

GENERAL NOTES

GENERAL

THE GENERAL NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL STRUCTURAL CONDITIONS NOT SPECIFICALLY DETAILED OR REFERENCED ON STRUCTURAL DRAWINGS.

THESE NOTES, DETAILS AND DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS.

THESE DRAWINGS ARE FOR THE USE OF THE CONSULTANT'S CLIENT ONLY. ALL INFORMATION SHOWN APPLIES TO THIS PROJECT ONLY AND REFLECT THE BEST JUDGEMENT OF THE CONSULTANT IN LIGHT OF THE AVAILABLE INFORMATION AT THE TIME OF PREPARATION. DECISIONS OR ACTIONS MADE BY THIRD PARTIES BASED ON THE DRAWINGS ARE THE SOLE RESPONSIBILITY OF SUCH PARTIES.

THESE DRAWINGS ARE THE PROPERTY OF THE CONSULTANT AND MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION.

CODES AND STANDARDS

DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE 2010 NATIONAL BUILDING CODE OF CANADA

SHOP DRAWINGS AND SUBMITTALS

GENERAL:
REPRODUCTIONS OF THE STRUCTURAL DRAWINGS SHALL NOT BE ACCEPTED AS SHOP DRAWINGS. "ENGINEER" IN THE FOLLOWING PARAGRAPHS AND THROUGHOUT THESE DRAWINGS SHALL BE A PROFESSIONAL ENGINEER REGISTERED AND LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.

REVIEW OF DRAWINGS APPLIES TO GENERAL ARRANGEMENT ONLY FOR THE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THIS REVIEW DOES NOT IMPLY APPROVAL OF DETAIL DESIGN OR QUANTITIES IN SUBMITTED DRAWINGS, NOR DOES IT RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITY FOR MAKING THE WORK COMPLETE, ACCURATE AND IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS. ALLOW 15 WORKING DAYS FOR SHOP DRAWING REVIEW.

DO NOT FABRICATE MATERIALS BASED ON REJECTED OR DISAPPROVED SHOP DRAWINGS.

MASONRY:
SUBMIT EVIDENCE OF MORTAR AND GROUT STRENGTH AND BLOCK STRENGTH

SUBMIT SAMPLES OF MASONRY ACCESSORIES.

STRUCTURAL STEEL AND STEEL DECK:

SUBMIT FOR REVIEW ELECTRONIC DRAWINGS IN PDF FORMAT OF ERECTION DRAWINGS WITH ALL FIELD WORK DETAILS FOR ALL STRUCTURAL STEEL ELEMENTS. ALL CONNECTIONS SHALL BE DESIGNED AND THE DRAWINGS SEALED (STAMPED & SIGNED) BY A PROFESSIONAL ENGINEER.

SHOP DRAWING SUBMITTALS SHALL INCLUDE: FOR STRUCTURAL STEEL: CONNECTIONS BETWEEN ALL STEEL MEMBERS AND PIECES, AND FOR STEEL DECK: DECKING PLAN, PROFILE, DIMENSIONS, CORE THICKNESS, CONNECTIONS TO SUPPORTS, REQUIRED BEARINGS, CLOSURES AND ACCESSORIES.

DIMENSIONS

CHECK DIMENSIONS ON THESE DRAWINGS AGAINST DIMENSIONS ON SITE AND ON ARCHITECTURAL DRAWINGS BEFORE USING THEM FOR FABRICATION OR CONSTRUCTION. REPORT DISCREPANCIES IMMEDIATELY UPON DISCOVERY. DRAWINGS HAVE BEEN DRAWN REASONABLY TO SCALE BUT THE CONTRACTOR MUST NOT SCALE THE DRAWINGS. CONFIRM EXISTING BUILDING LOCATION AND TIE-IN POINTS PRIOR TO CONSTRUCTION.

INSPECTIONS AND TESTING

THE FOLLOWING ITEMS SHALL BE INSPECTED OR TESTED BY INDEPENDENT INSPECTION/ TESTING AGENCIES DESIGNATED BY THE CLIENT. MATERIALS AND WORKMANSHIP NOT CONFORMING TO THE SPECIFICATIONS SHALL BE REJECTED BY THE CONTRACTOR. REPORTS AND TEST RESULTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW. TESTING SHALL INCLUDE BUT NOT BE LIMITED TO:

ENGINEERED MASONRY TEST:
TESTS TO VERIFY STRENGTH OF GROUT AND MORTAR.

STRUCTURAL STEEL:
VISUAL INSPECTION OF ALL WELDS, TIGHTNESS OF BOLTED CONNECTIONS AND CHECK ON BEARING, PLUMBNESS AND ALIGNMENT OF STEEL STRUCTURES.

NON-DESTRUCTIVE TESTING TO VERIFY THE QUALITY OF WELDING, WHERE DEEMED QUESTIONABLE BY VISIBLE DEFECTS OR WHERE REQUIRED BY THE ENGINEER.

SURFACE PREPARATION AND PAINT APPLICATION IN BOTH SHOP AND FIELD FOR EXPOSED PAINTED STRUCTURAL STEEL.

REINFORCING STEEL:
CONTRACTOR SHALL ADVISE ADJELEIAN ALLEN RUBELI OF REQUIRED REINFORCING STEEL SITE REVIEW AT LEAST 24 HOURS PRIOR TO CLOSING OF COLUMN OR WALL FORMS AND 24 HOURS PRIOR TO PLACING OF CONCRETE IN SLABS, FOOTINGS, ETC.

DESIGN AND DETAILING CRITERIA FOR SUPPLIERS

MISCELLANEOUS METALS & STEEL STAIRS
MISC. METALS AND STEEL STAIRS ARE TO BE DESIGNED AND DETAILED BY MISC. METALS AND STEEL STAIRS SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO ADJELEIAN ALLEN RUBELI LTD. FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL MISC. METALS AND STEEL STAIR WORK TO BE INSPECTED DURING CONSTRUCTION BY THE MISC. METALS AND STEEL STAIRS DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

COLD FORMED STEEL STUDS & JOISTS
STEEL STUDS & JOISTS ARE TO BE DESIGNED AND DETAILED BY STEEL STUDS & JOISTS SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO ADJELEIAN ALLEN RUBELI LTD. FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL STEEL STUD & JOIST WORK TO BE INSPECTED DURING CONSTRUCTION BY THE STEEL STUD & JOIST DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

MECHANICAL AND ELECTRICAL EQUIPMENT, PIPE SUPPORTS AND SEISMIC BRACES
SUPPORTS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, PIPES AND SEISMIC ARE TO BE DESIGNED AND DETAILED BY CONTRACTORS ENGINEER. SHOP DRAWINGS ARE TO BE SUBMITTED TO ADJELEIAN ALLEN RUBELI LTD. FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL SUPPORTS ARE TO BE INSPECTED DURING CONSTRUCTION BY THE SUPPORT DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

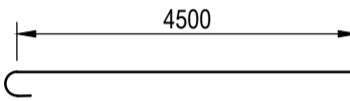
REINFORCING STEEL:

DETAIL AND PLACE REINFORCING STEEL IN ACCORDANCE WITH THE R.S.I.C. "REINFORCING STEEL MANUAL OF STANDARD PRACTICE" AND CSA-A23.1 UNLESS OTHERWISE NOTED.

PROVIDE DEFORMED BARS WITH YIELD STRENGTH OF 400 MPa AS SPECIFIED IN CSA G30.18-M92.

PROVIDE WELDED WIRE FABRIC AS SPECIFIED IN CSA G30.5M - FLAT SHEETS ONLY.

SPLICES:
COLUMNS COMPRESSION LAP U/N
SHEARWALLS AND COLUMNS SHEARWALLS 1.5 Ld (TENSION) U/N
SUPPORTING SHEARWALLS 1.5 Ld (TENSION) U/N
ALL OTHER Ld (TENSION) U/N



BAR DESIGNATION:
10-15T 4500 MEANS 10 BARS, SIZE 15M, TOP OF SLAB, 4500mm LONG (+ HOOK LENGTH)

REINFORCING CHAIRS:
PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING IN ACCORDANCE WITH THE LATEST EDITIONS OF CSA A23.1 AND A23.3. CHAIRS TO BE PLASTIC, PLASTIC TIPPED OR CONCRETE. ALL TIE WIRE, CHAIRS AND BAR SUPPORTS USED FOR COATED REINFORCING SHALL BE NON-METALLIC OR PROTECTED WITH AN ACCEPTABLE COATING.

CHAIRS SHALL BE SPACED AT 1200mm O.C. MAXIMUM. PROVIDE CONTINUOUS CHAIRS WHERE POSSIBLE.

MASONRY:

ALL MASONRY TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE AND CAN/CSA-A370 AND CAN/CSA-A371.

MINIMUM CONCRETE BLOCK UNIT STRENGTH (NET AREA) 15.0 MPa
MORTAR TYPE 'S'
GROUT STRENGTH $f_{gr} = 20.0$ MPa
MORTAR FOR EXPOSED AND BASEMENT SHALL BE AIR ENTRAINED.

WALL THICKNESS	LOAD BEARING
190mm	HORIZ HDMR @ 200 VERT 20M TO MATCH EXISTING DOWELS BUT NOT LESS THAN @ 1200

HDMR IS GALVANIZED LADDER TYPE HEAVY DUTY MASONRY REINFORCEMENT WITH 2-#6 Ga. (4.76mm) SIDE RODS (TOTAL AREA 35.6mm²)

PROVIDE ENGINEERED LATERAL BRACING FOR TEMPORARY SUPPORT OF ALL LOAD BEARING MASONRY WALLS UNTIL ROOF STEEL FRAMING IS WELDED IN PLACE.

PROVIDE 2-10M (MIN.) GROUTED LOW WEB BOND BEAM AT TOP OF REINFORCED WALLS. EXTEND VERTICAL BARS TO TOP OF BOND BEAM. PROVIDE METAL LATH STRIP UNDER BOND BEAMS BETWEEN GROUTED CORES TO RETAIN BOND BEAM GROUT.

PROVIDE VERTICAL REINFORCEMENT BARS IN GROUTED CORES AT SIDES OF ALL OPENINGS AND ENDS OF WALLS/CONSTRUCTION JOINTS.

PROVIDE LINTELS FOR ALL OPENINGS AND/OR RECESSES IN MASONRY WALLS SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS, INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT.

STRUCTURAL STEEL:

STRUCTURAL STEEL SHALL COMPLY WITH CAN/CSA- S16-01 UNLESS OTHERWISE NOTED.	
ITEM	APPLICABLE SPECIFICATION
ROLLED SECTIONS	G40.21 - 350W
HSS (TUBE) SECTIONS	G40.21 - 350W CLASS C (U/N)
ANCHOR BOLTS	NELSON STUDS, H4L, MILD STEEL U/N

ALL EXPOSED EXTERIOR STEEL TO BE GALVANIZED.

ALL STRUCTURAL STEEL TO BE PRIME PAINTED EXCEPT STEEL RECEIVING GALVANIZING, OR STEEL TO BE CAST-IN CONCRETE.

ALL BEAM CONNECTIONS TO BE TWO-SIDED UNLESS NOTED.

CENTRE ALL BEARING PLATES UNDER BEAMS UNLESS NOTED.

DO NOT CUT OR CORE ANY OPENINGS IN ANY STRUCTURAL STEEL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

WHERE A STRUCTURAL STEEL SHAPE SHOWN ON THE DRAWINGS IS UNAVAILABLE, A SHAPE OF EQUAL OR GREATER SECTION PROPERTIES AND STRUCTURAL CAPACITY SHALL BE SUBSTITUTED, UPON APPROVAL BY OWNER AND CONSULTANT, AT NO EXTRA COST

STEEL DECK:

SHEET STEEL TO CSSBI-10M, GRADE A STRUCTURAL QUALITY (Fy=230 MPa)

STEEL DECK TO BE GALVANIZED TO ASTM-A653M, ZF275 (275 g/m²) UNLESS OTHERWISE NOTED

WELD DECK TO SUPPORTING MEMBERS WITH 20mm EFFECTIVE PUDDLE WELDS OR HILTI X-HSN24 NAILS. DECK ACTS AS A DIAPHRAGM

TRANSVERSE WELD/NAIL SPACING 300mm MIN. U/N
LONGITUDINAL WELD/NAIL SPACING 300mm MIN. U/N
SIDE LAPS #10 SCREW 300mm MIN. U/N

DO NOT SUPPORT CEILINGS, DUCTS, LIGHTING OR PIPES FROM STEEL ROOF OR FLOOR DECK

PROVIDE CELL CLOSURES AT SUPPORTS U/N



Real Estate Management, Design and Construction Branch
Direction de la gestion de l'immobilier, design et construction

Design and Construction Division
Division design et construction

director - Claude Robert - directeur

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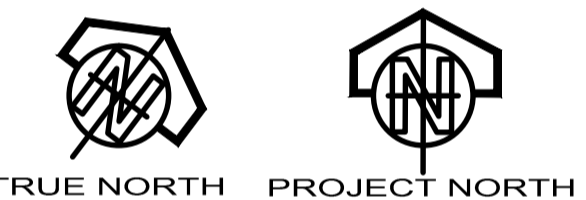
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AAR PROJECT 2508-01



issued or revised
émis ou révisé

no.	description	date
2	RE-ISSUED FOR TENDER	8 MAY 2014
1	ISSUED FOR TENDER	2 MAY 2014

project
projet

ELEVATOR REPLACEMENT

drawing
dessin

GENERAL NOTES

approved by approuvé par	M.D.
designed by conçu par	M.D.
drawn by dessiné par	XY.ZHANG
date	2014-04-28
scale échelle	INDICATED
NCC project no. no. du projet de la CCN	DC 1110-21-10
sheet no. no. de la feuille	S01

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no.	description	date
2	RE-ISSUED FOR TENDER	8 MAY 2014
1	ISSUED FOR TENDER	2 MAY 2014

project
projet

ELEVATOR REPLACEMENT

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**EXISTING/DEMOLITION
SECTIONS &
ROOF PLAN**

approved by approuvé par	M.D.	scale échelle	INDICATED
designed by conçu par	M.D.		
drawn by dessiné par	XY-ZHANG		
date	2014-04-28		
NCC project no. no. du projet de la CCN	DC 1110-21-10	sheet no. no. de la feuille	S02

DRAWING NOTES

- EX. 8" OWSJ @ 2'-0" o/c AND EX. C4x6.25 @ 2'-0" o/c TO REMAIN
- EXPOSE EXISTING STRUCTURE ADJACENT TO SHAFT. REPORT EXISTING CONDITION FOR REVIEW AND AWAIT DIRECTION TO PROCEED
EXPECTED PROCEDURE:
* CUT EXISTING ROOF STRUCTURE OVERHANG PAST OUTSIDE FACE OF EXISTING STONE WALL
* PROVIDE NEW DRY SPF #1 38x140 MEMBERS TO CONNECT AFFECTED TRUSSES ABOVE STONE WALL TO ADJACENT TRUSSES
* REPAIR ROOF SHEATHING AS REQUIRED WITH SPF SELECT PLANKS SIZED TO MATCH EXISTING
* PROVIDE NEW WOOD SUPPORT AFFECTED DECKING AS DIRECTED (TO SUIT AS-FOUND CONDITIONS)

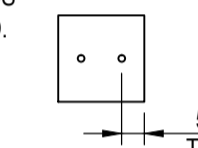
- REMOVE EXISTING:
* PIPE OVERRUN ENCLOSURE
* ROOF OVER ELEVATOR SHAFT
(2 1/2" CONC. ON 1" PAN w/ 5"x6"x3/8" WIRE MESH)
* CHANNEL FRAMING AND BASE PLATES
* COURSE OF HALF-HEIGHT BLOCK (DO NOT DAMAGE DOWELS)

- PROVIDE ADD'L BLOCK COURSE AT FRONT WALL OF SHAFT. PROVIDE CUT BLOCKS ON SIDE WALLS UNDER BOND BEAM TO PROVIDE SMOOTH TRANSITION BETWEEN FRONT AND BACK WALLS. TOTAL 7 FULL COURSES ABOVE CONCRETE ON FRONT WALL AND 6 FULL COURSES ABOVE CONCRETE ON BACK WALL

- NEW ROOF:
76x0.91 STEEL DECK
PUDDLE WELD OR NAIL @ 300 ALL AROUND
SLOPE +60 AT FRONT TO +0 AT BACK

- N/A

- NEW W150x22 HOIST BEAM c/w 500 HOLE EACH END AND c/w PL8x190x190 BEARING PLATE w/ 2-10M NELSON STUDS
100mm EMBED.

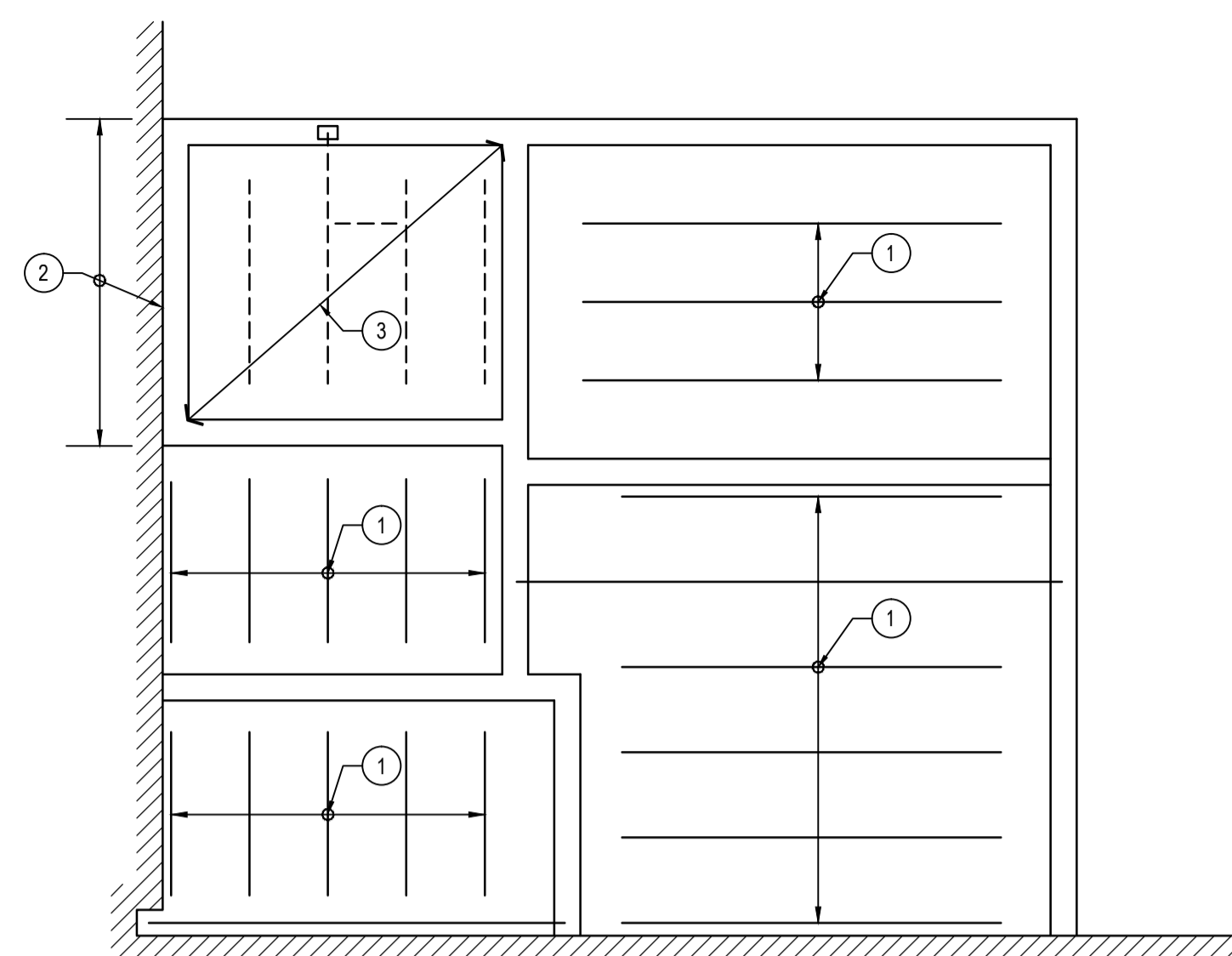


GROUT SOLID ONCE INSTALLATION IS APPROVED.
LOCATION SUIT ELEVATOR REQUIREMENTS

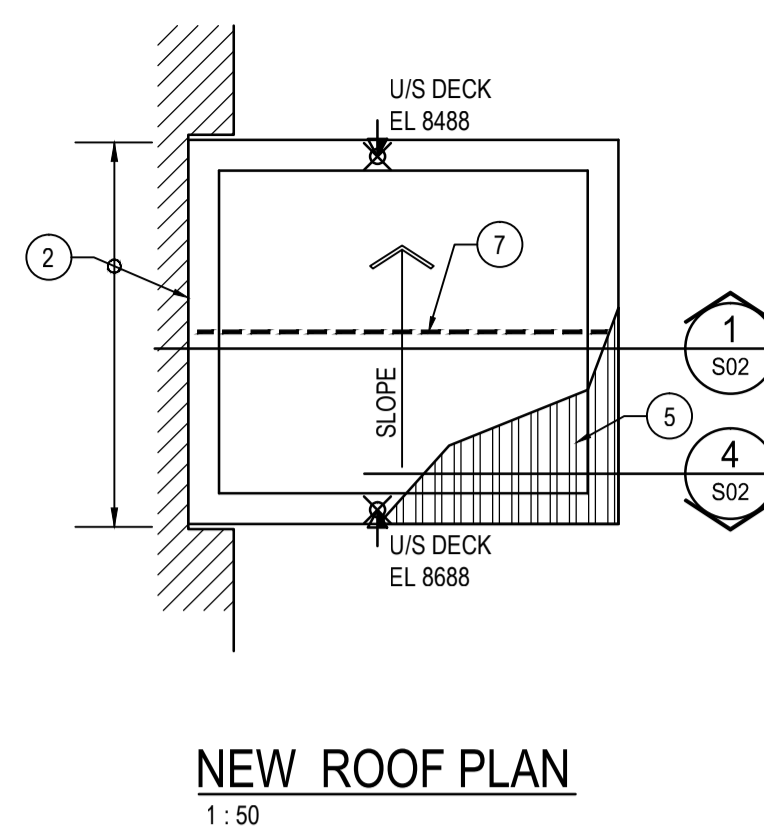
MAX. HOIST LOAD: 3500 kg (7700 POUNDS)

- PL4.8x100 CONT. c/w 10mmØ NELSON STUD
100mm LONG @ 400
- 190 LOW WEB BOND BEAM ALL AROUND c/w 2-10M CONTINUOUS
- N/A
- NEW BLOCK WORK. PROVIDE REINFG AS PER NOTE 25
- GROUT CORE(S) FULL HEIGHT UNDER BEAM SOLID c/w 1-20M VERT. DRILL & EPOXY MIN. 150mm INTO EXISTING CONCRETE BEAM EACH GROUTED CORE (OR MECH COUPLER 20M TO EXISTING DOWEL AS PER NOTE 25)
- EXISTING 190mm BLOCK
- EXISTING CONCRETE BEAM (203x406)
- SAW CUT EXISTING CONC. SLAB AT EDGE OF BLOCK DO NOT CUT INTO JOIST.
- REMOVE EXISTING PARTIAL BLOCK COURSE
- REMOVE EXISTING FULL HEIGHT BLOCKS AND/OR GROUTED CORES. AS REQUIRED TO EXPOSE VERT. REINFG. CLEAN REINFG.
- CONNECT ELEVATOR RAILS TO EXISTING CONCRETE BEAMS ONLY, USING MIN. 2-12mmØ HILTI KB-TZ ANCHORS, 89mm EMBED, EACH CONNECTION. IF REQUIRED, PROVIDE NEW MASONRY BOND BEAM TO SUIT TOP OF RAIL CONNECTION (SIM. TO NEW BOND BEAM AT TOP OF SHAFT) & SIMILAR RAIL CONNECTION

- ROYAL ATTIC
- EXISTING STONE WALL (TO BE CONFIRMED)
- EXISTING ROYAL ATTIC FLOOR BEAM
- EXISTING ROYAL ATTIC ROOF TRUSS (150Wx146D @ 2250), ROOF PURLIN (114Wx203D), ROOF JOISTS (62Wx178D @ 610), ROOF DECKING (254Wx25D) (SEE NOTE 2). DIMENSIONS ARE APPROXIMATE
- LOCATION OF ROYAL ATTIC FRAMING RELATIVE TO PRINCESS ANNE PAVILLION TO BE CONFIRMED ON SITE
- EXISTING ROYAL ATTIC FRAMING REFERRED TO IN NOTE 2 (TO BE CONFIRMED ON SITE)
- PROVIDE 20M REINFG IN GROUTED CORES TO MATCH EXISTING DOWELS c/w 90° HK AT TOP OF NEW BOND BEAM AND FULL TENSION MECHANICAL COUPLER TO EXISTING DOWELS (DAYTON SUPERIOR BARLOCK 6S/CA OR EQUAL)
- VERIFY EXISTING REINFG STEEL AND PREPARE FOR ADDITION OF NEW SPLICE COUPLER
- EXISTING ROUGH OPENING (APPROX 1165 W x 2185 H)
- NEW ROUGH OPENING
- NEW MASONRY LINTEL:
190x190 LINTEL c/w 2-10M BOT, FILLED WITH 20MPa CONCRETE. PROVIDE MIN. 200 BEARING EACH END. DO NOT DAMAGE EXISTING REINFG IN BEARING CORES. GROUT CORES FULLY EACH END

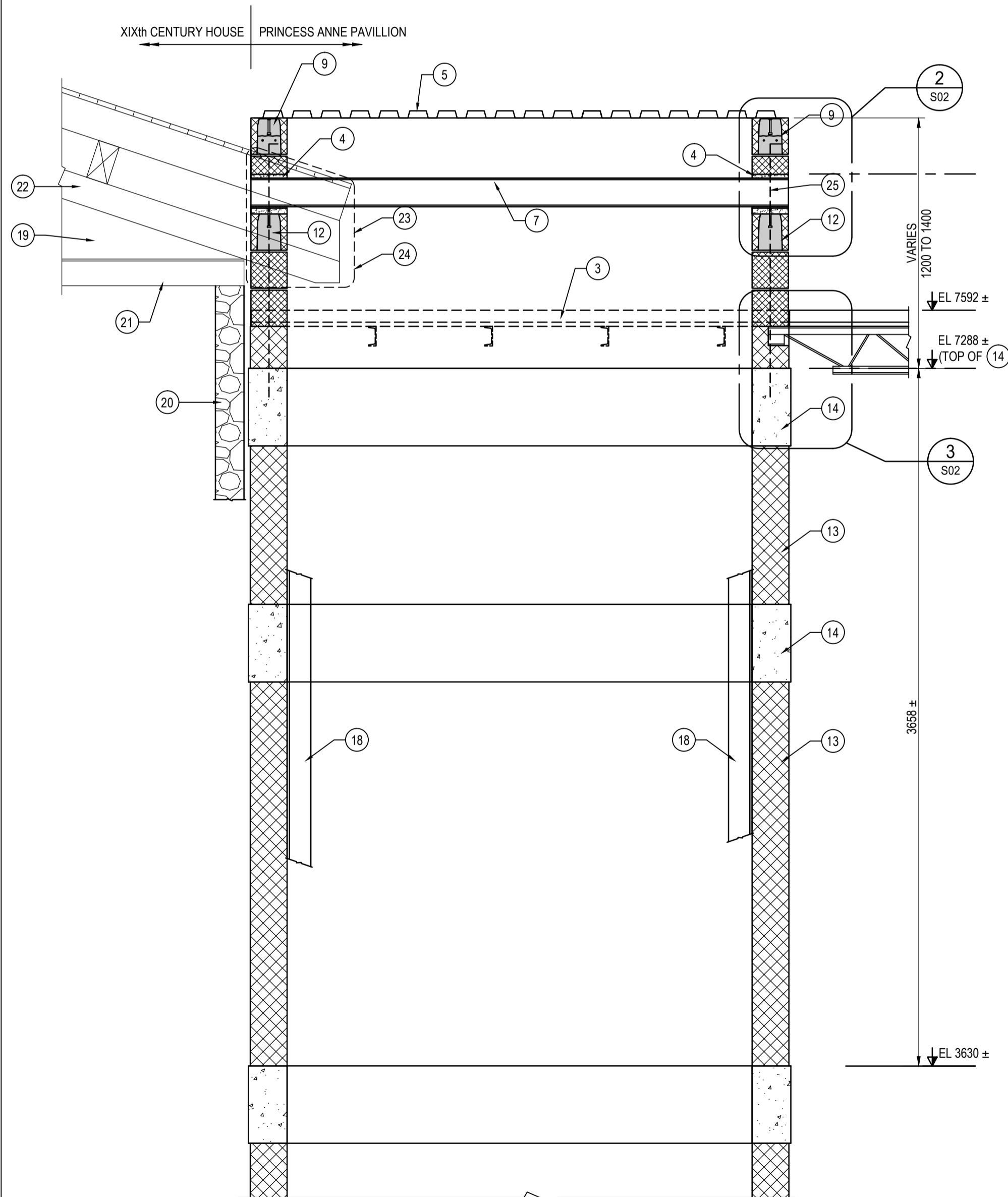
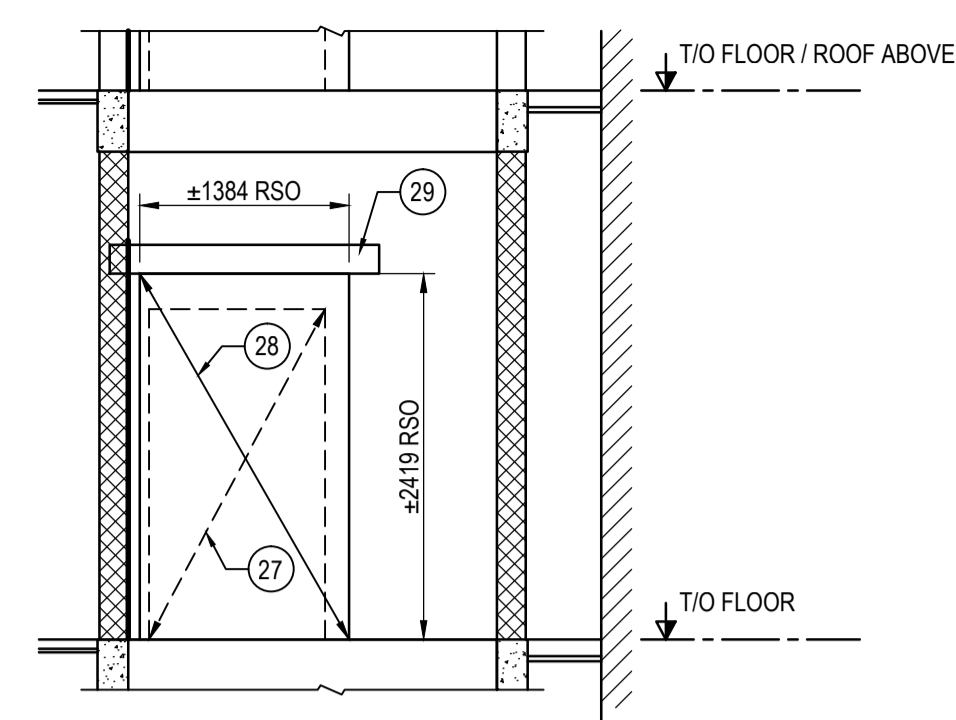


EXISTING / DEMOLITION ROOF PLAN
1:50

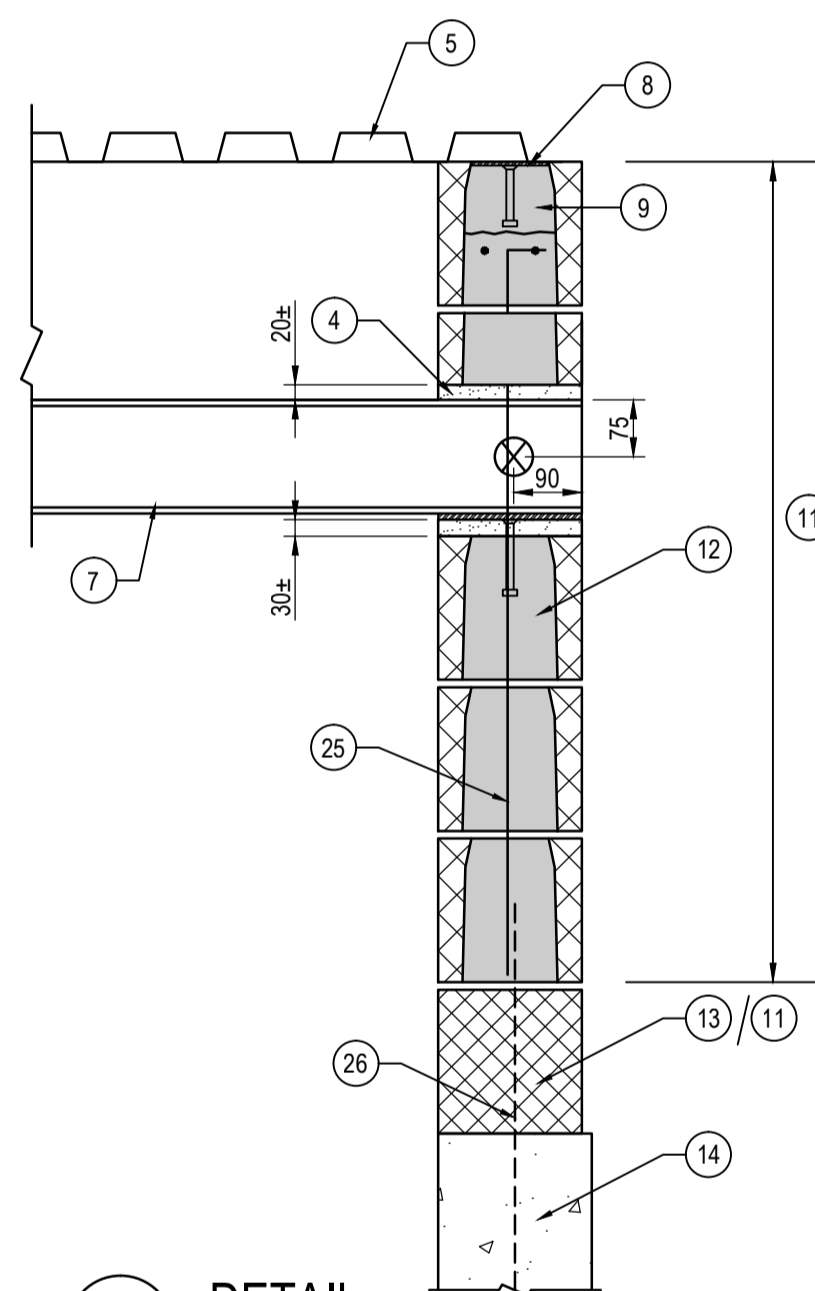


NEW ROOF PLAN
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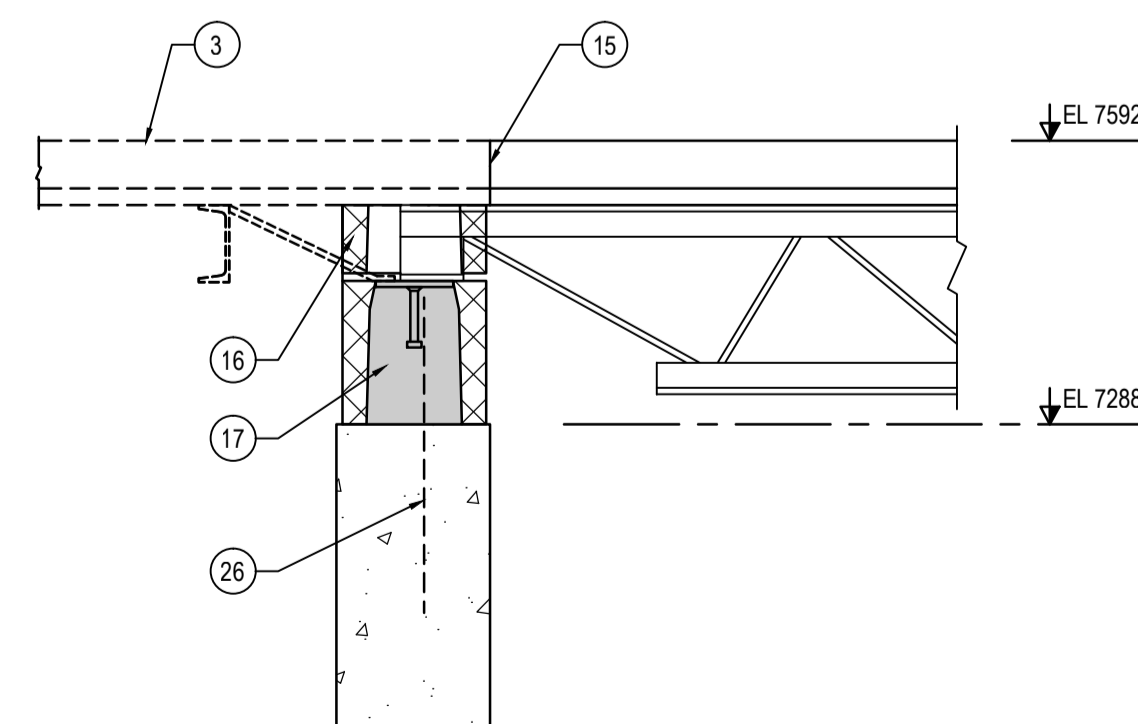
4 TYPICAL MASONRY OPENING ENLARGEMENT (3 TOTAL)
1:50



1 SECTION 18
S02 1:20



2 DETAIL
S02 1:10



3 DETAIL
S02 1:10