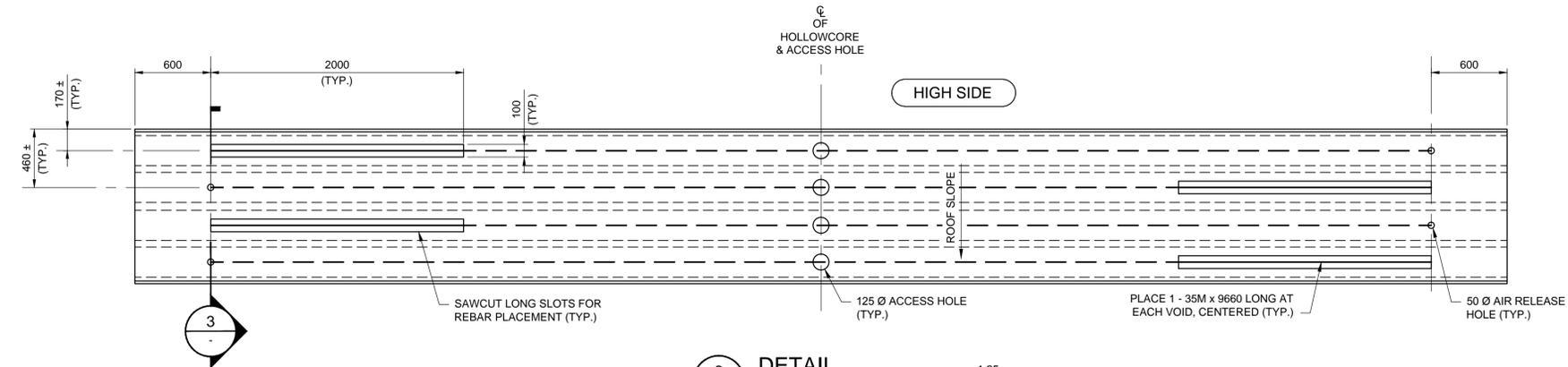
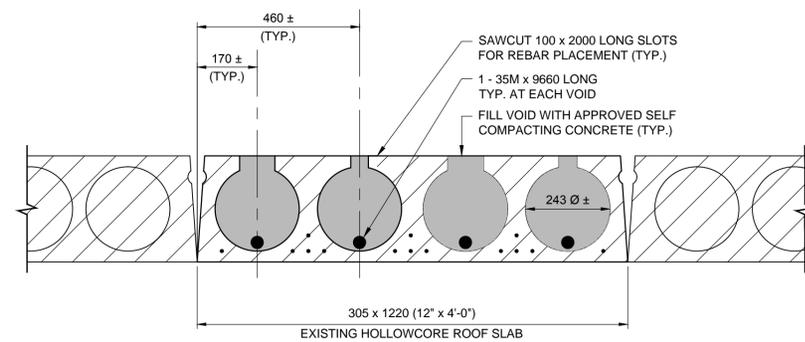


1 DETAIL
TYPICAL HOLLOWCORE
EPDM ACCESS
1:25



2 DETAIL
TYPICAL HOLLOWCORE
REPAIR
1:25



3 SECTION
1:10

HOLLOWCORE ROOF SLAB REPLACEMENT AND REPAIRS - CONSTRUCTION PROCEDURE NOTES:

GENERAL:

1. THE EXISTING DETAILS AND DIMENSIONS SHOWN ON ALL DRAWINGS ARE TAKEN FROM ORIGINAL CONTRACT DOCUMENTS AT TIME OF CONSTRUCTION. ACTUAL CONDITIONS MAY VARY. CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE COMMENCING WITH THE WORK.
2. CUT EXISTING EPDM MEMBRANE AS SHOWN ON THE DRAWINGS. FOLD EPDM MEMBRANE BACK EXPOSE THE HOLLOWCORE AND SECURE WITH SURPLUS PAVERS. CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE THE EXISTING EPDM. ANY DAMAGED AREAS SHALL BE SEALED WITH AN APPROVED WATER TIGHT REPAIR TAPE AS SPECIFIED IN THE CONTRACT DOCUMENTS.
3. IF TWO OR MORE ADJACENT HOLLOWCORE REQUIRE REPAIR OR REPLACEMENT, CUT EPDM SHEET AS SHOWN OVER FOOTPRINT OF MULTIPLE HOLLOWCORE ROOF SLABS. FOLD EPDM MEMBRANE UP TO HIGH SIDE TO EXPOSE THE SELECTED HOLLOWCORE.

HOLLOWCORE REPLACEMENT:

1. REMOVAL AND REPLACEMENT OF HOLLOWCORE SLABS SHALL UTILIZE A CUSTOM STRUCTURAL WHEELED STEEL FRAME ASSEMBLY. STRUCTURAL WHEELED STEEL FRAME LOADS ARE RESTRICTED WITHIN A 600 ZONE ON EITHER SIDE OF THE BEAM LINES. MAXIMUM PUNCH OUT SHEAR FROM WHEEL LOADS MUST NOT EXCEED A SERVICE LOAD OF 1500 kg ASSUMING TIRE CONTACT FOOTPRINT AREA IS 150 x 150.
2. FRAMES AND CONNECTION HARDWARE TO THE EXISTING HOLLOWCORE SLABS MUST BE DESIGNED BY A STRUCTURAL PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
3. SEALED DESIGN DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW PRIOR TO THE COMMENCING OF THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS.
4. SAWCUT EXISTING HOLLOWCORE FREE FROM GROUT KEY AND ENDS. REMOVE EXISTING HOLLOWCORE ROOF SLAB AND EXISTING BEARING STRIPS.
5. CLEAN AND INSTALL NEW 100 x 1200 x 6 THICK NEOPRENE BEARING STRIPS AND INSTALL NEW HOLLOWCORE ROOF SLAB. NEW HOLLOWCORE SHALL BE DESIGNED FOR A SUPERIMPOSED LIVE LOAD 4.0 kN/m² AND A DEAD LOAD OF 2.0 kN/m².
6. AFTER NEW HOLLOWCORE HAS BEEN INSTALLED, GROUT KEY AND ENDS WITH A PRE-BAGGED NON-SHRINK GROUT (35 MPa) OR PLANT SUPPLIED 10 mm AGGREGATE 35 MPa CONCRETE. SURFACE SHALL BE SMOOTH AND FREE OF POINTED OR JAGGED EDGES. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONCRETE SURFACE PREPARATION TO MEET THE EPDM MEMBRANE MANUFACTURERS INSTALLATION REQUIREMENTS. CUT FACES AT THE HOLLOWCORE ENDS SHALL BE GREASED BEFORE GROUTING.
7. NO WORK IN THE RESERVOIR BELOW WITHIN 5 m OF THE PERIMETER OF THE HOLLOWCORE SLAB OR SLABS TO BE REMOVED WILL BE PERMITTED DURING REMOVAL OR REPLACEMENT OPERATIONS.

HOLLOWCORE REPAIRS:

1. CUT EXISTING EPDM MEMBRANE AS SHOWN ON THE DRAWINGS. FOLD BACK THE EXISTING EPDM AND ANCHOR WITH SALVAGED PAVERS ON THE ADJACENT HIGH SIDE OF THE ROOF DECK.
2. CUT ACCESS OPENINGS IN THE TOP OF THE HOLLOWCORE DESIGNATED FOR REPAIRS AS SHOWN ON THE DRAWINGS. IF WATER IS PRESENT IN THE VOIDS, THE WATER SHALL BE REMOVED WITH A SMALL PUMP AND BLASTS OF COMPRESSED AIR.
3. PLACE ONE 35M BAR FOR EACH VOID THROUGH THE SLOTTED OPENING SO THE BAR IS WITHIN 600 OF THE ENDS OF THE HOLLOWCORE.
4. SELF-COMPACTING CONCRETE (35 MPa) SHALL BE PUMPED INTO THE HOLLOWCORE VOIDS THROUGH 125 Ø ACCESS HOLES. THE VOIDS SHALL BE COMPLETELY FILLED UNTIL THE CONCRETE OVER FLOWS AT THE REBAR ACCESS SLOTS AND 50 Ø AIR RELEASED OPENINGS.
5. ANY EXCESS CONCRETE SHALL BE REMOVED AND THE SURFACE TROWELED SMOOTH. ABSOLUTELY NO POINTED OR JAGGED EDGES IS PERMITTED. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONCRETE SURFACE PREPARATION TO MEET THE EPDM MEMBRANE MANUFACTURERS INSTALLATION REQUIREMENTS.
6. THE EXPOSED CONCRETE SURFACE SHALL BE TREATED WITH AN NSF 61 APPROVED CURING COMPOUND AND COVERED WITH EXISTING EPDM SHEET.
7. THE EXISTING EPDM CUT EDGES SHALL BE SEALED WITH AN APPROVED WATER TIGHT REPAIR TAPE.

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.	
N/A			
SUPV. U/G STRUCTURES COMMITTEE		CONSTRUCTION COMPLETION DATE:	
DATE			
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.			

CHECKED BY	DRA
APPROVED BY	SSR
DESIGNED BY	FAK
DRAWN BY	TLK
SCALE:	
HORIZONTAL	AS NOTED
VERTICAL	
1 ISSUED FOR TENDER	2015 11 20
NO.	REVISIONS
DATE	BY
DATE	DATE

RELEASED FOR CONSTRUCTION	CONSULTANT DRAWING NUMBER
	14-1411-S-129
DATE	SHEET OF
2015 11 20	37 OF 47
DATE	CITY DRAWING NUMBER
	1-0650R-S0027-001



ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WILKES RESERVOIR NORTH CELL REHABILITATION
HOLLOWCORE REPAIRS AND REPLACEMENT
DETAILS AND SECTION
CONSTRUCTION PROCEDURE NOTES