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G1J 0C7

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

TPSGC-PWGSC

601-1550, Avenue d'Estimauville

Québec

Québec

G1J 0C7

<b>Title - Sujet</b> Relocalisation ferme Chapais	
<b>Solicitation No. - N° de l'invitation</b> EE474-170239/A	<b>Amendment No. - N° modif.</b> 003
<b>Client Reference No. - N° de référence du client</b> EE474-170239	<b>Date</b> 2016-06-30
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$QCM-008-16777	
<b>File No. - N° de dossier</b> QCM-6-39040 (008)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-07-13</b>	<b>Time Zone</b> Fuseau horaire Heure Avancée de l'Est HAE
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Rochette, Jean	<b>Buyer Id - Id de l'acheteur</b> qcm008
<b>Telephone No. - N° de téléphone</b> (418) 649-2834 ( )	<b>FAX No. - N° de FAX</b> (418) 648-2209
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> Route 138 St-Augustin-de-Desmaures Québec	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Solicitation No – N° de l'invitation  
EE517-170239/A  
Client Ref No. – N° de réf. du client  
EE517-17-0239

Amd. No. – N° de la modif.  
003  
File No. – N° du dossier  
QCM-6-39040

Buyer ID – id de l'acheteur  
qcm008

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## AMENDEMENT 003

**Title:** RELOCATION OF THE CHAPPAIS FARM

Included in the present amendment:

1. Addendum
- 

### ADDENDUM

1. See Addendum ENG01 attached.
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ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

**ADD-ENG01**

June 30<sup>th</sup>, 2016

PWGSC Reference : R.072490.001

**DRAWINGS**

**.1 Drawing C05/09 – Site plan view**

- .1 The pavement marking is eliminated.
- .2 The drinking water pipe connection with the building water plumbing pipe is at 1 meter from the foundation wall of the multifonctionnal building instead of three meters.
- .3 Added to the Notes:
  - For new grass and plantation areas see arch.  
Topsoil thickness see specifications

**.2 Drawing C07/09 - Culvert typical detail and Section A**

- .1 The pipe has a diameter of 1200 mm instead of 450 mm. See modified details in the attached sketch.

**.3 Drawing S04/19 - Plan view details and sections Warehouse**

- .1 Sections 1, 3 and 5 are modified as shown in the attached sketches.
- .2 Note 4 is added and reads as follows:
  4. Cover all excavated surface of clay-silt and silt with a geotextile membrane. If the 3B soil layer is present, install the membrane between that layer and the MG112 backfill to provide anchor during the backfill work.

**.4 Drawing S10/19 – Concrete section and details**

- .1 Sections 20 is modified as shown in the attached sketch.

**.5 Drawing S16/S19 – Typical wood sections and details**

- .1 The typical framing for the replacement of a truss around a trapdoor and the framing of the trapdoor opening are added and shown on the attached details.

**.6 Drawing M10/20 – Plumbing fixture table**

- .1 The equipment description of COMP-AIR-52 is modified as follow :

Rotary screw compresseur with integral oil separator allowing residual oil content of less than 2 ppm and and warranty for a period to 8000 time of operation. The compressor must have a motor of 25 HP, be air cooled of 90.2 scfm capacity at 1 033 kPA and equipped with a variable frequency drive which allowing to modulate the air compressed volume from 40% to 100% according to real demand. The direct drive compressor shall be lubricated, be driven by a TEFC motor and operate at 575V/3/60hz voltage.

The compressor shall be equipped by a full load starter with overload protection enclosed in a nema 4 casing. moreover, it shall be supplied with a 0,4 micron intake filter with differential indicator and with all of the other filters required by the air dryer manufacturer. The compressor shall operate at a pressure of 1030 kpa, be equipped with pressure adjustment devices that can change the supply pressure between 689 kPa and 1030 kPa, be quipped by a complete electronic control with tank and line pressures readings, maintenance and alarm indicators, discharge temperature, separator differential pressure, operating hours, compressors sequencing, protection : automatic shutdown on high temperature, high or low pressure and motor overload. Supplied with a sound attenuator cabinet in order to reach a sound level of 67 dBA @ 1 meter. Maximum accepted footprint: 1351mm x 800mm.

## SPECIFICATION

### .1 Section 22 13 18 – Drainage waste and vent piping – Plastic

#### .1 Item 2.01.1 is modified as follow :

- .1 DWV piping to be buried for sanitary drainage and vent conform to :
  - .1 CAN/CSA B1800.

#### .2 Item 2.01.2 is modified as follow :

- .2 PVDF pipe series 40 bonded joint for buried and above ground for drainage and laboratory vent only conform to ASTM F 1673.

### .2 Section 31 23 33.01 - Excavating trenching and backfilling

#### .1 Item 2.02.1.4 is modified as follows:

- .4 Compressive Strength psi, (kPa) min. 60 (415).

### .3 Section 32 12 16 – Asphalt paving

- .1 This section is in addition to the technical specification and is attached to the addendum.

### .4 Section 32 91 19.13 – Topsoil placement and grading

#### .1 Item 3.04.4 is modified as follows:

- .4 Spread the topsoil as indicated below to obtain the following minimum depths after settlement:
  - .1 100 mm for seeded areas.
  - .2 150 mm for sodded areas.
  - .3 600 mm for flower beds.
  - .4 500 mm for shrub beds.

FIN DE L'ADDENDA



## **1 GENERAL**

### **1.01 RELATED REQUIREMENTS**

- .1 Section 01 33 00 - submittal procedures.
- .2 Section 01 74 19 - construction/demolition waste management and disposal.
- .3 Section 31 23 33.01 – excavating, trenching and backfilling.
- .4 Section 32 11 23 – aggregate base courses.
- .5 Section 32 16 15 – concrete walks, curbs and gutters.

### **1.02 PRODUCTS INSTALLED BUT NOT SUPPLIED UNDER THIS SECTION**

- .1 Notify Departmental Representative of proposed date for use of materials; order and schedule shipments to coincide with construction schedule.

### **1.03 REFERENCES**

- .1 American Association of State Highway and Transportation Officials (AASHTO)
  - .1 AASHTO M320-10, Standard Specification for Performance Graded Asphalt Binder.
  - .2 AASHTO R29-08, Standard Specification for Grading or Verifying the Performance Graded of an Asphalt Binder.
  - .3 AASHTO T245-13, Resistance to Plastic flow of Bituminous Mixtures Using Marshall Apparatus.
- .2 Asphalt Institute (AI)
  - .1 AI MS2-1994 (Sixth Edition), Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types.
- .3 American Society for Testing and Materials International, (ASTM)
  - .1 ASTM C 88-13, Standard Test Method for Soundness of Aggregates by Use of Sodium Sulphate or Magnesium Sulphate.
  - .2 ASTM C 117-13, Standard Test Method for Material Finer Than 0.075mm (No.200) Sieve in Mineral Aggregates by Washing.
  - .3 ASTM C 123-12, Standard Test Method for Lightweight Particles in Aggregate.
  - .4 ASTM C 127-12, Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate.
  - .5 ASTM C 128-12, Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate.
  - .6 ASTM C 131-06, Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
  - .7 ASTM C 136-06, Standard Method for Sieve Analysis of Fine and Coarse Aggregates.
  - .8 ASTM C 207-06(2011), Standard Specification for Hydrated Lime for Masonry Purposes.
  - .9 ASTM D 995-95b(2002), Standard Specification for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
  - .10 ASTM D 2419-09, Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.



- .11 ASTM D 3203-11, Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures.
- .12 ASTM D 4791-10, Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate.
- .4 Canadian General Standards Board (CGSB).
  - .1 CAN/CGSB-8.2-M88, Sieves Testing, Woven wire, Metric.
  - .2 CAN/CGSB-16.3-M90, Asphalt Cement or Road Purpose.
- .5 “Cahier des charges et devis généraux” or CCDG (general specifications), “Infrastructures routières” (road infrastructures), “Construction et réparation” (construction and repairs), latest edition:
  - .1 Part 2: section 13 “Revêtement de chaussée en enrobe” (road surfacing with plant mixes).
  - .2 Part 3: “Liste des normes et méthodes du Ministère” (Ministry’s list of standards and methods), standards no. 4101 to 4401, 10201, 14101 and 14601 in Volume VII “Matériaux” (materials), (collection “Normes - Ouvrages routiers du ministère des Transports du Québec”).
- .6 Standard NQ 2560-114 “Travaux de génie civil – Granulats” (civil engineering work – aggregates).
- .7 In case of conflict between this section and the CCDG, the specifications in this section will prevail.
- .8 This section is to be considered as the specific requirements referred to in the CCDG.
- .9 Notwithstanding the indications in the CCDG, the measuring and payment modes are as specified in the “Clauses administratives générales et particulières” (general and technical provisions) of these specifications.
- .10 Volume V – “Signalisation routière” (road signing), collection “Normes – Ouvrages routiers du ministère des Transports du Québec”).

#### 1.04 SCOPE OF WORK

- .1 This section completes or modifies the CCDG, “Infrastructures routières” (road infrastructures), “Construction et réparation” (construction and repairs).

#### 1.05 PRODUCT DATA

- .1 Submittals in accordance with Section 01 33 00 - *Submittal Procedures*.
- .2 Submit manufacturer's test data and certification that asphalt cement meets requirements of this Section.
- .3 Submit manufacturer's test data and certification that hydrated lime meets requirements of this Section.
- .4 Submit asphalt concrete mix design and trial mix test results to Departmental Representative for approval at least 2 weeks prior to beginning Work. Work will not start before the mixes are approved.

#### 1.06 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00 - *Submittal Procedures*.





- .2 Inform Departmental Representative of proposed source of aggregates and provide access for sampling at least 2 weeks prior to beginning Work..

#### 1.07 DELIVERY, STORAGE AND HANDLING

- .1 When necessary to blend aggregates from one or more sources to produce required gradation, do not blend in stockpiles.
- .2 Stockpile fine aggregate separately from coarse aggregate, although separate stockpiles for more than two mix components are permitted.
- .3 Provide approved storage, heating tanks and pumping facilities for asphalt cement.
- .4 Submit to Departmental Representative copies of freight and waybills for asphalt cement as shipments are received. Departmental Representative reserves right to check weights as material is received.
- .5 Stockpile crushed RAP separately.
- .6 Protect stockpiles of crushed RAP from rain.

#### 1.08 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - *Construction/Demolition Waste Management and Disposal*.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Divert unused aggregate materials from landfill to quarry or facility for reuse as approved by Departmental Representative.
- .4 Divert unused asphalt from landfill to facility capable of recycling materials.
- .5 Fold up metal banding, flatten and place in designated area for recycling.

### 2 PRODUCTS

#### 2.01 MATERIAL

- .1 The material for the capping layer and lower and upper bases must comply with section 32 11 23 - *Aggregate Base Courses*.
- .2 The asphalt (asphalt concrete) used for the preparation of hot bituminous mixes must comply with Transport Quebec's standard 4101 "Bitumes" (asphalt).
- .3 Asphalt primer and tack coat must comply with the CCDG.
- .4 Aggregates used as components of the plant mixes: in compliance with the CCDG.
- .5 Unless otherwise indicated on the plans or bid sheet, use the following plant mixes:
  - .1 Two (2) layers:
    - .1 Base: 65 mm of ESG-14, grade PG58-34



## 2.02 EQUIPMENT

- .1 Pavers : mechanical grade controlled self-powered pavers capable of spreading mix within specified tolerances, true to line, grade and crown indicated.
- .2 Rollers: sufficient number of type and weight to obtain specified density of compacted mix.
- .3 Haul trucks: sufficient number and of adequate size, speed and condition to ensure orderly and continuous operation and as follows :
  - .1 Boxes with tight metal bottoms.
  - .2 Covers of sufficient size and weight to completely cover and protect asphalt mix when truck fully loaded.
  - .3 In cool weather or for long hauls, insulate entire contact area of each truck box.
  - .4 Use only trucks which can be weighed in single operation on scales supplied.
- .4 Hand tools :
  - .1 Lutes or rakes with covered teeth for spreading and finishing operations.
  - .2 Tamping irons having mass not less than 12 kg and bearing area not exceeding 310 cm<sup>2</sup> for compacting material along curbs, gutters and other structures inaccessible to roller. Mechanical compaction equipment, when approved by Departmental Representative, may be used instead of tamping irons.
  - .3 Straight edges, 4.5 m in length, to test finished surface.
- .5 Plant testing facility: provide laboratory space at plant site for exclusive use of Departmental Representative, for performing tests, keeping records and making reports.

## 2.03 MIX DESIGN

- .1 Mix design to be approved by Departmental Representative.
- .2 Mix design to be developed by testing laboratory approved by Departmental Representative.
- .3 Mix to contain maximum 50% by mass of RAP. Departmental Representative may approve higher proportion of RAP if Contractor demonstrates ability to produce mix meeting requirements of specification.
- .4 Design of mix: by Marshall method to requirements below :
  - .1 Measure physical requirements as follows.
    - .1 Marshall load and flow value: to [AASHTO T245.
    - .2 Compute void properties on basis of bulk specific gravity of aggregate to ASTM C 127 and ASTM C 128. Make allowance for volume of asphalt absorbed into pores of aggregate.
    - .3 Air voids: to ASTM D 3203.
    - .4 Voids in mineral aggregates: to AI MS2, chapter 4.
  - .2 Do not change job-mix without prior approval of Departmental Representative. When change in material source proposed, new job-mix formula will be provided to be approved by Departmental Representative.





### 3 EXECUTION

#### 3.01 TRANSPORTATION OF MIX

- .1 Transport mix to job site in vehicles cleaned of foreign material.
- .2 Deposit mix from surge or storage silo to trucks in multiple drops to reduce segregation. Do not dribble mix into trucks.
- .3 Deliver material to paver at uniform rate and in an amount within capacity of paving and compacting equipment.
- .4 Deliver loads continuously in covered vehicles and immediately spread and compact. Deliver and place mixes at temperature within range as directed by *CCDG*.

#### 3.02 PLACING

- .1 Apply the plant mixes as specified in the technical clauses of the *CCDG* and as described below.
- .2 Place asphalt concrete to thicknesses, grades and lines as indicated on the plans and in these specifications.
- .3 Placing conditions :
  - .1 Place asphalt mixtures only when air temperature is above 5 degrees C.
  - .2 When temperature of surface on which material is to be placed falls below 10 degrees C, provide extra rollers as necessary to obtain required compaction before cooling.
  - .3 Do not place hot-mix asphalt when pools of standing water exist on surface to be paved, during rain, or when surface is damp.
- .4 Begin application on the highest side of the surface or from the crown of the road surface. Make sure the initial strip overlaps the axis of the crowned surfaces.
- .5 Spread and strike off mixture with self propelled mechanical finisher.
  - .1 Maintain constant head of mix in auger chamber of paver during placing.
  - .2 If segregation occurs, immediately suspend spreading operation until cause is determined and corrected.
  - .3 Correct irregularities in alignment left by paver by trimming directly behind machine.
  - .4 Correct irregularities in surface of pavement course directly behind paver. Remove by shovel or lute excess material forming high spots. Fill and smooth indented areas with hot mix. Do not broadcast material over such areas.
  - .5 Do not throw surplus material on freshly screeded surfaces.
- .6 When hand spreading is used :
  - .1 Use approved wood or steel forms, rigidly supported to assure correct grade and cross section. Use measuring blocks and intermediate strips to aid in obtaining required cross-section.
  - .2 Distribute material uniformly. Do not broadcast material.
  - .3 During spreading operation, thoroughly loosen and uniformly distribute material by lutes or covered rakes. Reject material that has formed into lumps and does not break down readily.
  - .4 After placing and before rolling, check surface with templates and straightedges and correct irregularities.



- .5 Provide heating equipment to keep hand tools free from asphalt. Control temperature to avoid burning material. Do not use tools at higher temperature than temperature of mix being placed.
- .7 Use a sufficient number of compactors of appropriate types and weights to obtain mix compacted to the density specified in the CCDG.

### 3.03 JOINTS

- .1 General :
  - .1 Remove surplus material from surface of previously laid strip. Do not deposit on surface of freshly laid strip.
  - .2 Construct joints between asphalt concrete pavement and Portland cement concrete pavement as indicated.
  - .3 Paint contact surfaces of existing structures such as manholes, curbs or gutters with bituminous material prior to placing adjacent pavement.
- .2 Transverse joints :
  - .1 Offset transverse joint in succeeding lifts by at least 600 mm.
  - .2 Cut back to full depth vertical face and tack face with thin coat of hot asphalt prior to continuing paving.
  - .3 Compact transverse joints to provide smooth riding surface. Use methods to prevent rounding of compacted surface at joints.
- .3 Joint with the old surface
  - .1 Make the joints between the old and new pavement carefully. The edge of the old pavement must be cut through its full thickness and coated with a smooth layer of liquid asphalt in order to expose a clean surface against which the new mix will be applied and raked to the required thickness. This cut is made with a saw or pavement slicer to obtain a straight line. Asphaltting must be executed taking into account the extension of longitudinal and transversal slopes of the existing asphalt.

### 3.04 ADJUSTMENT OF CAST IRON ACCESSORIES

- .1 Adjust the height of inlets, manholes and gate boxes. Adjust the manhole covers and screens as required on the detail plan. Adjust the manholes and standard gate boxes to approximately 7 mm under the level of the finished pavement. Adjust the self-supporting accessories as recommended by the manufacturer and the Departmental Representative.

### 3.05 OPENING THE ROAD SURFACE TO TRAFFIC AND BINDING AGENT

- .1 Only the Departmental Representative may authorize the opening of the road to traffic. If traffic is allowed on a given section before the application of the top coat of asphalt, the General Contractor must clean and apply, at his own expense, a binding agent before the application of the next coat of asphalt. The residual rate is 0.20 L/m<sup>2</sup>, as specified in Article 13.2 of the CCDG.

### 3.06 ADJUSTMENT TO DRIVEWAYS

- .1 When driveways are present on the side of a street and when the road surface has been built within a period of 4 months, build a wedge with plant mix for every driveway. This wedge must exceed each side of the lower point of the driveway by at least 300 mm. The top part of the wedge must exceed the top of the curb by less than 25 mm. The slope of the wedge must be at least 1V:10H.



### 3.07 FINISH TOLERANCES

- .1 If the quality of the mixes does not meet the requirements during the verification of the mixes, enforce articles 13.2.2 and 13.3.2 of the CCDG.
- .2 Finished asphalt surface to be within 5 mm of design elevation but not uniformly high or low.
- .3 Finished asphalt surface not to have irregularities exceeding 5 mm when checked with 4.5 m straight edge placed in any direction.

### 3.08 DEFECTIVE WORK

- .1 Correct irregularities which develop before completion of rolling by loosening surface mix and removing or adding material as required. If irregularities or defects remain after final compaction, remove surface course promptly and lay new material to form true and even surface and compact immediately to specified density.
- .2 Repair areas showing checking, rippling, or segregation.
- .3 Adjust roller operation and screed settings on paver to prevent further defects such as rippling and checking of pavement.

### 3.09 SAMPLING

- .1 Sampling and core sampling are executed based on the requirements and frequency specified in the CCDG. It has been established that the minimum number of samples or core samples for a given is two (2).
- .2 Contrary to Article 13.3.2.2.5 of the CCDG, when reassessing compactness should the pavement differ from the norm, the Contractor is responsible for the hiring of an independent laboratory certified ISO-9002 and approved by the Departmental Representative to reassess compactness. He must also pay for the expenses unless the reassessment proves that the pavement does meet the specifications. If conformity is confirmed, the Departmental Representative will reimburse the cost associated with the laboratory based on the rates in effect at the Canadian Testing Association (CTA).

**END OF SECTION**



A  
C07

ENROCHEMENT  
ROCKFILL

REVÊTEMENT DE  
TALUS DU REMBLAIS :  
PLAQUE EN GAZON  
INFILL SLOPE  
COVERED IN GRASS

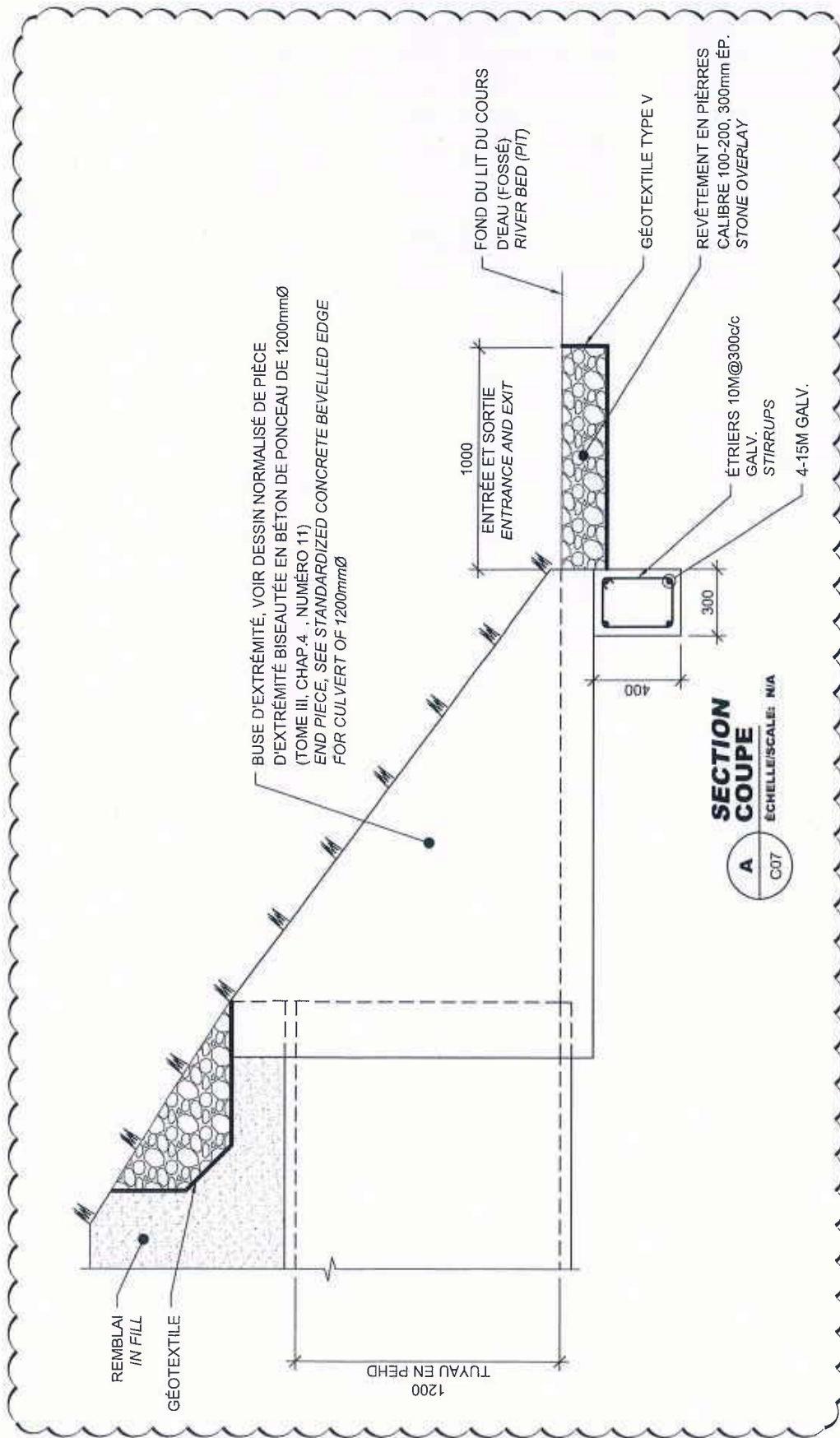
TUYAU EN PEHD. POUR  
INSTALLATION SE RÉFÉRER AU  
DESSIN NORMALISÉ DU MTQ  
(TOME III, CHAP. 4, NUMÉRO  
005A)

GÉOTEXTILE TYPE V,  
SI REQUIS  
IF REQUIRED

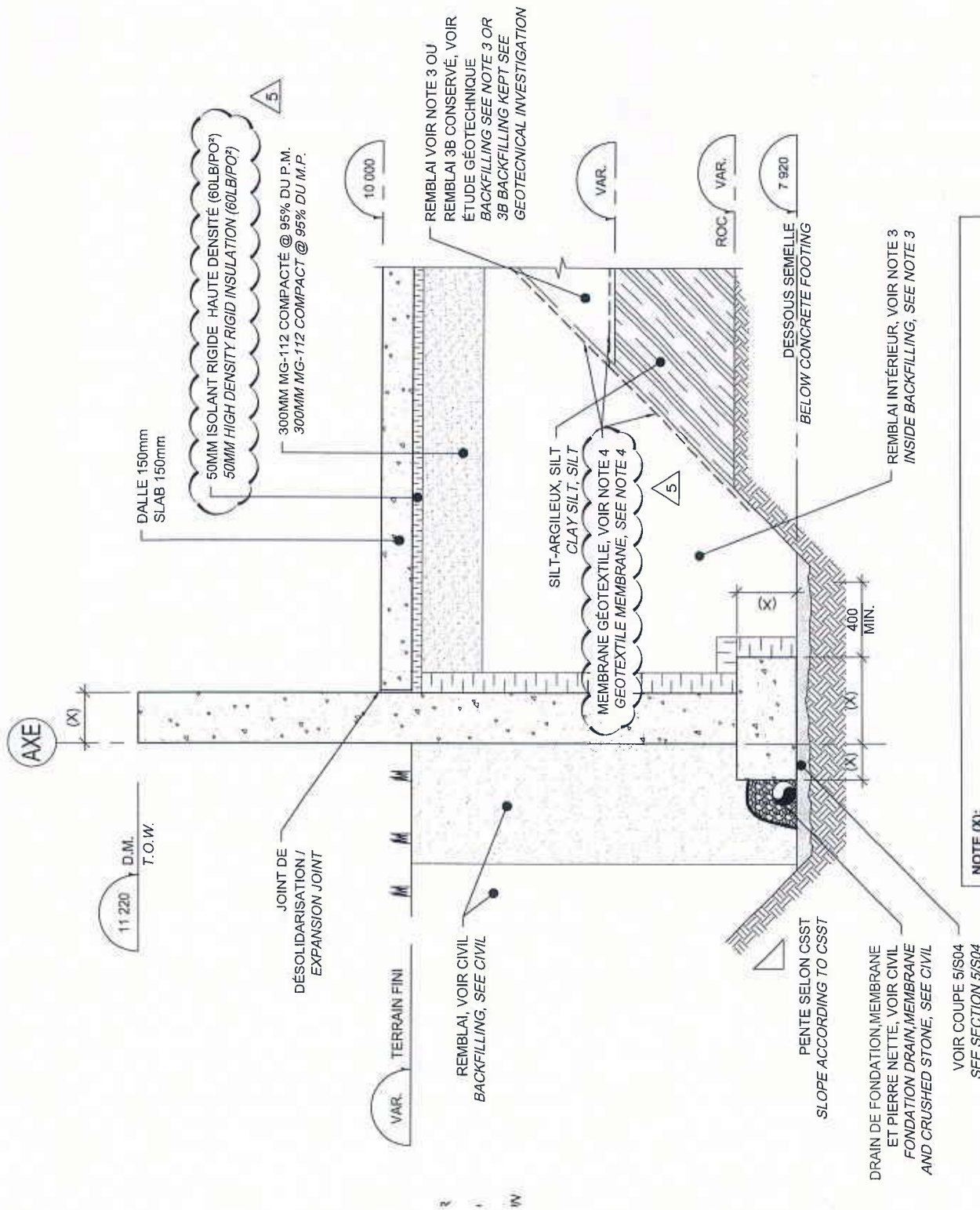
MUR DE PARAFOUILLE,  
VOIR COUPE  
CUTOFF WALL,  
SEE SECTION

## CULVERT TYPICAL DETAIL DÉTAIL TYPE PONCEAU

ÉCHELLE/SCALE: N/A







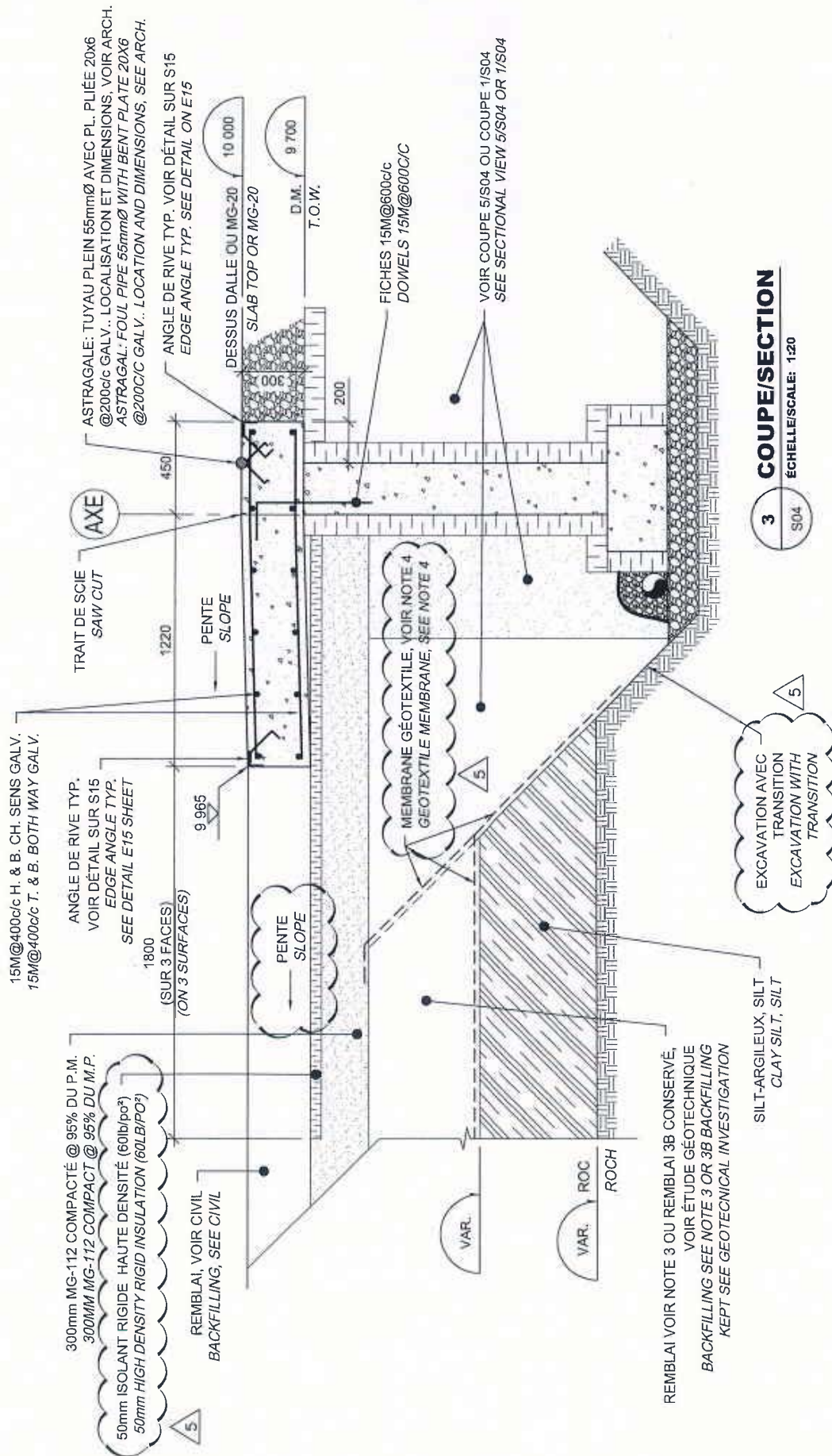
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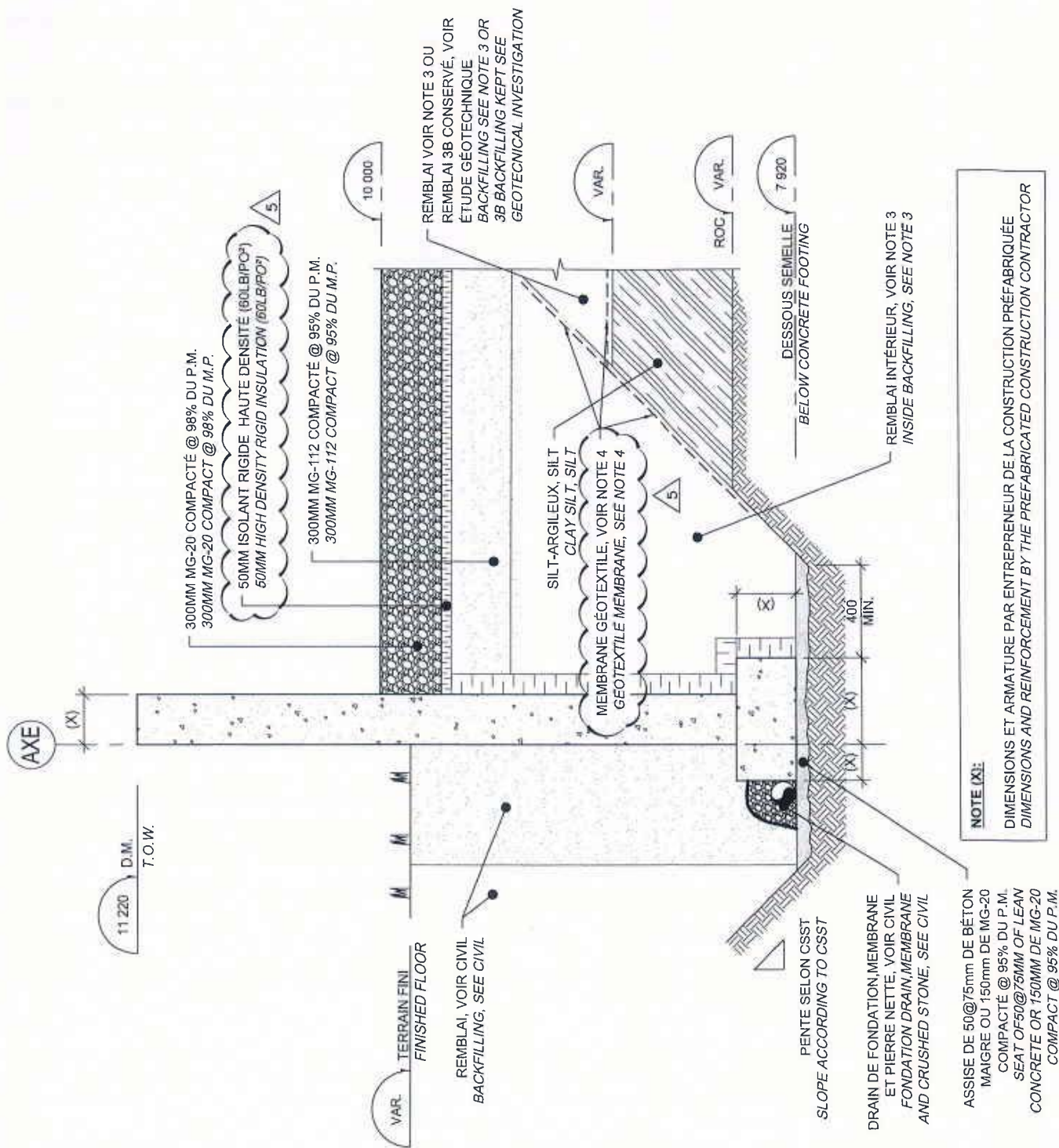
DIMENSIONS ET ARMATURE PAR ENTREPRENEUR DE LA CONSTRUCTION PRÉFABRIQUÉE  
DIMENSIONS AND REINFORCEMENT BY THE PREFABRICATED CONSTRUCTION CONTRACTOR

# COUPE/SECTION

ÉCHELLE/SCALE: 1:20

1  
S04





## 5 COUPE/SECTION

ÉCHELLE/SCALE: 1:20

5

S04



**NOTES:**

1. LES FONDATIONS DEVRONT PRENDRE APPUI SUR UN COUSSIN DE 150mm D'ÉP. DE MG-20 DÉPOSÉ DIRECTEMENT SUR LE ROC OU UNE ASSISE DE 50@75mm DE BÉTON MAIGRE. LES SURFACES D'APPUI DES FONDATIONS DEVRONT ÊTRE NETTOYÉES MÉTICULEUSEMENT. APRÈS VÉRIFICATION ET APPROBATION PAR LE LABORATOIRE DE CONTRÔLE DES MATÉRIAUX.
2. LES ÉLÉVATIONS DU DESSOUS DES EMPATTEMENTS SONT DONNÉES AUX PLANS. SI LE NIVEAU DU ROC EST À UNE ÉLÉVATION PLUS BASSE QUE LE DESSOUS DE L'EMPATTEMENT OU DE LA SEMELLE MONTRÉ AU PLAN, L'ENTREPRENEUR DEVRA COMBLER CET ESPACE AVEC UN BÉTON DE REMPLISSAGE. L'ENTREPRENEUR PEUT AUSSI COMBLER L'ÉCART AVEC UN REMBLAI MG-112 COMPACTÉ @ 95% DU P.M. PAR COUCHES DE 300mm SOUS LE COUSSIN DE MG-20. SI L'ASSISE DE FONDATION PRÉSENTE DES ASPÉRITÉS OU NÉCESSITE UNE CORRECTION DE NIVEAU CET ESPACE DEVRA AUSSI ÊTRE COMBLÉ AVEC DU BÉTON DE REMPLISSAGE.
3. REMBLAI : MATÉRIAUX 100mmØ MAX. NON GONFLANT COMPOSÉ DE SABLE ET/OU GRAVIER CONTENANT MOINS DE 15% DE PARTICULES FINES (PASSANT LE TAMIS 80µm) ET EXEMPT DE DÉBRIS ET DE MATIÈRE ORGANIQUES. MISE EN PLACE PAR COUCHES DE 300mm MAX. COMPACTÉ @ 95% DU P.M. LA RÉUTILISATION DE MATÉRIAUX D'EXCAVATION DOIT FAIRE L'OBJET D'UNE AUTORISATION PAR L'INGÉNIEUR GÉOTECHNIQUE AU CHANTIER.

4. COUVRIR TOUTES LES SURFACES EXPOSÉES DE SILT-ARGILEUX ET DE SILT D'UNE MEMBRANE GÉOTEXTILE. EN PRÉSENCE DU REMBLAI 3B, REMONTER LA MEMBRANE JUSQU'AU REMBLAI MG-112 SUR LE DESSUS DU REMBLAI 3B POUR ANCRER CELLE-CI DURANT LE REMBLAYAGE.

**NOTES:**

1. THE FOUNDATIONS SHALL BE BASED ON A LAYER OF MG-20 150mm THICKNESS PLACED DIRECTLY ON ROCK OR A FOUNDATION OF 50@75mm OF LEAN CONCRETE. THE FOUNDATION BEARING SURFACES SHALL BE METICULOUSLY CLEANED AFTER VERIFICATION AND APPROBATION BY THE MATERIALS CONTROL LABORATORY.

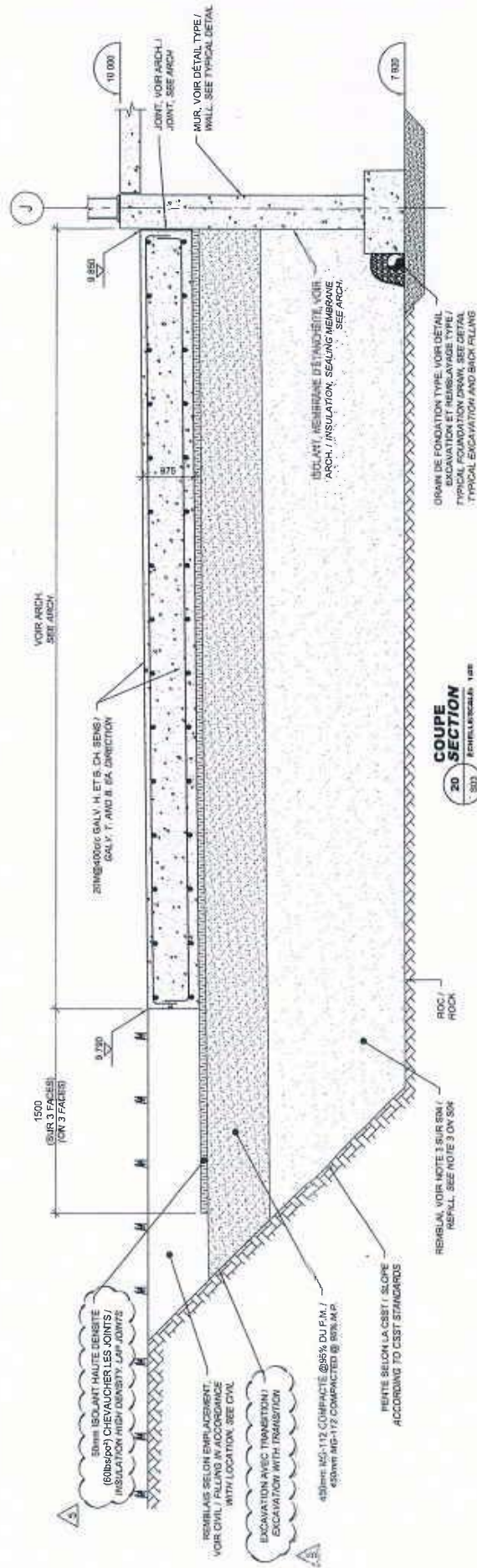
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305

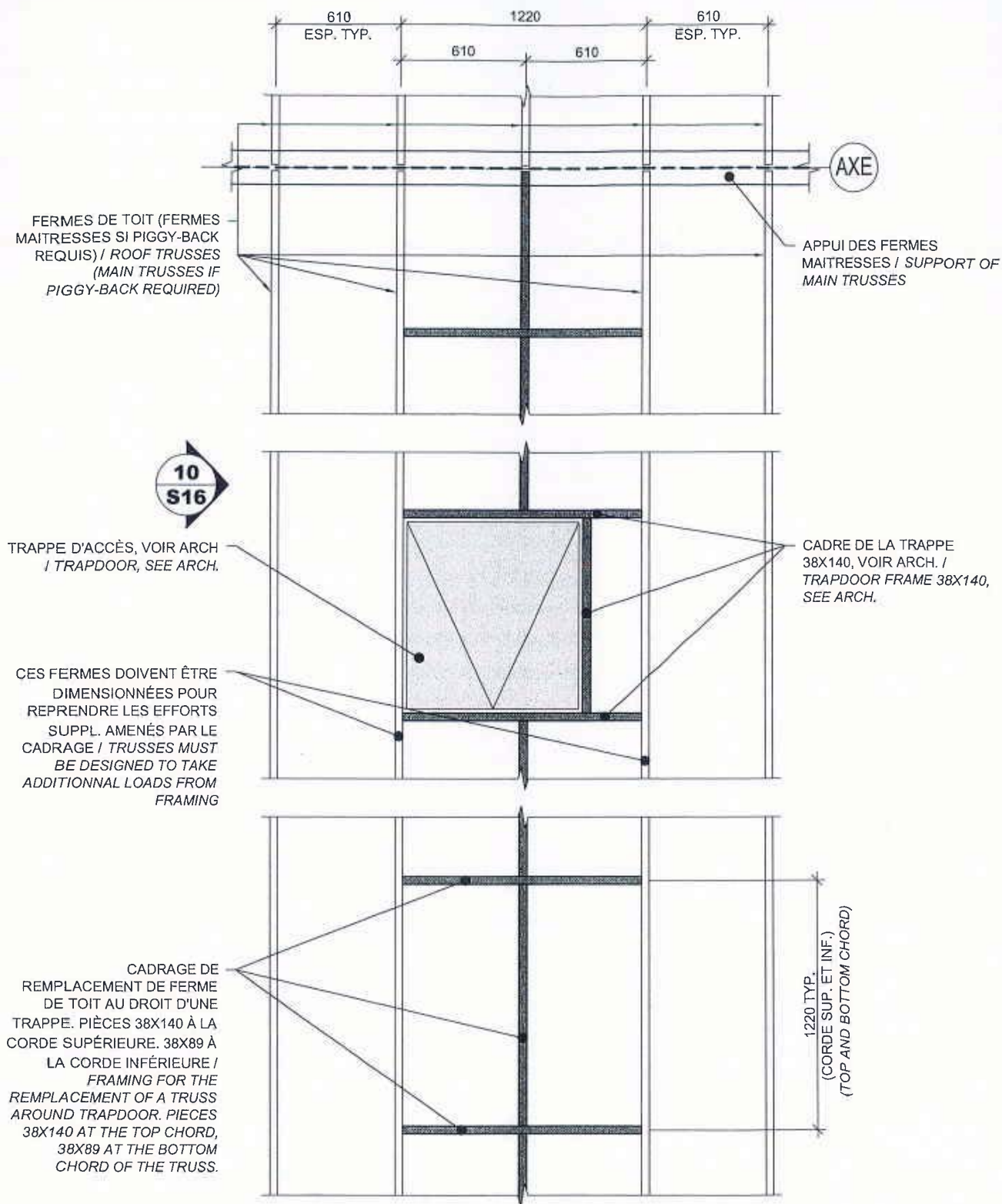
2. THE BELOW FOOTING LEVELS ARE SHOWN ON PLANS. IF THE ROCK LEVEL MEETS A LOWER LEVEL THAN THE BELOW FOOTING LEVEL OR THE SLAB SHOWN ON PLAN, THE CONTRACTOR SHALL FILL THIS SPACE WITH A FILLER CONCRETE. THE CONTRACTOR CAN ALSO FILL THE SPACE WITH A MG-112 BACKFILLED COMPACTED AT 95% M.P. BY 300mm LAYERS UNDER THE MG-20 FOUNDATION. IF FOUNDATION PRESENTS ROUGHNESS OR REQUIRES A LEVEL CORRECTION, THIS SPACE SHALL ALSO BE FILLED WITH FILLER CONCRETE.
3. NON-GELIF AND NON EXPANSIF MATERIAL COMPOSED OF SAND AND / OR GRAVEL WITH LESS THAN 15% FINE PARTICLE (PASSING 80µm SIEVE) AND WITHOUT PARTICLE OVER 100mmØ OR ORGANIC DEBRIS. BACKFILL PLACED AND COMPACTED IN 300mm LAYER. COMPACT @ 95% OF M.P. THE REUSE OF EXCAVATION MATERIAL MUST BE APPROVED BY GEOTECHNICAL ENGINEER ON THE SITE.

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4. COVER ALL EXCAVATED SURFACE OF CLAY-SILT AND SILT WITH A GEOTEXTILE MEMBRANE. IF THE 3B SOIL LAYER IS PRESENT, INSTALL THE MEMBRANE BETWEEN THAT LAYER AND THE MG-112 BACKFILL TO PROVIDE ANCHOR DURING THE BACKFILL WORK.





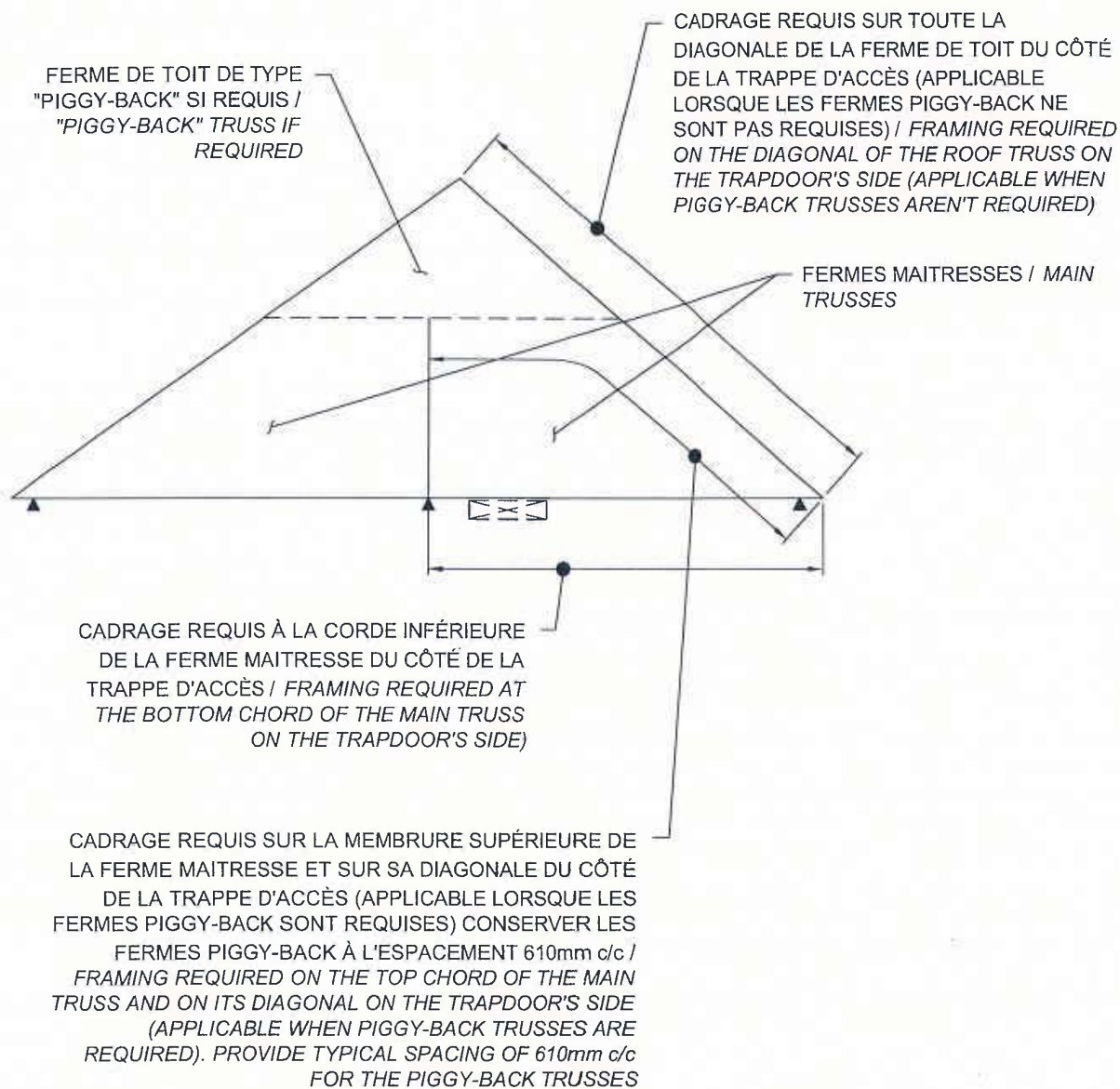


NOTE:

SI DES FERMES DE TYPE "PIGGY-BACK" SONT REQUISES AU DESSUS DU CADRAGE, GARDER L'ESPACEMENT TYPE DE 610mm c/c POUR CELLE-CI / IF "PIGGY-BACK" TRUSSES ARE REQUIRED ABOVE THE FRAMING, PROVIDE TYPICAL 610mm c/c SPACING FOR PIGGY-BACK TRUSSES.

## STRUCTURE DE BOIS AU DROIT D'UNE TRAPPE D'ACCÈS AU TOIT WOOD FRAMING AROUND ROOF TRAPDOOR

ÉCHELLE/SCALE: N/A



## LOCALISATION DES CADRAGES AUTOUR D'UNE TRAPPE D'ACCÈS FRAMING LOCATION AROUND ROOF TRAPDOOR

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S16

ÉCHELLE/SCALE: N/A

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