

JAN 21 2014

PERMIT TO PRACTICE
ALLNORTH CONSULTANTS LIMITED
PERMIT NUMBER: P 6366
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

GENERAL NOTES:

- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE ALBERTA BUILDING CODE - 2006.
- CONSTRUCT TO ALBERTA BUILDING CODE REQUIREMENTS. ALL REFERENCE STANDARDS ARE TO BE THE LATEST EDITION INCLUDING SUBSEQUENT REVISIONS.
- PROJECT LOCATION: INNISFAIL ALBERTA (RED DEER COUNTY)
- SPECIFIED DESIGN LOADS:
IMPORTANCE CATEGORY: NORMAL
LIVE LOAD : 6.0 kPa
DEAD LOAD: CONC. = 2400kg/m³
STEEL = 7850kg/m³
GROUND SNOW LOAD: Ss 1.9 kPa
RAIN LOAD: Sr 0.1 kPa
HOURLY WIND PRESSURE: 1/50Prob. = 0.42 kPa
WIND EXPOSURE: OPEN TERRAIN
SEISMIC DATA:
So(0.2) = 0.12
So(0.5) = 0.06
So(1.0) = 0.03
So(2.0) = 0.02
Fo = 1.3
Fv = 1.4
- CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL WORKSAFE ALBERTA REGULATIONS UNDER SECTION 20.81 "SLOPING AND SHORING REQUIREMENTS" ARE MET DURING EXCAVATION AND CONSTRUCTION.

CONCRETE:

- GENERAL:**
 - SUPPLY CONCRETE AND PERFORM WORK TO CAN/CSA-A23.1-04.
 - CONCRETE QUALITY CONTROL IS TO BE PERFORMED BY THE OWNER'S AGENCY IN ACCORDANCE WITH CAN/CSA-A23.2-04 INCLUDING STRENGTH, AIR CONTENT AND SLUMP TESTS FOR EACH CONCRETE POUR, WITH REPORTS SUBMITTED TO THE ENGINEER.
 - EXPOSED CORNERS OF CONCRETE SHALL BE BEVELED 20mm x 20mm (¾" x ¾"), UNO.
 - ALL HOT AND COLD WEATHER CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA A23.1/A23.2-04. CONTRACTOR MUST TAKE APPROPRIATE MEASURES WHEN TEMPERATURE RISES ABOVE 25°C OR FALLS BELOW 3°C.
 - TAKE ADEQUATE PRECAUTIONS TO MINIMIZE SHRINKAGE CRACKING INCLUDING COVERING AND KEEPING THE CONCRETE DAMP DURING THE INITIAL 7 DAYS OF CURING.
 - FORMWORK TO CAN/CSA-S269.3-M92.
 - CONSTRUCTION JOINTS: LOCATE CONSTRUCTION JOINTS AS SHOWN ON DRAWINGS.
 - FLOOR FINISH TO BE POWER FLOAT.
 - STEEL TROWEL FINISH EXPOSED CONCRETE (PEDESTALS, WALLS).
- PRODUCTS:**
 - CONCRETE: TYPE GU (FORMERLY TYPE 10)
 - AGGREGATE AND WATER: TO CAN/CSA-A23.1-04
 - ADMIXTURES: TO THE CSA A266 SERIES OF STANDARDS. ADMIXTURES OTHER THAN AIR ENTRAINING ARE NOT TO BE USED UNLESS ACCEPTED BY THE ENGINEER.
 - BASEPLATE GROUT: NON-SHRINK, NON-FERROUS GROUT MASTERFLOW 713 OR EQUAL.
 - MIX DESIGN AS FOLLOWS:

SLAB ON GRADE	MIN. 25 DAY STRENGTH	MAX. SIZE AGGREGATE	SLUMP	EXPOSURE CLASS	% AIR CONTENT	MAX. W/C RATIO
	25 MPa	¾" (20mm)	80 (±20)	N	1-4	0.45
FOUNDATION	25 MPa	¾" (20mm)	80 (±20)	F-2	4-7	0.45

- VAPOUR BARRIER TO BE 150 mil POLYETHYLENE TO CAN/CGSB-S1.34-M89.
- EXTERNALLY APPLIED DAMP-PROOFER TO BE "HENRY" HE107 ASPHALT EMULSION (OR EQUIVALENT).
- WATERSTOP TO BE "GREENSTREAK" CJ-1020-2K (20mmx10mm) HYDROTITE WATERSTOP SYSTEM.

PREPARATION FOR FOUNDATIONS:

- GENERAL:**
 - EXCAVATION TO BE INSPECTED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER.
 - TESTING AND INSPECTION OF SUBGRADE TO BE CARRIED OUT PRIOR TO PLACING SLAB ON GRADE.
 - FOLLOW ALL RECOMMENDATIONS GIVEN IN GEOTECHNICAL REPORT PREPARED BY SMITH DOW ASSOCIATES DATED MARCH 19, 2003 FOR BACKFILL, DRAINAGE, SUB-BASE, PREPARATION AND OTHER REQUIREMENTS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY DRAINAGE DURING EXCAVATION.
- PRODUCTS:**
 - IMPORTED GRANULAR MATERIALS SHALL BE CLEAN FREE-DRAINING, NON-FROST-SUSCEPTIBLE.
- EXECUTION:**
 - ANY TOPSOIL, DELETERIOUS SOILS, SOFT/WEAK SOIL, OR UN-SUITABLE SOILS ENCOUNTERED WITHIN THE FOOTPRINT OF THE BUILDINGS SHOULD BE REMOVED. THE EXPOSED SUBGRADE SHOULD BE SCARIFIED TO A MINIMUM DEPTH OF 200mm, MOISTURE CONDITIONED TO ±2% OF THE OPTIMUM MOISTURE CONTENT (OMC), AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). AFTER COMPACTION THE SUBGRADE SHOULD BE PROOF-ROLLED TO IDENTIFY ANY SOFT SPOTS. THE SOFT SPOTS SHOULD BE SUBCUT TO A MINIMUM DEPTH OF 0.6m AND BACKFILLED WITH SUB-BASE COMPACTED TO 95% OF THE SPMDD.
 - GRANULAR SOILS USED AS SUB-BASE SHOULD CONSIST OF CLEAN, WELL GRADED PIT RUN GRAVEL (MAXIMUM SIZE 80mm). IN GENERAL, FILL MATERIAL SHOULD BE COMPACTED TO WITHIN ±2% OF THEIR OPTIMUM MOISTURE CONTENT (OMC).
 - BASE COURSE SHOULD CONSIST OF WELL GRADED CRUSHED GRAVEL HAVING MAXIMUM PARTICLE SIZE OF 20mm. THE BASE COURSE SHOULD BE COMPACTED TO 95% OF SPMDD.
 - THE FILL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 150mm IN LOOSE THICKNESS. THE FILL SHOULD BE COMPACTED TO AT LEAST 95% OF THE SPMDD AT OR SLIGHTLY ABOVE OMC UNLESS OTHERWISE SPECIFIED. THE FILL SHOULD BE PLACED IN LIFTS THAT ARE COMPATIBLE WITH THE COMPACTION EQUIPMENT USED.

REINFORCING STEEL:

- GENERAL:**
 - REINFORCING WORK TO CAN/CSA-A23.1-04 AND CAN/CSA-A23.3-04.
 - REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE REINFORCING STEEL INSTITUTE OF CANADA MANUAL OF STANDARD PRACTICE.
- PRODUCTS:**
 - REINFORCING STEEL: NEW DEFORMED BARS TO CSA G30.18-M92 GRADE 400W.
- EXECUTION:**
 - PROVIDE MINIMUM CLEAR CONCRETE COVER OVER REINFORCING AS FOLLOWS U.N.O.:

CONCRETE COVER	
CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH	75mm
TIES AND STIRRUPS	40mm
SLABS, WALLS, & JOISTS	50mm

b) SPLICE BARS AS FOLLOWS:

MINIMUM LAP SPLICE LENGTHS					
BAR #	10M	15M	20M	25M	
"X"	360	540	725	900	

MINIMUM HOOK LENGTHS					
BAR #	10M	15M	20M	25M	
"Y"	180	260	310	400	

Revision/Édition	Description/Description	Date/Date
5		
4		
3		
2		
1	ISSUED FOR TENDER	13/05/08
0	Design Completion	

Client/Client
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project Title/Titre du projet
**INNISFAIL, ALBERTA
7-2A SYLVAIRE CLOSE**
**RCMP K-9 UNIT
PRE-ENG
BUILDING FOUNDATION**

Approved by/Approve par
D. WILLIAMS

Designed by/Concept par
C. POLSCOM

Drawn by/Dessiné par
S. NICKLIE

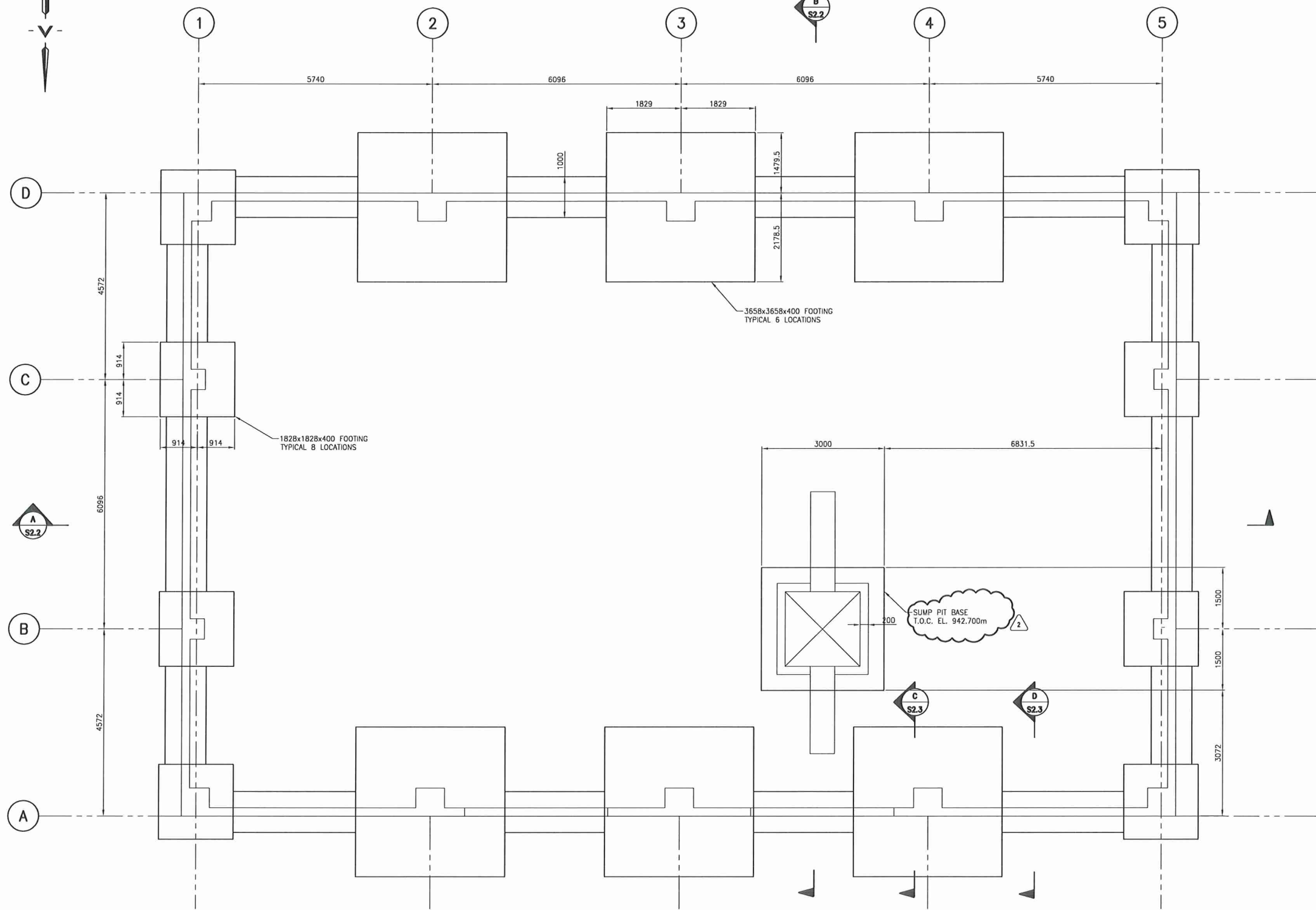
PWSGC Project Manager/Admistrateur de Projets TP50C

PWSGC, Architectural and Engineering Resource Manager/
Ressources Architectural et de Directeur d'ingénierie, TP50C

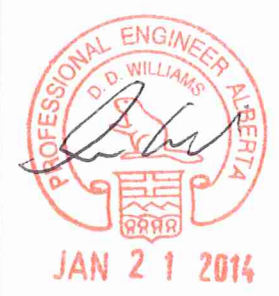
Client/Client
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Drawing Title/Titre du dessin
STRUCTURAL
**RCMP K-9 UNIT BUILDING
FOUNDATION
GENERAL NOTES**

Project No./No. du projet	Sheet/Feuille	Revision no./no.
M5000-4-0894/A	S1.0	1
	OF -	



PLAN @ T.O.C. FOOTING EL. 942.900m U.N.O. 2
 SCALE: 1:50



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5		
4		
3		
2	REVISED ELEVATIONS	13/10/21
1	ISSUED FOR TENDER	13/06/06
0	Design Completion	
Revision/Modification	Description/Description	Date/Date

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

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INNISFAIL, ALBERTA
7-2A SYLVAIRE CLOSE
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Client/Client
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Drawing title/Titre du dessin
STRUCTURAL
RCMP K-9 UNIT BUILDING
FOUNDATION
FOOTING PLAN

Project No./No. du projet M5000-4-0894/A	Sheet/Feuille S2.0 OF -	Revision no./ La Révision no. 2
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Revision/Revisions	Description/Description	Date/Date
5		
4		
3		
2	REVISED ELEVATIONS AND CONDUITS	13/10/21
1	ISSUED FOR TENDER	13/06/06
0	Design Completion	

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

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FWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TFSGC

Client/client
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

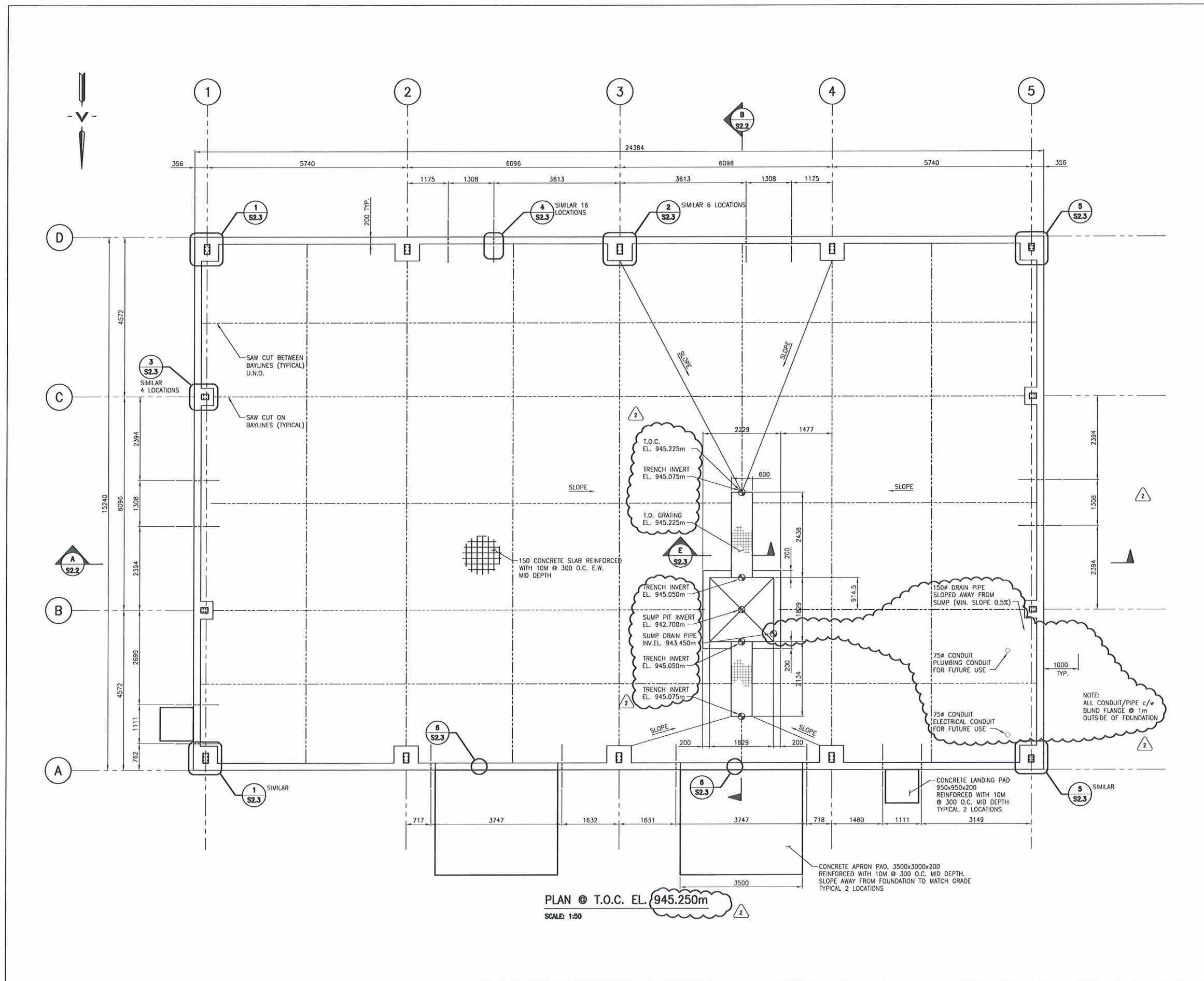
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STRUCTURAL

RCMP K-9 UNIT BUILDING
FOUNDATION
FLOOR PLAN

Project No./No. du projet
M5000-4-0894/A

Sheet/Feuille
S2.1
OF -

Revision no./
La Révision
no.
2





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5		
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2	REVISED ELEVATIONS	13/02/1
1	ISSUED FOR TENDER	15/06/08
0	Design Completion	

Revision/Description	Description/Description	Date/Date
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Client/Client
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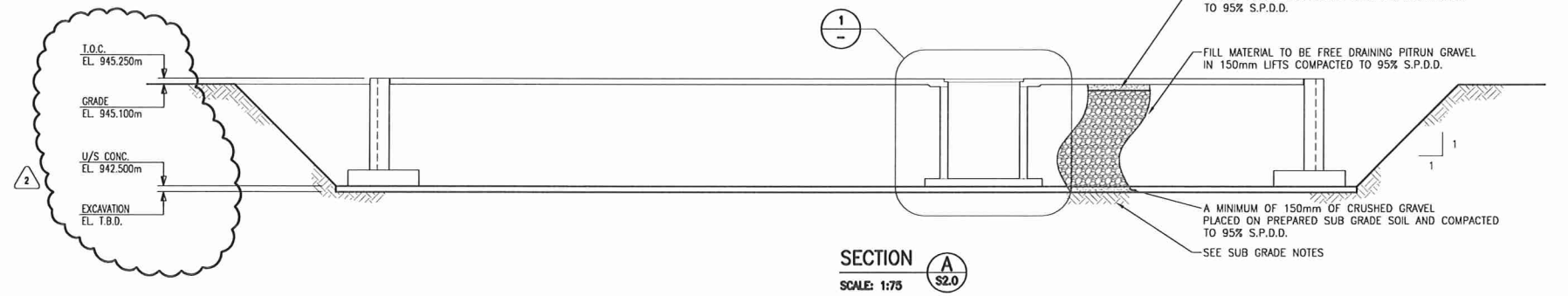
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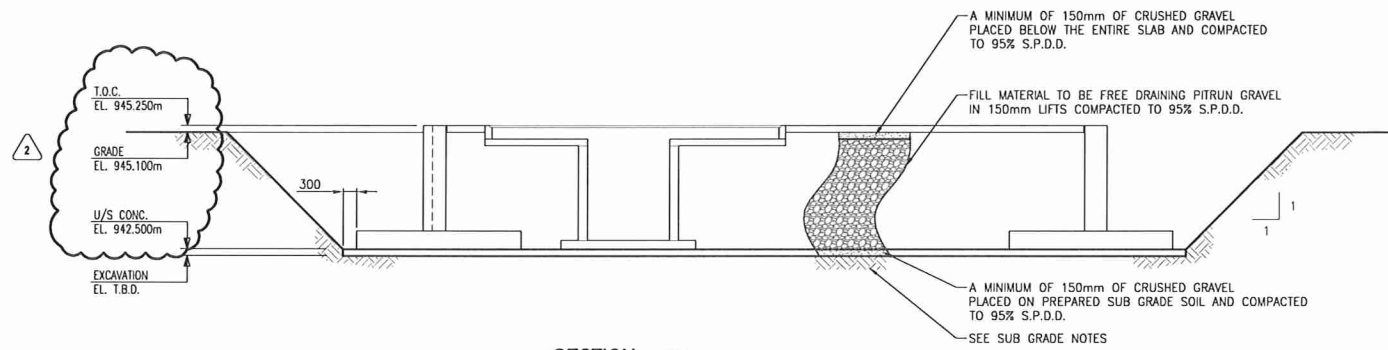
Drawing title/Titre du dessin
STRUCTURAL

**RCMP K-9 UNIT BUILDING
FOUNDATION
SECTIONS AND DETAIL**

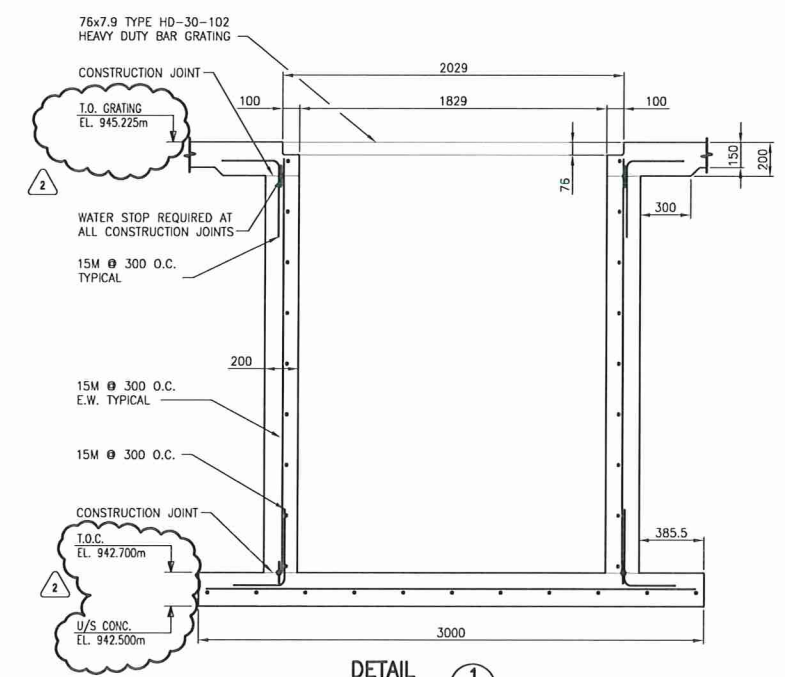
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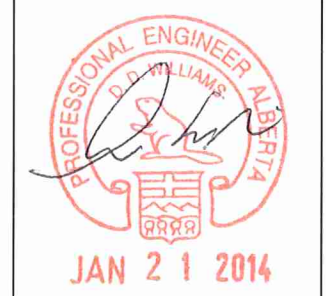
SECTION A
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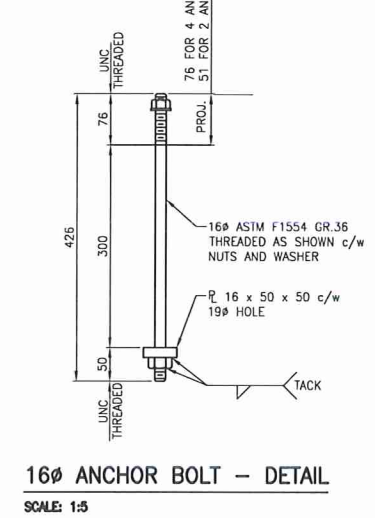
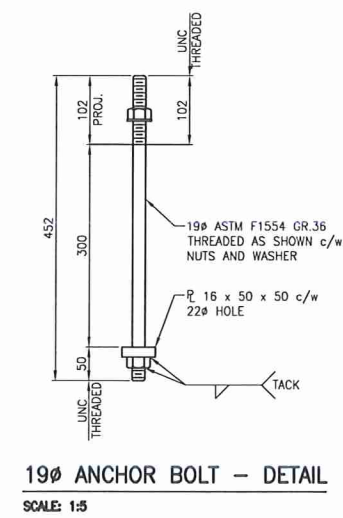
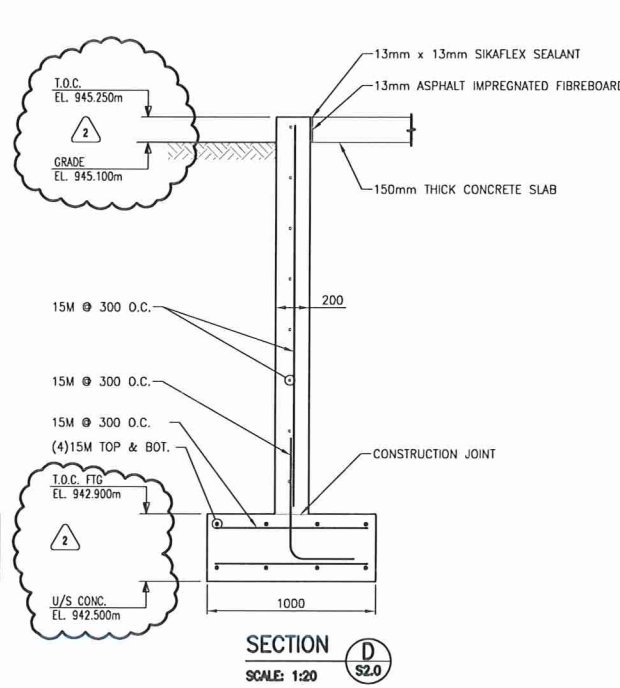
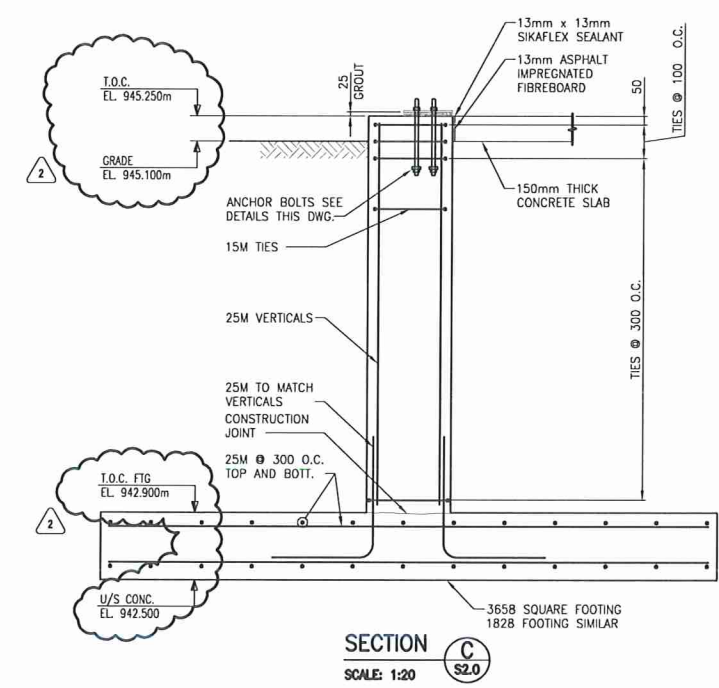
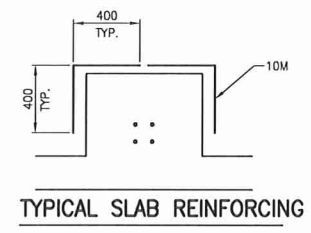
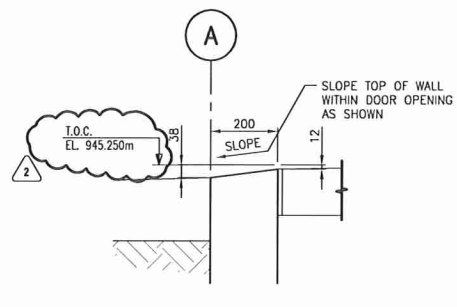
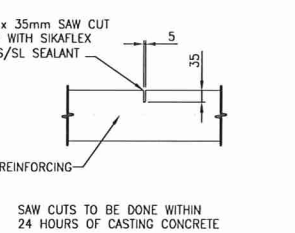
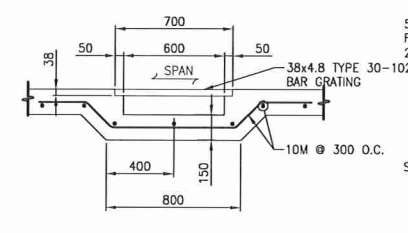
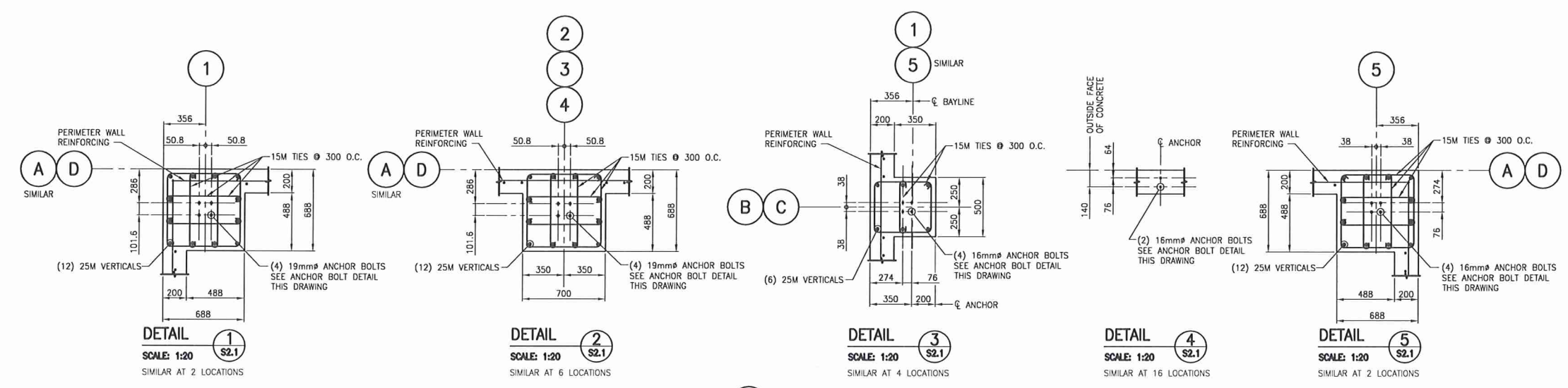
SECTION B
SCALE: 1:75



DETAIL 1
SCALE: 1:20



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RCMP K-9 UNIT BUILDING FOUNDATION DETAILS

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision
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