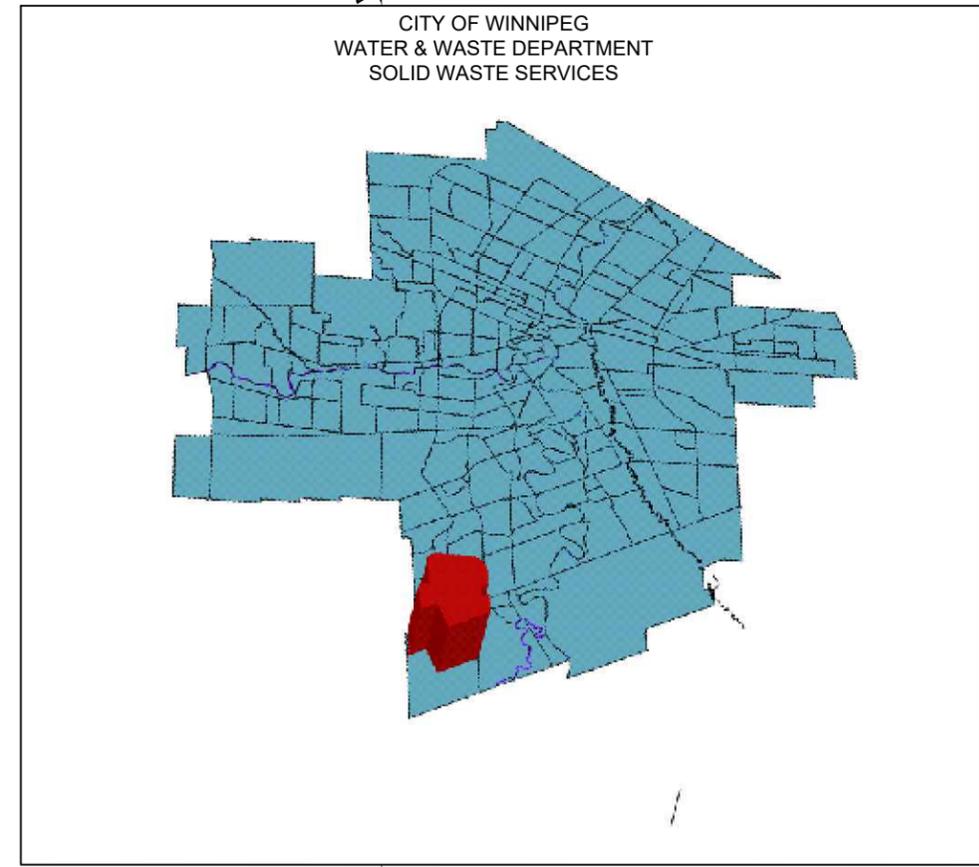
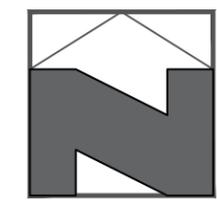
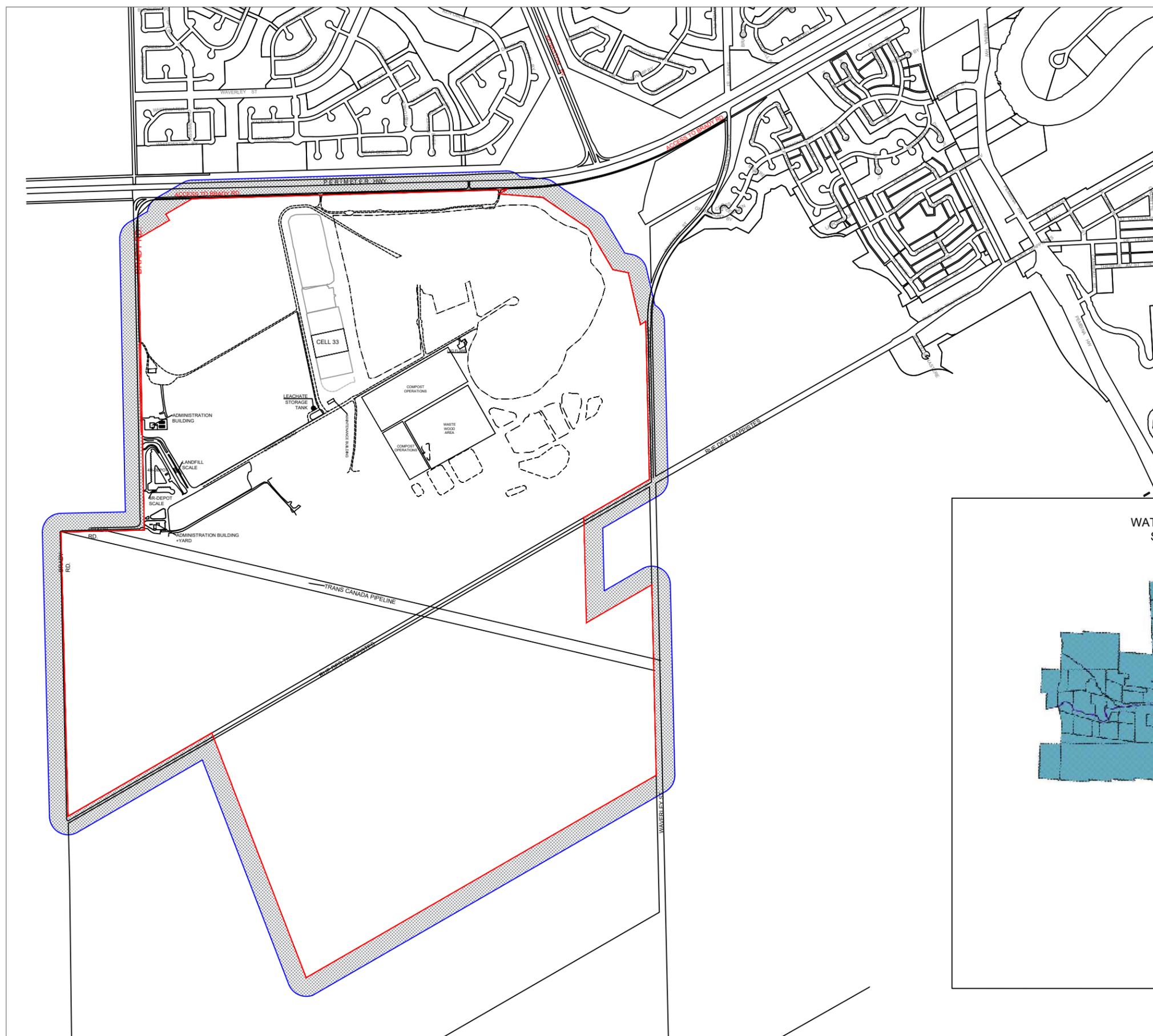
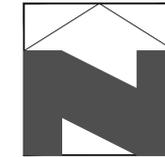
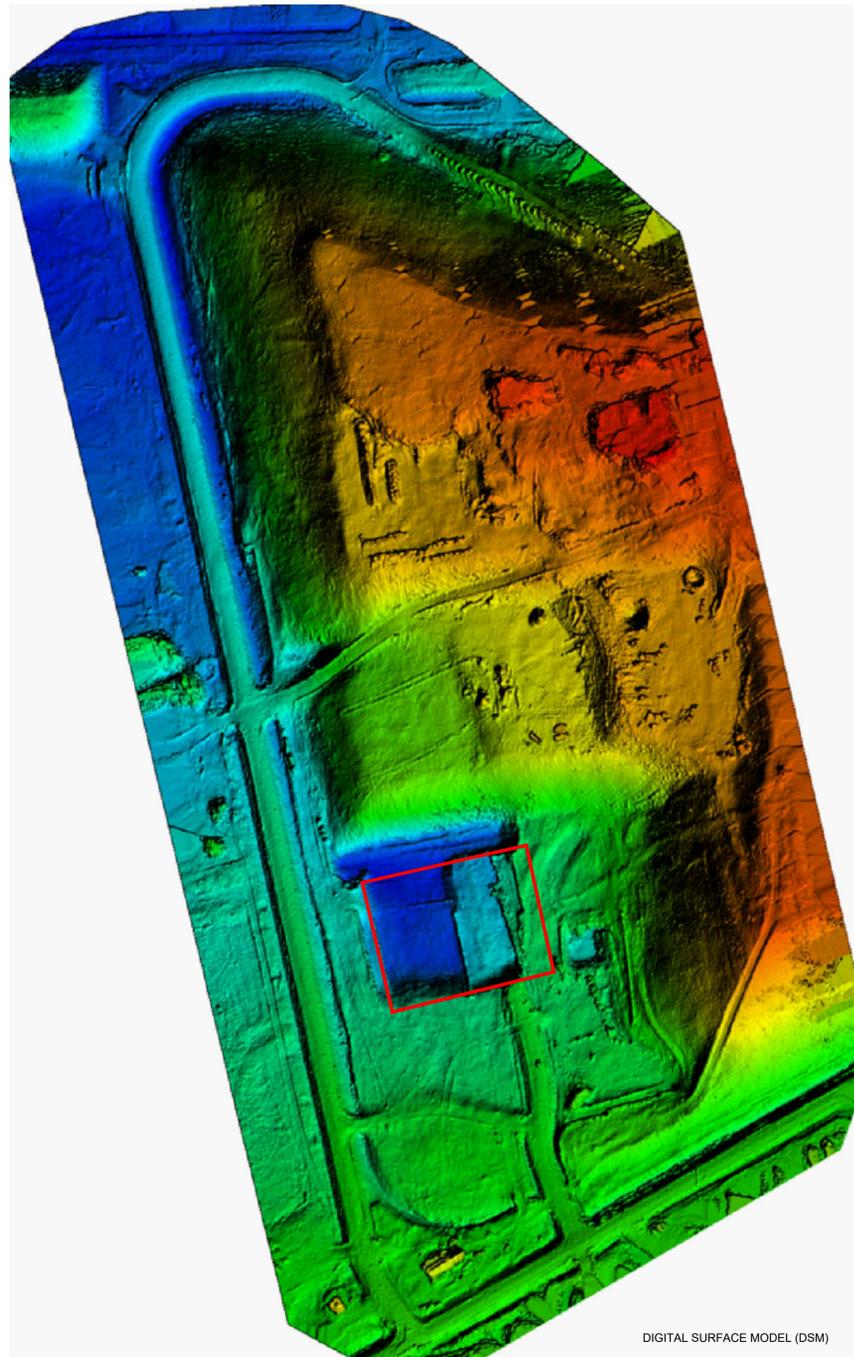
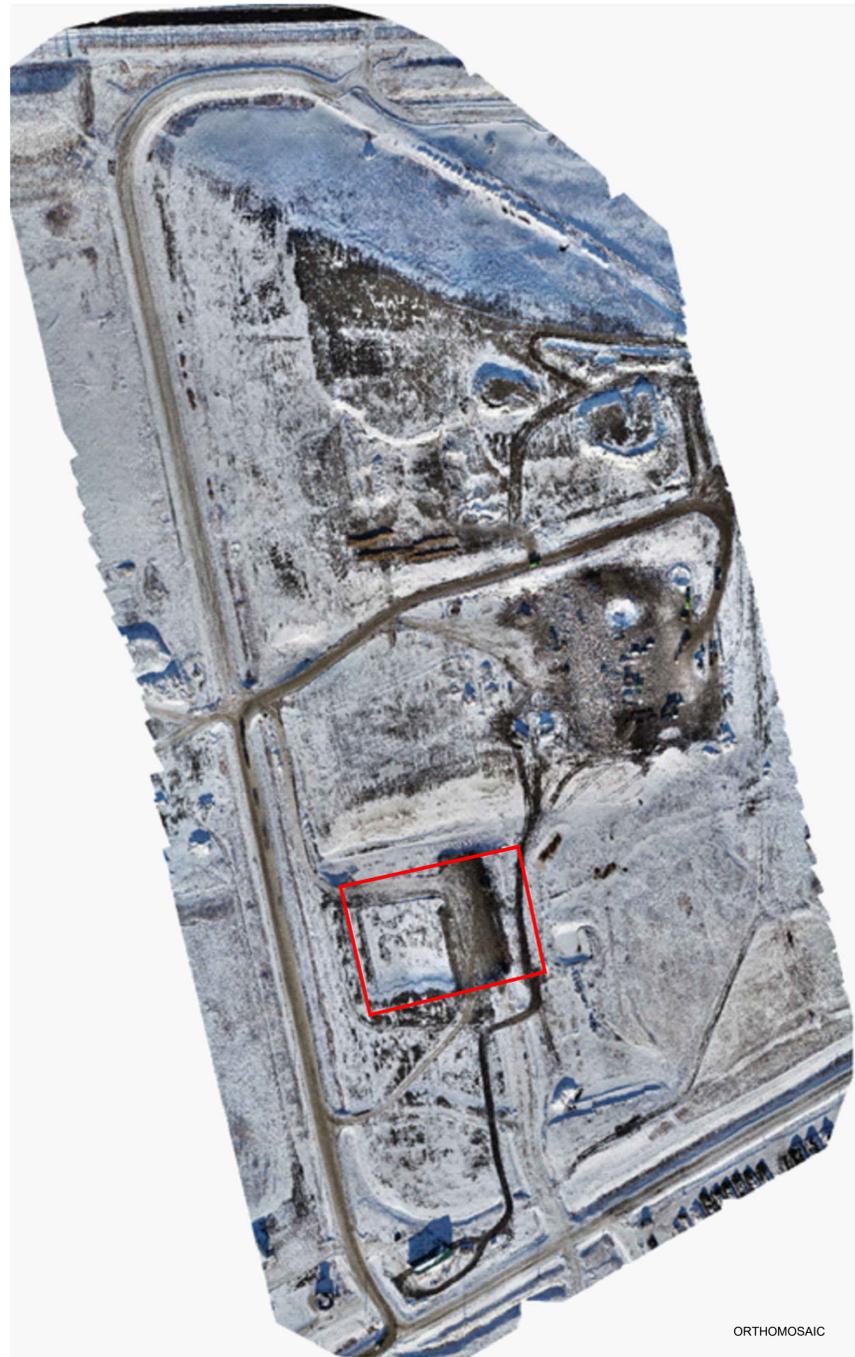


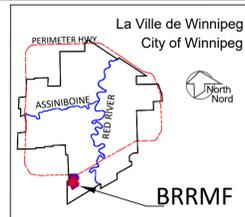
**BRADY ROAD RESOURCE
MANAGEMENT FACILITY
(BRRMF)
AREA A CONSTRUCTION CELL 33
TENDER No. 754-2020**





DRAWING INDEX

SHEET NUMBER	DRAWING TITLE
1	AREA A CONSTRUCTION: TITLE PAGE
2	AREA A CONSTRUCTION: INDEX PAGE
3	AREA A CONSTRUCTION: EXISTING CONDITIONS (2020)
4	AREA A CONSTRUCTION - CELL 33: SUBGRADE
5	AREA A CONSTRUCTION - CELL 33: LINER SYSTEM (TOP OF COMPACTED CLAY/HDPE)
6	AREA A CONSTRUCTION - CELL 33: LEACHATE COLLECTION SYSTEM (TOP OF GRANULAR)
7	AREA A CONSTRUCTION - CELL 33: CROSS-SECTIONS
8	AREA A CONSTRUCTION: LINER AND LEACHATE COLLECTION SYSTEM DETAILS
9	AREA A CONSTRUCTION: LEACHATE COLLECTION SYSTEM TRENCH AND CLEANOUT RISER PIPE DETAILS I
10	AREA A CONSTRUCTION: LEACHATE COLLECTION SYSTEM TRENCH AND CLEANOUT RISER PIPE DETAILS II
11	AREA A CONSTRUCTION: PERIMETER TIE-IN DETAILS I
12	AREA A CONSTRUCTION: PERIMETER TIE-IN DETAILS II
13	AREA A CONSTRUCTION: MISCELLANEOUS DETAILS
14	AREA A CONSTRUCTION - CELL 33: MANHOLE
15	AREA A CONSTRUCTION: MECHANICAL DETAILS



HATCH PATTERNS		
DESCRIPTION		
	NATIVE BACKFILL OR PREPARED SUBGRADE	
	WASTE	
	SAND DRAINAGE LAYER	
	GRANULAR ROADWAY BASE MATERIAL	
	GRANULAR DRAINAGE BLANKET	
	RE-COMPACTED CLAY	

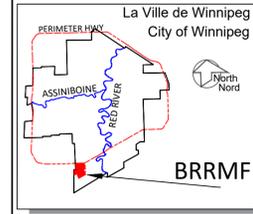
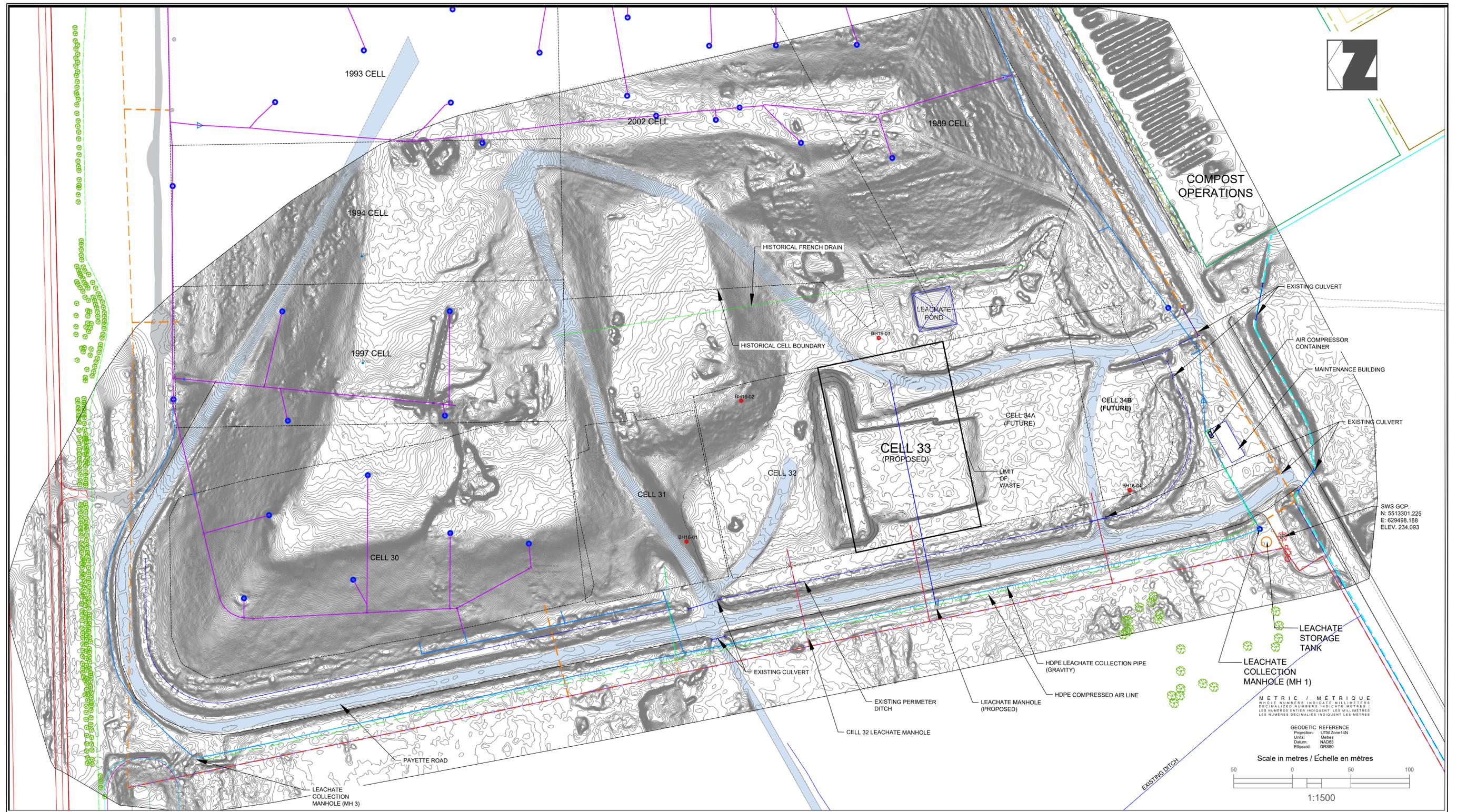
ABBREVIATIONS	
ELEV	ELEVATION
MIN	MINIMUM
N.I.C.	NOT IN CONTRACT

B.M.	SWS GCP N: 5 513 301 225	E: 629 498 188
ELEV.	234.093	
CONSTRUCTION COMPLETION DATE:		
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16 MO
NO.	REVISIONS	DATE BY

ENGINEER'S SEAL

ORIGINAL DRAWING
SEALED BY:
A.R. RANCHURA
2021/02/16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG WATER AND WASTE DEPARTMENT SOLID WASTE SERVICES			
DESIGNED BY	ARR	CHECKED BY	ARR
DRAWN BY	MO	APPROVED BY	ARR
SCALE: HORIZONTAL VERTICAL		RELEASED FOR CONSTRUCTION	
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)			SHEET- 2 OF 15
INDEX PAGE			CITY DRAWING NUMBER 1-0400A-D0025-001



LEGEND/LEGENDE

FENCE LINE	PROPERTY BOUNDARY	CELLS BOUNDARY
PERIMETER DITCH	LANDFILL ACCESS ROAD	CELL PROPOSED
MAJOR CONTOUR	LEACHATE COLLECTION PIPE	SOIL SAMPLES (BH-16-##)
MINOR CONTOUR	COMPRESSED AIR LINE	GROUND CONTROL
LANDFILL WELLS & LINES		LEACHATE COLLECTION MANHOLE

NOTES:

- EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
- CONTOURS REPRESENT BASE ELEVATION.
- ALL ELEVATION ARE REFERENCED TO GEODETTIC DATUM.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
- GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. SWS GCP N: 5 513 301.225 E: 629 498.188
ELEV. 234.093

CONSTRUCTION COMPLETION DATE:

NO.	ISSUED FOR REGULATORY COMPLIANCE	DATE	BY
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16	MO
	REVISIONS		

ENGINEER'S SEAL

ORIGINAL DRAWING SEALED BY
A.R. RAICHURA
2021/02/16

PLOT DATE: 2021 02 16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION - CELL 33
EXISTING CONDITIONS 2020

SHEET- 3 OF 15
CITY DRAWING NUMBER
1-0400A-C0087-001

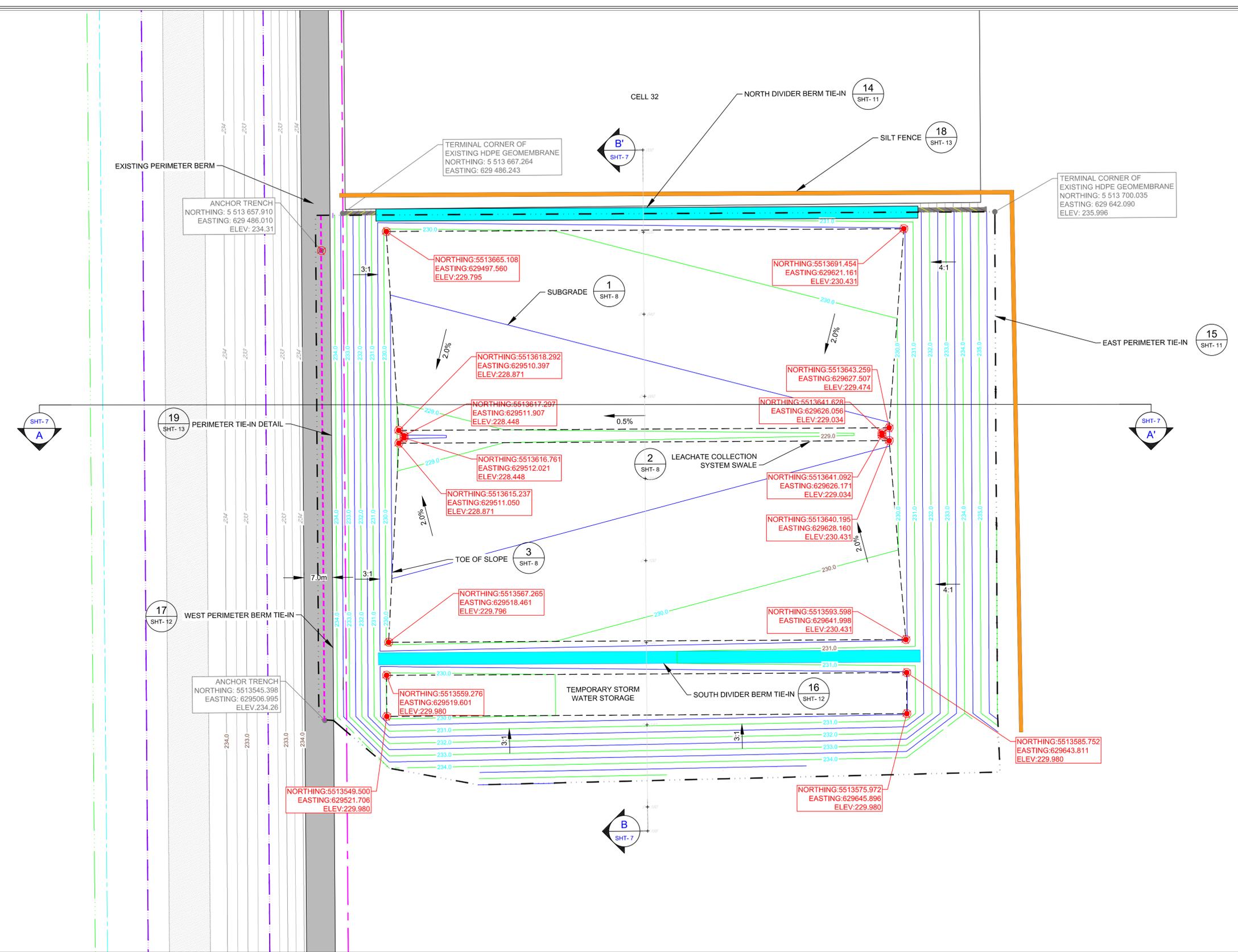
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DRAWN BY: MO	APPROVED BY: ARR
SCALE: HORIZONTAL 1:1500 VERTICAL	RELEASED FOR CONSTRUCTION

METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMÉROS ENTIERS INDICENT LES MILLIMÈTRES
LES NUMÉROS DÉCIMAUX INDICENT LES MÈTRES

GEODETTIC REFERENCE
Projection: UTM Zone 14N
Units: Metres
Datum: NAD83
Ellipsoid: GRS80

Scale in metres / Échelle en mètres
1:1500

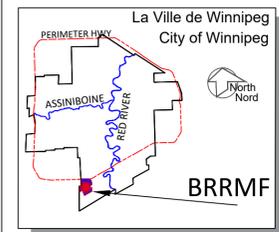
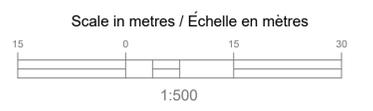
SWS GCP:
N: 5513301.225
E: 629498.188
ELEV. 234.093



- WARNING**
1. NOTIFY THE LANDFILL SUPERVISOR OF THE PROPOSED LOCATION OF EXCAVATION.
 2. TAKE PRECAUTION TO AVOID DAMAGE TO LEACHATE AND GAS INSTALLATIONS.
 3. TAKE PRECAUTION TO AVOID DAMAGE TO EXISTING LINER SYSTEMS.

METRIC / MÉTRIQUE
 WHOLE NUMBERS INDICATE MILLIMETERS
 DECIMALIZED NUMBERS INDICATE METRES /
 LES NUMEROS ENTIER INDIQUENT LES MILLIMETRES
 LES NUMEROS DECIMALISES INDIQUENT LES METRES

GEODETTIC REFERENCE
 Projection: UTM Zone14N
 Units: Metres
 Datum: NAD83
 Ellipsoid: GRS80



LEGEND/LEGENDE

	PERIMETER DITCH		LIMIT OF CONSTRUCTION		LEACHATE COLLECTION HEADER
	PROPOSED MAJOR CONTOUR		LIMIT OF WASTE		EXISTING AIR LINE
	PROPOSED MINOR CONTOUR		SILT FENCE		PERIMETER BERM
	EXISTING MAJOR CONTOUR		LANDFILL ACCESS ROAD		ANCHOR TRENCH
	EXISTING MINOR CONTOUR				TEMPORARY DIVERSION BERM
	TOE OF SLOPE				

- NOTES:**
1. EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
 2. CONTOURS REPRESENT BASE ELEVATION.
 3. ALL ELEVATION ARE REFERENCED TO GEODETTIC DATUM.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
 5. GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. ELEV.	SWS GCP N: 5 513 301.225	E: 629 498.188
	234.093	
CONSTRUCTION COMPLETION DATE:		
ENGINEER'S SEAL		
ORIGINAL DRAWING SEALED BY: A.R. RAICHURA 2021/02/16		
NO.	REVISIONS	DATE BY
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16 MO

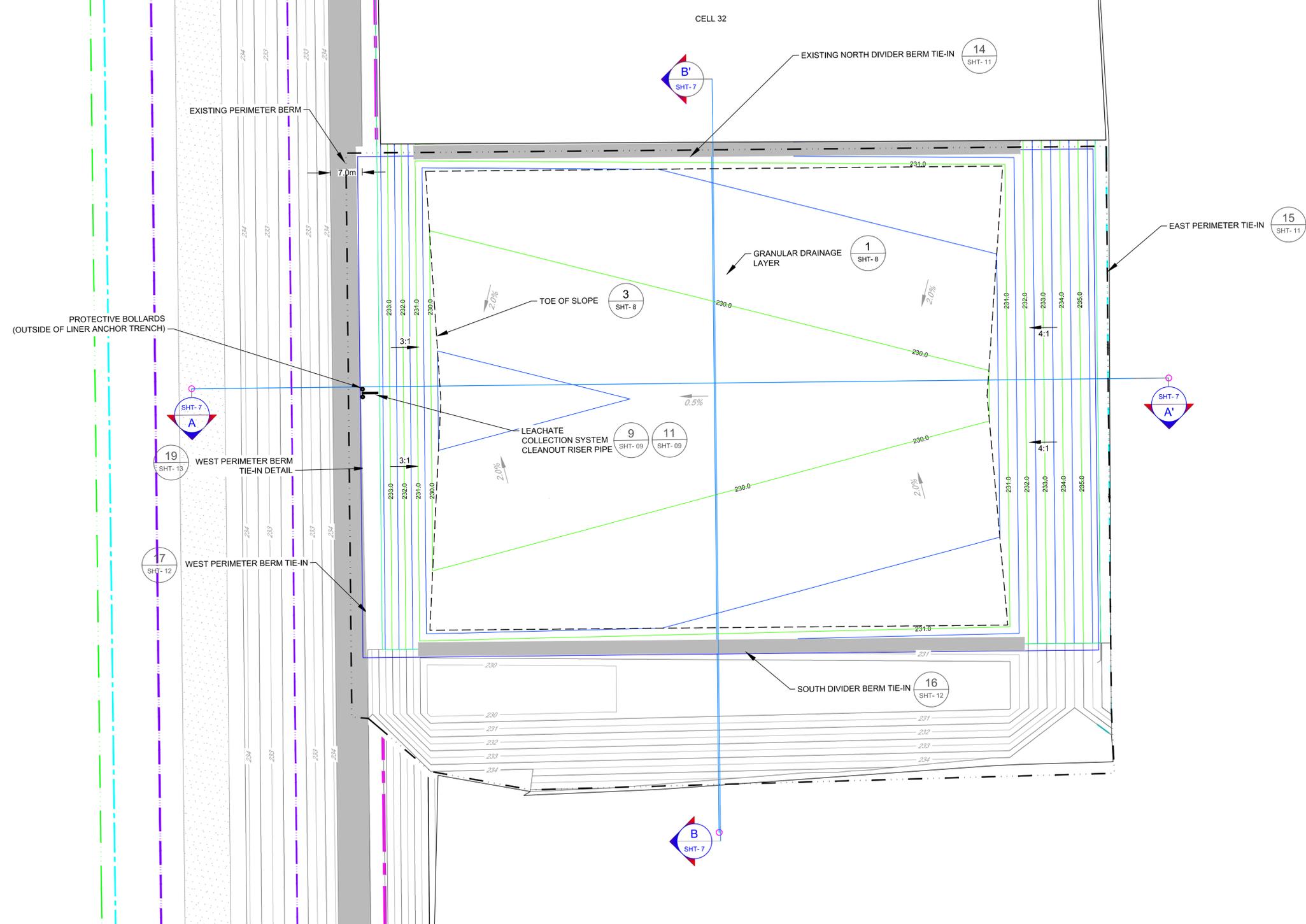
DESIGNED BY	ARR	CHECKED BY	ARR
DRAWN BY	MO	APPROVED BY	ARR
SCALE:	HORIZONTAL 1:500	RELEASED FOR CONSTRUCTION	
	VERTICAL		

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
 WATER AND WASTE DEPARTMENT
 SOLID WASTE SERVICES

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
 AREA A CONSTRUCTION -CELL 33

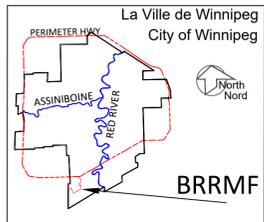
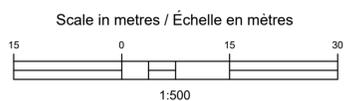
SHEET - 4 OF 15
 CITY DRAWING NUMBER 1-0400A-C0088-001

SUBGRADE



METRIC / MÉTRIQUE
 WHOLE NUMBERS INDICATE MILLIMETERS
 DECIMALIZED NUMBERS INDICATE METRES /
 LES NUMÉROS ENTIERS INDICENT LES MILLIMÈTRES
 LES NUMÉROS DÉCIMALIÉS INDICENT LES MÈTRES

GEODETTIC REFERENCE
 Projection: UTM Zone 14N
 Units: Metres
 Datum: NAD83
 Ellipsoid: GRS80



LEGEND/LEGENDE

233.00	PROPOSED MAJOR CONTOUR		PERIMETER DITCH		LEACHATE COLLECTION HEADER
	PROPOSED MINOR CONTOUR		LIMIT OF WASTE		EXISTING AIR LINE
	EXISTING MAJOR CONTOUR		LANDFILL ACCESS ROAD		PERIMETER BERM
	EXISTING MINOR CONTOUR				ANCHOR TRENCH
	TOE OF SLOPE				
	LIMIT OF CONSTRUCTION				

- NOTES:**
- EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
 - CONTOURS REPRESENT BASE ELEVATION.
 - ALL ELEVATION ARE REFERENCED TO GEODETTIC DATUM.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
 - GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. ELEV.	SWS GCP N: 5 513 301.225	E: 629 498.188
CONSTRUCTION COMPLETION DATE:		
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16 MO
NO.	REVISIONS	DATE BY

ENGINEER'S SEAL

ORIGINAL DRAWING SEALED BY:
 A.R. RAICHURA
 2021/02/16

PLOT DATE: 2021 02 16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
 WATER AND WASTE DEPARTMENT
 SOLID WASTE SERVICES

DESIGNED BY: ARR
 CHECKED BY: ARR

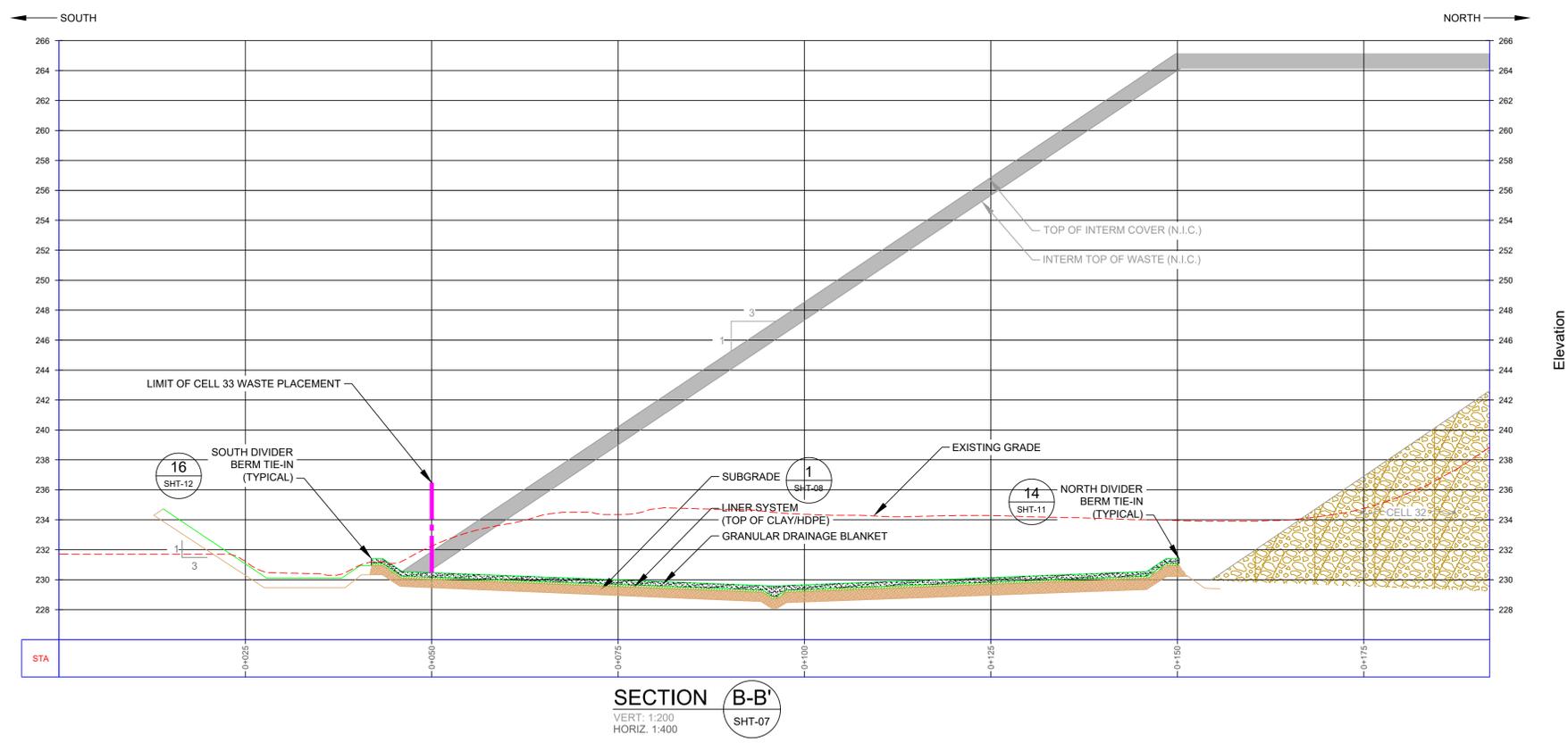
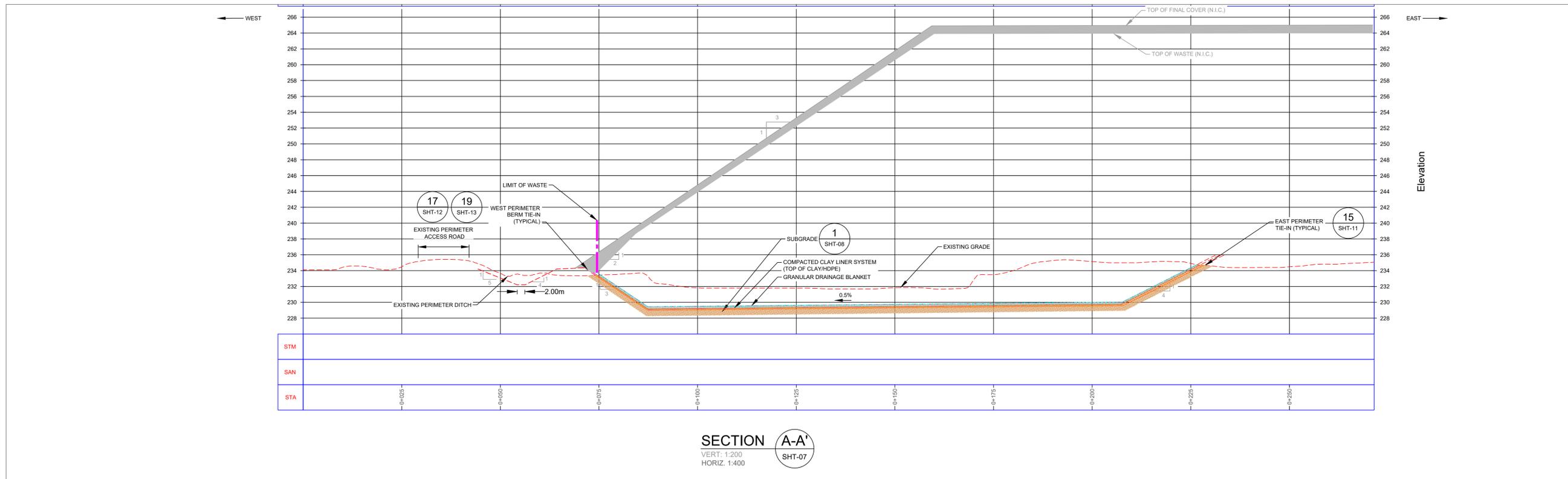
DRAWN BY: MO
 APPROVED BY: ARR

SCALE: HORIZONTAL 1:500
 VERTICAL

RELEASED FOR CONSTRUCTION

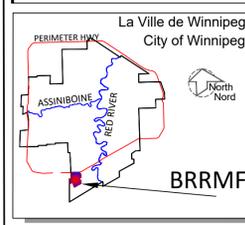
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
 AREA A CONSTRUCTION - CELL 33
 LEACHATE COLLECTION SYSTEM (TOP OF GRANULAR)

SHEET-6 OF 15
 CITY DRAWING NUMBER 1-0400A-C0090-001



METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMÉROS ENTIERS INDIQUENT LES MILLIMÈTRES
LES NUMÉROS DÉCIMALIÉS INDIQUENT LES MÈTRES

GEODETIC REFERENCE
Projection: UTM Zone14N
Units: Metres
Datum: NAD83
Ellipsoid: GRS80



LEGEND/LÉGENDE

	COMPACTED BEDDING		WASTE
	COMPACTED CLAY LINER		HDPE GEOMEMBRANE (SMOOTH)
	NON-WOVEN GEOTEXTILE (FILTER)		NON-WOVEN GEOTEXTILE (CUSHION)
	COMPACTED CLAY COVER		PROFILE DIGITAL SURFACE MODEL (AUG. 2020)

NOTES:

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- ALL ELEVATION ARE REFERENCED TO GEODETIC DATUM.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
- GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M.	SWS GCP N: 5 513 301.225	E: 629 498.188
ELEV.	234.093	
CONSTRUCTION COMPLETION DATE:		
NO.	REVISIONS	DATE
1	ISSUED FOR REGULATORY COMPLIANCE	02/25/2019
		MO

ENGINEER'S SEAL

ORIGINAL DRAWING
SEALED BY:
A.R. RACHORA
2021/02/16

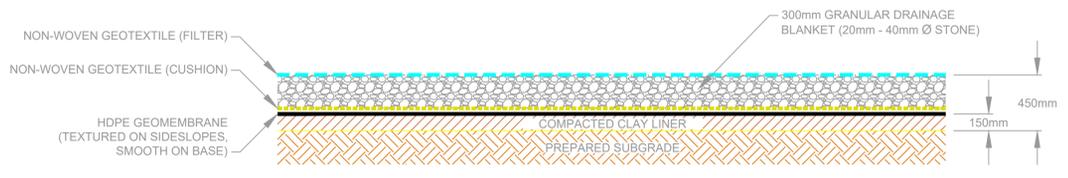
THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

DESIGNED BY: ARR	CHECKED BY: ARR
DRAWN BY: MO	APPROVED BY:
SCALE: HORIZONTAL AS NOTED	RELEASED FOR CONSTRUCTION
VERTICAL AS NOTED	

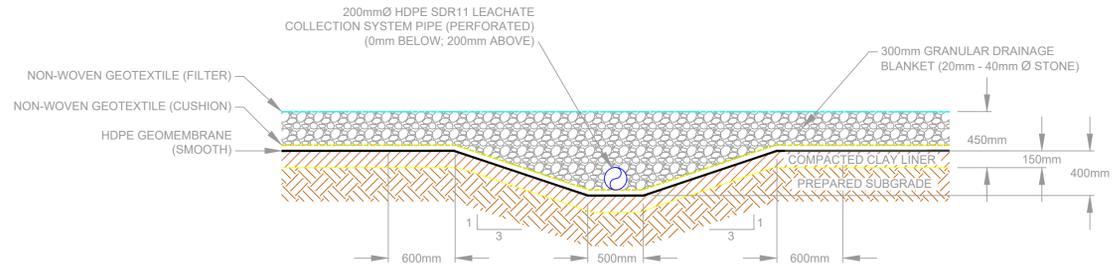
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION -CELL 33

CROSS-SECTIONS

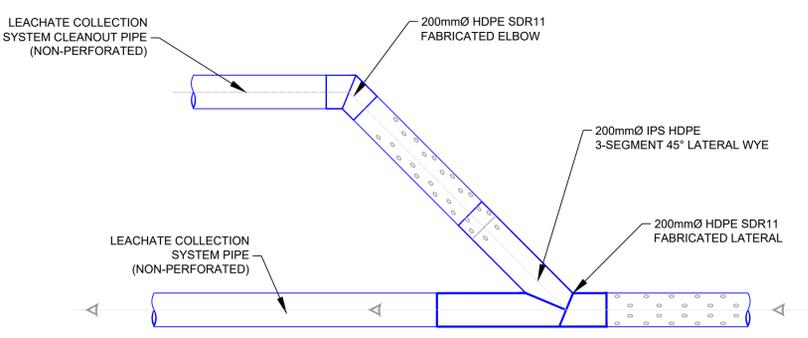
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CITY DRAWING NUMBER
1-0400A-C0091-001



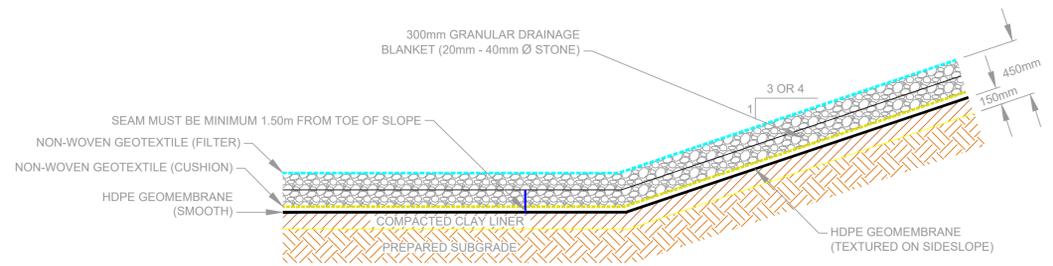
DETAIL 1 LINER SYSTEM
1:30 SHT-08



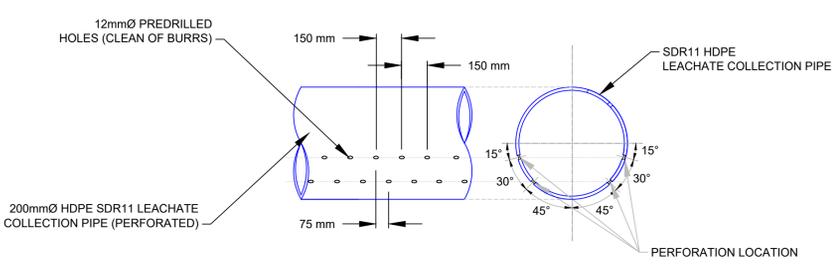
DETAIL 2 LEACHATE COLLECTION SYSTEM PIPE AND SWALE (TYPICAL)
1:30 SHT-08



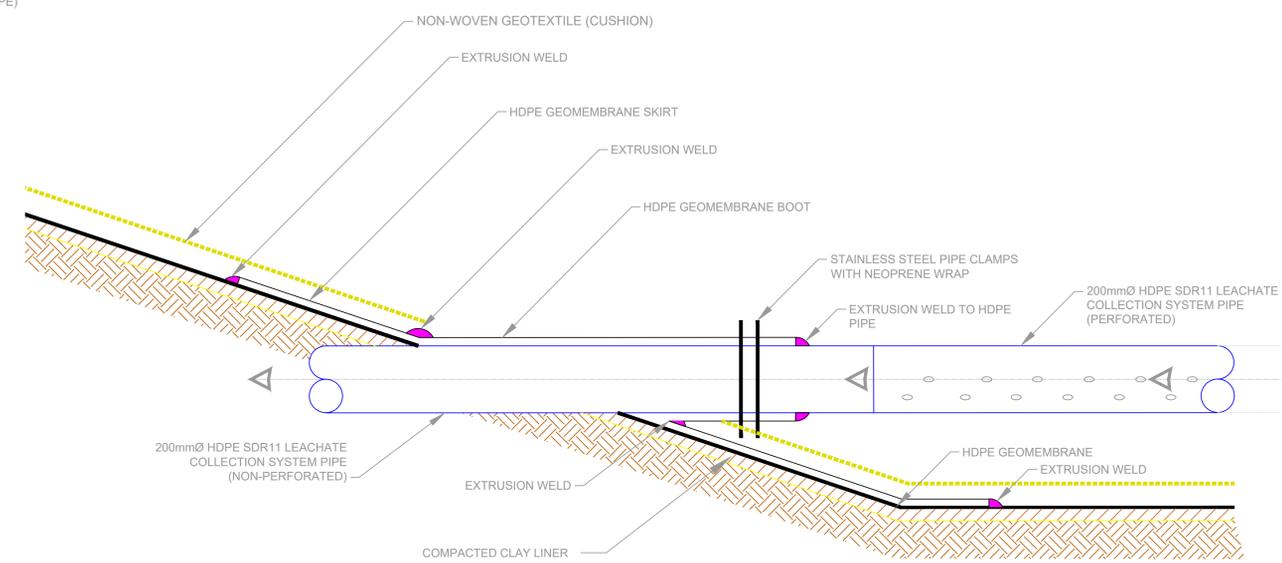
DETAIL 5 LEACHATE COLLECTION SYSTEM CLEANOUT RISER PIPE TO LEACHATE COLLECTION SYSTEM MANHOLE (IN TRENCH)
1:20 SHT-08



DETAIL 3 LINER SYSTEM (TOE OF SLOPE)
1:30 SHT-08



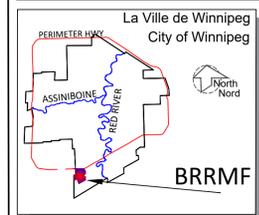
DETAIL 4 LEACHATE COLLECTION SYSTEM PIPE PERFORATIONS
NTS SHT-08



DETAIL 6 HDPE GEOMEMBRANE BOOT
NTS SHT-08

METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMEROS ENTIER INDIQUENT LES MILLIMETRES
LES NUMEROS DECIMALISES INDIQUENT LES METRES

GEODETIC REFERENCE
Projection: UTM Zone14N
Units: Metres
Datum: NAD83
Ellipsoid: GRS80



LEGEND/LEGENDE

	COMPACTED CLAY LINER		HDPE GEOMEMBRANE (SMOOTH)
	GRANULAR DRAINAGE		NON-WOVEN GEOTEXTILE (FILTER)
	COMPACTED BACKFILL		NON-WOVEN GEOTEXTILE (CUSHION)
	COMPACTED NATIVE SUBGRADE MATERIAL		

NOTES:

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- GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. ELEV.	SWS GCP N: 5 513 301.225 E: 629 498.188 234.093		
CONSTRUCTION COMPLETION DATE:			
DESIGNED BY	ARR		
CHECKED BY	ARR		
DRAWN BY	MO		
APPROVED BY	ARR		
SCALE:	AS NOTED		
HORIZONTAL	AS NOTED		
VERTICAL	AS NOTED		
RELEASED FOR CONSTRUCTION			
1	ISSUED FOR REGULATORY COMPLIANCE	MO	
NO.	REVISIONS	DATE	BY

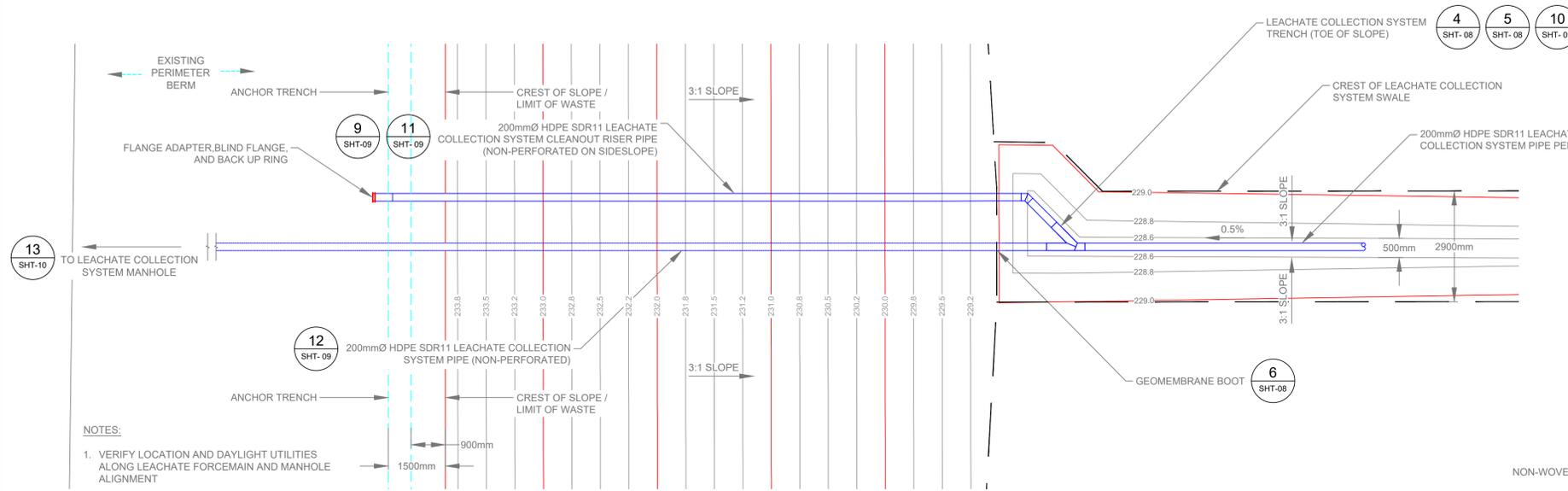
ENGINEER'S SEAL

ORIGINAL DRAWING SEALED BY:
A.R. RAJCHURA
2021/02/16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

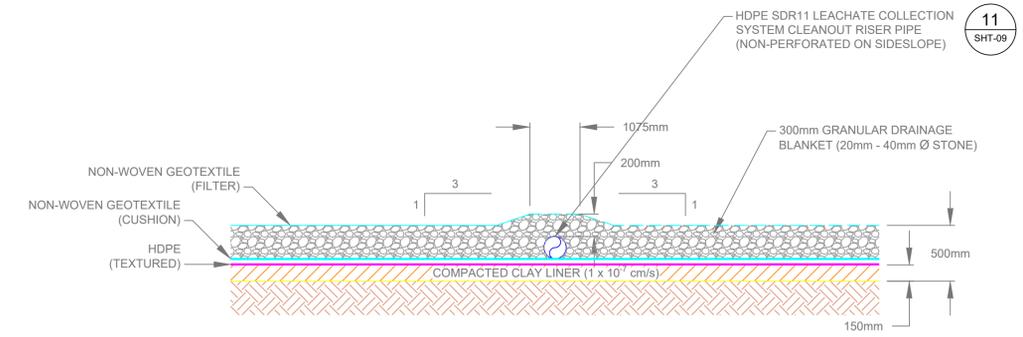
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRMF)
AREA A CONSTRUCTION - CELL 33
LINER AND LEACHATE COLLECTION SYSTEM DETAILS

SHEET- 8 OF 15
CITY DRAWING NUMBER
1-0400A-C0092-001

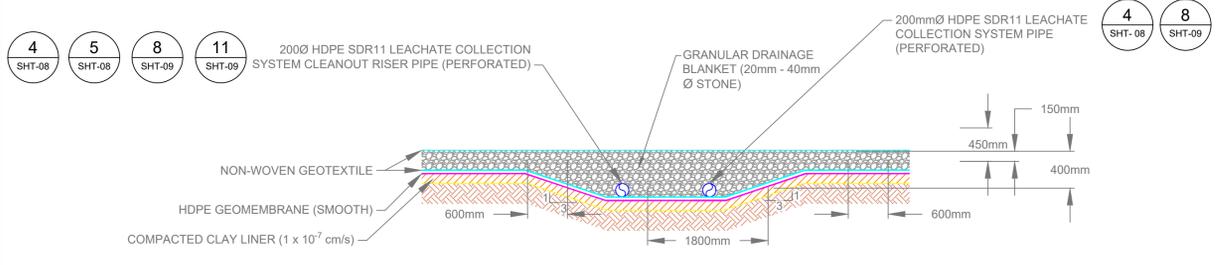


NOTES:
1. VERIFY LOCATION AND DAYLIGHT UTILITIES ALONG LEACHATE FORCEMAIN AND MANHOLE ALIGNMENT

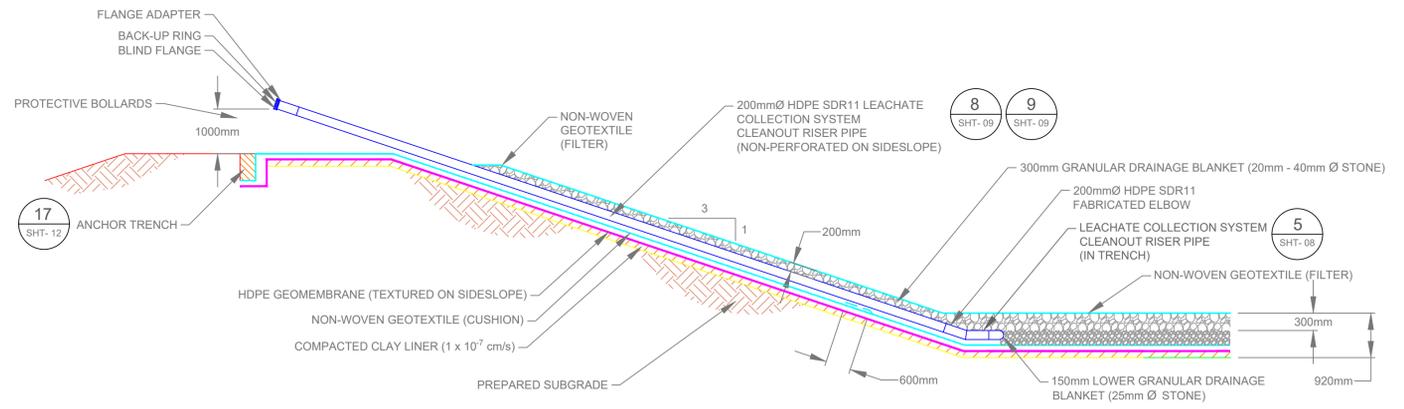
DETAIL 8 LEACHATE COLLECTION SYSTEM (TOE OF SLOPE)
1:50



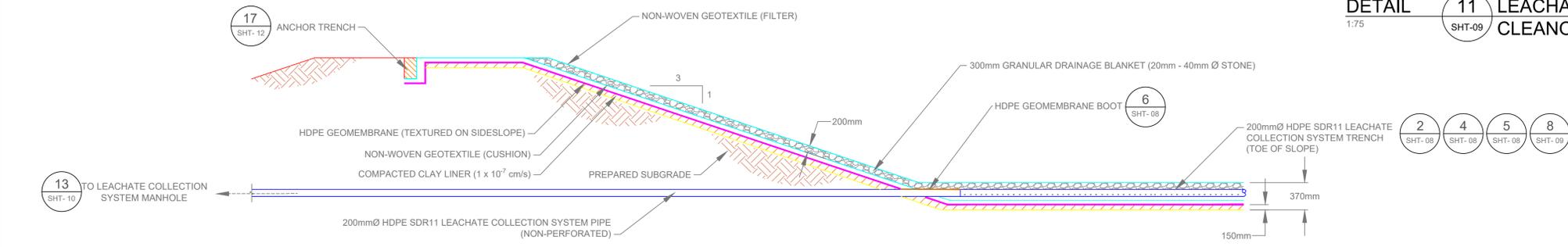
DETAIL 9 LEACHATE COLLECTION SYSTEM CLEANOUT RISER PIPE ON SIDESLOPE
1:30



DETAIL 10 LEACHATE COLLECTION SYSTEM SWALE (TOE OF SLOPE)
1:50



DETAIL 11 LEACHATE COLLECTION SYSTEM CLEANOUT RISER PIPE
1:75



DETAIL 12 LEACHATE COLLECTION SYSTEM PIPE
1:75

METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMÉROS ENTIERS INDICENT LES MILLIMÈTRES
LES NUMÉROS DÉCIMALIÉS INDICENT LES MÈTRES

GEODEIC REFERENCE
Projection: UTM Zone 14N
Units: Metres
Datum: NAD83
Ellipsoid: GR80



LEGEND/LEGENDE

	GRANULAR DRAINAGE		HDPE GEOMEMBRANE (SMOOTH)
	COMPACTED CLAY LINER		NON-WOVEN GEOTEXTILE (FILTER)
	COMPACTED BACKFILL		NON-WOVEN GEOTEXTILE (CUSHION)
			COMPACTED NATIVE SUBGRADE MATERIAL

NOTES:
1. EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
2. CONTOURS REPRESENT BASE ELEVATION.
3. ALL ELEVATION ARE REFERENCED TO GEODEIC DATUM.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
5. GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M.	SWS GCP N: 5 513 301.225	E: 629 498.188
ELEV.	234.093	
CONSTRUCTION COMPLETION DATE:		
NO.	REVISIONS	DATE BY
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16 MO

ENGINEER'S SEAL

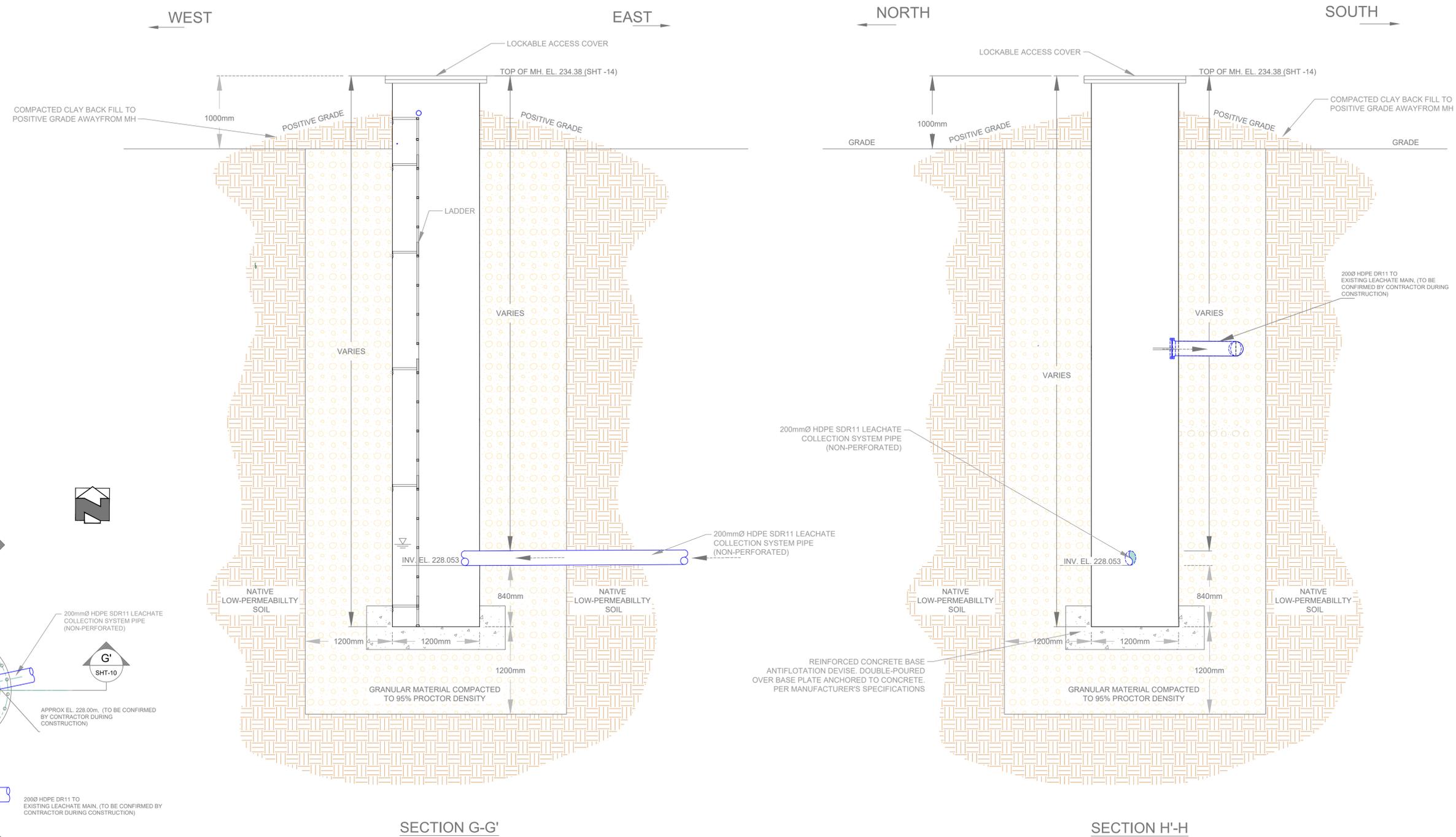
ORIGINAL DRAWING SEALED BY:
A.R. RAOJHURA
2021/02/16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

DESIGNED BY: ARR
CHECKED BY: ARR
DRAWN BY: MO
APPROVED BY: ARR
SCALE: HORIZONTAL AS NOTED, VERTICAL AS NOTED
RELEASED FOR CONSTRUCTION

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION - CELL 33
LEACHATE COLLECTION SYSTEM TRENCH AND CLEANOUT RISER PIPE DETAILS

SHEET-9 OF 15
CITY DRAWING NUMBER: 1-0400A-C0093-001



DETAIL 13 LEACHATE COLLECTION SYSTEM MANHOLE
 NTS SHT-10

METRIC / MÉTRIQUE
 WHOLE NUMBERS INDICATE MILLIMETERS
 DECIMALIZED NUMBERS INDICATE METRES /
 LES NUMEROS ENTIERS INDIOUENT LES MILLIMETRES
 LES NUMEROS DECIMALIES INDIQUENT LES METRES

GEODETIC REFERENCE
 Projection: UTM Zone14N
 Units: Metres
 Datum: NAD83
 Ellipsoid: GRS80



LEGEND/LEGENDE

	REINFORCED CONCRETE		COMPACTED NATIVE SUBGRADE MATERIAL
	GRANULAR MATERIAL COMPACTED		COMPACTED BACKFILL

NOTES:

- MANHOLE NOT SUITED FOR TRAFFIC LOADING.
- PUMPING SYSTEMS NOT SHOWN FOR CLARITY. LEACHATE PUMP AND INTERNAL PIPING DETAILS PROVIDED ON MECHANICAL DRAWINGS AND VERIFY LOCATION AND DAYLIGHT UTILITIES ALONG LEACHATE FOREMAIN AND MANHOLE ALIGNMENT.
- ALL PIPE ELEVATION (ESP. MANHOLE CONNECTIONS) ARE APPROXIMATE AND TO BE CONFIRMED BY THE CONTRACTOR DURING CONSTRUCTION.

B.M. ELEV. 234.093	SWS GCP N: 5 513 301 225 E: 629 498 188		
CONSTRUCTION COMPLETION DATE:			
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16	MO
NO.	REVISIONS	DATE	BY

ENGINEER'S SEAL

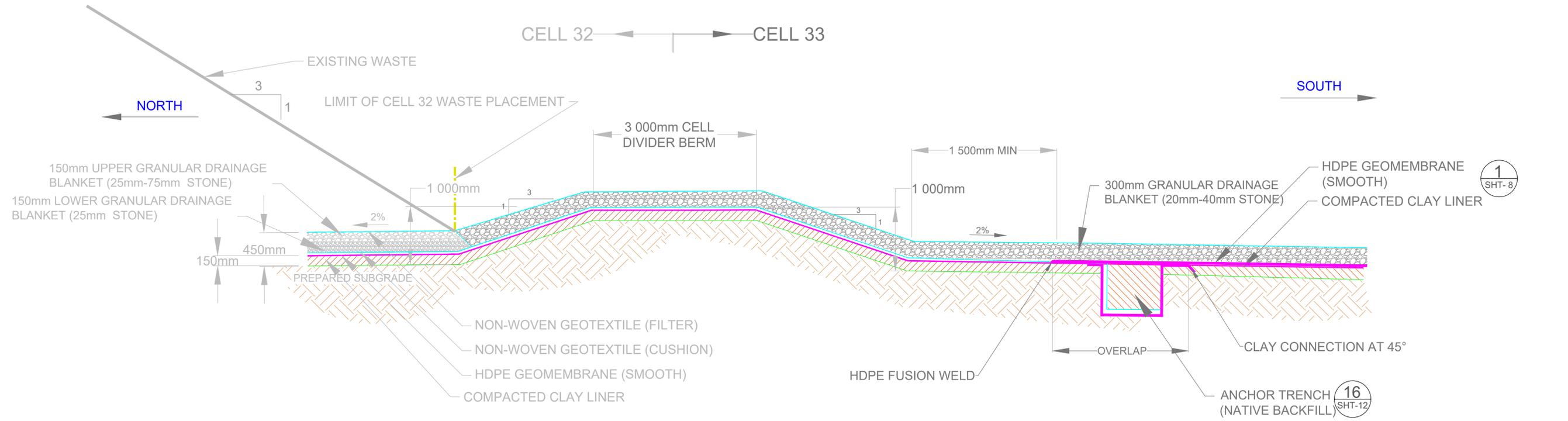
ORIGINAL DRAWING SEALED BY:
 A.R. RUCHIRA
 2021/02/16

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
 WATER AND WASTE DEPARTMENT
 SOLID WASTE SERVICES

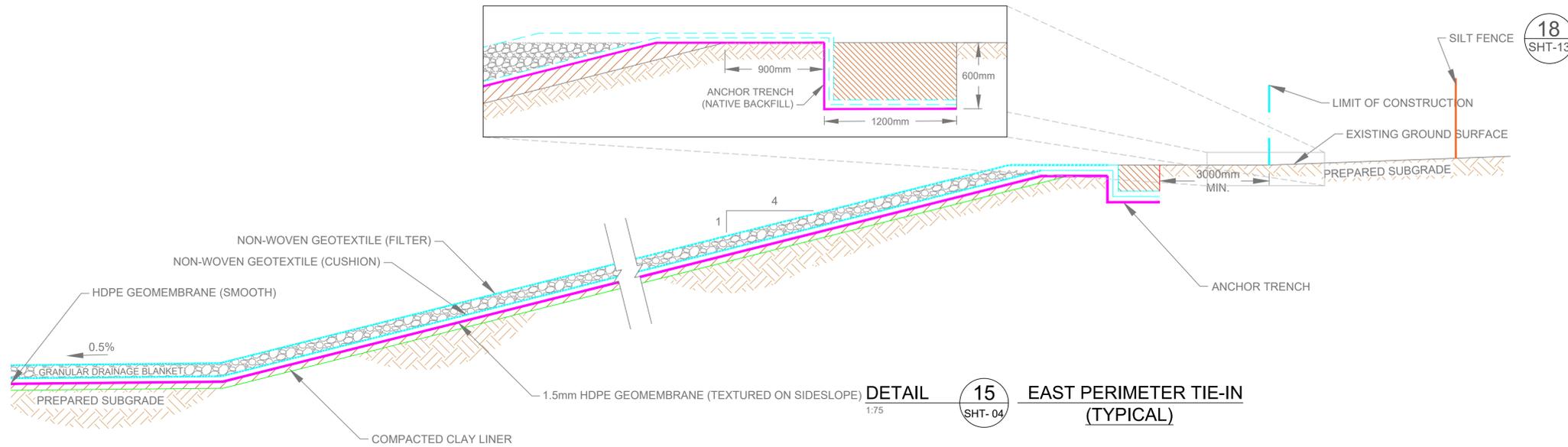
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
 AREA A CONSTRUCTION - CELL 33

LEACHATE COLLECTION SYSTEM TRENCH AND CLEANOUT RISER PIPE DETAILS II

SHEET 10 OF 15
 CITY DRAWING NUMBER
 1-0400A-C0094-001.dwg



DETAIL 14 NORTH DIVIDER BERM TIE-IN (TYPICAL) NTS SHT-04



DETAIL 15 EAST PERIMETER TIE-IN (TYPICAL) 1:75 SHT-04

- WARNING
1. NOTIFY THE LANDFILL SUPERVISOR OF THE PROPOSED LOCATION OF EXCAVATION.
 2. TAKE PRECAUTION TO AVOID DAMAGE TO LEACHATE AND GAS COLLECTION INSTALLATIONS.
 3. TAKE PRECAUTION TO AVOID DAMAGE TO EXISTING LINER SYSTEMS.

METRIC / MÉTRIQUE
 WHOLE NUMBERS INDICATE MILLIMETERS /
 DECIMALIZED NUMBERS INDICATE METRES /
 LES NUMÉROS ENTIERS INDIQUENT LES MILLIMÈTRES /
 LES NUMÉROS DÉCIMAUX INDIQUENT LES MÈTRES

GEODETTIC REFERENCE
 Projection: UTM Zone14N
 Units: Metres
 Datum: NAD83
 Ellipsoid: GRS80



LEGEND/LEGENDE

	COMPACTED BEDDING		COMPACTED NATIVE-SUBGRADE MATERIAL		HDPE GEOMEMBRANE (SMOOTH)
	COMPACTED CLAY LINER		COMPACTED BACKFILL		NON-WOVEN GEOTEXTILE (FILTER)
	GRANULAR DRAINAGE				NON-WOVEN GEOTEXTILE (CUSHION)

- NOTES:
1. EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
 2. CONTOURS REPRESENT BASE ELEVATION.
 3. ALL ELEVATION ARE REFERENCED TO GEODETTIC DATUM.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
 5. GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. SWS GCP N: 5 513 301 225 E: 629 498 188
 ELEV. 234.993

CONSTRUCTION COMPLETION DATE:

NO.	REVISIONS	DATE	BY
1	ISSUED FOR REGULATORY COMPLIANCE	2021 02 16	MO

ENGINEER'S SEAL

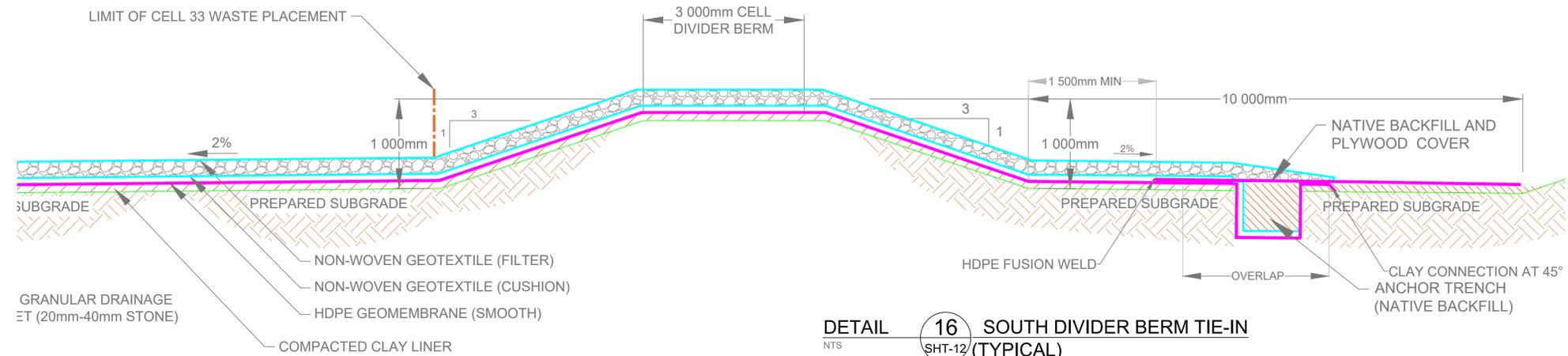
ORIGINAL DRAWING SEALED BY: A.R. RAICHURA

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
 WATER AND WASTE DEPARTMENT
 SOLID WASTE SERVICES

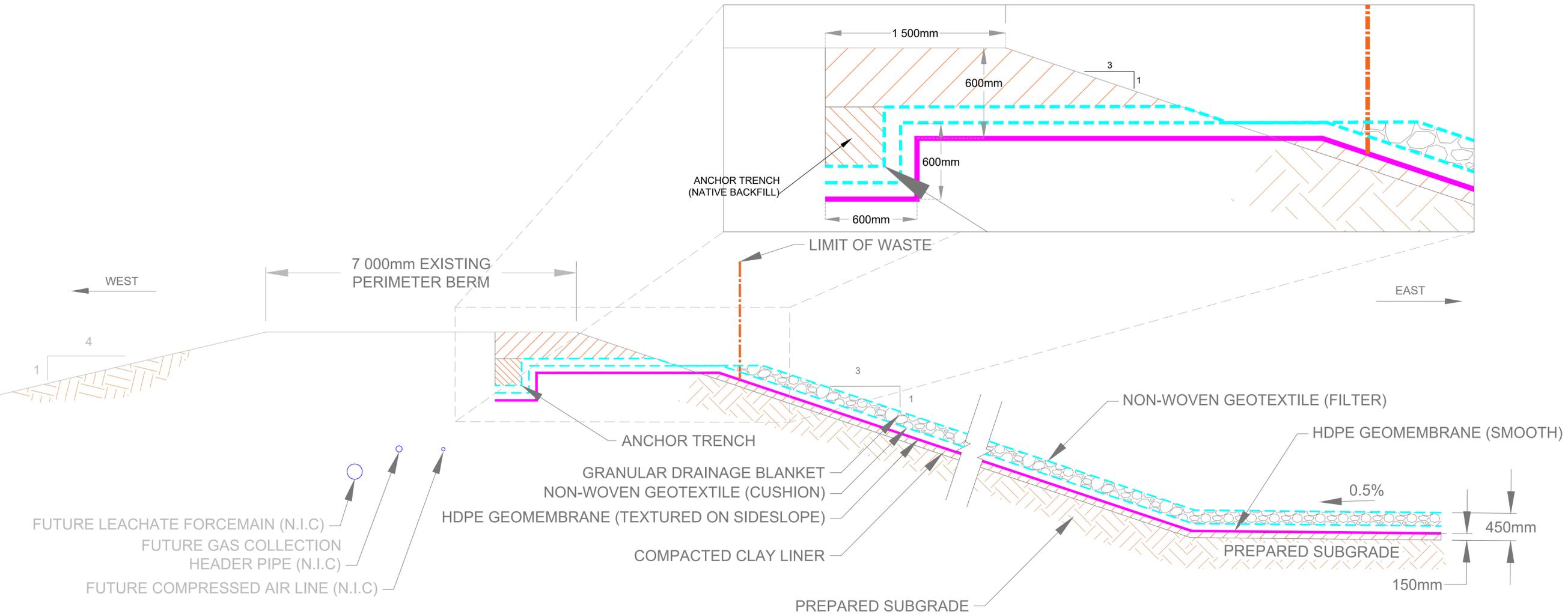
BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
 AREA A CONSTRUCTION - CELL 33
 PERIMETER TIE-IN DETAILS I

SHEET 11 OF 15
 CITY DRAWING NUMBER 1-0400A-C0095-001

DESIGNED BY: ARR	CHECKED BY: ARR
DRAWN BY: MO	APPROVED BY: ARR
SCALE: HORIZONTAL: AS NOTED	RELEASED FOR CONSTRUCTION
VERTICAL: AS NOTED	



DETAIL 16 SOUTH DIVIDER BERM TIE-IN
SHT-12 (TYPICAL)



DETAIL 17 WEST PERIMETER TIE-IN
SHT-12 (TYPICAL)

METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMÉROS ENTIERS INDICENT LES MILLIMÈTRES
LES NUMÉROS DÉCIMAUX INDICENT LES MÈTRES

- WARNING**
1. NOTIFY THE LANDFILL SUPERVISOR OF THE PROPOSED LOCATION OF EXCAVATION.
 2. TAKE PRECAUTION TO AVOID DAMAGE TO LEACHATE AND GAS COLLECTION INSTALLATIONS.
 3. TAKE PRECAUTION TO AVOID DAMAGE TO EXISTING LINER SYSTEMS.

GEODETTIC REFERENCE
Projection: UTM Zone 14N
Units: Metres
Datum: NAD83
Ellipsoid: GRS80



LEGEND/LEGENDE

	COMPACTED CLAY LINER		COMPACTED NATIVE-SUBGRADE MATERIAL		HDPE GEOMEMBRANE (SMOOTH)
	GRANULAR DRAINAGE		COMPACTED BACKFILL		NON-WOVEN GEOTEXTILE (FILTER)
					NON-WOVEN GEOTEXTILE (CUSHION)

- NOTES:**
1. EXCAVATION CONTOURS ARE AT 0.5 METRE INTERVALS.
 2. CONTOURS REPRESENT BASE ELEVATION.
 3. ALL ELEVATION ARE REFERENCED TO GEODETTIC DATUM.
 4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
 5. GROUND CONTOURS BASED ON AUGUST 27, 2020 MAPPING.

B.M. ELEV.	SWS GCP N: 5 513 301.225	E: 629 498.188
CONSTRUCTION COMPLETION DATE:		
NO.	REVISIONS	DATE
1	ISSUED FOR REGULATORY COMPLIANCE	11/4/2020

ENGINEER'S SEAL

ORIGINAL DRAWING SEALED BY:
A.R. RAICHURA
2021-02-16

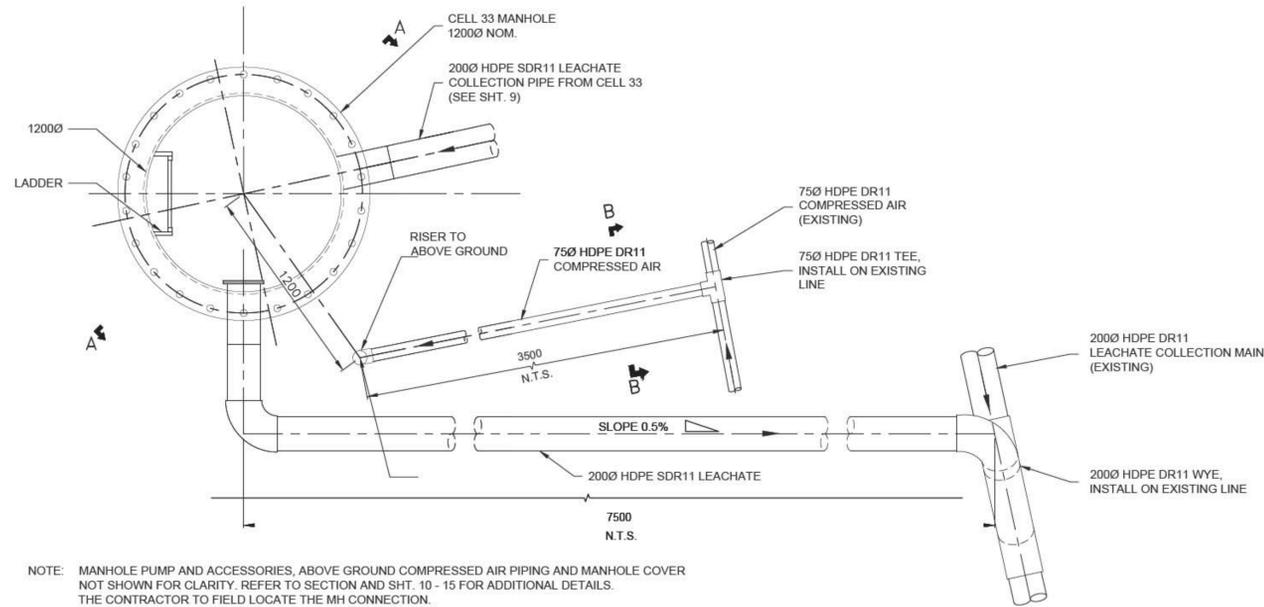
THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION -CELL 33

PERIMETER TIE-IN DETAILS II

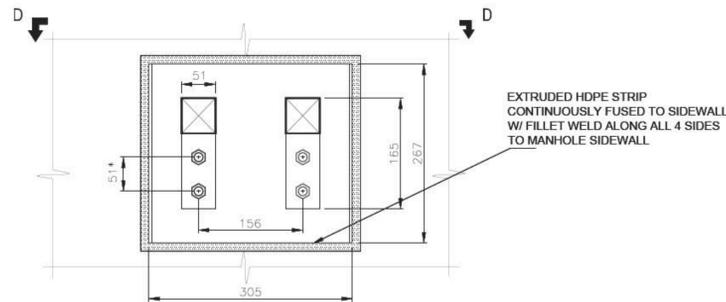
SHEET 12 OF 15

CITY DRAWING NUMBER
1-0400A-C0096-001

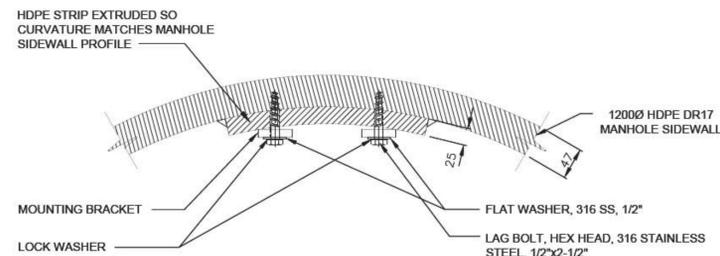


NOTE: MANHOLE PUMP AND ACCESSORIES, ABOVE GROUND COMPRESSED AIR PIPING AND MANHOLE COVER NOT SHOWN FOR CLARITY. REFER TO SECTION AND SHT. 10 - 15 FOR ADDITIONAL DETAILS. THE CONTRACTOR TO FIELD LOCATE THE MH CONNECTION.

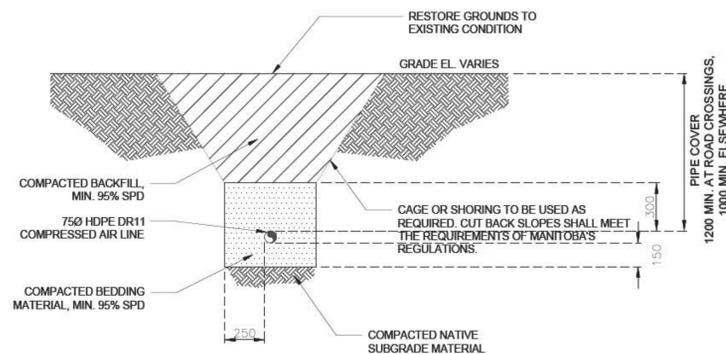
1 PLAN - CELL 33 MANHOLE
SHT-13 SCALE: 1:20mm



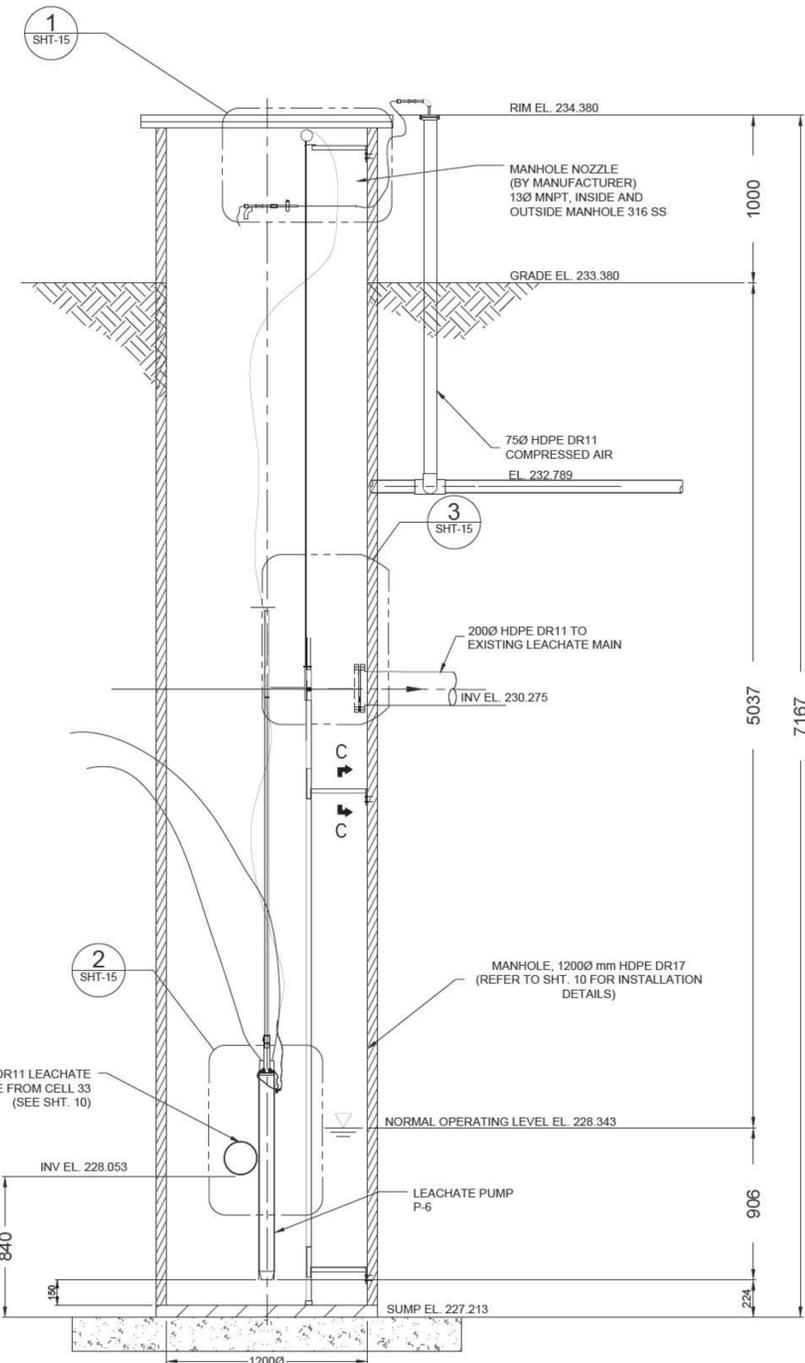
C-C DETAIL - SUPPORT BRACKET
SHT-14 SCALE: 1:5mm



D-D SECTION - MANHOLE
SHT-14 SCALE: 1:5mm



B-B SECTION - COMPRESSED AIR PIPE TRENCH
SHT-14 SCALE: N.T.S.



NOTES: COMPRESSED AIR SUPPLY TO MANHOLE AND LADDER NOT SHOWN FOR CLARITY. REFER TO PLAN AND SHT. 10 FOR DETAILS.

A-A SECTION - CELL 33 MANHOLE
SHT-14 SCALE: 1:20mm

MECHANICAL GENERAL NOTES:

- PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL REVIEW THE PROJECT DRAWINGS AND SPECIFICATIONS PRIOR TO ANY CONSTRUCTION ON SITE. ANY DISCREPANCIES, MISSING DIMENSION AND/OR REQUIRED DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACT ADMINISTRATOR BEFORE AFFECTED WORK IS COMMENCED. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL REQUIRED INFORMATION PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL FIELD CONFIRM LOCATIONS OF ALL PIPING, STRUCTURES AND SERVICES ABOVE OR BELOW GROUND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EQUIPMENT LOCATIONS PRIOR TO CONSTRUCTION AND REPORT DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK. FIELD CONFIRM EXISTING GRADE ELEVATIONS AT MANHOLE LOCATIONS.
- ALL EXISTING CONSTRUCTION ALTERED OR DAMAGED DURING THE COURSE OF WORK SHALL BE MADE GOOD TO MATCH.
- THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACT ADMINISTRATOR TO ENSURE THE WORK DOES NOT DISRUPT NORMAL SITE OPERATIONS.

METRIC / MÉTRIQUE
WHOLE NUMBERS INDICATE MILLIMETERS
DECIMALIZED NUMBERS INDICATE METRES /
LES NUMÉROS ENTIERS INDICENT LES MILLIMÈTRES
LES NUMÉROS DÉCIMAUX INDICENT LES MÈTRES

GEODEIC REFERENCE
Projection: UTM Zone14N
Units: Metres
Datum: NAD83
Ellipsoid: GRS80



LEGEND/LEGENDE



NOTES:

- MANHOLE NOT SUITED FOR TRAFFIC LOADING.
- PUMPING SYSTEMS NOT SHOWN FOR CLARITY. LEACHATE PUMP AND INTERNAL PIPING DETAILS PROVIDED ON MECHANICAL DRAWINGS AND VERIFY LOCATION AND DAYLIGHT UTILITIES ALONG LEACHATE FOREMAIN AND MANHOLE ALIGNMENT.
- ALL PIPE ELEVATION (ESP, MANHOLE CONNECTIONS) ARE APPROXIMATE AND TO BE CONFIRMED BY THE CONTRACTOR DURING CONSTRUCTION.

B.M. SWS GCP N: 5 513 301.225 E: 629 498.188
ELEV. 234.063

CONSTRUCTION COMPLETION DATE:

ISSUED FOR REGULATORY COMPLIANCE 2021/02/17

NO. REVISIONS DATE BY

KGS GROUP

ENGINEERS
GEOSCIENTISTS
MANITOBA
Certificate of Authorization
KGS Group
No. 245

WILLIAMS
20958
2021-02-17

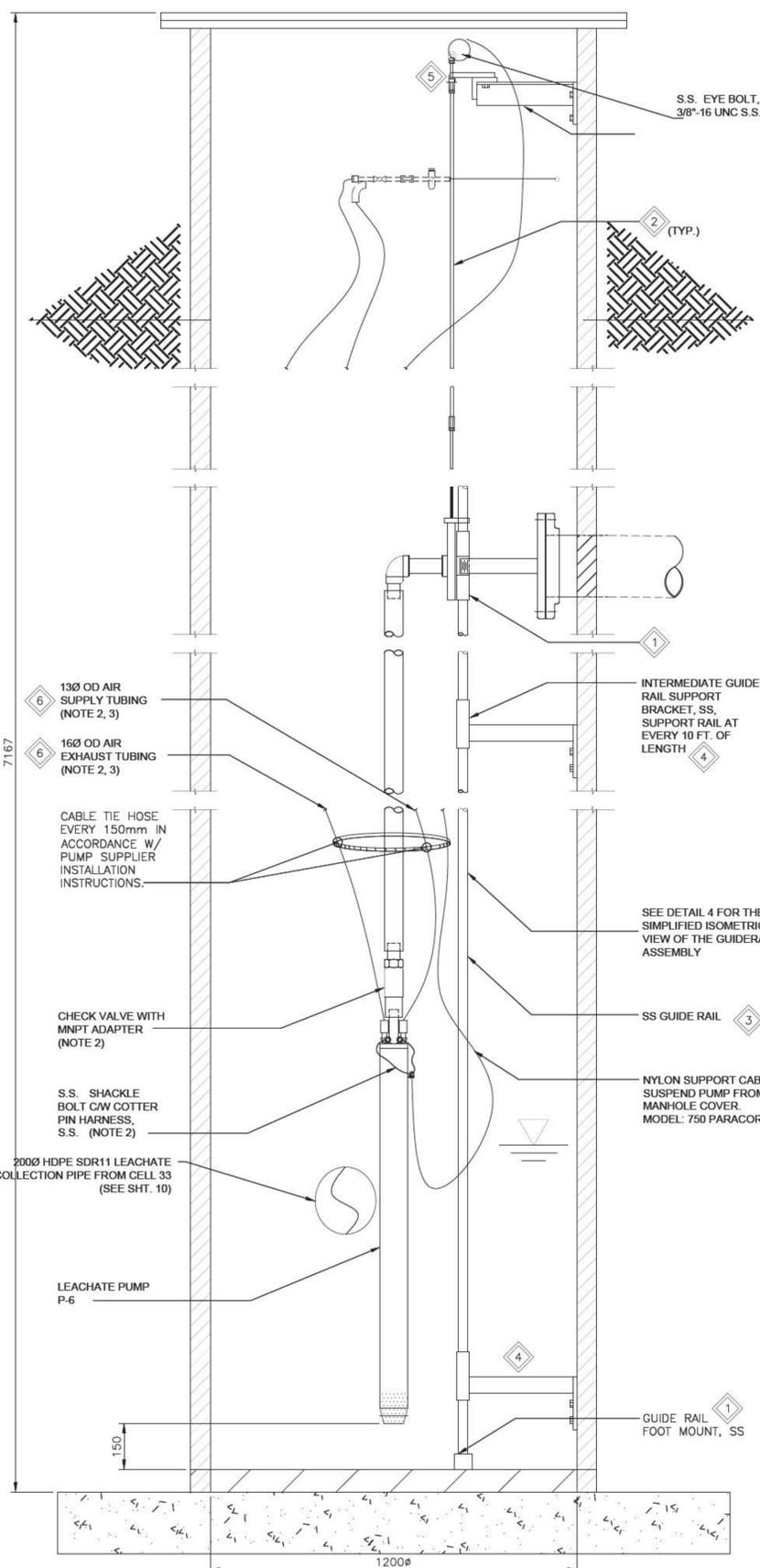
THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

DESIGNED BY HW
DRAWN BY BP
SCALE: HORIZONTAL AS NOTED
VERTICAL AS NOTED
DATE 2021/02/09

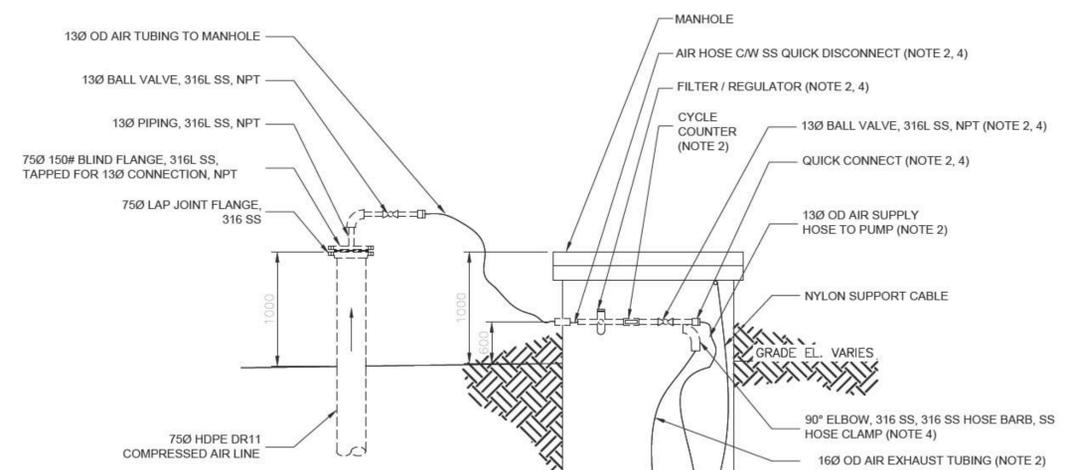
CHECKED BY HW
APPROVED BY
ISSUED FOR REVIEW
DATE 2021/02/10

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION - CELL 33
MANHOLE

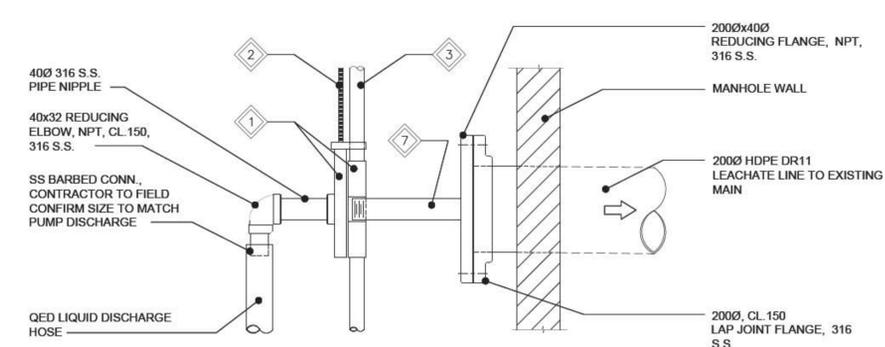
SHEET 14 OF 15
CITY DRAWING NUMBER
1-0400A-M022-001 - R0.dwg



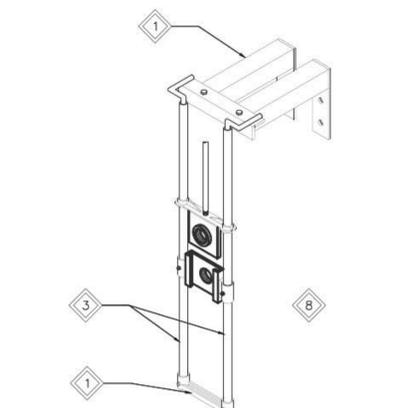
2 DETAIL - MANHOLE PUMP
SHT-14 SCALE: NTS



1 DETAIL - COMPRESSED AIR SUPPLY
SHT-14 SCALE: NTS



3 DETAIL - LEACHATE DISCHARGE FROM MANHOLE
SHT-14 SCALE: NTS



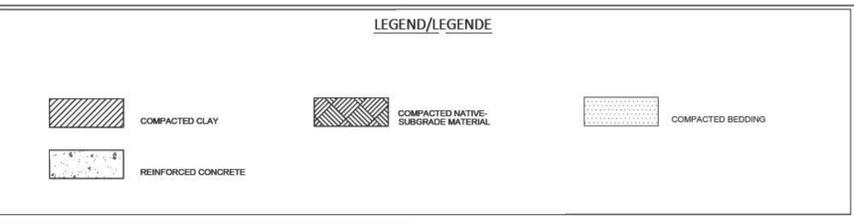
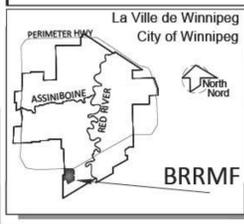
4 ISOMETRIC VIEW GUIDE RAIL DISCONNECT
SHT-15 SCALE: NTS

- GENERAL NOTES:**
- REFER TO SHT. 14 FOR MECHANICAL GENERAL NOTES.
 - SUPPLIED WITH PUMP.
 - PROVIDE SUFFICIENT LENGTH OF TUBING TO ALLOW REMOVAL OF PUMP FROM SUMP.
 - INSTALL INSIDE MANHOLE NEAR COVER, SECURE TO WALL.

- KEYNOTES:**
- RAIL AND DISCONNECT SYSTEM, SIZE 1 1/2" NPT. 2 STANDOFFS INCLUDED W/ KIT. MODEL: ZOELLER PUMP CO. MODEL 39-0003
 - 3/8"-16 UNC S.S. THREADED ROD. USE 6' LENGTHS AND 3/8"-16 UNC S.S. COUPLING NUTS. EACH COUPLING NUT IS DOUBLE-NUTTED TO LOWER THREADED ROD. UPPER THREADED ROD AT EACH COUPLING NUT CAN BE TURNED OUT AS PUMP IS LIFTED OUT OF CELL.
 - GUIDE RAILS: 3/4" IPS, S.S. PIPE.
 - INTERMEDIATE GUIDE RAIL BRACKET. MODEL: ZOELLER PUMP CO. MODEL 39-0022.
 - S.S. STANDOFF NEAR TOP OF CELL TO PREVENT LATERAL MOVEMENTS OF THREADED ROD WHEN IT IS IN ITS FULL LENGTH/STORED POSITION.
 - AIR SUPPLY, AIR EXHAUST AND PUMP DISCHARGE TUBING. MODEL: QED TRI-HOSE BUNDLE.
 - LENGTH OF PIPE NIPPLE BASED ON ZOELLER GUIDE RAIL BRACKET LENGTH.
 - INTERMEDIATE AND BOTTOM SUPPORT BRACKETS NOT SHOWN

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LES NUMEROS DECIMALIES INDIOUENT LES METRES

GEODETTIC REFERENCE
Projection: UTM Zone14N
Units: Metres
Datum: NAD83
Ellipsoid: GR580



NOTES:

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B.M. SWS GCP N: 5 513 301.225	E: 620 468.188
ELEV. 234.093	
CONSTRUCTION COMPLETION DATE:	
ISSUED FOR REGULATORY COMPLIANCE	2021/02/17
NO.	REVISIONS

KGS GROUP

ENGINEERS
GEOLOGISTS
MANITOBA

Certificate of Authorization
KGS Group
No. 245

THE CITY OF WINNIPEG / LA VILLE DE WINNIPEG
WATER AND WASTE DEPARTMENT
SOLID WASTE SERVICES

BRADY ROAD RESOURCE MANAGEMENT FACILITY (BRRMF)
AREA A CONSTRUCTION - CELL 33

MECHANICAL DETAILS

DESIGNED BY: HW
DRAWN BY: BP
SCALE: HORIZONTAL AS NOTED, VERTICAL AS NOTED
DATE: 2021/02/09

CHECKED BY: BP
APPROVED BY:
ISSUED FOR REVIEW
DATE: 2021/02/10

SHEET 15 OF 15
CITY DRAWING NUMBER: 1-0400A-M0023-001 - R0.dwg