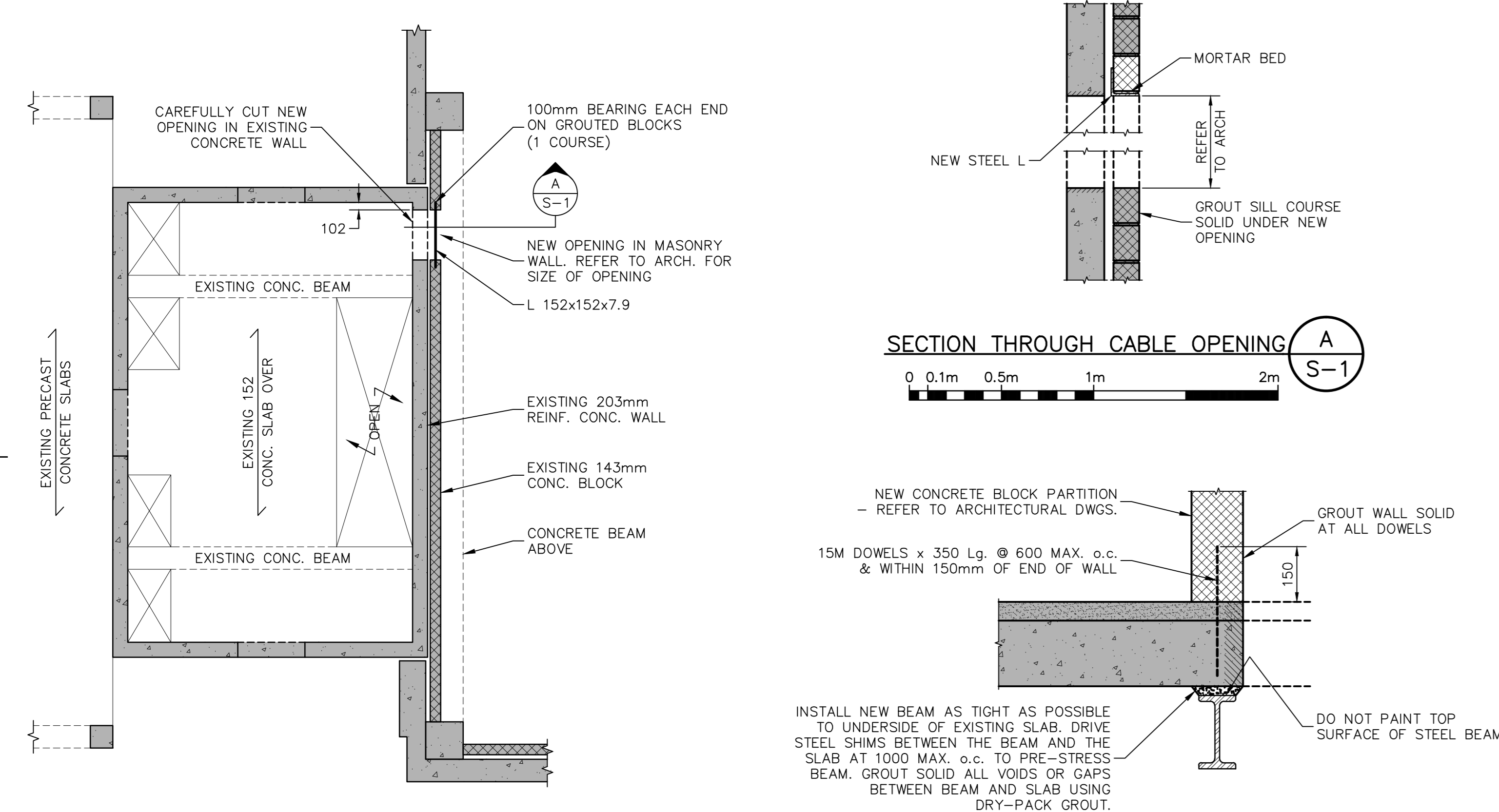
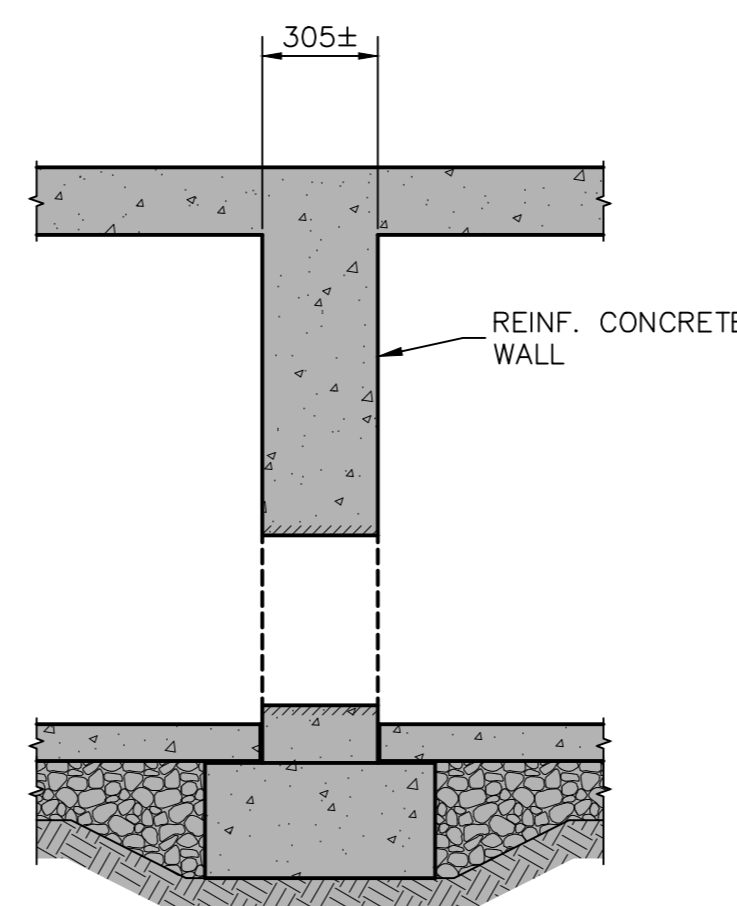
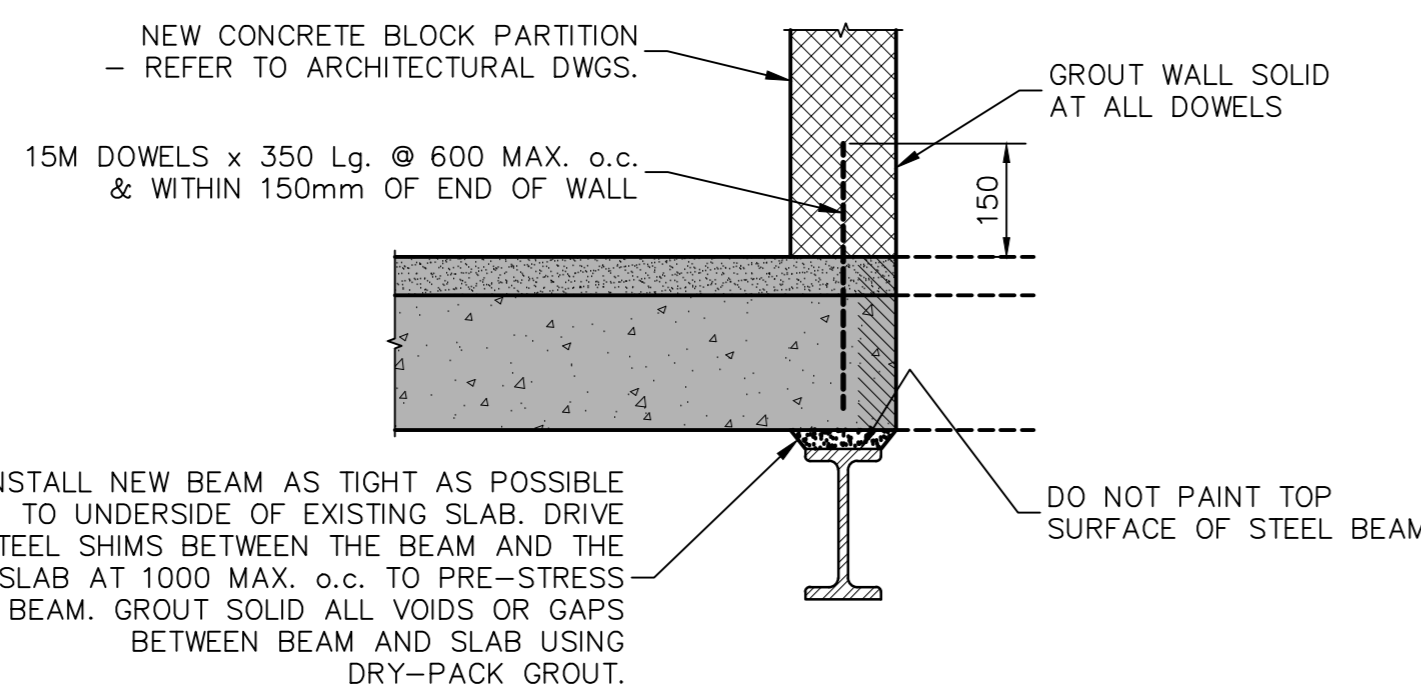
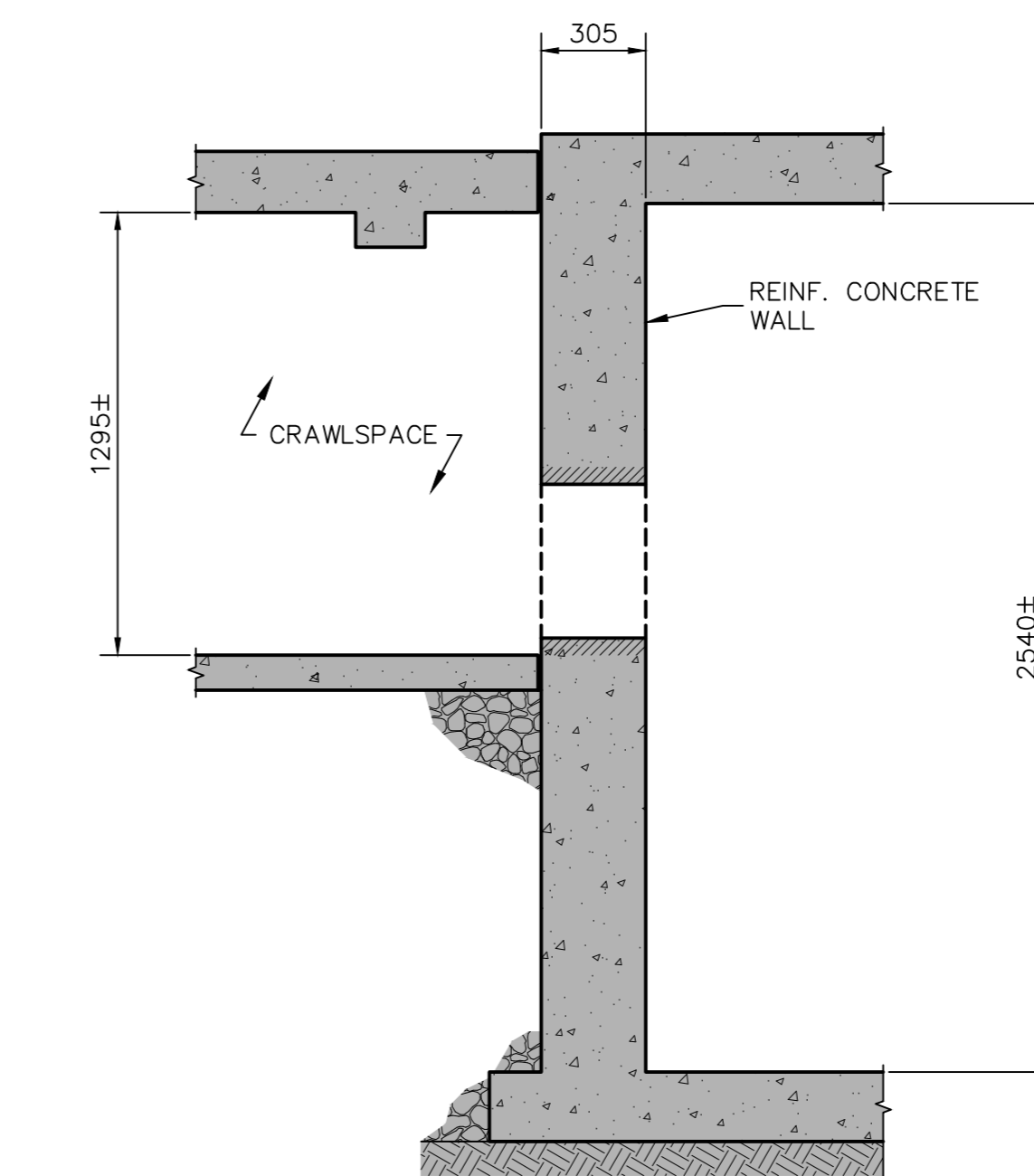
CRAWL SPACE PLAN
1:75

SECTION THROUGH CABLE OPENING A-S-1

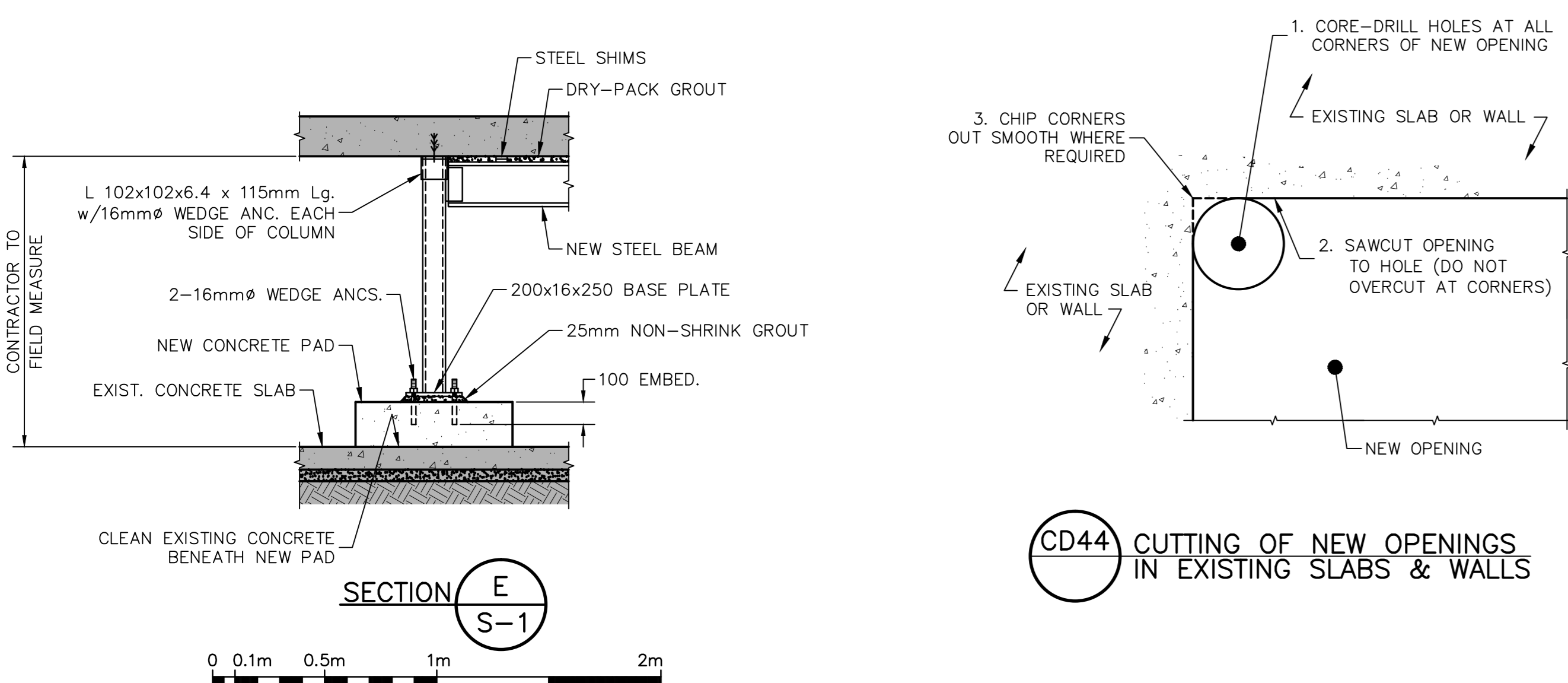


SECTION B-S-1

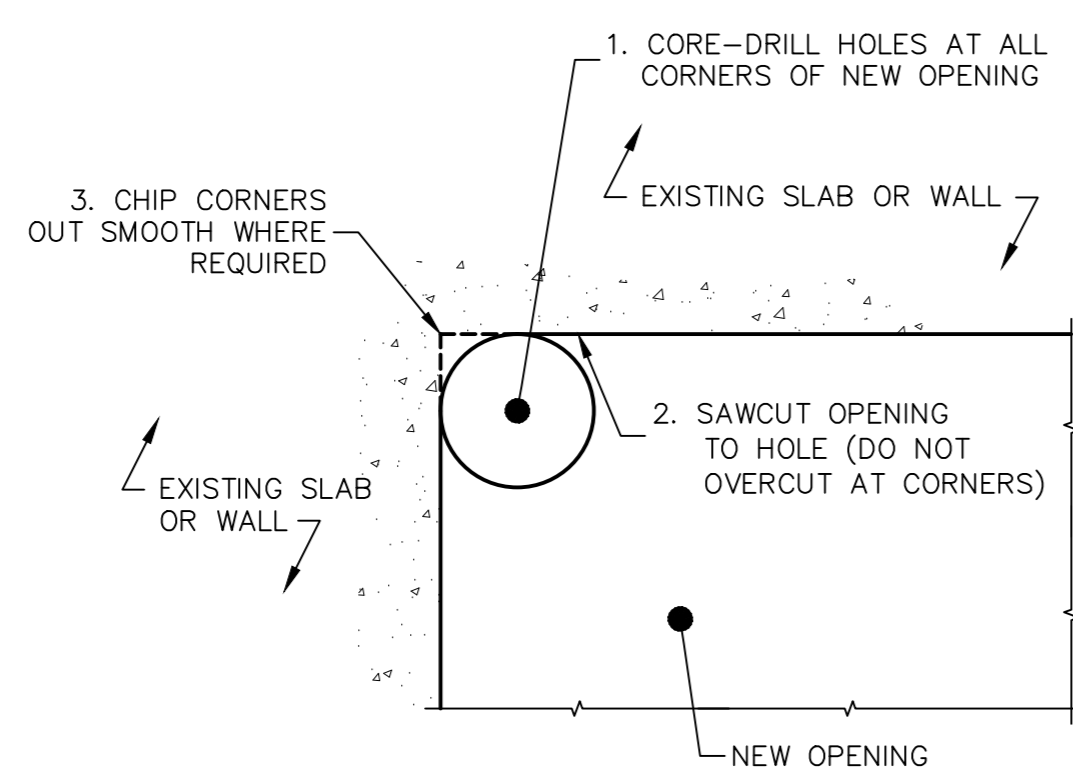
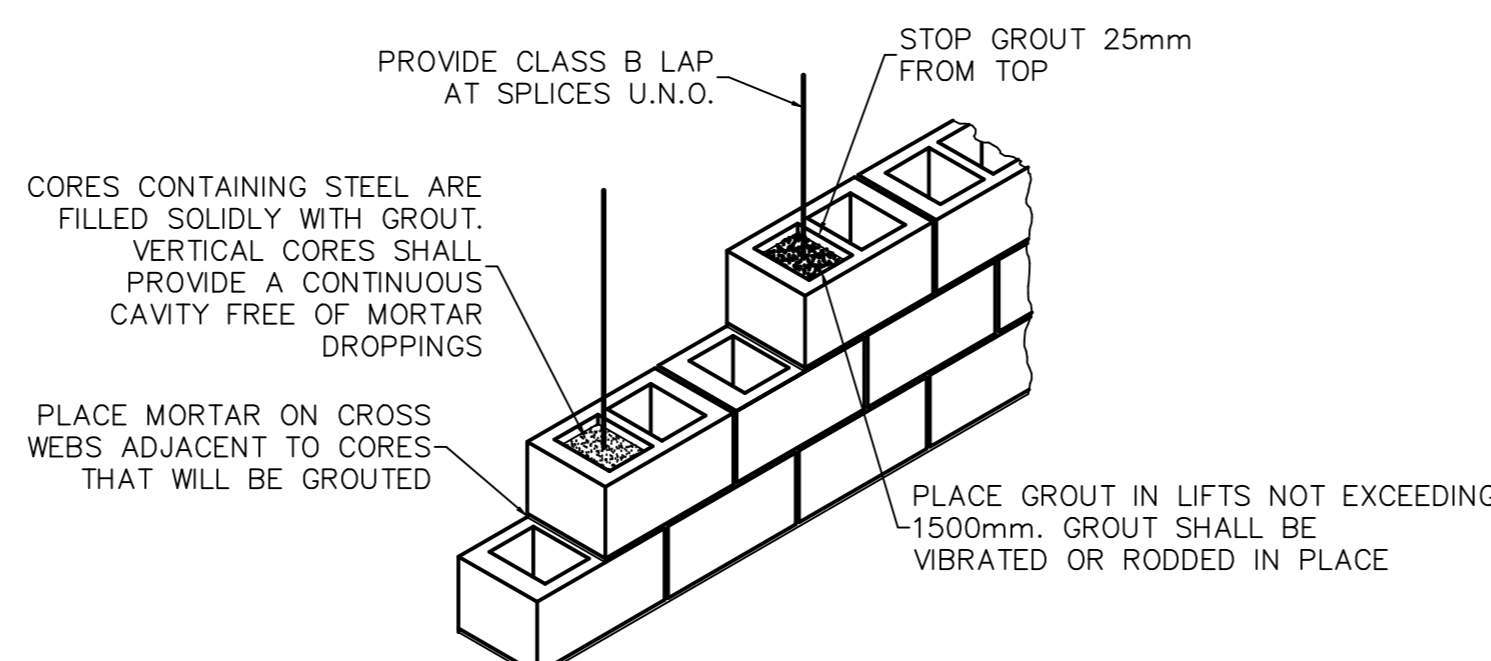


SECTION C-S-1

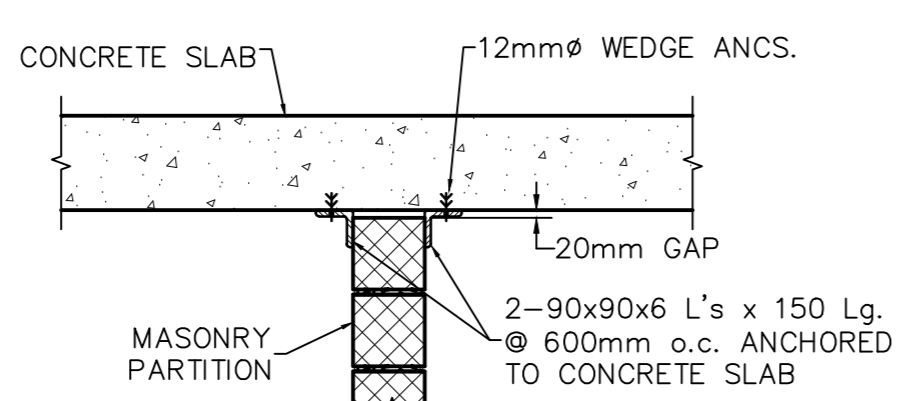
PARTIAL SECOND FLOOR FRAMING PLAN



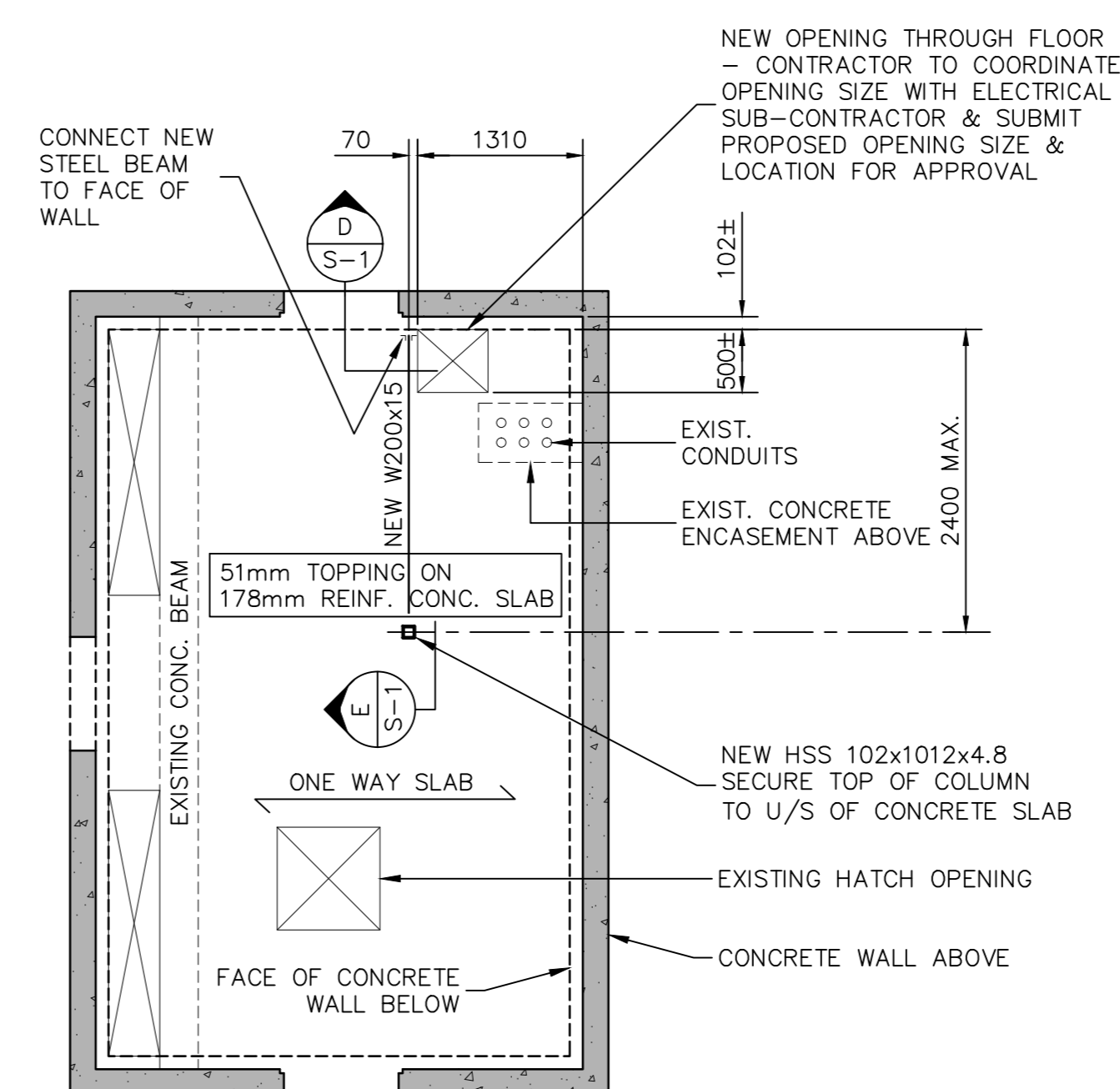
SECTION E-S-1

CD44 CUTTING OF NEW OPENINGS
IN EXISTING SLABS & WALLS

MD2 REINFORCED MASONRY WALL GROUTING

MD9 LATERAL SUPPORT FOR NON-LOADBEARING
MASONRY PARTITIONS

NOTE: CAREFULLY DRILL HOLES FOR ANCHORS. DO NOT CUT SLAB REINFORCEMENT. IF REINFORCEMENT IS ENCOUNTERED RELOCATE ANCHORS.



PARTIAL FIRST FLOOR FRAMING PLAN

LIVE LOAD: 4.8 kPa
0 1m 5m

DESIGN NOTES

D1a. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2010 NATIONAL BUILDING CODE OF CANADA.

GENERAL NOTES

- G10. CHECK ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH MECHANICAL, ELECTRICAL, AND/OR ANY OTHER RELATED DRAWINGS AND REPORT ANY INCONSISTENCIES TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH ANY WORK.
- G12. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS.
- G13. SEE MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS OF OPENINGS, PITS, BASES, SUMPS, TRENCHES, SLEEVES, DEPRESSIONS, GROOVES AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DRAWINGS.
- G14. CLARIFY WITH THE DEPARTMENTAL REPRESENTATIVE ANY QUERIES REGARDING INTERPRETATION OF THE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- G15. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND SHALL REPORT ANY DISCREPANCY TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH ANY WORK.

FOUNDATION NOTES

- F20. ALL FOOTINGS ARE CENTRED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.

CONCRETE NOTES

- C1. ALL STRUCTURAL CONCRETE ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA A23.3 "DESIGN OF CONCRETE STRUCTURES".
- C2. CONCRETE SHALL BE MIXED, PLACED & CURED IN ACCORDANCE WITH CSA STANDARD A23.1 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION".
- C6. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa AT 28 DAYS AND A MAXIMUM SLUMP OF 100mm.
- C8. THE MAXIMUM NOMINAL AGGREGATE SIZE FOR CONCRETE SHALL BE 20mm.
- C14. REINFORCING STEEL SHALL CONFORM TO CSA STANDARD G30.18 GRADE 400 (GRADE 60).
- C15. REINFORCING WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA - A23.1, CSA W186 AND REINFORCING STEEL - MANUAL OF STANDARD PRACTICES.
- C16. UNLESS NOTED OTHERWISE, ALL LAP SPLICES IN CONCRETE REINFORCEMENT TO BE CLASS "B".
- C33. CHAIRS, BOLSTERS, BAR SUPPORTS AND SPACERS FOR REINFORCING SHALL CONFORM TO CAN/CSA - A23.1.
- C34. FORMWORK SHALL BE IN ACCORDANCE WITH CAN/CSA - A23.1, FALSEWORK WITH CSA S269.1.
- C35. NO OPENINGS IN STRUCTURAL SLABS SHALL BE MADE NEAR A COLUMN OR WALL WITHOUT SPECIFIC APPROVAL FROM THE DEPARTMENTAL REPRESENTATIVE.

MASONRY NOTES

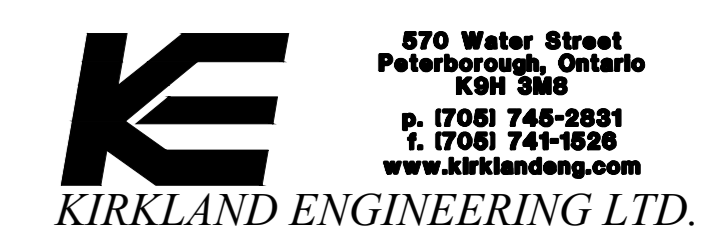
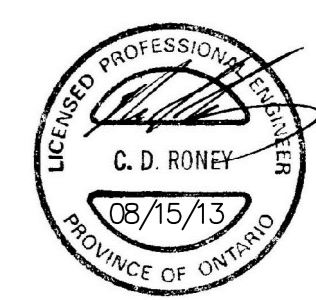
- M2. MASONRY CONSTRUCTION SHALL CONFORM TO CSA STANDARD A371.
- M3. CONNECTORS SHALL CONFORM TO CSA STANDARD A370.
- M4. CONCRETE MASONRY UNITS SHALL BE TYPE H/15/A/M.
- M5. MORTAR SHALL BE TYPE S.
- M13. ALL CELLS IN MASONRY UNITS CONTAINING REINFORCING OR ANCHORS SHALL BE FILLED SOLID WITH GROUT.
- M19. STACK BOND SHALL NOT BE USED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
- M23. ALL MORTAR JOINTS IN CONCRETE BLOCK WORK SHALL BE TOOLED CONCAVE TYPE.
- M24. MORTAR JOINTS SHALL BE 10mm THICK (±3mm). BED JOINTS OF THE STARTING COURSE SHALL NOT BE LESS THAN 6mm NOR MORE THAN 20mm.
- M26. MORTAR & GROUT FOR UNIT MASONRY SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD A179-M.
- M33. ADHESIVE ANCHORS SHALL BE BONDED TO MASONRY ELEMENTS USING PURPOSE MADE EPOXY ADHESIVE COMPLETE w/SCREEN TUBES WHERE REQUIRED, IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- M39. GROUT FOR UNIT MASONRY: TYPE S BASED ON PROPORTION SPECIFICATIONS, OR 13.3 MPa BASED ON PROPERTY SPECIFICATIONS.
- M40. REINFORCE 140 PARTITION WALLS WITH 10M VERT AT 1200mm ON CENTRE MAXIMUM AND 2 WIRE 3.66mm JOINT REINFORCEMENT AT 400mm ON CENTRE MAXIMUM.

STEEL NOTES

- S1. ALL STRUCTURAL STEEL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA-S16 "LIMIT STATES DESIGN OF STEEL STRUCTURES".
- S4. STRUCTURAL STEEL: CSA G40.21 300W EXCEPT W SECTIONS: CSA G40.21 350W HSS MEMBERS: CSA G40.21 350W CLASS C OR ASTM A500 GRADE C ANCHOR BOLTS: ASTM A307 OF SECTIONS: ASTM A570M GRADE 350W
- S22. WELDING SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD W59 AND CSA STANDARD S16.
- S23. THE FABRICATOR OR CONTRACTOR UNDERTAKING WELDING WORK SHALL BE CERTIFIED BY THE CANADIAN WELDING BUREAU AS BEING QUALIFIED UNDER REQUIREMENTS OF CSA STANDARD W-47.1; CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES DIVISION 2.1.
- S24. UNLESS OTHERWISE SPECIFIED, SHOP PAINT AND SURFACE PREPARATION FOR PAINTING SHALL CONFORM TO CAN/CGSB - 85.10.
- S25. STEEL SURFACES IN CONTACT WITH CONNECTIONS DESIGNATED AS FRICTION TYPE, CONCRETE OR TOP SURFACES OF BEAMS CARRYING MASONRY, SHALL NOT BE PAINTED.
- S38. PROVIDE ALL ANCHOR BOLTS, CAST IN PLATES WITH ANCHORS, AND ANCHORS REQUIRED TO CONNECT STRUCTURAL STEEL TO CAST-IN-PLACE CONCRETE.

ABBREVIATIONS

A.B.	= ANCHOR BOLT	LSSJ	= LONG SPAN STEEL JOIST
ADJ.	= ADJUSTABLE	LLH	= LONG LEG HORIZONTAL
ALT.	= ALTERNATE	KN	= KILONEWTON
ARCH.	= ARCHITECTURAL	KP	= KILOPASCAL
ANC.	= ANCHOR	K	= KIP, KIPS
B.	= BOTTOM	MAX.	= MAXIMUM
B.D.G.	= BUILDING	MECH.	= MECHANICAL
BM	= BEAM	MEZZ.	= MEZZANINE
B.P.	= BASE OR BEARING PLATE	MIN.	= MINIMUM
BSMT.	= BASEMENT	MISC.	= MISCELLANEOUS
C/C	= CENTRE TO CENTRE	ML	= MIDDLE LAYER
CL	= CENTRE LINE	mm	= MILLIMETRE
COL.	= COLUMN	N.F.	= NEAR FACE
CONC.	= CONCRETE	N-S	= NORTH - SOUTH
CONSTR.	= CONSTRUCTION	NTS	= NOT TO SCALE
CONT.	= CONTINUOUS	O.C.	= ON CENTRES, CENTRE TO CENTRE
DET.	= DETAIL	OP.	= OPENING
DIAG.	= DIAGONAL	OWS	= OPEN WEB STEEL JOIST
DIA.	= DIAMETER	O.F.	= OUTSIDE FACE
DM.	= DIMENSION	PART.	= PARTITION
D.L.	= DEAD LOAD	P	= PLATE
DWG.	= DRAWING	PLF	= POUNDS PER LINEAL FOOT
DWL.	= DOWEL	PSF	= POUNDS PER SQUARE FOOT
EA.	= EACH	PSI	= POUNDS PER SQUARE INCH
E.F.	= EACH FACE	PROJ.	= PROJECTION
E.W.	= EACH WAY	R	= RADIUS
ELEV.	= ELEVATION	REF.	= REFERENCE
EX.	= EXISTING	REIN.	= REINFORCING
EXT.	= EXTERIOR	REQ'D.	= REQUIRED
F.F.	= FAR FACE	REV.	= REVISION, REVISED
FDN.	= FOUNDATION	SECT.	= SECTION
FIN.	= FINISHED	SLAB	= SLAB
FL.	= FLOOR	SEC'S	= SPECIFICATIONS
FT.	= FOOT, FEET	STD.	= STANDARD
G.A.	= GAUGE	T	= TOP
GALV.	= GALVANIZED	TEMP	= TEMPERATURE
GEN.	= GENERAL	TYP.	= TYPICAL
HOR.	= HORIZONTAL	UL	= UPPER LAYER
INT.	= INTERIOR	U/S	= UNDERSIDE
I.F.	= INSIDE FACE	UN.	= UNLESS NOTED OTHERWISE
LLBB	= LONG LEG BACK TO BACK	VERT.	= VERTICAL
LL	= LOWER LAYER	W/W.	= WELDED WIRE
L.L.	= LIVE LOAD	W.	= WITH

Public Works and
Government Services Canada
Travaux publics et
Services gouvernementaux CanadaRONEY ENGINEERING
LIMITEDCONSULTING STRUCTURAL ENGINEERS
KINGSTON, ONTARIO
www.roneyengineering.com

04		
03		
02		
01	ISSUED FOR BID	2013-08-15
revision		date

Do not scale drawings.
Verify all dimensions and conditions on site and immediately
notify the Departmental Representative of all discrepancies

A	Detail No.	No. du détail
B	drawing no. - where detail required	dessin no. - où détail exigé
C	drawing no. - where detailed	dessin no. - où détaillé

project title
titre du projet
BATH
MILLHAVEN INSTITUTION
HWY. 33, BATH, ON
K0H 1G0
**ELECTRICAL DISTRIBUTION SYSTEM
UPGRADE**drawing title
titre du dessin
**BUILDING MHK PLANS
SECTIONS & DETAILS**drawn by
dessiné par
KAdesigned by
conc par
CDRapproved by
approuvé par
CDRbid
offre
K. HAQUEproject manager
administrateur
de projetsproject date
date du projet
2013-05-27project no.
no. du projet
R.053529.001drawing no.
dessiné no.
S-1