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Saved by: Fehr, Elizabeth
Plotted on: December 10, 2014
CADD FILE LOCN: P:\60332049\900\WORK\910\CAD\20-SHEETS\SGR-014204-336_G00-RX.DWG
A1 - 841 x 594



**Public Works and
Government Services
Canada**

**Travaus publics et
Services gouvernementaux
Canada**

REAL PROPERTY SERVICES

Western Region

SERVICES IMMOBILIERS

Région de l'ouest

**GIANT MINE
REMEDIATION PROJECT
EFFLUENT TREATMENT PLANT
REACTOR TANKS**



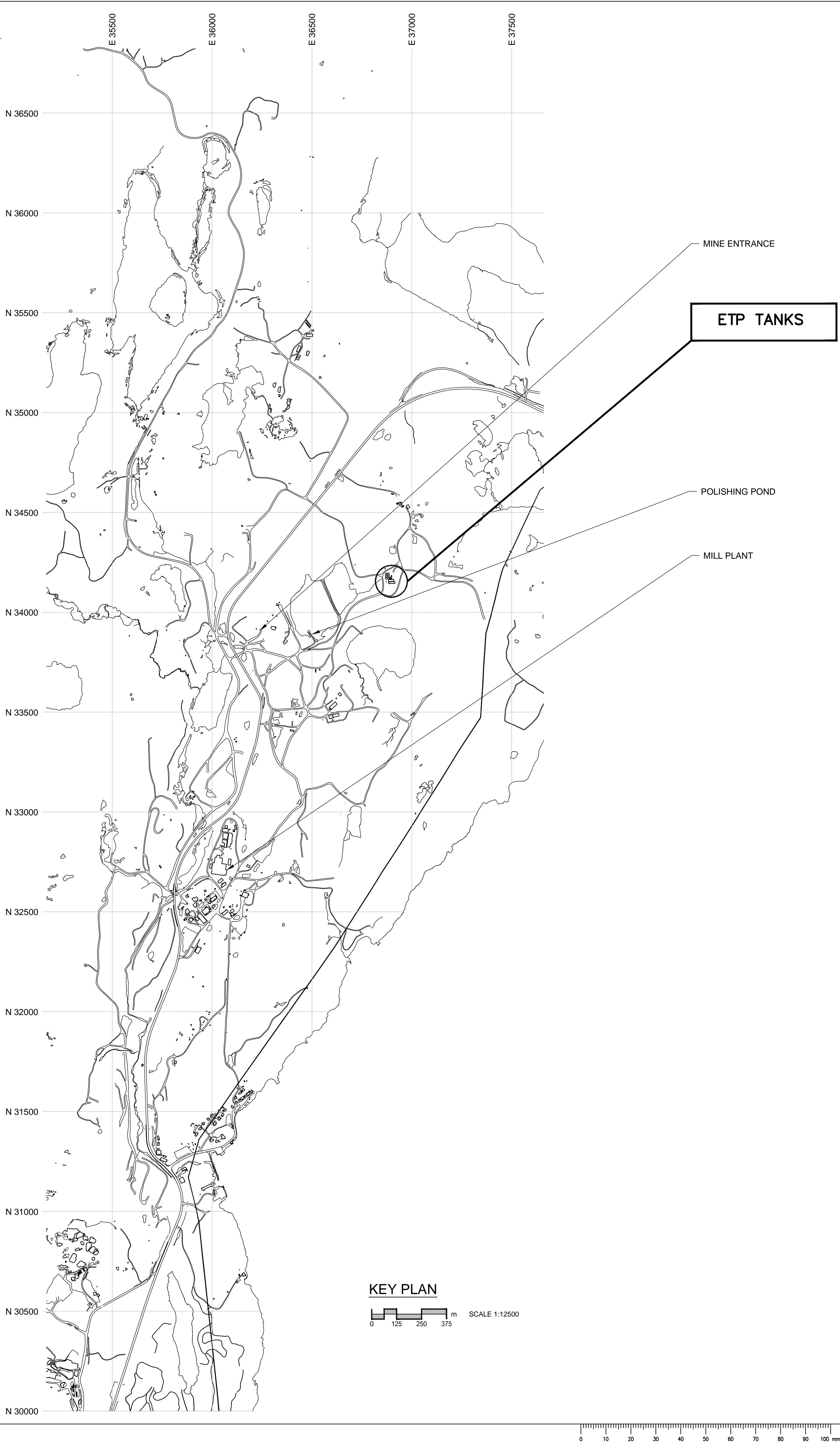
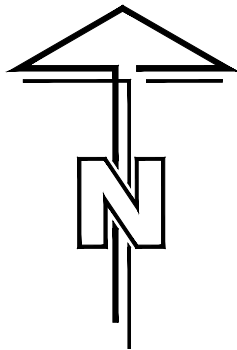
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TENDER**

PROJECT No. R.014204.336

AECOM

12 December 2014

Sheet Size: A1 (841mm x 594mm)
Saved by: Carlson, Jordan
Plotted on: December 12, 2014
CADD FILE LOC: P:\03\32\04\9\00-WORK\910-CAD\20-SHEETS\GIR-014204-336_G01-RX.DWG



LIST OF DRAWINGS

DWG NUMBER	TITLE OF DRAWING
R-014204.336_G00	COVER SHEET
R-014204.336_G01	KEY PLAN AND LIST OF DRAWINGS
R-014204.336_H01	DEMOLITION PLAN
R-014204.336_H02	PLAN AT PLATFORM
R-014204.336_H03	PLAN BELOW PLATFORM
R-014204.336_H04	TANK 1A DETAILS
R-014204.336_H05	TANK 2A DETAILS
R-014204.336_H06	TANK 3A DETAILS
R-014204.336_H07	DETAILS
R-014204.336_E01	ELECTRICAL PLAN AT PLATFORM

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Client/client

PUBLIC WORKS
GOVERNMENT SERVICES
CANADA

Project title/Titre du projet

GIANT MINE
REMEDICATION PROJECT
EFFLUENT TREATMENT PLANT
REACTOR TANKS

Approved by/Approuve par
B.B.

Designed by/Concept par
L.R.

Drawn by/Dessiné par
E.F.

PWGSC Project Manager/Administrateur de Projets TPSGC
J.M.

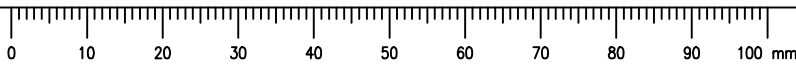
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Ressources Architectural et de Directeur d'ingénierie, TPSGC

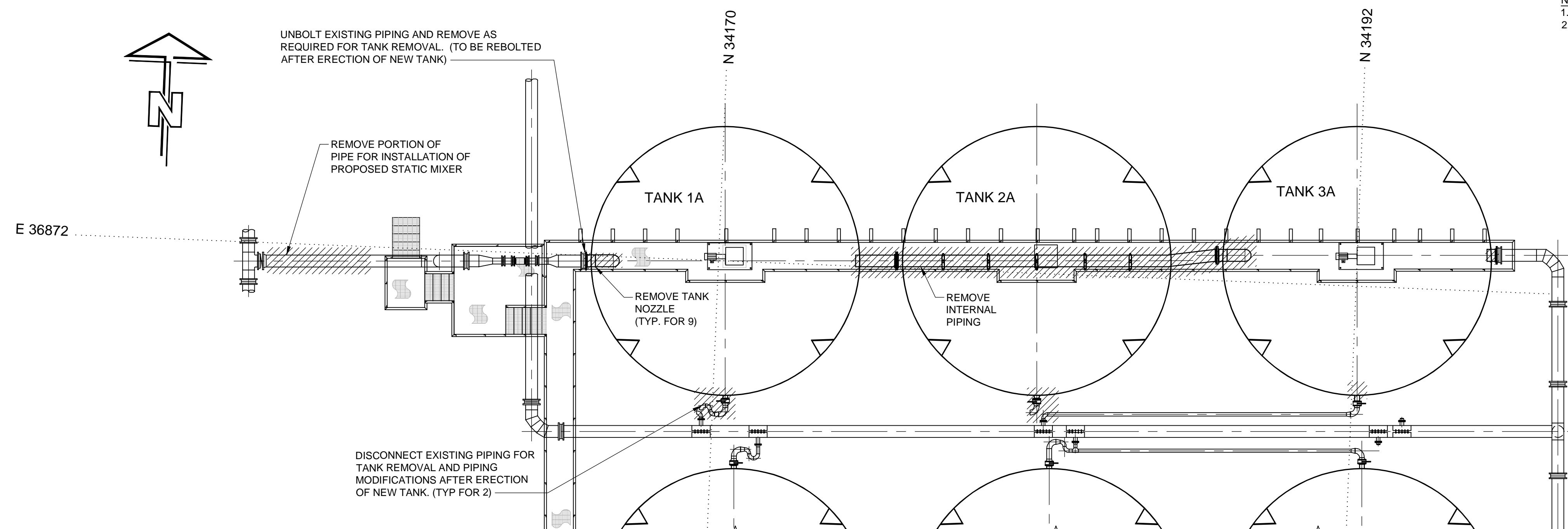
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Drawing title/Titre du dessin

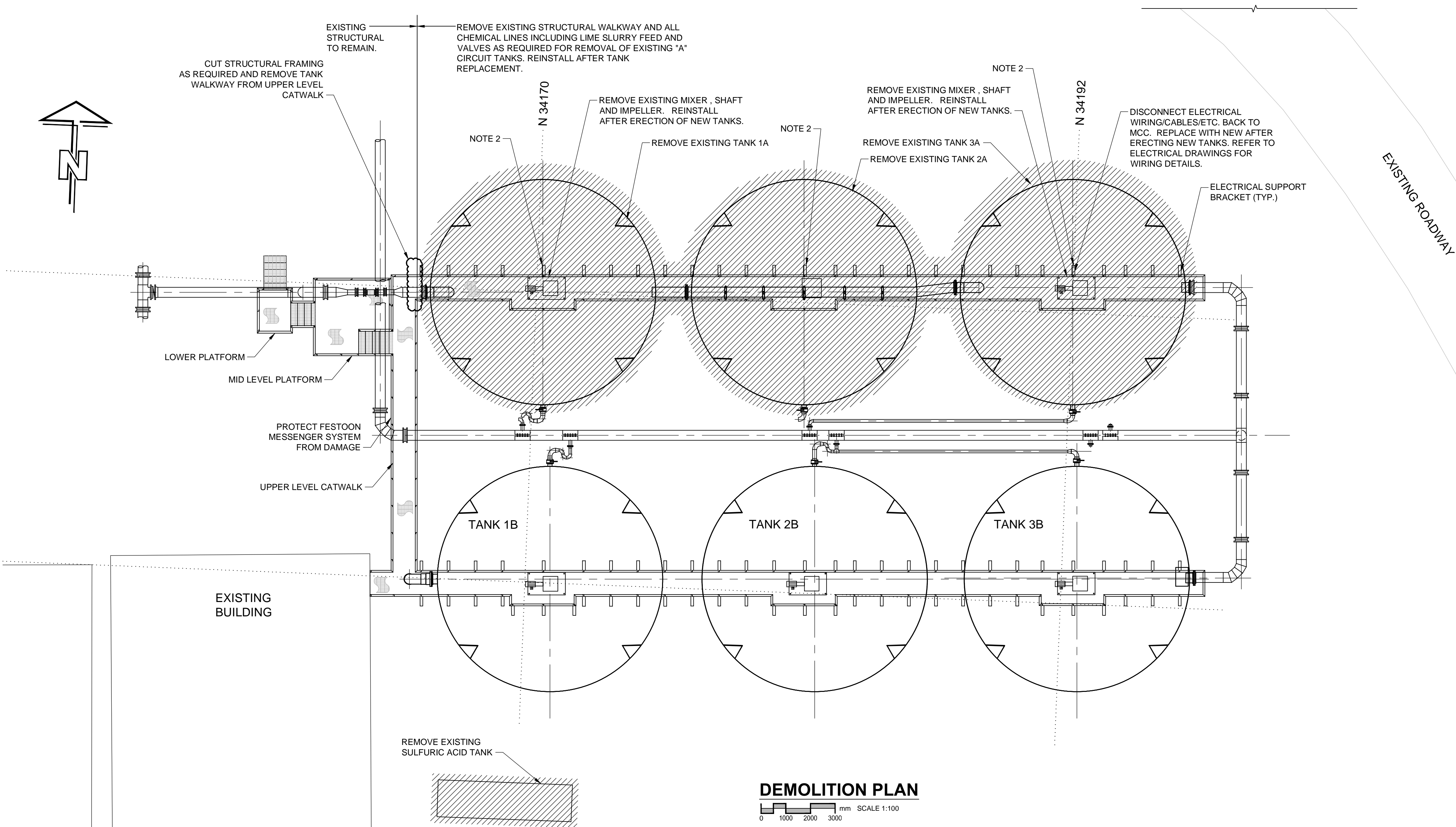
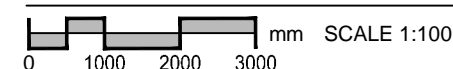
KEY PLAN
and
LIST OF DRAWINGS

Project No./ No. du projet	Sheet/Feuille	Revision no./ La Révision no.
R.014204.336	G01 OF G01	B

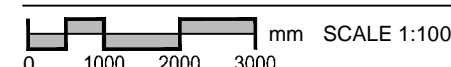




PIPING DEMOLITION DETAIL



DEMOLITION PLAN



NOTES:

- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 2. SALVAGE EXISTING LIGHT FIXTURES RETURN TO OWNER.



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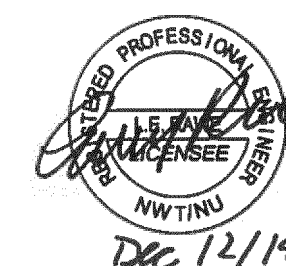
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Revision
Client/Client

**PUBLIC WORKS
GOVERNMENT SERVICES
CANADA**

Project title/Titre du projet

GIANT MINE REMEDIATION PROJECT

EFFLUENT TREATMENT PLANT REACTOR TANKS

Approved by/Approuve par

B.B.

Designed by/Concept par

L.R.

Drawn by/Dessine par

E.F.

PWGS

J.M.

PWGSC, Architectural and Engineering Resources Manager
Ressources Architectural et de Directeur d'ingénierie, TRSC

Resources Architectural et de Direction d'Ingénierie, 11 55

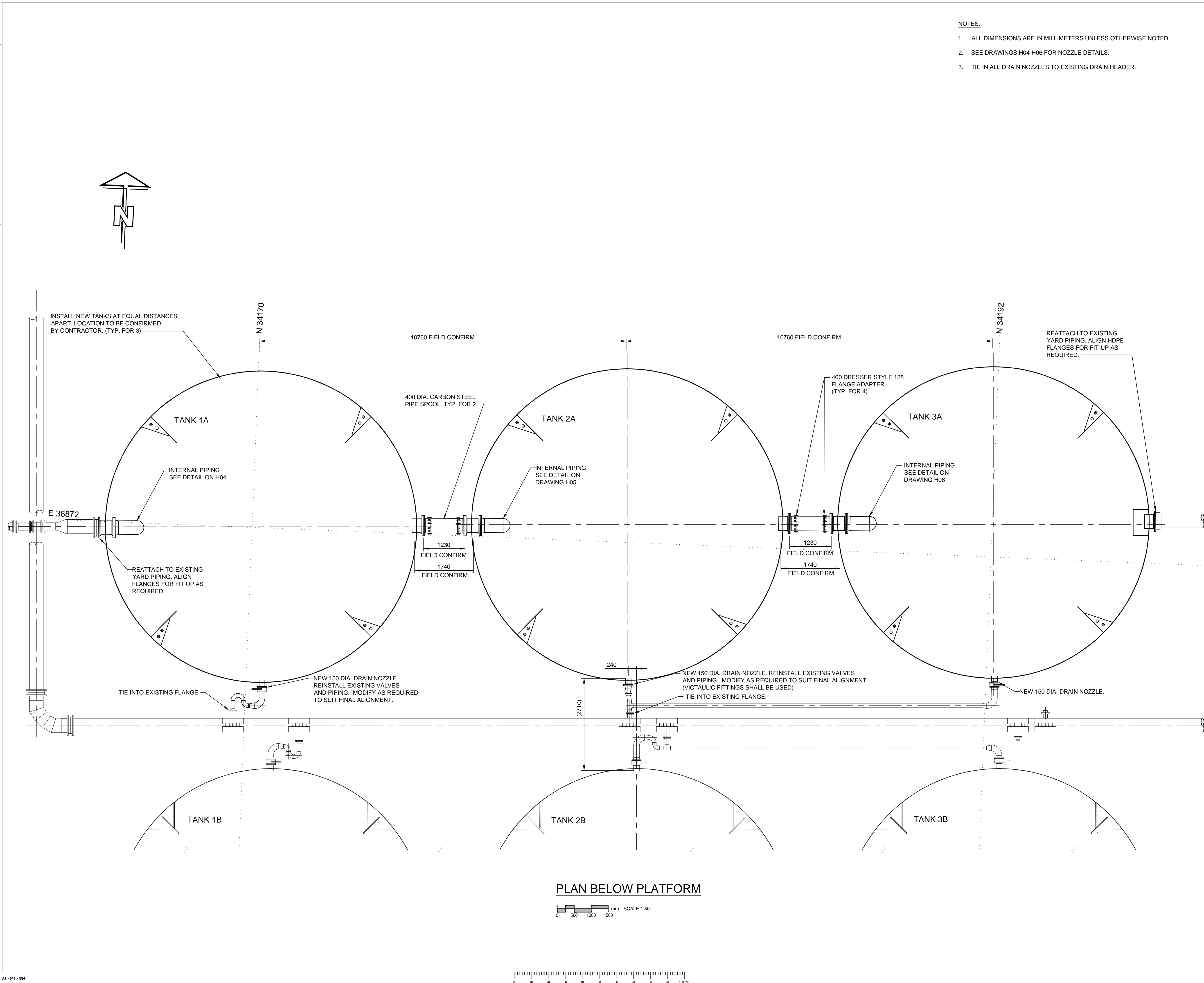
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DEMOLITION PLAN

Project No./ No. du projet	Sheet/Feuille	Revision no./ La Révision no.
R.014204.336	H01 OF H07	B



NOTES:

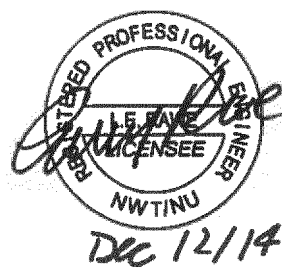
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. SEE DRAWINGS H04-H06 FOR NOZZLE DETAILS.
3. TIE IN ALL DRAIN NOZZLES TO EXISTING DRAIN HEADER.

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**PUBLIC WORKS
GOVERNMENT SERVICES
CANADA**

Project title/Titre du projet
**GIANT MINE
REMEDATION PROJECT**
**EFFLUENT TREATMENT PLANT
REACTOR TANKS**

Approved by/Approuvé par

B.B.

Designed by/Concept par

L.R.

Drawn by/Dessiné par

E.F.

PWGSC Project Manager/Administrateur de Projets TP/SCG

J.M.

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'Ingénierie, TP/SCG

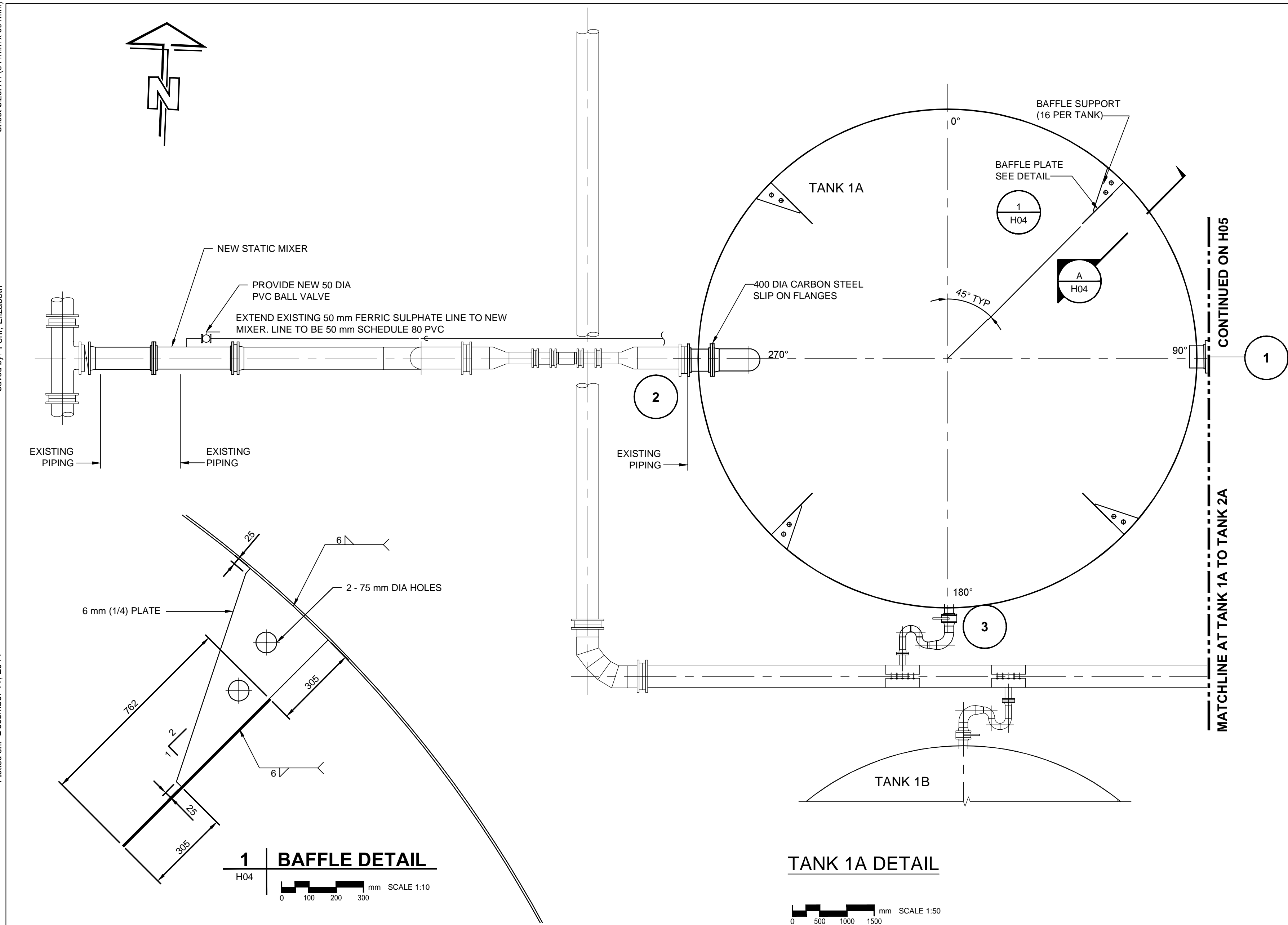
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PLAN BELOW PLATFORM

Project No./ No. du projet R.014204.336	Sheet/Feuille H03 of H07	Revision no./ La Révision no. B
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TANK 1A DETAIL

SCALE 1:50

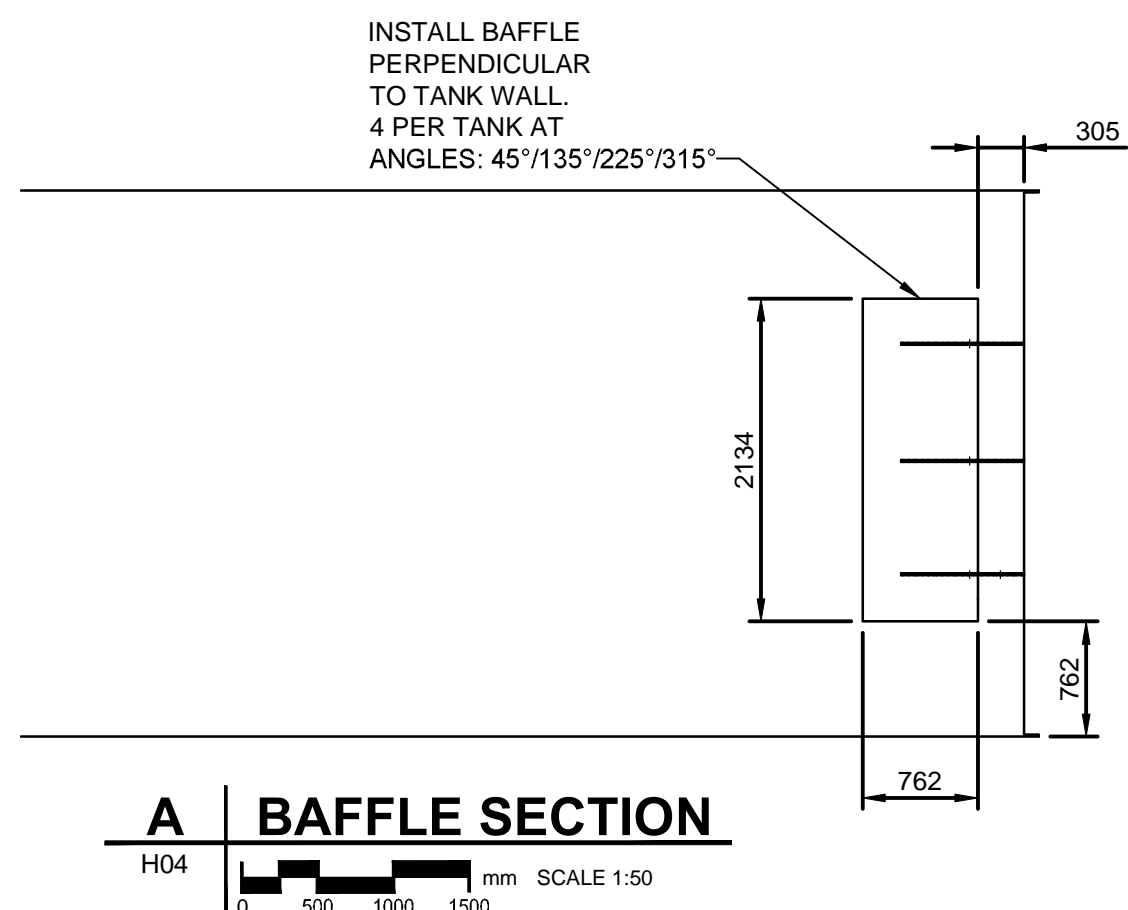
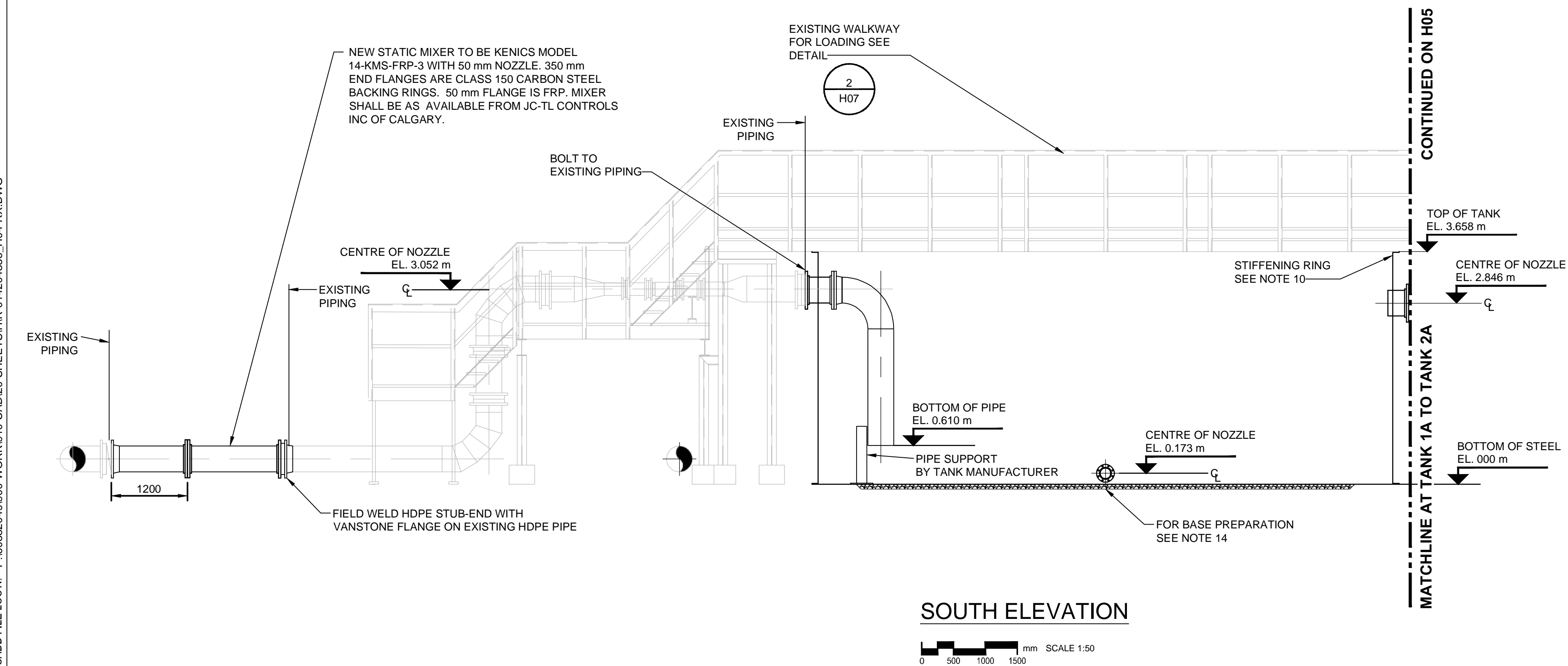
SOUTH ELEVATION

SCALE 1:50

TANK NOZZLE TABLE					
NO.	SIZE	ELEVATION	PROJECTION	DESCRIPTION	ANGLE
1	400	2846	250	OUTLET (SINGLE FLANGE)	90°
2	400	3052	250	INLET (DOUBLE FLANGE)	270°
3	150	173	200	DRAIN (SINGLE FLANGE)	180°

GENERAL NOTES (TYP FOR 3)

- SUPPLY AND INSTALL THREE (3) IDENTICAL ABOVEGROUND VERTICAL WELDED STEEL STORAGE TANKS AS INDICATED AND SPECIFIED. TANKS 1A, 2A, 3A.
- STORAGE TANK SHALL BE 9,144 mm ID X 3,658 mm HIGH AND DESIGNED IN ACCORDANCE WITH API 650.
- TANKS TO BE CONSTRUCTED FROM ASTM A36 PLATES OR APPROVED ALTERNATE.
- DESIGN LOADS
 - WIND LOAD 0.47 kPa
 - SG OF TANK CONTENTS 1.02
 - CONTENTS WATER (FeSO4)
 - CONTENTS pH 9.8
 - CONTENTS TEMPERATURE 5°C to 30°C
 - EXTERNAL VERTICAL LOADS 100 kN, (SEE DETAIL 2 ON H07)
- TANK CORROSION ALLOWANCE 1.58 mm.
- DESIGN AND CONSTRUCT NOZZLES AND FLANGES PER ASME B16.5/API 650, SECTION 3.
- PIPE SHALL BE STEEL, STD. WALL, ASTM A53 GR. B.
- STEEL FITTINGS SHALL BE ASTM 284, BUTT WELDED. ELBOWS TO BE LONG RADIUS.
- TANK NOZZLES TO BE SINGLE FLANGE AND DOUBLE FLANGE AS INDICATED, PROVIDE REINFORCING PLATES.
- PROVIDE AN EXTERNAL STIFFENING RING IN THE FORM OF A STRUCTURAL ANGLE, OF THE SAME MATERIAL AS TANK, MINIMUM SIZE 68 MM X 68 MM X 6 MM THICK, CONTINUOUSLY WELDED TO THE TANK SHELL.
- ADDITIONAL STIFFENING RINGS, IF USED, SHALL BE ON THE OUTSIDE OF THE TANK SHELL.
- TANK 3A SHALL BE FITTED WITH AN OUTLET WEIR BOX TO THE DIMENSIONS AS SHOWN. SEE DRAWING H06 FOR DETAILS.
- EACH TANK TO BE FITTED WITH FOUR (4) ANTI-ROTATION BAFFLES. DETAILS ARE AS REQUIRED BY MIXER MANUFACTURER.
- TANK TO BE SUPPORTED AS PER API 650 FIGURE B-2, FOUNDATION WITH CRUSHED STONE RINGWALL. RINGWALL SHALL BE FROM NATIVE MATERIAL. NATIVE MATERIAL SHALL BE FORMED TO ALLOW A MINIMUM 75 mm THICK CLEAN COMPACTED SAND UNDER THE ENTIRE TANK BOTTOM. SAND TO EXTEND TO WITHIN 600 MM OF THE TANK SHELL.
- FIELD TESTING: FILL EACH TANK WITH WATER (SUPPLIED BY OWNER) AND ALLOW TANK TO SIT FOR 48 HOURS. CHECK FOR LEAKS AND CORRECT OR REPAIR ANY LEAKING AREAS.
- EXTERIOR COATING SHALL BE DEVCOE DEVGUARD 4160, 50 MICRON DFT OR APPROVED ALTERNATE. SURFACE PREPARATION SHALL BE COMMERCIAL BLAST TO SSPC-SP6. COATING TO BE WHITE.
- TANK REQUIRES NO INTERNAL COATING.
- PROJECTION IS FROM OUTER SHELL TO FLANGE FACE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE IN METERS AND ARE GEODETIC.
- TOP ELEVATION OF NEW ERECTED TANKS SHALL BE SAME AS DEMOLISHED TANKS. (CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO DEMOLITION)
- NOZZLES OF NEW TANKS SHALL MATCH EXISTING. INLET AND OUTLET NOZZLES TO MATCH ELEVATIONS OF EXISTING PIPING. (CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS PRIOR TO DEMOLITION)



A BAFFLE SECTION

SCALE 1:50

(TYP. FOR ALL TANKS 4 BAFFLES PER TANK)

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GOVERNMENT SERVICES
CANADA

Project title/Titre du projet

GIANT MINE
REMEDATION PROJECT
EFFLUENT TREATMENT PLANT
REACTOR TANKS

Approved by/Approuvé par

B.B.

Designed by/Conçue par

L.R.

Drawn by/Dessiné par

E.F.

PWGSC Project Manager/Administrateur de Projets TPSCG

J.M.

PWGSC Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie, TPSCG

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TANK 1A DETAIL

Project No./ No. du projet

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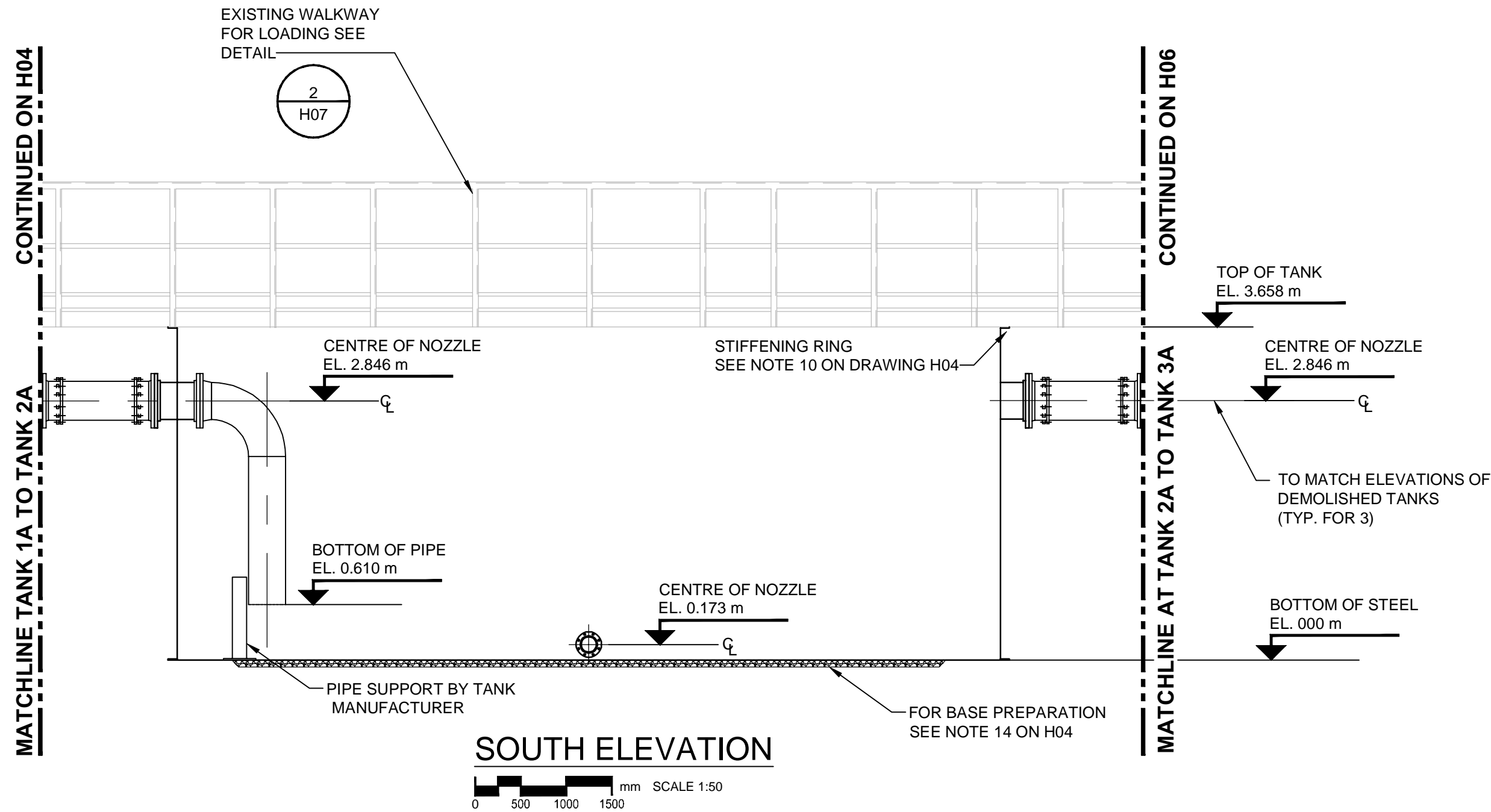
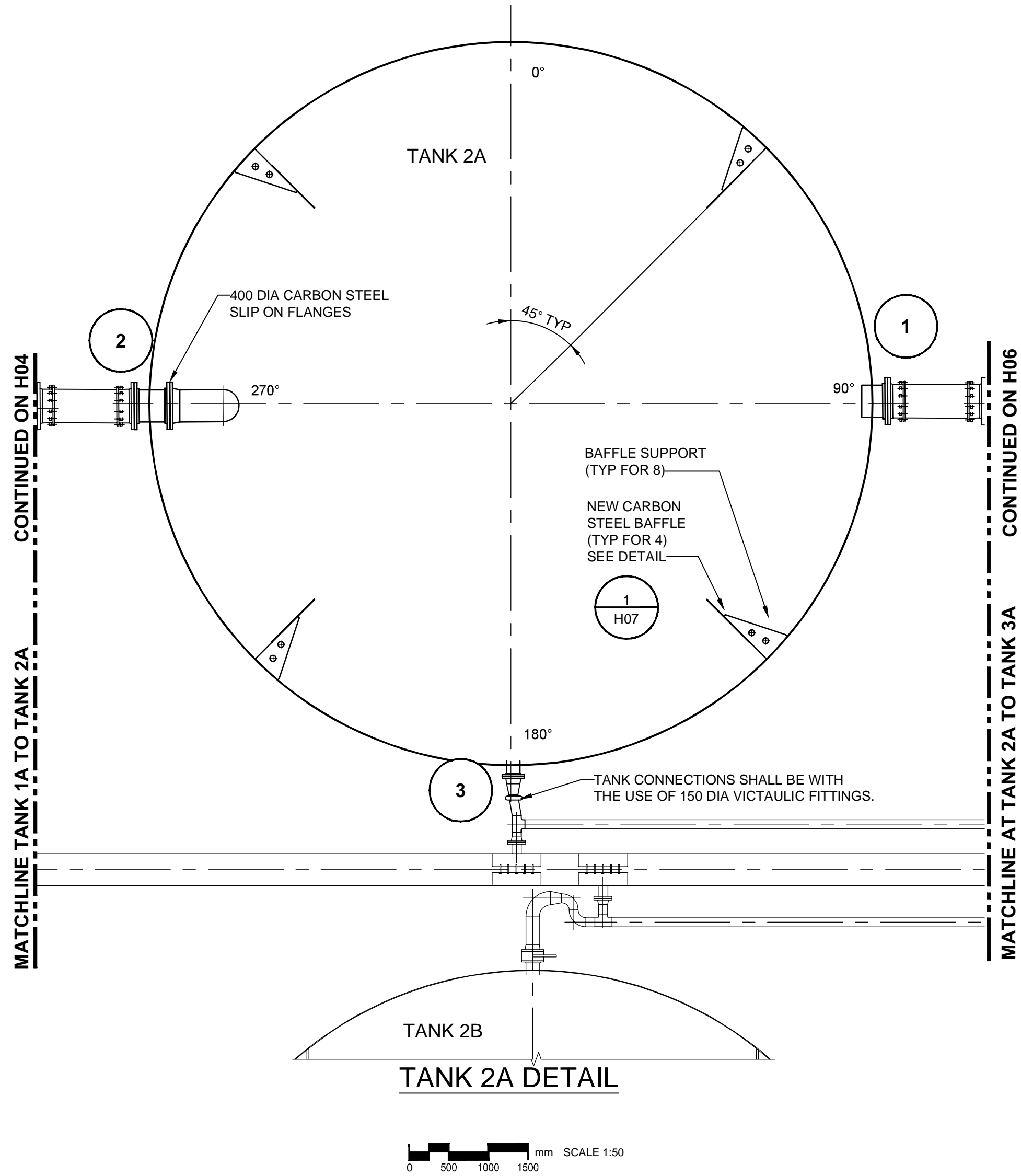
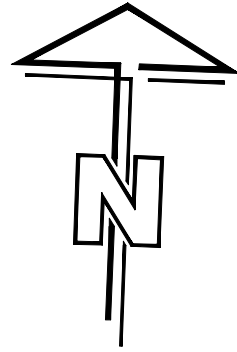
Sheet/Feuille

H04

of H07

Revision no./ La Révision no.

B



TANK NOZZLE TABLE					
NO.	SIZE	ELEVATION	PROJECTION	DESCRIPTION	ANGLE
1	400	*2846	250	OUTLET (SINGLE FLANGE)	90°
2	400	*2846	250	INLET (DOUBLE FLANGE)	270°
3	150	*173	200	DRAIN (SINGLE FLANGE)	180°

*CONTRACTOR TO VERIFY DIMENSIONS
(EQUAL TO EXISTING TANKS)

NOTES

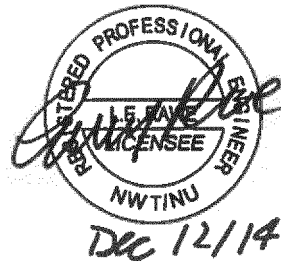
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE IN METRES AND ARE GEODETIC.
- SEE DRAWING H04 NOTES FOR DESIGN DETAILS.

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PUBLIC WORKS
GOVERNMENT SERVICES
CANADA

GIANT MINE
REMEDATION PROJECT
EFFLUENT TREATMENT PLANT
REACTOR TANKS

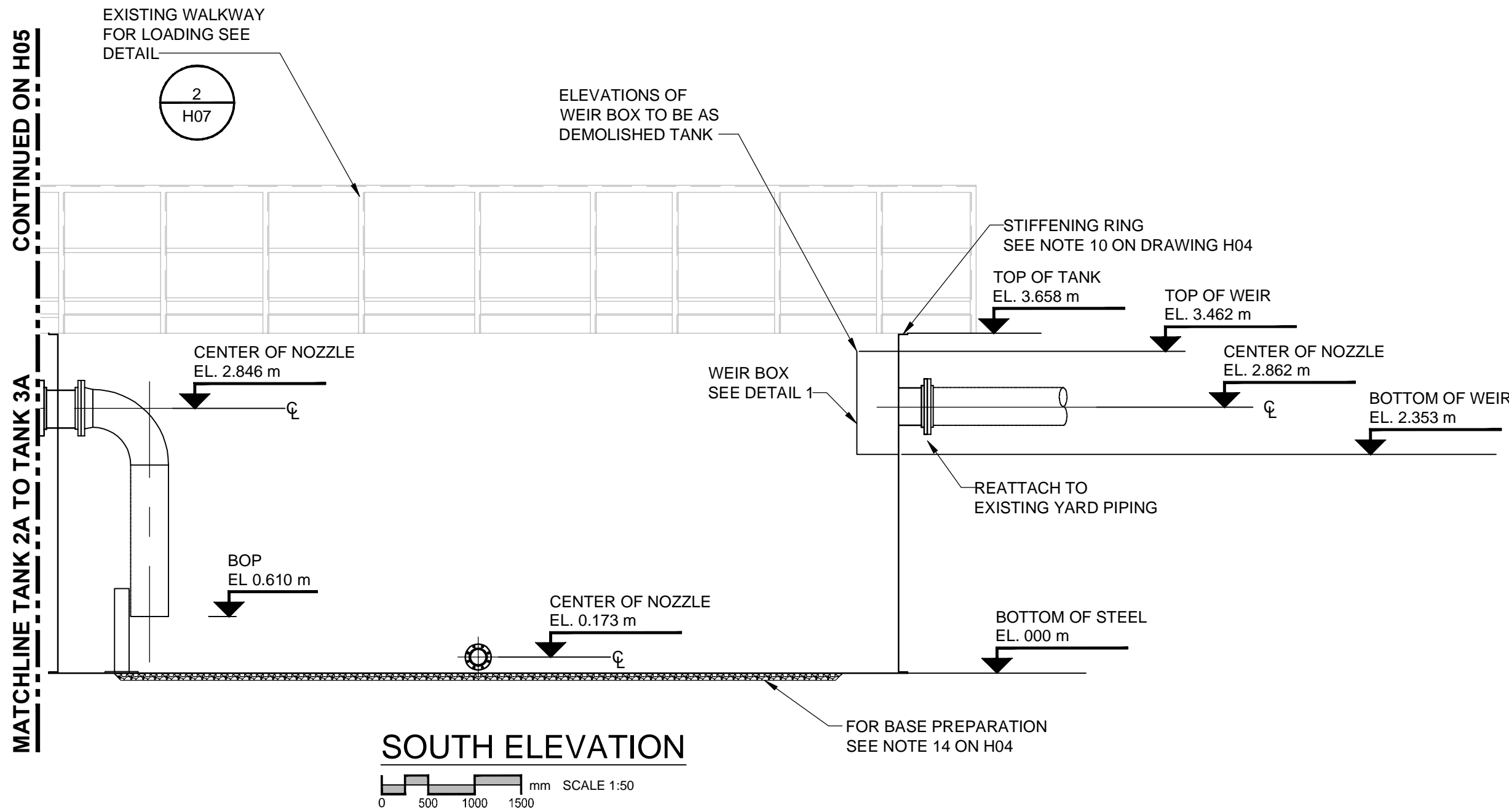
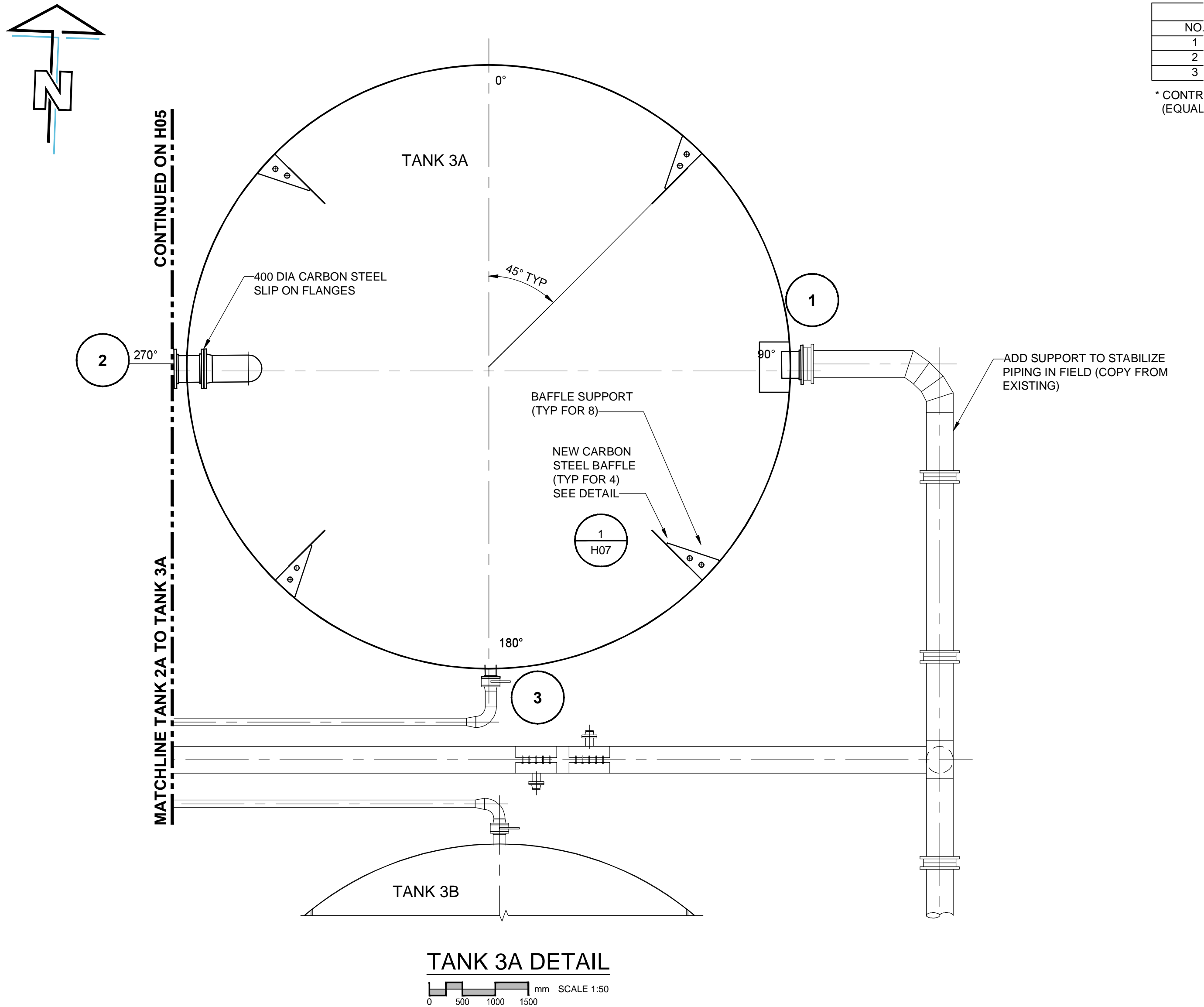
Approved by/Approve par B.B.
Designed by/Concept par L.R.
Drawn by/Dessiné par E.F.
PWGSC Project Manager/Administrateur de Projets TPSGC J.M.
PWGSC Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie, TPSGC

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TANK 2A DETAIL

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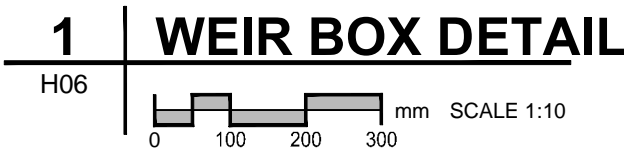
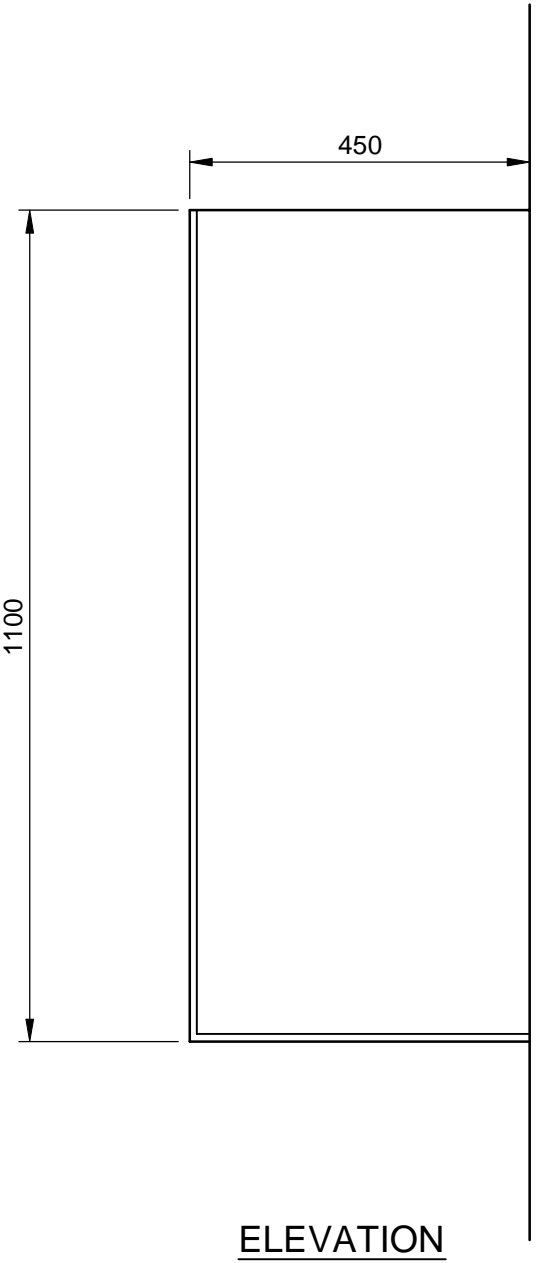
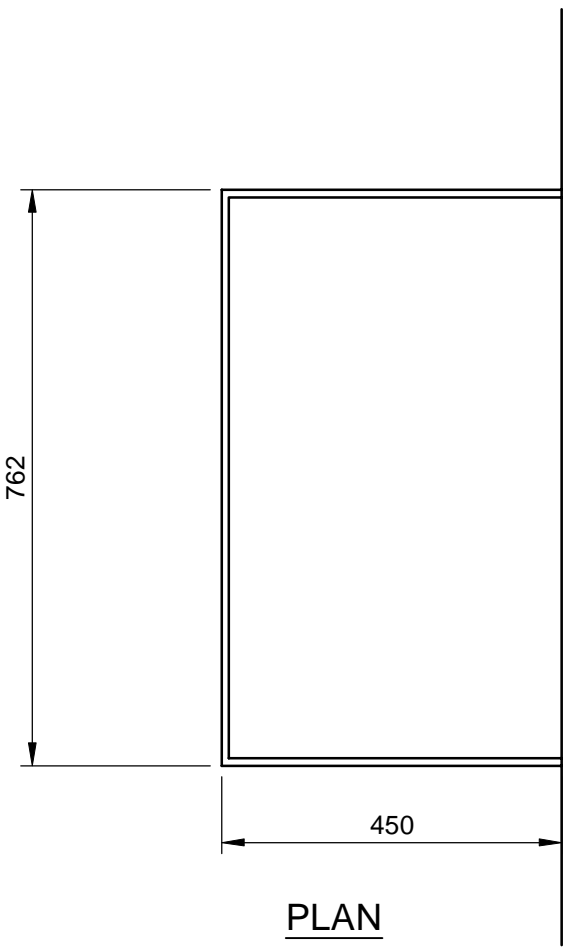


TANK NOZZLE TABLE					
NO.	SIZE	ELEVATION	PROJECTION	DESCRIPTION	ANGLE
1	400	*2862	250	OUTLET (SINGLE FLANGE)	90°
2	400	*2849	250	INLET (DOUBLE FLANGE)	270°
3	150	*173	200	DRAIN (SINGLE FLANGE)	180°

* CONTRACTOR TO VERIFY DIMENSIONS
(EQUAL TO EXISTING TANKS)

NOTES

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- ALL ELEVATIONS ARE IN METERS AND ARE GEODETIC.
- SEE NOTES ON H04 FOR TANK DESIGN DETAILS.

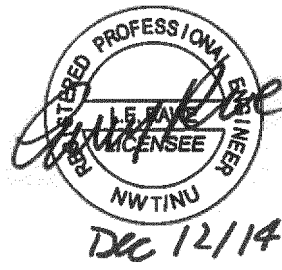


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REACTOR TANKS

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PWGSC Project Manager/Administrateur de Projets TPSSC

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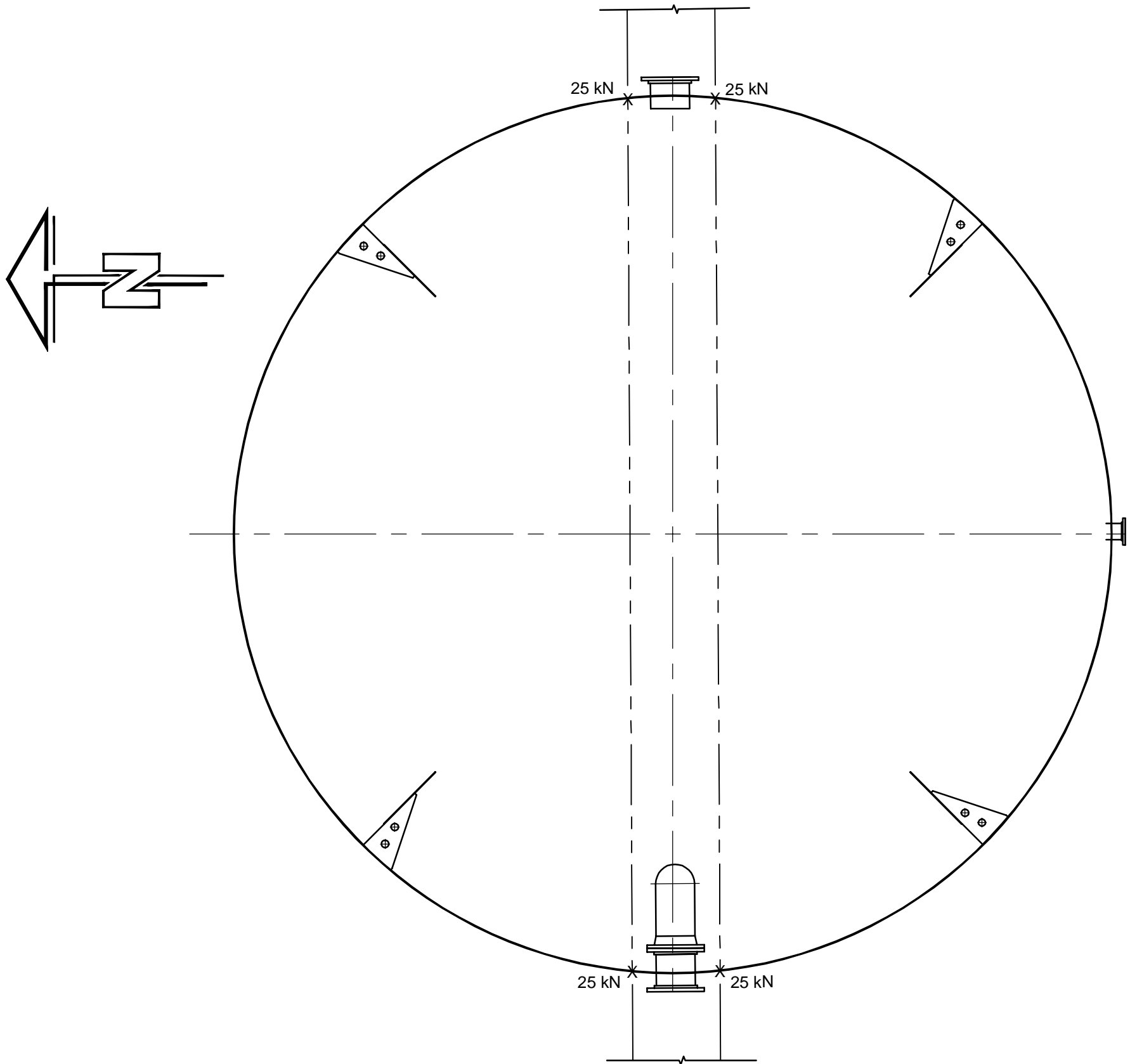
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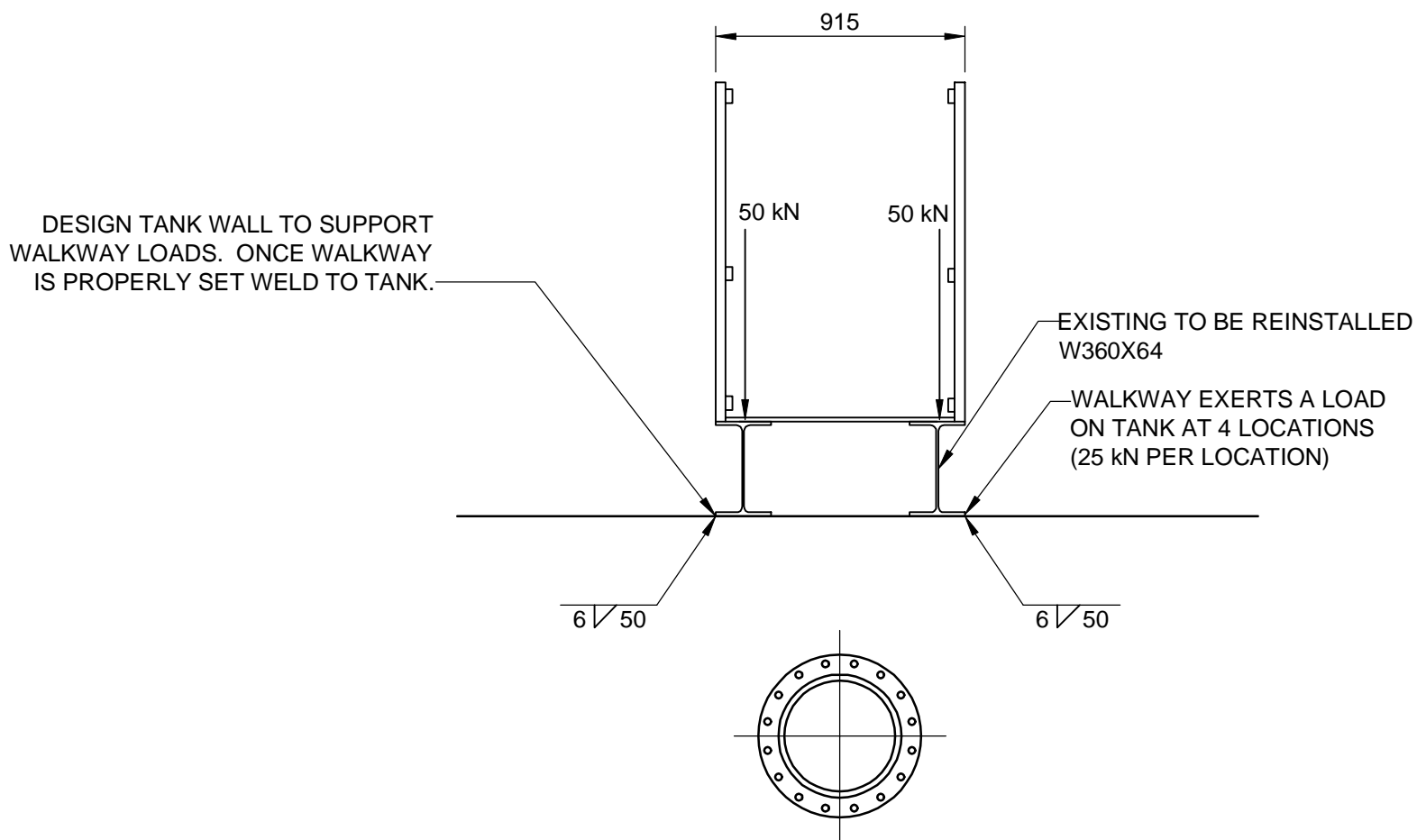
TANK 3A DETAIL

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R.014204.336	H06 of H07	B



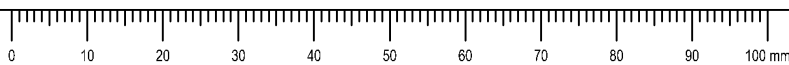
2 | WALKWAY STRUCTURAL LOADING PLAN

H04 0 500 1000 1500 mm SCALE 1:50



3 | WALKWAY STRUCTURAL LOADING DETAIL

H04 0 1000 2000 3000 mm SCALE 1:25

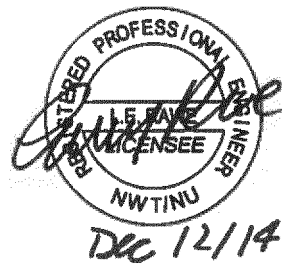


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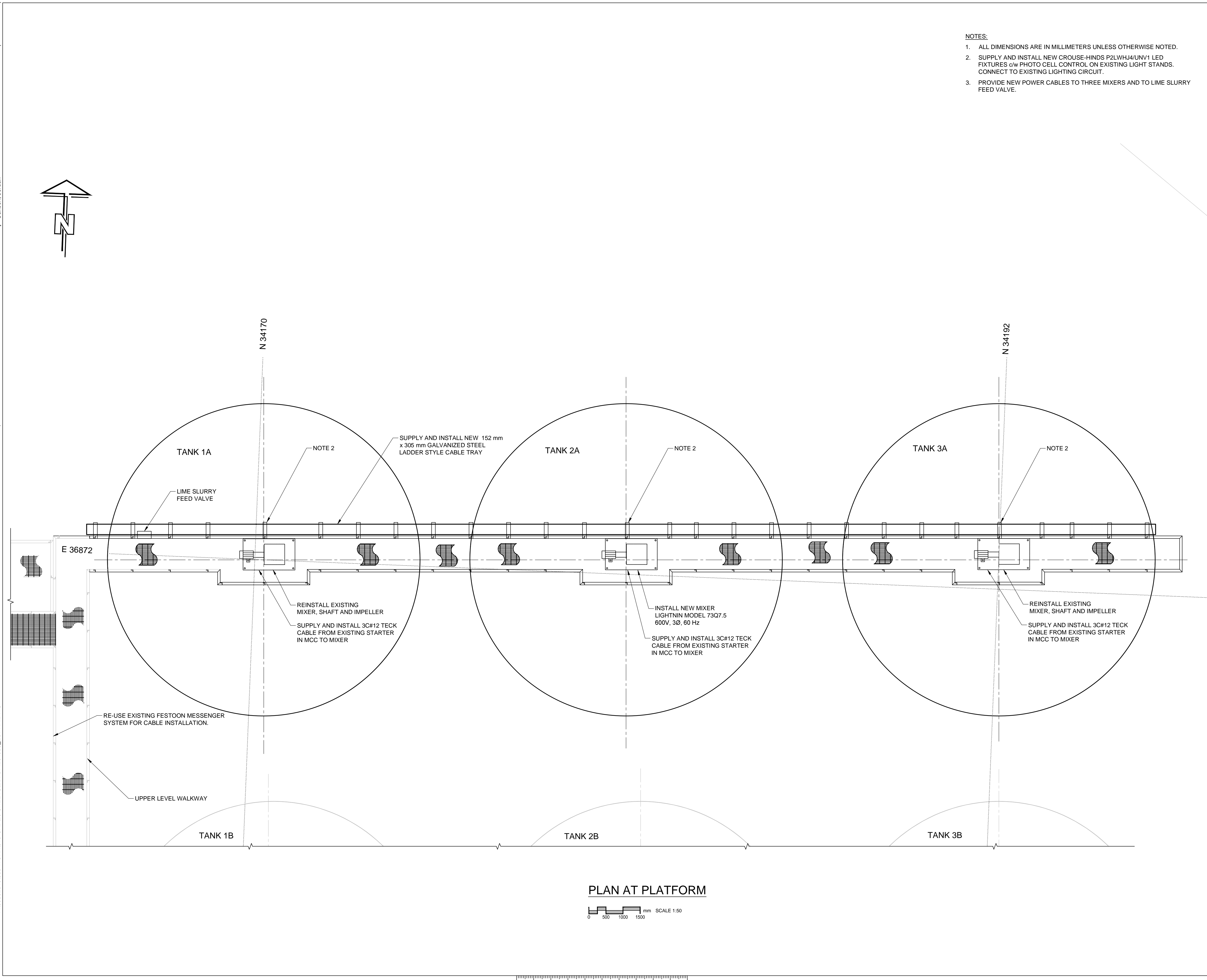
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DETAILS

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- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 2. SUPPLY AND INSTALL NEW CROUSE-HINDS P2LWHJ4/UNV1 LED FIXTURES c/w PHOTO CELL CONTROL ON EXISTING LIGHT STANDS. CONNECT TO EXISTING LIGHTING CIRCUIT.
 3. PROVIDE NEW POWER CABLES TO THREE MIXERS AND TO LIME SLURRY FEED VALVE.




Public Works and
Government Services
Canada


Travaux publics et
Services gouvernementaux
Canada

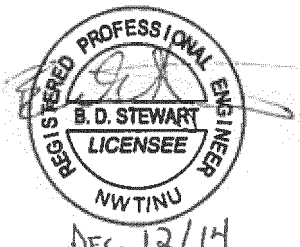
REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

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Revision/	Description/Description	Date/Date
C		
B	ISSUED FOR TENDER	14/12/12
A	ISSUED FOR 90% DESIGN REVIEW	14/11/18

Client/Client

PUBLIC WORKS
GOVERNMENT SERVICES
CANADA

Project title/Titre du projet
**GIANT MINE
REMEDIATION PROJECT**
**EFFLUENT TREATMENT PLANT
REACTOR TANKS**

Approved by/Approuvé par
B.B.
Designed by/Conçue par
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Drawn by/Dessiné par
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Client/Client
PWGSC
Drawing title/Titre du dessin
**ELECTRICAL
PLAN AT PLATFORM**

Project No/
No. du projet
R.014204.336

Sheet/Feuille
**E01
OF E01**

Revision no./
La Revision no.
B

A1 - 841 x 594

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