

WEST TUNNEL SHAFT:

- USE NEW GASKETS AND HARDWARE FOR REASSEMBLY
- WRAP ALL JOINTS WITH PETROLATUM CORROSION PROTECTION SYSTEM IN TUNNEL SHAFT AFTER FFRP INSTALLATION
- FEEDER MAIN JOINTS IN TUNNEL: CLEAN, REPLACE HARDWARE AND WRAP WITH PETROLATUM CORROSION PROTECTION SYSTEM
- REPLACE VICTAULIC COUPLINGS IF REQUIRED
- CAUTION: EXTERIOR PIPE COATINGS MAY CONTAIN ASBESTOS

REMOVABLE ROOF SLAB. RE-SEAL UPON REINSTALLATION, SEE DETAILS THIS DRAWING.

REPAIR EXISTING ROOF SLAB, SEE DETAILS THIS DRAWING.

INSTALL 150 ASPHALT CAP

INSTALL MANHOLE RISERS AS REQUIRED.

TAPER ASPHALT EDGE 1H:1V SLOPE, COMPACT EDGE

TOP OF CHAMBER EL 231.151

SANDBLAST AND EPOXY COAT THE EXTERIOR OF BOTH PIPE PENETRATIONS.

INSTALL TEMPORARY BLIND FLANGE c/w PORT FOR LEAKAGE TEST AND DISINFECTION PURPOSES

600mm DISASSEMBLY JOINT

RESTORE COATINGS ON EXISTING LADDERS, HANDRAILS, AND STRUCTURAL STEEL COMPONENTS WITH ZINC-RICH COATING IN ACCORDANCE WITH THE SPECIFICATIONS. ALTERNATIVELY, REMOVE AND REPLACE EXISTING LADDERS AND HANDRAILS. REMOVE EXISTING LADDER CAGES (TYP).

INSTALL PVC 25mm LINER VENT. EXTEND TO MINIMUM EL 230m. CAP WITH 180° ELBOW. ATTACH TO WALL WITH CLAMPS AT 3.0m OC. RUN VENT IN MH RISER IF REQUIRED.

EXISTING 600 STEEL FEEDER MAIN (ONE PIECE). REMOVE AND REPLACE STEEL RISER. EPOXY LINED AND COATED TO AWWA C213

DEMOLISH THRUST BLOCK AS REQUIRED. RECONSTRUCT UPON REASSEMBLY OF PIPING.

INV 215.700±

MEASUREMENT AND PAYMENT LIMITS FOR FLEXIBLE FABRIC REINFORCED PIPE (FFRP)

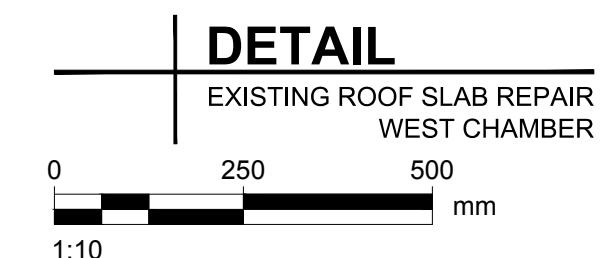
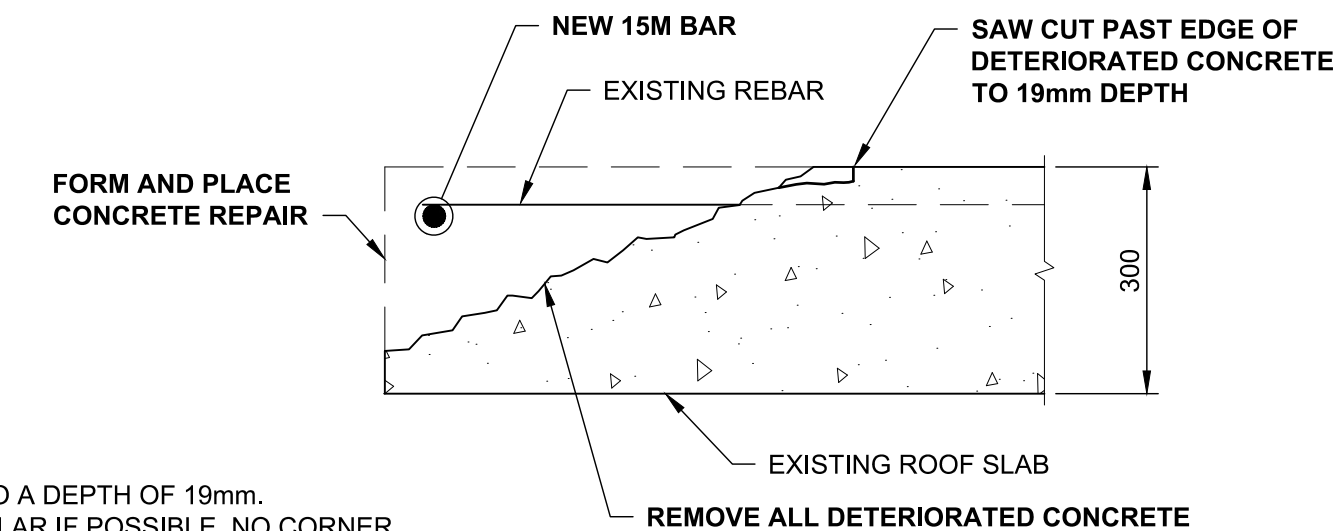
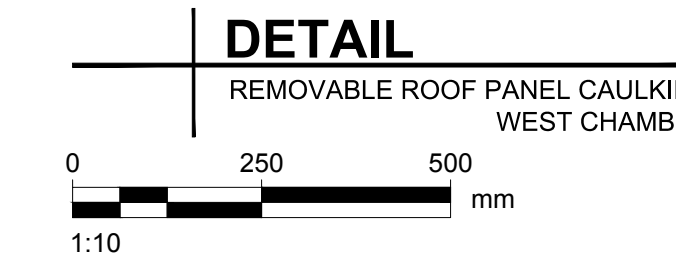
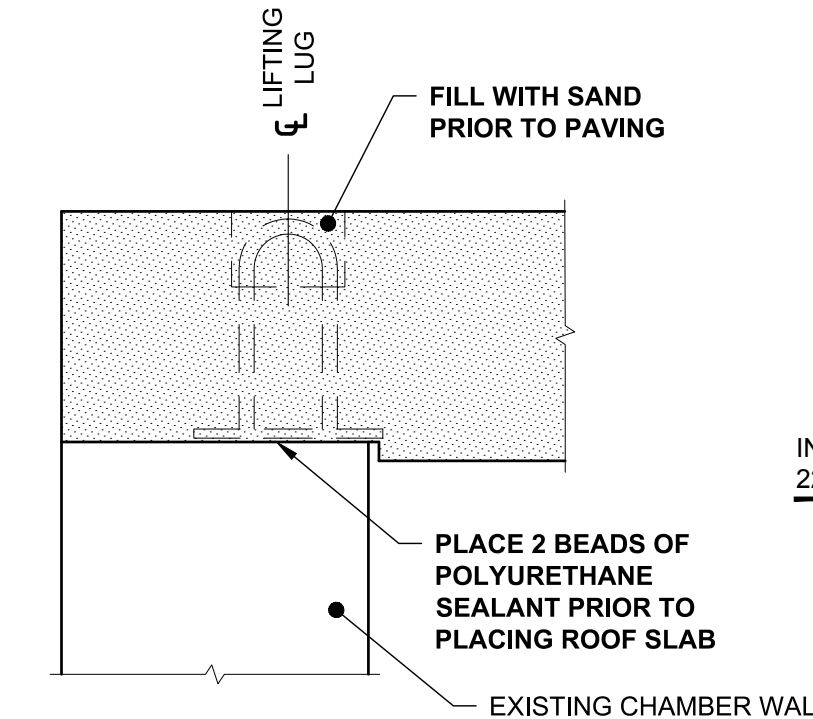
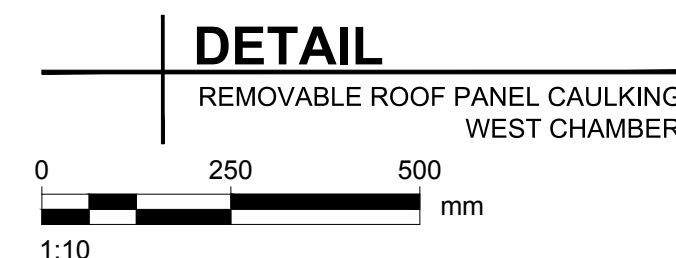
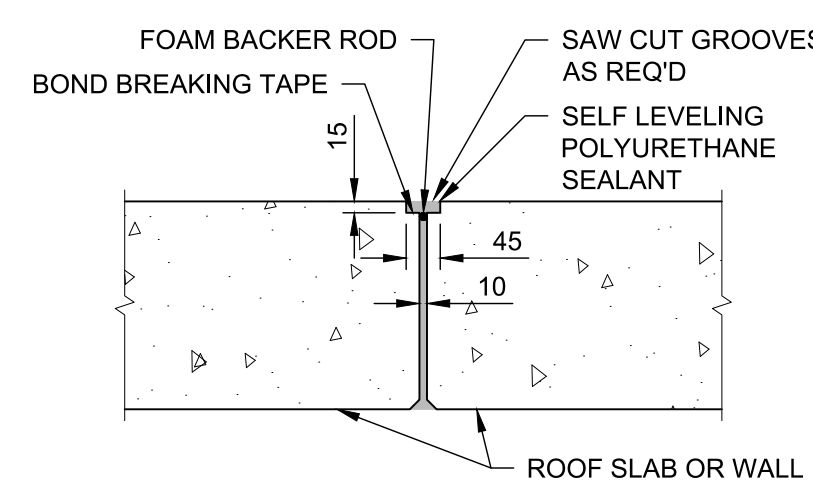
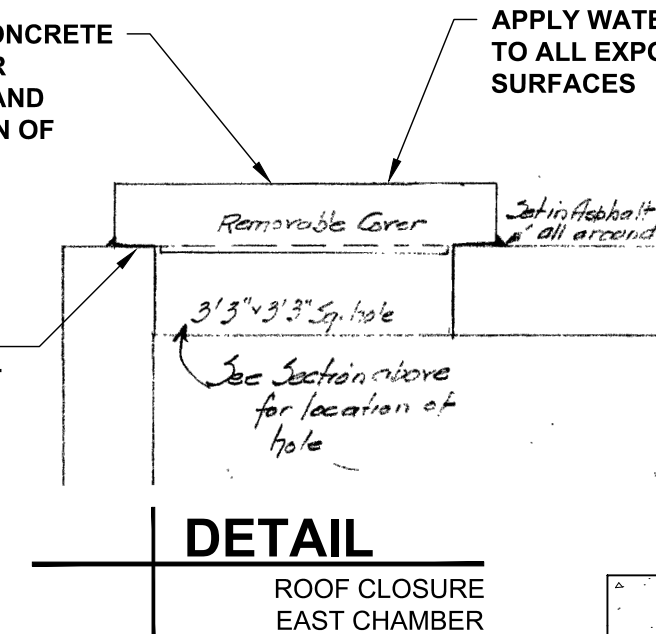
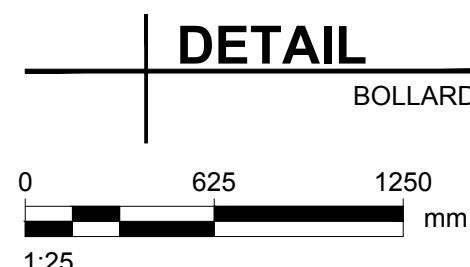
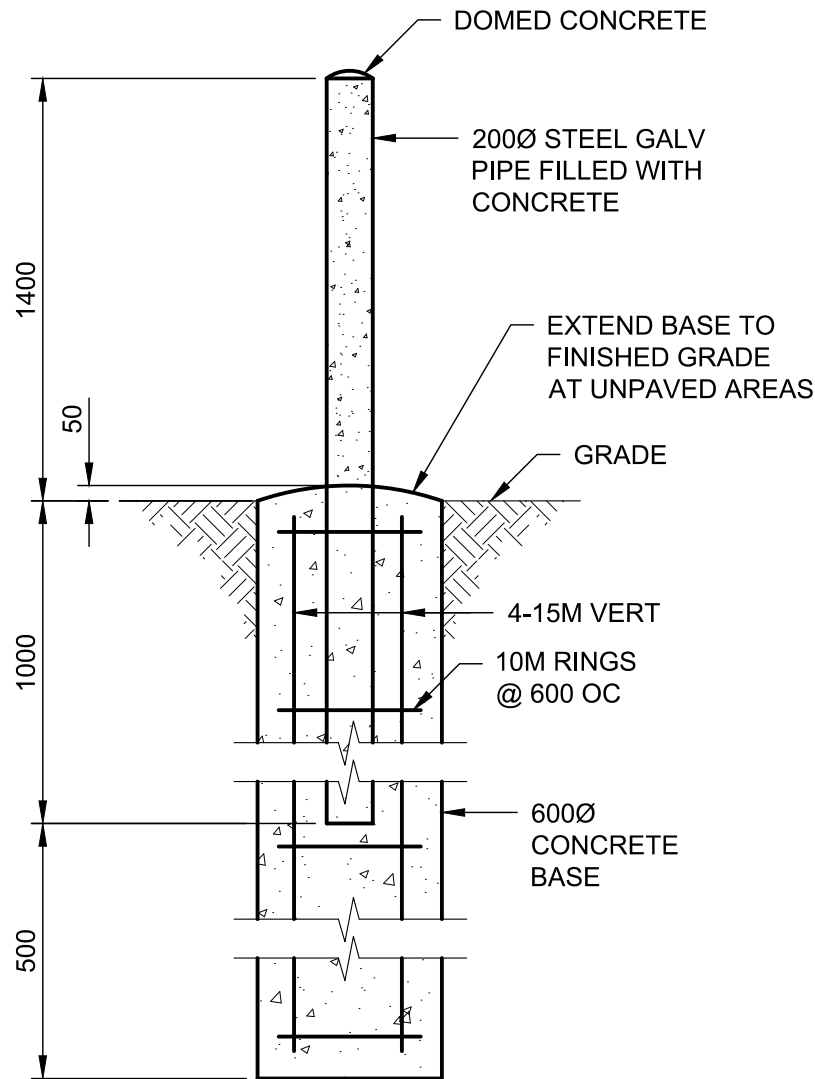
500mm DISASSEMBLY JOINT

EXISTING VENTILATION PIPING. REPLACE ALL VENTILATION PIPE HANGERS IN SHAFT AND TUNNEL.

EXISTING 600x350 CAST IRON SIDE-OUTLET ELBOW FL x FL x VICTAULIC. REMOVE TO FACILITATE WORK. SANDBLAST AND EPOXY COAT INTERIOR AND EXTERIOR PRIOR TO REASSEMBLY.

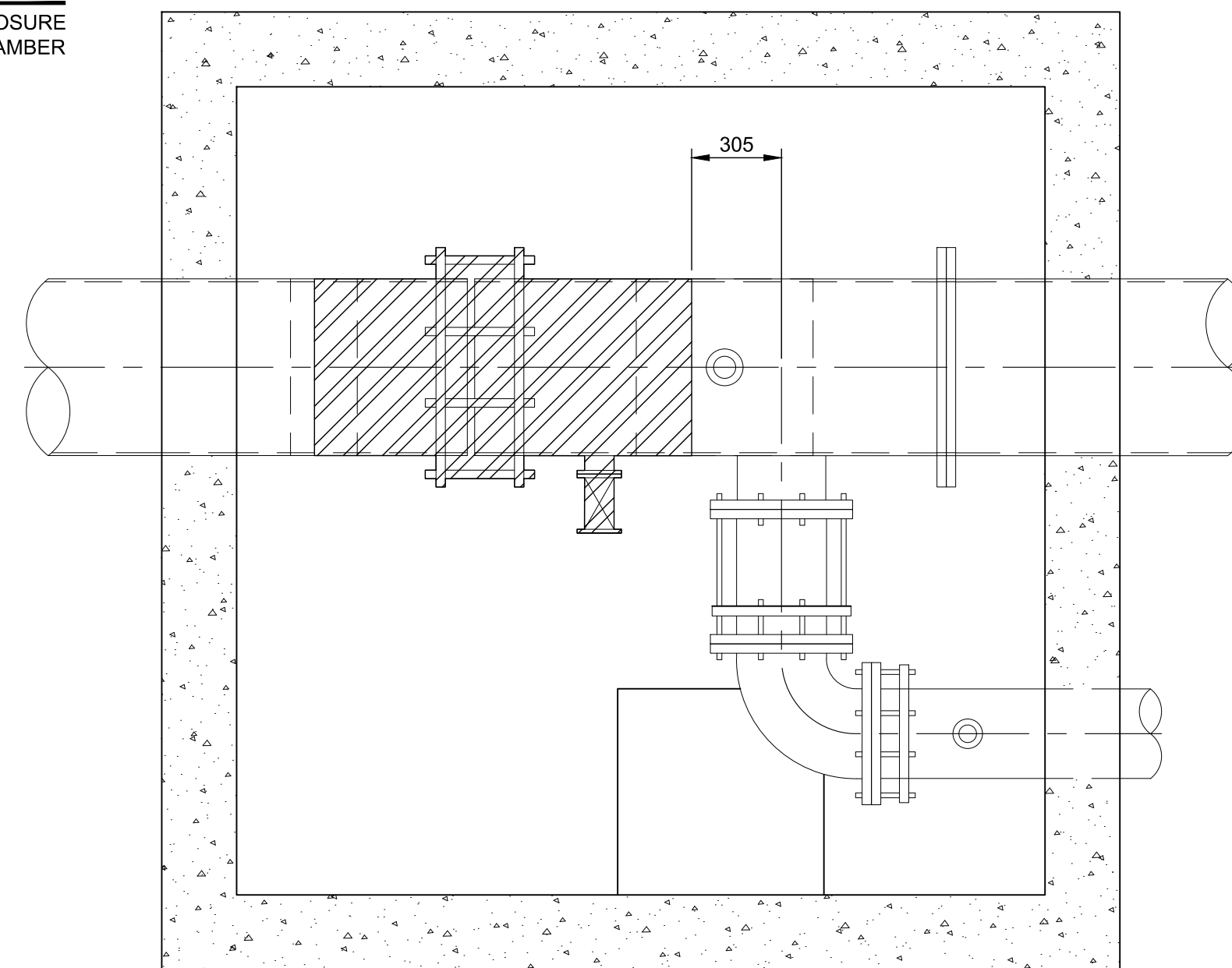
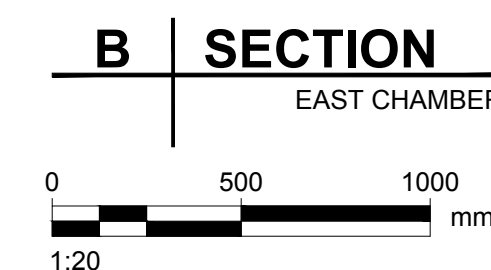
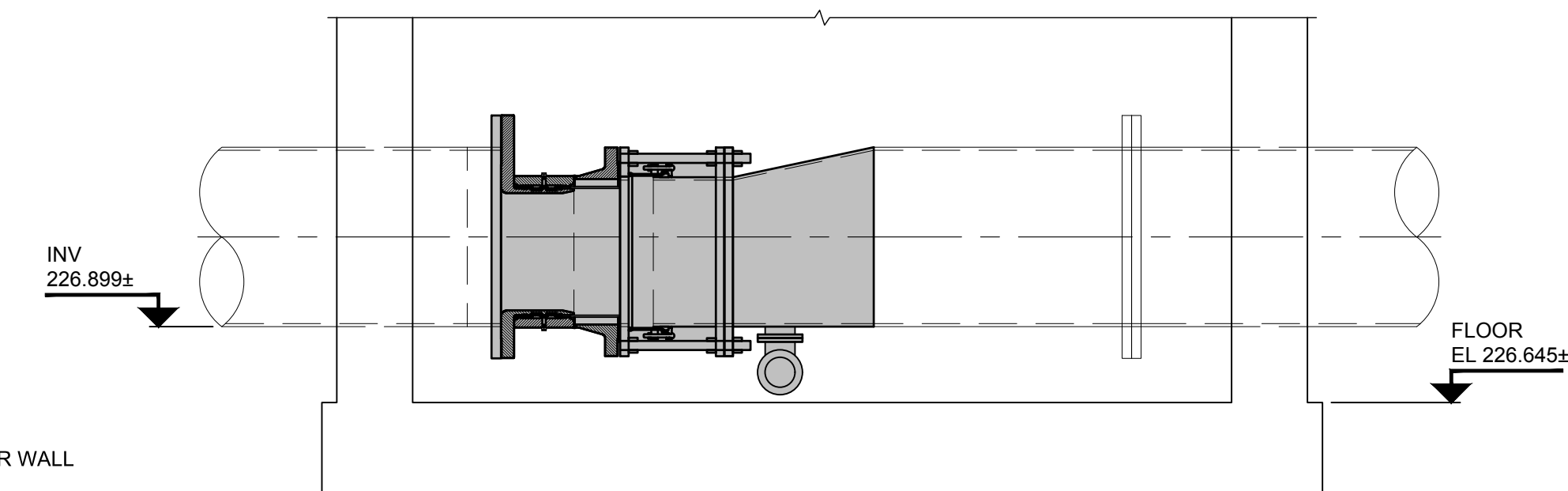
EXCAVATE AND REMOVE CONCRETE ROOF SLABS FOR CHAMBER MODIFICATIONS. REPLACE AND RE-SEAL UPON COMPLETION OF CONSTRUCTION.

PLACE TWO BEADS OF POLYURETHANE SEALANT PRIOR TO PLACING CONCRETE COVER

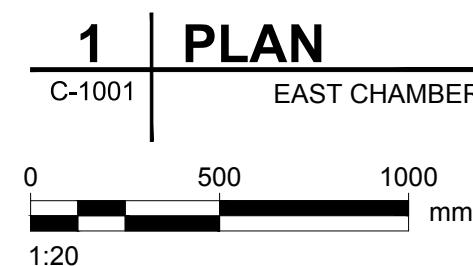


CONCRETE REPAIR

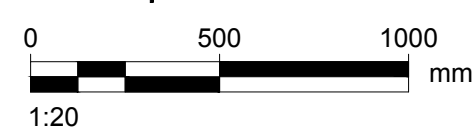
- SAWCUT AROUND AREA TO BE REPAIRED TO A DEPTH OF 19mm.
- AREA TO BE REMOVED IS TO BE RECTANGULAR IF POSSIBLE. NO CORNER OF THE LIMITS OF THE CONCRETE PATCH SHALL HAVE AN INTERNAL ANGLE GREATER THAN 225°.
- ALL EXISTING CONCRETE SURFACES TO BE REPAIRED SHALL BE CLEANED AFTER REMOVAL OF DETERIORATED CONCRETE USING HIGH PRESSURE WASHING, MINIMUM PRESSURE OF 35 MPa (5000 PSI). RE-CLEAN SURFACE PRIOR TO PLACEMENT OF CONCRETE.
- ALL MATERIAL SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- CONCRETE REPAIR PRODUCT SHALL MEET THE FOLLOWING:
 - CW2160
 - TYPE HS CEMENT
 - MIN 28 DAY COMPRESSIVE STRENGTH: 35 MPa



REMOVALS

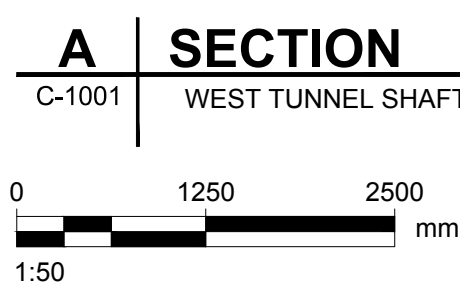


1 | PLAN
C-1001 EAST CHAMBER



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: 2022-02-15



WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

- 1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
- 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 21072 FOR DETAILS

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE 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.

B.M. ELEV. CONSTRUCTION COMPLETION DATE: YYYY MM DD

NO.	REVISIONS	DATE	BY
1	ISSUED FOR ADDENDUM 2	22/02/15	ADL
0	ISSUED FOR CONSTRUCTION	22/01/25	ADL

AECOM

DESIGNED BY: MGM
CHECKED BY:
DRAWN BY: ADL
APPROVED BY:
SCALE: HORIZONTAL AS NOTED
VERTICAL: N/A
DATE: 2022 02 15

ENGINEER'S SEAL
PROVINCE OF MANITOBA
N.J. KEHLER
Member 30100
REGISTERED PROFESSIONAL ENGINEER
CONSULTANT DRAWING NUMBER
C-4001

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

KILDONAN – REDWOOD FEEDERMAIN
CROSSING REHABILITATION
DETAILS

SHEET 04 OF 04
CITY DRAWING NUMBER
1-0798E-C0008-001