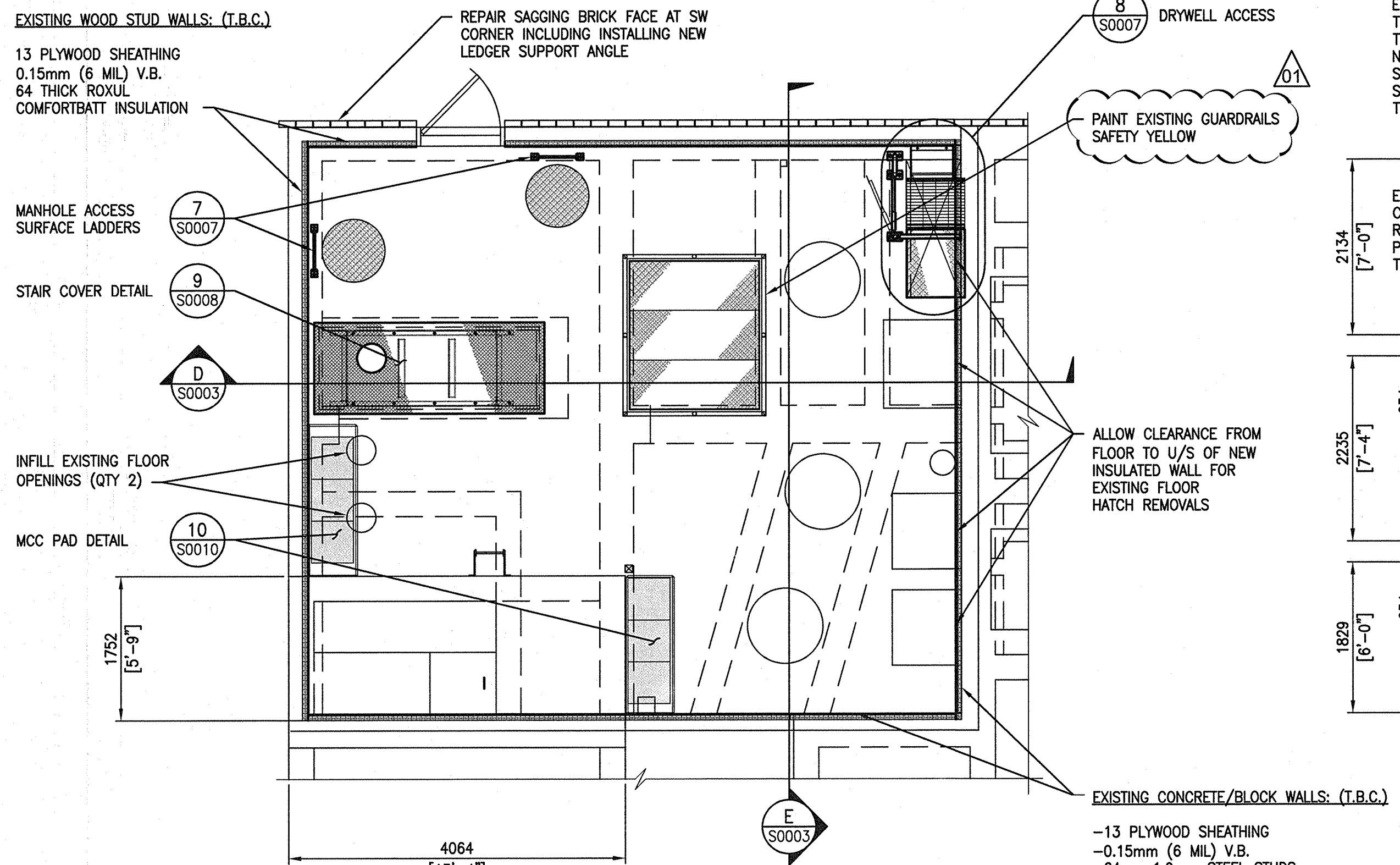
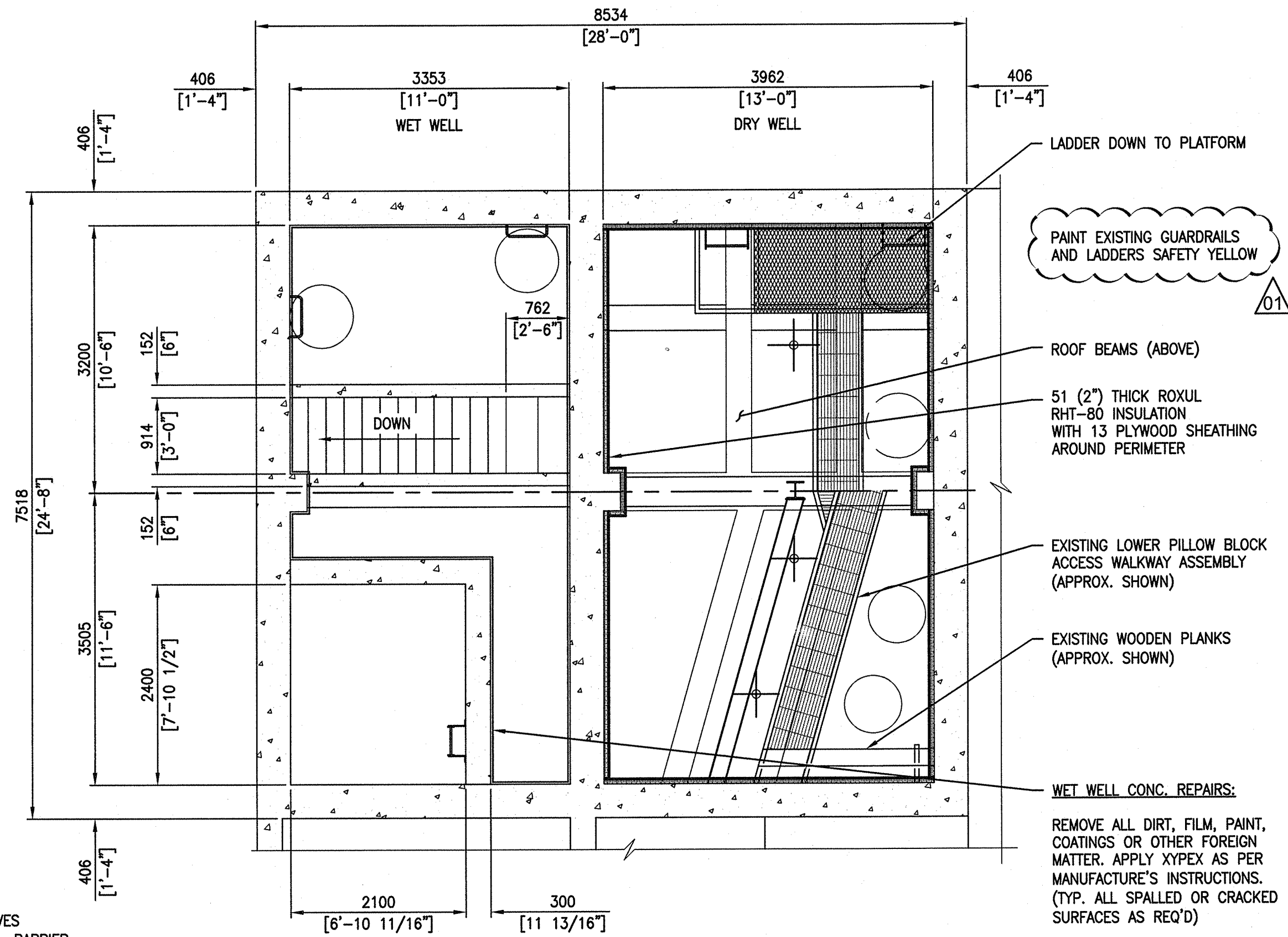


PLAN - U/S ROOF JOIST @ EL. 233.507±
SCALE: 1 : 50



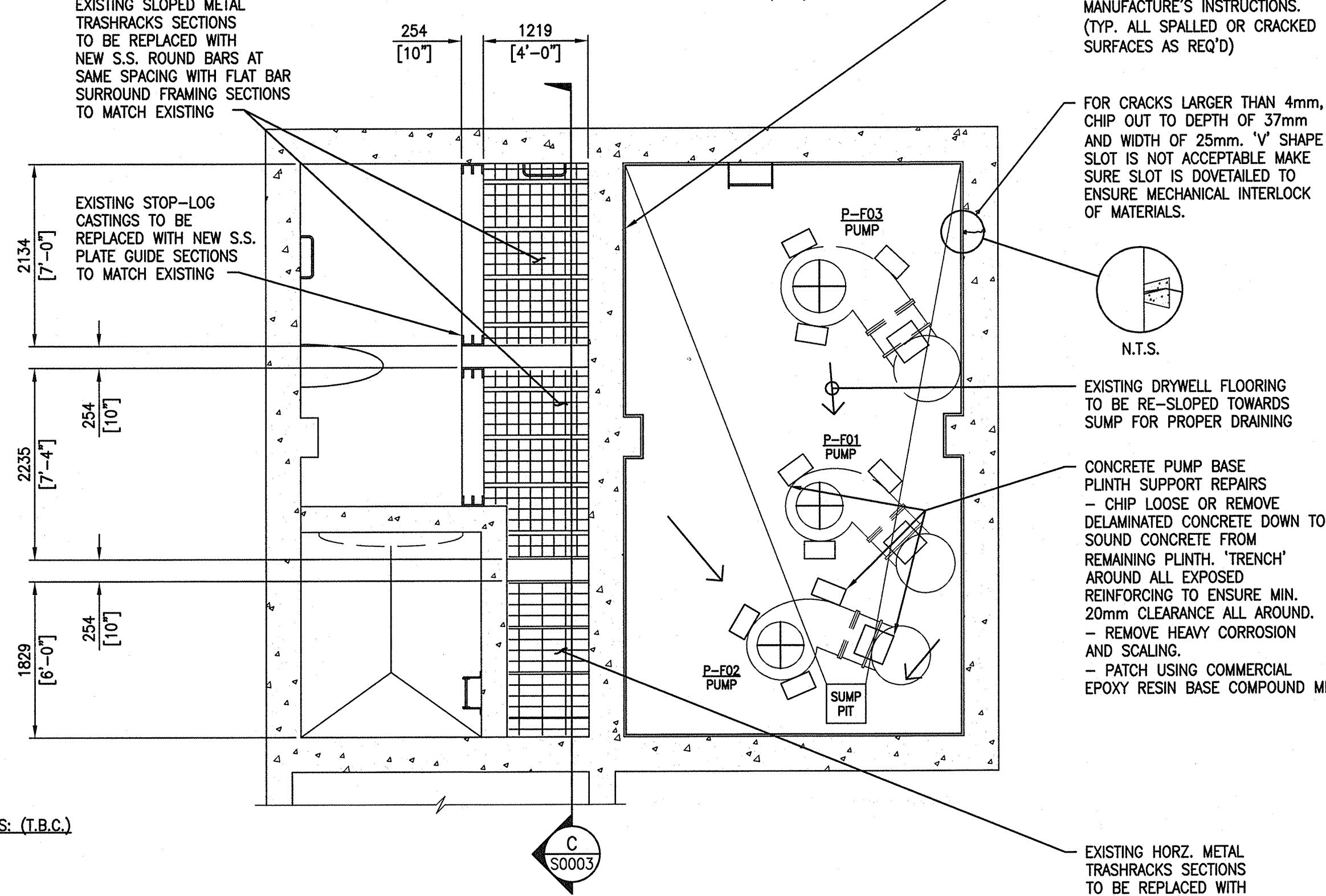
PLAN @ MOTOR FLOOR LEVEL T.O.C. 230.459
SCALE: 1 : 50

- DISCHARGE CHAMBER PARTIALLY SHOWN (REF.) -



PLAN @ U/S MOTOR ROOM LEVEL
SCALE: 1 : 50

- DISCHARGE CHAMBER PARTIALLY SHOWN (REF.) -



PLAN @ PUMP FLOOR LEVEL T.O.C. 222.268
SCALE: 1 : 50

NOTES:

1. SEE DRAWING 1-0173F-S0001 FOR GENERAL NOTES.
- STRUCTURAL STEEL:**
- ALL STRUCTURAL STEEL ANGLES AND PLATES TO BE IN ACCORDANCE WITH CSA G40.21 GRADE 300W, ALL OTHERS MEMBERS TO BE GRADE 350W UNLESS OTHERWISE NOTED.
 - DETAILING, FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH CSA-S16.
 - ALL WELDING TO CONFORM TO CSA W47.1 & W59.
 - INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
 - WELDING SHOPS TO BE CERTIFIED TO DIVISION 1 OR 2 OF CSA W47.1 BY THE CANADIAN WELDING BUREAU. ALL WELDING TO BE PERFORMED BY CWB CERTIFIED WELDERS.

SHOP WELDED CONNECTIONS:

- ALL SHOP WELDING SHALL CONFORM TO CSA W59. CONTRACTOR TO BE CERTIFIED IN ACCORDANCE WITH CSA W47.1, DIVISION 1 OR 2. ALL WELDERS TO BE CWB CERTIFIED FOR THE REQUIRED WELDS.
- ALL WELDS TO BE CONTINUOUS FILLET OR GROOVE SEAL WELDS. GROOVE WELDS TO BE DETAILED AS FULL PENETRATION WELDS WITH BACKER PLATE.

FINISHES:

- ALL LADDER COMPONENTS, SUPPORT CHANNELS AND ANGLES ARE TO BE HOT DIPPED GALVANIZED FINISHES TO MATCH EXISTING (EXCEPT ITEMS NOTED.)
- ALL GUARDRAILS AND RETURNS ARE TO BE SSPC-SP6 BLAST CLEANED THEN COATED WITH 'FORMULA 2' PER SPECIFICATION 099123. COLOUR: SAFETY YELLOW.
- MAIN FLOOR WALLS ARE TO BE PAINTED AND CEILING TO BE CLEANED AND REPAINTED WITH 'FORMULA 1' PER SPECIFICATION 099123. COLOUR: ANSI 70.
- TOUCH UP ALL FIELD WELDS AND DAMAGED AREAS WITH ZINC RICH PRIMER OR PRIMER AND TOPCOAT FOR HDG OR PAINTED SURFACES, RESPECTIVELY.

DESIGN OF BOLTED CONNECTIONS:

- DESIGN ALL BOLTED CONNECTIONS IN ACCORDANCE WITH CSA-S16 AND THE CISC CODE OF STANDARD PRACTICE FOR STRUCTURAL STEEL.
- ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR. CONNECTION CONFIGURATIONS SHALL (IN GENERAL) CONFORM WITH THE DETAILS PROVIDED. SUBMIT SHOP DRAWINGS OF ALL MEMBERS AND CONNECTIONS. DRAWINGS MUST BE SEALED BY PROFESSIONAL ENGINEER REGISTERED IN MANITOBA. THE STEEL FABRICATOR SHALL ADVISE THE ENGINEER IN WRITING WHEN DEVIATION FROM THE APPROVED CONNECTION CONFIGURATION DETAILS IS REQUIRED.
- OVERSIZED HEAVY DUTY 60mm DIA. x 5mm THICK HARDENED PLATE WASHERS REQUIRED AT ALL SLOTTED/BOLTED CONNECTION LOCATIONS.

FIELD ANCHORING:

- LOCATE EXISTING REINFORCING IN THE CONCRETE ELEMENTS TO RECEIVE POST-FACTO ANCHORAGE AND POSITION HOLES FOR THE NEW ANCHORS CLEAR OF THE EXISTING REINFORCING.
- DRILL HOLES INTO THE EXISTING CONCRETE ADVANCING THE DRILL BIT TO FULL DEPTH OF REQUIRED ANCHORAGE. IF REINFORCEMENT IS ENCOUNTERED, TERMINATE DRILLING THE HOLE AND RELOCATE THE ANCHORAGE CLEAR OF THE REINFORCING. USE A STANDARD HARDENED CARBIDE TIPPED CONCRETE BIT. DO NOT USE A CORE DRILL THAT CAN INTERCEPT AND CUT THE EXISTING REINFORCING - EXCEPT WHERE NOTED.
- ADVISE THE CONTRACT ADMINISTRATOR IMMEDIATELY IF THE REQUIRED ANCHORAGE HOLE LOCATIONS CANNOT BE FIELD ADJUSTED TO CLEAR THE EXISTING REINFORCING AND AWAIT FURTHER INSTRUCTIONS. THE SITE ENGINEER WILL REVIEW THE SITUATION AND MAKE A DETERMINATION REGARDING HOW BEST TO INSTALL THE ANCHORS, GIVEN THE ACTUAL POSITIONS OF THE REINFORCING ENCOUNTERED.
- ALL ANCHORS MUST BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

LOADING:

- PER MBC/NBCC
- GUARDS: 0.74 kN/m HORIZONTAL TOP RAIL OR 1.0 kN ANY DIRECTION ALL RAIL VERTICAL
- LADDER: 1.0 kN EACH RUNG VERTICAL 4.45 kN MAIN RAIL VERTICAL
- SNOW: Ss 1.9 kPa Sr 0.2 kPa S (ROOF SNOW) 1.72kPa
- WIND: Q 1/50 0.45kPa LIVE: 4.78 kPa (FLOOR) DEAD: SELF-WEIGHT
- COMM. CHAMBER ROOF NEW SUPPORT BEAMS DESIGNED FOR 4.78 kPa LIVE PLUS MAX. 4500 kg MAINTENANCE EQUIPMENT WEIGHT.

LOADS INDICATED ARE FOR NEW COMPONENT INSTALLS ONLY. EXISTING BUILDING COMPONENTS NOT MODIFIED REMAIN PER ORIGINAL BUILDING DESIGN

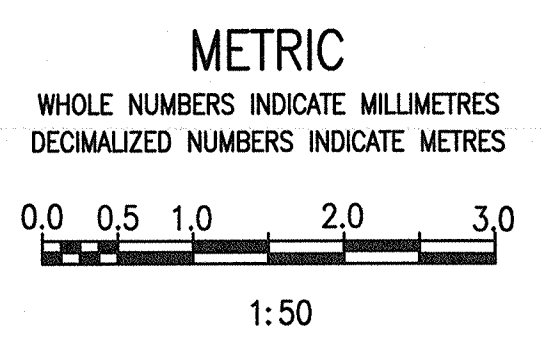
CAST-IN-PLACE CONCRETE:

- ALL CONCRETE TO BE MIXED, PLACED, AND TESTED ACCORDING TO CSA A23.1 & CSA A23.2.
- CONCRETE: COMPRESSIVE STRENGTH = 35 MPA AT 28 DAYS, SLUMP = 80 +/- 20 MM, MAXIMUM AGGREGATE SIZE = 10 MM, ENTRAINED AIR = 4-7%, CEMENT = HS OR HSB SULPHATE RESISTANT.
- ADVISE THE CONTRACT ADMINISTRATOR AT LEAST 48 HOURS IN ADVANCE OF CONCRETE POUR.
- FORMS SHALL NOT BE STRIPPED UNTIL 75% OF THE SPECIFIED CONCRETE STRENGTH HAS BEEN REACHED.

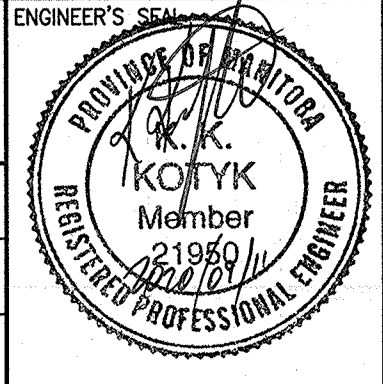
ACCESSORIES EMBEDDED IN CONCRETE:

- THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING, LOCATING AND PLACING ALL PLATES, ANCHOR BOLTS, INSERTS, DOWELS, SLEEVES AND OPENINGS. COORDINATE ACCESSORY PLACEMENT REQUIREMENTS WITH THE SHOP DRAWINGS.
- ANCHOR BOLTS, INSERTS, SLEEVES DOWELS, ETC. SHALL BE SECURED IN POSITION BY MEANS OF TEMPLATES BEFORE CONCRETE IS PLACED.

LD-2960	POLSON FLOOD PUMPING STATION - CONCRETE SLAB REPAIR
LD-2644	POLSON FLOOD PUMPING STATION - ACCESS HATCH
LD-2643	POLSON FLOOD PUMPING STATION - FLAPGATE INSTALLATION
5-SD-4	POLSON AVENUE PUMPING STATION - SHEET 2
5-SD-4	POLSON AVENUE PUMPING STATION - SHEET 1
512	POLSON COMMUNOTOR STATION - REINFORCING STEEL DETAILS
511	POLSON COMMUNOTOR STATION - CONSTRUCTION DETAILS
DRAWING NUMBER	REFERENCE DRAWINGS



<p>SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-788-8080</p>			
DESIGNED BY:	K. KOZYK	CHECKED BY:	B. CLEVEN
DRAWN BY:	B. DICKSON	APPROVED BY:	B. CLEVEN
SCALE:	1 : 50	ISSUED FOR CONSTRUCTION	By: K. ZUREK
DATE:	2020/05/25	DATE:	2020/09/02
CONSULTANT NO.:			
NO.	REVISIONS	DATE	DESIGN/CHECK
01	ISSUED FOR CONSTRUCTION	2020/09/11	K.K. B.C.
00	ISSUED FOR TENDER, BID OP 567-2020	2020/08/19	K.K. B.C.



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

POLSON FLOOD PUMPING STATION
2020 UPGRADES
STRUCTURAL MODIFICATIONS - PUMPING STATION
PLANS & NOTES

CITY DRAWING NUMBER: 1-0173F-S0002
SHEET: 001
REV: 01
SIZE: A1

1-0173F-S0002-001.dwg