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DRUMHELLER INSTITUTIONS 50 BED LIVING UNIT

TENDER SET

ISSUED June 17, 2020

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Project title			Projet		
Highway 9, Drumheller Alberta, T0J 0Y0 CSC Drumheller 50 Bed Unit Floor Slab Repair					
Designed by			Conçu par		
Drawn by LKM			Dessiné par		
Approved by IH			Approuvé par		
PWGSC Project Manager			Administrateur de Projets TPWGC		
Drawing title			Titre du dessin		
COVER SHEET					
Project no./No. du projet		Drawing no./No. du dessin		Revision no.	
60608478		G-001 OF XX		C	

	MINIMUM SECURITY INSTITUTION, FREE ACCESS, FLOOR SLAB REPAIR										
ITEM	National Building Code Data Matrix										
1	Project Description: <div><div><input type="checkbox"/> Addition</div><div><input type="checkbox"/> Change of Use</div><div><input checked="" type="checkbox"/> Alteration</div></div>						<div><div></div>Part 3</div>	Remarks			
2	Major Occupancy(s)	Group C & D (lodging House & Offices)					3.1.2.2.				
3	Basement Area (m²)	Existing	529m²	New	0m²	Total	529m²				
	Ground Floor (m²)	Existing	1073m²	New	0m²	Total	1073m²				
	Second Floor (m²)	Existing	1073m²	New	0m²	Total	1073m²				
4	Gross ARea	Existing	2675m²	New	0m²	Total	2675m²				
5	Number of Storeys	above grade	2	Below grade	0						
6	Number of Streets/Fire Fighter Access 1										
7	Building Classification	Group C, Up to 4 storeys, sprinklered Group D, Up to 3 storeys, sprinklered					3.2.2.45, 3.2.2.45				
8	Sprinkler System Proposed <div><div><input checked="" type="checkbox"/> entire building</div><div><input type="checkbox"/> basement only</div><div><input type="checkbox"/> in lieu of roof rating</div><div><input type="checkbox"/> not required</div></div>										
9	Standpipe required	<div><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>					3.2.5.8.				
10	Fire Alarm required	<div><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</div>					3.2.4.1.(2)i				
11	Water Service/ Supply is Adequate	<div><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</div>					3.2.5.7.				
12	High Building	<div><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>					3.2.6.1.				
13	Permitted Construction	<input type="checkbox"/> Combustible	<input type="checkbox"/> Non-combustible		<input checked="" type="checkbox"/> Both		3.2.2.45.(2)				
	Actual Construction	<input type="checkbox"/> Combustible	<input type="checkbox"/> Non-combustible		<input checked="" type="checkbox"/> Both						
14	Mezzanine(s) area m²	N/A									
15	Occupant load base on	<input type="checkbox"/> m²/person	<input checked="" type="checkbox"/> design of building				3.1.17.1.				
	Basement	Occupancy	C	Load	XX	persons					
	1st Floor	Occupancy	C,B	Load	XX	persons					
	2nd Floor	Occupancy	C,B	Load	XX	persons					
	3rd Floor	Occupancy	N/A	Load	N/A	persons					
16	Barrier-free Design	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Explain: _____			3.5.1.1.					
17	Hazardous Substances	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
18	Required Fire Resistance Rating (FRR)	Horizontal Assemblies FRR (Hours)			Listed Design No. or Description (SG-2)		3.2.2.20.-83				
		Floors	1	Hours							
		Roof	N/A	Hours			3.2.2.45-3/3.4.2/2				
		Mezzanine	N/A	Hours							
		FRR of Supporting Members (Hours)			Listed Design No. Or Description (SG-2)						
		Floors	1	Hours							
		Roof	0	Hours							
		Mezzanine	N/A	Hours							
19	Separation between Occupancies - N/A										
20	Spatial Separation - construction of exterior walls										
	WALL	ARE OF EBF (m²)	L.D. (m)	L/H or H/L	PERMITTED % OF OPNG	PROPOSED % OF OPNG	FRR (HOURS)	LISTED DESIGN or DESCRIPTION	COMB. CONSTR.	COMB. CONTR. NONC. CLADD.	NON-COMB. CONSTR.
	NORTH				N/A	N/A			<div></div>		
	SOUTH				N/A	N/A			<div></div>		
	EAST				N/A	N/A			<div></div>		
	WEST				N/A	N/A			<div></div>		
Distance between exits		3.4.2.3.		Travel distance to exit		3.4.2.1.		Minimum Number of Exits			

GENERAL NOTES:

- ALL DIMENSIONS IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- DRAWINGS ARE NOT TO BE SCALED FOR SIZE OR DIMENSION. PATCH, REPAIR AND REFINISH ALL EXISTING SURFACES AND MATERIALS DAMAGED DURING DEMOLITION AND CONSTRUCTION.
- CONTRACTOR RESPONSIBLE TO VERIFY EXISTING DIMENSIONS AND CONDITIONS IN THE FIELD AND NOTIFY CONSULTANT IF ANY DEVIATIONS FROM DOCUMENTS ARE FOUND IN THE FIELD. INCLUDING UNFORESEEN CONDITIONS AFFECTING THE WORK WHICH MAY BE ENCOUNTERED.
- REPAIR ANY EXISTING DAMAGED CONCRETE AND CONCRETE AT LOCATIONS WHERE CURBS, PADS AND EQUIPMENT HAS BEEN REMOVED. REFER TO SPECIFICATIONS FOR CONCRETE REPAIR PRODUCT TO BE USED.
- SIZE AND LOCATION OF WALL/ROOF PENETRATIONS ARE APPROXIMATE. ALL PENETRATIONS MAY NOT BE INDICATED. COORDINATE ALL PENETRATIONS WITH ALL DISCIPLINES FOR EXACT SIZE AND LOCATION.
- ALL PENETRATIONS TO BE SEALED WEATHER TIGHT.
- PROVIDE BLOCKING, STRAPPING, NAILING STRIPS, WOOD FRAMING, ETC. AS INDICATED ON DRAWINGS OR AS REQUIRED.
- PROVIDE FIRESTOP ASSEMBLY AT FIRE RATED WALL INTERSECTION OF WALL AND ROOF/CEILING ASSEMBLY TO MATCH FIRE RATING OF WALL.
- FIRE RATED WALLS EXTEND TO THE UNDERSIDE OF THE CEILING/ROOF DECK.

ABBREVIATIONS

AL	ALUMINUM
AN	ANNODIZED
AT	ACOUSTIC TILE
B	BRICK
C	CONCRETE
CB	CONCRETE BLOCK
CC	CONCRETE CURB
CH	EXISTING METAL CLADDING
CJ	EXPOSED STRUCTURE
CS	GOOD ONE (1) SIDE
DIA	GYPSUM BOARD
EX	GLAZING
EP-F	HOLLOW METAL
EX-C	LONG
EX-M	LEFT HAND REVERSE
EXPS	MAXIMUM
G1S	METAL DECKING
GB	MINIMUM
GL	MILLIMETERS
HM	METAL
LG	NOT IN CONTRACT
LHR	
MAX	
MD	
MIN	
mm	
MTL	
NIC	

O.C.

OH	OVERHEAD
P	PAINT
PL	PLATE
PLY	PLYWOOD
PRE	PREFINISHED
PSF	PRESSED STEEL FRAME
PT	PRESSURE TREATED
REQ'D	REQUIRED
RHR	RIGHT HAND REVERSE
S	SEALER
SS	STAINLESS STEEL
ST	STEEL

ON CENTRE

OH	OVERHEAD
P	PAINT
PL	PLATE
PLY	PLYWOOD
PRE	PREFINISHED
PSF	PRESSED STEEL FRAME
PT	PRESSURE TREATED
REQ'D	REQUIRED
RHR	RIGHT HAND REVERSE
S	SEALER
SS	STAINLESS STEEL
ST	STEEL

IMAGE	TAG	DESCRIPTION (mm)	FIRE RATING ULC DESIGN No	STC RATING	REMARKS
PARTITION TYPES					
	PTN-1	16 ABUSE RESISTANT GYPSUM WALLBOARD 38 x 89 WOOD STUDS @ 400 O.C. 89 mm SOUND ATTENUATION BATTS 16 ABUSE RESISTANT GYPSUM WALLBOARD		STC 46 (APPROX)	ALL WALLS PT-1 UNLESS NOTED OTHERWISE
	PTN-2	16 TYPE 'X' GYPSUM WALLBOARD 38 x 89 WOOD STUDS @ 400 O.C. 75 mm MINERAL WOOL BATTS 16 TYPE 'X' GYPSUM WALLBOARD	1 HOUR ULC des W301	STC 46 (APPROX)	WHEN USED AT BASEMENT LEVEL DOES NOT CONTAIN MINERAL WOOL BATT INSULATION - EXTEND PARTITION TO UNDERSIDE OF STRUCTURE ABOVE- TAPE SEAL ALL CONNECTIONS TO MAINTAIN 1 HR FIRE SEPARATION
	PTN-3	16 TYPE 'X' GYPSUM WALLBOARD 38 x 140 WOOD STUDS @ 400 O.C. 75 mm MINERAL WOOL BATTS 16 TYPE 'X' GYPSUM WALLBOARD	1 HOUR SIM ULC des W301 (USING LARGER WOOD STUDS)		STAIR WELL
	PTN-6	16 ABUSE RESISTANT GWB 38 x 140 WOOD STUDS @ 400 O.C. FILL CAVITY WITH SOUND ATTENUATION BATTS 16 ABUSE RESISTANT GWB		STC 46	USE MOISTURE RESISTANT GYPSUM RESISTANT GYPSUM BOARD @ WASHROOMS

ROOF FINISH SCHEDULE: MAIN FLOOR

(AS PER ORIGINAL CONSTRUCTION. CLIENT TO REVIEW AND CONFIRM FINISHES.)

No.	ROOM NAME	BASE	FLOOR	WALL	DOOR	CEILING	CABINETS	Counter Top	PULLS		REMARKS / DEFINITIONS								
	<div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div>	1 101mm RUBBER COVE	2 50mm TILE COVE BASE	3 SHEET LINOLEUM	4 CARPET TILE	5 50mm x 50mm FLOOR TILES	6 RUBBER FLOORING	7 76mm x 152mm CERAMIC TILE	8 PAINT FINISH 1	9 PAINT FINISH 2	10 INTERIOR DOOR FINISH	11 INTERIOR DOOR FRAME FINISH	12 PAINTED GYPSUM WALL BOARD	13 LAMINATE FINISH CABINETS	14 STAINLESS STEEL COUNTERTOP	15 PLASTIC LAMINATE COUNTERTOP	16 CHROME CABINET PULS	COLOUR LOCATION FOR HI-LIGHT PAINT FINISH #2	N=NORTH WALL SURFACE E=EAST WALL SURFACE S=SOUTH WALL SURFACE W=WEST WALL SURFACE
W100	LIVING RM/DINING RM	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	E	
W101-W108	BED	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W110	MECH / ELEC	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W111	LAUNDRY	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W112	W/C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W113	W/C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W114	KITCHEN	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W115	SHOWER	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
W116a,b,c	CORRIDOR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

MATERIAL SPECIFICATIONS:

MAT. NO.	MATERIAL	SPECIFICATION	SUPPLIER	NOTES
1	RUBBER BASE	JOHNSONITE RUBBER (101mm) 29-MOON ROCK (WG)	KBM COMMERCIAL FLOOR COVERING Matt Cree 403-206-9772	USE WITH INSIDE AND OUTSIDE CORNER PIECES IN SAME COLOUR
2	TILE COVE BASE	DAL TILE 50mm X 50mm COVER FABRIQUE, COL: GRIS LINEN P690	DAL TILE 403-255-2566	USE WITH INSIDE AND OUTSIDE CORNER PIECES IN SAME COLOUR
3	SHEET LINOLEUM	ARMSTRONG GRANETTE LP152 ITSY BITSY SPIDER	KBM COMMERCIAL FLOOR COVERING MATT CREE 403-206-9772	USE WITH COORDINATING WELD ROD W1168
4	CARPET TILE	BIGELOW - BENDING EARTH CALIBER (.6096m X .6096m) COLOUR: 7728 CHERT	KBM COMMERCIAL FLOOR COVERING MATT CREE 403-206-9772	1/4 TURN INSTALLATION
5	50mm x 50mm FLOOR TILES	DAL TILE 50mm X 50mm SIZE FABRIQUE, COL: GRIS LINEN P690	DAL TILE 403-255-2566	GROUT COLOUR: MAPEI, 09 GRAY
6	RUBBER FLOORING	JOHNSONITE SMOOTH (RET) 29 MOON ROCK	KBM COMMERCIAL FLOOR COVERING MATT CREE 403-206-9772	COORDINATING RUBBER TREADS & RISERS: FAST LANE (CFLTR)
7	WALL TILES	DAL TILE 76mm X 152mm SIZE ELEMENTAL TAN 0166	DAL TILE 403-255-2566	GROUT COLOUR: MAPEI, 09 GRAY
8	PAINT FINISH 1	PRATT & LAMBERT DAWN MIST 32-25	PRATT & LAMBERT 1-877-772-8898	MINIMUM - PRIMER PLUS TWO COATS EGGSHELL FINISH
9	PAINT FINISH 2	PRATT & LAMBERT RUBIDOUX 32-23	PRATT & LAMBERT 1-877-772-8898	MINIMUM - PRIMER PLUS TWO COATS EGGSHELL FINISH
10	INTERIOR DOORS FINISH	PRATT & LAMBERT RUBIDOUX 32-23	PRATT & LAMBERT 1-877-772-8898	MINIMUM - PRIMER PLUS TWO COATS EGGSHELL FINISH
11	DOOR FRAME FINISH	PRATT & LAMBERT RUBIDOUX 32-23	PRATT & LAMBERT 1-877-772-8898	MINIMUM - PRIMER PLUS TWO COATS EGGSHELL FINISH
12	PAINTED CEILING	PRATT & LAMBERT CHINA WHITE 33-8	PRATT & LAMBERT 1-877-772-8898	MINIMUM - PRIMER PLUS TWO COATS EGGSHELL FINISH
13	CABINETS	ARBORITE W-428 VL	P.J. WHITE HARDWOODS LTD. 403-243-4747	OR SIMILAR PRODUCT / FINISH
14	STAINLESS STEEL COUNTERTOPS	FOOD GRADE STAINLESS STEEL OVER PLYWOOD BASE/FRAMING 14 GAUGE	CONTRACTOR TO SOURCE	CONTINUOUS ROLLED EDGES ADD 101mm SPLASH - CONTINUOUS
15	PLASTIC LAM. COUNTERTOP	ARBORITE P-345 RM INUKSHUK TAUPE	FORMATIONS INC. 403-243-3115	CONTINUOUS ROLLED EDGE PROFILE
16	CABINET PULLS	RICHELIEU BP33206140 (CHROME) 101mm WIDE	RICHELIEU 1-800-361-6000	QUANTITIES TO BE DETERMINED BY CABINET MAKER

MAIN FLOOR FINISHES NOTES:

- ACOUSTIC CEILING TILE & T-BAR CEILING: ARMSTRONG, FINE FISSURED, SQUARE LAY-IN (118" OR 23.8mm) - 1811 (600x1200x19mm), COLOUR: WHITE, WITH 'PRELUDE XL' T-BAR
- SUPPLY & INSTALL 1219mm HIGH x 38mm STAINLESS STEEL CORNER GUARDS ON ALL GYPSUM CORNERS IN THE RESIDENTIAL PODS.

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C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06
Revision	Description	Date
Client		client

Department of Public Works
& Governments Services Canada

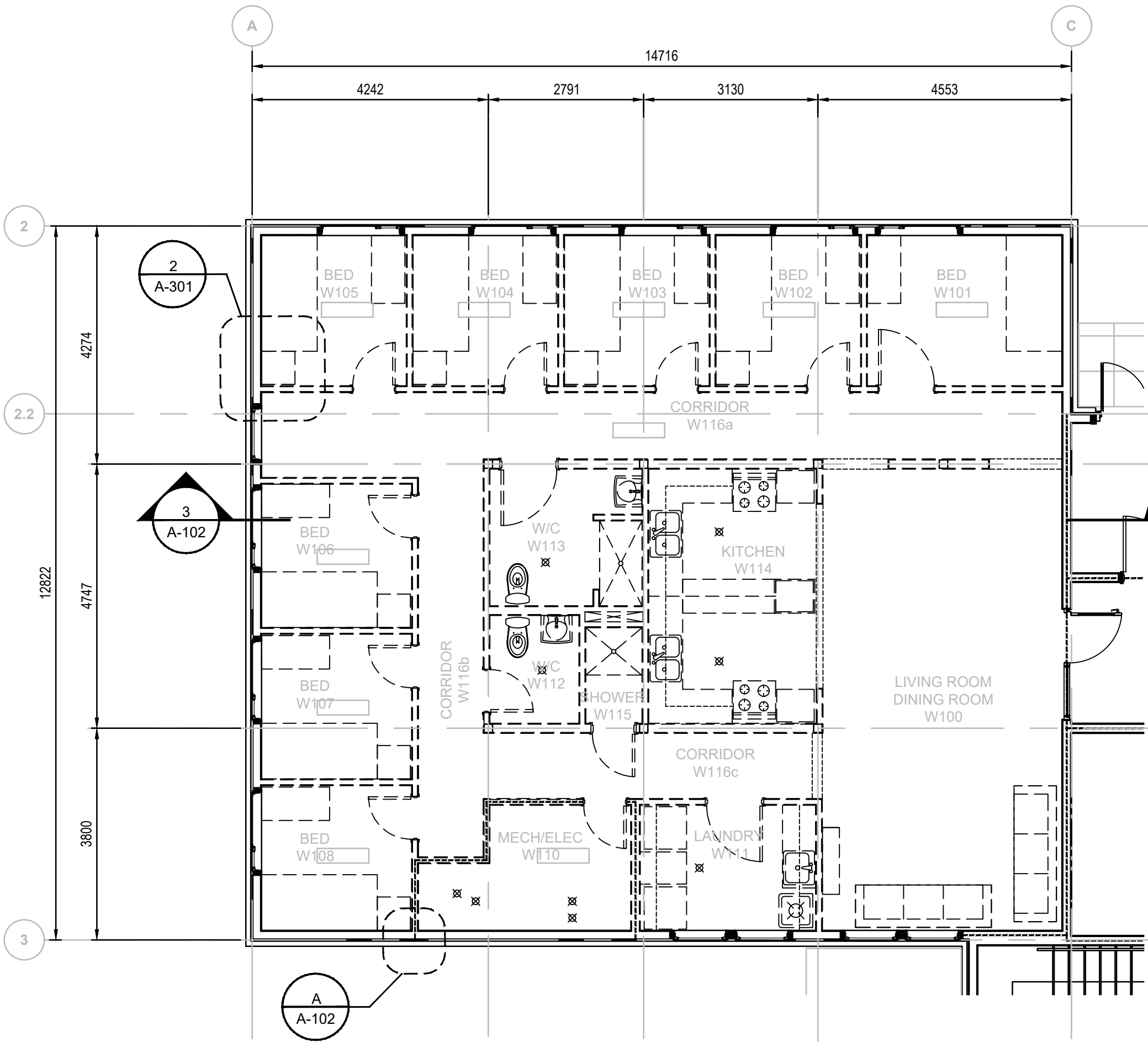
ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by RGM	Conçu par
Drawn by LKM	Dessiné par
Approved by IH	Approuvé par
PWSSC Project Manager	Administrateur de Projets TPSSC

Drawing title
ARCHITECTURAL
SCHEDULES, NOTES & LEGENDS

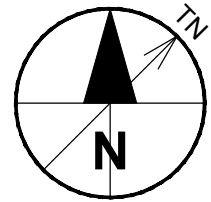
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	A-001	C



1 | **DEMOLITION MAIN FLOOR PLAN**
A-101 | Scale 1:100

- DEMOLITION NOTES:**
- REMOVE INTERIOR PARTITIONS TO UNDERSIDE OF FINISHED CEILING. PROVIDE TEMPORARY SHORING FOR FINISHED CEILING.
 - REMOVE INTERIOR PARTITIONS TO INTERIOR FACE OF EXTERIOR WALLS.
 - SALVAGE DOORS, FRAMES AND HARDWARE FOR REUSE.
 - SALVAGE BEDROOM BUILT-IN FURNITURE AND CABINETS FOR REUSE.
 - SALVAGE LAUNDRY MILLWORK, APPLIANCES, AND PLUMING FIXTURES FOR REUSE
 - SALVAGE WASHROOM ACCESSORIES AND PLUMING FIXTURES FOR REUSE
 - SALVAGE KITCHEN MILLWORK, APPLIANCES, AND PLUMBING FIXTURES FOR REUSE.
 - SALVAGE LIVING/DINING ROOM FURNITURE FOR REUSE.
 - STORE SALVAGED ITEMS AS DIRECTED BY THE OWNER.
 - REFER TO REFERENCE DRAWING SET: "DRUMHELLER INSTITUTION 50 MAN LIVING UNIT ISSUED FOR RECORD SET" FOR INFORMATION ON EXISTING CONSTRUCTION TO BE REBUILT TO MATCH AND REINSTALLATION DETAILS OF SALVAGED ITEMS.

- LEGEND:**
- CEILING HEIGHT ABOVE FLOOR
 - WALLS AND PARTITIONS TO BE REMOVED



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A	ISSUED FOR 50% REVIEW	2020/03/06
Revision	Description	Date
Client		client

**Department of Public Works
& Governments Services Canada**

**ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6**

Project title
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Alberta, T0J 0Y0
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Approved by IH	Approuvé par
PWGSC Project Manager	Administrateur de Projets TPSSGC

Drawing title
**ARCHITECTURAL
DEMOLITION PLANS AND NOTES**

Project no./No. du projet 60608478	Drawing no./No. du dessin A-101 OF 06	Revision no. C
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Project title Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by RGM Conçu par

Drawn by LKM Dessiné par

Approved by IH Approuvé par

PWSSC Project Manager Administrateur de Projets TPSSC

Drawing title TITRE DU Dessin

ARCHITECTURAL
DEMOLITION
BUILDING SECTIONS & DETAILS

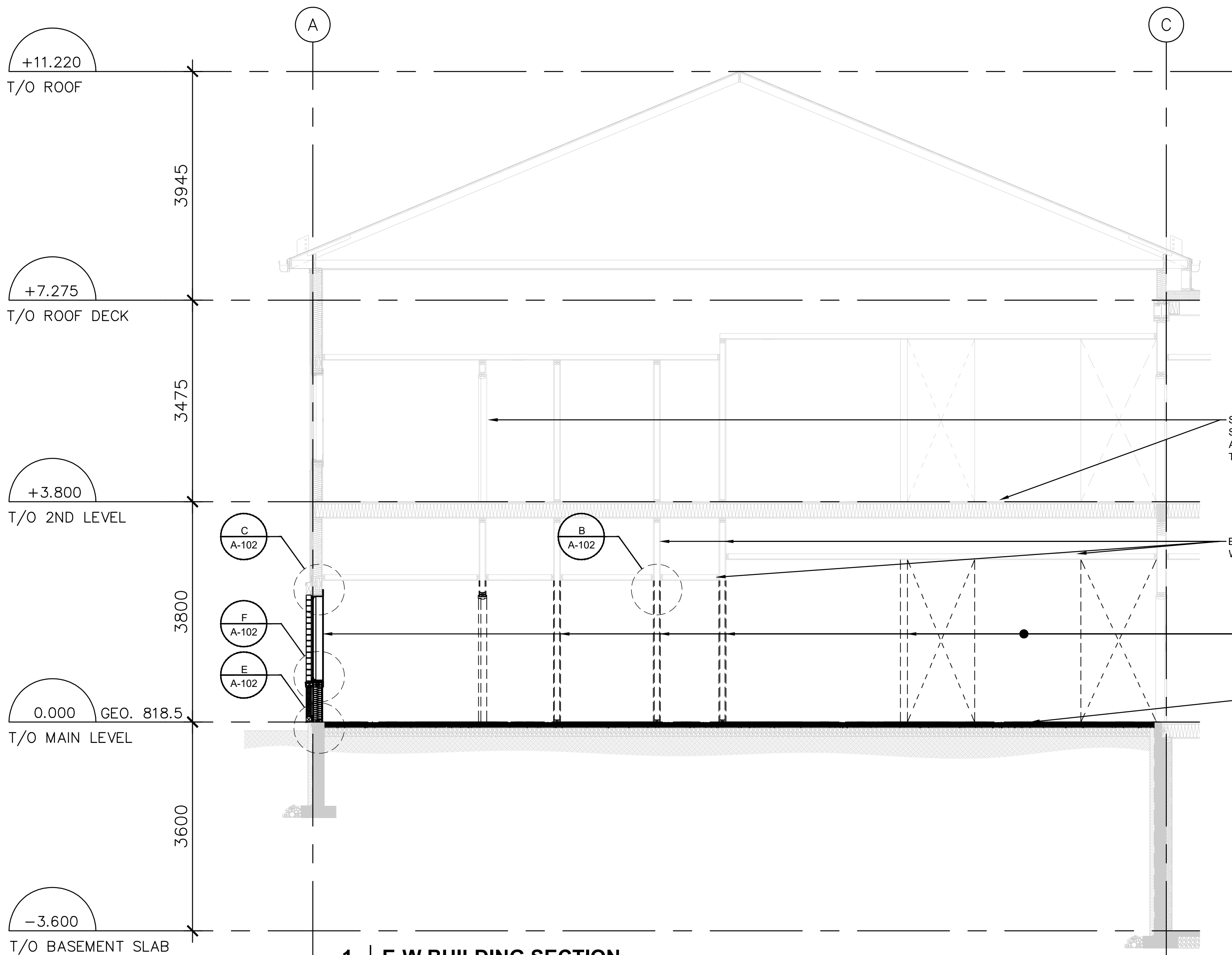
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60608478

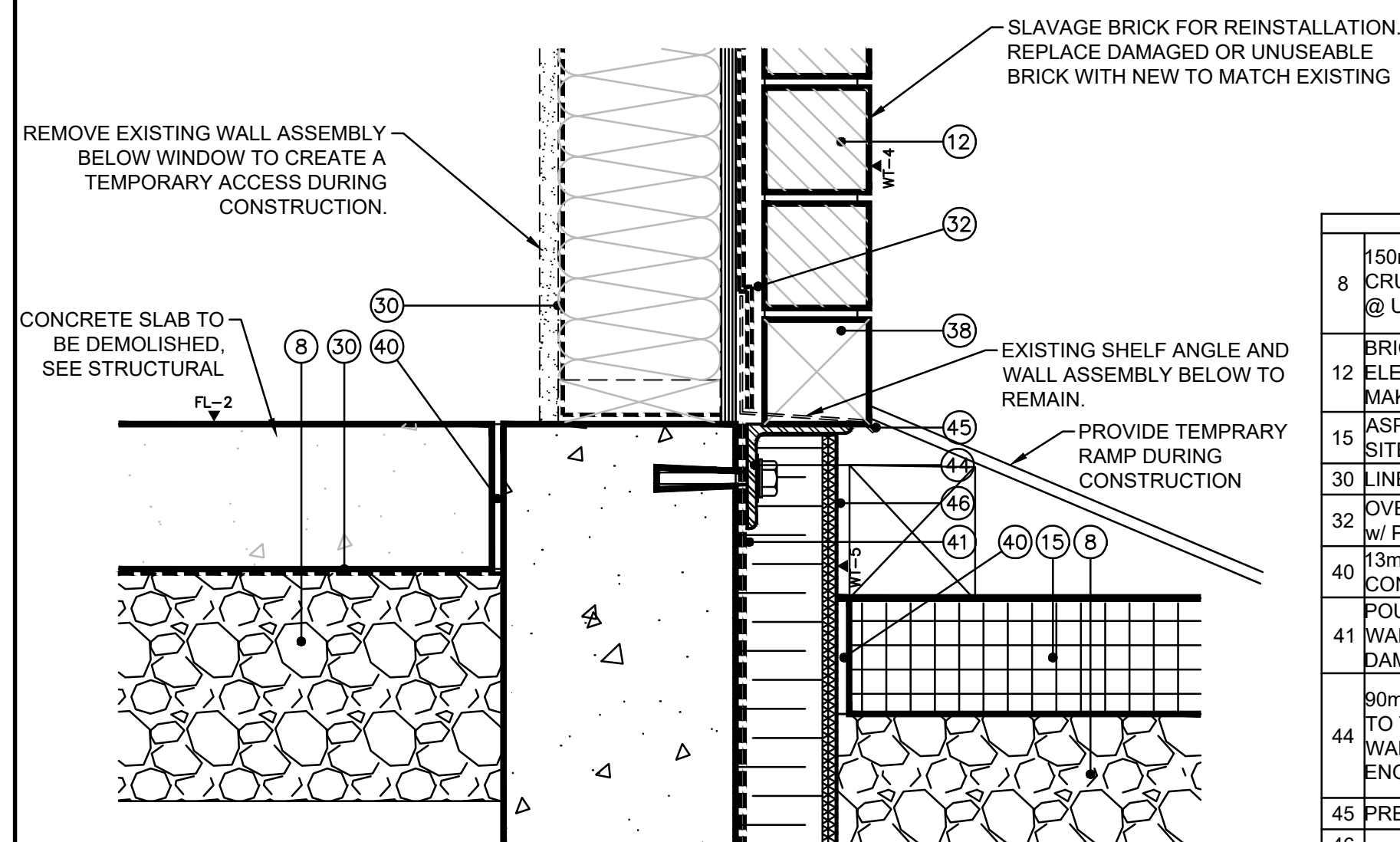
A-102

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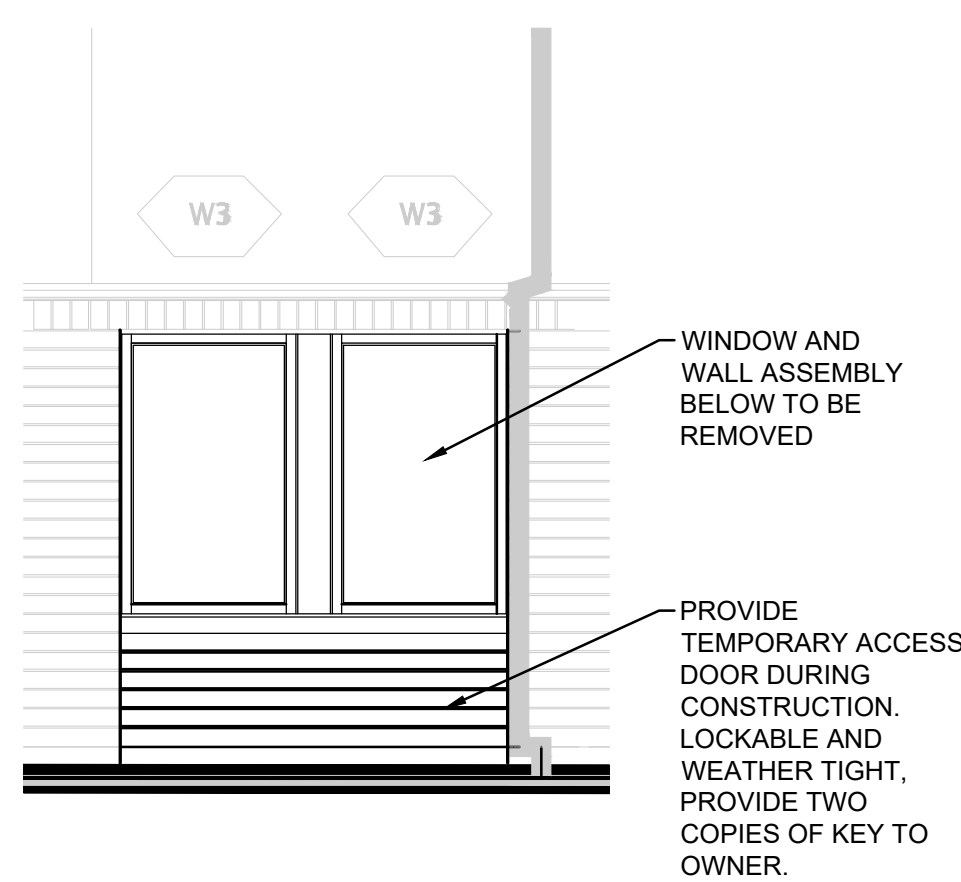
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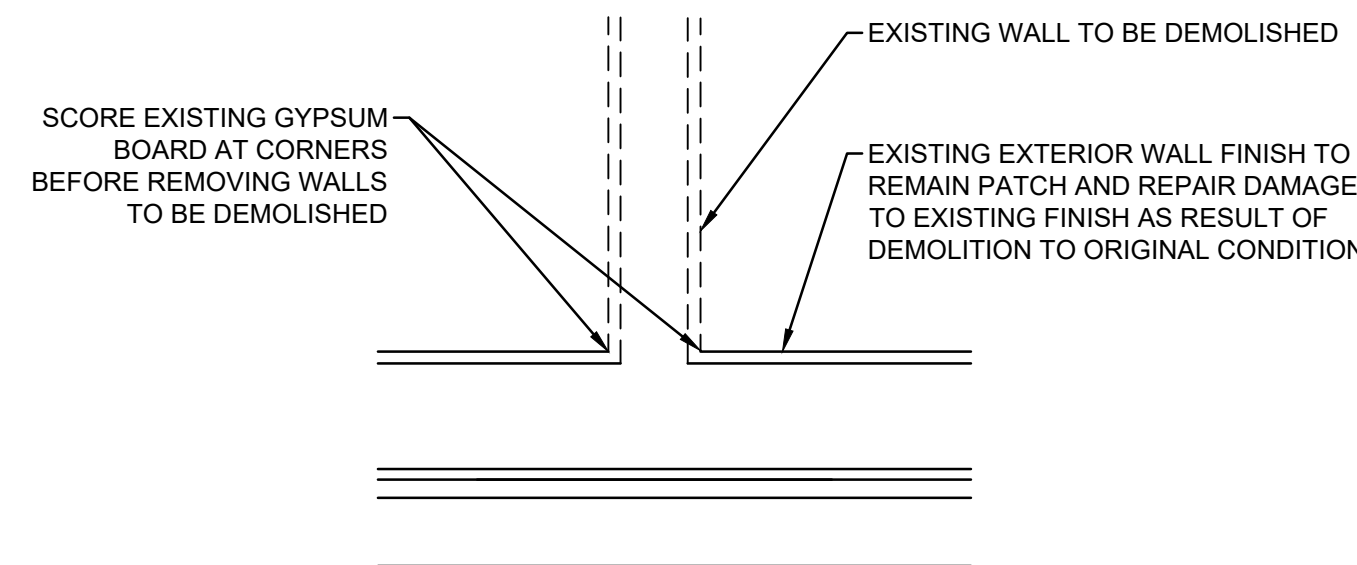
1 E-W BUILDING SECTION
A-201 Scale 1:50



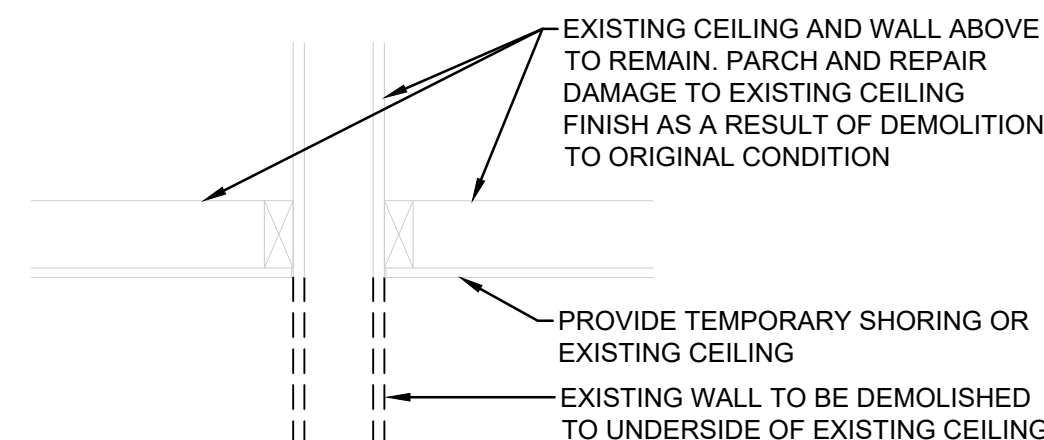
D DETAIL
S-102 Scale 1:5



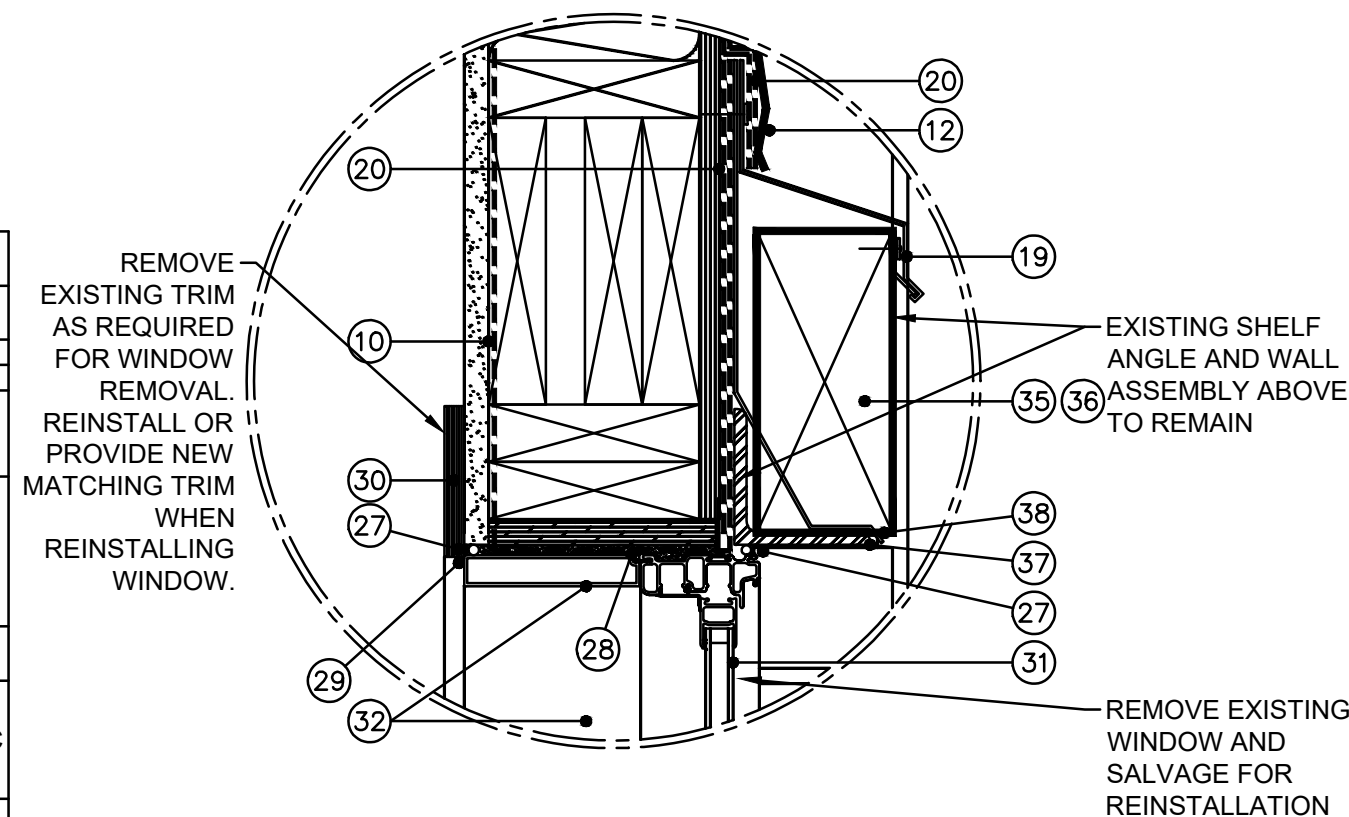
E DETAIL
Scale 1:10



A PLAN DETAIL
A-101 Scale 1:10

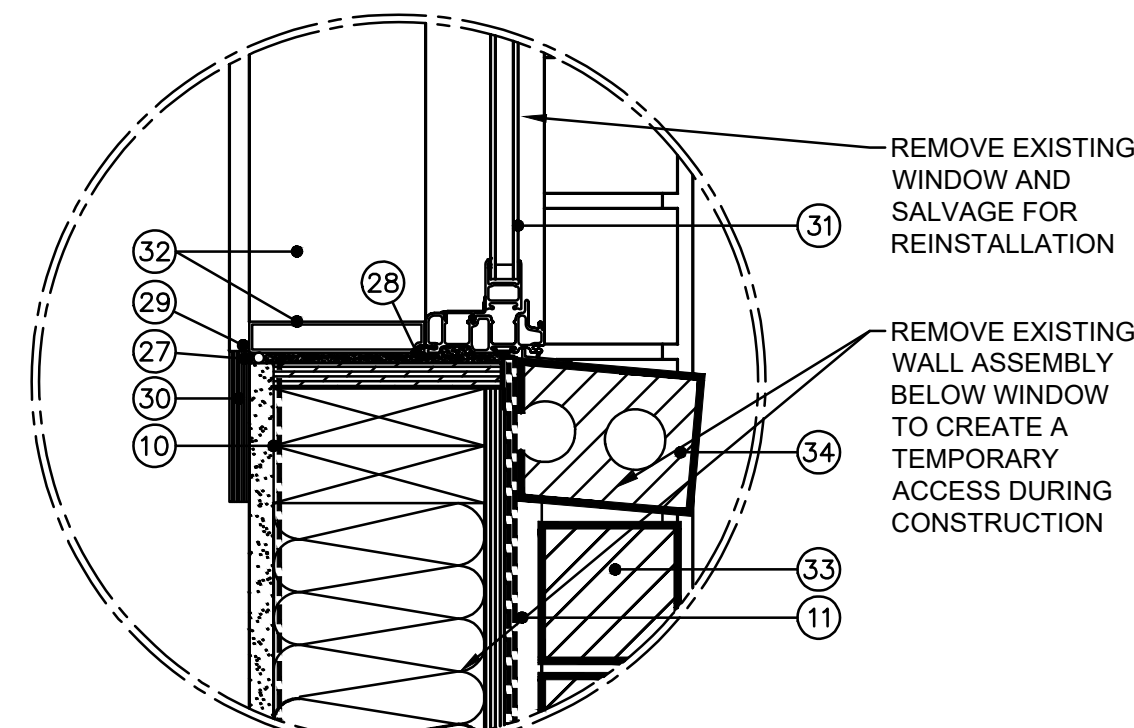


B DETAIL
A-102 Scale 1:10



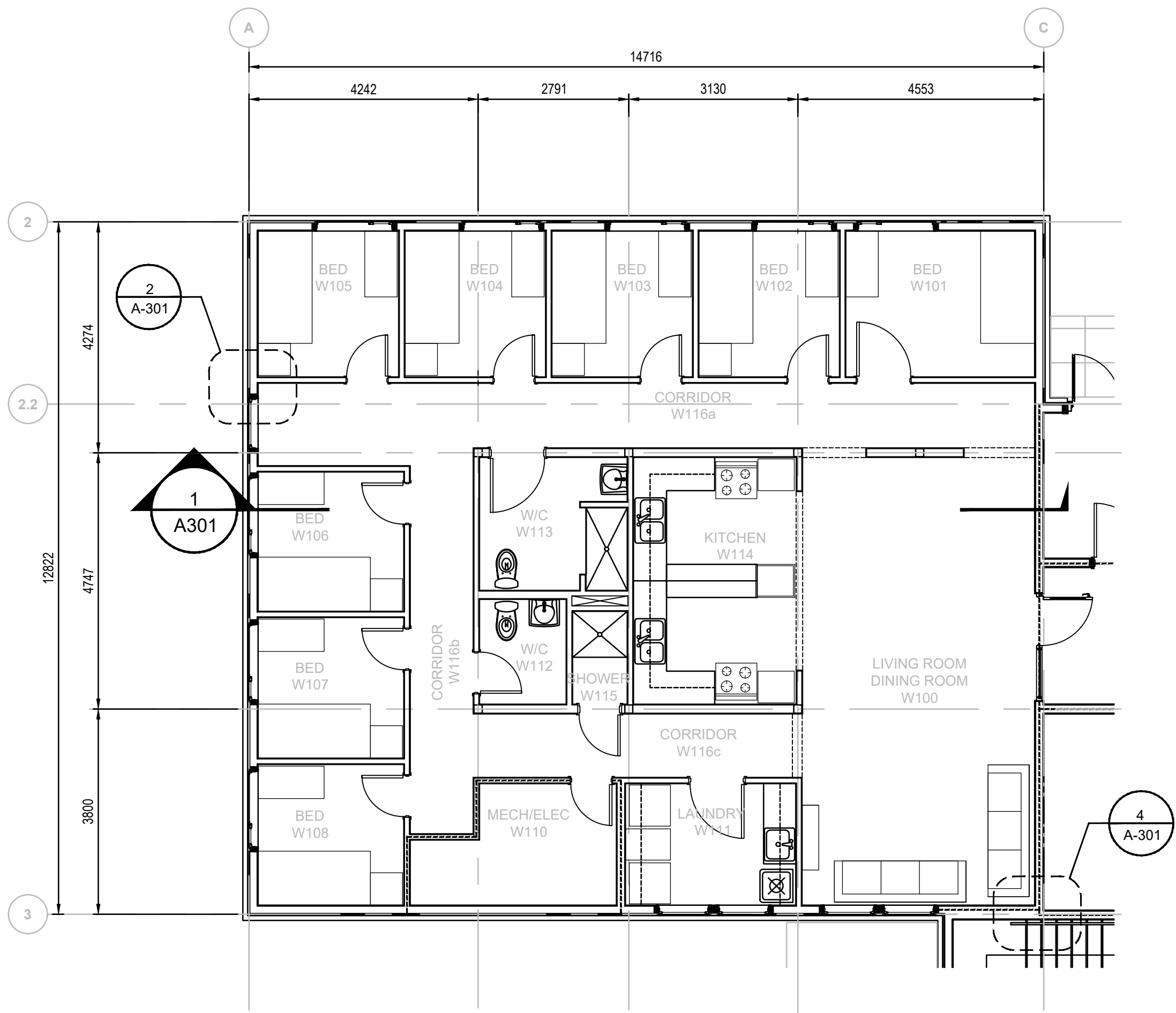
SECTION DETAIL @ THERMALLY BROKEN PVC WINDOW FRAMING SYSTEM HEAD @ SOLDIER COURSE BRICK VENEER

C DETAIL
A-102 Scale 1:5

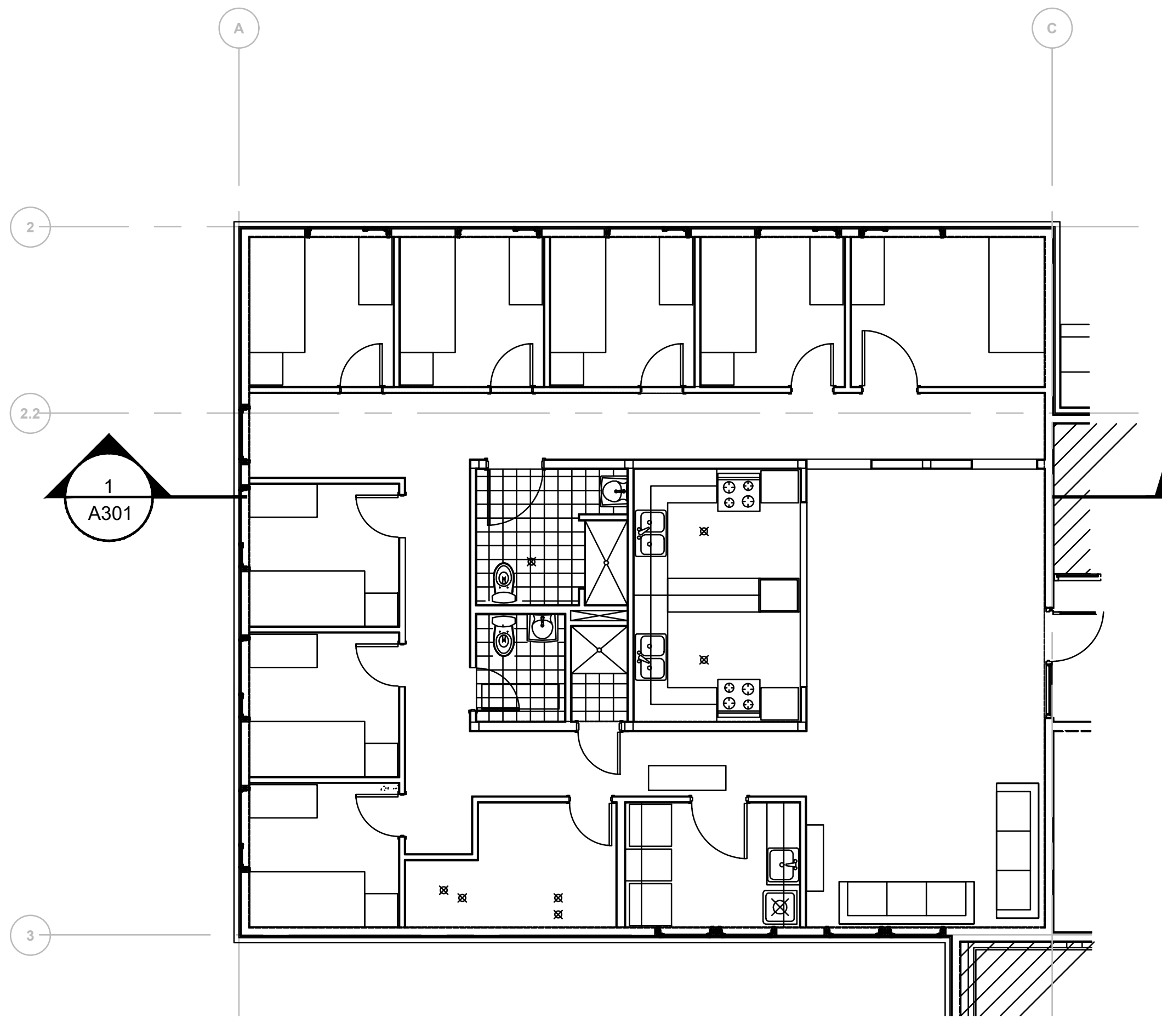


SECTION DETAIL @ THERMALLY BROKEN PVC WINDOW FRAMING SYSTEM BRICK VENEER SILL

F DETAIL
A-102 Scale 1:5



1 | **MAIN FLOOR PLAN**
A-201 Scale 1:75

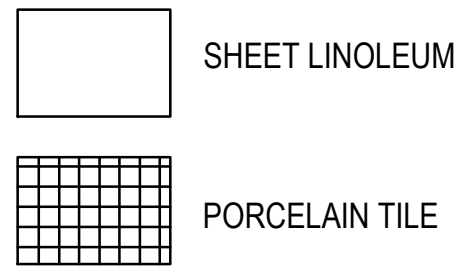


2 | **MAIN FLOOR -FLOOR FINISH PLAN**
A-201 Scale 1:75

NOTES:

- REBUILD INTERIOR PARTITIONS TO MATCH DEMOLISHED CONSTRUCTION.
- REINSTALL DOORS, FRAMES AND HARDWARE.
- REINSTALL BEDROOM BUILT-IN FURNITURE AND CABINETS.
- REINSTALL CANOPY MILLWORK, APPLIANCES AND PLUMBING FIXTURES.
- REINSTALL KITCHEN MILLWORK, APPLIANCES AND PLUMBING FIXTURES.
- REINSTALL LIVING / DINING ROOM FURNITURE.
- REFER TO REFERENCE DRAWING SET: "DRUMHELLER INSTITUTION 50 MAN LIVING UNIT ISSUED FOR RECORD SET" FOR INFORMATION ON EXISTING CONSTRUCTION TO BE REBUILT TO MATCH AND REINSTALLATION DETAILS OF SALVAGED ITEMS.

FLOOR FINISHES LEGEND



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CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by
RGM

Drawn by
LKM

Approved by
IH

PWGSC Project Manager
Administrateur de Projets TPSCG

Drawing title
ARCHITECTURAL
PLANS AND SECTIONS

Project no./No. du projet
60608478

Drawing no./No. du dessin
A-201

Revision no.
OF 06

B

PRELIMINARY
NOT FOR CONSTRUCTION

AECOM



AECOM CANADA ARCHITECTS LTD.
PERMIT NO. AC 10451
ISSUED PURSUANT TO THE
ARCHITECTS ACT OF ALBERTA

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by RGM Conçu par

Drawn by LKM Dessiné par

Approved by IH Approuvé par

PWSSC Project Manager Administrateur de Projets TPSSC

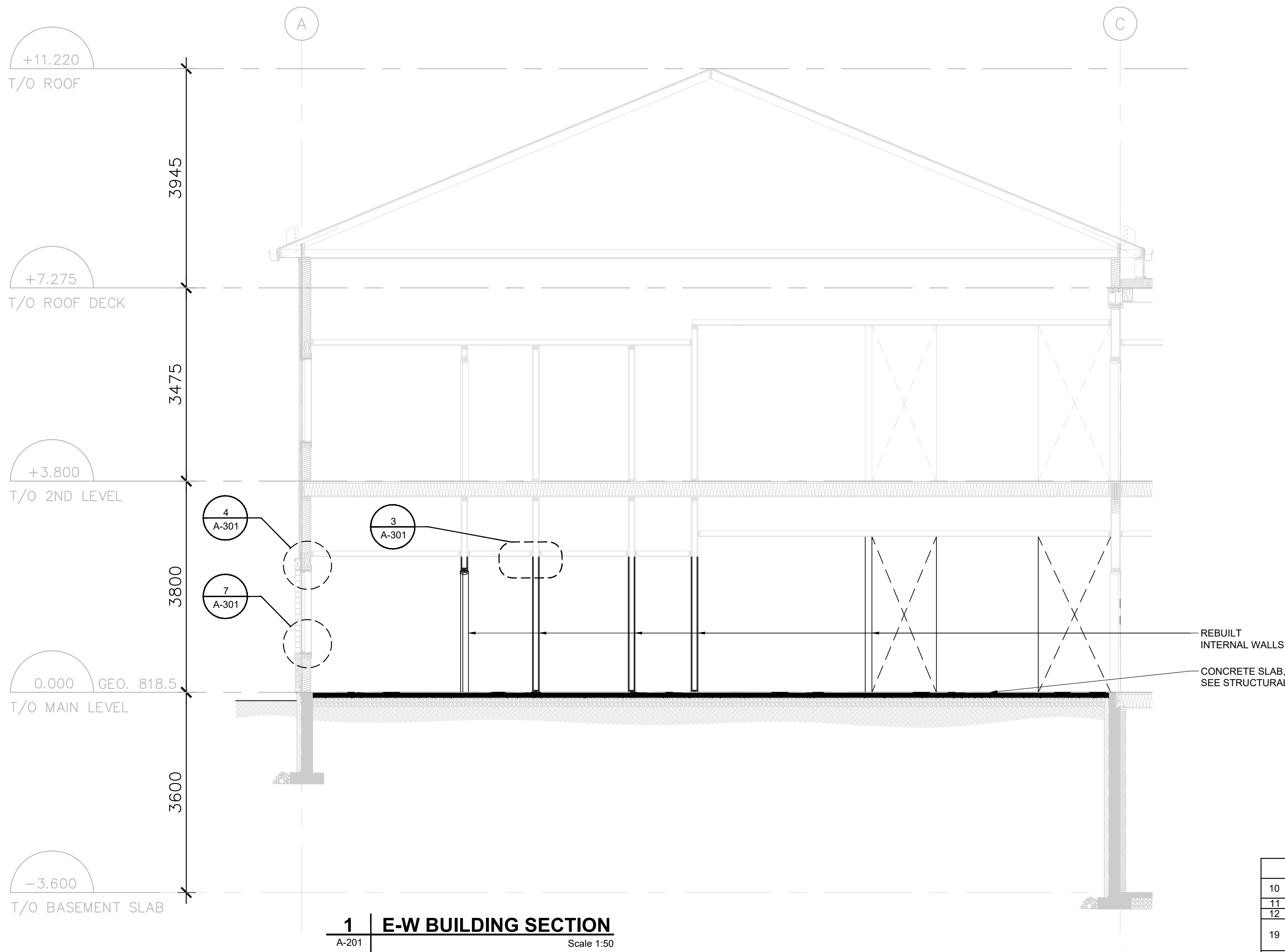
Drawing title ARCHITECTURAL Titre du dessin

NEW CONSTRUCTION/REPLACEMENT
BUILDING SECTIONS & DETAILS

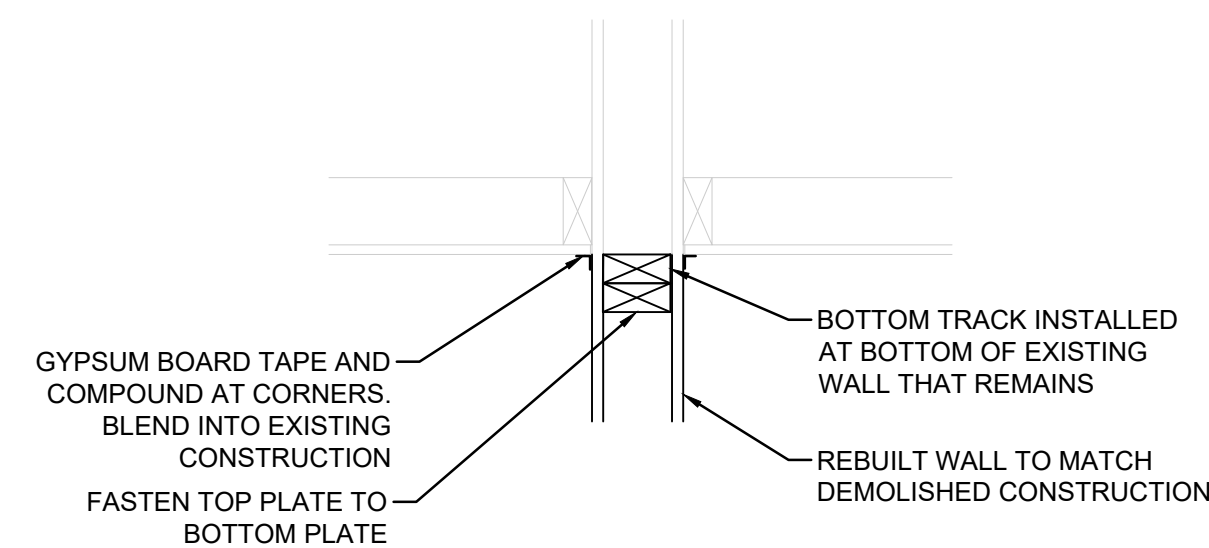
Project no./No. du projet 60608478

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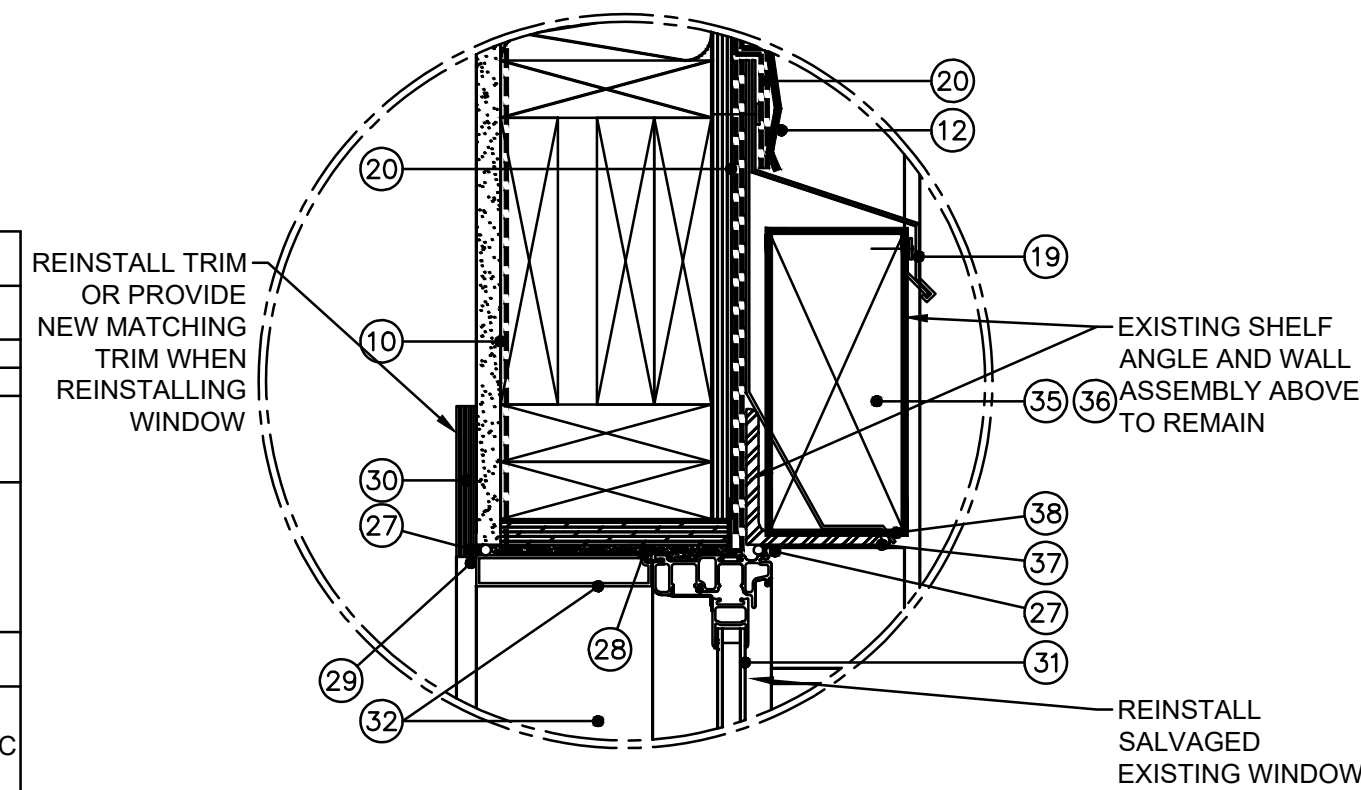
Revision no. C



2 TYPICAL WALL DETAIL AT EXTERIOR WALL
A-201 Scale 1:10

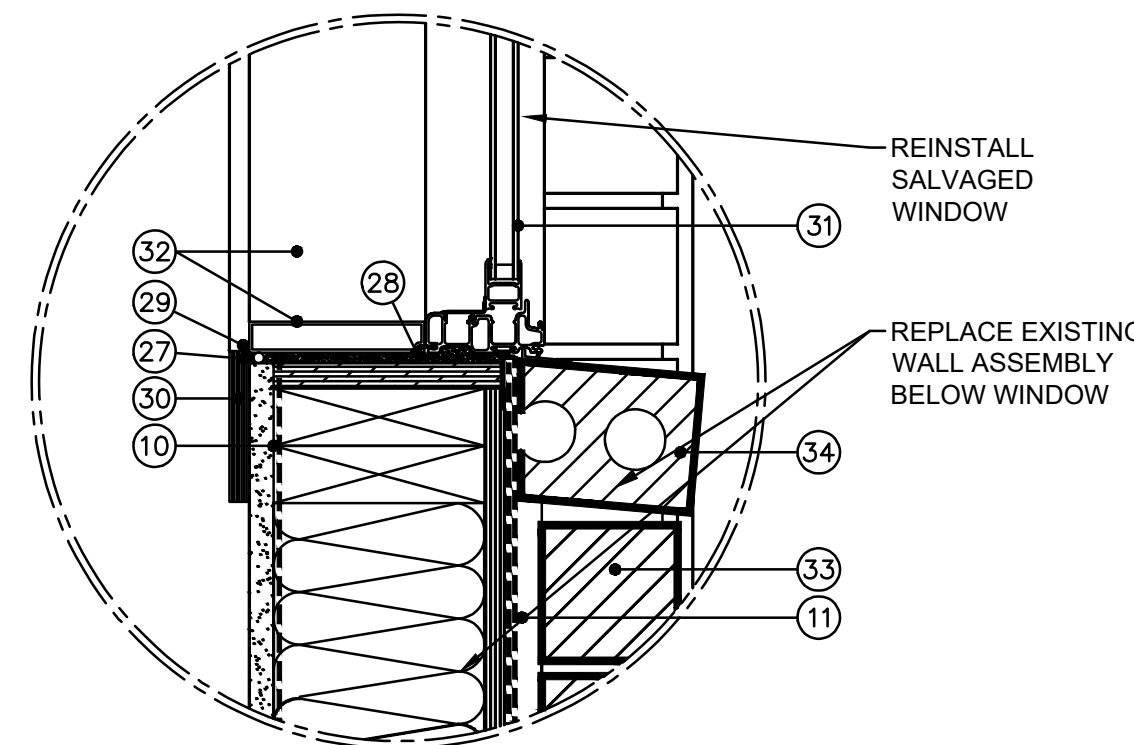


3 TYPICAL WALL DETAIL AT CEILING
A-301 Scale 1:10



SECTION DETAIL @ THERMALLY BROKEN PVC FRAMING SYSTEM HEAD @ SOLDIER COURSE BRICK VENEER

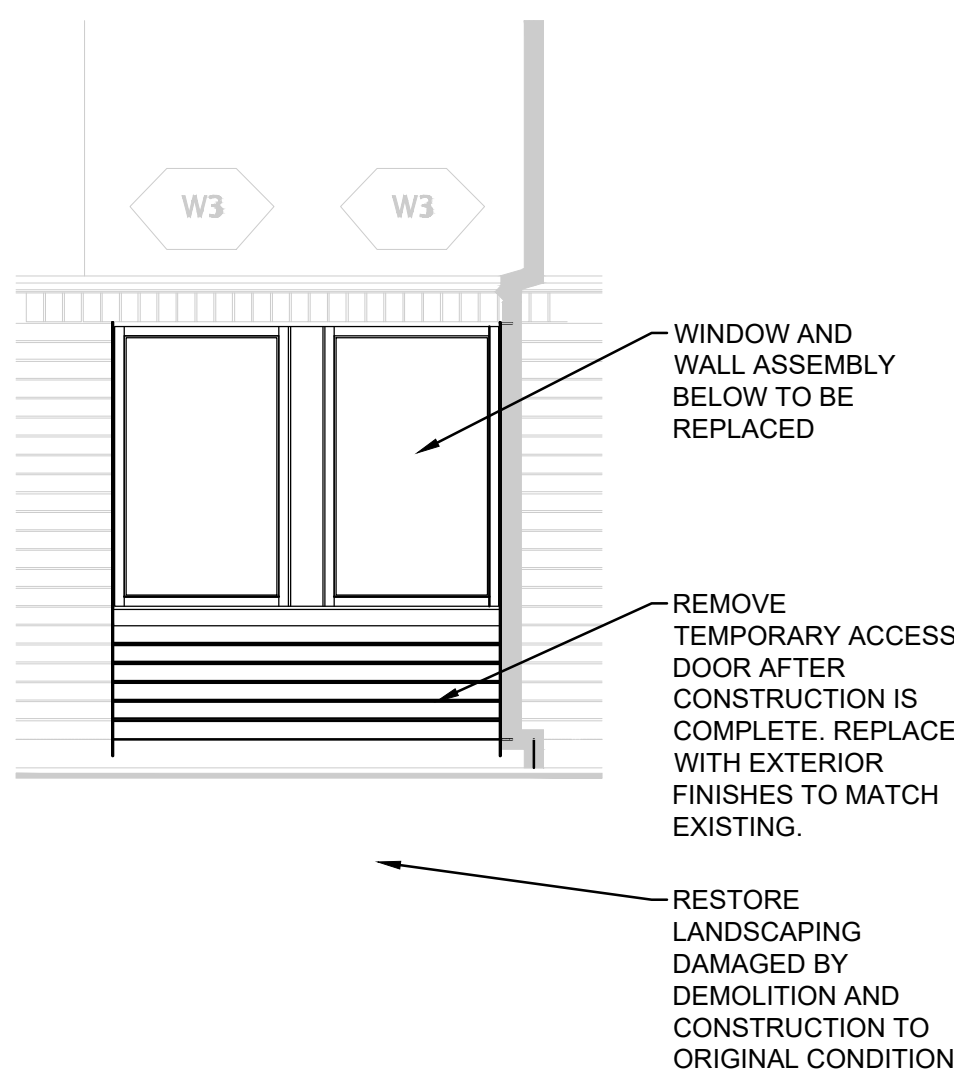
4 DETAIL
A-301 Scale 1:5



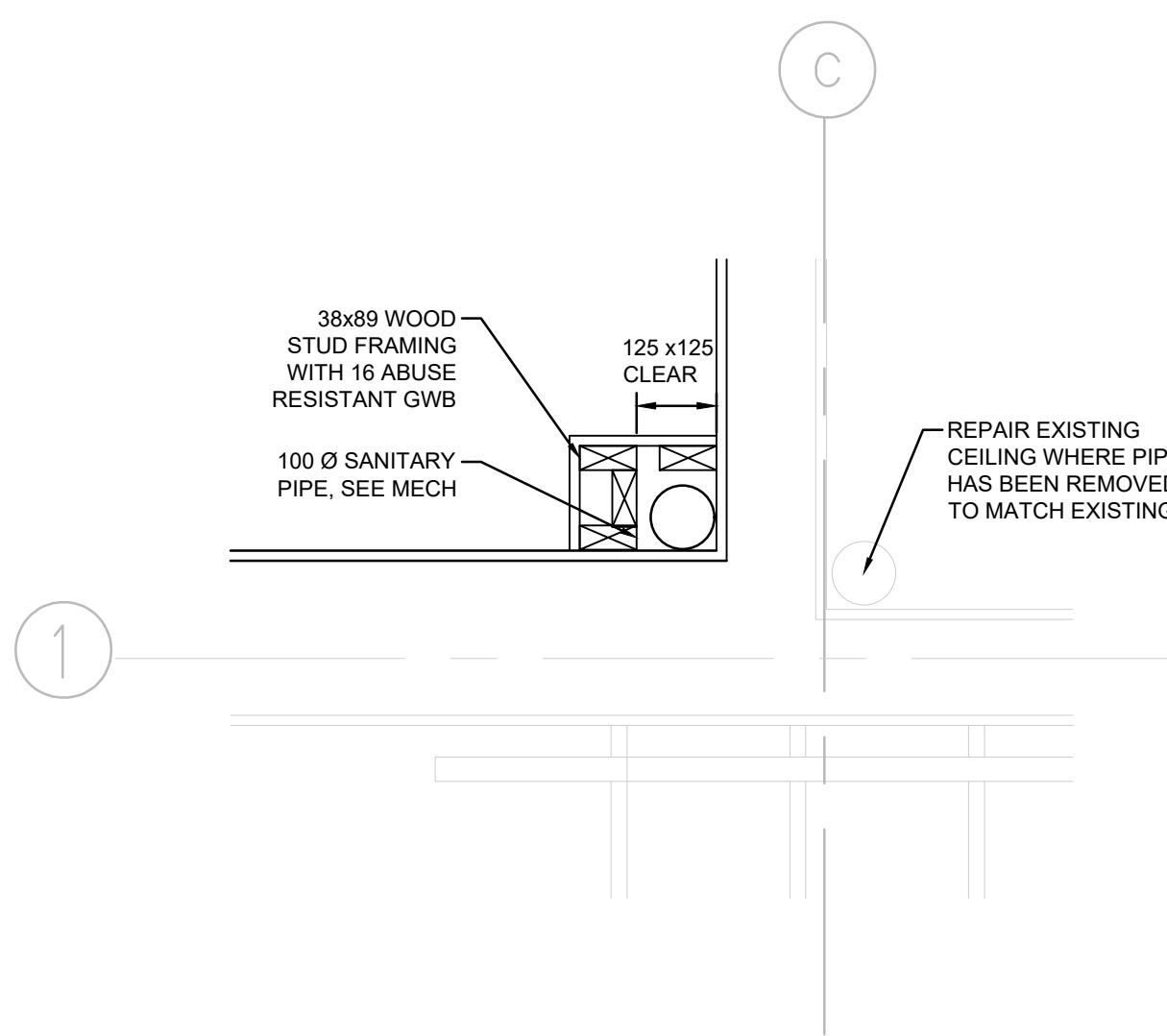
SECTION DETAIL @ THERMALLY BROKEN PVC WINDOW FRAMING SYSTEM BRICK VENEER SILL

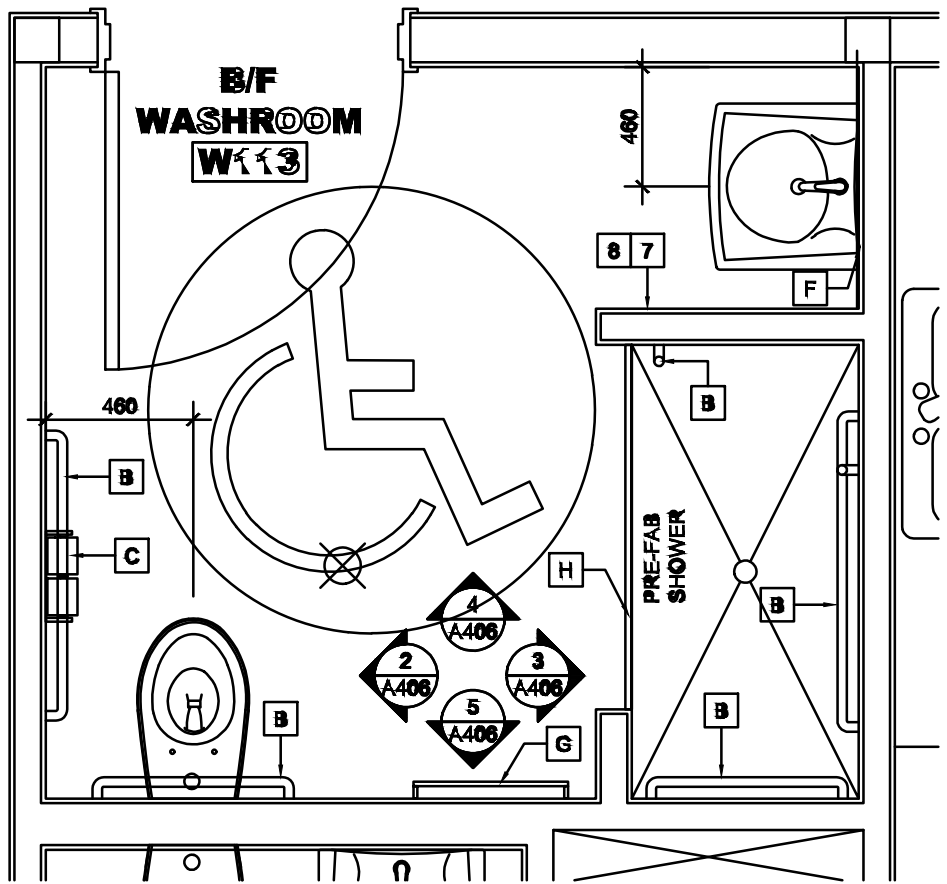
7 DETAIL
A-301 Scale 1:5

5 WINDOW REINSTALLATION DETAIL
A-301 Scale 1:10

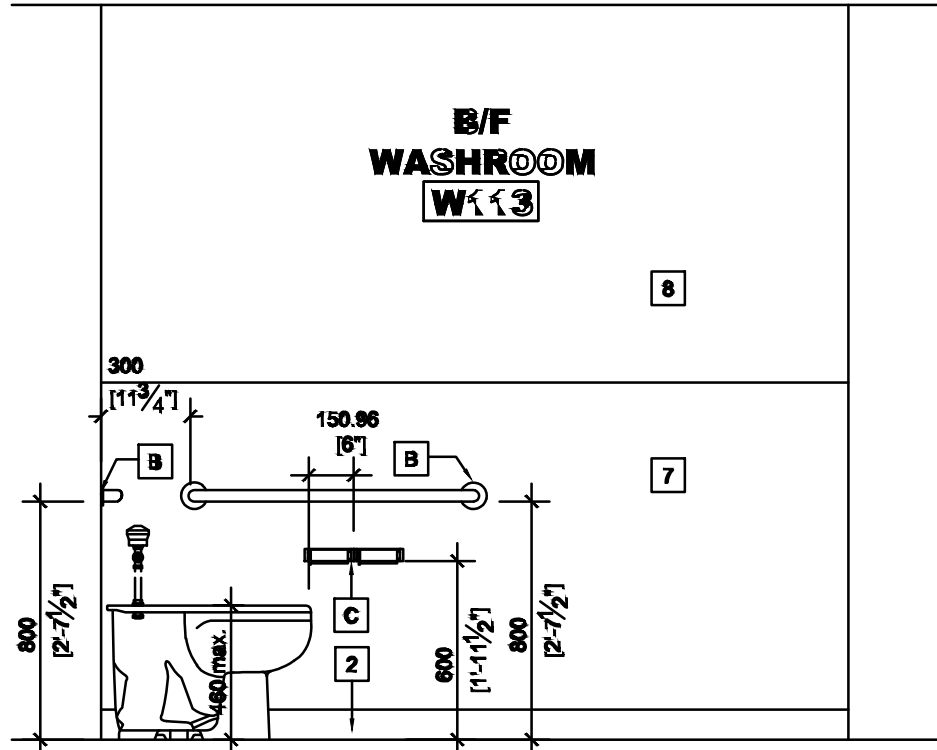


6 PIPE CHASE DETAIL
A-301 Scale 1:10

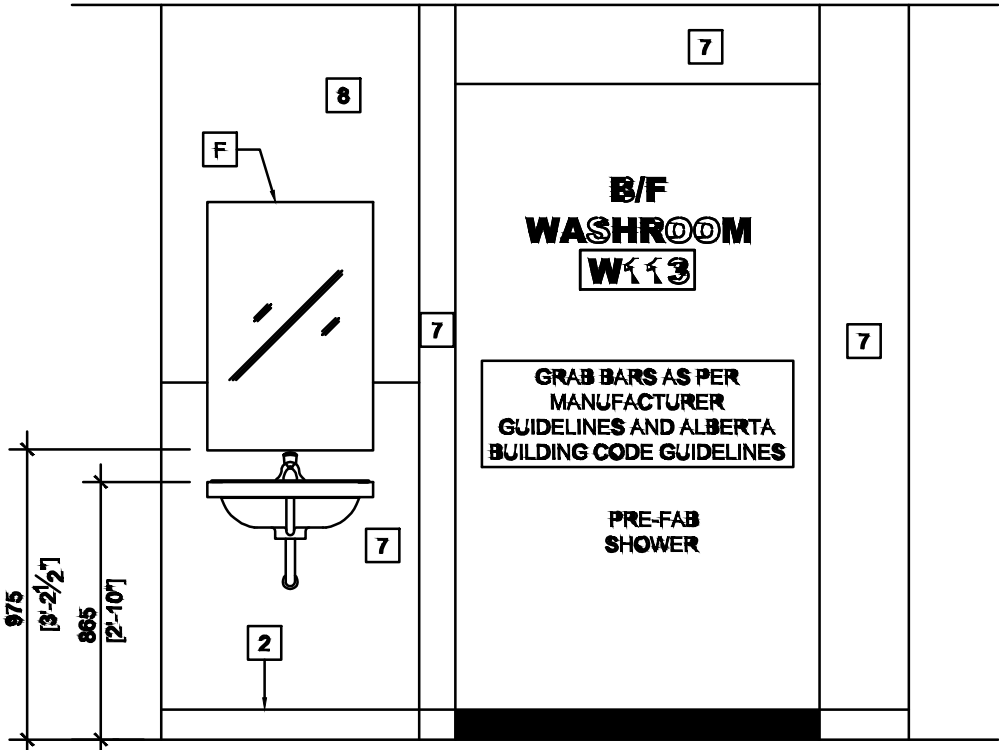




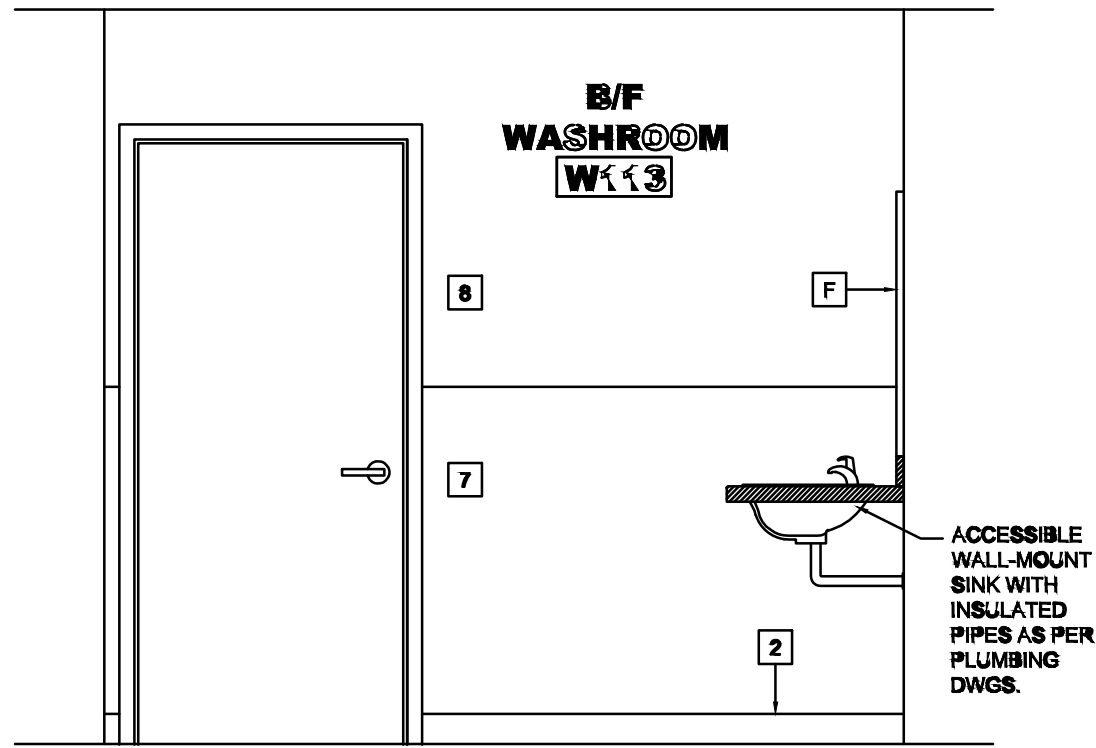
1 | WASHROOM W113: PLAN
A-304 Scale 1:25



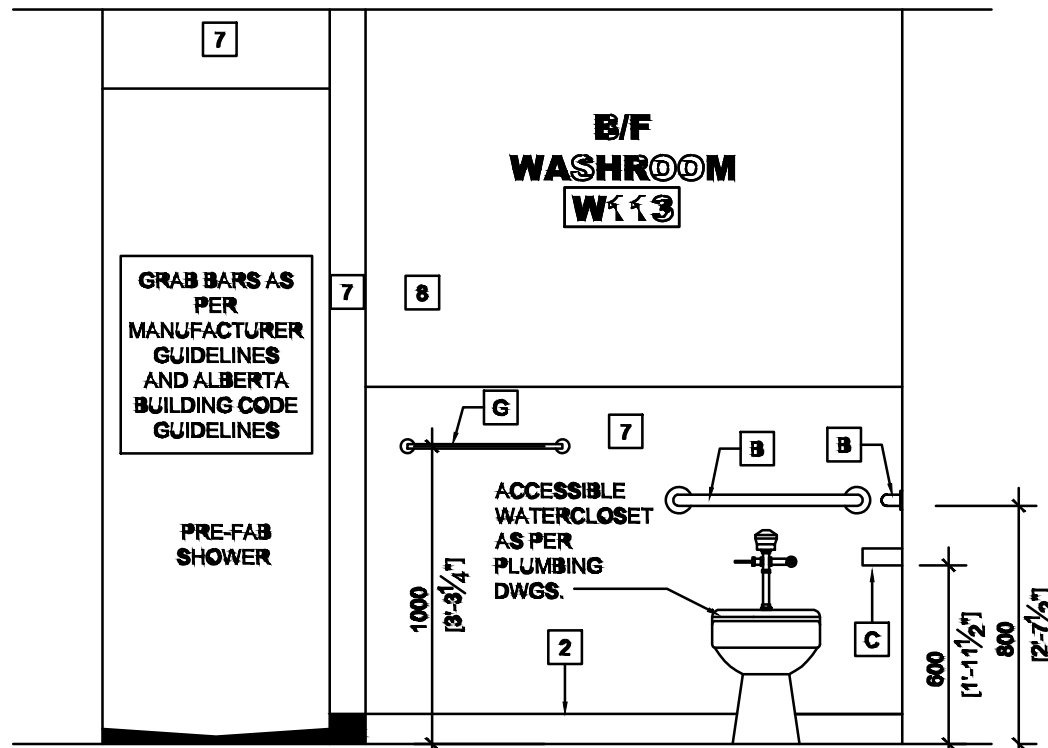
2 | WASHROOM W113: ELEVATION
A-304 Scale 1:25



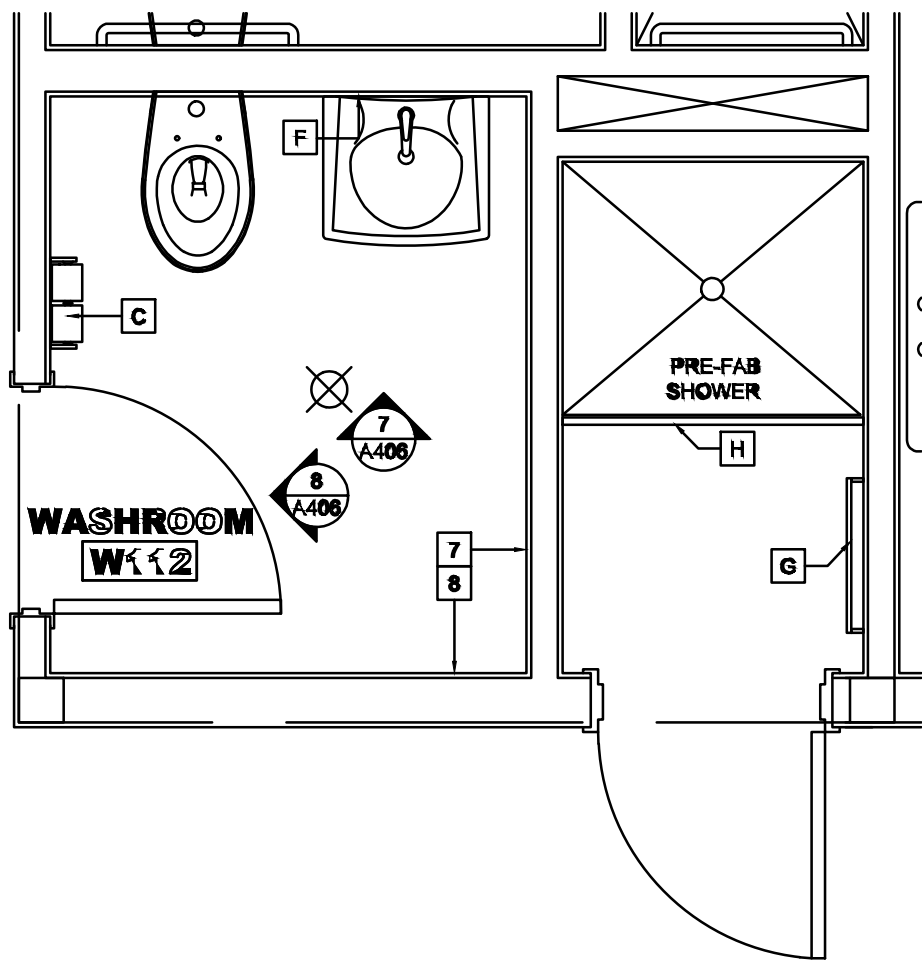
3 | WASHROOM W113: ELEVATION
A-304 Scale 1:25



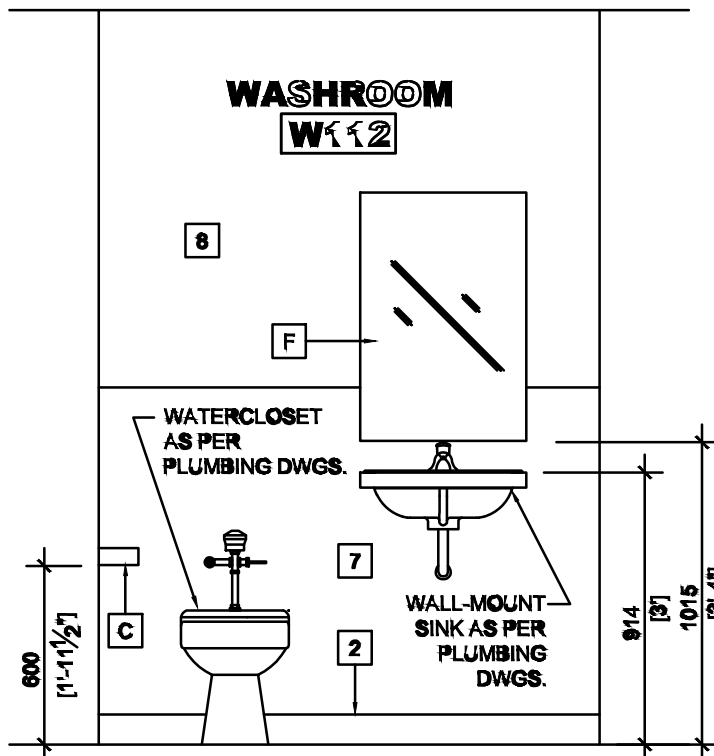
4 | WASHROOM W113: ELEVATION
A-304 Scale 1:25



5 | WASHROOM W113: ELEVATION
A-304 Scale 1:25



6 | WASHROOM W112: PLAN
A-304 Scale 1:25



7 | WASHROOM W112: ELEVATION
A-304 Scale 1:25



8 | WASHROOM W112: ELEVATION
A-304 Scale 1:25

NOTES:
1. REFER TO A-001 FOR FINISH SCHEDULE

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ARCHITECTS ACT OF ALBERTA

Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by RGM	Conçu par
Drawn by LKM	Dessiné par
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PWGSC Project Manager	Administrateur de Projets TPSSC

Drawing title
ARCHITECTURAL
INTERIOR ELEVATIONS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	A-304 OF 06	C



**Department of Public Works
& Governments Services Canada**

Project title	Project
<p>Highway 9, Drumheller Alberta, T0J 0Y0 CSC Drumheller 50 Bed Unit</p> <p>Floor Slab Repair</p>	

PWGSC Project Manager	Administrateur de Projets TPSGC
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Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	S-001 OF 05	C

3. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER PERTINENT CONTRACT DOCUMENTS. ENSURE THAT RELEVANT STATUTORY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING SITE WORKS.
2. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS NOTED. THE CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE CONSTRUCTION AND REPORT DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.
3. THE DESIGN, CONSTRUCTION AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH 2019 NATIONAL BUILDING CODE - ALBERTA EDITION, USER'S GUIDE TO NBC2015, STRUCTURAL COMMENTARIES (PART 4) AND REFERENCED STANDARDS THEREIN. IF CONFLICTS ARISE BETWEEN DOCUMENTS, THE MORE STRINGENT SHALL APPLY UNLESS AGREED OTHERWISE.
4. REFER TO ALL OTHER RELEVANT DRAWINGS (E.G., ARCHITECTURAL, MECHANICAL AND ELECTRICAL) DRAWINGS FOR LOCATIONS AND DIMENSIONS OF EQUIPMENT BASE, PITS, DEPRESSIONS, OPENINGS, SLEEVES AND OTHER BUILDING COMPONENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REPORT DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
5. CONTRACTOR TO CONFIRM WITH EQUIPMENT SUPPLIERS DIMENSIONS AND ALL OTHER CRITICAL DETAILS PRIOR TO CONSTRUCTION. REPORT DISCREPANCIES AND OBTAIN APPROVAL PRIOR TO PROCEEDING WITH CONSTRUCTION.
6. DO NOT RELY ON ACCURACY OF ANY AS-BUILT RECORDS PROVIDED. SURVEY AND VERIFY ACTUAL DIMENSIONS AND LAYOUT.
7. NOTIFY THE STRUCTURAL ENGINEER OF RECORD 48 HOURS IN ADVANCE FOR SITE REVIEW OF STRUCTURAL WORK.
8. DRAWINGS SHOW COMPLETED STRUCTURES ONLY. PROVIDE TEMPORARY BRACING FOR CONSTRUCTION LOADING CONDITIONS AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LOADS.
9. CONSTRUCTION METHODS REQUIRING TEMPORARY SHORING, OR BRACING, SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER, REGISTERED IN THE PROVINCE OF ALBERTA, TO PERFORM AND TAKE RESPONSIBILITY FOR ANY SHORING OR OTHER DESIGNS REQUIRED TO COMPLETE THE CONSTRUCTION.
10. VERIFY LOCATION OF UNDERGROUND SERVICES AND BE RESPONSIBLE FOR DISRUPTIONS.
11. IF NO DATES GIVEN FOR CODES AND STANDARDS REFERENCED, USE LATEST EDITION.
12. SUBMIT THE FOLLOWING SHOP DRAWINGS, SEALED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ALBERTA, PRIOR TO FABRICATION:
 - A) METAL STUDS
 - B) STEEL REINFORCING FOR REINFORCED CONCRETE
 - C) STRUCTURAL STEEL FRAMING AND MISCELLANEOUS STEEL
 - D) CONCRETE MIX AND MORTAR DESIGNIMPROPERLY PREPARED SHOP DRAWINGS ARE SUBJECT TO REJECTION AND, ON THAT BASIS, ARE TO BE WITHDRAWN AND RESUBMITTED.
 - E) SCREW PILES, SCREW PILE CONNECTION PLATE, AND UNDERPINNING PILE DESIGN
13. ALL SHOP DRAWING SUBMITTALS TO BE METRIC, INCLUDING DIMENSIONS, REINFORCING, BOLTS AND STRUCTURAL STEEL SIZES.
14. COMPLY WITH ALL RELEVANT WORK AND SAFETY PROCEDURES GIVEN IN THE CODES, REGULATIONS AND CLIENT'S COMPANY STANDARDS.
15. SUBMIT METHOD STATEMENTS TO CONSULTANTS WHEN REQUESTED FOR INFORMATION / COMMENT / AGREEMENT:
 - CONTRACTOR'S QUALITY / INSPECTION PROCEDURES
 - CONCRETE REPAIR PROCEDURES
16. REPORT TO THE CONSULTANT ALL WORKS THAT DO NOT COMPLY WITH THE PROJECT REQUIREMENTS AND SUBMIT REMEDIAL WORKS PROPOSAL FOR COMMENT / AGREEMENT. DEFECTIVE WORK AND SUBSTANDARD MATERIALS SHALL BE RECTIFIED SATISFACTORILY OR REMOVED FROM SITE.

1.	DEAD LOADS:	SEE PLANS FOR DEAD LOADS AND SUPERIMPOSED DEAD LOAD.
2.	LIVE LOADS:	SEE PLANS FOR LIVE LOAD
3.	IMPORTANCE CATEGORY	NORMAL
4.	GEOTECHNICAL NOTES:	REPORT BY AECOM DATED 29 NOV 2019

1. THE CONTRACTOR SHALL SUBMIT AND OBTAIN AN EXCAVATION PERMIT PRIOR TO ANY EXCAVATION / FOUNDATION WORKS.
2. ENSURE THAT THE INTEGRITY OF EXISTING UNDERGROUND SERVICES / STRUCTURES ARE MAINTAINED AT ALL TIMES DURING THE WORK. REPAIR / RECTIFY IMMEDIATELY ANY DAMAGE OR DISRUPTION TO THE CLIENT'S SATISFACTION AND AT THE CONTRACTOR'S OWN COST.
3. EXCAVATE TO LINES AND LEVELS NECESSARY TO PROPERLY COMPLETE THE WORK. MINIMUM SIDE SLOPES OF TEMPORARY EXCAVATIONS SHALL NOT EXCEED 1 TO 1, OR AS RECOMMENDED IN THE GEOTECHNICAL REPORT. CONTROL EXCAVATION TO ENSURE BOTTOM OF EXCAVATION DOES NOT SOFTEN DUE TO EXCESS MOISTURE.
4. EXCAVATE BELOW GRADE SUPPORTED SLABS TO REMOVE TOPSOIL, FILL AND ORGANIC CLAY. REMOVE UNSUITABLE MATERIAL AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND REPLACE WITH WELL GRADED APPROVED MATERIAL IN 150 mm LIFTS COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
5. BACKFILL AND COMPACT TO GRADES INDICATED IN LAYERS NOT EXCEEDING 150mm.
6. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDED GRADATION OF CRUSHED GRAVEL.
7. FENCE OFF OR MAKE INACCESSIBLE ALL EXCAVATIONS IF LEFT UNATTENDED.
8. WHERE EXCAVATION IS IN AN EXISTING CONCRETE SLAB, SAWCUT NEATLY AROUND EDGES OF EXCAVATION AREA. DO NOT OVERCUT.

1. ALL FOUNDATION CONSTRUCTION TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS GIVEN IN ENGINEERING GEOTECHNICAL INVESTIGATION MEMO "DRUMHELLER 50-BED UNIT FLOOR REPAIR" DATED NOVEMBER 29, 2019 AND PREPARED BY AECOM AND THE GEOTECHNICAL INVESTIGATION - "CSC DRUMHELLER INSTITUTION - 50 BED HOUSING UNIT", DATED SEPTEMBER 2011 PREPARED BY AECOM.
2. THE SITE SHALL BE FORMED TO THE GENERAL GRADE LEVEL PRIOR TO CONSTRUCTION OF PILE FOUNDATIONS AND GRADE BEAMS.
3. REFER TO THE GEOTECHNICAL REPORT FOR SCREW PILE INFORMATION. SCREW PILE CONTRACTOR TO SUBMIT DESIGN PARAMETERS USED FOR REVIEW BY AECOM-GEOTECHNICAL.
4. UNLESS SHOWN OTHERWISE, CENTER PILES UNDER COLUMNS, GRADE BEAMS OR WALLS.
5. CONTRACTOR SHALL SUBMIT PILE INSTALLATION METHOD STATEMENT AND WORK PLAN FOR REVIEW.
6. PILING CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF DEPTHS OF PILES, EXCAVATED SOILS PENETRATED, WATER SEEPAGE AND OTHER PERTINENT CONDITIONS. REPORT ANY ABNORMAL CONDITIONS TO THE ENGINEER.
7. MONITORING OF PILE INSTALLATION SHALL BE PERFORMED BY A PROFESSIONAL GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF ALBERTA AS REQUIRED BY SCREW PILE DESIGNER. CONTRACTOR TO NOTIFY GEOTECHNICAL ENGINEER PRIOR TO COMMENCING PILING.
8. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING PILE INSTALLATION METHOD INCLUDING REMOVAL OF OBSTRUCTION.
9. SUBMIT LAYOUT AND SHOP DRAWINGS SHOWING PROPOSED SEQUENCE OF PILE INSTALLATION, PILE CAP DETAILS AND NOTES ON PILE INSTALLATION METHOD
10. HELICAL SCREW PILES ARE A PROPRIETARY SYSTEM AND THEIR LONG-TERM PERFORMANCE IS HIGHLY DEPENDENT ON THE CONTRACTOR'S EXPERIENCE, INSTALLATION METHODOLOGY, AND WORKMANSHIP DURING CONSTRUCTION. THEREFORE, THE INSTALLATION OF THE PILES SHALL BE COMPLETED BY A CONTRACTOR WITH SCREW PILE EXPERIENCE.
11. THE SCREW PILES SHALL BE INSTALLED SUCH THAT THE FIRST HELIX IS BELOW THE DEEPEST FOOTING (I.E. 3.5 M DEPTH), THE FINAL DESIGN SCREW PILE LENGTH SHOULD BE DETERMINED BY THE SUPPLIER. THE SOILS ON THE SITE HAVE BEEN FOUND TO BE HIGHLY CORROSIVE AND THE DESIGN OF SCREW PILES MUST TAKE THIS INTO ACCOUNT. REFER TO GEOTECHNICAL MEMO.

AB ANCHOR BOLT
ADDL ADDITIONAL
ABV ABOVE
ADJ ADJUSTABLE
ARCH ARCHITECTURAL
ALT ALTERNATE
APPROX APPROXIMATELY
ASFS ASPHALT SATURATED FIBER BOARD
ASL ADDITIONAL SNOW LOAD
AES ARCH EXPOSED STEEL

BB BOND BEAM
BCE BOTTOM CHORD EXTENSION
BLL BOTTOM LOWER LAYER
BE BUILDING ENVELOPE
BLDG BUILDING
BRG BEARING
BTWN BETWEEN
BM BEAM
BTM BOTTOM
BUL BOTTOM UPPER LAYER
B PL BASE (BEARING) PLATE
BOF BOTTOM OF FOOTING
BOW BOTTOM OF WALL
BOT BOTTOM
BS BOTH SIDES

CONC CONCRETE
CONN CONNECTION
CONTCONTINUED(OUS)
CTJ CONTROL JOINT
CTR CENTRE
CPLG COUPLING
CL CENTRE LINE
C/W COMPLETE WITH

DIAG DIAGONAL
DIM DIMENSION
DIA DIAMETER
DL DEAD LOAD
DN DOWN
DWLSDOWELS

EF	EACH FACE
EL	ELEVATION
EW	EACH WAY
EW T&B	EACH WAY, TOP AND BOTTOM
EWFE	EACH WAY EACH FACE
EX	EXISTING
EJ	EXPANSION JOINT
EXT	EXTERIOR
E-W	EAST- WEST
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT

FF	FAR FACE, FINISH FLOOR
FIN	FINISHED
FLR	FLOOR
FTG	FOOTING
FW	FOUNDATION WALL
FLG	FLANGE(D)

GRT GROUT
GRTGGRATING
GB GRADE BEAM
GL GRID LINE
G.L. GROUND LEVEL
GALV GALVINIZED

HOR HORIZONTAL
HP HIGH POINT
HH HOOKED EACH END
Hf FACTORED HORIZONTAL FORCE, kN
HSC HORIZONTALLY SLOTTED
CONNECTION
HSS HOLLOW STRUCTURAL SECTION
HST HOIST

INS INSULATE(D)(ION)

JT	JOINT
JST	JOIST
JG	JOIST GIRDER
JH	JOIST HANGER

kN KILONEWTON
kNm KILONEWTON METRE
kg KILOGRAM
kN/m² kN PER SQUARE METRE
kN/m kN PER METRE
kPa KILOPASCAL

LLH LONG LEG HORIZONTAL
LLV LONG LEG VERTICAL
LL LIVE LOAD

LP LOW POINT
LG LONG
LAT LATERAL
LEV LEVEL
LT LEFT

MPa MEGAPASCALS
MEZZ MEZZANINE
MISC MISCELLANEOUS
ML MIDDLE LAYER
MIN MINIMUM
MAX MAXIMUM
M_x FACTORED BENDING MOMENT ABOUT
X-X AXIS,kN-m
M_y FACTORED BENDING MOMENT ABOUT
Y-Y AXIS,kN-m
m METRE
mm MILLIMETERS

NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
N-S	NORTH-SOUTH
Nos	NUMBER
NF	NEAR FACE
N	NEWTON
NS	NEAR SIDE

OC ON CENTER
O/O OUT TO OUT
OD OUTSIDE DIAMETER
OPNG OPENING
OPENOPENING
OF OUTSIDE FACE
OPP OPPOSITE
OH OVERHEAD

P	PEDESTAL OR PILE
PF	PAD FOOTING
PL	PLATE
PC	PRECAST
PROJ	PROJECTION

R	REACTION, RADIUS
RF	FACTORED VERTICAL REACTION, KN
REF	REFERENCE
REINF	REINFORCING
REQ'D	REQUIRED
RC	REINFORCED CONCRETE
RD	ROOF DRAIN
R/W	REINFORCED WITH
RW	RETAINING WALL
REV	REVISION
RT	RIGHT
RTU	REMOTE TERMINAL UNIT

SDF STEP DOWN FOOTING
SECTION SECTION
SL SLAB
SF STRIP FOOTING
SFRCS STEEL FIBRE REINFORCED
CONCRETE
SOG SLAB-ON-GRADE
SIM SIMILAR
SP SUPPORT POINTS
SPMMD STANDARD PROCTOR MAXIMUM
DENSITY
STD STANDARD
STRU STRUCTURAL
STRUCT STRUCTURAL
SQ SQUARE
SPG SPACING
SPL SPLICE
STL STEEL
SUPT SUPPORT

T	TOP
T&B	TOP AND BOTTOM
TBC	TO BE CONFIRMED
TBD	TO BE DETERMINED
TC	TOP OF CURB
THK	THICK
TJ	TIE JOIST
TOC	TOP OF CONCRETE
TOG	TOP OF GRATING
TOS	TOP OF STEEL
TOF	TOP OF FOOTING
TOW	TOP OF WALL
TL	TOP LOWER LAYER
TSE	TO SUIT EQUIPMENT
TPG	TOPPING
TUL	TOP UPPER LAYER
TP	TYPICAL
TD	TYPICAL DETAILS
Tmf	FACTORED TENSION
Tf	FACTORED TENSION
TEMP	TEMPERATURE

UNO UNLESS NOTED OTHERWISE
U/S UNDERSIDE
UL UPPER LAYER
UG UNDER GROUND

VBR VERTICAL BRACING
Vf FACTORED VERTICAL SHEAR, kN
(KIPS)
V,VERT VERTICAL
VSC VERTICALLY SLOTTED CONNECTION
VAR VARIES, VARIABLE
VIF VERIFY IN FIELD

W WIDTH
W/ WITH
W/O WITHOUT
WD WOOD
WP WORK POINT / WIND POST
WS WATERSTOP
WF WIDE FLANGE
WWF WELDED WIRE FABRIC
WWF WELDED WIDE FLANGE SECTION

@ AT
± APPROXIMATELY
Ø DIAMETER

CONCRETE REINFORCEMENT

1. DEFORMED BARS CONFORMING TO CSA-G30.18 GRADE 400
2. WELDABLE REINFORCING BARS SHALL CONFORM TO CSA-G30.18 GRADE 400W. WELDING OF REINFORCING SHALL CONFORM TO CSA-W186. THE WELDER CERTIFICATION MUST BE VALID AND IN FORCE DURING THE CONSTRUCTION PERIOD. PORTION OF REBAR THAT HAS BEEN COLD BENT SHALL NOT BE WELDED. WELDING SHALL NOT BE DONE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
3. REINFORCING WORK SHALL BE IN ACCORDANCE WITH CSA-A23.1 AND CSA-A23.3.
4. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL OR THE REINFORCING STEEL INSTITUTE OF CANADA DETAILING MANUAL.
5. REINFORCING IN SLABS AND BEAMS TO BE CONTINUOUS UNLESS NOTED. LAP TOP BARS AT MIDSPAN, BOTTOM BARS AT SUPPORTS. MINIMUM LAP FOR 10M BARS TO BE 450 MM. MINIMUM LAPS FOR OTHER BARS TO BE CLASS B TENSION SPLICES. WHERE REINFORCEMENT LAPS ARE REQUIRED IN ADJACENT BARS, STAGGER LAPS MINIMUM 1200 MM UNLESS NOTED OTHERWISE.

CLASS 'B' TENSION SPLICE LENGTH TABLE

BAR LOCATION										
BAR SIZE	VERTICAL DOWELS, BOTTOM REINFORCING					TOP REINFORCING SEE NOTE 1				
	CONCRETE STRENGTH					CONCRETE STRENGTH				
	25 MPa	30 MPa	32 MPa	35 MPa	35 MPa	25 MPa	30 MPa	32 MPa	35 MPa	35 MPa
10	440	400	360	370	370	570	520	500	480	480
15	620	570	550	520	520	800	740	710	680	680
20	760	690	670	640	640	1000	900	870	830	830
25	1120	1120	1082	1030	1030	1560	1460	1410	1340	1340
30	1450	1320	1280	1220	1220	1890	1720	1670	1590	1590
NOTES TO TABLE:										
1. HORIZONTAL REINFORCING PLACED IN SUCH A WAY THAT MORE THAN 300mm OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE.										
2. REFERENCE, CSA A23.3-14 CLAUSE 12.2.3 DEVELOPMENT LENGTH, L _d OF DEFORMED WIRE IN TENSION.										

6. CHAIR SLAB REINFORCING NOT FURTHER THAN 1000 MM IN EITHER DIRECTION. SUPPLY SUPPORT BARS, CHAIRS, AND CARRIERS AS NECESSARY.
7. DOWELS AND ANCHOR BOLTS SHALL BE SECURED IN POSITION BY MEANS OF TEMPLATES BEFORE CONCRETE IS POURED. WHERE DOWELS OR ANCHOR BOLTS ARE TO BE EXPOSED FOR LONGER THAN 1 MONTH AFTER INSTALLATION, PROVIDE WRAPPING AND COVERING AS PROTECTION.
8. 90° HOOKS AND 180° HOOKS WHERE SHOWN SHALL BE DETAILED AS STANDARD HOOKS UNLESS NOTED OTHERWISE.
9. REPLACE BARS THAT DEVELOPED SPLITS OR CRACKS.
10. MINIMUM REINFORCING AROUND OPENINGS LARGER THAN 300 MM: 1-15M EACH SIDE AND EACH FACE OF OPENING EXTENDED 600 MM PAST CORNERS.
11. PROVIDE DOWELS FROM CONCRETE BEAMS OR WALLS TO MATCH REINFORCING OF MASONRY BLOCK WALL OR ADJOINING CONCRETE.
12. UNLESS OTHERWISE NOTED, ALL DOWELS TO PROJECT A MINIMUM OF 40 BAR DIAMETERS INTO SLAB OR WALL FROM FACE OF SUPPORT.
13. WELDED WIRE MESH WHERE ALLOWED SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.3 AND SHALL BE FLAT SHEETS ONLY.
14. REINFORCING SHOWN ON STRUCTURAL DETAILS ARE SCHEMATIC ONLY AND MAY NOT SHOW THE ACTUAL NUMBER OF REBARS.
15. WHERE STATED ON THE FOUNDATION PLANS, ANCHOR RODS AND REBARS IN FOUNDATIONS ARE TO BE ELECTRICALLY BONDED. ANCHOR RODS TO BE 'DOUBLE TIED' OR WELDED TO THE REBAR CAGE OF THE FOUNDATION.

CONCRETE ACCESSORIES

1. GROUT: NON-SHRINK, NON-METALLIC GROUT WITH MINIMUM STRENGTH AT THREE DAYS OF 20 MPA AND MINIMUM STRENGTH AT 28 DAYS OF 50 MPA. EPOXY GROUT SHALL BE USED FOR VIBRATING EQUIPMENT BASE WHERE SPECIFIED. APPLY GROUT STRICTLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. EXPANSION ANCHORS: OF DIAMETER & PENETRATION SHOWN. CAPACITIES ARE BASED ON HILTI KWIK BOLTS. SUBMIT ANCHOR LOAD RESISTANCE DATA FROM INDEPENDENT TESTING FIRM FOR REVIEW BY ENGINEER MIN 2 WEEKS PRIOR TO INTENDED USE.
3. EPOXY ANCHORS: OF DIAMETER & PENETRATION SHOWN. SHEAR AND TENSION CAPACITIES ARE BASED ON HILTI HY150 + HIT-HAS SUPER HARDWARE. SUBMIT ANCHOR LOAD RESISTANCE DATA FROM INDEPENDENT TESTING FIRM FOR REVIEW BY ENGINEER MIN 2 WEEKS PRIOR TO INTENDED USE.
4. BONDING AGENTS: THREE COMPONENT, WATER BASED, EPOXY RESIN / CEMENT BONDING AGENT
5. PRE-FORMED KEYED JOINTS: 24 ga. GALVANIZED STEEL WITH DOWEL KNOCK-OUTS AT 150 MM O.C. C/W 600 MM LONG SUPPORTING STAKES AT 600 MM O.C. JOINT SYSTEM TO BE COMPLETE WITH SPLICE PLATES, CAP PLATES AND RELATED COMPATIBLE HARDWARE.
6. VAPOUR BARRIER: 10 MIL OR 0.25MM CLEAR OR BLACK, POLYETHYLENE FILM, UNREINFORCED, WITH SELF ADHESIVE POLYETHYLENE TAPE FOR JOINTS, SUITABLE FOR BELOW GRADE USE. LAP JOINTS & REPAIRS MIN 300mm
7. VOID FORM: 150 MM THICK CARDBOARD HONEYCOMB. TOP SHEET TO BE 6MM THICK PLYWOOD. COVER AND WRAP EDGES WITH 6 MIL OR 0.15 MM POLY. OR LOW DENSITY EXPANDED POLYSTYRENE WITH SUFFICIENT STRENGTH TO SUPPORT CONCRETE WEIGHT AND CONSTRUCTION LOAD. DESIGNED TO COLLAPSE UNDER SOIL EXPANSION (FROST CUSHION OR APPROVED ALTERNATE) PROVIDE LEVELED SAND BASE UNDER VOID FORM. PROVIDE UNDER GRADE BEAMS & EXTERIOR TANK SLAB.
8. STEEL BAR SUPPORT/CHAIRS: GALVANIZED/STAINLESS STEEL OR PLASTIC. DO NOT USE ROCK, BRICKS OR CONCRETE FRAGMENTS.
9. INSULATION: RIGID STYROFOAM HI-40 BY DOW OR APPROVED EQUIVALENT.
10. CURING COMPOUNDS SHALL NOT BE USED OVER CONCRETE SURFACE DESIGNATED TO RECEIVE PROTECTION COATING OR PAINTED FINISH.
11. ENSURE REINFORCEMENT AND INSERTS ARE NOT DISTURBED DURING CONCRETE PLACEMENT. DO NOT PLACE CONCRETE AGAINST FROZEN GROUND OR IN STANDING WATER.
12. ACCURATELY SET SLEEVES, ANCHOR BOLTS, OTHER EMBEDS, AND OPENINGS AS SHOWN ON THE DRAWINGS. OPENINGS GREATER THAN 200mm X 200mm NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE ENGINEER.
13. CHECK LOCATIONS AND SIZES OF SLEEVES AND OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND OTHER RELEVANT DRAWINGS. SLEEVES SHALL NOT BE PLACED HORIZONTALLY ALONG OR VERTICALLY THROUGH BEAMS UNLESS AUTHORIZED BY CONSULTANT.
14. CONSTRUCTION JOINTS: KEYED AND DOWELED AS DIRECTED BY ENGINEER UNLESS DETAILED ON THE DRAWINGS. ALL REINFORCING SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS. SUBMIT PROPOSED DETAIL AND LOCATION OF ALL CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS TO THE ENGINEER FOR REVIEW.
15. USE 25 X 25 FORMED CHAMFERS ON EXPOSED CORNERS OF BEAMS, COLUMNS AND WALLS U.N.O.
16. MAINTAIN ACCURATE RECORDS OF POURED CONCRETE ITEMS TO INDICATE DATE, LOCATION OF POUR, AIR TEMPERATURE, AND TEST SAMPLES TAKEN. SUBMIT RECORDS TO ENGINEER UPON REQUEST.
17. A MINIMUM OF THREE (3) DAYS SHALL ELAPSE BETWEEN ADJACENT WALL OR SLAB POURS.
18. PROTECT CONCRETE FROM PREMATURE DRYING. CURE CONCRETE IN ACCORDANCE WITH CSA-A23.1. PROVIDE ADDITIONAL CURING MEASURES OR PROTECTION DURING HOT OR COLD WEATHER IN ACCORDANCE WITH CSA-A23.1.
19. DO NOT PLACE CONCRETE WHEN WEATHER IS NOT SUITABLE (E.G. DURING RAIN, SNOW) UNLESS ADEQUATE PRECAUTIONARY MEASURES ARE IN PLACE.
20. CUTBACK ALL TIES EMBEDDED IN CONCRETE TO A MINIMUM OF 16 MM, OR 38 MM FOR CLASS C EXPOSURES.
21. FILL TIE HOLES IN ACCORDANCE WITH CSA-A23.1.
22. REPAIR HONEYCOMBED AND DEFECTIVE CONCRETE AT CONTRACTOR'S OWN COST. PROPOSED METHOD STATEMENT AND MATERIAL FOR REPAIR SHALL BE SUBMITTED TO THE CONSULTANT FOR APPROVAL.

CONCRETE

1. PROVIDE CONCRETE AND PERFORM WORK IN ACCORDANCE WITH CSA-A23.1. THE CONTRACTOR SHALL HAVE A COPY OF THIS STANDARD ON SITE AT ALL TIMES.
2. THE CONCRETE SUPPLIER SHALL BE A MEMBER OF THE ALBERTA READY MIXED CONCRETE ASSOCIATION.
3. PROPORTION NORMAL DENSITY CONCRETE (2400 KG/M3) IN ACCORDANCE WITH CSA-A23.1 TO MEET THE FOLLOWING REQUIREMENTS:

LOCATION	EXPOSURE CLASS	MIN. COMPRESSIVE STRENGTH (MPa)	MAX AGGREGATE SIZE (MM)
STRUCTURAL SLAB	N	30 (28 DAY)	20

4. FLY ASH CONTENT IN TERMS OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED THE FOLLOWING LIMITS:
- FOR FLOOR SLABS, BEAMS AND TOPPINGS 15%
5. USE OF ANY ADMIXTURES IN THE CONCRETE SHALL BE APPROVED, IN WRITING, BY THE CONSULTANT AND CONCRETE SUPPLIER PRIOR TO USE. ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE NOT PERMITTED.
6. TARGET SLUMP OF FRESH CONCRETE SHALL BE APPROPRIATE TO THE METHOD OF PLACING CONCRETE AND TO THE ELEMENT BEING CONCRETED.
7. SUBMIT CONCRETE MIX PROPORTIONS TO THE ENGINEER FOR REVIEW IN ACCORDANCE WITH TABLE 5 IN CSA-A23.1. ALTERNATIVE 1. AT THE REQUEST OF THE ENGINEER, SUBMIT A LETTER SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ALBERTA, STATING THAT ALL CONCRETE SUPPLIED MEETS THE PROJECT SPECIFICATIONS AND REQUIREMENTS OF CSA-A23.1.
8. OBTAIN ENGINEER'S APPROVAL BEFORE PLACING CONCRETE. PROVIDE FORTY- EIGHT (48) HOURS NOTICE PRIOR TO PLACING OF CONCRETE.
9. CONCRETE TO BE BATCHED AND COMPLETELY DISCHARGED IN A PERIOD NOT EXCEEDING ONE HUNDRED AND TWENTY (120) MINUTES FROM THE TIME OF INITIAL ADDITION OF WATER TO THE CEMENT AND AGGREGATE.
10. CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO TABLE BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

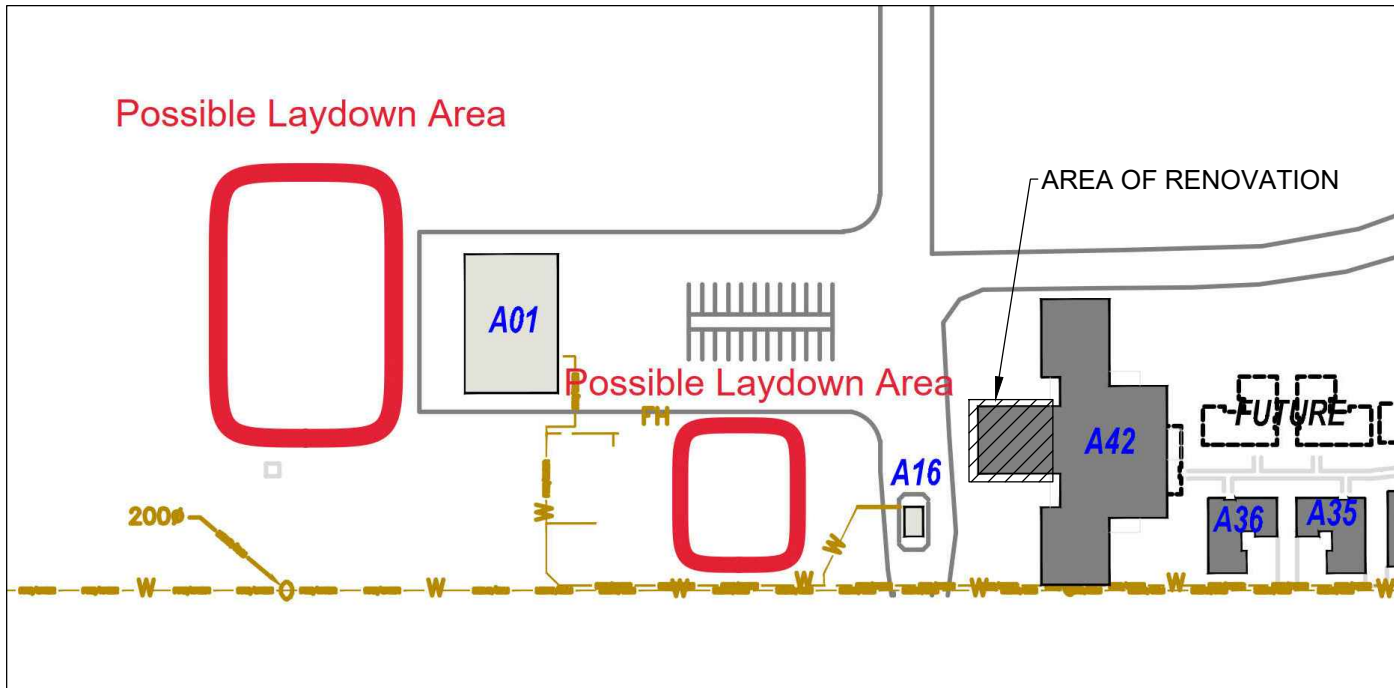
EXPOSURE CLASS	CLEAR COVER (MM)
FORMED SURFACE NOT EXPOSED TO WEATHER AND NOT IN CONTACT WITH EARTH	25
SLAB	
RATIO OF COVER TO NOMINAL BAR DIAMETER	1.0
RATIO OF COVER TO NOMINAL BAR DIAMETER	1.0
SEE TABLE 17 CSA A23.1 FOR NOTES ON ADDITIONAL COVER	

CONCRETE TESTING

1. INSPECTION AND TESTING OF CONCRETE MATERIALS WILL BE CARRIED OUT BY AN INDEPENDANT TESTING LABORATORY DESIGNATED AND PAID FOR BY THE OWNER, IN ACCORDANCE WITH CSA-A23.2.
2. A STRENGTH TEST WILL CONSIST OF THREE (3) STANDARD CYLINDERS; ONE TESTED AT SEVEN (7) DAYS, AND TWO TESTED AT TWENTY-EIGHT (28) DAYS.
3. FREQUENCY OF CONCRETE TESTING WILL BE ONE SET OF CYLINDERS FOR EVERY 50 CUBIC METERS OR PART THEREOF OF EACH CONCRETE MIX POURED IN A DAY. THIS FREQUENCY MAY BE INCREASED OR DECREASED AT THE ENGINEER'S DISCRETION.
4. TEST SLUMP AND AIR CONTENT EACH TIME CYLINDER SAMPLES ARE TAKEN.
5. THE TESTING LABORATORY WILL TAKE ADDITIONAL CYLINDERS DURING COLD WEATHER CONCRETING. CURE CYLINDERS ON JOB SITE UNDER SAME CONDITIONS AS CONCRETE WHICH THEY REPRESENT.
6. CONTRACTOR SHALL PROVIDE ACCESS TO ALL WORK BEING INSPECTED/TESTED.
7. NON-DESTRUCTIVE METHODS OF TESTING CONCRETE SHALL BE IN ACCORDANCE WITH CSA-A23.2.
8. INSPECTION OR TESTING BY TESTING LABORATORY WILL NOT AUGMENT OR REPLACE CONTRACTOR QUALITY CONTROL NOR RELIEVE HIM OF HIS CONTRACTUAL RESPONSIBILITY.
9. CONCRETE FAILING TO MEET THE SPECIFIED REQUIREMENTS SHALL BE RETESTED, STRENGTHENED, OR REJECTED IN ACCORDANCE WITH THE CSA-A23.2. ALL ADDITIONAL TESTING, STRENGTHING, AND/OR REPLACEMENT SHALL BE AT THE CONTRACTOR'S EXPENSE.

DEMOLITION SPECIFICATIONS:

1. DEMOLITION TO CONFORM TO THE NATIONAL BUILDING CODE 2019 - ALBERTA EDITION AND THE LATEST ALBERTA OCCUPATIONAL HEALTH AND SAFETY ACT, REGULATION AND CODE.
2. PRIOR TO DEMOLITION:
- 2.1. LOCATE AND PROTECT UTILITIES. PRESERVE ACTIVE UTILITIES TRAVERSING THE WORK AREA IN OPERATIONAL CONDITION.
- 2.2. NOTIFY AND OBTAIN APPROVAL FROM UTILITY COMPANIES BEFORE STARTING DEMOLITION.
- 2.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A DEMOLITION PERMIT, AS REQUIRED.
3. DURING DEMOLITION:
- 3.1. PROTECT FROM DAMAGE ALL MATERIALS AND COMPONENTS THAT ARE TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR RESTORING TO PRE-DEMOLITION CONDITION ALL REMAINING COMPONENTS AND SURROUNDING STRUCTURES DAMAGED DURING DEMOLITION. ENSURE PARTIALLY DEMOLISHED WALLS ARE SUPPORTED DURING EXTENT OF SLAB REPAIRS. ENSURE EXISTING INTERIOR COLUMNS ARE WELL SUPPORTED THROUGHOUT DURING OF CONSTRUCTION WITH NO ADDITIONAL IMPOSED LOADING DURING CONSTRUCTION.
- 3.2. IMMEDIATELY NOTIFY THE ENGINEER, PWGSC, AND UTILITY COMPANY CONCERNED IN CASE OF DAMAGE TO ANY UTILITY OR SERVICE. DESIGNATED TO REMAIN IN PLACE.
- 3.3. IMMEDIATELY NOTIFY THE ENGINEER AND PWGSC SHOULD UNCHARTED UTILITY OR SERVICE BE ENCOUNTERED, AND AWAIT INSTRUCTION REGARDING REMEDIAL ACTION.
- 3.4. KEEP NOISE, DUST, AND INCONVENIENCE TO OCCUPANTS TO A MINIMUM.
- 3.5. PROTECT BUILDING SYSTEMS, SERVICES AND EQUIPMENT.
- 3.6. PROVIDE TEMPORARY DUST SCREENS, COVERS, RAILINGS, SUPPORTS AND OTHER PROTECTION AS REQUIRED.
- 3.7. DO WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY ACT, REGULATION AND CODES.
4. CONTRACTOR SHALL SURVEY AND CHECK ACTUAL CONDITIONS AND DIMENSIONS ON SITE. DETAILS AND DIMENSIONS ON DRAWINGS ARE BASED ON OWNER SUPPLIED DRAWINGS. ALL DIMENSIONS TO BE IDENTIFIED AND CONFIRMED BY THE CONTRACTOR. CONTRACTOR TO INFORM THE ENGINEER AND PWGSC OF ANY DISCREPANCIES.
5. CONTRACTOR IS RESPONSIBLE FOR REMOVAL FROM SITE AND DISPOSAL OF ALL DEMOLISHED MATERIAL. CONTRACTOR SHALL PLAN WORK SO THAT STOCK PILING IS MINIMIZED.
6. CLEANING:
- 6.1. PROGRESS CLEANING: LEAVE WORK AREA CLEAN AT END OF EACH DAY.
- 6.2. FINAL CLEANING: UPON COMPLETION REMOVE SURPLUS MATERIALS, RUBBISH, TOOLS AND EQUIPMENT. CONFIRM WITH PWGSC IF EXTRA MATERIAL FOR MAINTENANCE IS TO BE PROVIDED OR LEFT WITH PWGSC FOR FUTURE PATCH OR TOUCH-UPS
- 6.3. REFER TO DEMOLITION DRAWINGS AND NOTES FOR ITEMS TO BE SALVAGED FOR REUSE.
- 6.4. REMOVE RECYCLING CONTAINERS AND BINS FROM SITE AND DISPOSE OF MATERIALS AT APPROPRIATE FACILITY.
7. PATCH & REPAIR:
- 7.1. ALL WORK AFFECTED BY DEMOLITION THAT HAS NOT BEEN IDENTIFIED DIRECTLY IN NEW WORK IS TO BE PATCHED, REPAIRED, PAINTED OR FINISHED TO MATCH CONDITIONS OF EXISTING OR NEW CONSTRUCTION AND FINISHED TO MAKE GOOD.

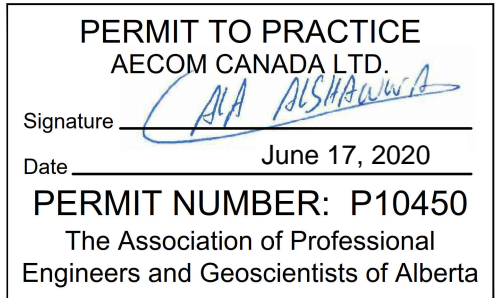


PARTIAL SITE PLAN SHOWING POSSIBLE LAYDOWN AREAS WHILE CONSTRUCTION ON A42 IS IN PROGRESS

TEMPORARY CONSTRUCTION FENCE NOTES

1. TYPE 1: MINIMUM INSTITUTION CONSTRUCTION FENCE IS USED PRIMARILY AS A PHYSICAL BARRIER TO PREVENT UNAUTHORIZED PERSONS ACCESS TO THE SITE FOR REASONS OF SAFETY AND TO PROTECT THE CONTRACTOR'S ASSETS. THIS FENCE IS NO DIFFERENT FROM THAT USED IN THE COMMUNITY.
2. THIS FENCE TYPE SHALL BE SELF SUPPORTING WELDED MESH SECTIONAL FENCE TYPICALLY AVAILABLE BY RENTAL. THE HEIGHT OF THE FENCE SHALL BE NO LESS THAN 1800mm HIGH BUT MAY BE HIGHER DEPENDING ON LOCAL AVAILABILITY. THE FENCE MUST BE STABLE AND SELF SUPPORTING. WELDED WIRE MESH IS CONSIDERED TO BE NON-CLIMBABLE DUE TO ITS MESH SIZE WHICH INHIBITS THE INSERTION OF FOOT TO AID CLIMBING. THE TOP OF THE FENCE ALSO HAS ITS VERTICAL WIRE PROJECTING OVER THE TOP RAIL TO DISCOURAGE BREACH. MATCHING VEHICLE GATES ARE PADLOCKED AFTER WORK HOURS. THE TEMPORARY CONSTRUCTION FENCE SHALL BE REMOVED FROM THE INSTITUTION BY THE CONTRACTOR AFTER CONSTRUCTION IS COMPLETED.
3. SPECIFICATIONS: RENTAL CONSTRUCTION PROTECTION FENCE COMES WITH WELDED WIRE MESH AND COMPONENTS CONFORMING TO ASTM F2919 WELDED MESH FENCE SPECIFICATION. MESH IS GALVANIZED STEEL, NO LARGER THAN 50X150mm (VERTICALLY LONG RECTANGLE) WITH VERTICAL WIRE PROJECTING AND EXPOSED AT TOP. FENCE MUST BE AT LEAST 1800mm HIGH AND SECURED WITH PINS INSERTED IN THE GROUND THROUGH THE 'T' BASE SUPPORT. SECTIONS OF FENCE MUST BE SECURELY CLAMPED TOGETHER TO ENSURE THAT THE EACH FENCE RUN ACTS AS A CONTINUOUS BARRIER WHICH WILL RESIST LATERAL FORCES AND SEPARATION. SLOPED RUNS MUST BE PROTECTED BY MESH PANELS TO ENSURE CONTINUITY OF BARRIER FROM GROUND UP.

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Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair**

Designed by
JDV

Drawn by
LKM, AMH

Approved by
AA

PWGSC Project Manager
Administrateur de Projets TPSSGC


Drawing title
**GENERAL NOTES
SHEET 2 OF 2**

Project no./No. du projet
60608478

Drawing no./No. du dessin
S-002

Revision no.
C

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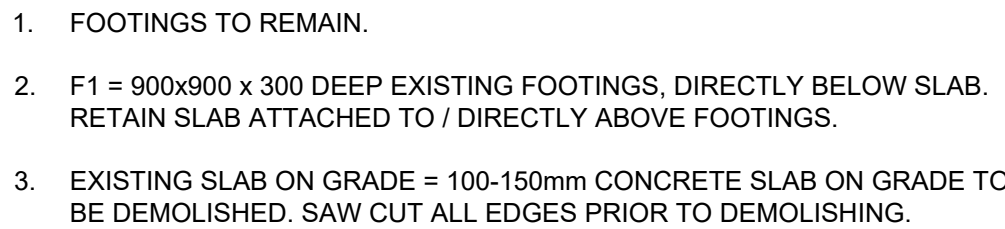

 June 17, 2020

**Department of Public Works
& Governments Services Canada**

Floor Slab Repair

DEMOLITION PLANS AND DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	S-101	C



1	FOUNDATION DEMOLITION PLAN
S-101	Scale 1:50





June 17, 2020

Project title	Project
<p>Highway 9, Drumheller Alberta, T0J 0Y0 CSC Drumheller 50 Bed Unit</p> <p>Floor Slab Repair</p>	

Drawing title	Titre du dessin
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PROPOSED FOUNDATION PLAN

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	S-102	C

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 June 17, 2020



**Department of Public Works
& Governments Services Canada**

Project title

**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair**

Drawn by LKM, AMH Dessiné par

PWGSC Project Manager Administrateur de Projets TPSGC















































NEW SLAB SECTIONS

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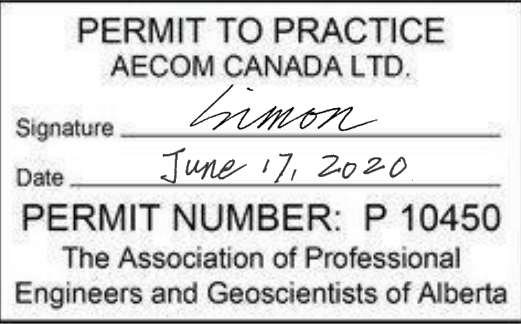
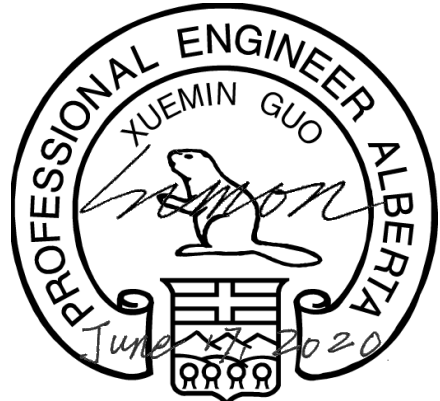
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DRAWING LIST	
DWG #	DRAWING TITLE
E-001	SYMBOL LEGEND AND DRAWING LIST
E-101	DEMOLITION PLAN
E-102	POWER AND SYSTEMS PLAN
E-103	LIGHTING PLAN
E-104	LOW VOLTAGE PLAN
E-401	PANEL SCHEDULE AND DETAILS

SYMBOL LEGEND					
SYMBOL	DESCRIPTION LIGHTING	SYMBOL	DESCRIPTION POWER	SYMBOL	DESCRIPTION COMMUNICATION
	FLUORESCENT/LED LUMINAIRE - SURFACE OR SUSPENDED		PANELBOARD		MANUAL BREAKGLASS STATION
	CEILING POT OR HID LUMINAIRE		20A DUPLEX RECEPTACLE (5-20R)		BELL C/W VISUAL ALARM LIGHT
	WALL POT OR HID LUMINAIRE		20A CEILING MOUNTED RECEPTACLE		HORN
	SINGLE POLE SWITCH		20A GROUND FAULT RECEPTACLE		SMOKE DETECTOR
	THREE WAY SWITCH		SPECIAL 120V RECEPTACLE		RATE OF RISE THERMAL DETECTOR
	CEILING EXIT LIGHT - DIRECTION ARROWS AS INDICATED		SPECIAL 208V 1PH RECEPTACLE		FIRE SPEAKER - CEILING MOUNTED
	WALL EXIT LIGHT - DIRECTION ARROWS AS INDICATED		SPECIAL 208V 3PH RECEPTACLE		FIRE SPEAKER - WALL MOUNTED
	BATTERY PACK C/W HEADS AS INDICATED		20A DUPLEX RECEPTACLE - MOUNTED ABOVE COUNTER		FIRE SPEAKER WITH VISUAL SIGNAL - CEILING MOUNTED
	WALL MOUNTED EMERGENCY REMOTE HEADS		20A SPLIT-FEED RECEPTACLE - MOUNTED ABOVE COUNTER		FIRE SPEAKER WITH VISUAL SIGNAL - WALL MOUNTED
			20A GFI RECEPTACLE - MOUNTED ABOVE COUNTER		VISUAL SIGNAL - CEILING MOUNTED
			MOTOR		VISUAL ALARM LIGHT - WALL MOUNTED
			DISCONNECT SWITCH		SPRINKLER FLOW SWITCH
			PANELBOARD		SPRINKLER VALVE MONITOR
			4" OCTAGON OR SQUARE CEILING MOUNTED JUNCTION BOX		
					Co ² DETECTOR
					WALL MOUNTED INTERCOM
					PAGER SPEAKER
					WALL MOUNTED VOICE AND DATA
					WALL MOUNTED TELEPHONE OUTLET
					EXISTING TO REMAIN
					REMOVE
					RELOCATE
					ABOVE FINISHED FLOOR
SYMBOL	DESCRIPTION SECURITY				
	ELECTRIC DOOR STRIKE				

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C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 90% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06
Revision	Description	Date
Client	client	

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
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Project titleProjet

Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed byConçu par

Drawn byDessiné par

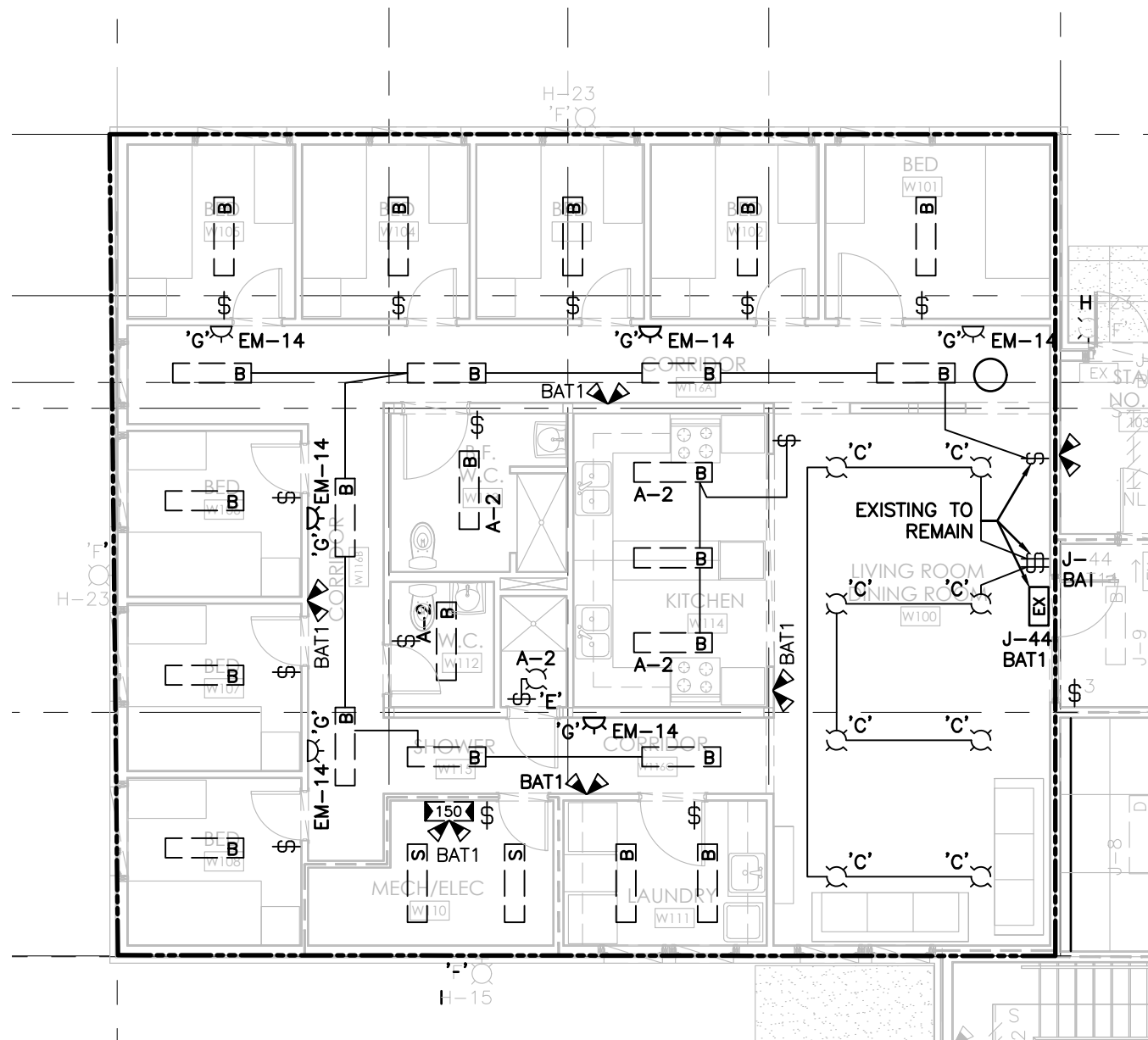
Approved byApprouvé par

PWGSC Project ManagerAdministrateur de Projets TPSGC

Drawing titleTitre du dessin

SYMBOL LEGEND AND DRAWING LIST

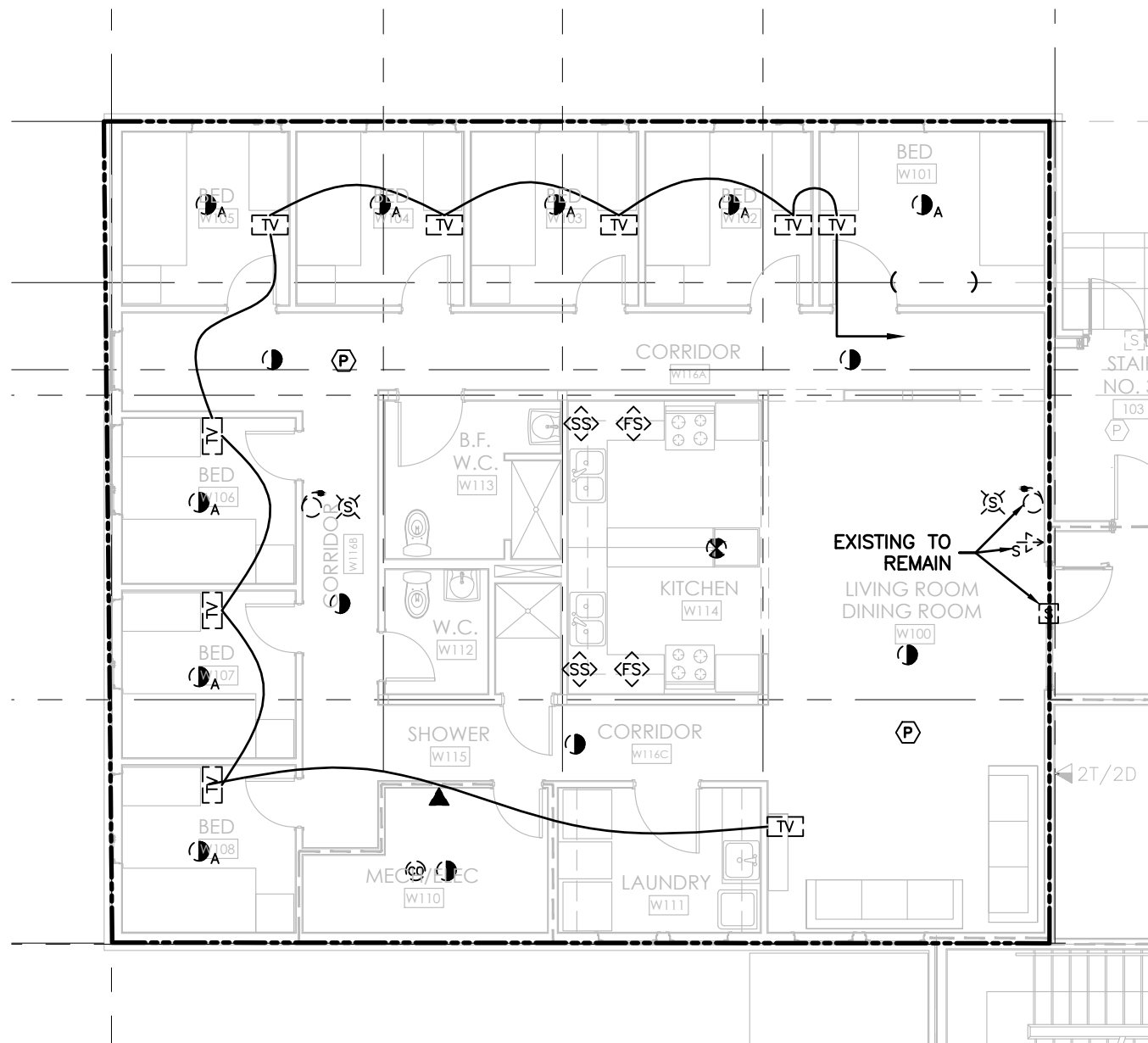
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	E-001 OF	C



1 DEMOLITION LIGHTING FLOOR PLAN
1:100

NOTES:

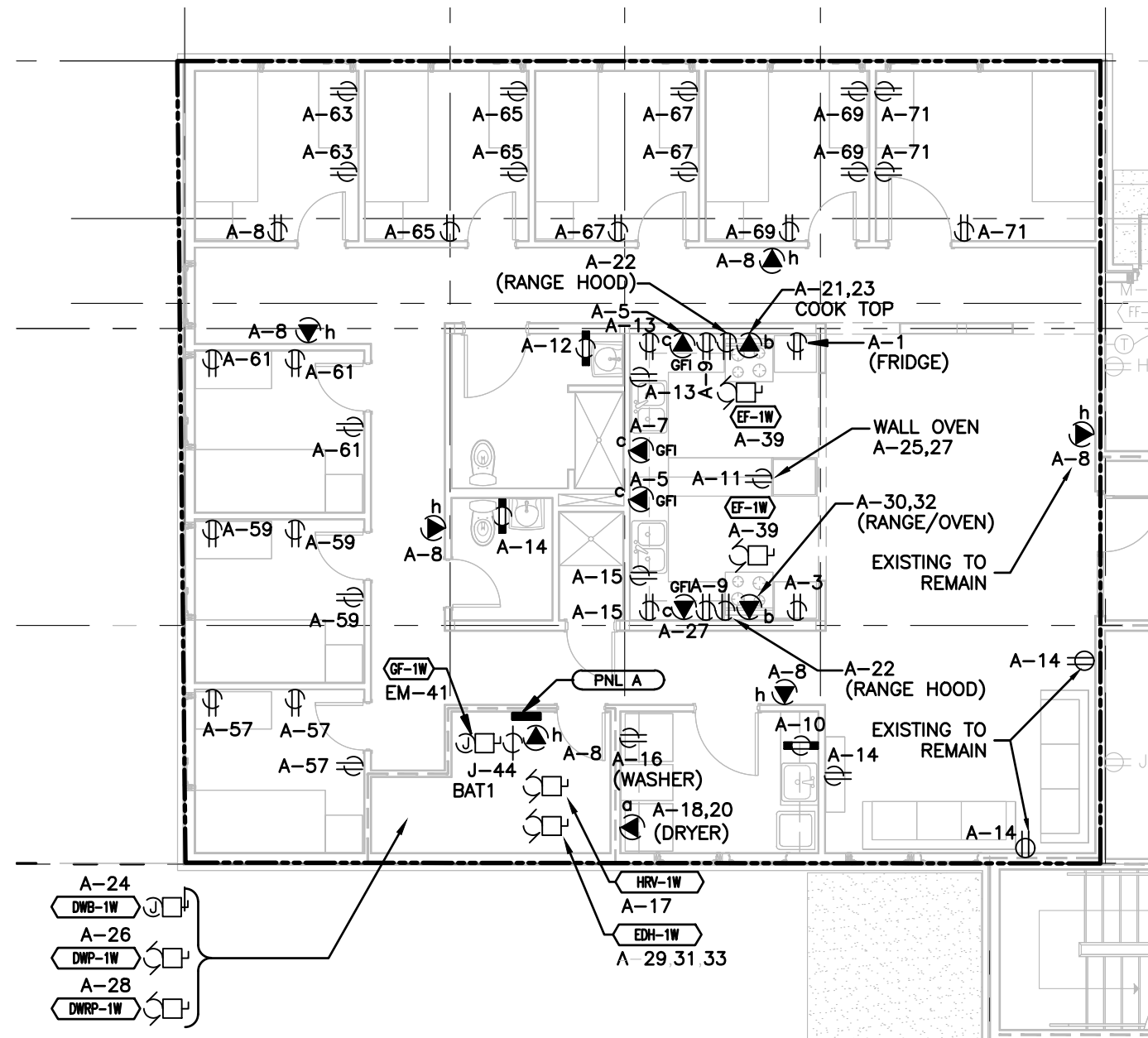
- DISCONNECT LIGHTING CIRCUITS. SALVAGE ALL LIGHT FIXTURES AS SHOWN IN THE DRAWING. SALVAGE OF BALLASTS AND FIXTURE. MAKE NOTE OF EXISTING LUMINAIRE MODEL NUMBERS AND SHEET TYPE FOR THE SELECTION OF NEW LED FIXTURES.
- EXTERIOR TYPE"F" FIXTURES TO REMAIN.
- REMOVE ALL CONDUITS WITHIN INTERNAL WALLS. ALL CONDUIT IN THE CEILING SHALL REMAIN AND RE-USE.
- SALVAGE ALL EXISTING ELECTRICAL DEVICES IN DEMOLITION AREAS TO ACCOMMODATE NEW INSTALLATION.
- ENSURE ALL CIRCUITS THAT ARE BEING DISCONNECTED ARE REMOVED BACK TO SOURCE. DO NOT FEED OTHER AREAS OUTSIDE OF CONTRACT.
- CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.
- NO EXTRA WILL BE ALLOWED.
- FOR ADDITIONAL INFORMATION PLEASE REQUEST A SITE WALK THROUGH.



2 DEMOLITION LOW TENSION FLOOR PLAN
1:100

NOTES:

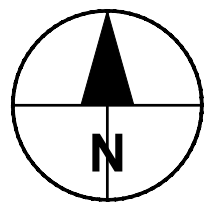
- FIRE ALARM DEVICES MUST REMAIN DURING DEMOLITION & CONSTRUCTION PHASE.
- SALVAGE ALL DEVICES, COIL UP AND TIE WRAP FIRE ALARM DEVICES TO EXISTING CONDUITS UNDER SLAB.
- SALVAGE ALL TV RECEPTACLES AND COIL UP THE CABLE FOR RE-USE.
- CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.



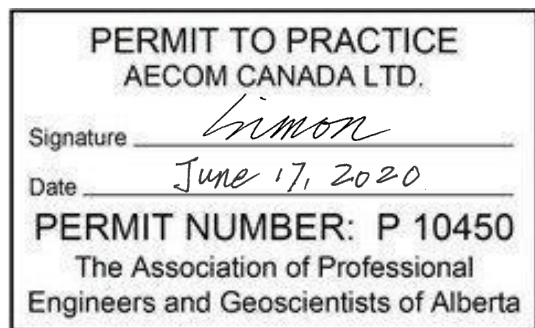
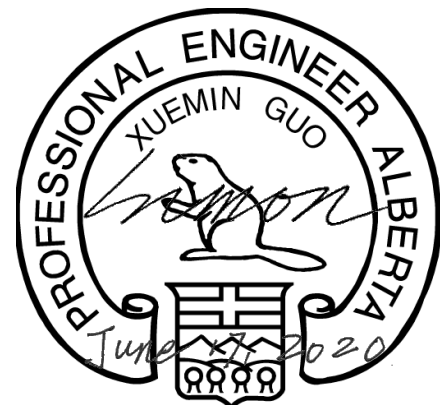
3 DEMOLITION POWER FLOOR PLAN
1:100

NOTES:

- SALVAGE EXISTING ELECTRICAL SHOWN IN THE DEMOLITION AREA IDENTIFIED ON THIS DRAWING TO ACCOMMODATE NEW INSTALLATION.
- CO-ORDINATE WITH MECHANICAL CONTRACTOR BEFORE DISCONNECTING A/C UNITS. ELECTRICAL CONTRACTOR TO DISCONNECT AND RECONNECT EQUIPMENT. COORDINATE WITH MECHANICAL.
- DISCONNECT ALL NETWORK CABLES. REMOVE CABLES BACK TO THE CEILING FOR RE-CONNECTION.
- DISCONNECT ELECTRICAL FROM WALLS THAT ARE BEING REMOVED, REFER TO ARCHITECTURAL.
- ENSURE TO RE-INSTATE POWER TO ALL CIRCUITS AFFECTED BY THE DEMOLITION THAT HAVE LOADS OUTSIDE OF THE WORK ARE UNDER THIS SCOPE.
- SALVAGE ALL EXISTING OUTLETS IN NOTED WALLS.
- CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.



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Revision	Description	Date
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B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06

Client
Department of Public Works
& Governments Services Canada

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Highway 9, Drumheller
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Floor Slab Repair

Designed by
Conçu par

Drawn by
Dessiné par

Approved by
Approuvé par

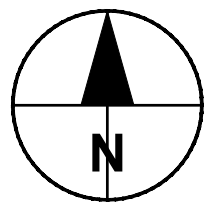
PWGSC Project Manager
Administrateur de Projets TPSGC

Drawing title
Titre du dessin
DEMOLITION PLAN

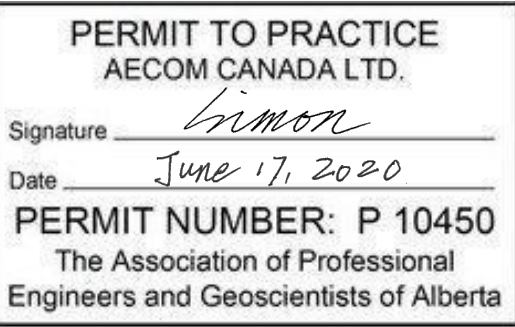
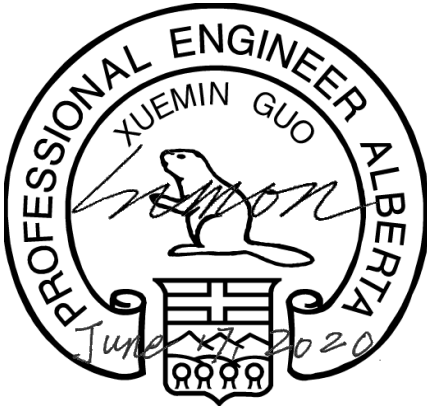
Project no./No. du projet
60608478

Drawing no./No. du dessin
E-101
OF

Revision no.
C



PRELIMINARY
NOT FOR CONSTRUCTION



Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair**

Designed by _____ Conçu par _____

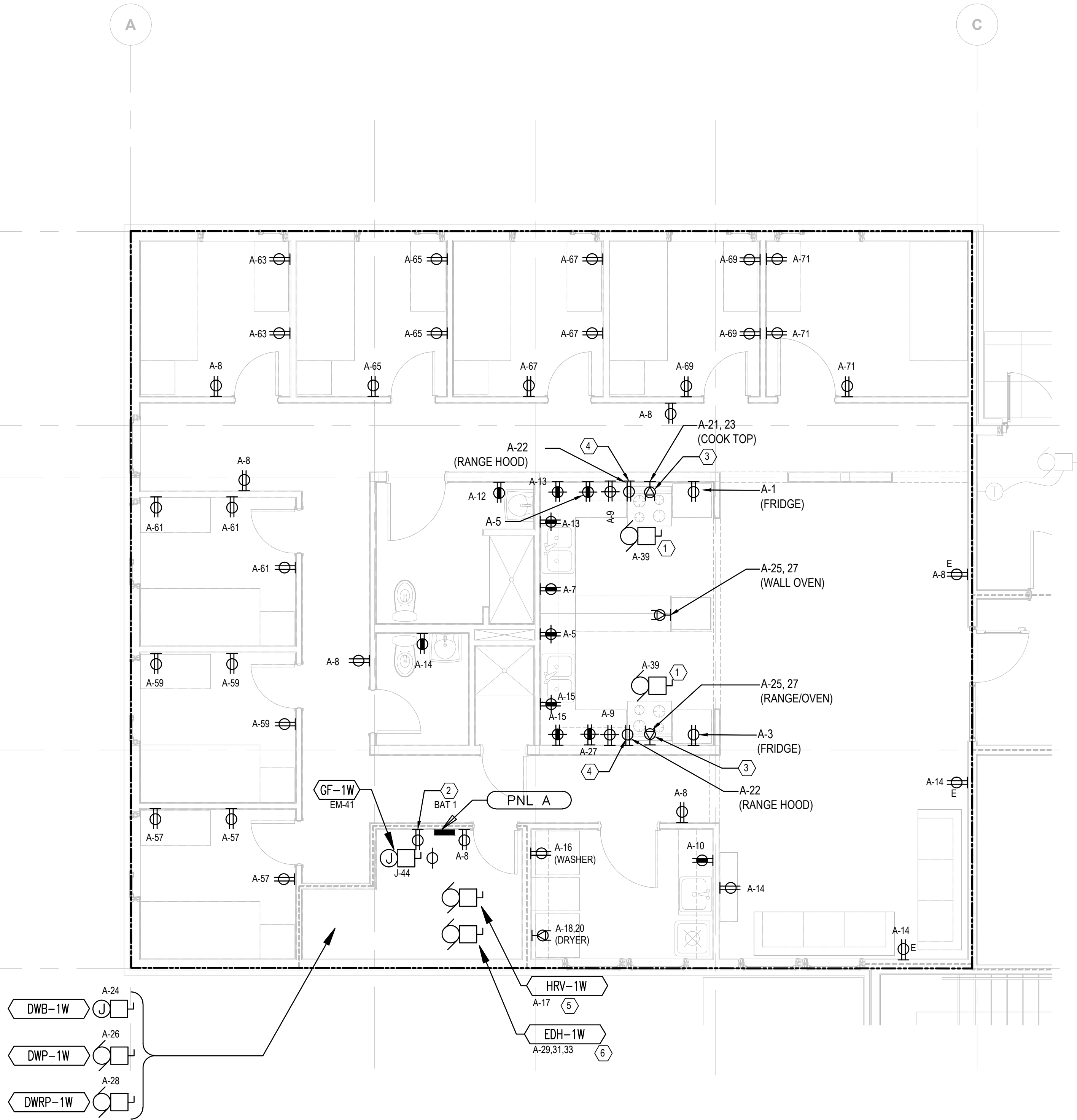
Drawn by _____ Dessiné par _____

Approved by _____ Approuvé par _____

PWSC Project Manager Administrateur de Projets TPSGC

Drawing title
POWER AND SYSTEMS PLAN

Project no./No. du projet
E-102
OF
C



KEYNOTES:

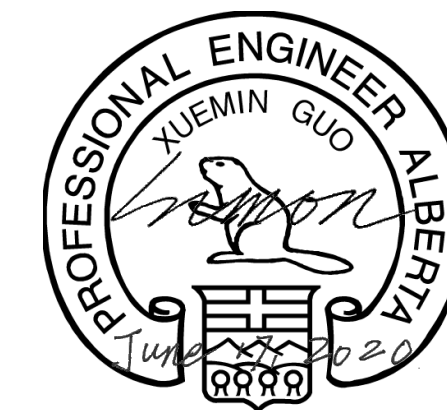
- 1 RANGE HOOD CONNECTION. REFER TO ARCHITECTURAL ELEVATIONS AND COORDINATE WITH MECHANICAL CONTRACTOR.
- 2 EMERGENCY LIGHTING BATTERY PACK RECEPTACLE TO BE INSTALLED 2286mm ABOVE FINISHED FLOOR. CONNECTED TO CIRCUIT A-37.
- 3 14-50R RECEPTACLE FOR RANGE OVEN. PROVIDE SHUNT TRIP BREAKER CONNECTION WITH FIRE SUPPRESSION SYSTEM TO ALLOW POWER SHUTOFF UPON FIRE SUPPRESSION SYSTEM ACTIVATION
- 4 120V RECEPTACLE TO BE INSTALLED ABOVE RANGE HOOD FOR FIRE SUPPRESSION SYSTEM
- 5 COORDINATE THE REINSTALLATION OF THE TIME CLOCK FOR THE HEAT RECOVERY VENTILATOR WITH MECHANICAL CONTRACTOR.
- 6 COORDINATE RECONNECTION OF ELECTRIC DUCT HEATER THERMOSTAT WITH MECHANICAL CONTRACTOR.

NOTES:

1. PROVIDE NEW CONDUIT AND WIRING FOR ALL NEW INSTALLATIONS, UNLESS ADDRESSED IN KEY NOTES.
2. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND REQUIREMENTS FOR NEW OR REVISED MECHANICAL EQUIPMENT PRIOR TO INSTALLATION. MECHANICAL DEVICES TO BE FED FROM DEDICATED CIRCUITS. CONFIRM POWER REQUIREMENTS AND PROVIDE APPROPRIATE BREAKER AND WIRING.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DEVICE LOCATIONS AND MOUNTING HEIGHTS.
4. ALL DATA OUTLETS TO CONNECT TO EXISTING WALL MOUNTED DATA RACK. CONTRACTOR TO CONFIRM IF A NEW PATCH PANEL IS REQUIRED.
5. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS TO COMPLY WITH CEC, LOCAL BUILDING CODES AND DRUMHELLER INSTITUTE REQUIREMENTS.
6. CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.

1 POWER AND SYSTEMS FLOOR PLAN
1:50

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NOT FOR CONSTRUCTION



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AECOM CANADA LTD.

Signature Immon

Date June 17, 2020

PERMIT NUMBER: P 10450
The Association of Professional
Engineers and Geoscientists of Alberta

C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/06
Revision	Description	Date

Revision	Description	Date
Client		client

**Department of Public Works
& Governments Services Canada**

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title	Project
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Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by	Conçu par
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Drawn by	Dessiné par
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Approved by	Approuvé par
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PWSC Project Manager	Administrateur de Projets TPSGC
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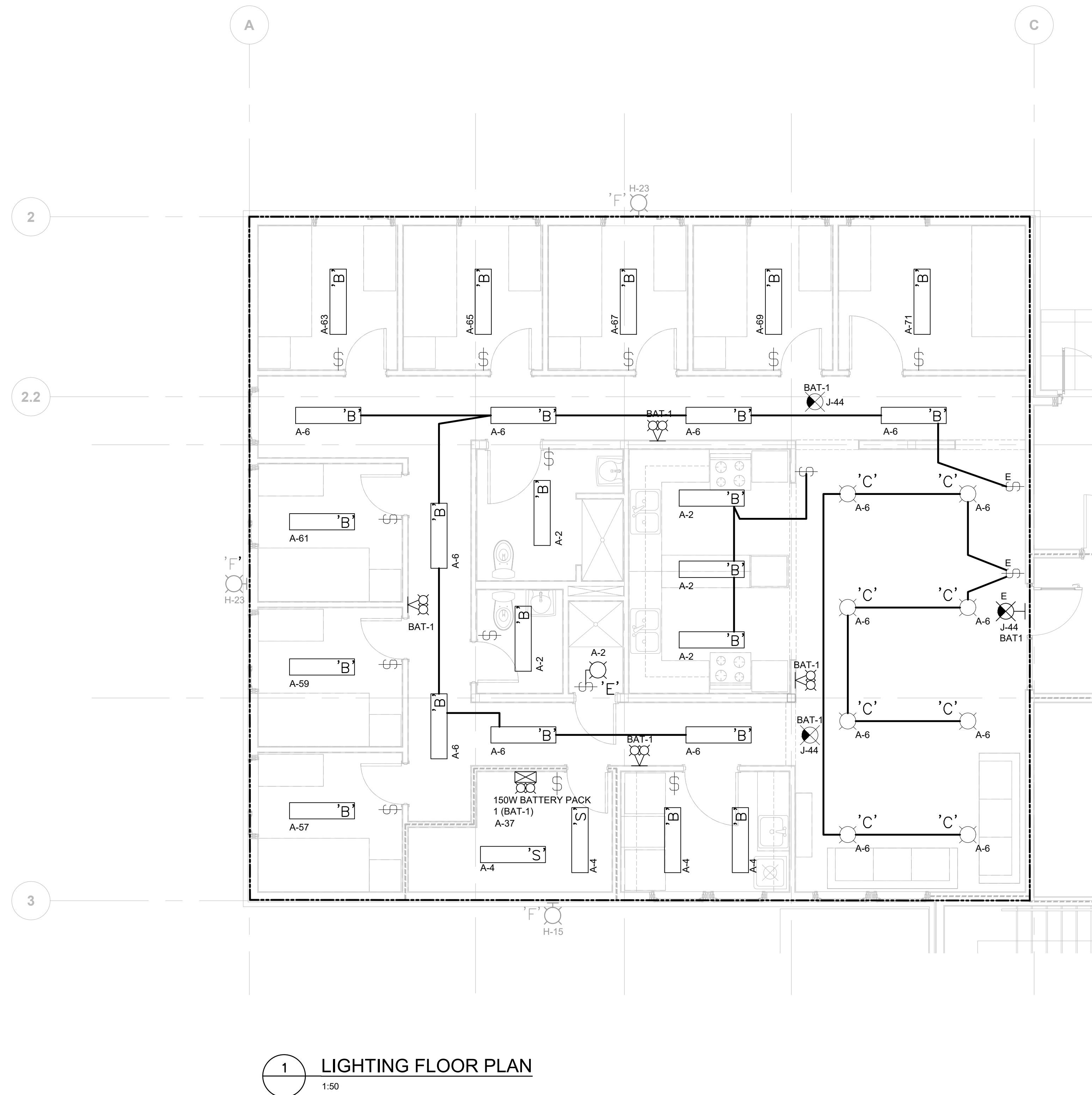
Drawing title	Titre du dessin
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LIGHTING PLAN

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
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60608478	E-103	C
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OF

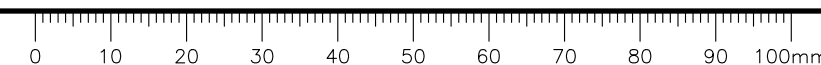


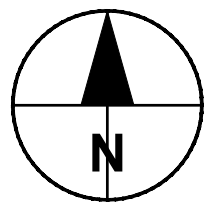
1 LIGHTING FLOOR PLAN

1:50

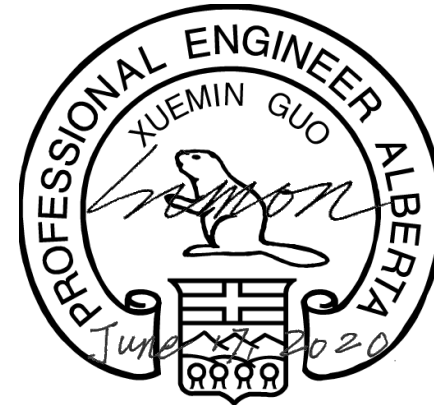
NOTES:

1. RE-USE ALL LIGHTING FIXTURES UNLESS NOTED OTHERWISE.
2. PROVIDE AND INSTALL ALL LUMINAIRES INDICATED. CONNECT LUMINAIRES TO CIRCUITS AND DESIGNATED SWITCHES INDICATED. RE-USE EXISTING CONDUIT AND WIRING FOR NEW LIGHTING SYSTEM.
3. PROVIDE AND INSTALL ALL EXIT SIGNAGE AS INDICATED. ALL EXIT SIGNAGE SHALL BE RUNNING MAN TYPE EXITS.
4. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS TO COMPLY WITH CEC, LOCAL BUILDING CODES AND DRUMHELLER INSTITUTE REQUIREMENTS.
5. CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.





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AECOM CANADA LTD.
Signature: *[Signature]*
Date: June 17, 2020
PERMIT NUMBER: P 10450
The Association of Professional
Engineers and Geoscientists of Alberta

Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 90% REVIEW	2020/05/08
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Client	client
Department of Public Works & Governments Services Canada	

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair**

Designed by
Conçu par

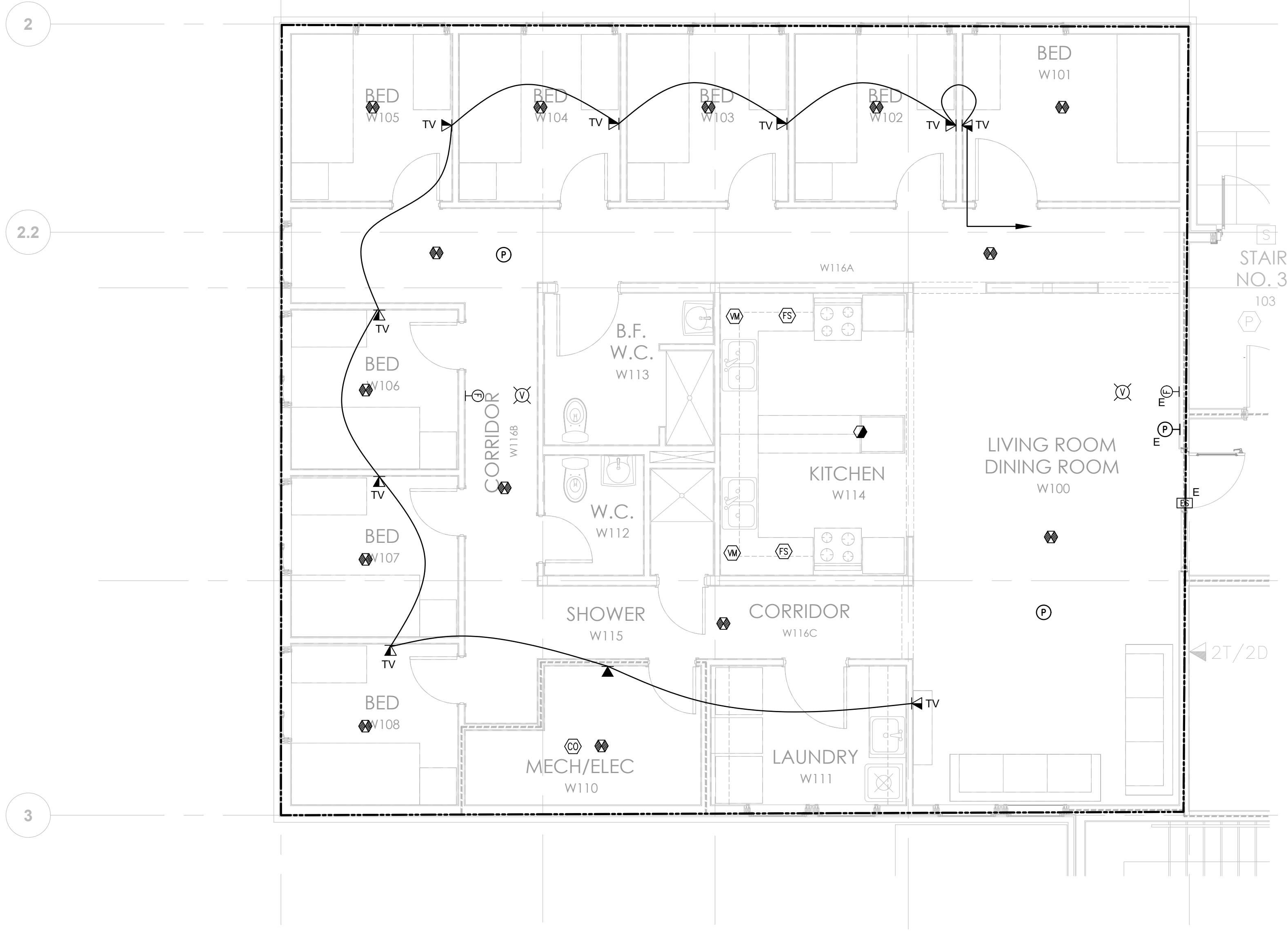
Drawn by
Dessiné par

Approved by
Approuvé par

PWGSC Project Manager
Administrateur de Projets TPSGC

Drawing title
LOW VOLTAGE PLAN

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	E-104 OF	C

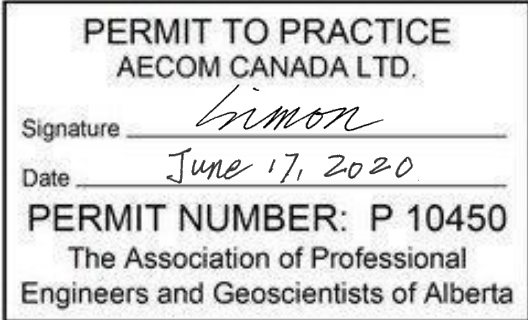
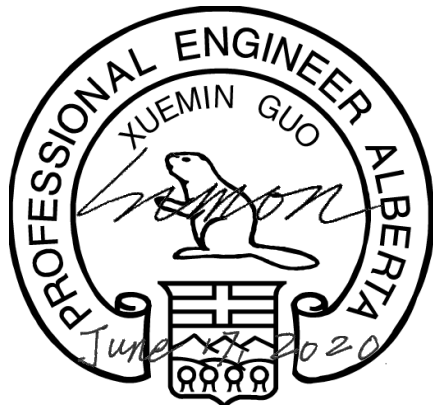


1 LOW VOLTAGE FLOOR PLAN
1:50

NOTES:

- ALL FIRE ALARM DEVICES ARE EXISTING TO REMAIN. ALL DATA/COMMUNICATION DEVICES AND EQUIPMENT INDICATED SHALL BE NEW UNLESS NOTED OTHERWISE.
- REFER TO ARCHITECTURAL DRAWINGS FOR DEVICE EXACT LOCATIONS AND MOUNTING HEIGHTS.
- REUSE EXISTING CABLE COILED IN THE CEILING SPACE.
- CONTRACTOR TO PROVIDE CODE COMPLIANT, FULLY FUNCTIONAL FIRE ALARM SYSTEM INTEGRATE WITH THE EXISTING SYSTEM.
- ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS TO COMPLY WITH CEC, LOCAL BUILDING CODES AND DRUMHELLER INSTITUTE REQUIREMENTS.
- CONTRACTOR TO EVALUATE THE CONDITION OF ALL SALVAGED EQUIPMENT, DEVICES, CONDUIT AND WIRING PRIOR TO REINSTALLATION. ALL EQUIPMENT THAT DOES NOT MEET CEC OR DRUMHELLER INSTITUTION REQUIREMENTS IS TO BE REPLACED WITH NEW EQUIVALENT. REVIEW PRIOR TO SUBMITTING TENDER.

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Revision	Description	Date

Client

client

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title

Projet

Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair

Designed by

Conçu par

Drawn by

Dessiné par

Approved by

Approuvé par

PWGSC Project Manager

Administrateur de Projets TPSGC

Drawing title

Titre du dessin

PANEL SCHEDULE AND DETAILS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	E-401 OF	C

MECHANICAL LEGEND & SYMBOLS

PLUMBING

DIRECTION OF FLOW	
SANITARY	
STORM	
VENT	
DOMESTIC COLD WATER	
DOMESTIC HOT WATER	
DOMESTIC HOT WATER RECIRC	
FILTERED WATER	
SOFT WATER	
NATURAL GAS	
NATURAL GAS VENT	
FRESH AIR	
NON-FREEZE HOSE BIBB	
FREEZE PROOF WALL HYDRANT	
P-TRAP	
FLOOR DRAIN	
FUNNEL FLOOR DRAIN	
HUB DRAIN	
ROOF DRAIN	
FLOOR CLEANOUT	
CLEAN OUT	
GAS METER	
GAS REGULATOR	
WATER METER	
FIRE EXTINGUISHER	

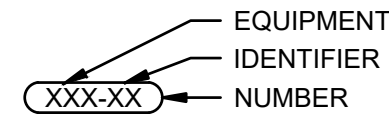
MATERIALS & EQUIPMENT TAG



AIR OUTLET TAG

SUPPLY	S		TYPE
RETURN	R		SIZE
EXHAUST	E		FLOW (L/s)
TRANSFER	T		
LOUVER	L		

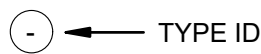
MECHANICAL TAG



REVISION TAG



KEYNOTE TAG



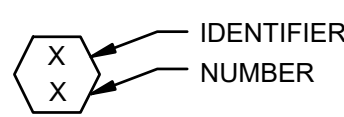
PIPE FITTINGS

PUMP	
FLOW METER	
PIPE RISE	
PIPE DROP	
PIPE TOP TAKE-OFF	
PIPE BOTTOM TAKE-OFF	
SIMPLE CONNECTION	
PIPE CAP	
PIPE CONTINUATION	
GATE VALVE	
ISOLATION VALVE	
ISOLATION VALVE NORMALLY CLOSED	
BALANCING VALVE	
CHECK VALVE	
CONTROL VALVE	
BALL VALVE	
REDUCED PRESSURE BACK FLOW PREVENTER	
BACKWATER VALVE	
PLUG VALVE	
FLEXIBLE CONNECTION	
PRESSURE RELIEF VALVE	
PRESSURE REGULATING VALVE	
MANUAL AIR VENT	
PRESSURE GAUGE	
THERMOMETER	
UNION	
STRAINER	
WATER PRESSURE GAUGE	
AIR SEPERATOR	

DUCT DIMENSIONING

ROUND DUCT		
RECTANGULAR DUCT		NOTE: WHERE '300' IS THE VISIBLE DIMENSION

PLUMBING TAG



VENTILATION

SUPPLY AIR DIFFUSER	
RETURN AIR GRILLE	
EXHAUST AIR GRILLE	
SUPPLY GRILLE	
EXHAUST FAN	
RETURN GRILLE	
TRANSFER GRILLE	
FIRE DAMPER VERTICAL	
FIRE DAMPER HORIZONTAL	
OPEN END DUCT	
MOTORIZED DAMPER	
COAXIAL VENT	

ELECTRICAL

SWITCH	
--------	--

AIR DISTRIBUTION

SUPPLY AIR (S/A)	DUCT DOWN		DUCT UP
RETURN AIR (R/A)	DUCT DOWN		DUCT UP
EXHAUST AIR (E/A)	DUCT DOWN		DUCT UP
BALANCING DAMPER			
TURNING VANES			
ACOUSTIC LINED DUCTWORK			
FLEXIBLE CONNECTION			
RADIANT PANEL			
THERMOSTAT			
HUMIDITY SENSOR			
DIFFERENTIAL PRESSURE SENSOR			
CARBON MONOXIDE SENSOR			
NITROGEN DIOXIDE SENSOR			
GAS SENSOR			

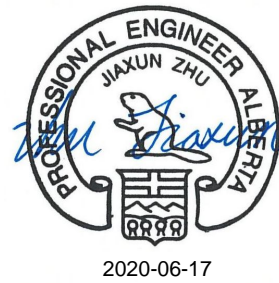
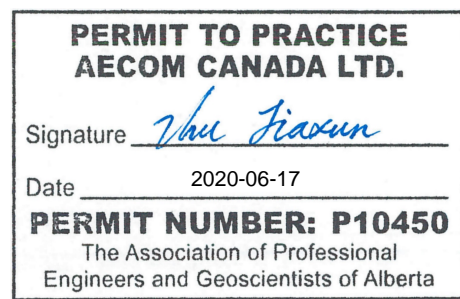
FIRE

FIRE WATER LINE	
FIRE SPRINKLER LINE	
DRY FIRE SPRINKLER LINE	
SUPERVISED ISOLATION VALVE	
FLOW SWITCH (FIRE ALARM)	
CHECK VALVE W/ AUTOMATIC DRIP	
FIRE DEPARTMENT SIAMESE CONNECTION	
FIRE EXTINGUISHER	
INSPECTORS SITE GLASS	
PENDANT SPRINKLER HEAD	
PENDANT SPRINKLER HEAD (DRY)	
UPRIGHT SPINKLER HEAD	
UPRIGHT SPINKLER HEAD (DRY)	
DRY SPRINKLER VALVE	
FIRE EXTINGUISHER CABINET	

CODES & STANDARDS COMPLIANCE:

1. NATIONAL BUILDING CODE 2019 ALBERTA EDITION.
2. NATIONAL PLUMBING CODE OF CANADA 2015.
3. NATURAL GAS AND PROPANE INSTALLATION CODE CSA B149.1-2015.
4. NATIONAL FIRE CODE 2019 ALBERTA EDITION.
5. NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.
6. NFPA 10 STANDARD FOR PORTABLE FIRE EXTINGUISHERS.
7. ASHRAE 62.1-2019 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY.
8. SMACNA HVAC DUCT CONSTRUCTION STANDARDS.

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NOT FOR CONSTRUCTION



Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 90% REVIEW	2020/05/08
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Department of Public Works & Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit

Floor Slab Repair
MECHANICAL

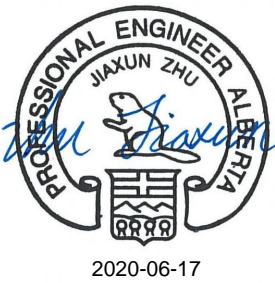
Designed by MT	Conçu par
Drawn by JD	Dessiné par
Approved by JZ	Approuvé par
PWSSC Project Manager	Administrateur de Projets TPSSC

Drawing title
WEST RESIDENCE POD
MECHANICAL
LEGEND & SYMBOLS

Project no./No. du projet 60608478	Drawing no./No. du dessin M-001 OF 12	Revision no. C
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PRELIMINARY
NOT FOR CONSTRUCTION

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AECOM CANADA LTD.
Signature *John Stinson*
Date 2020-06-17
PERMIT NUMBER: P10450
The Association of Professional
Engineers and Geoscientists of Alberta



Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 90% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/05

Client client

Department of Public Works
& Governments Services Canada

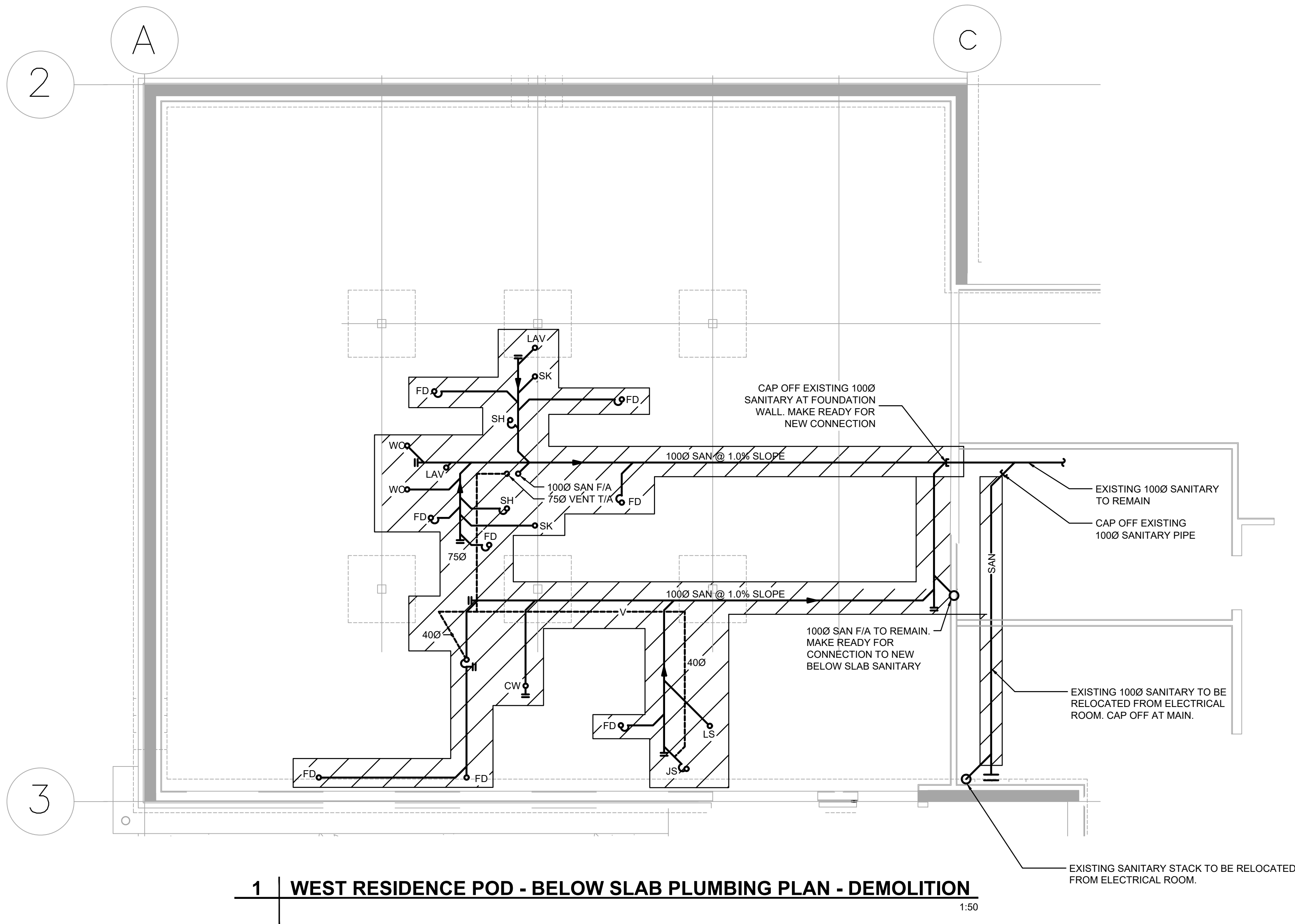
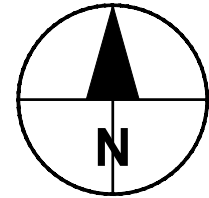
ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair
MECHANICAL

Designed by MT	Conçu par
Drawn by JD	Dessiné par
Approved by JZ	Approuvé par
PWSSC Project Manager	Administrateur de Projets TPSSC

Drawing title
WEST RESIDENCE POD
BELOW SLAB PLUMBING PLAN
DEMOLITION

Project no./No. du projet 60608478	Drawing no./No. du dessin M-101 OF 12	Revision no. C
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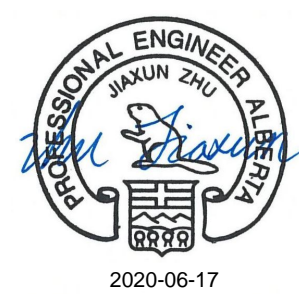
1 | WEST RESIDENCE POD - BELOW SLAB PLUMBING PLAN - DEMOLITION

NOTES:

1. REMOVE AND DISPOSE OF ALL EXISTING UNDERSLAB PIPING INCLUDING ALL SANITARY WASTE LINES AND VENTS

PRELIMINARY
NOT FOR CONSTRUCTION

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AECOM CANADA LTD.
Signature *John Stevan*
Date 2020-06-17
PERMIT NUMBER: P10450
The Association of Professional
Engineers and Geoscientists of Alberta



Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
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A	ISSUED FOR 50% REVIEW	2020/03/05

Department of Public Works
& Governments Services Canada

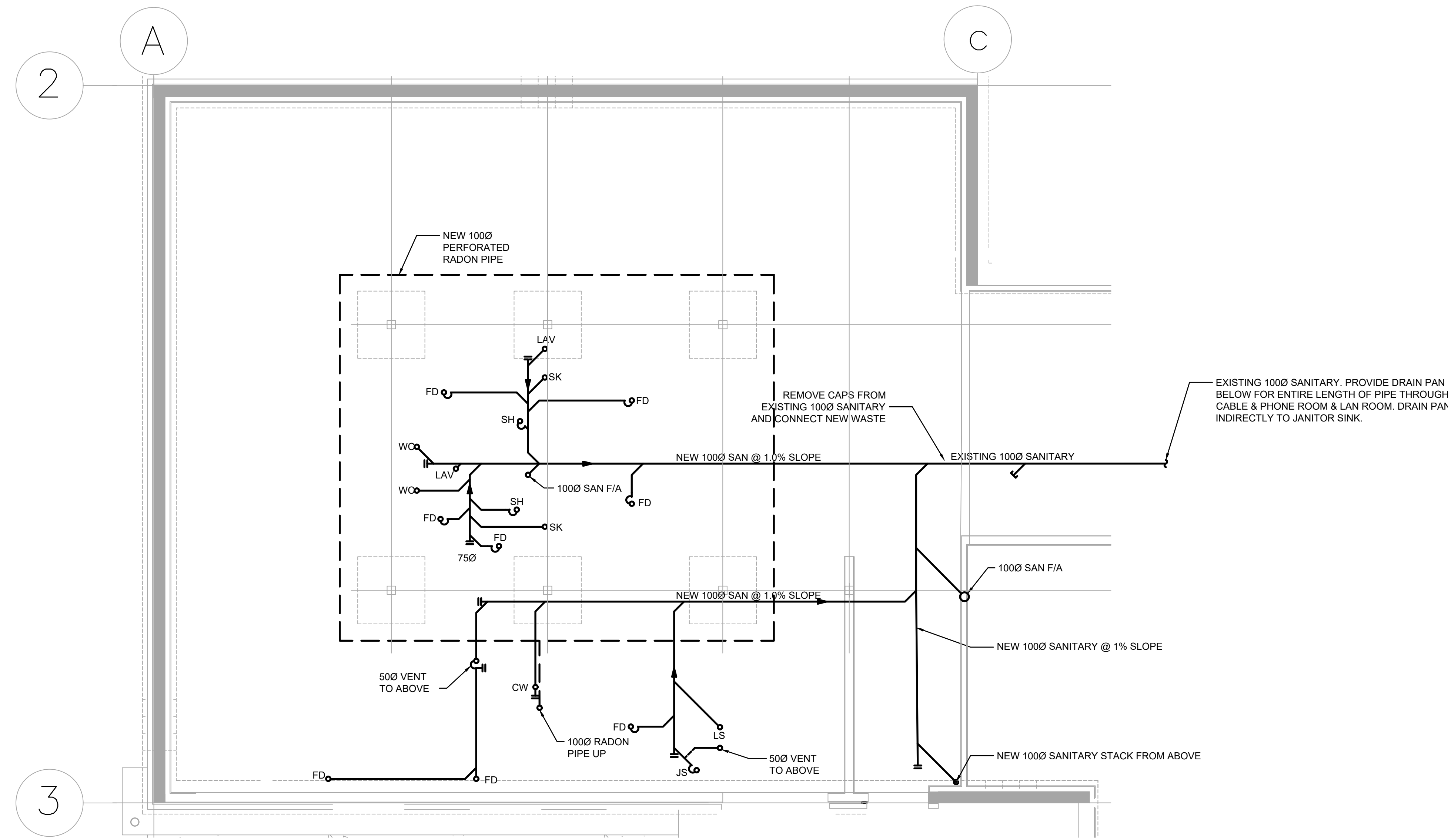
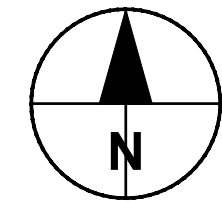
ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair
MECHANICAL

Designed by MT
Drawn by JD
Approved by JZ
PWSC Project Manager
Administrateur de Projets TPSCG

Drawing title
WEST RESIDENCE POD
BELOW SLAB PLUMBING PLAN
NEW CONSTRUCTION

Project no./No. du projet
60608478
Drawing no./No. du dessin
M-102
Revision no.
C
OF 12



1 | WEST RESIDENCE POD - BELOW SLAB PLUMBING PLAN - NEW CONSTRUCTION 1:50

- NOTES:
1. PROVIDE ALL NEW SANITARY PIPING AND VENTS BELOW SLAB, DO NOT REUSE EXISTING PIPE SALVAGED FROM DEMOLITION.

FIXTURE CONNECTION SCHEDULE					
TAG	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
DF-W	DRINKING FOUNTAIN	150	-	300	300
LAV-W	LAVATORY	150	150	400	400
SH-W	SHOWER	150	150	500	400
SK-W	SINK	150	150	400	400
JS-W	JANITOR SINK	150	150	750	400
LS-W	LAUNDRY SINK	150	150	400	400
LM-W	LAUNDRY MATE	150	150	500	400
BT-W	BATH TUB	150	150	500	400
WC-W	FLUSH TANK WATER CLOSET	150	-	1000	400
WC-W	FLUSH VALVE WATER CLOSET	200	-	1000	400
UR-W	URINAL	200	-	500	400
FD-W	FLOOR DRAIN	-	-	1000	500

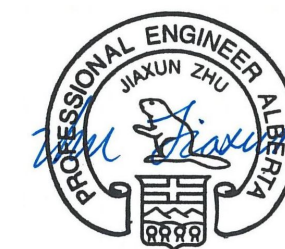
PRELIMINARY
NOT FOR CONSTRUCTION

PERMIT TO PRACTICE
AECOM CANADA LTD.

Signature *John Heston*

Date 2020-06-17

PERMIT NUMBER: P10450
The Association of Professional
Engineers and Geoscientists of Alberta



2020-06-17

Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/05

Client client

**Department of Public Works
& Governments Services Canada**

**ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6**

Project title
**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair
MECHANICAL**

Designed by Conçu par
MT

Drawn by Dessiné par
JD

Approved by Approuvé par
JZ

PWSSC Project Manager Administrateur de Projets TPSSC

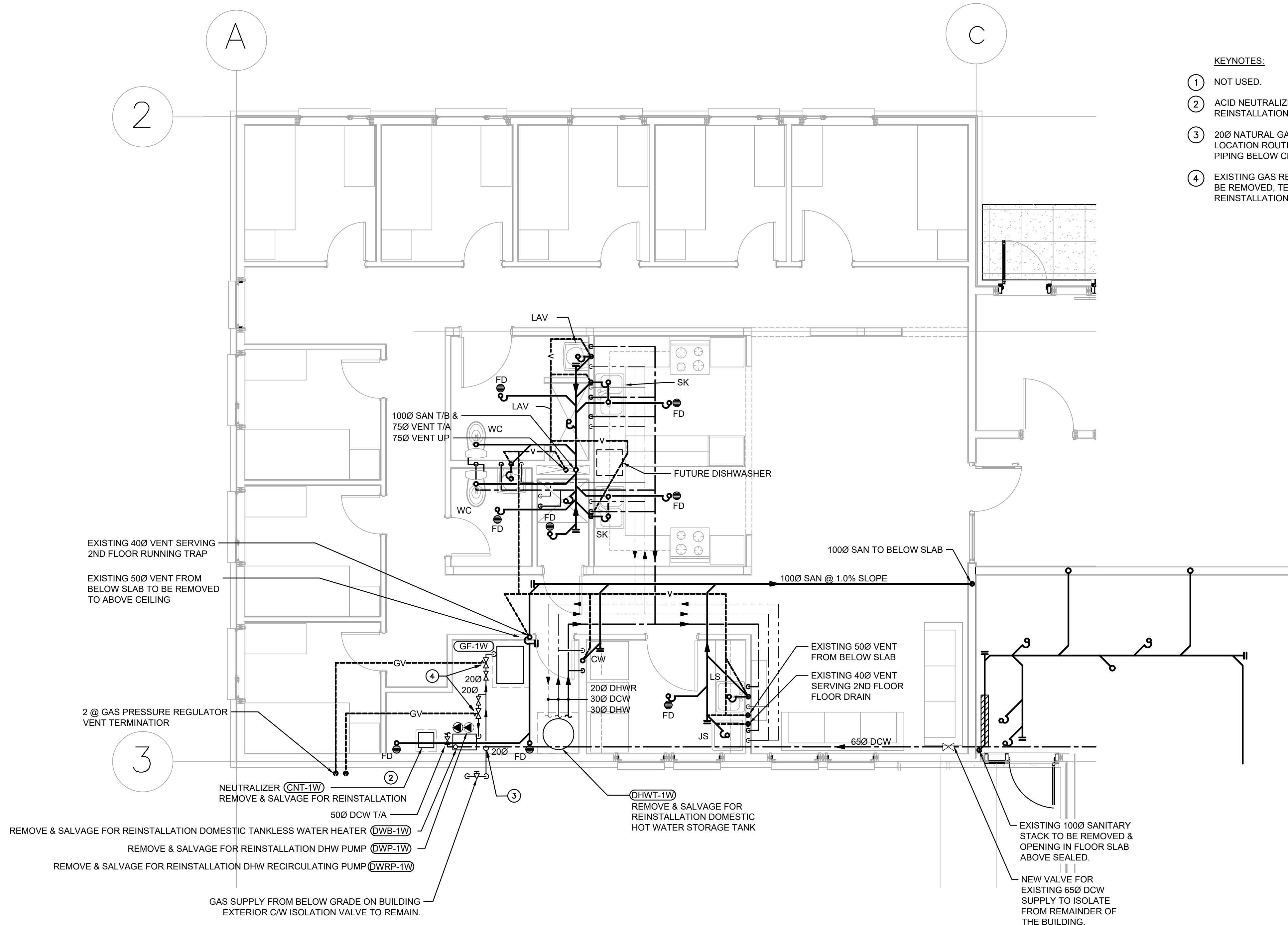
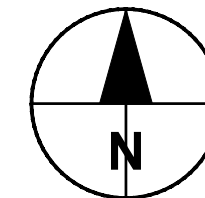
Drawing title Titre du dessin

**WEST RESIDENCE POD
MAIN FLOOR PLUMBING PLAN
DEMOLITION**

Project no./No. du projet
60608478

Drawing no./No. du dessin
M-103
OF 12

Revision no.
C



1 | WEST RESIDENCE POD - MAIN FLOOR PLUMBING PLAN - DEMOLITION

1:50

NOTES:

1. REMOVE AND SALVAGE ALL PLUMBING FIXTURES, EQUIPMENT AND APPLIANCES (SHADED ON DRAWINGS FOR EASE OF LOCATING). CONTRACTOR SHALL IDENTIFY ANY DAMAGED FIXTURES PRIOR TO DEMOLITION. ALL FIXTURES DAMAGED DURING DEMOLITION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
2. ISOLATE ALL PLUMBING SYSTEMS FROM THE REMAINDER OF THE BUILDING AS AREAS OUTSIDE OF SCOPE ARE TO REMAIN OCCUPIED. PROVIDE NEW ISOLATION VALVES IF REQUIRED.
3. ALL EXISTING PIPING ABOVE CEILING TO REMAIN. REMOVED ALL PIPING BELOW THE CEILING AS FOLLOWS.
 - 3.a. DISCONNECT ALL PLUMBING MAIN FLOOR FIXTURE WATER SUPPLIES, REMOVE DROPS FROM FIXTURES UP TO ABOVE CEILING AND MAKE READY FOR NEW CONNECTIONS.
 - 3.b. DISCONNECT SANITARY WASTE PIPING FROM ALL MAIN FLOOR PLUMBING FIXTURES. REMOVED PIPING TO BELOW SLAB.
 - 3.c. DISCONNECT SANITARY VENT PIPING SERVING MAIN FLOOR PLUMBING AND FLOOR DRAIN TRAPS UP TO ABOVE CEILING AND MAKE READY FOR NEW CONNECTIONS.
 - 3.d. DISCONNECT SANITARY WASTE STACKS SERVING ALL THE SECOND FLOOR PLUMBING FIXTURES FROM JUST ABOVE THE CEILING DOWN TO BELOW SLAB. MAKE READY FOR NEW CONNECTIONS.

PRELIMINARY
NOT FOR CONSTRUCTION



1. PIPING IN CEILING SPACE IS TO REMAIN & IS SHOWN FOR INFORMATION ONLY. ACTUAL SIZE, LOCATION & ROUTING MAY DIFFER & IS TO BE CONFIRMED ON SITE BY THE CONTRACTOR AS NEEDED.
2. ALL EQUIPMENT, APPLIANCES & FIXTURES, ARE TO BE REINSTALLED IN THEIR ORIGINAL LOCATIONS, AS SHOWN, COMPLETE WITH ALL PIPING CONNECTIONS & TIE-INS BELOW SLAB & ABOVE CEILING.

- ① 100mm HOUSEKEEPING PLATFORM. SEE ARCH DWGS FOR DETAIL.
- ② ACID NEUTRALIZATION (CONDENSATE NEUTRALIZATION TANK), 20 LITER C/W INITIAL CHARGE. PIPE CONDENSATE DRAIN FROM WATER HEATER. SEE PLAN FOR LOCATION.
- ③ 20Ø GAS FROM BELOW. 84kW @ 34.5kPa TO EACH POD 168kW @ 34.5kPa TOTAL.
- ④ TWO (2) GAS PRESSURE REGULATORS. CONNECTION LOAD IS 25.8 kW (88 MBH) 1GF-1("C") & 58.3 kW (199 MBH) DWB-1 ("C"). 34.5 kPa to 1 kPa 1/5 kPa OUTLET PRESSURE. PIPE RELIEF TO ATMOSPHERE C/W REVERSE ELBOW AND BUGSCREEN. GATHER VENTS FROM ALL REGULATORS AND EXIT INDIVIDUALLY THROUGH ROOF OR WALL AT THE SAME LOCATION.
- ⑤ CONDENSING, TANKLESS, TEMPERATURE CONTROLLED, CONTINUOUS FLOW. GAS HOT WATER HEATER. FOR PIPING ARRANGEMENT WITH BACKUP STORAGE REFER TO SCHEMATIC.
- ⑥ HOT WATER STORAGE TANK, 1034 kPa (150 PSI) WORKING PRESSURE, 50mm FOAM INSULATION, 600mm DIA 1600mm HEIGHT, REINFORCE WALL AT THE BACK AND PROVIDE ADEQUATE BACKING FOR STRIP AROUND STORAGE TANK.
- ⑦ 50 DCW T/A.
- ⑧ 15Ø DCW DOWN TO CONNECT TO EXISTING EXTERIOR, NON-FREEZE HOSE BIBB.

2020-06-17

**Department of Public Works
& Governments Services Canada**

**ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6**

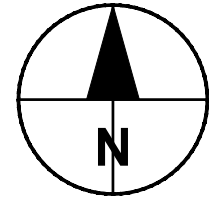
Project title	Project
<p align="center"> Highway 9, Drumheller Alberta, T0J 0Y0 CSC Drumheller 50 Bed Unit Floor Slab Repair MECHANICAL </p>	

Drawing title

Titre du dessin

**WEST RESIDENCE POD
MAIN FLOOR PLUMBING PLAN
NEW CONSTRUCTION**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	M-104	C



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NOT FOR CONSTRUCTION

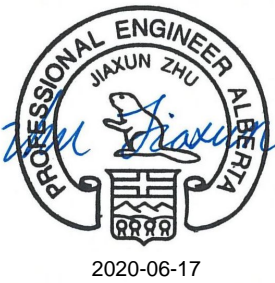
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Signature *John Stinson*

Date 2020-06-17

PERMIT NUMBER: P10450

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Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/05

Client client

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title Projet
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit

Floor Slab Repair
MECHANICAL

Designed by Conçu par
MT

Drawn by Dessiné par
JD

Approved by Approuvé par
JZ

PWGSC Project Manager Administrateur de Projets TPSSGC

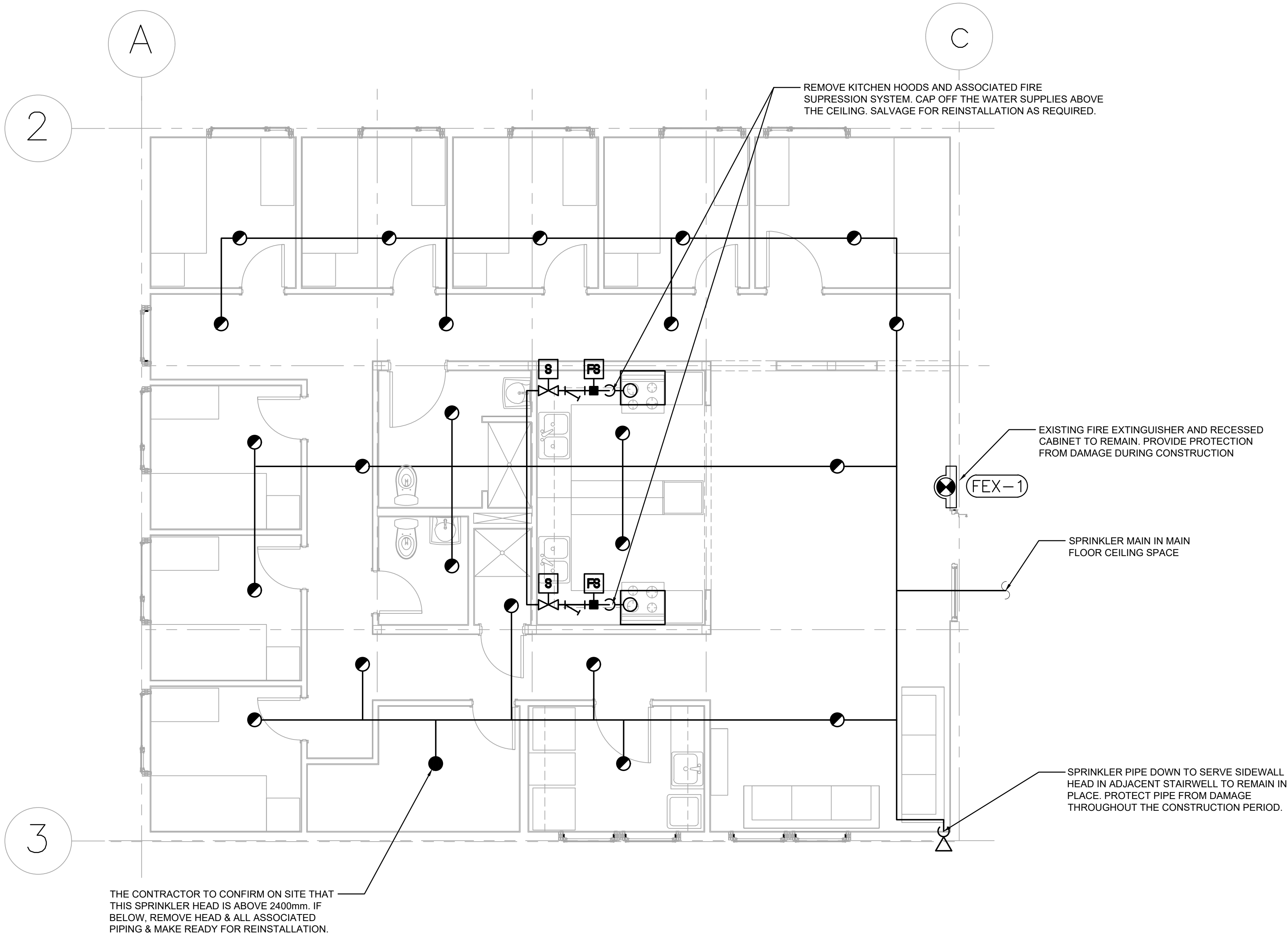
Drawing title Titre du dessin

WEST RESIDENCE POD
FIRE PROTECTION PLAN
DEMOLITION

Project no./No. du projet Drawing no./No. du dessin Revision no.

60608478 M-105 C

OF 12



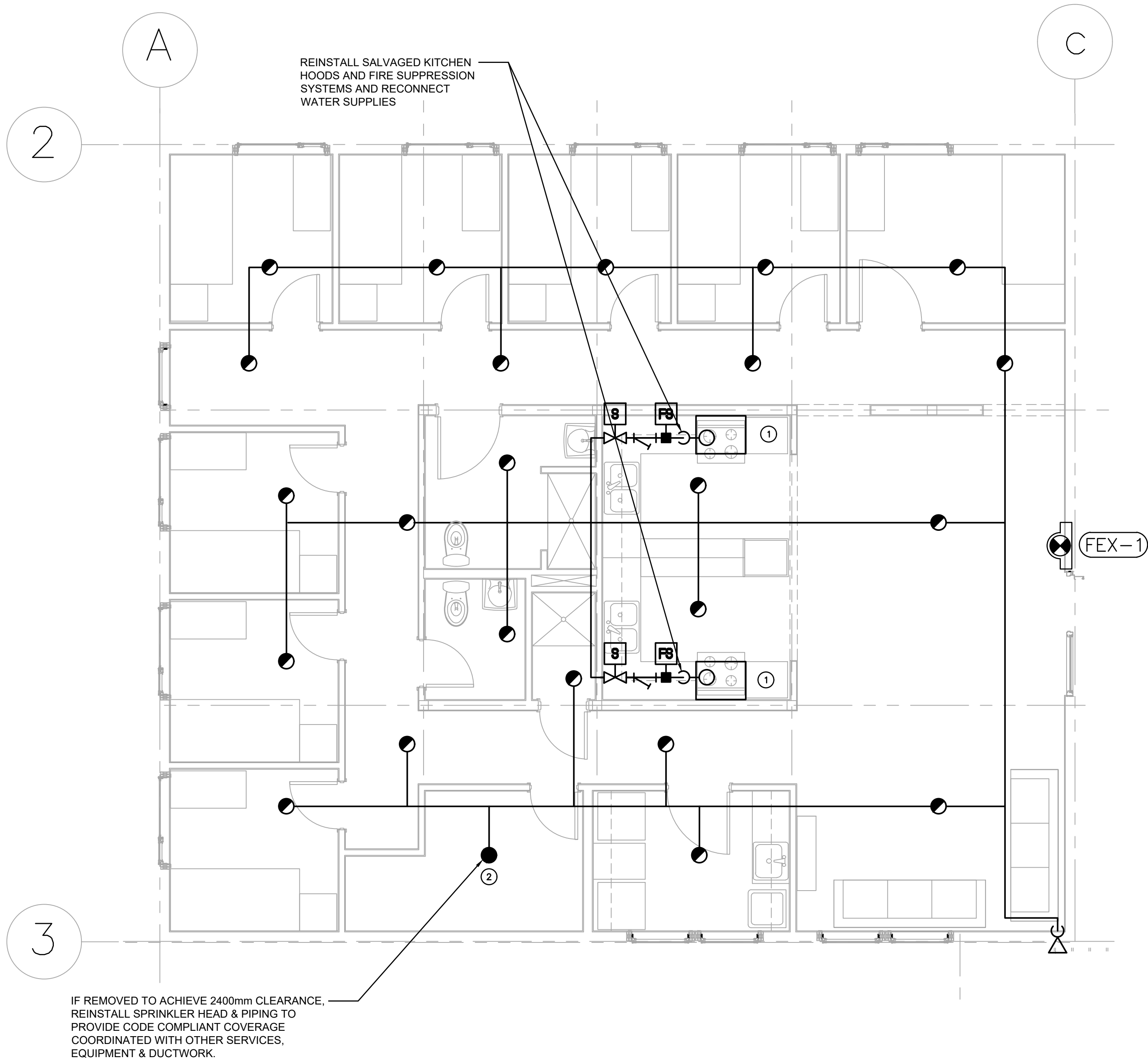
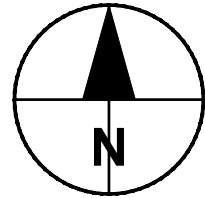
1 | WEST RESIDENCE POD - FIRE PROTECTION PLAN - DEMOLITION

1:50

NOTES:

- EXISTING FIRE SPRINKLER HEADS IN CEILING 2400mm & HIGHER, AND DISTRIBUTION PIPING IN CEILING SPACE SHALL REMAIN. WITH REMOVAL OF PARTITIONS THE CONTRACTOR TO TAKE PRECAUTIONS TO PREVENT DAMAGE TO THE EXISTING SYSTEM AND SHALL REPAIR DAMAGES AT OWN COST.
- SPRINKLER SYSTEM SHALL REMAIN ACTIVE THROUGHOUT THE REMAINDER OF THE BUILDING. ISOLATE AND DEACTIVATE OF EXISTING SYSTEM WITHIN THIS RESIDENCE POD ONLY. NOTE THAT THE MAIN FLOOR OF THE POD IS PART OF THE ZONE SERVING THE ENTIRE MAIN FLOOR.
- CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS TO ENSURE THE SAFETY OF THE ENTIRE STRUCTURE & ALL OCCUPANTS THROUGHOUT THE CONSTRUCTION PERIOD ESPECIALLY WHILE SPRINKLER SYSTEMS ARE SHUTDOWN. CONFIRM MEASURES WITH AUTHORITY HAVING JURISDICTION.

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- FIRE PROTECTION GENERAL NOTES:
- IN GENERAL, PLANS AND DIAGRAMMS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
 - INTENT OF THESE NOTES AND MECHANICAL NOTES ON DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT CONTRACTOR OF EXISTING CONDITIONS. CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES TO MEET FIELD CONDITIONS AND COORDINATE WITH OTHER TRADES BEFORE PROCEEDING WITH ANY CONSTRUCTION WORK.
 - CONTRACTOR IS TO NOTIFY THE OWNER, ARCHITECT OR HIS AUTHORIZED REPRESENTATIVE OF ANY DAMAGE TO THE INSTALLATION BEFORE PROCEEDING WITH THE WORK.
 - ALTERATIONS TO THE EXISTING FIRE SPRINKLER SYSTEM IS TO BE DESIGNED BY A LICENSED SPRINKLER SYSTEM ENGINEER AND SHALL BE DESIGNED AND INSTALLED AS PER THE NATIONAL BUILDING CODE - ALBERTA EDITION 2019 AND NFPA 13 REQUIREMENTS.
 - SUPPLY AND INSTALL NEW SPRINKLER HEADS TO REPLACE ANY DAMAGED DURING CONSTRUCTION TO MATCH EXISTING AND TO MEET THE NFPA 13 REQUIREMENTS.
 - SUPPLY AND INSTALL NEW FIRE EXTINGUISHERS TO REPLACE ANY DAMAGED DURING CONSTRUCTION TO MATCH EXISTING AND TO MEET THE NFPA 10 REQUIREMENTS.
 - CONTRACTOR TO PERFORM PIPING PRESSURE TESTING AS PER NFPA 13 AND SUBMIT THE TESTING REPORT.
 - CONTRACTOR TO RECORD AS-BUILTS AND SUBMIT THE REDLINES FOR ENGINEER'S REVIEW.
 - ALL SPRINKLER HEAD INSTALLED IN 2400mm HIGH CEILING & HIGHER & PIPING IN CEILING SPACE REMAIN ARE SHOWN HERE FOR REFERENCE ONLY. ACTUAL INSTALLATION MAY VARY FROM LAYOUT SHOWN CONTRACTOR TO CONFIRM ON SITE.

- KEYNOTES:
- PROTECTOSPRAY NOZZLE (7.5mm ORIFICE, 163 DEG. C TEMP. RATING, 160 DEG. ANGLE DISCHARGE) FOR PROTECTION OF RANGE HOOD. ACTIVATION OF SPRINKLER TO SHUT OFF POWER SUPPLY TO RANGE.
 - PROVIDE APPROVED ELECTRICAL EQUIPMENT SHIELD (TYP.)

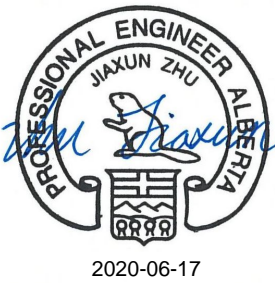
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Signature *John Stinson*

Date 2020-06-17

PERMIT NUMBER: P10450

The Association of Professional
Engineers and Geoscientists of Alberta



Revision	Description	Date
C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/05

Client

client

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project titleProjet

Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit

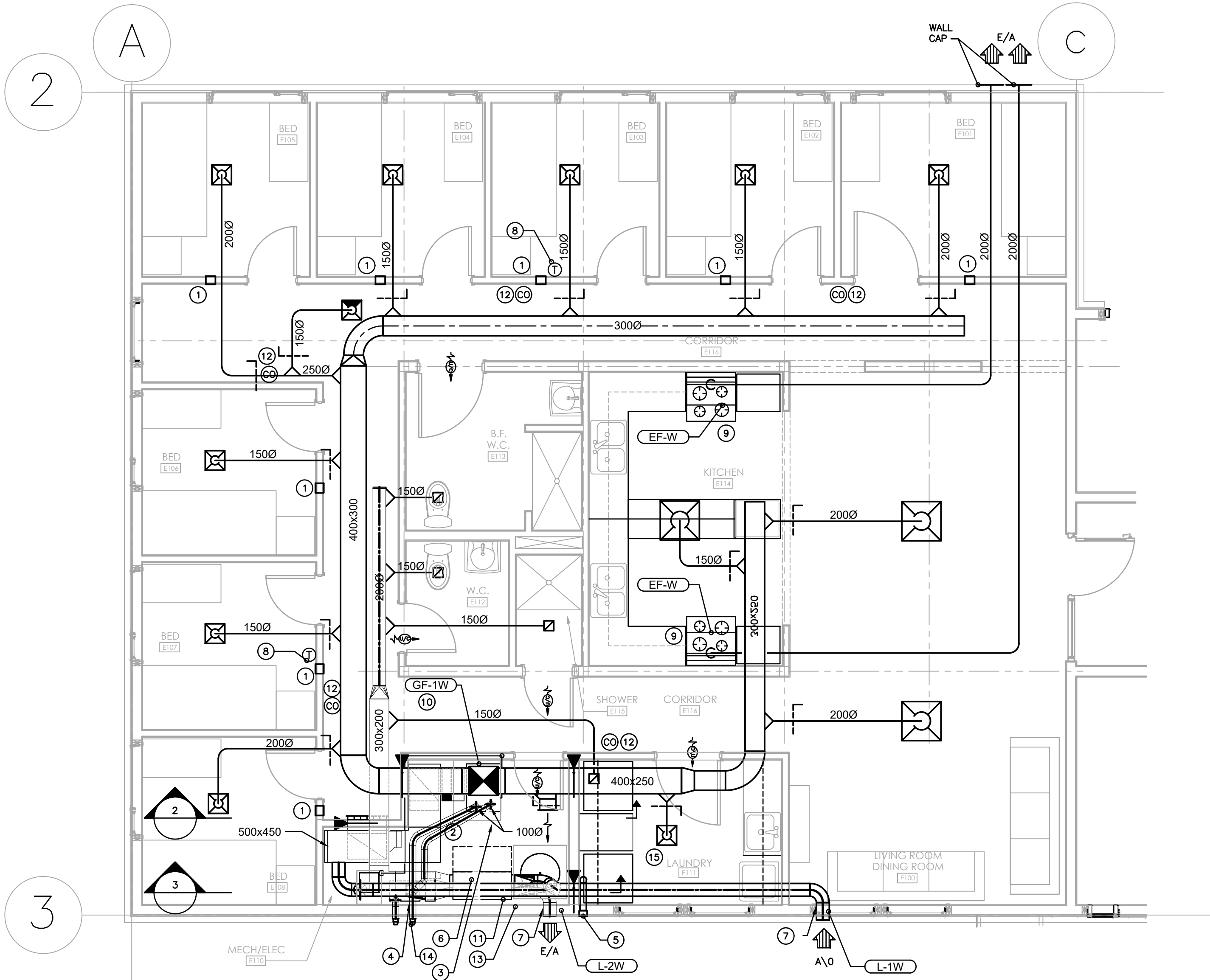
Floor Slab Repair
MECHANICAL

Designed by MT	Conçu par
Drawn by JD	Dessiné par
Approved by JZ	Approuvé par
PWSSC Project Manager	Administrateur de Projets TPSSC

Drawing titleTitre du dessin

WEST RESIDENCE POD
FIRE PROTECTION PLAN
NEW CONSTRUCTION

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	M-106 OF 12	C



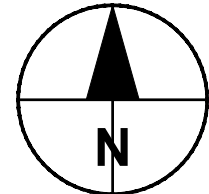
1 | WEST RESIDENCE POD - MAIN FLOOR - HVAC PLAN - DEMOLITION

1:50

EQUIPMENT TAGS (EXISTING, REMOVE & REINSTALL)								
RESIDENCE POD	FLOOR	GAS FURNACE	HEAT RECOVERY UNIT	EXHAUST FAN	ELECTRIC DUCT HEATER	O/A INTAKE LOUVRE	EXH. AIR LOUVRE	DOMESTIC HOT WATER TANK
TYPICAL	TYPICAL	GF-(**)	HRV-(**)	EF-(**)	EDH-(**)	L-1.(**)	L-2.(**)	DHWT-(**)
W	GROUND	GF-1W	HRV-1W	EF-1W	EDH-1W	L-1.1W	L-2.1W	DHWT-1W

KEYNOTES:

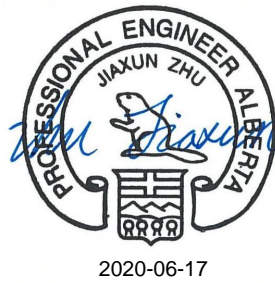
- TRANSFER GRILLES AT LOW LEVEL SERVING BEDROOMS SHALL BE SALVAGED & REINSTALLED AFTER PARTITION WALLS ARE REPLACED.
- EXISTING AIR FILTER HOUSING TO BE SALVAGED & REINSTALLED AFTER FLOOR IS REPLACED.
- ACID NEUTRALIZER TO BE SALVAGED & REINSTALLED AFTER FLOOR IS REPLACED, REMOVE ALL ASSOCIATED PIPING.
- SIDEWALL CONCENTRIC VENT TO REMAIN, DISCONNECT & REMOVE ALL ASSOCIATED VENT PIPING BELOW 2400mm. MAKE READY FOR NEW PIPE CONNECTION.
- DRYER VENT WALL CAP & BACKDRAFT DAMPER TO REMAIN, DISCONNECT ALL ASSOCIATED DRYER VENT PIPING. REMOVE ALL DUCT BELOW 2400mm.
- SALVAGE HRV (HEAT RECOVERY VENTILATOR) & REINSTALL AFTER FLOOR IS REPLACED. REMOVE ALL ASSOCIATED DUCTWORK BELOW 2400mm.
- OUTSIDE AIR INTAKE LOUVRE & EXHAUST AIR LOUVRE TO REMAIN C/W ALL DUCTWORK ABOVE 2400mm.
- TEMPERATURE SENSOR WITH BLANK COVER TO BE SALVAGED & REINSTALLED AFTER PARTITION IS REPLACED. CABLE TO BE COILED UP & SECURED TO CEILING WITHOUT BREAKING CONNECTION.
- RANGE HOOD TO BE SALVAGED & REINSTALLED AFTER PARTITION WALL IS REPLACED. REMOVE DUCTWORK TO 2400mm ABOVE FLOOR.
- FURNACE TO BE SALVAGED & REINSTALLED. REMOVE ALL ASSOCIATED DUCTWORK & CONDENSATE & GAS PIPING BELOW 2400mm.
- DOMESTIC HOT WATER BOILER TO BE SALVAGED & REINSTALLED AFTER FLOOR IS REPLACED. REFER TO PLUMBING PLAN - DEMOLITION.
- CARBON MONOXIDE SENSORS TO BE SALVAGED & REINSTALLED AFTER PARTITION WALLS ARE REPLACED. REFER TO PLUMBING PLAN - DEMOLITION.
- PVC CONCENTRIC VENT KIT SERVING DOMESTIC HOT WATER BOILER SHALL BE REMOVED AS NECESSARY TO PROVIDE 2400mm CLEARANCE, SALVAGED & REINSTALLED. PORTION THROUGH EXTERIOR WALL SHALL REMAIN.
- PVC CONCENTRIC VENT KIT SERVING FURNACE SHALL BE REMOVED AS NECESSARY TO PROVIDE 2400mm CLEARANCE, SALVAGED & REINSTALLED. PORTION THROUGH EXTERIOR WALL SHALL REMAIN.
- LAUNDRY WASHER & DRYER TO BE SALVAGED & REINSTALLED AFTER PARTITION WALLS ARE REPLACED. REFER TO PLUMBING PLAN - DEMOLITION.



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Signature: *John Stinson*
Date: 2020-06-17
PERMIT NUMBER: P10450
The Association of Professional Engineers and Geoscientists of Alberta



Department of Public Works
& Governments Services Canada

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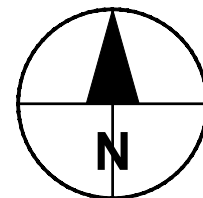
Project title: Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair
MECHANICAL

Designed by: MT
Drawn by: JD
Approved by: JZ
PWSSC Project Manager: Administrateur de Projets TPSSC

Drawing title: WEST RESIDENCE POD
MAIN FLOOR HVAC PLAN
DEMOLITION

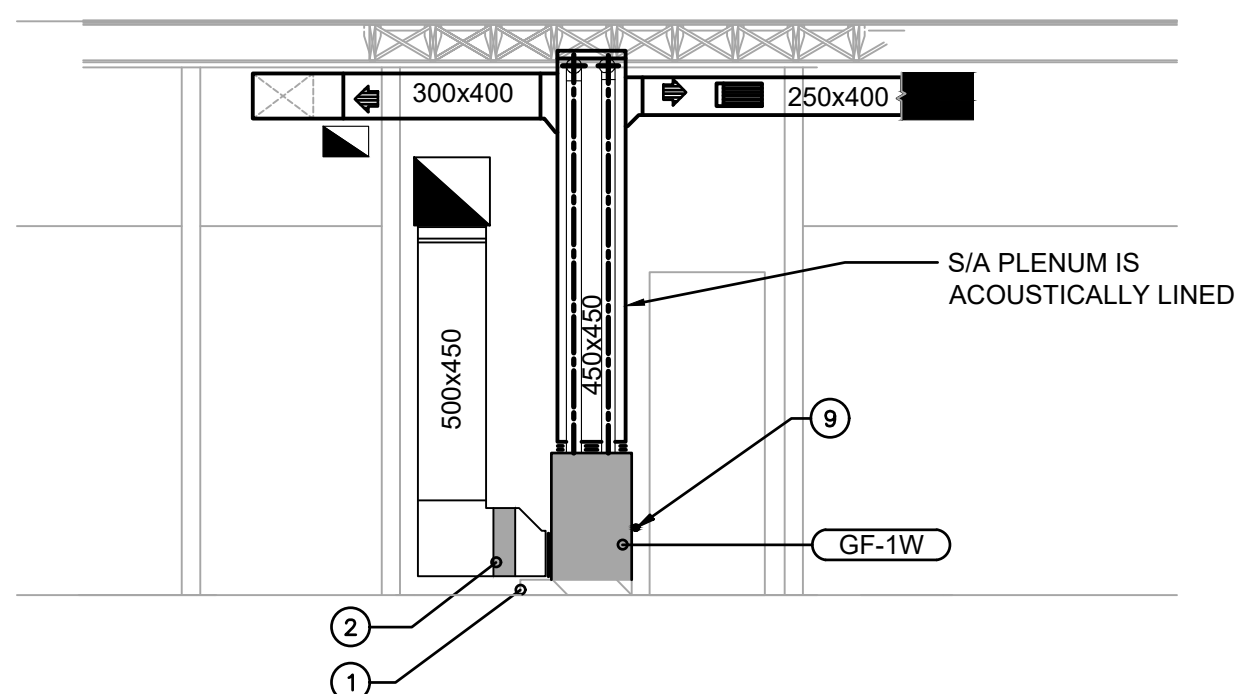
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Drawing no./No. du dessin: M-107
Revision no.: C

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NOT FOR CONSTRUCTION

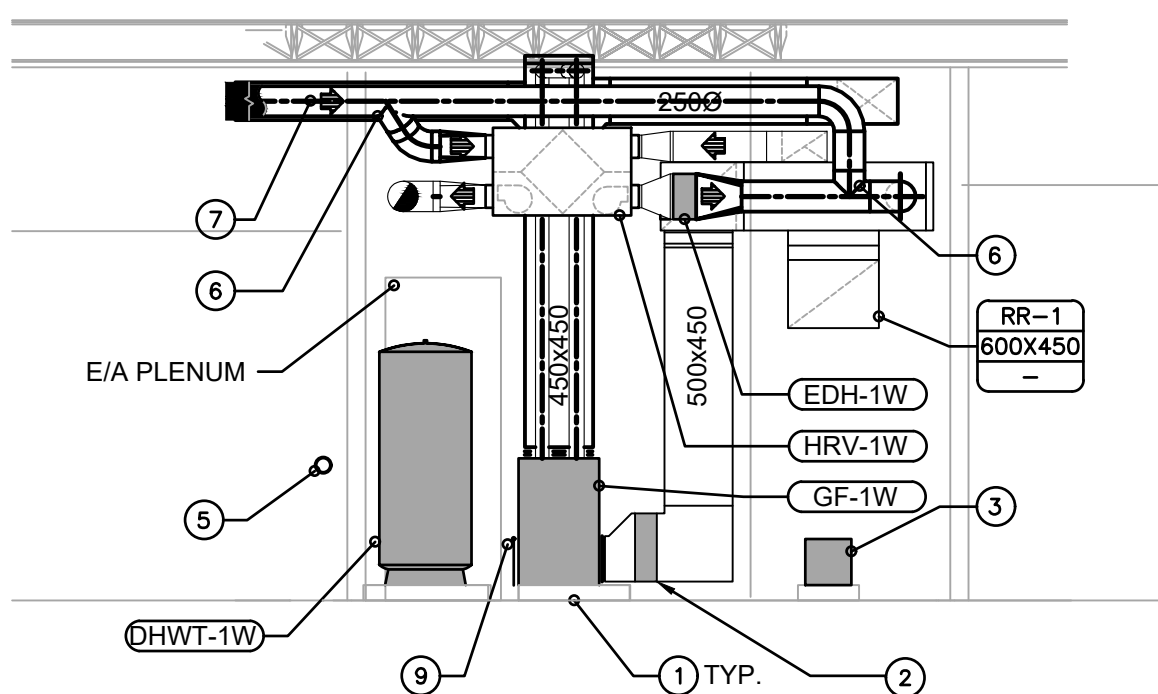


KEYNOTES:

- 100mm HOUSEKEEPING PLATFORM. SEE ARCH DWG FOR DETAIL.
- REINSTALL AIR FILTER HOUSING MOUNTED IN R/A DUCT, C/W 600x600x50 MERV FILTER.
- REINSTALL ACID NEUTRALIZER. PIPE TO FLOOR DRAIN.
- SIDEWALL CONCENTRIC VENTING THIMBLE. VENT OUTLET RECONNECT VENT PIPES.
- DRYER VENT WALL CAP C/W BACKDRAFT DAMPER. RECONNECT 100Ø VENT FROM DRYER. REFER TO DETAIL.
- 250Ø O/A BYPASS DUCT THROUGH HRV. CONNECT INLET TO BOTTOM OF HORIZONTAL O/A INTAKE DUCT. CONNECT TO VERTICAL DROP OF O/A INTAKE DUCT. SEE SECTION AND SCHEMATIC FOR DETAILS.
- 250Ø O/A INTAKE. SEE SCHEMATIC FOR DETAILS.
- TEMPERATURE SENSOR C/W BLANK COVER PLATE. PROVIDE 2@ SENSORS FOR AVERAGING PER FURNACE.
- 20Ø CONDENSATE DRAIN TO ACID NEUTRALIZATION TANK. ROUTE PIPE BEHIND FURNACE TO MINIMIZE TRIPPING HAZARD. SIZE AND SLOPE PIPE PER MANUFACTURER'S REQUIREMENTS.
- INSTALL CONDENSATE TRAP AND PROVIDE 20 CONDENSATE DRAIN (PVC) TO ACID NEUTRALIZER. RUN DRAIN PIPE ALONG WALL AND AVOID TRIPPING HAZARD. INSTALL PER MANUFACTURER'S RECOMMENDATION.
- DOMESTIC HOT WATER BOILER. REFER TO DRAWINGS P-301.
- RANGE HOOD.
- DHWB 200MBH PVC CONCENTRIC VENT KIT.
- FURNACE CONCENTRIC VENT TO THE OUTSIDE. SIZE PER MANUFACTURER'S INSTRUCTIONS.
- 1000mm CLEARANCE FOR HRV FILTER ACCESS.
- INSTALL TRANSFER AIR DUCTS THROUGH BEDROOM WALL 300mm ABOVE FINISHED FLOOR & REINSTALL GRILLE SALVAGED DURING DEMOLITION.



2 SECTION
SCALE: 1:50



3 SECTION
SCALE: 1:50

1 | WEST RESIDENCE POD - MAIN FLOOR - HVAC PLAN - NEW CONSTRUCTION

1:50

EQUIPMENT TAGS (EXISTING. REMOVE & REINSTALL)									
RESIDENCE POD	FLOOR	GAS FURNACE	HEAT RECOVERY UNIT	EXHAUST FAN	ELECTRIC DUCT HEATER	O/A INTAKE LOUVRE	EXH. AIR LOUVRE	DOMESTIC HOT WATER TANK	DOMESTIC HOT WATER BOILER
TYPICAL	TYPICAL	GF-(**)	HRV-(**)	EF-(**)	EDH-(**)	L-1.(**)	L-2.(**)	DHWT-(**)	DHWT-(**)
W	GROUND	GF-1W	HRV-1W	EF-1W	EDH-1W	L-1.1W	L-2.1W	DHWT-1W	DHWT-1W

GRILLE & DIFFUSER SCHEDULE (EXISTING. TO REMAIN)								
ROOM		SUPPLY/EXHAUST				RETURN/RELIEF		
		TYPE	SIZE	AIRFLOW (L/S)	QTY	TYPE	SIZE	QTY
(W)100	LIVING RM / DINING RM	SD-1	203Ø	71	2			
(W)101	BED	SD-1	203Ø	80	1			
(W)102	BED	SD-1	203Ø	52	1			
(W)103	BED	SD-1	203Ø	52	1			
(W)104	BED	SD-1	203Ø	52	1			
(W)105	BED	SD-1	203Ø	76	1			
(W)106	BED	SD-1	203Ø	52	1			
(W)107	BED	SD-1	203Ø	52	1			
(W)108	BED	SD-1	203Ø	76	1			
(W)110	MECH / ELECT	SG-1	152x152	44	1			
(W)110	MECH / ELECT	ER-1	152x152	-44	1			
(W)111	LAUNDRY	SD-1	203Ø	44	1			
(W)111	LAUNDRY	ER-1	152x152	-44	1			
(W)112	W/C	ER-1	203x203	-24	1			
(W)113	B.F. W/C	ER-1	203x203	-47	1			
(W)114	KITCHEN	SD-2	203Ø	71	1			
(W)115	SHOWER	ER-1	203x203	-24	1			
(W)116	CORRIDOR	SD-1	152Ø	34	1			

NOTES:

- THE CONTRACTOR SHALL REINSTALL ALL HVAC EQUIPMENT IN ORIGINAL LOCATIONS AND ON HOUSEKEEPING PADS AS INDICATED. PROVIDE ALL NEW MATERIALS AS REQUIRED TO RECONNECT TO THE EXISTING SYSTEM. ALL SYSTEMS SHALL BE FULLY TESTED, BALANCED & OPERATIONAL.
- THE REINSTALLATION, TESTING, AND BALANCING OF ALL MECHANICAL EQUIPMENT, ACCESSORIES & SPECIALTY DEVICES SHALL BE AS PER THE MANUFACTURER'S INSTRUCTION / RECOMMENDATIONS. THIS INFORMATION WILL BE PROVIDED BY THE OWNER WHERE POSSIBLE. IF NOT AVAILABLE THE CONTRACTOR SHALL ACQUIRE AS NEEDED.

**Department of Public Works
& Governments Services Canada**

**ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6**

Project title

**Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit**

**Floor Slab Repair
MECHANICAL**

Designed by

MT

Drawn by

JD

Approved by

JZ

PWGSC Project Manager

Administrateur de Projets TPSSC

Drawing title

**WEST RESIDENCE POD
MAIN FLOOR HVAC PLAN
NEW CONSTRUCTION**

Project no./No. du projet

60608478

Drawing no./No. du dessin

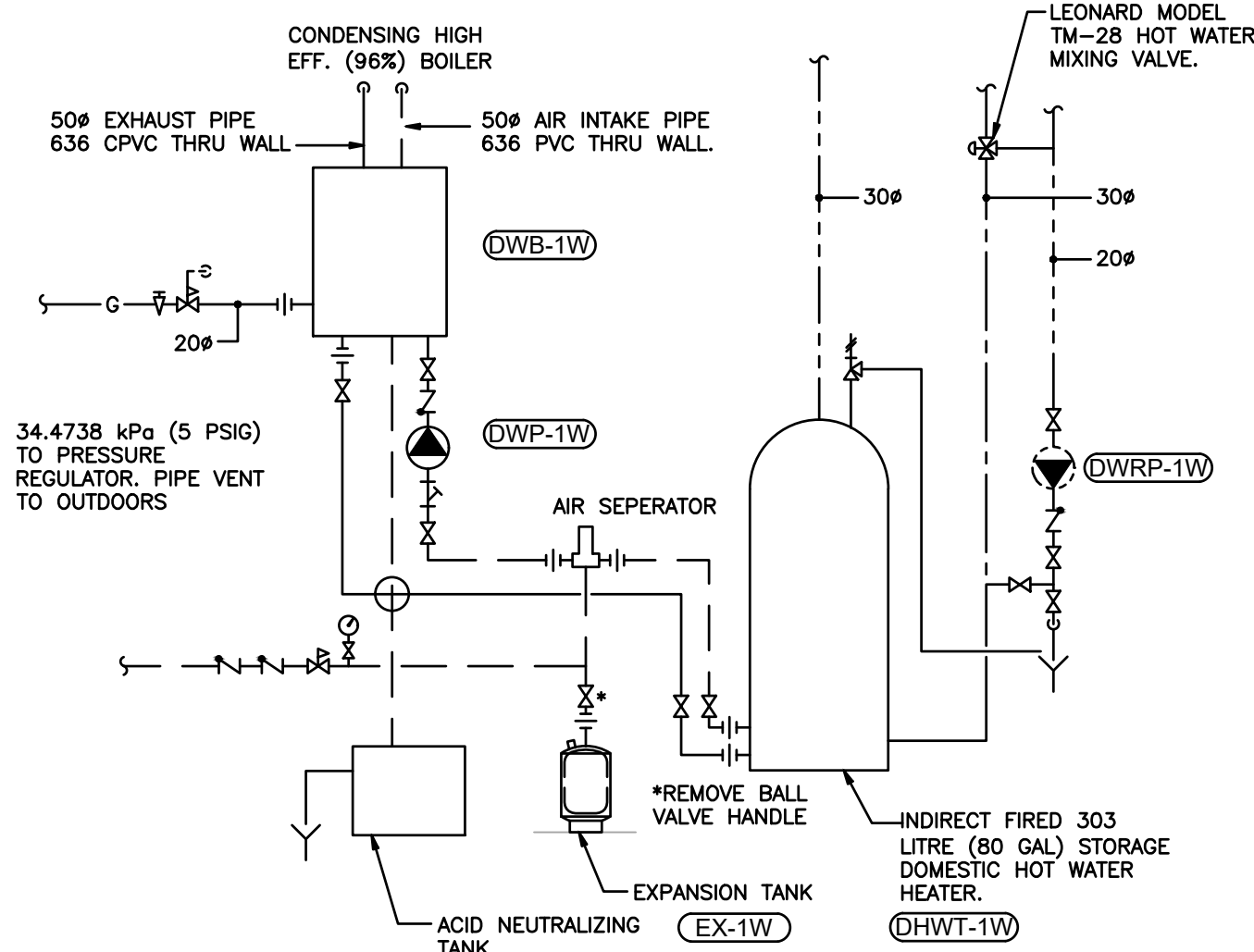
M-108

OF 12

Revision no.

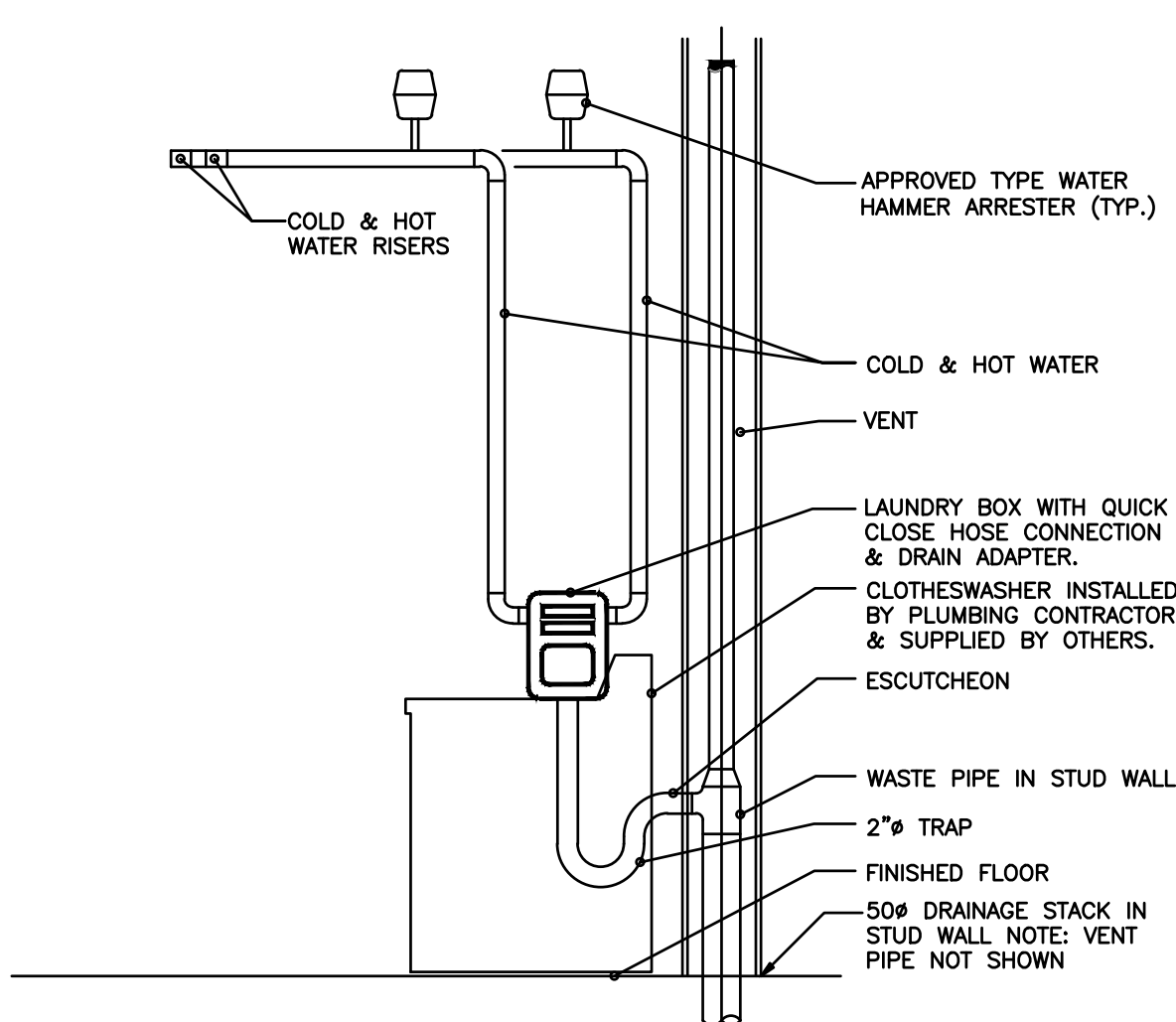
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NOT FOR CONSTRUCTION



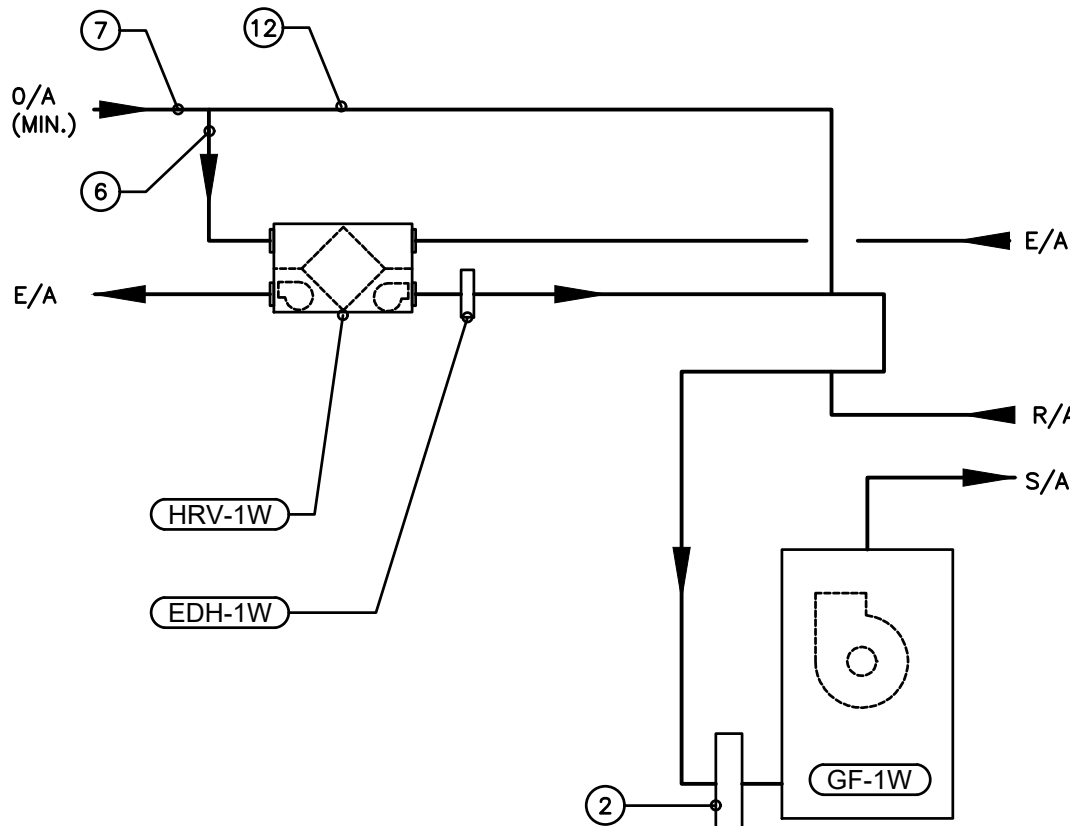
NOTE: REMOVE ALL EQUIPMENT BELOW 2.4m (8 FT) THEN REINSTALL THEM.

1 | DOMESTIC HOT WATER SYSTEM SCHEMATIC
N.T.S



NOTE: REMOVE ALL EQUIPMENT BELOW 2.4m (8 FT) THEN REINSTALL THEM.

2 | CLOTHES WASHER HOOK UP DETAIL
N.T.S

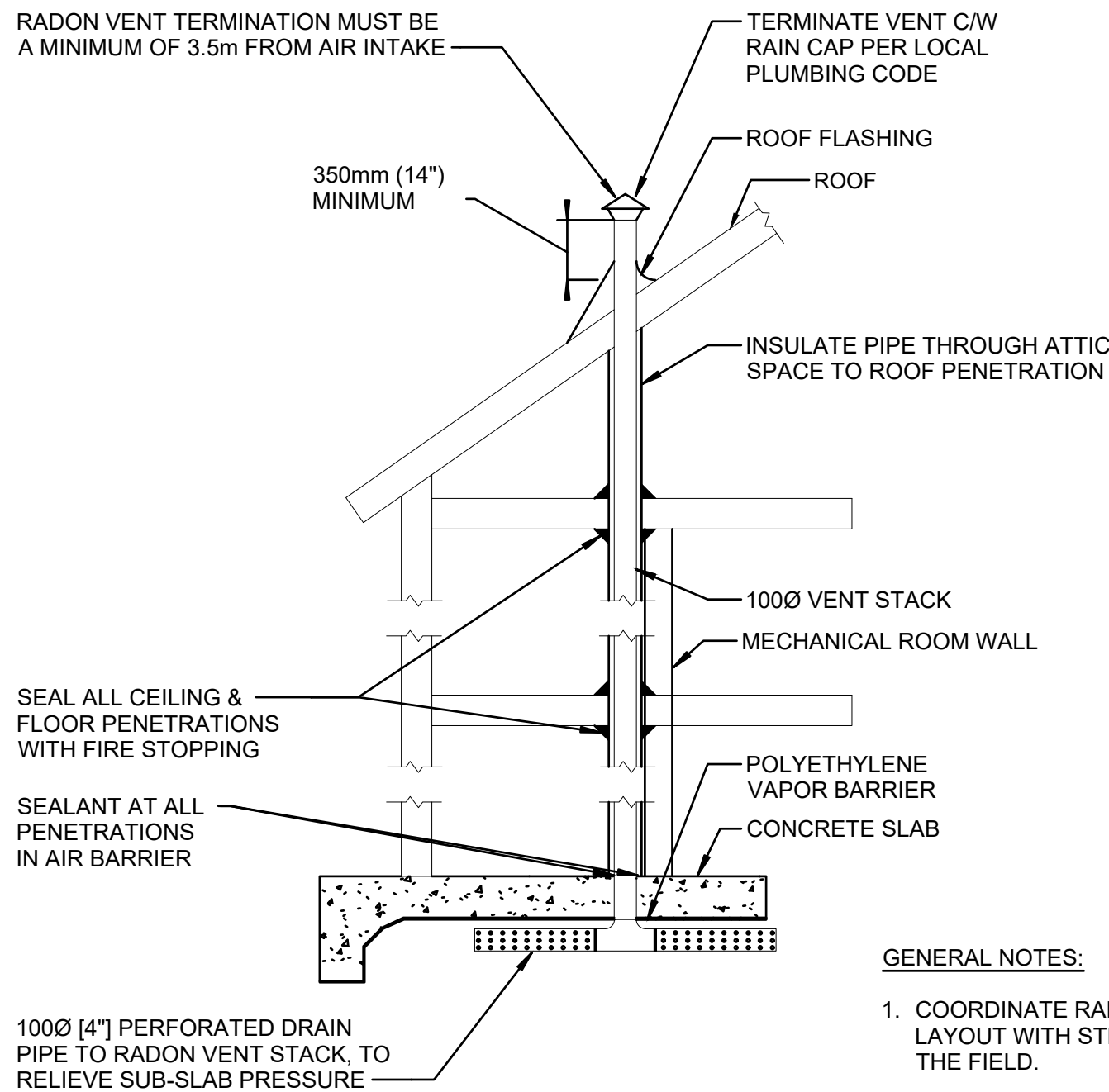


NOTE: REMOVE ALL EQUIPMENT BELOW 2.4m (8 FT) THEN REINSTALL THEM.

3 | RESIDENCE POD AIRSIDE SCHEMATIC
N.T.S

KEYNOTES:

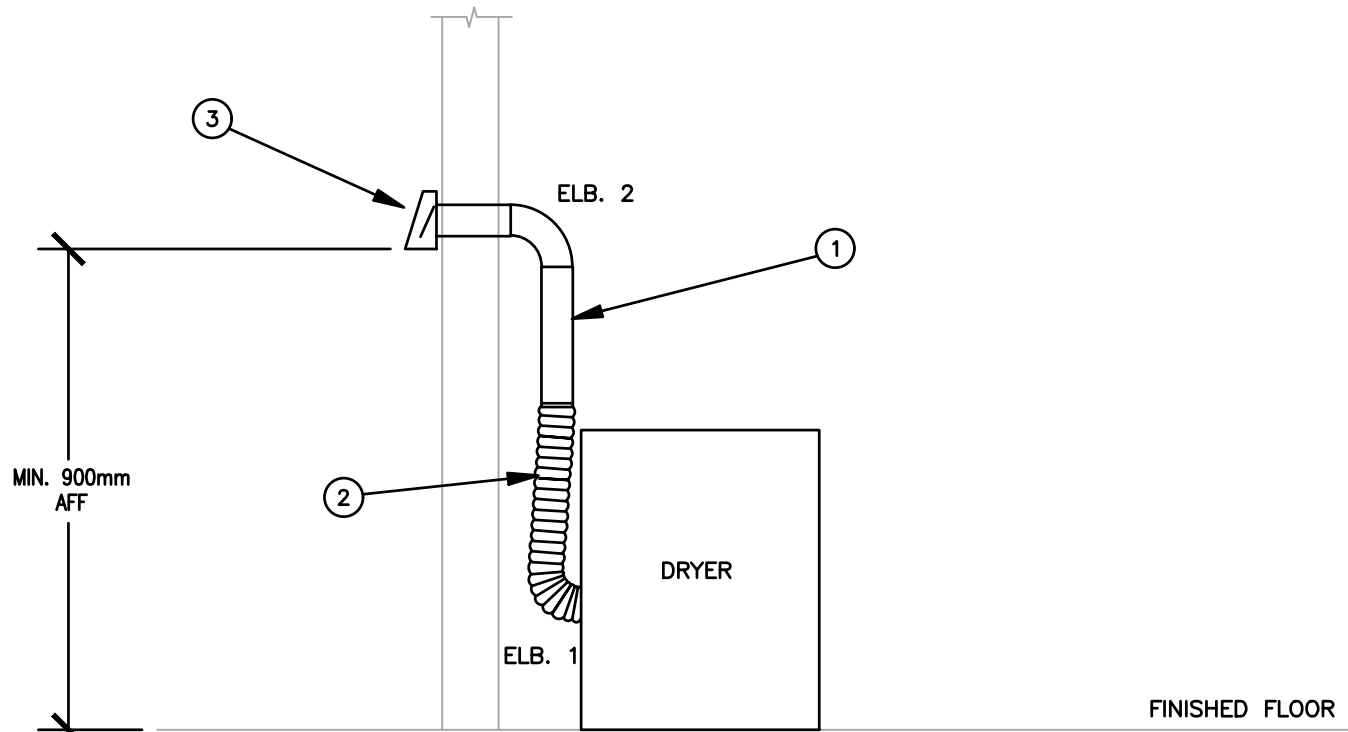
- 2 REINSTALL AIR FILTER HOUSING MOUNTED IN R/A DUCT, C/W 600x600x50 MERV FILTER.
- 6 250Ø O/A BYPASS DUCT THROUGH HRV. CONNECT INLET TO BOTTOM OF HORIZONTAL O/A INTAKE DUCT. CONNECT TO VERTICAL DROP OF O/A INTAKE DUCT. SEE SECTION AND SCHEMATIC FOR DETAILS.
- 7 250Ø O/A INTAKE. SEE SCHEMATIC FOR DETAILS.
- 12 FULL SIZE BYPASS.



GENERAL NOTES:

- 1. COORDINATE RADON PIPING LAYOUT WITH STRUCTURAL IN THE FIELD.
- 2. INSTALL UNDERSLAB PORTION OF RADON SYSTEM PIPING AS HIGH AS POSSIBLE. COORDINATE WITH STRUCTURAL TO PROVIDE SLEEVES WHERE GRADE BEAMS ARE USED.

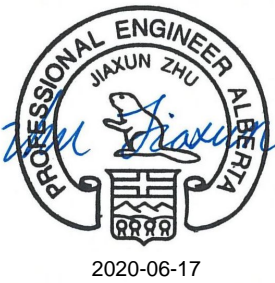
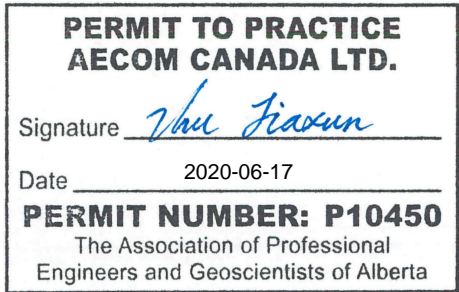
4 | RADON PIPE DETAIL
N.T.S



- 1. 100Ø RIGID DUCT OF ALUMINUM CONSTRUCTION, MINIMUM 24 GAUGE THICKNESS, HAVING SMOOTH INTERIOR SURFACES WITH JOINTS RUNNING IN DIRECTION OF FLOW. DO NOT USE SHEET METAL SCREWS OR FASTENERS. MAXIMUM LENGTH SHALL NOT EXCEED 4.2 METRES, BASED ON TOTAL OF TWO (2) 90° ELBOWS IN THE SYSTEM.
- 2. 100Ø ALUMINUM FLEXIBLE DUCT, NOT EXCEEDING 1.0 METRE.
- 3. DRYER VENT OUTLET C/W BACKDRAFT DAMPER. SEAL WALL PENETRATION WATERTIGHT.

NOTE: REMOVE ALL EQUIPMENT BELOW 2.4m (8 FT) THEN REINSTALL THEM.

5 | DRYER VENT DETAIL
N.T.S



C	ISSUED FOR TENDER	20200617
B	ISSUED FOR 99% REVIEW	20200508
A	ISSUED FOR 50% REVIEW	20200305
Revision	Description	Date
Client		client

Department of Public Works
& Governments Services Canada

ATB Place North, 5th Floor
10025 Jasper Ave, Edmonton, AB T5J 1S6

Project title
Highway 9, Drumheller
Alberta, T0J 0Y0
CSC Drumheller 50 Bed Unit
Floor Slab Repair
MECHANICAL

Designed by MT	Conçu par
Drawn by JD	Dessiné par
Approved by JZ	Approuvé par
PWSSC Project Manager	Administrateur de Projets TPSSC

Drawing title
MECHANICAL
DETAILS

Project no./No. du projet 60608478	Drawing no./No. du dessin M-401	Revision no. C
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PUMP SCHEDULE (EXISTING. REMOVE & REINSTALL)													
TAG	SERVICE & LOCATION	TYPE	MAKE	MODEL	SIZE	MEDIA	TEMPERATURE (°C)	FLOW (L/s)	HEAD (KPa)	RPM	MOTOR (HP)	ELECTRICAL VOLTS/PH/Hz	NOTES
TYPICAL RESIDENTIAL PODS													
DHWP-1W	DOMESTIC HOT WATER RECIRC PUMP	WET ROTOR CIRCULATOR, WITH STAINLESS STEEL IMPELLER AND INTERNAL CHECK VALVE	GRUNDFOS	UP	10-16BU ATLC	POTABLE WATER	50	0.12	7.5	-	FRAC	120/1/60	3,4,5,6
DWP-1W	DOMESTIC HOT WATER HEATING	WET ROTOR CIRCULATOR, WITH STAINLESS STEEL IMPELLER AND INTERNAL CHECK VALVE	GRUNDFOS	UPS	15-58	WATER	60	0.44	13.8		1/6	120/1/60	2,3,4
NOTES:													
1	PARALLEL OPERATION												
2	PROVIDE MULTI SPEED OR VARIABLE SPEED PUMP WITH INTEGRAL SPEED CONTROLLER AND FLANGED CONNECTIONS												
3	PROVIDE NON OVERLOADING PUMPS												
4	C/W DIELECTRIC ISOLATION VALVES												
5	BRONZE FITTED PUMP SUITABLE FOR POTABLE WATER USE												
6	C/W INTEGRAL TIME CLOCK												


SPECIALTY TANK SCHEDULE (EXISTING. REMOVE & REINSTALL)							
TAG	SERVICE & LOCATION	TYPE	MAKE	MODEL	VOLUME (L)	ELECTRICAL VOLTS /PH/Hz	NOTES
CNT-1W	BOILER FLUE CONDENSATE / 013 MECHANICAL ROOM	CONDENSATE NEUTRALIZATION TANK	AXIOM IND.	NT-20	20	N/A	

GAS FURNACE SCHEDULE (EXISTING. REMOVE & REINSTALL)	
TAG	GF-1W
SERVICE	RESIDENCE POD (*) 1/F
LOCATION	MECH RM (*) 110
MAKE	LENNOX
MODEL	SLP98VUH090V60C
SUPPLY FAN AIR FLOW - L/s (CFM)	850 (1,800)
SUPPLY FAN EXTERNAL S.P. - PA (IN W.G.)	156.25 (0.625)
SUPPLY FAN SIZE/TYPE	11x11
SUPPLY FAN HORSEPOWER	1
HEATING INPUT KW (MBH)	25.8 (88.0)
HEATING OUTPUT KW (MBH)	24.9 (85.0)
TURNDOWN RATIO	2.8: 1
ENTERING AIR TEMPERATURE - °C (°F)	12.8 (55.0)
LEAVING AIR TEMPERATURE - °C (°F)	37.1 (98.7)
AIR TEMPERATURE RISE - °C (°F)	24.3 (43.7)
MINIMUM OUTDOOR AIR FLOW - L/s (CFM)	179 (380)
POWER	115/1/60
MCA MOCP	12.8 (20)
WEIGHT - KG (LBS.)	111 (200)
NOTES	1,2,3
REFER TO DRAWINGS FOR INSTALLATION DETAILS.	
INTERLOCK OPERATION WITH HRV'S AS NOTED ON THE HRV SCHEDULE.	
STATIC PRESSURES NOTED ARE EXTERNAL TO THE UNIT. FAN TOTAL PRESSURE TO INCLUDE ALL CABINET EFFECTS AS WELL AS AN ALLOWANCE OF 75 PA (0.3" W.G) FOR DIRTY FILTERS. MOTORS TO BE SIZED SO NORMAL OPERATING LOAD IS NOT MORE THAN 90% OF RATED MOTOR CAPACITY.	
NOTES:	
1. FURNACE TYPE: UPFLOW, VARIABLE CAPACITY, VARIABLE SPEED BLOWER.	
2. TEMPERATURE SENSORS BY CONTROLS CONTRACTOR.	
3. FURNISHED WITH CONCENTRIC VENT TERMINATION KIT.	

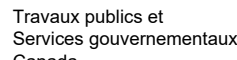
HEAT RECOVERY VENTILATOR SCHEDULE (EXISTING. REMOVE & REINSTALL)		
HEAT RECOVERY UNITS		
	MARK	HRV-1W
	SERVICE	RESIDENCE POD (*) 1/F
	LOCATION	MECH ROOM (*) 110
	MAKE MODEL	NU - AIR NU500
SUPPLY FAN	TOTAL SUPPLY AIR FLOW - L/s (CFM)	179 (380)
	SUPPLY FAN E.S.P. - PA (IN W.G.)	100 (0.4)
	SUPPLY FAN RPM	1,275 (2 SPEED)
	POWER SUPPLY	115/1/60
EXHAUST FAN	SUPPLY FAN MOTOR - FLA	SEE NOTE 1
	EXHAUST AIR FLOW - L/s (CFM)	179 (380)
	EXHAUST FAN E.S.P. - PA (IN W.G.)	125 (0.5)
	EXHAUST FAN RPM	1,275 (2 SPEED)
HEAT RECOVERY	POWER SUPPLY	115/1/60
	EXHAUST FAN MOTOR - FLA	SEE NOTE 1
	TYPE	CROSS FLOW CORE
	SENSIBLE EFFECTIVENESS	0.5
	AIR P.D. - PA (IN W.G.)	235 (0.94)
	WINTER OUTDOOR AIR TEMP °C (°F)	-34.4 (-30.0)
	WINTER OA DENSITY - KG/m3 (lb/ft3)	1.29 (0.0808)
	EXH. AIR ENTERING AIR DB °C (°F)	18.3 (65)
	EXH. AIR DENSITY - KG/m3 (lb/ft3)	1.06 (0.066)
	POWER	115/1/60
	AMPERAGE	4.5 FLA
	WEIGHT - KG (lbs)	27 (60)
NOTES:		
1	THE SCHEDULE FLA INCLUDES BOTH SUPPLY AND EXHAUST FANS.	

NOTES:

1. INFORMATION PROVIDED IN THE EQUIPMENT SCHEDULES IS FOR REFERENCE ONLY. ACTUAL INSTALL EQUIPMENT MAY DIFFER & SHALL BE DETERMINED ON SITE BY CONTRACTOR.
2. CONTRACTOR TO NOTE ALL DAMAGES TO EQUIPMENT & MAKE KNOWN TO OWNER & ENGINEER PRIOR TO DEMOLITION. ANY EQUIPMENT DAMAGED OR DESTROYED DURING DEMOLITION OR STORAGE SHALL BE REPAIRED/ REPLACED BY THE CONTRACTOR AT OWN EXPENSE.



Public Works and
Government Services
Canada

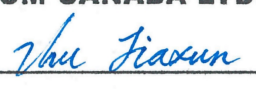


Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest


PRELIMINARY
NOT FOR CONSTRUCTION

PERMIT TO PRACTICE
AECOM CANADA LTD.

Signature 

Date 2020-06-17

PERMIT NUMBER: P10450
The Association of Professional
Engineers and Geoscientists of Alberta



2020-06-17

C	ISSUED FOR TENDER	2020/06/17
B	ISSUED FOR 99% REVIEW	2020/05/08
A	ISSUED FOR 50% REVIEW	2020/03/05
Revision	Description	Date
Client		client
Department of Public Works & Governments Services Canada		
ATB Place North, 5th Floor 10025 Jasper Ave, Edmonton, AB T5J 1S6		
Project title	Project	
Highway 9, Drumheller Alberta, T0J 0Y0 CSC Drumheller 50 Bed Unit Floor Slab Repair MECHANICAL		
Designed by MT	Conçu par	
Drawn by JD	Dessiné par	
Approved by JZ	Approuvé par	
PWGSC Project Manager	Administrateur de Projets TPWGC	
Drawing title	Titre du dessin	
MECHANICAL EQUIPMENT SCHEDULES		
Project no./No. du projet	Drawing no./No. du dessin	Revision no.
60608478	M-405 OF 12	C