



October 2, 2015

F:\200\206 Dauphin River Band\206.05 Water and Sewer Project\01 Correspondence\U.tr - EAP to MB Con Liner Change.docx

Ms. Tracey Braun
Director of Environmental Approvals
Manitoba Conservation
123 Main Street
Suite 160 VIA Station
Winnipeg, Manitoba
R3C 1A5

Via Email

D-206.05

Dear Ms. Braun,

RE: Dauphin River First Nation Environmental Act Proposal for Wastewater Treatment Lagoon Construction Liner Alteration


The initial Environmental Act Proposal submitted for the Dauphin River First Nation lagoon identified a 1 m thick remolded clay liner. Since the original submission in April 2015 additional geotechnical investigations have been completed onsite, along with additional design works.

During the geotechnical investigation completed by AMEC Foster Wheeler in April 2015 and subsequent testing completed in May 2015, tests results show samples collected of the insitu clay soils meet the liner requirements of 1×10^{-7} cm/s. Instead of remolding the entire site as presented in the original EAP, the design has changed to only remold 1 m thick the soil under the keyway and inside slope of the perimeter dikes and under the intercell dike. (as identified on the attached plan L3) Should areas be found to have insufficient depth of clay during the excavation of the lagoon perimeter remolded liner, additional excavation will continue into the cell floor to confirm the availability of the minimum 1 m thick insitu clay liner.

If there are any questions or concerns, please contact the undersigned.

Yours truly,

JR Cousin Consultants Ltd.



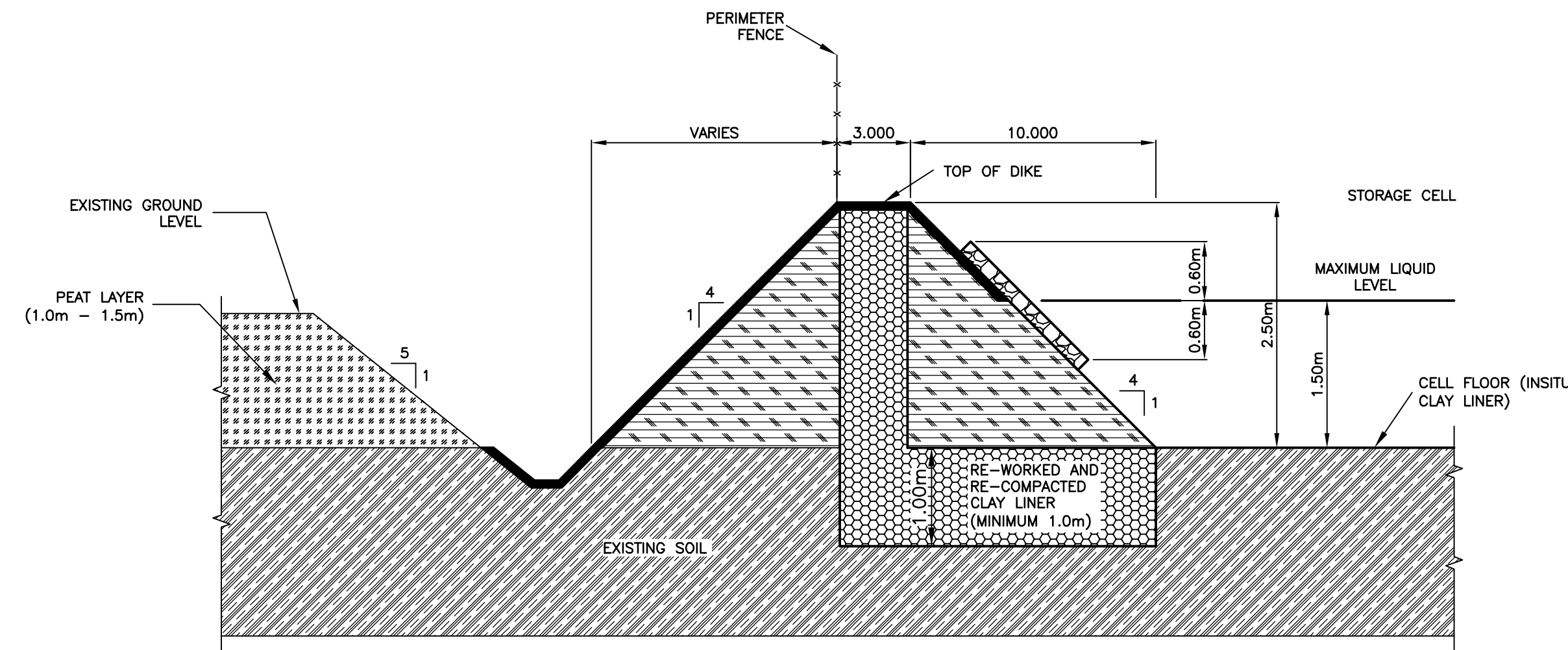
Jason Cousin, P. Eng.
Municipal Engineer

enc. Plan L3 - Dikes Details - Revision 1

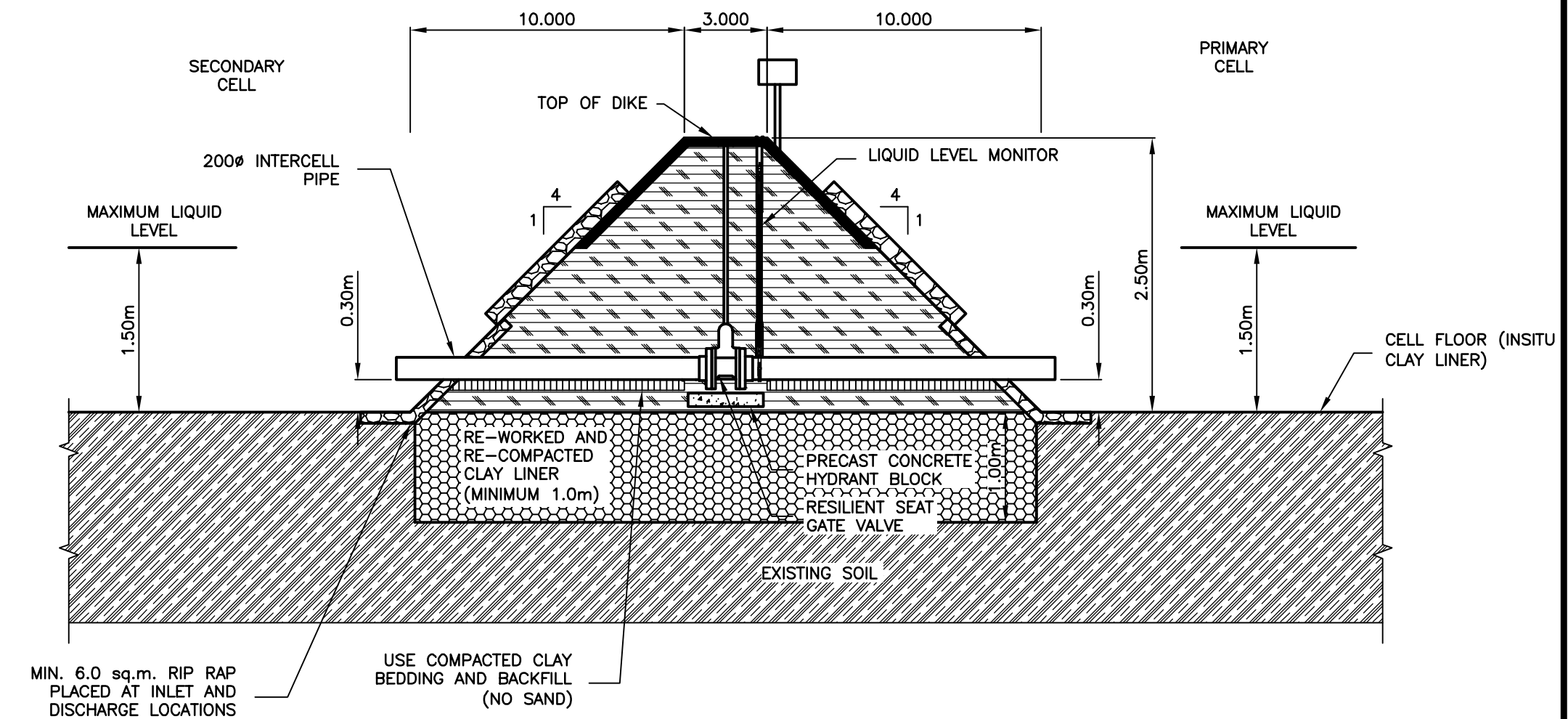


LEGEND:

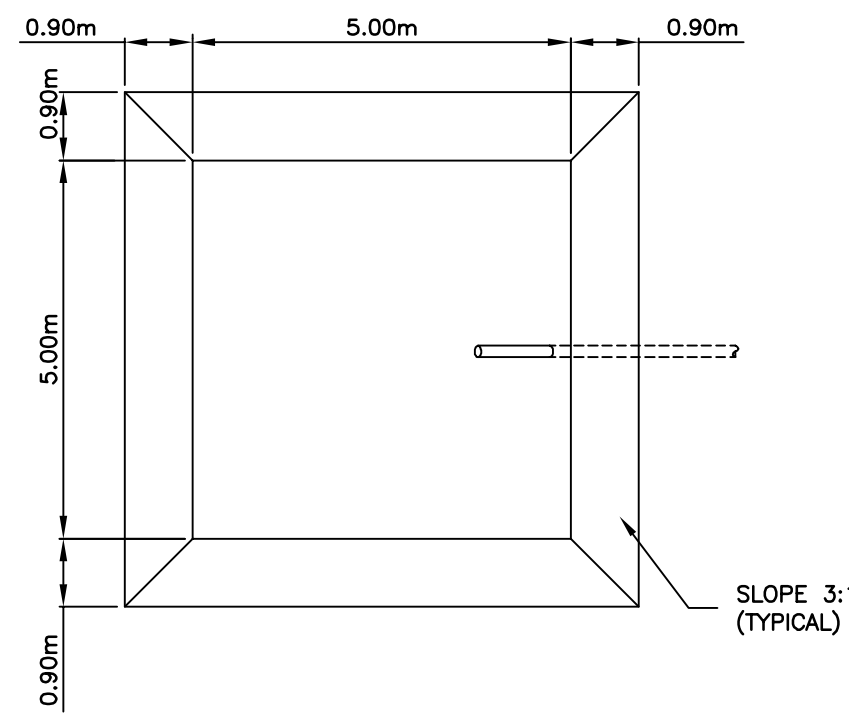
- EXCAVATED AND COMPACTED CLAY
- EXCAVATED AND COMPACTED MIXTURE OF SOILS
- EXISTING SLIGHTLY PLASTIC, BROWN CLAY
- RIP RAP
- TOPSOIL
- EXISTING PEAT



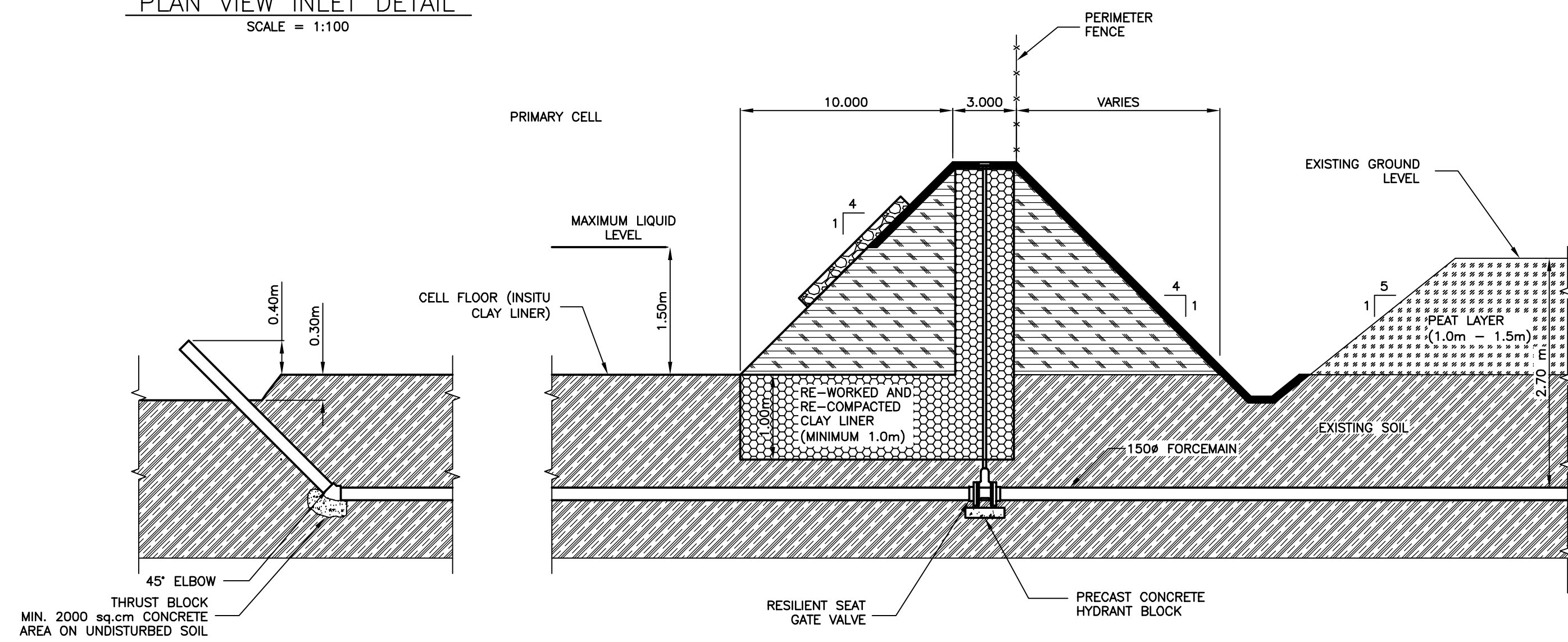
1
2 | 3
PERIMETER DIKE IN STORAGE CELL
HOR = 1:200
VER = 1:50



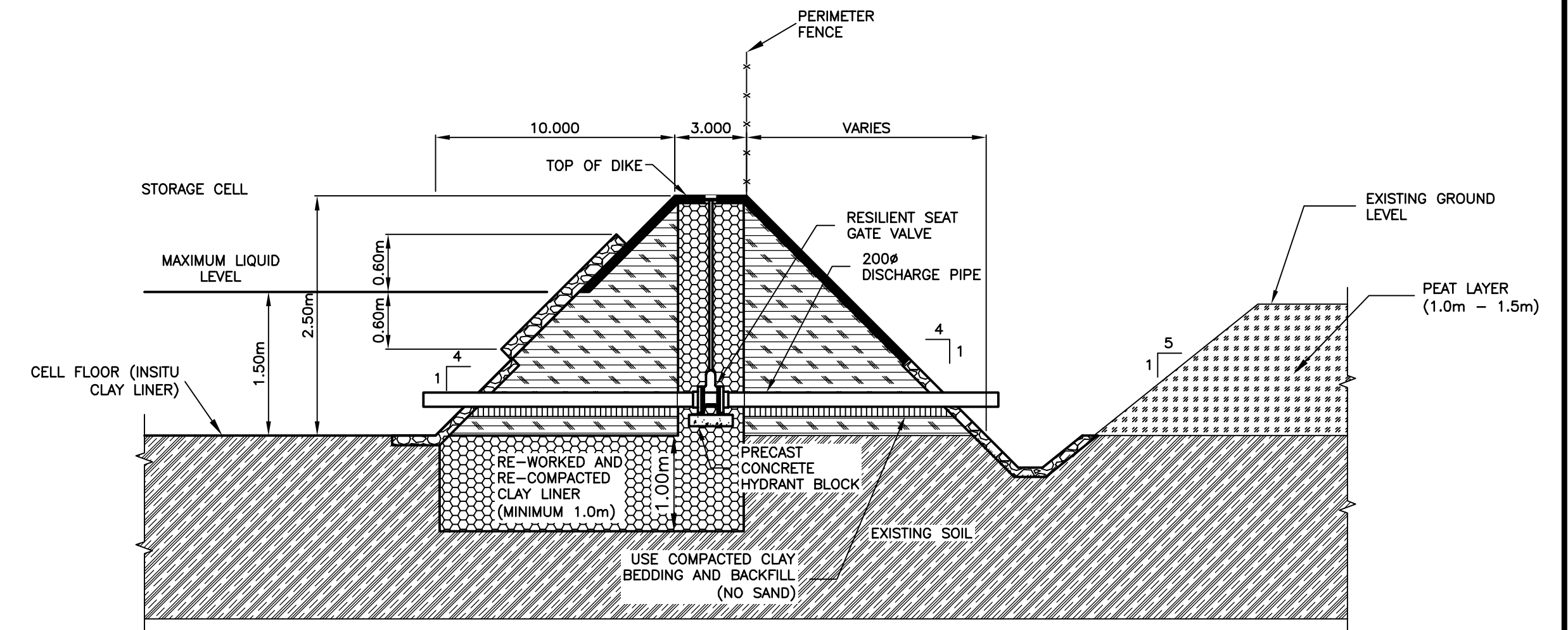
2
2 | 3
INTERCELL DIKE AT INTERCELL PIPE
HOR = 1:200
VER = 1:50



PLAN VIEW INLET DETAIL
SCALE = 1:100



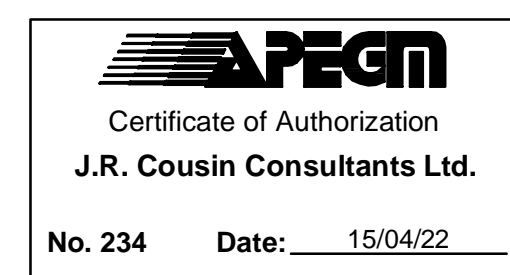
3
2 | 3
PERIMETER DIKE AT FORCEMAIN INLET
HOR = 1:200
VER = 1:50



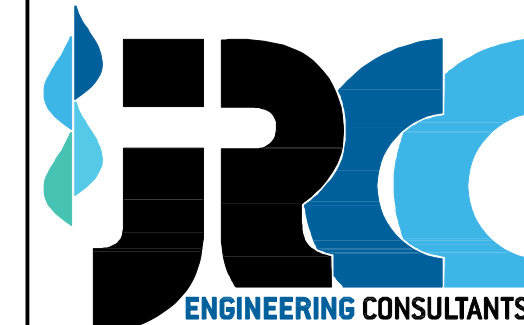
4
2 | 3
PERIMETER DIKE AT DISCHARGE PIPE
HOR = 1:200
VER = 1:50

PRELIMINARY
NOT FOR CONSTRUCTION

									B.M. EL.
1	LINER REVISION	15/10/02	RH	LOCATIONS OF UNDERGROUND STRUCTURES/UTILITIES AS SHOWN ARE BASED ON AVAILABLE INFORMATION BUT NO GUARANTEE IS GIVEN OR IMPLIED THAT ALL EXISTING UNDERGROUND STRUCTURES/UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL UNDERGROUND STRUCTURES/UTILITIES MUST BE OBTAINED FROM THE APPROPRIATE AUTHORITY/OWNER, BY THE CONTRACTOR, BEFORE PROCEEDING WITH CONSTRUCTION.					
No.	REVISIONS	DATE	INITIALS						



ENGINEER'S SEAL
ORIGINAL DRAWING
SIGNED AND SEALED
BY
J.R.L. COUSIN
15/04/22



JR Cousin Consultants Ltd.
91A Scurfield Blvd. Winnipeg MB R3Y 1G4
p. (204) 489-0474
f. (204) 489-0487
www.jrcc.ca
ENGINEERING EXCELLENCE SINCE 1981

CODE: D-206.05	PROJECT: DAUPHIN RIVER FIRST NATION WATER AND SEWER PROJECT	DESIGNED BY: MP	TITLE: DIKE DETAILS	DRAWN BY: MP	REVIEWED BY: JRC	SCALE: AS NOTED	DATE: 15/03/26	PLAN: L3	SHEET: 3 of 5
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