

NATURAL RESSOURCES CANADA GOVERNMENT OF CANADA

PROJECT:

**CANMET ENERGY
GEOTHERMY**

PROJECT NUMBER:

206-0103

EMISSION DATE:

2021/04/26



733, chemin Jean-Adam, Piedmont (Québec) J0R 1R3
T 450 227 1857
info@equipelaurence.ca | equipelaurence.ca

CANMET ENERGY - GEOTHERMY
PROJECT 206-0103 - PLAN ISSUED FOR PERMIT AND SUBMISSION, 2021/04/26

1.0 GENERAL SPECIFICATIONS

1.1 CONSTRUCTION AND REPAIRS

The general technical clauses are defined in the part 2 and 3 of "CAHIER DES CHARGES ET DEVIS GÉNÉRAUX - INFRASTRUCTURES ROUTIÈRES - CONSTRUCTION ET RÉPARATION" 2020th edition.

1.2 WATERMAIN AND SEWERS CONSTRUCTION

The general technical clauses related to watermain and sewers construction are defined in the BNQ 1809-300/2018.

1.3 TERMINOLOGY

Dans le cahier des charges et devis généraux du ministère des Transports du Québec, le terme ministère doit être remplacé par maître de l'ouvrage ou maître d'œuvre selon le cas

MAÎTRE DE L'OUVRAGE : RESSOURCES NATURELLES CANADA / GOURVERNEMENT DU CANADA
 CONSULTANT : ÉQUIPE LAURENCE Inc.

2.0 GENERAL INFORMATION

2.1 UNDERGROUND SERVICES

The plans show certain underground installations for the sole purpose to highlight the existence of cables, pipelines and underground structures. In the sectors where work must be performed, the contractor is responsible to verify himself with the competent authorities the existence and actual location of all cables, pipelines and existing underground structures that may affect the works. Before beginning excavations, the contractor must thus contact Info-Excavation, the municipal authorities and all other stake holders in order to identify on the field all existing underground structures whether they are shown on the plans or not. He is responsible for damages to cables, pipelines and underground structures. No cost variation resulting from underground structures not shown or poorly located on the plans can be claimed against the building owner. Following the review of the plans and specifications, the contractor must notify the engineer of any error, omission or discrepancy noted by him before starting work.

2.2 EXISTING WATERMAIN AND SEWER CONDUITS

The location of the watermain and sewer pipes is approximated. The contractor must verify and validate the position and depth of the pipes by th means of meticulous excavation. Should discrepancies be observed, they must be provided to the engineer without delay in order that the required modifications are made to the construction plans. The contractor will have to coordinate with the city, the connecting works to the existing networks (watermain and sewers). No service interruption shall take place without the building owner's autorization or the relevant authorities.

2.3 FINAL PLANS

A series of plans showing all of the changes occuring during construction must be produced and updated by the contractor thorough the whole construction and should be available at all time for consultation on site. At the end of the construction phase, before the provisional acceptance, the contractor must provide the owner with the annotated plans in a CAD format. The provisional acceptance of the work cannot be done before the plans are provided.

2.4 PROTECTION OF THE ENVIRONMENT

The contractor must respect the relevant requirements of the Loi sur la qualité de l'environnement (RLRQ Chapter Q-2), the municipal regulations or the directives issued by th owner.

2.5 PROTECTION AGAINST EROSION

In all areas of the building site where there is a risk of erosion, the ground must be stabilized. Runoff water must be intercoated and routed to stabilized areas and this, throughout the construction period. The contractor must use the recognized methods to prevent the transport of sediments.

- Sediment barrier
- Sedimentation pond
- Filtering berm and sediment trap
- Straw bale filter

Any intervention on the building site which may cause the transfer of sediment must be simultaneously accompanied by sediment capture measures.

2.6 DRAINING OF EXCAVATIONS

The contractor shall take all necessary precautions to prevent the penetration of surface waters and evacuate surface, underground or sewer waters. Wastewaters must be directed towards a combined sewer or a sanitary seewer and the surface and underground waters towards a strom sewer, a combined sewer or a ditch. In all cases, the diversion site must be submitted for approval.

The contractor must assume all required pumping and cleaning.

2.7 PAVEMENT PROTECTION

At all times, the movement of machinery and metal tracked vehicles is prohibited on paved surfaces unless plywood sheets with a 20mm normal thickness or rubber with a 12.5mm thickness are used in order to avoid damaging the pavement. All repairs or complete replacements of the pavement and the cost associated are the contractor's responsibility.

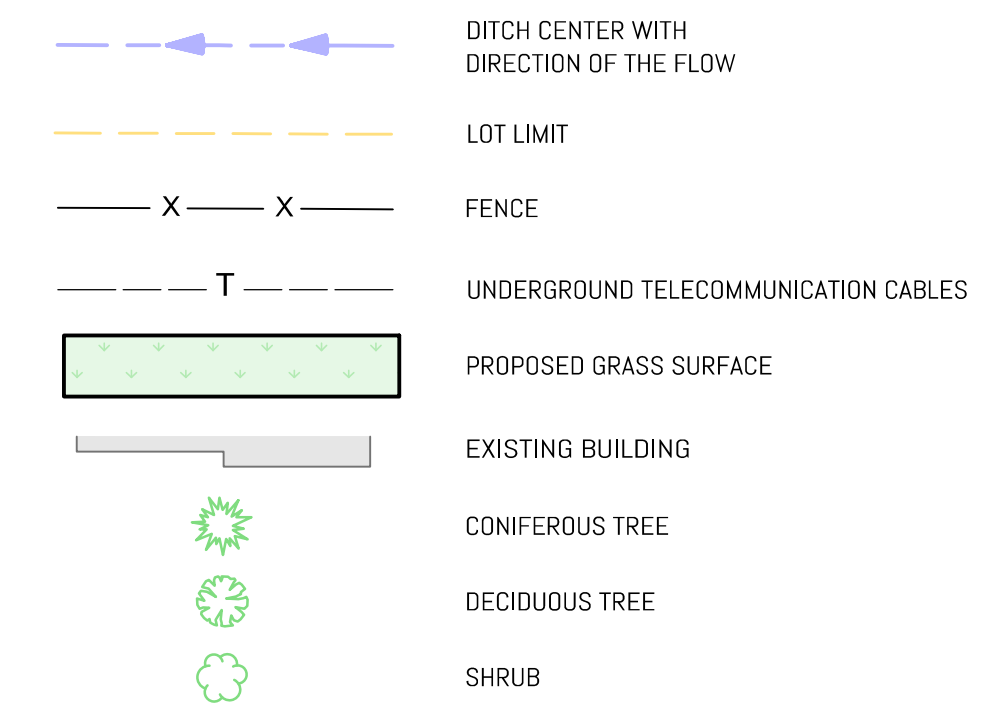
2.8 CLEANING OF THE SITE

At the end of the construction works and as often as requested by the project superintendent, the contractor must clean and eliminate all construction generated debris and restore all construction affected areas. The cleaning of the construction site is included in the global market unit prices.

2.9 DEMOLITION AND MANAGEMENT OF THE MATERIAL

The management of removed material and excavated natural granular will be conform to the guidelines provided in the article "Lignes directrices relatives à la gestion de béton, de brique et d'asphalte issus des travaux de construction et de démolition et des résidus du secteur de la pierre de taille" as well as the "Guide de bonnes pratiques pour la gestion des matériaux de démantèlement" by the MELCC.

CIVIL ENGINEERING LEGEND



PLANS LIST

C-201	GENERAL SPECIFICATION, LEGEND AND LOCALISATION PLAN
C-202	GLOBAL VIEW PROPOSED GEOTHERMY SYSTEM
C-203	PLAN VIEW PROPOSED GEOTHERMY SYSTEM STANDARD SECTIONS AND DETAILS

THIS DOCUMENT MUST NOT BE USED FOR CONSTRUCTION

REV	DESCRIPTION	BY	DATE
0	FOR PERMIT AND SUBMISSION	J.L.	2021/04/26

CLIENT: NATURAL RESSOURCES CANADA
 GOVERNMENT OF CANADA
 1815, BOULEVARD LIONEL-BOULET
 VARENNES (QUÉBEC) J3X 1P7

PROJECT: CANMET ENERGY
 GEOTHERMY



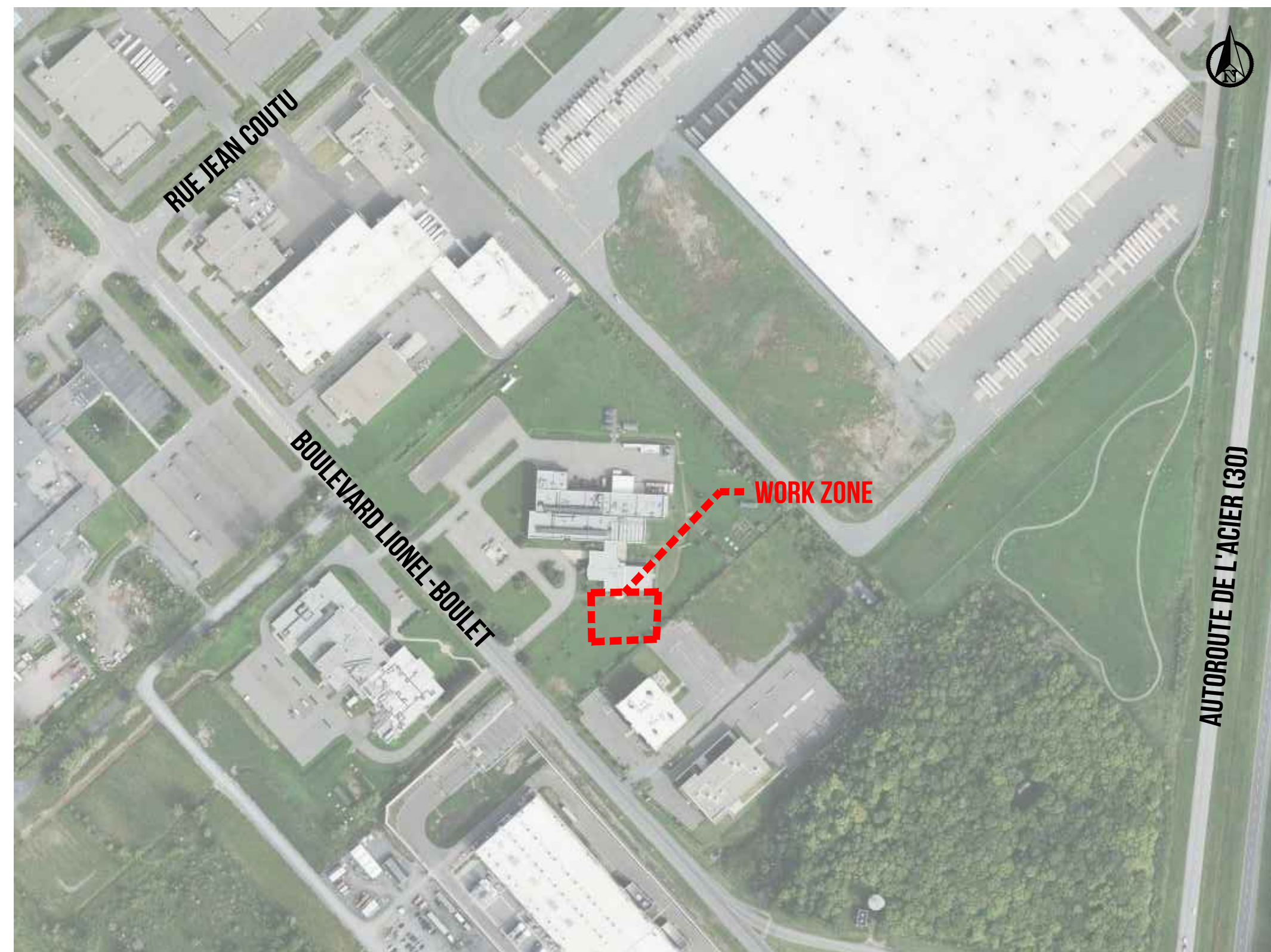
733, chemin Jean-Adam, Piedmont (Québec) J0R 1R3
 T. 450 227 1857
 info@equipelaurence.ca | equipelaurence.ca



PLAN TITLE: GENERAL SPECIFICATIONS, LEGEND AND LOCALISATION PLAN

SCALE: NO SCALE

PROJECT MANAGER	G. LAURIN	FILE	C-301.dwg
DRAWN BY	J. LEVESQUE, ing.	DATE	2021/03/15
VERIFIED BY		PROJECT NUMBER	206-0103
		PLAN NO	C-301



LOCALISATION PLAN
 SCALE: NONE



IMPLEMENTATION PLAN PREPARED BY
 NFOE ET ASSOCIÉS ARCHITECTES
 01 MAY 2017

**THIS DOCUMENT MUST
 NOT BE USED FOR
 CONSTRUCTION**

REV	DESCRIPTION	BY	DATE
0	FOR PERMIT AND SUBMISSION	J.L.	2021/04/26

CLIENT: NATURAL RESSOURCES CANADA
 GOVERNMENT OF CANADA
 1815, BOULEVARD LIONEL-BOULET
 VARENNES (QUEBEC) J3X 1P7

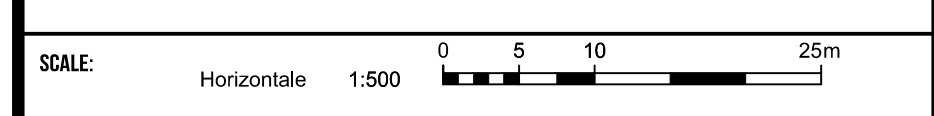
PROJECT: CANMET ENERGY
 GEOTHERMY



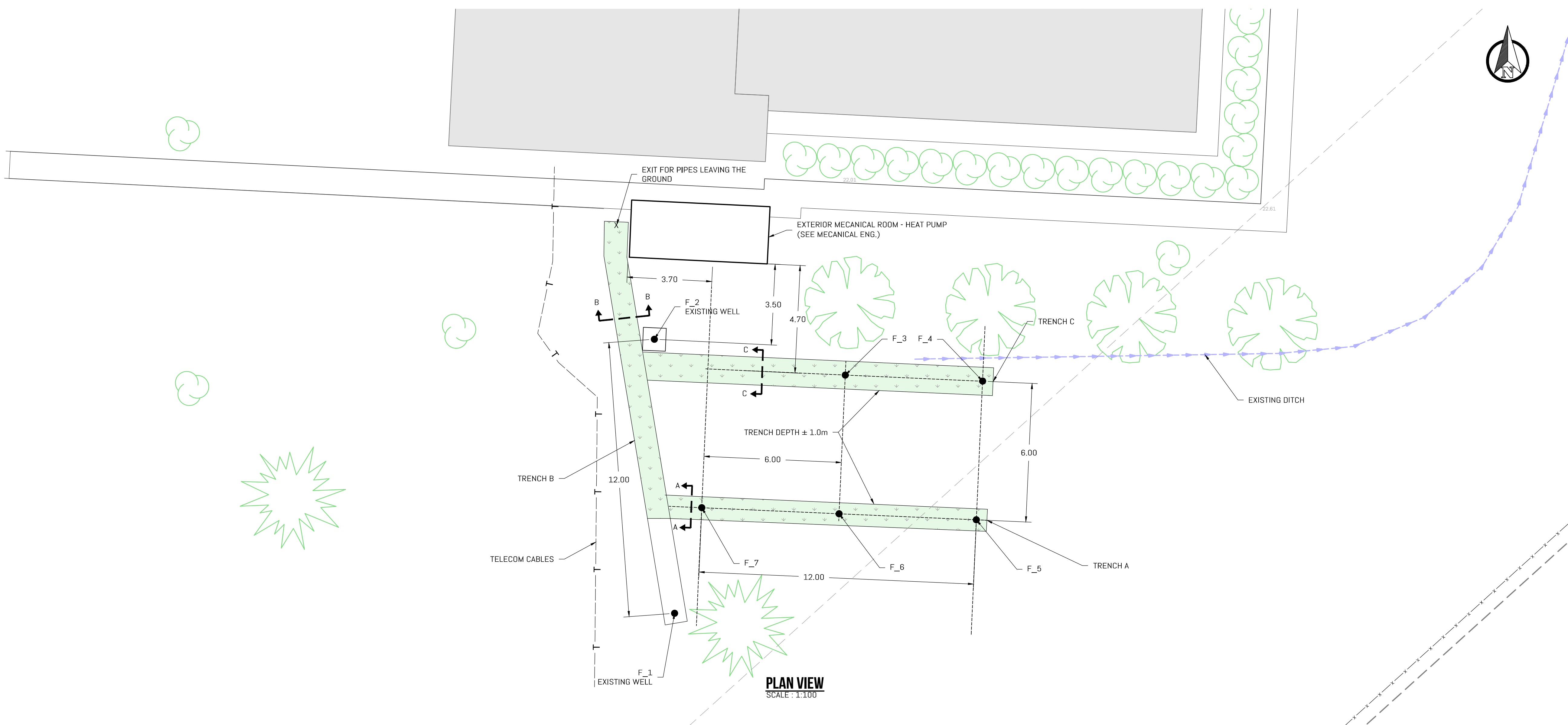
733, chemin Jean-Adam, Piedmont (Québec) J0R 1R3
 T. 450 227 1857
 info@equipelaurence.ca | equipelaurence.ca



PLAN TITLE:
 GLOBAL VIEW
 PROPOSED GEOTHERMY SYSTEM



PROJECT MANAGER	G. LAURIN	FILE	C-302.dwg
DRAWN BY	J. LEVESQUE, ing.	DATE	2021/03/15
VERIFIED BY		PROJECT NUMBER	206-0103
		PLAN NO	C-302



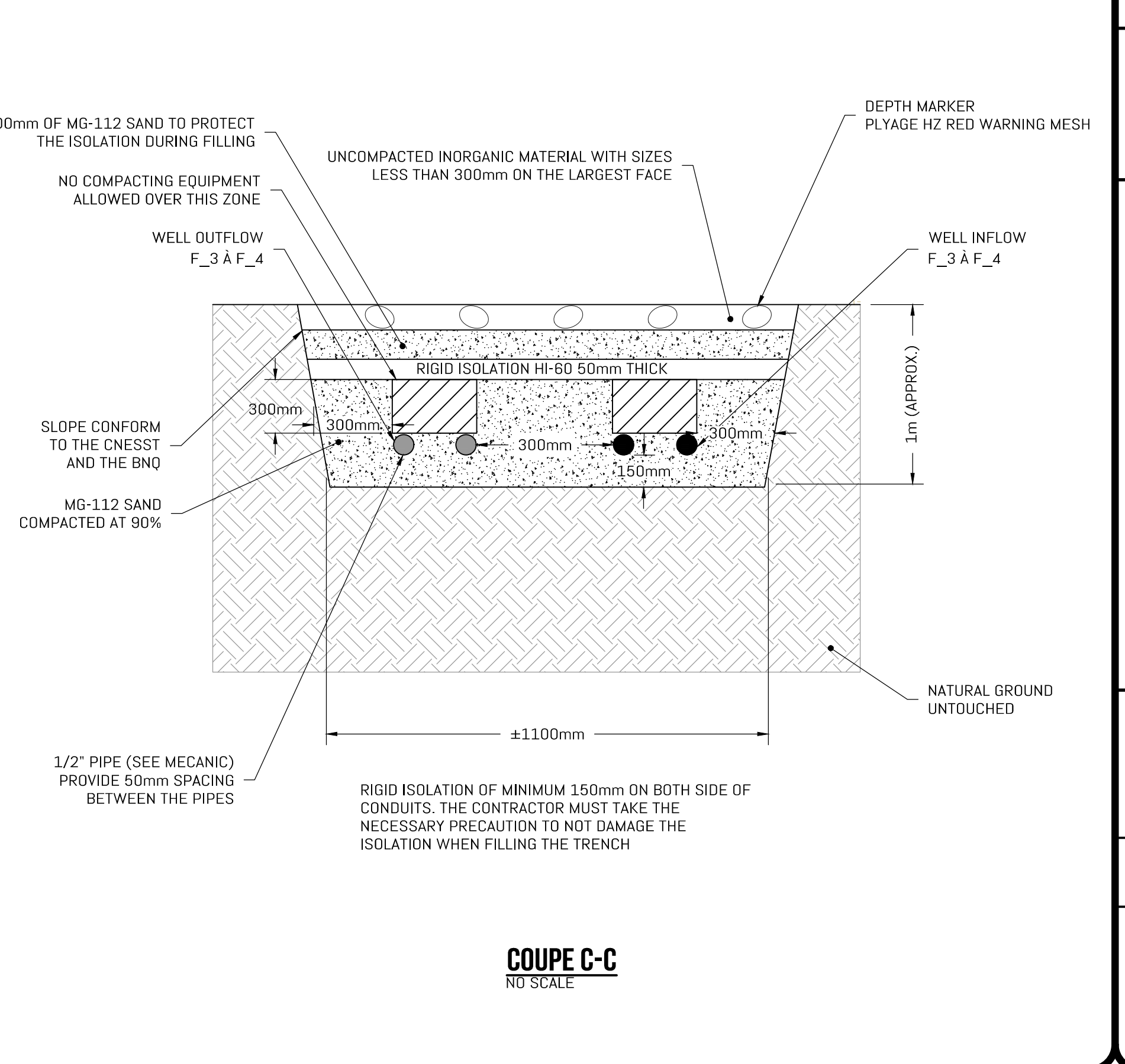
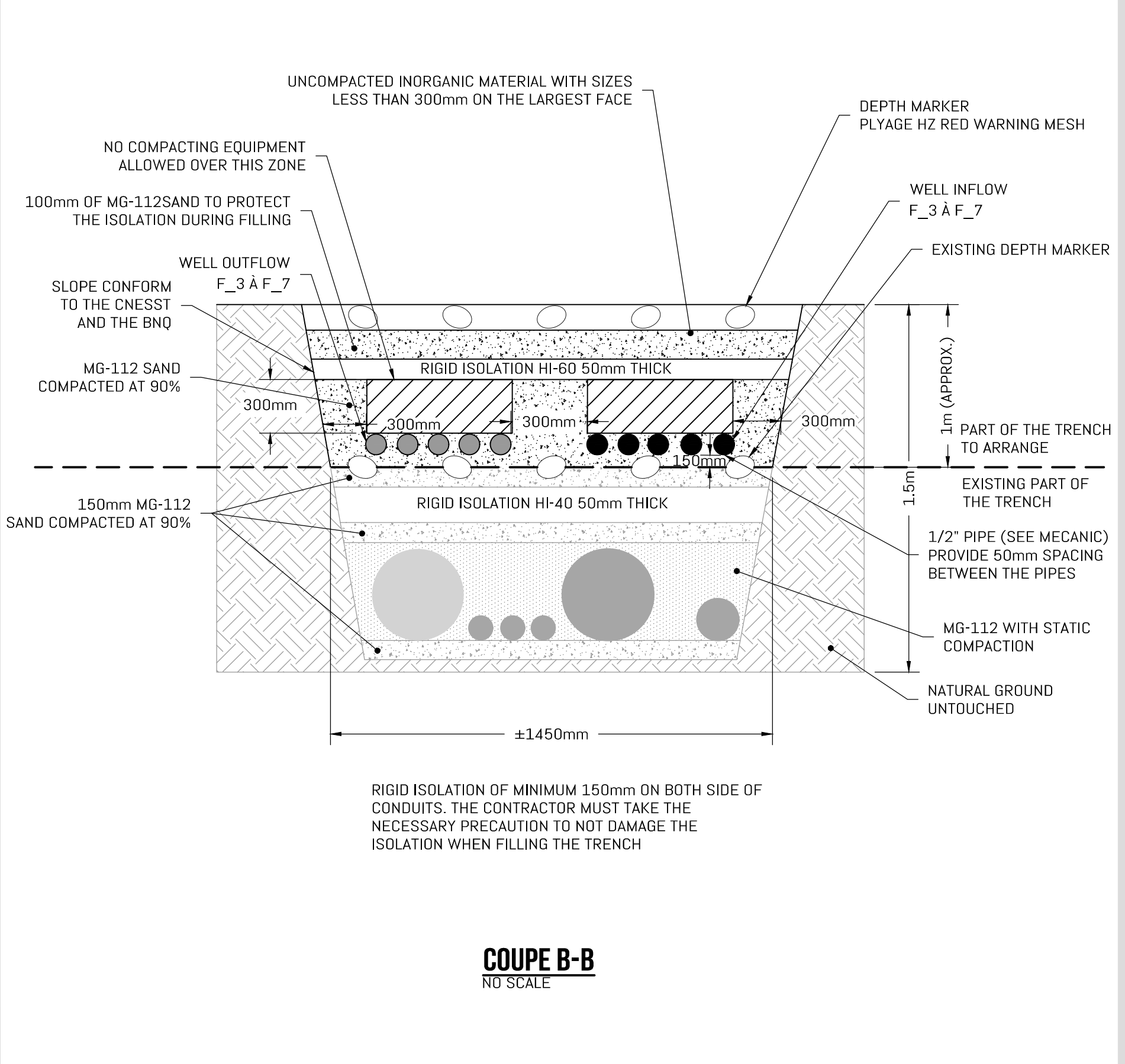
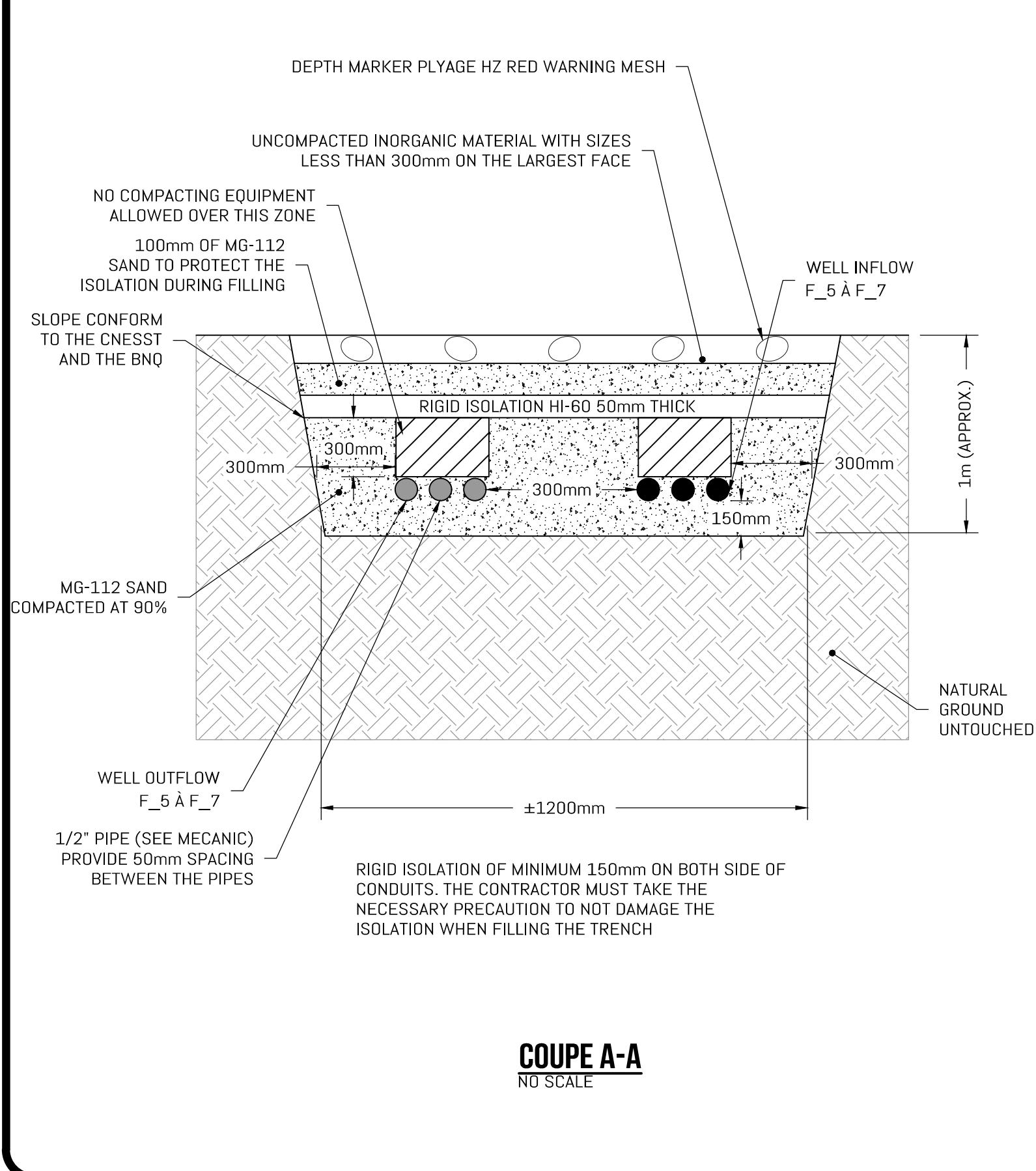
THIS DOCUMENT MUST NOT BE USED FOR CONSTRUCTION

REV	DESCRIPTION	BY	DATE
0	FOR PERMIT AND SUBMISSION	J.L.	2021/04/26

CLIENT: NATURAL RESSOURCES CANADA
GOVERNMENT OF CANADA
1815, BOULEVARD LIONEL-BOULET
VARENNES (QUEBEC) J3X 1P7

PROJECT: CANMET ENERGY GEOTHERMY

733, chemin Jean-Adam, Piedmont (Québec) J0R 1R3
T 450 227 1857
info@equipe-laurence.ca | equipe-laurence.ca



PLAN TITLE: PLAN VIEW PROPOSED GEOTHERMY SYSTEM STANDARD SECTIONS AND DETAILS

SCALE: Horizontale 1:100

PROJECT MANAGER	G. LAURIN	FILE	C-303.dwg
DRAWN BY	J. LEVESQUE, ing.	DATE	2021/03/15
VERIFIED BY		PROJECT NUMBER	206-0103
		PLAN NO	C-303