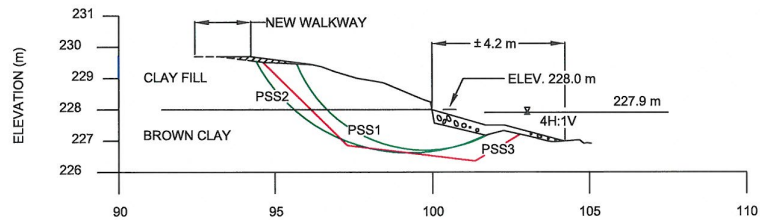
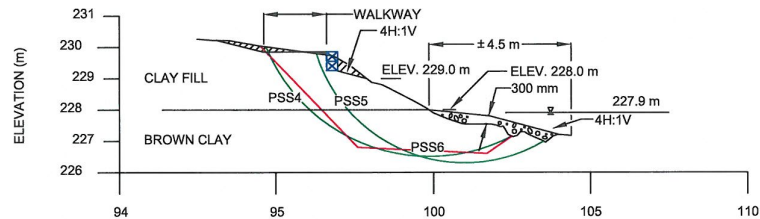


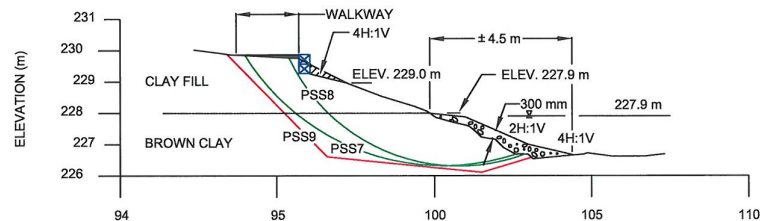
SECTION OVERLAY DISTANCE (m)



SECTION 3 DISTANCE (m)



SECTION 5 DISTANCE (m)



SECTION 6 DISTANCE (m)

SOIL STRENGTH PARAMETER VALUES USED IN MODELLING			
SOIL TYPE & CLASSIFICATION	BULK DENSITY γ (kN/m ³)	EFFECTIVE COHESION c' (kPa)	EFFECTIVE FRICTION ANGLE ϕ' (°)
CLAY FILL (CH)	18	3	12
BROWN CLAY (CH)	17	1	13
RIP-RAP	20	0	5 (*)
NEW CLAY FILL	17	0.5	1
CONCRETE BLOCKS	23	0	5 (*)

(*) USED TO PREVENT SLIP SURFACES THROUGH THE BLOCKS.
 (*) USED FOR LOADING AND NOT FOR SHEAR RESISTANCE.

SECTION 3, FACTOR OF SAFETY (FS)			
POTENTIAL SLIP SURFACE (PSS)	EXISTING CONDITIONS	PROPOSED DESIGN	PROPOSED DESIGN & RIP-RAP
PSS1 [†]	1.11	--	1.24 (12%)
PSS2	1.15	--	1.25 (9%)
PSS3 [‡]	1.26	--	1.37 (9%)

[†] CRITICAL SLIP SURFACE.
[‡] BLOCK SLIDE.

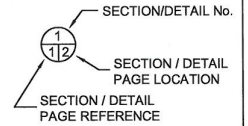
SECTION 5, FACTOR OF SAFETY (FS)			
POTENTIAL SLIP SURFACE (PSS)	EXISTING CONDITIONS	PROPOSED DESIGN	PROPOSED DESIGN & RIP-RAP
PSS4 [†]	0.98	0.98	1.08 (10%)
PSS5	1.15	1.17 (2%)	1.32 (15%)
PSS6 [‡]	1.06	1.07 (1%)	1.16 (9%)

[†] CRITICAL SLIP SURFACE.
[‡] BLOCK SLIDE.

SECTION 6, FACTOR OF SAFETY (FS)			
POTENTIAL SLIP SURFACE (PSS)	EXISTING CONDITIONS	PROPOSED DESIGN	PROPOSED DESIGN & RIP-RAP
PSS7 [†]	1.00	0.97 (-3%)	1.07 (7%)
PSS8	1.11	1.10 (-1%)	1.25 (13%)
PSS9 [‡]	1.03	1.01 (-2%)	1.08 (5%)

[†] CRITICAL SLIP SURFACE.
[‡] BLOCK SLIDE.

LEGEND



- CUT CLAY
- CLAY FILL
- RIP-RAP
- DURAHOLD II CONCRETE BLOCK

NOTES

- ALL ELEVATIONS ARE IN METERS UNLESS OTHERWISE NOTED.
- A GROUNDWATER LEVEL AND RIVER LEVEL USED IN THE ANALYSIS WERE 228.5 m AND 227.9 m, RESPECTIVELY.
- VALUES IN PARENTHESIS ARE PERCENT REDUCTION OR IMPROVEMENT.

No.	DATE	ISSUE / REVISION
0	Oct 2015	Report

ENG. STAMP:

CLIENT: DEAN SPEARMAN LANDSCAPE ARCHITECT
 PROJECT: WALKWAY REMEDIATION, BOIS DES ESPRIT, WINNIPEG, MB
 DWG DESCRIPTION: CROSS SECTION OVERLAY AND SLOPE ANALYSIS

SCALE: 1:150	
DRAWN BY: ERM	DATE: OCTOBER 2015
FILE No.: 15-330-02	CLIENT DWGFIG. No.:
ENG-TECH DWGFIG. No.: G2	No.: