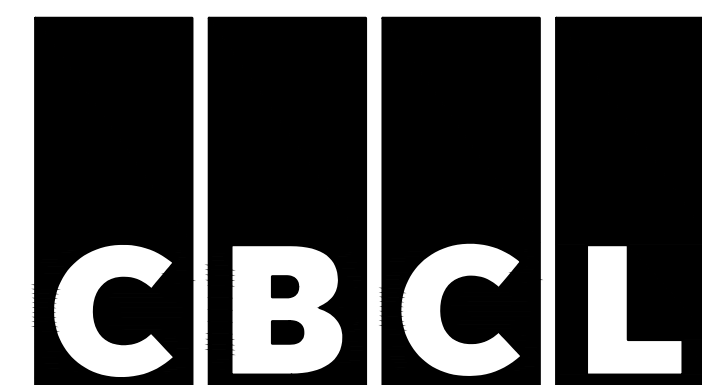




WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

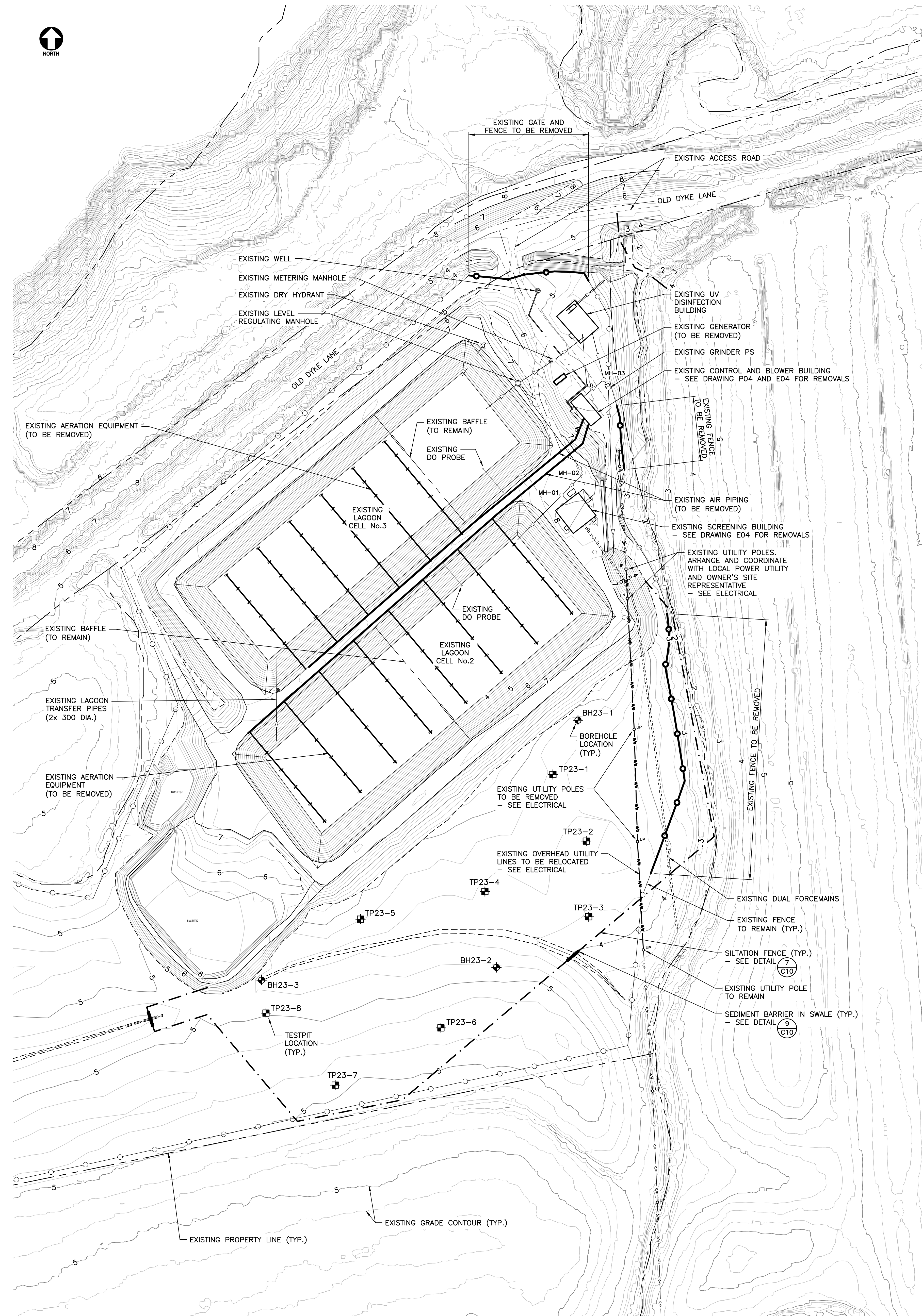
DRAWING LIST	
Sheet Number	Sheet Title
COVER SHEET	
000	COVER SHEET AND DRAWING LIST
CIVIL	
C01	EXIST. CONDITIONS & REMOVALS, EROSION & SEDIMENT CONTROL & NOTES
C02	SERVICING PLAN
C03	BERM AND ACCESS ROAD GRADING
C04	LAGOON GRADING
C05	BLOWER BUILDING GRADING
C06	LAGOON PLANS
C07	LAGOON SECTIONS
C08	LAGOON DETAILS
C09	CIVIL DETAILS SHEET 1 OF 2
C10	CIVIL DETAILS SHEET 2 OF 2
ARCHITECTURAL	
A01	BLOWER BUILDING PLANS AND SECTIONS
A02	BLOWER BUILDING ELEVATIONS
A03	DETAILS AND SCHEDULES
STRUCTURAL	
S01	GENERAL NOTES
S02	BLOWER BUILDING - PLANS AND CROSS SECTIONS
S03	SECTIONS AND TYPICAL DETAILS - CONCRETE
S04	TYPICAL DETAILS - MASONRY AND TIMBER
PROCESS	
P01	LEGEND
P02	HYDRAULIC PROFILE
P03	P & ID
P04	EXISTING BLOWER BUILDING DEMOLITION
P05	BLOWER BUILDING PLAN AND SECTIONS
P06	DETAILS
MECHANICAL	
M01	BLOWER BUILDING HVAC AND ROOF LAYOUTS
ELECTRICAL	
E01	LEGEND
E02	SITE PLAN & SECTIONS
E03	SINGLE LINE DIAGRAM
E04	BLOWER BUILDING & SCREENING BUILDING DEMO PLANS
E05	PROPOSED BLOWER BUILDING & SCREENING BUILDING PLANS
E06	BLOWER BUILDING LIGHTING AND POWER PLAN
E07	HAZARDOUS CLASSIFICATION AND DETAILS
E08	DETAILS SHEET 1 OF 2
E09	DETAILS SHEET 2 OF 2
E10	SCHEMATICS AND BLOCK DIAGRAM
INSTRUMENTS	
J01	CONTROL SYSTEM BLOCK DIAGRAM
J02	SCHEMATIC, IO LISTS & PLC-RTU LAYOUT
J03	SCHEMATICS AND BLOCK DIAGRAM



NOT FOR
CONSTRUCTION

ISSUED FOR
TENDER

MARCH 11, 2025



PLAN
1:750

GENERAL NOTES:

1. THE FOLLOWING NOTES APPLY UNLESS OTHERWISE INDICATED.
2. SPECIFICATIONS AND STANDARD DETAILS ISSUED WITH THESE DRAWINGS FORM AN INTEGRAL PART OF THIS CONTRACT.
3. ALL CONSTRUCTION WORK TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NSRBA/CENS STANDARD SPECIFICATIONS FOR MUNICIPAL SERVICES. WHEN CONFLICTS OCCUR THE MORE STRINGENT SHALL APPLY AS DIRECTED BY THE ENGINEER.
4. EXISTING GRADE ELEVATIONS AND COORDINATES ARE DERIVED FROM DATA OBTAINED FROM AVAILABLE PROVINCIAL 10K DERIVED LIAR MAPPING PRODUCTS AND ARE NAD83 (CSRS) MTM ZONE 5 COVD 2013.
5. FOR GEOTECHNICAL AND BOREHOLE INFORMATION REFER TO REPORT PREPARED BY CBCL LIMITED DATED AUG. 16/24 (INCLUDED AS AN APPENDIX IN SPECIFICATIONS).
6. A SITE MEETING WILL BE HELD AT THE WOLFVILLE WASTEWATER TREATMENT PLANT TO PROVIDE AN OPPORTUNITY FOR TENDERERS TO GAIN ACCESS TO THE FACILITY AND BECOME FAMILIAR WITH THE NATURE AND EXTENT OF THE WORK REQUIRED. CONSULT THE SPECIFICATIONS FOR DATE AND TIME.
7. CONTRACTOR TO PROTECT ALL CONTROL MONUMENTS FROM DAMAGE DURING CONSTRUCTION. IF ANY MONUMENT IS DISTURBED, IT MUST BE RESET AND RE-SURVEYED AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK AND SHALL COMPLY WITH THE PERMIT'S REQUIREMENTS AND CONDITIONS. CONTRACTOR WILL BE PROVIDED COPY OF NOVA SCOTIA ENVIRONMENT AND CLIMATE CHANGE APPROVAL TO CONSTRUCT.
8. DO NOT SUBSTITUTE MATERIALS UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
9. CONTRACTOR TO CARRY OUT ENVIRONMENTAL PROTECTION MEASURES IN ACCORDANCE WITH NOVA SCOTIA ENVIRONMENT EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION SITES (LATEST EDITION). CONTRACTOR SHALL PROTECT ALL DOWNSTREAM AREAS FROM ANY NEGATIVE IMPACT WHATSOEVER FROM THE CONSTRUCTION ACTIVITIES.
10. MAINTAIN MINIMUM DISTURBANCE IN ALL AREAS. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL OR BETTER THAN EXISTED BEFORE CONSTRUCTION.
11. LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY. CONTRACTOR SHALL CONFIRM EXISTING UTILITY AND SUBSURFACE INFORMATION PRIOR TO CONSTRUCTION. EXCAVATE AND EXPOSE TO CONFIRM ELEVATIONS.
12. PROTECT ALL EXISTING SERVICES AND FEATURES DESIGNATED TO REMAIN. CONTRACTOR TO IMMEDIATELY MAKE GOOD ANY DAMAGES CAUSED BY EXECUTION OF WORK. REPAIR FEATURES TO A CONDITION EQUAL OR BETTER THAN EXISTED PRIOR TO THE WORK. ALL REPAIRS AND REPLACEMENTS TO BE MADE AT NO CHARGE TO THE OWNER.

EROSION AND SEDIMENT CONTROL NOTES:

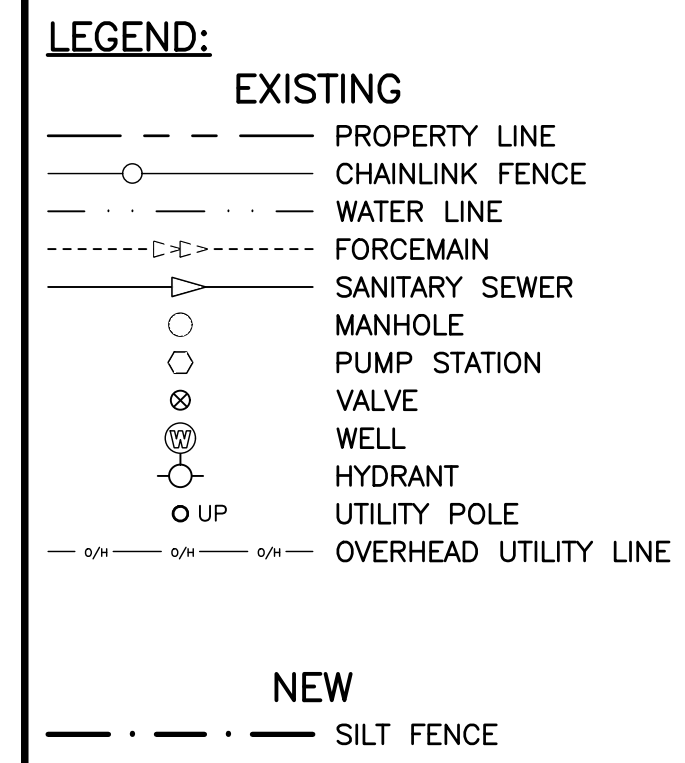
1. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE MEASURES AND CONTROLS TO ENSURE THE PROTECTION OF NATURAL WATERCOURSES FROM DAMAGE DUE TO SILTATION RUNOFF FROM ALL CONSTRUCTION SITES AND DE-WATERING PROCEDURES.
2. CONTRACTOR TO SUBMIT EROSION AND SEDIMENT CONTROL PLAN FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
3. EROSION AND SEDIMENTATION CONTROLS INDICATED ON PLANS AND DETAILS REPRESENT THE MINIMUM REQUIREMENT. ADDITIONAL CONTROLS TO BE INSTALLED AS REQUIRED. ENVIRONMENTAL PROTECTION MEASURES IN ACCORDANCE WITH NOVA SCOTIA ENVIRONMENT EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION (LATEST EDITION).
4. ALL CONTROLS TO BE INSTALLED PRIOR TO BEGINNING WORK, AND MAINTAINED THROUGHOUT CONSTRUCTION.
5. STRAW BALE BARRIERS TO BE IN ACCORDANCE WITH STANDARD DRAWING HS701 OF NOVA SCOTIA DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE MAINTENANCE (LATEST EDITION).
6. PROTECT ALL REMAINING VEGETATION FROM DAMAGE.
7. EXCAVATE DITCHES IN ALL AREAS AT THE EARLIEST PRACTICAL TIME IN THE CONSTRUCTION SEQUENCE TO MAINTAIN FLOW TO SEDIMENTATION PONDS AND PREVENT WATER FROM UPSTREAM AREAS FROM FLOWING ACROSS EXPOSED SOIL.
8. MAINTAIN A STOCKPILE OF APPROPRIATE EROSION AND ENVIRONMENTAL PROTECTION MATERIALS (E.G. SILT FENCES, STRAW OR HAY BALES, HAY OR STRAW MULCH AND CLEAR STONE) ON SITE AT ALL TIMES.
9. INSPECT AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES FROM THE TIME OF INSTALLATION UNTIL AFTER ALL AREAS HAVE BEEN STABILIZED.
10. REMOVE SILT ACCUMULATIONS AT SILT FENCES AND OTHER PROTECTION DEVICES BY CAREFUL HAND EXCAVATION. DISPOSE OF ACCUMULATED SILT BY REMOVING FROM SITE.

EXISTING WASTEWATER TREATMENT PLANT NOTES:

1. THE EXISTING FACILITY IS PART OF A FUNCTIONING WASTEWATER TREATMENT PLANT AND IS TO REMAIN OPERATIONAL FOR THE DURATION OF CONSTRUCTION. MINIMIZE AND SCHEDULE DISTURBANCES TO EXISTING SYSTEMS AND PROVIDE ACCESS TO OPERATIONS STAFF FOR ROUTINE MAINTENANCE AND INSPECTION. SITE ACTIVITIES AFFECTING THE EXISTING FACILITY SHALL BE COORDINATED WITH THE OWNER IN ADVANCE OF UNDERTAKING THE WORK.
2. EXISTING PIPING, VALVES, FITTINGS, ETC. ARE SHOWN AS APPROXIMATE ONLY. CONTRACTOR TO CONFIRM SIZE, LOCATION, AND ELEVATION OF ALL EXISTING INFRASTRUCTURE AND NOTIFY THE ENGINEER, IN WRITING, OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DISTURBING EXISTING SERVICES/SYSTEMS NOT DESIGNATED FOR REMOVAL.
3. CONTRACTOR IS RESPONSIBLE FOR WATER-TIGHT BULKHEADS, BYPASS PUMPING, LOWERING LIQUID LEVEL WITHIN LAGOONS, HAULING OF WASTEWATER AND ANY OTHER TEMPORARY SET-UPS REQUIRED DURING CONSTRUCTION TO MAINTAIN OPERATION OF THE EXISTING FACILITY.
4. BYPASS/TEMPORARY PUMPING TO INCLUDE A SPARE BACK-UP PUMP ON-SITE AND READY FOR USE.

DEMOLITION AND REMOVALS NOTES:

1. LIMITS OF REMOVALS SHOWN ARE APPROXIMATE.
2. TREES TO BE CLEARED AND AREA GRUBBED AS REQUIRED. REMOVE ALL VEGETATION, TOPSOIL, FILL MATERIALS, AND ANY OTHER DELETERIOUS MATERIALS WITHIN FOOTPRINT OF LAGOON. TOPSOIL IS TO BE STOCKPILED ON SITE FOR RE-USE. ALL UNSUITABLE AND DELETERIOUS MATERIALS ARE TO BE DISPOSED OF OFF-SITE.
3. UNLESS OTHERWISE NOTED, ALL PIPES ENCOUNTERED DURING EXECUTION OF WORK THAT ARE NO LONGER REQUIRED SHALL BE REMOVED AND TRENCHES BACKFILLED. CAP AND ABANDON REMAINING LENGTHS OF PIPE AND RECORD LOCATIONS OF ANY RE-ROUTED OR ABANDONED PIPELINES. OBTAIN ENGINEER'S APPROVAL PRIOR TO ABANDONING ANY PIPELINES.
4. PRIOR TO UNDERTAKING DEMOLITION AND REMOVALS, CONTRACTOR SHALL SUBMIT A PLAN/SCHEDULE OUTLINING THE SWITCHOVER PROCESS. PLAN/SCHEDULE TO BE UPDATED AND/OR REVISED AS CONSTRUCTIONS PROGRESSES.
5. CONTRACTOR TO COORDINATE WITH THE OWNER FOR SALVAGE OF EXISTING EQUIPMENT. OWNER WILL PROVIDE A LIST OF EQUIPMENT FOR SALVAGE TO THE CONTRACTOR AND DESIGNATE A LOCATION ON-SITE FOR STORAGE OF SALVAGED EQUIPMENT. EQUIPMENT NOT DESIGNATED FOR SALVAGE SHALL BE TRANSPORTED OFFSITE FOR DISPOSAL.
6. INFRASTRUCTURE REQUIRING DEMOLITION, REMOVALS AND/OR SALVAGE INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
 - a.) CHAIN LINK FENCING (PORTION OF);
 - b.) BLOWERS AND ASSOCIATED PIPEWORK;
 - c.) CELL #1 LAGOON AERATION SYSTEM & ASSOCIATED PIPEWORK, DO PROBE (BOTH LOCATIONS)
 - d.) CELL #2 LAGOON AERATION SYSTEM & ASSOCIATED PIPEWORK, DO PROBE (BOTH LOCATIONS)
 - e.) STANDBY GENERATOR AND ASSOCIATED CONCRETE PAD;
 - f.) ELECTRICAL INSTRUMENTATION (SEE ELECTRICAL DRAWINGS);
7. CONTRACTOR TO OBSERVE CONFINED SPACE PROTOCOL AS REQUIRED THROUGHOUT THE DEMOLITION AND REMOVALS PROCESS.



NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BT

Revision of Issue

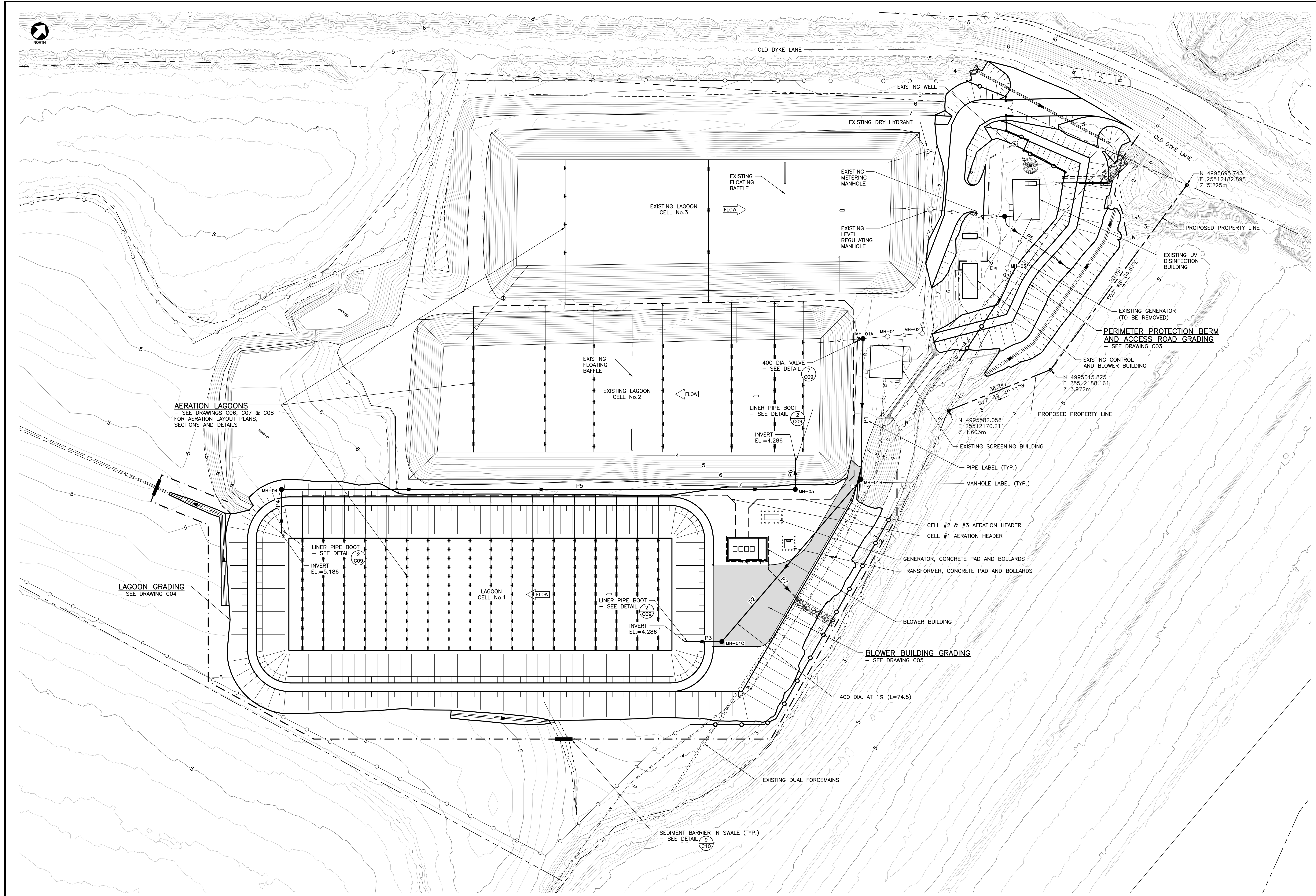
TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

CIVIL

EXIST. CONDITIONS & REMOVALS, EROSION & SEDIMENT CONTROL & NOTES

Contract No. 230813.02	Contract No. WOL005-2025
Date APR 2024	Scale AS NOTED
Designed DAT	Drawn NHM
Checked DAT	Approved DAT
Sheet No. 1	of 10
Drawing No. C01	



LEGEND:

EXISTING	
---	PROPERTY LINE
- - -	CHAINLINK FENCE
—○—	WATER LINE
—●—	FORCEMAIN
- - -	SANITARY SEWER
○	MANHOLE
○	PUMP STATION
○	VALVE
○	WELL
○	HYDRANT
○	UTILITY POLE
—○—	OVERHEAD UTILITY LINE
NEW	
- - -	CHAINLINK FENCE
—○—	WATER LINE
—●—	AERATION PIPING
- - -	SANITARY PIPE
- - -	DRAIN PIPE
○	MANHOLE
○	VALVE
NEW	
- - -	SILT FENCE

AERATION LAGOONS
 - SEE DRAWINGS C06, C07 & C08
 FOR AERATION LAYOUT PLANS,
 SECTIONS AND DETAILS

LAGOON GRADING
 - SEE DRAWING C04

**PERIMETER PROTECTION BERM
 AND ACCESS ROAD GRADING**
 - SEE DRAWING C03

BLOWER BUILDING GRADING
 - SEE DRAWING C05

PLAN
 1:500

MANHOLE DATA				
MANHOLE	COORDINATES	INV. IN	INV. OUT	TOP RIM ELEV.
MH-01	N 4995588.018 E 25512137.220	4.316m (400ø)	4.316m (400ø)	7.949m
MH-01A (1500ø)	N 4995581.892 E 25512131.193	4.306m (400ø)	4.306m (400ø)	7.730m
MH-01B (1200ø)	N 4995543.931 E 25512162.351	4.296m (400ø)	4.296m (400ø)	7.365m
MH-01C (1200ø)	N 4995469.407 E 25512161.779	4.286m (400ø)	4.286m (400ø)	7.405m
MH-04 (1200ø)	N 4995410.847 E 25512010.230	5.186m (400ø)	5.186m (400ø)	7.480m
MH-05 (1200ø)	N 4995526.458 E 25512147.090	4.286m (400ø)	4.286m (400ø)	7.570m

PIPE DATA				
PIPE	DIA.	MATERIAL	LENGTH	SLOPE
P1	400	PVC	49.1	1.0%
P2	400	PVC	74.5	1.0%
P3	400	PVC	12.9	0%
P4	400	PVC	15.4	0%
P5	400	PVC	179.2	0.5%
P6	400	PVC	11.0	0%
P7	100	PVC	21.3	3.7%
P8	100	PVC	29.6	0.5%

CELL #1 AERATION HEADER PIPE DATA			
PIPE	DIA.	MATERIAL	LENGTH
AH1	300	DI	25
AH2	300	HDPE	43
AH3	250	HDPE	36
AH4	200	HDPE	36
AH5	150	HDPE	25
TOTAL			165

CELL #2 & #3 AERATION HEADER PIPE DATA			
PIPE	DIA.	MATERIAL	LENGTH
AH6	250	DI	25
AH7	250	HDPE	125
AH8	200	HDPE	40
AH9	150	HDPE	60
TOTAL			250

NOT FOR CONSTRUCTION

No.	Description	Date	By
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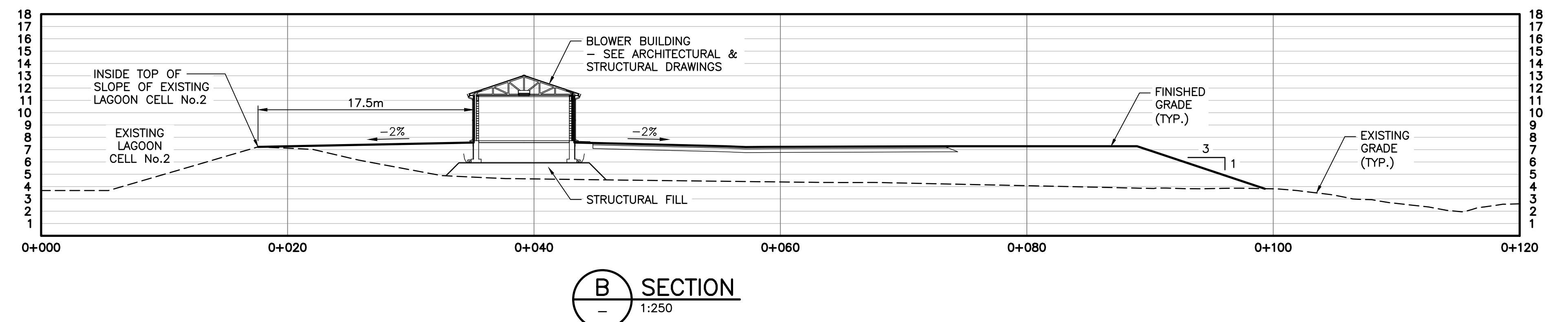
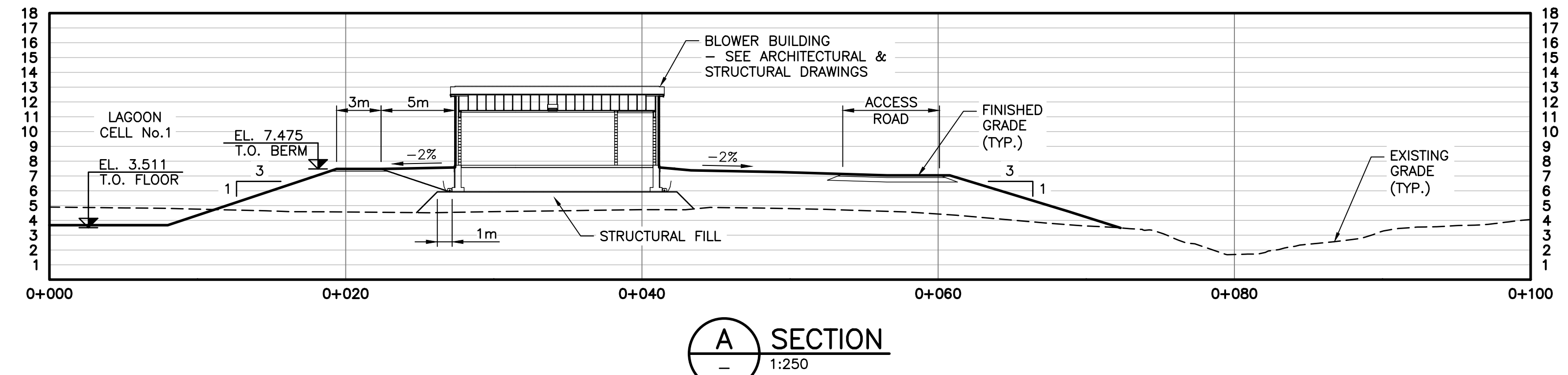
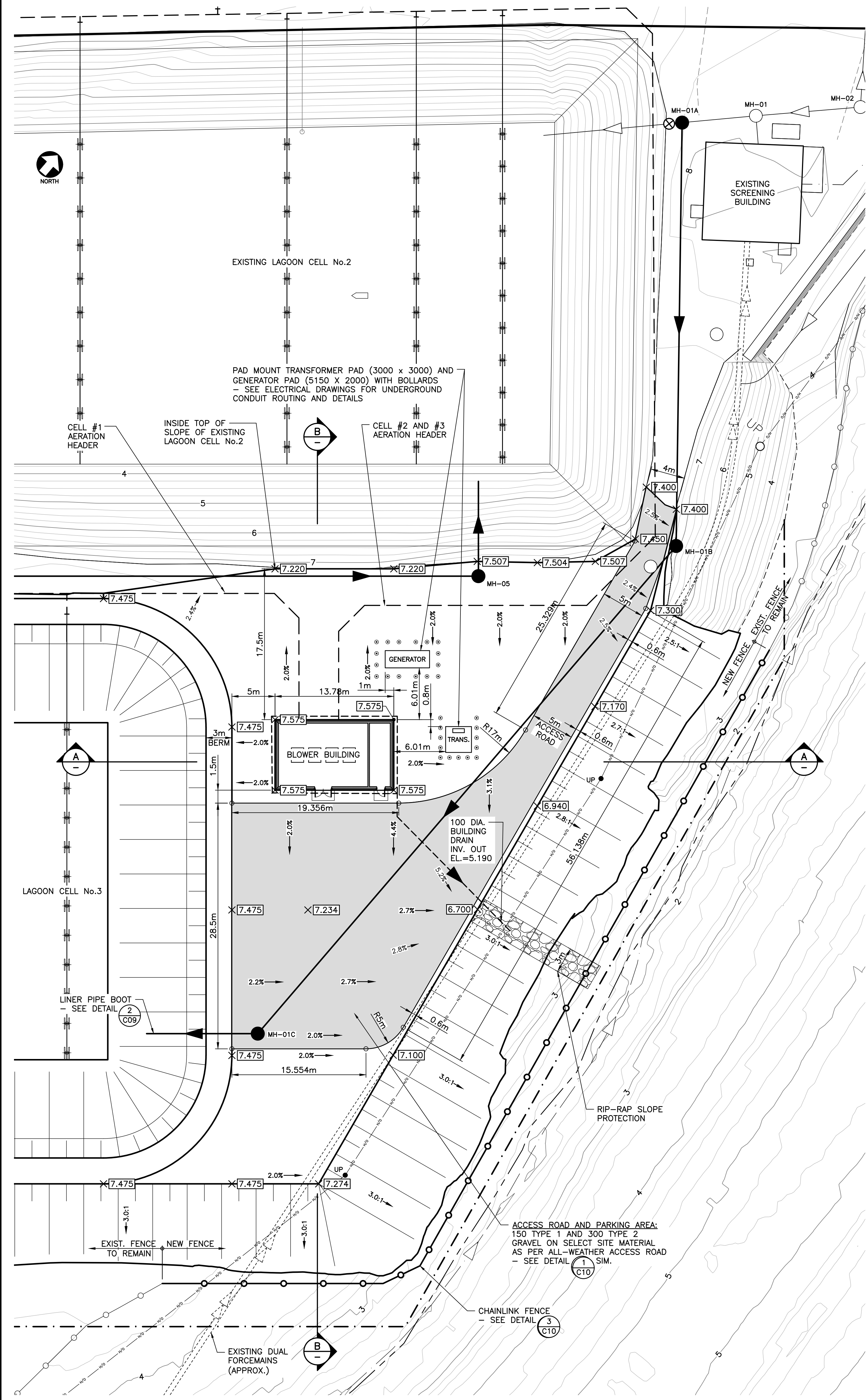
Revision of Issue

TOWN OF WOLFVILLE
 WASTEWATER TREATMENT PLANT
 PHASE 2 UPGRADES

CIVIL
 SERVICING PLAN

Checked DAT	Approved DAT
Sheet No. 2 of 10	Drawing No. C02

Contract No. WOL005-2025
 Scale: AS NOTED
 Date: APR 2024



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No.	Description	Date	By
A	ISSUED FOR TENDER	MAR 11/25	BY

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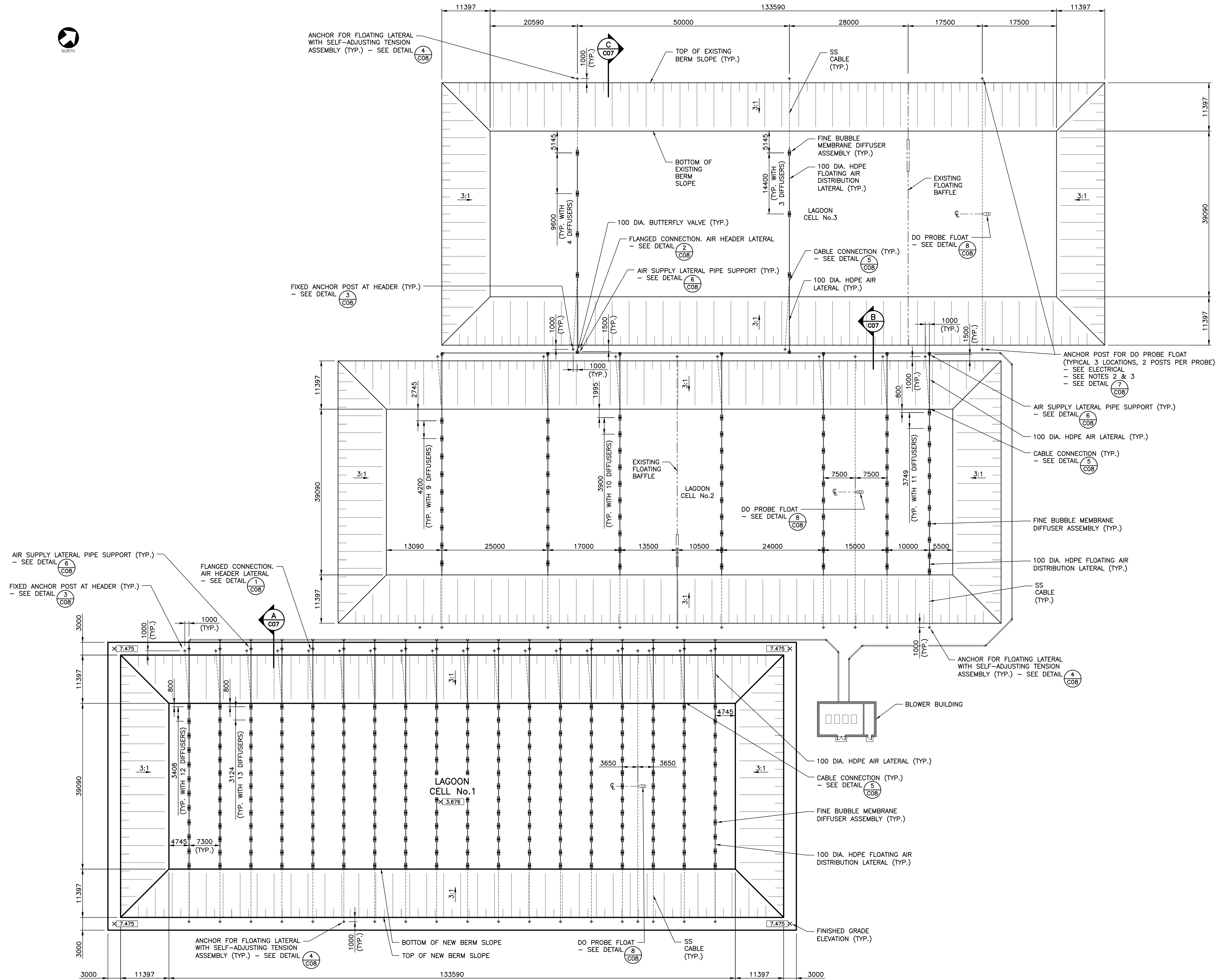
TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

CIVIL

BLOWER BUILDING GRADING

Contract No. 230813.02
Scale: AS NOTED
Date: APR 2024
Designed: DAT
Drawn: NHM
Checked: DAT
Approved: DAT
Sheet No. 5 of 10
Drawing No. C05



1 PLAN - LAGOON CELLS
C02 1:400 (SEE NOTE 1)

- NOTES:**
- LAGOON AERATION SYSTEM LAYOUT IS PRELIMINARY. LAYOUT (INCLUDING LATERAL AND DIFFUSER SPACING) TO BE CONFIRMED DURING SHOP DRAWING REVIEW PROCESS.
 - TRANSMITTER ASSOCIATED WITH DO PROBE TO BE INSTALLED WITHIN EXISTING BLOWER BUILDING (SEE ELECTRICAL).
 - CONTRACTOR TO COMPACT MATERIAL AROUND SONO TUBES IN 300 MM LIFTS TO 98% STANDARD PROCTOR DENSITY.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BY

Revision or Issue

TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

CIVIL

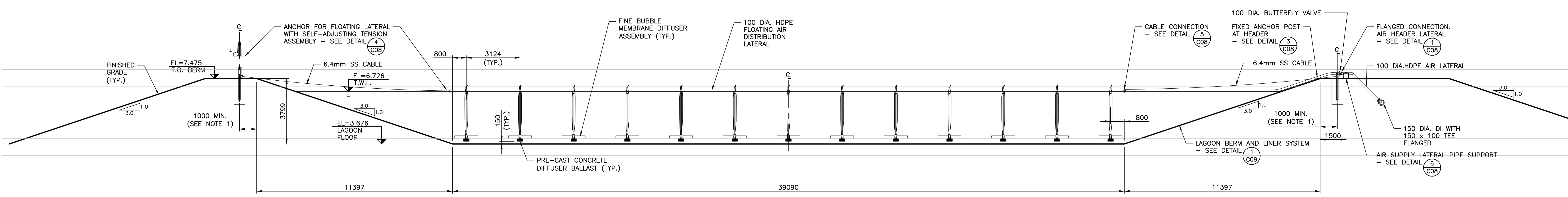
LAGOON PLANS

Contract No. 230813.02
WOL005-2025
Date: APR 2024
Scale: AS NOTED

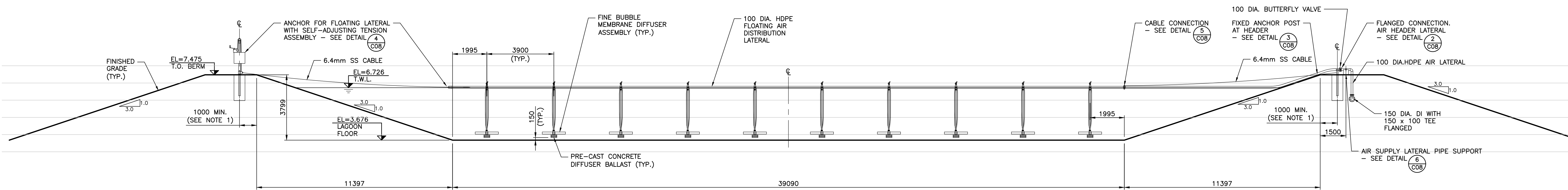
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Sheet No. 6 of 10
Drawing No. C06

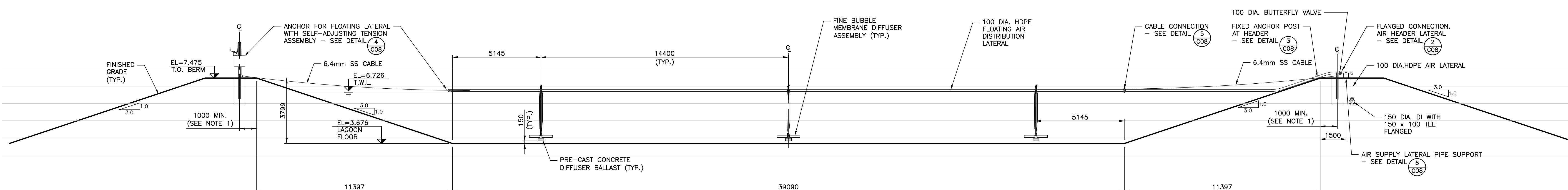
- NOTES:**
1. FIELD LOCATE FIXED AND SELF-TENSIONING ANCHOR POST TO AVOID PENETRATING EXISTING LAGOON LINER SYSTEM.
 2. LAGOON AERATION SYSTEM LAYOUT IS PRELIMINARY. LAYOUT (INCLUDING LATERAL AND DIFFUSER SPACING) TO BE CONFIRMED DURING SHOP DRAWING REVIEW PROCESS.



A SECTION— AERATED LAGOON #1
C06 1:100



B SECTION— AERATED LAGOON #2
C06 1:100



C SECTION— AERATED LAGOON #3
C06 1:100

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

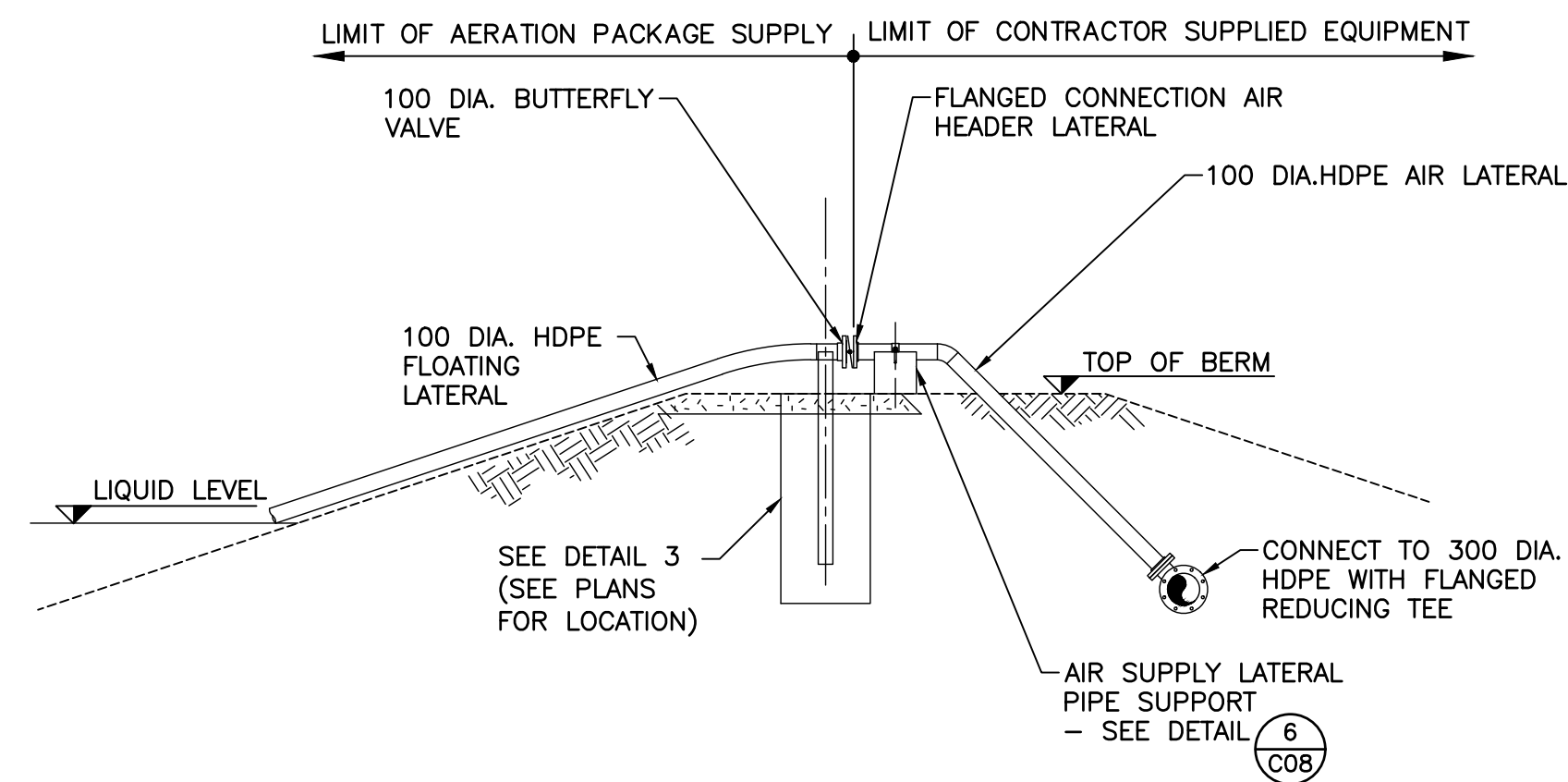
Revision of Issue

TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

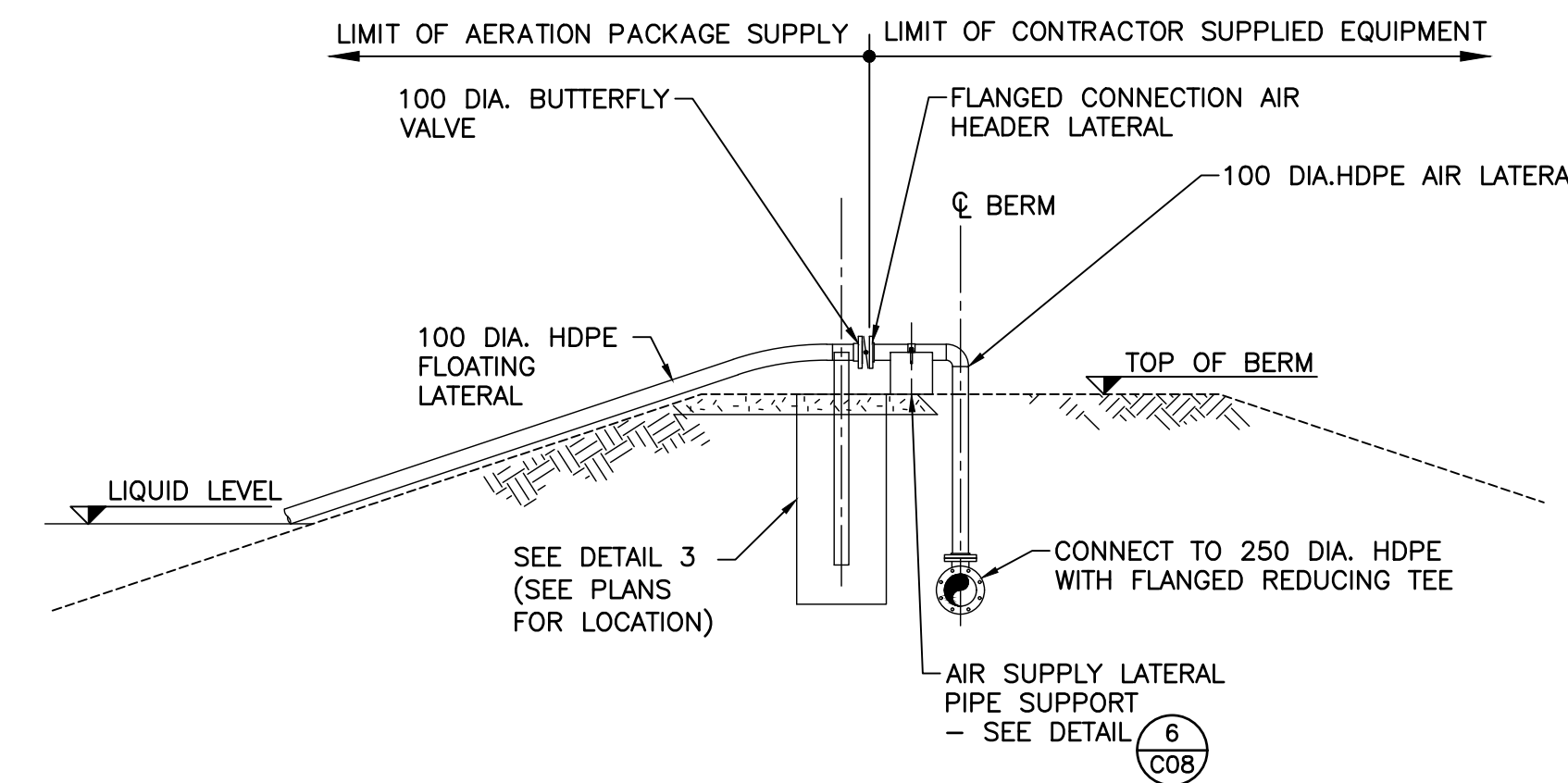
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LAGOON SECTIONS

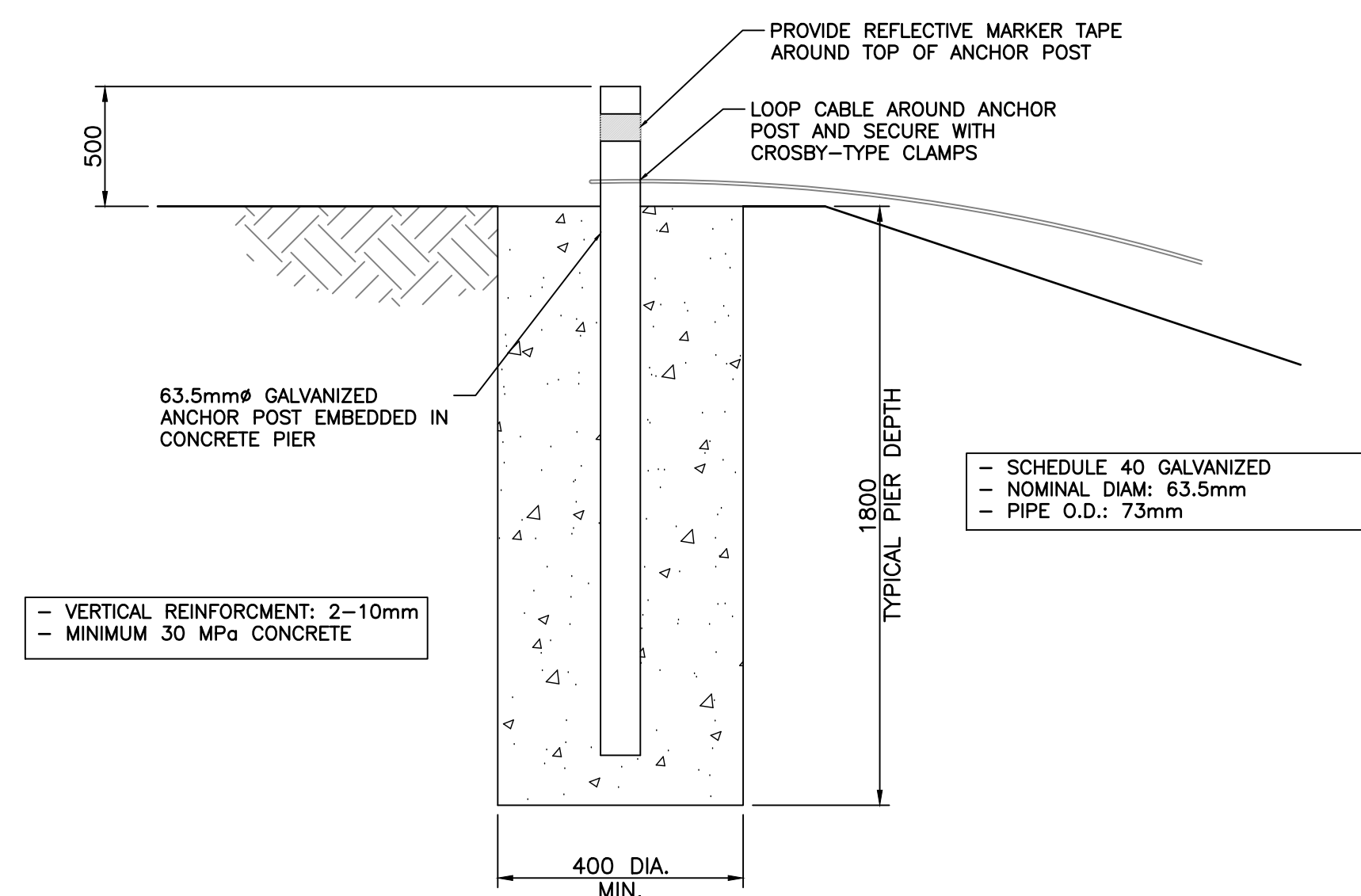
Contract No. 230813.02	Contract No. WOL005-2025
Date APR 2024	Scale AS NOTED
Designed DAT	Drawn NHM
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Sheet No. 7	of 10
Drawing No.	C07



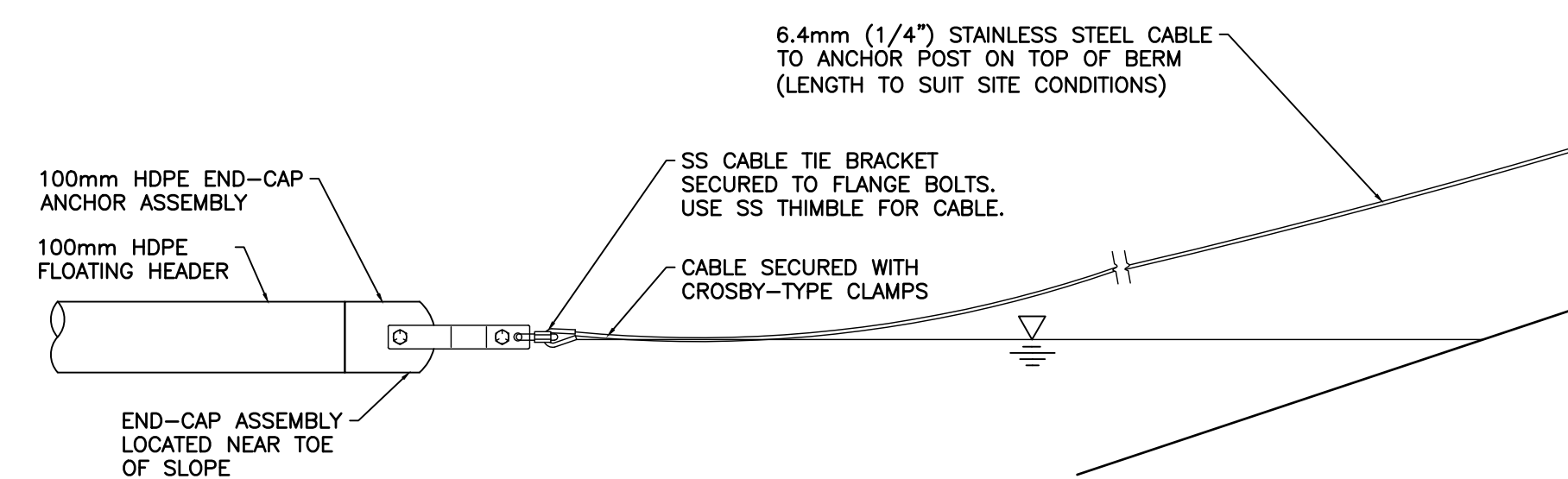
1 DETAIL—AIR HEADER LATERAL
NTS LAGOON No.1



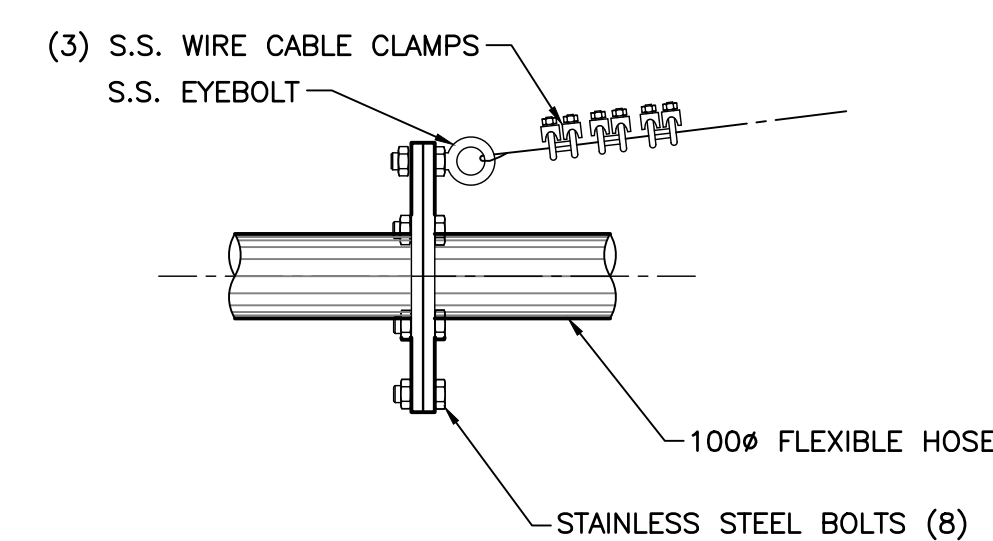
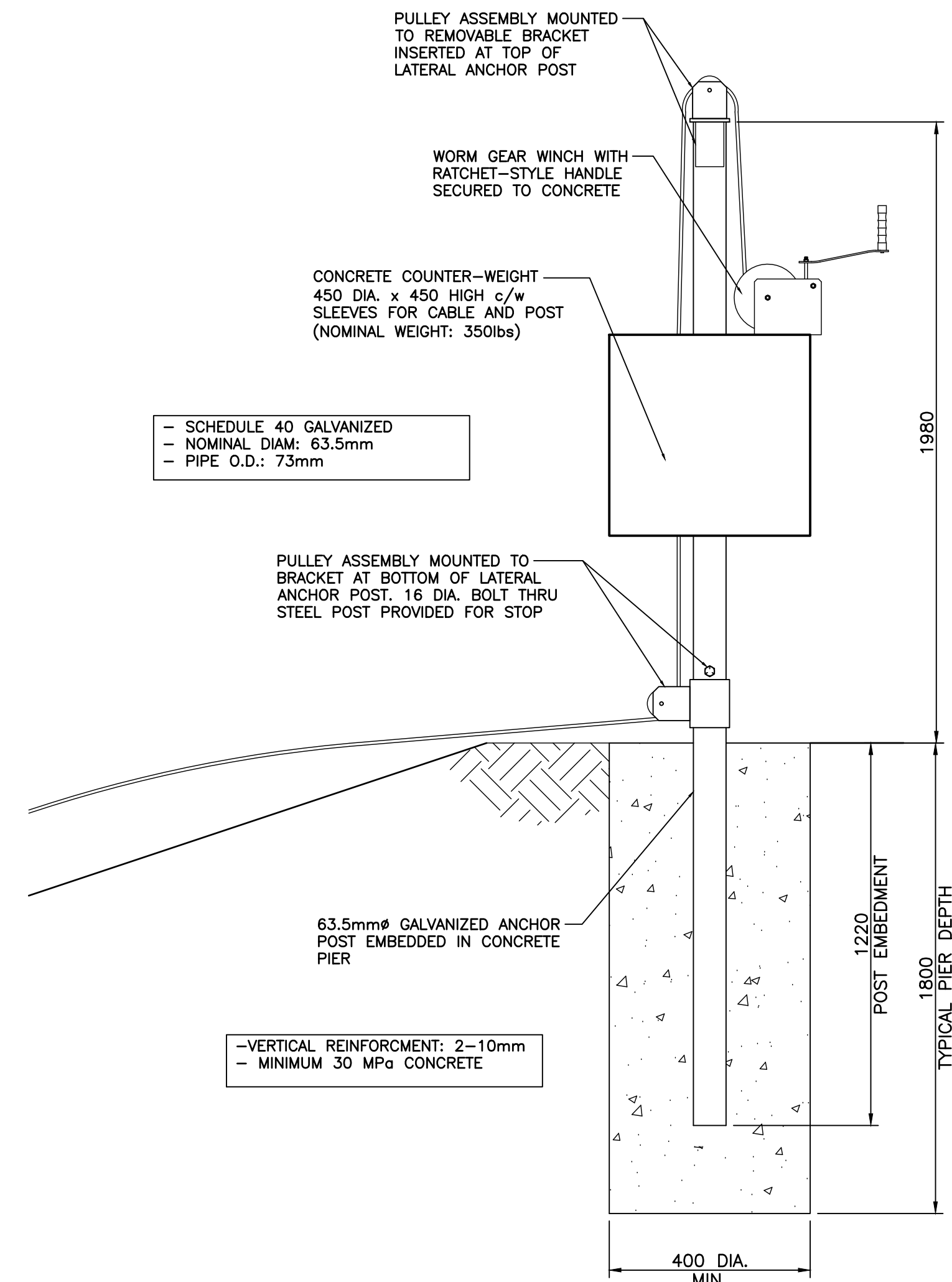
2 DETAIL—AIR HEADER LATERAL
NTS LAGOON No.2 & No.3



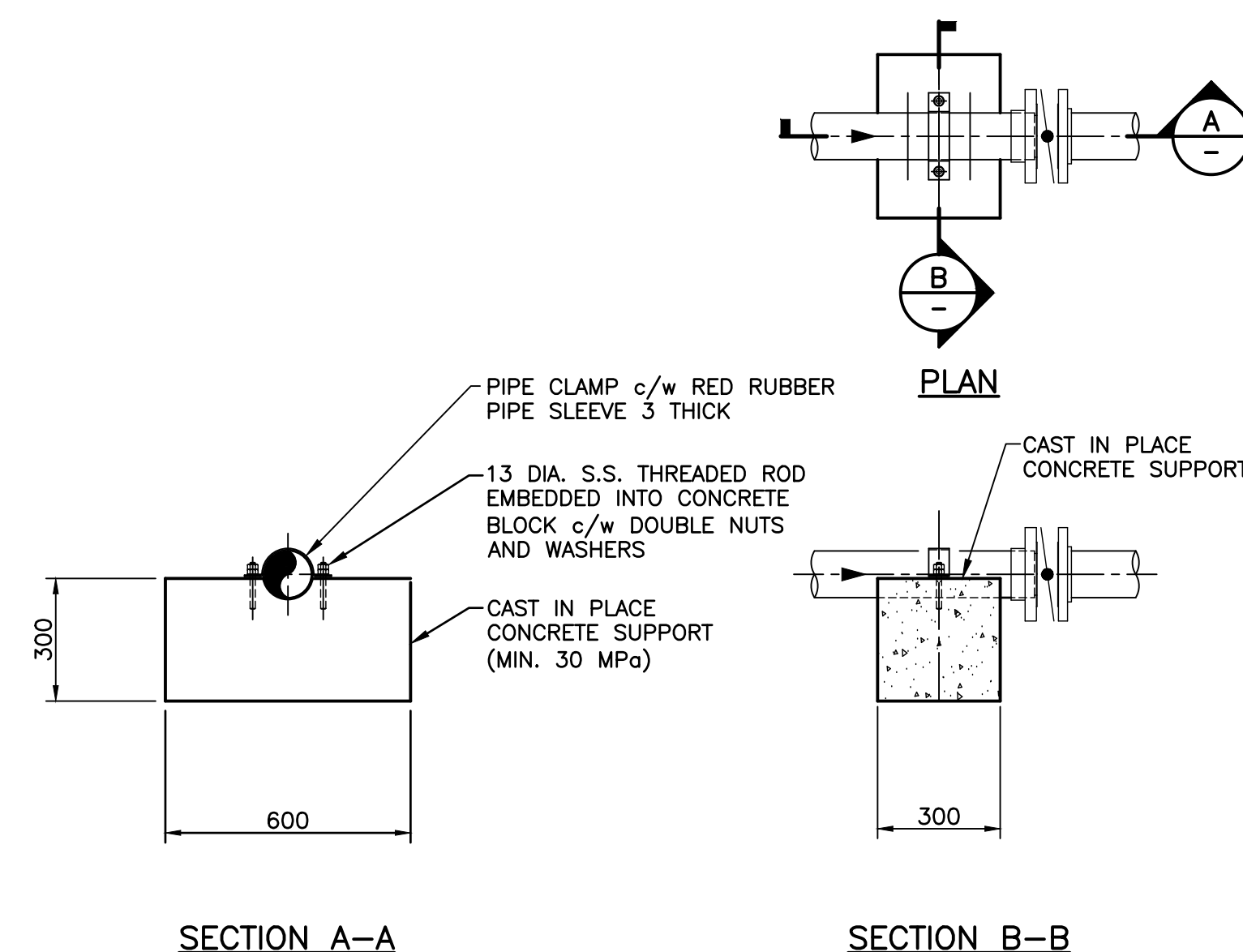
3 DETAIL—ANCHOR POST FOR FLOATING LATERALS
1:15 (STATIC POST - SEE NOTE 3)



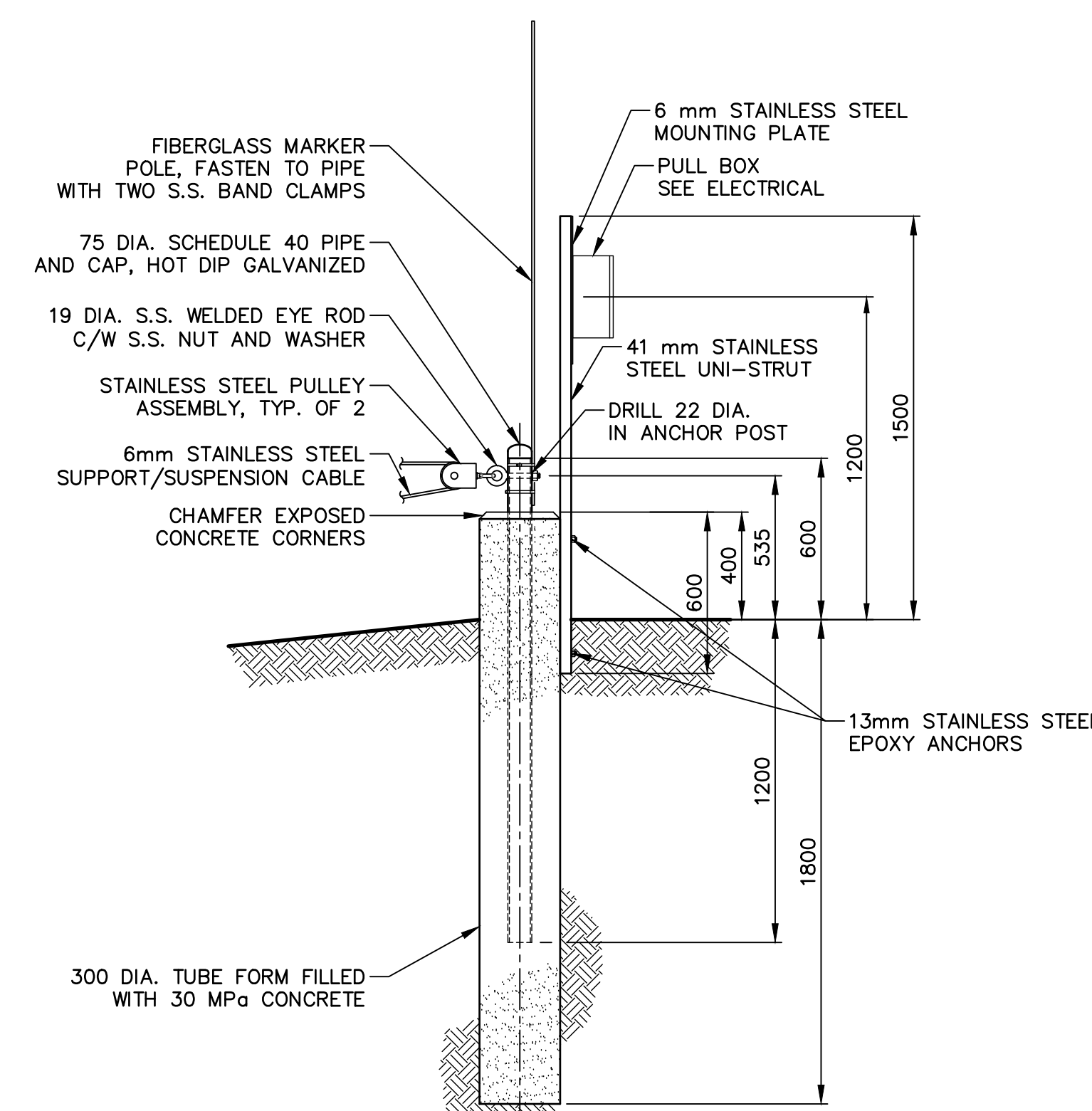
4 DETAIL—ANCHOR FOR FLOATING LATERALS
1:15 (POST WITH SELF-ADJUSTING TENSION ASSEMBLY - SEE NOTE 3)



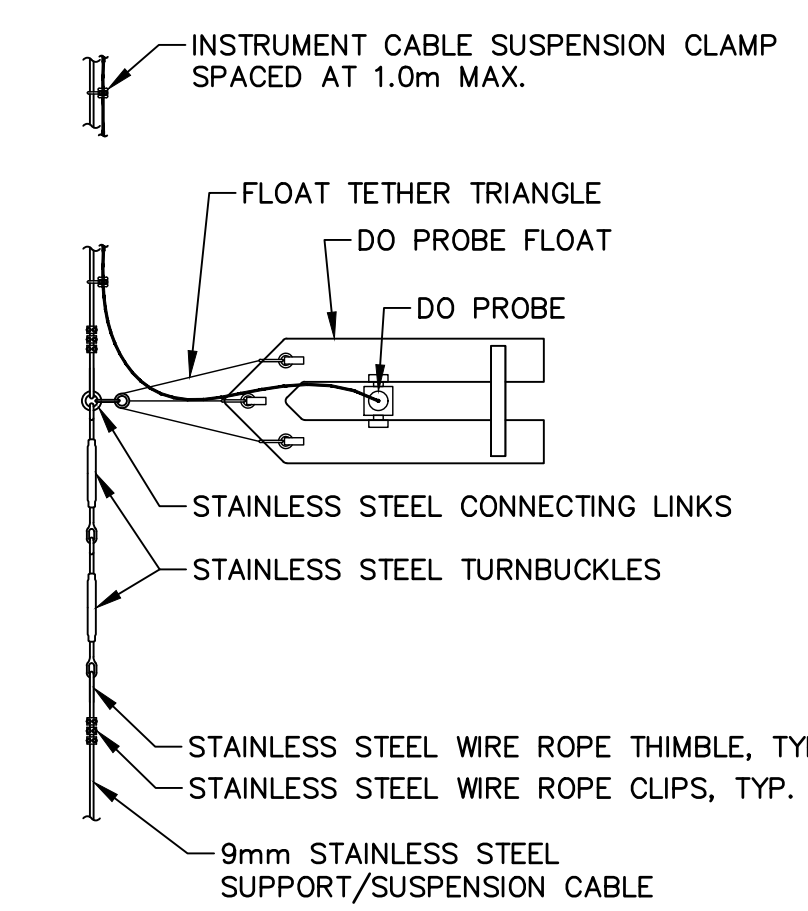
5 DETAIL—CABLE CONNECTION
NTS



6 DETAIL—AIR SUPPLY LATERAL PIPE SUPPORT
1:15



7 DETAIL—ANCHOR POST FOR DO PROBES
N.T.S. (SEE NOTES 1, 2 & 3)



8 DETAIL—DO PROBE FLOAT
C06 N.T.S.

NOTES:
1. TWO ANCHOR POSTS PER DO PROBE. ELECTRICAL MOUNTING PLATE ARRANGEMENT ONLY REQUIRED AT ONE OF TWO POST LOCATIONS (SEE ELECTRICAL).
2. TRANSMITTER ASSOCIATED WITH DO PROBE TO BE INSTALLED WITHIN EXISTING BLOWER BUILDING (SEE ELECTRICAL).
3. CONTRACTOR TO COMPACT MATERIAL AROUND SONO TUBES IN 300 MM LIFTS TO 98% STANDARD PROCTOR DENSITY.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	NTS

Revision of Issue

wolfville

TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

CIVIL

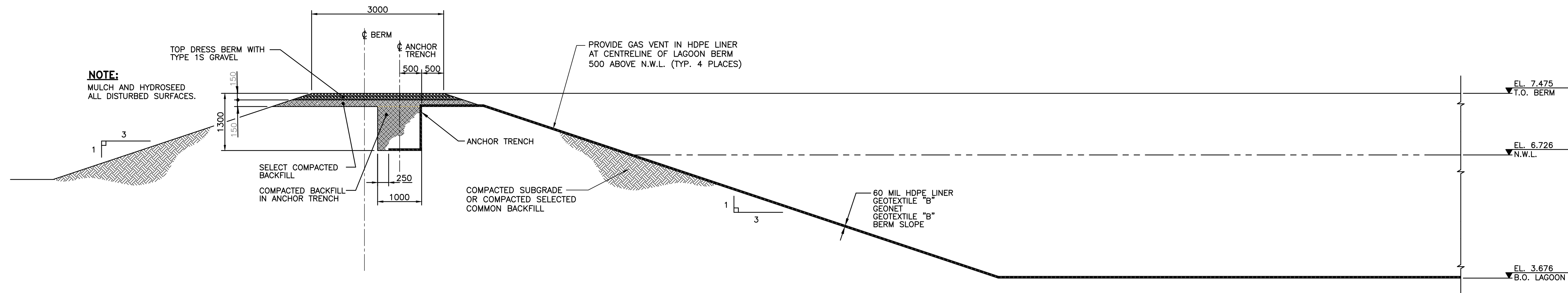
LAGOON DETAILS

CBCL

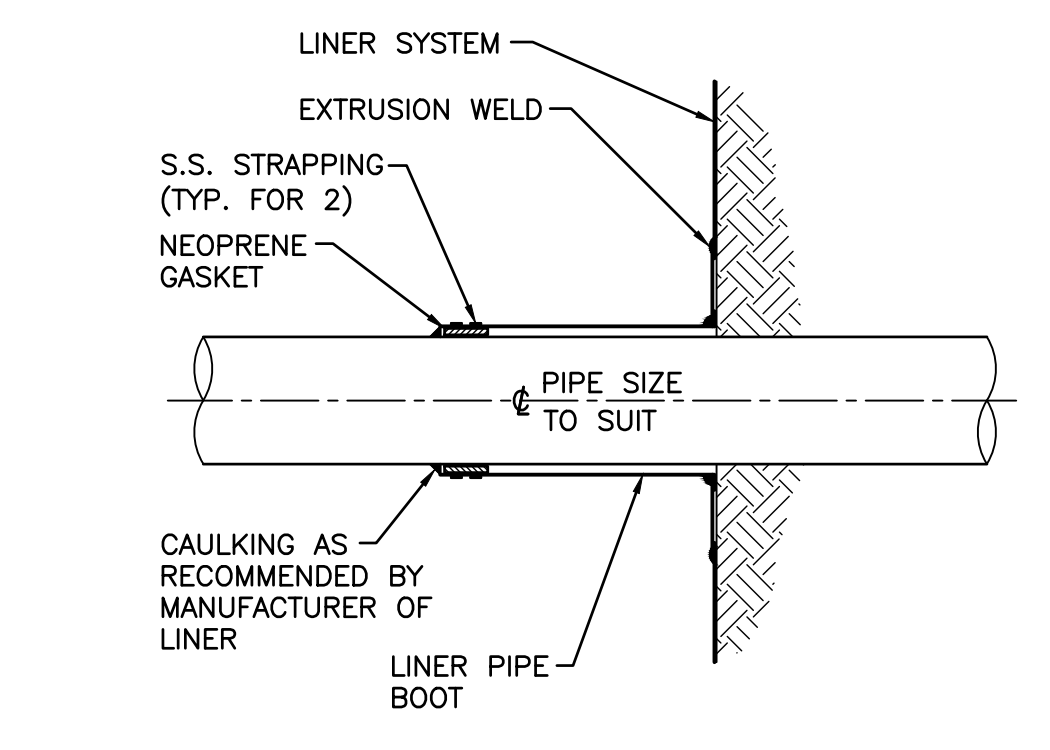
Contract No: 230813.02
Date: APR 2024
Scale: AS NOTED

Designed: NHM
Drawn: NHM
Checked: DAT
Approved: DAT

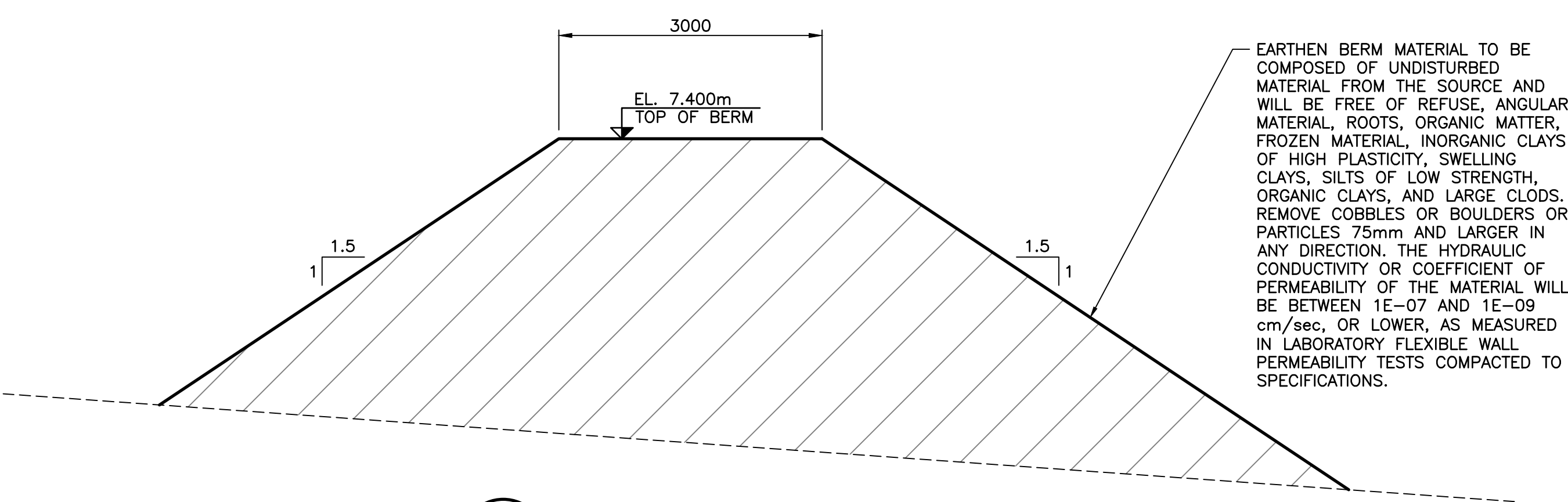
Sheet No: 8 of 10
Drawing No: C08



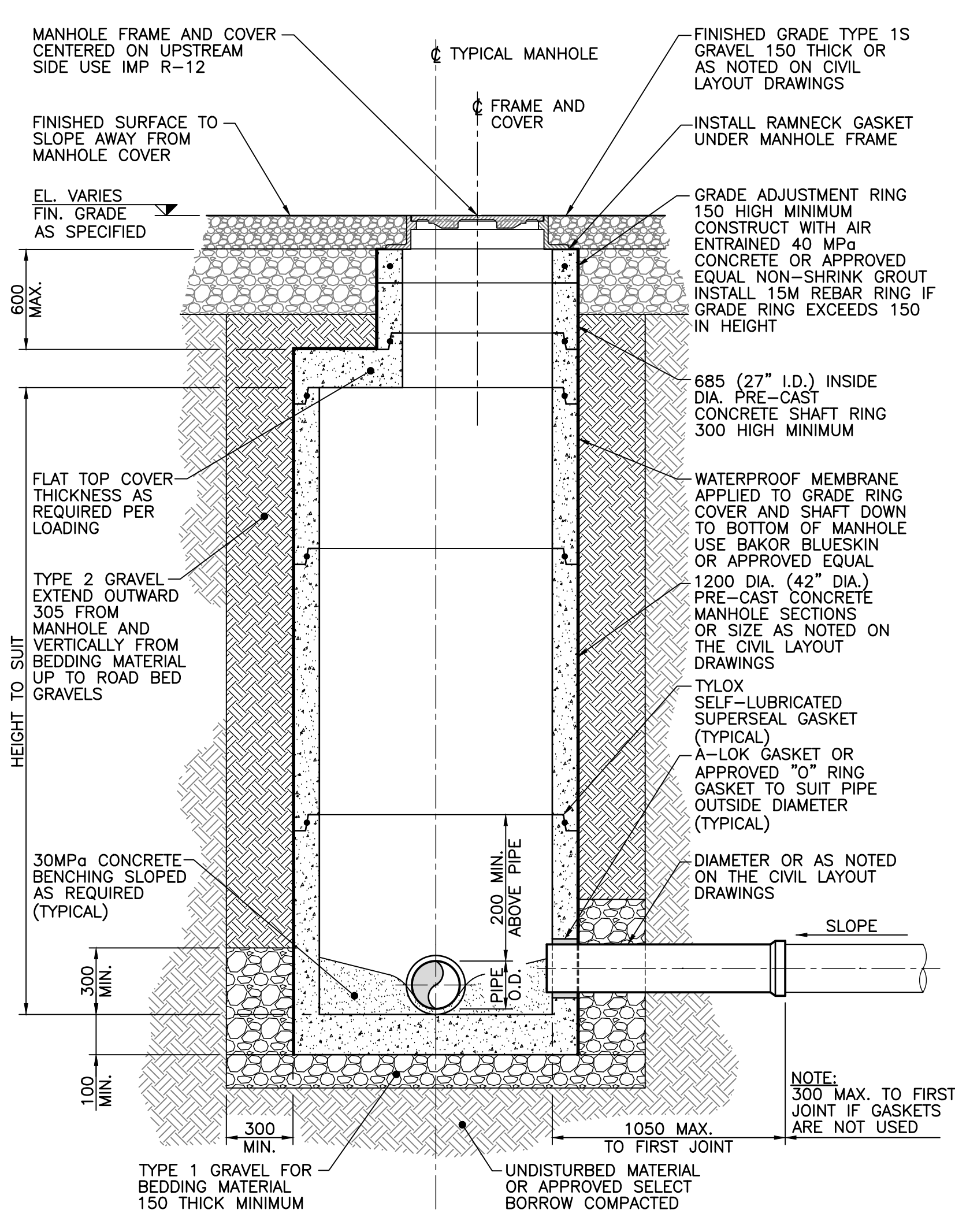
1 DETAIL - LAGOON BERM AND LINER SYSTEM
C04 1:50



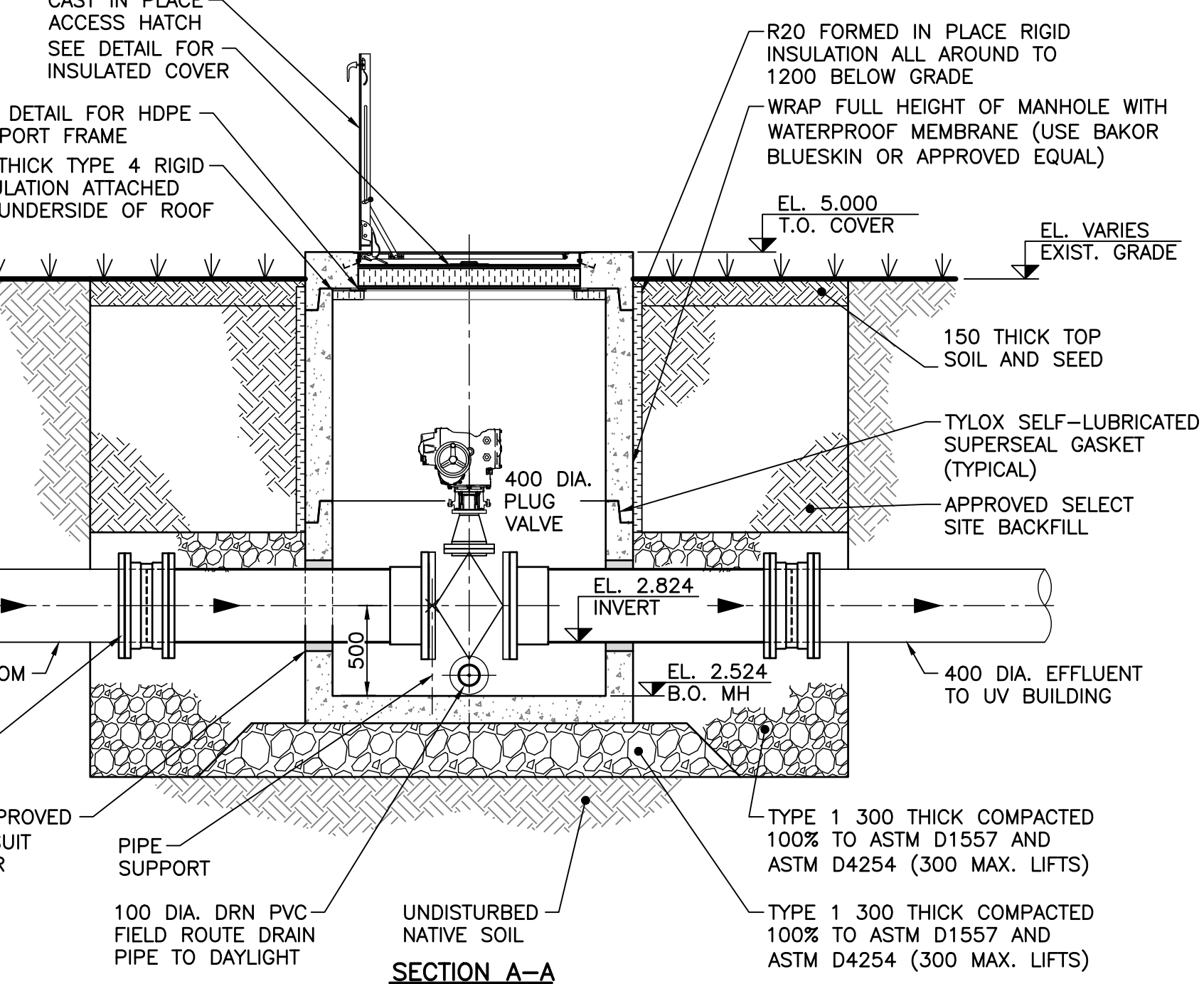
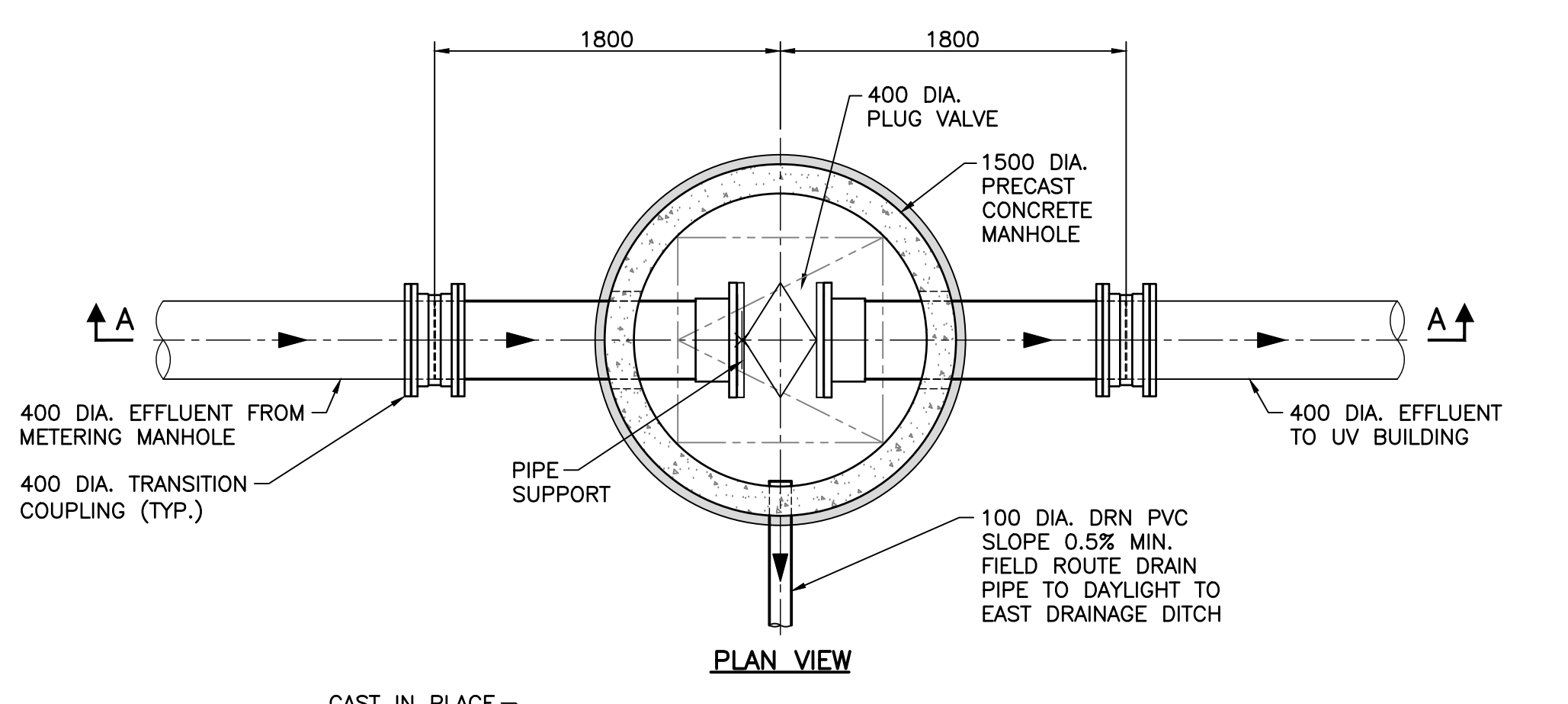
2 DETAIL - TYPICAL LINER PIPE BOOT
N.T.S.



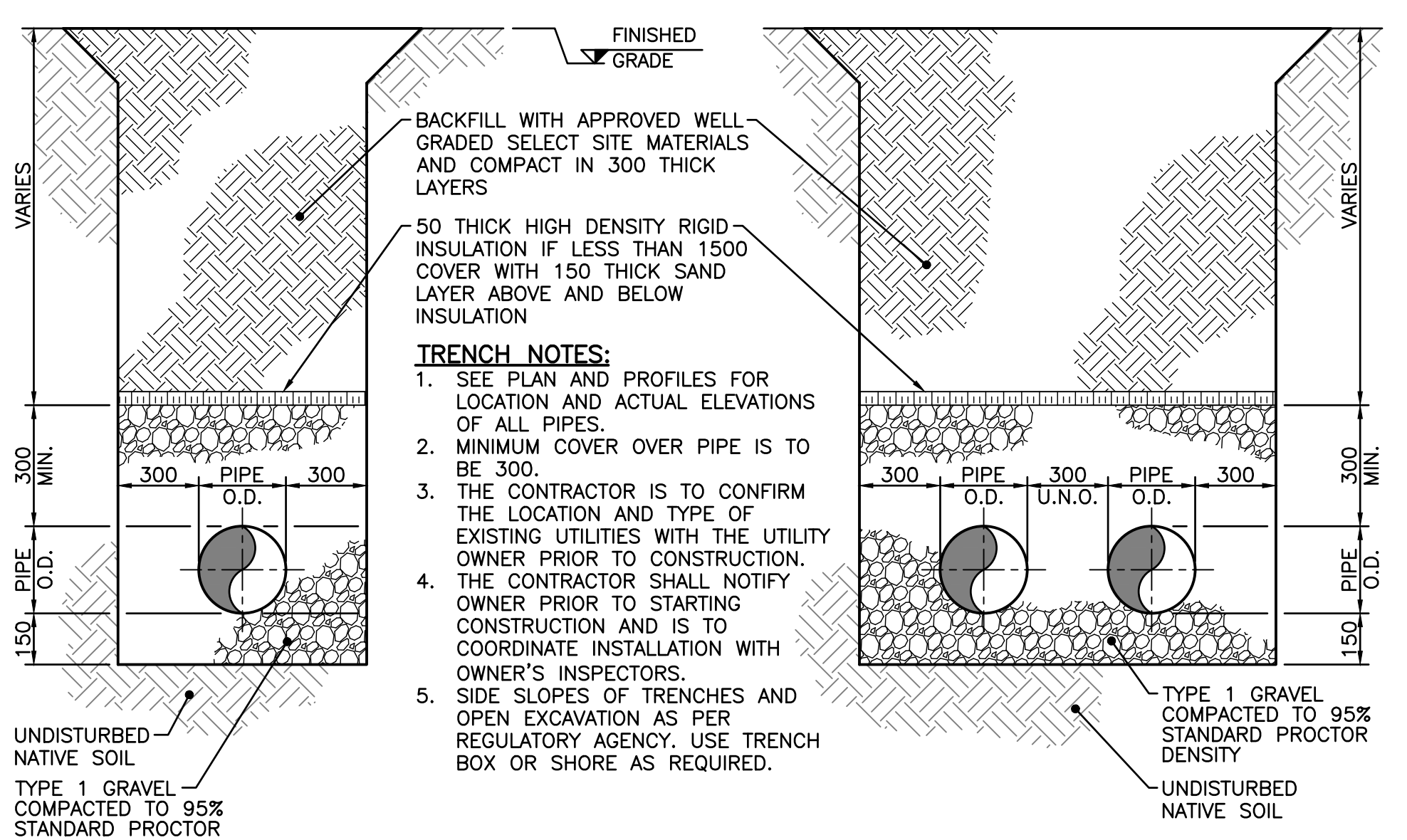
3 DETAIL - PERIMETER PROTECTION BERM
C03 1:50



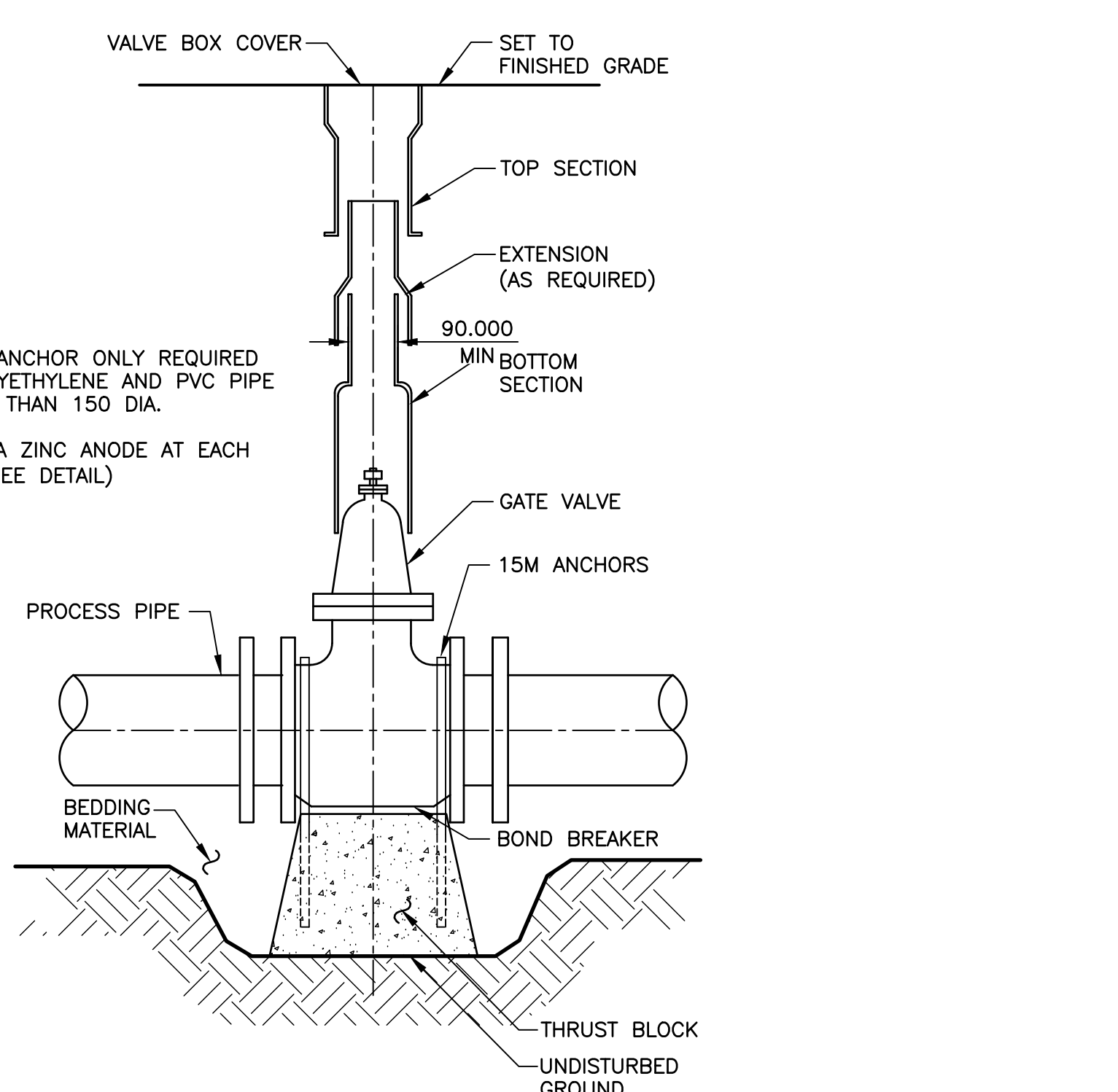
5 DETAIL - TYPICAL FLAT TOP MANHOLE
C02 N.T.S. 1200 DIA. PRECAST CONCRETE MANHOLE WITH R-10 FRAME AND COVER



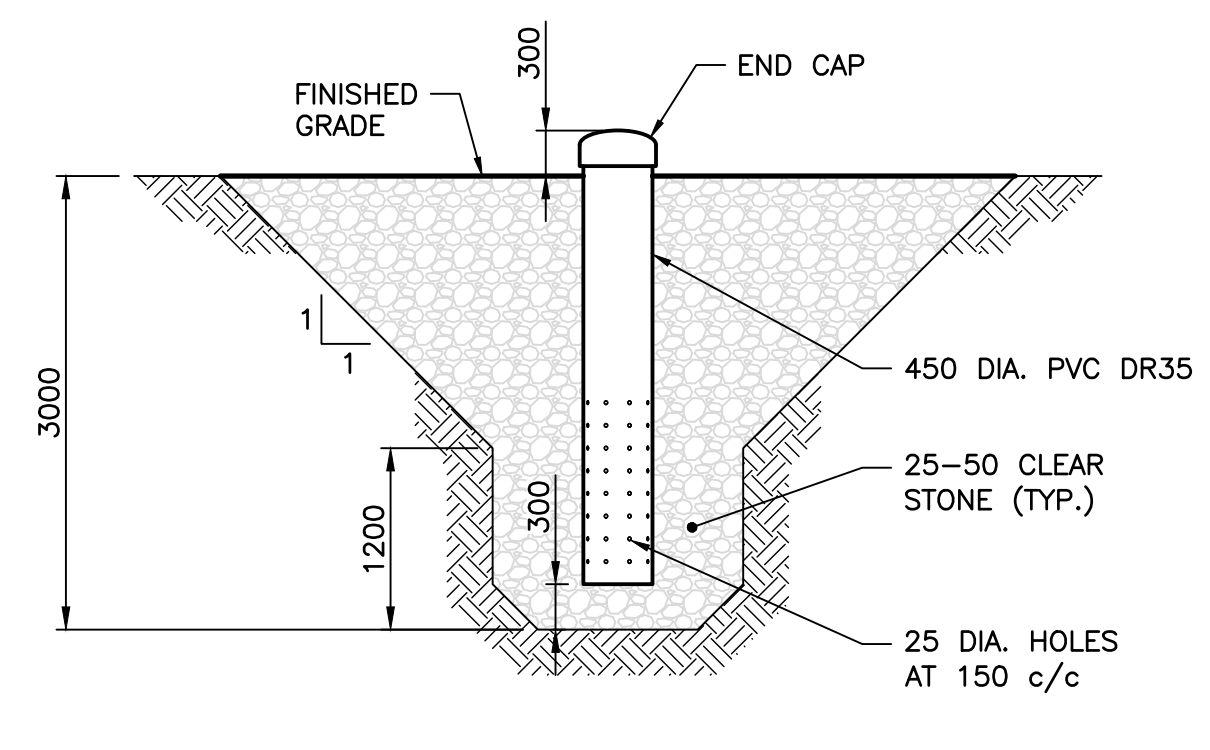
6 DETAIL - EFFLUENT CONTROL CHAMBER
C03 1:30



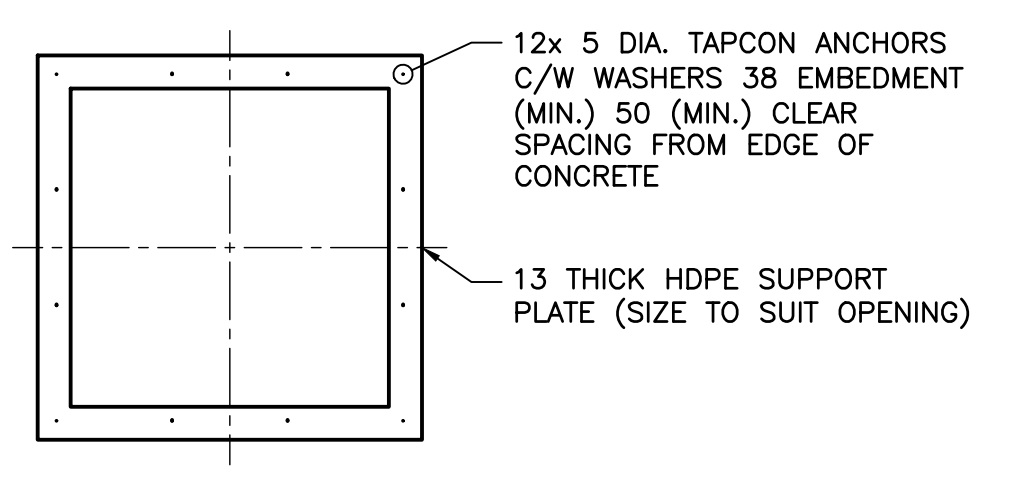
4 DETAIL - TYPICAL BURIED PIPE TRENCH
C02 1:20



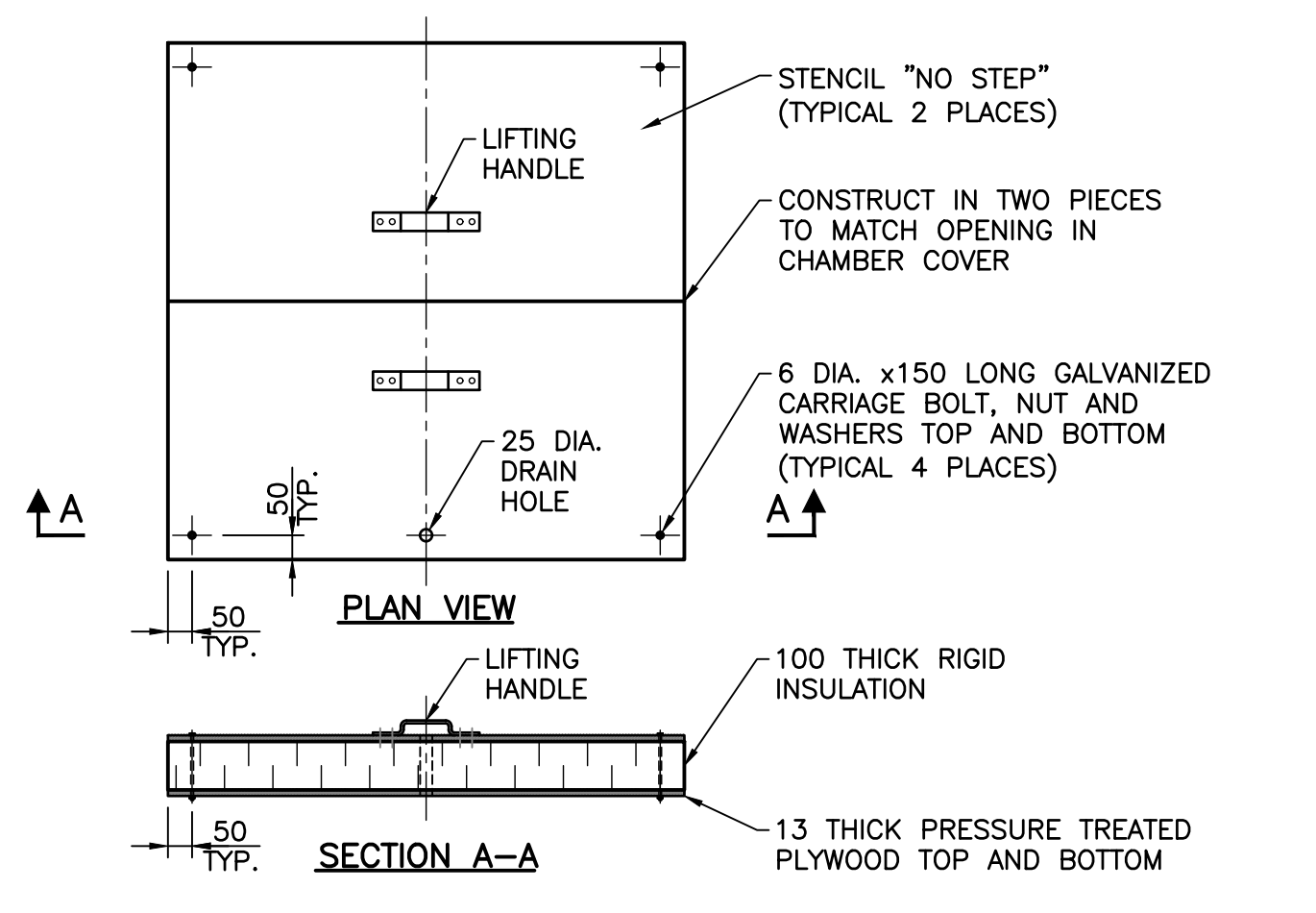
7 DETAIL - TYPICAL BURIED VALVE BOX INSTALLATION
C02 1:10



8 DETAIL - DEWATERING SUMP
C03 1:50



9 DETAIL - HDPE SUPPORT FRAME FOR INSULATED COVER
1:20



10 DETAIL - INSULATED COVER
1:15

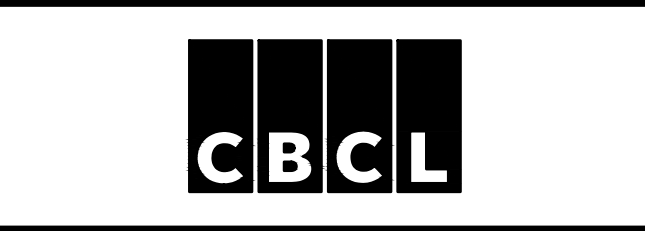
NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BT

Revision of Issue

wolfville
TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

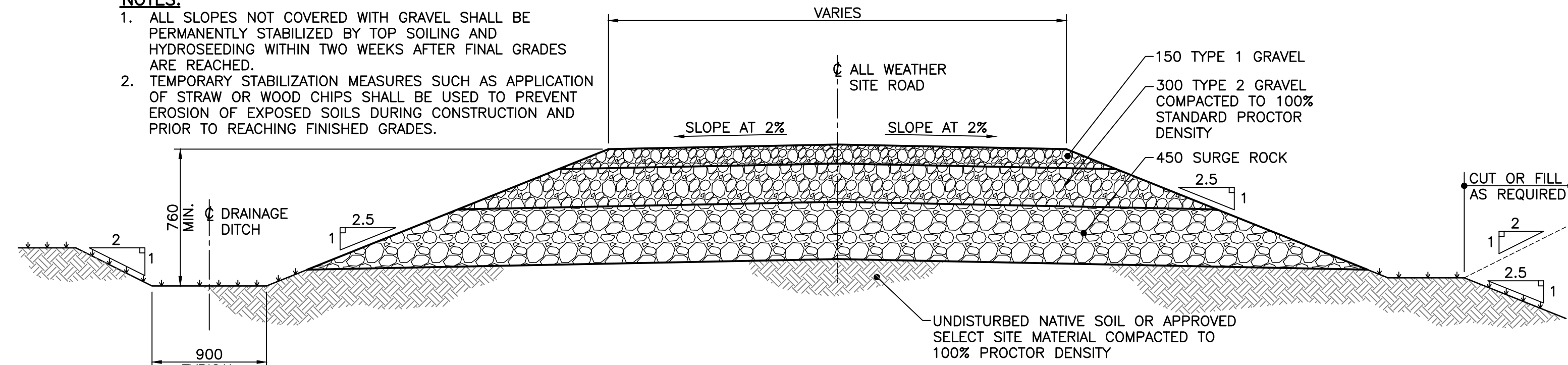
CIVIL
CIVIL DETAILS
SHEET 1 OF 2



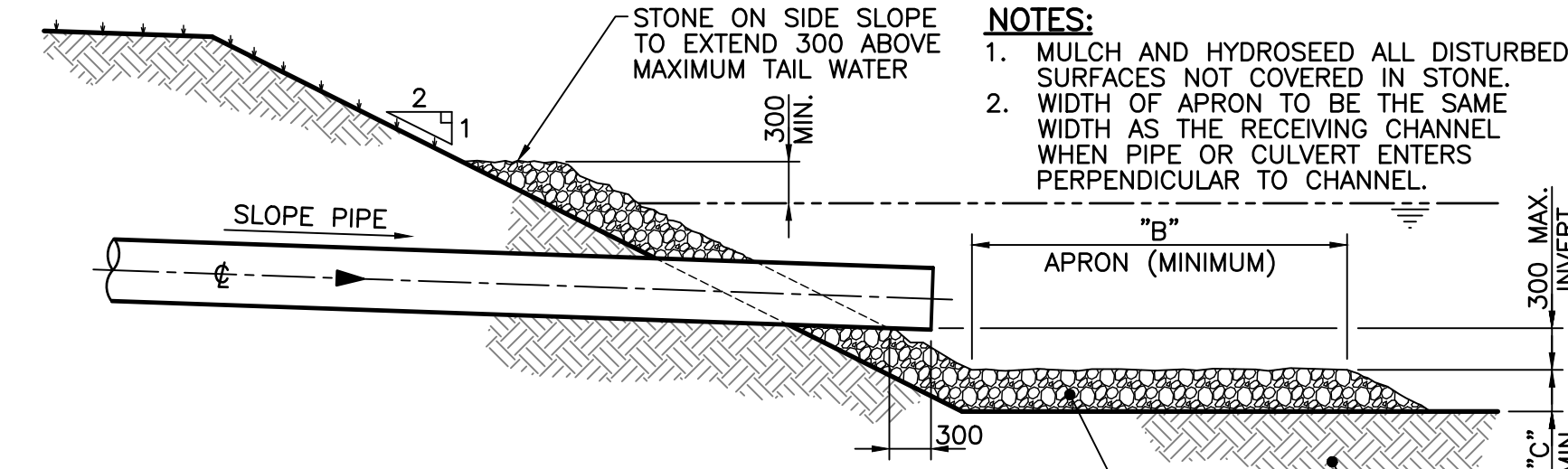
Contract No. 230813.02	Contract No. WOL005-2025
Date APR 2024	Scale AS NOTED
Designed DAT	Drawn NHM
Checked DAT	Approved DAT
Sheet No. 9	of 10
Drawing No. C09	

NOTES:

- ALL SLOPES NOT COVERED WITH GRAVEL SHALL BE PERMANENTLY STABILIZED BY TOP SOILING AND HYDROSEEDING WITHIN TWO WEEKS AFTER FINAL GRADES ARE REACHED.
- TEMPORARY STABILIZATION MEASURES SUCH AS APPLICATION OF STRAW OR WOOD CHIPS SHALL BE USED TO PREVENT EROSION OF EXPOSED SOILS DURING CONSTRUCTION AND PRIOR TO REACHING FINISHED GRADES.

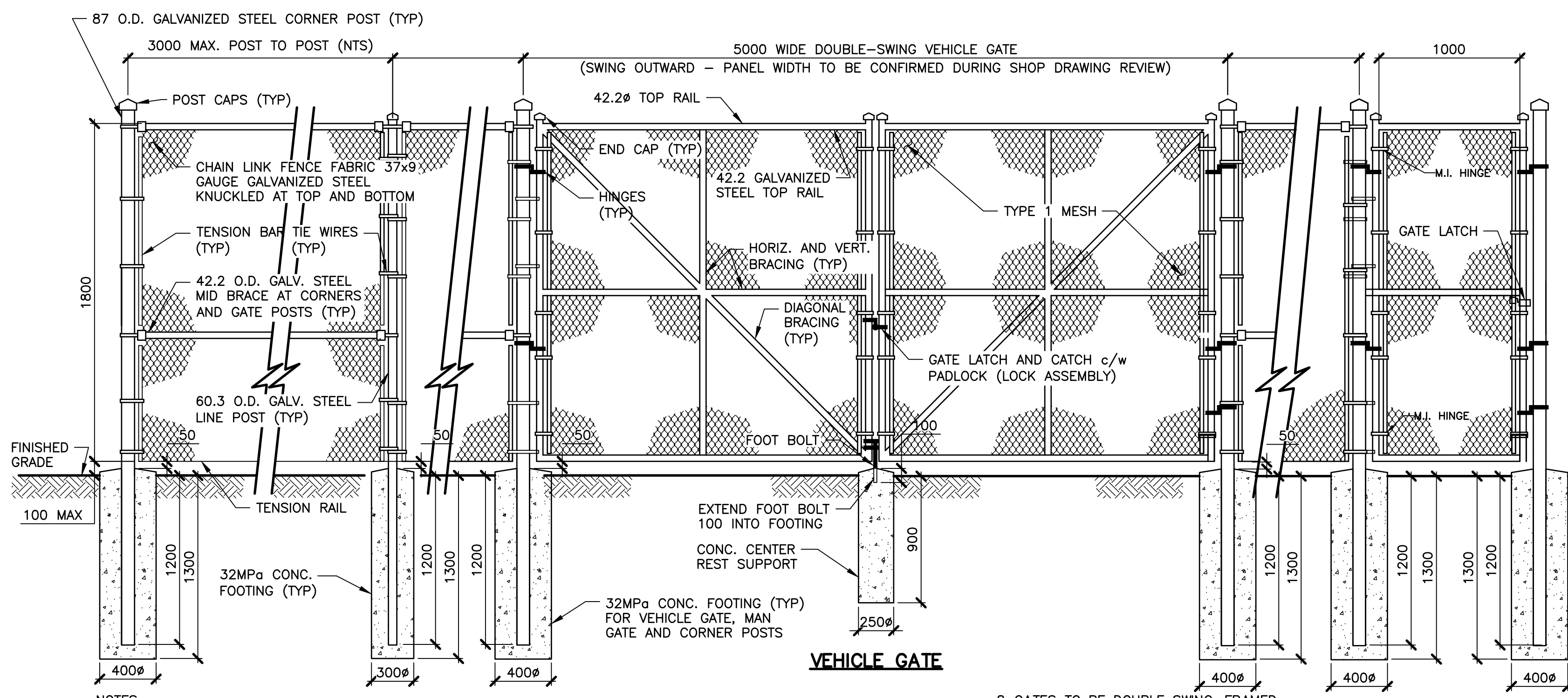


1 DETAIL— TYP. ALL WEATHER SITE ROAD
C02 1:30



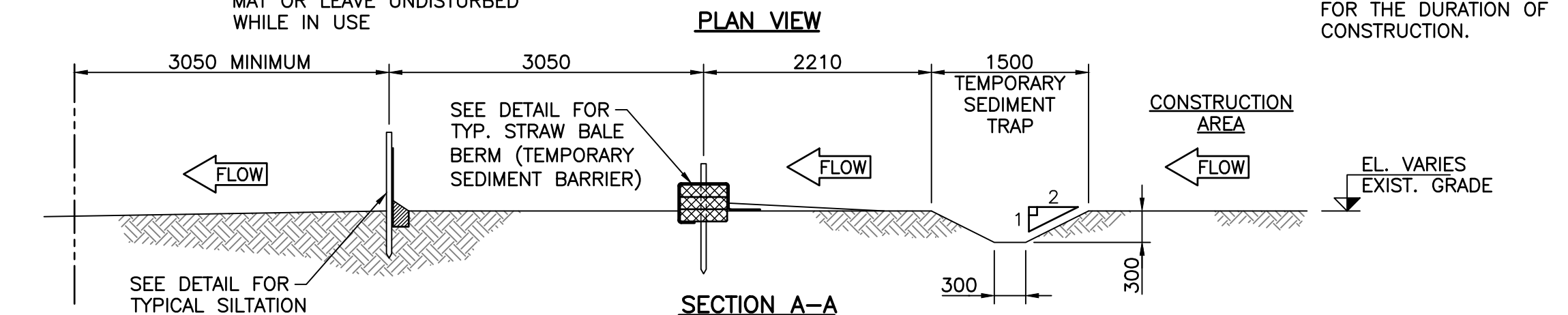
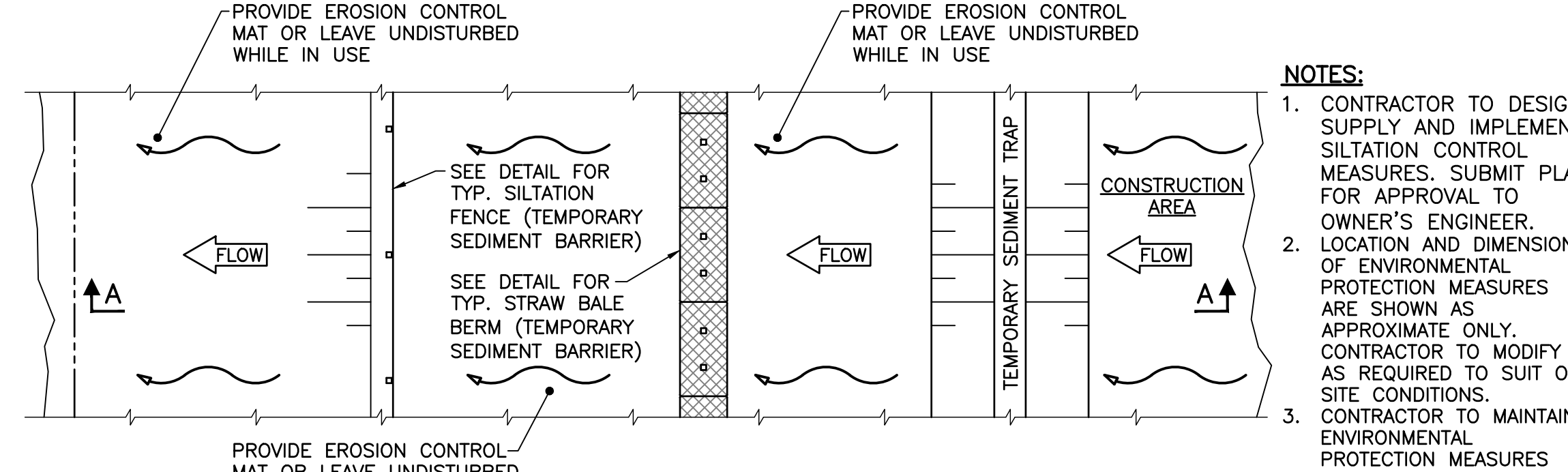
PIPE OR CULVERT NOMINAL OUTSIDE DIAMETER	"A" AVERAGE STONE SIZE	"B" APRON LENGTH	"C" APRON THICKNESS
UP TO 1200 (48")	150 (6")	6x PIPE DIA.	300 (12")
ABOVE 1200 (48") TO 2100 (84")	300 (12")	8x PIPE DIA.	450 (18")
ABOVE 2100 (84") TO 3000 (120")	600 (24")	10x PIPE DIA.	750 (30")

2 DETAIL— PIPE OR CULVERT OUTLET
C02 1:50

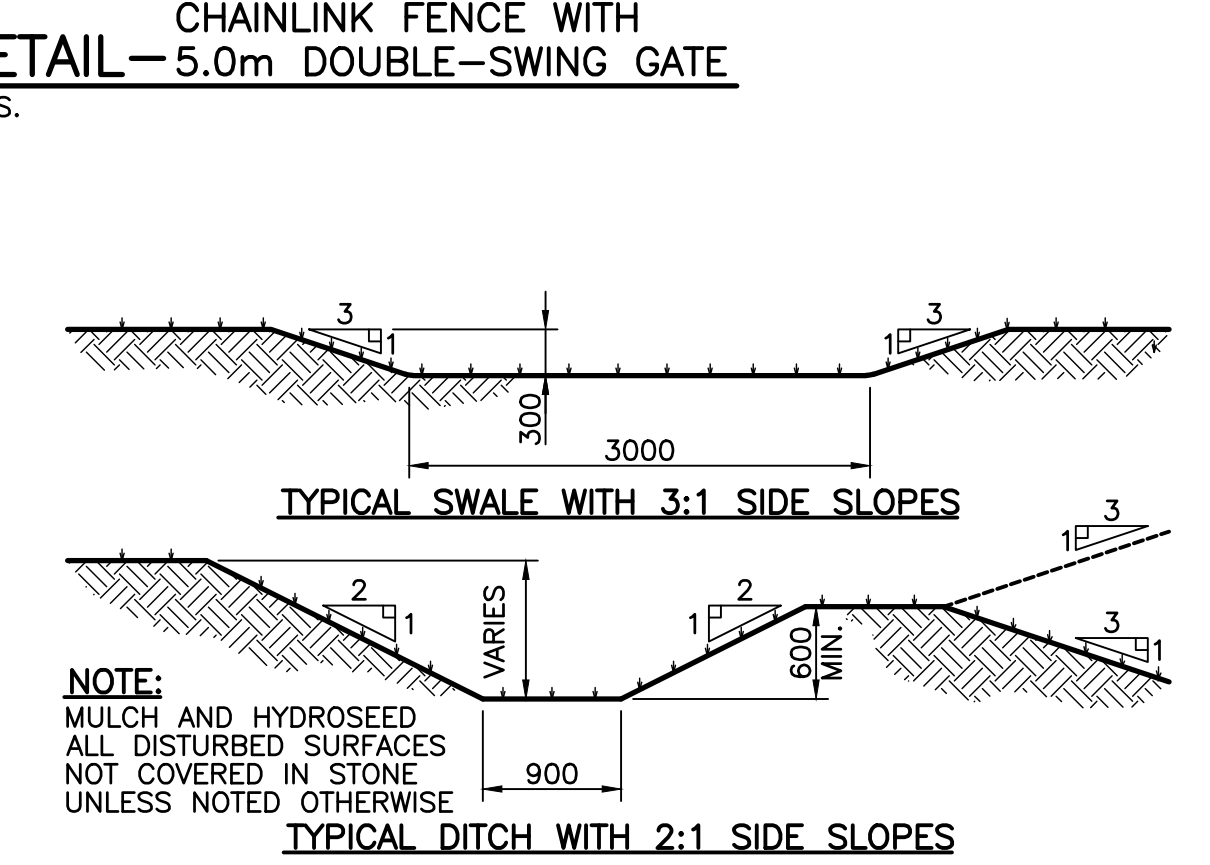


3 DETAIL— 5.0m DOUBLE-SWING GATE
C02 N.T.S.

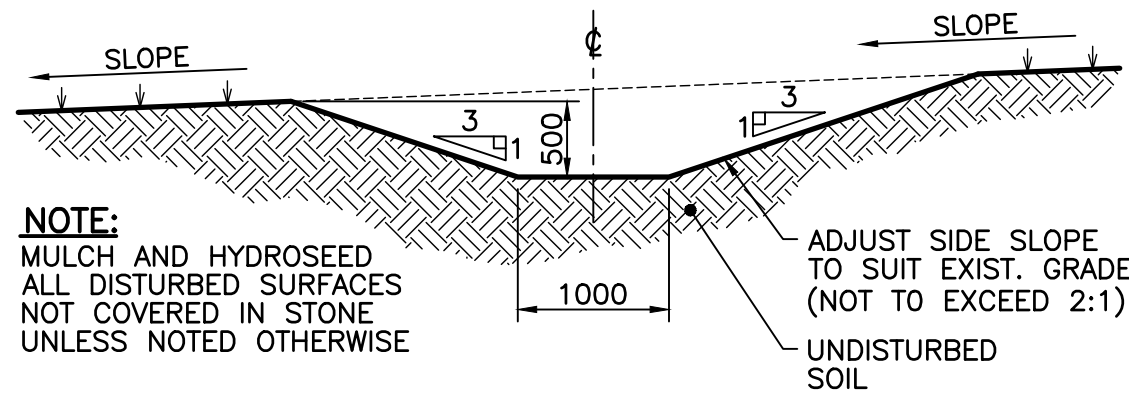
- INSTALL CORNER POSTS WHERE CHANGES IN ALIGNMENT EXCEED 10'.
- INSTALL BRACE BETWEEN END AND GATE POSTS AND NEAREST LINE POST. INSTALL BRACES ON BOTH SIDES OF CORNER AND STRAINING POSTS.
- INSTALL OVERHANG TOPS AND CAPS.
- PLACE TENSION BAR BANDS @ 3000 INTERVALS.
- SECURE FABRIC TO TOP RAILS, LINE POSTS AND BOTTOM TENSION RAIL WITH TIE WIRES AT 450mm INTERVALS.
- ALL FENCE FABRIC, STEEL FRAMEWORK, GATES AND INSTALLATION TO CONFORM WITH CAN/CGSB-138.1 THROUGH 138.4.
- POSTS TO BE SCHEDULE 40, HOT DIPPED GALVANIZED STEEL COATED WITH A 3mil ELECTROSTATICALLY APPLIED POLYESTER COATING (BLACK) TO THE FOLLOWING SIZES:
POST DESCRIPTION O.D. O.D.
LINE POSTS 60 900
END, GATE, & CNR POSTS 87 400
RAILS 42 N/A
- GATES TO BE DOUBLE SWING, FRAMED WITH 42 O.D. FRAMING, 2.0mm WALL THICKNESS.
- PROVIDE CLEARANCES BETWEEN BOTTOM OF FENCE AND GROUND SURFACE OF 150mm.



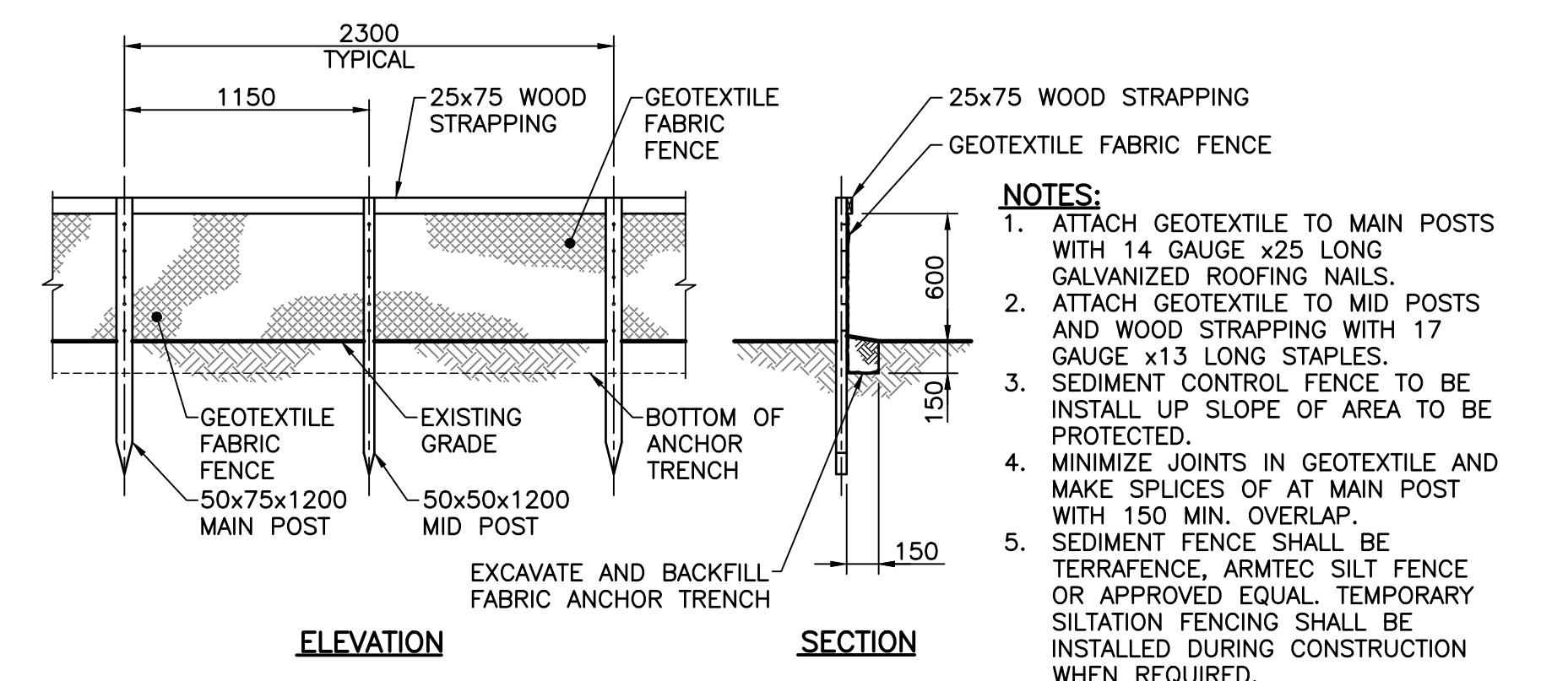
4 DETAIL— SEDIMENT CONTROL LAYOUT
C02 1:50



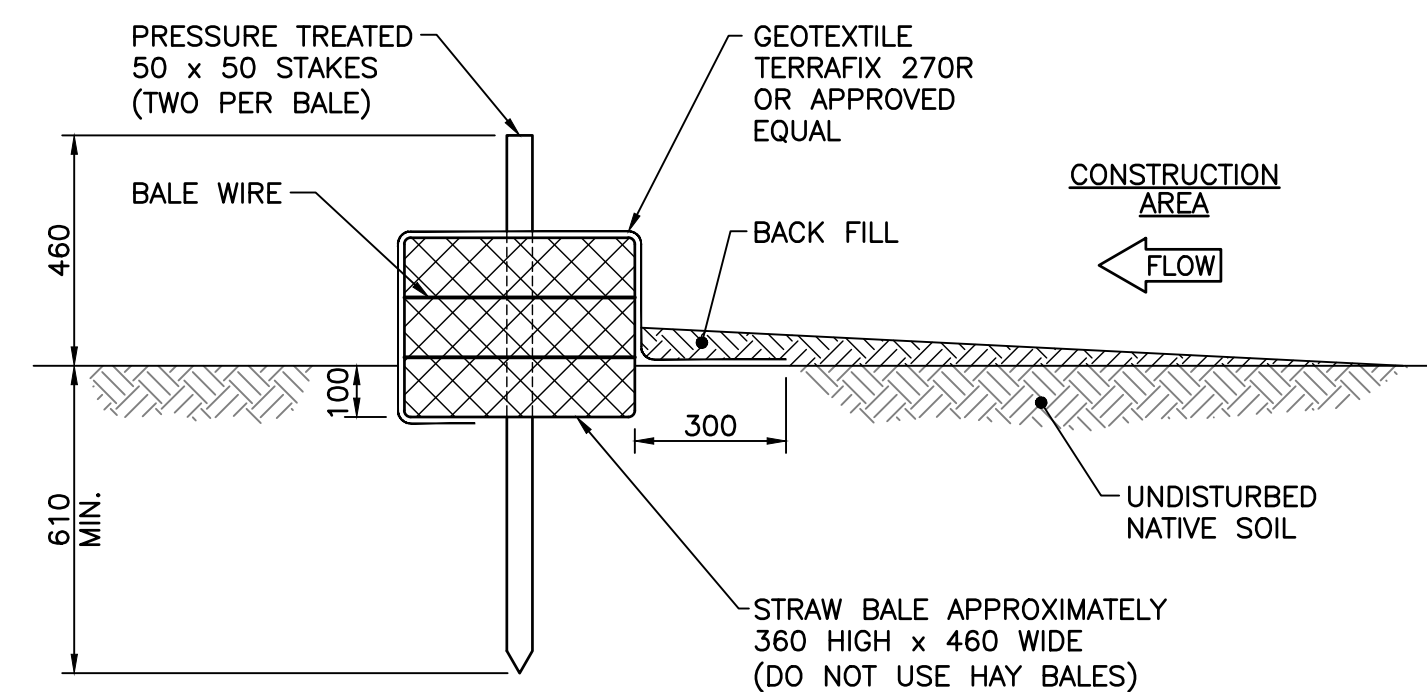
5 DETAIL— DRAINAGE DITCH AND SWALE
C02 1:50



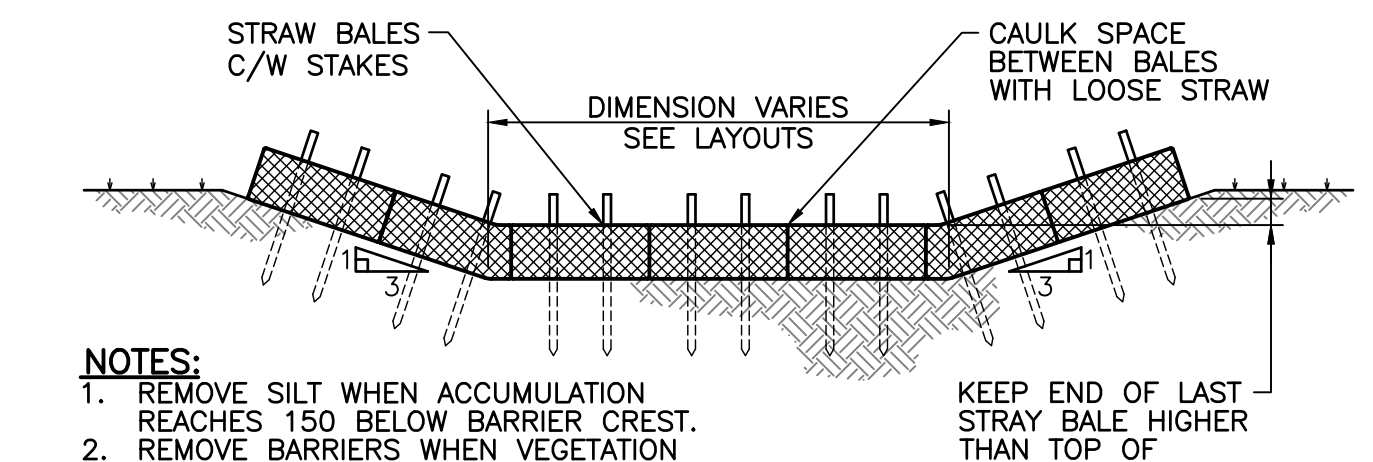
6 DETAIL— TYPICAL INTERCEPTOR DITCH
C02 1:50



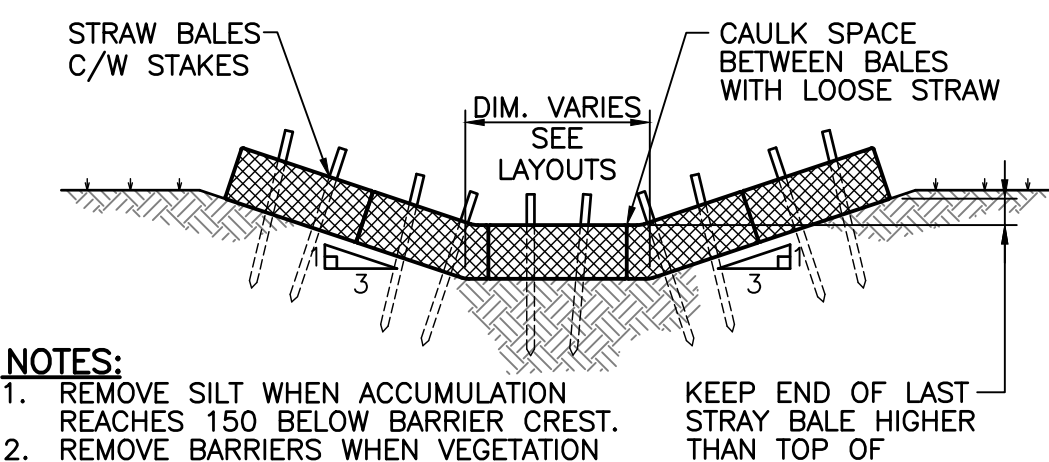
7 DETAIL— TYPICAL SILTATION FENCE
C01 1:30



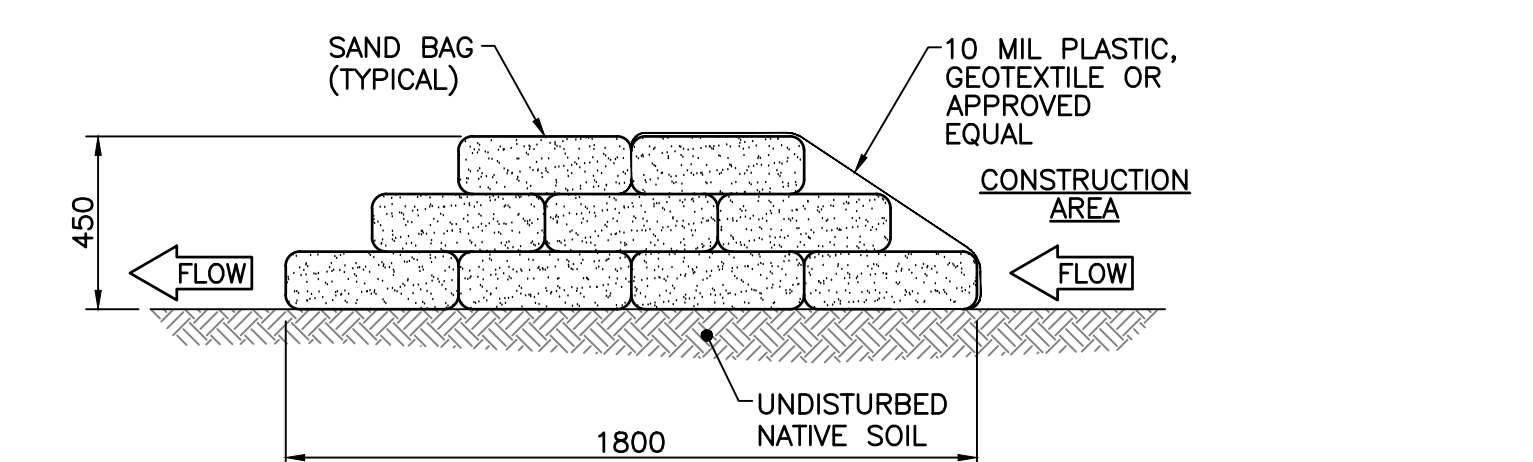
8 DETAIL— TYPICAL STRAW BALE BERM
C01 1:15



9 DETAIL— SEDIMENT BARRIER IN SWALE
C01 1:50



10 DETAIL— SEDIMENT BARRIER IN DITCH
C01 1:50



11 DETAIL— TYPICAL SAND BAG BERM
C01 1:20

- NOTES:**
- DRAWINGS IN GENERAL ARE TO SCALE BUT FIGURED DIMENSIONS TAKE PRECEDENCE. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACCURACY OF INFORMATION SCALED FROM THE DRAWINGS.
 - ALL DIMENSIONS USE METRIC UNITS. DIMENSIONS SHOWN IN MILLIMETERS AND POINT ELEVATIONS AS METERS (UNLESS NOTED OTHERWISE).
 - SEE CIVIL DRAWING C01 FOR GENERAL NOTES.
 - SEE CIVIL DRAWING C08 TO C10 FOR DETAILS.

NOT FOR CONSTRUCTION

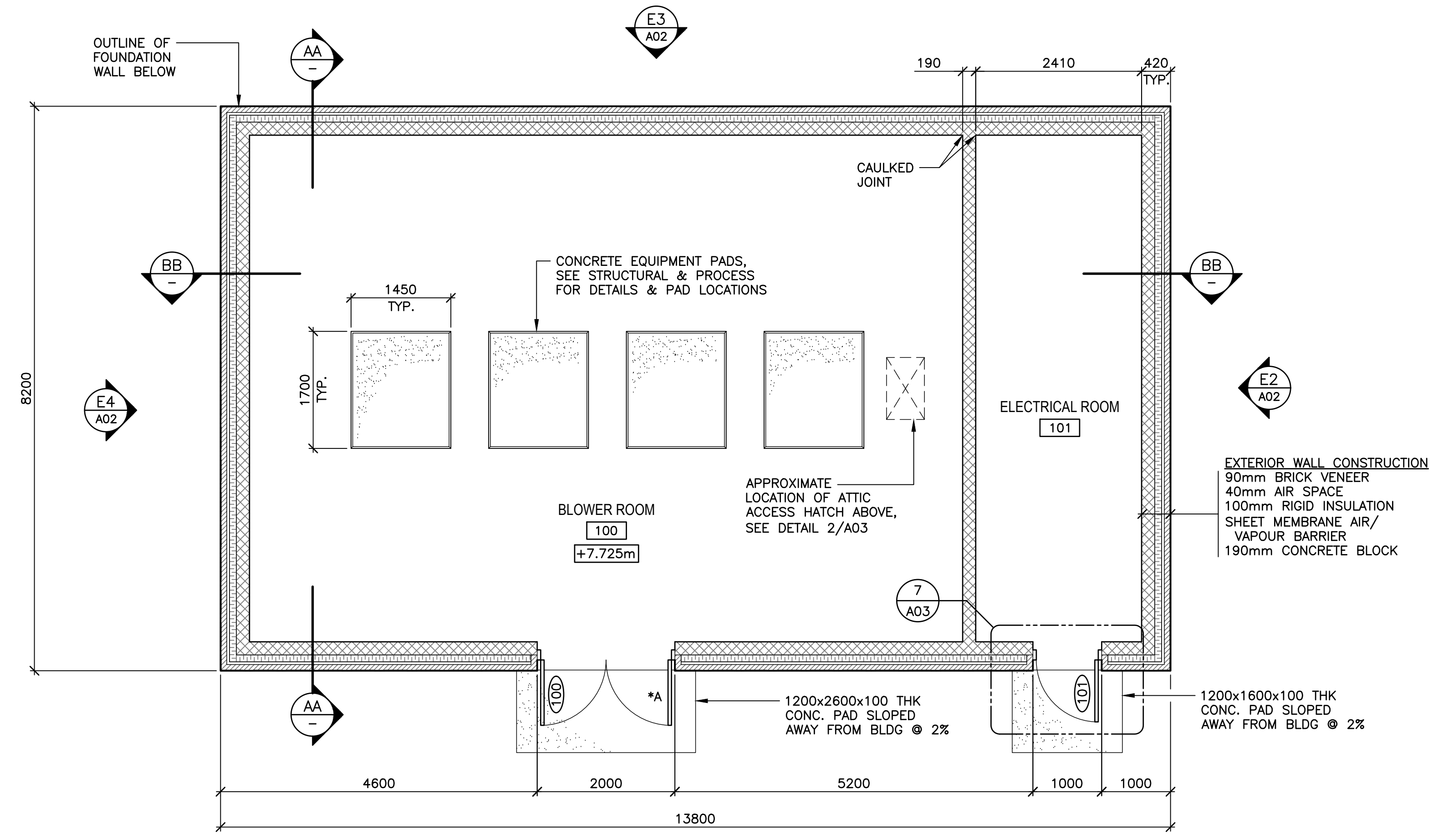
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BT

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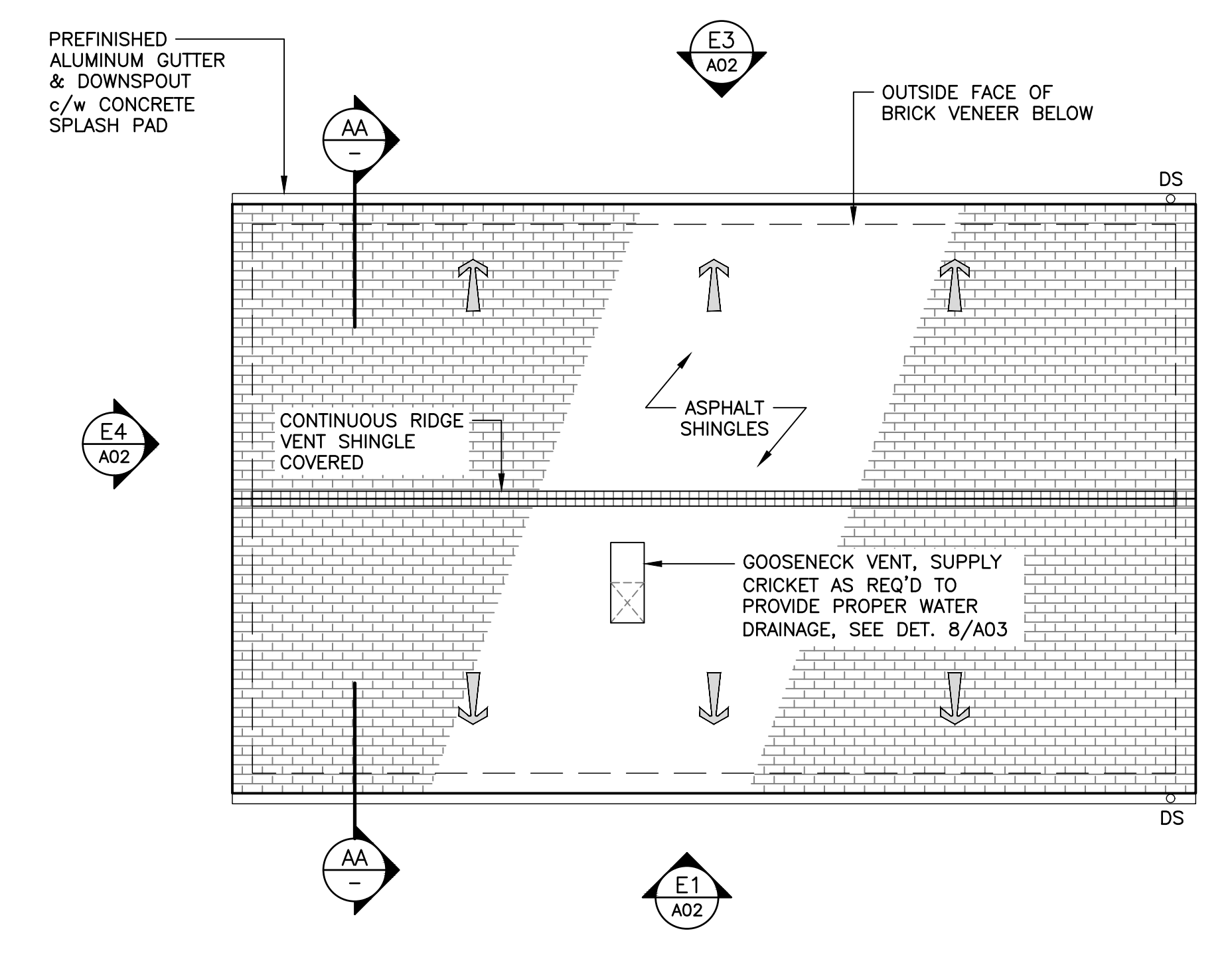
wolfville
TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES
CIVIL
CIVIL DETAILS
SHEET 2 OF 2

CBCL

Contract No. WOL005-2025
Date: APR 2024
Scale: AS NOTED
Designed: DAT
Drawn: NHM
Checked: DAT
Approved: DAT
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Drawing No. C10

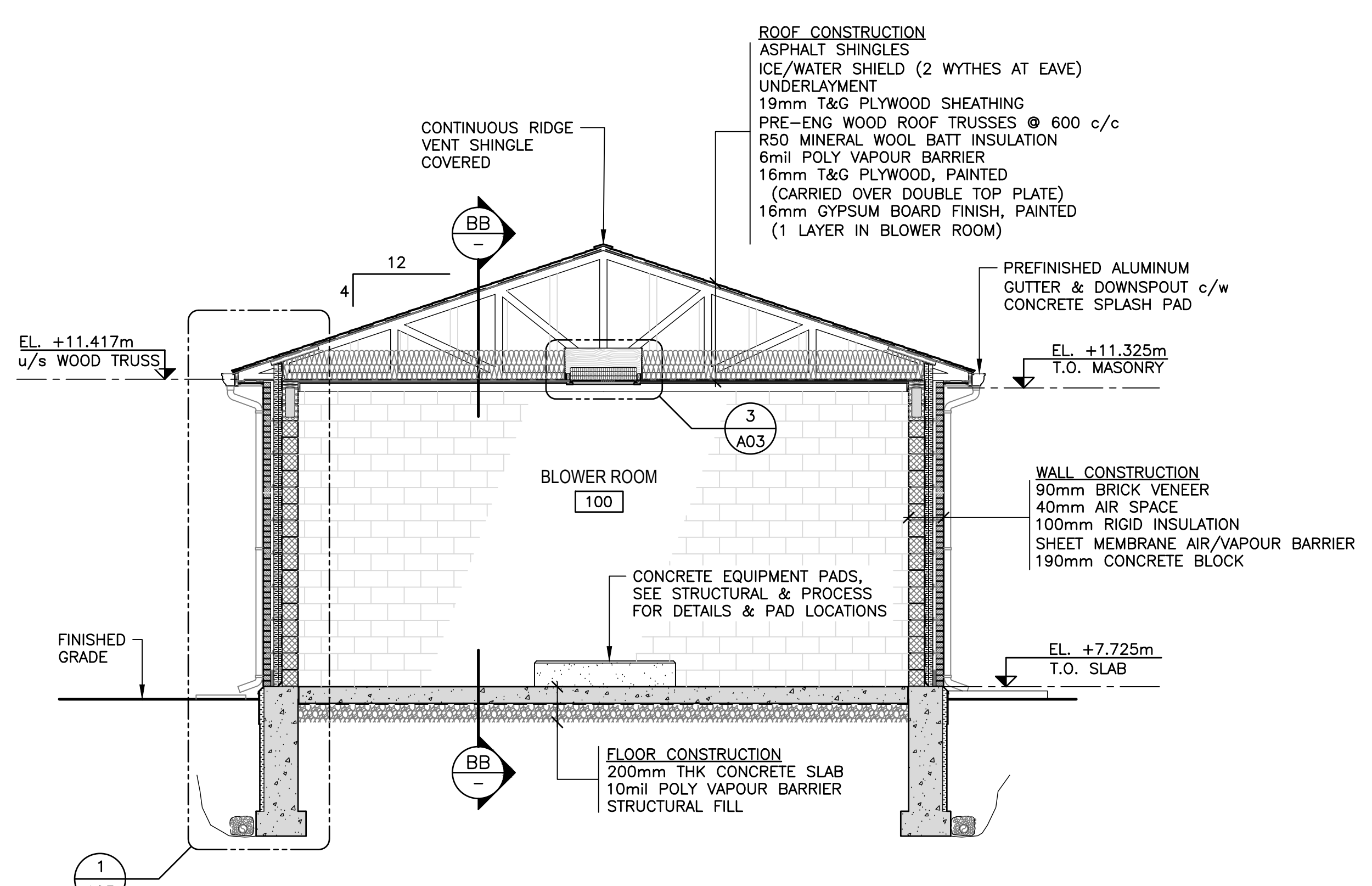


FLOOR PLAN
1:50

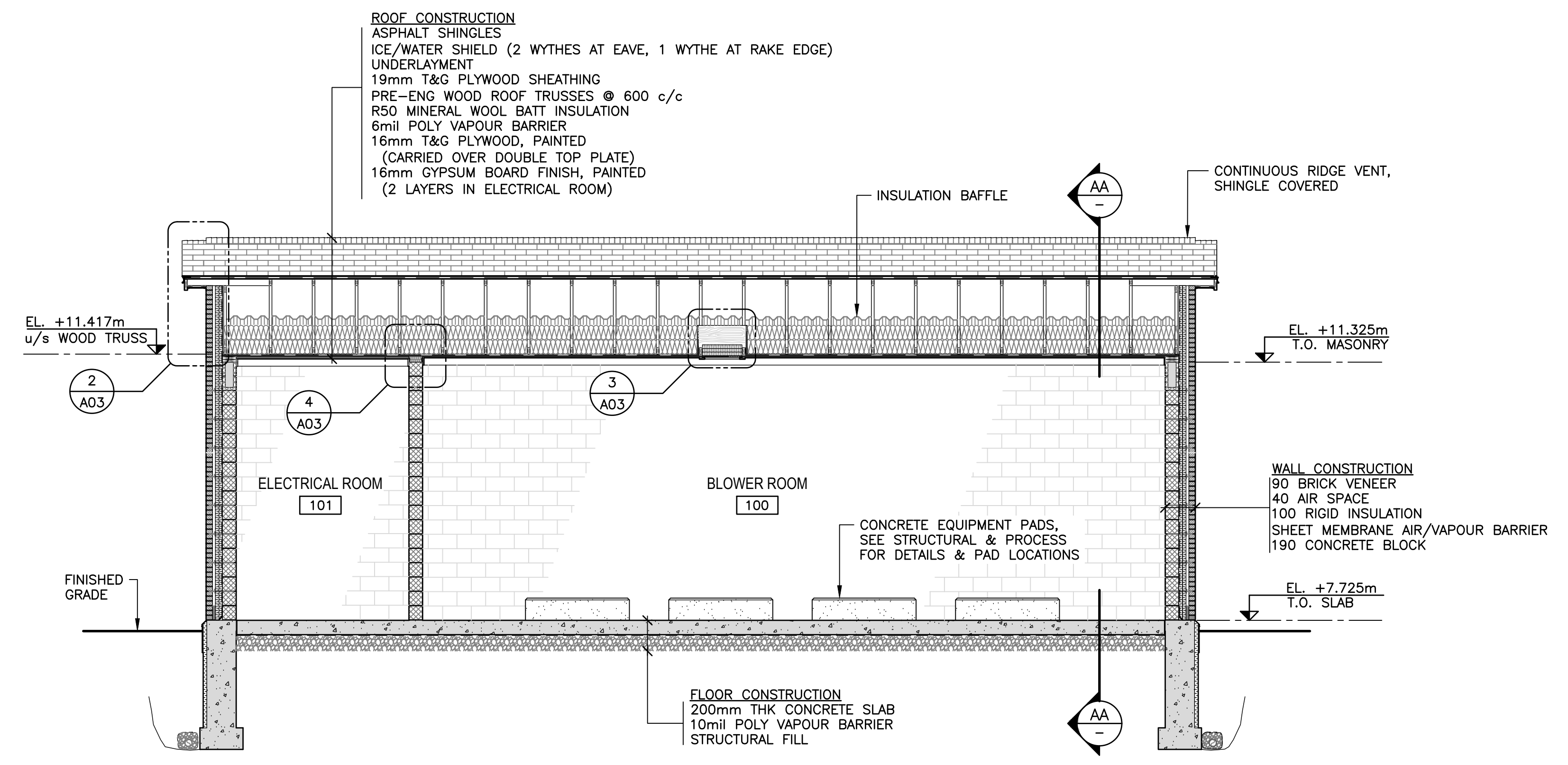


ROOF CONSTRUCTION
ASPHALT SHINGLES
ICE/WATER SHIELD (2 WYTHES AT EAVE)
UNDERLAYMENT
19mm T&G PLYWOOD SHEATHING
PRE-ENG WOOD ROOF TRUSSES @ 600 o.c.
R50 MINERAL WOOL BATT INSULATION
6mil POLY VAPOUR BARRIER
16mm T&G PLYWOOD, PAINTED
(CARRIED OVER DOUBLE TOP PLATE)
16mm GYPSUM BOARD FINISH, PAINTED
(REFER TO FINISH SCHEDULE)

ROOF PLAN
1:75



SECTION AA
1:50



SECTION BB
1:50

- NOTES:**
- CONTRACTOR TO CONFIRM ALL SITE CONDITIONS AND DIMENSIONS.
 - ALL WALL, FLOOR, AND ROOF PENETRATION LOCATION AND SIZES TO BE COORDINATED WITH MECHANICAL, ELECTRICAL, AND STRUCTURAL.

- LEGEND:**
- DS DOWNSPOUT LOCATION
 - XXX DOOR TAG, SEE DOOR SCHEDULE
 - DIRECTION OF WATER FLOW
 - *A ACTIVE DOOR LEAF

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

Revision of Issue

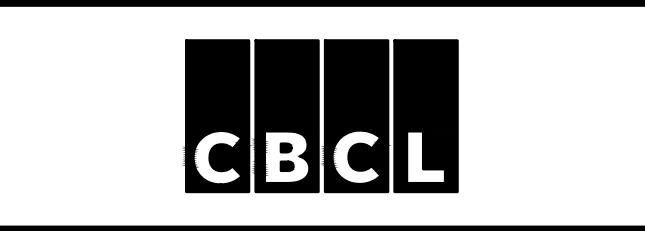
wolfville

TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

ARCHITECTURAL

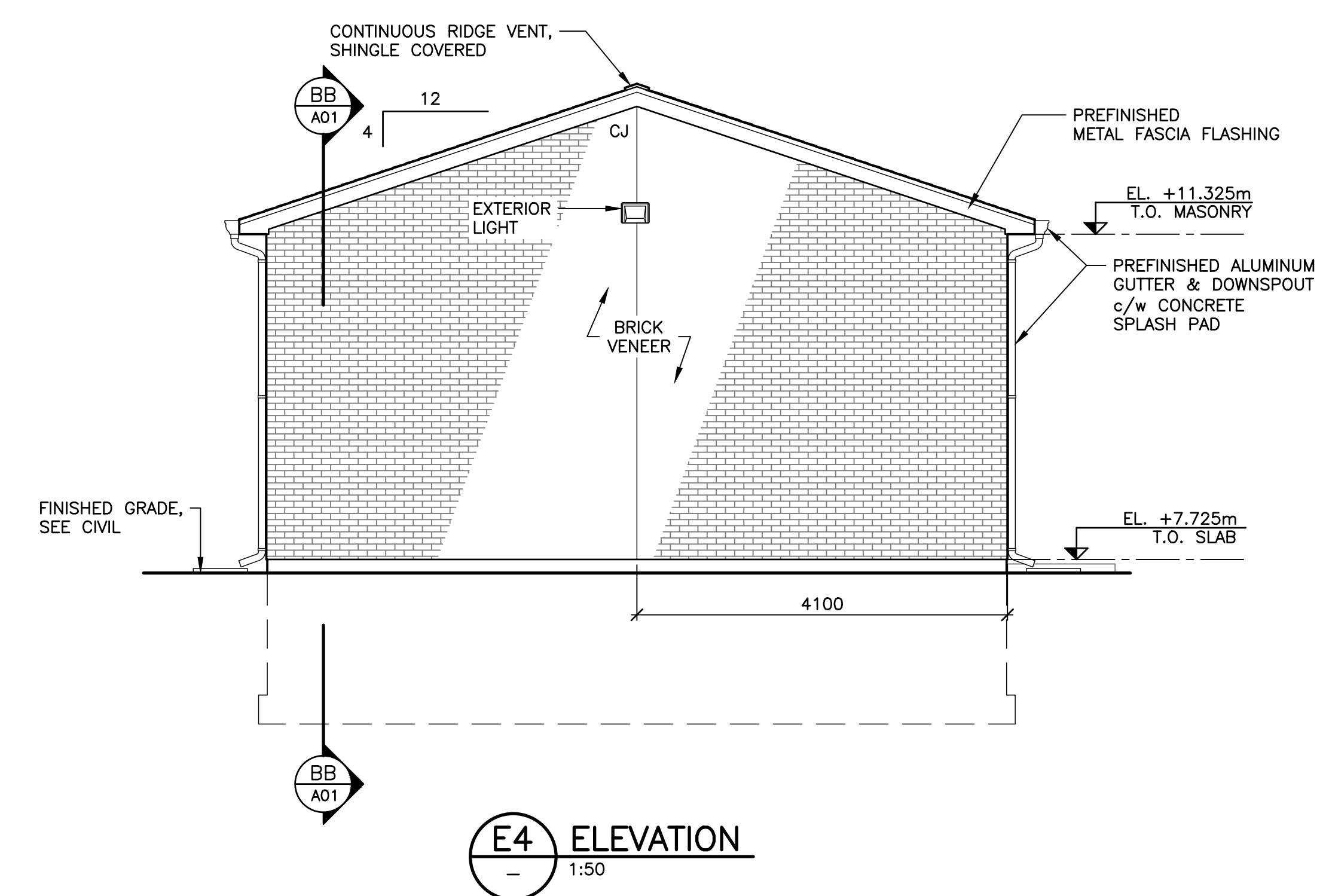
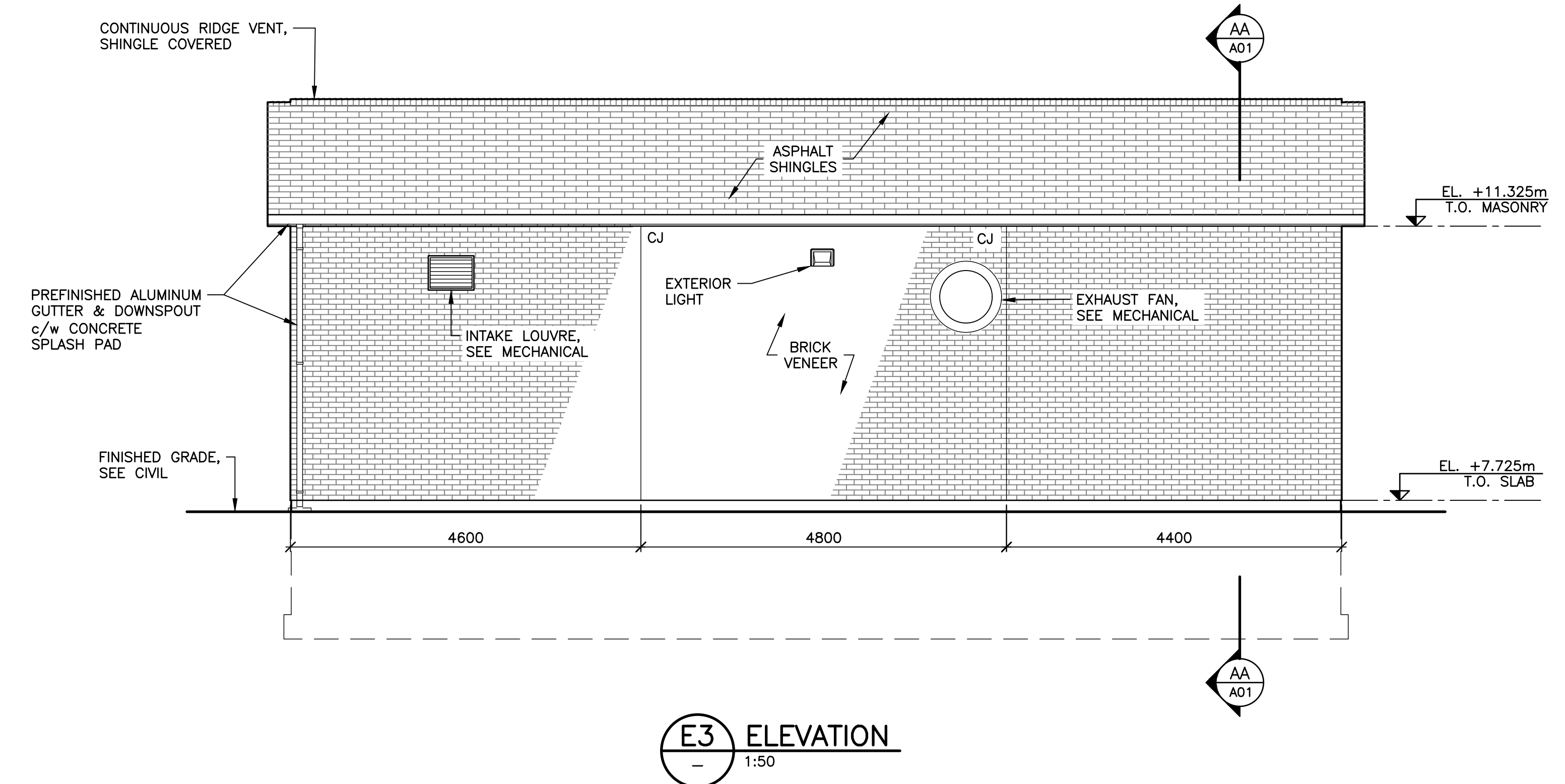
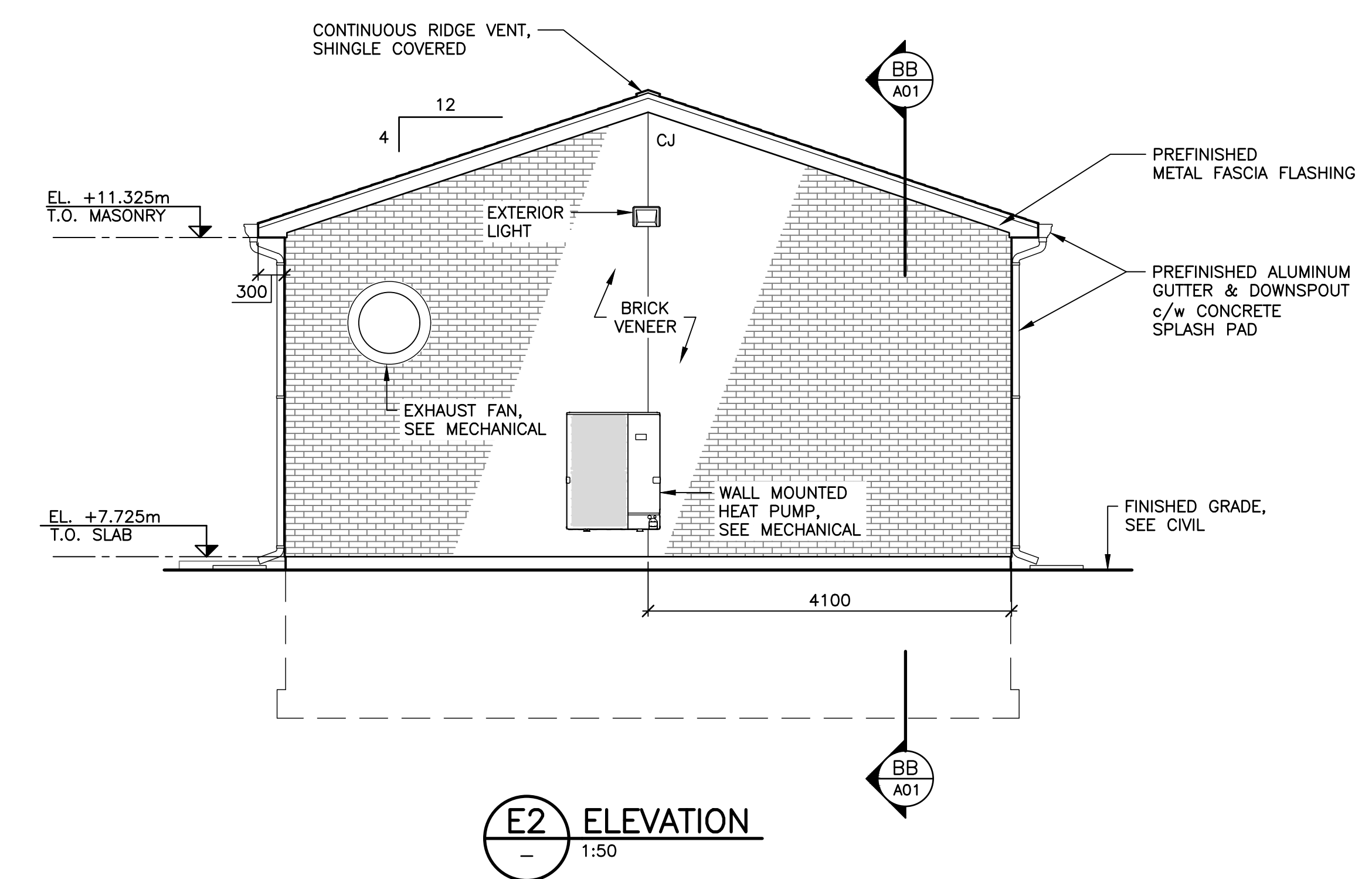
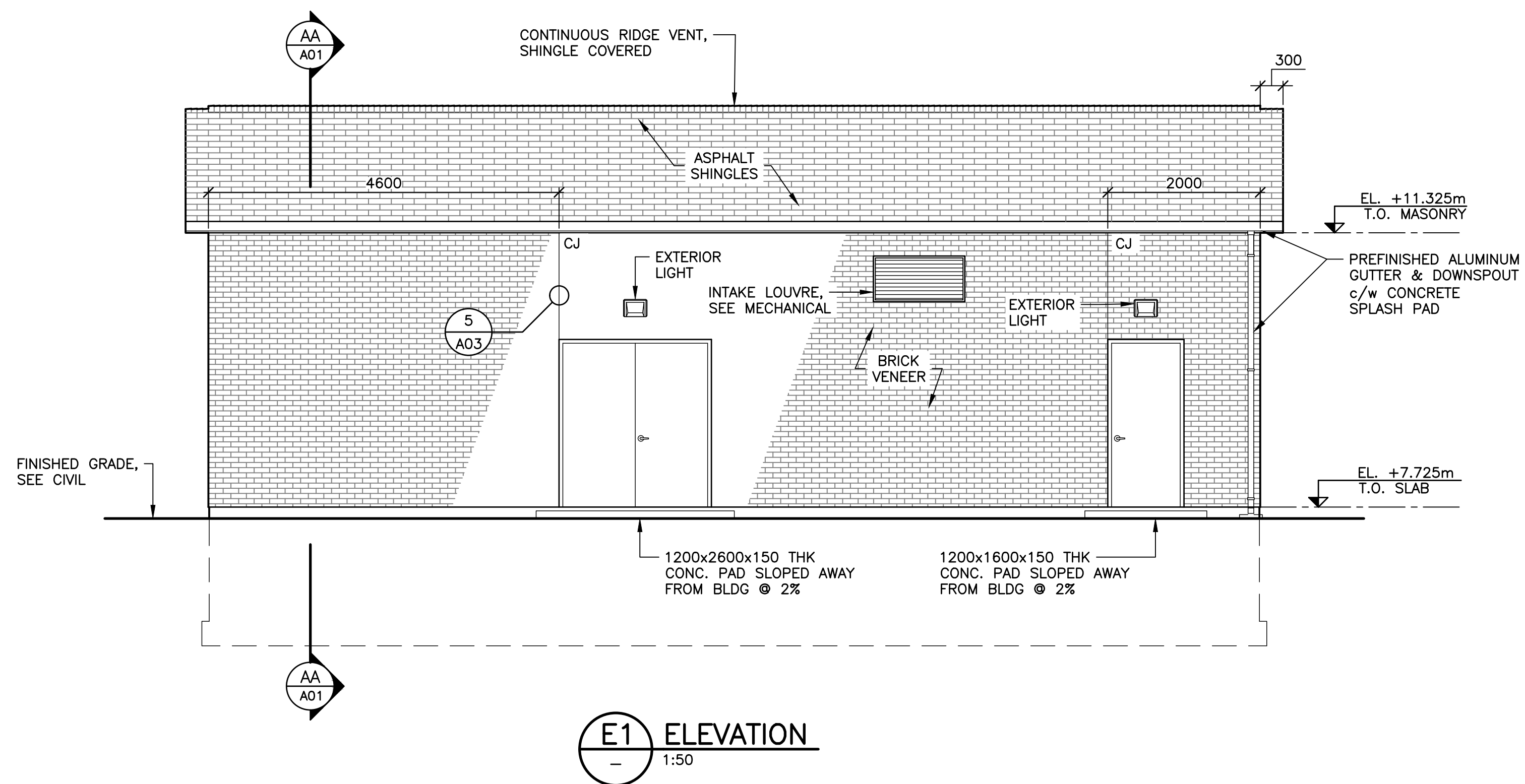
BLOWER BUILDING PLANS AND SECTIONS



Contract No. 230813.02	Scale AS NOTED
Date APR 2024	Drawn JVP
Designed MRH	Approved DAT
Checked MRH	Approved DAT
Sheet No. 1	of 3
A01	

- NOTES:**
1. CONTRACTOR TO CONFIRM ALL SITE CONDITIONS AND DIMENSIONS.
 2. ALL WALL, FLOOR, AND ROOF PENETRATION LOCATION AND SIZES TO BE COORDINATED WITH MECHANICAL, ELECTRICAL, AND STRUCTURAL.

LEGEND:
CJ MASONRY VENEER CONTROL JOINT LOCATION



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No.	Description	Date	By
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Revision of Issue

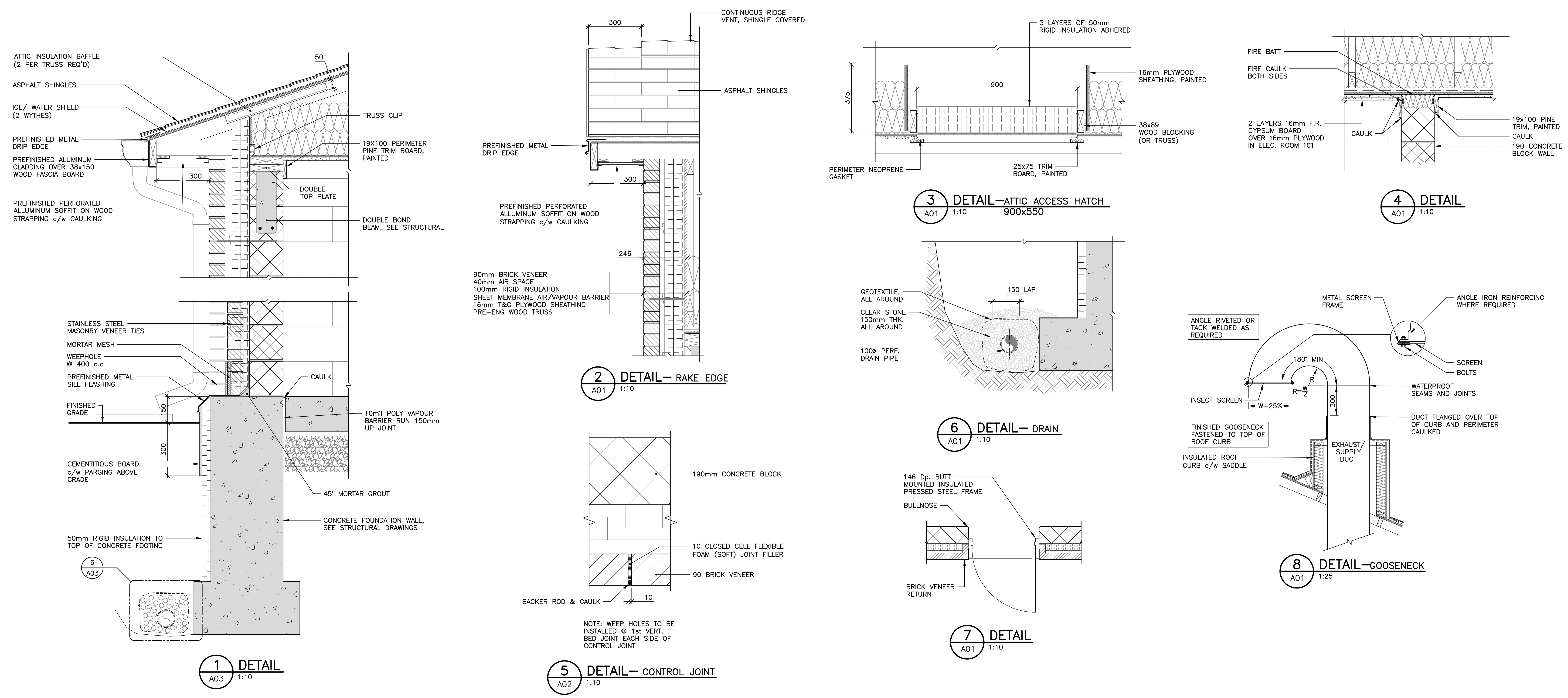
TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

ARCHITECTURAL
BLOWER BUILDING
ELEVATIONS

Contract No. 230813.02	Contract No. WOL005-2025
Date APR 2024	Scale AS NOTED
Designed MRH	Drawn JVP
Checked MRH	Approved DAT
Sheet No. 2	of 3
Drawing No. A02	

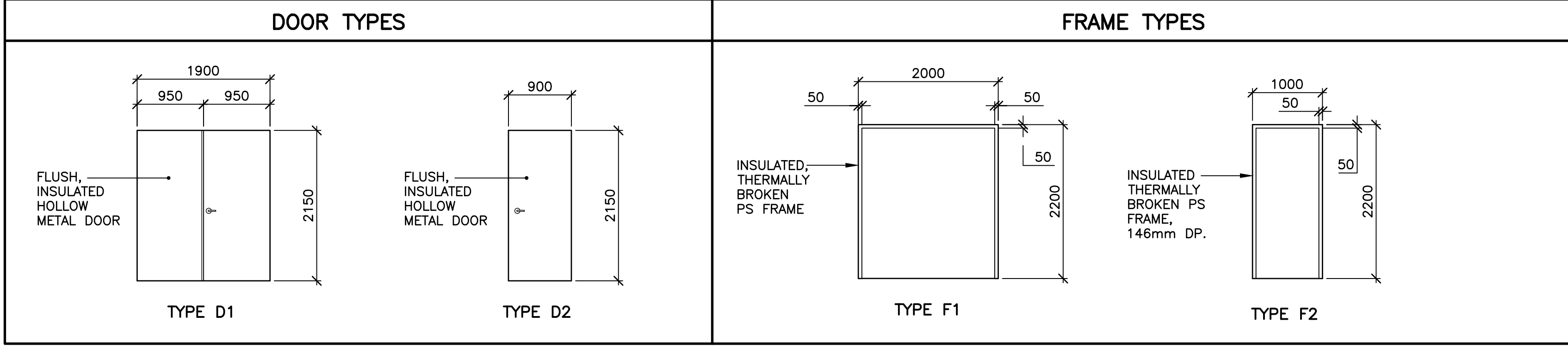
NOTES:

- CONTRACTOR TO CONFIRM ALL SITE CONDITIONS AND DIMENSIONS.
- ALL WALL, FLOOR, AND ROOF PENETRATION LOCATION AND SIZES TO BE COORDINATED WITH MECHANICAL, ELECTRICAL, AND STRUCTURAL.



ROOM FINISH SCHEDULE										
ROOM	No.	FLOOR		BASE	WALL		CEILING			NOTES
		MATERIAL	FINISH		MATERIAL	FINISH	MATERIAL	FINISH	HEIGHT	
BLOWER ROOM	100	CONCRETE	EP	-	CB	PAINT	1 LAYER 16mm GYPSUM BOARD	PAINT	3660mm A.F.F.	
ELECTRICAL ROOM	101	CONCRETE	EP	-	CB	PAINT	2 LAYERS 16mm GYPSUM BOARD	PAINT	3676mm A.F.F.	1 HOUR FIRE RATED ROOM. FIRE SEAL ALL WALL PENETRATIONS

DOOR SCHEDULE																	
DOOR NO.	FROM	TO	HAND	TYPE	MATERIAL	GLASS	SIZE	FINISH	HDWR TYPE	DOOR & FRAME RATING	FRAME				REMARKS		
											TYPE	MATERIAL	GLASS	SIZE		MOUNT	FINISH
100	EXTERIOR	100	LHR/RHR	D1	HMD/IN	-	2-950X2150X45	PAINT	1	-	F1	PS/TB/IN	-	146mm Dp.	BUTT	PAINT	RIGHT HAND DOOR ACTIVE
101	EXTERIOR	101	RHR	D2	HMD/IN	-	900X2150X45	PAINT	2	-	F2	PS/TB/IN	-	146mm Dp.	BUTT	PAINT	



HARDWARE TYPES			
HARDWARE TYPE 1:			
6 BUTT HINGES	FBB191 114 X 102	NRP	C26D
1 EXIT DEVICE	6008-PB-440F		626
1 DOOR CLOSER	351-P3	EN	C26D
1 OVERHEAD STOP	598H	AL	AL
1 ASTRAGAL	W-8	305	AL
2 SURFACE BOLTS	276D		C26D
1 THRESHOLD	CT-47	AL	AL
1 WEATHERSTRIPPING SET	W-15 +W-22 @ ASTRAGAL		AL
2 DOOR SWEEPS	W-24S		AL
2 KICKPLATES	K10A	305	AL
HARDWARE TYPE 2:			
3 BUTT HINGES	FBB191 114 X 102	NRP	C26D
1 EXIT DEVICE	21-8913	LL	EN
1 DOOR CLOSER	351-P3	EN	C26D
1 OVERHEAD STOP	598H	AL	AL
1 THRESHOLD	CT-47	AL	AL
1 WEATHERSTRIPPING SET	W-15		AL
1 DOOR SWEEP	W-24S		AL
1 KICKPLATE	K10A	305	AL
HARDWARE MANUFACTURER'S PRODUCT NUMBERS USED IN THE SPECIFICATIONS ARE AS FOLLOWS:			
.1 HINGES - "STANLEY"			
.2 LOCKSET, ETC. - "YALE"			
.3 DOOR CLOSER - "SARGENT"			
.4 OVERHEAD STOP - "SARGENT"			
.5 KICKPLATE - "HAGER"			
.6 THRESHOLD - "K.N. CROWDER"			
.7 WEATHERSTRIPPING SET - "K.N. CROWDER"			
.8 DOOR SWEEPS - "K.N. CROWDER"			
.9 DOOR STOP - "HAGER"			

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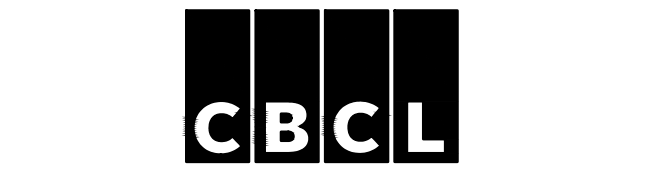
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

Revision or Issue



TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

ARCHITECTURAL
DETAILS AND SCHEDULES



Client No. 230813.02	Contract No. WOL005-2025
Date APR 2024	Scale AS NOTED
Designed MRH	Drawn JVP
Checked MRH	Approved DAT
Sheet No. 3	of 3
A03	

GENERAL NOTES:

1. ALL WORK AND MATERIALS TO CONFORM TO THE REQUIREMENTS OF THE NATIONAL BUILDING CODE OF CANADA, 2015, AND ANY APPLICABLE ACTS OF THE AUTHORITY HAVING JURISDICTION.
2. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT OF NOVA SCOTIA.
3. NO ALTERATIONS TO STRUCTURAL DETAILS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER. ALL OPENINGS IN SLABS OR WALLS ARE TO BE PRE-FORMED AND ALL HOLES SLEEVED. CONSTRUCTION ERRORS ARE TO BE DOCUMENTED AND REPORTED TO THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH SUBSEQUENT WORK.
4. PERIODIC AND DISCRETIONARY SITE OBSERVATIONS ARE MADE AT THE JOB SITE BY THE STRUCTURAL ENGINEER AND ARE NECESSARILY LIMITED IN SCOPE TO OBSERVATION OF WORK IN PROGRESS AT THE TIME OF THE SITE OBSERVATION. THESE SITE OBSERVATIONS DO NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO PROVIDE CONTINUOUS ON-SITE SUPERVISION OF ALL STRUCTURAL WORK TO ENSURE THAT BOTH THE INTENT AND DETAILS OF THE DRAWINGS AND SPECIFICATIONS ARE BEING FOLLOWED.
5. THE CONTRACTOR IS TO COORDINATE DETAILS SHOWN ON THE STRUCTURAL DRAWINGS WITH ALL OTHER DISCIPLINES DRAWINGS AND SPECIFICATIONS.
6. ALL DESIGN LOADS NOTED ON DRAWINGS ARE UNFACTORED UNLESS NOTED OTHERWISE.
7. ALL UNITS TO BE MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
8. REFER TO ARCHITECTURAL DRAWINGS FOR THE SIZES AND LOCATIONS OF ALL EXTERIOR AND INTERIOR DOOR AND WINDOW OPENINGS THROUGH ALL WALLS.
9. COORDINATE ALL DIMENSIONS WITH ALL OTHER DISCIPLINE DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
10. COORDINATE ALL CAST IN PLACE PIPING, CONDUITS AND GROUNDING WIRES WITH CIVIL/ELEC./MECH./PROC. DRAWINGS AS WELL AS CIVIL/ELEC./MECH./PROC. CONTRACTORS.
11. DRAWINGS IN GENERAL ARE TO SCALE, BUT FOLLOW FIGURED DIMENSIONS. THE DRAWINGS ARE NOT TO BE SCALED.

FOUNDATION NOTES:

1. FOUNDATIONS ARE DESIGNED TO BEAR ON FULLY COMPACTED ENGINEERED FILL WITH A MINIMUM FACTORED GEOTECHNICAL BEARING RESISTANCE AT ULTIMATE LIMIT STATES (ULS) OF 150 kPa AND A MINIMUM FACTORED GEOTECHNICAL BEARING RESISTANCE AT SERVICEABILITY LIMIT STATES (SLS) OF 100 kPa, AS PER CBCL LIMITED REPORT DATED AUGUST 16, 2024, PROJECT# 230813.01.
2. ALL ENGINEERED (STRUCTURAL) FILL AND BACKFILLING IS TO BE PLACED UNDER THE CONTINUOUS SUPERVISION OF THE GEOTECHNICAL ENGINEER.
3. THE GEOTECHNICAL ENGINEER TO INSPECT ALL PROPOSED BEARING SURFACES AND CONFIRM THAT THE FACTORED GEOTECHNICAL BEARING RESISTANCE STATED IN THE GEOTECHNICAL REPORT CAN BE ACHIEVED PRIOR TO PLACEMENT OF ANY CONCRETE IN FOOTINGS, AND THAT BEARING SURFACE IS FREE FROM FROST AND WATER. IF THE GEOTECHNICAL ENGINEER DEEMS BEARING SURFACE CAN NOT PROVIDE THE FACTORED GEOTECHNICAL BEARING RESISTANCE, THE CONTRACTOR IS TO LOWER FOOTINGS AS DIRECTED BY GEOTECHNICAL ENGINEER TO A LEVEL THAT CAN PROVIDE THE FACTORED GEOTECHNICAL BEARING RESISTANCE.
4. BACKFILLING AGAINST WALLS OR GRADE BEAMS TO PROCEED IN APPROXIMATELY EQUAL LIFTS ON BOTH SIDES OF THE WALL OR GRADE BEAM, UNLESS NOTED OTHERWISE.
5. NO PIPING/DUCTBANKS/CONDUIT ARE TO PASS UNDER ANY LOAD BEARING FOUNDATIONS OR WITHIN THEIR ASSOCIATED ZONE OF INFLUENCE. STEPPED/LOWERED FOUNDATIONS TO ALLOW PIPING/DUCTBANKS/CONDUIT TO BE SLEEVED THROUGH THE FOUNDATION WALL OR PASS OVER TOP OR OUT OF THE ZONE OF INFLUENCE OF THE ISOLATED FOOTING. TOP OF FOOTINGS TO BE A MINIMUM 50 BELOW ULS SLEEVES. CONTRACTOR TO COORDINATE WITH CIVIL/ELEC./MECH./PROC. DRAWINGS. THE LAYOUT OF STEPPED/LOWERED FOOTINGS SHOWN ON THE STRUCTURAL DRAWINGS IS SCHEMATIC ONLY, AND MAY NOT SHOW ALL LOCATIONS WHERE STEPPED/LOWERED FOOTINGS ARE REQUIRED. CONTRACTOR IS TO COORDINATE ALL STEPPED/LOWERED FOOTING LOCATIONS AND DEPTHS WITH ALL SUB-TRADES AND SUBMIT ALL PROPOSED FOOTING LOCATIONS AND DEPTHS TO ENGINEER PRIOR TO EXCAVATION FOR FOOTINGS, REINFORCING AND FORMWORK FABRICATION. REFER TO TYPICAL FOOTING DETAILS.

REINFORCED CONCRETE NOTES:

1. ALL CONCRETE, CONCRETE MATERIALS, FORMS, WORKING PROCEDURES AND THE LIKE TO CONFORM TO CSA A23.1:19, UNLESS NOTED OTHERWISE.
2. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS & CLASS OF EXPOSURE TO BE AS FOLLOWS UNLESS NOTED OTHERWISE ON DRAWINGS:
 - A. BUILDING FOUNDATIONS, FROST WALLS 25 MPa/F-2
 - B. INTERIOR SLAB ON GRADE AND HOUSEKEEPING PADS 25 MPa/F-2
 - C. MUD SLABS 20 MPa/N
 - D. EXTERIOR PADS 32 MPa/C-2
3. CONCRETE PROTECTIVE COVER TO REINFORCING STEEL TO BE AS FOLLOWS UNLESS NOTED OTHERWISE ON DRAWINGS:
 - CAST AGAINST GROUND - NO FORMWORK 75
 - EXPOSED TO EARTH OR WEATHER 60
 - INTERIOR SLAB ON GRADE 50
4. ALL REINFORCING BARS MUST BE ACCURATELY SUPPORTED ON CHAIRS TO MAINTAIN EXACT CONCRETE COVER.
5. CONSTRUCTION JOINTS TO BE LOCATED SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE. LOCATIONS TO BE AS SHOWN ON THE DRAWINGS OR CONTRACTOR IS TO SUBMIT PROPOSED CONSTRUCTION JOINTS FOR THE STRUCTURAL ENGINEER'S APPROVAL. CONSTRUCTION JOINTS TO BE KEVED AND REINFORCEMENT TO NOT BE INTERRUPTED.
6. ALL REINFORCING STEEL TO HAVE A MINIMUM YIELD POINT STRENGTH OF 400 MPa AND TO CONFORM TO CSA G30.18:21.
7. ALL W.W.F. TO CONFORM TO ASTM A1064/1064M-24.
8. UNLESS NOTED OTHERWISE, AT ALL SPLICE LOCATIONS, REINFORCING STEEL TO BE PROVIDED WITH A CLASS 'B' TENSION LAP, OR WHEN BARS OF DIFFERENT SIZES (SM OR SMALLER) ARE LAP SPLICED IN TENSION, THE SPLICE LENGTH TO BE THE LARGER OF THE DEVELOPMENT LENGTH OF THE LARGER BAR OR THE SPLICE LENGTH OF THE SMALLER BAR, AS PER CSA A23.3:19.
9. ALL HOOKS SHOWN TO BE STANDARD 90 OR 180 DEGREE HOOKS UNLESS NOTED OTHERWISE.
10. ALL POST-INSTALLED ANCHORS AND REBAR INTO CONCRETE TO BE INSTALLED WITH HIT-HY 200 V3 INJECTABLE ADHESIVE BY HILTI (OR APPROVED EQUAL), UNLESS NOTED OTHERWISE. INSTALL ALL ADHESIVE ANCHORS AS PER MANUFACTURERS INSTRUCTIONS. CHEMICAL ANCHORS TO BE INSTALLED BY AN EXPERIENCED APPLICATOR, TRAINED BY THE ANCHOR MANUFACTURER. CONTRACTOR TO SUBMIT TRAINING CERTIFICATE(S) TO OWNERS REPRESENTATIVE UPON REQUEST.

BLOWER BUILDING DESIGN LOADS:

1. BUILDING IMPORTANCE CATEGORY: POST-DISASTER
2. ROOF DESIGN LOADS:
 - A. DEFLECTION CRITERIA = L/300
 - B. SUPERIMPOSED TRUSS DEAD LOAD:
 - 0.30 kPa + SELF WEIGHT OF TRUSS (TOP CHORD)
 - 0.30 kPa + SELF WEIGHT OF TRUSS (BOTTOM CHORD)
 - C. MECHANICAL/ELECTRICAL DEAD LOAD ALLOWANCE = 0.50kPa (BOTTOM CHORD)
 - D. SNOW LOAD = 3.35 kPa
 - E. SNOW IMPORTANCE FACTOR:
 - $I_s = 1.25$ (ULS)
 - $I_s = 0.90$ (SLS)
3. WIND LOADS:
 - A. THE WIND LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH STATIC PROCEDURE AS OUTLINED IN THE 2015 NATIONAL BUILDING CODE
 - B. HOURLY WIND PRESSURES FOR TOWN OF WOLFVILLE:
 - $q_{30} = 0.54$ kPa
 - C. WIND IMPORTANCE FACTOR:
 - $I_w = 1.25$ (ULS)
 - $I_w = 0.75$ (SLS)
 - D. EXPOSURE FACTORS BASED ON OPEN TERRAIN:
 - $C_e = 0.90$; $C_w = 0.90$
 - E. TOPOGRAPHIC FACTOR:
 - $G = 1.00$
 - F. EXTERNAL PRESSURE AND GUST COEFFICIENT (LOW BUILDING) C_{pe}, C_{pi} BASED ON FIGURE 4.1.7.8-A OF THE BUILDING CODE WHICH VARIES BASED ON BUILDING SURFACE LOCATION
 - G. INTERNAL PRESSURE COEFFICIENT BASED ON BUILDING OPENING CATEGORY 3:
 - $p = -0.85$ kPa
 - $p = +0.85$ kPa
4. EARTHQUAKE LOADS:
 - A. THE EARTHQUAKE LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH THE EQUIVALENT STATIC FORCE PROCEDURE.
 - B. EARTHQUAKE IMPORTANCE FACTOR:
 - $I_e = 1.50$ (ULS)
 - C. SEISMIC HAZARD PARAMETERS FOR TOWN OF WOLFVILLE:
 - $S_h(0.2) = 0.117$, $S_h(0.5) = 0.085$, $S_h(1.0) = 0.054$, $S_h(2.0) = 0.030$, $S_h(5.0) = 0.008$, $S_h(10.0) = 0.003$, $PGA = 0.069$, $PGV = 0.073$
 - D. SITE CLASSIFICATION FOR SEISMIC SITE RESPONSE:
 - CLASS = E
 - E. ACCELERATION AND VELOCITY BASED SITE COEFFICIENTS:
 - $F_a = 1.64$, $F_v = 2.81$
 - F. TYPE OF SEISMIC FORCE RESISTING SYSTEM (SFRS), MODERATELY DUCTILE SHEAR WALLS:
 - $R_s = 2.0$, $R_p = 1.5$
 - G. FUNDAMENTAL LATERAL PERIOD USED FOR CALCULATIONS:
 - $T_n = 0.13$ SEC

TIMBER NOTES:

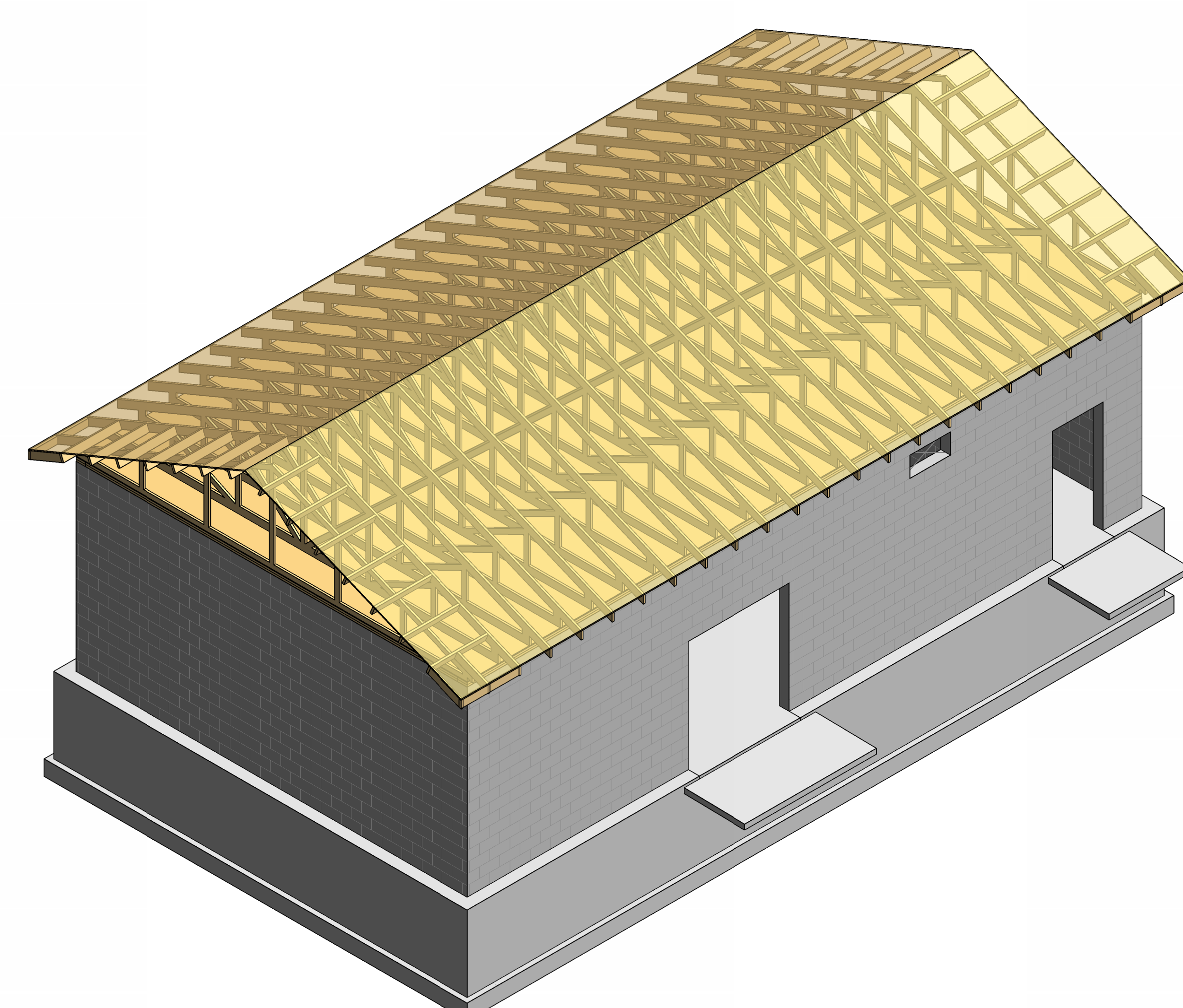
1. ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING STANDARDS:
 - A. CODE FOR ENGINEERING DESIGN IN WOOD CSA 086:19
 - B. NATIONAL BUILDING CODE OF CANADA, PART 4.
2. SHEATHING TO BE AS FOLLOWS:
 - A. ROOF 19 THK PLYWOOD
 - B. CEILING 16 THK PLYWOOD
3. ALL SHEATHING TO BE TRIPLE SPAN MINIMUM U.N.O
4. ALL WALL & SPIKES TO BE IN ACCORDANCE NBCC CLAUSE 9.23.3.
5. ROOF SHEATHING NAILING PATTERN TO BE AS INDICATED IN DETAIL 3/ S02.
6. CEILING SHEATHING NAILING PATTERN TO BE 64 LONG NAILS AT 100 c/c ALONG PANEL EDGES AND 64 LONG NAILS AT 100 c/c ALONG INTERMEDIATE FRAMING.
7. AT TRUSS BEARING POINTS WHERE THE COMPRESSION RESISTANCE PERPENDICULAR TO THE GRAIN IS EXCEEDED, THE TRUSS SUPPLIER TO PROVIDE BEARING PLATES.
8. PRIOR TO DEVELOPMENT OF TRUSS SHOP DRAWINGS, TRUSS DESIGNER TO CONTACT ENGINEER REGARDING GIRDER TRUSSES, TRUSS BEARING POINTS, ETC.
9. THE CONTRACTOR TO PROVIDE SUCH TEMPORARY BRACING AS IS REQUIRED BY THEIR ERECTION PROCEDURES AND THE ARRANGEMENT OF LOAD BEARING UNITS, UNTIL THE ROOF SHEATHING, JOISTS AND JOIST BRACING AND BRIDGING IS INSTALLED.
10. GABLE END TRUSSES TO HAVE VERTICAL WEB MEMBERS AT 600 c/c AND BOTTOM CHORD TO BE FULLY BEARING.
11. TRUSS MANUFACTURER TO DESIGN, SELECT, SUPPLY AND INSTALL ALL TRUSS TIE DOWNS, INCLUDING THE TRUSS TIE DOWNS FOR ANY GIRDER TRUSSES.
12. ALL TOP PLATES THAT BEAR ON MASONRY UNITS TO BE PRESSURE TREATED, U.N.O.
13. WALL TOP PLATE SPLICES TO BE LAPPED A MINIMUM OF 1200 AND HAVE 15 - 89 LONG CLINCHED NAILS EACH SIDE OF SPLICE.
14. ALL TIMBER CONNECTORS BY SIMPSON STRONG-TIE (OR APPROVED EQUAL), UNLESS NOTED OTHERWISE.

MASONRY NOTES:

1. ALL CONCRETE BLOCK WALLS TO BE OF STANDARD CONCRETE MASONRY UNITS, TO CSA A165 SERIES-14, AND CONFORM TO THE FOLLOWING CLASSIFICATION:
 - A. LOAD BEARING WALLS: H1/S1/A0
 - B. PARTITION WALLS: H1/S1/A0
2. ALL MASONRY MORTAR TO BE:
 - A. TYPE 'S' FOR ALL LOAD BEARING WALLS.
 - B. TYPE 'N' FOR PARTITION WALLS AND VENEER.
3. ALL REINFORCING IN MASONRY CORE FILLS TO BE LAPPED A MINIMUM CLASS 'B' TENSION LAP UNLESS NOTED OTHERWISE PROVIDE REINFORCEMENT FROM FOUNDATIONS TO MATCH CORE FILL REINFORCEMENT DIAMETER AND SPACING.
4. REINFORCING BARS TO CONFORM TO CSA G30.18:21, GRADE 400.
5. FOR DOWELS INTO FOUNDATIONS, SEE FOUNDATION AND ELEVATION DRAWINGS FOR DETAILS.
6. MINIMUM WALL REINFORCING AS PER MASONRY WALL REINFORCING SCHEDULE.
7. ALL MASONRY LINTELS TO BE SHORED UNTIL ENTIRE MASONRY WALL IS FULLY CURED.
8. PROVIDE 1 - 15M VERTICAL FULL HEIGHT AT EACH END OF WALL AND AT EACH SIDE OF OPENINGS UNLESS NOTED OTHERWISE.
9. PROVIDE 2 COURSE KNOCK OUT BOND BEAM WITH 1 - 15M CONTINUOUS CENTERED IN EACH COURSE AT TOP OF ALL MASONRY WALLS UNLESS NOTED OTHERWISE REINFORCING TO HAVE STD. HOOK AT EACH END OF WALL AND AT ALL OPENINGS.
10. GROUT INSPECTION PORTS AT THE BOTTOM OF WALLS TO BE PROVIDED IN THE FACE SHELL OF THE BLOCK AT ALL VERTICAL REINFORCING LOCATIONS. GROUTING OF WALLS TO NOT TAKE PLACE UNTIL THE ENGINEER HAS REVIEWED PLACEMENT OF REINFORCING STEEL.
11. THE CONTRACTOR TO PROVIDE SUCH TEMPORARY BRACING AS IS REQUIRED BY THEIR ERECTION PROCEDURES AND THE ARRANGEMENT OF LOAD BEARING UNITS UNTIL THE FLOOR FRAMING/ ROOF FRAMING AND FLOOR DECK/ROOF DECK HAVE BEEN INSTALLED.
12. SEE ARCHITECTURAL FOR MASONRY PARTITION WALL LOCATIONS. PROVIDE VERTICAL MOVEMENT JOINTS AT MAXIMUM 7600 SPACING (TYP.) AND WITHIN 3800 OF CORNER INTERSECTIONS U.N.O. CONTRACTOR TO SUBMIT PROPOSED LOCATION OF ALL VERTICAL MOVEMENT JOINTS PRIOR TO CONSTRUCTION.
13. ALL POST-INSTALLED ANCHORS INTO MASONRY TO BE INSTALLED WITH HIT-HY 270 INJECTABLE ADHESIVE BY HILTI (OR APPROVED EQUAL) AND HILTI HIT-SC SCREEN TUBES (HOLLOW), UNLESS NOTED OTHERWISE. INSTALL ALL ADHESIVE ANCHORS AS PER MANUFACTURERS INSTRUCTIONS. CHEMICAL ANCHORS TO BE INSTALLED BY AN EXPERIENCED APPLICATOR, TRAINED BY THE ANCHOR MANUFACTURER. CONTRACTOR TO SUBMIT TRAINING CERTIFICATE(S) TO OWNERS REPRESENTATIVE UPON REQUEST.

ABBREVIATIONS:

ADDL	ADDITIONAL
ARCH	ARCHITECTURAL
BOT	BOTTOM
CC	CENTER TO CENTER
CJ	CONSTRUCTION/CONTROL JOINT
CL	CLEAR
CONC	CONCRETE
CONT	CONTINUOUS
COORD	COORDINATE
CVR	COVER
D/W	COMPLETE WITH
DIA	DIAMETER
DM	DIMENSION
DN	DOWN
DWG	DRAWING
E.E	EACH END
E.F	EACH FACE
ELEC	ELECTRICAL
ELEV	ELEVATION
EMB	EMBEDDED OR EMBEDMENT
EQ	EQUAL
E.S	EACH SIDE
E.W	EACH WAY
FTG	FOOTING
HORIZ	HORIZONTAL
LG	LONG
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MRR	MIRROR
MNU	MASONRY MOVEMENT JOINT
N.T.S	NOT TO SCALE
PROC	PROCESS
REIN	REINFORCING
RECD	REQUIRED
SC	SAW CUT
SM	SIMILAR
S.O.G	SLAB ON GRADE
STD	STANDARD
T&B	TOP AND BOTTOM
THK	THICK
T.O	TOP OF
TYP	TYPICAL
U.N.O	UNLESS NOTED OTHERWISE
US	UNDERSIDE
VERT	VERTICAL
W	WITH



3D ISO NOTE:
3-DIMENSIONAL (3D) VIEWS ARE VISUAL REPRESENTATION OF THE PROJECT.
3D VIEWS ARE FOR GENERAL REFERENCE ONLY. 2-DIMENSIONAL (2D) CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL GOVERN.

3D ISO BLOWER BUILDING
N.T.S.

NOT FOR CONSTRUCTION

0	ISSUED FOR TENDER	MAR 11/25	CB
No	Description	Date	By

Revision or Issue

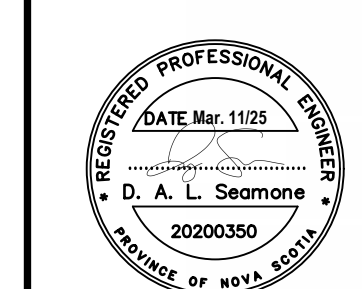
wolfville

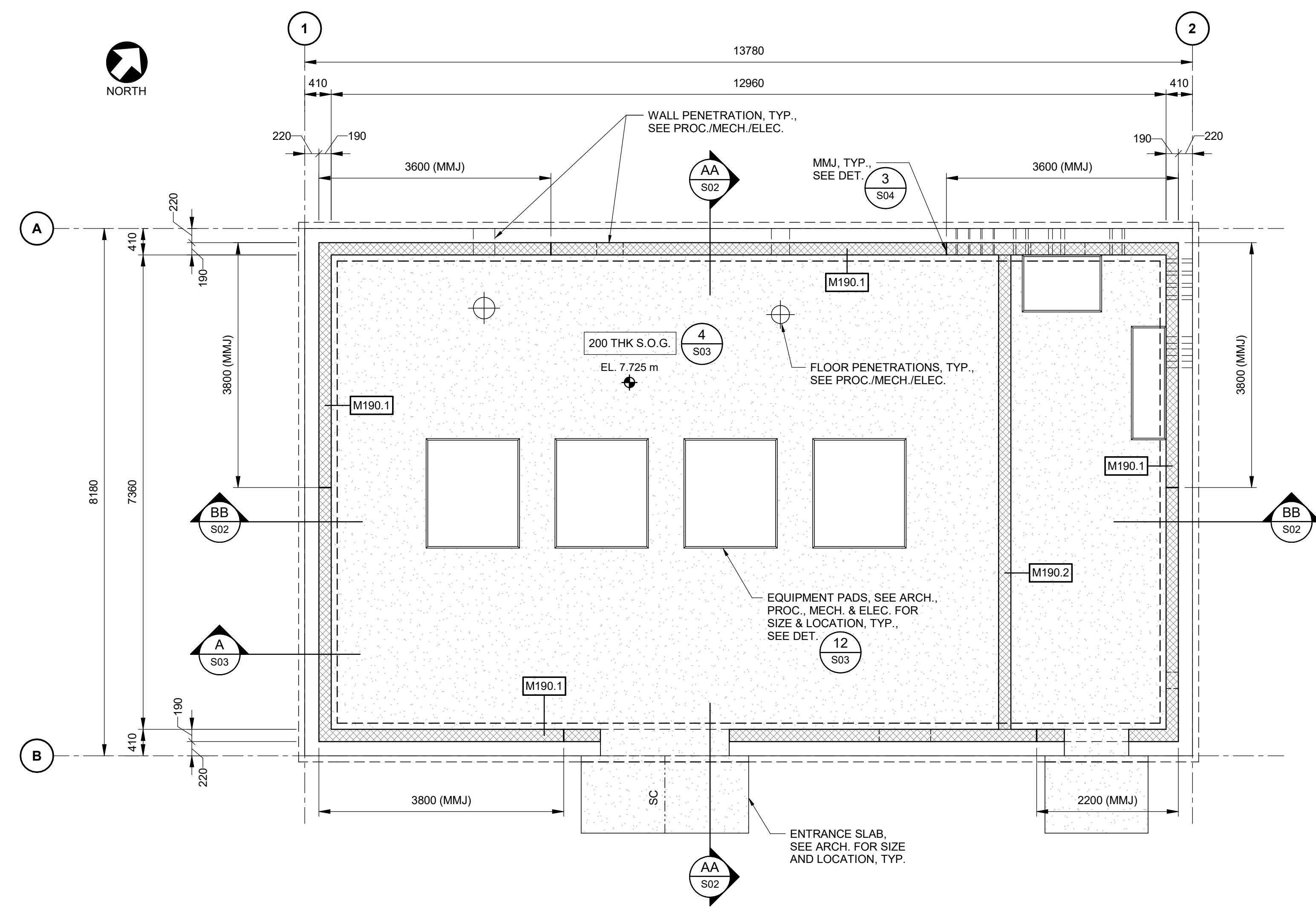
TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

STRUCTURAL
GENERAL NOTES

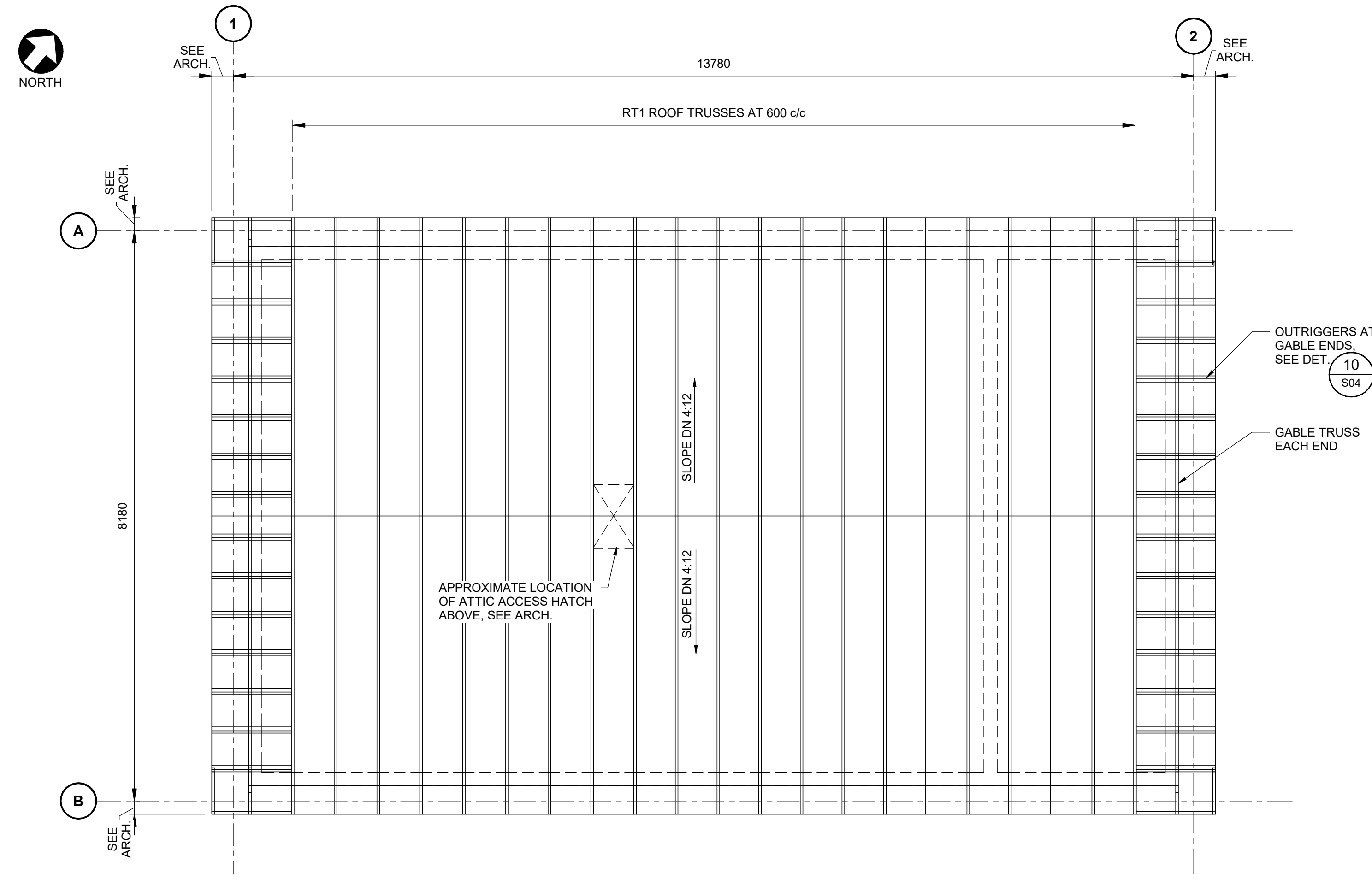


CRCL No 230813.00	Contract No WOL005-2025
Date APR 2024	Scale N.T.S.
Designed DALS	Drawn EM
Checked JRF	Approved DAT
Sheet No 1	of 4
Drawing No	
S01	



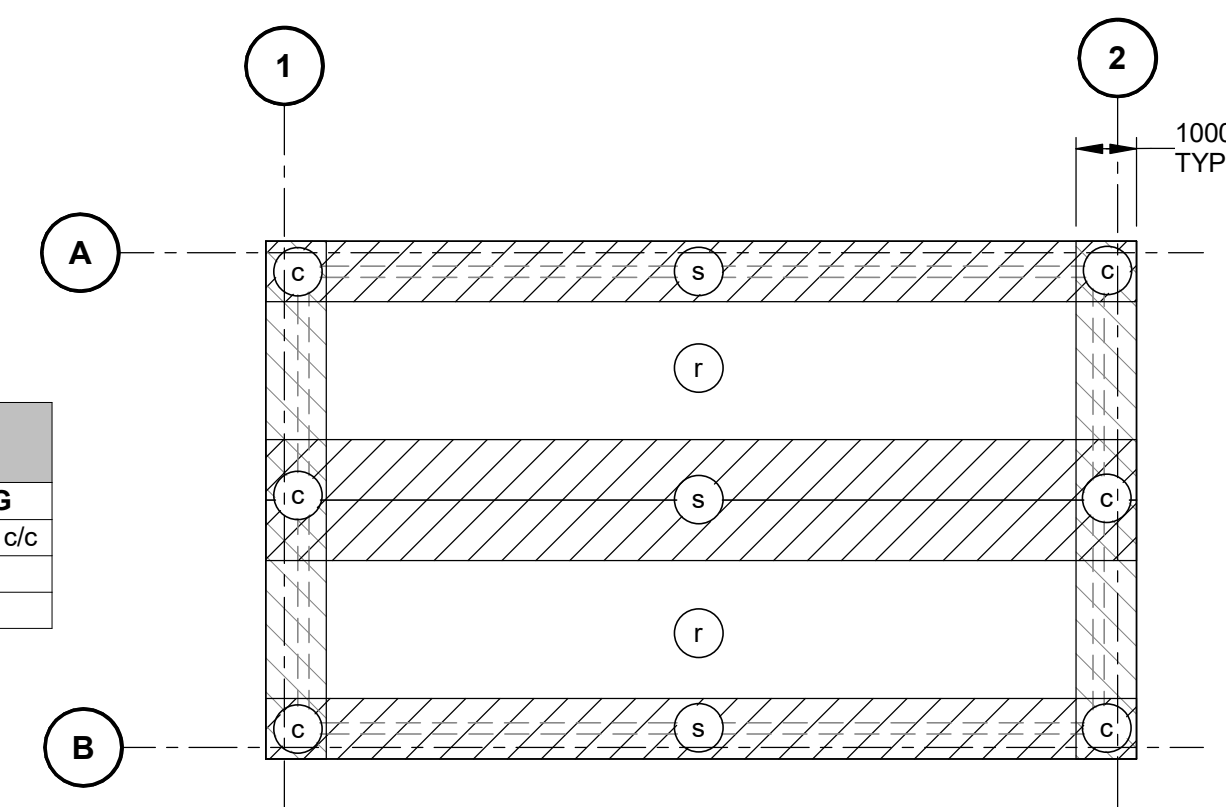


1 PLAN BLOWER BUILDING - SLAB ON GRADE
1:50

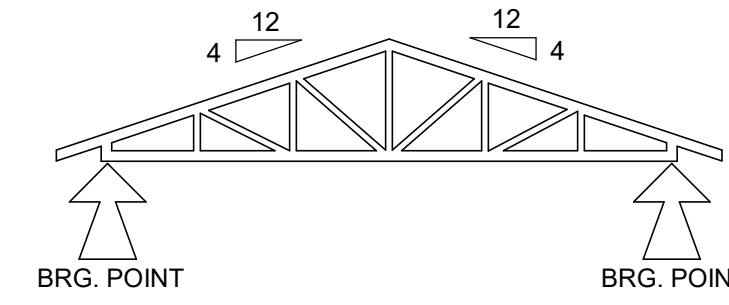


2 PLAN BLOWER BUILDING - ROOF FRAMING
1:50

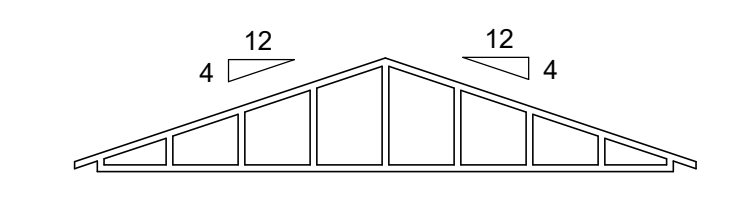
FASTENING SHEATHING PATTERN		
ZONE	EDGE PANEL	INTERMEDIATE FRAMING
c	76 LG NAILS AT 150 c/c	#8 - 64 LG SCREWS AT 100 c/c
s	76 LG NAILS AT 150 c/c	76 LG NAILS AT 100 c/c
r	76 LG NAILS AT 150 c/c	76 LG NAILS AT 150 c/c



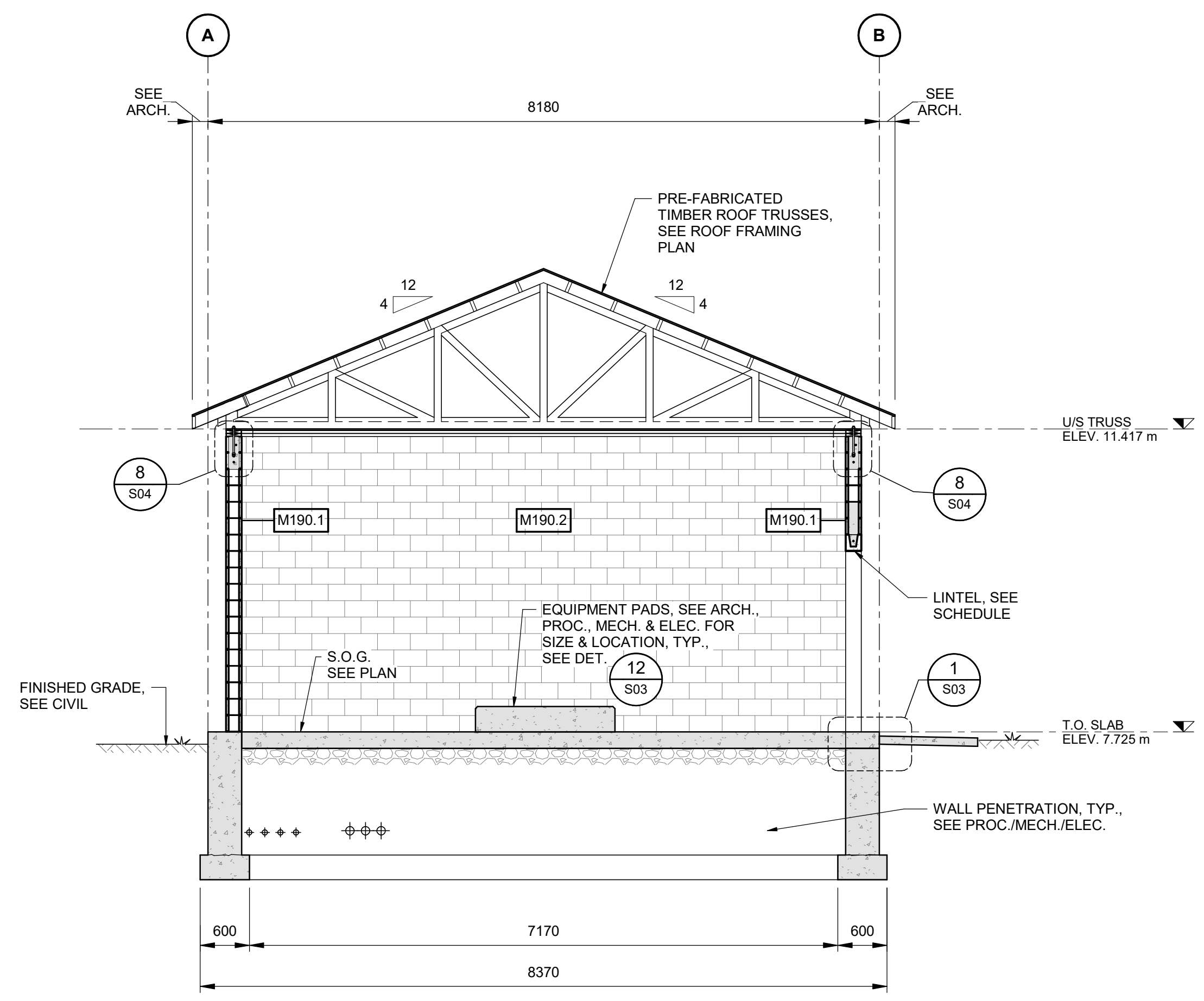
3 PLAN ROOF SHEATHING FASTENING PATTERN
N.T.S.



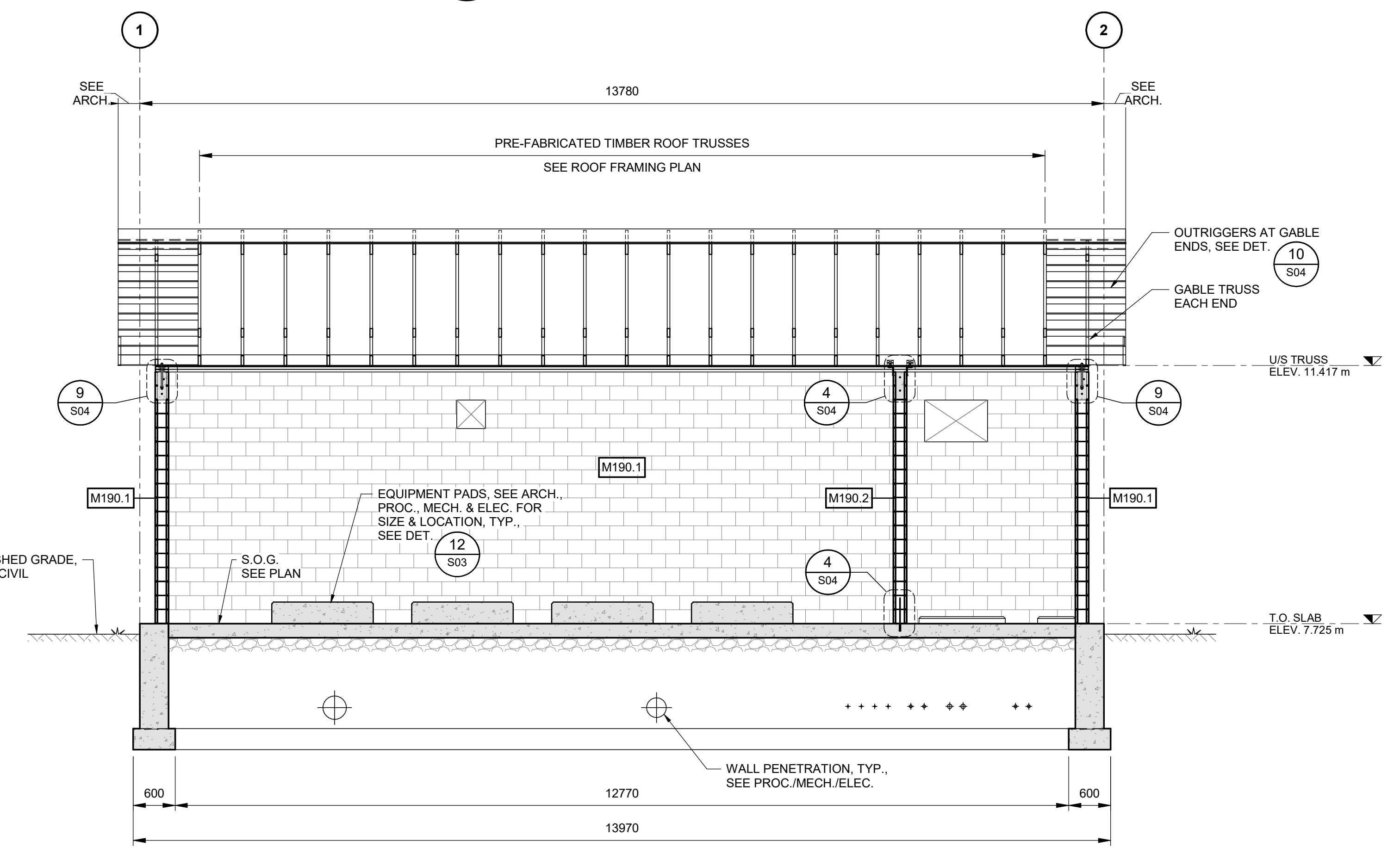
ELEVATION RT1 TRUSS
N.T.S.



ELEVATION GABLE TRUSS
N.T.S.



AA SECTION BLOWER BUILDING
1:50



BB SECTION BLOWER BUILDING
1:50

LEGEND:
 M###.# DENOTES CONCRETE MASONRY BLOCK WALL
 WALL THICKNESS

NOTES:
 1. SAW CUTS CONTROL JOINTS TO BE 6 x 38 DP.
 2. SEE ARCH. FOR PARTITION WALL LOCATIONS.

NOT FOR CONSTRUCTION

0	ISSUED FOR TENDER	MAR 11/25	BT
No	Description	Date	By

Revision or Issue

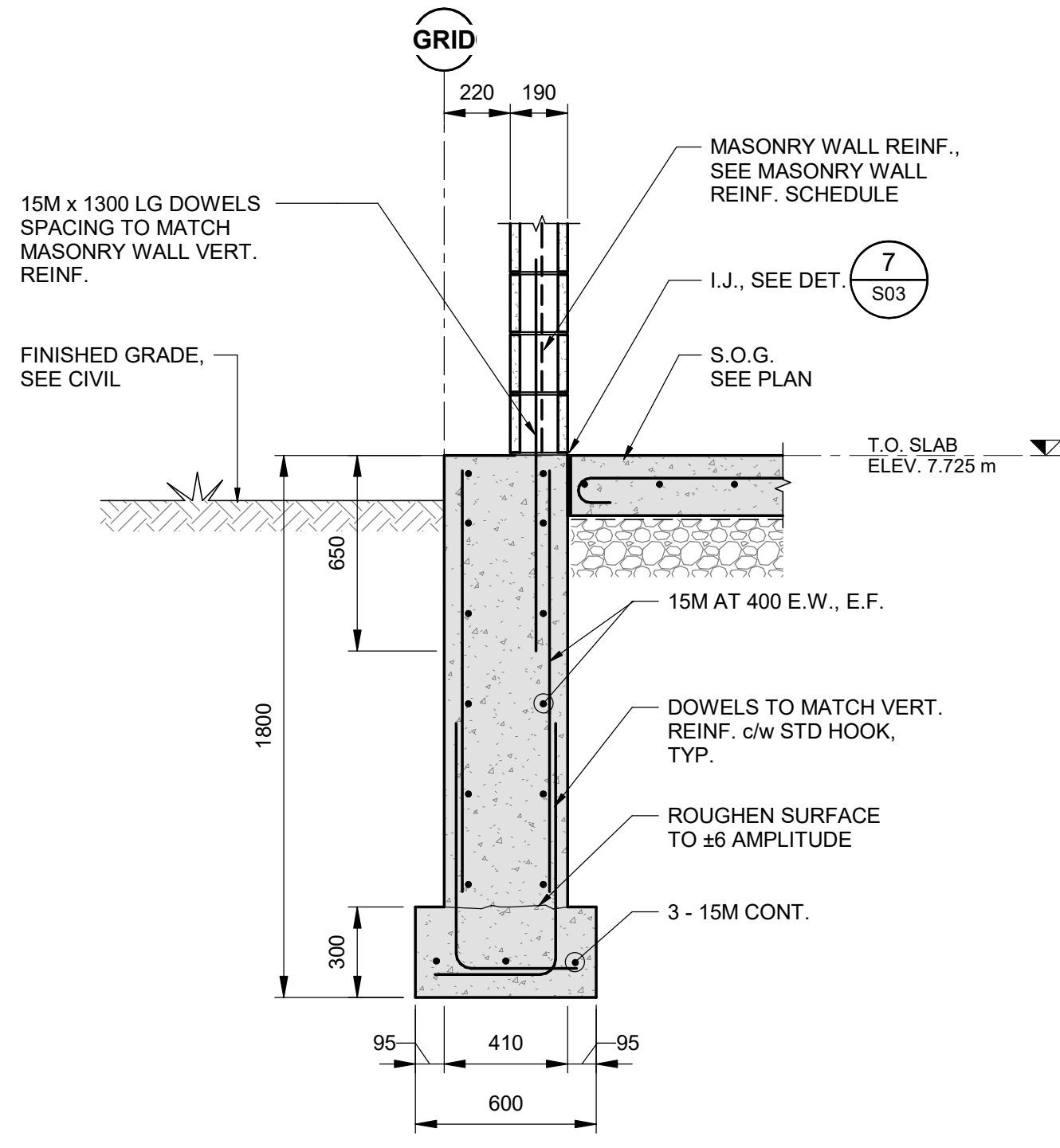
wolfville

TOWN OF WOLFVILLE
 WASTEWATER TREATMENT PLANT
 PHASE 2 UPGRADES

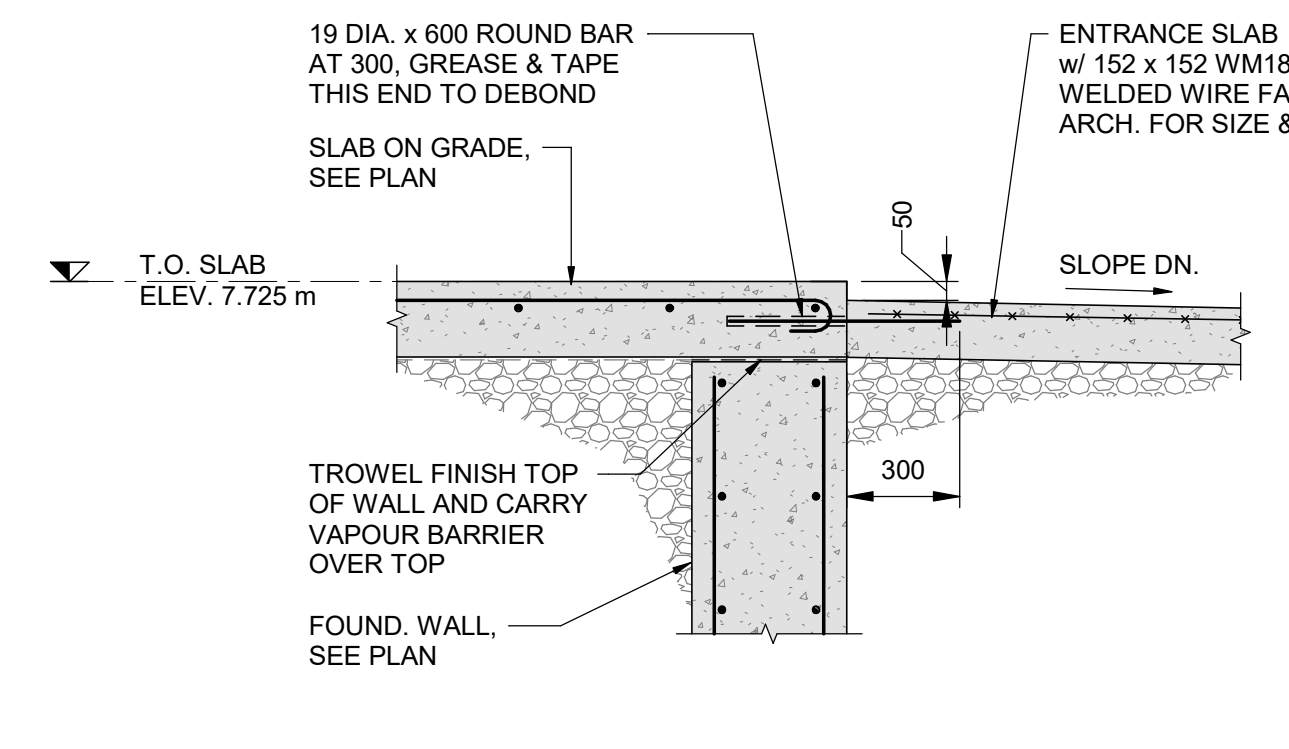
STRUCTURAL
 BLOWER BUILDING - PLANS
 AND CROSS SECTIONS

CBCL

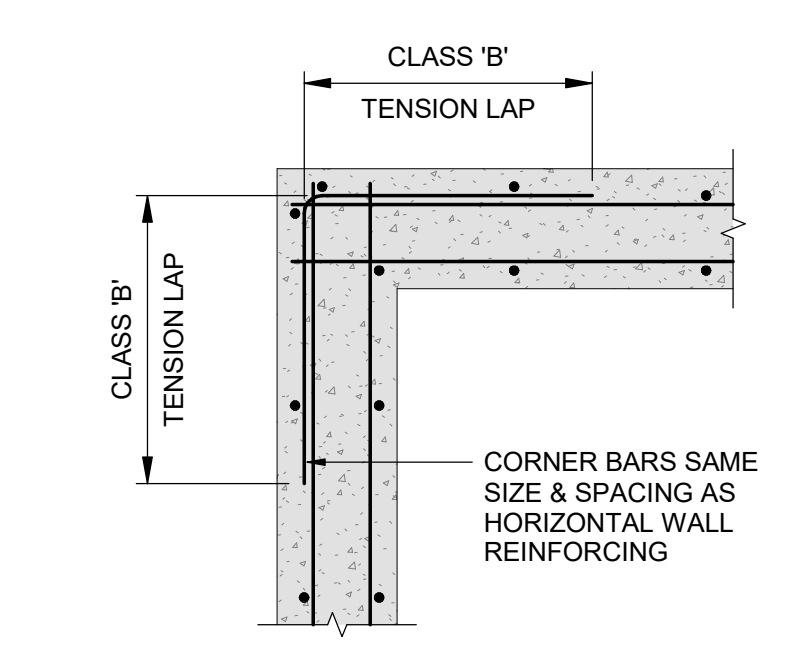
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 Designated: DALS
 Drawn: EM
 Checked: JRF
 Approved: DAT
 Sheet No. 2 of 4
 Drawing No. S02



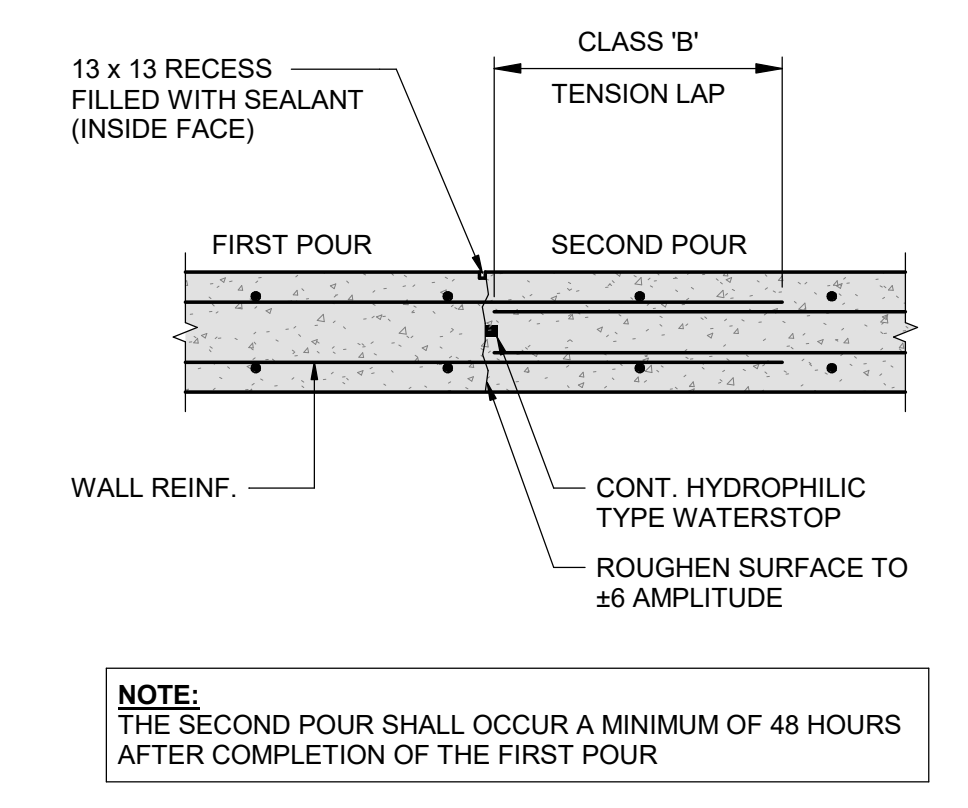
A SECTION TYPICAL FOUNDATION WALL
S02 1:20



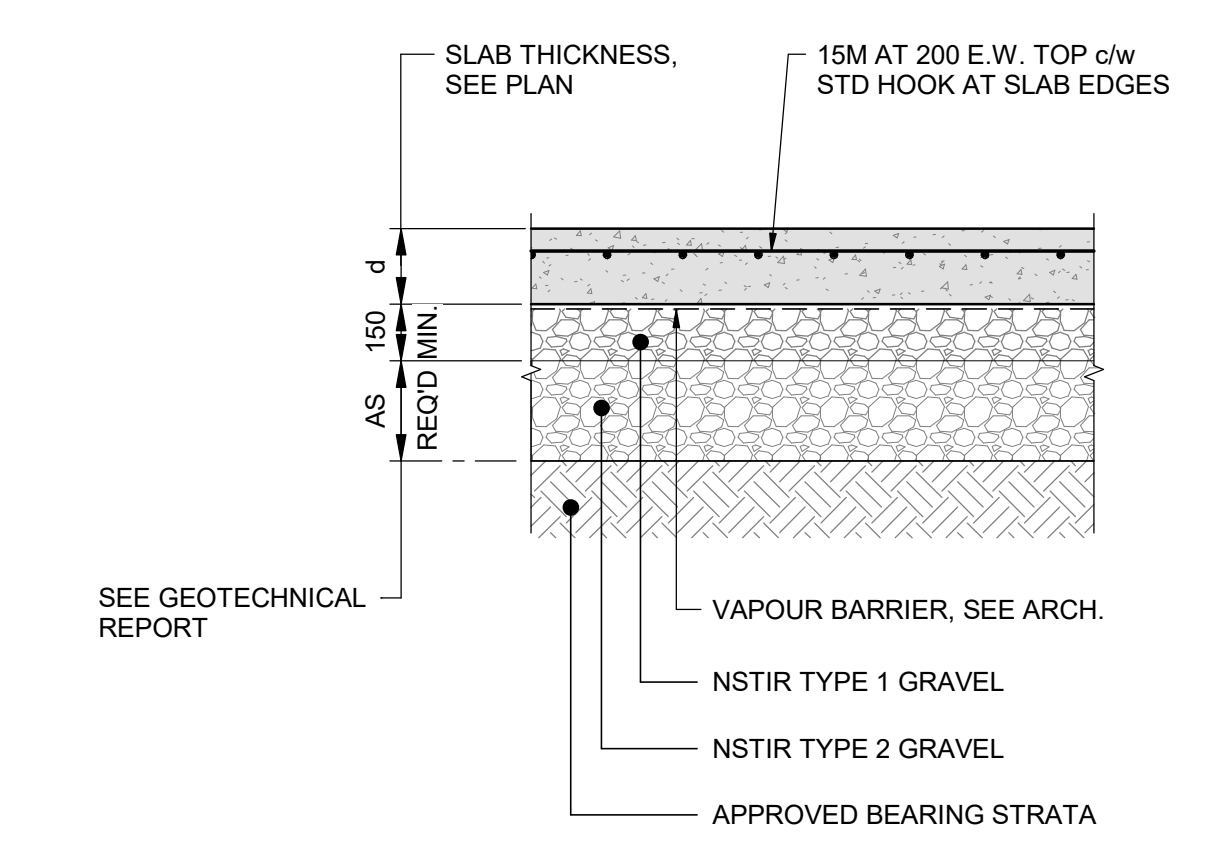
1 DETAIL TYPICAL FOUNDATION WALL AT MAN DOOR
S02 1:20



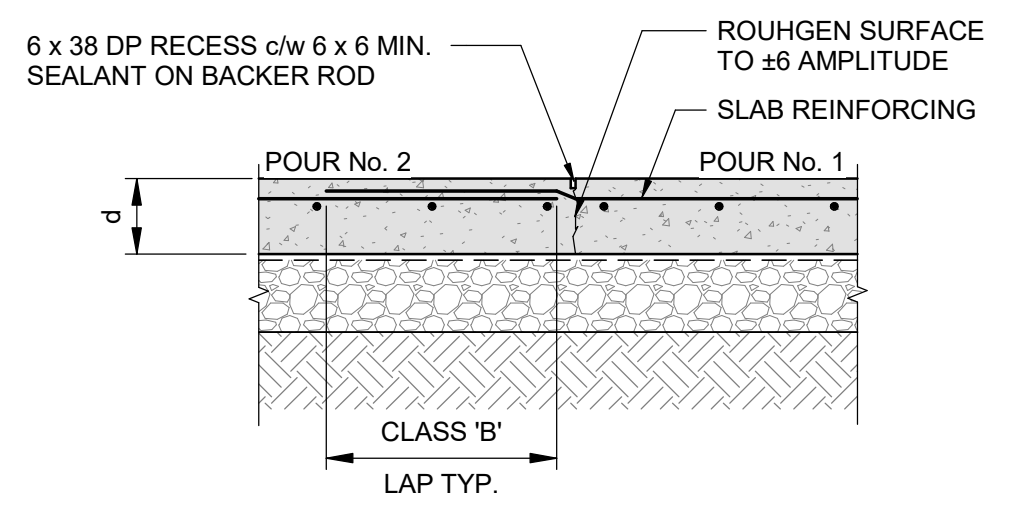
2 DETAIL TYPICAL FOUNDATION WALL CORNERS
N.T.S.



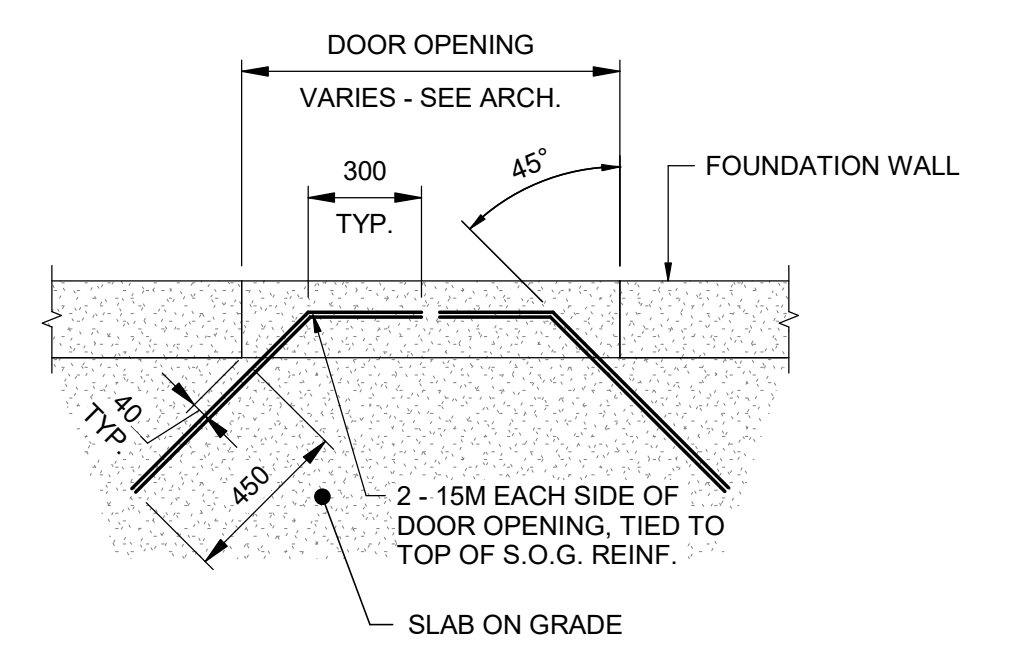
3 DETAIL TYPICAL WALL CONSTRUCTION JOINT
N.T.S.



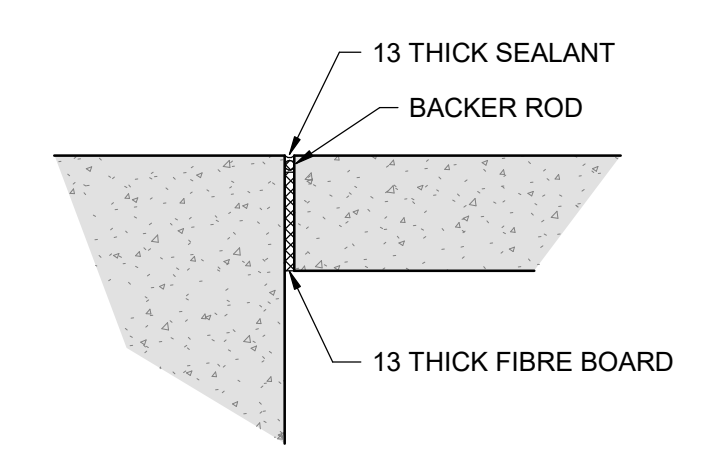
4 DETAIL TYPICAL SLAB ON GRADE
N.T.S.



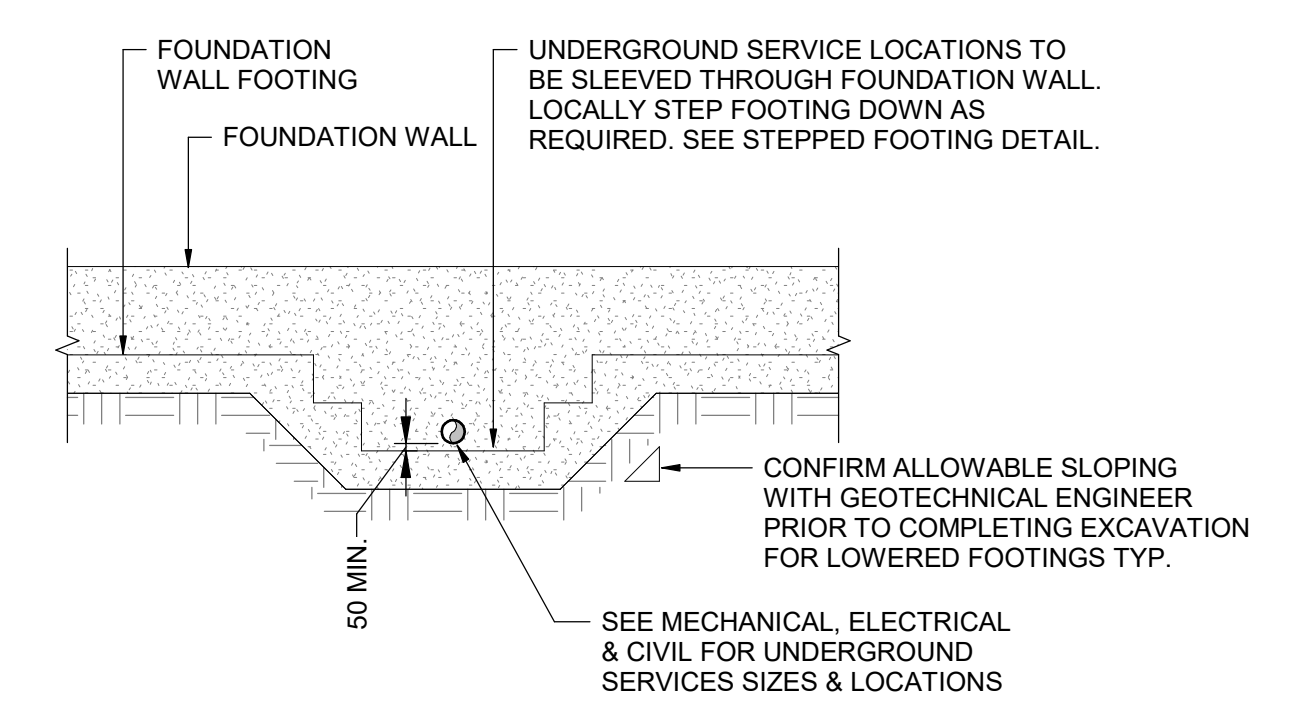
5 DETAIL TYPICAL SLAB ON GRADE CONSTRUCTION JOINT
N.T.S.



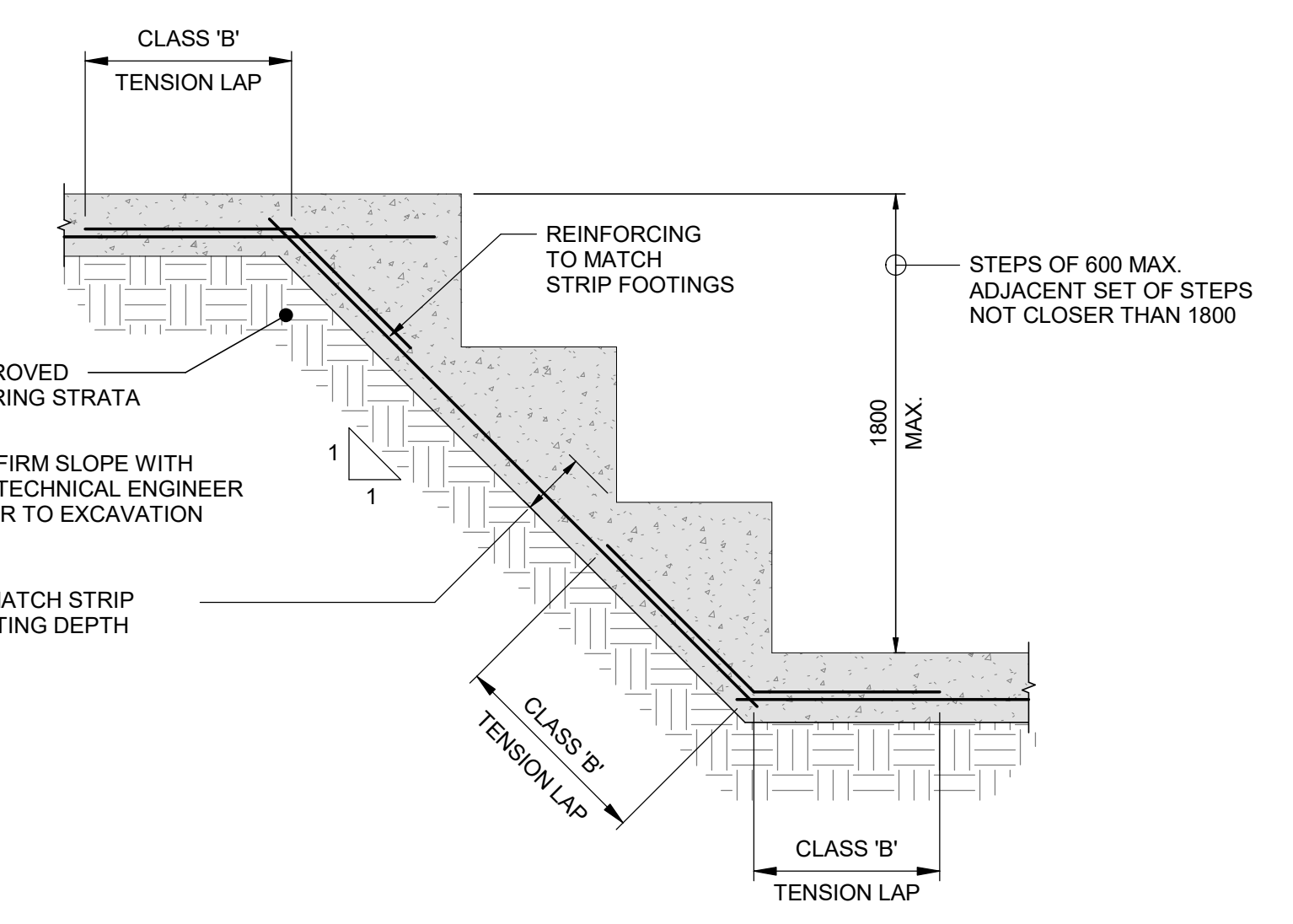
6 DETAIL TYPICAL SLAB ON GRADE ADDITIONAL REINFORCING AT DOOR OPENINGS
N.T.S.



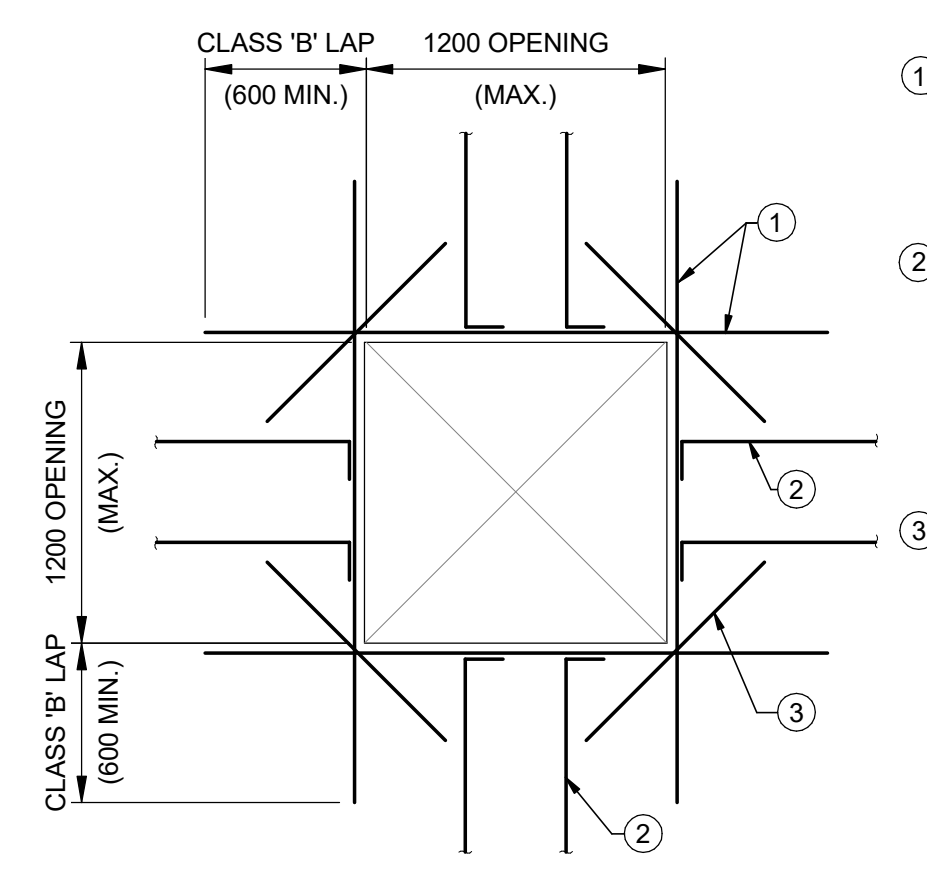
7 DETAIL TYPICAL ISOLATION JOINT
N.T.S.



8 DETAIL TYPICAL PENETRATIONS AT FOUNDATION WALLS
N.T.S.

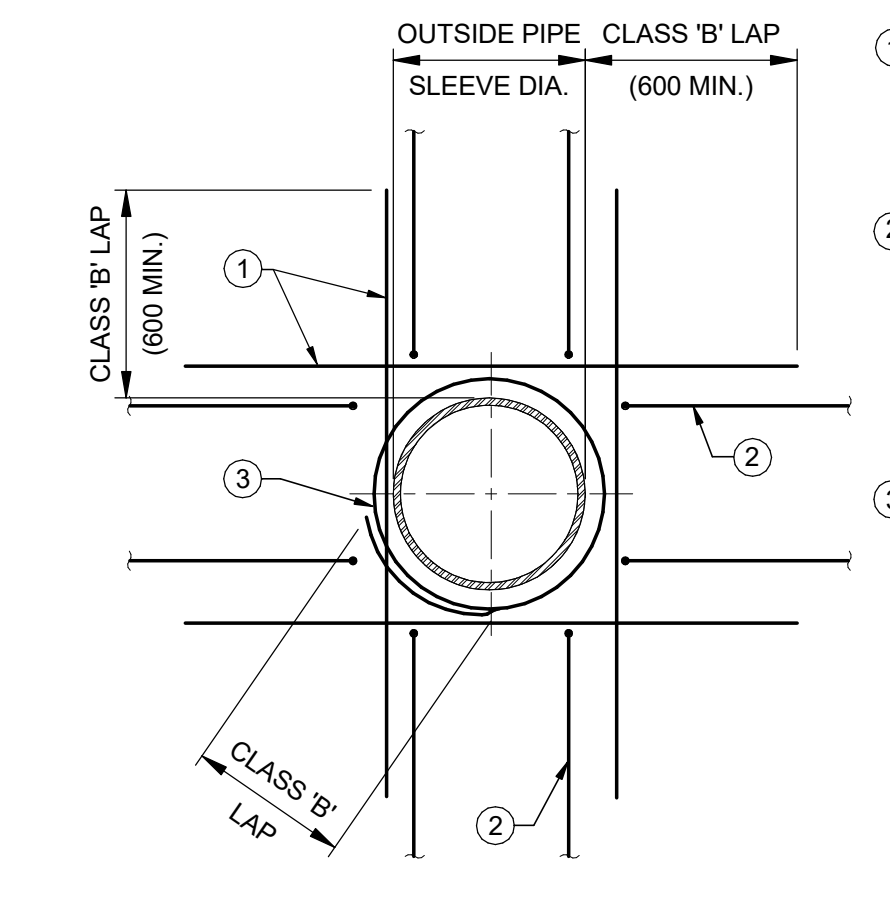


9 DETAIL TYPICAL STEPPED FOOTING
N.T.S.



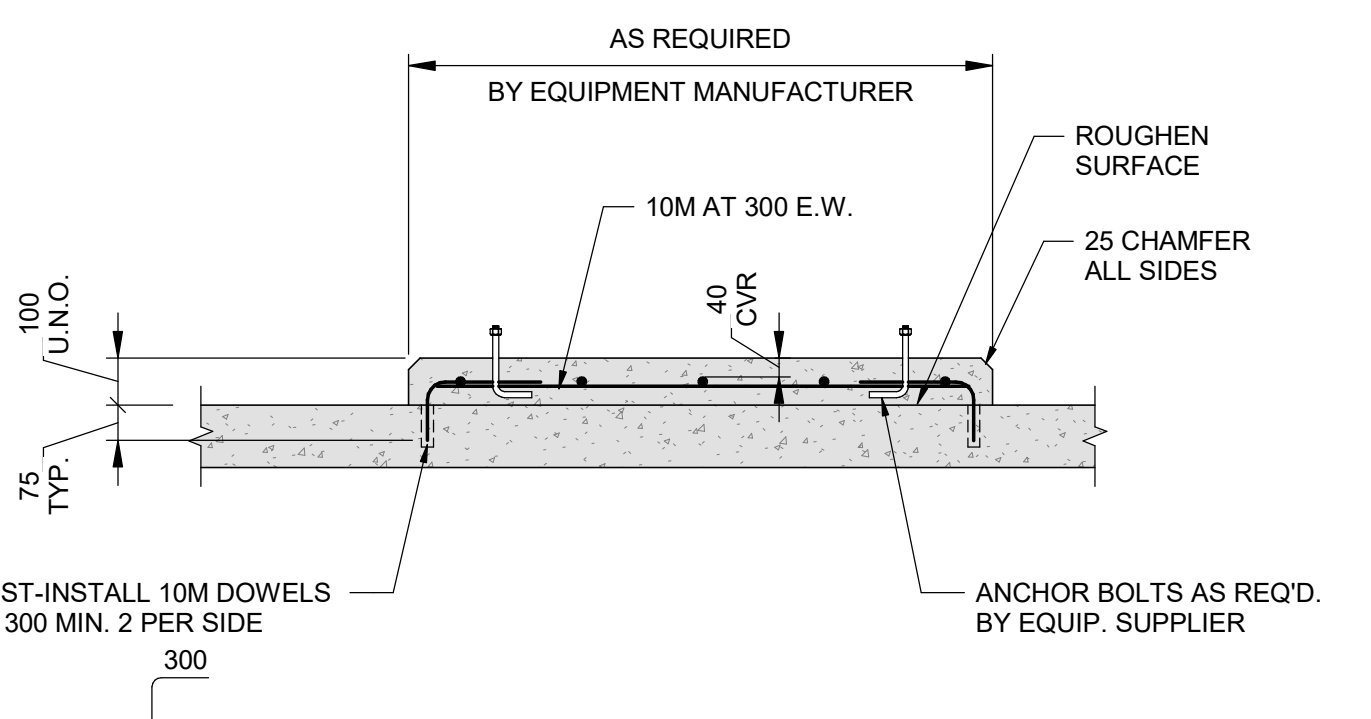
10 DETAIL TYPICAL RECTANGULAR CONCRETE WALL OPENING
N.T.S.

- 1 PROVIDE BARS OF EQUIVALENT AREA FOR REINFORCEMENT INTERRUPTED BY OPENING. ADD HALF EACH SIDE OF OPENING. MINIMUM OF 1-15M MUST BE PROVIDED EACH SIDE OF OPENING.
 - 2 PROVIDE STANDARD 90° HOOK ON VERTICAL AND HORIZONTAL BARS INTERRUPTED BY OPENING. ALTERNATIVELY, PROVIDE STRAIGHT BARS AND U-BARS WITH A MINIMUM CLASS 'B' TENSION LAP SPLICE OR A STD. HOOKED BAR WITH A MINIMUM CLASS 'B' TENSION LAP.
 - 3 PROVIDE 1-15M DIAGONAL BAR 1200 LG AT EACH CORNER. BARS TO BE IN THIRD LAYER.
- NOTES:**
- FOR OPENINGS LESS THAN SPACING OF REINFORCEMENT, NO ADDITIONAL REINFORCING BARS ARE REQUIRED PROVIDED NO BARS ARE CUT.
 - AT FOOTING, SLAB OR WALL LOCATIONS WHERE THE REQUIRED LENGTH OF ADDITIONAL BARS CANNOT BE ACHIEVED, PROVIDE STD. HOOK.

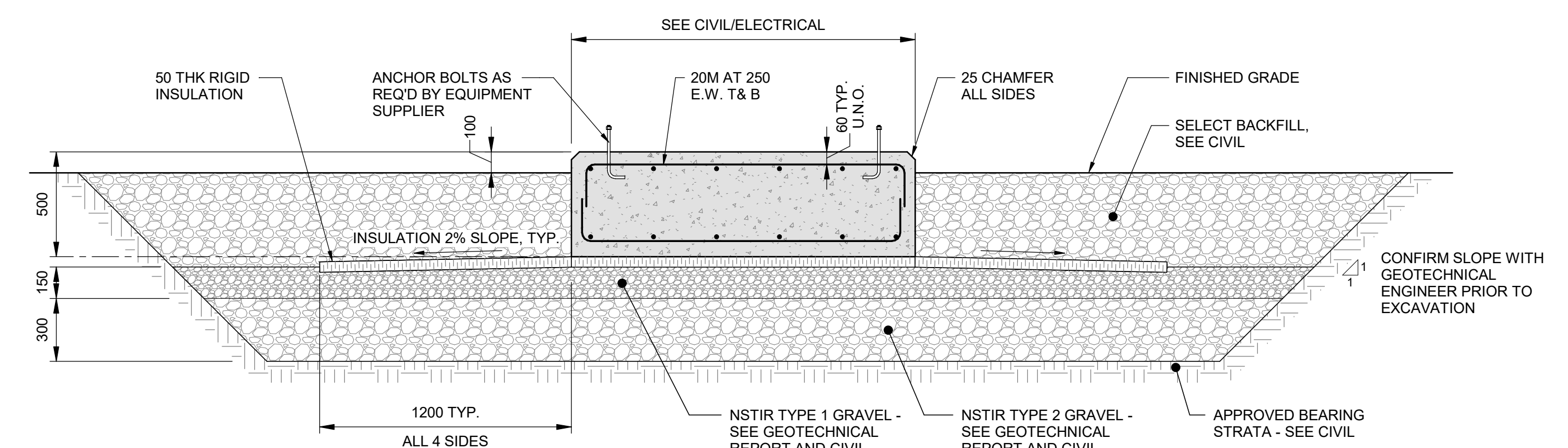


11 DETAIL TYPICAL ROUND CONCRETE WALL OPENING
N.T.S.

- 1 PROVIDE BARS OF EQUIVALENT AREA FOR REINF. INTERRUPTED BY OPENING. ADD HALF EACH SIDE OF OPENING. MINIMUM OF 1 - 15M MUST BE PROVIDED EACH SIDE OF OPENING.
 - 2 PROVIDE STANDARD 90° HOOK ON VERTICAL AND HORIZONTAL BARS INTERRUPTED BY OPENING. ALTERNATIVELY, PROVIDE STRAIGHT BARS AND U-BARS WITH A MINIMUM CLASS 'B' TENSION LAP SPLICE OR A STD HOOKED BAR WITH A MINIMUM CLASS 'B' TENSION LAP.
 - 3 PROVIDE 1 - 15M TIE TO BE IN CENTER OF WALL FOR WALLS WITH CENTER REINF. & THIRD LAYER EACH FACE FOR WALLS WITH REINF. ON EACH FACE.
- NOTES:**
- FOR OPENINGS LESS THAN SPACING OF REINF. NO ADDITIONAL REINFORCING BARS ARE REQUIRED.
 - AT FOOTING, SLAB OR WALL LOCATIONS WHERE THE REQUIRED LENGTH OF ADDITIONAL BARS CANNOT BE ACHIEVED, PROVIDE STD. HOOK.



12 DETAIL TYPICAL HOUSE KEEPING PADS
N.T.S.



13 DETAIL GENERATOR PAD
N.T.S.

NOT FOR CONSTRUCTION

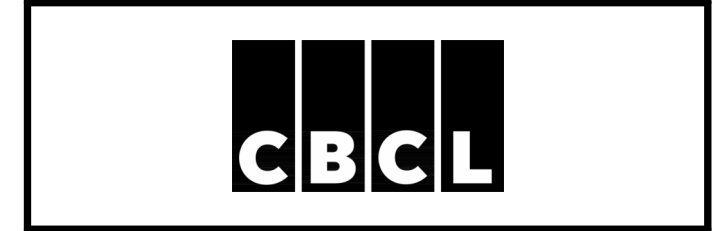
0	ISSUED FOR TENDER	MAR 11/25	3
No	Description	Date	Rev

Revision or Issue

wolfville

TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

STRUCTURAL
SECTIONS AND TYPICAL DETAILS
- CONCRETE

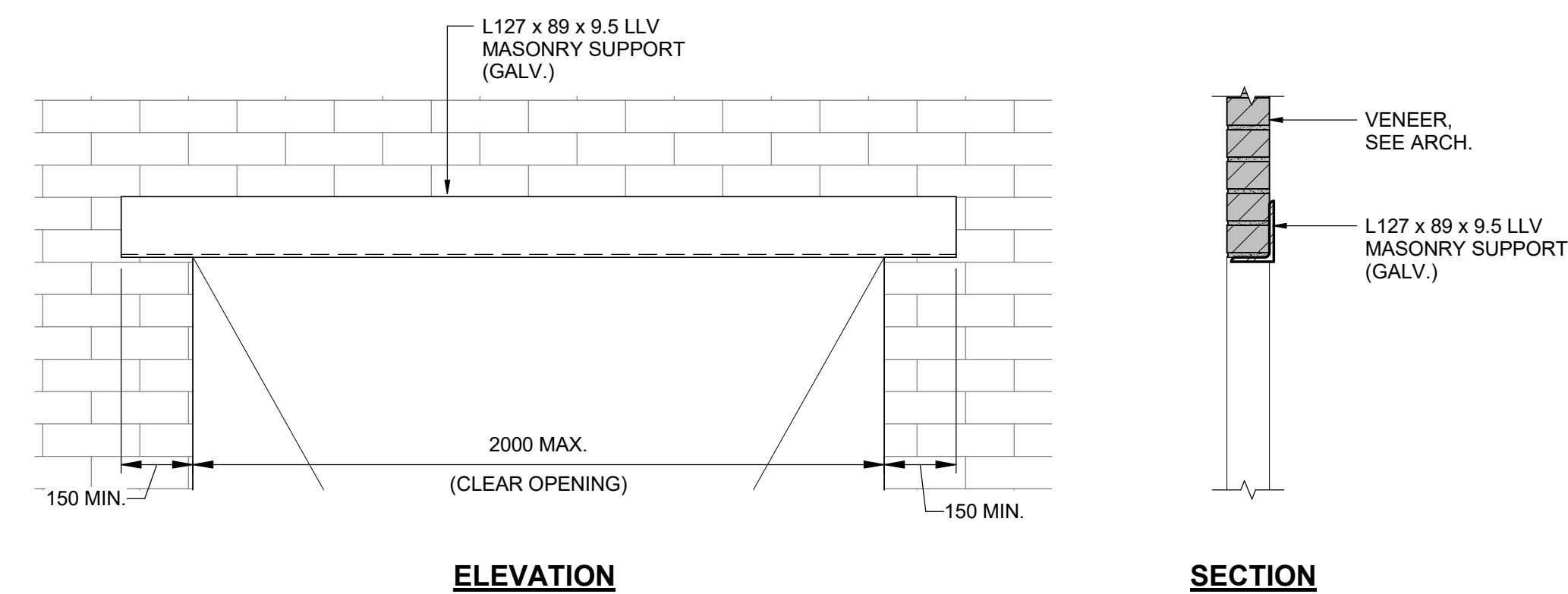
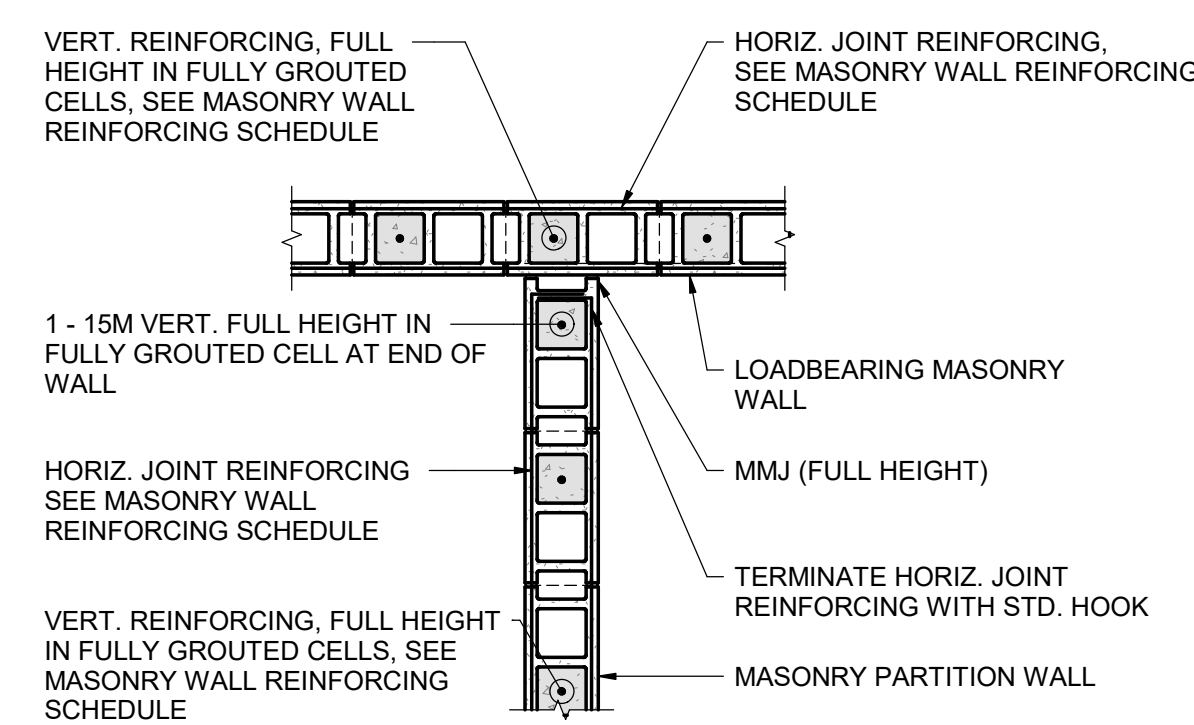
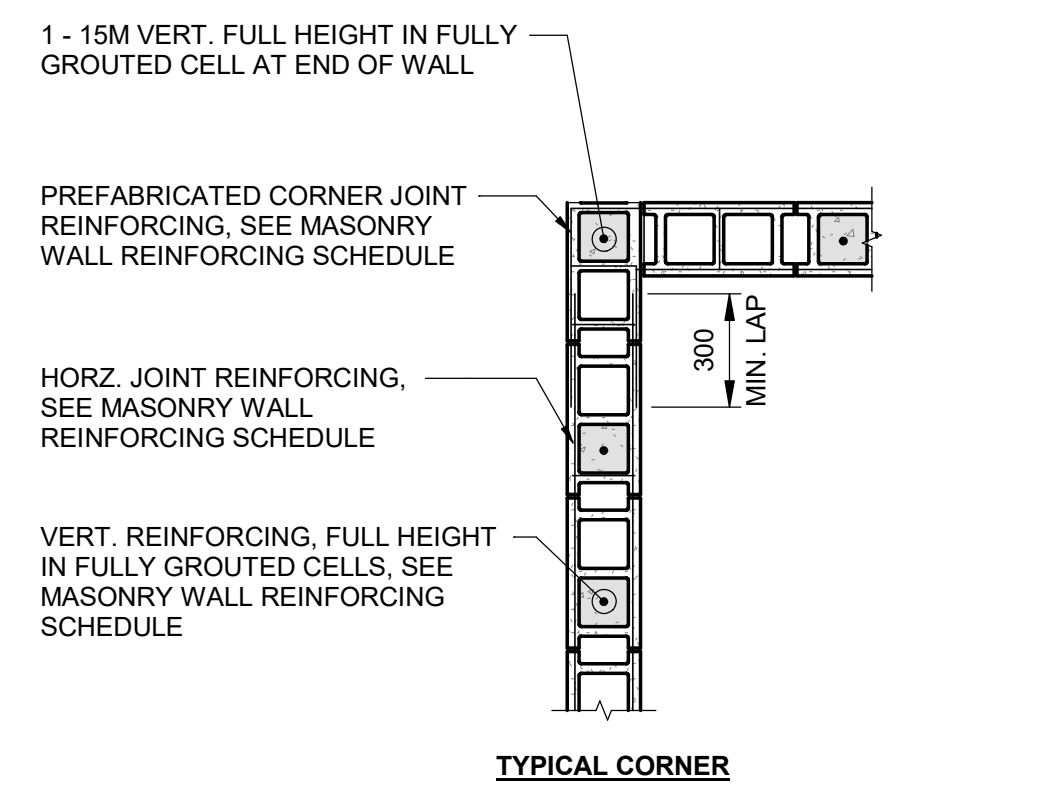
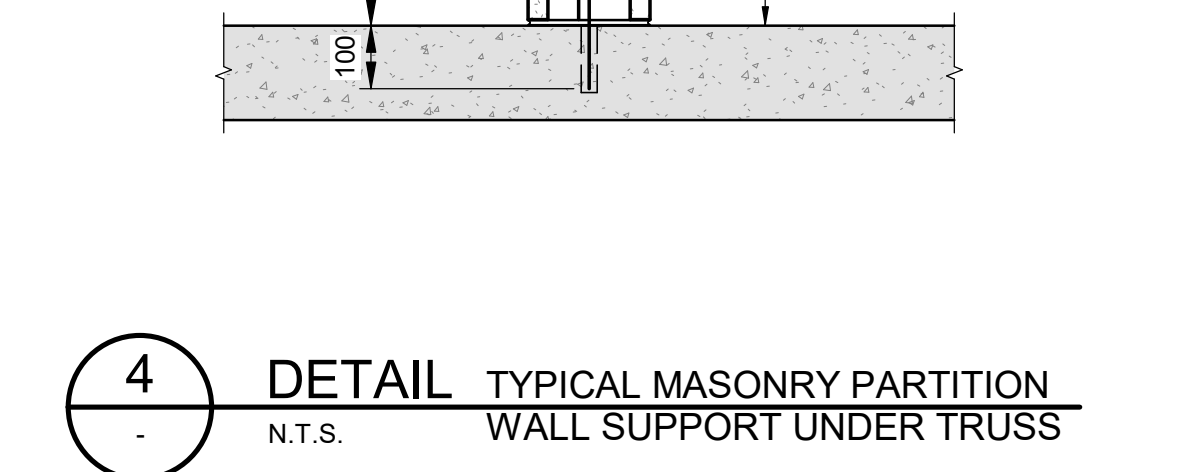
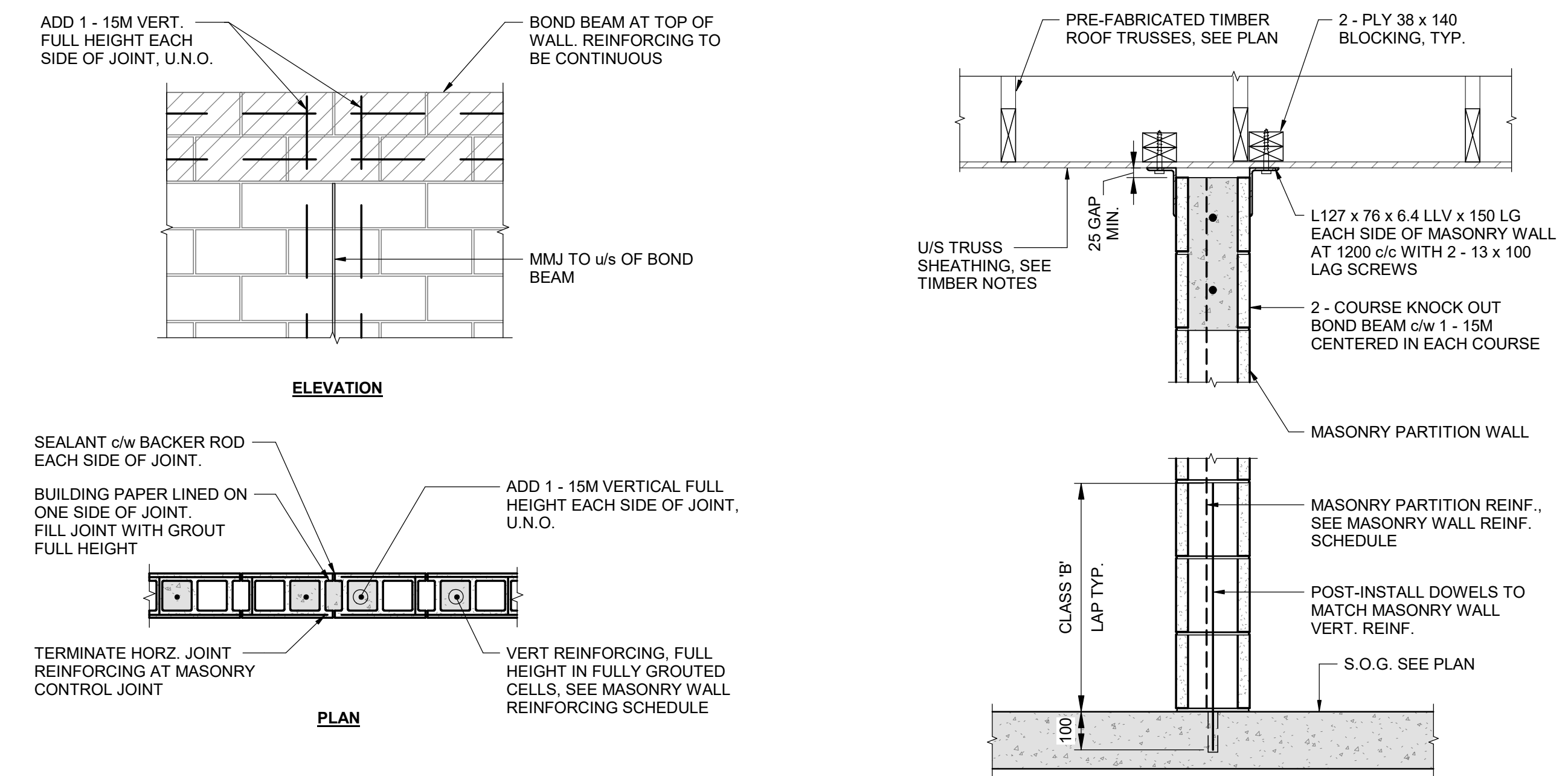
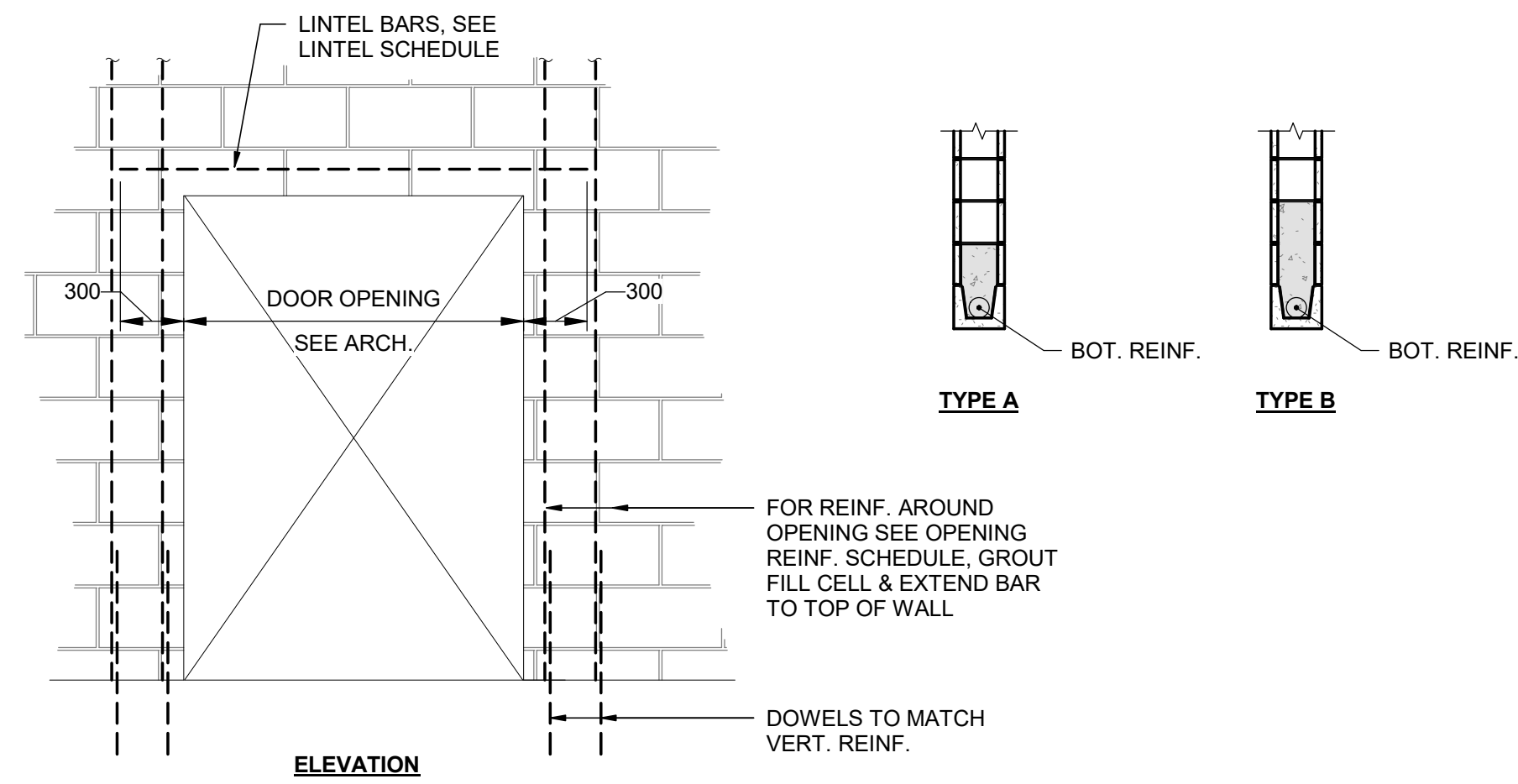
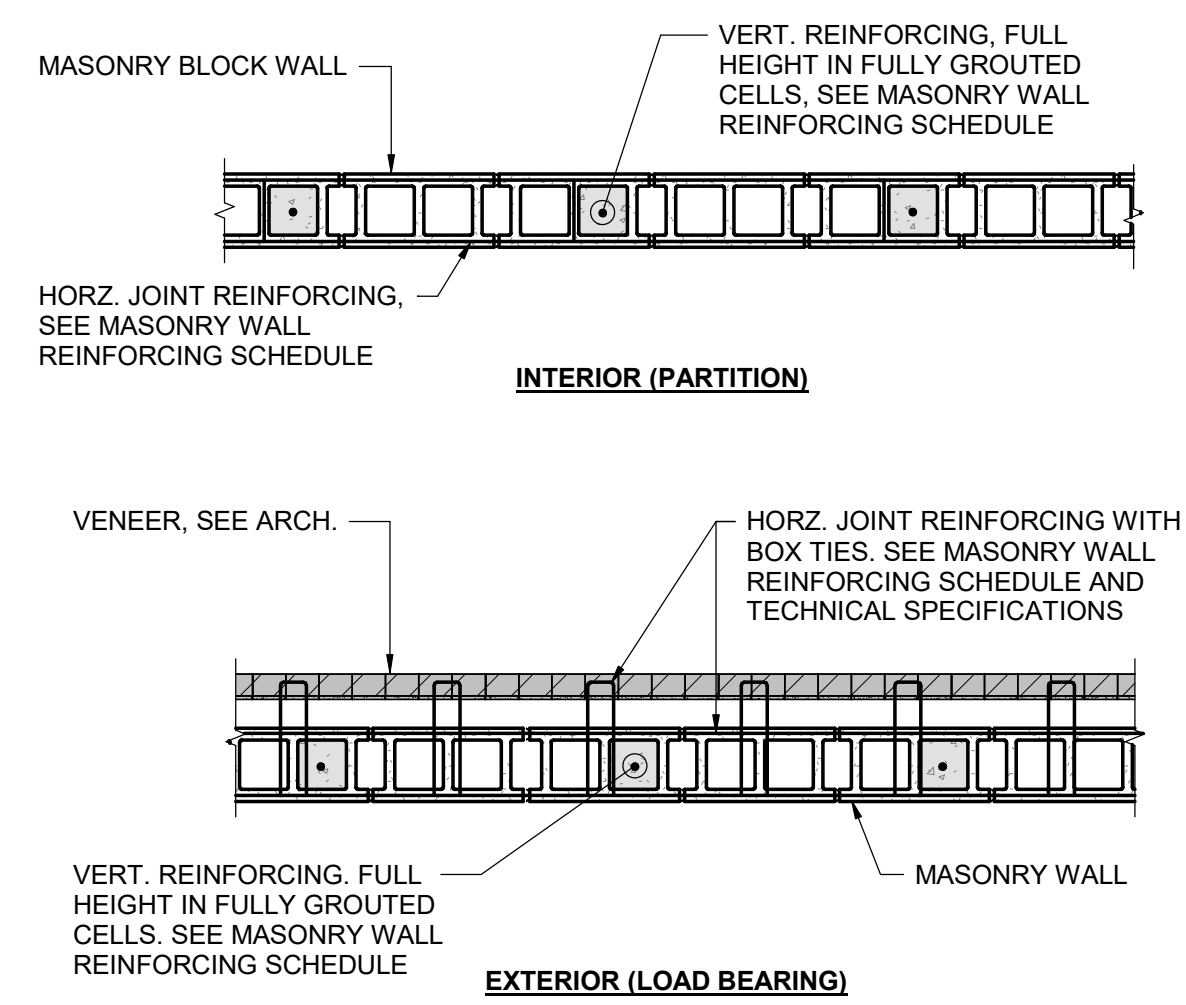


Contract No. 230813.00	Scale As indicated
Date APR 2024	Drawn EM
Designed DALS	Approved DAT
Checked JRF	Sheet No 3 of 4
Sheet No 3	Drawing No S03

MASONRY WALL REINFORCING U.N.O.		
WALL TYPE	VERTICAL REINFORCING	HORIZONTAL REINFORCING
M190.1	15M AT 800 FULL HEIGHT IN FULLY GROUTED CELLS	EXTRA HEAVY DUTY LADDER TYPE JOINT REINF. EVERY 2ND COURSE
M190.2	15M AT 1200 FULL HEIGHT IN FULLY GROUTED CELLS	EXTRA HEAVY DUTY LADDER TYPE JOINT REINF. EVERY 2ND COURSE

MASONRY LINTEL SCHEDULE		
WALL TYPE	OPENING WIDTH	LINTEL REINFORCING
M190.1	UP TO 1000	TYPE A - 2 COURSE WITH 1 - 10M BOT.
M190.1	1001 TO 2000	TYPE B - 3 COURSE WITH 1 - 15M BOT.
M190.2	UP TO 1000	TYPE A - 2 COURSE WITH 1 - 10M BOT.

MASONRY REINFORCING AROUND OPENINGS		
WALL TYPE	OPENING WIDTH	REINFORCING
M190.1	UP TO 1000	2 - 15M E.S. OF OPENING IN SEPARATE CELLS
M190.1	1001 TO 2000	3 - 15M E.S. OF OPENING IN SEPARATE CELLS
M190.2	UP TO 1000	2 - 15M E.S. OF OPENING IN SEPARATE CELLS



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0	ISSUED FOR TENDER	MAR 11/25	DA
No	Description	Date	By

Revision or Issue



TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

STRUCTURAL
TYPICAL DETAILS - MASONRY AND TIMBER



Contract No.	W04005-2025
Scale	As indicated
Date	APR 2024
Designed	EM
Drawn	EM
Checked	JRF
Approved	DAI
Sheet No.	4 of 4
Drawing No.	S04

PIPING SYMBOLS	
	GATE VALVE (NORMALLY OPEN)
	GATE VALVE (NORMALLY CLOSED)
	PLUG VALVE (NORMALLY OPEN)
	PLUG VALVE (NORMALLY CLOSED)
	LUBRICATED PLUG VALVE
	GLOBE VALVE (NORMALLY OPEN)
	GLOBE VALVE (NORMALLY CLOSED)
	BALL VALVE (NORMALLY OPEN)
	BALL VALVE (NORMALLY CLOSED)
	NEEDLE VALVE (NORMALLY OPEN)
	NEEDLE VALVE (NORMALLY CLOSED)
	KNIFE GATE VALVE (NORMALLY OPEN)
	KNIFE GATE VALVE (NORMALLY CLOSED)
	BUTTERFLY VALVE
	CHECK VALVE
	BALL CHECK VALVE
	STOP-CHECK VALVE
	THREE WAY VALVE
	FOUR WAY VALVE
	Y-STRAINER
	FLOW ORIFICE
	DIAPHRAGM SEAL
	INSERT PRESSURE SENSOR
	REDUCER (CONCENTRIC)
	REDUCER (ECCENTRIC)
	HOSE CONNECTION
	FLANGE CONNECTION
	PIPE SEALED END
	BLANK FLANGED END
	FLOOR DRAIN
	DRAIN TO SUMP
	VENT
	DUPLEX BASKET STRAINER
	SINGLE BASKET STRAINER
	CONDENSATE TRAP
	FILTER
	SIGHT GLASS (FLOW GAUGE)
	PUMP
	PERISTALTIC PUMP
	RUPTURE DISK
	FLAME TRAP
	PULSATION DAMPER
	PRESSURE TANK
	WATER HAMMER ARRESTOR

VALVE ACTUATORS	
	HAND (SLIDE) GATE
	SLUICE GATE
	AGITATOR
	STATIC MIXER
	GRINDER
	PURGE POINT
	PROGRESSIVE CAVITY PUMP
	SUBMERSIBLE PUMP
	HEAT EXCHANGER
	SILENCER
	TURBINE FLOWMETER
	VORTEX FLOWMETER
	V-CON FLOWMETER
	TRANSIT TIME METER
	MAGNETIC FLOWMETER
	THERMAL MASS FLOW METER
	CORIOLIS MASS FLOW METER
	VISUAL FLOW MEASUREMENT (ROTAMETER)
	AUTO DRAIN
	AIR VENT
	VACUUM BREAKER
	MANUALLY ADJUSTABLE SPEED/STROKE
	MOTOR MOTOR POWER (HP)
	EXISTING (EQUIPMENT/DEVICES)
	UNION
	FIELD WELD
	FLEXIBLE COUPLING
	CORPORATE COCK
	GROVE END COUPLING
	PINCH VALVE
	CONTROL VALVE (SHOWN IN PLAN)
	DENOTES WALL FLANGE ON A PIPE

VALVE ACTUATORS	
	DIAPHRAM ACTUATOR C/W POSITIONER
	CYLINDER ACTUATOR (SINGLE ACTING, SPRING TO CLOSE) C/W ACTIVATING SOLENOID VALVE
	SOLENOID
	MOTOR OPERATED VALVE
	MANUAL HANDWHEEL (1/4 TURN)
	MANUAL HANDWHEEL (MULTI-TURN)
	PNEUMATIC ACTUATOR
	PEDestal MOUNTED OPERATOR (SHOWN IN PLAN)
	MANUAL OPERATING NUT

SELF ACTUATED DEVICES	
	PRESSURE RELIEF (SAFETY VALVE)
	BACK PRESSURE REGULATOR (SELF CONTAINED)
	THERMALLY ACTIVATED VALVE
	SELF REGULATING PRESSURE CONTROL VALVE (SELF CONTAINED)
	SELF REGULATING FLOW CONTROL VALVE (SELF REGULATING)

PIPELINE IDENTIFICATION	
	PIPE MATERIAL (REFER THIS DRAWING)
	PIPE DIA. & FLUID CODE
	SERVICE
	FLUID CODE
	SANITARY SEWER
	SECONDARY CLARIFIER EFFLUENT
	SECONDARY CLARIFIER INFLUENT
	SEPTAGE SLUDGE
	SERVICE WATER (NON-POTABLE)
	SODIUM HYPOCHLORITE
	THICKENED WASTE ACTIVATED SLUDGE
	TREATED EFFLUENT
	TREATED WATER
	VENT
	VOLATILE FATTY ACID
	WASTE ACTIVATED SLUDGE

FIRST LETTERS	INITIATING OR MEASURED VARIABLE	CONTROLLERS		READOUT DEVICES		SWITCHES AND ALARM DEVICES		TRANSMITTERS		MULTIPLEXERS		TEST POINTS		VIEWING DEVICES		SAFETY DEVICES		FINAL ELEMENT		
		RECORDING	INDICATING	RECORDING	INDICATING	HIGH	LOW	COMBINED	RECORDING	INDICATING	RECORDING	INDICATING	TEST POINT	WELL PROBE	VIEWING GLASS	SAFETY DEVICES	FINAL ELEMENT			
A	ANALYSIS	ARC	ARC	AR	AR	ASH	ASH	ART	ART	AY	AY	AE	AP	AW	BW	BG	AV	BZ		
B	BURNER/COMBUSTION	BRC	BIC	BC		BR	BI	BSH	BSL	BRT	BIT	BT	BY	BE						
C	USERS CHOICE																			
D	USERS CHOICE																			
E	VOLTAGE	ERC	EC	EC		ER	EI	ESH	ESL	ESH	ERT	EIT	ET	EY	EE				EZ	
F	FLOW RATE	FR	FR	FR	FCV	FR	FI	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	
FO	FLOW QUANTITY	FORC	FQIC	FQC		FOR	FQI	FQSH	FQSL					FQI	FQI	FQY	FQE		FBV	
FF	FLOW RATIO	FFRC	FFIC	FFC		FFR	FFI	FFSH	FFSL					FFI	FFI	FFY	FFE		FFV	
G	USERS CHOICE																			
H	HAND	HIC	HC							HS									HV	
I	CURRENT	IRC	IC			IR	II	ISH	ISL	ISH	IRT	IIT	IT	IY	IE				IZ	
J	POWER	JRC	JIC			JR	JI	JSH	JSL	JSH	JRT	JIT	JT	JY	JE				JV	
K	TIME	KRC	KIC	KC	KCV	KR	KI	KSH	KSL	KSH	KRT	KIT	KT	KY	KE				KV	
L	LEVEL	LRC	LIC	LC	LCV	LR	LI	LSH	LSL	LSH	LRT	LIT	LT	LY	LE				LV	
M	USERS CHOICE																			
N	USERS CHOICE																			
O	USERS CHOICE																			
P	PRESSURE VACUUM	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSH	PRT	PIT	PT	PY	PE	PP	PC	PSV/PSE	PV	
PD	PRESSURE DIFFERENTIAL	PRC	PDIC	PDC	PDCV	PDR	PDI	PDR	PDI	PDR	PDI	PDI	PDI	PDY	PE	PP	PC	PSV/PSE	PV	
Q	QUANTITY	QRC	QIC	QC		QR	QI	QSH	QSL	QSH	QRT	QIT	QT	QY	QE				QZ	
R	RADIATION	RRC	RIC	RC		RR	RI	RSH	RSL	RSH	RRT	RIT	RT	RY	RE				RZ	
S	SPEED/FREQUENCY	SRC	SIC	SC	SCV	SR	SI	SSH	SSL	SSH	SRT	SIT	ST	SY	SE				SV	
T	TEMPERATURE	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSH	TRT	TIT	TT	TY	TE	TP	TW		TSE	TV
TD	TEMPERATURE DIFFERENTIAL	TDR	TDIC	TDC	TDCV	TDR	TDI	TDR	TDI	TDR	TDI	TDI	TDI	TDY	TE	TP	TW		TDV	
U	MULTIVARIABLE	UR	UI											UY					UV	
V	VIBRATION/MACHINERY ANALYSIS	VR	VI	VSH	VSHL	VSH	VRT	VIT	VT	VY	VE								VZ	
W	WEIGHT/FORCE	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSH	WRT	WIT	WT	WY	WE				WZ	
WD	WEIGHT/FORCE DIFFERENTIAL	WDR	WDIC	WDC	WDCV	WDR	WDI	WDR	WDI	WDR	WDI	WDI	WDI	WDY	WE				WZ	
X	UNCLASSIFIED																		WOZ	
Y	EVENT/STATE/PRESENCE	YRC	YIC	YC		YR	YI	YSH	YSL				YT	YI	YE				YZ	
Z	POSITION/DIMENSION	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSH	ZRT	ZIT	ZT	ZY	ZE				ZV	
ZD	GAUGING/DEVIATION	ZDR	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDR	ZDI	ZDR	ZDI	ZDI	ZDI	ZDY	ZDE				ZDV	

MISCELLANEOUS INSTRUMENTATION ABBREVIATIONS	
AC	- AIR TO CLOSE
AL	- ALARM LIGHT
AO	- AIR TO OPEN
AS	- AIR SUPPLY
AI	- ANALOG INPUT SIGNAL(PLC)
AO	- ANALOG OUTPUT SIGNAL(PLC)
BDG	- BADGE CARD READER
C/O/A/O	- CLOSE/OFF/AUTO/OPEN SELECTOR
CRT	- COMPUTER TERMINAL
CV	- CONTROL VALVE
D	- DRAIN
D/B/U	- DOWN/BYPASS/UP SELECTOR
D/O/U	- DOWN/OFF/UP SELECTOR
DDN	- DISCONNECT
DCS	- DISTRIBUTED CONTROL SYSTEM
DI	- DIGITAL INPUT SIGNAL(PLC)
DO	- DIGITAL OUTPUT SIGNAL(PLC)
EMCS	- ENERGY MANAGEMENT CONTROL SYSTEM
ES	- EMERGENCY STOP
FC	- FAILS CLOSED
FLP	- FAILS IN LAST POSITION
FO	- FAILS OPEN
F/R	- FORWARD/REVERSE
FVNR	- FULL VOLTAGE NON-REVERSING STARTER
FVR	- FULL VOLTAGE REVERSING STARTER
FZ	- DAMPER ACTUATOR (FLOW CONTROL)
F/O/R	- FWD/OFF/REV SELECTOR
H/O/A	- HAND/OFF/AUTO SELECTOR SWITCH
HRN	- HORN
I/O	- ANALOG AND DIGITAL CONTROL SYSTEM INPUTS AND OUTPUTS
JB	- JUNCTION BOX / CONTROL PANEL
LEL	- LOWER EXPLOSIVE LIMIT
L/O/R	- LOCAL/OFF/REMOTE
L/O/R/C	- LOCAL/OFF/REMOTE/EXTRACTION TEST SELECTOR
L/O/R/E	- LOCAL/OFF/REMOTE/CLEAN TEST SELECTOR
L/R	- LOCAL/REMOTE
L/R/M	- LOCAL/REMOTE/MANUAL TEST SELECTOR
M	- ELECTRIC MOTOR
MCC	- MOTOR CONTROL CENTER
MFC	- MULTIFUNCTIONAL FLOW CONTROLLER
MOD	- MODULATING SERVICE
MOV	- MOTOR OPERATED VALVE
MR	- MEASURE RANGE
MV	- MANUAL VALVE
NC	- NORMALLY CLOSED
NO	- NORMALLY OPEN
O/C	- OPEN/CLOSE
O/C/S	- OPEN/CLOSE/STOP
O/L	- OVERLOAD
OS	- OUTPUT SIGNAL POTENTIOMETER
O/O/A	- ON/OFF/AUTO SELECTOR
O/R/M	- OFF/REMOTE/MANUAL TEST SELECTOR
PNTR	- PRINTER
PLC	- PROGRAMMABLE LOGIC CONTROLLER
POT	- POTENTIOMETER
PRV	- PRESSURE REDUCING VALVE
PS	- POWER SUPPLY
RLY	- RELAY LOGIC
RO	- RESTRICTION ORIFICE
RTD	- RESISTIVE TEMPERATURE DEVICE (100 Ohm PLATINUM)
RTU	- REMOTE TERMINAL UNIT
SR	- SPRING RETURN
S/S	- START/STOP
SSNR	- SOFT START NON-REVERSING STARTER
SSR	- SOFT START REVERSING STARTER
SV	- SOLENOID VALVE
TSS	- TOTAL SUSPENDED SOLIDS
VCC	- VENDOR CONTROL CABINET
VFD	- VARIABLE FREQUENCY DRIVE STARTER
VRV	- VACUUM REDUCING VALVE
WS	- WATER SUPPLY
ZSC	- POSITION LIMIT SWITCH CLOSED
ZSO	- POSITION LIMIT SWITCH OPEN

TABLE 2 - INSTRUMENTATION LOOP NUMBER ASSIGNMENTS	
SYSTEM	LOOP NUMBER RANGE
UNCLASSIFIED	00-04
INFLUENT SYSTEM/HEADWORKS	05-19
PRIMARY CLARIFICATION/EQUALIZATION	20-29
ANAEROBIC SYSTEM	30-39
BIOGAS HANDLING/UTILIZATION SYSTEM	40-49
ANOXIC/PRE-AERATION SYSTEM	50-54
MBR SYSTEM	55-59
AERATION/COMPRESSED AIR SYSTEM	60-64
RAS SYSTEM	65-69
SLUDGE MANAGEMENT SYSTEM	70-79
EFFLUENT TREATMENT/PUMPING SYSTEM	80-89
CHEMICAL METERING SYSTEM	90-99

TABLE 3 - CONTROL SIGNAL SOURCE/DESTINATION IDENTIFIER	
IDENTIFIER	DESCRIPTION
PLC-EX	SURFLINE PLC
PLC-01	BLOWER BUILDING PLC
RIO-01	CONTROL AND BLOWER BUILDING PLC
DP-1	SCREENING BUILDING DISTRIBUTION PANEL
DP-2	BLOWER BUILDING DISTRIBUTION PANEL
PP-1	UV BUILDING PRODUCTION PANEL
BMS-01	BUILDING MANAGEMENT SYSTEM
VCC-01	AUTO SCREEN No.1 VENDOR CONTROL CABINET
VCC-02	AUTO SCREEN No.2 VENDOR CONTROL CABINET
VCC-03	UV DISINFECTION VENDOR CONTROL CABINET
VCC-04	GRINDER PS VENDOR CONTROL CABINET
VCC-05	EXISTING GENERATOR VENDOR CONTROL CABINET
VCC-06	PROPOSED GENERATOR VENDOR CONTROL CABINET

PIPE MATERIAL	
AC	ASBESTOS CEMENT
BDI	BARE/JN-LINED DUCTILE IRON
DI	DUCTILE IRON
LDI	GLASS-LINED DUCTILE IRON
CPR	COPPER
CS	CARBON STEEL
FRP	FIBERGLASS REINFORCED PLASTIC
PLY	POLYURETHANE (HDPE)
PVC	POLYVINYL CHLORIDE
RC	REINFORCED CONCRETE
SS	STAINLESS STEEL (SCHEDULE 10)
SSS	STAINLESS STEEL (I.D./GAUGE)
SSZ	316L STAINLESS STEEL (I.D./GAUGE)

PROCESS EQUIPMENT IDENTIFICATION	
XX-XXX	SEQUENTIAL NUMBER IDENTIFIER CODE (SEE TABLE)
P	PUMP
MXR	MIXER
BWR	BLOWER
OMP	COMPRESSOR
BLR	BOILER
FLTR	FILTER
HX	HEAT EXCHANGER
GRDR	GRINDER
INU	INJECTOR
HG	HAND GATE
SG	SLUICE GATE
CG	CHANNEL GATE
WG	WIER GATE
STR	STRAINER
TK	TANK
V	VALVE
M	MOTOR
FS	FINE SCREEN

INSTRUMENTATION SYMBOLS	
	"NEW" FIELD MOUNTED INSTRUMENT
	"EXISTING" FIELD MOUNTED INSTRUMENT
	PANEL FRONT MOUNTED INSTRUMENT IN CONTROL ROOM OR ELECTRICAL ROOM
	PANEL FRONT MOUNTED INSTRUMENT IN FIELD PANEL
	FIELD MOUNTED INSTRUMENTS SHARING COMMON HOUSING
	DENOTES BACK LITE PUSHBUTTON OR INDICATING LIGHT
	RADIO ANTENNA

CONTROL SYMBOLS	
	PLC OR ELECTRONIC CONTROLLER INPUT/OUTPUT (LOCATED IN CONTROL ROOM OR ELECTRICAL ROOM)
	PLC OR ELECTRONIC CONTROLLER INPUT/OUTPUT (LOCATED IN FIELD MOUNTED PANEL)
	MOTOR CONTROL CENTER OR RELAY LOGIC LOCATED IN CONTROL ROOM OR ELECTRICAL ROOM
	MOTOR CONTROL CENTER OR RELAY LOGIC LOCATED IN FIELD MOUNTED PANEL
	STANDALONE VFD CABINET IN ELECTRICAL ROOM
	STANDALONE VFD CABINET LOCATED IN FIELD MOUNTED CABINET

INSTRUMENT LINE LEGEND	
	INSTRUMENT SUPPLY OR CONNECTION TO PROCESS
	PNEUMATIC SIGNAL LINE
	ELECTRIC SIGNAL
	CAPILLARY SIGNAL
	DATA HIGHWAY
	MECHANICAL LINKAGE

NOTES:

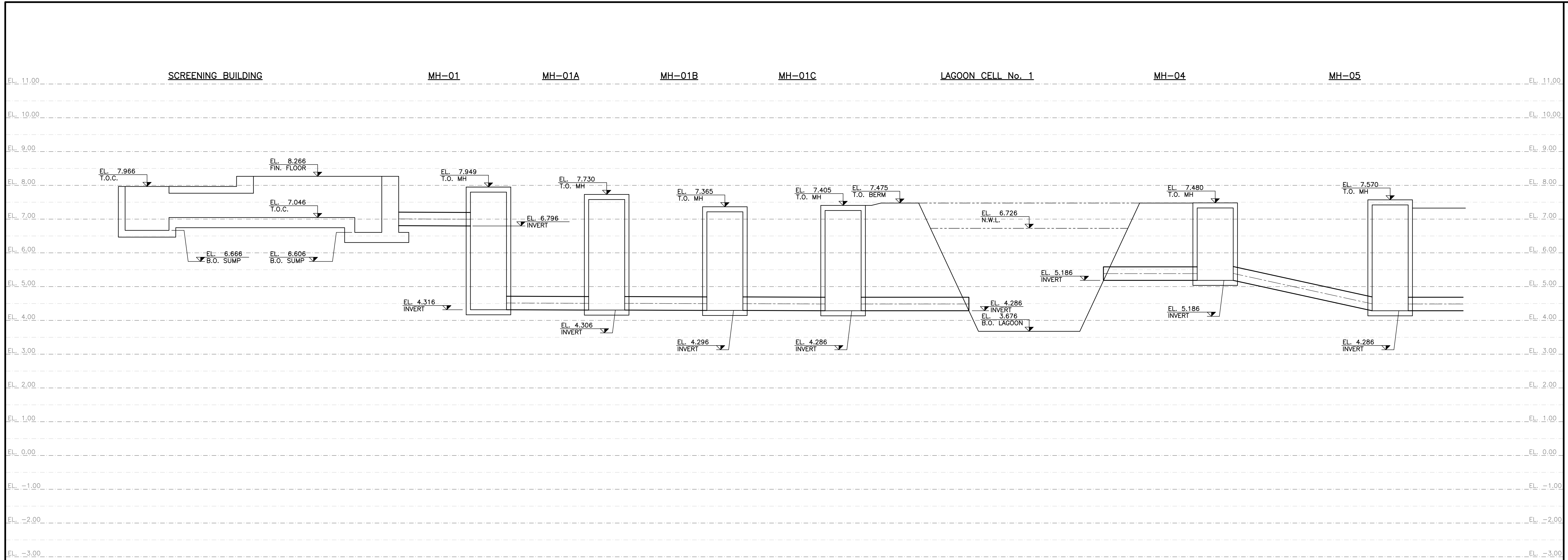
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- ALL DIMENSIONS USE METRIC UNITS. DIMENSIONS SHOWN IN MILLIMETERS AND POINT ELEVATIONS AS METERS (UNLESS NOTED OTHERWISE). SEE PROCESS DRAWING POS FOR PROCESS NOTES.

DRAFTING LEGEND:

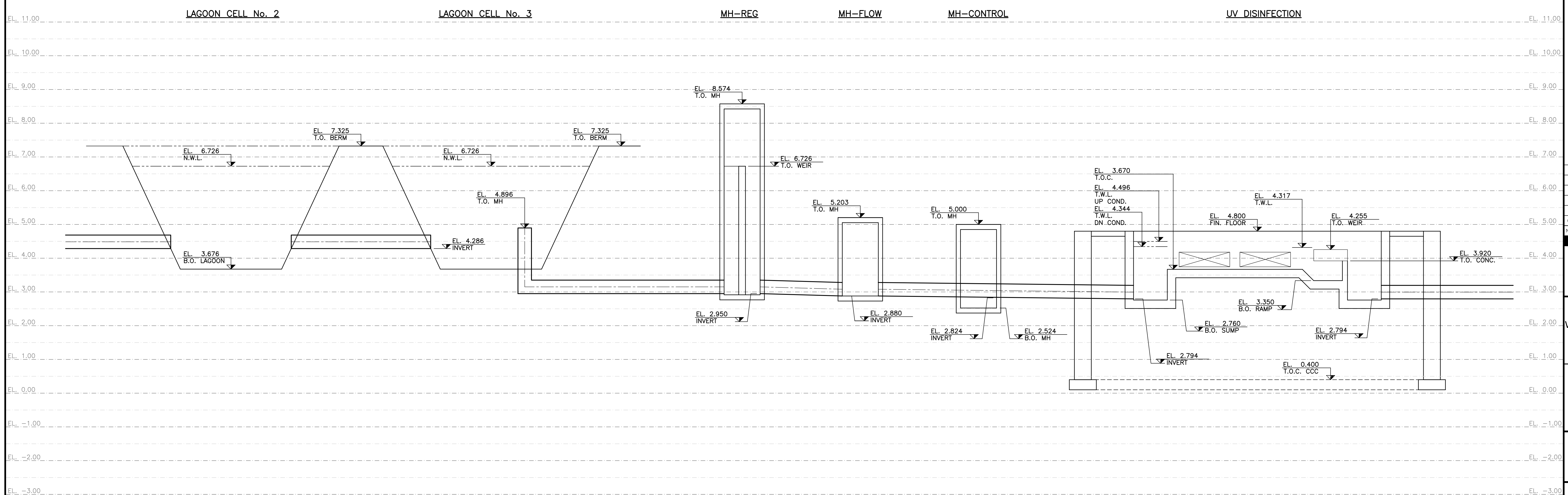
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STANDARD ABBREVIATIONS:

- ADMIN - ADMINISTRATION
- A.F.F. - ABOVE FINISHED FLOOR
- APPROX. - APPROXIMATE
- BLDG. - BUILDING
- B.O. - BOTTOM OF PIPE
- B.O.C. - BOTTOM OF CONCRETE
- B.O.P. - BOTTOM OF PIPE
- B.O.S. - BOTTOM OF STEEL
- CONC. - CONCRETE
- CORP. - CORROSION
- C/W - COMPLETE WITH
- D.I. - DUCTILE IRON
- DIA. - DIAMETER
- EXIST. - EXISTING
- EL. - ELEVATION
- FIN. - FINISHED
- F.O.B. - FLAT ON BOTTOM
- F.O.T. - FLAT ON TOP



HYDRAULIC PROFILE
N.T.S. (HORIZONTAL) / 1:50 (VERTICAL)



HYDRAULIC PROFILE
N.T.S. (HORIZONTAL) / 1:50 (VERTICAL)

- NOTES:**
1. DRAWINGS IN GENERAL ARE TO SCALE BUT FIGURED DIMENSIONS TAKE PRECEDENCE. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACCURACY OF INFORMATION SCALED FROM THE DRAWINGS.
 2. ALL DIMENSIONS USE METRIC UNITS. DIMENSIONS SHOWN IN MILLIMETERS AND POINT ELEVATIONS AS METERS (UNLESS NOTED OTHERWISE). SEE PROCESS DRAWING POS FOR PROCESS NOTES.

NOT FOR CONSTRUCTION

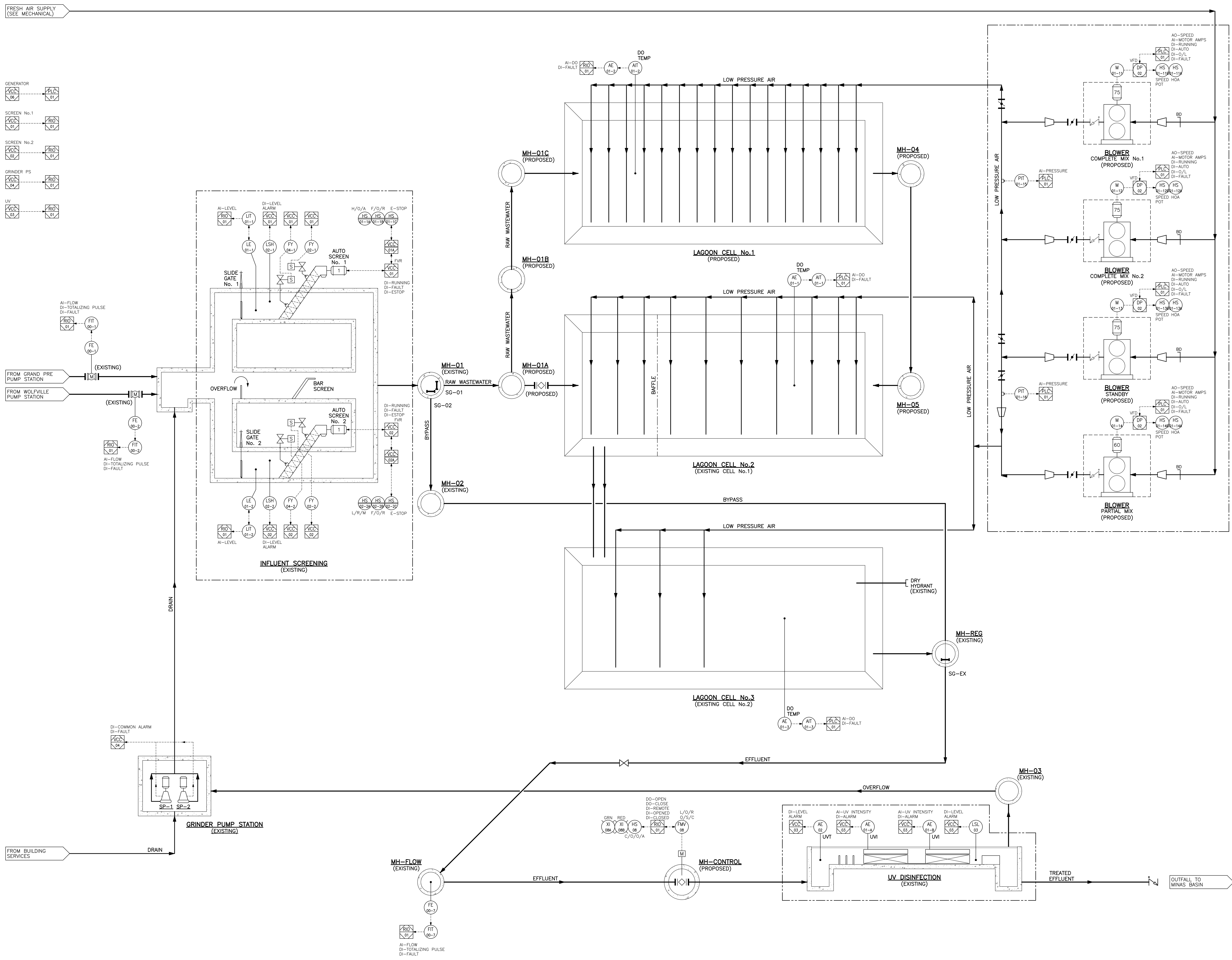
No.	ISSUED FOR TENDER	Date	By
0		MAR 11/25	CB

Revision of Issue

TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

PROCESS
HYDRAULIC PROFILE

Contract No. WOL005-2025
Date: APR 2024
Scale: AS NOTED
Designed: DAT
Drawn: MAA
Checked: DAT
Approved: DAT
Sheet No. 2 of 6
Drawing No. P02



NOTES:
 1. DRAWINGS IN GENERAL ARE TO SCALE BUT FIGURED DIMENSIONS TAKE PRECEDENCE. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACCURACY OF INFORMATION SCALED FROM THE DRAWINGS.
 2. ALL DIMENSIONS USE METRIC UNITS. DIMENSIONS SHOWN IN MILLIMETERS AND POINT ELEVATIONS AS METERS (UNLESS NOTED OTHERWISE). SEE PROCESS DRAWING P03 FOR PROCESS NOTES.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

Revision of Issue

wolfville

TOWN OF WOLFVILLE

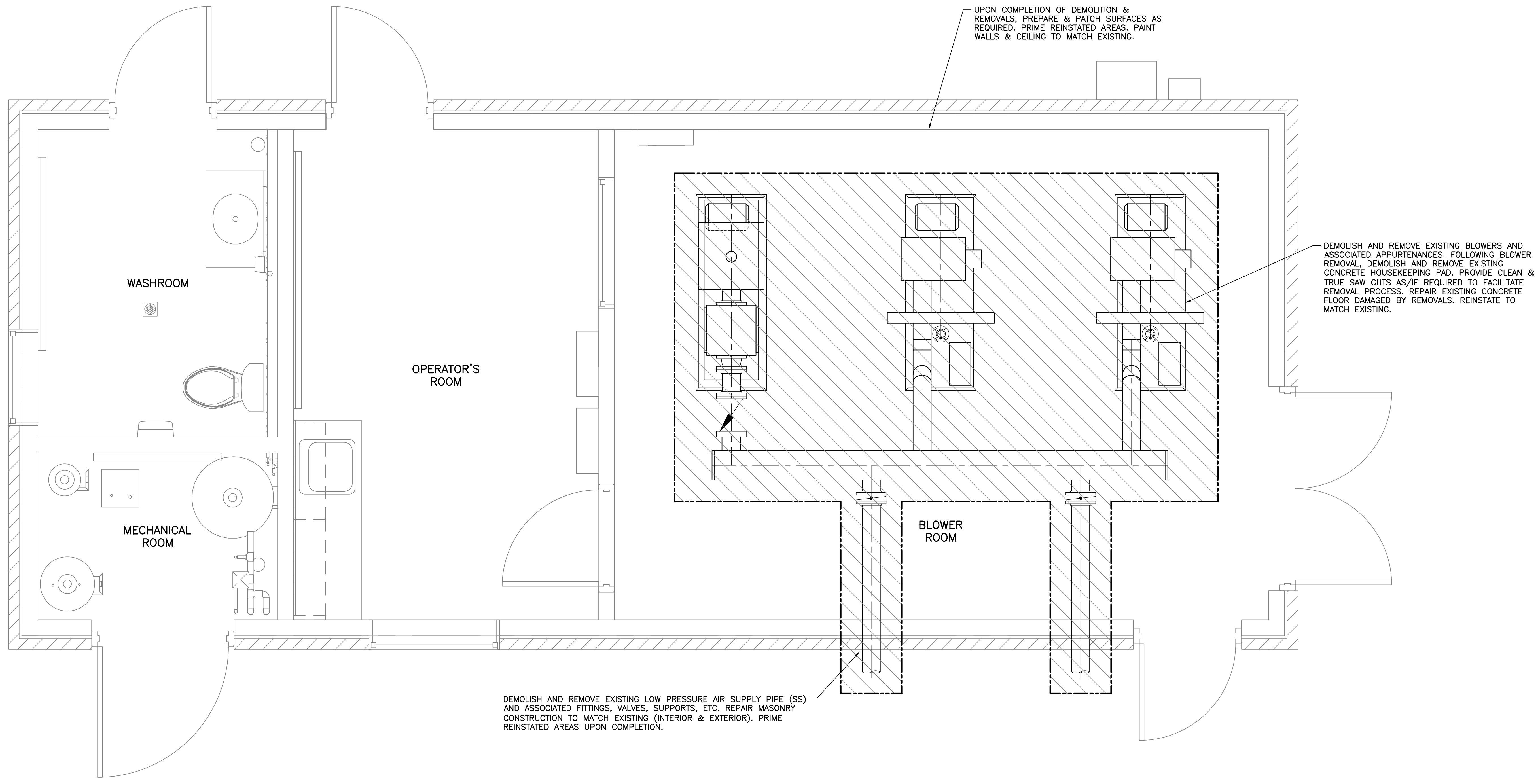
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

PROCESS

P & ID

CBCL

LIBL No 230813.02	Contract No WOL005-2025
Date APR 2024	Scale N.T.S.
Designed DAT	Drawn MAA
Checked DAT	Approved DAT
Sheet No 3	of 6
P03	




PLAN—BLOWER BUILDING
1:20

NOTES:

- SEE CIVIL DRAWING C02 FOR GENERAL NOTES, EXISTING WASTEWATER TREATMENT PLANT NOTES, AS WELL AS DEMOLITION & REMOVAL NOTES.
- SEE PROCESS DRAWING P05 FOR PROCESS NOTES.


LEGEND:

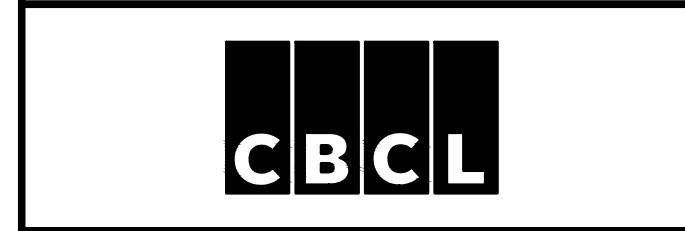
 DENOTES EQUIPMENT, PIPING OR MATERIALS TO BE DEMOLISHED, REMOVED OR REPLACED.

NOT FOR CONSTRUCTION

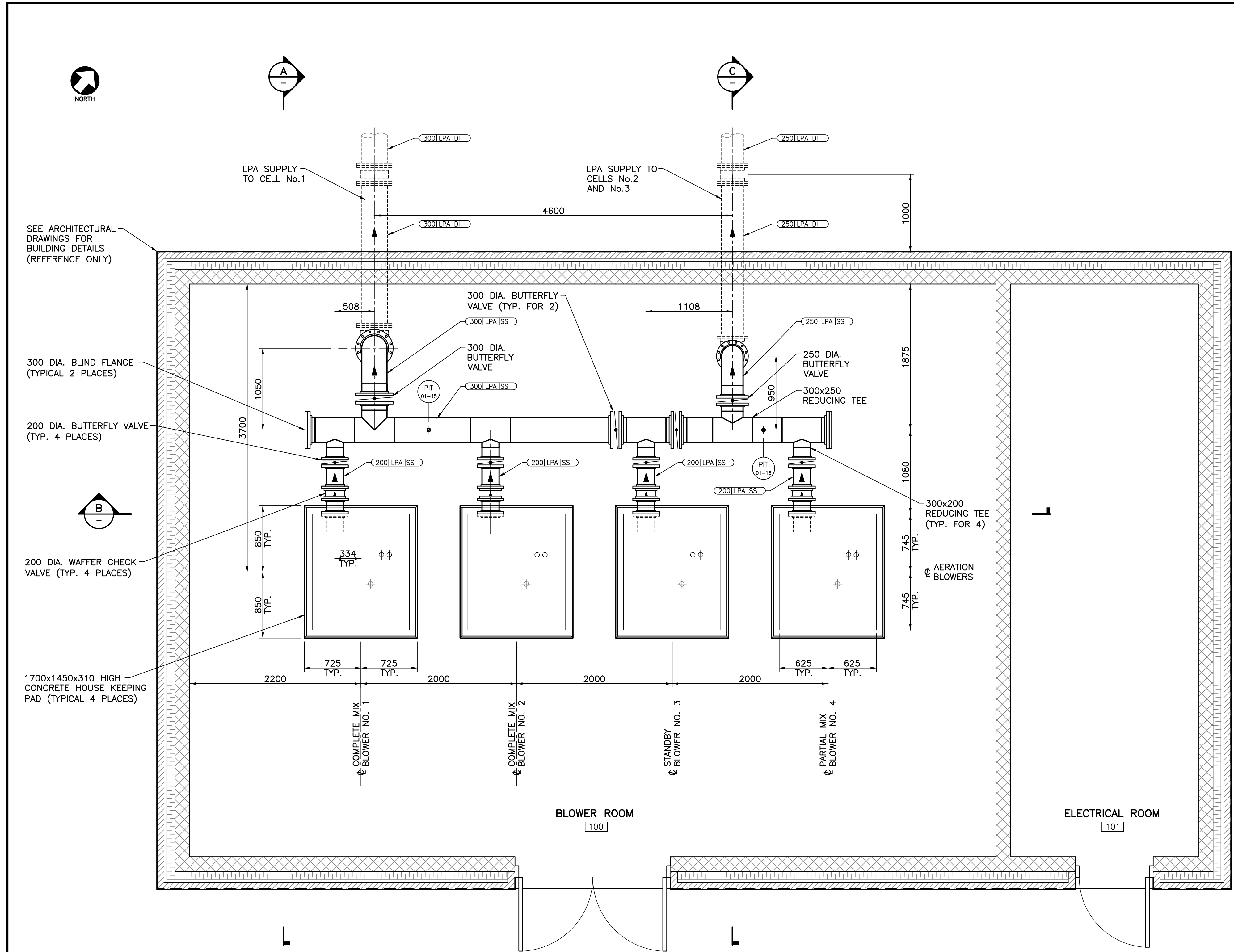
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/24	CB

Revision of Issue

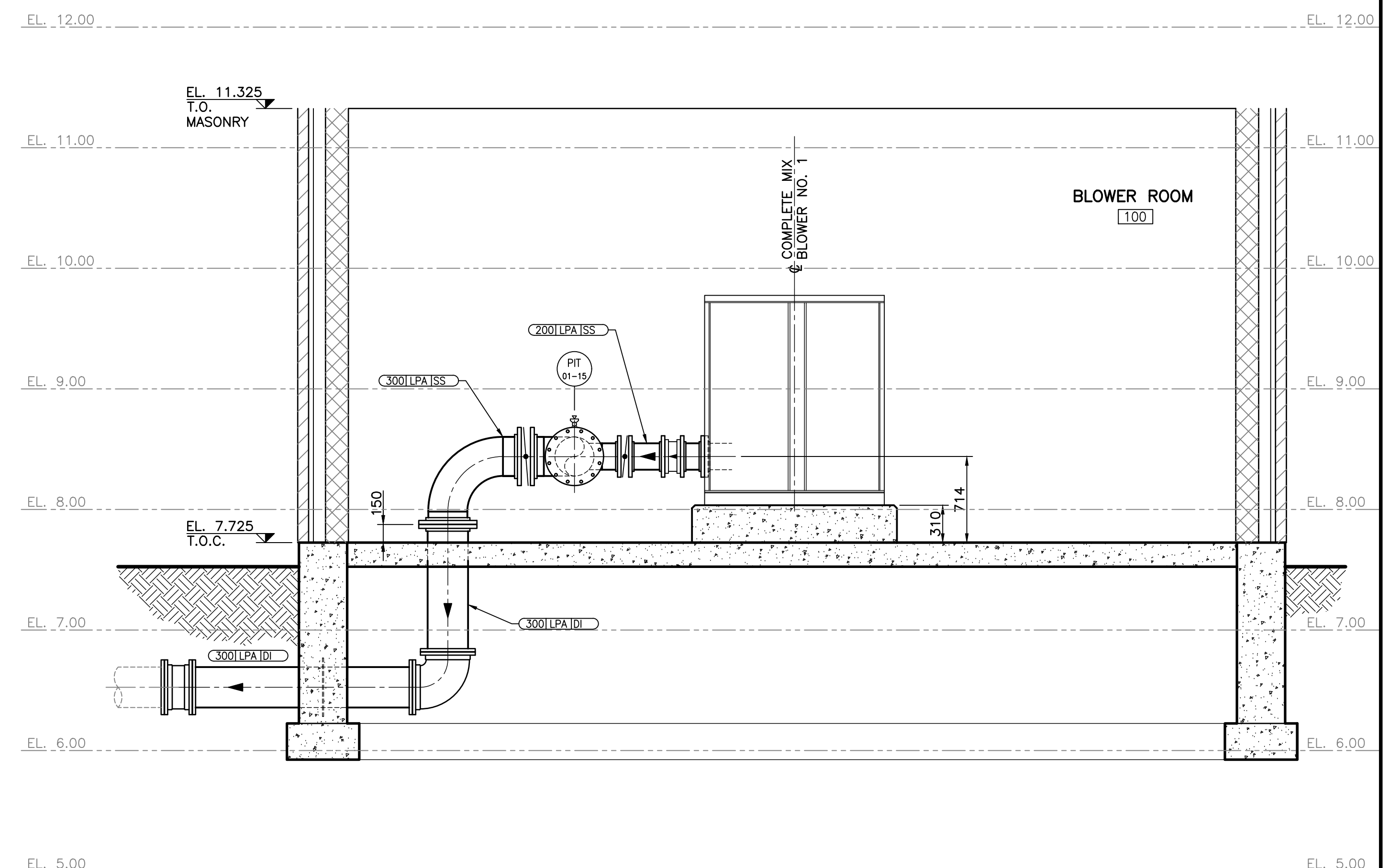

TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES
PROCESS
EXISTING BLOWER BUILDING
DEMOLITION



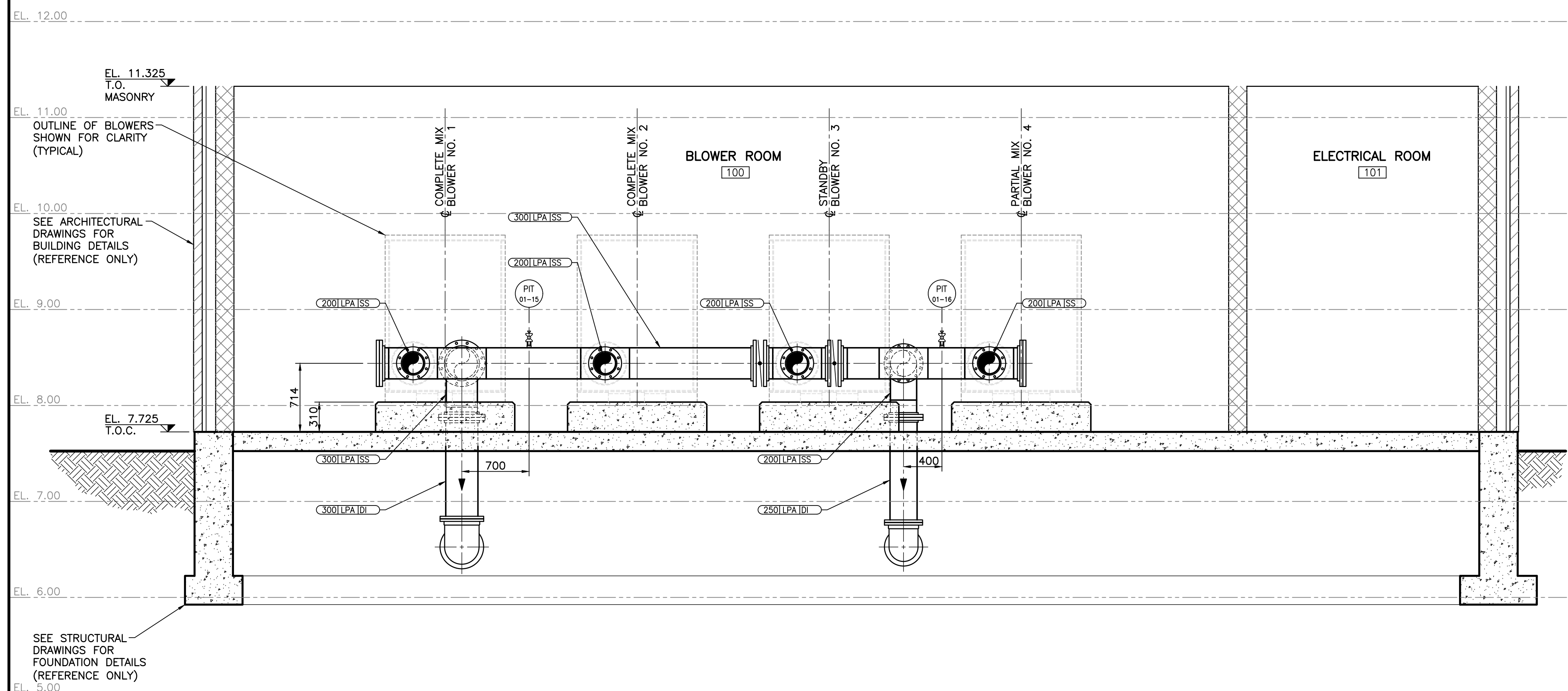
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Date APR 2024	Scale AS NOTED
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P04	



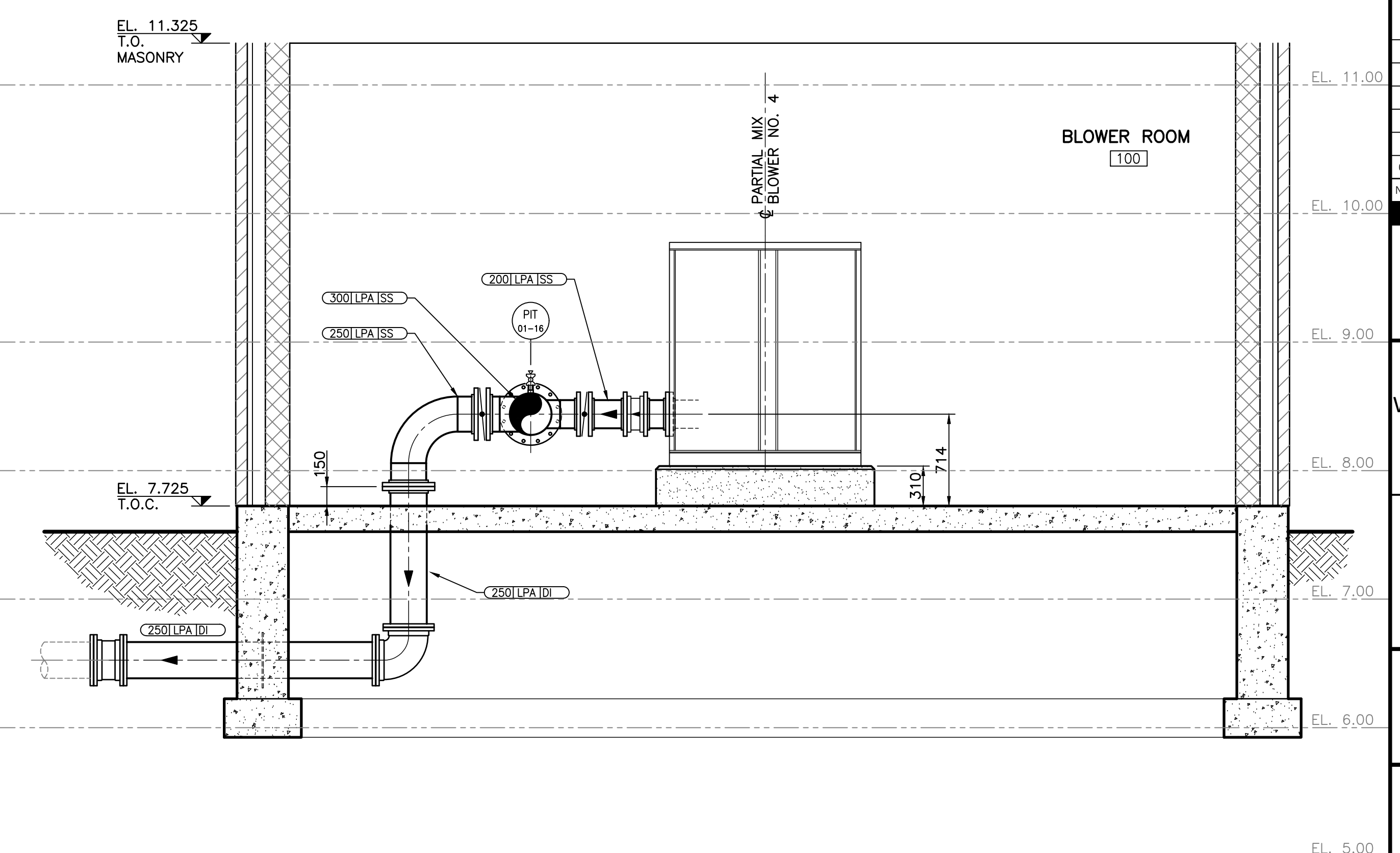
PLAN— BLOWER BUILDING
1:30



A SECTION— COMPLETE MIX
1:30 BLOWER No.1



B SECTION— AERATION BLOWERS
1:30



C SECTION— PARTIAL MIX
1:30 BLOWER No.4

- NOTES:**
1. DRAWINGS IN GENERAL ARE TO SCALE BUT FIGURED DIMENSIONS TAKE PRECEDENCE. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACCURACY OF INFORMATION SCALED FROM THE DRAWINGS.
 2. ALL DIMENSIONS USE METRIC UNITS. DIMENSIONS SHOWN IN MILLIMETERS AND POINT ELEVATIONS AS METERS (UNLESS NOTED OTHERWISE).

- PROCESS NOTES:**
1. ALL WORK IS TO BE EXECUTED IN A SAFE AND ORDERLY MANNER. CONTRACTOR IS TO MAINTAIN A CLEAN JOBSITE AND REMOVE DEBRIS AND WASTE FROM THE SITE ON A DAILY BASIS. WASTE DISPOSAL TO BE IN ACCORDANCE WITH ENVIRONMENTAL REGULATIONS, AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
 2. NO CHANGES OR REVISIONS TO THE WORK SHALL BE EXECUTED WITHOUT THE APPROVAL OF THE ENGINEER.
 3. SHOP DRAWINGS FOR ALL COMPONENTS SHALL BE SUBMITTED TO THE OWNER'S ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OR USE.
 4. ALL SUPPORTS, HANGERS, BRACKETS AND ASSOCIATED HARDWARE WITHIN TANKS SHALL BE 316 STAINLESS STEEL UNLESS NOTED OTHERWISE.
 5. ABSOLUTELY NO JUNCTION BOXES WITHIN TANKS.
 6. SEE MECHANICAL DRAWINGS FOR BLOWER INTAKE DUCTWORK.
 7. SEE ELECTRICAL DRAWINGS FOR WIRING OF PROCESS EQUIPMENT AND ASSOCIATED APPURTENANCES.
 8. MECHANICAL AND PROCESS PIPES TO RUN 1000 OUTSIDE OF STRUCTURES AND THE CIVIL CONTRACTOR IS TO CONTINUE PIPES FROM THIS POINT UNLESS NOTED OTHERWISE.
 9. SEE PROCESS DRAWINGS:
 - 9.1. P01 FOR LEGEND.
 - 9.2. P02 FOR HYDRAULIC PROFILE.
 - 9.3. P03 FOR P&ID.
 - 9.4. P04 FOR DEMOLITION.
 - 9.5. P06 FOR MISCELLANEOUS DETAILS.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	CB

Revision of Issue

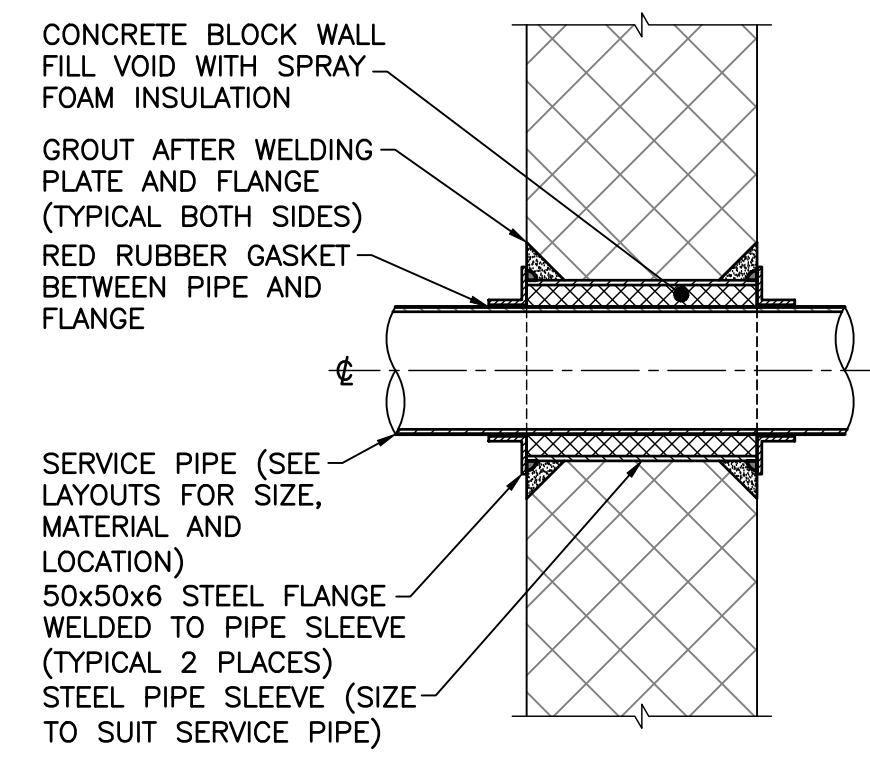
TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

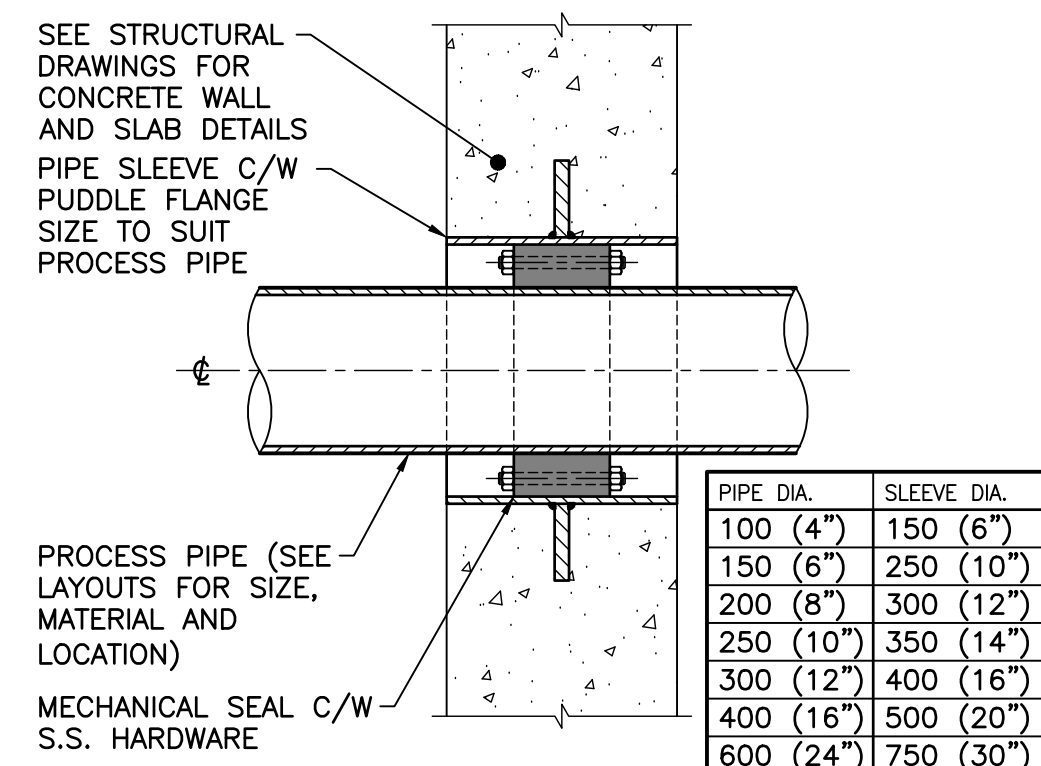
PROCESS

BLOWER BUILDING PLAN AND SECTIONS

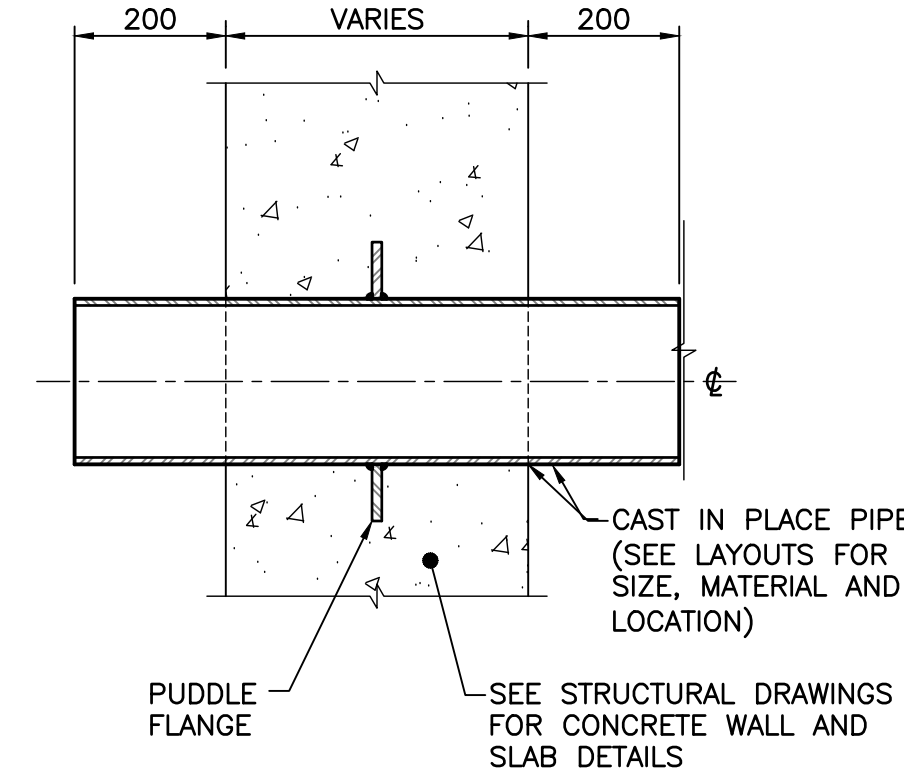
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 Date APR 2024 Scale 1:30
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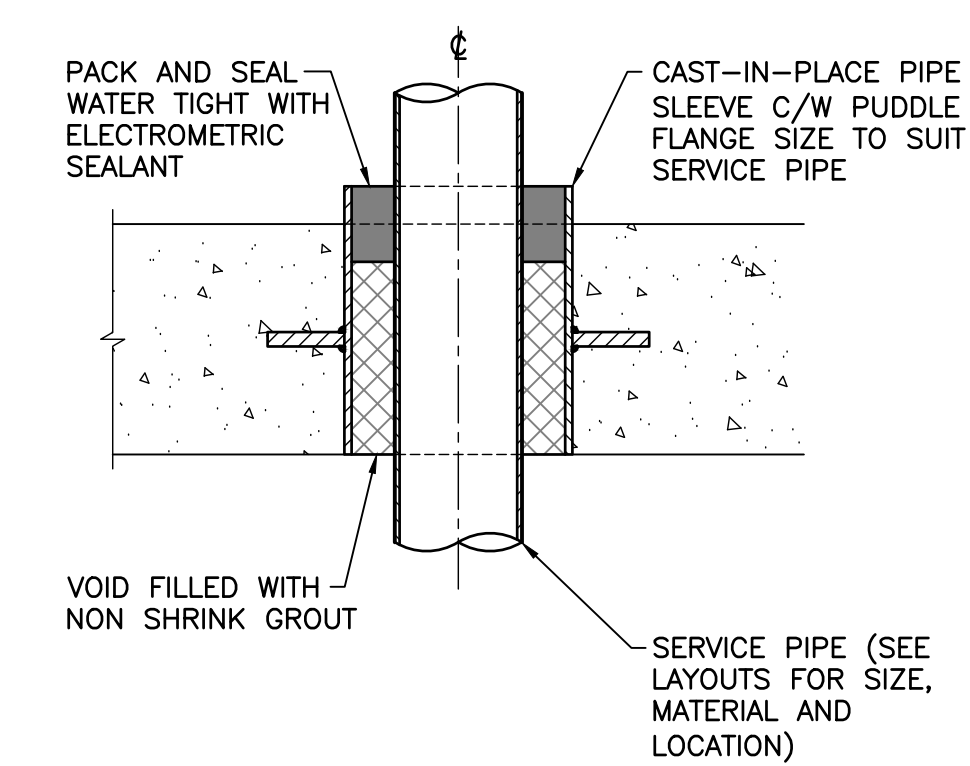
DETAIL-PIPE PENETRATION
N.T.S. THROUGH BLOCK WALL



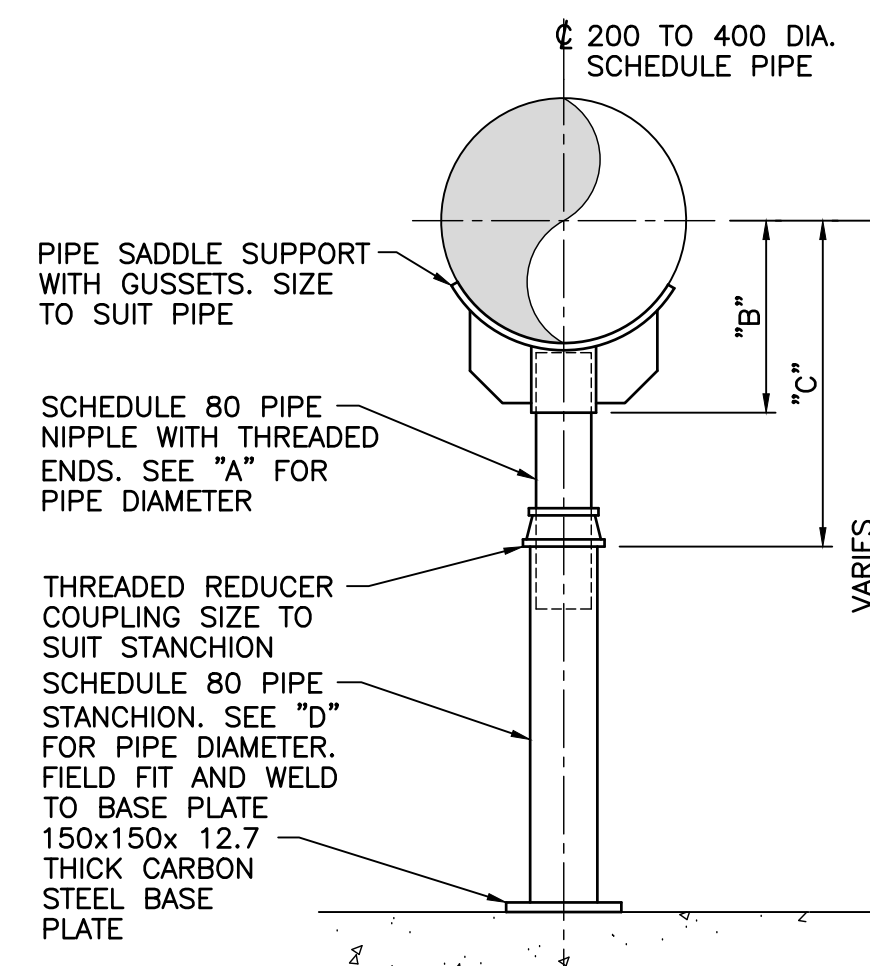
DETAIL-PIPE PENETRATION
N.T.S. MECHANICAL SEAL C/W PIPE SLEEVE



DETAIL-PIPE PENETRATION
N.T.S. CAST IN PLACE PIPE C/W PUDDLE FLANGE

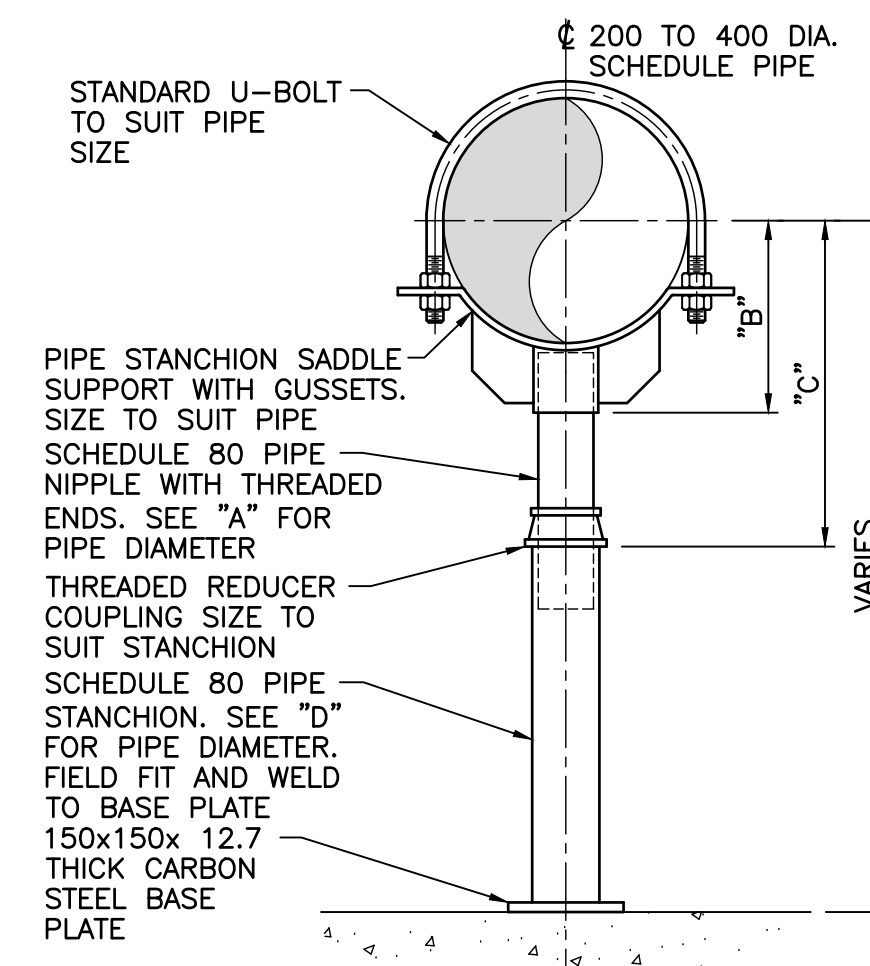


DETAIL-PIPE PENETRATION
N.T.S. THROUGH CONCRETE SLAB C/W PIPE SLEEVE



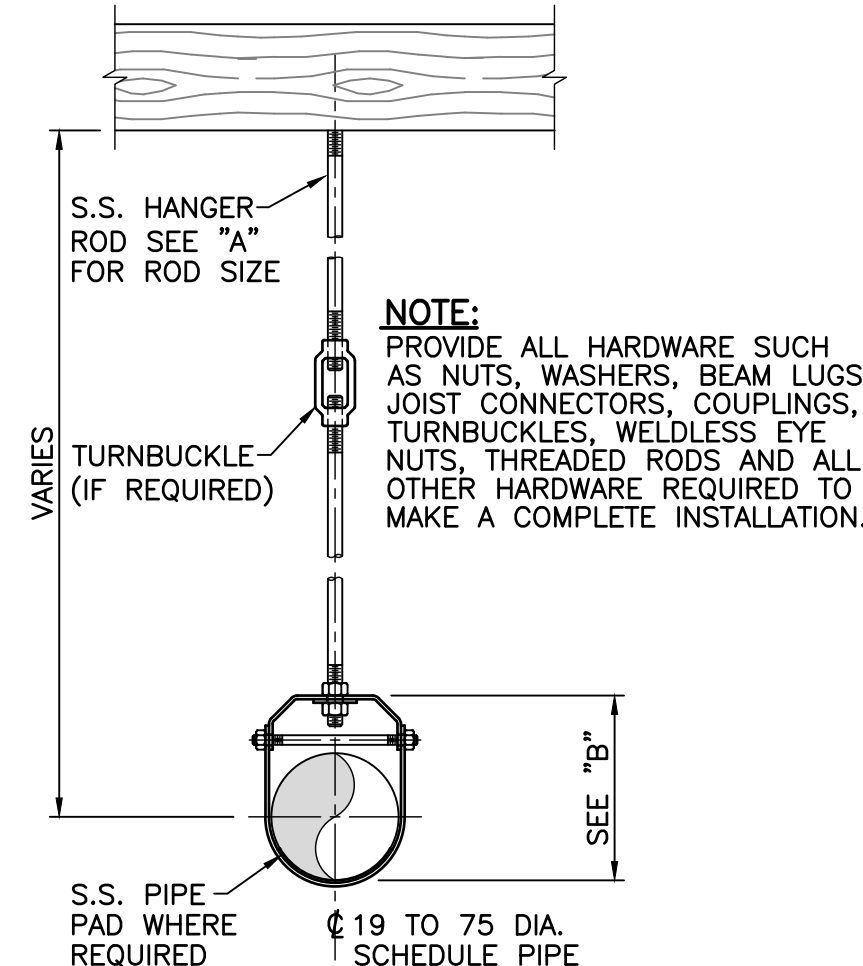
NOMINAL PIPE SIZE (NPS) SUPPORTED	"A" NPS	"B" REF.	"C" MIN.	"D" NPS
200 (8")	50 (2")	179	298	75 (3")
250 (10")	50 (2")	216	343	75 (3")
300 (12")	50 (2")	254	381	75 (3")
350 (14")	75 (3")	279	413	100 (4")
400 (16")	75 (3")	314	451	100 (4")

DETAIL-PIPE SADDLE SUPPORT
N.T.S. WITH ADJUSTABLE SADDLE



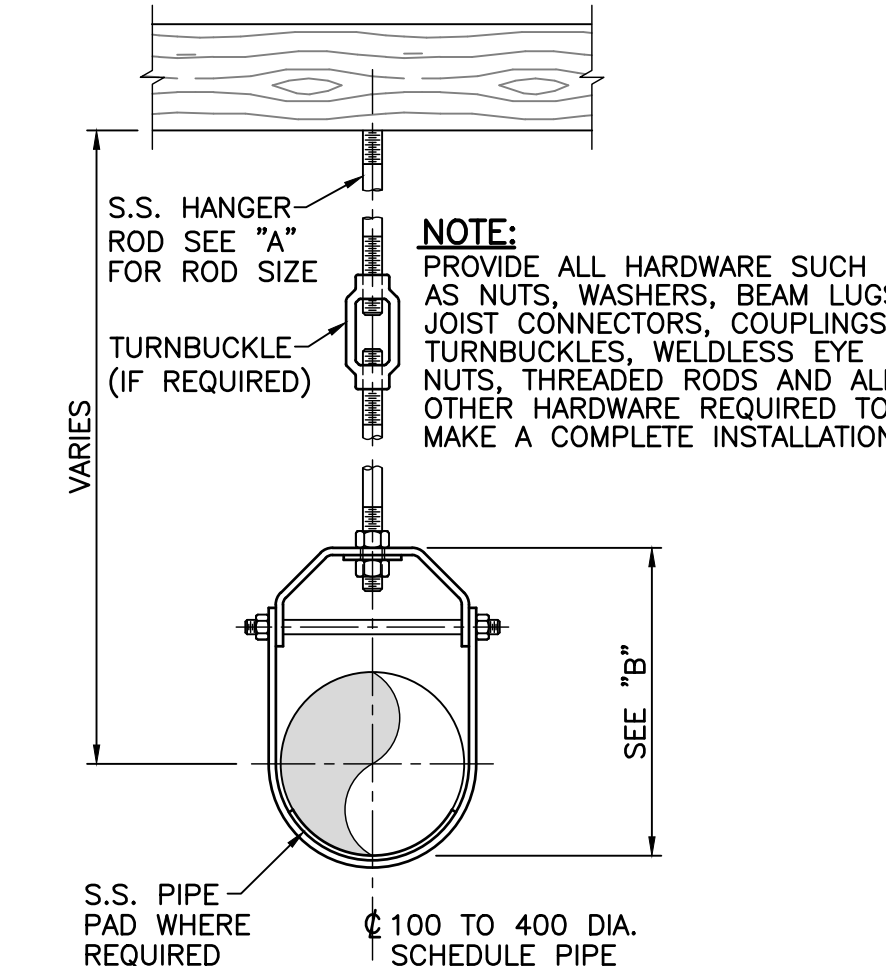
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350 (14")	75 (3")	279	413	100 (4")
400 (16")	75 (3")	314	451	100 (4")

DETAIL-PIPE STANCHION SUPPORT
N.T.S. WITH ADJUSTABLE STANCHION



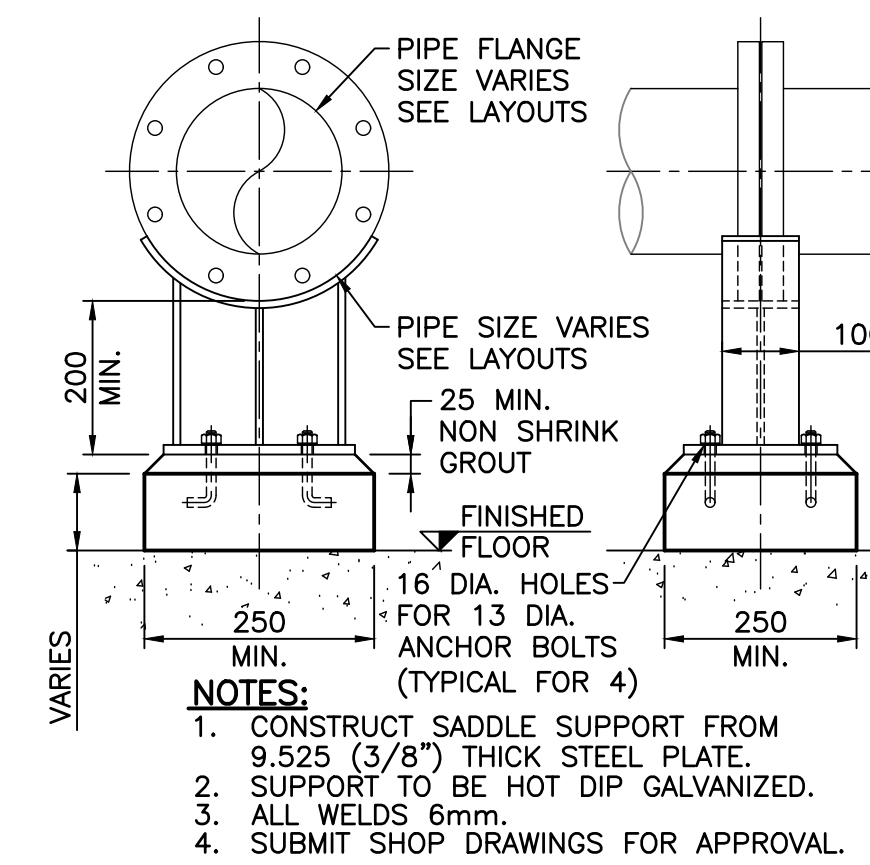
NOMINAL PIPE SIZE (NPS) SUPPORTED	"A" DIA.	"B" REF.	RECOMMENDED HANGER SPACING
19 (3/4")	10 (3/8")	75	1800 (6'-0")
25 (1")	10 (3/8")	79	2100 (7'-0")
32 (1 1/4")	10 (3/8")	98	2400 (8'-0")
38 (1 1/2")	10 (3/8")	102	2700 (9'-0")
50 (2")	10 (3/8")	127	3000 (10'-0")
50 (2")	13 (1/2")	199	3300 (11'-0")
64 (2 1/2")	13 (1/2")	183	3600 (12'-0")

DETAIL-TYPICAL CLEVIS HANGER
N.T.S. LIGHT DUTY PIPE HANGER

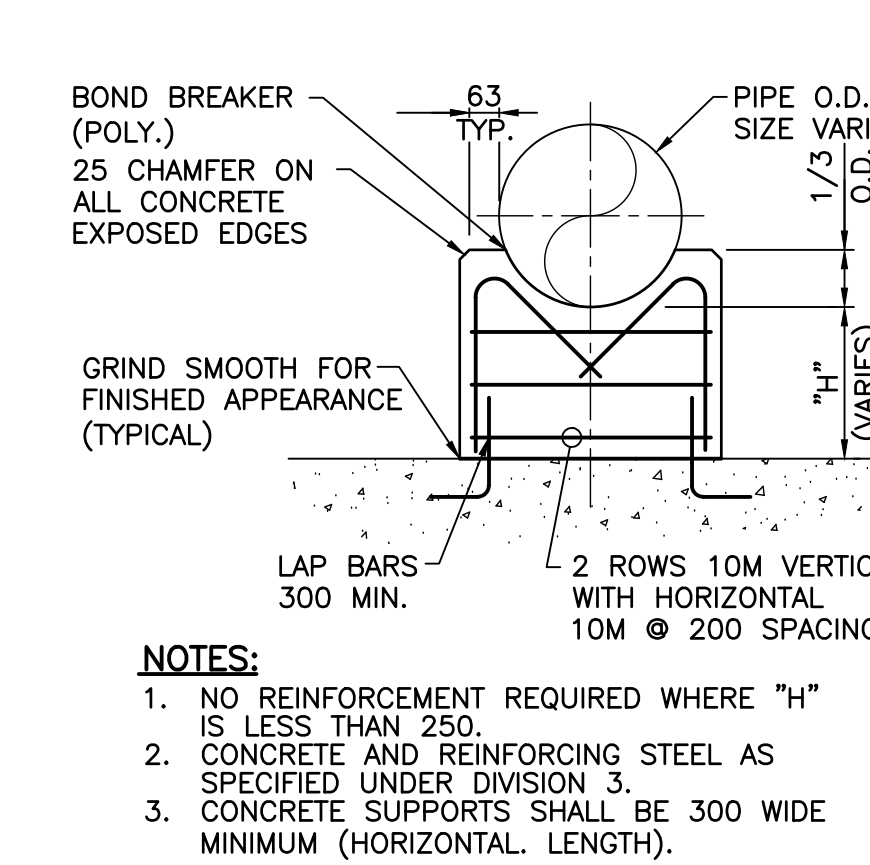


NOMINAL PIPE SIZE (NPS) SUPPORTED	"A" DIA.	"B" REF.	RECOMMENDED HANGER SPACING
100 (4")	16 (5/8")	191	4200 (14'-0")
150 (6")	19 (3/4")	254	5100 (17'-0")
200 (8")	19 (3/4")	337	5700 (19'-0")
250 (10")	22 (7/8")	391	6600 (22'-0")
300 (12")	22 (7/8")	448	6900 (23'-0")
350 (14")	25 (1")	502	7500 (25'-0")
400 (16")	25 (1")	578	8100 (27'-0")

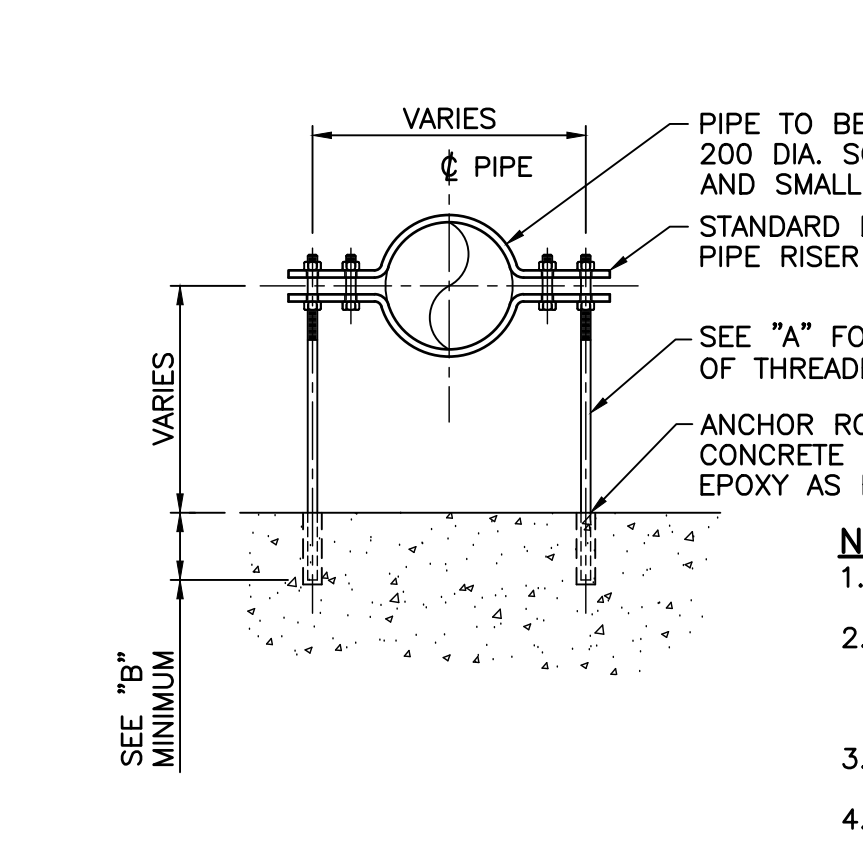
DETAIL-TYPICAL CLEVIS HANGER
N.T.S. STANDARD DUTY PIPE HANGER



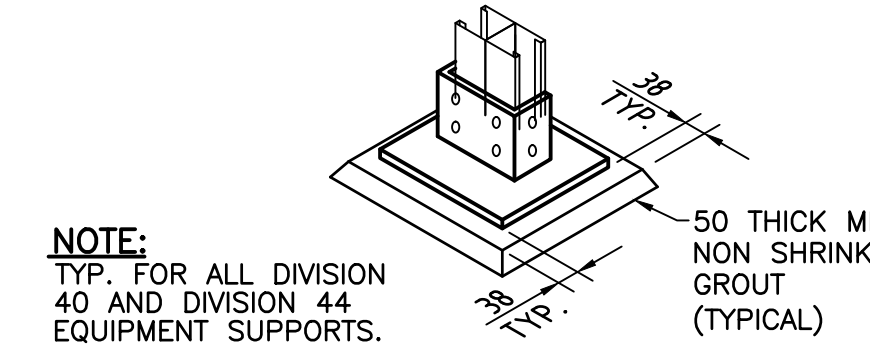
DETAIL-TYPICAL VALVE SUPPORT
N.T.S.



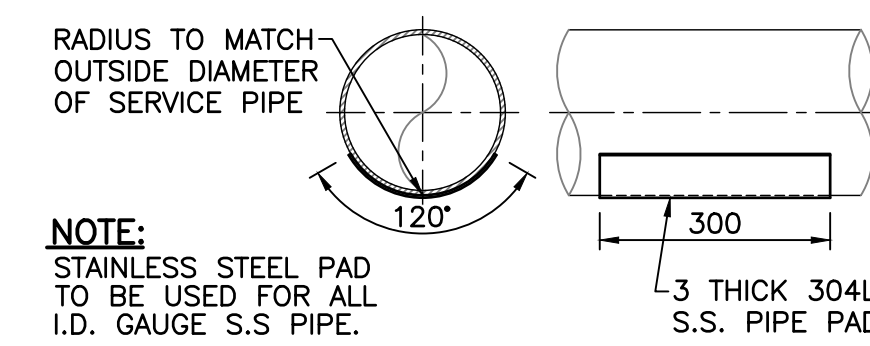
DETAIL-TYPICAL CONCRETE SUPPORT
N.T.S.



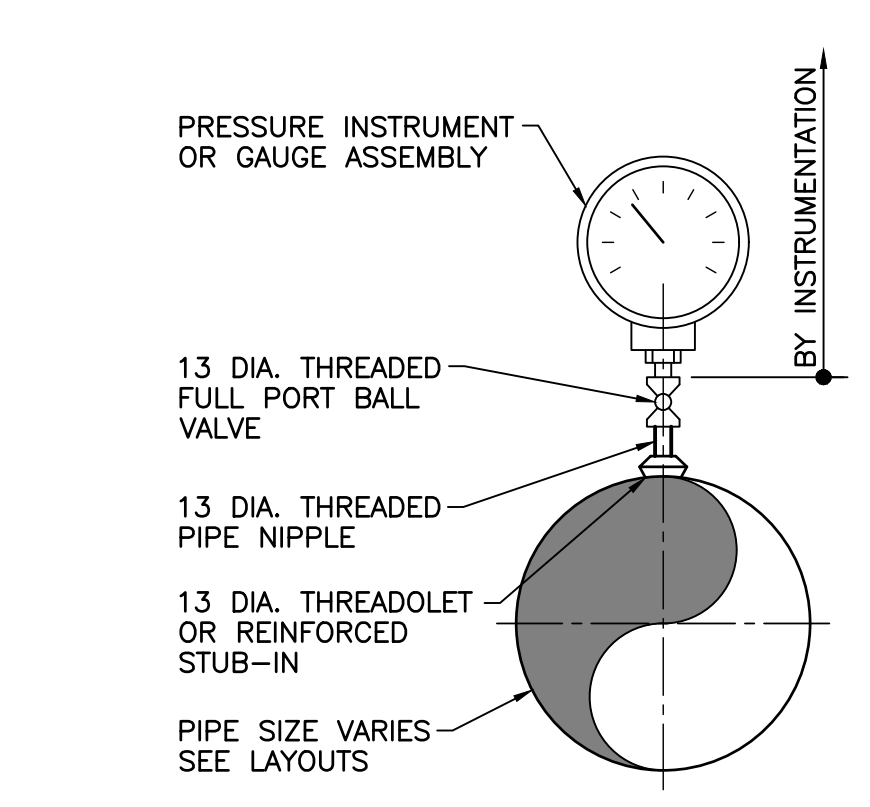
DETAIL-PIPE SADDLE SUPPORT
N.T.S. WITH ADJUSTABLE SADDLE



DETAIL-EQUIPMENT PADS
N.T.S.



DETAIL-PIPE PAD FOR I.D. PIPE
N.T.S.



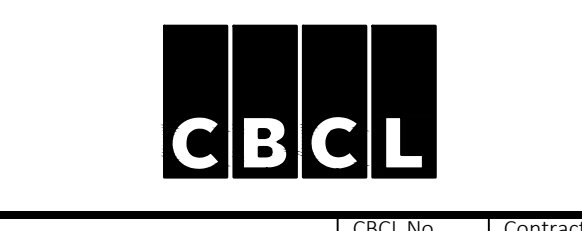
DETAIL-PRESSURE GAUGE
N.T.S. DIRECT MOUNTED

NOT FOR CONSTRUCTION

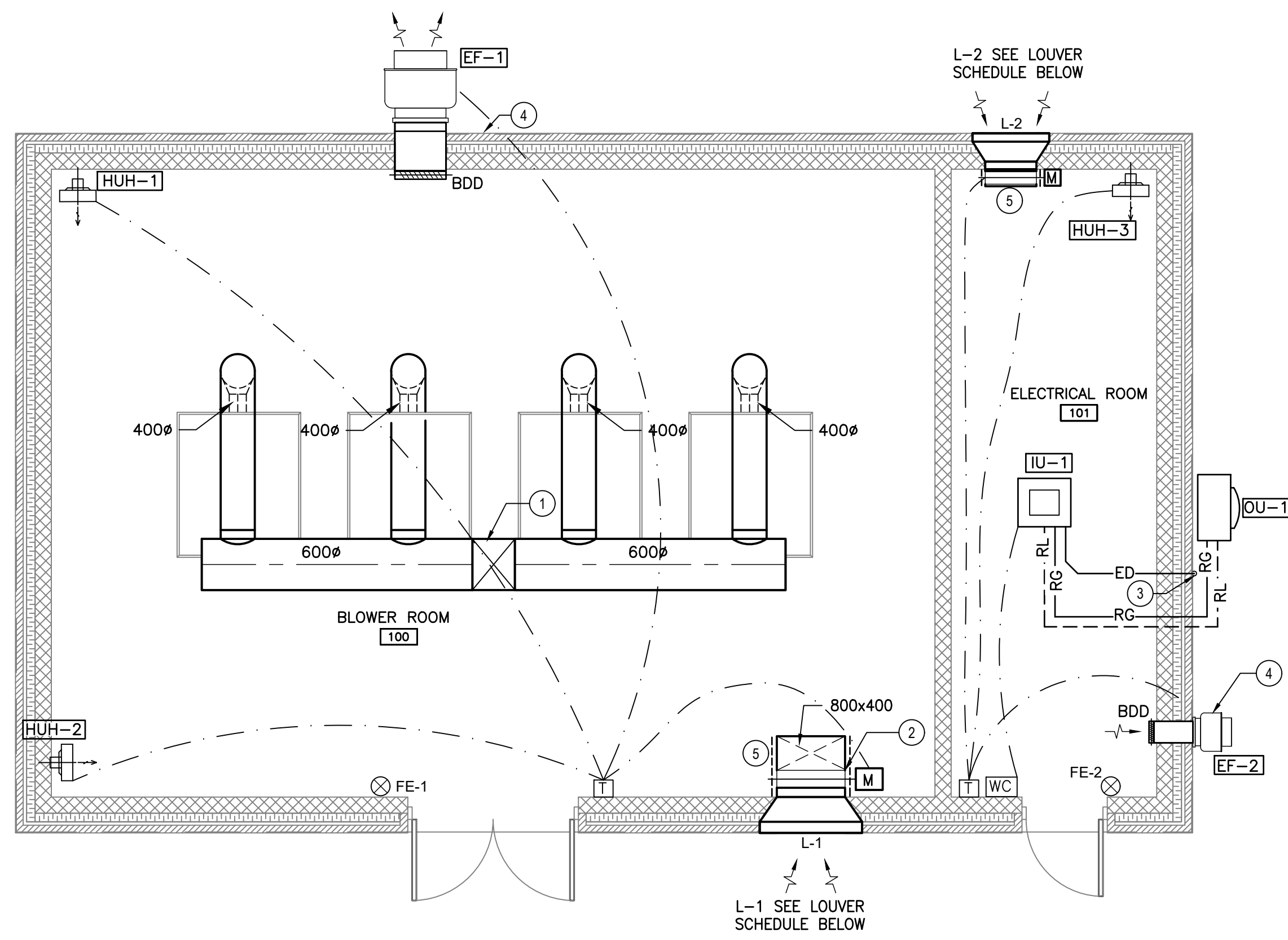
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BT

Revision of Issue

wolfville
TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES
PROCESS
DETAILS



LIBCL No 230813.02
Date APR 2024
Scale AS NOTED
Contract No WOL005-2025
Drawn RH
Approved DAT
Sheet No 6 of 6
Drawing No P06



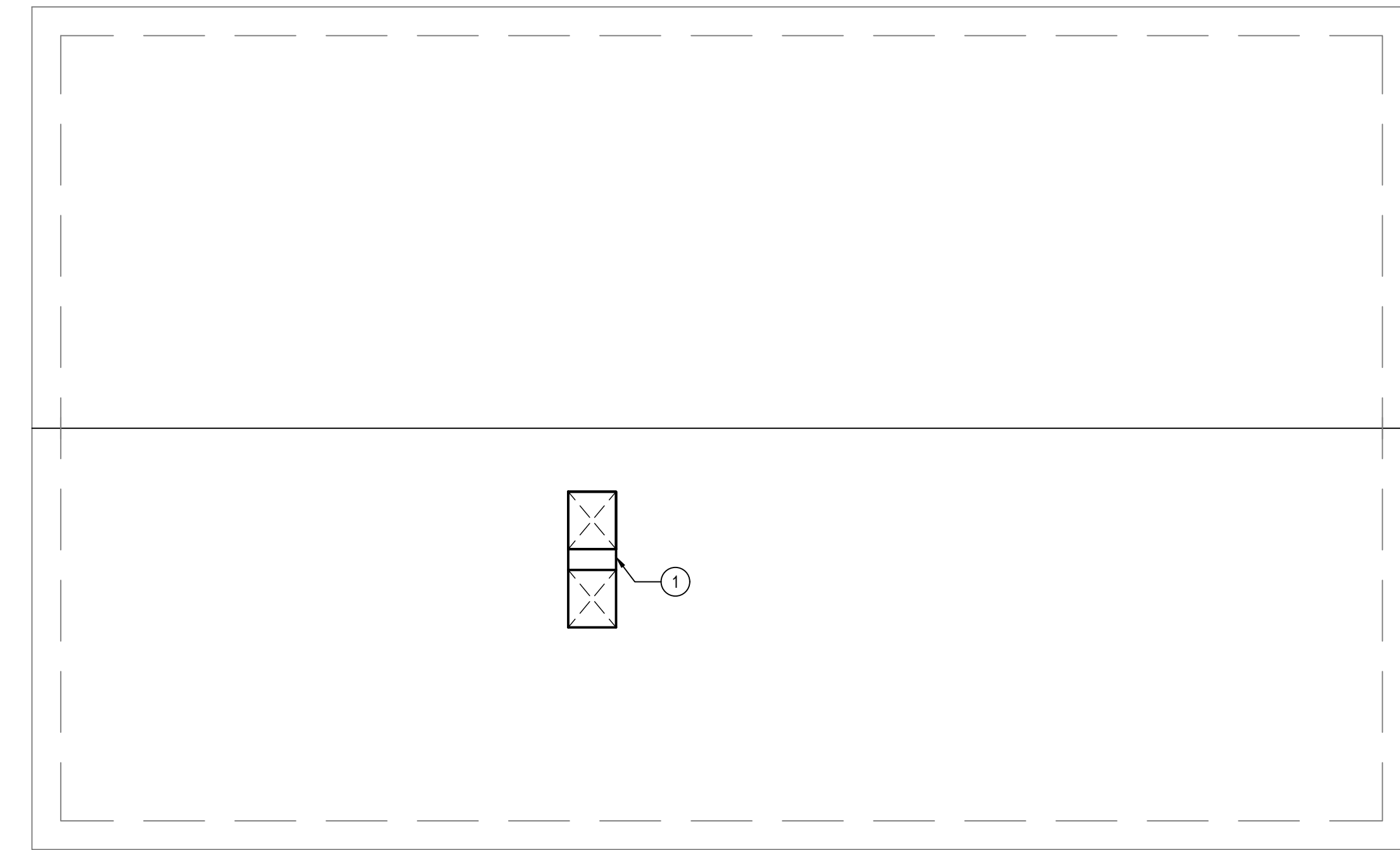
1 PLAN - HVAC LAYOUT
1:50

KEYNOTES:

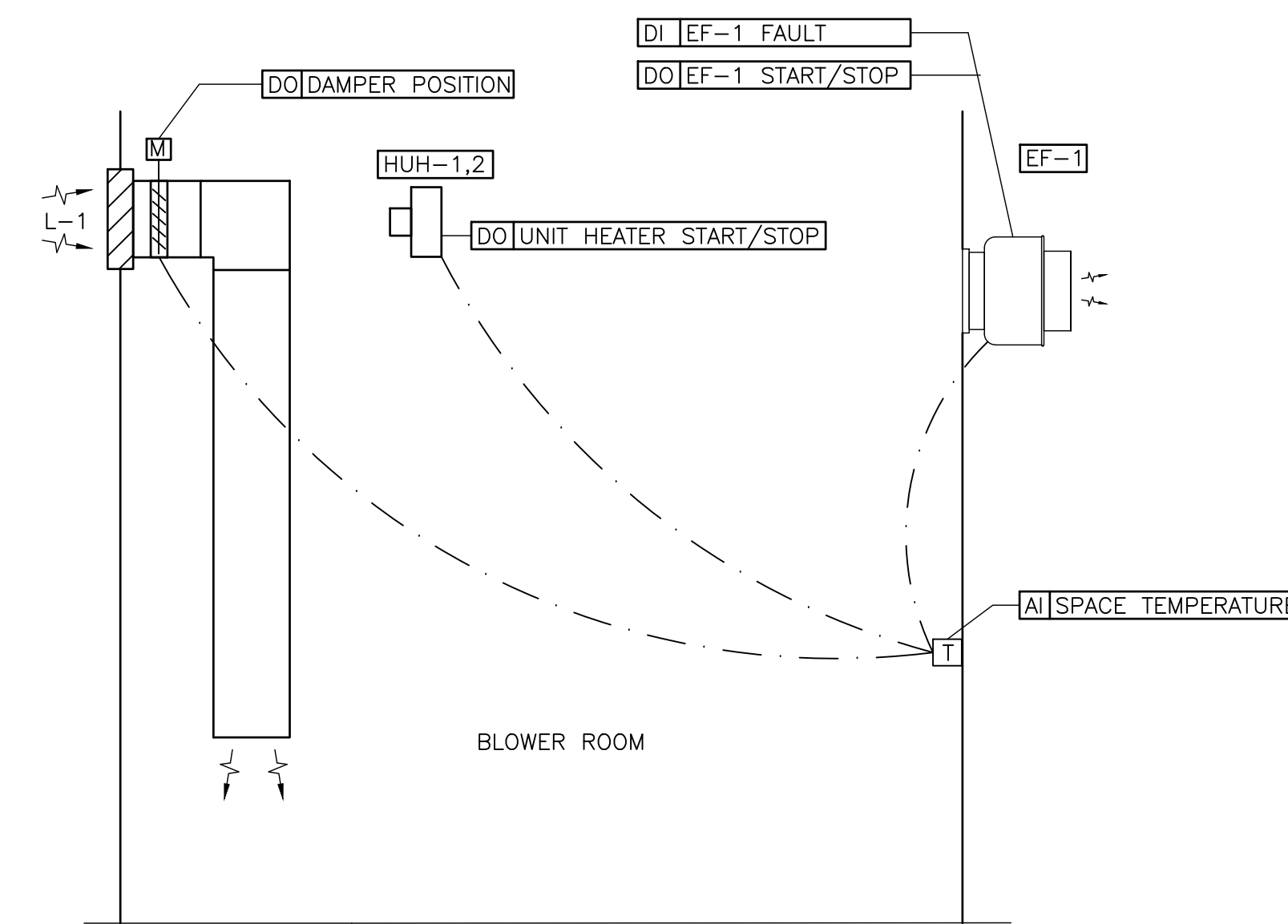
- 600x500 FRESH AIR DUCT DOWN FROM ROOF TO SERVE BLOWERS C/W THERMAL INSULATION FOR ENTIRE LENGTH. PROVIDE DN400 PVC PIPE FROM DUCT PLENUM DOWN TO BLOWER INLET, CONNECTION AT BLOWER IS DN200. TYPICAL OF 4. PRIOR TO INSTALLING DUCT, CONFIRM LOCATION OF TRUSSES ABOVE CEILING, AND LOCATION OF CONNECTIONS ON BLOWERS. REFER TO ARCHITECTURAL DWGS.
- DUCT FOR AMBIENT AIR COOLING. PROVIDE INSULATED MOTORIZED DAMPER W ACTUATOR. INSULATE DUCT FROM LOUVER TO DAMPER. DUCT TO DROP DOWN TO 450mm AFF. ADD SCREEN AT BOTTOM.
- CONDENSATE DRAIN TO OUTSIDE.
- EXHAUST FAN, SEE STRUCTURAL DRAWINGS FOR PENETRATION HEIGHT. C/W BACKDRAFT DAMPER AND SCREEN AT INLET.
- PROVIDE SCREEN AT DUCT OPENING.

CONTROLS NOTES:

- THE CONTROLS SCOPE OF WORK IS TO EXTEND THE EXISTING BMS SYSTEM TO INCLUDE THIS BUILDING.
- CONTROL WIRING BETWEEN BUILDINGS IS TO RUN IN CONDUIT FROM SCREENING BUILDING TO THIS BUILDING INSIDE DUCTBANK BY OTHERS. SEE ELECTRICAL DRAWING E02.



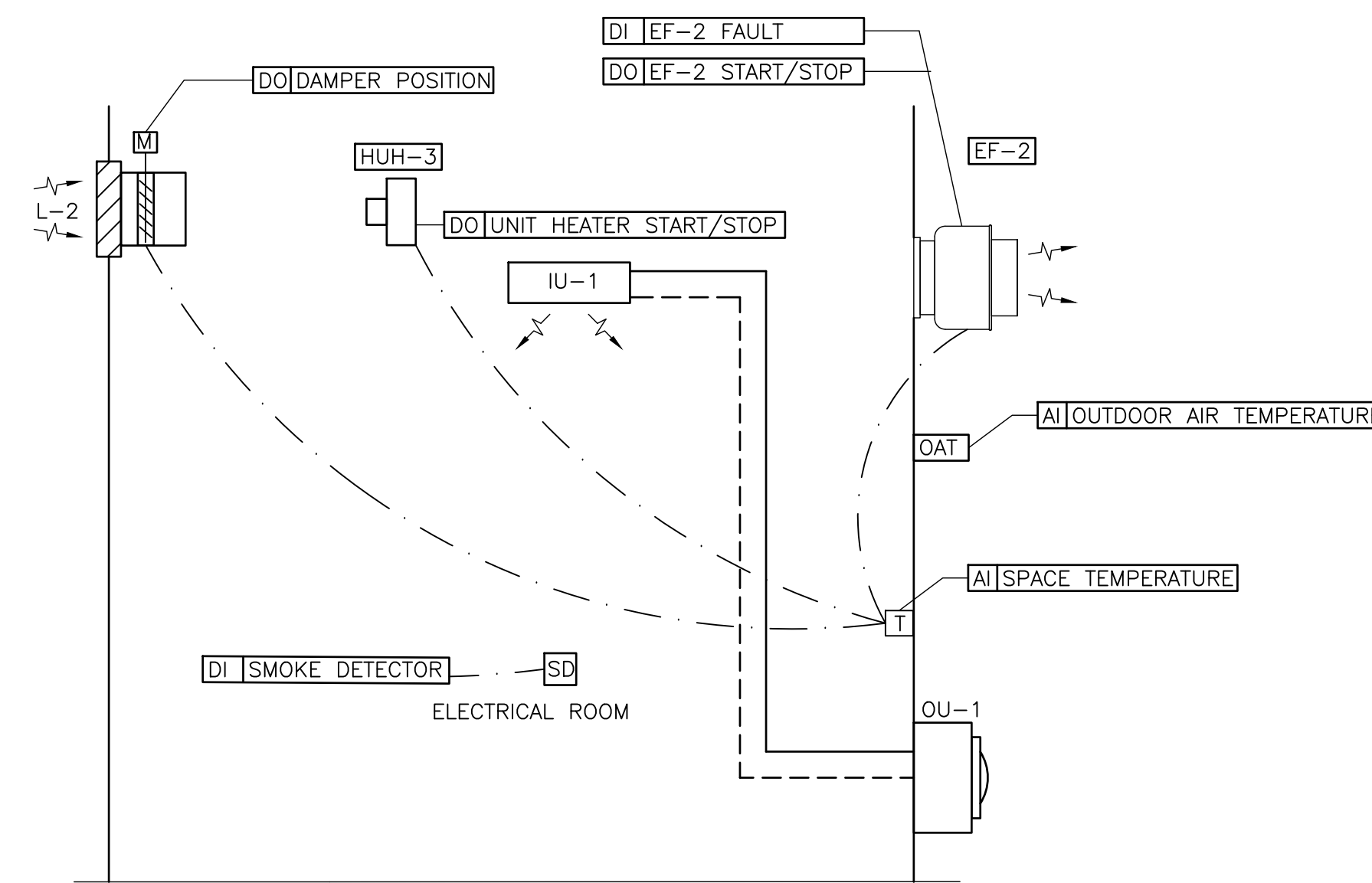
2 PLAN - ROOF LAYOUT
1:50



FF-1 CONTROLS SEQUENCES:

THE FAN IS NORMALLY OFF, AND THE DAMPER IS CLOSED. WHEN SPACE TEMPERATURE IS GREATER THAN [32] DEGC, OPEN DAMPER, AND TURN ON EF-1. WHEN SPACE TEMPERATURE = OUTDOOR AIR TEMPERATURE, TURN OFF FAN, AND CLOSE DAMPER. HEATING SPACE TEMPERATURE SETPOINT SHALL BE [10] DEG C. IF SPACE DROPS BELOW THAT, TURN ON HUH-1 AND 2. IF SPACE TEMP IS ABOVE 38C OR DROPS BELOW 5C, SEND ALARM TO OWS.

3 DETAIL - BLOWER ROOM CONTROLS
N.T.S.



HEAT PUMP

THE HEAT PUMP WILL MODULATE TO MAINTAIN THE SPACE TEMPERATURE SETPOINT OF [20] DEG C. WHEN THE SPACE TEMPERATURE RISES ABOVE [28] DEG C, OPEN DAMPER, TURN ON EF-2, HEATING SPACE SETPOINT SHALL BE [10] DEG C. IF SPACE DROPS BELOW THAT, TURN ON HUH-3. IF SPACE TEMP IS ABOVE 38C OR DROPS BELOW 5C, SEND ALARM TO OWS.

4 DETAIL - ELECTRICAL ROOM CONTROLS
N.T.S.

VENTILATION LEGEND:

- SPACE TEMPERATURE SENSOR TO DDC
- FD FIRE DAMPER
- BD BALANCING DAMPER
- BDD BACKDRAFT DAMPER
- LINE VOLTAGE WIRING
- THERMALLY INSULATED DUCT
- ACOUSTIC DUCT LINING
- M MOTORIZED DAMPER
- EF-# EXHAUST FAN
- SUPPLY DIFFUSER
- RETURN GRILLE
- HUH-# HORIZONTAL UNIT HEATER
- GRILLE/DIFFUSER DESIGNATION (SEE SCHEDULE)
- DESIGN AIRFLOW (l/s)
- MECHANICAL EQUIPMENT TAG
- RL -- REFRIGERANT LIQUID
- RG -- REFRIGERANT GAS
- ED EQUIPMENT DRAIN
- FE-1 10-B,C FIRE EXTINGUISHER C/W MOUNTING KIT.
- FE-2 20lb CO2 FIRE EXTINGUISHER C/W MOUNTING KIT.
- WC WALL CONTROLLER
- SD SMOKE DETECTOR

NOT FOR CONSTRUCTION

ELECTRIC HEATER SCHEDULE							
DESIG.	MANUFACTURER	MODEL	LOCATION	ELECTRICAL	AIRFLOW L/s	HEATING OUTPUT kW	COMMENTS
HUH-1,2	REZNOR	EGEB	BLOWER ROOM	600V/3ph/60Hz 1/50 HP	146	5	ELECTRIC UNIT HEATER, C/W 40A DISCONNECT SWITCH BA14. HEATERS TO BE INSTALLED BY MECHANICAL CONTRACTOR, THERMOSTAT BY CONTROLS CONTRACTOR.
HUH-3	REZNOR	EGEB	ELECTRICAL ROOM	600V/3ph/60Hz 1/50 HP	146	3	ELECTRIC UNIT HEATER, C/W WALL MOUNT LINE VOLTAGE THERMOSTAT CLS AND 40A DISCONNECT SWITCH BA14. HEATERS TO BE INSTALLED BY MECHANICAL CONTRACTOR.

EXHAUST FAN SCHEDULE								
DESIG.	DESCRIPTION	MANUFACTURER	MODEL	AIRFLOW (L/s)	STATIC PRESSURE (Pa)	POWER (w)	ELECTRICAL	COMMENTS
EF-1	BLOWER ROOM WALL MOUNTED EXHAUST FAN	COOK	150 ACWB	1483	62	560	120V/1ø/60Hz	DIRECT DRIVE WALL MOUNT FAN C/W NEMA WALL DISCONNECT, FAN SPEED CONTROLLER, GRAVITY BACKDRAFT DAMPER, WIRE GUARD.
EF-2	ELECTRICAL ROOM WALL MOUNTED EXHAUST FAN	COOK	100 ACWB	226	62	125	120V/1ø/60Hz	DIRECT DRIVE WALL MOUNT FAN C/W NEMA WALL DISCONNECT, FAN SPEED CONTROLLER, GRAVITY BACKDRAFT DAMPER, WIRE GUARD.

LOUVRE SCHEDULE					
DESIG.	MANUFACTURER	MODEL	SIZE	DEPTH	COMMENTS
L-1	RUSKIN	ELF6375DX	1200x600	150	ALUMINUM LOUVRE, DRAINABLE BLADES, C/W BIRDSCREEN.
L-2	RUSKIN	ELF6375DX	600x300	150	ALUMINUM LOUVRE, DRAINABLE BLADES, C/W BIRDSCREEN.

HEAT PUMP SCHEDULE						
DESIG.	MANUFACTURER	MODEL	COOLING CAPACITY (kW)	HEATING CAPACITY (kW)	ELECTRICAL	COMMENTS
IU-1	DAIKIN	PLA-A42EAB	12.3	--	208V/1ph/60Hz; 31A MOCB; (OUTDOOR)	OAT IN PEAK COOLING = 32°C. ELECTRICAL ROOM COOLING ONLY, NOT TO BE USED FOR HEATING. INCLUDE WIRED REMOTE CONTROL THERMOSTAT PAR-41MAU, REFRIGERANT R410A. C/W MANUFACTURERS WALL MOUNTING KIT AS REQUIRED.
OU-1	DAIKIN	PUY-A42NKA7	12.3	--	208V/1ph/60Hz; 31A MOCB; (OUTDOOR)	IU-1 CEILING CASSETTE C/W INTEGRAL CONDENSATE PUMP. MAX AMBIENT TEMP IN COOLING: 32°C. ELECTRICAL ROOM COOLING ONLY, NOT TO BE USED FOR HEATING. INCLUDE WIRED REMOTE CONTROL THERMOSTAT PAR-41MAU, REFRIGERANT R410A.

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/27	JT

Revision of Issue



TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

MECHANICAL
BLOWER BUILDING HVAC AND ROOF LAYOUTS



Doc No 230813.02	Contract No WOL005-2025
Date APR 2024	Scale AS NOTED
Designed TT	Drawn JJ
Checked DB	Approved DAT
Sheet No 1	of 1
Drawing No M01	

ELECTRICAL & INSTRUMENTATION LEGEND					
POWER		SCHEMATIC		SINGLE LINE DIAGRAM (CONT.)	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	15A, 120V, DUPLEX RECEPTACLE: TYPE 5-15R		HAND-OFF-AUTO SWITCH		HEAT RECOVERY VENTILATOR
	CONTROL PANEL		RELAY (X DENOTES RELAY TAG)		
	DISCONNECT SWITCH		PILOT LIGHT X DENOTES COLOR, W=WHITE, R=RED, G=GREEN, A=AMBER		
	DIRECT CONNECTION		NORMALLY OPEN PUSH BUTTON		
	JUNCTION BOX / PULL BOX		NORMALLY CLOSE PUSH BUTTON		
	THREE PHASE MOTOR X=(HP RATING)		TERMINAL BLOCK		
	SINGLE PHASE MOTOR X=(HP RATING)				
	UNIT HEATER	SINGLE LINE DIAGRAM			
	DATA/VOICE OUTLET	CABLE DIAGRAM			
	DATA OUTLET		BREAKER		DESCRIPTION
	PROCESS/CONTROL NETWORK OUTLET		DISCONNECT SWITCH		INSTRUMENT TAG NUMBER XXX=INSTRUMENT TYPE YYY=INSTRUMENT NUMBER
	GROUND ROD		FUSE		
	THERMOSTAT (LINE VOLTAGE)		GENERATOR	FIRE ALARM	
	MISCELLANEOUS ELECTRICAL EQUIPMENT (AS INDICATED)		GROUND		DESCRIPTION
	DISCONNECT SWITCH (TOGGLE TYPE)		METER		SMOKE DETECTOR
			CT'S AND P'S		
			ELECTRONIC OVERLOAD	ELECTRICAL LINES	
			MISCELLANEOUS ELECTRICAL EQUIPMENT (AS INDICATED)		DESCRIPTION
			PANELBOARD		UNDERGROUND LINES
			LINE OR LOAD REACTOR		OVERHEAD LINES
LIGHTING				ABBREVIATIONS	
	FLOOD LIGHT (TYPE AS INDICATED)		AUTOMATIC TRANSFER SWITCH	AC = ABOVE CEILING AE = ANALYZER ELEMENT AIT = ANALYZER INDICATING TRANSMITTER DCN = DISCONNECT SWITCH EX = SUITABLE FOR HAZARDOUS AREA FE = FLOW ELEMENT FIT = FLOW INDICATING TRANSMITTER FY = FLOW SOLENOID GFI = GROUND-FAULT CIRCUIT INTERRUPTER I.S. = INTRINSICALLY SAFE LEL = LOWER EXPLOSIVE LIMIT LSH = LEVEL SWITCH HIGH LT = LEVEL TRANSMITTER M = MOTOR MH = SEWAGE MANHOLE MCC = MOTOR CONTROL CENTER PI = PRESSURE INDICATOR UP = UTILITY POLE UVT = ULTRAVIOLET TRANSMITTER VCC = VENDOR CONTROL CABINET VFD = VARIABLE FREQUENCY DRIVE WP = WEATHER PROOF * = INDICATES INSTRUMENTATION & CONTROLS EQUIPMENT PROVIDED BY OWNER AND FREE ISSUED TO THE SITE CONTRACTOR, FOR INSTALLATION, CABLING, TERMINATING, & TESTING AS REQUIRED. CONTRACTOR TO REFER TO APPROVED VENDOR SHOP DWGS. TO VERIFY CABLING REQUIREMENTS AND TERMINATION DETAILS.	
	FIXTURE - WALL MOUNTED (TYPE AS INDICATED)		TRANSFORMER (TYPE AS INDICATED)		
	LINE VOLTAGE SWITCH		VARIABLE FREQUENCY DRIVE		
	EXIT SIGN - WALL MOUNTED (TYPE AS INDICATED)		dV/dT FILTER		
	LED WALL MOUNTED LUMINAIRE, MOUNT 300mm ABOVE DOOR, RATING 120V, C/W WIRE GUARD OVER RED OR GREEN GLASS CLOBES		SURGE PROTECTIVE DEVICE		
	EMERGENCY LIGHT C/W BATTERY PACK (TYPE AS INDICATED)		UNDERGROUND CABLING/CONDUIT		
	EMERGENCY LIGHT REMOTE HEAD PACK (TYPE AS INDICATED)				
	SUSPENDED LIGHT FIXTURE				

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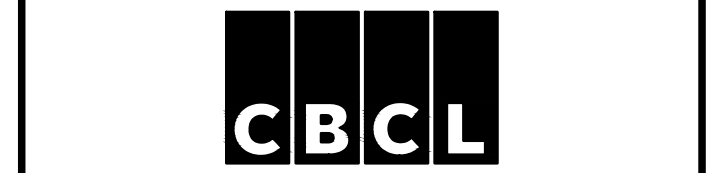
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	23

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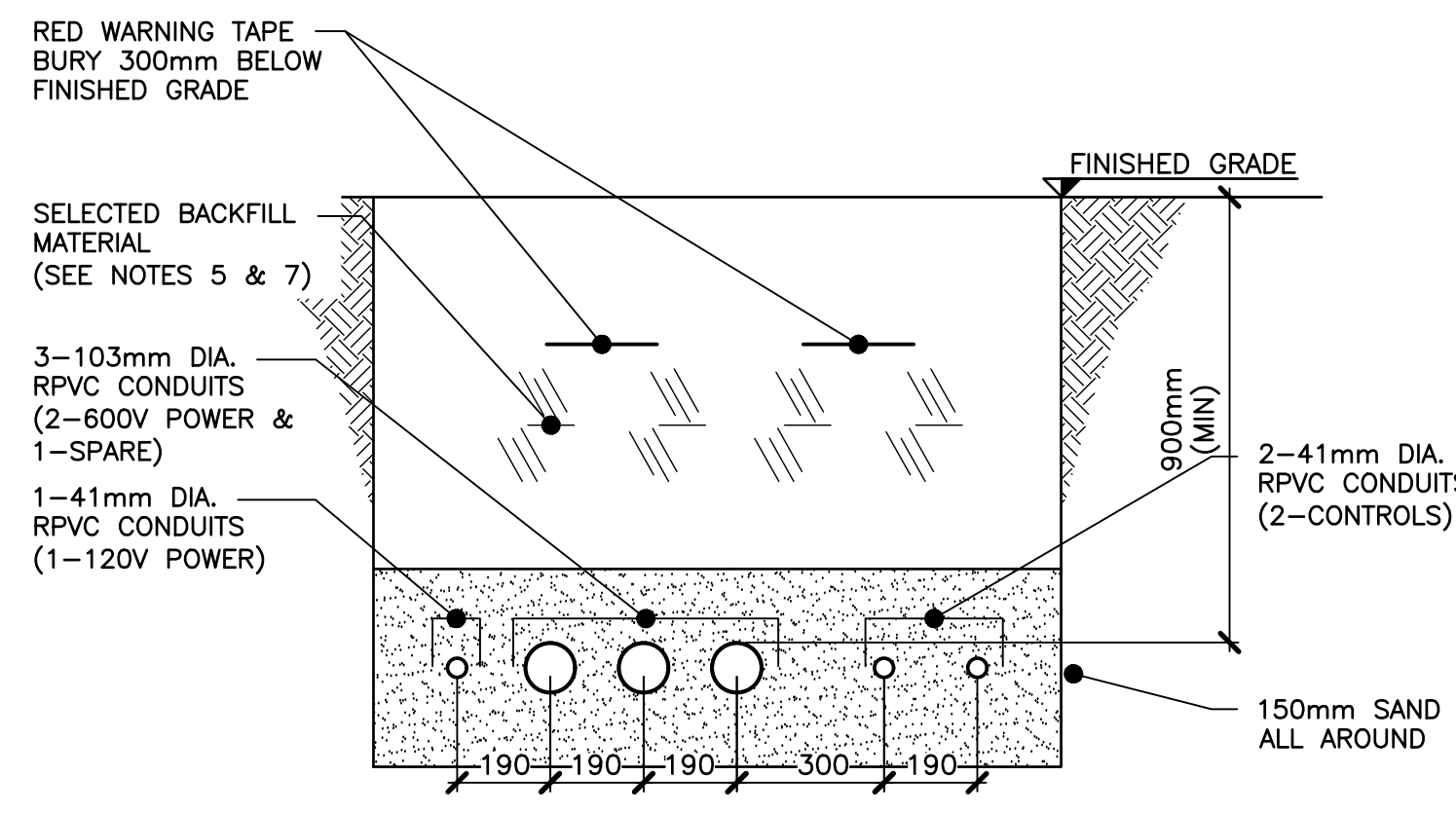


TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

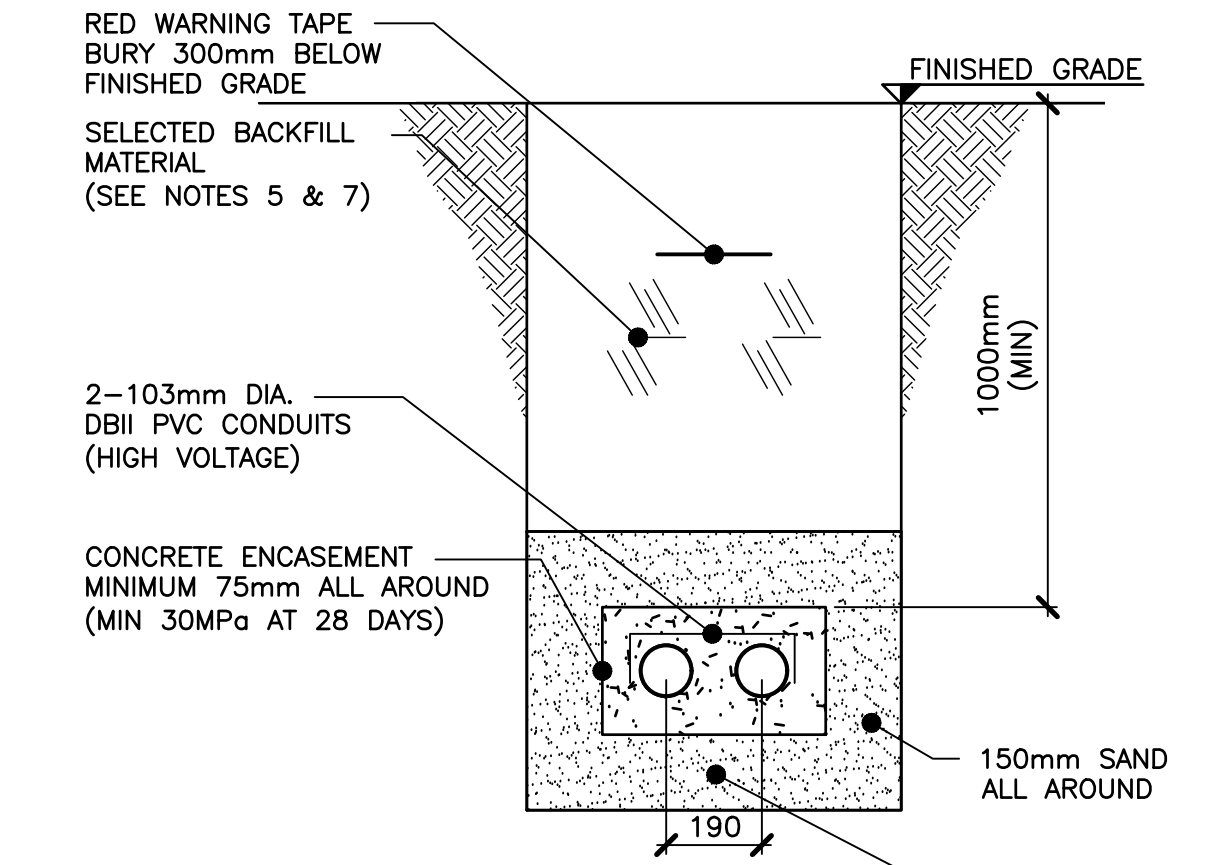
ELECTRICAL
LEGEND



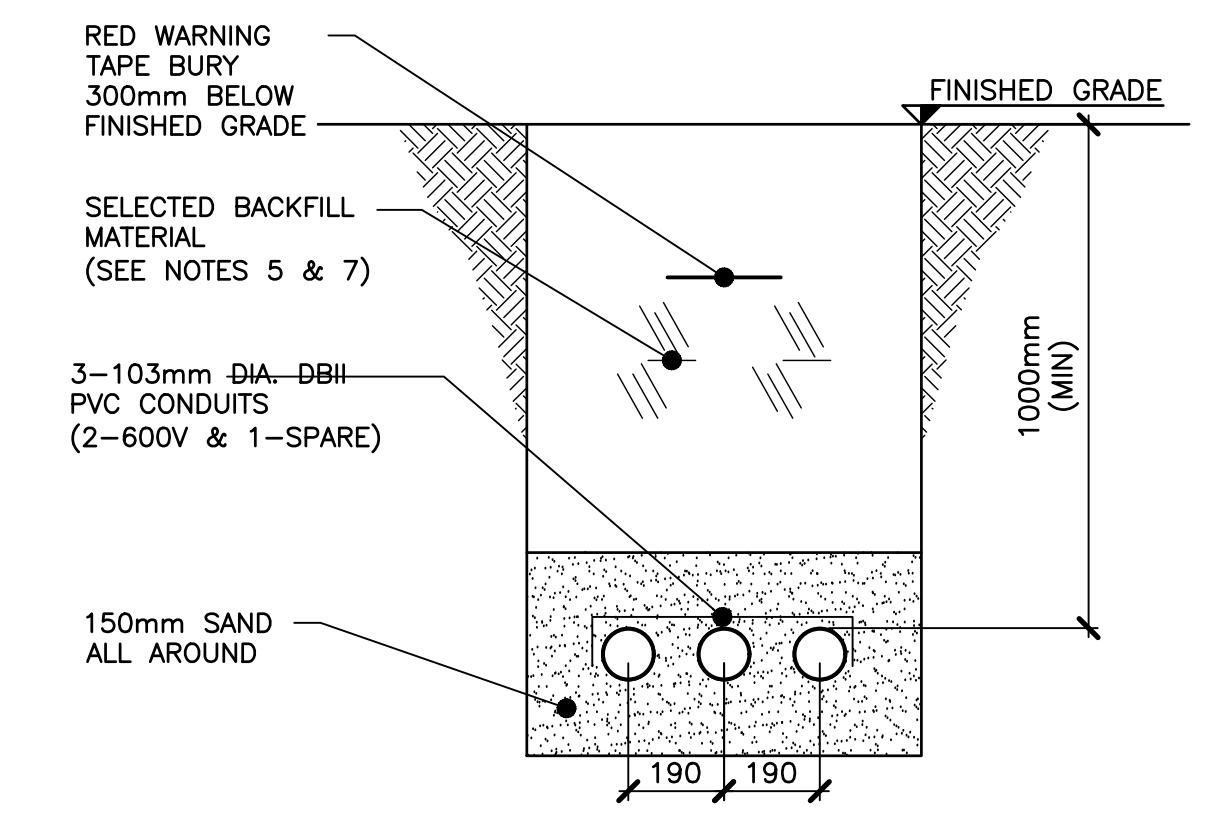
LIBCL No 230813.02	Contract No WOL005-2025
Date APR 2024	Scale AS NOTED
Designed CKS	Drawn IGG
Checked LH	Approved DAT
Sheet No 1	of 10
Drawing No: E01	



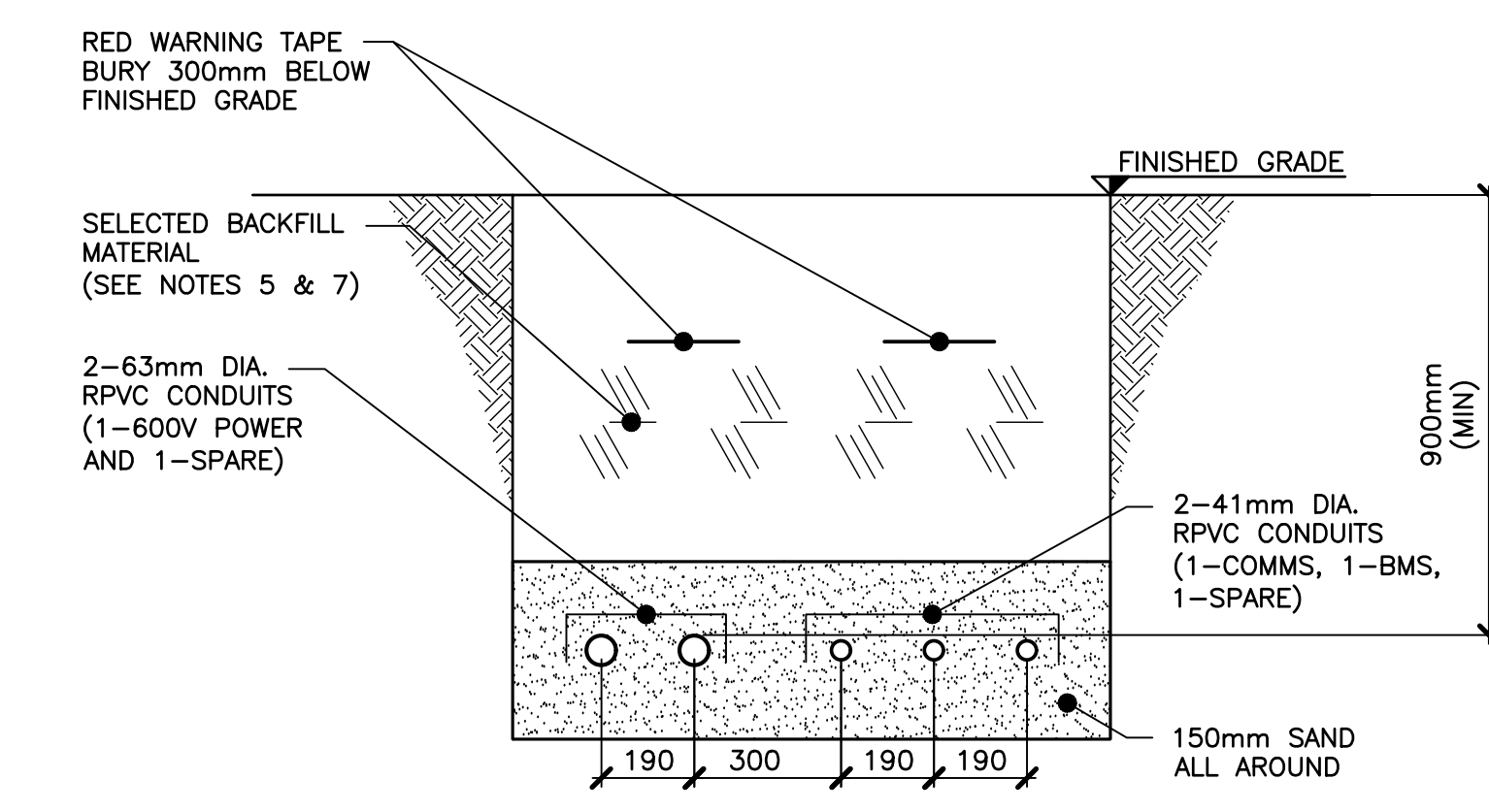
A SECTION- GENERATOR DUCTBANK
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



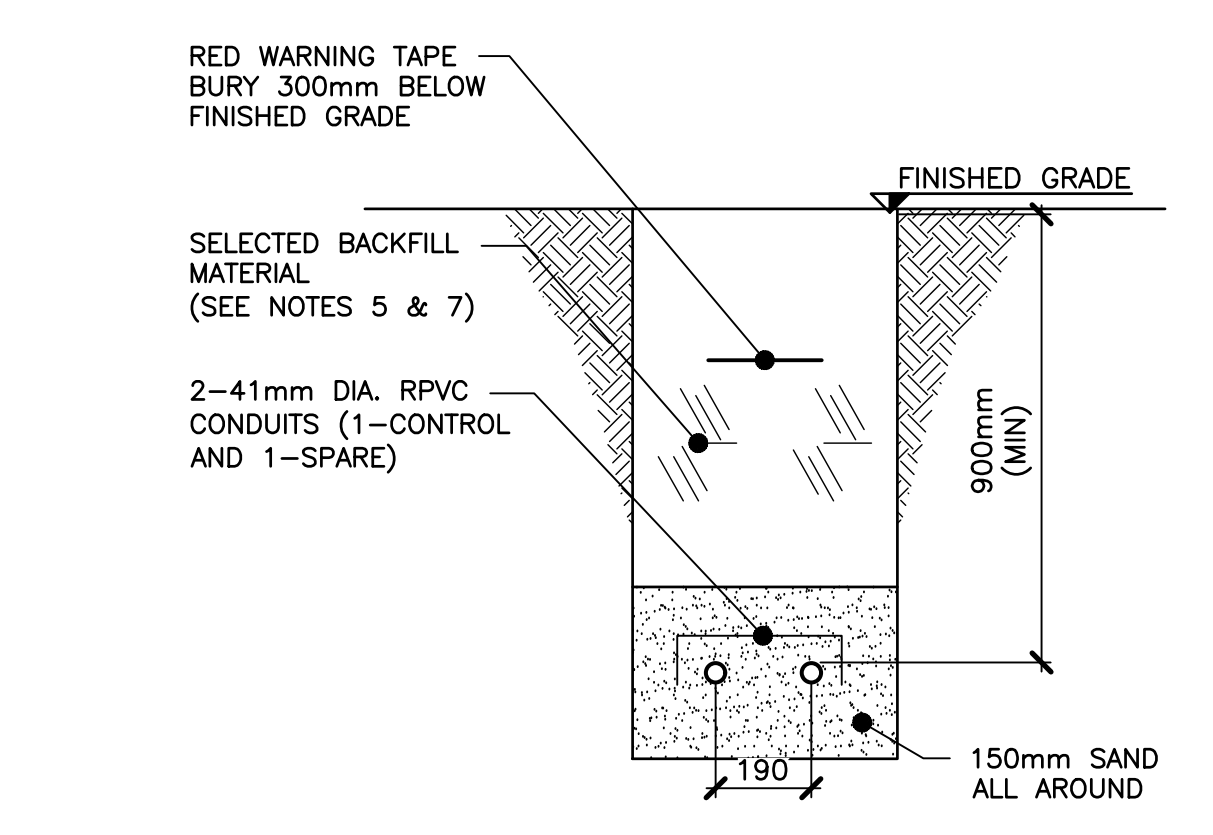
B SECTION- TRENCH PRIMARY
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



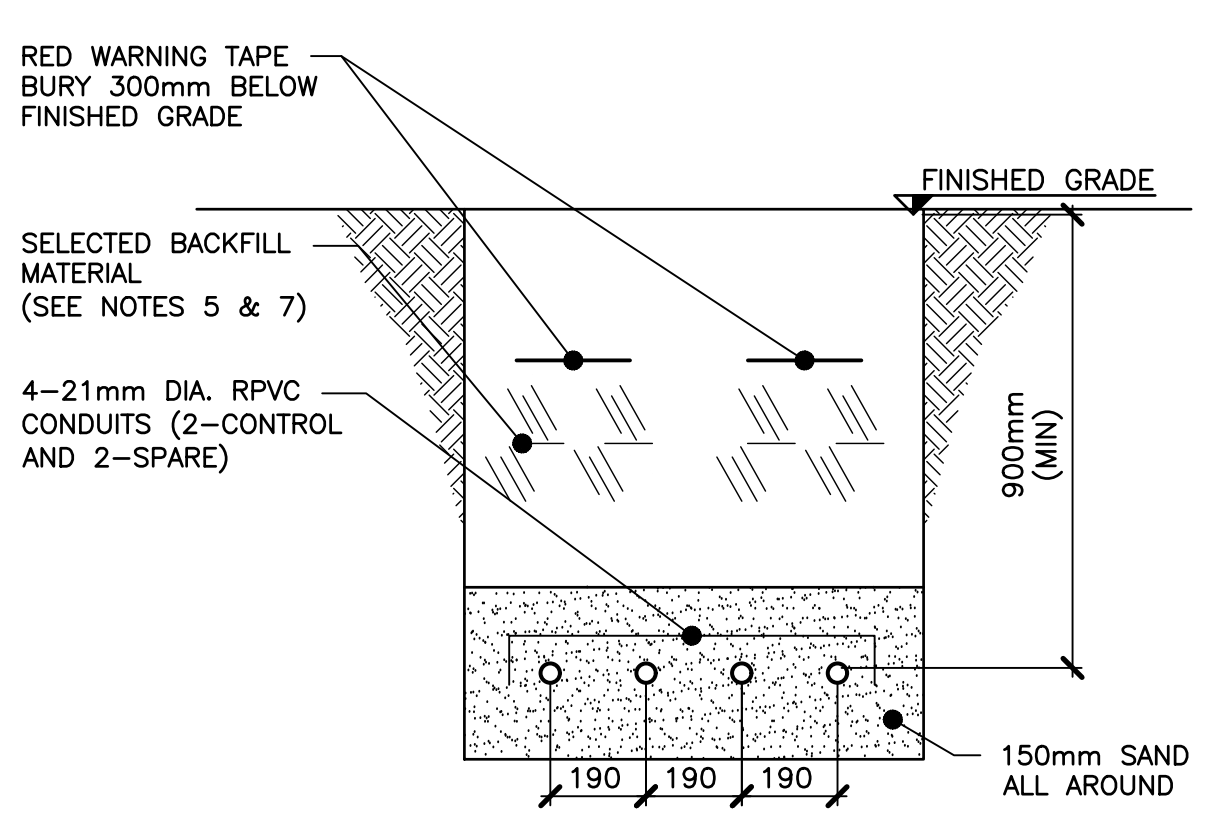
C SECTION- TRENCH SECONDARY
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



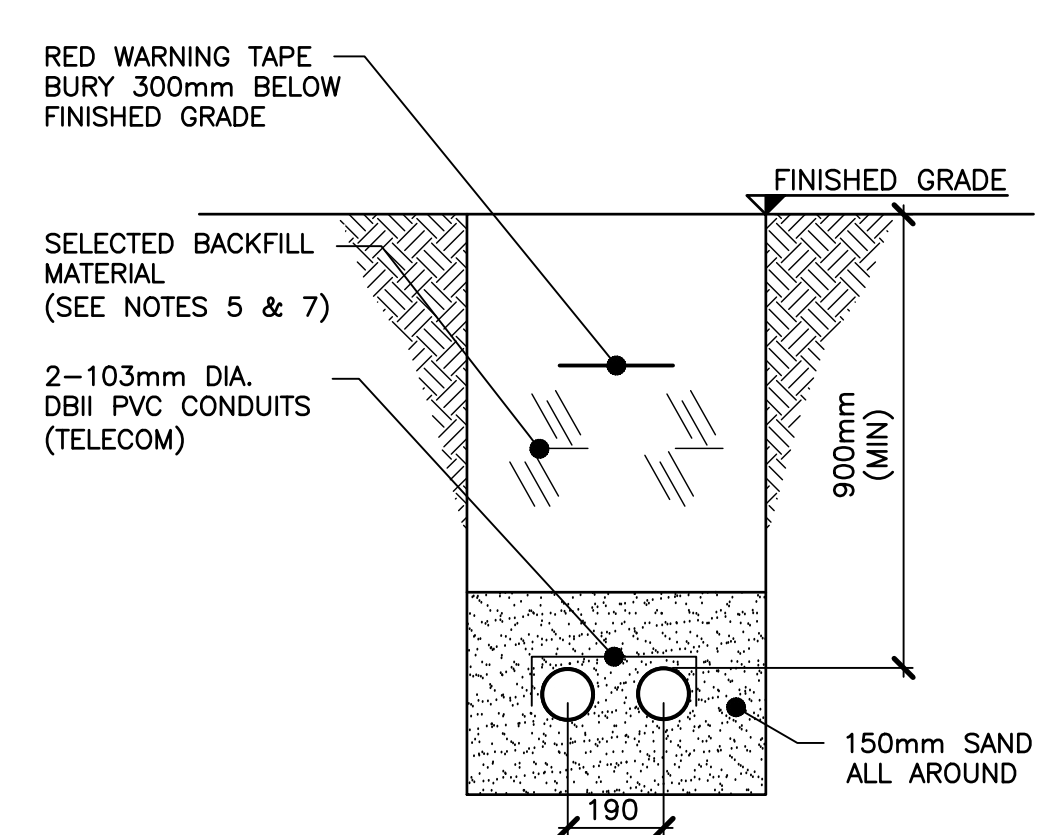
D SECTION- SCREENING TO BLOWER BUILDING
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



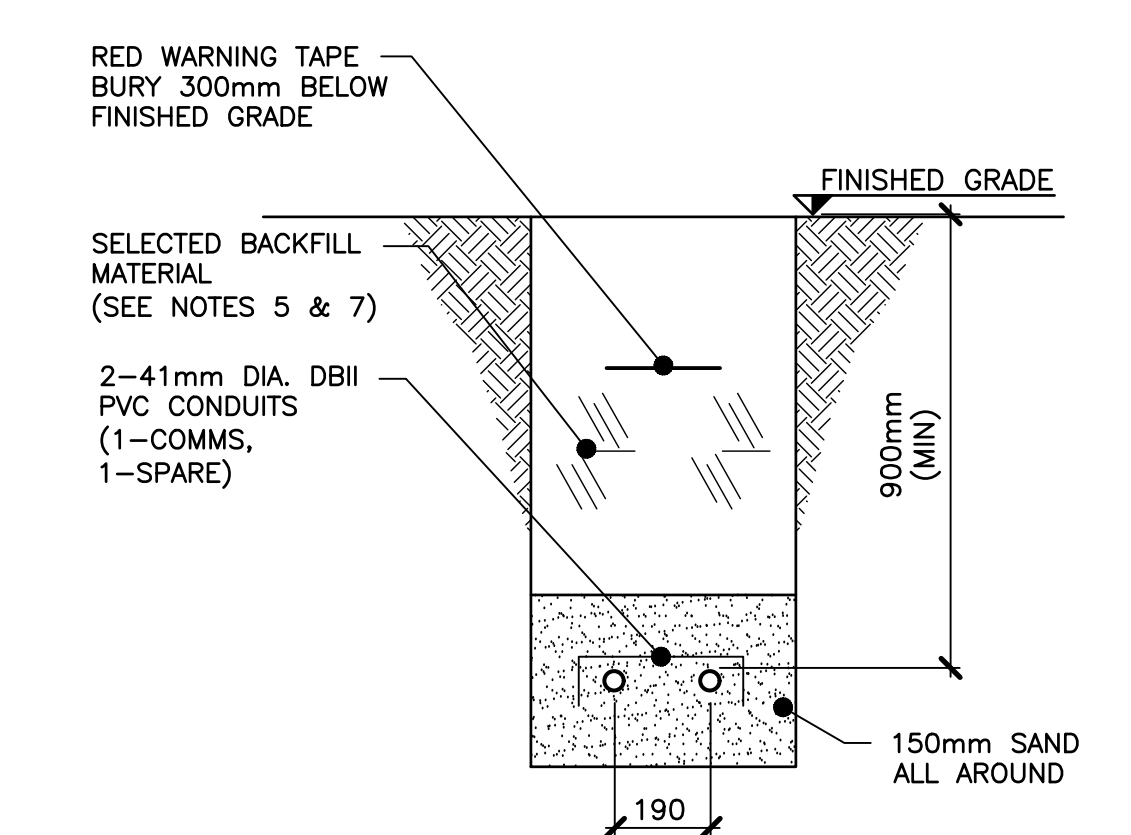
E SECTION- DO PROBE FOR LAGOONS
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



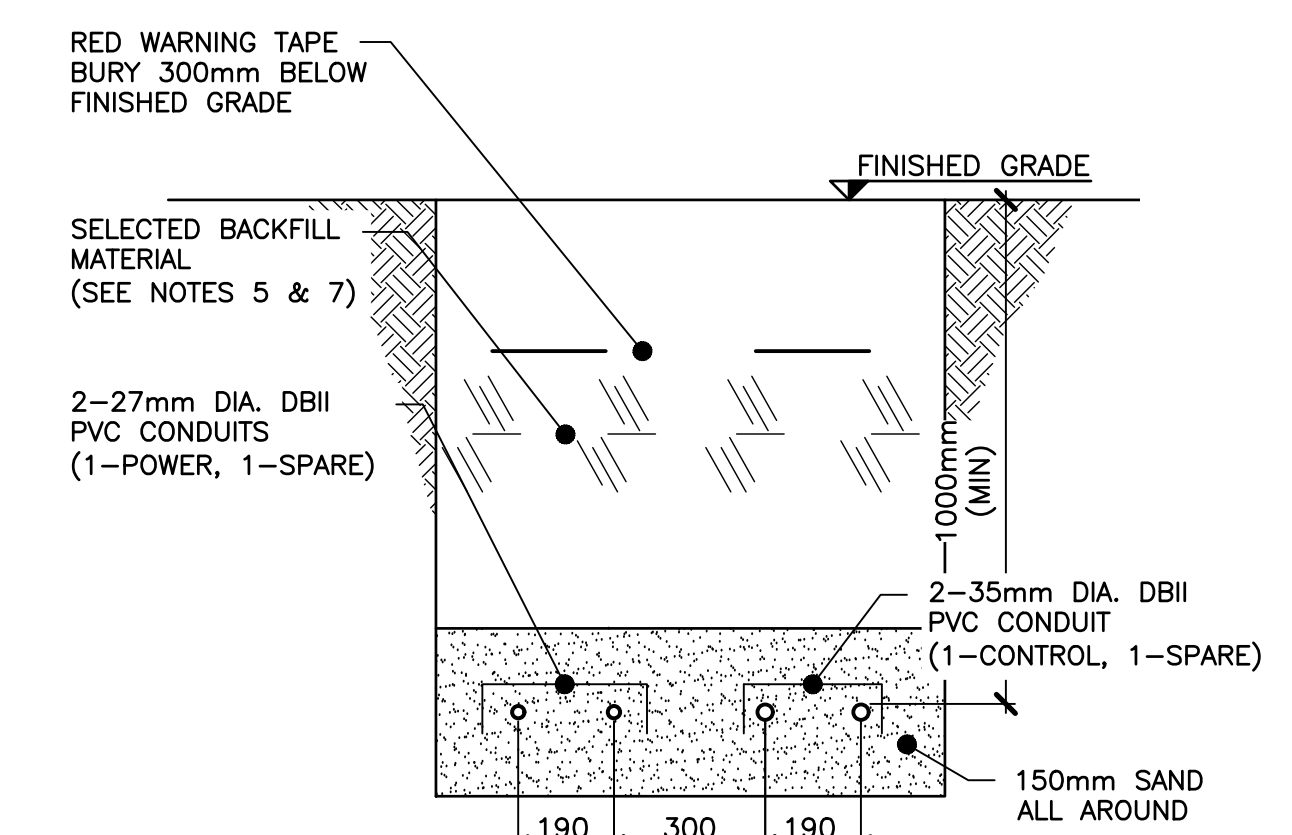
F SECTION- DO PROBE FOR LAGOONS #1 & #2
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



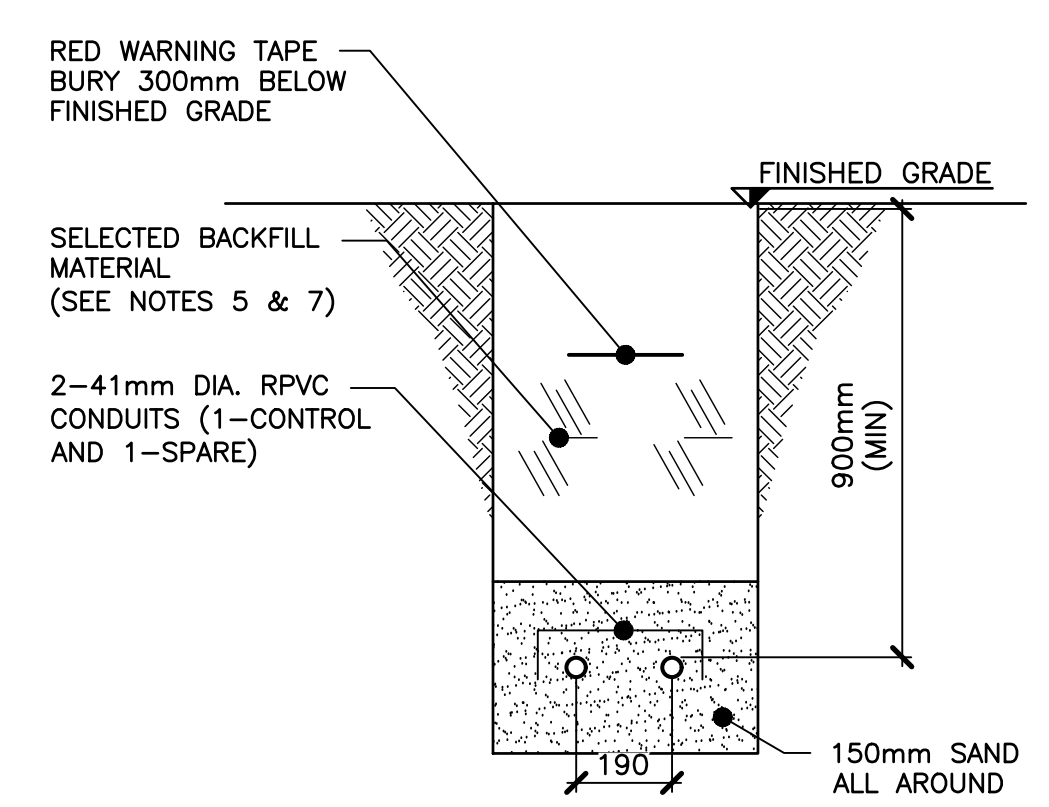
G SECTION- TELECOM SERVICES
N.T.S (SEE NOTES 5, 6, 7, 8, 9 & 10)



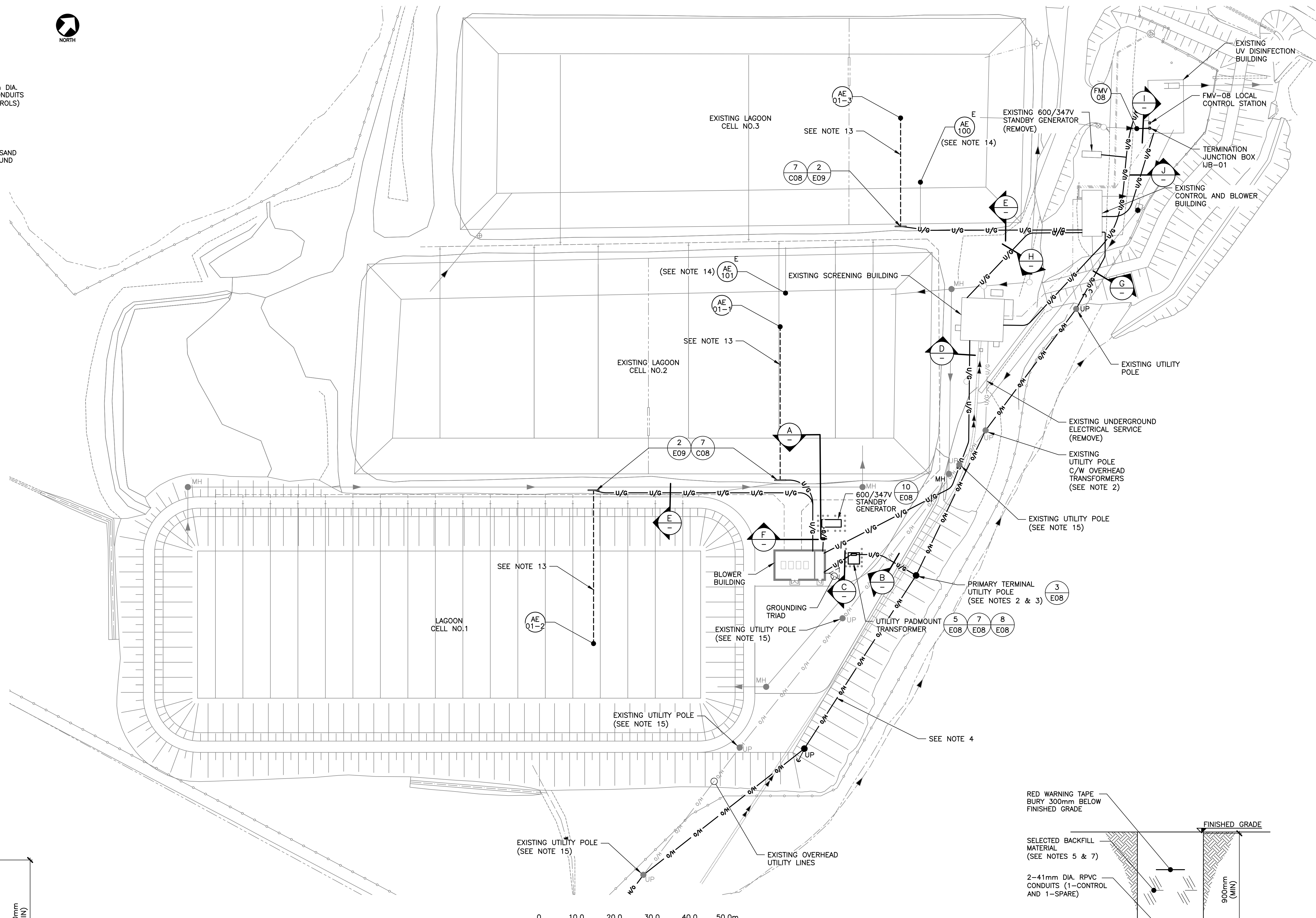
H SECTION- COMMUNICATION LINK FOR SCREENING BUILDING AND CONTROL BUILDING
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



I SECTION- POWER AND CONTROL FOR NEW MANHOLE
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



J SECTION- FMV-08 CONTROLS DUCTBANK
N.T.S (SEE NOTES 5, 6, 7, 8 & 9)



PLAN - SITE PLAN
1:500

- NOTES:**
- UNLESS OTHERWISE NOTED, ELECTRICAL EQUIPMENT IS NEW.
 - ARRANGE AND COORDINATE INSTALLATION OF NEW UTILITY SERVICE WITH OWNER'S SITE REPRESENTATIVE AND LOCAL POWER UTILITY PRIOR TO BEGINNING WORK.
 - VERIFY FINAL UTILITY POLE LOCATION WITH THE UTILITY PRIOR TO INSTALLATION OF THE UNDERGROUND PRIMARY DUCTBANK.
 - ARRANGE FOR THE POWER UTILITY TO REROUTE THE EXISTING OVERHEAD LINE AND POLES TO THE SITE AS REQUIRED FOR NEW CONSTRUCTION.
 - BACKFILL TRENCH WITH SELECTED BACKFILL SOIL FREE FROM LARGE ROCK AND DEBRIS, AND IN ACCORDANCE WITH THE SPECIFICATIONS.
 - LOCATIONS OF BURIED SERVICES ARE APPROXIMATE. CONFIRM THE LOCATIONS OF ANY EXISTING BURIED SERVICES AS REQUIRED FOR INSTALLATION OF ANY NEW UNDERGROUND ELECTRICAL SERVICES. REFER TO CIVIL DRAWINGS FOR OTHER BURIED SERVICES.
 - BACKFILL TRENCH IN LAYERS NOT EXCEEDING 300MM (MECHANICALLY TAMPED).
 - MAINTAIN MINIMUM 1M LATERAL SEPARATION FROM ALL OTHER PIPING AND MAINTAIN 300MM SEPARATION BETWEEN POWER AND COMMUNICATION/INSTRUMENTATION CONDUITS.
 - IF SITE CONDITIONS PROHIBIT TRENCH DEPTH AS PER INSTALLATION DETAILS, ADVISE THE ENGINEER.
 - COORDINATE WITH OWNER FOR VALLEY COMMUNITY FIBRE NETWORK (VCFN) TO PROVIDE NEW FIBRE HIGH SPEED INTERNET TO THE TREATMENT PLANT.
 - CONTRACTOR TO INSTALL MINIMUM #12 FISH WIRE IN EACH SPARE CONDUIT AND SECURELY CAP BOTH ENDS.
 - REFER TO HAZARDOUS AREA CLASSIFICATION ON DRAWING E07
 - INSTALL DO PROBES AT LOCATIONS INDICATED ON THIS DRAWING. CONTRACTOR TO RUN CABLE ALONG MESSENGER CABLE FOR FINAL TERMINATION TO THE TRANSMITTER WITHIN BUILDING.
 - DISCONNECT AND REMOVE EXISTING DO PROBES. PULL ALL CABLES BACK TO THE SOURCE.
 - COORDINATE THE REMOVAL AND MODIFICATION OF UTILITY POLES WITH LOCAL UTILITY.

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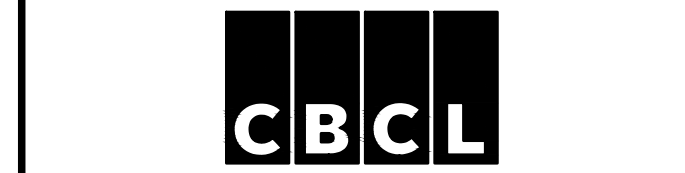
No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BY

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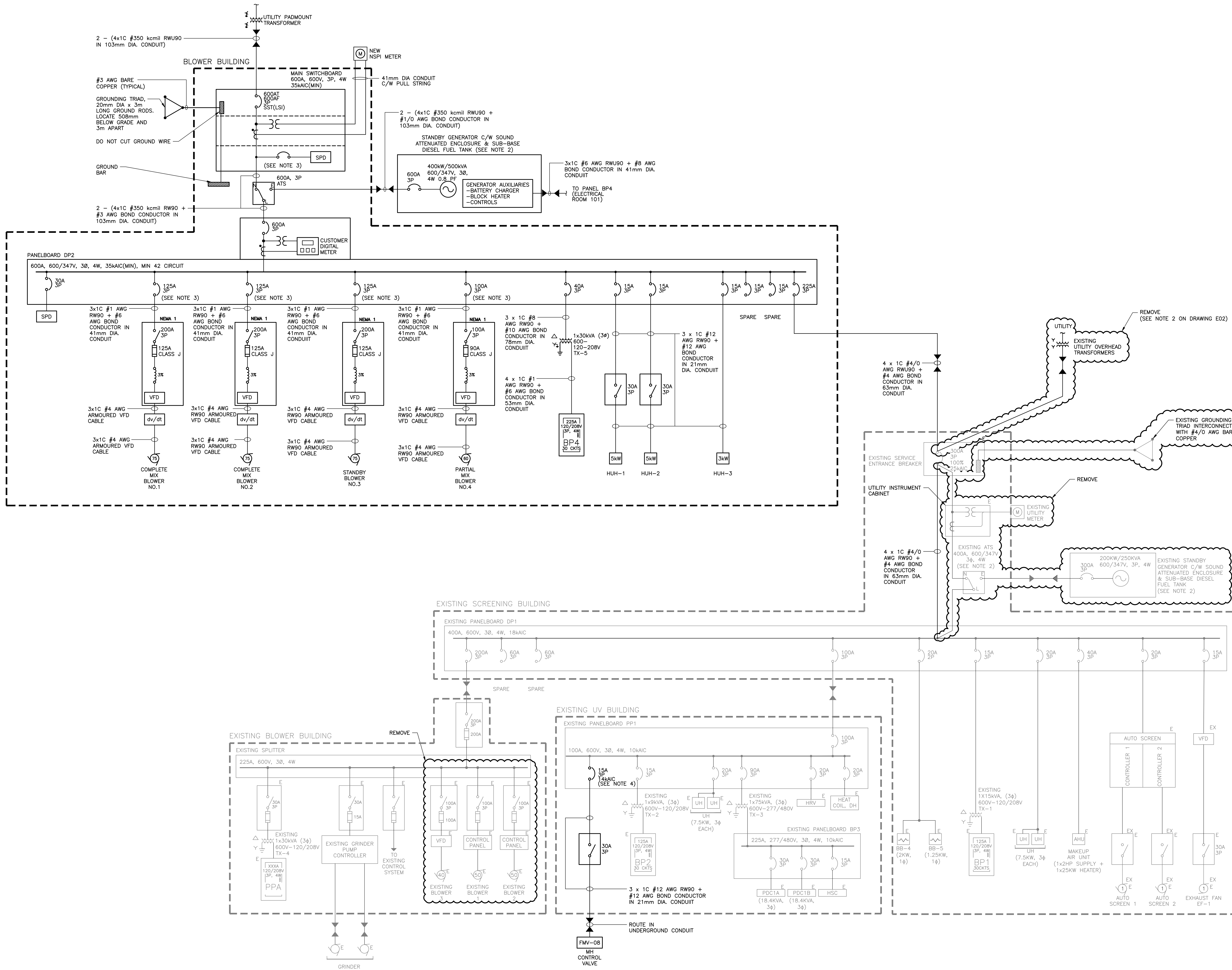


TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

ELECTRICAL
SITE PLAN & SECTIONS



LIBCL No 230813.02	Contract No WOL005-2025
Date APR 2024	Scale AS NOTED
Designed CKS	Drawn IGG
Checked LH	Approved DAT
Sheet No 2	of 10
Drawn by E02	



- NOTES:**
1. UNLESS OTHERWISE NOTED, ELECTRICAL EQUIPMENT IS NEW.
 2. REMOVE GROUNDING JUMPER BETWEEN THE GENERATOR FRAME AND NEUTRAL.
 3. VERIFY BREAKER RATING WITH EQUIPMENT SHOP DRAWINGS.
 4. SUPPLY AND INSTALL NEW CIRCUIT BREAKER C/W MOUNTING HARDWARE IN THE EXISTING PANELBOARD.
 5. COORDINATE AND SCHEDULE ELECTRICAL SHUTDOWN WORK WITH THE OWNER.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	BY

Revision of Issue

wolfville

TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

ELECTRICAL

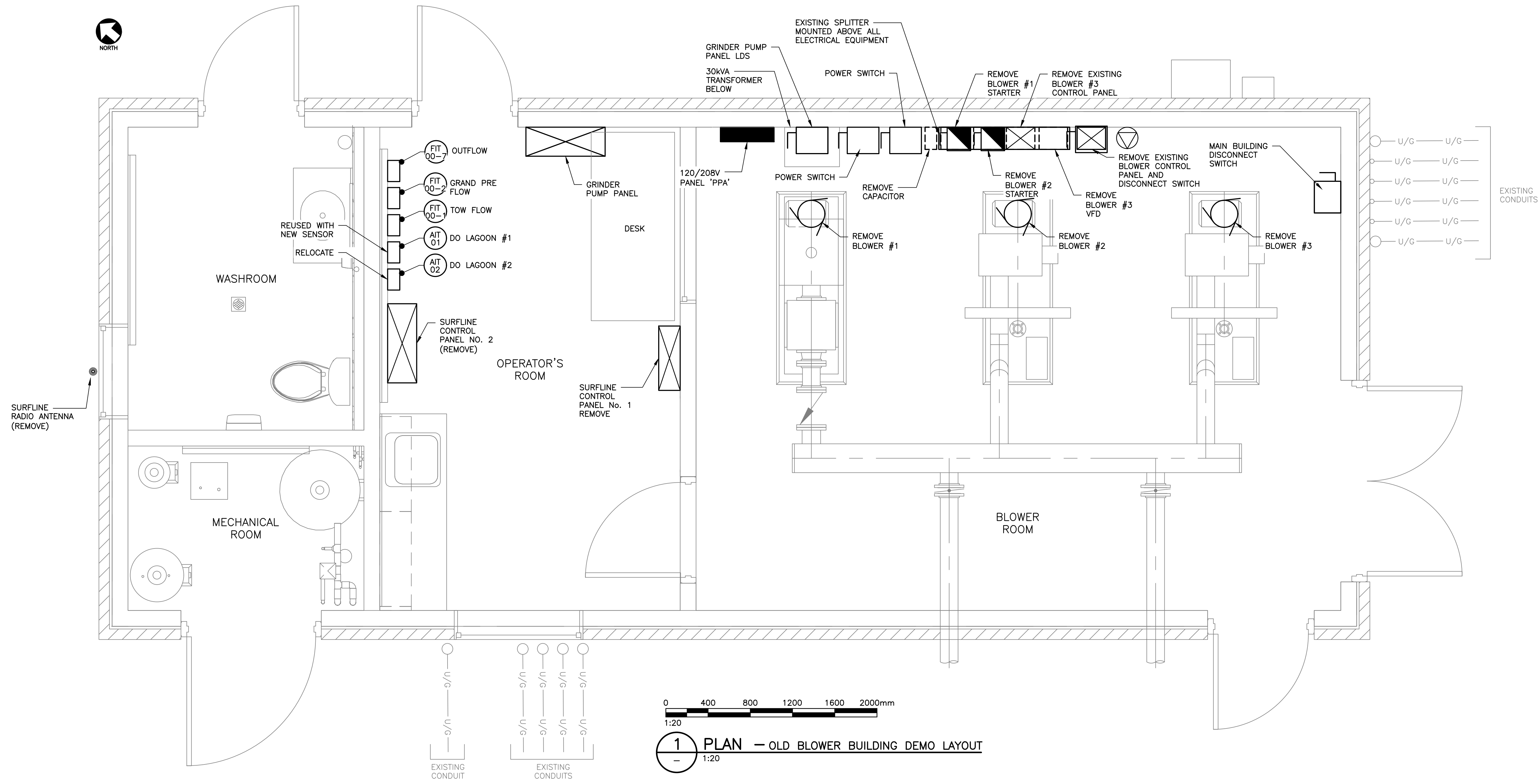
SINGLE LINE DIAGRAM

CBCL

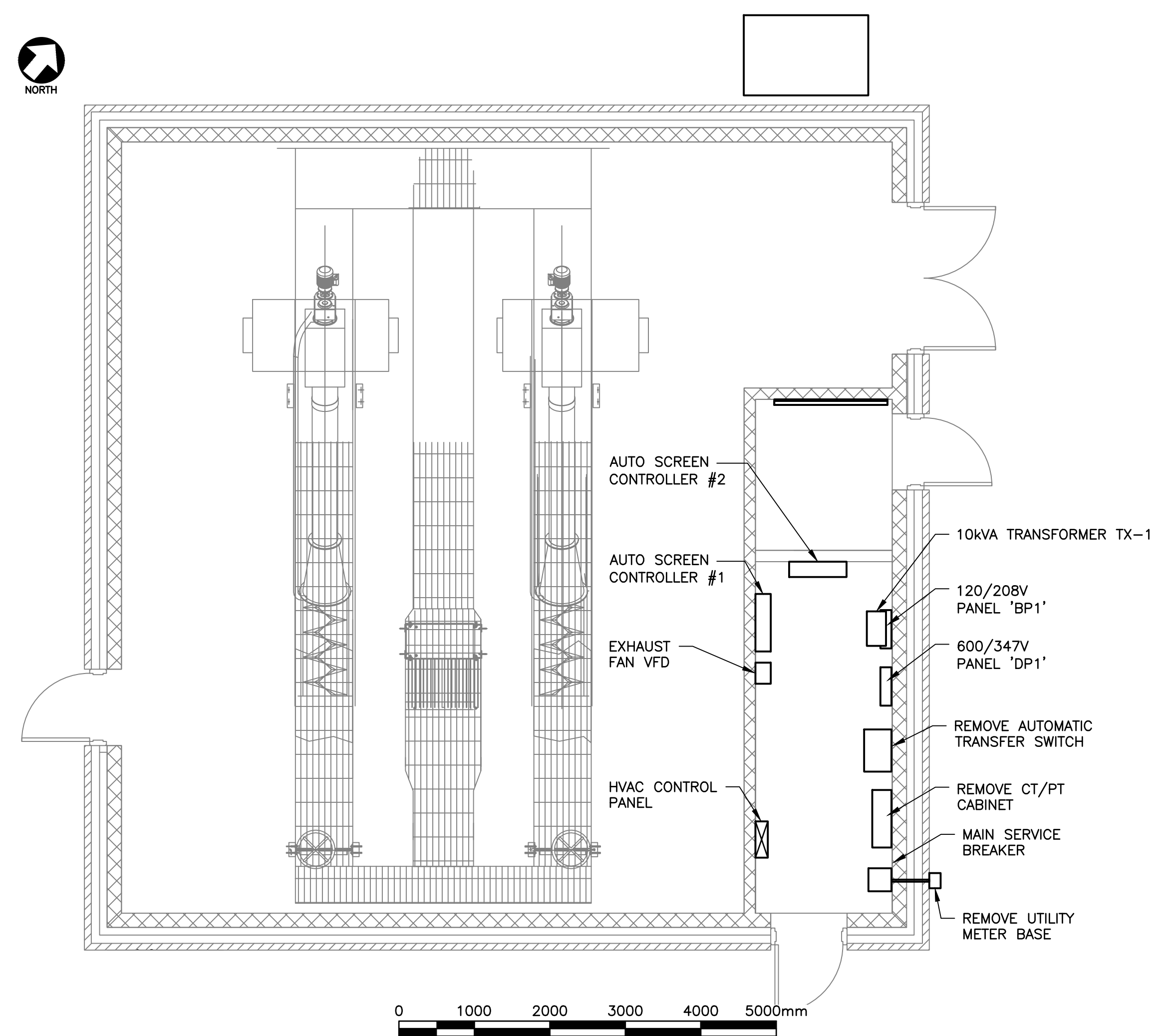
LIBCL No 230813.02	Contract No WOL005-2025
Date APR 2024	Scale N.T.S.
Designed CKS	Drawn IGG
Checked LH	Approved DAT
Sheet No 3	of 10

E03

DETAIL—SINGLE LINE DIAGRAM
N.T.S.



1 PLAN — OLD BLOWER BUILDING DEMO LAYOUT
1:20



2 PLAN — SCREENING BUILDING DEMO LAYOUT
1:50

Power 120/208 V 3ø 4 W										
PANEL PPA										
LOCATION ELECTRICAL ROOM										
SYM. I.C.: 10000 A										
MAINS: 125 A										
MAIN BKR: A										
# OF CKTS: 30										
INCOMING:										
Designation	CKT #	Watts	BKR	PHASE	a	b	c	Watts	CKT#	Designation
1 ELECTRIC HEAT OFFICE	1	15A	X	15A				2		BLOWER CONTROLS
2 BLOCK HEATER SA BATTERY CHARGER SB	3	2P	X	15A				4		PLUGS BY DESK
1 FLOW METER	5	20/20	X	15A				6		OFFICE LIGHTS
1 UTILITY ROOM HEAT	7	15A	X	15A				8		BLOWER ROOM LIGHTS
1 SCADA PANEL	9	15A	X	15A				10		ELECTRIC HEAT BATHROOM
1 BMS SCADA & FLOW METERS	11	2P	X	2P				12		LIGHT & PLUG WASHROOM
1 EXHAUST FANS 17A/BUILDING AUTOMATION 17B	13	15A	X	15A				14		DO LAGOON #3 (AIF-01-2)
SPARE	15	15A	X	15A				16		REMOVE I/O RACK #1
SPARE	17	15/15	X	15A				18		WATER SOFTENER & OSMOSIS PLUG
SPARE	19	40A	X	15A				20		SPARE
SPARE	21	2P	X	30A				22		WELL PUMP
WATER HEATER	23	20A	X	2P				24		
GEN COOLANT HEATER	25	2P	X	20A				26		
	27	15A	X	3P				28		
	29	2P	X	2P				30		

FEEDER:	1 EXISTING LOAD TO REMAIN	Phase A Total	0W	0.0A
	2 EXISTING BREAKER TO BE MADE SPARE	Phase B Total	0W	0.0A
	3 GFCI BREAKER	Phase C Total	0W	0.0A
	4 CONNECT TO NEW LOAD INDICATED. REFER TO DRAWING E04.	TOTAL	0W	0.0A

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - EQUIPMENT TO BE REMOVED IS INCLUDED IN THE CLOUDED AREA ALL EQUIPMENT IS TO BE DISCONNECTED AND ALL CABLES PULLED BACK TO THE SOURCE AND REMOVED.
 - CONTRACTOR TO COORDINATE DEMOLITION SCOPE WITH NEW CONSTRUCTION TO ENSURE MINIMAL INTERRUPTION OF SERVICES.
 - NOT ALL EXISTING ELECTRICAL EQUIPMENT IS INDICATED.
 - CAP AND SEAL ALL EXISTING UNDERGROUND CONDUITS MADE REDUNDANT BY THIS WORK.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

Revision of Issue

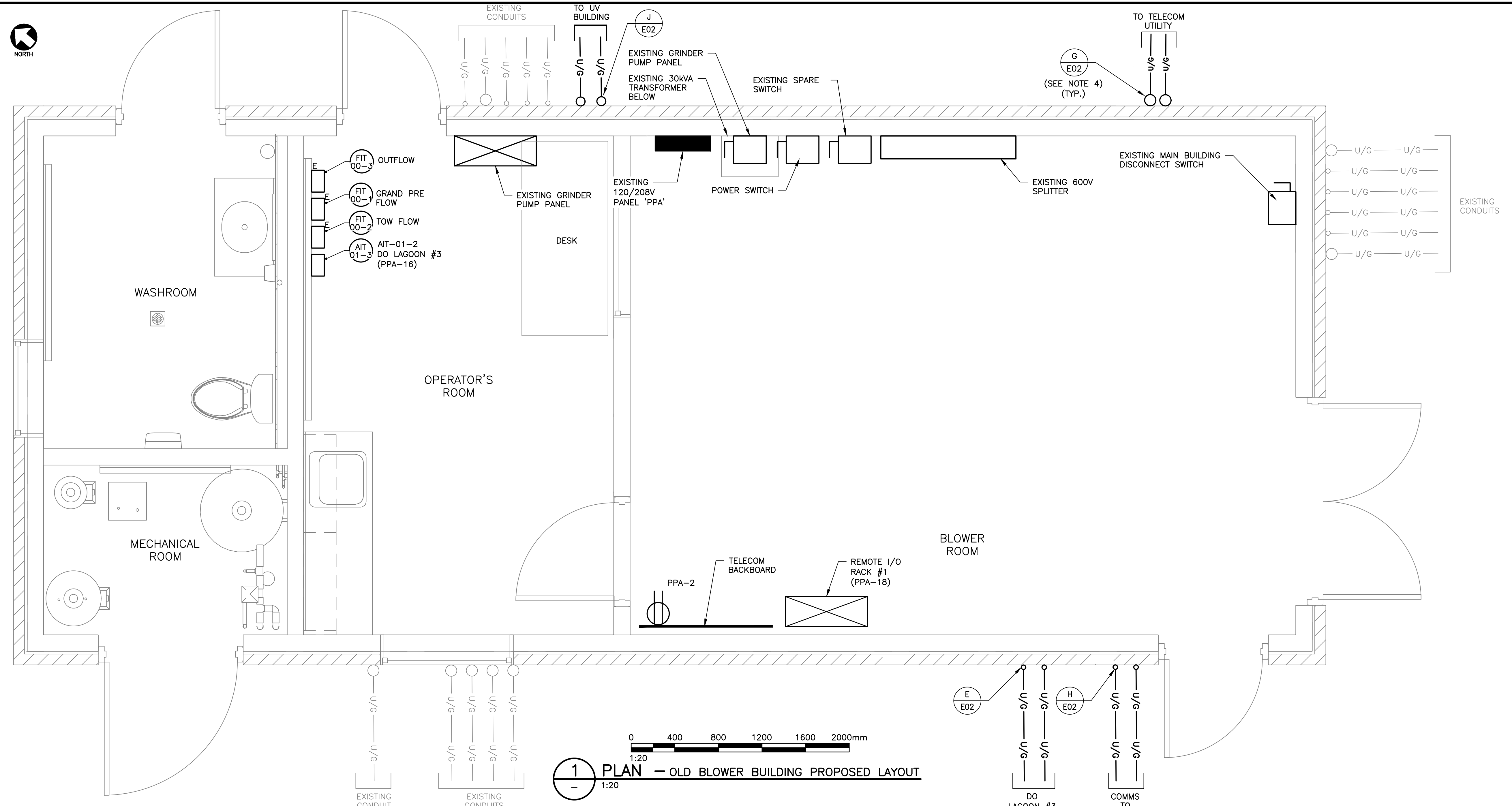
TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

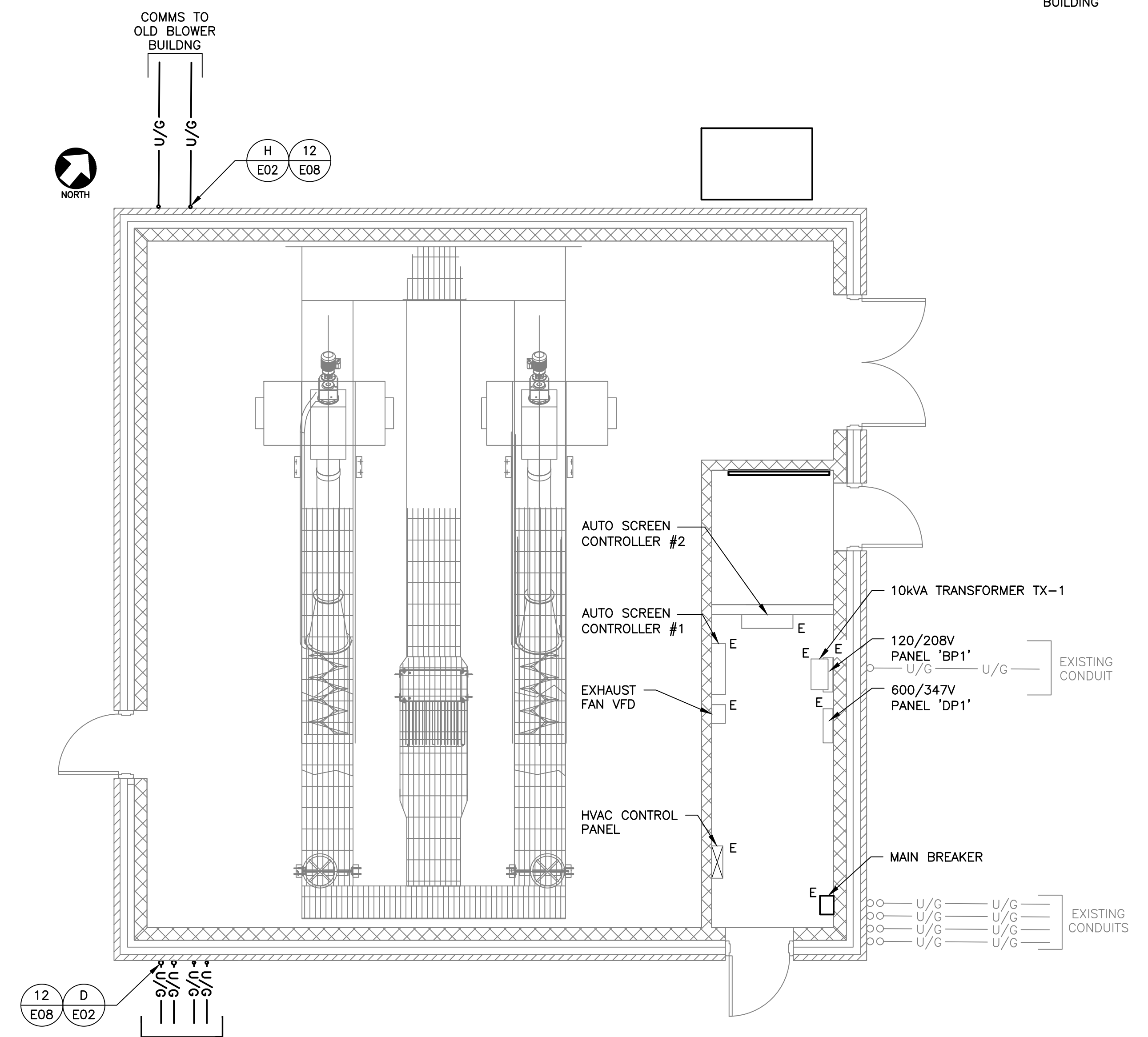
ELECTRICAL

BLOWER BUILDING & SCREENING BUILDING DEMO PLANS

Contract No. 230813.02
Scale: AS NOTED
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Drawn: IGG
Checked: LH
Approved: DAT
Sheet No. 4 of 10
Drawing No. **E04**



1 PLAN - OLD BLOWER BUILDING PROPOSED LAYOUT
1:20



2 PLAN - SCREENING BUILDING PROPOSED LAYOUT
1:50

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 2. UNLESS OTHERWISE NOTED ALL ELECTRICAL EQUIPMENT IS NEW.
 3. NOT ALL EXISTING ELECTRICAL EQUIPMENT IS INDICATED.
 4. SUPPLY AND INSTALL NEW PULLBOX (NEMA 4X) AT EACH EXTERIOR CONDUIT STUB UP LOCATION.

NOT FOR CONSTRUCTION

No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	

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TOWN OF WOLVILLE

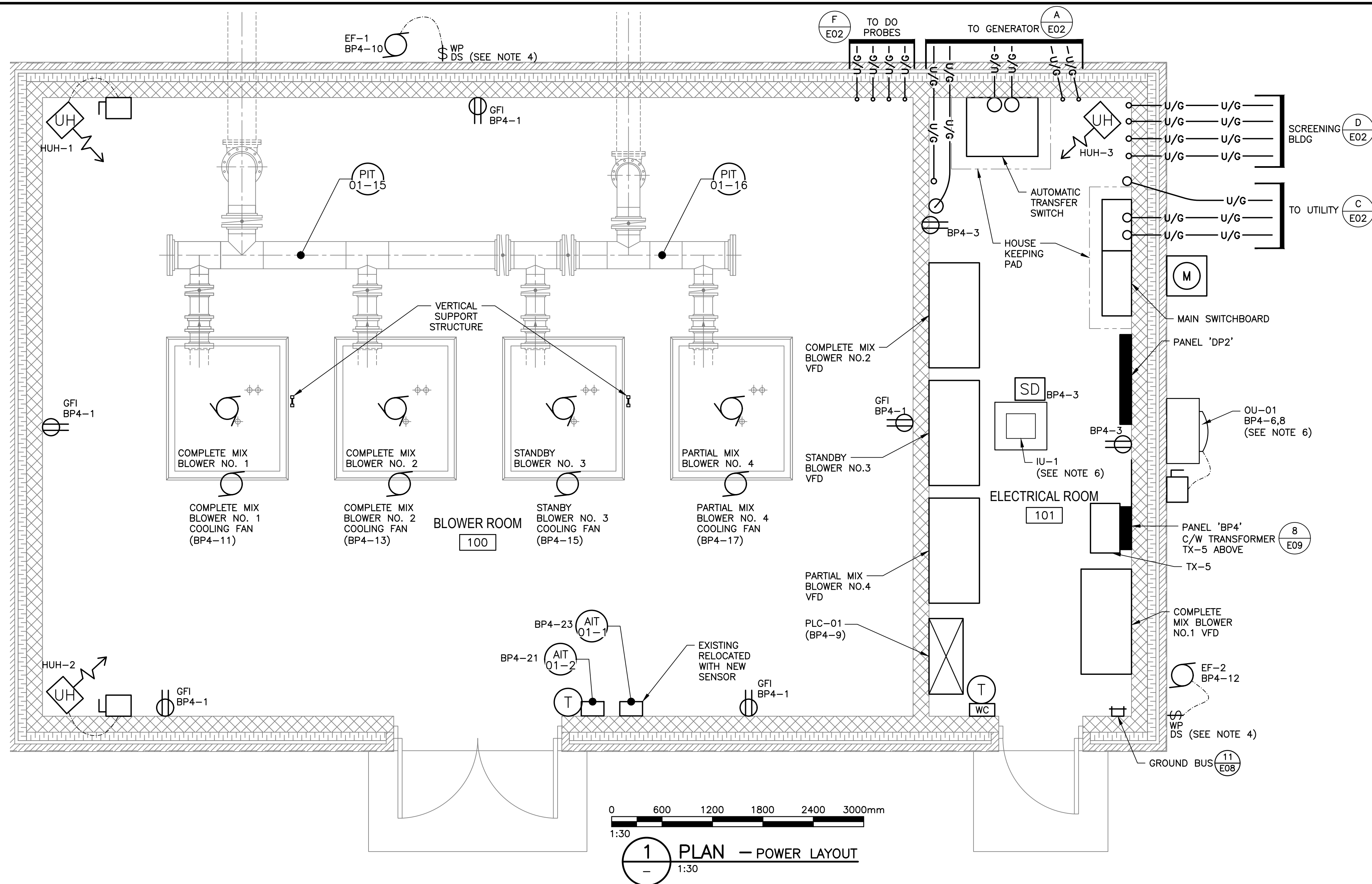
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

ELECTRICAL

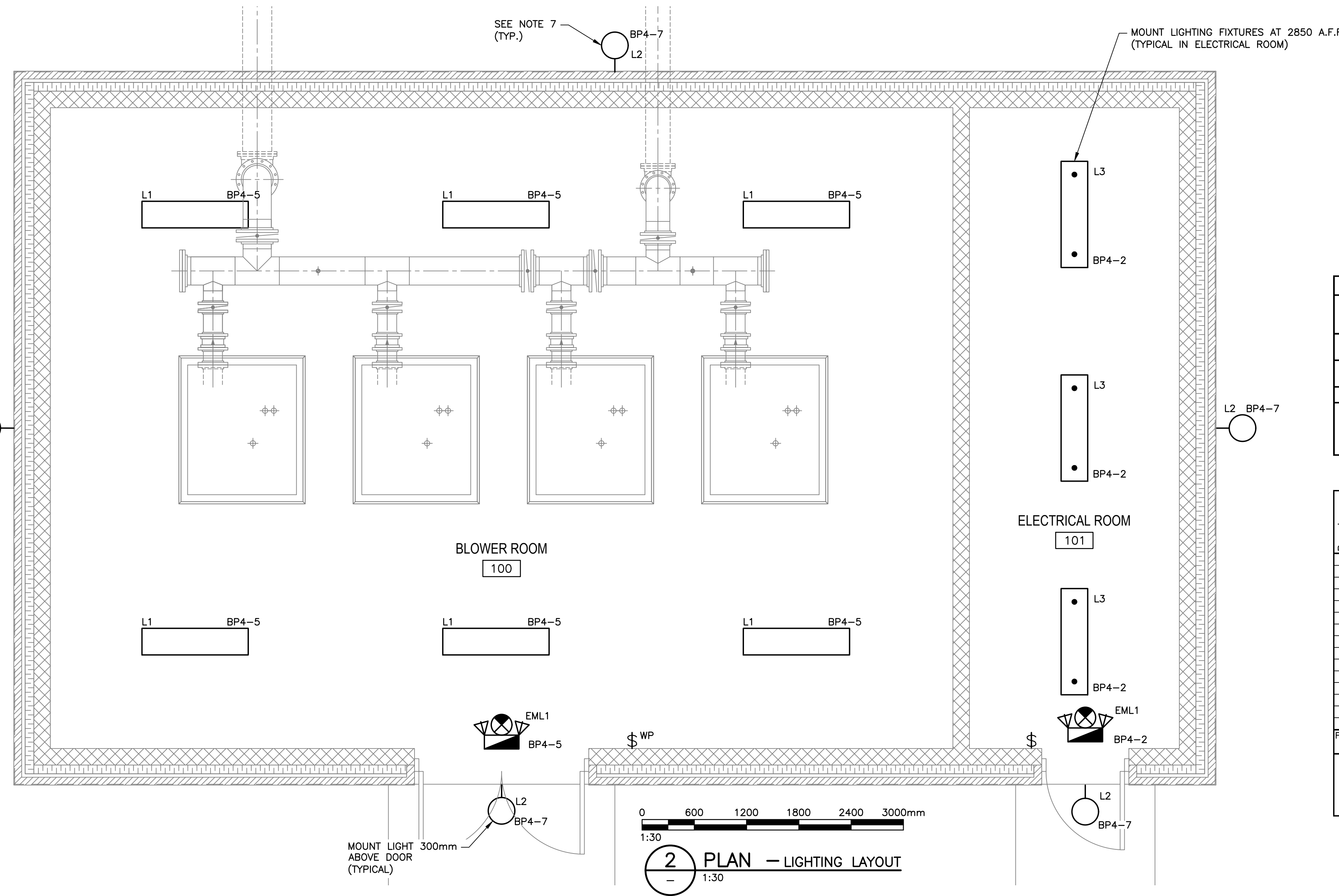
PROPOSED BLOWER
BUILDING & SCREENING
BUILDING PLANS

CBCL

LIBCL No 230813.02	Contract No WOL005-2025
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Designed CKS	Drawn IGG
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E05	



1 PLAN - POWER LAYOUT
1:30



2 PLAN - LIGHTING LAYOUT
1:30

LIGHTING SCHEDULE						
LUMINAIRE TYPE	SUPPLY VOLTAGE	LAMP SOURCE	WATTAGE	LUMENS	GENERAL DESCRIPTION	
L1	120VAC	LED	30	4000	1200mm VAPOUR TIGHT, 4000K SUITABLE FOR SURFACE MOUNTING.	
L2	120VAC	LED	20	3000	WALL MOUNTED AREA LIGHT (FULL CUT-OFF), C/W INTEGRAL PHOTOCCELL.	
L3	120VAC	LED	30	4000	1200mm SUSPENDED OPEN INDUSTRIAL FIXTURE.	
EML1	120VAC	LED	2 @ 5	60	EMERGENCY LIGHT, STEEL CABINET C/W BATTERY BACKUP (MIN. 30 MINUTES), EXIT SIGN, AUTOMATIC SELF DIAGNOSTIC, 12VDC OUTPUT, MR16 LED LAMPS, INTEGRAL EXIT SIGN.	

PANEL BP4 LOCATION ELECTRICAL ROOM									
Designation		CKT #	Watts	BKR	PHASE	a	b	c	Designation
BLOWER ROOM RECEPTACLES		1	15A	X	15A			2	ELECTRICAL ROOM LIGHTING/EMERGENCY EXIT LIGHT
ELECTRICAL ROOM RECEPTACLES		3	15A	X	15A			4	SMOKE DETECTORS
BLOWER ROOM LIGHTING/EMERGENCY EXIT LIGHT		5	15A	X	15A			6	HEAT PUMP (OU-1/OU-1)
EXTERIOR LIGHTING		7	15A	X	2P			8	EXHAUST (EF-01)
PLC-01		9	20A	X	15A			10	EXHAUST (EF-02)
COMPLETE MIX No 1 COOLING FAN		11	15A	X	15A			12	SPARE
COMPLETE MIX No 2 COOLING FAN		13	15A	X	15A			14	GENERATOR AUXILIARY
STANDBY BLOWER No 3 COOLING FAN		15	15A	X	50A			16	SPARE
PARTIAL MIX No 4 COOLING FAN		17	15A	X	2P			18	SPARE
SPARE		19	15A	X	20A			20	SPARE
LAGOON CELL 2 DO (AIT-01-2)		21	15A	X	15A			22	SPARE
LAGOON CELL 1 DO (AIT-01-1)		23	15A	X	15A			24	SPARE
SPARE		25	15A	X	15A			26	SPARE
SPARE		27	15A	X	15A			28	SPARE
SPARE		29	15A	X	15A			30	SPARE

Remarks:
1. LOCKABLE BREAKER
2. SIZE THE BREAKER AS PER MANUFACTURER SHOP DRAWINGS PRIOR TO ORDERING AND INSTALLING.
3. GFCI BREAKER

Phase A Total	0 W	0.0 A
Phase B Total	0 W	0.0 A
Phase C Total	0 W	0.0 A
TOTAL	0 W	0.0 A

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - CONTRACTOR TO VERIFY ALL DIMENSIONS & SITE CONDITIONS.
 - ALL ELECTRICAL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.
 - DISCONNECT SWITCH RATING TO BE A MINIMUM AMPERE RATING AND NUMBER OF POLES TO MATCH ITS FEEDER BREAKER.
 - PROVIDE CONCRETE HOUSEKEEPING PADS FOR ELECTRICAL FLOOR MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO TRANSFORMERS, SWITCHBOARDS, VCC'S AND AUTOMATIC TRANSFER SWITCH.
 - COORDINATE WITH MECHANICAL CONTRACTOR FOR INSTALLATION OF THE HEAT PUMP.
 - UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS OF EXTERIOR WALL LIGHT FIXTURES TO BE LOCATED 3 METERS ABOVE FINISHED GRADE.

NOT FOR CONSTRUCTION

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TOWN OF WOLFFVILLE

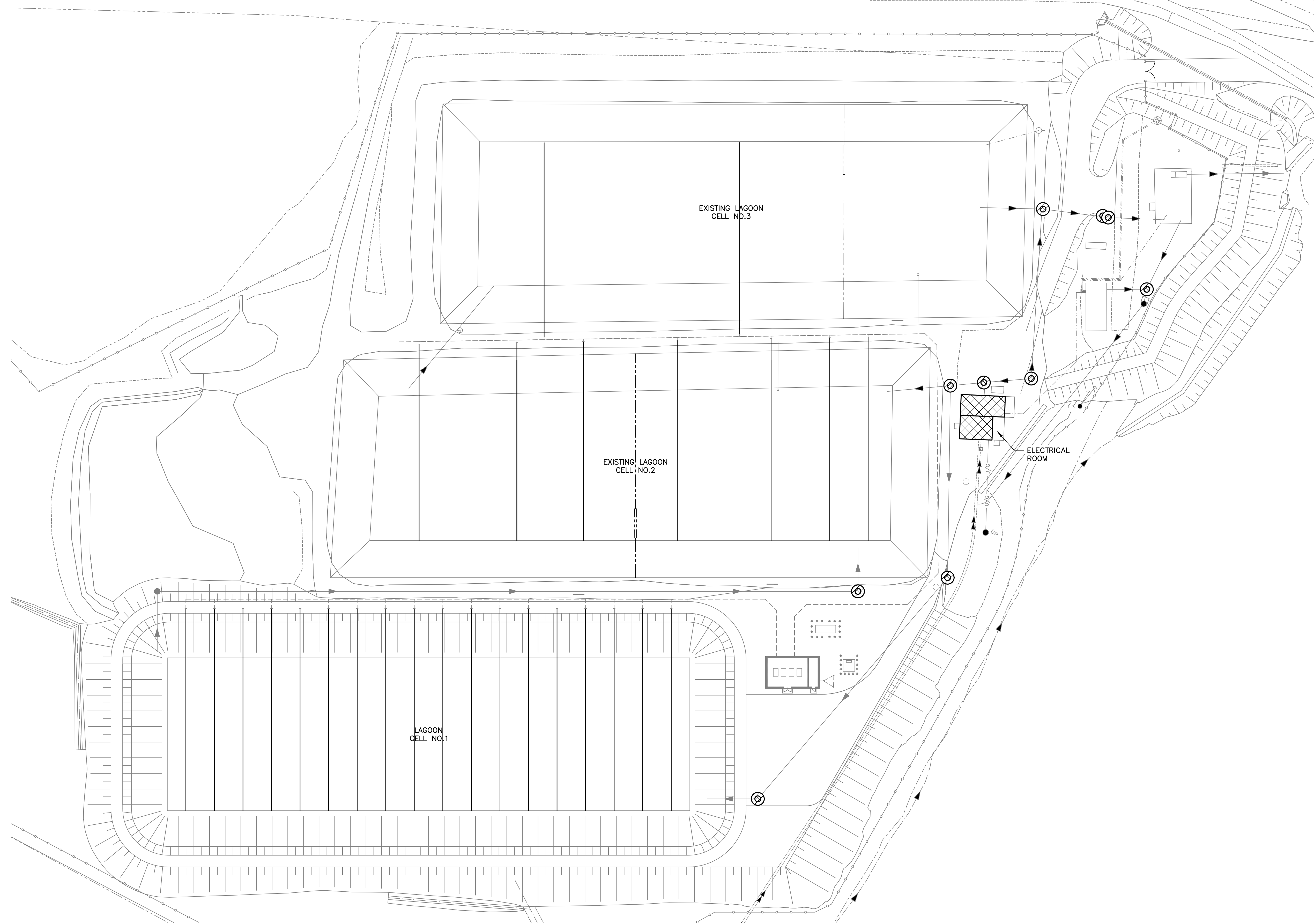
WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

ELECTRICAL

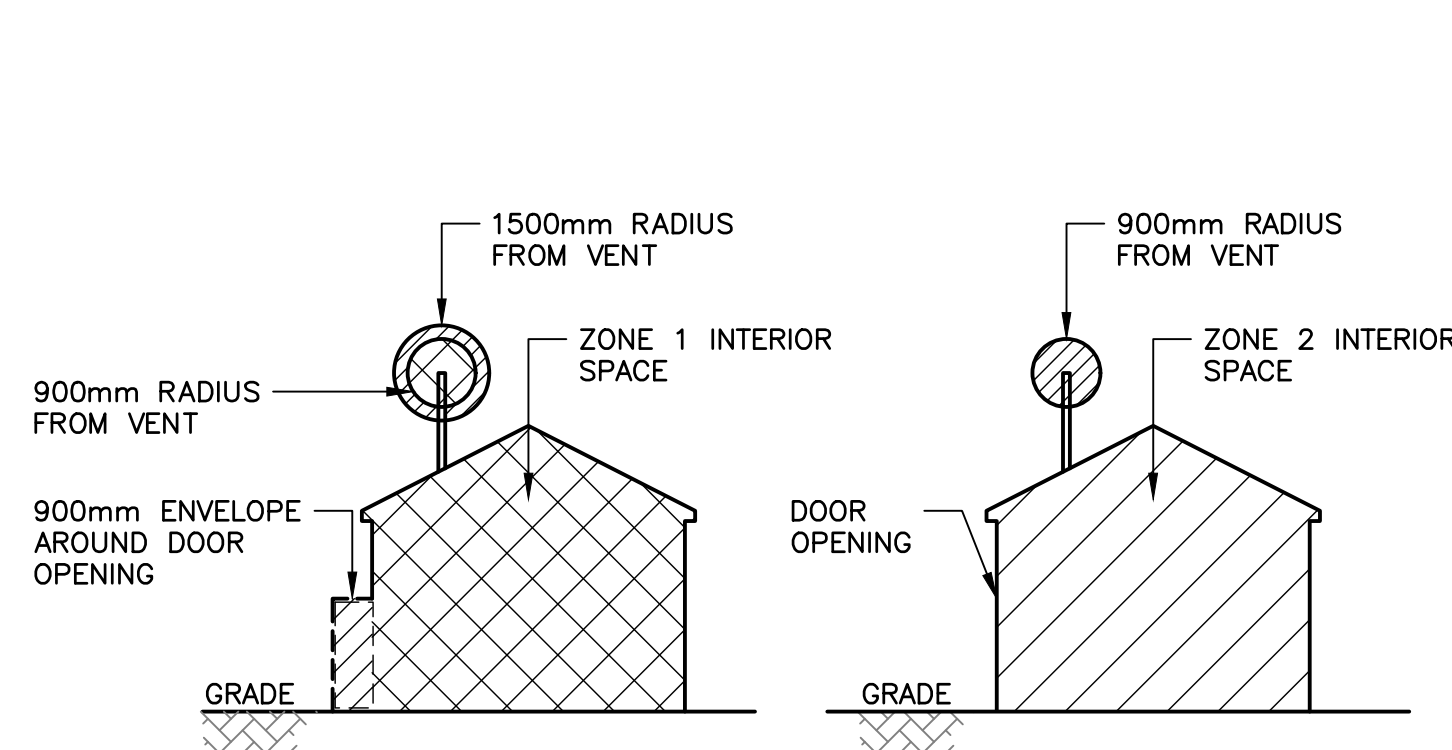
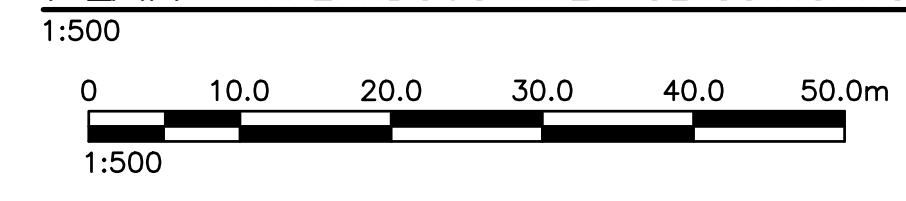
BLOWER BUILDING LIGHTING AND POWER PLAN

CBCL

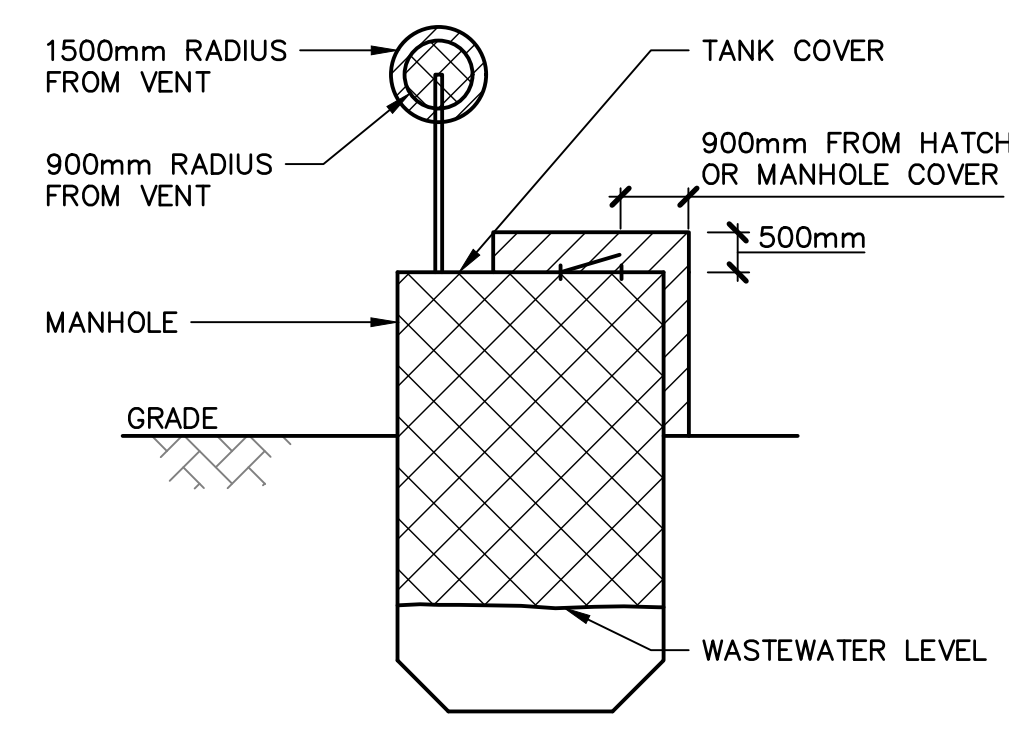
Contract No: WOL005-2025
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Date: APR 2024
Designed: IGG
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Drawing No: **E06**



PLAN— HAZARDOUS AREA CLASSIFICATION



1 DETAIL— ABOVE GRADE EQUIPMENT HOUSING
N.T.S.



2 DETAIL— SEWAGE MANHOLE
N.T.S.

NOTES:

1. ALL ELECTRICAL PENETRATIONS FROM A NON-HAZARDOUS AREA TO A HAZARDOUS SHALL BE SEALED AND MADE GAS TIGHT.
2. ELECTRICAL INSTALLATIONS IN HAZARD AREAS SHALL BE IN ACCORDANCE WITH SECTION 18 OF THE CANADIAN ELECTRICAL CODE FOR THE SPECIFIED CLASSIFICATION.
3. ZONE 1 AND ZONE 2 HAZARDOUS AREAS ARE A CATEGORY 2 LOCATION IN ACCORDANCE WITH SECTION 22 OF THE CANADIAN ELECTRICAL CODE AND THE ELECTRICAL INSTALLATION SHALL BE COMPLETED AS PER THE REQUIREMENTS OF A CATEGORY 2 LOCATION.

HAZARDOUS AREA CLASSIFICATION	
SYMBOL	DESCRIPTION
	INDICATES ZONE 1 HAZARDOUS AREA GAS GROUP IIA & IIB, T3 TEMP CODE
	INDICATES ZONE 2 HAZARDOUS AREA GAS GROUP IIA & IIB, T3 TEMP CODE
	UNCLASSIFIED

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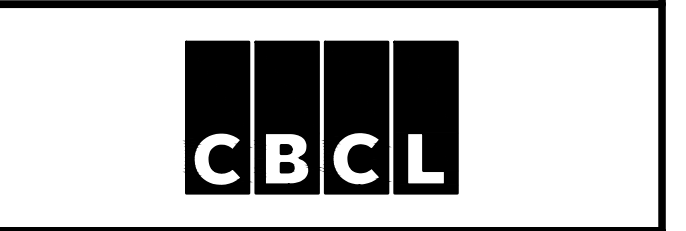
Revision of Issue

TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

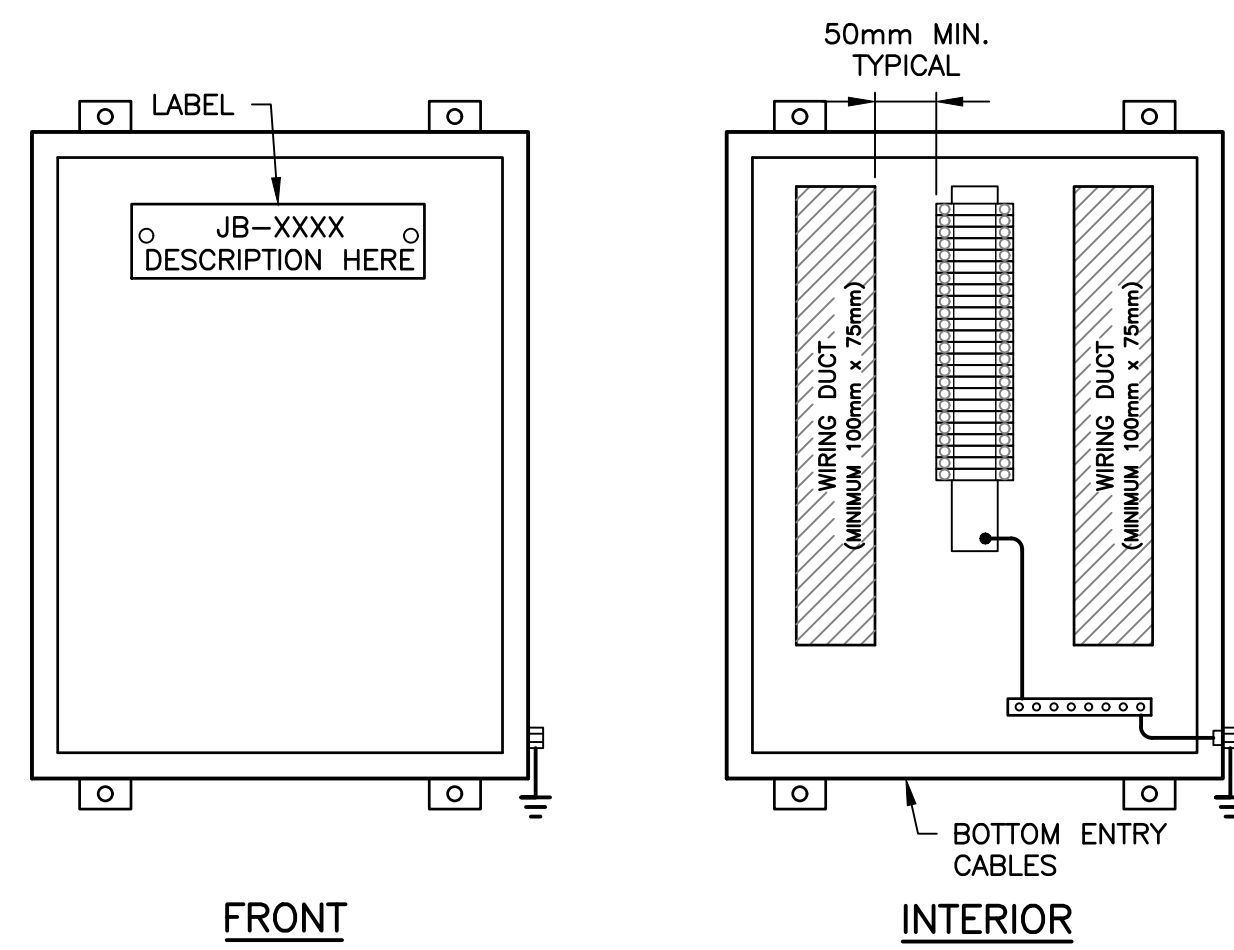
ELECTRICAL

HAZARDOUS CLASSIFICATION
AND DETAILS



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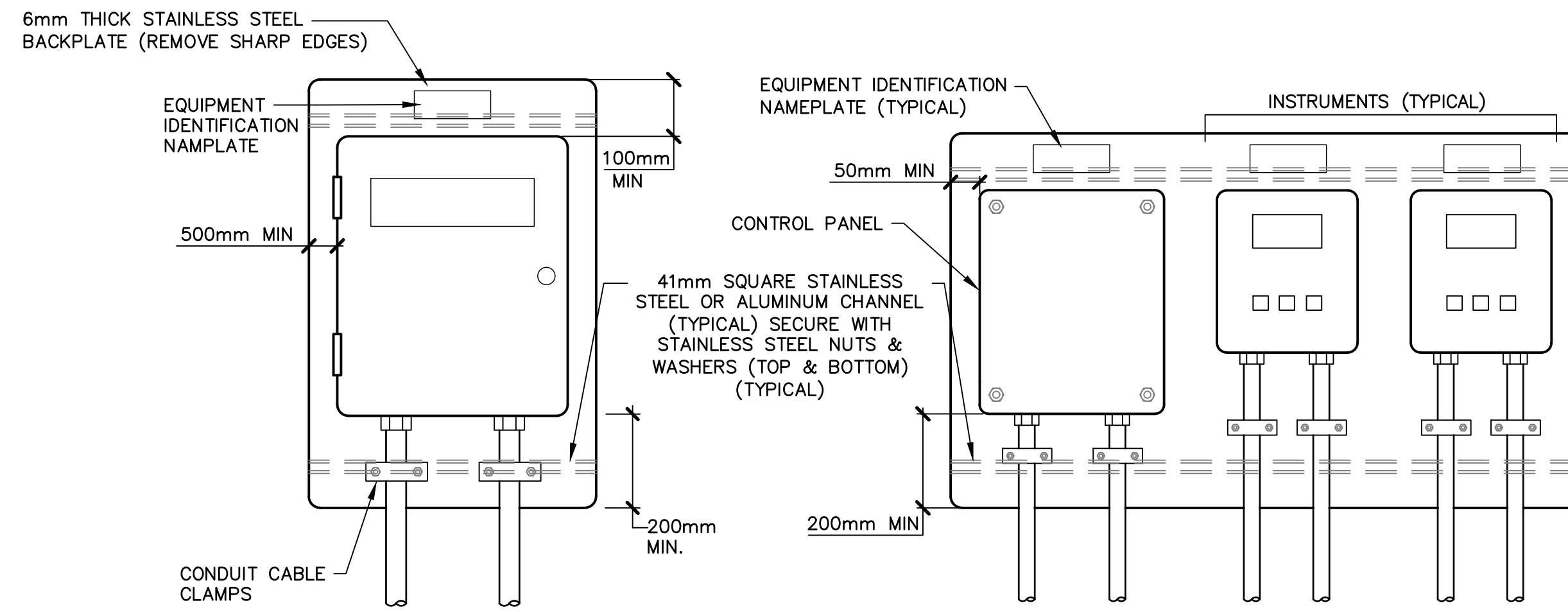
E07



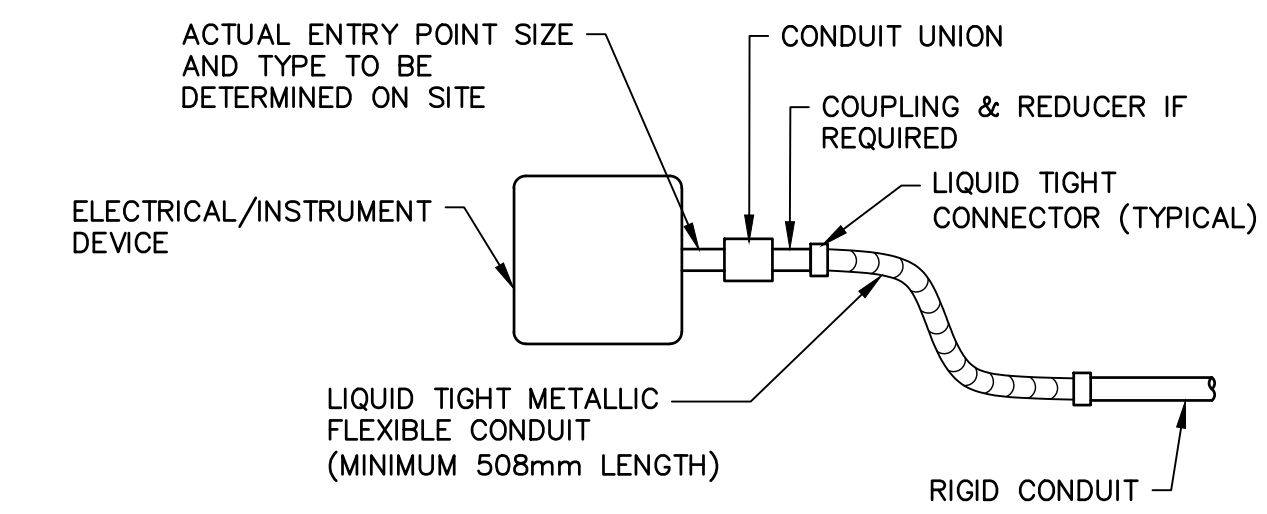
DETAIL NOTES:

1. THIS LAYOUT DRAWING APPLIES TO INSTRUMENTATION TERMINATION JUNCTION BOXES. THE ABOVE LAYOUT IS TO BE USED AS A GUIDE ONLY. REFER TO THE INSTRUMENTATION CABLING DRAWINGS TO DETERMINE THE NUMBER OF TERMINAL BLOCKS REQUIRED IN EACH FIELD JUNCTION BOX.
2. REFER TO SPECIFICATION SECTION XXXXX FOR MATERIAL REQUIREMENTS.

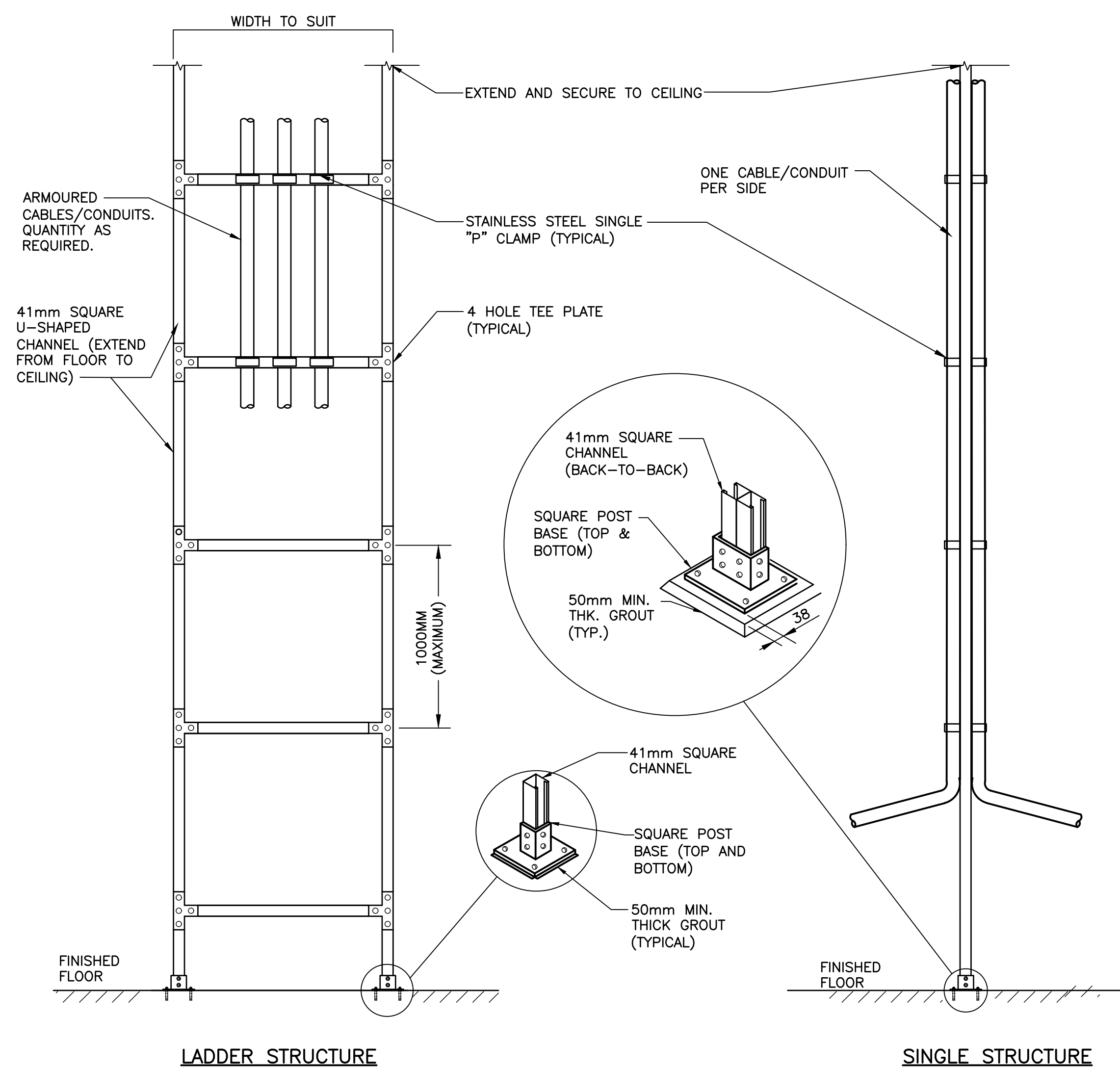
1 TYPICAL INSTRUMENTATION TERMINATION JUNCTION BOX LAYOUT
N.T.S.



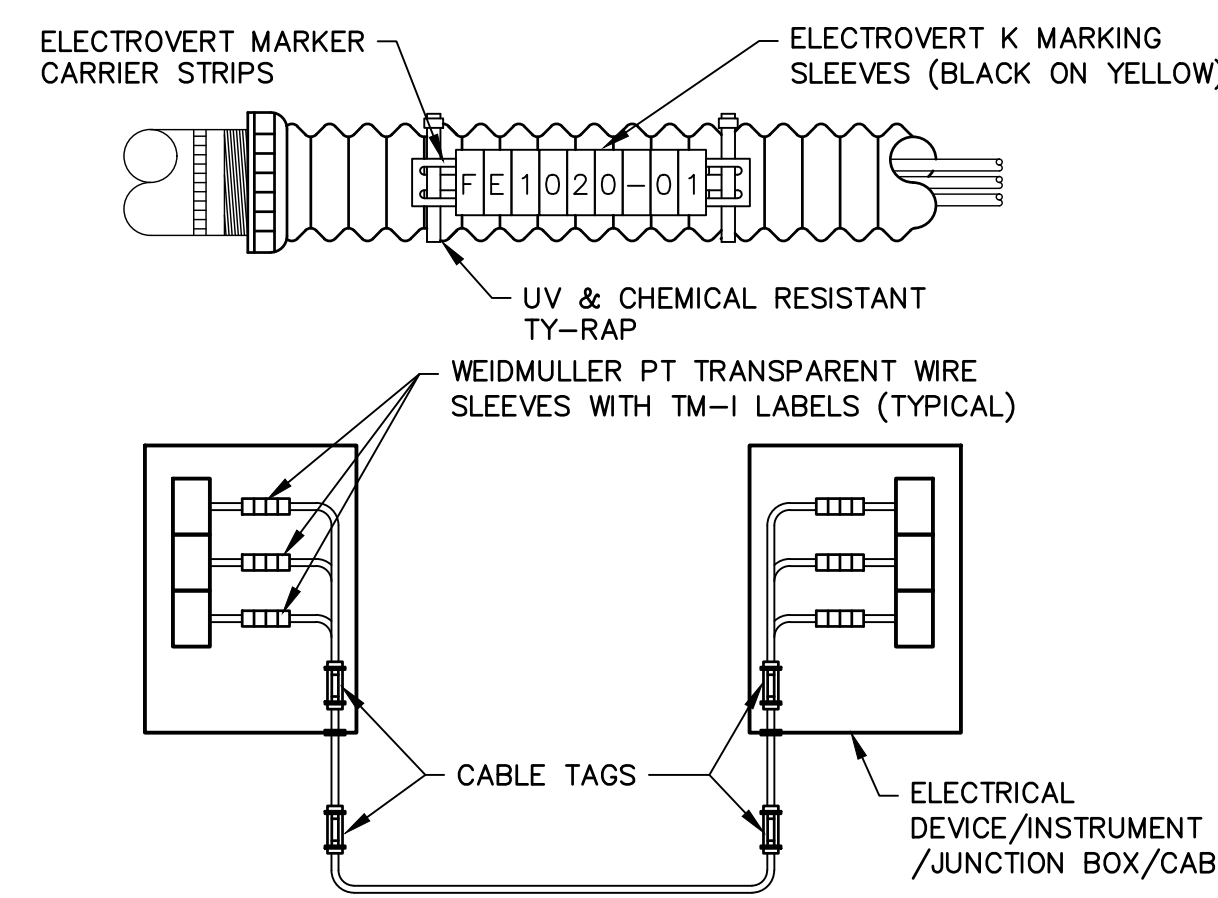
2 DETAIL— CONTROL PANEL/MAJOR JUNCTION BOX/INSTRUMENTATION MOUNTING
N.T.S.



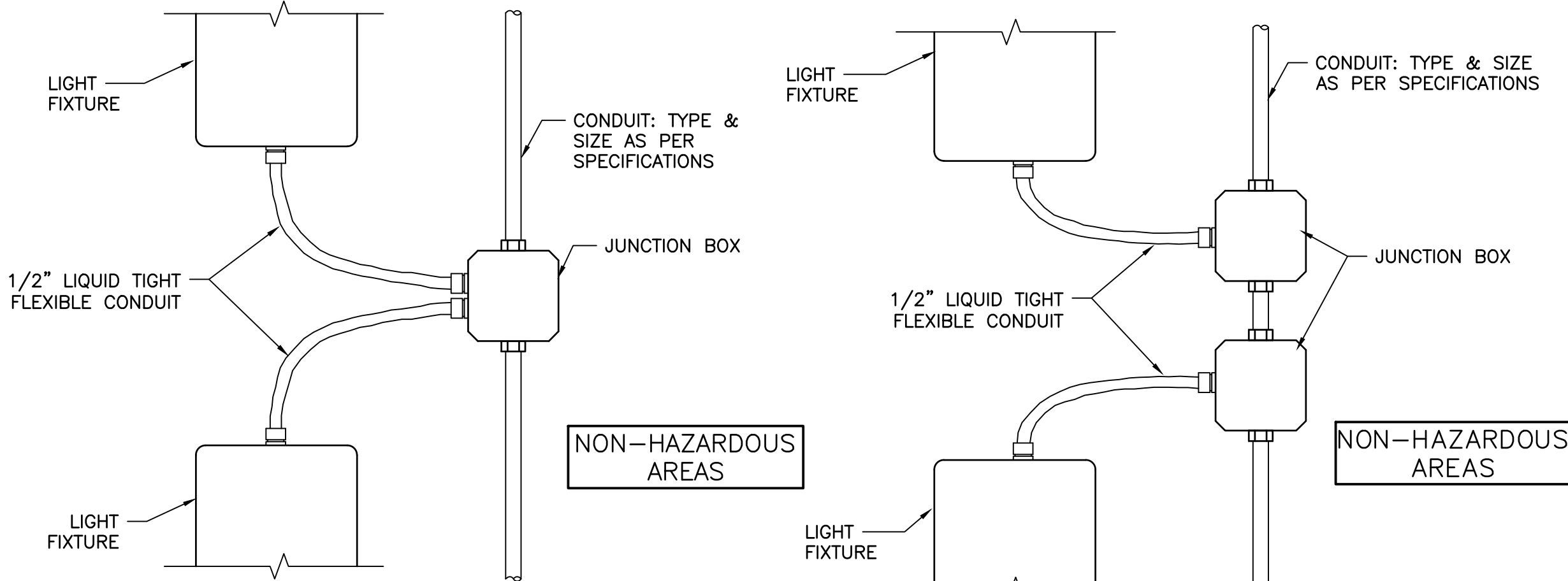
3 DETAIL— EQUIPMENT CONDUIT ENTRY (NON-HAZARDOUS AREAS)
N.T.S.



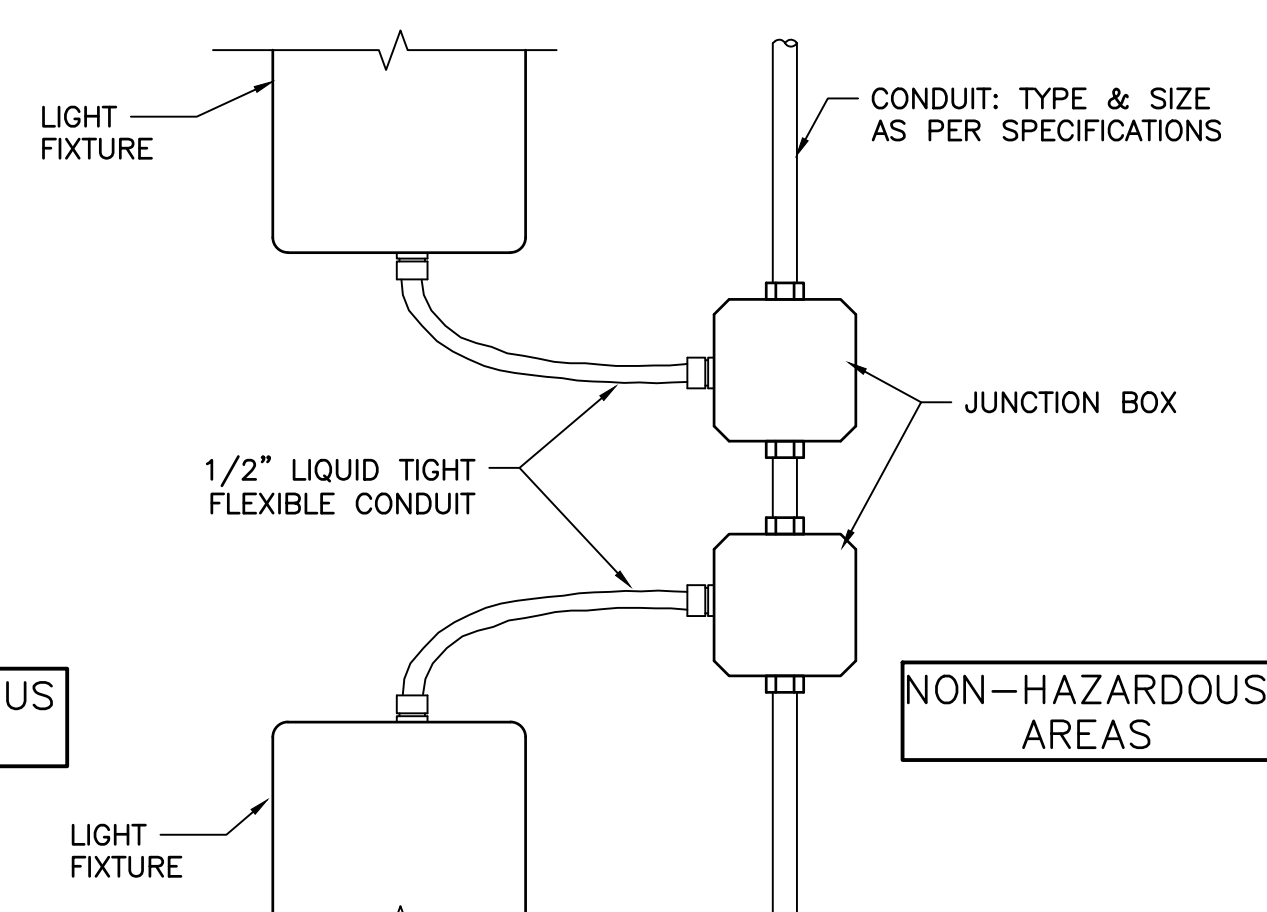
4 DETAIL— VERTICAL CONDUIT/CABLE SUPPORT STRUCTURE
N.T.S.



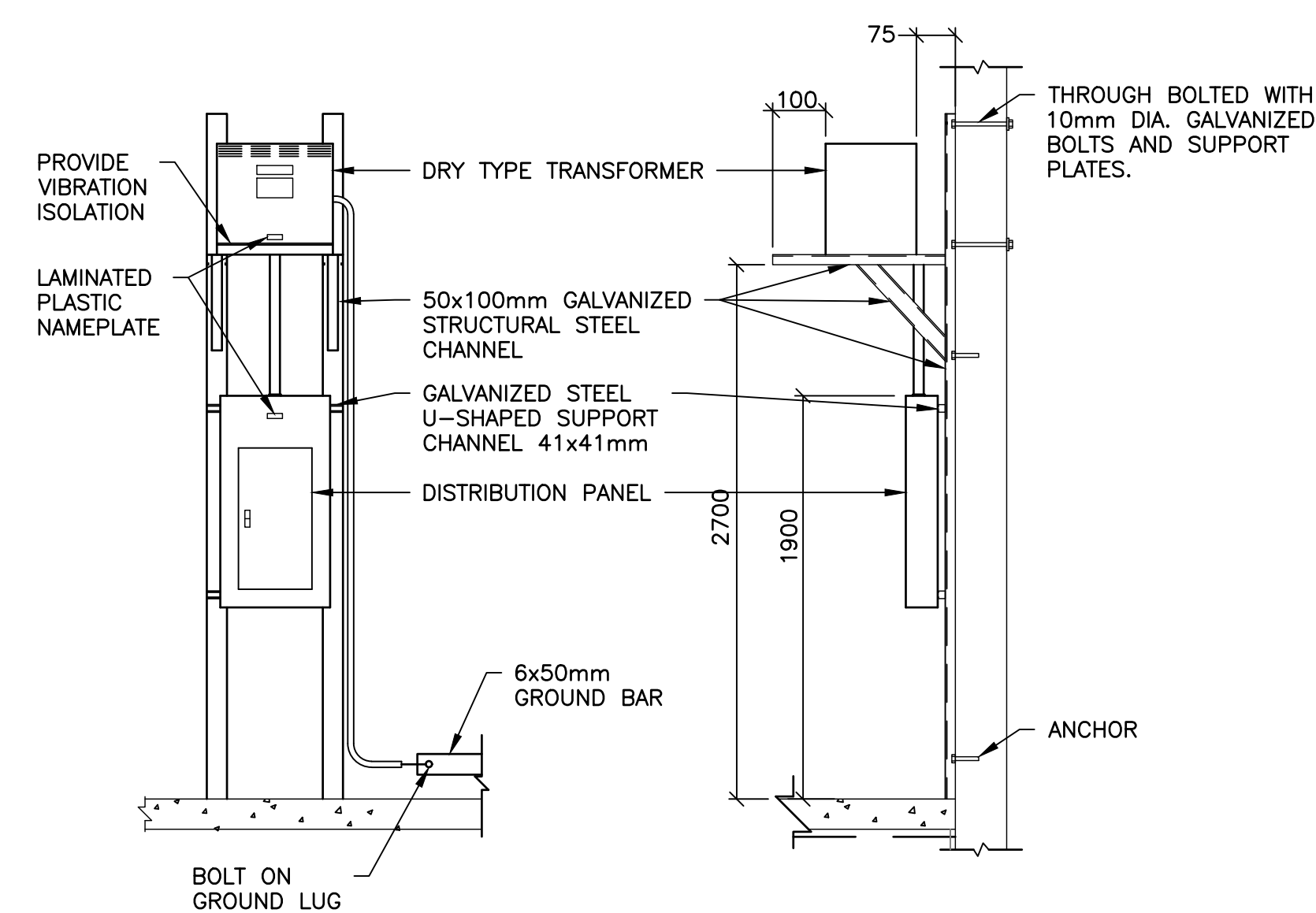
5 DETAIL— POWER CABLE AND CONDUCTOR IDENTIFICATION
N.T.S.



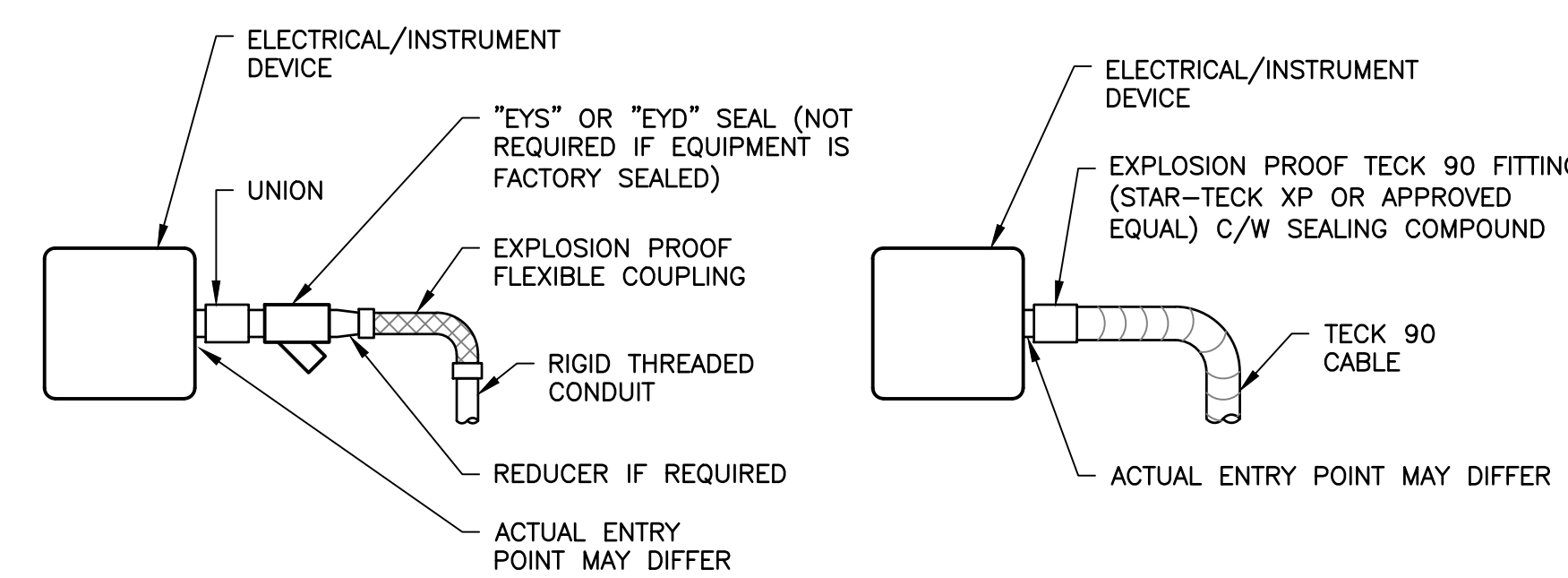
6 DETAIL— ALTERNATE CONNECTION OF LIGHT FIXTURES VIEWED FROM BELOW
N.T.S.



7 DETAIL— TYPICAL CONNECTION OF TWO LIGHT FIXTURES VIEWED FROM BELOW
N.T.S.



8 DETAIL— TRANSFORMER AND PANEL MOUNTING
N.T.S.



9 DETAIL— EQUIPMENT CONDUIT ENTRY (ZONE 1/2 HAZARDOUS AREAS)
N.T.S. TYP FOR: GENERAL

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TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

ELECTRICAL

DETAILS SHEET 2 OF 2

CBCL

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Designed: CKS
Checked: LH
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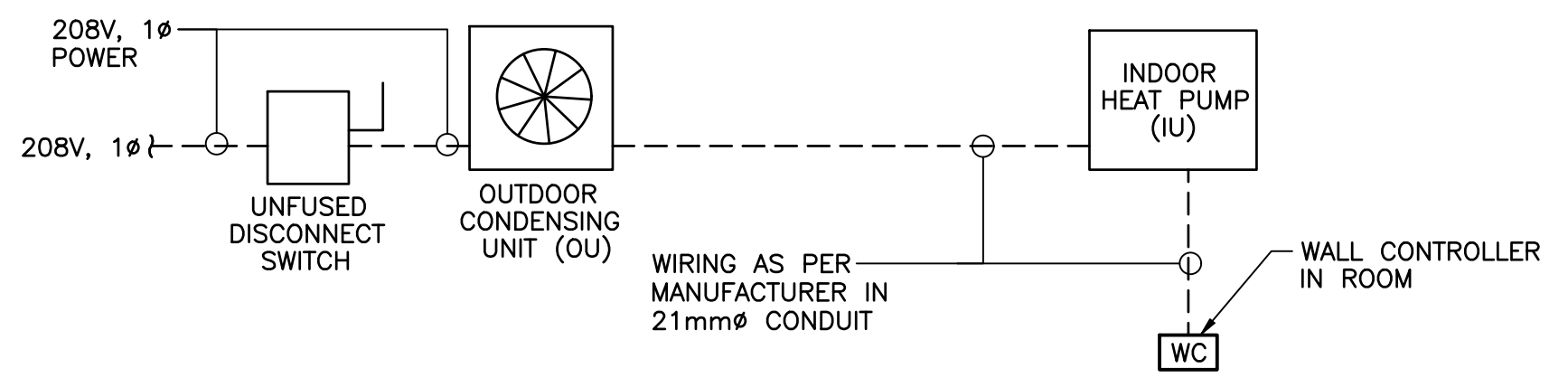
Contract No. WOL005-2023
Date: APR 2024
Scale: AS NOTED

Designed: IGG
Checked: DAT
Sheet No. 9 of 10

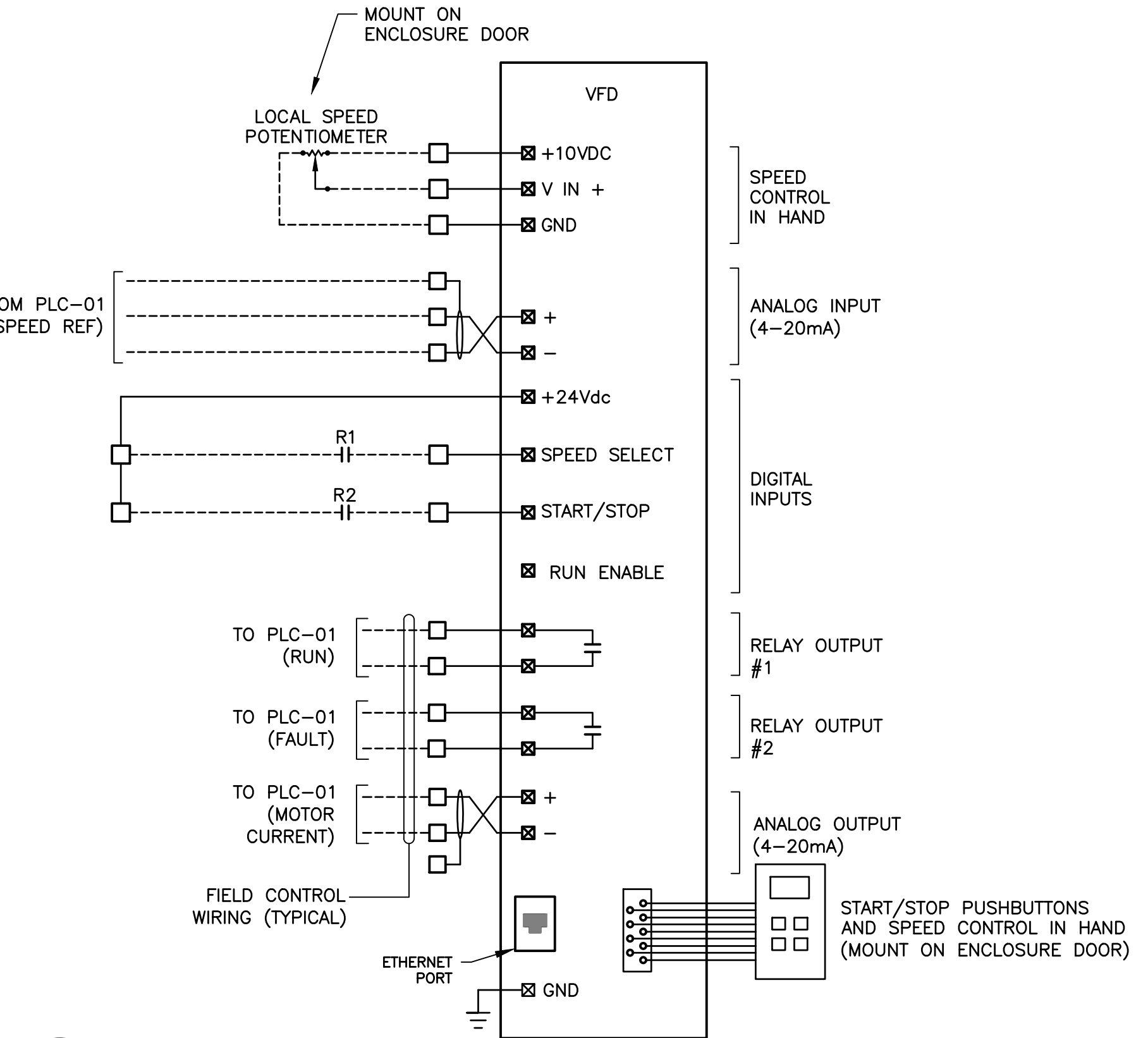
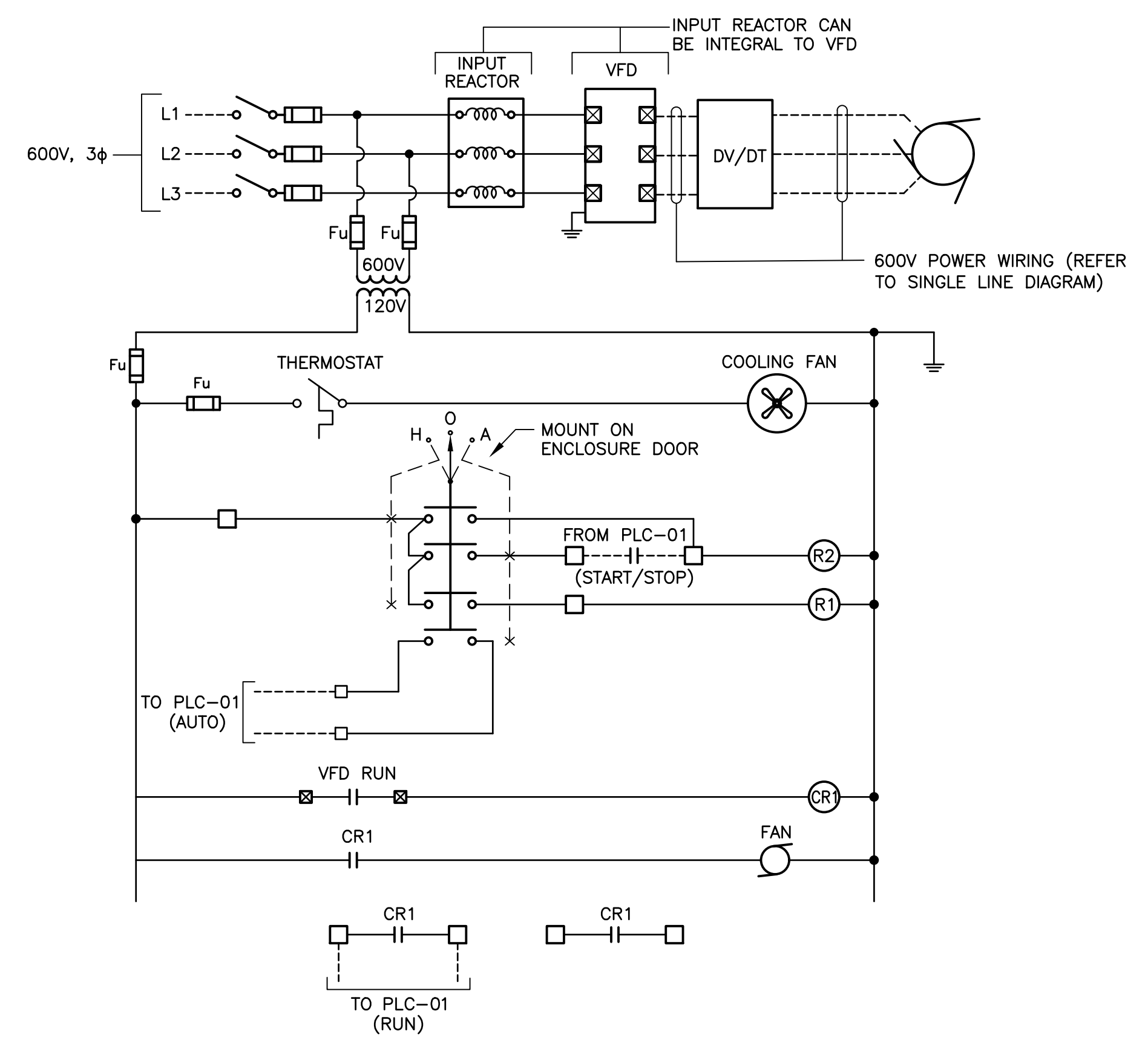
Drawing No. **E09**

HEAT PUMP CONTROL NOTES:

1. PROVIDE FIELD WIRING AS REQUIRED.
2. PROVIDE NECESSARY HARDWARE AS PER MANUFACTURER TO PROVIDE A FULL FUNCTIONAL SYSTEM.



1 BLOCK DIAGRAM —INDOOR/OUTDOOR HEAT PUMP
N.T.S. POWER/CONTROLS CONNECTION (TYPICAL)




2 SCHEMATIC—TYPICAL BLOWER VFD SCHEMATICS
N.T.S. (SEE NOTES 2 & 3)

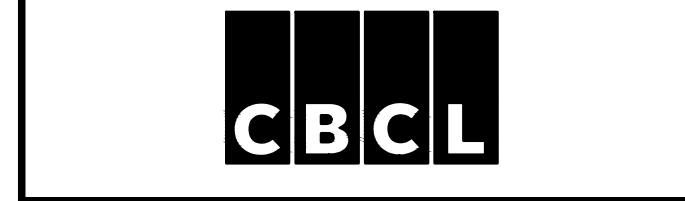
- NOTES:**
1. ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.
 2. FIELD CONTROL WIRING IS IDENTIFIED ON THE INSTRUMENTATION AND CONTROLS CABLING DIAGRAM.
 3. CONTROL SCHEMATIC IS TYPICAL AND IS SHOWN FOR CONTROL PHILOSOPHY ONLY. SUBMIT SHOP DRAWINGS INDICATING WIRING CONNECTIONS SPECIFIC TO THE MANUFACTURER'S VFD.
 4. EQUIPMENT SPECIFIED IN DIVISION 23.

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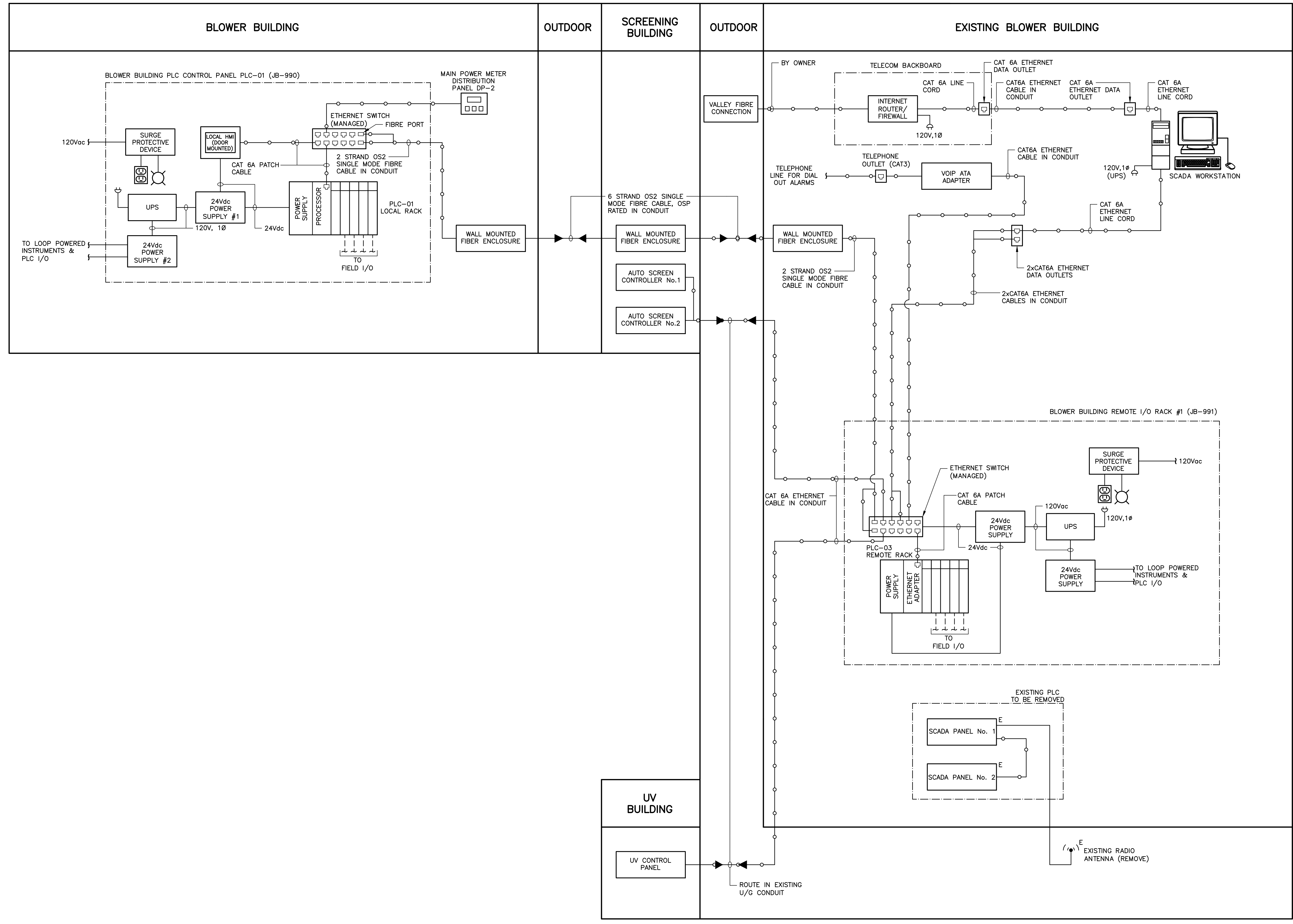
No.	Description	Date	By
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TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES
 ELECTRICAL
SCHEMATICS AND BLOCK
DIAGRAM



LIBCL No 230813.02	Contract No WOL005-2025
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E10	



1 SCHEMATIC-PLC CONTROL SYSTEM
N.T.S.

NOTES:
1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT SHOWN IS NEW.
2. REFER TO DRAWING E01 FOR LEGEND.

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No.	Description	Date	By
0	ISSUED FOR TENDER	MAR 11/25	25

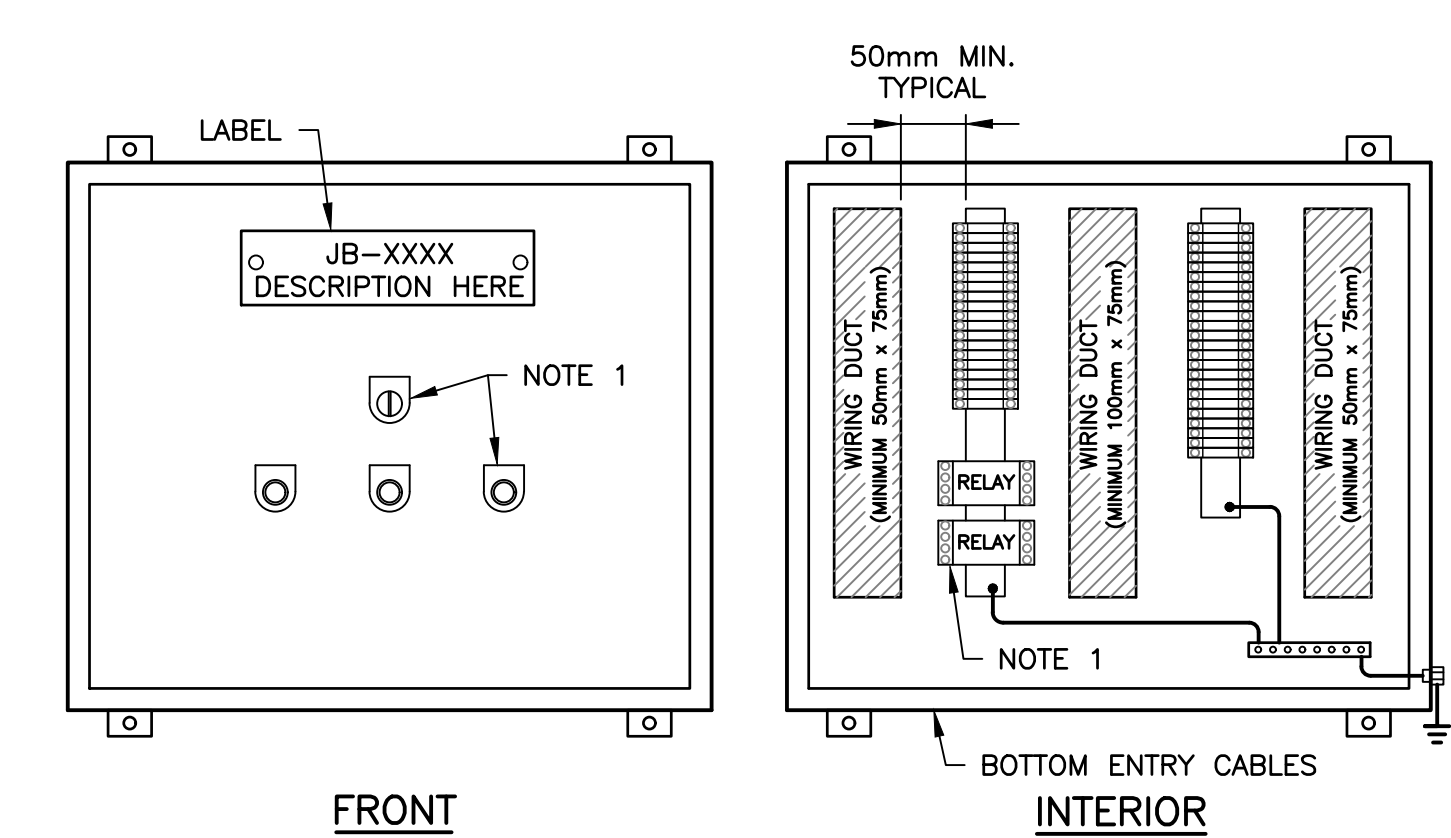
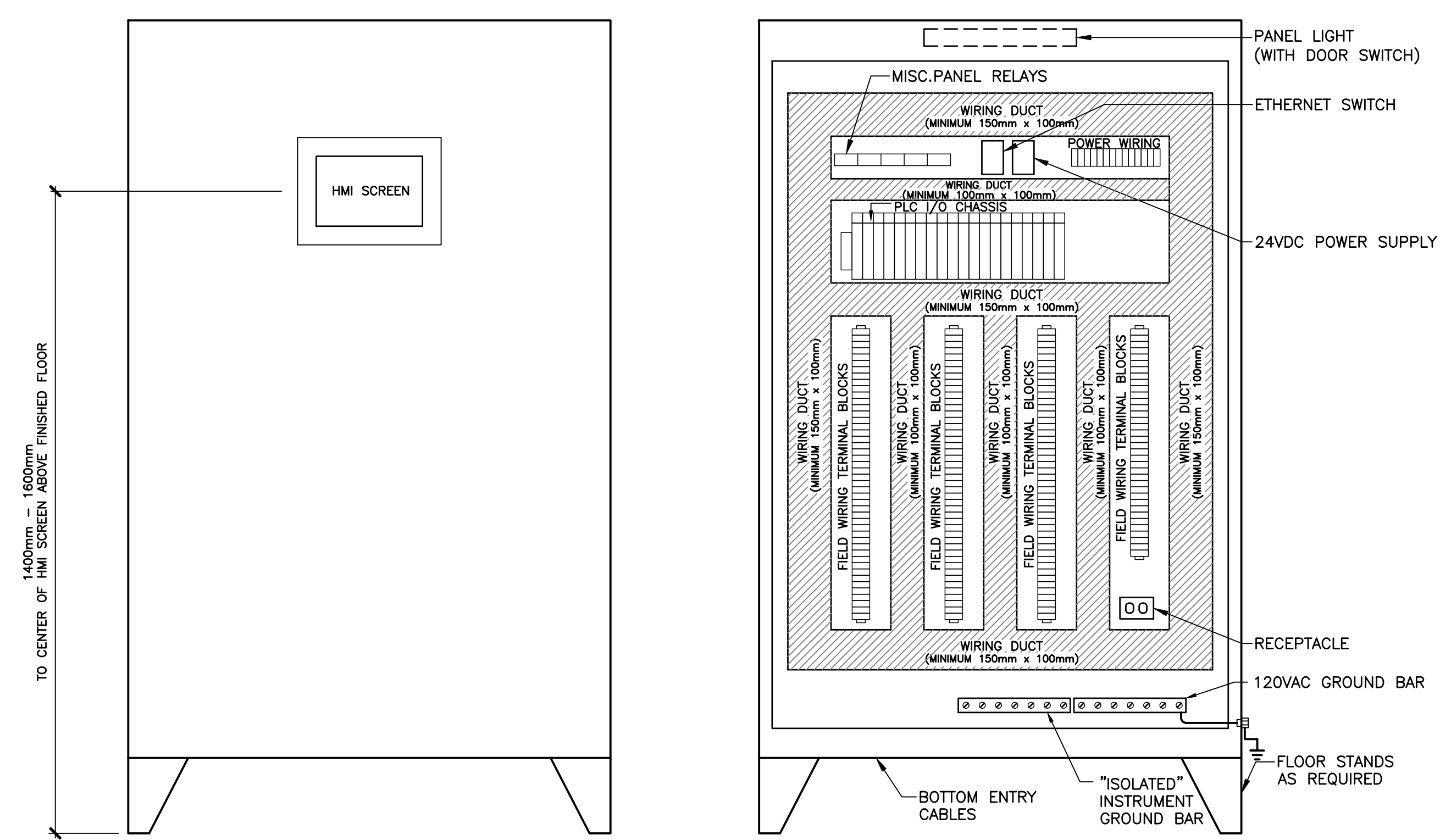
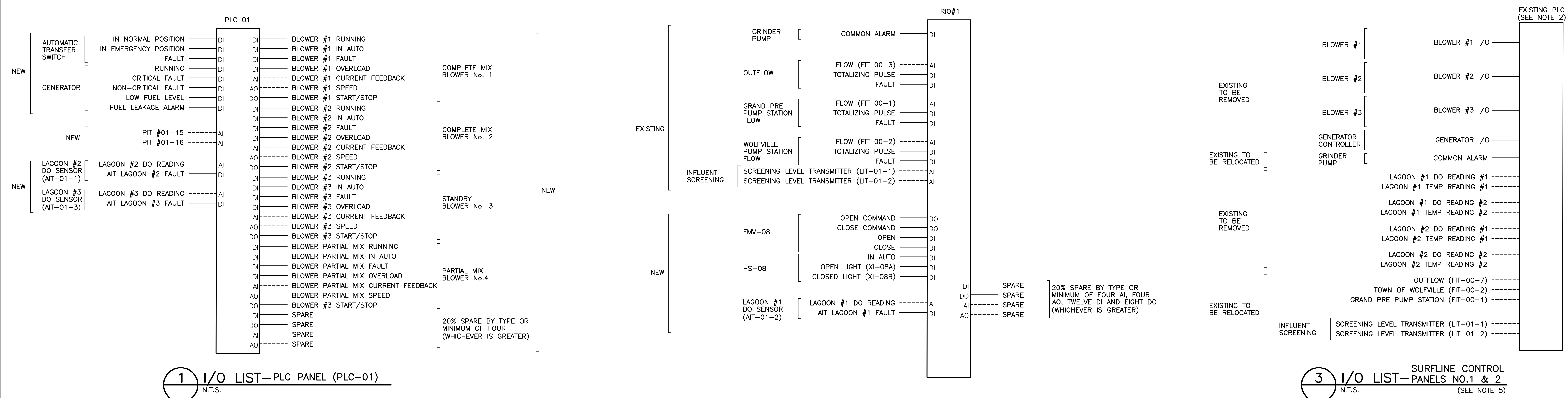
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TOWN OF WOLFVILLE
WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

INSTRUMENTS
CONTROL SYSTEM BLOCK
DIAGRAM

LIBCL No 230813.02 Contract No WOL005-2025
Date APR 2024 Scale N.T.S.
Designed Drawn
Checked LH Approved DAT
Sheet No 1 of 3
Drawing No
J01

- NOTES:**
- UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT SHOWN IS NEW.
 - NOT ALL I/O ON EXISTING PLC-01 IS SHOWN. CONTRACTOR TO COORDINATE EXISTING REMOVALS WITH OWNER.
 - REFER TO TELECOMMUNICATIONS BLOCK DIAGRAM ON DRAWING E10.
 - REFER TO DRAWING E01 FOR LEGEND.
 - VERIFY EXISTING I/O PRIOR TO REMOVAL AND FORWARD INFORMATION TO OWNER AND CONSULTANT.



- NOTES:**
- THIS LAYOUT DRAWING APPLIES TO FLOOR MOUNTED (OR WALL MOUNTED) PLC/RTU CONTROL PANELS. THE ABOVE LAYOUT IS TO BE USED AS A GUIDE ONLY. REFER TO THE CONTROL SYSTEM BLOCK DIAGRAM, CONTROL SCHEMATICS, PLC/RTU I/O LISTS, ETC., TO DETERMINE THE NUMBER OF I/O CARDS, RELAYS, TERMINAL BLOCKS, ETC., REQUIRED FOR EACH PANEL.
 - REFER TO SPECIFICATION SECTION 40 95 00 FOR MATERIAL REQUIREMENTS.

- NOTES:**
- THIS LAYOUT DRAWING APPLIES TO RELAY CONTROL PANELS. THE ABOVE LAYOUT IS TO BE USED AS A GUIDE ONLY. REFER TO THE INSTRUMENTATION CABLING DIAGRAMS, AND CONTROL SCHEMATICS TO DETERMINE THE NUMBER OF PUSHBUTTONS, SWITCHES, INDICATING LIGHTS, RELAYS, TERMINAL BLOCKS, ETC., REQUIRED FOR EACH CONTROL PANEL.
 - REFER TO SPECIFICATION SECTION 40 95 00 FOR MATERIAL REQUIREMENTS.

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TOWN OF WOLFVILLE

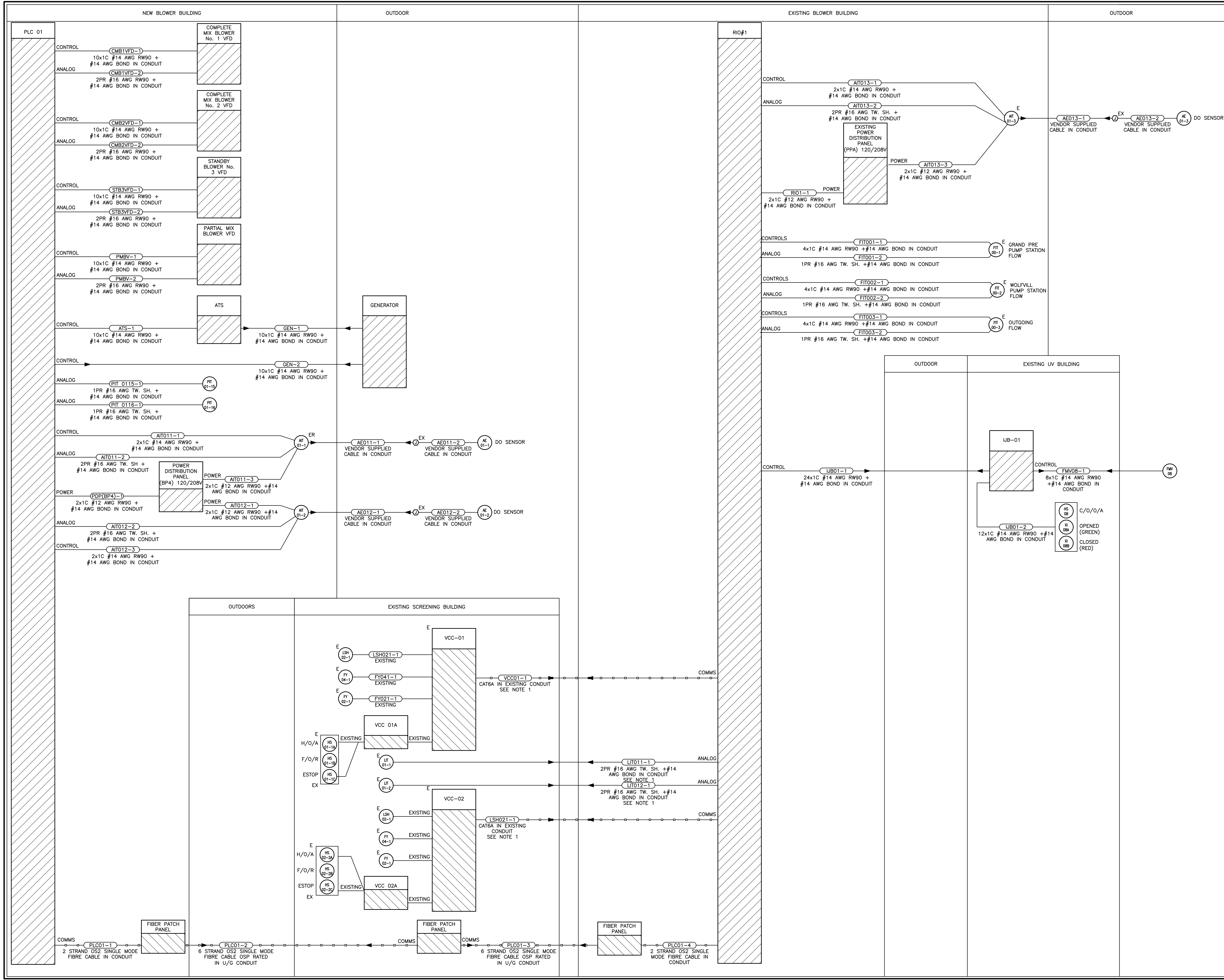
WASTEWATER TREATMENT PLANT PHASE 2 UPGRADES

INSTRUMENTS

SCHEMATIC, IO LISTS & PLC-RTU LAYOUT

CBCL

LIBCL No 230813.02 Contract No WOL005-2025
Date APR 2024 Scale N.T.S.
Designed CKS Drawn IGG
Checked LH Approved DAT
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Drawing No: **J02**



NOTES:

- CONTRACTOR TO SUPPLY AND INSTALL NEW CABLE TO REPLACE EXISTING AND RUN IN EXISTING CONDUITS. EXTEND CONDUITS TO NEW REMOTE I/O RACK#1.
- UNLESS NOTED OTHERWISE, ALL ELECTRICAL CONTROLS AND INSTRUMENTATION EQUIPMENT IS NEW.
- ALL FIELD PULL BOXES, JUNCTION BOXES AND CONTROL PANELS SHOWN SHALL BE PROVIDED BY THE CONTRACTOR, UNLESS INDICATED OTHERWISE.
- CONTRACTOR TO USE THESE CABLING DRAWINGS IN CONJUNCTION WITH THE SITE ELECTRICAL EQUIPMENT LAYOUT DRAWINGS TO DETERMINE CABLE LENGTHS.
- ALL CABLES/CONDUITS SHOWN SHALL BE PROVIDED BY THE CONTRACTOR UNLESS INDICATED OTHERWISE. REFER TO SPECIFICATION NO. 40 91 00 FOR PROCESS INSTRUMENTATION CABLING SPECIFICATIONS. FOR CONDUIT IN HAZARDOUS AREAS, PROVIDE SEALS IN ACCORDANCE WITH SECTION 18 OF THE CEC. PROVIDE BOND CONDUCTOR IN ALL CONDUIT, SIZED IN ACCORDANCE WITH THE CEC. SIZE CONDUITS IN ACCORDANCE TO CEC.
- REFER TO E01 FOR ELECTRICAL LEGEND.

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TOWN OF WOLFVILLE

WASTEWATER TREATMENT PLANT
PHASE 2 UPGRADES

INSTRUMENTS
INSTRUMENTATION &
CONTROLS CABLING DIAGRAM

CBCL

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Designed CKS	Drawn IGG
Checked LH	Approved DAT
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Drawing No: J03	