environmental Impact Assessment Regulation of the Government of New Brunswick (GNB). The Closure of the McAdam Gypsum Wallboard Plant undertaking will be referred to as “Closure Project” for the remainder of this report and includes decommissioning, Site clean-up, care and maintenance, and monitoring.

## **2.2 Project Overview**

The Closure Project will involve the decommissioning of existing infrastructure and equipment associated with the current and former operation of the MGWP. Figures 1.3a and 1.4a present an overview of the infrastructure and equipment.

The overall intent of the Closure Project is to decommission and remove infrastructure and equipment from the existing buildings for off-Site re-use or recycling to the extent possible; the remainder will be disposed of at approved facilities. The buildings themselves will remain on-Site. Remaining raw gypsum rock will be removed from the property for re-use or sale; the domes will also be dismantled and shipped to another CertainTeed facility for reuse. Waste wallboard is being removed from the property as part of current operations; the remaining area will be re-graded and covered. The waste paper stockpile will also be re-graded and covered. The PDD will be upgraded.

Permanent infrastructure associated with the Plant with inherent value for future commercial/industrial re-development of the Site will remain post-decommissioning. The existing fabrication buildings (including the warehouses and offices), paper storage and staging building, paper delivery building, buried services (potable water, domestic wastewater and electrical power systems), fire-fighting system (including fire ponds and hydrants), pumphouses and water production wells, petroleum storage tanks, roadways, PDD and rail siding have been identified as having inherent value for future sale and re-development of the Site. Excluding some limited modifications for long-term care and maintenance, this infrastructure will not be decommissioned as part of the Closure Project. Following the decommissioning activities, CertainTeed will continue to maintain the land, buildings, petroleum storage tanks, utilities, fire-fighting equipment, paved surfaces and PDD in good order and seek opportunities to sell the property for commercial/industrial re-development.

CertainTeed ceased production in August 2020. CertainTeed is currently operating its finished-products warehouse (receiving and shipping wallboard to customers which is expected to continue until March 1, 2021) as well as transporting waste wallboard that was generated from the Plant operation (the process allowed up to 25% recycled material) for disposal at Envirem Organics. The Closure Project will be initiated as soon as the EIA Determination is received from the NBDELG. With the expectation that the EIA Determination and related approvals to proceed with the Closure Project will be received in the fall of 2020, CertainTeed plans to complete the decommissioning activities by end of winter or early spring 2021. The Closure Project is scheduled to occur over approximately four months followed by a care and maintenance as well as monitoring period.

### ***Plant Decommissioning Overview***

The MGWP infrastructure is generally located in the central portion of the Site. The broad lines of the Plant operation are as follows:

- Primary crushing of the raw gypsum rock to a reduced size less than 5 cm in diameter.
- Rock-drying in a rotary kiln dryer unit to evaporate excess free moisture from the rock.



- Feeding the dried gypsum to the calcine mill for further size reduction to 95% passing 100-mesh screens in a ball mill and calcination to stucco in a calcine burner.
- The fabrication line, where all the dry and liquid ingredients are added, mixed and placed between sheets of paper and the wallboard is extruded to the desired form before it is fed into an oven.

The infrastructure identified for decommissioning and removal for off-Site re-use, recycling or disposal as well as the infrastructure to remain on-Site post-closure are outlined below and shown on Figures 1.3b and 1.4b. Additional information on the Plant (e.g., dimensions; equipment to be dismantled) is provided in Section 2.6, while Section 2.7 outlines the Closure Project activities in further detail.

The following infrastructure, equipment and materials associated with the Plant will be decommissioned and removed from the property:

- Gypsum rock pile and associated tarpaulin-covered steel domes (Area A on Figure 1.3b).
- Infrastructure and manufacturing equipment exterior to the buildings, such as the rock hopper, primary crusher, rock dryer, exterior conveyors and associated piping (Areas B and C on Figure 1.3b), as well as the compressor, stucco storage silos and chemicals and propane storage tanks (Figure 1.4b).
- Infrastructure and manufacturing equipment inside the buildings, such as the calcine mill and dryers, unwind stand, fabrication line, process tanks and interior conveyors, as well as the equipment inside the wet additives and aqua rooms, mechanical room, electrical room, storage rooms, mud room and carpentry shop (Figure 1.4b).
- Compressed natural gas (CNG) terminal supplied by Irving Oil, which is leased infrastructure located in the central portion of the Site (Area J on Figure 1.3b).
- Bone yard, where metal debris is stored, located in the southeast corner of the Site (Area P on Figure 1.3b). The metal debris will be disposed of at an approved metal-processing recycling facility.
- Waste paper stockpile (Area N on Figure 1.3b). The majority of the waste paper has been removed for off-Site recycling, and the remaining stockpile will be re-graded and covered as part of the Closure Project.
- Waste wallboard stockpile (Area M on Figure 1.3b). The waste wallboard is currently being transported off-Site for recycling as part of on-going Plant operations; the area will be re-graded and covered as part of the Closure Project.

The following permanent infrastructure associated with the Plant will remain post-decommissioning for care and maintenance until the Site can be sold for commercial/industrial re-development:

- The main building (including the warehouses and offices), the east and west additions to the main building, the adjacent buildings (except for the domes) and the gatehouse (Figure 1.3b).
- The four pump houses, seven water production well heads, two fire ponds, fire hydrants (surrounding the main building) and NB Power substation (Figure 1.3b), as well as the potable water, domestic wastewater and electrical power systems (described in Section 2.7.8).





- The PDD that surrounds the Site, collecting process wastewater and runoff and discharging into a settling pond at the western limit of the property (Figure 1.3b). It will be upgraded as part of the Closure Project.
- The rock hill extension, located in the northern section of the Site (Area O on Figure 1.3b). Other than observation and a paint sample (described in Section 2.7.2), it has not been investigated as part of the Closure Project and potentially contains Construction and Demolition (C&D) debris. It will not be disturbed as part of the Closure Project.

A list of the specific equipment planned to be removed for shipment to other CertainTeed facilities and/or demolition/sub to third parties is provided in Appendix B.

### **Site Clean-up**

Site clean-up will be undertaken after the removal of the equipment, materials and waste. It will involve the safe removal of any miscellaneous or extraneous materials or waste.

The end land use of the Site following closure is care and maintenance until the eventual sale of the property for commercial/industrial re-development with title transferred to the purchaser.

## **2.3 Project Rationale**

The MGWP is a wallboard manufacturing plant that was originally a plywood mill commissioned in 1976 before being converted to a gypsum plant in 1989. It had annual production capacity of 23 million square metres of wallboard.

Although Approvals to Operate the MGWP under the Clean Air Act and the Clean Environment Act do not expire until March 31, 2023 and December 7, 2022 respectively, CertainTeed has decided to permanently close the Plant. It ceased production in August 2020, as continued operation of the MGWP was determined not to be economically viable.

## **2.4 Project Location**

The Site is located at the southern limits of the Village of McAdam (Village), directly north of McAdam Parish, in York County, NB. Regionally, the Village is situated approximately 75 km southwest of Fredericton.

The Site, covering 30.14 ha, lies within a primarily commercial/industrial area of the Village; a residential area is located north of the Site. A rail line belonging to the NB Southern Railway Company Ltd. borders the western limit of the Site and connects to a rail siding leading to the on-Site north warehouse. A gravel road bounds the northern portion of the Site. The main access route to the Site is via Quality Way, which is connected to Provincial Highway 4 (locally referred to as Harvey Road).

The nearest water bodies relative to the Site include McAdam Pond, situated approximately 800 m west of the Site, and several small regulated wetlands located at the western limit of the Site, shown on Figure 1.3a. The McAdam Bird Sanctuary is adjacent to the northeastern corner of McAdam Pond.



The immediate surroundings of the Site are primarily vacant forested land. The nearest residential dwellings are located north of the Site, approximately 170 m from the inner service road near the main Site building and 210 m from the domes (Figure 1.3a).

The north – south coordinates of the Site are 163646.24 m, 5057699.68 m to 163504.68 m, 5056933.95 m (UTM Zone 20N, NAD83 (2011), EPSG 26920).

A 1:10,000 topographical map identifying the Site relative to the Village and its surroundings is presented as Figure 1.1. A property map identifying the Site and surrounding land designations is illustrated on Figure 1.2.

## **2.5 Siting Considerations**

Siting considerations for the Closure Project are generally not warranted, as it concerns an existing Plant. The disposal of C&D debris generated as part of the Closure Project that are not salvageable, recyclable or destined for disposal as hazardous materials or chemicals is discussed in Section 2.7.6.

## **2.6 Physical Components and Dimensions of the Project**

The Site encompasses a total area of 30.14 ha. Primary access to the Site is through Quality Way, which connects to Harvey Road and Saunders Road, ultimately leading to Provincial Highway 4. Quality Way is currently the primary access route for the transportation of equipment and materials into and out of the Site. It will continue to be the main access route for the Closure Project.

The Site houses several buildings and additions. The main building, which includes the north and south warehouses, offices and part of the fabrication line, is the original building. Over time, additions were made to the main building as well as to a few adjacent buildings. The additions include the west end fabrication line, the east end fabrication line, the paper storage and staging building, the rock dryer and calcine building, the compressor room, the bulk chemicals room, the aqua and wet additives rooms, and the paper delivery building (Figure 1.4a). Out-buildings include the rock hopper, the crusher room, the rock dryer and baghouse, the calcine baghouse and fan, the stucco storage, the fire pumphouse, several well houses and the gatehouse; there are also two domes outside (Figure 1.3a).

The decommissioning activities will be contained to within the Site property boundaries. The Closure Project also involves the off-Site transportation of potential hazardous materials and chemicals, salvageable/recyclable metals, non-hazardous materials, ASTs and valuable assets.

The following complements information on the Site facilities provided in Section 2.2. A more detailed description of the Closure Project activities is provided in Section 2.7. It is based on the information available at the time of preparing the EIA Registration document. Final Closure Project design will be based on contractor requirements, certificates of approval and stakeholder input. The Closure Project sequencing assumes that hazardous materials and chemicals removal activities will be completed before any dismantling activities are initiated.



### ***Main Building***

The main building contains both the north and south warehouses, offices, several storage rooms and part of the fabrication line. The building is approximately two storeys high along the north and south walls with slightly curved roofline rising to approximately three storeys in the centre. The entire building covers approximately 14,000 m<sup>2</sup>. The floor is concrete throughout, with the exception of the second floor offices. The structure is a combination of wood and steel framing with wooden rafters overlain with wood sheeting. The exterior walls are finished with metal siding, with the exception of the east and west walls of the south warehouse and the west wall of the north warehouse, which are finished with wood panelling. The exterior roof is a tar and paper finish.

The portion of the fabrication line inside the main building includes the conveyor system that transports the continuous sheet of wallboard to the cutting area. It also includes the final drying, stacking and taping of the finished product. The south and north warehouses store all the finished product and house truck-loading areas; the north warehouse also contains a train-loading area.

The fabrication line contains an oven that has ten levels and two zones; the initial zone, located in the west end fabrication building, operates at 245 to 288°C, while the second zone, located in the main building, operates at 191°C. The initial zone eliminates most of the moisture, while the second one permits continued drying; the panel emerges at approximately 0.5% free moisture. In addition to CNG, the oven uses No. 2 Fuel Oil at a rate of 35 L per MSF and is equipped with two dryer stacks, one for each zone that are 6.7 m above adjacent ground level. Each dryer can discharge process gas at between 700 and 1,300 m<sup>3</sup>/min.

### ***Rock Dryer and Calcine Building***

The rock dryer and calcine building is a two-storey building, with the calcine tower portion extending five storeys. The floor level of the building is made of concrete and covers approximately 1,300 m<sup>2</sup>. The main structure of the building consists of wood beams and steel framing. The roof consists of wooden rafters overlain with wood panelling. The walls contain pink batt fibreglass insulation covered with plastic sheeting and wallboard. The north and west exterior walls are finished with metal siding, while the east side of the building has wood sheeting. The calcine tower portion is all metal framing, siding and roofing. In this building, the gypsum dust is dried and stored; it is where the dry gypsum is mixed with calcine mixtures and other additives to produce a stucco mixture, which is stored in silos outside the building.

The rock dryer uses No. 2 Fuel Oil (113,500 L capacity). It can discharge process gas at a maximum rate of 492 m<sup>3</sup>/min from the exhaust stack that is 7 m above adjacent ground level; the exhaust gas passes through a bag house filtration system.

The mill uses No. 2 Fuel Oil and natural gas. It can discharge process gas at 751 m<sup>3</sup>/min from the exhaust stack that is 6.5 m above adjacent ground level; the exhaust gas passes through a bag house filtration system and stack equipped with a damper to recycle some of the gas into the calcination process. The combined combustion rate for the rotary dryer and the calcine mill is 15 L per MSF.



### ***Paper Storage and Staging Building***

The paper storage and staging building is newer construction. The building is two storeys high and covers approximately 650 m<sup>2</sup>. Its floor is concrete and its structure is all steel-beam construction. There is batt insulation with plastic sheeting in the ceiling and the walls, with the exception of a portion of the north wall that connects to the rock dryer and calcine building, in which the wall is finished with a combination of wood sheeting and metal siding. The exterior of the building is finished with metal siding and roofing. This building is divided into three sections: the eastern portion has been transformed into the vehicle maintenance area, mainly for forklifts; the middle portion stores the rolls of paper used in the fabrication process; and the western portion is where the paper feeds into the fabrication line.

### ***Paper Delivery Building***

The paper delivery building is an addition to the paper storage and staging building. It is a single-storey building that covers approximately 60 m<sup>2</sup>. The building has a concrete floor and wood-framed walls and trusses. The inside is finished with a combination of wallboard and metal siding, while the exterior is finished with metal siding and roofing.

### ***East End Fabrication Building (Wet Additives and Belt #1)***

The east end fabrication building is a single-storey building that was added to the main building. It connects the paper staging to the warehouse. It covers approximately 500 m<sup>2</sup> and has a concrete floor and is of steel-beam construction. There is a combination of batt insulation, plastic sheeting, metal siding and wallboard on the interior walls and ceiling. The exterior is all metal siding and roofing. It is in this building where the paper from the staging area is fed to start the fabrication phase. The bottom paper layer is coated with the gypsum stucco mixture and other additives, and a paper layer is added on the top, after which a long, continuous sheet is sent to the next portion of the fabrication line via a conveyor belt.

### ***West End Fabrication Building (Inlet and Outlet Rolls)***

The west end fabrication building is a two-storey, peaked-roof building that was added to the main warehouse building. It covers approximately 1,175 m<sup>2</sup>, has a concrete floor and steel-beam framing. The interior is finished with a combination of metal siding, batt insulation with plastic sheeting and wallboard. The exterior is finished with metal siding and roofing. It is in this building that the continuous sheet of wallboard is cut to length and graded for quality. Reject wallboard was discharged to the waste wallboard stockpile outside, while the rest was sent through the first drying and curing area.

### ***Bulk Chemicals Room***

The bulk chemicals room lies just outside the rock dryer and calcine building, on the western side. The room consists of one storey and covers approximately 50 m<sup>2</sup>. It has a concrete floor and is finished inside with a combination of wallboard and wood sheeting on the ceiling and walls. The exterior is metal siding and roofing.



### ***Compressor Room***

The compressor room lies just outside the rock dryer and calcine building, at the northwestern corner. It consists of one storey building and covers approximately 60 m<sup>2</sup>. It has a concrete floor and is finished inside with wallboard on the ceiling and walls. The exterior is metal siding and roofing.

### ***Gypsum Rock Pile and Domes***

The gypsum rock pile area, located in the northeastern section of the Site, covers approximately 2 ha. It consists of two tarpaulin-fabric-covered, steel-spanned domes built in 2012. Each dome has two, parallel physical walls. The remaining rock on-Site is located inside the domes; together, the domes currently contain some gypsum rock. Section 2.7.4 explains how the rock and the domes dismantled and shipped to another CertainTeed facility for reuse.

### ***Rock Hopper and Primary Crusher***

The rock hopper and the primary crusher are each housed in a three-storey building with a concrete floor and metal siding and roofing. The building for the hopper covers approximately 110 m<sup>2</sup>, while the one for the crusher has an area of approximately 50 m<sup>2</sup>.

### ***Waste Wallboard Stockpile***

The waste wallboard is currently being hauled for disposal at an approved recycling facility as part of CertainTeed's current operations; it is expected that the stockpile will be substantially removed by the fall of 2020. The waste wallboard area covers approximately 6,950 m<sup>2</sup> and is located at the western boundary of the property. Section 2.7.5 describes its decommissioning.

### ***Waste Paper Stockpile***

The recycling process separated the interior gypsum product from the paper by means of a trommel. During operations, the waste paper was transported to a stockpile area situated at the southern boundary of the Site, in a wooded area, that covers 2,580 m<sup>2</sup>. Waste paper was transported by truck to Envirem Organics.

The remaining waste paper is a potential source of wastewater that could affect nearby soils, groundwater and surface water; it is also a source of fugitive PM. CertainTeed has leveled the stockpile to the adjacent road grade (2-3 m above forest grade). Section 2.7.5 describes its decommissioning.

### ***Peripheral Drainage Ditch***

Process water drains to a sediment trap and catch basin system and discharges to the PDD. There is a sediment trap between the gypsum rock pile and the main building, another sediment trap in the southeastern part of the Site and a catch basin sump at the east end of the main building. The PDD feeds into a settling pond at the western limit of the Site. The pond drains westward through a culvert below the rail line; the culvert belongs to NB Southern Railway Company Ltd. Figure 1.6 illustrates the PDD.

The PDD is a potential source of wastewater and runoff that could affect nearby surface water. There is no apparent potential to affect the potable water supply for the Village, which is obtained from the wells located approximately 2 km southeast of the Site.



CertainTeed will maintain the PDD in good order until the eventual sale of the property. The PDD will be upgraded as part of the Closure Project, as explained in Section 2.7.7.

### ***Above-ground Storage Tanks***

The ASTs include tanks owned by CertainTeed (chemicals and petroleum products) and leased tanks (propane). There is also on-Site a CNG terminal supplied by Irving Oil. Section 2.7.3 presents a complete list of the ASTs with their location.

Petroleum storage tanks will be emptied, cleaned and maintained in usable condition for future use by an eventual new owner.

Chemicals storage tanks will be emptied of contents, cleaned and removed from the property. Chemicals from these tanks will be relocated to another facility or sent for disposal at an approved facility.

The leased propane tanks will be returned to the supplier. The CNG terminal will be removed by appropriately licensed contractor.

There are no under-ground storage tanks at the Site.

### ***Bone Yard***

The metal debris consists of various types of metal, including metal racking, drying drums, wire mesh, machine parts and forklift chassis. Minor other debris is also found there, including wooden pallets, concrete debris, new concrete manholes and two plastic and metal storage totes, which will also be removed from the bone yard for disposal.

## **2.7 Closure Details**

The MGWP decommissioning activities are proposed to occur over a four-month period followed by a care and maintenance and monitoring period. The activities will be initiated as soon as the EIA Determination is received from the NBDELG along with other requisite approvals/permits. The purpose of initiating the Closure Project as soon as possible is to maximize employee work time by having non-retirement age employees participate in the decommissioning activities. The proposed Closure Project activities and sequencing is outlined below.

### **2.7.1 Pre-Closure Preparation**

Pre-closure preparation involves the tasks described below.

#### ***Public Involvement and Aboriginal Engagement***

To meet the requirements of the EIA Registration process, the public involvement and Aboriginal engagement activities must be completed and a report thereon submitted to the NBDELG within 60 days of project registration.

At this stage, the planned activities involve notification of the Closure Project via an information flyer mailed to the Village council, the nearest land-owners, the local service district and the NB Department of Aboriginal Affairs (NBDAA), with the latter communicating directly with the concerned





Aboriginal groups on behalf of CertainTeed. Discussions or meetings would be arranged if requested.

CertainTeed will make copies of the EIA Registration document available to any interested member of the public or Aboriginal group for comment. It will thereafter submit to the NBDELG a report documenting involvement and engagement activities.

Section 6.0 outlines further the public involvement and Aboriginal engagement process.

### ***Regulatory Approvals Planning***

Assuming a positive EIA Determination, it is anticipated that several approvals will be required prior to implementing the Closure Project. As such, federal, provincial and municipal officials will be engaged as needed to determine potential project approval requirements in addition to conditions outlined in the EIA Determination. The regulatory approvals likely to be required over the duration of the Closure Project are discussed in Section 7.0.

Additionally, an Environmental Protection Plan (EPP) will be prepared and submitted to the NBDELG for approval prior to the start of the Closure Project.

### ***Assets Inventory***

CertainTeed will undertake an assets inventory to identify specific MGWP assets, such as equipment, raw materials and containerized materials that can be salvaged. Salvageable materials that are re-usable, recyclable or considered to be a valuable asset will be removed from the property for re-use at other facilities, recycling or sale.

### ***Detailed Design and Tender Document Preparation***

Detailed Closure Project design may be required, including preparation of public tender documents such that CertainTeed may obtain competitive quotes. The tender documents may include instructions to bidders, general and technical specifications and detailed design drawings. Detailed Closure Project design and tender package documents will be provided to NBDELG for review and comment prior to public release.

## **2.7.2 Hazardous Materials and Chemicals Removal**

### ***Hazardous Materials***

The hazardous materials to be considered in the context of the Closure Project include, but are not limited to, polychlorinated biphenyls (PCBs), asbestos-containing materials (ACMs), ozone-depleting substances (ODS), mercury switches, batteries and lead-based paint (LBP). The selective draining and flushing of hydraulic and waste oil from equipment, including gearboxes, pumps and lines, will form part of the hazardous materials removal activity (as necessary).

The removal of hazardous materials will be carried out by appropriately licensed contractors and trained MGWP staff. The hazardous materials will be trucked off-Site through a contractor and disposed of at provincially or federally approved facilities. The destination will be confirmed at the start of the Closure Project.



The following sub-sections outline each broad category of hazardous materials and present the existing data for each of them. Section 3.12 summarizes the occurrences of accidental spills at the Site.

### ***Asbestos-Containing Materials***

No compliance issue related to ACMs was noted during an Environmental Compliance Audit (ECA) of the Site carried out by Conestoga-Rovers & Associates (CRA) in 2006 (report enclosed as Appendix C). It was recommended that a full ACMs inspection be conducted. In 2006, Zia Engineering & Environmental Consultants completed a survey of potential ACMs, at the time that the Site was being operated by BPB Canada (report included as Appendix D). Visual identification of ACMs was based on the consultant's experience. The survey included an inspection of Plant structures and facilities (offices, manufacturing, warehouses, mill and calcine facilities), which were built in the 1970s and since renovated. A total of 24 bulk samples were identified and collected, including from vinyl floor tiles (various colours), wallboard/compound/tape, vibration joint cloth, tile grout, and roofing felt and tar. All samples were determined through laboratory analysis not to contain asbestos.

During the August 27, 2020 Site visit completed by GHD, no additional suspected ACMs were identified.

### ***Polychlorinated Biphenyls***

No compliance issue related to PCBs was noted during the 2006 ECA conducted by CRA. All transformers inside the Plant had previously been replaced with dry-type transformers. In 2013, a sample of oil was taken from the main oil-filled circuit breaker at the Plant, located near the fire ponds outside. The result showed a concentration of PCBs of less than 1.0 ppm (report presented in Appendix E). According to the NBDELG property information, the Site is not listed as a PCB storage site.

A lighting upgrade study was completed at the Plant in 2019; Appendix F lists all the lighting fixtures identified at the time. The lights on-Site included fluorescent and metal halide (high intensity discharge); most have since been replaced with Light Emitting Diode versions. During GHD's August 27, 2020 Site visit, some lights were inspected in the office areas; all the ballasts checked were confirmed not to contain PCBs. Light ballasts in the production areas were too high to access at the time of the visit. Lighting is not expected to be removed from the Site.

Should any suspected PCBs-containing material be encountered during the Closure Project, it will be checked or sampled accordingly and, if required, a PCBs Management Plan will be prepared; such a plan would include among other things the identification, labelling and off-Site transportation of the relevant material for disposal at an approved facility.

### ***Ozone-Depleting Substances***

No compliance issue related to ODS was noted during the 2006 ECA. During the Site visit conducted in August 2020 by GHD, it was noted that sources of ODS were limited to air conditioning units in offices, as well as refrigerators in both staff rooms and water coolers at various locations around the Plant. The air conditioning units will be maintained in usable condition for future use by



an eventual new owner. The other equipment will be disposed of at authorized facilities (as required).

### ***Lead-Based Paint***

It was common to use LBP in buildings constructed in the 1940s-1960s. In 1976, the Government of Canada limited the amount of interior paint to 0.5% by weight. Given that the Site facilities were reportedly constructed in 1972, LBP was suspected on the property. During its August 2020 Site visit, GHD inspected the Site for possible LBP. A total of eight samples were collected from interior and exterior walls, as well as on equipment and barriers around the property. The paint samples were analyzed for lead using an Olympus Delta Premium XRF (X-Ray Fluorescence Analyzer).

The paint samples are listed below along with the lead analytical results.

- P-1 - Yellow paint on exterior barriers and markers on concrete surface (36 mg/kg lead)
- P-2 - Yellow paint on exterior of calcine building on wood surface (55 mg/kg lead)
- P-3 - Beige paint on BMA Silo on second floor of calcine tower on metal surface (263 mg/kg lead)
- P-4 - White paint on interior wall of paper delivery building on metal surface (<5 mg/kg lead)
- P-5 - Green, blue, white and red paint layers on gauging water tank, wet additives on metal surface (248 mg/kg lead)
- P-6 - Gray paint on floor in dryer zone #2 on concrete (46 mg/kg lead)
- P-7 - Green and white layers on insulation in Rock Hill Extension (20 mg/kg lead)
- P-8 - Gray paint on exterior wall of north warehouse on wood surface (28 mg/kg lead)

The lead content in the paint samples analyzed ranged from 0 to 263 mg/kg; below the NBDELG guideline for the disposal of lead paint and lead-painted material dated August 2014 (of 1,000 mg/kg); therefore, samples were not required to be analyzed for leachable lead.

### ***Other Hazardous Materials***

Other on-Site hazardous materials include possible ionizing radiation sources, including smoke detectors and self-illuminating EXIT signs. Some light bulbs may contain mercury. Most of these devices will remain on-Site as part of the care and maintenance period. The applicable regulatory guidelines for removal and disposal will be followed should any of them be decommissioned.

### ***Chemicals***

An inventory of chemicals currently at the Site has been prepared by CertainTeed (Appendix G). The chemicals will be removed from the property and transported off-Site for disposal at an approved facility or re-use at other CertainTeed owned facilities.

### ***Equipment-Washing***

The equipment and tanks that leave the Site will be purged, rinsed and otherwise cleaned prior to removal as determined necessary by visual inspection, in order to remove accumulated solid residue and oils or other liquids that may be present. The level of cleaning will also be determined by the



need to remove potentially hazardous dust. Cleaning will render the materials free of gross process residue, enabling shipment of salvageable materials.

Cleaning techniques will include low-volume, high-pressure water-blasting, steam-cleaning, washing with detergent and other means. Wastewater and residues will be contained and collected for disposal off-Site at approved facilities. Water required for equipment-washing will be obtained from the existing production wells.

### **2.7.3 Above-Ground Storage Tanks Decommissioning**

There are numerous ASTs on-Site, containing chemicals, petroleum products and propane. They are listed below by location:

- Aqua Room – Water Repellant Tank
- Bulk Chemicals Room – Dispersant (Diesel) Tank
- Bulk Chemicals Room – Foam Concentrate Tank
- Bulk Chemicals Room – Polymer Day Tank
- Calcine Tower – Cold Water Tank
- Calcine Tower – Landplaster Tank
- Rock Dryer Area – Fuel Oil Storage Tank (113,500 L)
- North Warehouse – Fuel Oil Storage Tank (113,500 L)
- Stucco Storage – Two Stucco Tanks
- Wet Additives Room – Gauging Water Tank
- Wet Additives Room – Foam Concentrate Day Tank
- Wet Additives Room – Retarder Tank
- Wet Additives Room – Dispersant (Disal) Day Tank
- Loader Shed – Diesel Tank (1,100 L)
- Outside Vehicle Maintenance Room – Propane Tank
- Outside Rock Dryer – Propane Tank
- Outside South Warehouse – Propane Tank
- Outside North Warehouse – Propane Tank

The petroleum storage tanks are licensed until September 30, 2021 (a copy of the NBDELG Licence to Operate is included in Appendix H). It is noted that the 900 L gasoline AST and the 795 L diesel AST as shown on this licence are not located on the Site.

The chemical storage tanks are to be transferred to another facility, sold or removed as scrap. They will be drained and cleaned; the chemicals will be transported off-Site for disposal at approved facilities. Because of the modest scale and size of the chemical ASTs, no issue related to sludge is expected as it is assumed that any existing quantity would be negligible.



The four propane tanks of various sizes that are leased will be returned to the supplier. The CNG terminal will be removed by appropriately licensed contractor.

#### **2.7.4 Gypsum Rock Removal**

CertainTeed intends to transport by dump truck all the remaining gypsum rock to one of its other manufacturing facilities in Canada. Alternatively, the remaining gypsum rock will be sold to a local manufacturing facility or returned to the originated mine in Nova Scotia.

The domes will be dismantled and shipped to another CertainTeed facility for reuse.

#### **2.7.5 Waste Wallboard and Paper Decommissioning**

The waste wallboard stockpile is currently being removed. The final area will be re-graded to ensure positive drainage and covered with 150 mm of topsoil and hydroseed. All exposed areas, which will be hydroseeded, will be lined with sediment-control fencing until vegetation in the area has been established.

The waste paper stockpile has been reduced to 2-3 m above forest grade. The current intent is to re-grade the area to ensure positive drainage and to cover it with 150 mm of topsoil imported from a local provider as well as hydroseed, as shown on Figure 1.6. Sediment and erosion controls will be installed and maintained during the post-closure care and maintenance period.

#### **2.7.6 Manufacturing Equipment Dismantling and Transportation**

Section 2.2 identifies the manufacturing equipment that will be dismantled and transported off-Site for re-use, recycling or disposal at an approved facility. Dismantling will be done in a piece-by-piece fashion; metal structures will be sheared. The Closure Project does not involve the demolition of buildings. Selective de-energizing of equipment be carried out by trained electrical contractors.

The final dismantling methodology will be completed as part of the contracting documents consistent with standard industry practices and in a manner that is protective of human health and the environment.

Non-recyclable decommissioned material (e.g., wood; certain plastics) will be handled and disposed of as C&D debris at either the Southwest New Brunswick Service Commission Facility at Hemlock Knoll Sanitary Landfill or the Fredericton Region Solid Waste Commission Landfill, pending approval from the NBDELG.

Highway-registered trucks of similar size to trucks currently (as well as when the Plant was in operation) transporting materials into and out of Site will be used to haul the dismantled equipment and other materials off-Site; oversize or overweight loads are not anticipated.

#### **2.7.7 Peripheral Drainage Ditch Upgrade**

Figure 1.6 illustrates the planned upgrade to the PDD. Maximum side slopes of 3 Horizontal to 1 Vertical will be maintained along the eastern and southern sections of the PDD and hydroseeded to avoid future erosion. Silt fences and check dams will be installed in all areas receiving flow from disturbed areas; the silt fences will remain in place until the upstream area has established a permanent cover. The sediment traps, catch basin sump and drainage paths will be visually



inspected on a regular basis and cleaned out as required. The cleaned-out sediments could be used as appropriate as organic material to cover the remaining waste wallboard and paper areas. The chipping of alders and other vegetation in the PDD could also be used as first layer cover material for the waste wallboard and paper areas.

### **2.7.8 Water and Electrical Services Maintenance**

The Site is serviced by the municipal potable water and domestic wastewater systems. The potable water supply for the Village is groundwater obtained from the wells located approximately 2 km southeast of the Site, as indicated by the New Brunswick Wellfield Protected Area Designation Order (2000-47). The MGWP is located approximately 1 km northwest of Zone C of the wellfield protected area for the Village. Domestic wastewater is directed to the municipal sanitary sewage treatment facility.

The potable water main and sanitary sewer at the Site will remain in place for use for the duration of the post-closure care and maintenance period and future use by an eventual purchaser of the property. The Closure Project is not anticipated to affect them.

There are six process water production wells (labeled 1A, 1B, and 2 to 5) and four pump houses on-Site, as shown on Figure 1.3a. As noted in Section 1.2, a production well (labeled 6) is also located approximately 400 m off-Site. The pump house will be locked and the well heads secured at the end of the Closure Project for future supply of process water by a new property owner.

The Site uses electricity received from the provincial grid provided by NB Power. Electrical services will be maintained to provide the required heat and lighting during the care and maintenance period. The NB Power substation will also remain on-Site.

### **2.7.9 Site Clean-Up**

Final Site clean-up (i.e., safe removal of any miscellaneous or extraneous materials or waste) will be completed in spring 2021.

### **2.7.10 Post Site Closure**

Post Site closure will essentially involve environmental monitoring, proposed as follows:

- Collection of surface water samples on the Site twice annually for a period of two years, with at least four months between each sampling event. The surface water samples will be collected from the same sampling points used over the past few years (described in Section 3.10) and will be submitted for the same laboratory analyses and analytes (outlined in Section 3.10).
- Annual Site inspections for the duration of the care and maintenance period to ensure that the control systems put in place, such as the cover (waste wallboard and paper areas) and Site drainage and erosion control structures, are functioning as designed until future sale of the property.

Section 5.0 presents the proposed monitoring program for the Closure Project in further detail.

CertainTeed will make any required adjustments to its proposed monitoring program in response to the Conditions of Approval flowing from the NBDELG Minister's Determination for the undertaking.





### **2.7.11 Operation and Maintenance Details**

Decommissioning equipment, which could include front-end loaders, forklifts, excavators, bulldozers and cranes, utilized for the Closure Project will require fuel, which will be provided by direct re-fuelling through commercial fuel deliveries or contractor-supplied. Maintenance and re-fuelling of the equipment will be completed in designated areas of the Site located a minimum of 30 m from the PDD, including the sediment traps, catch basin sump and settling pond. The fuelling of highway-registered equipment belonging to contractors, such as transport trucks and dump trucks, will occur off-Site under the responsibility of the contractors.

The existing lunch-room and wash-room facilities at the Plant will be utilized by on-Site workers during the Closure Project. Temporary construction trailers may be used for office purposes for the duration of the Closure Project if required by contractors. No portable wash-rooms will be required. Domestic garbage, such as paper, food wrappers and beverage containers, will be collected in the designated locations in conformity with the EPP.

## **2.8 Future Modifications, Extensions or Abandonment**

The main purpose of the Closure Project is to close the Site. Once all the relevant equipment and materials are removed from the Site, the intended future land use for the Site includes the care and maintenance of the remaining assets and environmental monitoring by CertainTeed, as well as making the Site available for sale for commercial/industrial re-development.

## **2.9 Project-Related Documents**

Approvals to Operate the Plant filed under the Clean Air Act (I-10064) and the Clean Environment Act (I-10537) issued by the NBDELG expire on March 31, 2023 and December 7, 2022, respectively. The licenses for the petroleum storage tanks expires on September 30, 2021.

As part of preparing the EIA Registration document, a number of studies and documents were consulted. They are referenced throughout the document.

In preparation of this document, a number of provincial agencies were contacted to discuss various aspects of the Closure Project including the NBDELG on September 14, 2020.

# **3. Description of the Existing Environment**

## **3.1 Overview**

The Site is located at the southern extremity of the Village of McAdam. Apart from work at the MGWP, the local economy rests in a large measure on logging, outfitting and tourism (NBDNR, 2007). The Wauklehegan Lake Campground is located northwest of the Village centre.

The Site was originally used as the Georgia-Pacific Plywood Mill in 1976, which closed in 1981. That mill re-opened as Eastern Veneer from 1982 to 1987, after which it remained vacant for two years before being converted to a gypsum plant in 1989. The plant closed again in 1991. It was operated as Nova Gypsum from 1992 to 1993, and was acquired by BPB (Westroc) in 1994. CertainTeed later acquired the Site and operated the Plant until August 2020.



The Site consists of several facilities, described in Sections 2.2 and 2.6. The property boundaries and a Site plan are presented in Figures 1.2 and 1.3, respectively. Photographs of the Site are included in Appendix I.

The Approvals Branch of the NBDELG has developed a Facility Profile document (September 2012) that describes the Site history, design, air quality control and compliance (attached as Appendix J).

## **3.2 Climate**

The Site is located within the Köppen climatic classification (Dfb) - Warm-summer humid continental, that exhibits large seasonal temperature contrasts with hot summers and cold winters, with average temperatures below respectively 22°C and -3°C (Peel et al., 2007). The nearest climate station with historical data is the Vanceboro 2 Station (ID GHCND: USC00178974), operated by the National Oceanic and Atmosphere Administration (NOAA). The station is located in Maine (United States), approximately 9 km west of the Site; its geographic coordinates are 45.56083°, -67.43028°.

Three other stations are of interest for historical climatological data, but they do not have complete historical series of observations and are located further from the Site (Fredericton CDA station (ID 8101600) approximately 65 km to the northwest, Woodstock (ID 8105600) approximately 65 km to the north and St. Stephen (ID 8104935) approximately 45 km to the south).

The following summarizes average climate conditions recorded at the Vanceboro 2 station, based on climate normals published by NOAA for the 1981-2010 period (NOAA, 2020):

- Average annual total precipitation is 1,126.7 mm. Precipitation is generally uniform throughout the year, with the most precipitation occurring in November and the least precipitation occurring in February. Measurable precipitation occurs on average 254 days per year, with 184 days of measurable rainfall and 70 days of measurable snowfall.
- Average annual temperature is 5.8°C. Seasonal temperature variations are characterized by pronounced extremes, which range from -15.8°C to 26.3°C. An average of 272 days per year have an average temperature above 0°C.

Wind data were obtained from numerical simulations at 30 m altitude provided by the Canadian Wind Atlas. In the Site area, predominant winds blow from the southwest at an annual average speed of 4.14 m/s. The strongest winds come from the northwest in winter with the monthly average speed reaching 5.12 m/s. In summer, the predominant winds come from the southwest, reaching a monthly average speed of 3.44 m/s. The fall season is characterized by predominant winds blowing from the west and the southwest, attaining a monthly average speed of 4.29 m/s. In spring, the predominant winds come from the northwest, west and southwest, with a monthly average speed of 4.25 m/s (ECCC, 2020a). Based on those results, the wind speed in the area of the Site is generally considered to be low, except in winter when it is considered to be moderate (Cantat et al., 2009).

## **3.3 Regional Ecological Features**

The Site is located in the Valley Lowlands Ecoregion in the southeastern portion of New Brunswick. This Ecoregion generally borders the upper and middle parts of the Saint John River valley. More specifically, the Village lies on the border between the Cranberry and Magaguadavic Ecodistricts, while the Site itself is part of the Magaguadavic Ecodistrict, an undulating plateau.



The Magaguadavic Ecodistrict reaches north to the St. John River valley and south to the Fundy coast. Its elevations are generally low. Two basic rock types compose the bedrock of the Magaguadavic Ecodistrict: Ordovician to Devonian sedimentary strata; and Silurian to Devonian granitic rocks. Calcareous sedimentary rocks give rise to loamy, non-compact soils in the vicinity of McAdam. Cedar is a characteristic tree species in the Magaguadavic Ecodistrict. The Digdeguash River system originates immediately south of the Village and the general drainage pattern is southeastward. Abundant lakes and wetlands characterize the area (NBDNR, 2007).

The geology in the vicinity of the Site typically consists of Silurian age bedrock mapped as the Burtt's Corner Formation, which consists of light grey, medium- to coarse-grained, generally non-calcareous, lithic feldspathic wacke grading to dark, interlaminated, generally noncalcareous siltstone and shale. These Silurian sedimentary rocks are intruded by the Early Devonian age granite (Pokiok Batholith) to the north of the Site.

The land surface in the area of the Site is covered with unconsolidated sediment that was either deposited directly by glacial ice or by ice mass wasting during the Quaternary (Wisconsinan) age. The surficial geology of the McAdam area is mapped as blanket and veneer of loamy lodgement till and minor ablation till generally 0.5 to 3 m thick (Rampton, 1984). Glacial erratics (consisting of large granite boulders) were deposited in the McAdam area due to glacial processes. In 2008, Glacier Rock was formally recognized as a Local Historic Place for being a rare natural phenomenon and has come to represent and symbolize the geological history of the McAdam area. The rock was moved from its original location to the McAdam Heritage Park (<https://www.historicplaces.ca>).

The surface material at the Site consists of reworked glacial sediment and imported fill during its development since the mid 1970s.

### **3.4 Fish and Fish Habitat**

There is no significant waterway within 500 m of the Site. The drainage from the Site is via an unnamed channel leading into a wetland approximately 250 m to the south. There is no easily discernable channel through the wetland; however, it becomes a defined channel as it leaves the wetland approximately 500 m downstream of the Site. This channel slowly grows, forming a tributary and eventually discharges to the Digdeguash River approximately 5 km from the Site (Figure 1.1).

The Digdeguash River system contains at least eight species of fish: Atlantic salmon, brook trout, brown trout, white sucker, yellow perch, pumpkinseed, common shiner and American eel (NBDNR, 2007).

McAdam Pond is approximately 800 m west of the Site. It is a dam-controlled lake fed by both springs and streams. McAdam Pond forms part of a different watershed and is not connected to waters associated with the Site.

### **3.5 Wetlands**

The wetlands mapped by the GNB along with a 30-m protective buffer are presented on Figure 1.3. A portion of two wetlands are located within the Site, but outside any of the planned working areas. Three other regulated wetlands, larger in size, are found off-Site; one of them is downgradient of the PDD.



One of the two wetlands located partially on-Site is a small wetland in the northwest corner of the property; it is primarily a cattail marsh with no open water. The second wetland is directly west of the Site across the NB Southern Railway line; it is mainly cattail marsh, with no open water, emerging from the wooded area. This second wetland represents the headwaters of the Digdeguash River system.

### **3.6 Flora**

Given that the Site has been used for commercial/industrial purposes since the mid 1970s, vegetation is generally limited to adventive weed species, low growth shrubs and early successional tree species, such as white birch and alder. The Site borders mixed mature deciduous and coniferous trees that extend along its boundaries. The disturbed areas of the Site lack vegetation.

A review of the NBDNR Protected Natural Area database indicates that current or proposed Protected Natural Areas are not found in the Closure Project footprint or within 5 km of its boundaries. In addition, the Closure Project involves the decommissioning activities in previously developed areas; as such, old-growth forest habitat or deer wintering areas are not known or expected to be present within the Closure Project footprint.

### **3.7 Fauna**

Given the extended commercial/industrial use of the Site and the general lack of functional habitat over most of it, with the exception of the northwest portion, terrestrial wildlife associated with the Site is likely restricted to a variety of small terrestrial mammals (e.g., meadow vole), soil invertebrates, transient birds and potentially small, upper trophic level terrestrial mammals (e.g., fox).

Based on a review of aerial photographs and a Site walk-over in August 2020, the Site likely does not contain habitat sufficient to support larger mammals (e.g., deer, moose), with the exception of outer boundaries of the property. Since the Site is not fenced, larger animals could wander across the property and spend limited periods of time on-Site.

Given that the area surrounding the Site and the northwestern portion consist largely of mixed forest habitat, larger mammals such as deer, moose or black bear may utilize the Site for foraging. Wildlife most likely to utilize the Site on a regular basis are typically associated with developed areas and relatively insensitive to anthropogenic activities.

### **3.8 Species at Risk**

Information obtained in September 2020 from the Atlantic Canada Conservation Data Centre (ACDC) regarding the historical and current occurrence of animal and plant species of concern in the Site area was used to determine if potential species at risk (SAR) occur in the vicinity of the MGWP (report attached as Appendix K). The ACDC maintains linked data-bases that document species that occur in each Atlantic Canada province. Figure 1.5 illustrates the principal results of the ACDC report.

The ACDC data-base identified eight SAR under Schedule 1 of the federal Species at Risk Act (SARA) as potentially occurring within 5 km of the Site centroid. Those eight species are: Wood thrush (*Hylocichla mustelina*), Barn swallow (*Hiundo rustica*), Chimney swift (*Chaetura pelagica*),



Canada warbler (*Cardellina canadensis*), Rusty blackbird (*Euphagus carolinus*), Common nighthawk (*Chordeiles minor*), Eastern wood-pewee (*Contopus virens*) and Eastern cougar (*Puma concolor*). SAR were not identified as occurring within 1 km of the Site centroid. The table below indicates the status for each of those species pursuant to the SARA, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the NB Species at Risk Act. A description of the identified SAR follows.

Common Name	SARA Status	COSEWIC	Provincial Status
Wood Thrush <i>Hylocichla mustelina</i>	Threatened	Threatened	Threatened
Barn Swallow <i>Hirundo rustica</i>	Threatened	Threatened	Threatened
Chimney Swift <i>Chaetura pelagica</i>	Threatened	Threatened	Threatened
Canada Warbler <i>Cardellina canadensis</i>	Threatened	Threatened	Threatened
Rusty Blackbird <i>Euphagus carolinus</i>	Special Concern	Special Concern	Special Concern
Common Nighthawk <i>Chordeiles minor</i>	Special Concern	Threatened	Threatened
Eastern Wood-pewee <i>Contopus virens</i>	Special Concern	Special Concern	Special Concern
Eastern Cougar <i>Puma concolor</i>	Data Deficient	Data Deficient	Endangered

Note:

- (1) Definitions of provincial ranks are provided in Appendix K.

Reports prepared by the ACCDC provide the user with coordinates of records of SAR within 5 km of the center of a site. The NBDNR has, however, classified several species as “location sensitive”, meaning that the ACCDC does not provide specific location information for them. Concern about the exploitation of location-sensitive species precludes identification of coordinates. Location-sensitive species in New Brunswick include Eastern painted turtle (*Chrysemys picta picta*), Snapping turtle (*Chelydra serpentina*), Wood turtle (*Glyptemys insculpta*), Bald eagle (*Haliaeetus leucocephalus*), Peregrine falcon anatum/tundius pop. (*Falcon peregrinus* pop.1), Cobblestone tiger beetle (*Cicindela marginipennis*), Maritime ringlet (*Coenonympha nipisiquit*) and bat (*Bat hibernaculum*). If any of these species are present within 5 km of the center of a site, the ACCDC report identifies them as present.

The ACCDC reported two location-sensitive species within 5 km of the centre of the MGWP, as follows: Snapping turtle (*Chelydra serpentina*) – Special concern; bat (*Bat hibernaculum*) – Endangered. The use of a bird-deterrent system around the Plant buildings would prevent bats from roosting or nesting in any of the buildings on-Site. Snapping turtles prefer quiet, mud-bottomed water; the only such habitat on-Site would be the settling pond on the western boundary of the property.

### Wood Thrush

Wood thrush is listed as a threatened species under SARA. The only reported occurrence of the Wood thrush within 1 km of the Site occurred in 1964 with the confirmed activity being breeding. Wood thrush is most abundant in moist, mature and preferably undisturbed deciduous woodlands and mixed forests. Wood thrush nests are typically low in the fork of deciduous tree using grass, twigs, moss, weeds, bark strips and mud. The Site generally lacks mature forest, except on the



outskirts of the property and surrounding properties that could be used as habitat by Canada warbler.

### ***Barn Swallow***

Barn swallow is listed as a threatened species under SARA. Although there are several occurrences of sightings in the Plant area, the only reported occurrence of Barn swallow within 1 km of the Plant occurred in 1973. Barn swallow is most often associated with open rural and urban areas where bridges, culverts and buildings are found near rivers, lakes, marshes or ponds. Barn swallow nests are typically constructed on vertical or horizontal building structures under suitable overhang, on bridges or in a culvert, usually made of mud and grass or straw. Since the Site employs a bird-deterrent system, the habitat to support the Barn swallow's nesting requirements is generally lacking at the Site.

### ***Chimney Swift***

Chimney swift is listed as a threatened species under SARA. Although there are several occurrences of sightings in the Plant area, none of the reported occurrences of Chimney swift was within 1 km of the Site. Chimney swift is most often associated with cities and towns, creating roosts and nests in chimneys, and occasionally in tree cavities. Chimney swift nests are typically constructed on vertical surfaces with dead twigs and saliva. Since the Site employs a bird-deterrent system, the habitat to support the Barn swallow's nesting requirements is generally lacking at the Site.

### ***Canada Warbler***

Canada warbler is listed as a threatened species under SARA. The only reported occurrence of Canada warbler within 1 km of the Site occurred in 1989 with the confirmed activity being breeding. Canada warbler is found in a variety of forest types, but it is most abundant in wet, mixed deciduous-coniferous forest with a well-developed shrub layer. It is also found in riparian shrub forests on slopes and in ravines and in old-growth forests with canopy openings and a high density of shrubs; it typically builds its nest on or very close to the ground, often in dense ferns or fallen logs. The Site generally lacks mixed deciduous-coniferous forests in the operational areas, although forests surrounding the Site could be used as habitat by Canada warbler.

### ***Rusty Blackbird***

Rusty blackbird is listed as a threatened species under SARA. The only occurrence of Rusty blackbird was in 2007 and was more than 1 km from the Site. Rusty blackbird is most often associated with treed bogs, fens, beaver ponds, wet meadows and the shrubby shorelines of lakes, rivers and swamps. Rusty blackbird nests are typically constructed low in shrub or small conifers, often over or near water. The nest is made of twigs, grass and lichen. The Site generally lacks the habitat required for Rusty blackbird to be in the area, with the exception of flying by.

### ***Common Nighthawk***

Common nighthawk is listed as a threatened species under SARA. Although there are several occurrences of sightings in the Plant area, none of the reported occurrences of Common nighthawk was within 1 km. Common nighthawk is most often associated with forest openings as well as burns, bogs, rocky outcroppings, gravel rooftops and sometimes fields with sparse cover or bare patches.





Common nighthawk lay eggs on bare ground without constructing a nest. Common nighthawk may use areas of the Site as habitat for foraging or breeding.

#### ***Eastern Wood-pewee***

Eastern wood-pewee is listed as a threatened species under SARA. The only occurrence of Eastern wood-pewee was in 2007 and was more than 1 km from the Site. Eastern wood-pewee is most often associated with open mixed and deciduous woodlots with sparse understorey, especially woodland openings and edges. Eastern wood-pewee nests are typically constructed in the fork of a horizontal deciduous branch well away from the trunk. The nest is constructed with grass, plant fibres and lichen, bound with spider webs. This is a migratory species that winters in South America. There is potential habitat around the edges of the Site for foraging or breeding, but not in areas of potential disturbance.

#### ***Eastern Cougar***

Eastern cougar is listed as threatened under SARA and is noted as potentially occurring within 5 km of the Site. However, specific observations of Eastern cougar within 1 km of the Site were not available in the ACCDC database. Eastern cougar can be found in most natural settings, generally far away from people and human activities. Given the nature of activities and human presence on the Site, it is unlikely to observe Eastern cougar at the Site.

#### ***Other Species***

The ACCDC also identified other species that have been observed within 5 km of the Site listed as at risk to secure (provincially) that are not listed under SARA and NBDNR. These species include eight vascular and one nonvascular flora species, along with 14 species of vertebrate and three species of invertebrate fauna.

### **3.9 Special Areas**

The report generated by the ACCDC in September 2020 for the Closure Project identified two ecologically significant areas within 5 km of the Site centroid: the McAdam Bird Sanctuary, situated at the northeast corner of McAdam Pond, approximately 800 m west of the Site (shown on Figure 1.5); and the Oromocto Lake Environmentally Significant Area, located between the Village and Fredericton Junction at a significant distance from the Site.

### **3.10 Water Quality**

#### ***Site Effluent***

Monitoring of the quality of the Site effluent discharged to the PDD, which feeds into a settling pond at the western extremity of the Site, is required to meet the conditions of Approval to Operate I-10537, issued August 7, 2019 by the NBDELG under the Water Quality Regulation of the Clean Environment Act (valid to December 7, 2022).

Those conditions include ensuring that the sediment traps and catch basin sump for process wastewater and Site runoff drainage are well maintained, which entails regular inspections and solids clean-out, in order to minimize the discharge of sediments to the PDD.



Also as per the conditions of its Approval to Operate, CertainTeed must conduct two rounds of grab sampling of water in the PDD at least four months apart in the same calendar year. For each round, a grab sample must be taken at the following points: where the PDD enters the Site property; at the sediment traps on the Site; and where the PDD exits the property. The samples must be analyzed for total petroleum hydrocarbon (TPH), total suspended solids (TSS), pH, calcium, sulphide and sulphate.

The Approval to Operate foresees Annual Environmental Reports summarizing the results of the grab sampling.

The most recent surface water sampling reports provided (attached as Appendix L) refer to the following sampling events:

- December 14, 2018 -- Under-ice samples were taken at the following locations: approximately 615 m downstream of where the stream enters the property; at the settling pond; and where the stream exits the property. All the samples were analyzed for: TPH; benzene, toluene, ethylbenzene and xylene (BTEX); TSS; calcium; sulphide; and sulphate. Measurements included temperature, pH, conductivity, salinity, total dissolved solids and dissolved oxygen. The report concluded that the overall water quality appeared to be good at the approximately 615 m downstream station and the exit station, while the results at the settling pond showed increases in all general chemistry parameters, suggesting increasing trends. The pH measured at the settling pond was slightly below the Canadian Guidelines for the Protection of Aquatic Life.
- May 30, 2018 – Samples taken at the same locations as in December 2018, with an additional station where the stream enters the Site. The report concluded that the overall water quality appears to be good; the pH at the approximately 615 m downstream station was slightly above the Canadian Guidelines for the Protection of Aquatic Life.
- October 27, 2017 – Samples taken at the same stations as in 2018 indicated that the overall water quality appeared to be good.

During the 2006 ECA, Site runoff and fine PM originating from the gypsum rock pile and the calcine processing area were seen discharging into the PDD. Substantial improvements to the surface water management system were made in 2007-2008 to address deficiencies. The December 16, 2008 report by CRA (enclosed as Appendix L-3) indicated that the surface water quality results show that the improvements to the surface water drainage were effective.

### **Groundwater**

There are six process water production wells on-Site and one off-Site (Figure 1.3a). The 2006 ECA conducted by CRA notes that these wells have been sampled bi-annually since 1995. The water samples were analyzed for calcium, sulphate, sulphide, TSS and pH; TPH analyses were added in 2005.

The most recent groundwater sampling results provided are dated November 3, 2008 and April 30, 2008. Those sampling events covered four on-Site production wells for the calcium, sulphate, sulphide, TSS, pH and BTEX/TPH analytes. The results show that the water respected the BTEX/TPH criteria; the criteria for the other analytes are not provided in the reports. In addition, a sample of sludge removed from the settling pond and stockpiled on-Site at the western property limit was collected on November 3, 2008. The results respected the Canadian Soil Quality Guidelines for



the Protection of Environmental and Human Health of the Canadian Council of Ministers for the Environment, which led to the conclusion that the sludge could remain on-Site. Appendix L-3 encloses the reports for both sampling events.

### **3.11 Air Quality**

Air quality monitoring at the Site is required under Approval to Operate I-10064, issued April 1, 2018 by the NBDELG under the Air Quality Regulation of the Clean Air Act (valid to March 31, 2023).

The monitoring requirements include ensuring that the total combined release of sulphur dioxide (SO<sub>2</sub>) from all Site sources does not exceed 200 t per calendar year and that the total combined release of PM from all Site sources also does not exceed 200 t per calendar year. The Approval to Operate also notes that, prior to December 1, 2020, CertainTeed must conduct source testing to determine the concentration and emission rate of SO<sub>2</sub>, carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>) and PM being released from the exhaust stacks of the rock dryer, the calcine mill and the two dryer ovens representing normal operating conditions (that requirement is no longer relevant, since the production line has been shut down).

Source emissions testing was conducted at the four MGWP exhaust stacks in 2015 by Stantec Consulting Ltd. (report, attached as Appendix M, provides the results and indicates that there are no stack-specific limits specified in the Approval to Operate). According to the Facility Profile for the MGWP prepared by the NBDELG in September 2012, similar source emissions testing was also conducted in 2010. The 2010 results for SO<sub>2</sub> and PM were compliant with permitting requirements; process gas flow was slightly more than 3,000 m<sup>3</sup>/min, requiring the Plant to remain a Class 1B facility (the current Approval to Operate designates the MGWP as a Class 2 facility).

According to the 2012 Facility Profile, an Air Quality Dispersion Modeling Report dated 2006 showed that the predicted ground-level concentrations of SO<sub>2</sub>, NO<sub>x</sub> and CO generated from the four exhaust stacks at the Site were below their respective regulatory thresholds for all averaging periods; the maximum predicted ground-level concentration of fine PM was slightly above the regulatory threshold in a small area of the Site.

CertainTeed must also ensure that fugitive PM emitted from the Site does not adversely affect any off-Site receptor. Our review of available records revealed that a complaint about dust was made from a resident of the Village by telephone on September 25, 2017. The caller, residing on Mill Street near the Plant, reported that dust potentially generated by the Plant was covering her car and preventing her from opening the windows. The record notes that the Plant was not in operation that morning, but that gypsum rock was being screened, which could have caused dust that may have been carried by the wind. The record also indicates that road construction on Mill Street and local traffic on the unpaved road leading to the rock-unloading ramp located near the back of the residence may have contributed to the dust nuisance. In response, the rock screening activity was halted immediately after the complaint was made and the equipment and material was moved to the back of the Plant, away from residential dwellings.

The 2012 Facility Profile indicates that the Plant was in full compliance with its air quality criteria since 2007, noting that emissions decreased over the years due to reduced production and improved processes. The Facility Profile further indicates that, since the creation of the NBDELG in 1973, there were no official warnings or orders issued in relation to air quality for the Site.



The 2006 ECA conducted at the Site did not identify any compliance issues relative to air emissions. It noted that an air vacuum collection system accumulates PM in the Plant and discharges it into a collection hopper for subsequent use in the rock recycle program.

The MGWP reports to the National Pollutant Release Inventory (NPRI) for SO<sub>2</sub>, PM equal to or less than 2.5 microns (PM<sub>2.5</sub>), PM 10, total PM, NO<sub>x</sub> and volatile organic compounds (ECCC, 2020b).

The total greenhouse gas (GHG) emissions reported to Environment and Climate Change Canada (ECCC) for the MGWP in 2018 amounted to 15,871.83 t CO<sub>2</sub>e, compared to 13,078.49 t CO<sub>2</sub>e in 2017. The GHG emissions reports are included in Appendix M-2.

Approval to Operate I-10064 foresees Annual Environmental Reports outlining: the annual amount and type of fuel oil used at the Site for the previous year, as well as their sulphur content; and a calculation of the total SO<sub>2</sub> emitted from the Plant in tonnes per year based on the preceding data.

The Approval to Operate also requires assurance that noise emitted from the Site does not adversely affect any off-Site receptors. Should a negative effect related to noise be suspected, CertainTeed is required to submit a Noise Prevention and Control Plan for approval by the NBDELG prior to its implementation.

### **3.12 Accidental Spills**

A review of the available documentation yielded the following list of all recent spills (2017-2019) recorded at the Site:

- January 3, 2017 Hydraulic leak from contractor-owned front-end loader. Approximately 5 L. Sprayed onto snow, which was hauled away for disposal.
- March 9, 2017 Diesel leak while fueling. Inside containment. Drips only. Cleaned up with absorbent material.
- November 22, 2017 Diesel spill of approximately 2,800 L into secondary containment and approximately 10 L on the ground. Overflow while filling tank. Outside material contained and cleaned used spill kits and absorbent material. Inside of the containment in the bulk chemical building, a vac truck was used to pump Diesel and room was pressure-washed.
- March 19, 2018 Loss of approximately 15 L of gear oil from front-end loader differential broke. Spill was cleaned up with absorbent material and NBDELG was notified.
- March 27, 2018 Foam hose ruptured after a clog developed and too much pressure built up.
- August 28, 2018 Out-of-service forklift in the Bone Yard was found to be leaking fluids. Not fully drained before taken out of service. Cleaned up with absorbent material.
- September 25, 2018 Small spill of Ecossem, approximately 0.75 L. Container data sheet indicated material is non-hazardous and safe for the environment.
- November 9, 2018 Diesel spill in Calcine area leaking from fuel/air actuator. Being collected in bucket, but the bucket tipped over and spilled the diesel on the floor.
- November 11, 2018 Glue storage tote leaked. Considered non-hazardous.
- November 13, 2018 Aqualite line left off after testing in the day tank room.



- November 14, 2018 Hydraulic leak on forklift after catching hose on post. Loosened hose. In train bagging area. Was cleaned up with absorbent material.
- January 6, 2019 Oil leak from dryer gearbox. Valve not closed tight after testing.
- January 10, 2019 Loss of approximately 38 L of gear oil in the maintenance room. Valve not closed. Contained with absorbent socks and cleaned with loose absorbent material.
- March 22, 2019 Loss of approximately 40 L of hydraulic oil from broken hose on front-end loader near recycle pile. NBDELG contacted and report filed.
- November 7, 2019 Loss of approximately 1.5 L hydraulic oil released under stacker unit. Loose fitting.
- November 14, 2019 Loss of approximately 5.7 L of aqualite, in Aqua Room. Leak around pump.
- November 19, 2019 Glue release, after test valve not fully closed on Dunnage Machine.

According to the NBDELG records, a file was opened (File 6515-5-0304) on April 14, 1997 to address Industrial/Hazardous Waste at 57 Quality Way, McAdam. The subsequent clean-up achieved the 1992 Generic criteria and the file was closed. The relevant NBDELG record is enclosed as Appendix N.

### **3.13 Hazardous Materials and Chemicals**

The existing data about potential hazardous materials and chemicals that might be encountered as part of the Closure Project is presented in Section 2.7.2.

### **3.14 Socio-Economic and Cultural Features**

The Village features the McAdam Railway Station, a National Historic Site built in 1911 that used to service 16 trains daily. Today, only freight trains pass on the rail line.

The Mayor estimates the Village population at 1,350 persons (CBC News, 2020). According to the 2016 Census, the average age of the Village population is 47.4 years, compared to 43.6 for the province; also, the labour participation rate was 45.8, compared to 61.5 for the province. The Census recorded 73 individuals in McAdam Parish (Statistics Canada 2016 Census).

The Aboriginal communities nearest the Site are Kingsclear First Nation, located along the Saint John River approximately 50 km northeast of the Site (as the crow flies) and Woodstock First Nation, also situated along the Saint John River approximately 60 km north of the Site (as the crow flies). Both First Nations are members of Wolastoqey Tribal Council Inc., a not-for-profit organization that supports the capacity-building of its member communities within the traditional Wolastoqey territory in New Brunswick. Both First Nations are also part of the comprehensive land claims negotiations involving the Mi'kmaq and Maliseet First Nations of Brunswick.

The Peskotomuhkati Nation, of which the Skutik community in southwestern New Brunswick forms part, is also involved in comprehensive land claims negotiations that involve the McAdam area (ATRIIS, 2020).

Given that the Closure Project is restricted to within CertainTeed's property, which has been highly disturbed over the last 44 years, and to the use of existing, often-travelled roads, an archaeological



survey is not planned as part of the EIA submission. A request was made to the NB Department of Tourism, Heritage and Culture in August 2020 to determine if any known remains of archaeological significance are present on-Site or nearby. The response received noted that there is an area identified as having an elevated archaeological potential at the western boundary of the Site, within 80 m of a watercourse (as shown on Figure 1.5). The response also stated that an archaeological impact assessment would be required if any ground disturbance is planned in the area of archaeological potential. It is noted that the archaeological potential is located off-Site and west of the NB Southern Rail line. As noted above, the western portion of the Site has been previously disturbed with the past installation of culverts under the rail line and no ground disturbance will occur off-Site associated with this project. A copy of the NB Department of Tourism, Heritage and Culture email correspondence is included in Appendix O.

## **4. Summary of Environmental Impacts**

The present EIA establishes the interactions between Closure Project activities and aspects of the natural and socio-economic environment, identifies Valued Environmental Features (VEFs) to focus the assessment on the issues of greatest ecological and socio-economic concern, assesses the significance of potential impacts of the Closure Project on the VEFs and suggests measures to avoid or mitigate them. The EIA then proposes a monitoring program as part of an environmental management planning process. Section 4.1 further outlines the EIA methodology. It is consistent with the guidance provided in the NBDELG Guide to Environmental Impact Assessment in New Brunswick (NBDELG, 2018) and Additional Information Requirements for Waste Disposal Facilities (NBDELG, 2020).

### **4.1 Assessment Methodology**

The interactions between the Closure Project activities, described in Section 2.0, and environmental components were established on the basis of the sources of potential impacts of those activities. The VEFs were established principally on the basis of protection afforded by legislation and importance accorded by regulators, stakeholders and the scientific community. Section 4.3 discusses the VEFs and the potential impacts thereon. Some components of the natural and socio-economic environment were determined not to constitute VEFs in the context of the Closure Project; Table 1 lists those components and the reasons for their exclusion.

The potential impacts on the VEFs are assessed in the context of their magnitude, geographic extent, duration, degree of reversibility and probability of occurrence, where possible. The significance of potential negative impacts is first reduced by virtue of design features of the Closure Project and standard mitigation measures, which are outlined in Section 4.2. The potential impacts are assessed taking into account those features and measures, and additional mitigation measures are proposed to further reduce impact significance where warranted. The significance of the resulting residual negative impacts is ascribed to one of four categories: negligible; low; moderate; or high. Potential positive impacts are also anticipated as a result of the Closure Project during the care and maintenance period; their significance is not evaluated.

The study area for the purposes of the EIA is broadly bound by the outer limits of Provincial Highway 4 to the west, north and east of the Site, which encompass the Village centre, and to



down-gradient receptors south of the Site. The temporal boundaries encompass the duration of the Closure Project activities, ending with the eventual sale of the property.

## **4.2 Impact Avoidance/Mitigation by Project Design**

Several impact avoidance and mitigation measures have been established by virtue of the design of the Closure Project. They are summarized for each Closure Project activity as follows:

### ***Hazardous Materials and Chemicals Removal***

The hazardous materials to be considered as part of the Closure Project essentially involve PCBs, ACMs, ODS, mercury switches, batteries and LBP. As presented in Section 2.7.2, the likelihood of finding ACMs is negligible, as is the likelihood of finding LBP exceeding the guidelines. The Site is not a PCBs storage site. Should any suspected PCBs-containing material be encountered during the Closure Project, it will be checked or sampled accordingly and, if required, a PCBs Management Plan will be prepared. No compliance issue relative to ODS was noted; office air conditioning units will be maintained and refrigerators and water coolers will be disposed of following the applicable standards. Other hazardous materials include possible ionizing radiation sources (e.g., smoke detectors; self-illuminating EXIT signs) and some light bulbs that may contain mercury; most of them will remain on-Site for the care and maintenance period.

A list of the chemicals associated with the operations was prepared by Plant employees intimately familiar with the Plant and is provided in Appendix G. The removal and disposal of chemicals will be completed by CertainTeed and licensed contractors depending on the type of material.

An internal CertainTeed manifest tracking system that identifies where hazardous materials and chemicals originate as well as the carrier and the receiver will be used to ensure that the hazardous materials and chemicals are properly transported and disposed in accordance with provincial and federal regulations. The hazardous materials and chemicals removal program will be overseen and audited by CertainTeed representatives to ensure that the materials are being removed, sorted and disposed of in accordance with the manifest system.

### ***Non-Hazardous Materials***

Non-hazardous materials will be sorted for re-use and recycling where possible. The sorting will be completed by the contractors as a contractual condition; CertainTeed personnel will oversee and audit the sorting to ensure contractual compliance. Non-recyclable decommissioned material will be handled and disposed of as C&D debris at either the Hemlock Knoll Sanitary Landfill or the Fredericton Region Solid Waste Commission Landfill, pending approval from NBDELG.

### ***Above-Ground Storage Tanks Decommissioning***

The decommissioning of ASTs containing petroleum products will be completed by a licensed petroleum contractor, consistent with the NB Petroleum Storage and Handling Regulation, minimizing the potential for accidental releases. The chemical storage tanks will also be decommissioned by private contractors or CertainTeed employees familiar with appropriate tank decommissioning techniques; the residual chemicals will be transported off-Site for disposal at an approved facility or for re-use at another CertainTeed facility. Soil samples will be collected from beneath and surrounding ASTs for petroleum hydrocarbon analysis or other potential contaminants





as deemed necessary. In the event of an accidental spill during the decommissioning of ASTs, the release will be managed in accordance with the EPP.

The CNG terminal will be removed by an appropriately licensed contractor.

### ***Manufacturing Equipment Dismantling and Transportation***

The trucks will be highway-registered and of similar size to the transport trucks that were accessing the Site during operations. Oversize or overweight truck loads are not anticipated. Therefore, no impacts associated with vehicle traffic patterns are expected. If, however, during the course of the Closure Project, oversize or overweight loads are required, an engineered traffic management plan will be prepared and a permit obtained from the NB Department of Transportation and Infrastructure.

Quality Way and Provincial Highway 4 eastward will be primary access route for trucks and equipment into and out of the Site.

Decommissioning equipment will be re-fuelled through commercial deliveries. Maintenance and re-fuelling of the equipment will be completed in designated areas of the Site located a minimum of 30 m from the PDD, sediment traps, catch basin sump and settling pond. The fuelling of highway-registered trucks will occur off-Site under the responsibility of the contractors.

### ***Environmental Protection Plan***

In a commitment to adhering to best management practices, CertainTeed will ensure the development of an EPP concurrent with final Closure Project design in order to minimize the environmental impacts to the extent possible. In addition to the above-cited measures, the EPP will include protocols to address such things as leak and spill prevention, work near surface water, waste collection, erosion and sedimentation control, contingency plans (including spill notification and clean-up protocols) and Site access. A dedicated CertainTeed representative will be responsible to ensure the EPP is being followed by CertainTeed personnel and independent contractors working at the Site for the duration of the Closure Project.

Other specific mitigation measures are discussed in the subsequent sections as part of assessing the impacts of the Closure Project.

## **4.3 Impact Assessment**

### **4.3.1 Surface Water Quality**

The results of the surface water quality monitoring (summarized in Section 3.10) show that the surface water quality is generally good.

Several Closure Project activities have the potential to impact surface water quality, such as the removal of hazardous materials and chemicals, the decommissioning of the ASTs and of the waste wallboard and paper areas as well as the washing and dismantling of equipment. The potential impacts involve siltation and impact to water entering the PDD.

The EPP will effectively mitigate the potential for silt and chemical contaminants to enter into the PDD. The waste wallboard area will be re-graded to ensure proper drainage and covered with topsoil and hydroseed. The waste paper area will also be re-graded and covered with topsoil and



hydroseeded to improve slope stability. The PDD will be upgraded as explained in Section 2.7.7. A conceptual surface water drainage plan that incorporates sediment and erosion control structures as part of the final Closure Project design is shown on Figure 1.6.

The closure of the Site along with the improved PDD is expected to improve the long-term quality of surface water on the Site and downstream.

In the light of the preceding, the residual Closure Project impact on surface water quality is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period prior to the eventual sale of the property.

#### **4.3.2 Groundwater Quality**

Groundwater sampling in the on-Site production wells conducted in 2008 indicated that the water respected the BTEX/TPH criteria.

The MGWP is located approximately 1 km northwest of Zone C of the wellfield protected area for the Village.

Closure Project activities with the potential to negatively impact groundwater quality are the same as those for surface water quality. The mitigation measures applied to protect surface waters will also serve to protect groundwater.

In the light of the preceding, the residual Closure Project impact on groundwater quality is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.3 Soil Quality**

A summary of the accidental spills recorded between 2017 and 2019 is provided in Section 3.12. With many of them occurring inside the Site buildings, the potential that the historical Plant operations and the above-ground storage (with secondary containment) of petroleum hydrocarbons on-Site would have negatively affected soil quality compared to background conditions is considered to be low.

The main Closure Project activities with the potential to impact soil quality at the Site are the removal of hazardous materials and chemicals and the decommissioning of the on-Site ASTs, during which petroleum products or chemicals, among other substances, could be released to the soil.

The EPP will effectively mitigate the potential for contaminants to affect soil quality.

In the light of the preceding, the residual Closure Project impact on soil quality is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.4 Air Quality**

As summarized in Section 3.11, the Plant was in general conformity with the applicable air quality criteria during its operation.



Exhaust from construction vehicles and equipment and fugitive dust resulting from such activities as gypsum rock removal, stockpile re-grading and cover activities, equipment dismantling, and equipment and materials transportation are the main anticipated air emissions resulting from the Closure Project. The emissions produced will include PM, CO, carbon dioxide (CO<sub>2</sub>), NO<sub>x</sub> and SO<sub>2</sub>.

The air emissions generated during the Closure Project are not expected to significantly increase compared to emissions generated at the Site during its operation. There is, however, the potential for a temporary increase in dust generation during the transportation of gypsum rock off-Site. The general absence of strong winds in the study area (explained in Section 3.2) reduces the risk to negatively impact air quality during the Closure Project. Also, it is noteworthy that only one dust-related complaint was found in the historical documentation on the Closure Project.

Other mitigation measures include the following:

- Use standard construction equipment and existing roads for movement of equipment and materials into and out of the Site, and prioritize eastward travel from the Site
- No excessive idling of construction vehicles
- Use of wet suppression controls as required to minimize dust produced by on-Site vehicles and equipment
- Routine inspection of construction equipment by qualified staff and/or a CertainTeed representative to ensure efficient operation

The long-term ambient air quality is anticipated to be positively impacted with the closure of the Plant.

In the light of the preceding, the residual Closure Project impact on air quality is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.5 Wetlands**

The outlet of the PDD enters one of the regulated wetlands adjacent to the Site. Consequently, the wetlands could be affected indirectly by the potential impacts on surface water quality.

The EPP will include measures to protect the wetlands, including:

- No machinery, equipment, materials or debris allowed near the 30 m wetland buffer
- Installation of erosion and sedimentation controls on-Site

The anticipated improvement of water quality on the Site and in its vicinity following closure should assist in improving the quality of the wetlands in the long term.

In the light of the preceding, the residual Closure Project impact on wetlands is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.6 Fish and Fish Habitat**

Fish and fish habitat are protected by the federal Fisheries Act.



It is considered that the regulated wetlands on and near the Site drain into fish and fish habitat. The Closure Project therefore has the potential to impact fish and fish habitat indirectly as a result of potential impacts on the wetlands, which in turn could be affected by potential impacts on surface water quality during Site closure.

The EPP measures that will apply to surface water quality and wetlands will serve to protect fish and fish habitat from being negatively affected by the Closure Project.

The anticipated improvement of water quality and wetlands on the Site and in its vicinity following closure could assist in improving fish and fish habitat downstream in the long term.

In the light of the preceding, the residual Closure Project impact on fish and fish habitat is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.7 Migratory Birds**

The Migratory Birds Convention Act protects migratory birds as well as their eggs, nests and young. It is prohibited to deposit substances harmful to migratory birds in areas, including waters that they use. It is also prohibited to disturb, destroy or take a nest or an egg of a migratory bird unless a permit to do so has been issued. The incidental take of migratory birds is not permitted.

Work areas will be limited to disturbed areas and main roadways that generally lack vegetation suitable for nesting/breeding migratory birds. Also, the Closure Project will occur outside the nesting and migration periods. No raptor species (e.g., eagles, hawks) or their nests were identified during the Site walk-over by GHD in August 2020.

Potential impacts to the waters in the study area that might be used by migratory birds will be minimized through the application of the mitigation measures relative to surface water bodies. Additionally, the Plant buildings are equipped with an ultrasonic deterrent system that deters birds from nesting or roosting in the buildings.

In the light of the preceding, the residual Closure Project impact on migratory birds is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.8 Species at Risk and Special Areas**

SAR are protected under the federal SARA and the NB Species at Risk Act, which forbid harm to a listed species or its habitat.

The ACCDC data-base identified eight SAR as potentially occurring within 5 km of the Site centre; they are identified in Section 3.8. Figure 1.5 shows that the SAR identified by the ACCDC in the vicinity of the Site are generally located either at McAdam Pond, along Harvey Road, Saunders Road and Provincial Highway 4 or beyond those main roads. None of those species was reported to be within 1 km from the Site centroid. Except for one of the SAR identified within 5 km of the Site centre (Eastern cougar), all of them are migratory birds.

Two location-sensitive species were identified within 5 km of the Site centre: Snapping turtle (*Chelydra serpentina*) – Special concern; and bat (*Bat hibernaculum*) – Endangered.



The Closure Project will occur outside the bird nesting and migration periods, and the ultrasonic deterrent system that deters birds from nesting or roosting in the Site buildings will also deter bats. The only suitable habitat on-Site for Snapping turtle would be the settling pond on the western boundary of the property. Should any turtles be encountered on-Site during the Closure Project activities, the NBDNR will be notified and the prescribed procedure followed.

Of the two special areas identified by the ACCDC within 5 km of the Site centre, only one – the McAdam Bird Sanctuary – is within 1 km of the Site.

The trucks that will transport equipment/material in or out of the Site will travel primarily on the eastern side of the Site. The existing traffic patterns on that road are not expected to be altered notably by the Closure Project.

In the light of the preceding, the residual Closure Project impact on SAR and special areas is predicted to be negative yet of negligible importance during the closure of the Site and positive during the care and maintenance period.

#### **4.3.9 Socio-Economic Issues**

As discussed in Section 3.14, the Village population is on average older and less employed than the population of New Brunswick. Roughly 1,350 persons reside in the Village.

Prior to the cessation of production at the Plant in August 2020, CertainTeed employed about 60 persons, with two-thirds residing at the Village, and provided work to 15 contractors. Close to 10 employees currently work at the Site (CBC News, 2020).

The Closure Project will result in short-term employment and contracts, but it will ultimately cause a significant loss of jobs and contracting once the Site closure is completed. It is anticipated that the eventual sale of the property for commercial/industrial re-development will provide new employment and contracting opportunities.

CertainTeed intends to initiate the Closure Project as soon as possible to retain its existing staff to carry out the activities. In addition, local contractors and equipment will be utilized to the extent possible. On July 17, 2020, several GNB Ministers met with the Village Mayor and Council as well as the Plant Manager to discuss the Site closure. The GNB committed to supporting the affected employees through its counseling and career transitioning services.

CertainTeed is partnering with WorkingNB, Service Canada, the Village Mayor and other companies in the region to support employee transition. More specifically, CertainTeed has undertaken, or will be undertaking, the following actions:

- Participated in the August 17, 2020 job fair held in the Village. Organized by WorkingNB, the career guidance event focussed on apprenticeships and trades. Some of CertainTeed's former staff found new employment as a result of the event
- Educate its affected staff on WorkingNB programming. A CertainTeed representative presented the relevant programs to staff on October 2, 2020
- Hold an information session with Service Canada for affected staff on the relevant federal programming



- Offer customized out-placement services to its affected staff (e.g., career counseling)
- Provide CertainTeed's Employee Assistance program to affected staff and their families

The negative impact of the cessation of the production of wallboard panels at the Plant on the socio-economic conditions of the Village population has already occurred. The support actions listed above help to mitigate that impact.

## **5. Monitoring Program**

Compliance to regulations, the EPP and the avoidance/mitigation measures described in Section 4.0 will be monitored by a CertainTeed representative.

The following sub-sections outline additional monitoring measures to ensure that certain key mitigation measures are performing as planned.

Furthermore, CertainTeed will institute a public complaints protocol for the Village residents by providing the email and telephone coordinates for CertainTeed's respondents. The protocol will serve to record any complaints about nuisances caused by the Closure Project and to take action to resolve them satisfactorily. It will be submitted to the NBDELG for approval before starting the Closure Project activities.

### **5.1 Surface Water Quality**

Surface water samples will be collected on-Site twice annually for a period of two years, with at least four months between each sampling event. The samples will be collected from the same sampling points as over the past few years and will be submitted for the same laboratory analyses.

Annual Site inspections will be carried out for the duration of the care and maintenance period to ensure that the sediment and erosion control systems put in place are functioning as designed until future sale of the property.

### **5.2 Wetlands, Fish and Fish Habitat**

The monitoring measures foreseen for surface water quality will also serve to protect the wetlands, fish and fish habitat.

## **6. Public Involvement and Aboriginal Engagement**

As presented in Section 2.7.1, CertainTeed proposes to meet the minimum notification, involvement and engagement requirements of the NBDELG Guide to Environmental Impact Assessment. As such, CertainTeed will notify the Village council, the nearest land-owners, the local service district and the NB Department of Aboriginal Affairs (NBDA) of the Closure Project; the NBDA will communicate directly with the concerned Aboriginal groups on behalf of CertainTeed.

The notification will consist of an information flyer that will briefly describe the undertaking and the Site as well as the status of the GNB approval process; the flyer will also explain how to view the EIA Registration document, invite comments or questions about the environmental impacts by a



specified date and provide the relevant contact information. CertainTeed will make copies of the EIA Registration document available to any interested member of the public or Aboriginal group. CertainTeed will also provide a hard copy of the EIA Registration document to the Village office for viewing by the public and will request that the Village provides notice of such on their website (<https://mccadamnb.com/news-and-events/news/>).

Finally, CertainTeed will submit to the NBDELG a report documenting the public involvement and Aboriginal engagement activities, describing any issues or concerns received and indicating how they were, or will be, addressed.

## **7. Approval of the Undertaking**

The permits, licenses, approvals or authorizations that may be required for the Closure Project include:

- Determination from NBDELG under the Environmental Impact Assessment Regulation, Clean Environment Act
- Approval from the NBDELG under the Petroleum Product Storage and Handling Regulation, Clean Environment Act
- Approvals to Construct and Approvals to Operate issued by NBDELG under the Clean Environment Act and Clean Air Act
- Approval of a site-specific EPP and any required plans for hazardous materials/chemicals from the Manager, Environmental Assessment Section, NBDELG
- Engineered Traffic Management Plan for routing of equipment, materials, wastes and oversized equipment (potentially)
- Consultation with Municipal District Planning Commission to determine municipal permit requirements
- Consultation and potential Authorization from the Federal Department of Fisheries and Oceans under the Fisheries Act

## **8. Funding**

The McAdam Gypsum Wallboard Plant undertaking is fully funded by the Proponent, Saint-Gobain. No federal or provincial funding or land is sought for the Closure Project.





## 9. Closure

All of Which is Respectfully Submitted,

GHD

A handwritten signature in blue ink, appearing to read "Brigitte Masella".

Brigitte Masella, M.E.S.

A handwritten signature in blue ink, appearing to read "Robert Turner".

Robert Turner, M.A.Sc., P.Geo.

A handwritten signature in blue ink, appearing to read "Michael Gaines".

Michael Gaines, B.Sc.

Reviewed by Troy Small, M.Sc. CE



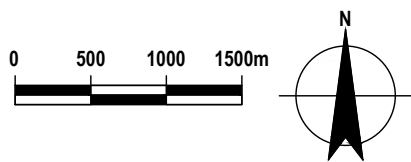
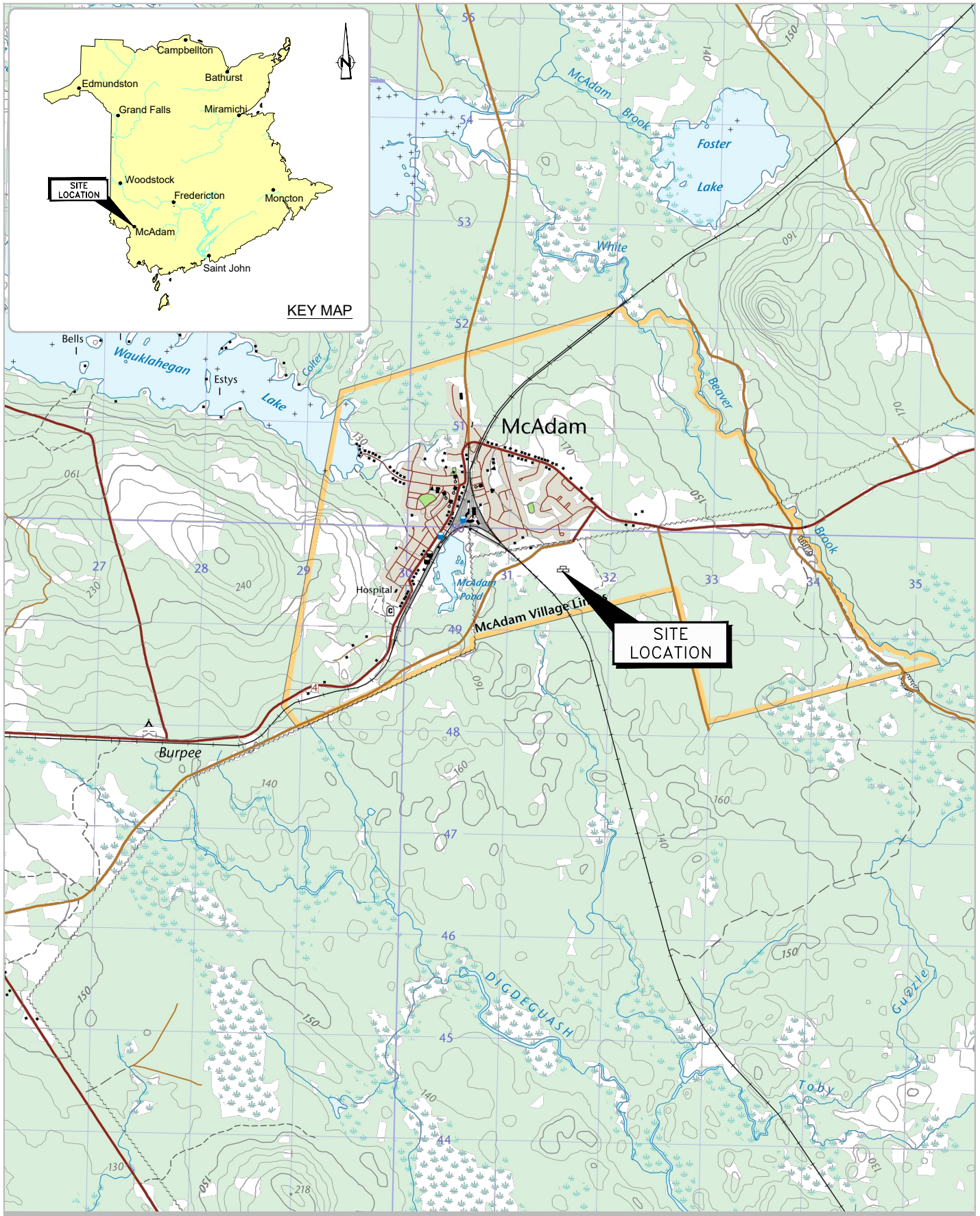
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Scale: 200,000.

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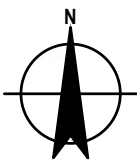
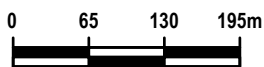
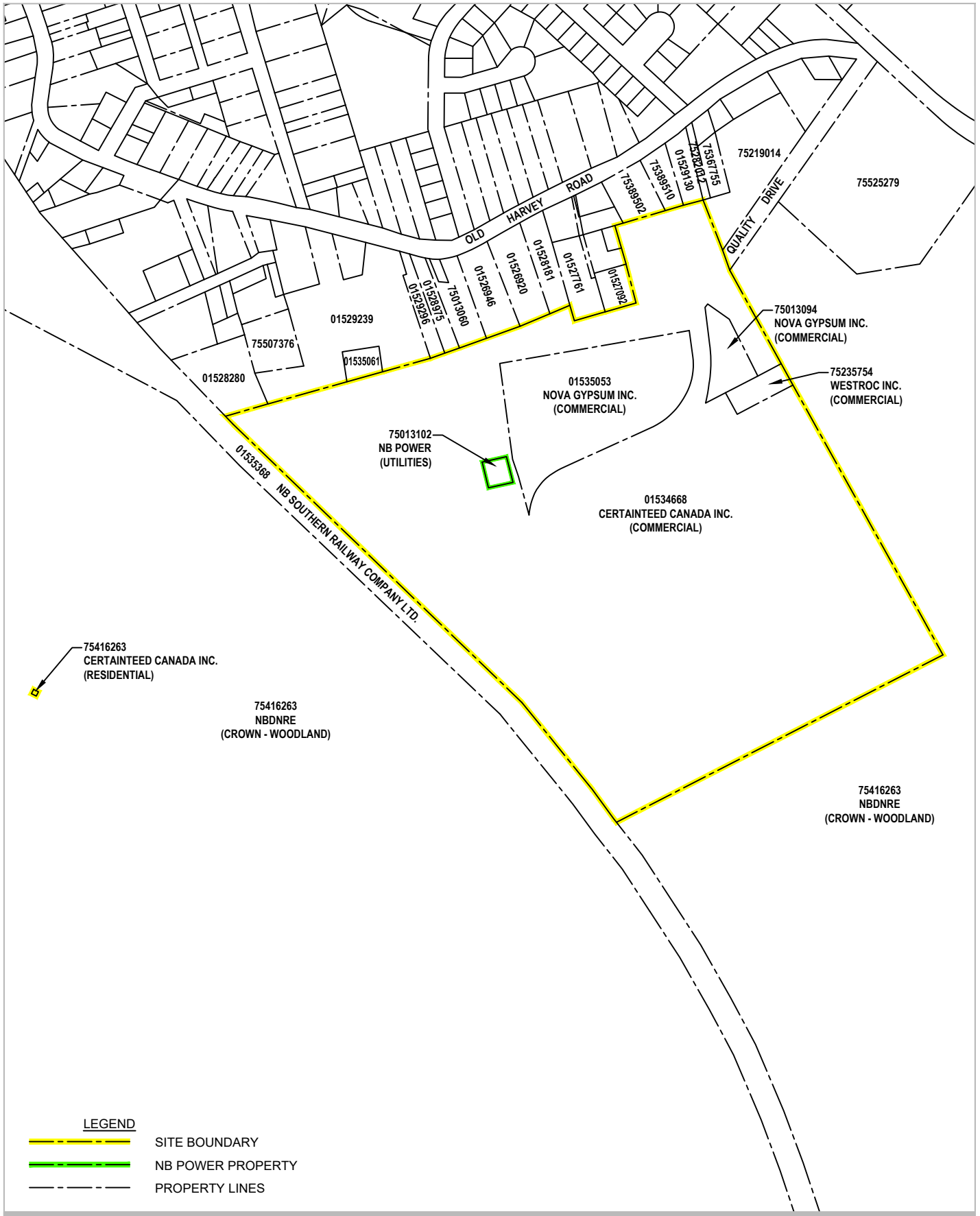


SAINT-GOBAIN  
 CERTAINTÉED CANADA INC. -  
 MCADAM WALLBOARD PLANT  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION

Project No. 11217404  
 Date October 2020

SITE LOCATION

FIGURE 1.1



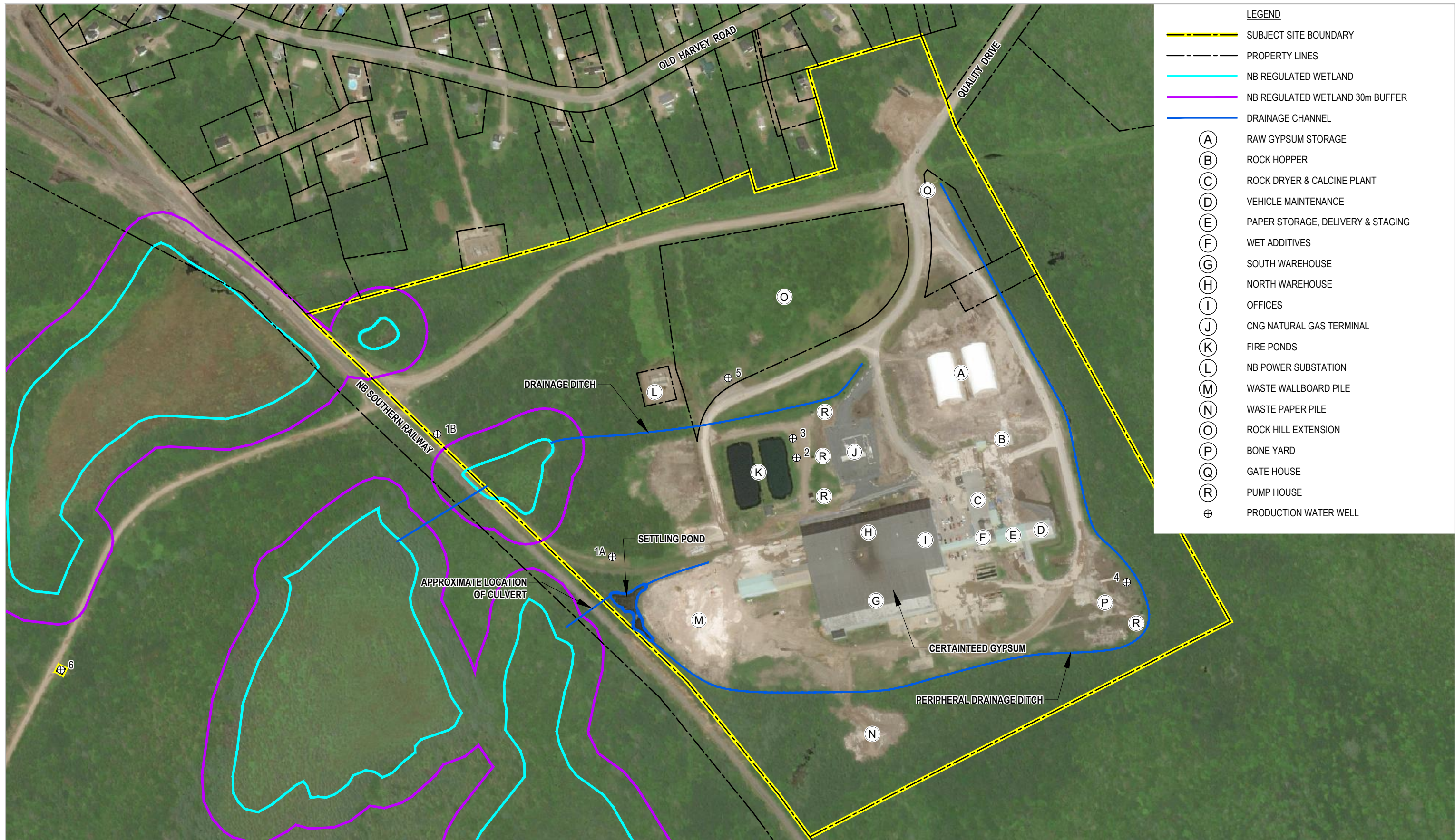
SAINT-GOBAIN  
 CERTAINEED CANADA INC. -  
 MCADAM WALLBOARD PLANT  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION

Project No. 11217404  
 Date October 2020

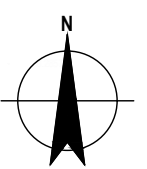
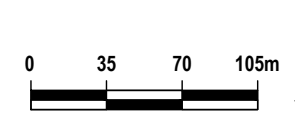
PROPERTY PLAN

FIGURE 1.2





LEGEND	
	SUBJECT SITE BOUNDARY
	PROPERTY LINES
	NB REGULATED WETLAND
	NB REGULATED WETLAND 30m BUFFER
	DRAINAGE CHANNEL
	RAW GYPSUM STORAGE
	ROCK HOPPER
	ROCK DRYER & CALCINE PLANT
	VEHICLE MAINTENANCE
	PAPER STORAGE, DELIVERY & STAGING
	WET ADDITIVES
	SOUTH WAREHOUSE
	NORTH WAREHOUSE
	OFFICES
	CNG NATURAL GAS TERMINAL
	FIRE PONDS
	NB POWER SUBSTATION
	WASTE WALLBOARD PILE
	WASTE PAPER PILE
	ROCK HILL EXTENSION
	BONE YARD
	GATE HOUSE
	PUMP HOUSE
	PRODUCTION WATER WELL



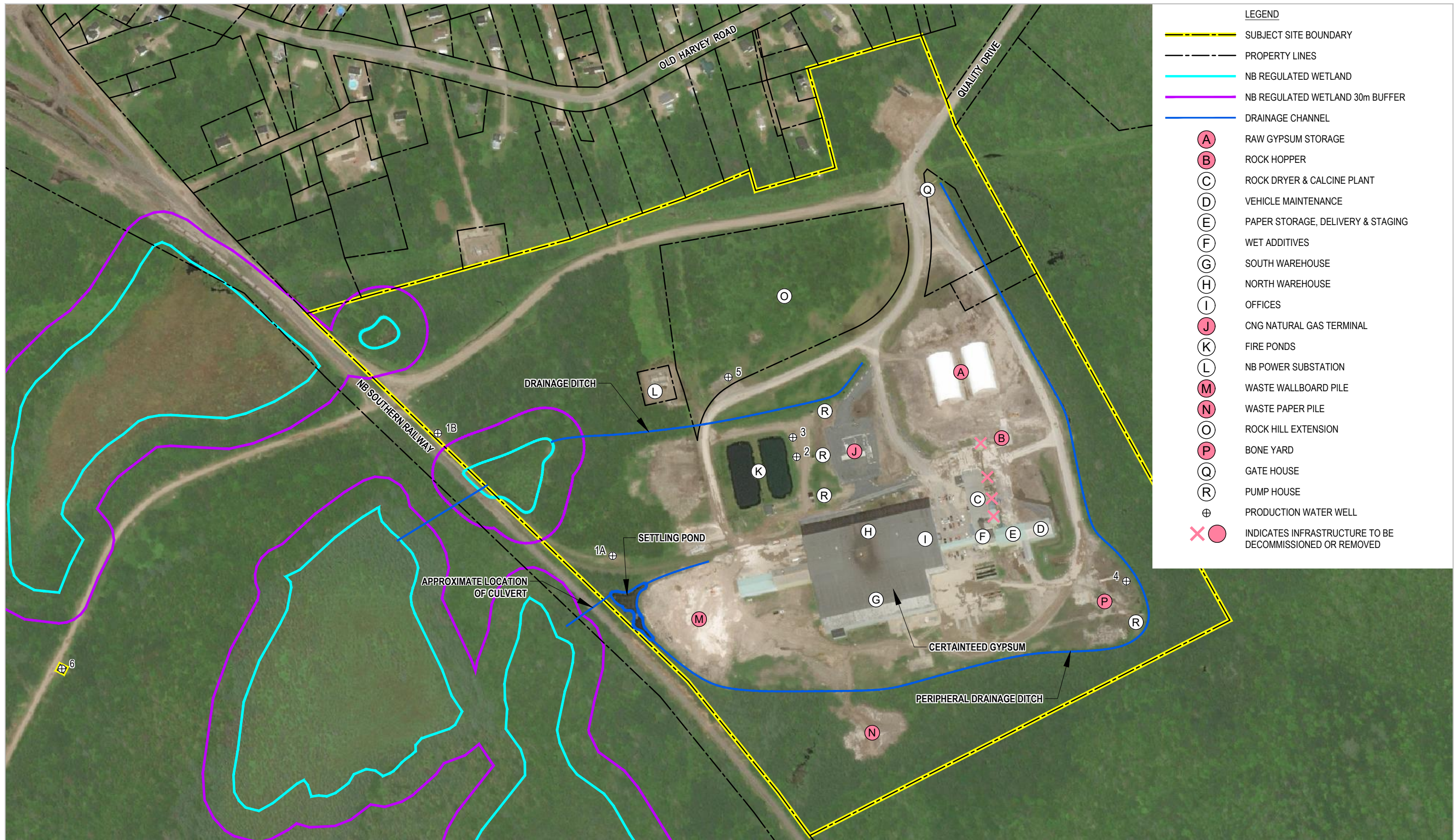
SAINT-GOBAIN  
 CERTAINTEED CANADA INC. -  
 MCADAM WALLBOARD PLANT  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION

Project No. 11217404  
 Date October 2020

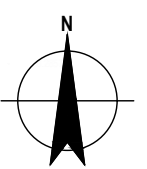
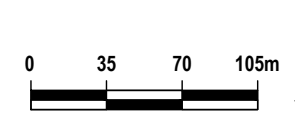
EXISTING CONDITIONS SITE PLAN

FIGURE 1.3a





- LEGEND**
- SUBJECT SITE BOUNDARY
  - PROPERTY LINES
  - NB REGULATED WETLAND
  - NB REGULATED WETLAND 30m BUFFER
  - DRAINAGE CHANNEL
  - A RAW GYPSUM STORAGE
  - B ROCK HOPPER
  - C ROCK DRYER & CALCINE PLANT
  - D VEHICLE MAINTENANCE
  - E PAPER STORAGE, DELIVERY & STAGING
  - F WET ADDITIVES
  - G SOUTH WAREHOUSE
  - H NORTH WAREHOUSE
  - I OFFICES
  - J CNG NATURAL GAS TERMINAL
  - K FIRE PONDS
  - L NB POWER SUBSTATION
  - M WASTE WALLBOARD PILE
  - N WASTE PAPER PILE
  - O ROCK HILL EXTENSION
  - P BONE YARD
  - Q GATE HOUSE
  - R PUMP HOUSE
  - + PRODUCTION WATER WELL
  - X INDICATES INFRASTRUCTURE TO BE DECOMMISSIONED OR REMOVED

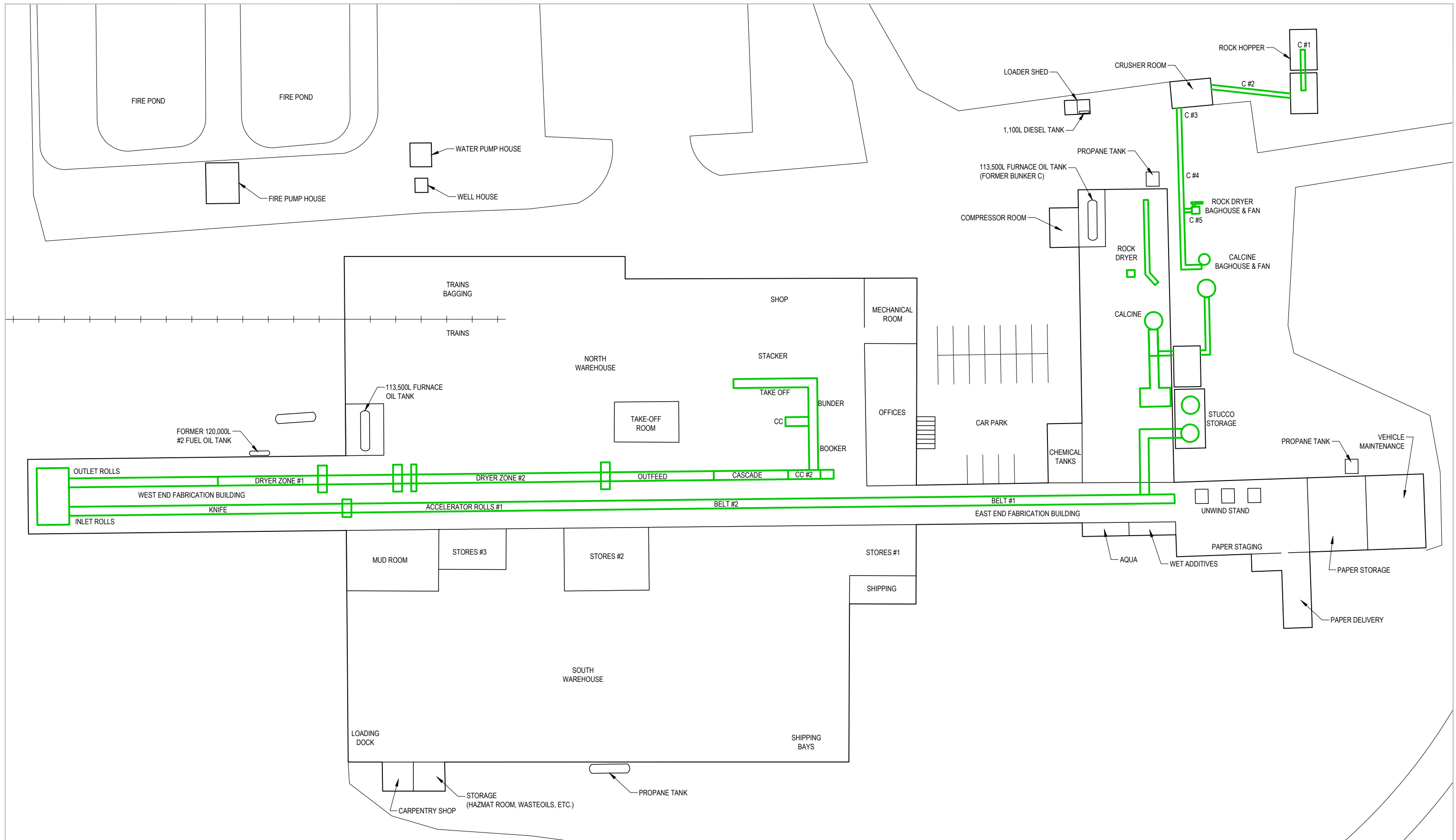


SAINT-GOBAIN  
 CERTAINTED CANADA INC. -  
 MCADAM WALLBOARD PLANT  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION  
 INFRASTRUCTURE TO BE  
 DECOMMISSIONED / REMOVED SITE PLAN

Project No. 11217404  
 Date October 2020

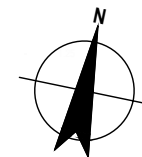
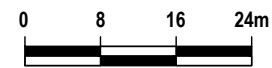
**FIGURE 1.3b**





LEGEND:

— PRODUCTION LINE

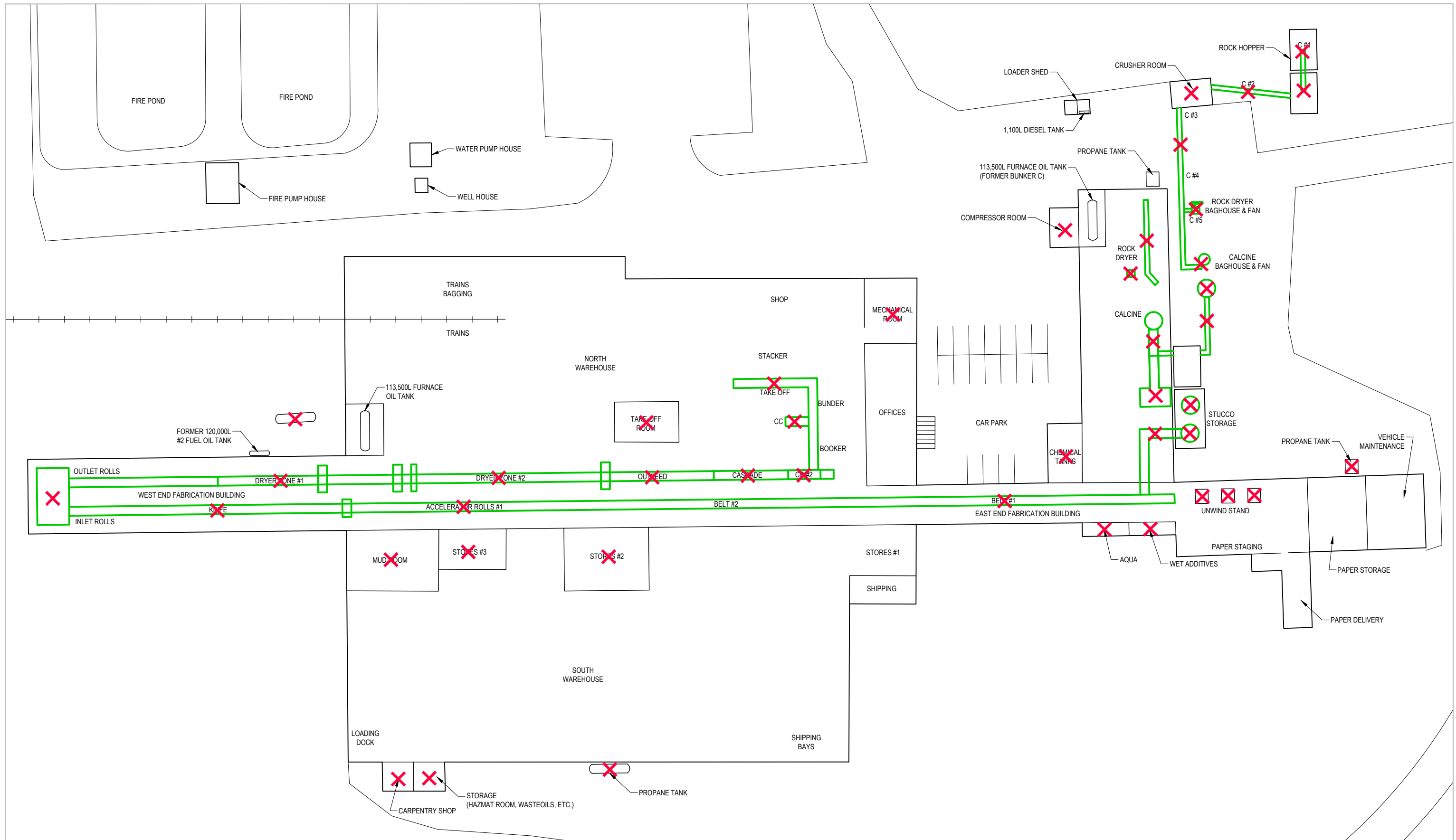


SAINT-GOBAIN  
 CERTAINTEED CANADA INC. -  
 MCADAM WALLBOARD PLANT  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION

EXISTING PROCESSING EQUIPMENT

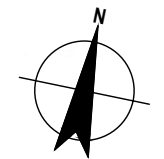
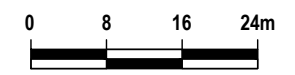
Project No. 11217404  
 Date October 2020

FIGURE 1.4a



LEGEND:

- PRODUCTION LINE
- X INFRASTRUCTURE TO BE DECOMMISSIONED / REMOVED

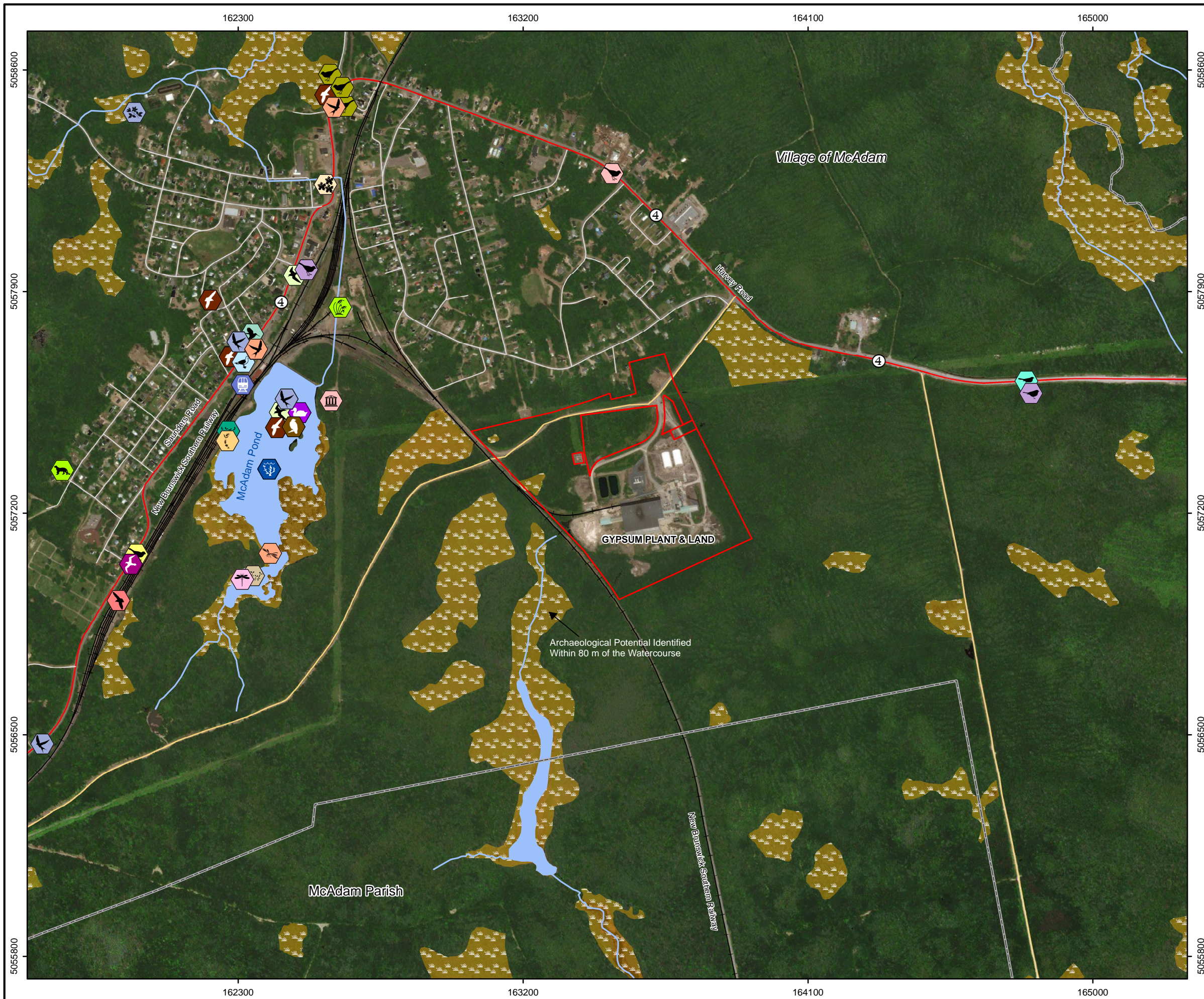


**SAINT-GOBAIN  
CERTAINTEED CANADA INC. -  
MCADAM WALLBOARD PLANT**  
57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
EIA REGISTRATION  
INFRASTRUCTURE TO BE DECOMMISSIONED  
/ REMOVED (PROCESS EQUIPMENT)

Project No. 11217404  
Date October 2020

**FIGURE 1.4b**





**Fauna**

*Avifauna*

Barn Swallow	Eastern Kingbird
Black-billed Cuckoo	Killdeer
Brown-headed Cowbird	Northern Mockingbird
Canada Warbler	Purple Martin
Cape May Warbler	Rusty Blackbird
Chimney Swift	Scarlet Tanager
Cliff Swallow	Wilson's Snipe
Common Gallinule	Wood Thrush

*Entomofauna*

Lilypad Clubtail	
Orange Bluet	

*Mammalofauna*

Eastern Cougar	
----------------	--

**Flora**

Great Duckweed	Tall Goldenrod
Farwell's Water Milfoil	Tufted Love Grass
Little Floating Bladderwort	Yellow Specklebelly Lichen
New England Violet	

**Wetlands**

Regulated Wetland	
-------------------	--

**Hydrography**

River	
Lake	

**Infrastructure**

*Transportation Network*

Railway	
Arterial	
Local Street	
Resource Road F2	

*Buildings*

McAdam Bird Sanctuary	
Railway Station	

**Boundary**

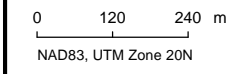
Project Site	
Municipality Boundary	

Environmental Impact Assessment Registration  
McAdam Gypsum Wallboard Plant Closure

**Fauna and Flora of Concern**

**Sources:**  
 Fauna and Flora Inventory, © Atlantic Canada Conservation Data Centre, September 2020  
 New Brunswick Road Network, © New Brunswick Government, Ministry of Public Security, August 2020  
 National Railway Network (RFN), 1: 10 000, NRCan, August 2015  
 Hydrographic Network, © New Brunswick Government, Ministry of Natural Resources, August 2018  
 Detailed Mapping of Wetlands, © New Brunswick Government, Ministry of the Environment and Local Government, December 2019  
 Property Assessment Roll, © New Brunswick Government, Service New Brunswick, May 2020  
 Satellite Imagery, © ESRI, 2020

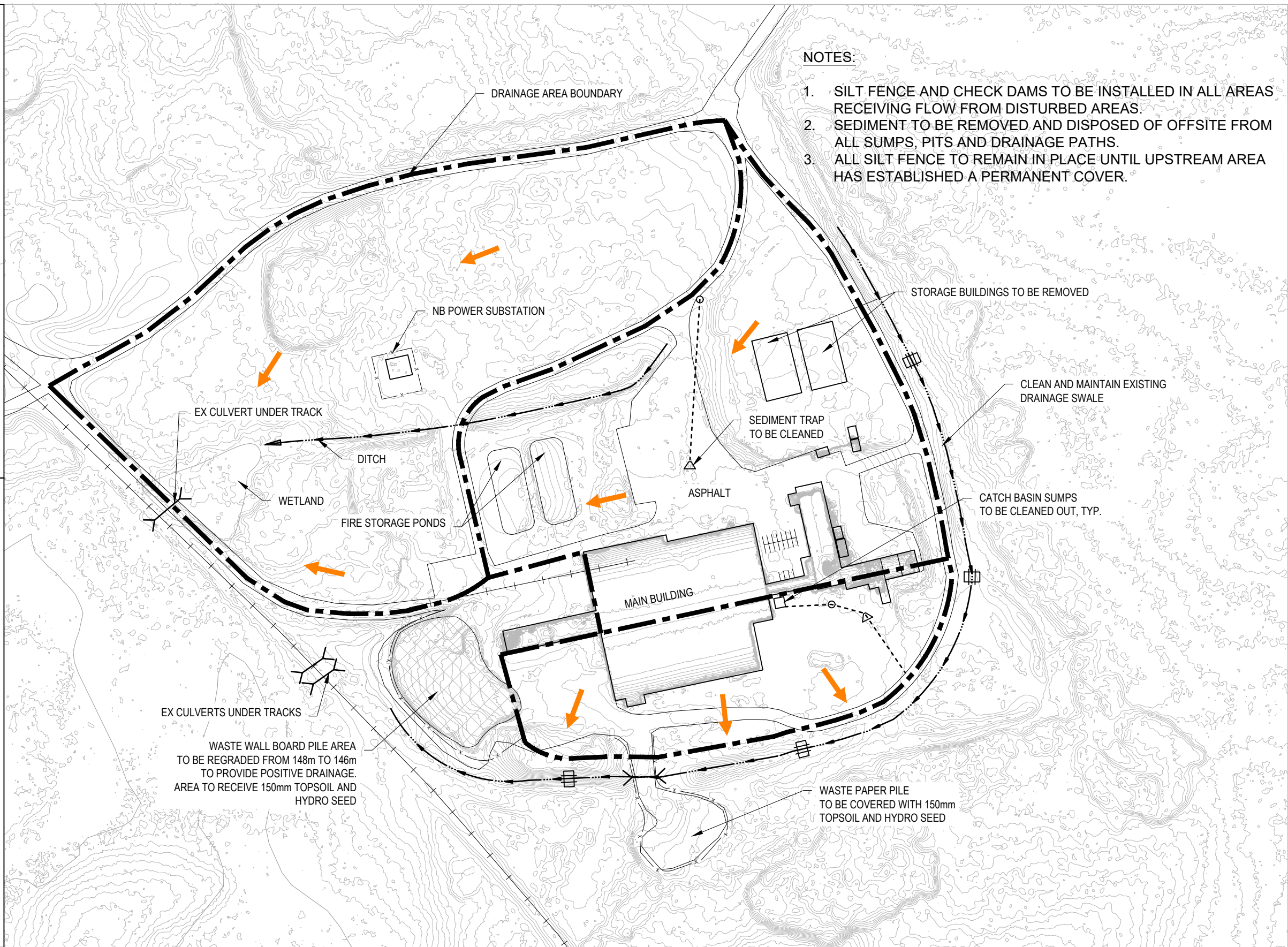
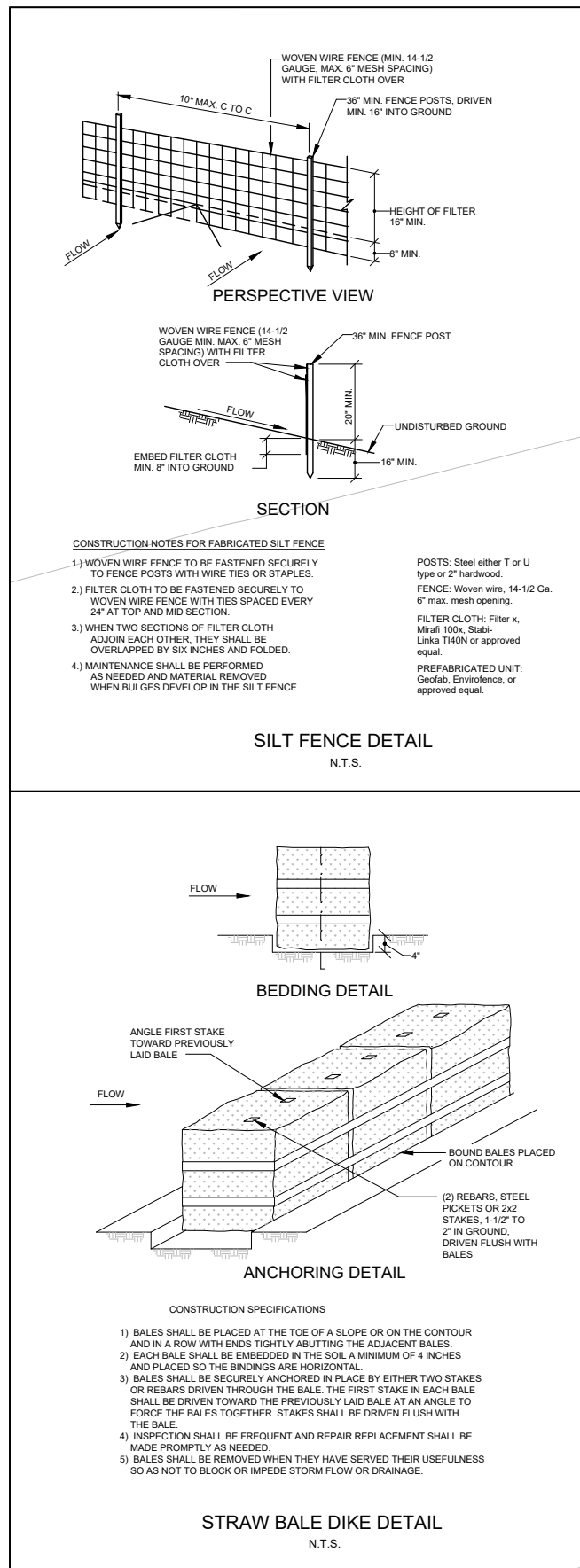
Note : Where several observations overlap, their locations were slightly dispersed.



October 2020

Figure 1.5





0 30 60 90m

**SAINT-GOBAIN CERTAINTÉD CANADA INC. - MCADAM WALLBOARD PLANT**  
 57 QUALITY WAY, MCADAM, NEW BRUNSWICK  
 EIA REGISTRATION

**GHD**

Project No. 11217404  
 Date October 2020

**DRAINAGE AND RESTORATION PLAN**

**FIGURE 1.6**



**Table 1: Environmental Features Not Retained As Valued Environmental Features**

Environmental Feature	Considerations	Avoidance/Mitigation by Project Design
Sound Environment	<p>Data are not available for ambient noise levels at or near the MGWP. However, the Site has operated as a wallboard manufacturing plant for 44 years, and it is not anticipated that the Project will generate noise levels exceeding those when the Site was in operation.</p> <p>No record of complaints about Site-related noise was found.</p>	<p>Activities likely to augment adjacent noise levels will be limited to 7:00 AM to 7:00 PM during week days.</p> <p>Equipment will be properly maintained and, where necessary, equipped with noise-reduction devices (e.g. mufflers).</p>
Flora	<p>On-Site vegetation is generally limited to adventive weed species, low growth shrubs and early successional tree species. The vegetation that could be disturbed at the Site as a result of the Project is native grasses; the Project will therefore have a negligible potential impact on the overall flora community in the study area.</p>	<p>Clearing/grubbing of vegetated areas is not part of the Project, except for the chipping of alders and other vegetation in the PDD that could be used as first-layer cover material for the waste wallboard and paper areas.</p>
Fauna	<p>Wildlife most likely to utilize the Site on a regular basis are typically associated with developed areas and relatively insensitive to anthropogenic activities.</p> <p>There is no potential to affect wildlife populations.</p>	<p>The NBDNR will be contacted if animal burrows or other structures are identified to be present in areas of the Site scheduled for earth-work activities.</p> <p>The workers will ensure that there are no nests in the trees to be removed from the PDD, should the work occur during the nesting period.</p>
Land Use	<p>The Site has been used or disturbed as part of the historical operations as a commercial/industrial facility. Its end land use will be ongoing care and maintenance and the potential sale of the property for commercial/industrial re-development.</p>	<p>No change to land designation expected.</p>



**Table 1: Environmental Features Not Retained As Valued Environmental Features**

<b>Environmental Feature</b>	<b>Considerations</b>	<b>Avoidance/Mitigation by Project Design</b>
Cultural Resources	The potential to affect archaeological resources is negligible, since no ground disturbance will occur in the area of archaeological potential that has been identified by the NB Department of Tourism, Heritage and Culture (Figure 1.5).	If suspected remains of archaeological significance are found during the Project, all work nearby will be halted immediately and the NB Department of Tourism, Heritage and Culture contacted.
Safety	The planned work activities resemble the basic activities that form part of typical construction or decommissioning projects in New Brunswick.	CertainTeed will ensure that all staff and contractors working on-Site have the required health and safety training and equipment.  CertainTeed will prepare and present health and safety plans to its relevant staff. The health and safety plans of the contractors will be approved by CertainTeed prior to the conduct of work.

# Appendices