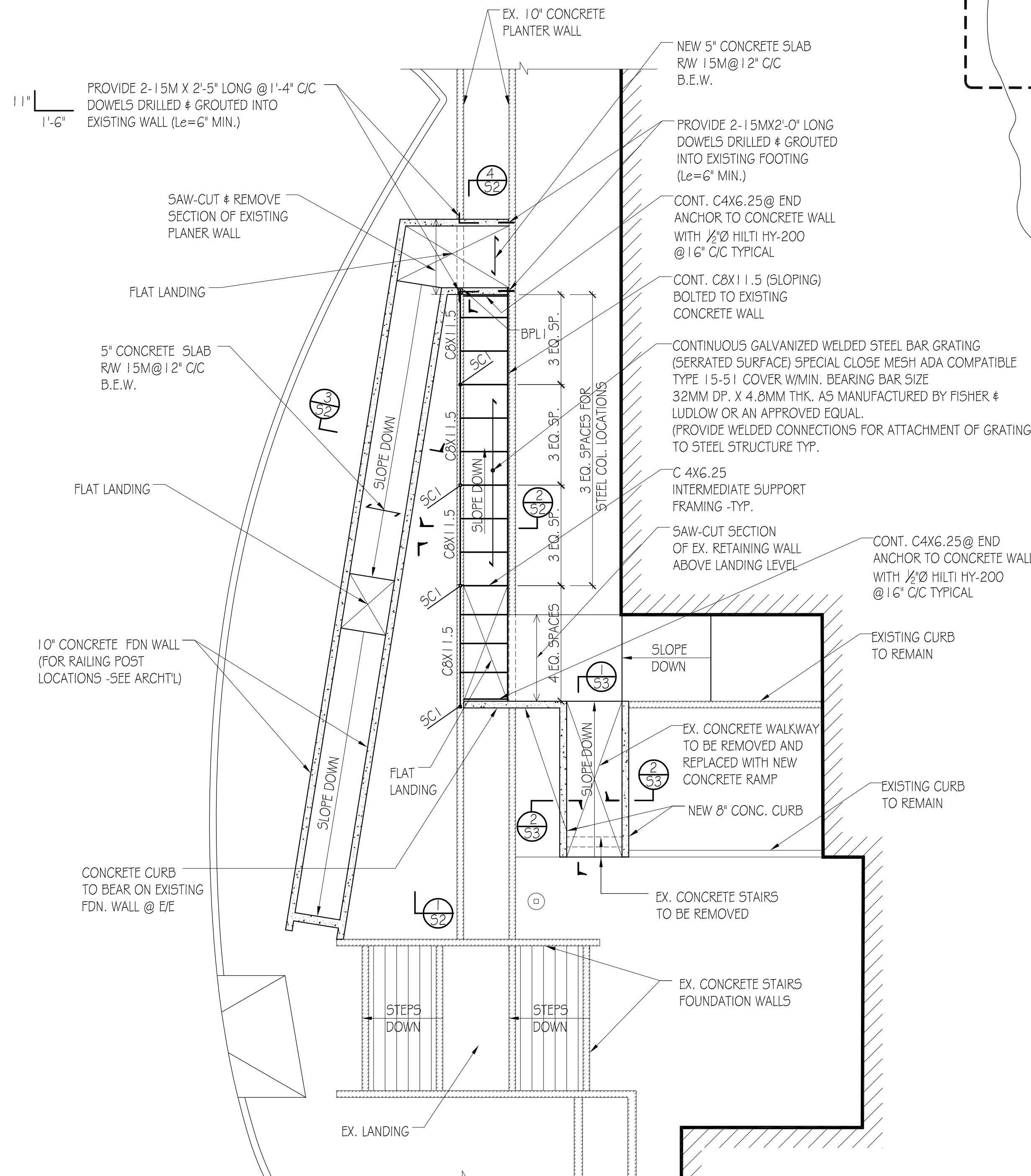


# RAMP FOUNDATION PLAN

SCALE:  $\frac{1}{8}" = 1'-0"$

NOTES:

- FOUNDATIONS HAVE BEEN DESIGNED FOR BEARING CAPACITY STATED ON DWG. 53

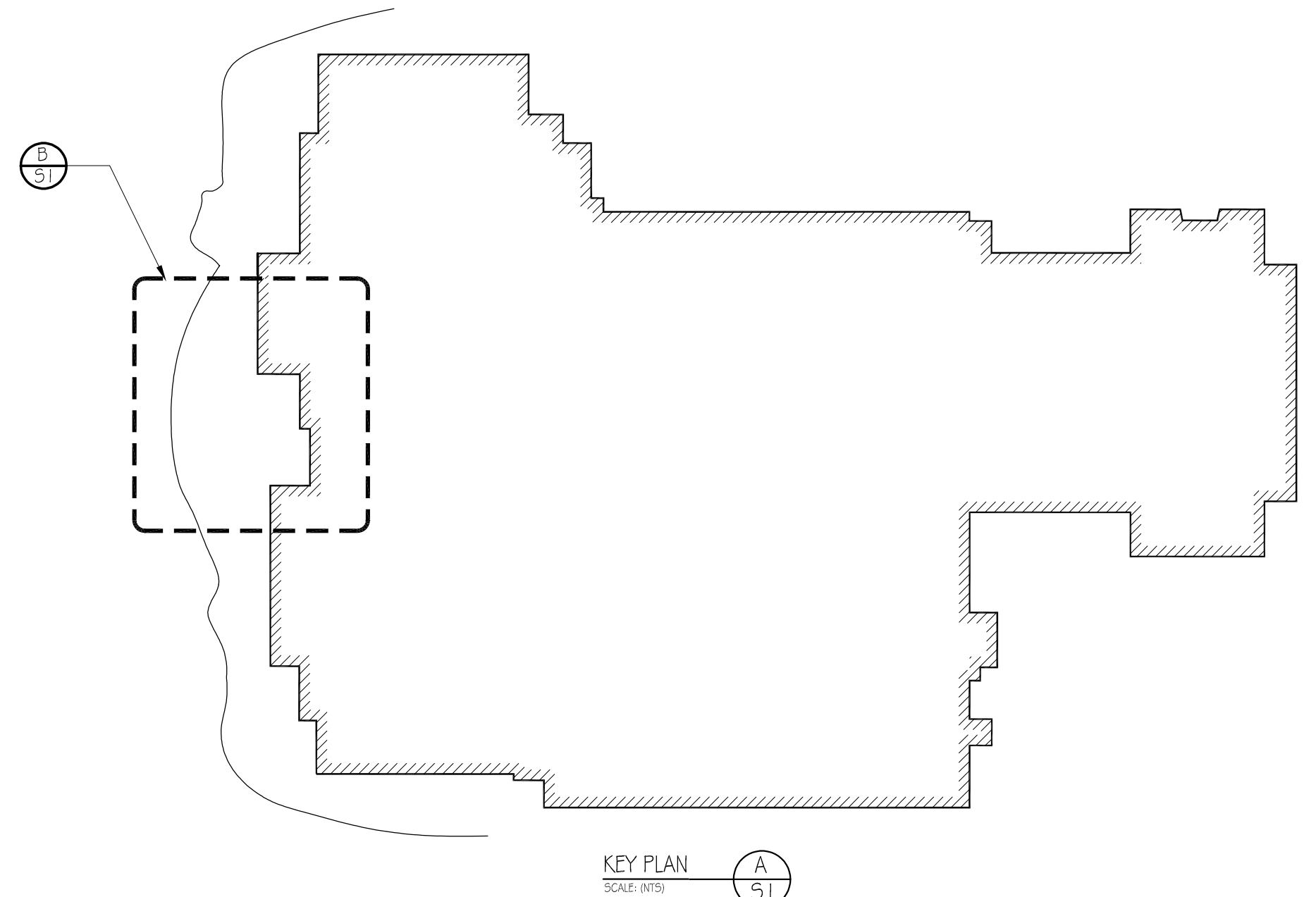


# RAMP FRAMING PLAN

SCALE:  $\frac{1}{8}" = 1'-0"$

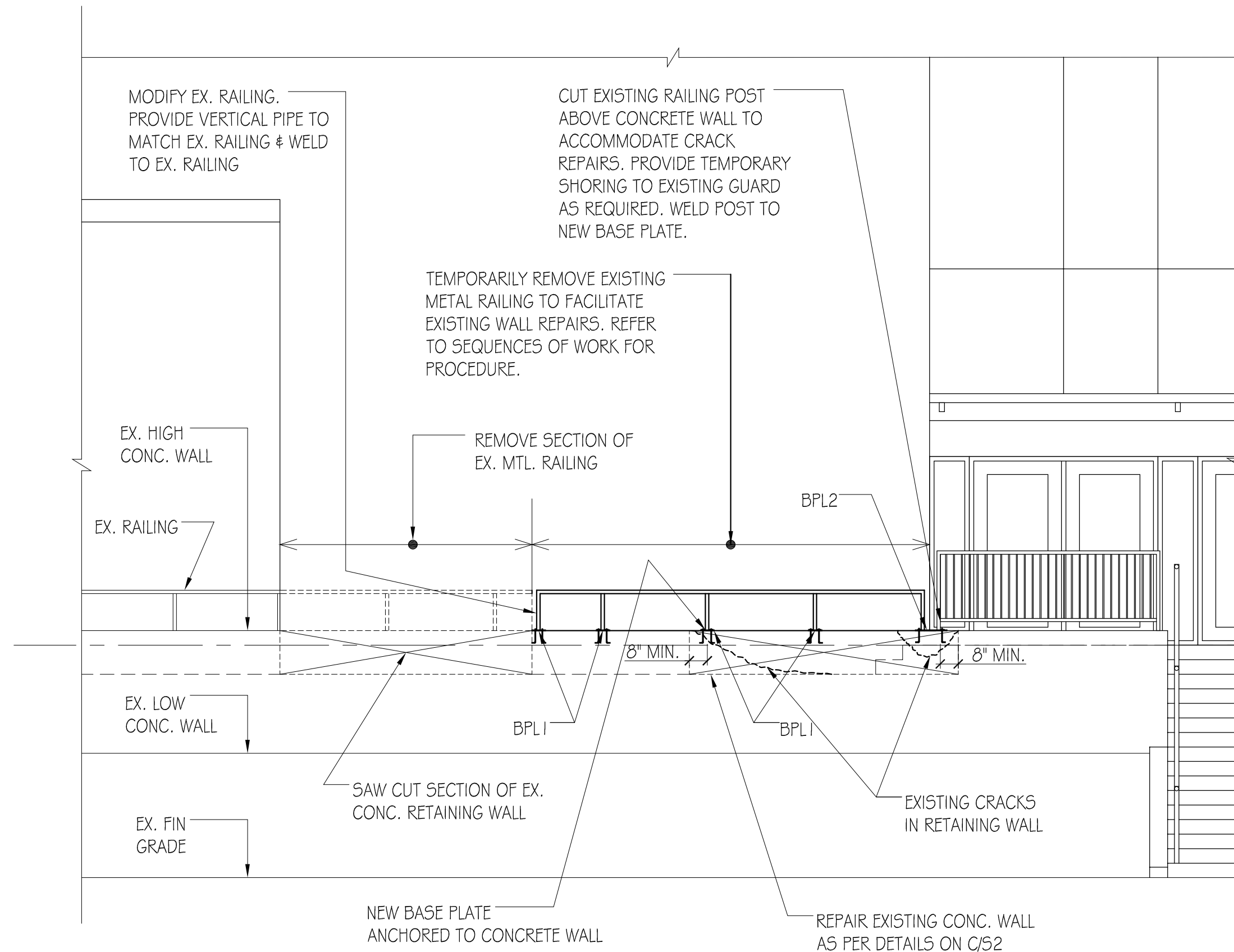
NOTES:

- DESIGN LIVE LOAD FOR RAMP IS 100 PSF.
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS & SLOPES.



ISSUED FOR PERMIT & TENDER	APR 16/21	D.K
ISSUED FOR 75% DESIGN REVIEW	APR 06/21	D.K
No.	REVISION	DATE BY
<small>All drawings, plans, models, designs, specifications and other documents prepared by AMR Engineering Limited ("AMR") and used in connection with this project are instruments of service for the work shown in them (the "Work") and as such are and remain the property of AMR whether the Work is executed or not, and AMR reserves the copyright in them and in the Work executed from them, and they shall not be used for any other work or project. Contractor shall verify all dimensions etc. on site and shall be responsible for reporting any discrepancies to the engineer.</small>		
CLIENT: <b>WILCOX ARCHITECTS INC.</b> 74 LINDSAY ST. S. LINDSAY, ONT.		
PROJECT: <b>HOLY CROSS CATHOLIC SECONDARY SCHOOL -NEW RAMP</b>		
64 LINDSAY STREET SOUTH, LINDSAY, ONTARIO		
DRAWING: RAMP FOUNDATION PLAN, RAMP FRAMING PLAN AND KEY PLAN		
<b>AMR</b> AMR ENGINEERING LTD. STRUCTURAL ENGINEERS 920 ALNESS STREET, SUITE 205 TORONTO, ON M3J 2H7 (416) 551-1611		REGISTERED PROFESSIONAL ENGINEER 21-2138 D. KOTOBELLI PROVINCE OF ONTARIO
DRAWN BY:	M.K.	AMR PROJECT No.
CHECKED BY:	D.K.	21-2138
DATE:	APR 16/21	DWG. No.
SCALE:	AS NOTED	<b>S1</b> OF 3





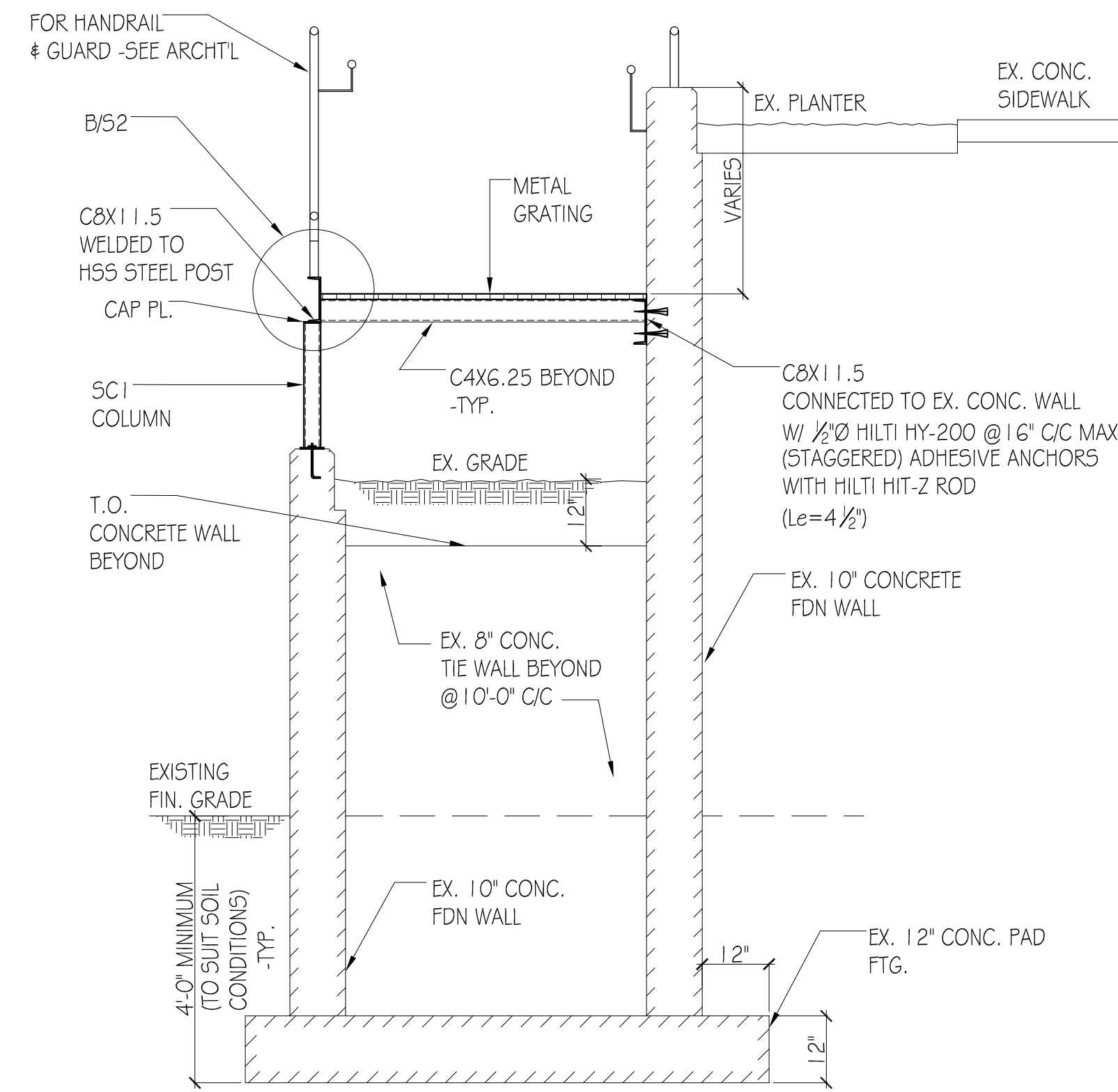
### ELEVATION

SCALE:  $\frac{1}{4}'' = 1'-0''$

NOTE:

1. NEW RAMP FRAMING NOT SHOWN FOR CLARITY

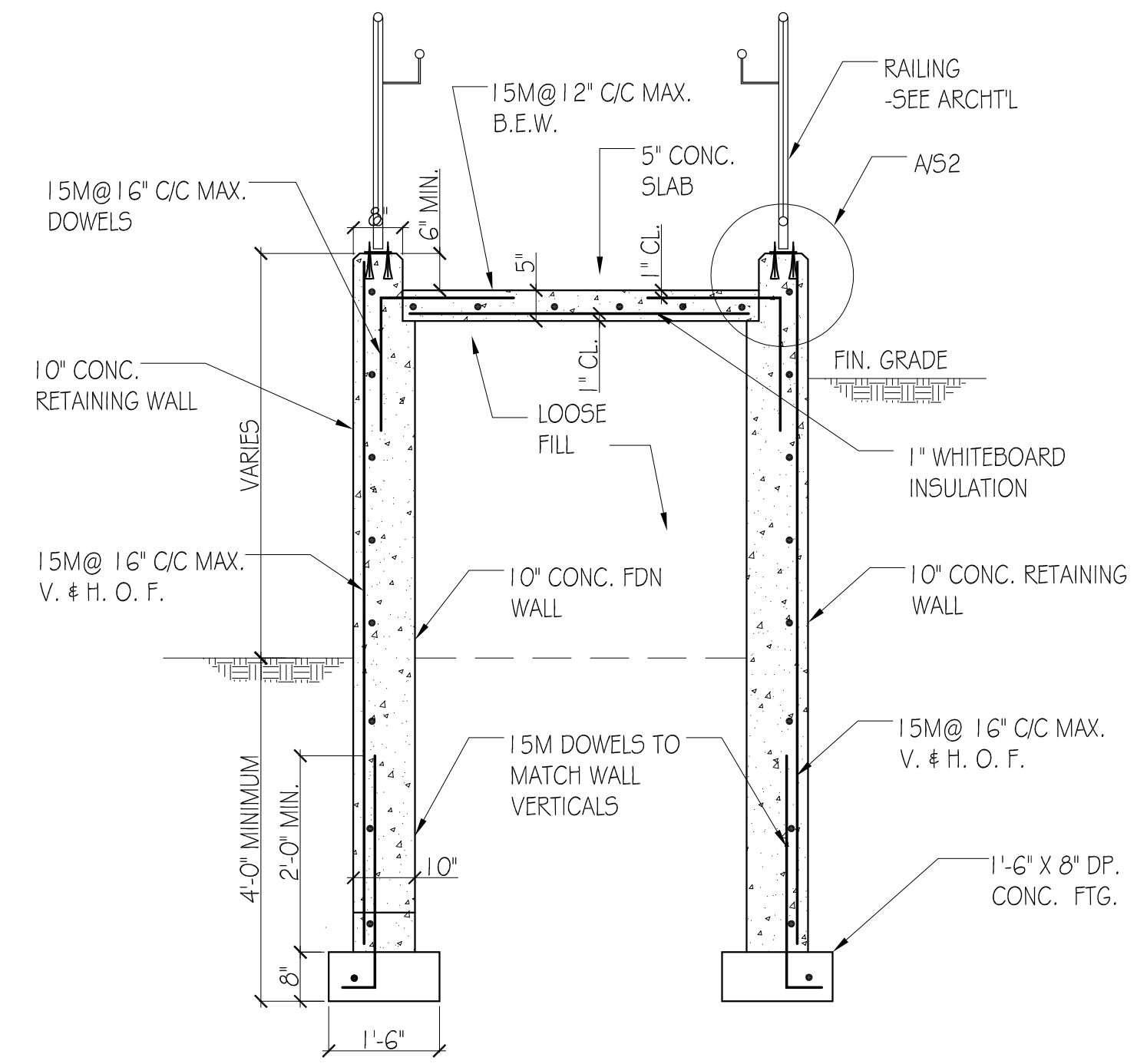
1  
52



### SECTION

SCALE:  $\frac{1}{2}'' = 1'-0''$

2  
52



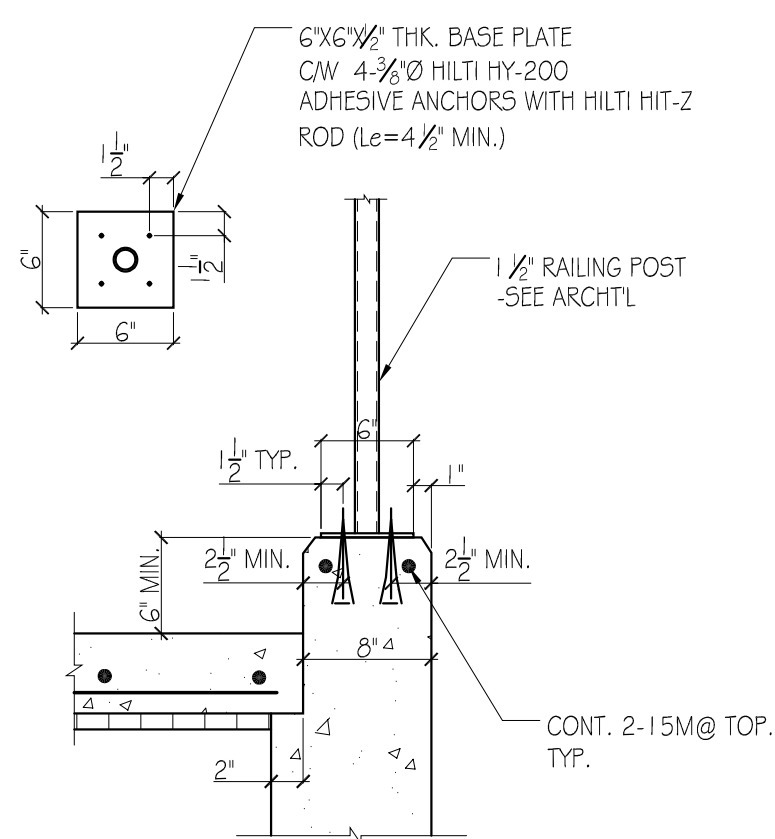
### SECTION

SCALE:  $\frac{1}{2}'' = 1'-0''$

3  
52

#### SEQUENCE OF WORK FOR CONCRETE WALL CRACK REPAIR:

1. TEMPORARILY REMOVE EXISTING POSTS METAL RAILING AS NOTED ON ELEVATION 1/52. CUT RAILING ABOVE EXISTING CONCRETE WALL.
2. REPAIR EXISTING CONCRETE WALL CRACKS AS PER DETAIL C/52.
3. INSTALL NEW BASE PLATES ANCHORED TO NEW/EXISTING CONCRETE WALL AS NOTED ON ELEVATION.
4. MODIFY EXISTING RAILING TO ACCOMMODATE NEW LENGTH.
5. WELD EXISTING RAILING POSTS TO NEW BASE PLATES ALL AROUND.
6. TOUCH UP ALL FIELD WELDS WITH ZINC RICH PAINT.



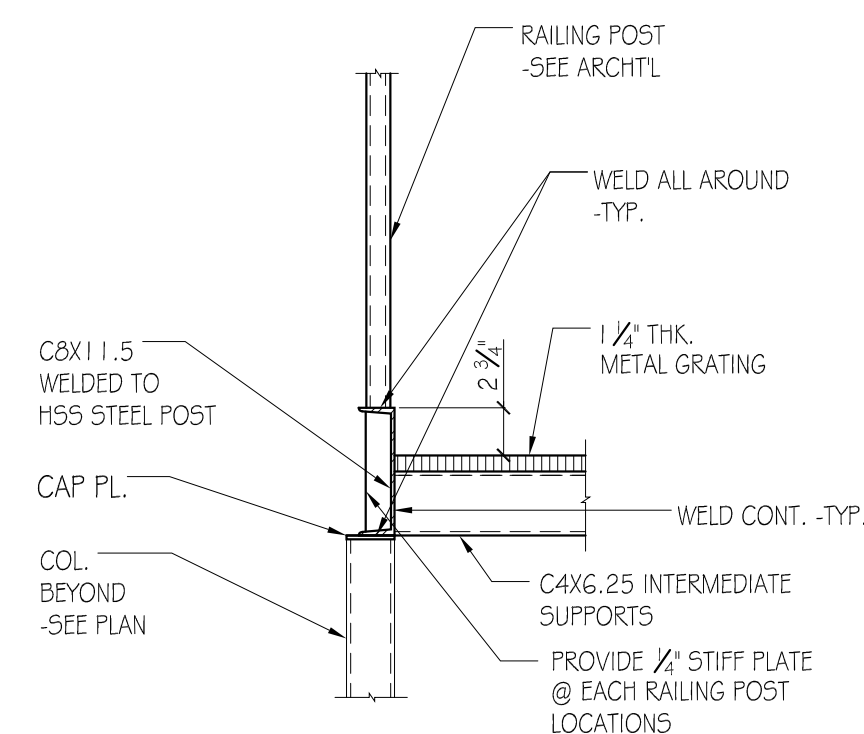
TYPICAL RAILING BASE PLATE POST DETAIL

SCALE:  $1'' = 1'-0''$

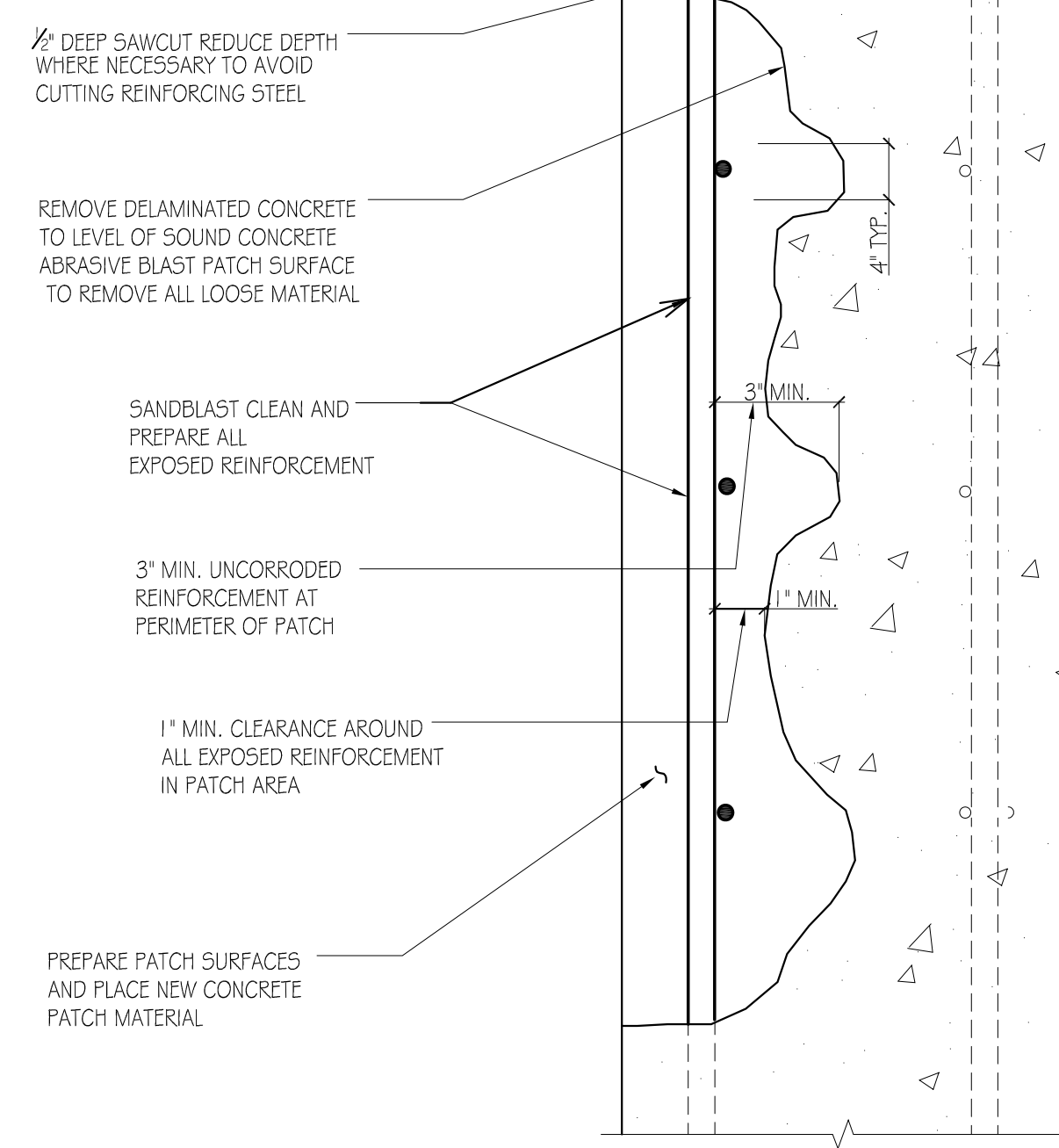
A  
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TYPICAL RAILING POST CONNECTION DETAIL

SCALE:  $1'' = 1'-0''$



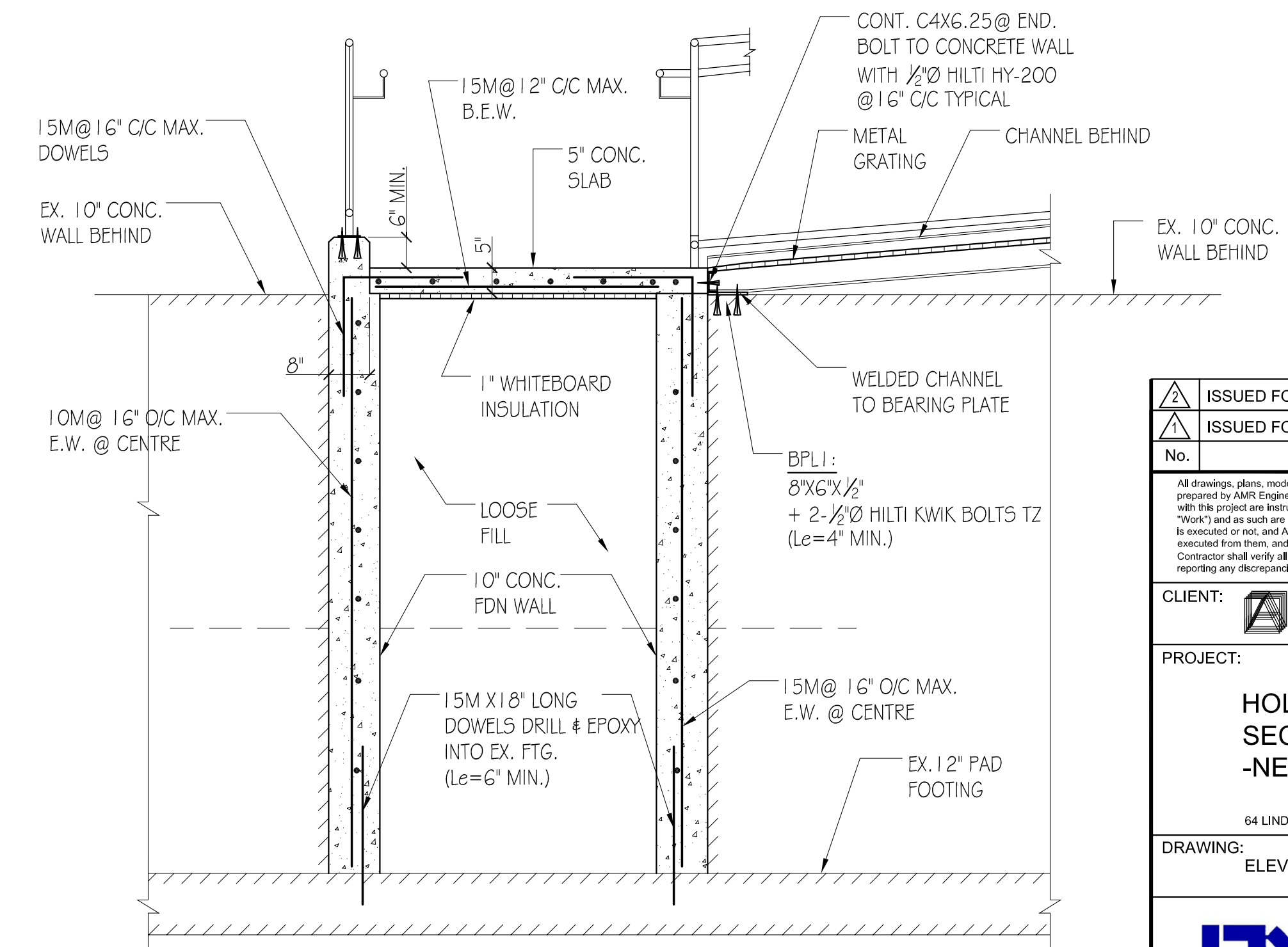
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TYPICAL CONCRETE WALL REPAIR

SCALE:  $1'' = 1'-0''$

C  
52



### SECTION

SCALE:  $\frac{1}{2}'' = 1'-0''$

4  
52

ISSUED FOR PERMIT & TENDER	APR 16/21	D.K
ISSUED FOR 75% DESIGN REVIEW	APR 06/21	D.K
No.	REVISION	DATE BY

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PROJECT NORTH

CLIENT: **WILCOX ARCHITECTS INC.**  
74 LINDSAY ST. S. LINDSAY, ONT.

PROJECT:  
**HOLY CROSS CATHOLIC  
SECONDARY SCHOOL  
-NEW RAMP**

64 LINDSAY STREET SOUTH, LINDSAY, ONTARIO

DRAWING:  
ELEVATION, SECTIONS AND DETAILS

**AMR**

AMR ENGINEERING LTD.  
STRUCTURAL ENGINEERS  
920 ALNESS STREET, SUITE 205  
TORONTO, ON M3J 2H7  
(416) 551-1611

REGISTERED PROFESSIONAL ENGINEER  
21-2138  
D. KOTOBELLI  
PROVINCE OF ONTARIO

DRAWN BY:	M.K.	AMR PROJECT No.
CHECKED BY:	D.K.	21-2138
DATE:	APR 16/21	DWG. No.
SCALE:	AS NOTED	<b>S2</b> OF 3



DESIGN CODE

1.

THE COMPLETED STRUCTURE SHOWN ON THE STRUCTURAL DRAWINGS HAS BEEN DESIGNED IN SUBSTANTIAL ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012 WHICH IS BASED ON THE NATIONAL BUILDING AMENDED CODE OF CANADA 2015.

GENERAL NOTES

1.

THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISIONS COLUMN.

2.

THE INFORMATION ON THESE DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT OR WORKS. THE INFORMATION ON THESE DRAWINGS APPLIES SOLELY TO THIS PROJECT.

3.

STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS.

4.

THE GENERAL CONTRACTOR SHALL EXAMINE SITE CONDITIONS AND REPORT ANY INCONSISTENCIES TO THE ENGINEER BEFORE COMMENCING ANY WORK.

5.

CHECK ALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

6.

DRAWINGS MUST NOT BE SCALED.

7.

DO NOT EXCEED LIVE LOADS SHOWN DURING CONSTRUCTION.

8.

OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO STARTING ANY CONSTRUCTION.

9.

THE DRAWINGS DO NOT SHOW COMPONENTS THAT MAY BE NECESSARY FOR CONSTRUCTION SAFETY. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SAFETY IN AND ABOUT THE JOB SITE DURING CONSTRUCTION, AND THE DESIGN AND ERECTION OF ALL TEMPORARY STRUCTURES, FORMWORK, FALSE WORK, SHORING, ETC. REQUIRED TO COMPLETE THE WORK.

10.

"NON-STRUCTURAL" OR "SECONDARY STRUCTURAL" ELEMENTS ARE NOT PART OF THE STRUCTURAL DESIGN SHOWN ON THESE DRAWINGS. SUCH ELEMENTS ARE DESIGNED, DETAILED AND REVIEWED IN THE FIELD BY OTHERS. THEY APPEAR ON DRAWINGS OTHER THAN THESE DRAWINGS OF AMR ENGINEERING LIMITED, WHERE STRUCTURAL ENGINEERING RESPONSIBILITY IS REQUIRED FOR THESE ELEMENTS. THIS SHALL BE PROVIDED BY SPECIALTY STRUCTURAL ENGINEERS, WHO SHALL ALSO PROVIDE ANY LETTERS REQUIRED BY BUILDING PERMIT AUTHORITIES.

11.

SHOP DRAWINGS FOR NON-STRUCTURAL ELEMENTS WHICH MAY AFFECT THE PRIMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO AMR ENGINEERING LIMITED. THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT OF THE ELEMENT ON THE PRIMARY STRUCTURAL SYSTEM.

RENOVATION NOTES

1.

OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO STARTING ANY CONSTRUCTION.

2.

PROTECT ADJOINING PROPERTIES AT ALL TIMES DURING DEMOLITION. CONTRACTOR TO BE RESPONSIBLE FOR ANY DAMAGE CAUSED.

3.

CONFORM TO THE REQUIREMENTS OF ONTARIO BUILDING CODE AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS.

4.

THE CONTRACT DOCUMENTS ARE BASED ON ASSUMED AS-BUILT DIMENSIONS FOR THE EXISTING BUILDING STRUCTURE AND ASSUMPTIONS IN ACCORDANCE WITH DETAILING AND PLACING PRACTICE. THESE ASSUMPTIONS MAY VARY FROM THE ACTUAL ON-SITE CONDITIONS. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONSULTANT OF ANY ACTUAL VARIATIONS FROM THE ASSUMED CONDITIONS.

5.

MINOR MODIFICATIONS TO SUIT TOLERANCES OF +/- 50mm WILL BE REQUIRED TO THE WORK INDICATED ON THESE DRAWINGS TO REFLECT ACTUAL SITE CONDITIONS. THE CONTRACTOR WILL COOPERATE WITH THE CONSULTANT AND AMR IN THIS REGARD. MINOR MODIFICATIONS WILL BECOME THE RESPONSIBILITY OF THE CONTRACTOR AND WILL NOT RESULT IN A CHANGE IN THE CONTRACT PRICE.

6.

ENSURE THAT ALL NECESSARY JOB DIMENSIONS ARE TAKEN AND ALL TRADES ARE COORDINATED FOR THE PROPER EXECUTION OF THE WORK. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF SUCH DIMENSIONS, AND FOR COORDINATION.

7.

PRIOR TO FABRICATION OF ANY STRUCTURAL MEMBERS, THE CONTRACTOR SHALL COMPLETE THIS SITE REVIEW OF CRITICAL "TIE-IN" DIMENSIONS AND CONFIRM ALL DIMENSIONS TO ENSURE PROPER FIT OF NEW WORK TO EXISTING. REPORT ANY DISCREPANCIES TO AMR PRIOR TO STARTING WORK.

8.

COMMENCEMENT OF CONSTRUCTION OR ANY PART THEREOF CONSTITUTES ACCEPTANCE OF EXISTING CONDITIONS AND MEANS DIMENSIONS AND ELEVATIONS HAVE BEEN CONSIDERED, VERIFIED AND ARE ACCEPTABLE.

9.

ANY OPENINGS THAT ARE NOT SHOWN OR INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE REPORTED TO AMR FOR REVIEW. THESE OPENINGS MAY NOT BE ALLOWED, MAY HAVE TO BE MOVED, OR MAY REQUIRE ADDITIONAL STRUCTURAL WORK AND DETAILING. DO NOT PROCEED WITH THESE OPENINGS WITHOUT WRITTEN PERMISSION FROM AMR.

10.

UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, THE CORING OR CUTTING OF OPENINGS AND HOLES SHOWN ON THE STRUCTURAL DRAWINGS THROUGH THE EXISTING STRUCTURE SHALL NOT CUT ANY REINFORCING BARS. THE CONTRACTOR SHALL LOCATE THE LOCATION, SIZE, LENGTH, ORIENTATION AND POSITION OF EXISTING REINFORCING AND PROVIDE AMR WITH HARD COPIES OF SUCH FOR OUR REVIEW IN THE VICINITY OF THE HOLES AND SLEEVES TO BE CUT OR CORED, AND THE HOLES AND SLEEVES SHALL BE LOCATED TO AVOID CUTTING OF REINFORCING BARS. WHERE THIS IS NOT POSSIBLE, IT SHALL BE REPORTED TO AMR FOR REVIEW.

11.

UNLESS NOTED OTHERWISE AT ALL LOCATIONS WHERE NEW CONCRETE WILL BE IN CONTACT WITH EXISTING CONCRETE SURFACES, THE EXISTING CONCRETE SURFACE IS TO BE COMPLETELY CLEANED AND ROUGHENED BY HYDRODEMOLITION, BUSH HAMMERING, (OR APPROVED EQUAL) TO AN AMPLITUDE OF 6 mm (1/4").

12.

CONTRACTOR TO ENSURE THAT UNDERGROUND OR IN-SLAB SERVICES ARE NOT DAMAGED THROUGH DEMOLITION, SAWCUTTING, HOLE AUGURING, OR OTHER CONSTRUCTION ACTIVITIES. SEE SPECIFICATION FOR TESTING/LOCATING REQUIREMENTS.

13.

REPAIR ALL AREAS DAMAGED BY CONSTRUCTION ACTIVITY. SPECIFICALLY, THE CONTRACTOR SHALL REPAIR ALL DAMAGE RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONSULTANT

14.

CONTRACTOR TO CARRY OUT FINAL CLEANING OF STRUCTURE, FIXTURES, PIPING ETC., AND THE DISPOSAL ALL WASTE PRODUCTS AND/ OR DEBRIS GENERATED BY THE CONSTRUCTION ACTIVITY AS WELL AS ANY MATERIAL PRESENT IN THE WORK AREA PRIOR TO THE COMMENCEMENT OF THE WORK. THE AREAS REQUIRING CLEANING SHALL CONSIST OF ALL AREAS AFFECTED BY THE WORK.

STRUCTURAL STEEL

1.

STRUCTURAL STEEL SECTIONS SHALL BE NEW AND CONFORM TO THE FOLLOWING:

A.

WIDE FLANGE BEAMS AND WWF SECTIONS — CSA G40.21 350W

B.

MISCELLANEOUS ROLLED SECTIONS (EXCEPT WIDE FLANGES) — CSA G40.21 300W

C.

HOLLOW STRUCTURAL SECTIONS (CLASS 'C' U.N.O.) — CSA G40.21 350W

D.

ROLLED PLATES — CSA G40.21 300W

E.

BOLTS (SEE PLANS AND DETAILS) — ASTM A325 OR ASTM A490

F.

STRUCTURAL STEEL ANCHOR RODS (U.N.O.) — ASTM F1554 GRADE 36 MINIMUM

G.

REINFORCING BAR ANCHOR BOLTS — CAN/CSA-G30.18R, GRADE 400

3.

ALL CONNECTIONS TO BE DESIGNED BY FABRICATOR UNLESS NOTED OTHERWISE. ALL BEAM CONNECTIONS TO BE STANDARD FRAME BEAM CONNECTIONS OR EQUIVALENT, UNLESS NOTED OTHERWISE. SUBMIT A LETTER OF CERTIFICATION BY P.ENG RESPONSIBLE FOR DESIGN OF CONNECTIONS.

4.

SHOP DRAWINGS SHALL BE PREPARED UNDER THE DIRECTION OF A SPECIALTY STRUCTURAL ENGINEER. FOR THOSE CONNECTIONS AND COMPONENTS DESIGNED BY THE FABRICATOR, THIS ENGINEER OR THEIR REPRESENTATIVE SHALL VISIT THE SITE TO REVIEW IN PLACE THE CONNECTIONS AND COMPONENTS DESIGNED BY THIS ENGINEER TO SATISFY THEMSELVES THAT THESE CONNECTIONS AND COMPONENTS COMPLY WITH THEIR DESIGN ON THE SHOP DRAWINGS. THIS ENGINEER SHALL PROVIDE A LETTER TO AMR TO THIS EFFECT. THIS ENGINEER SHALL ALSO PROVIDE SEALED SKETCHES FOR ALL FIELD MODIFICATIONS MADE TO THEIR DESIGN.

5.

SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO START OF STEEL FABRICATION.

6.

FABRICATION, ERECTION, STRUCTURAL DESIGN, AND DETAILING OF ALL STEEL SHALL BE IN ACCORDANCE WITH CAN/CSA-S16.

7.

FILLET WELDS SHALL BE 5 mm MINIMUM U.N.O.

8.

BOLTS SHALL BE A325 19 mm Ø MINIMUM U.N.O.

9.

BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS IN EACH MEMBER U.N.O.

10.

UNLESS NOTED OTHERWISE, COLUMN CAP PLATES SHALL BE 16 mm THICK AND COLUMN BASE PLATES SHALL BE 20 mm MINIMUM THICK.

11.

PROVIDE 6 mm CAP PLATES FOR ALL HSS MEMBERS U.N.O.

12.

CONNECTION DETAILS SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE ALTERED BY THE CONTRACTOR WITHOUT WRITTEN APPROVAL FROM AMR ENGINEERING LIMITED.

13.

TOUCH UP ALL FIELD WELDS WITH ZINC RICH PAINT.

14.

NON-SHRINK GROUT SHALL BE M-BED STANDARD BY SIKA CANADA INC. OR APPROVED EQUAL.

15.

ALL WELDING SHALL BE CARRIED OUT BY A WELDER QUALIFIED BY CANADIAN WELDING BUREAU (CWB) AND SHALL BE IN ACCORDANCE WITH CSA STANDARDS W59.

16.

ALL STRUCTURAL STEEL WORK SHALL BE INSPECTED BY THIRD PARTY INDEPENDENT TESTING COMPANY. INSPECTION REPORTS SHALL BE FORWARDED TO AMR FOR REVIEW AND RECORDS.

17.

WELD BAR GRATING TO ALL SUPPORTING STEEL MEMBERS WITH MINIMUM 19MM DIAMETER PLUG WELDS @ 300 C/C MAX. AND 5MMX40MM LONG FILLET WELDS @ 300 C/C MAX. ALONG PERIMETER TYP. UNLESS NOTED OTHERWISE.

18.

GALVANIZED STEEL BAR GRATING FOR PLATFORM SHALL BE SPECIAL CLOSE MESH ADA COMPATIBLE TYPE 15-51 COVER W/ MIN. BEARING BAR SIZE 32MM DP, X 4.8MM THK AS MANUFACTURED BY FISHER & LUDELOW OR AN APPROVED EQUAL. (DESIGN LIVE LOAD=100 PSF.)

19.

ALL STEEL SHALL BE HOT DIPPED GALVANIZED AS PER REQUIREMENTS OF CSA G164-18.

CONCRETE

1.

CONCRETE IS SPECIFIED AS PER THE "PERFORMANCE" ALTERNATE AS OUTLINED IN TABLE 5 OF CAN/CSA-A23.

2.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR WORKING WITH THE CONCRETE SUPPLIER TO ENSURE THAT THE PLASTIC AND HARDENED MIX PROPERTIES MEET SITE REQUIREMENTS FOR PLACING, FINISHING, AND THE OWNERS' SPECIFIED PERFORMANCE REQUIREMENTS. THE GENERAL CONTRACTOR SHALL MEET THE DOCUMENTATION AND QUALITY CONTROL REQUIREMENTS OUTLINED UNDER THE "PERFORMANCE" ALTERNATE OF TABLE 5 OF CAN/CSA-A23.

3.

THE SUPPLIER SHALL MEET ALL CERTIFICATION AND DOCUMENTATION REQUIREMENTS AS OUTLINED UNDER THE "PERFORMANCE" ALTERNATE OF TABLE 5 OF CAN/CSA-A23.

4.

THE CONCRETE SUPPLIER SHALL BE CERTIFIED BY THE READY MIXED CONCRETE ASSOCIATION OF ONTARIO.

5.

PORTLAND CEMENT SHALL BE TYPE GU UNLESS NOTED OTHERWISE.

6.

CONCRETE SHALL HAVE A UNIT WEIGHT OF 23±1 kN/m³ (145±5 PCF) UNLESS NOTED OTHERWISE.

7.

THE ULTIMATE 28 DAYS COMPRESSIVE STRENGTH OF CONCRETE EXPOSED TO FREEZING AND THAWING (EXTERIOR SLABS, SIDEWALKS, CURBS, RETAINING WALLS ETC.) SHALL BE 32 MPa WITH MINIMUM AIR ENTRAINMENT CONTENT OF 5%-8% AND MAXIMUM WATER CEMENT RATIO BY MASS OF 0.45. EXPOSURE CLASS FOR CONCRETE EXPOSED TO FREEZING AND THAWING SHALL BE C-2.

8.

DO NOT USE CALCIUM CHLORIDE OR OTHER CHLORIDE PRODUCTS IN CONCRETE.

9.

DETAIL REINFORCING IN ACCORDANCE WITH REINFORCING STEEL MANUAL OF STANDARD PRACTICE PREPARED BY RS10.

10.

SUPPLY AND INSTALL CONCRETE, REINFORCING STEEL AND FORMWORK INCLUDING PLACING, FINISHING AND CURING AS SHOWN ON THE DRAWINGS IN ACCORDANCE WITH CSA-A23 AND CSA G30.18R.

11.

SUBMIT SHOP DRAWINGS AND BAR LISTS TO THE ENGINEER FOR REVIEW BEFORE FABRICATION IS STARTED. ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE WORK AND BE AWARE THAT REVIEW OF SHOP DRAWINGS IS ONLY TO ENSURE THAT CONTRACT DRAWINGS ARE BEING CORRECTLY INTERPRETED.

12.

FOR EPOXY GROUT REQUIREMENTS USE SIKADUR-42 AS MANUFACTURED BY SIKA OR AN APPROVED EQUAL.

13.

FOR CONCRETE PATCH MATERIAL USE SIKA LATEX R AS MANUFACTURER BY SIKA OR AN APPROVED EQUAL. FOR CEMENT SLURRY USE ASTM C 150 PORTLAND TYPE I OF II.

EXCAVATIONS AND EARTHWORK

1.

ALL EXCAVATION WORK TO BE CARRIED OUT IN CONFORMANCE WITH SOILS REPORT #7800-18-4 PREPARED BY V.A. WOOD ASSOCIATES LIMITED DATE MAY 15, 2019.

2.

BEFORE COMMENCING WORK, CONTRACTOR SHALL ESTABLISH THE LOCATION OF ALL BURIED SERVICES ON THE SITE AND ARRANGE WITH APPROPRIATE AUTHORITY FOR RELOCATION OF BURIED SERVICES.

3.

SHORE AND BRACE EXCAVATIONS, PROTECT SLOPES AND BANKS AND PERFORM ALL WORK IN ACCORDANCE WITH PROVINCIAL AND MUNICIPAL REGULATIONS.

4.

PROTECT EXCAVATIONS FROM FREEZING, KEEP EXCAVATIONS CLEAN, FREE OF STANDING WATER AND LOOSE SOIL.

5.

BACKFILL MATERIAL AND SPACES TO BE REVIEWED AND APPROVED BY SOIL CONSULTANT. REMOVE SNOW, ICE, CONSTRUCTION DEBRIS, ORGANIC SOIL AND STANDING WATER FROM SPACES TO BE FILLED. MAINTAIN EVEN LEVELS OF BACKFILL AROUND STRUCTURES AS WORK PROGRESSES. TO EQUALIZE EARTH PRESSURES.

6.

TESTING OF COMPACTION TO BE CARRIED OUT BY TESTING LABORATORY DESIGNATED BY THE SOIL CONSULTANT.

FOUNDATIONS

1.

NORMAL SOIL CONDITIONS HAVE BEEN ASSUMED. FOOTINGS HAVE BEEN DESIGNED FOR THE FOLLOWING BEARING RESISTANCES:  
A. STRIP FOOTINGS: ULS: 225 KPa, SLS: 150 KPa

2.

BEARING SURFACES MUST BE APPROVED BY THE SOILS ENGINEER IMMEDIATELY BEFORE FOOTING CONCRETE IS PLACED. AMR IS NOT RESPONSIBLE FOR CONFIRMING BEARING CAPACITIES OF SOILS.

3.

REFER TO SOILS REPORT #7800-19-4 PREPARED BY V.A.WOOD ASSOCIATES LIMITED DATE MAY 15, 2019, FOR FOOTINGS, SOIL SLOPES, FROST PROTECTION MINIMUM COVER, ETC.

4.

UNLESS OTHERWISE SHOWN, CENTER FOOTINGS UNDER COLUMNS AND WALLS.

5.

DOWELS SHALL BE PLACED BEFORE CONCRETE IS PLACED. TEMPLATES SHALL BE USED TO ENSURE CORRECT PLACEMENT OF DOWELS.

6.

PROVIDE 50 mm GROUND SEAL/ SKIM COAT, MUD SLAB UNDER FOOTINGS AS REQUIRED BY SOIL CONDITIONS.

7.

FOR GROUND ELEVATIONS AND DRAINAGE SLOPES, SEE ARCHITECT'S DRAWINGS.

8.

VARY FOOTING ELEVATIONS WHERE REQUIRED IN ACCORDANCE WITH DETAIL FOR "TYPICAL STEPPED FOOTING"(S.D.F.), SHOWN ON STRUCTURAL DRAWINGS.

9.

FOOTINGS MAY HAVE TO BE LOWERED TO ACCOMMODATE MECHANICAL OR ELECTRICAL SERVICES. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ELEVATIONS OF SAME. FOOTINGS ARE NOT TO BE UNDERMINED BY EXCAVATIONS FOR SERVICES, PITS, ETC.

10.

FOOTING ELEVATIONS, IF SHOWN, ARE FOR PRICE ESTIMATING PURPOSES ONLY. ARE NOT FINAL, AND MAY VARY ACCORDING TO SITE CONDITIONS OR AS REQUIRED BY SERVICES. ALL FOOTINGS MUST BE TAKEN TO A BEARING LAYER APPROVED BY THE SOILS ENGINEER.

11.

BEARING SURFACES MUST BE PROTECTED FROM FREEZING BEFORE AND AFTER FOOTINGS ARE POURED.

12.

SUB-BASE DESIGN OF SOIL UNDER THE SLAB ON GRADE SHALL BE IN ACCORDANCE WITH THE SOIL REPORT.

13.

CONCRETE PLACED UNDER WATER SHALL CONFORM TO CAN/CSA-A23.1.

14.

WHERE A FOUNDATION WALL INCLUDING BUTTRESSES RETAINS SOIL ON EACH SIDE, PLACE BACKFILL ON BOTH SIDES SIMULTANEOUSLY.

15.

FOUNDATION WALLS RETAINING EARTH BETWEEN SLABS AT DIFFERENT LEVELS SHALL BE SHORED UNTIL THE SLAB AT HIGHER LEVEL IS IN PLACE AND HAS REACHED ITS REQUIRED STRENGTH.

16.

DESIGN AND FIELD REVIEW OF EXCAVATION SHORING AND BACKFILL IS NOT DONE BY AMR.

TYPICAL FOOTING ADJACENT TO EXCAVATION

EDGE OF ADJACENT EXCAVATION FOR FOOTINGS, SUMPS, BASEMENT, SITE SERVICES, ETC.

APPROVED BEARING MATERIALS

EDGE OF EXCAVATION

MAX. SLOPE PER GEOTECHNICAL SOIL CONDITION

LINE OF UNDISTURBED SOIL MUST BE ABOVE SLOPE LINE

CONCRETE COLD WEATHER REQUIREMENTS

(SEE ALSO CAN/CSA-A23.1, CLAUSE 7.4.2.5, EXCEPT THE FOLLOWING MINIMUM REQUIREMENTS MUST ALSO BE MET)

1.

FORECASTED AIR TEMPERATURE AT OR BELOW 5°C

A.

THE AGGREGATE OR MIXING WATER SHALL BE HEATED TO MAINTAIN A MINIMUM CONCRETE TEMPERATURE OF 10°C.

B.

CONCRETE SHALL NOT BE PLACED ON OR AGAINST ANY SURFACE WHICH IS AT A TEMPERATURE LESS THAN 5°C.

C.

CONTRACTOR SHALL BE PREPARED TO COVER SLAB IF UNEXPECTED DROP IN AIR TEMPERATURE SHOULD OCCUR.

D.

CONCRETE TEMPERATURE SHALL BE MAINTAINED ABOVE 10°C FOR AT LEAST 7 DAYS OR UNTIL THE CONCRETE REACHES 70% OF SPECIFIED STRENGTH.

2.

FORECASTED AIR TEMPERATURE BELOW 2°C BUT NOT BELOW -4°C

(NOTE - FOR THESE CONDITIONS STRUCTURAL CONCRETE TOPPINGS ON METAL DECK SHALL SATISFY THE REQUIREMENTS OF 3).

A.

FORMS AND STEEL SHALL BE FREE FROM ICE AND SNOW.

B.

THE AGGREGATE OR MIXING WATER SHALL BE HEATED TO GIVE A MINIMUM CONCRETE TEMPERATURE OF 10°C AT POINT OF POUR.

C.

CONCRETE SHALL NOT BE PLACED ON OR AGAINST ANY SURFACE WHICH IS AT A TEMPERATURE OF LESS THAN 5°C.

D.

SLABS SHALL BE COVERED WITH CANVAS OR SIMILAR, KEPT A FEW INCHES CLEAR OF SURFACE.

E.

PROTECTION SHALL BE MAINTAINED FOR AT LEAST THE SPECIFIED CURING PERIOD.

F.

CONCRETE TEMPERATURE SHALL BE MAINTAINED ABOVE 10°C FOR AT LEAST THE SPECIFIED CURING PERIOD.

3.

FORECASTED AIR TEMPERATURE BELOW -4°C

A, B, C, D, AS UNDER POINT 2.

E.

WORK AREA SHALL BE ENCLOSED AND ARTIFICIAL HEAT PROVIDED. HEATING TO BE STARTED AT LEAST ONE HOUR AHEAD OF POURING AND MAINTAINED FOR A MINIMUM OF THE SPECIFIED CURING PERIOD.

F.

TEMPERATURE OF THE CONCRETE AT ALL SURFACES SHALL BE KEPT AT A MINIMUM OF 20°C FOR 3 DAYS, OR 10°C FOR 7 DAYS. CONCRETE SHALL BE KEPT ABOVE FREEZING TEMPERATURES UNTIL IT REACHES 70% OF ITS SPECIFIED STRENGTH.

G.

ENCLOSURE MUST BE CONSTRUCTED SO THAT AIR CAN CIRCULATE OUTSIDE THE OUTER EDGES AND MEMBERS.

H.

REINFORCING TO BE COVERED AND WARMED TO MAINTAIN ITS TEMPERATURE AT 0°C OR HIGHER AT THE TIME OF CONCRETE PLACEMENT.

SECTION 1

SCALE: 1/2" = 1'-0"

53

SECTION 2

SCALE: 1/2" = 1'-0"

53

STRIP FOOTING SCHEDULE

MARK	SIZE	NOTES
SF1	16" X 8" DP. + 2-15M CONT.	PROVIDE 15M DOWELS TO MATCH VERTICALS TO FOUNDATION WALL ABOVE (SEE SECTIONS)

STEEL COLUMN SCHEDULE

MARK	SIZE	BASEPLATE	ANCHOR BOLTS	BASEPLATE DETAIL
SC1	H55 3"x3"x1/4"	10"x1/2"x6"	2- 3/8" Ø HILTI HY-200 ADHESIVE WITH HILTI HIT-Z ROD (Le=6" MIN.)	

BEARING PLATE SCHEDULE

MARK	SIZE	ANCHORS	BEARING PAD
BPL1	8" X 1/2" X 6"	2- 1/2" Ø HILTI KWIK BOLTS T2 (Le=4" MIN.)	
BPL2	14" X 1/2" X 6"	4- 1/2" Ø HILTI HY-200 (Le=4 1/2" MIN.)	

ISSUED FOR PERMIT & TENDER

APR 16/21

D.K

ISSUED FOR 75% DESIGN REVIEW

APR 06/21

D.K

No.

REVISION

DATE

BY

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PROJECT NORTH

CLIENT: WILCOX ARCHITECTS INC.  
74 LINDSAY ST. S. LINDSAY, ONT.

PROJECT: HOLY CROSS CATHOLIC SECONDARY SCHOOL -NEW RAMP

64 LINDSAY STREET SOUTH, LINDSAY, ONTARIO

DRAWING: GENERAL NOTES, SECTIONS & SCHEDULES

HMR

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D. KOTOBELLI  
PROVINCE OF ONTARIO

DRAWN BY: M.K.

CHECKED BY: D.K.

DATE: APR 16/21

SCALE: AS NOTED

AMR PROJECT No.

21-2138

DWG. No.

S3

OF 3