

**December 9, 2024**

**Addendum No. 04**

**File Reference Number: RFP 2024 062**

**Title: Engineering and Design Study for Exhaust Fan Upgrades and Replacement**

**RE: Clarifications/Questions**

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Please refer to the following information/clarification:

**Item 1:** Part 3 – RFP Specifications – Schedule 3-A-1 – Scope of Work

Please share the structural/architectural details and/or drawings of the building envelope modification.

**Answer:** Please review the attachments provided at the end of this Addendum –

- a) 17944 – 19.09.16 – ONR – Diesel Shop Building Envelope Repair – Issued for Construction (IFC) Drawings
- b) 211725 – 23.05.05 – ONTC Wheel Shop – Architectural Drawings
- c) Cochrane Diesel Shop Envelope

This Addendum hereby forms part of the RFP.

Regards,

Brinda Ranpura  
Procurement Contracts Specialist  
[brinda.ranpura@ontarionorthland.ca](mailto:brinda.ranpura@ontarionorthland.ca)

# ONTARIO NORTHLAND

## DIESEL SHOP – BLDG. ENVELOPE REPAIR

### 916 MCINTYRE STREET EAST, NORTH BAY, ONTARIO

#### DRAWING INDEX

GENERAL		MECHANICAL	
GN0.0	COVER PAGE/GENERAL NOTES	M101	BUILDING ENVELOPE PLAN
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ARCHITECTURAL		ELECTRICAL	
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A8.1	BRICK CORNER REPAIR DETAIL		
A8.2	BLOCKING DETAIL PIPE SUPPORTS		

#### GENERAL NOTES

- OBTAIN ALL PERMITS INCLUDING BUILDING AND OCCUPANCY PERMITS AND ARRANGE ALL INSPECTIONS.
- THE SCOPE OF WORK IS NOT LIMITED TO THIS DRAWING. REFER ALSO TO STORM WATER MANAGEMENT & SITE GRADING PLAN, MECHANICAL AND ELECTRICAL DRAWINGS AND ADDITIONAL SCOPE OF WORK. CONTRACTOR TO REPORT ANY DISCREPANCIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS PRIOR TO STARTING THE WORK.
- CO-ORDINATE ALL WORK, INCLUDING THE WORK OF ALL SUBTRADES AND SUBCONTRACTORS.
- AT THE COMPLETION OF ALL WORK ALL TEMPORARY FACILITIES SHALL BE REMOVED AND THE ENTIRE AREA SHALL BE CLEANED & THOROUGHLY RESTORED TO ORIGINAL CONDITIONS
- CO-ORDINATE INSTALLATION OF EQUIPMENT WITH MANUFACTURERS REQUIREMENTS, INSTRUCTIONS AND THEIR SITE REPRESENTATIVES, WHERE APPLICABLE.
- ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL REGULATIONS.
- SEE ROOM FINISH SCHEDULES FOR ALL FINISHES UNLESS OTHERWISE NOTED. SEE DOOR/FRAME & WINDOW SCHEDULE AND ELEVATIONS FOR ALL DOORS AND WINDOWS.
- ALL PENETRATIONS THROUGH RATED FIRE SEPARATIONS TO BE SEALED WITH A FIRE STOP SYSTEM.
- COORDINATE ALL WORK WITH ONTC SITE REPRESENTATIVE & OBEY ALL ONTC SITE SAFETY REGULATIONS & PROCEDURES.
- CONTRACTOR TO PROVIDE PROTECTION OF THE ROOF SYSTEM(S) IN ACCORDANCE AND AS APPROVED BY GARLAND. ALL ASSOCIATED COSTS FOR PRE AND POST INSPECTIONS AT EACH PHASE OF CONSTRUCTION, WARRANTY CERTIFICATION AND REPORTING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS IS APPLICABLE TO ANY AREAS OF ROOF TOP STAGING AND/OR WORK AREAS ON THE ROOF(S). CONTRACTOR TO PROVIDE PROTECTION PROCEDURE/PLAN ENDORSED BY GARLAND FOR CLIENT REPRESENTATIVE'S REVIEW AND APPROVAL.
- CONTRACTOR TO REVIEW DESIGNATED SUBSTANCES SURVEY PROVIDED IN THE ONTC CONTRACT DOCUMENTS (DSS). THERE ARE ITEMS LISTED IN THE DSS DOCUMENT THAT ARE AFFECTED BY THE REQUIRED DEMOLITION/CONSTRUCTION. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH ANY/ALL DSS ITEMS AFFECTED.

#### SCOPE OF WORK

GENERAL CONTRACTOR TO PROVIDE FOR ALL MATERIALS, LABOUR, SUPERVISION, EQUIPMENT/TOOLS, & PERMITS TO MAKE ALL WORK COMPLETE

THE FOLLOW IS A GENERAL SCOPE OF WORK AND ACTIVITIES REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR TO REVIEW ON SITE DURING THE PRETENDER & PRE-CONSTRUCTION MEETINGS ALL ITEMS AFFECTING THE WORK AND MAKE APPROPRIATE ALLOWANCES FOR THE COMPLEXITY OF THE PROJECT (INCLUDING BUT NOT LIMITED TO THE FOLLOWING ITEMS);

- SET UP AND CONTROL OF CONSTRUCTION ISLAND(S) AS REQUIRED
- COORDINATION OF STAGING OF WORK WITH ONTC (SEE DRAWING A.01)
- COORDINATE DAILY ACTIVITIES WITH ONTC
- DEMOLITION AND DISPOSAL OF ANY & ALL ITEMS OFFSITE AS REQ'D AND AS SHOWN ON THE DRAWING A1.0 TO A1.4
- EXCAVATED MATERIAL SUCH AS SOIL, GRAVEL, CONCRETE, ETC TO BE DISPOSED OF ON SITE. CONTRACTOR TO ALLOW FOR RELOCATION OF MAT'L TO THE ON-SITE LOCATION
- METAL STUD WALL FRAMING, GAUGE METAL FRAMING, AND ALL ASSOCIATED SHEETING
- SPRAY FOAM INSULATION
- METAL SIDING AND LINER PANEL, INCLUDING FASTENERS, DRIPS, J-STRIP CLOSURES, FLASHING AND ALL ASSOCIATED ITEMS
- NEW WINDOWS AS SHOWN
- PATCH AND REPAIR ROOFING AT PARAPET AS REQUIRED (SEE DETAILS)
- PATCH AND REPAIR ALL ITEMS AFFECTED BY CONSTRUCTION TO ORIGINAL CONDITION AND TO SATISFACTION OF ONTC
- PAINT ALL AREAS INDICATED ON DRAWINGS
- M/E WORK AS OUTLINED ON PIOTROWSKI CONSULTANTS DRAWINGS
- CAULK AND SEAL ALL ITEMS AS REQUIRED & INSTRUCTED BY ENGINEER



**NORTHSHORE ENGINEERING**  
& DRAFTING SERVICES

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NORTH BAY ONTARIO  
PH 705-495-0981  
EMAIL ns@northshore-eng.com

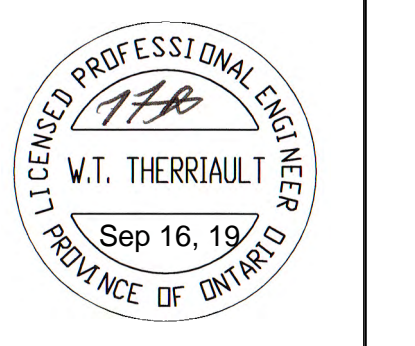
#### ENGINEERING CONSULTANTS

STRUCTURAL: NORTHSHORE ENGINEERING & DRAFTING SERVICES  
184 MCNAUGHTON AVE  
NORTH BAY, ONTARIO, P1C 1G7  
T 705 495 0981, F 705 497 7425  
NS@NORTHSHORE-ENG.COM

MECHANICAL & ELECTRICAL:

PIOTROWSKI CONSULTANTS LTD.  
1820 BOND STREET  
NORTH BAY, ONTARIO, P1B 4V6  
T 705 472 2536. F 705 476 5105  
PCL@ONLINK.NET

revision	description
1.	ISSUED FOR TENDER
2.	RE-ISSUED FOR TENDER - ADDENDUM MAY 24 2019
3.	ISSUED FOR CONSTRUCTION
	SEP 16 19
	MAY 24 19
	MAY 01 19



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project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 McIntyre St. E., North Bay, Ontario  
North Bay, Ontario  
title: COVER PAGE / DRAWING INDEX / NOTES

drawn by: BM	checked by: TIM T
scale: NTS	project no: 17944
date plotted: SEP 16 2019	
date revised: MAY 24 2019	
dwg no: GNO.0	

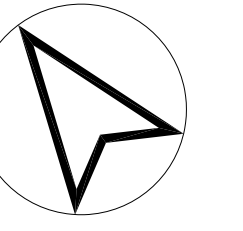




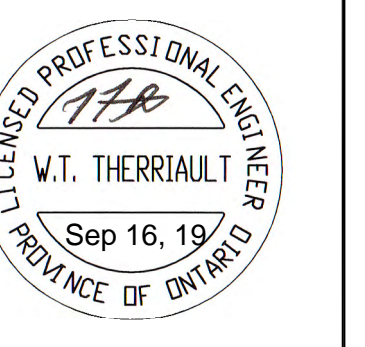
TURNTABLE

SITE PLAN NOTES

1) ERECTION & PLACEMENT OF CONSTRUCTION FENCING TO CREATE CONSTRUCTION ISLANDS ARE TO BE COORDINATED WITH ONTC, TO MINIMIZE IMPACT ON SHOP OPERATIONS.



DATE	REVISION
SEPT 16 19	3. ISSUED FOR CONSTRUCTION
	2. NOT USED
MAY 01 19	1. ISSUED FOR TENDER



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**PROJECT**  
 ONTARIO NORTHLAND  
 REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Mainway St. E., NORTH BAY, ONTARIO

**TYPE**  
 GENERAL SITE PLAN - REFERENCE

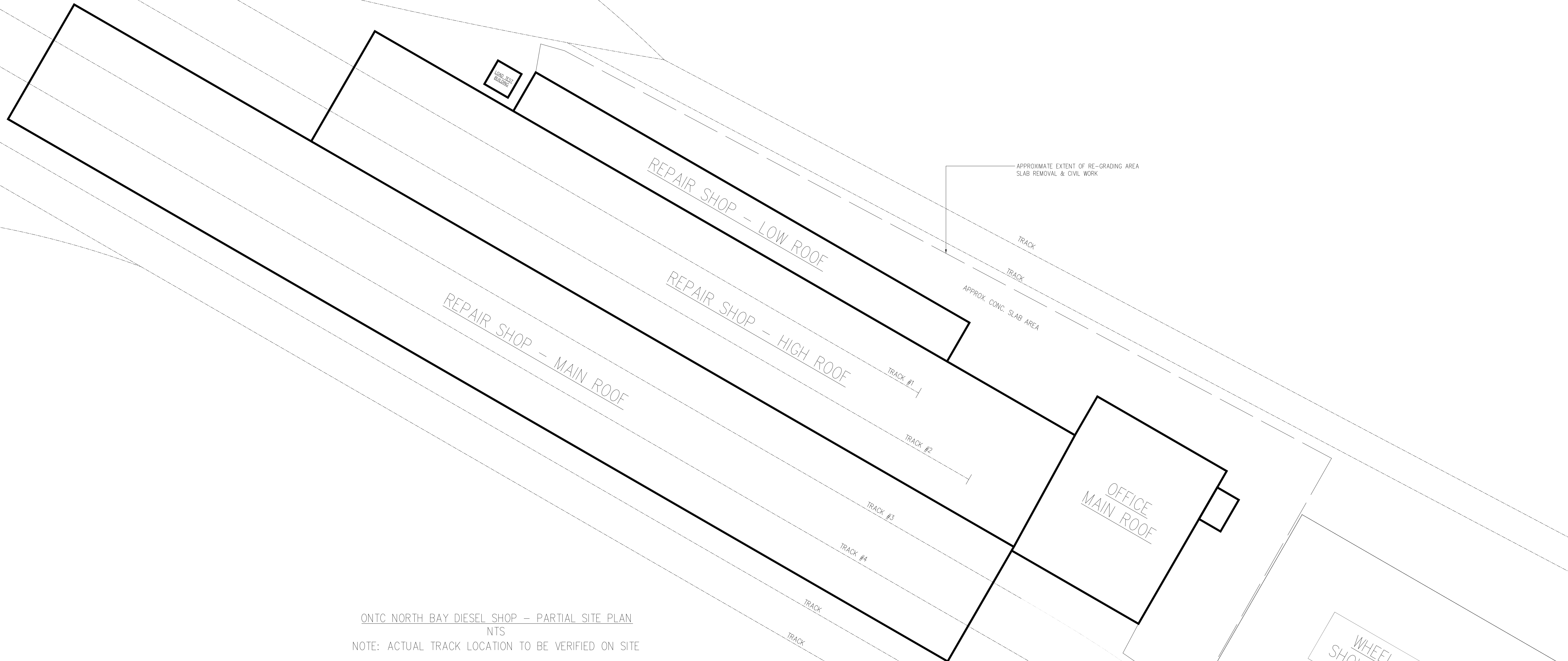
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**scale:** NTS  
**date plotted:** SEPT 16 2019  
**date revised:**

**checked by:** TIM T  
**project no:** 17944

**dwg no:** A0.0

FILE No 17944-0A0.0-Rx

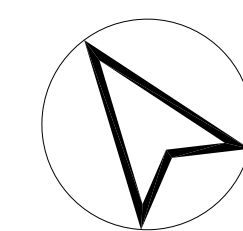
ONTC NORTH BAY DIESEL SHOP - PARTIAL SITE PLAN  
 NTS  
 NOTE: ACTUAL TRACK LOCATION TO BE VERIFIED ON SITE



**CONSTRUCTION STAGING REQUIREMENTS**

**STAGING NOTES:**

- 1) CONTRACTOR TO PROVIDE DETAILED STAGING PLAN TO ONTC FOR APPROVAL PRIOR TO CONSTRUCTION.
- 2) CONTRACTOR TO NOTE, PROJECT WILL BE COMPLETE OVER 4 YEARS BASED ON ONTC YEARLY BUDGET.
- 3) CONTRACTOR TO PROVIDE BREAK-OUT PRICES FOR EACH STAGE AS SHOWN
- 3) STAGING WILL BE NEGOTIATED WITH SUCCESSFUL BIDDER
- 4) STAGING MAY BE ACCELERATED OR ADDITIONAL STAGING MAY BE ADDED BASED ON PRICE AND BUDGET
- 5) EACH STAGE(S) IS TO BE COMPLETE 100% EACH YEAR(S)



DATE	REVISION
SEPT 16 19	3. ISSUED FOR CONSTRUCTION
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MAY 01 19	1. ISSUED FOR TENDER



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**ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR**  
 916 Mainway St. E. NORTH BAY, ONTARIO

**CONSTRUCTION STAGING CLADDING PLAN**

drawn by: BM  
 checked by: TIM T  
 scale: NTS  
 project no: 17944  
 date plotted:  
 date revised: APRIL 26 2019  
 dwg no: A0.1

FILE No 17944-0A0.1-Rx



ONTC NORTH BAY DIESEL SHOP PLAN – STAGING & CLADDING PROFILE TYPE  
 NTS

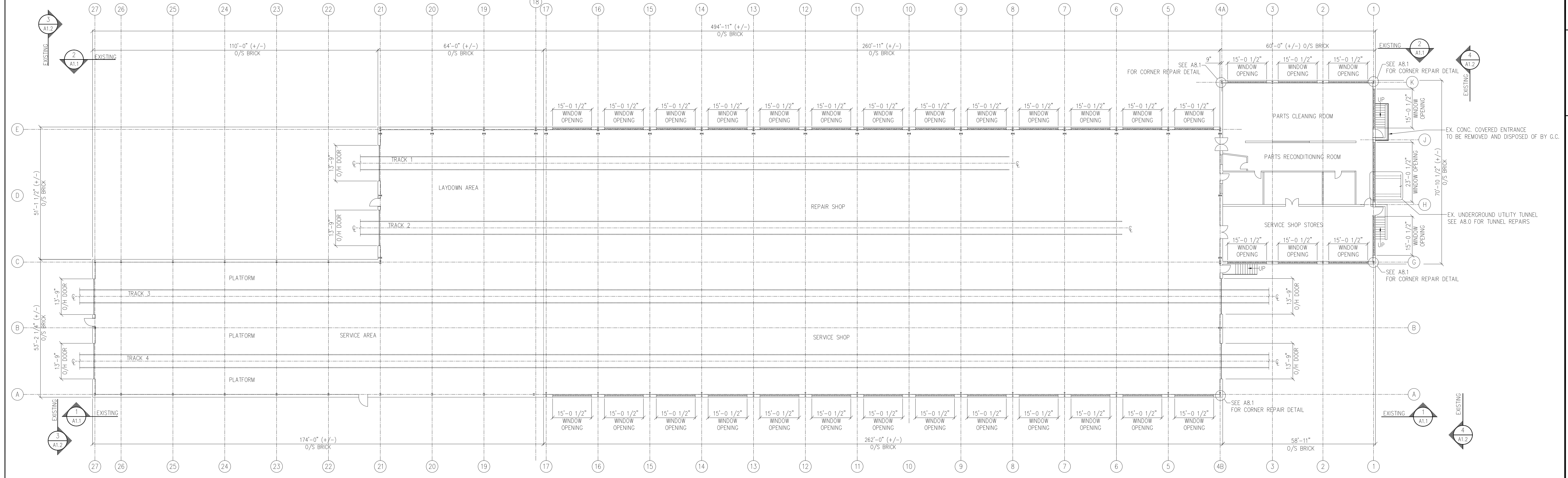
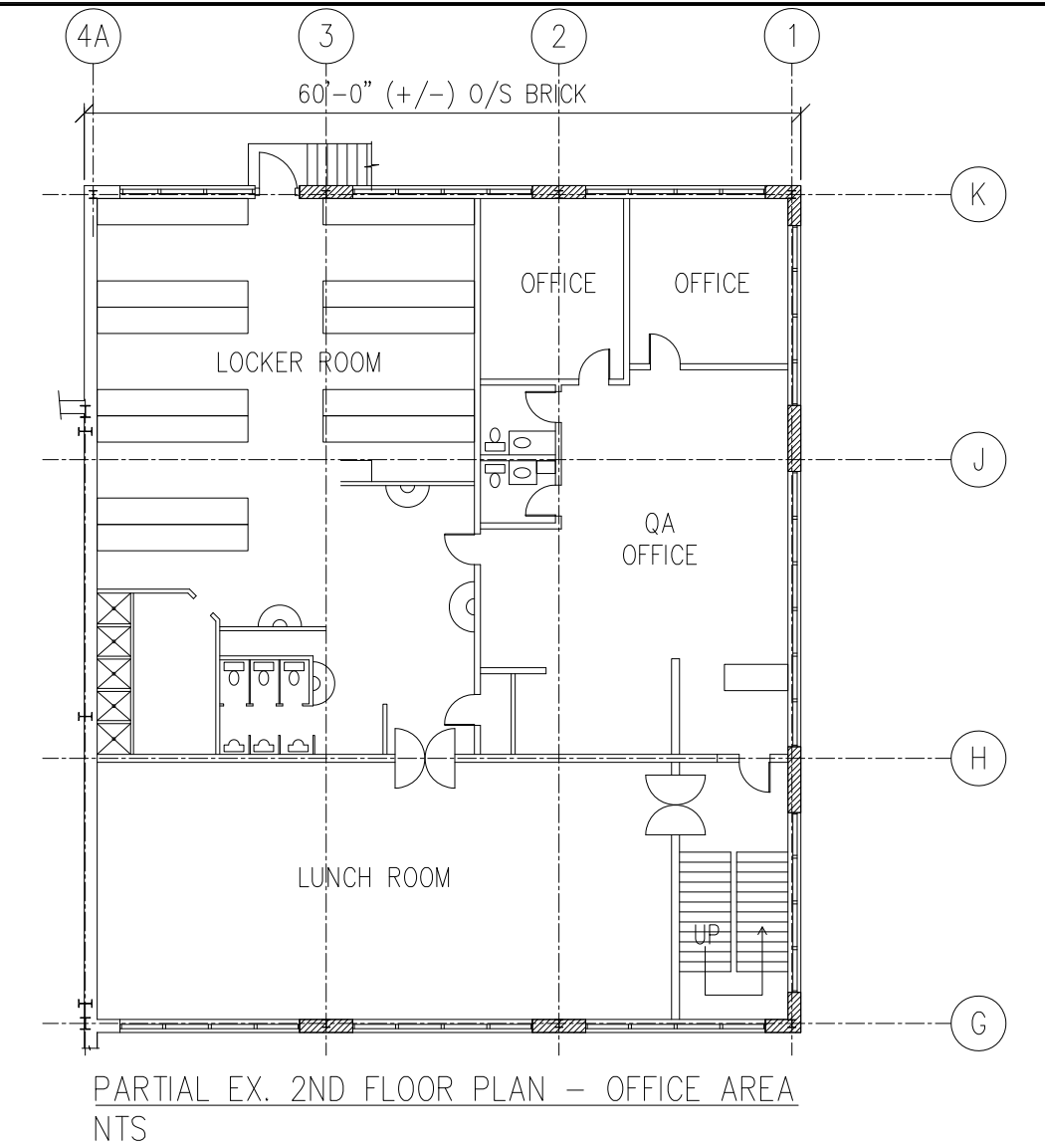
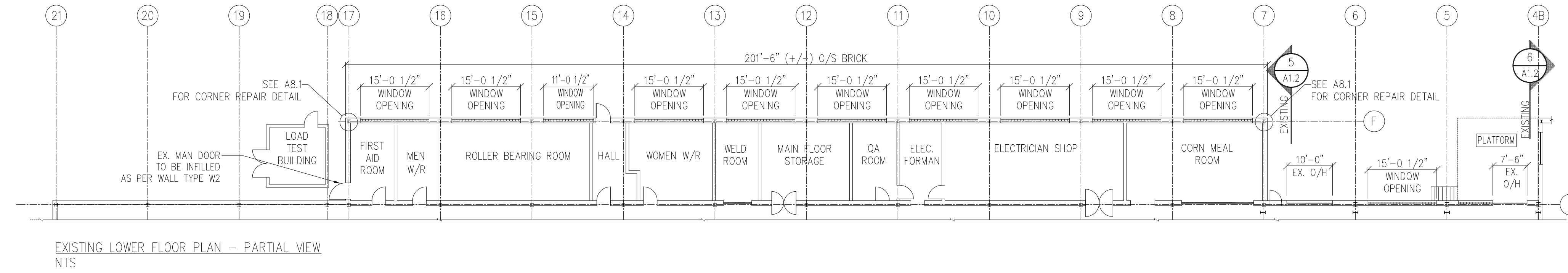
**CLADDING & COLOUR NOTES:**

**METAL WALL PANELS**  
 VERTICAL PREFORMED METAL CLADDING (TYPE 1)  
 1. PRODUCT: 22-GAUGE HF-12 BY AGWAY  
 2. FINISH: WEATHER STEEL AGWAY

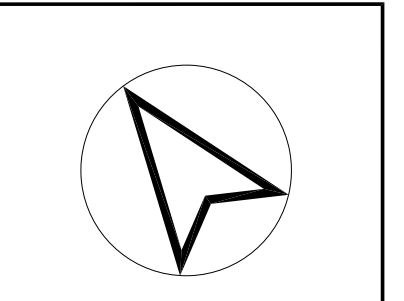
VERTICAL PREFORMED METAL CLADDING (TYPE 2)  
 1. PRODUCT: 24-GAUGE 7/8" CORRUGATED BY AGWAY  
 2. FINISH: COFFEE BROWN (QC 28326) BY AGWAY

INTERIOR METAL CLADDING (TYPE 3)  
 1. PRODUCT: 24-GAUGE 7/8" CORRUGATED BY AGWAY  
 2. FINISH: WHITE (QC 28317) BY AGWAY

**SHEET METAL FLASHINGS AND TRIMS**  
 PREFINISHED SHEET STEEL  
 1. BASE METAL THICKNESS: 22 GAUGE  
 2. FINISH: TYPE 1 & TYPE 2 TRIMS TO BE COFFEE  
 3. FINISH: TYPE 3 TRIMS TO BE COFFEE



EXISTING REFERENCE PLAN  
BUILDING ENVELOPE REPAIRS  
NTS  
NOTES:  
1) ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY  
2) CONTRACTOR TO CONFIRM ALL DIMENSIONS AND SITE CONDITIONS  
3) INTERIOR WALLS AND DETAILS SHOWN FOR REFERENCE ONLY  
(REFERENCE ONTC DRAWING: PROCTOR REDFERN & LAUGHLIN 1A-173)



SEPT 16 19	3. ISSUED FOR CONSTRUCTION
	2. NOT USED
MAX 01 19	1. ISSUED FOR TENDER



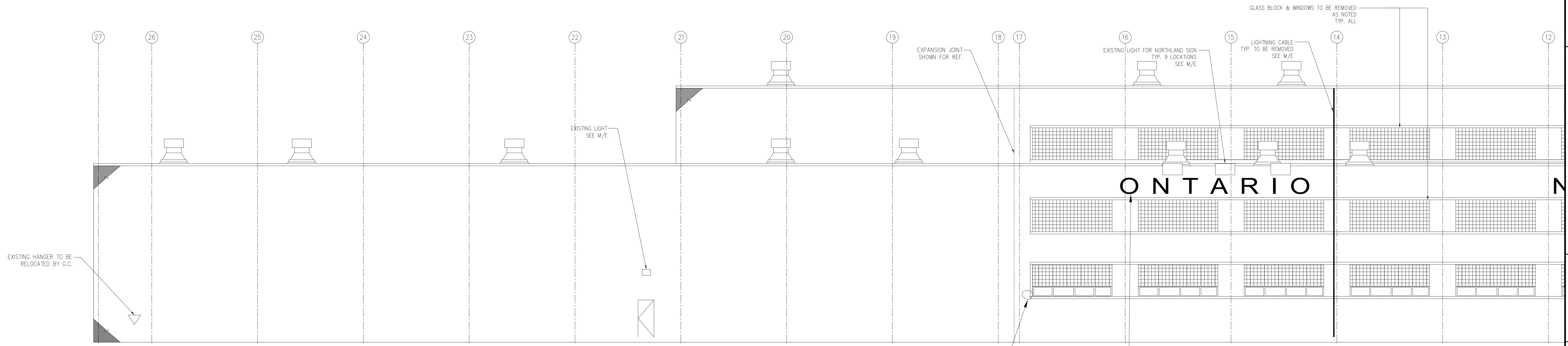
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705-495-0981

PROJECT: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Mainway St E. NORTH BAY, ONTARIO  
DRAWN BY: BM  
SCALE: NTS  
DATE PLOTTED: SEPT 16 2019  
DATE REVISED:

CHECKED BY: TIM T  
PROJECT NO: 17944  
DWG NO:

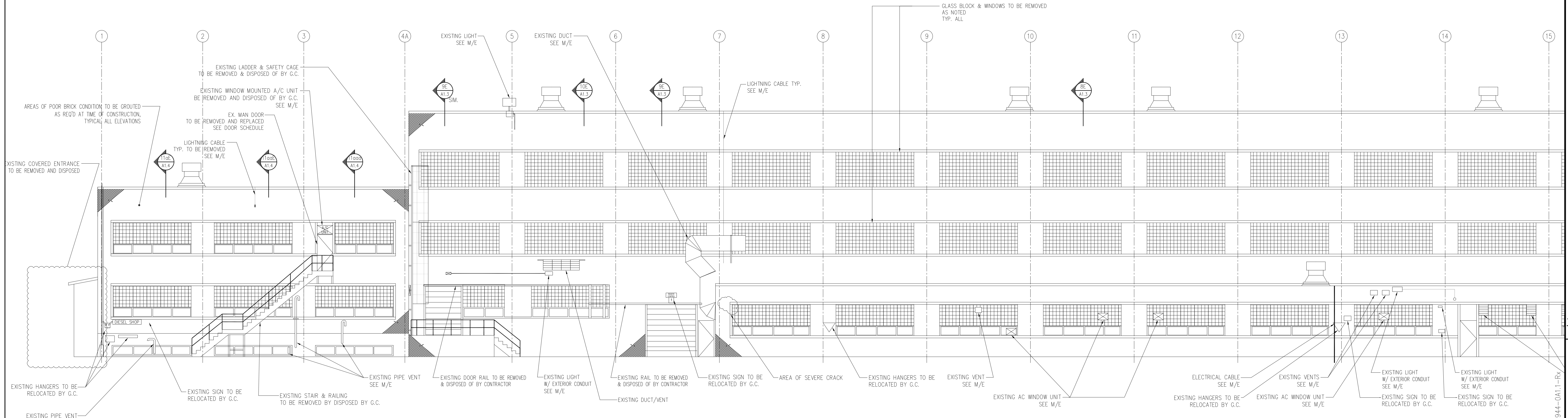
A1.0

FILE No 17944-041.0-Rx



1 SOUTH ELEVATION - EXISTING  
 NTS  
 NOTES:  
 1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

ELEVATION CONT'D  
 SEE DRAWING A1.1b



2 NORTH ELEVATION - EXISTING  
 NTS  
 LOAD TEST BUILDING NOT SHOWN FOR CLARITY

SEPT 16 19	3. ISSUED FOR CONSTRUCTION
MAY 01 19	2. NOT USED
	1. ISSUED FOR TENDER



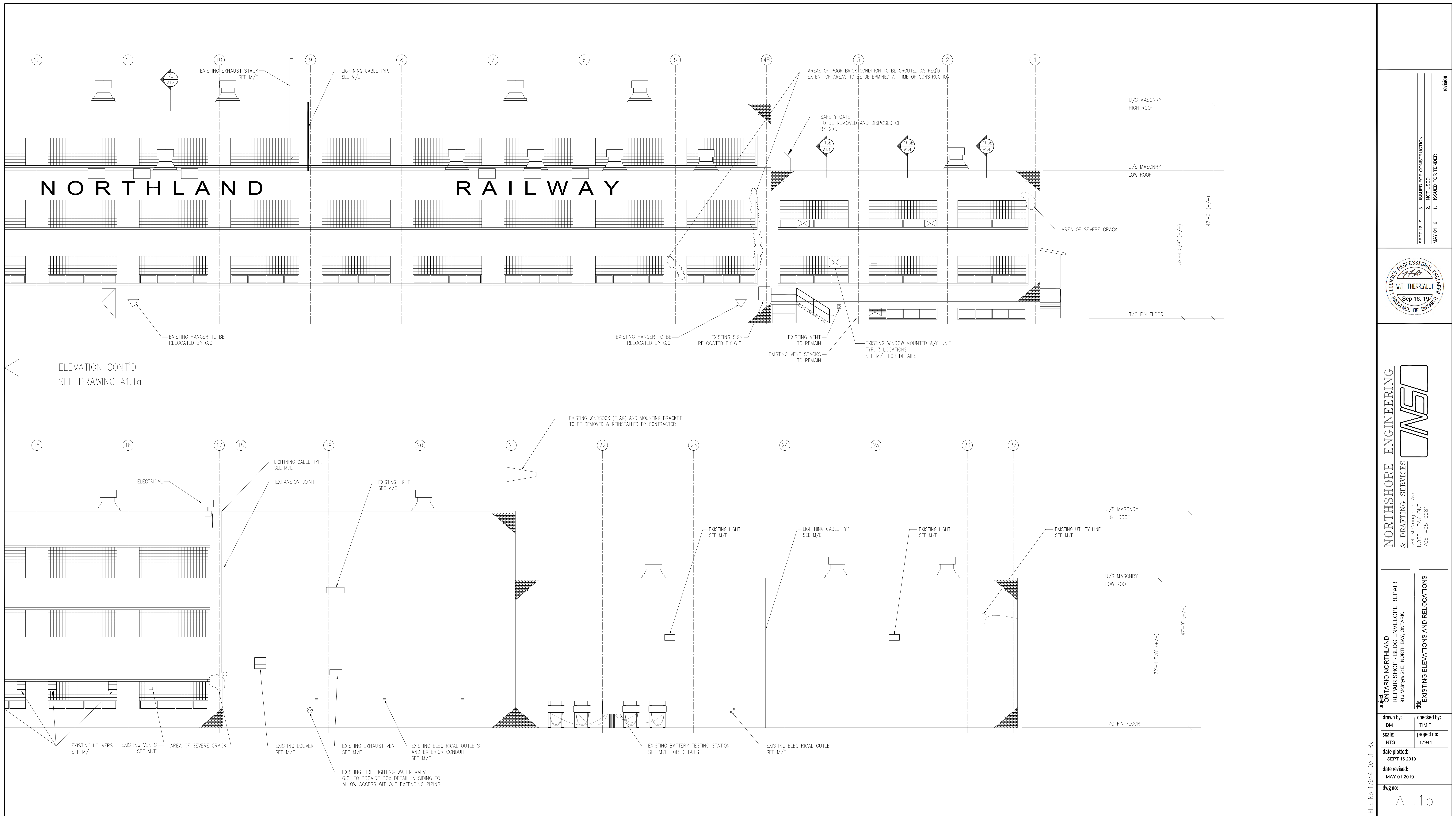
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 NORTH BAY, ONT.  
 705-495-0981

PROJECT: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Mainway St. E., NORTH BAY, ONTARIO

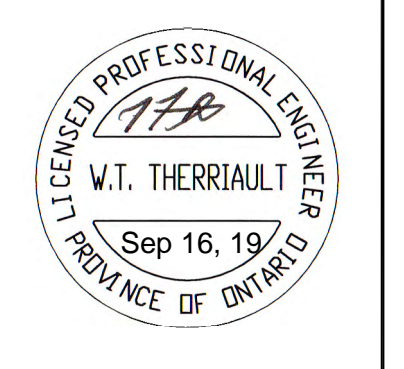
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 checked by: TIM T  
 scale: NTS  
 project no: 17944  
 date plotted: SEPT 16 2019  
 date revised:

FILE No 17944-0A1.1-Rx  
 dwg no: A1.1a





SEPT 16 19	3. ISSUED FOR CONSTRUCTION
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	1. ISSUED FOR TENDER



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**PROJECT:** ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Malhoye St E., NORTH BAY, ONTARIO

**DATE PLOTTED:** SEPT 16 2019

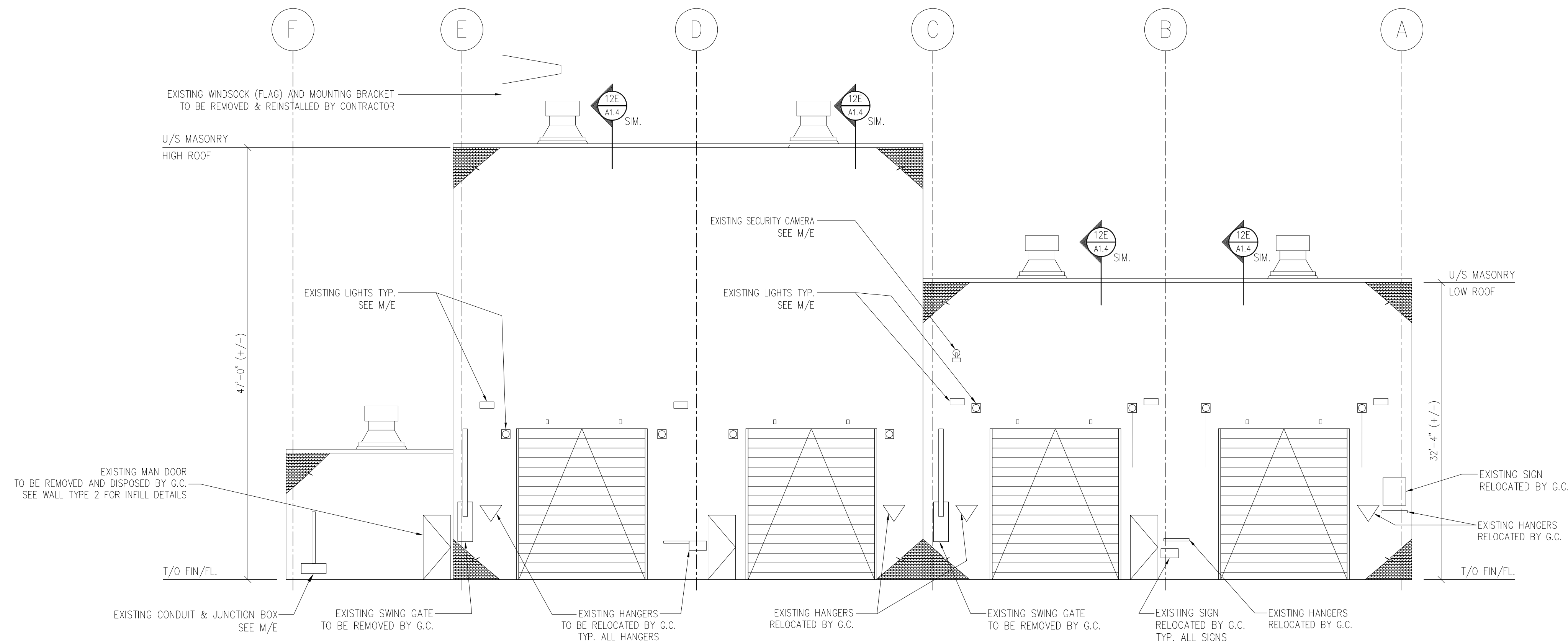
**DATE REVISED:** MAY 01 2019

**DWG NO.:** A1.1b

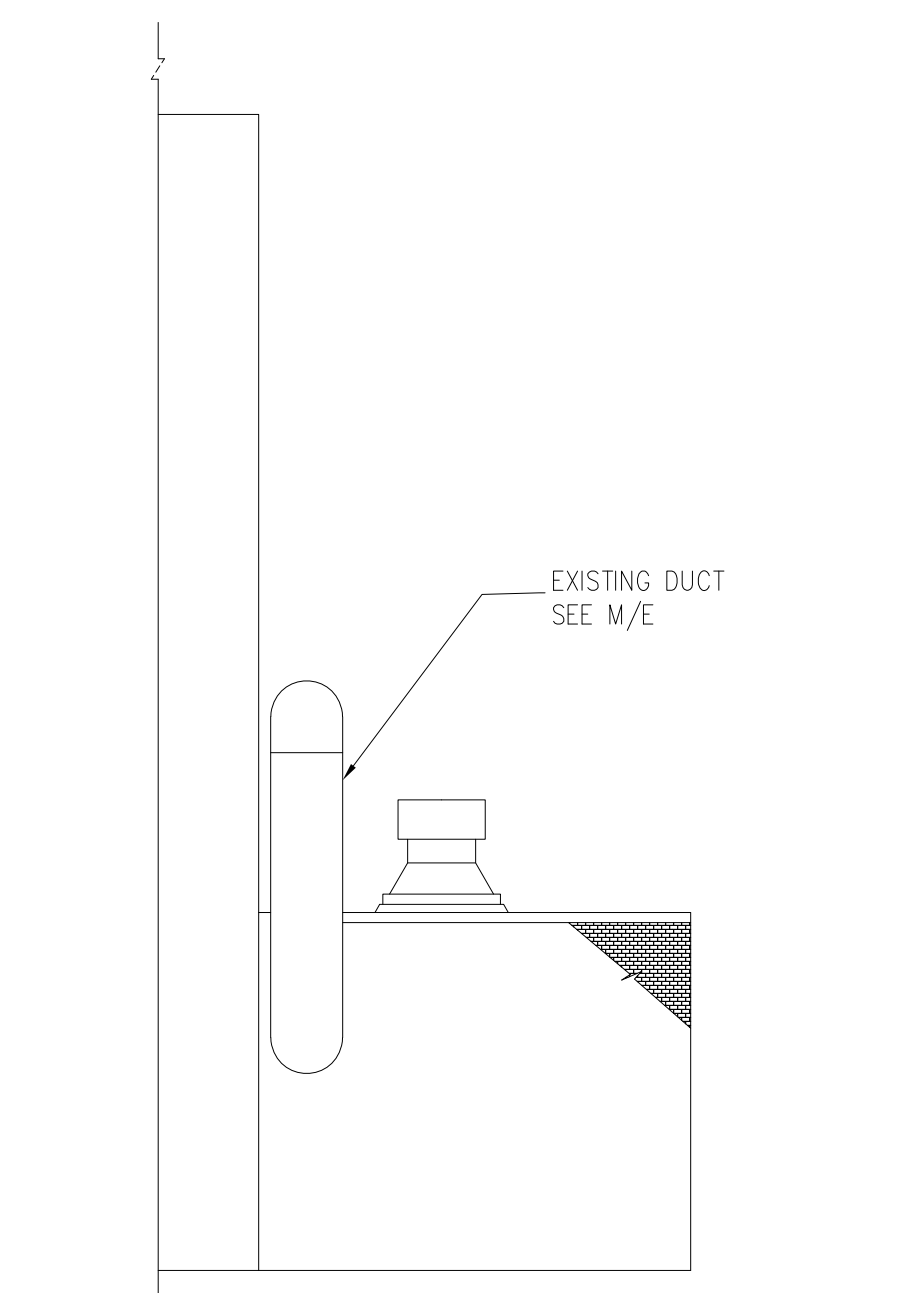
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**checked by:** TIM T

**scale:** NTS  
**project no.:** 17944

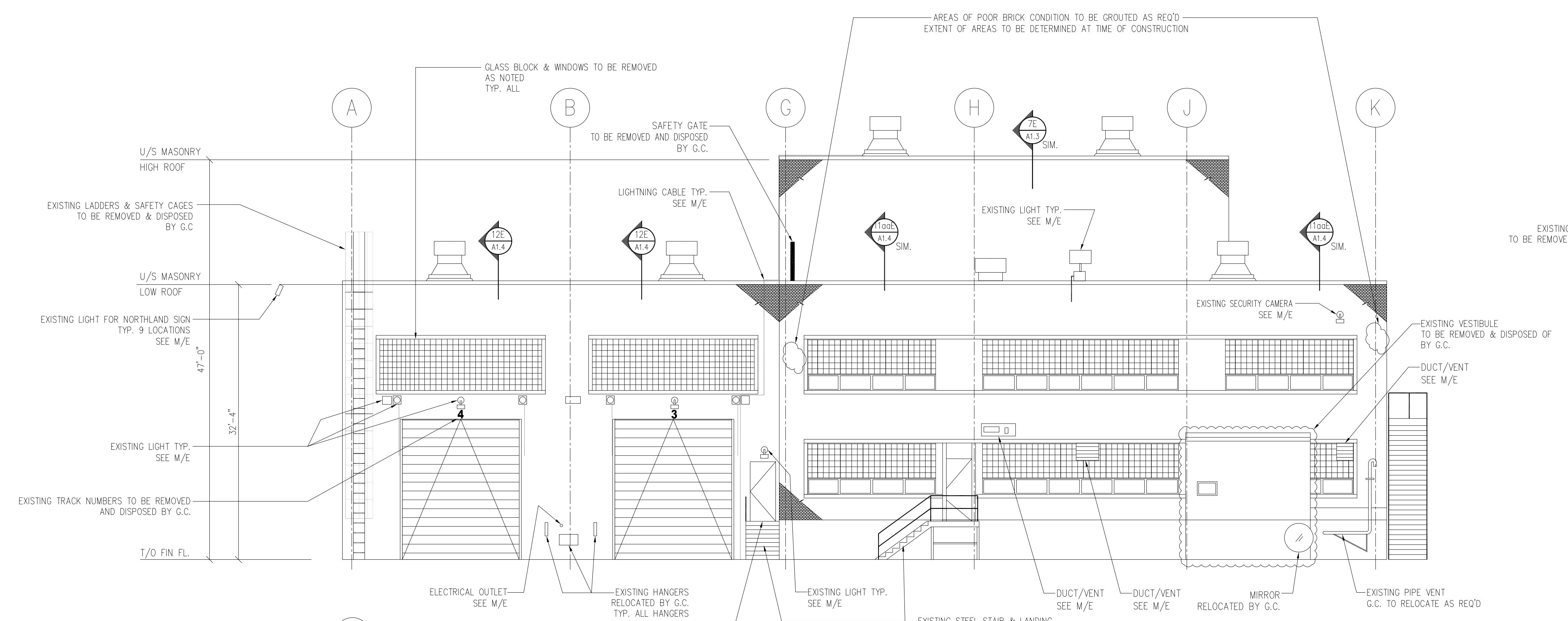
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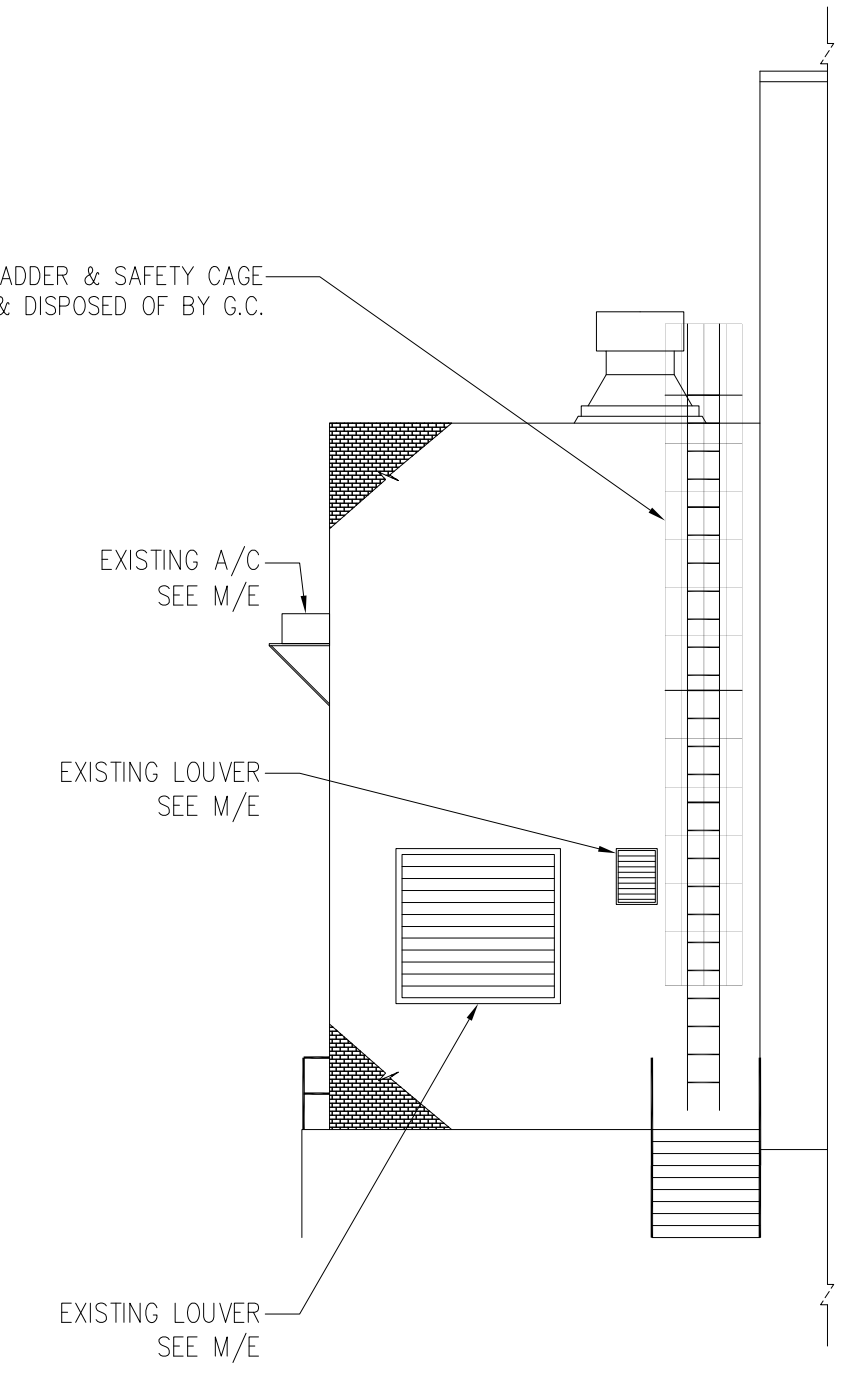
3 WEST ELEVATION - EXISTING  
NTS  
NOTES:  
1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



5 PARTIAL ELEVATION - EXISTING  
NTS

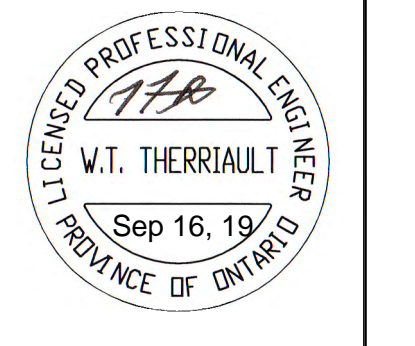


4 EAST ELEVATION - EXISTING  
NTS  
NOTES:  
1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



6 PARTIAL ELEVATION - EXISTING  
NTS

revision	
1.	ISSUED FOR TENDER
2.	NOT USED
3.	ISSUED FOR CONSTRUCTION
SEPT 16 19	
MAY 01 19	

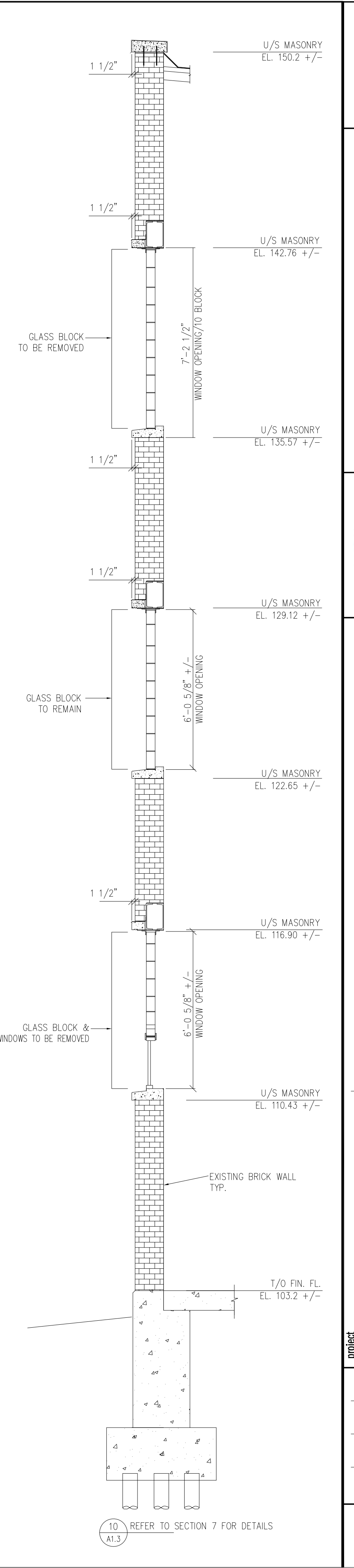
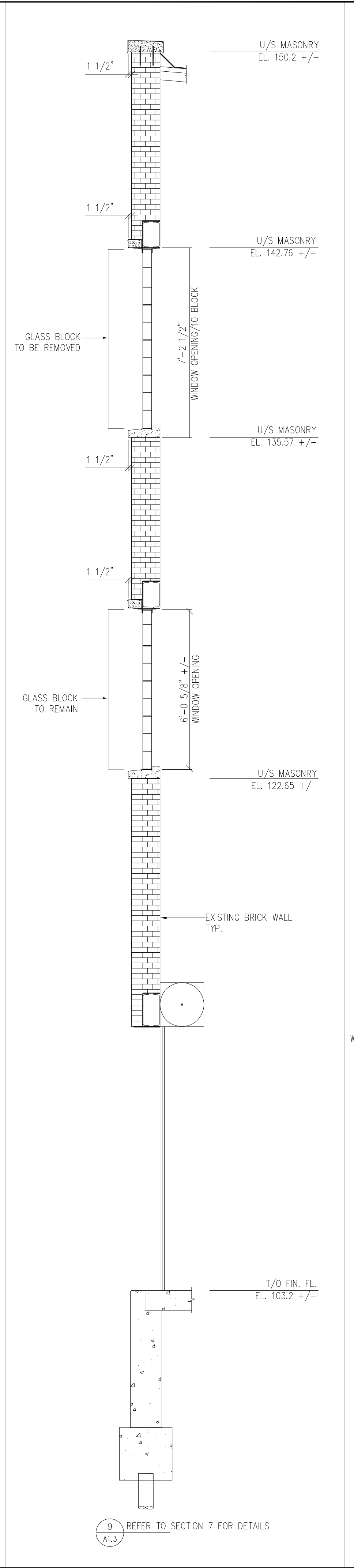
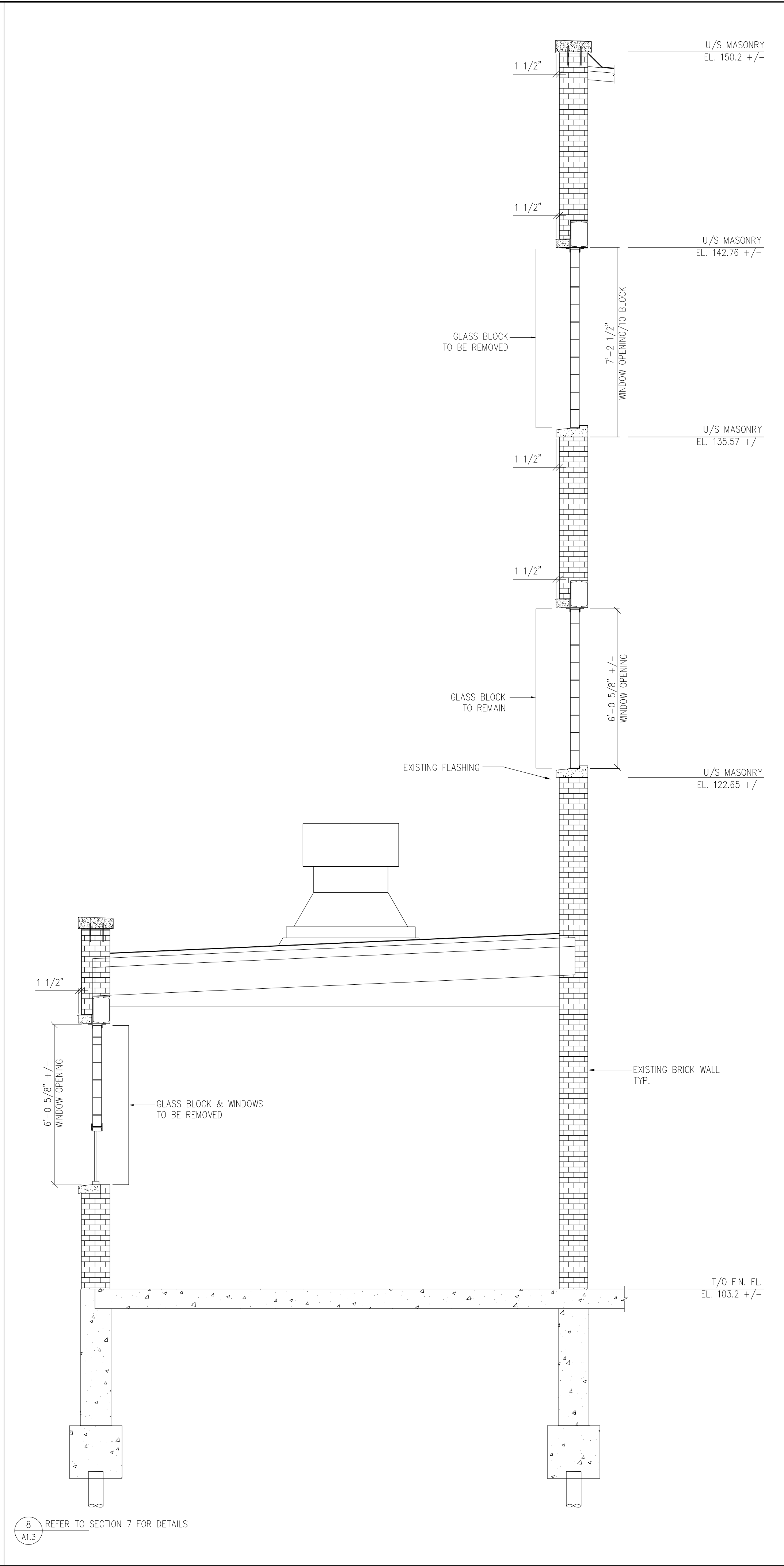
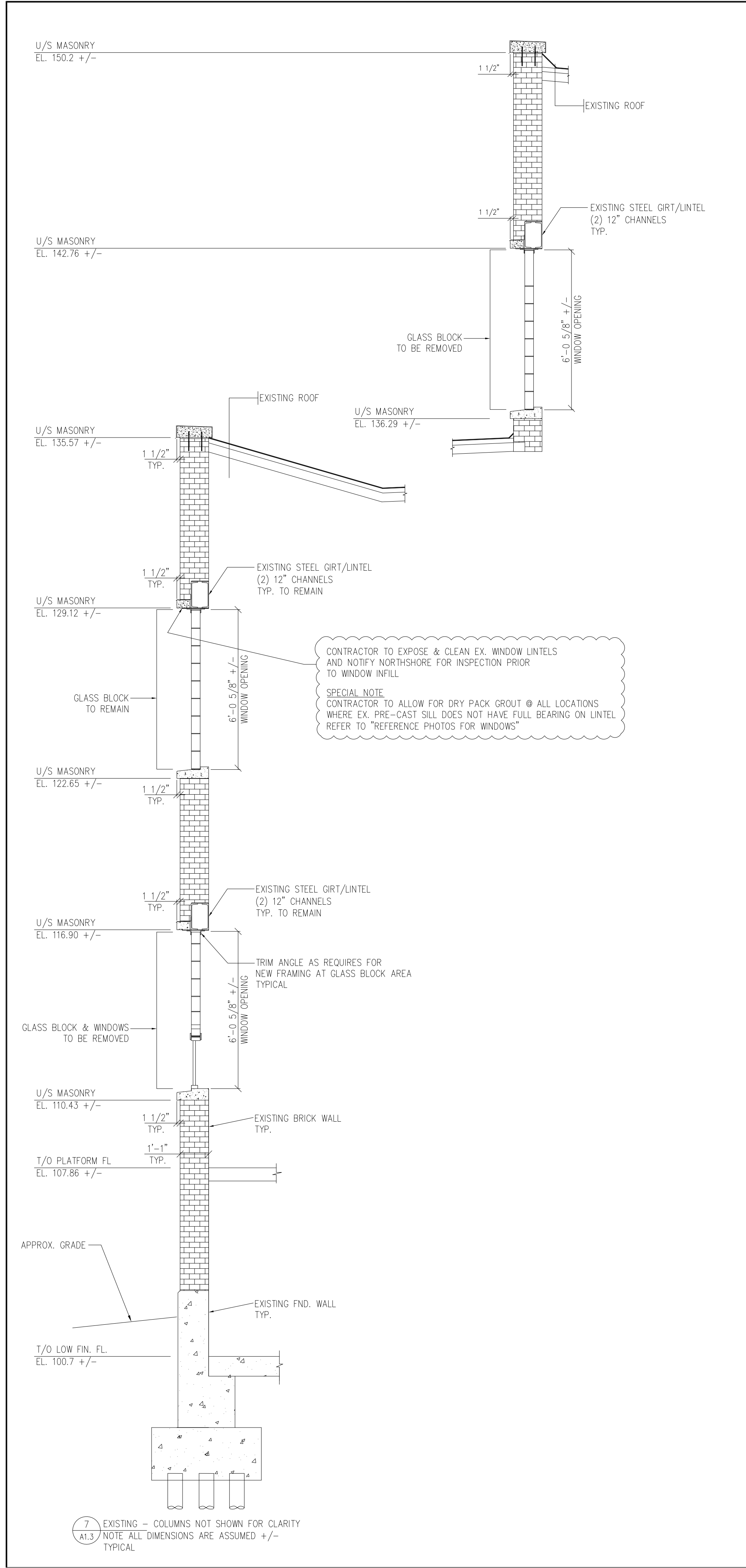


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184 McLaughlin Ave.  
NORTH BAY ONT.  
705-495-0981

project: **ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR**  
916 McInnes St. E., North Bay, Ontario  
North Bay, Ontario

title: **EXISTING ELEVATIONS AND RELOCATIONS**  
drawn by: **BM** checked by: **TIM T**  
scale: **NTS** project no: **17944**  
date plotted: **SEPT 16 2019**  
date revised:

dwg no: **A1.2**



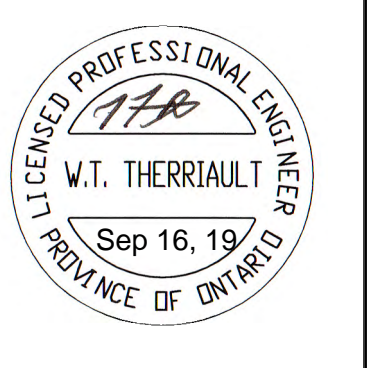
7 EXISTING - COLUMNS NOT SHOWN FOR CLARITY  
 NOTE ALL DIMENSIONS ARE ASSUMED +/-  
 TYPICAL

8 REFER TO SECTION 7 FOR DETAILS  
 A1.3

9 REFER TO SECTION 7 FOR DETAILS  
 A1.3

10 REFER TO SECTION 7 FOR DETAILS  
 A1.3

1.	ISSUED FOR TENDER
2.	NOT USED
3.	ISSUED FOR CONSTRUCTION
SEPT 16 19	
MAY 01 19	

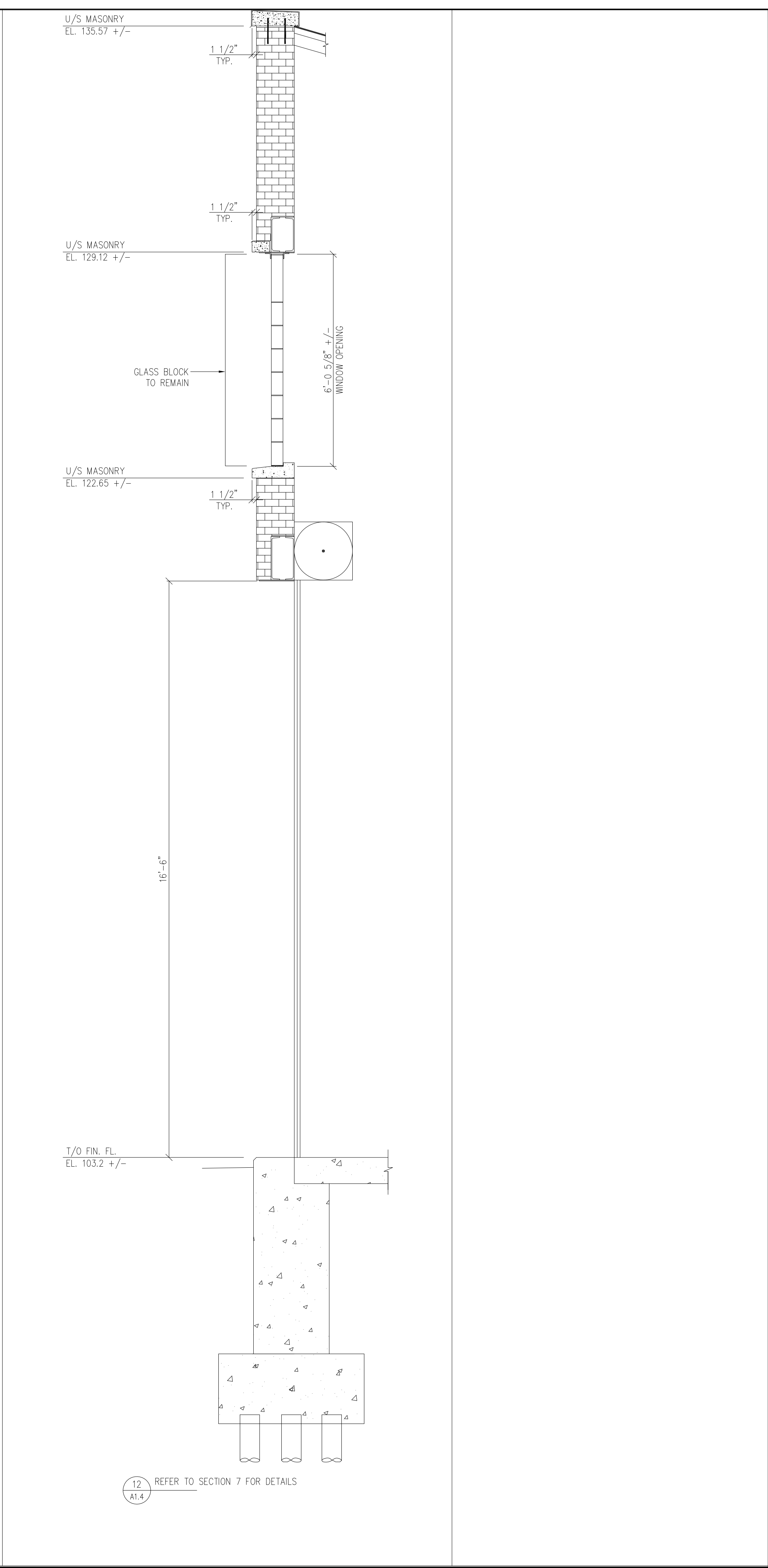
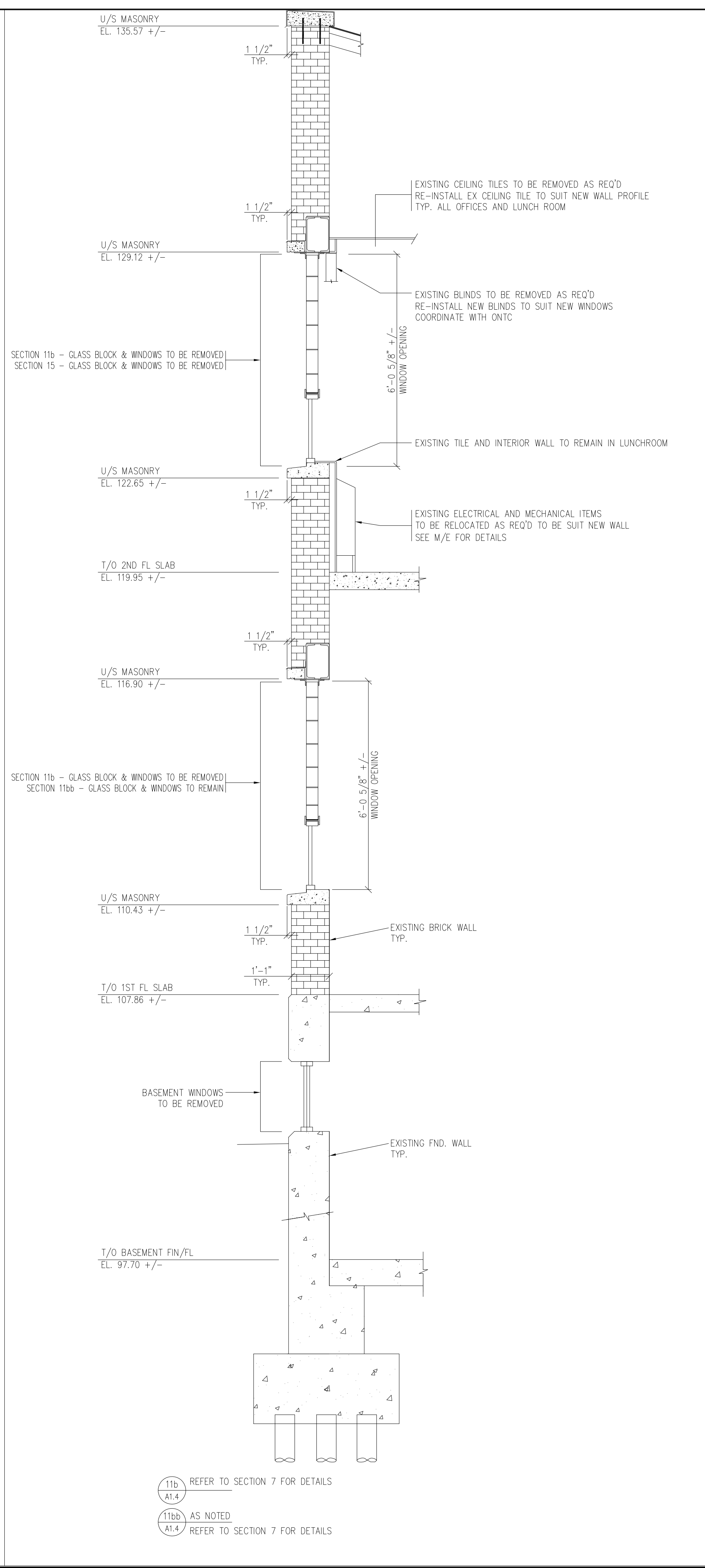
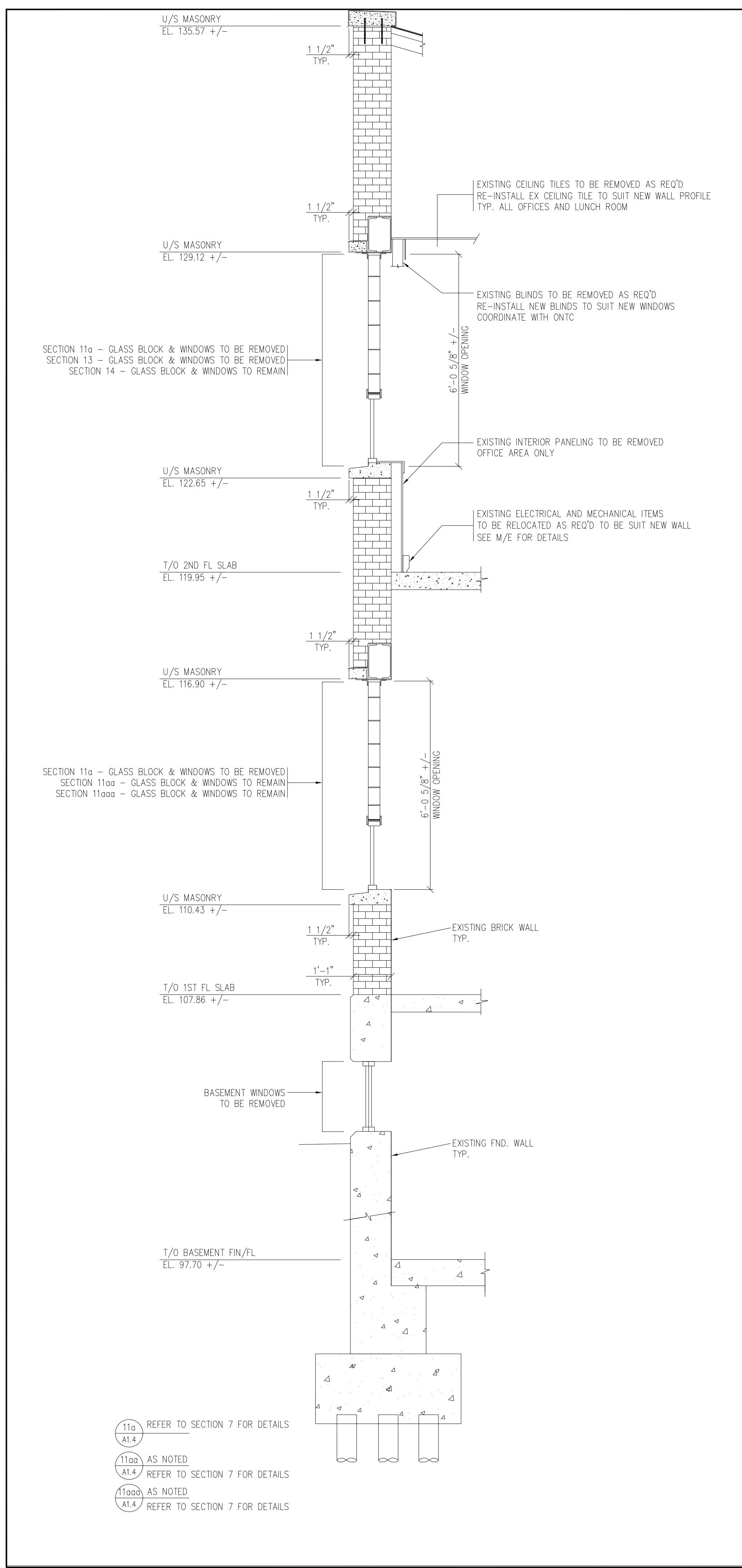


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project: **ONTARIO NORTH-LAND REPAIR SHOP - BLDG ENVELOPE REPAIR**  
 916 Melville St. E., NORTH BAY, ONTARIO  
 title: **EXISTING WALL SECTIONS AND REMOVALS**

drawn by: **BM** checked by: **TIM T**  
 scale: **NTS** project no: **17944**  
 date plotted: **SEPT 16 2019**  
 date revised: **MAY 01 2019**

dwg no: **A1.3**



11a REFER TO SECTION 7 FOR DETAILS  
 A1.4  
 11aa AS NOTED  
 A1.4 REFER TO SECTION 7 FOR DETAILS  
 11aaa AS NOTED  
 A1.4 REFER TO SECTION 7 FOR DETAILS

11b REFER TO SECTION 7 FOR DETAILS  
 A1.4  
 11bb AS NOTED  
 A1.4 REFER TO SECTION 7 FOR DETAILS

12 REFER TO SECTION 7 FOR DETAILS  
 A1.4

revision	
1.	ISSUED FOR TENDER
2.	NOT USED
3.	ISSUED FOR CONSTRUCTION
SEPT 16 19	
MAY 01 19	



**NORTHSHORE ENGINEERING**  
 & DRAFTING SERVICES

184 McNaughton Ave.  
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 705-495-0861

project: ONTARIO NORTH-LAND  
 REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Midway S.E., NORTH BAY, ONTARIO  
 NORTH BAY, ONTARIO

title: EXISTING WALL SECTIONS AND REMOVALS

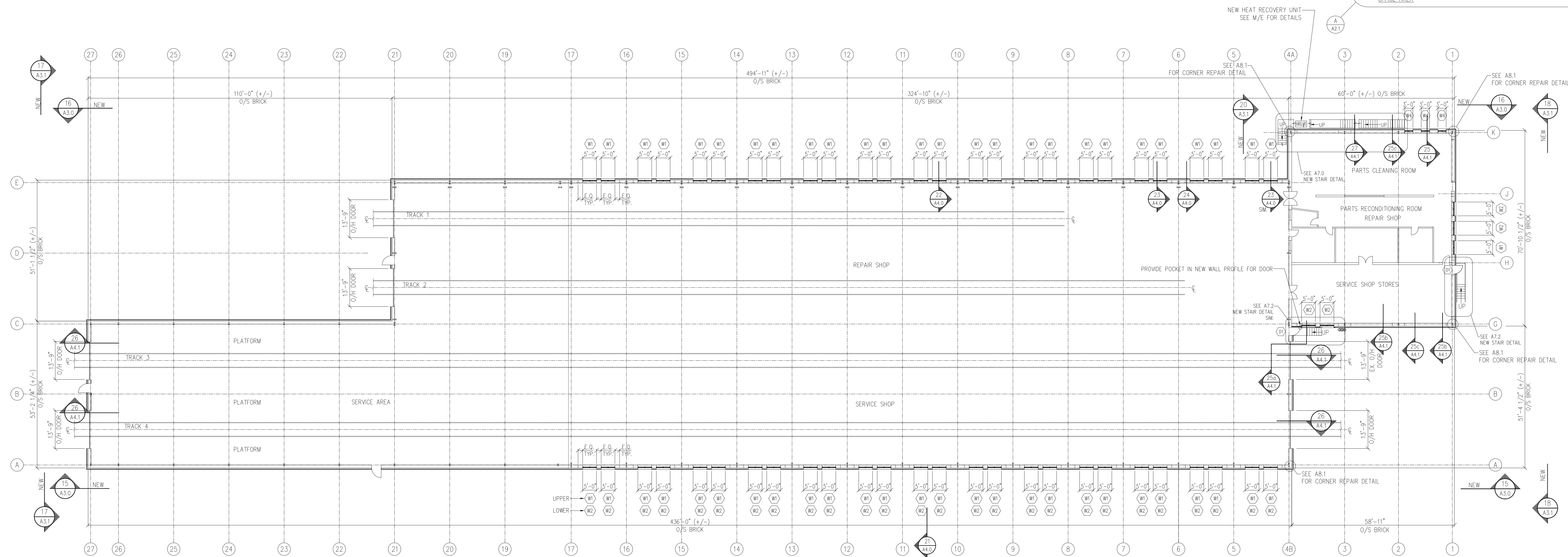
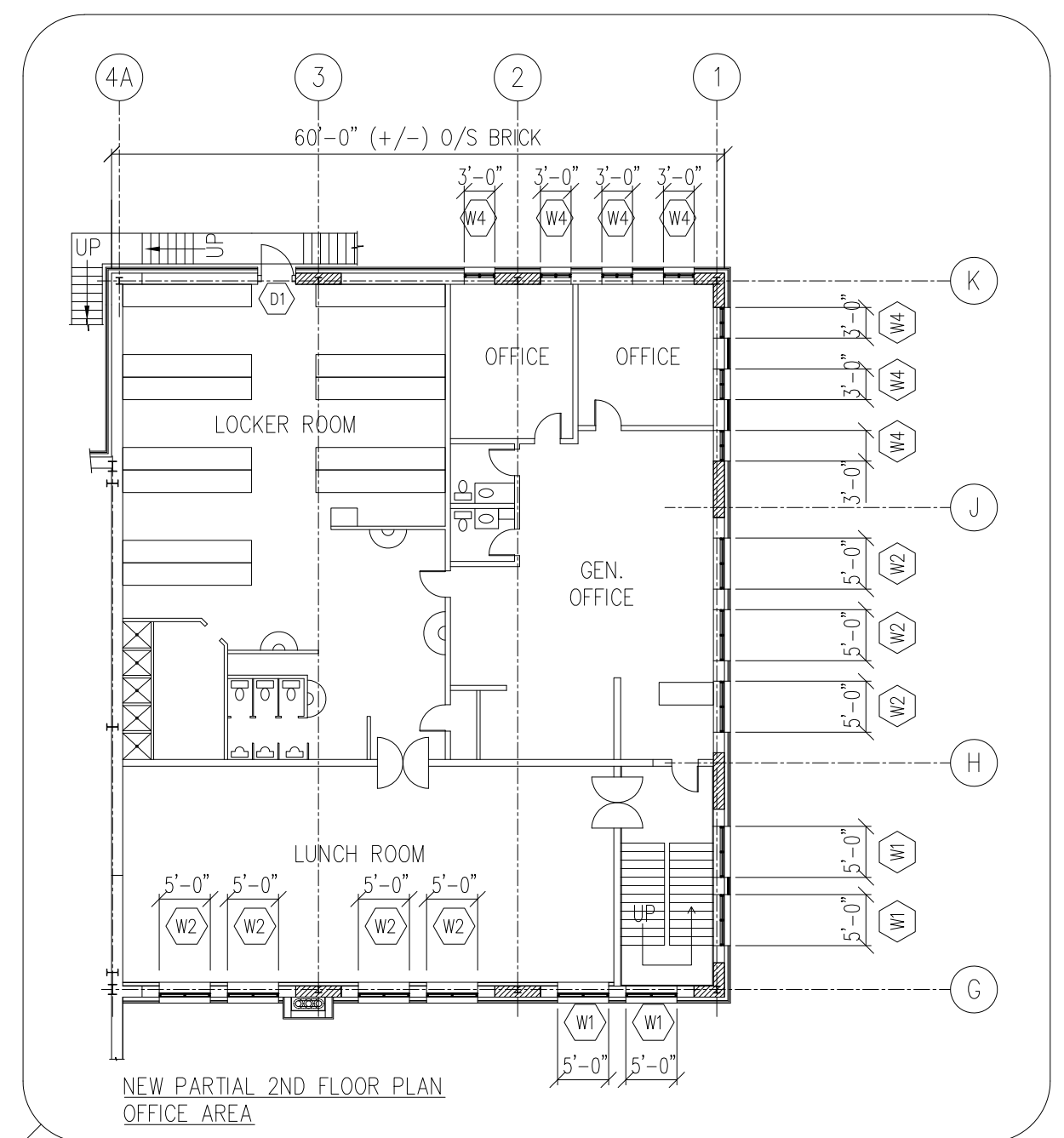
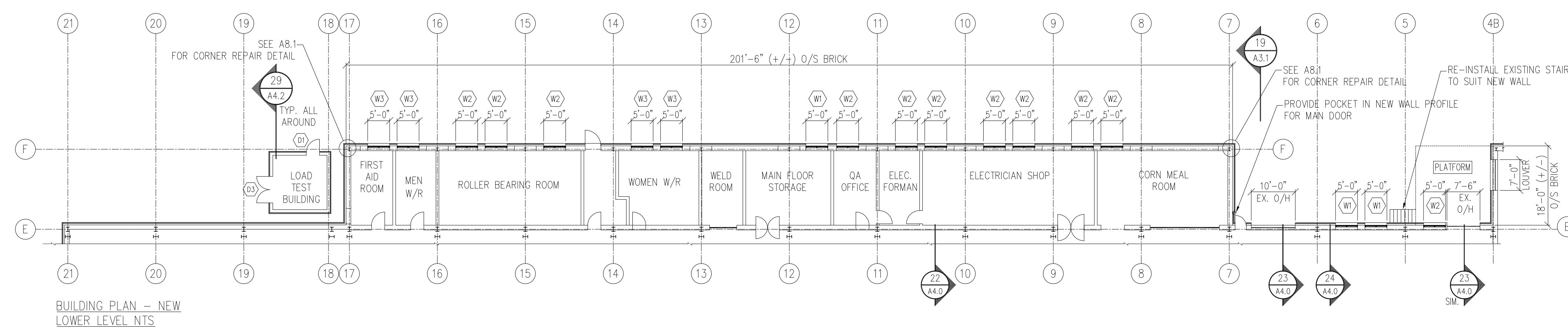
drawn by: BM  
 checked by: TIM T

scale: NTS  
 project no: 17944

date plotted: SEPT 16 2019  
 date revised:

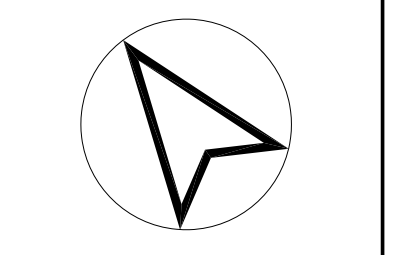
dwg no: A1.4

SEE ELEVATIONS FOR NEW WINDOWS NOT SHOWN ON PLAN



**BUILDING PLAN - NEW**  
**BUILDING ENVELOPE REPAIRS**  
 NTS

**NOTES:**  
 1) ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.  
 2) CONTRACTOR TO CONFIRM ALL DIMENSIONS AND SITE CONDITIONS.  
 3) INTERIOR WALLS AND DETAILS SHOWN FOR REFERENCE ONLY.  
 4) SEE ELEVATIONS FOR ADDITIONAL INFORMATION AND ITEMS NOT SHOWN ON PLAN.



SEPT 16 19	3. ISSUED FOR CONSTRUCTION
MAY 01 19	2. NOT USED
	1. ISSUED FOR TENDER



**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 Mainway Pl. North Bay, Ont. L4N 6Y1  
 705-495-0981

**PROJECT:**  
 ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Mainway St. E. North Bay, Ontario

**DWG:**  
 NEW FLOOR PLAN

**drawn by:** BM  
**checked by:** TIM T

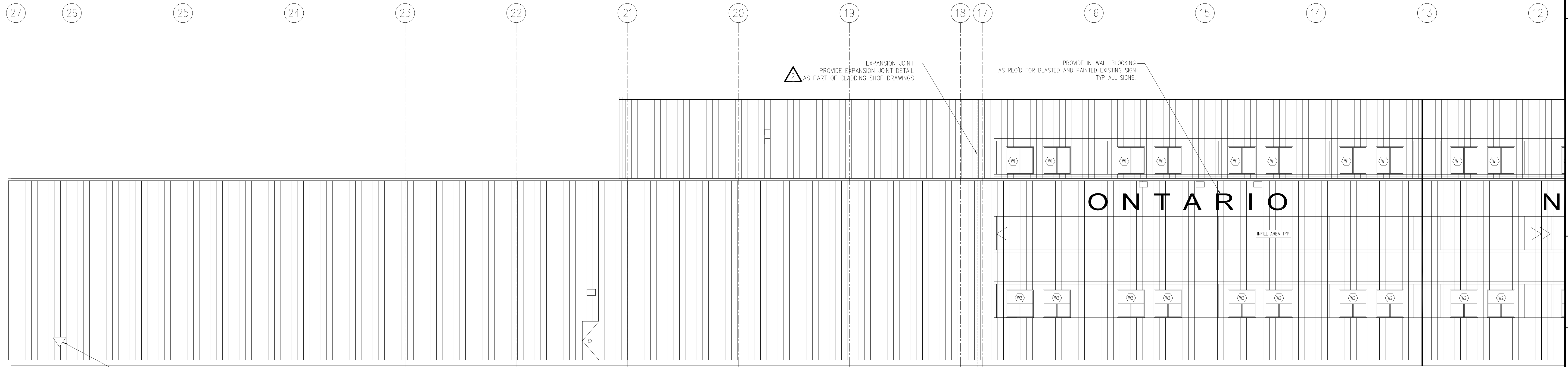
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**project no:** 17944

**date plotted:** SEPT 16 2019  
**date revised:** MAY 01 2019

**dwg no:**

FILE No 17944-0A2-0-Rx

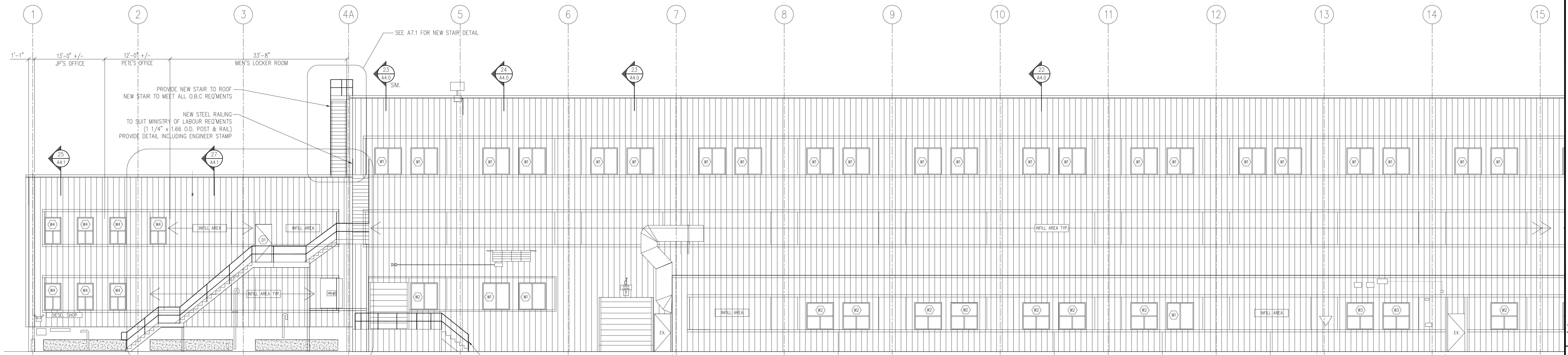
A2.0



15 SOUTH ELEVATION - NEW  
A3.0 NTS

PROVIDE IN-WALL BLOCKING AS REQ'D FOR EXISTING HANGERS TYP ALL HANGERS

ELEVATION CONT'D  
SEE DRAWING A3.0b



16 NORTH ELEVATION - NEW  
A3.0 NTS

- NOTES:  
1) SEE PLAN & SECTIONS ADDITIONAL DETAILS  
2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

CONTRACTOR TO SITE CONFIRM ALL DIMENSIONS AND FIELD LOCATE WINDOWS TO SUIT SITE CONDITIONS

revision  
1. ISSUED FOR TENDER  
MAY 01 19  
2. REISSUED FOR TENDER - ADDENDUM MAY 24 2019  
MAY 24 19  
3. ISSUED FOR CONSTRUCTION  
SEPT 16 19

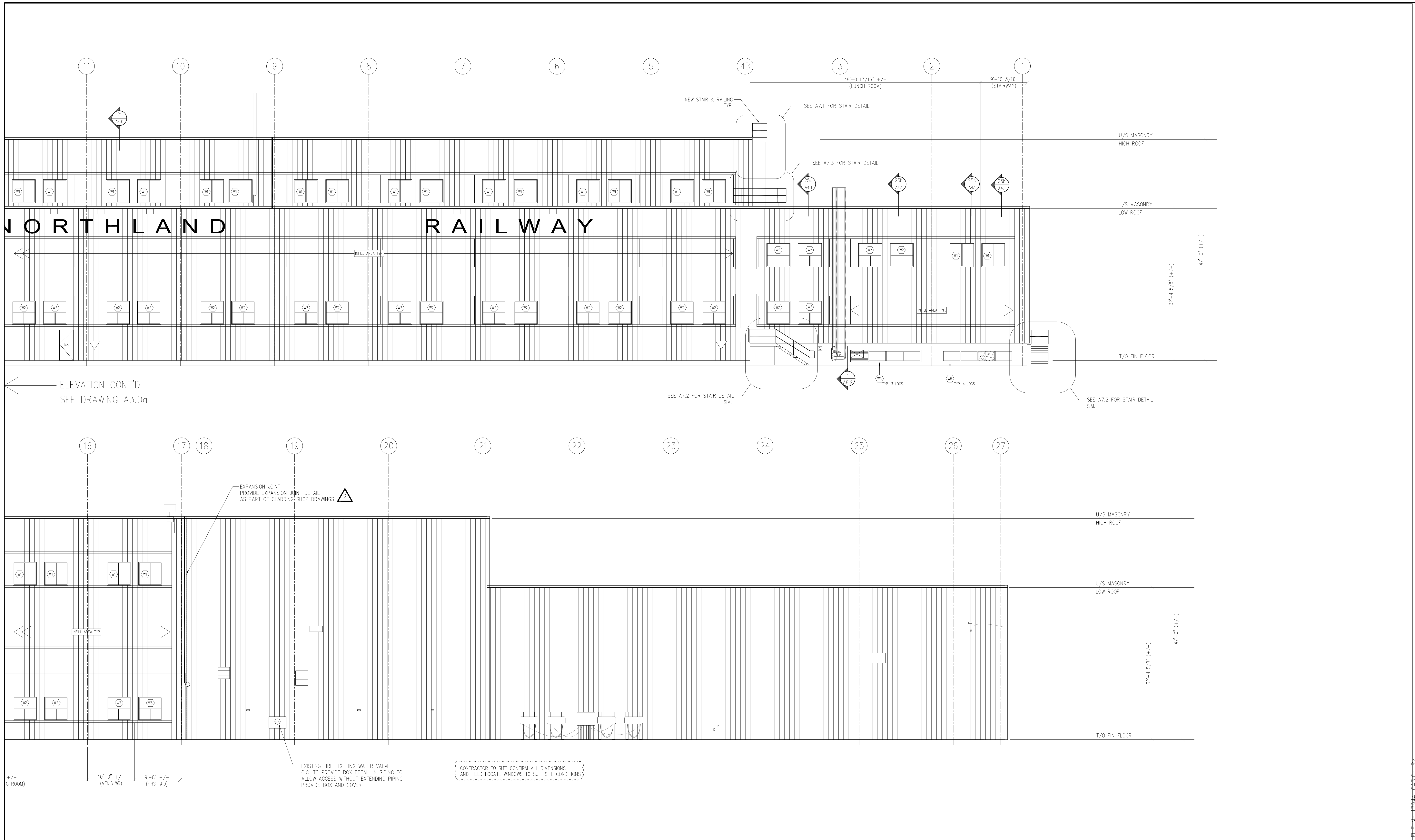


**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
184 Mainway  
North Bay, Ont.  
705-495-0981

PROJECT: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Mainway St. E. North Bay, Ontario

drawn by: BM  
scale: NTS  
checked by: TIM T  
project no: 17944  
date plotted: SEPT 16 2019  
date revised: MAY 24 2019

dwg no: A3.0a



FILE No T7914-0A3.0b-Rx

ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Malhyre St E, NORTH BAY, ONTARIO

PROJECT  
NEW EXTERIOR ELEVATIONS

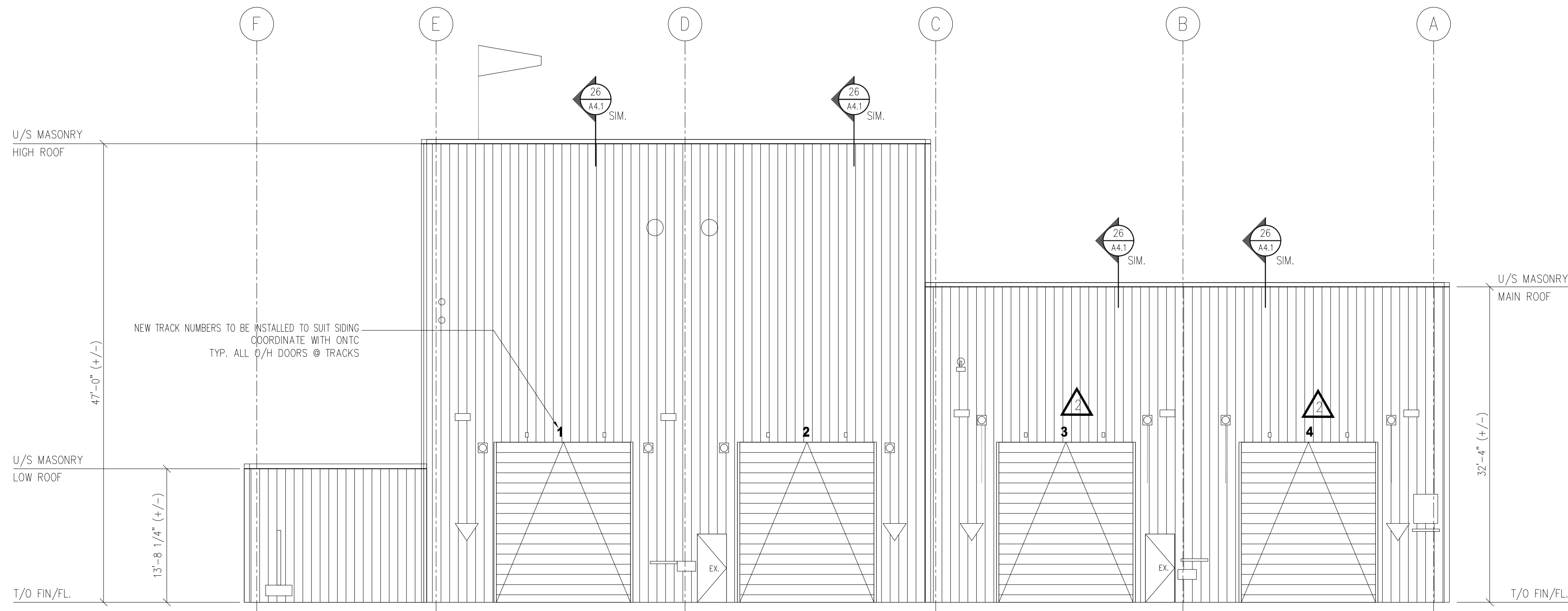
drawn by: BM  
scale: NTS  
date plotted: SEPT 16 2019  
date revised: MAY 24 2019  
checked by: TIM T  
project no: 17944  
dwg no:

NORTHSHORE ENGINEERING & DRAFTING SERVICES  
184 Mainway Ave.  
NORTH BAY, ONT.  
705-495-0981

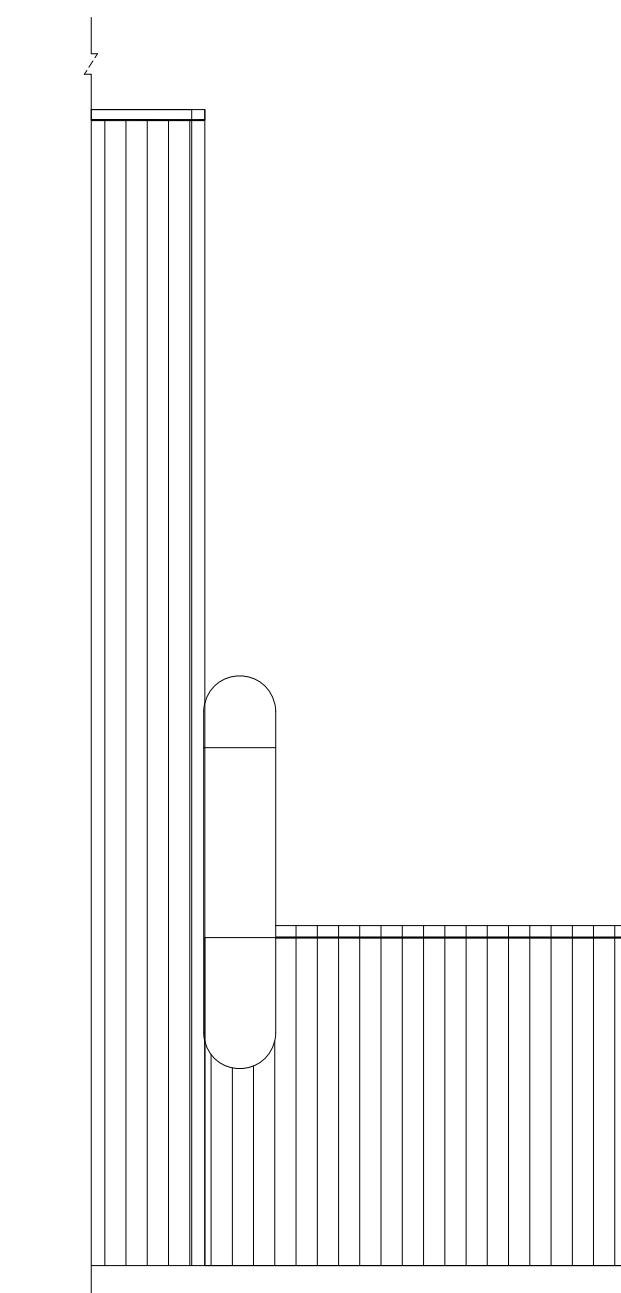
LI LICENSED PROFESSIONAL ENGINEER  
V.T. THERRIAULT  
Sep 16, 19  
PROVINCE OF ONTARIO

3. ISSUED FOR CONSTRUCTION  
2. REISSUED FOR TENDER - ADDENDUM MAY 24 2019  
1. ISSUED FOR TENDER

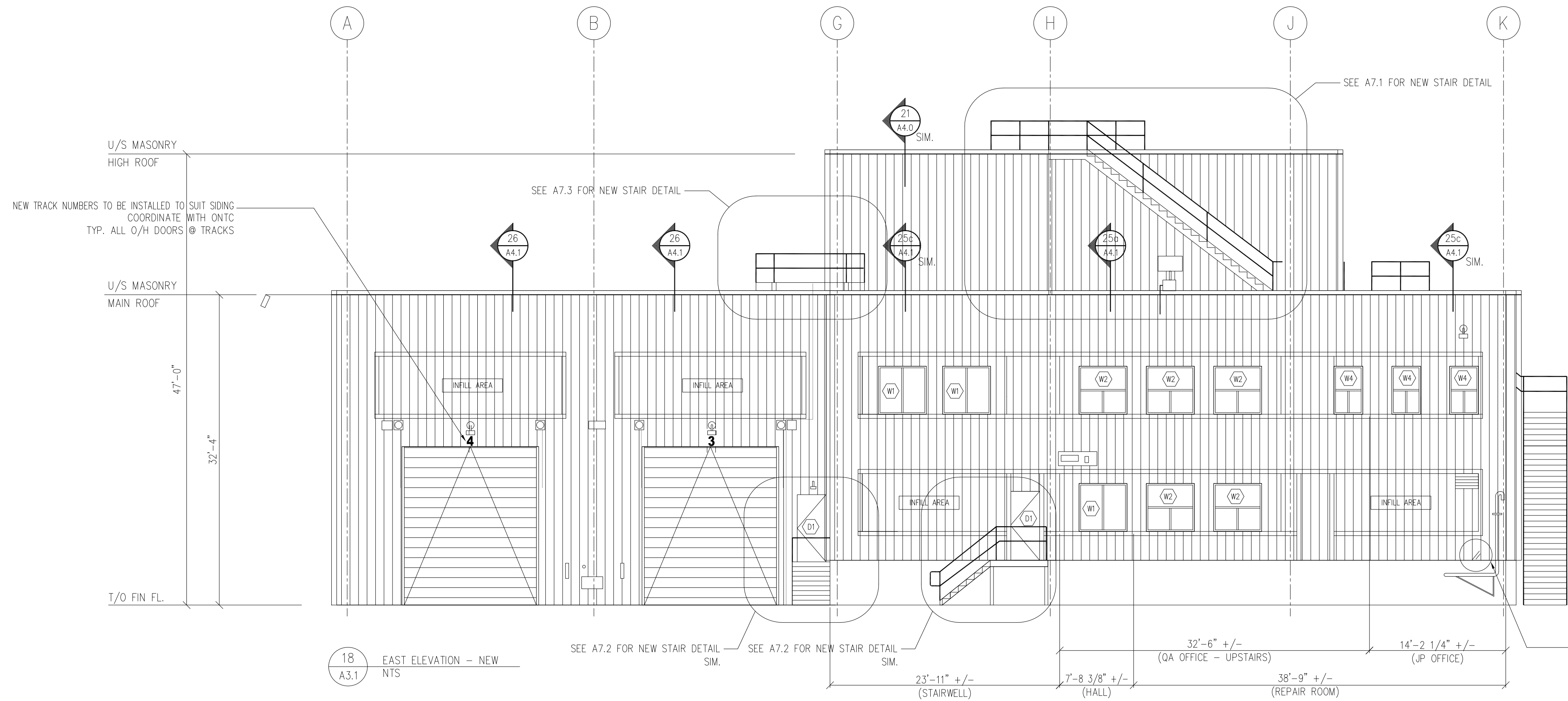
A3.0b



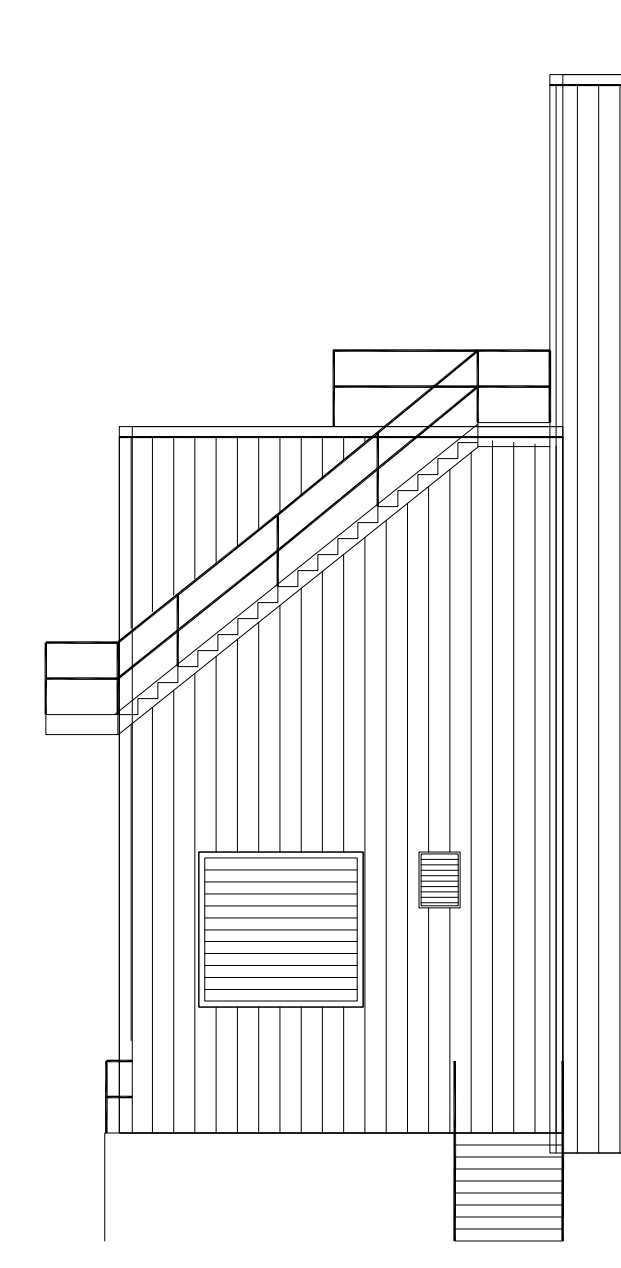
17 WEST ELEVATION - NEW  
A3.1 NTS



19 PARTIAL ELEVATION - NEW  
A3.1 NTS



18 EAST ELEVATION - NEW  
A3.1 NTS



20 PARTIAL ELEVATION - NEW  
A3.1 NTS

CONTRACTOR TO SITE CONFIRM ALL DIMENSIONS AND FIELD LOCATE WINDOWS TO SUIT SITE CONDITIONS

SEPT 16 19	3. ISSUED FOR CONSTRUCTION
MAY 24 19	2. RE-ISSUED FOR TENDER - ADDENDUM MAY 24 2019
MAY 01 19	1. ISSUED FOR TENDER



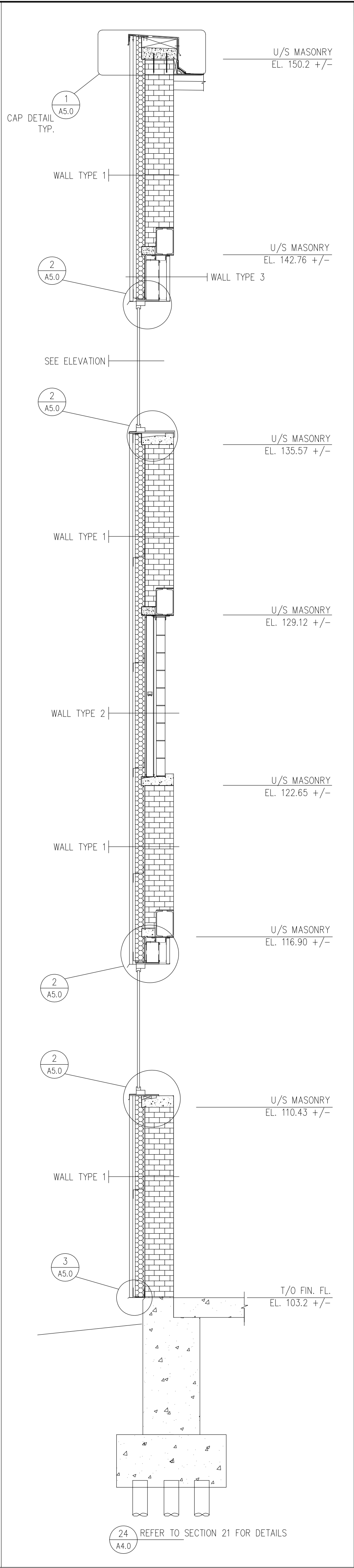
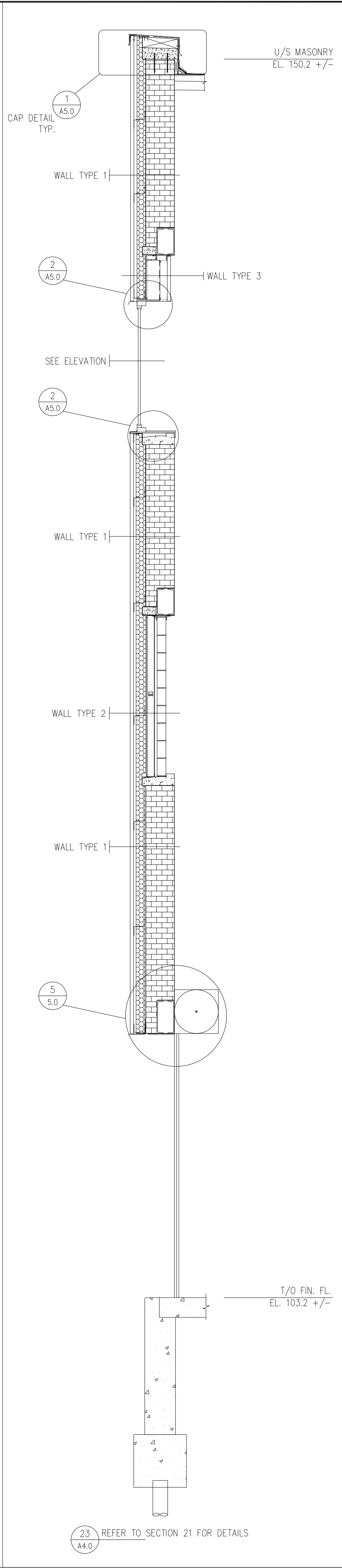
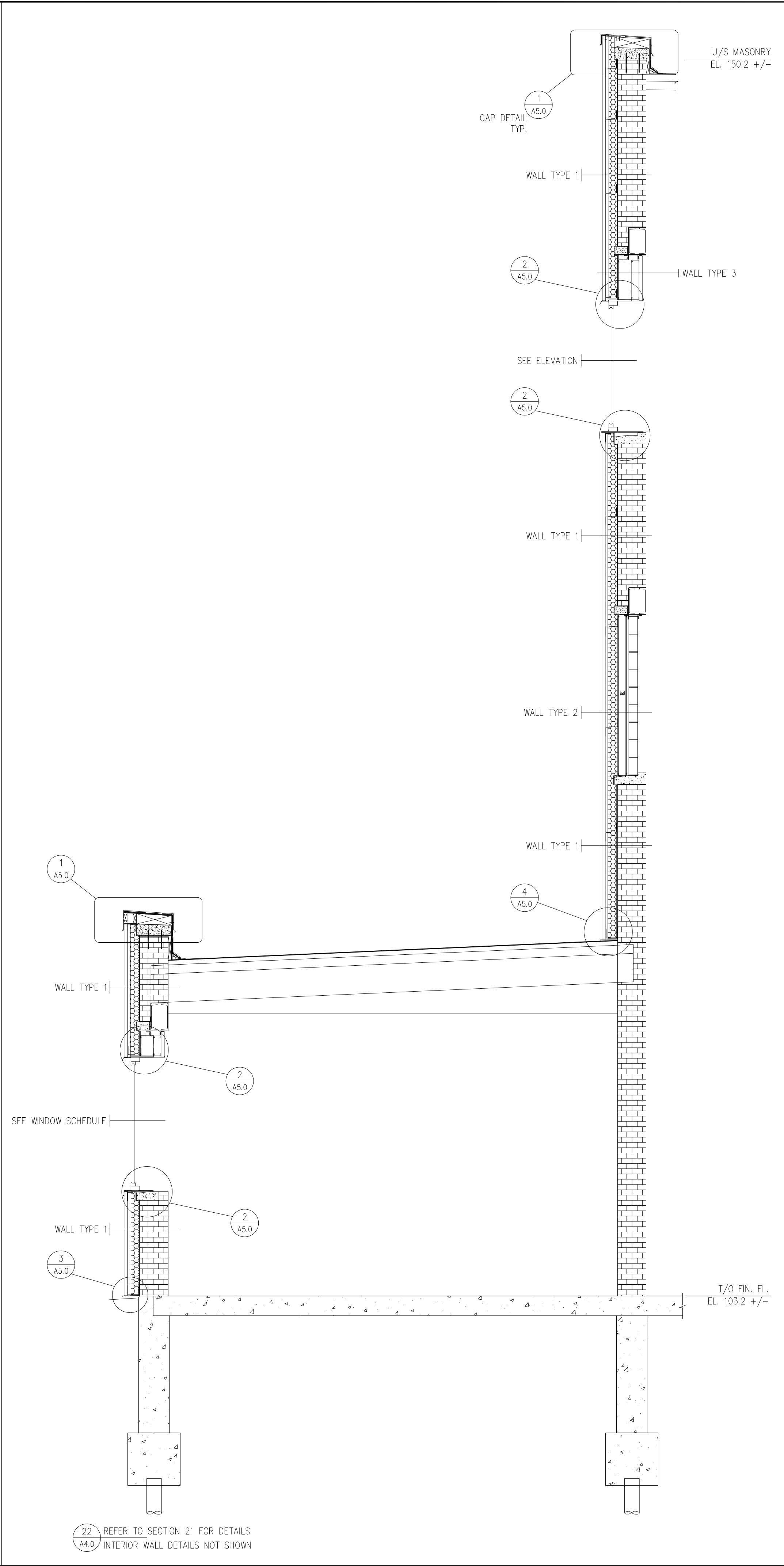
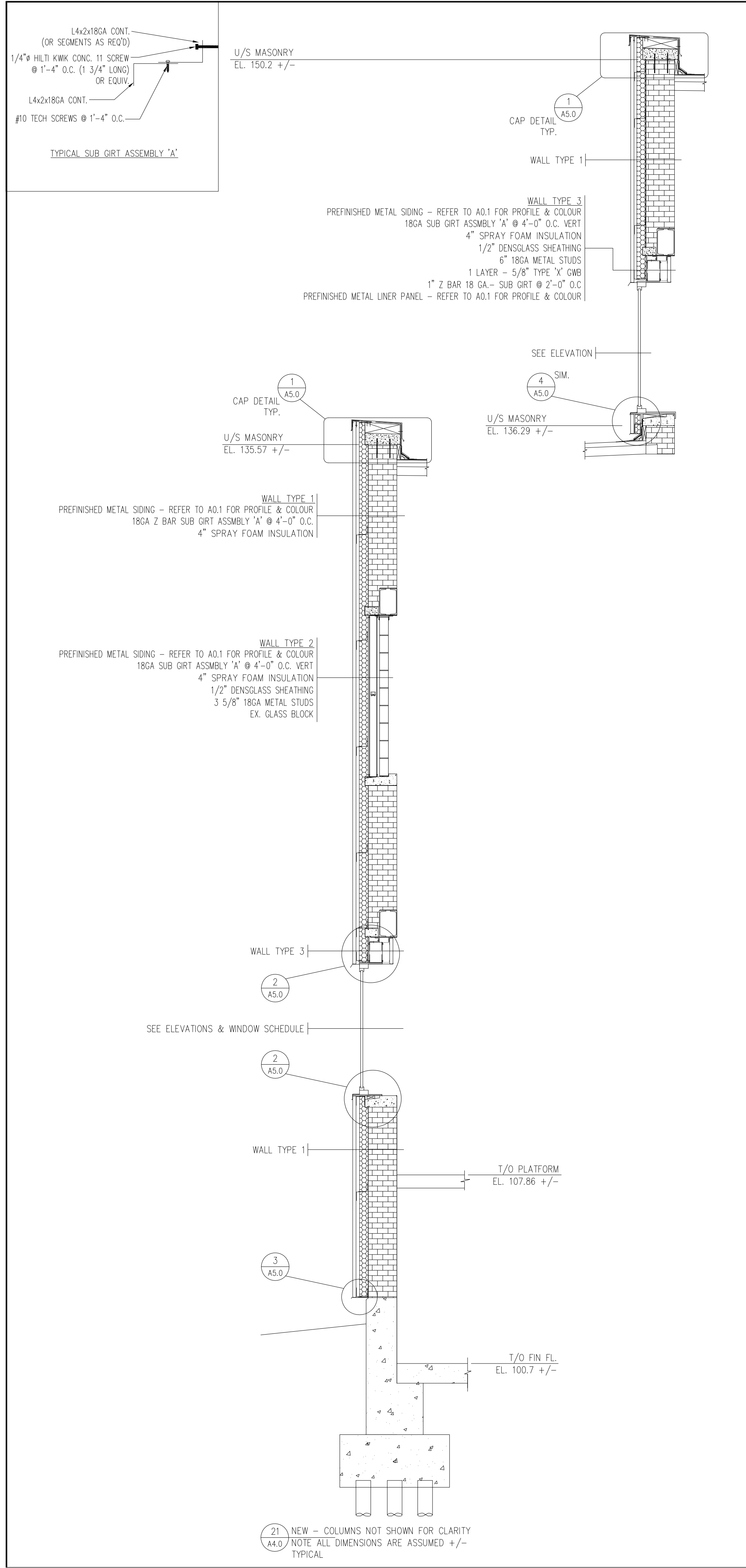
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
1778  
V.T. THÉRIAULT  
Sep 16, 19  
PROVINCE OF ONTARIO

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Midway S.E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO  
title: NEW EXTERIOR ELEVATIONS

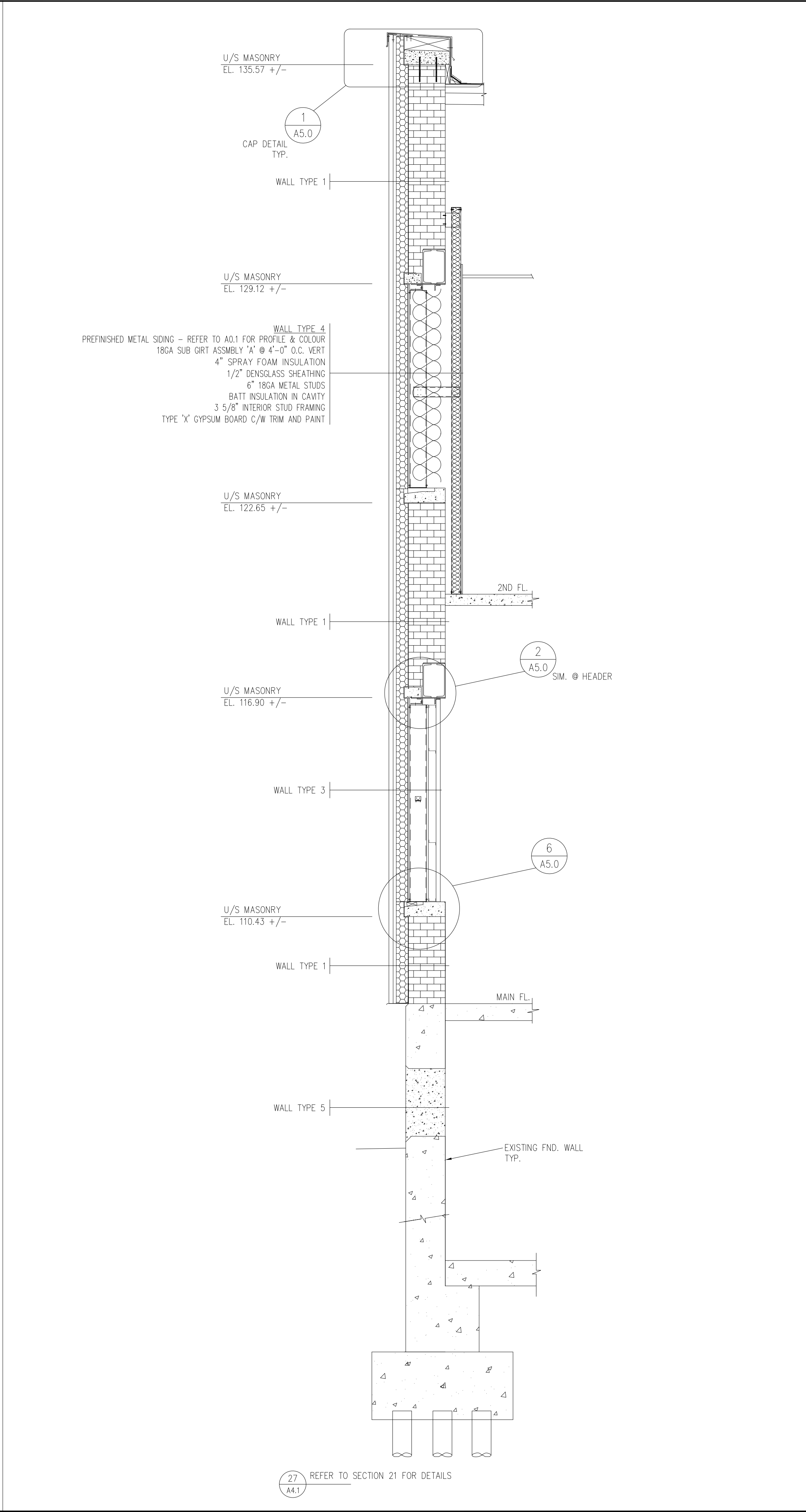
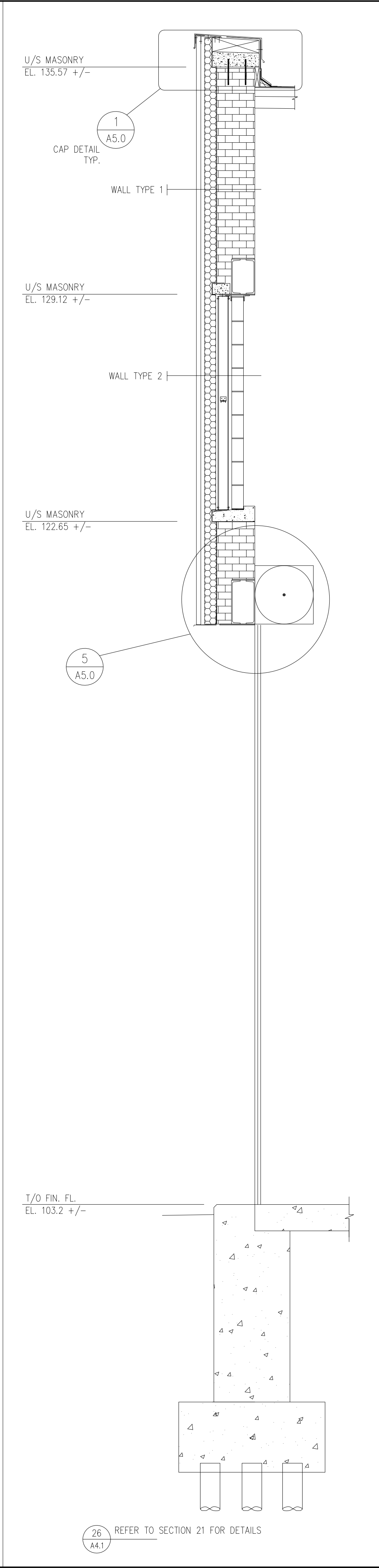
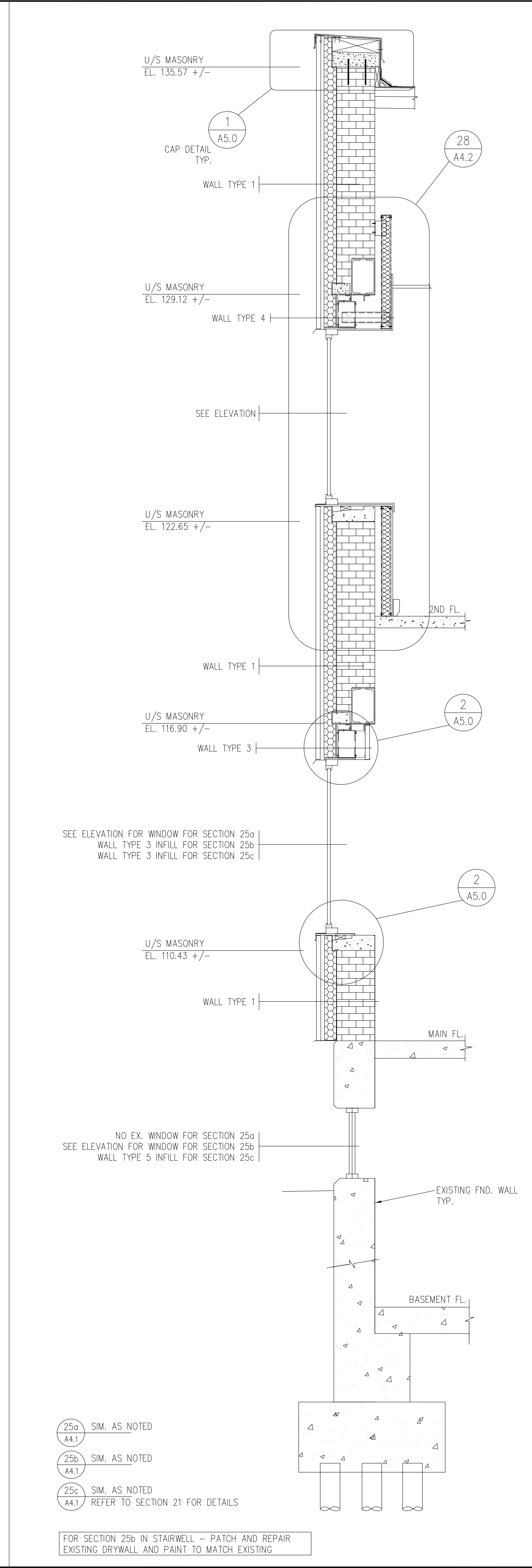
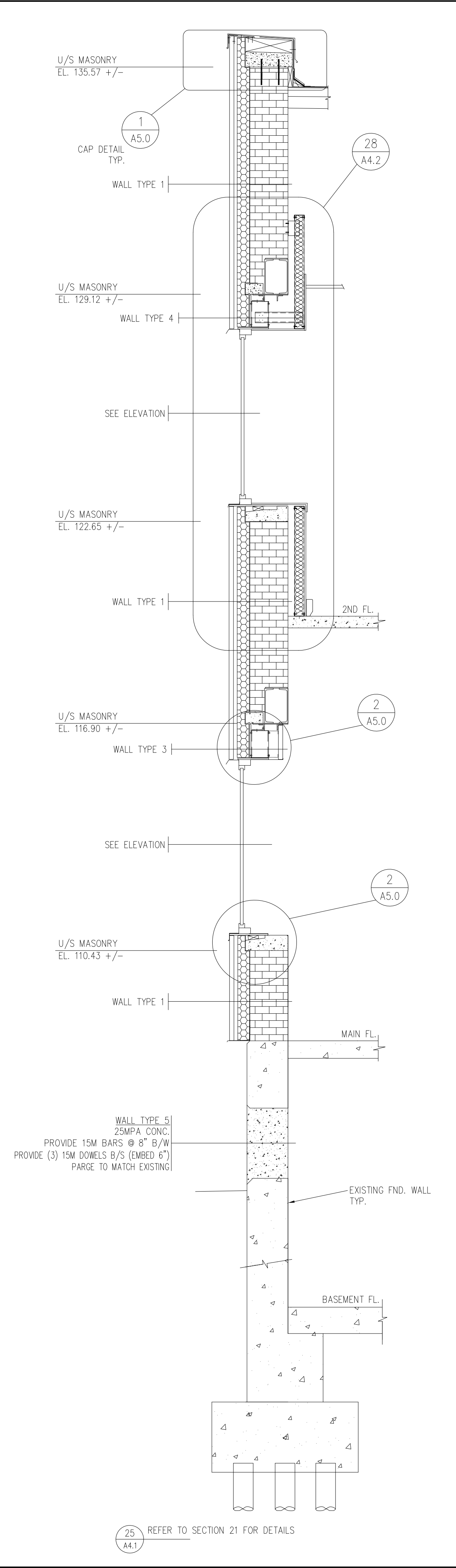
drawn by: BM	checked by: TIM T
scale: NTS	project no: 17944
date plotted: SEPT 16 2019	
date revised: MAY 24 2019	

dwg no: A3.1

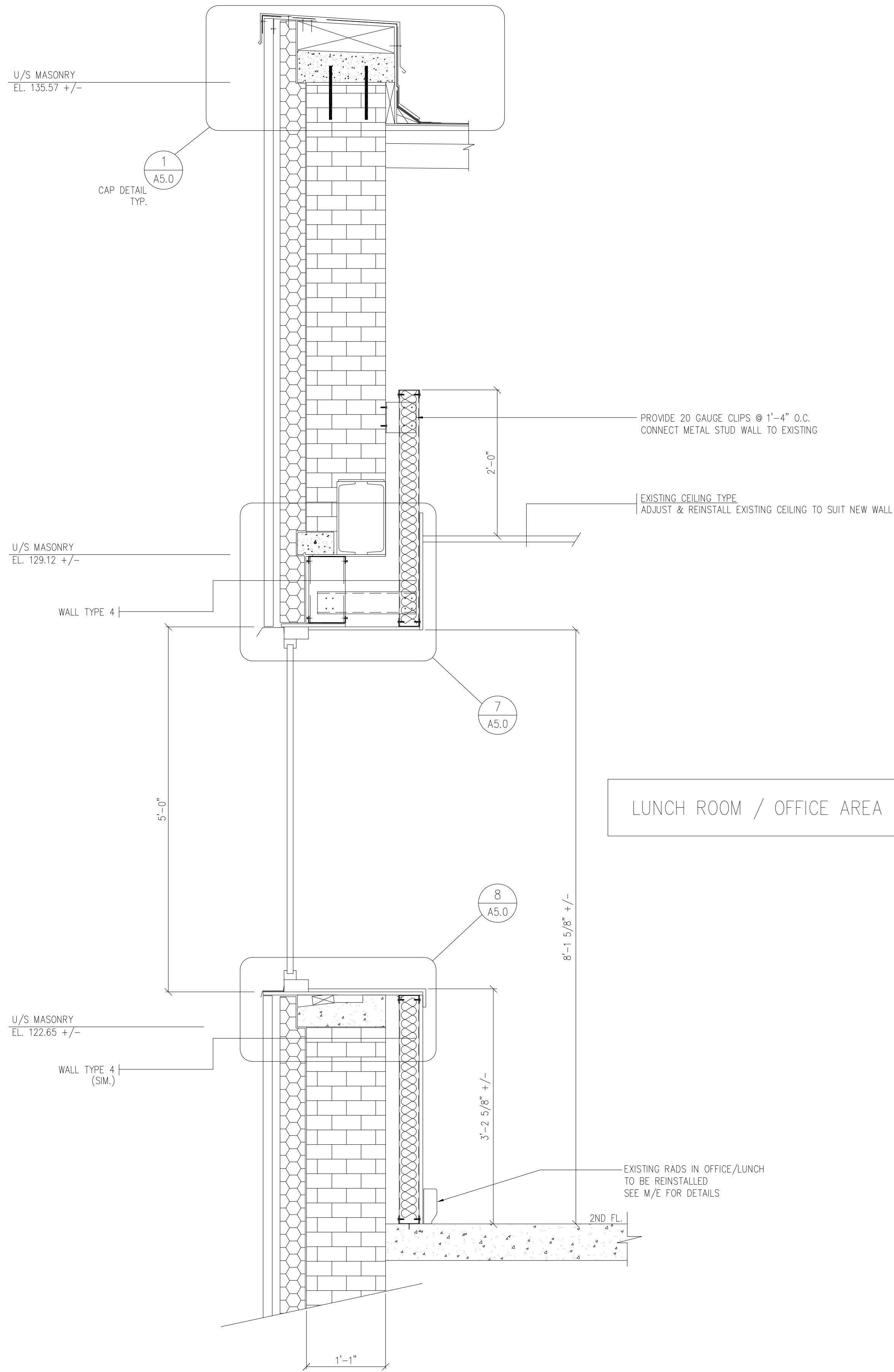




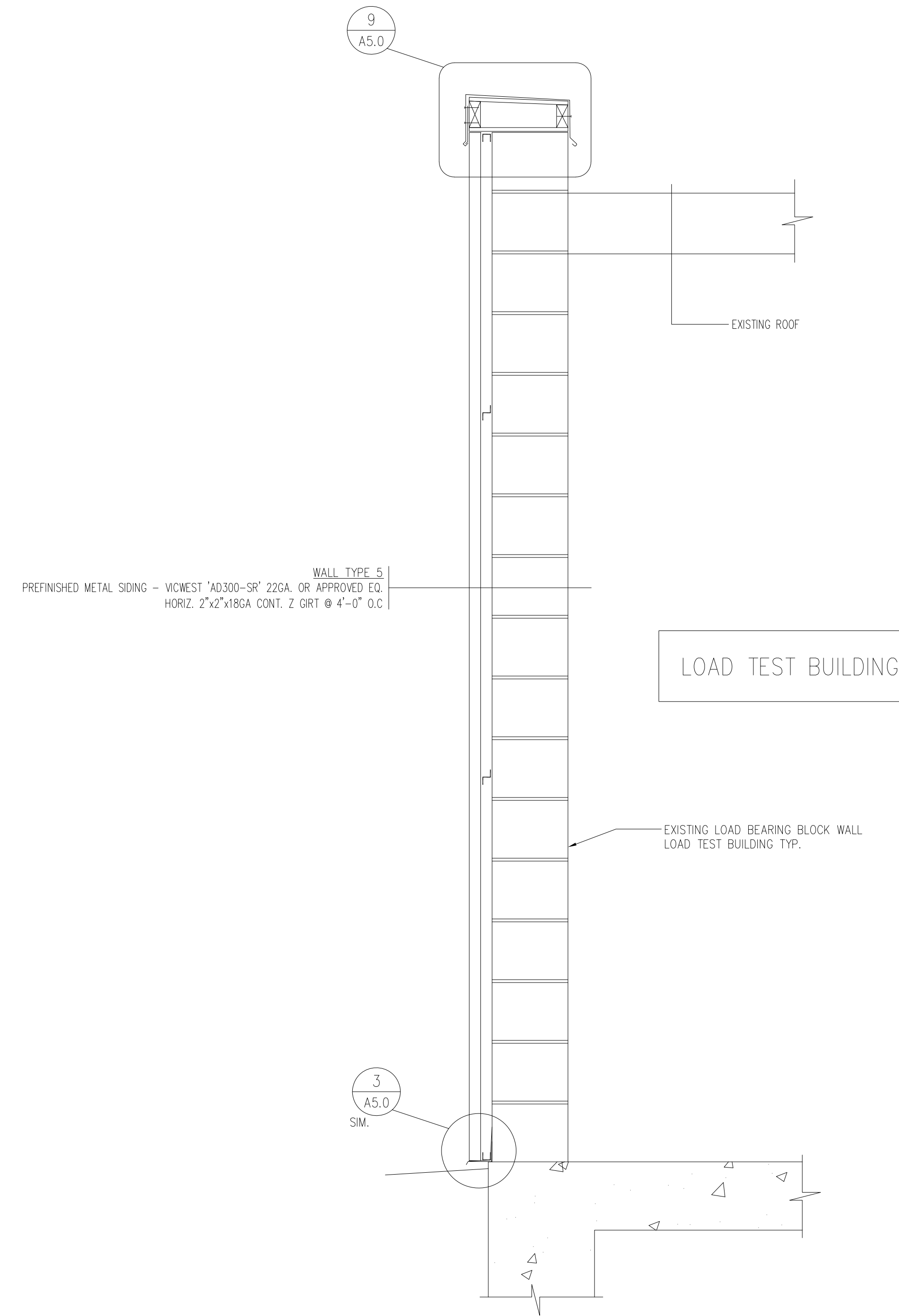
<p>revisions</p> <p>3. ISSUED FOR CONSTRUCTION SEPT 16 19</p> <p>2. NOT USED</p> <p>1. ISSUED FOR TENDER MAY 01 19</p>	
<p>LICENSED PROFESSIONAL ENGINEER W.T. THERRIAULT Sep 16, 19 PROVINCE OF ONTARIO</p>	
<p><b>NORTHSHORE ENGINEERING &amp; DRAFTING SERVICES</b></p> <p>184 McNaughton Ave. NORTH BAY ONT. 705-495-0981</p>	
<p>project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR 916 Melville St. E., NORTH BAY, ONTARIO NORTH BAY, ONTARIO</p> <p>title: NEW WALL SECTIONS</p>	
<p>drawn by: BM</p> <p>scale: NTS</p> <p>date plotted: SEPT 16 2019</p> <p>date revised: MAY 01 2019</p> <p>dwg no: A4.0</p>	<p>checked by: TIM T</p> <p>project no: 17944</p>



<p>1. ISSUED FOR TENDER MAY 01 19</p> <p>2. NOT USED</p> <p>3. ISSUED FOR CONSTRUCTION SEPT 16 19</p>		<p>revision</p>
<p><b>NORTHSHORE ENGINEERING &amp; DRAFTING SERVICES</b></p> <p>184 McNaughton Ave. NORTH BAY, ONT. 705-495-0861</p>		
<p>project: <b>ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR</b> 916 Midway St., North Bay, Ontario North Bay, Ontario</p> <p>title: <b>NEW WALL SECTIONS</b></p>		
<p>drawn by: BM</p> <p>scale: NTS</p> <p>date plotted: SEPT 16 2019</p> <p>date revised: MAY 01 2019</p> <p>dwg no:</p>	<p>checked by: TIM T</p> <p>project no: 17944</p>	
<p>A4.1</p>		

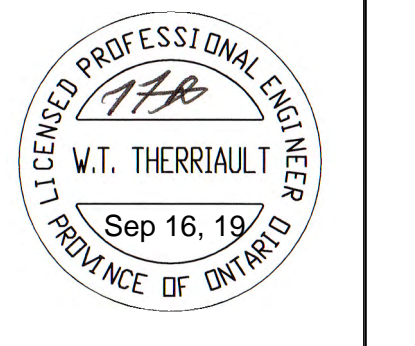


28 REFER TO SECTION 21 FOR DETAILS  
A4.2



29 REFER TO SECTION 21 FOR ADDITIONAL DETAILS  
CONTRACTOR TO PROVIDE ALL CLOSURES, FLASHING, CORNERS, ETC TO MAKE WORK COMPLETE FOR LOAD TEST BUILDING  
A4.2

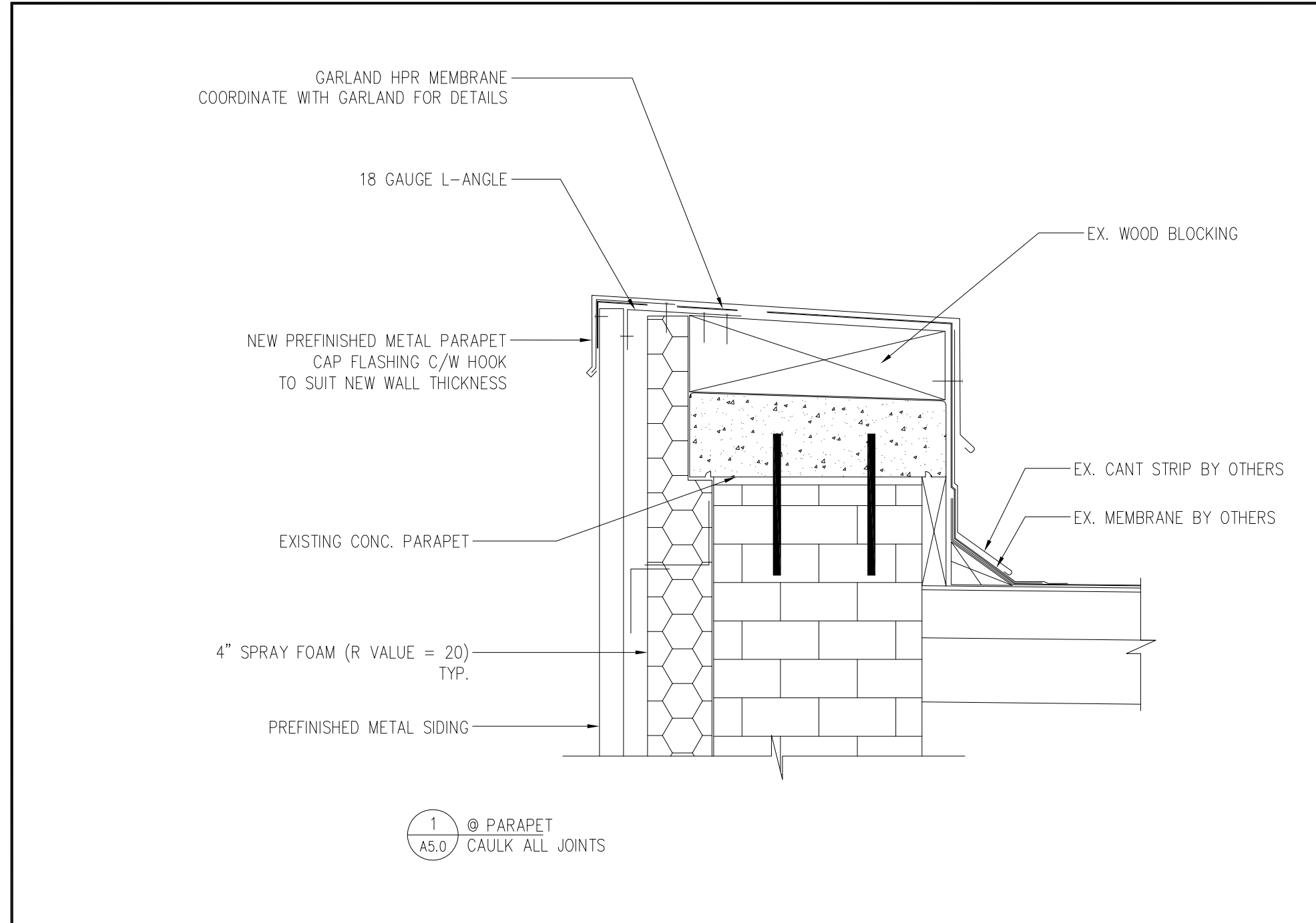
SEPT 16 19	3. ISSUED FOR CONSTRUCTION	revision
MAY 01 19	2. NOT USED	
	1. ISSUED FOR TENDER	



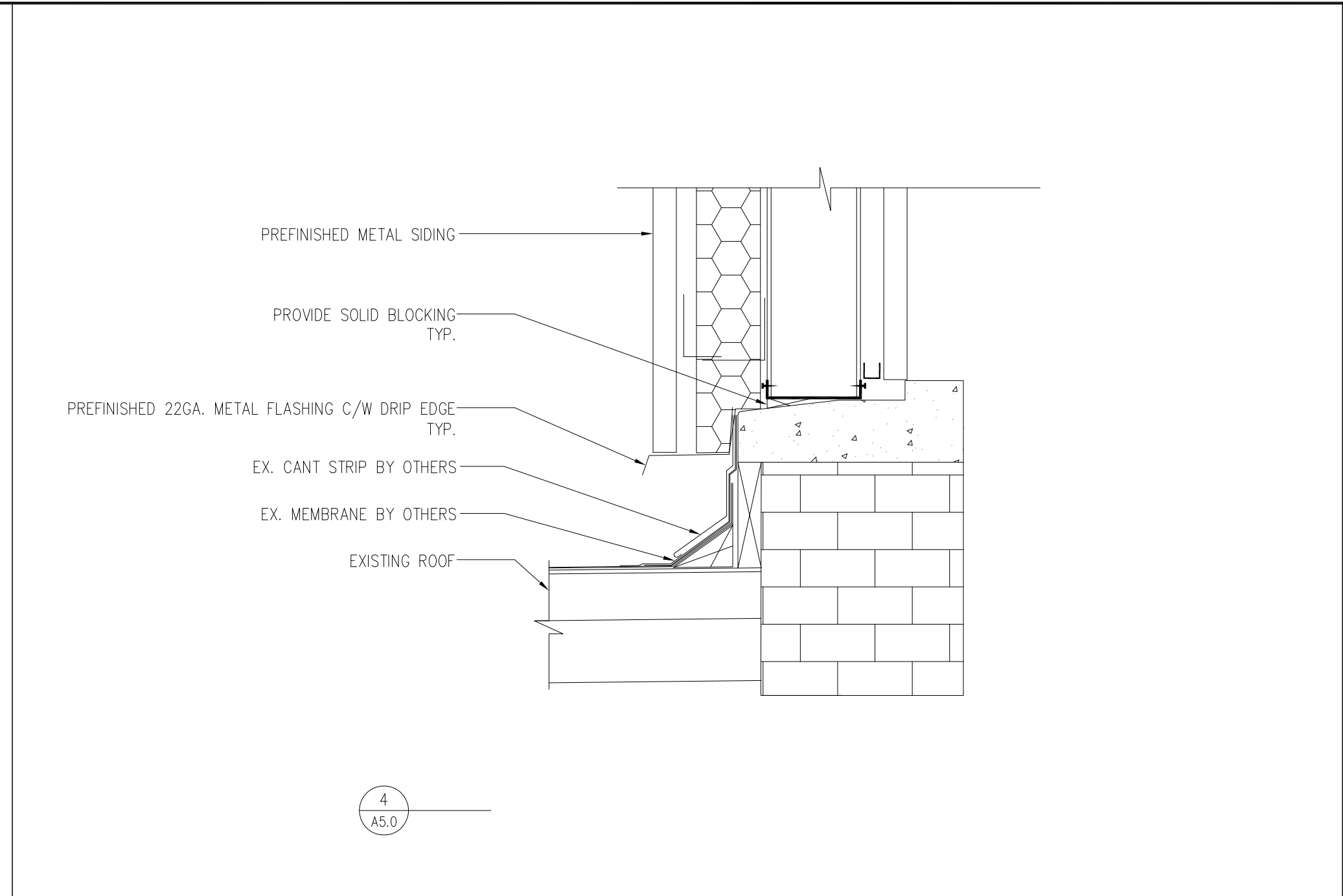
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
184 McLaughlin Ave.  
NORTH BAY ONT.  
705-495-0981

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Melville St. E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO  
title: NEW OFFICE WALL SECTIONS

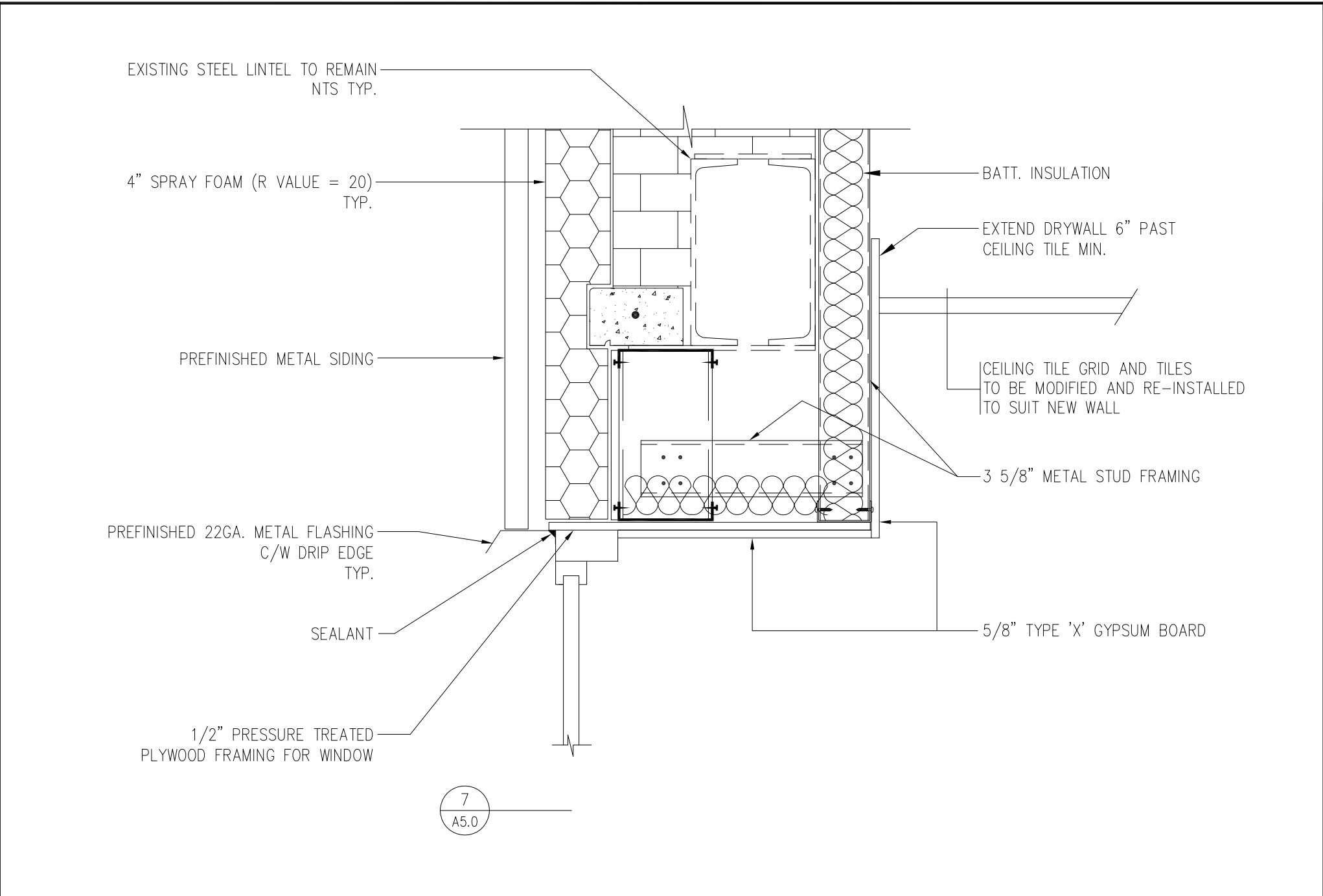
drawn by: BM checked by: TIM T  
scale: NTS project no: 17944  
date plotted:  
date revised: MAY 01 2019  
dwg no: A4.2



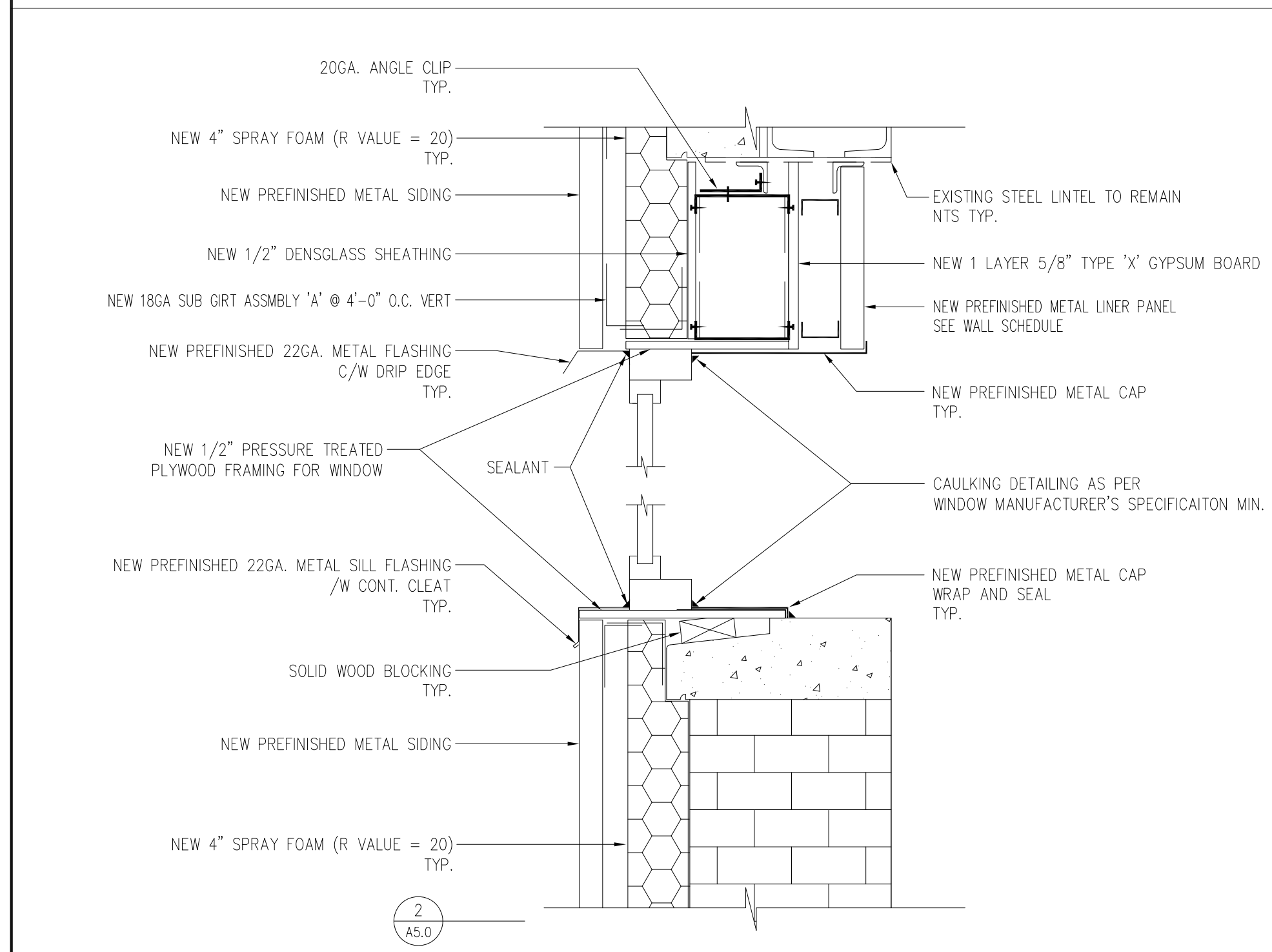
1 @ PARAPET  
A5.0  
CAULK ALL JOINTS



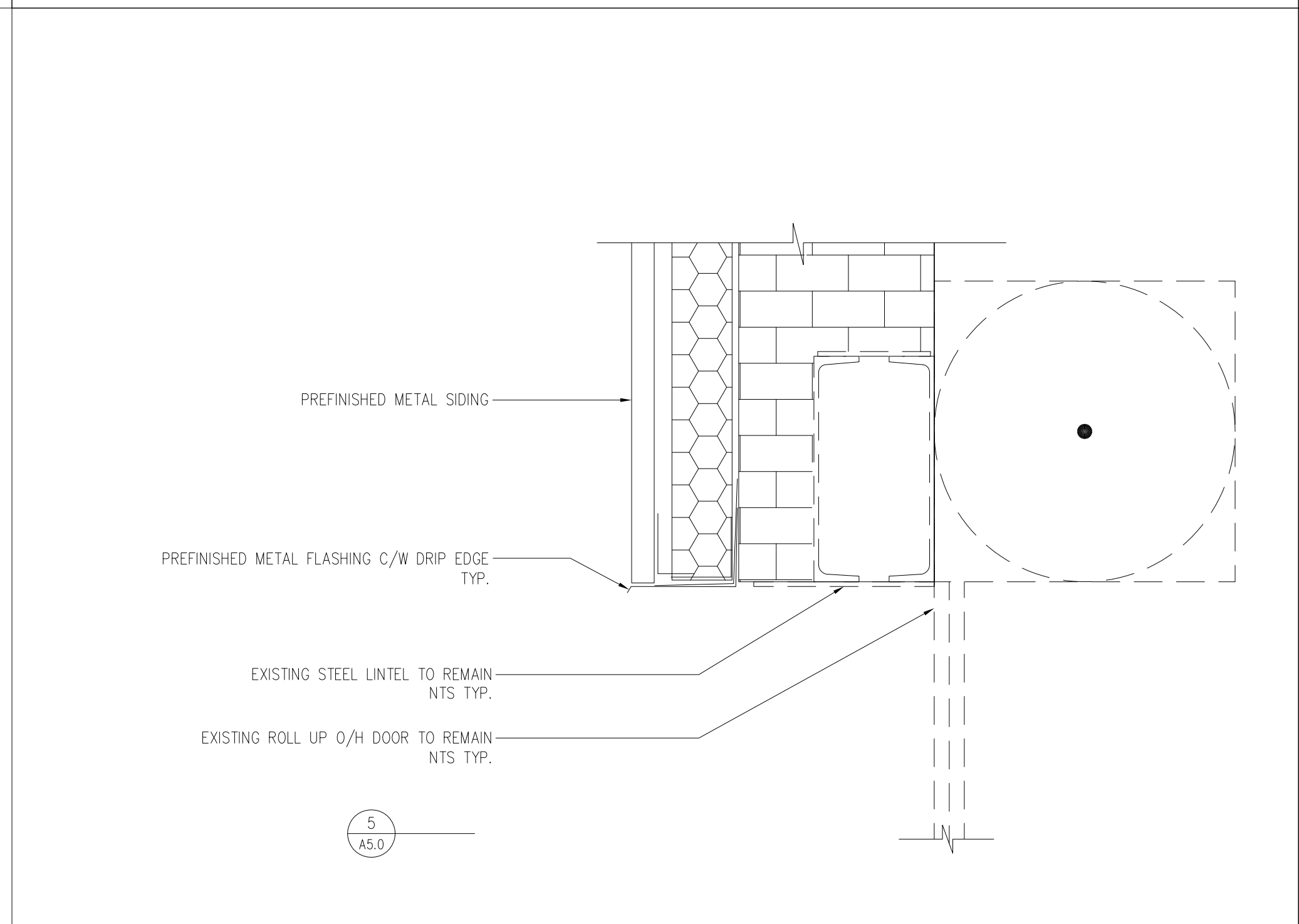
4  
A5.0



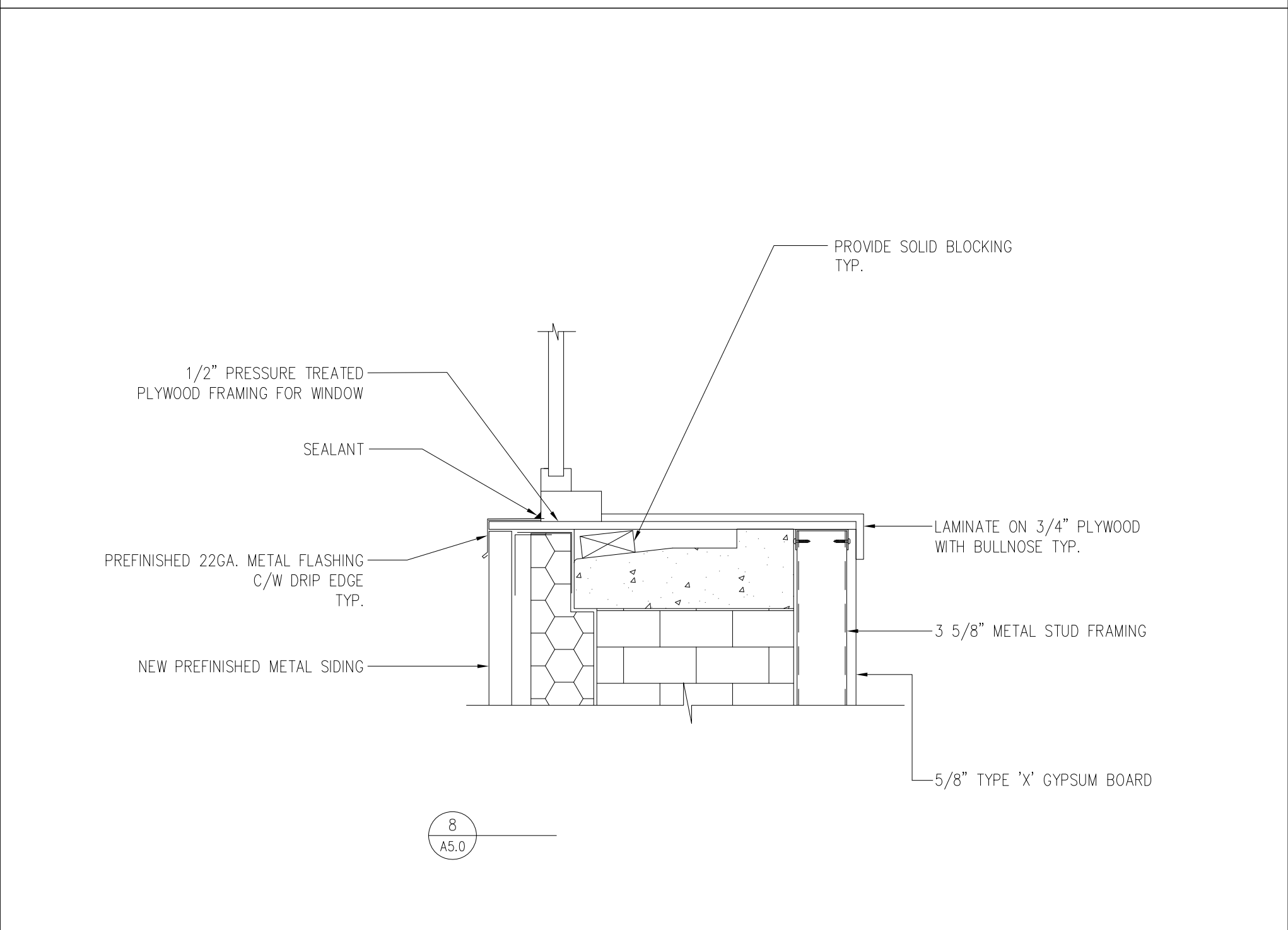
7  
A5.0



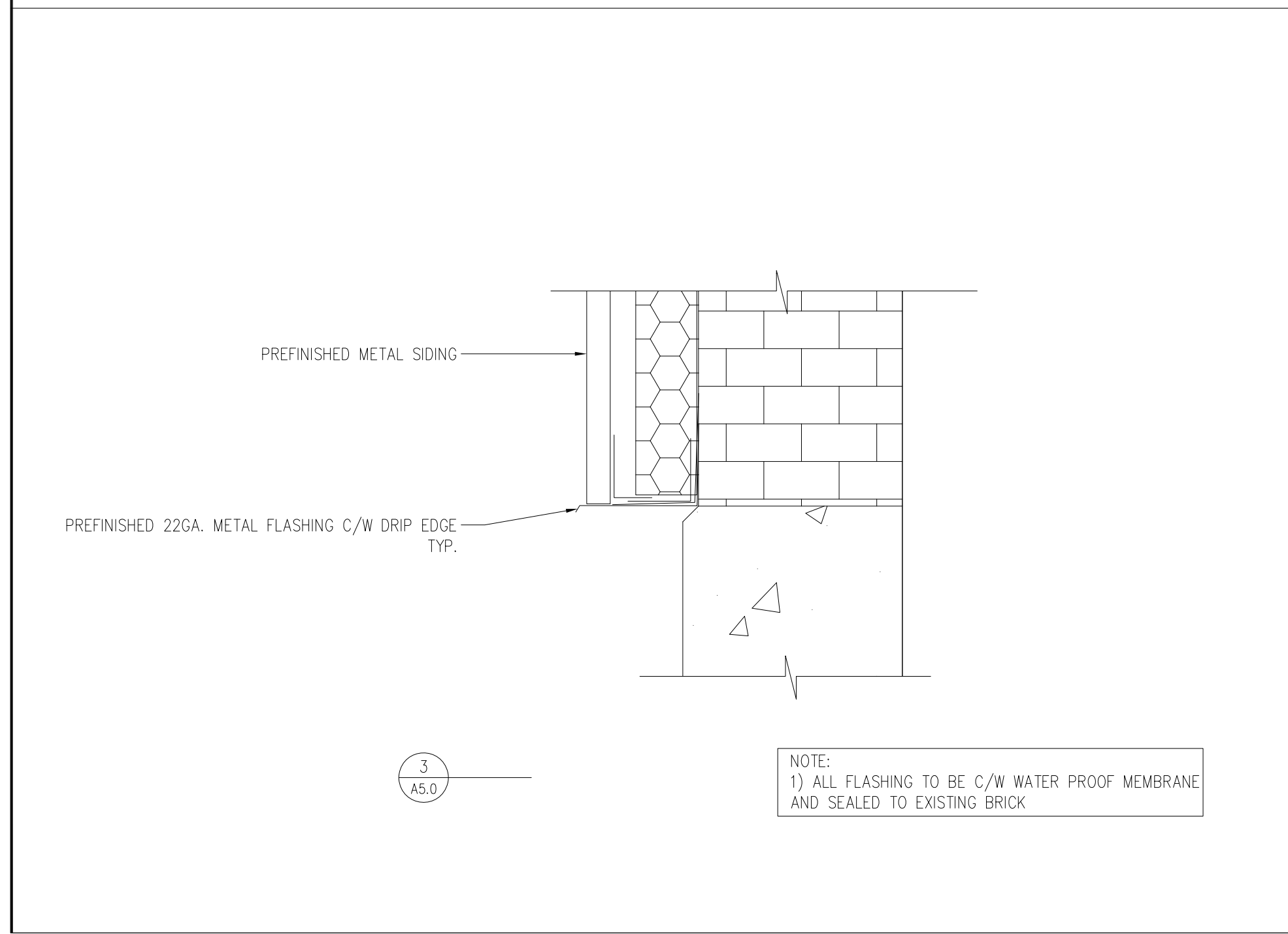
2  
A5.0



5  
A5.0

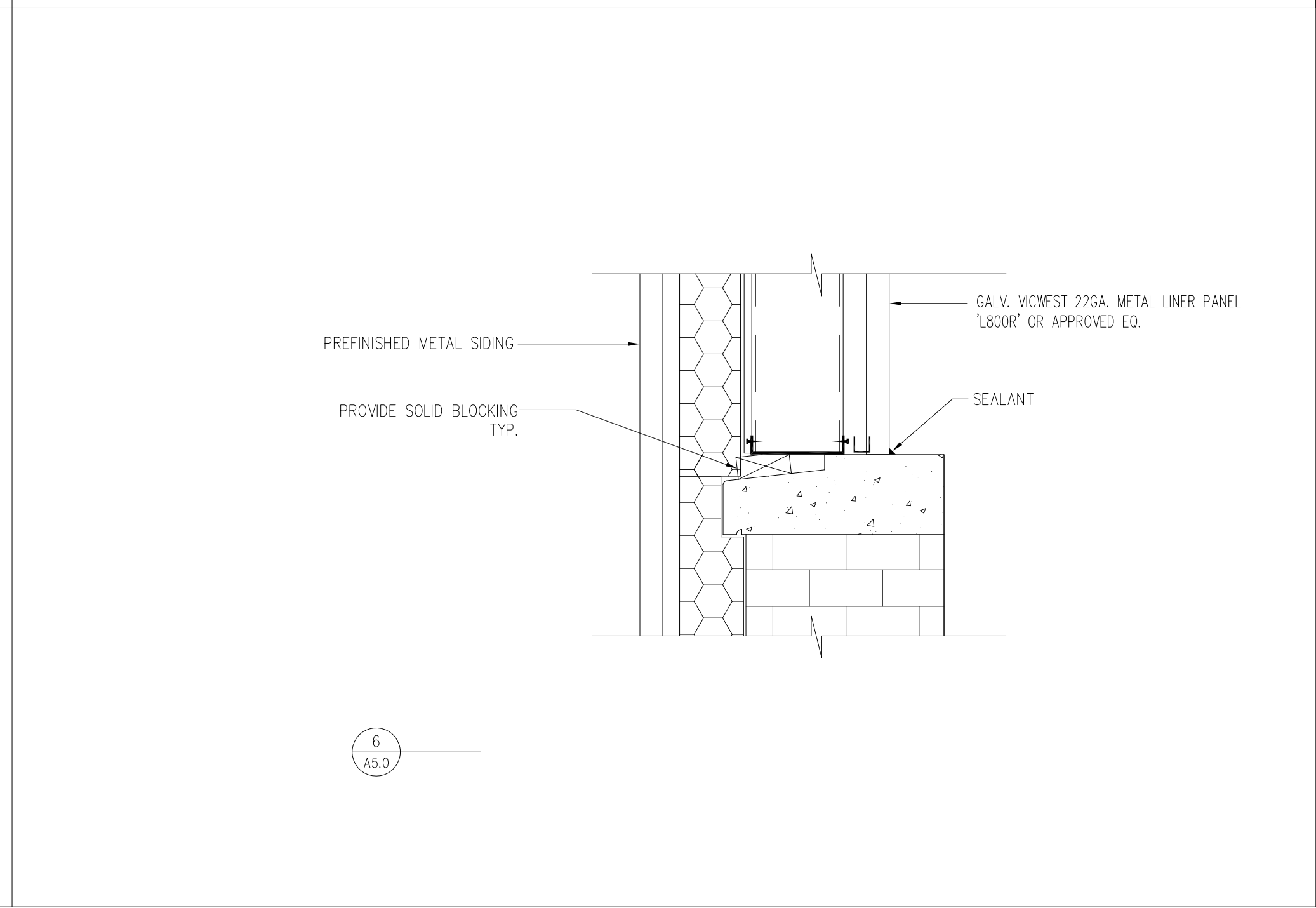


8  
A5.0

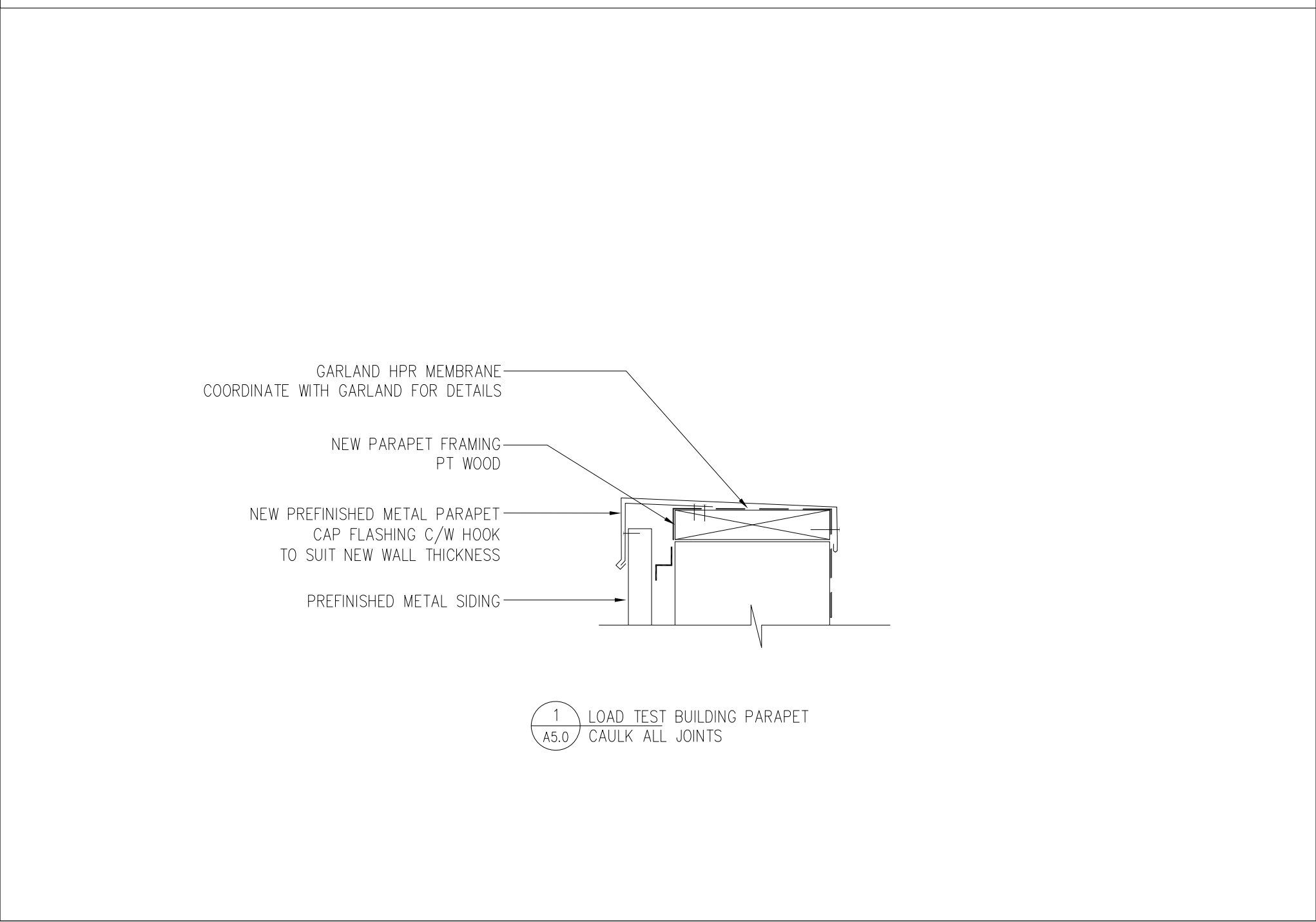


3  
A5.0

NOTE:  
1) ALL FLASHING TO BE C/W WATER PROOF MEMBRANE AND SEALED TO EXISTING BRICK



6  
A5.0



1 LOAD TEST BUILDING PARAPET  
A5.0  
CAULK ALL JOINTS

3. ISSUED FOR CONSTRUCTION SEPT 16 19	revision
2. NOT USED	
1. ISSUED FOR TENDER MAY 01 19	

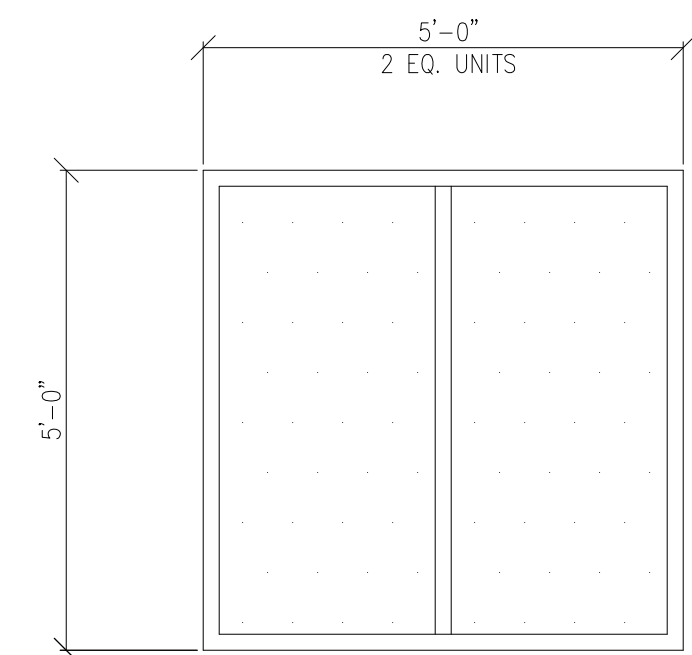


**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
1770  
V.T. THERRIAULT  
Sep 16, 19  
PROVINCE OF ONTARIO  
184 McNaughton Ave.  
NORTH BAY ONT.  
705-495-0981

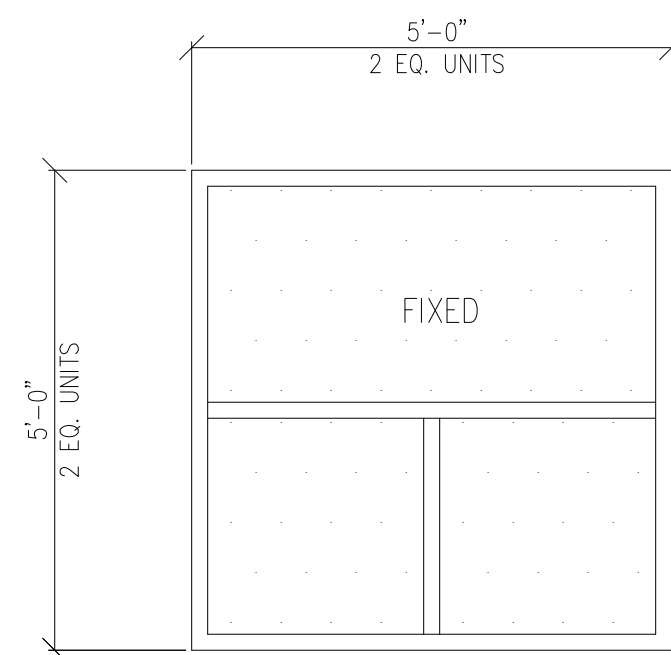
project: ONTARIO NORTH-LAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Melville St. E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

drawn by: BM  
checked by: TIM T  
scale: NTS  
project no: 17944  
date plotted: SEPT 16 2019  
date revised:

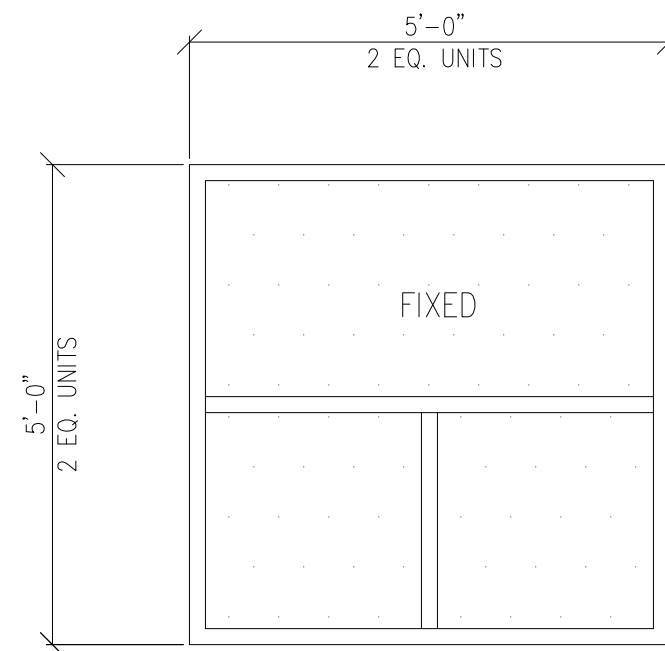
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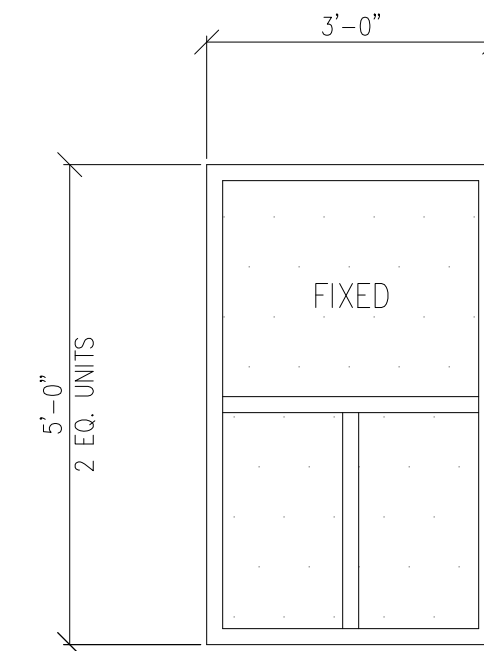
W1 FIXED THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR)



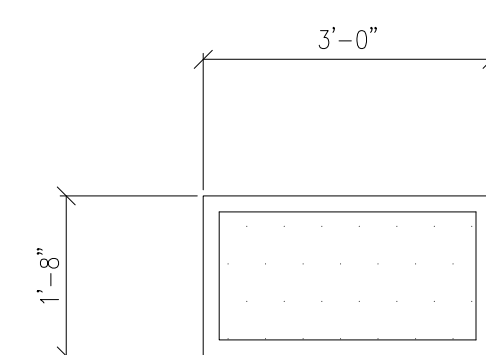
W2 HALF SLIDING GLASS THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN



W3 HALF SLIDING GLASS THERMAL PANE GLASS - FROSTED (WASHROOMS/FIRST AID ROOM) ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN

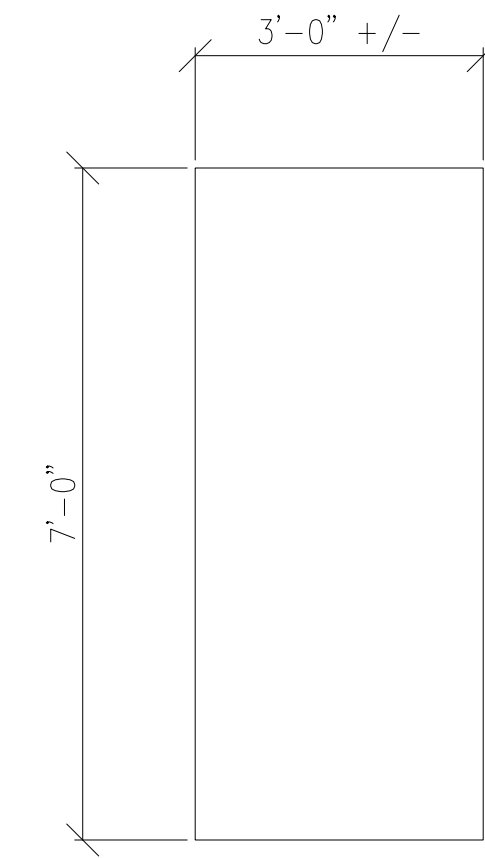


W4 HALF SLIDING GLASS THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN

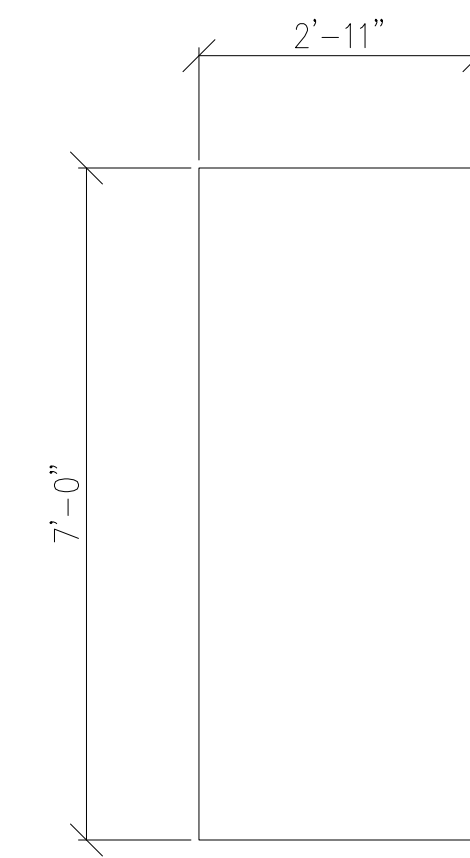


W5 FIXED THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR)

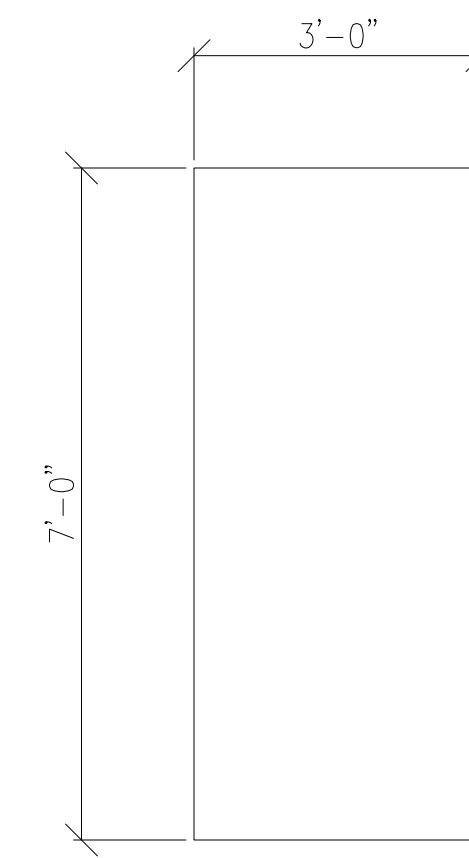
WINDOW NOTE:  
 1) ALL WINDOWS TO BE "FULTON 1200 SERIES" OR EQUIV.  
 2) ALL WINDOW SILLS ARE TO HAVE A 3" JAM DEFLECTOR BOTH SIDES  
 3) ALL SLIDER WINDOWS ARE TO COME C/W FULL SCREENS AS NOTED  
 4) ALL WINDOWS ARE TO BE SUPPORTED WITH 1/2" PRESSURE TREATED PLYWOOD ALL AROUND  
 5) NO BLOCK OR CONNECTION @ TOP OF WINDOW (ALLOW FOR 1/2" DEFLECTION AT TOP)  
 6) PROVIDE FOAM INSULATE, CAULK AND SEAL AS REQ'D TO MAKE WORK COMPLETE



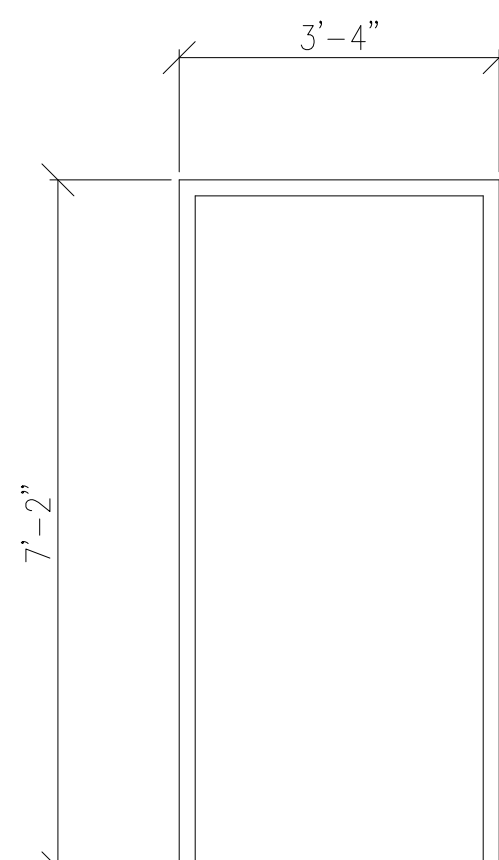
D1 DOOR D1 - HMI



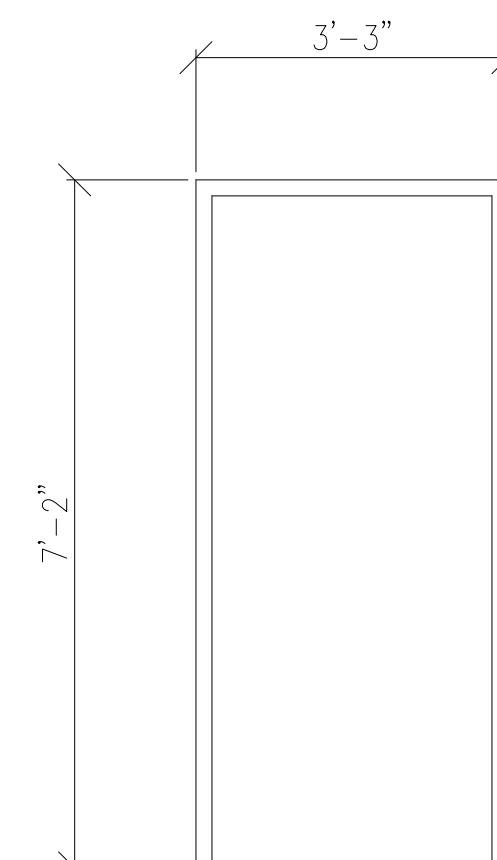
D2 DOOR D2 - HMI



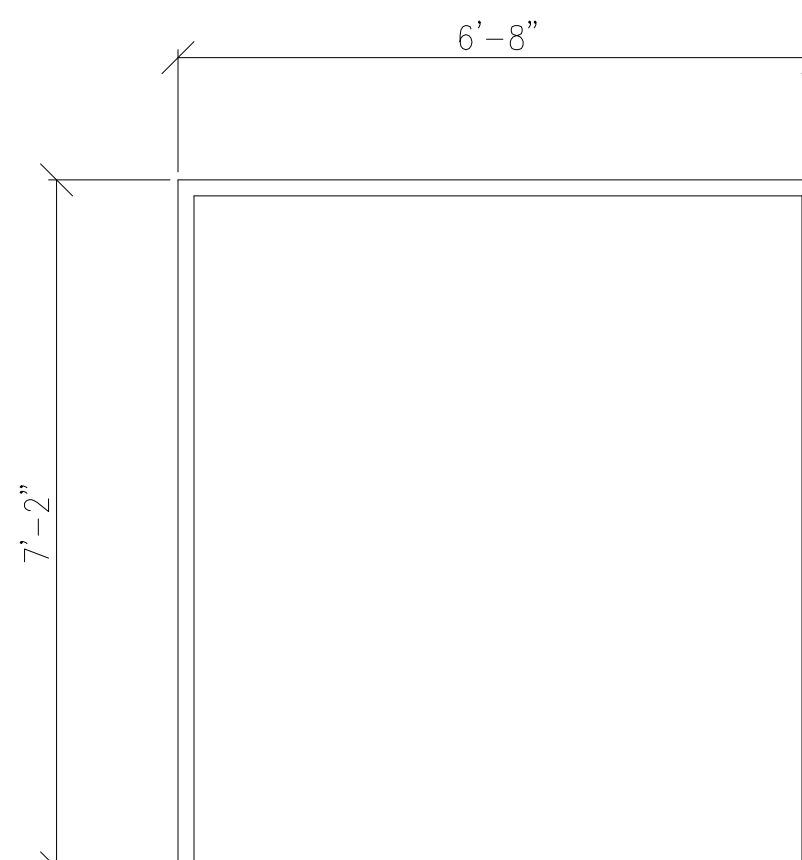
D3 DOOR D3 - HMI



FRAME F1



FRAME F2



FRAME F3

DOOR & FRAME SCHEDULE									
DOOR					FRAME			REMARKS	
QTY.	TYPE	MAT	FIN	WIDTH	HEIGHT	TYPE	FIN	WALL THK.	
3	D1	HMI	PT	3'-0"	7'-0"	F1	PT	TO SUIT EX.	INSUL. DOOR & FRAME c/w WEATHER STRIP, SWEEP, AND CLOSER
1	D2	HMI	PT	2'-11"	7'-0"	F2	PT	TO SUIT EX.	INSUL. DOOR & FRAME c/w WEATHER STRIP, SWEEP, AND CLOSER
1	D3	HM	PT	2'-3'-0"	7'-0"	F3	PT	TO SUIT EX.	INSUL. DOUBLE DOOR & FRAME c/w WEATHER STRIP, SWEEP, CLOSER

DOOR & FRAME NOTES

- SITE CONFIRM ALL WALL THICKNESSES AND OPENING SIZES WITH FRAMES BEFORE ORDERING
- ALL FRAMES HOLLOW METAL U.N.O.
- HARDWARE STANDARD COMMERCIAL GRADE
- HMI FRAMES TO BE STANDARD 6" DEPTH AT ALL LOCATIONS U.N.O.
- HARDWARE TO INCLUDE:
  - 3 HINGES
  - DOOR CLOSURE
  - LOCK SET (KEYED TO ONR STANDARDS)
- DOOR AND HARDWARE TO MATCH EXISTING DIESEL SHOP DOOR HARDWARE
- PROVIDE FOAM INSULATE, CAULK AND SEAL AS REQ'D TO MAKE WORK COMPLETE

LEGEND

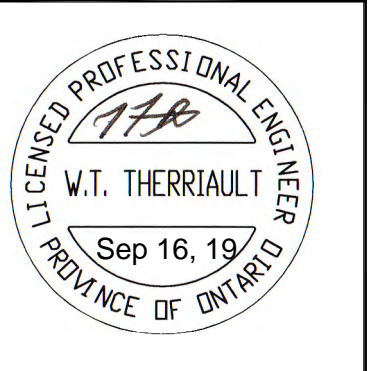
- HM - HOLLOW METAL
- HMI - HOLLOW METAL INSULATED
- WD - WOOD
- FR - FIRE RATED
- PT - PAINT
- ST - STAINED
- AL - ALUMINUM
- AL/G - ALUMINUM w/ GLASS

ROOM FINISH SCHEDULE

ROOM NAME	FLOORS		WALLS		CEILING		REMARKS
	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	
2ND FLOOR OFFICES, LUNCHROOM	EXISTING	N/A	R-GWB	PT	ADJUSTED EX. ACT	N/A	NEW GYPSUM BOARD ONLY AT AFFECTED WALLS & PAINT ENTIRE ROOM
LOCKER ROOM	EXISTING	N/A	R-GWB	PT	ADJUSTED EX. ACT	N/A	NEW GYPSUM BOARD AND PAINT ONLY AT AFFECTED WALLS
STAIRWELL	EXISTING	N/A	PATCH EX. GWB	PT	EXISTING	N/A	PATCH AND REPAIR AFFECTED WALLS & PAINT ENTIRE STAIRWELL
MAIN FLOOR - STORES, PARTS CLEANING ROOM	EXISTING	N/A	LINER PANEL	PRE-FIN.	EXISTING	N/A	PAINT WINDOW SILLS TO MATCH EXISTING INCLUDING HALLWAYS
MAIN FLOOR - WASHROOMS & FIRST AID ROOM	EXISTING	N/A	LINER PANEL & PATCH EX.	PT	EXISTING	N/A	PATCH AND REPAIR AFFECTED WALLS & PAINT AS REQ'D
MAIN FLOOR - MAIN SHOP	EXISTING	N/A	LINER PANEL	PRE-FIN.	EXISTING	N/A	

- GWB - GYPSUM BOARD
- R-GWB - RATED GYPSUM BOARD
- PT - PAINT (1 PRIME, 2 TOP COATS)
- ACT - ACOUSTICAL CEILING TILE

revision  
 1. ISSUED FOR TENDER  
 2. RE-ISSUED FOR TENDER - ADDENDUM MAY 24 2019  
 3. WINDOW SCHEDULE REVISED AS PER ADDENDUM #4  
 4. ISSUED FOR CONSTRUCTION  
 JUNE 12 2019  
 SEPT 16 2019

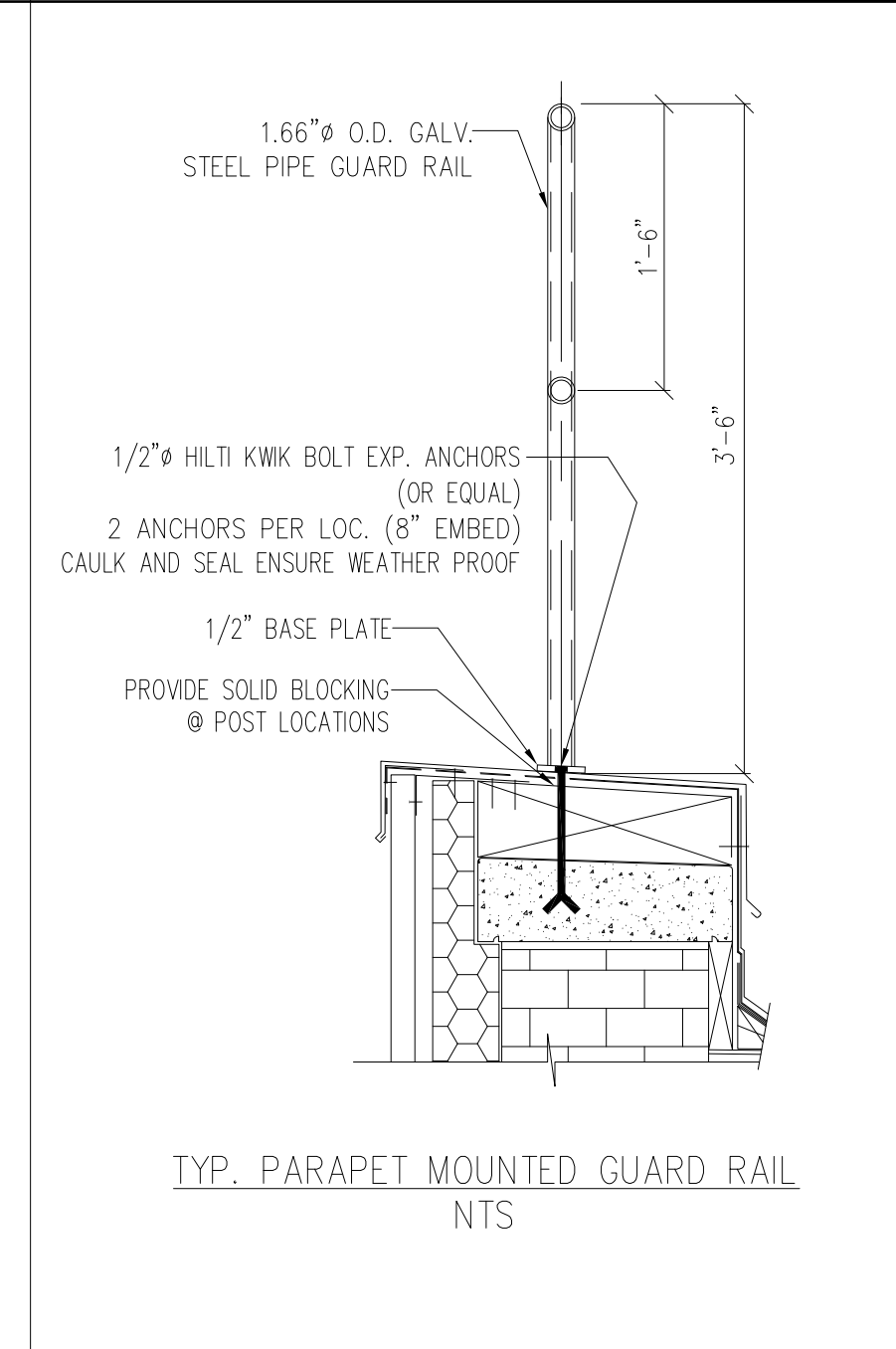
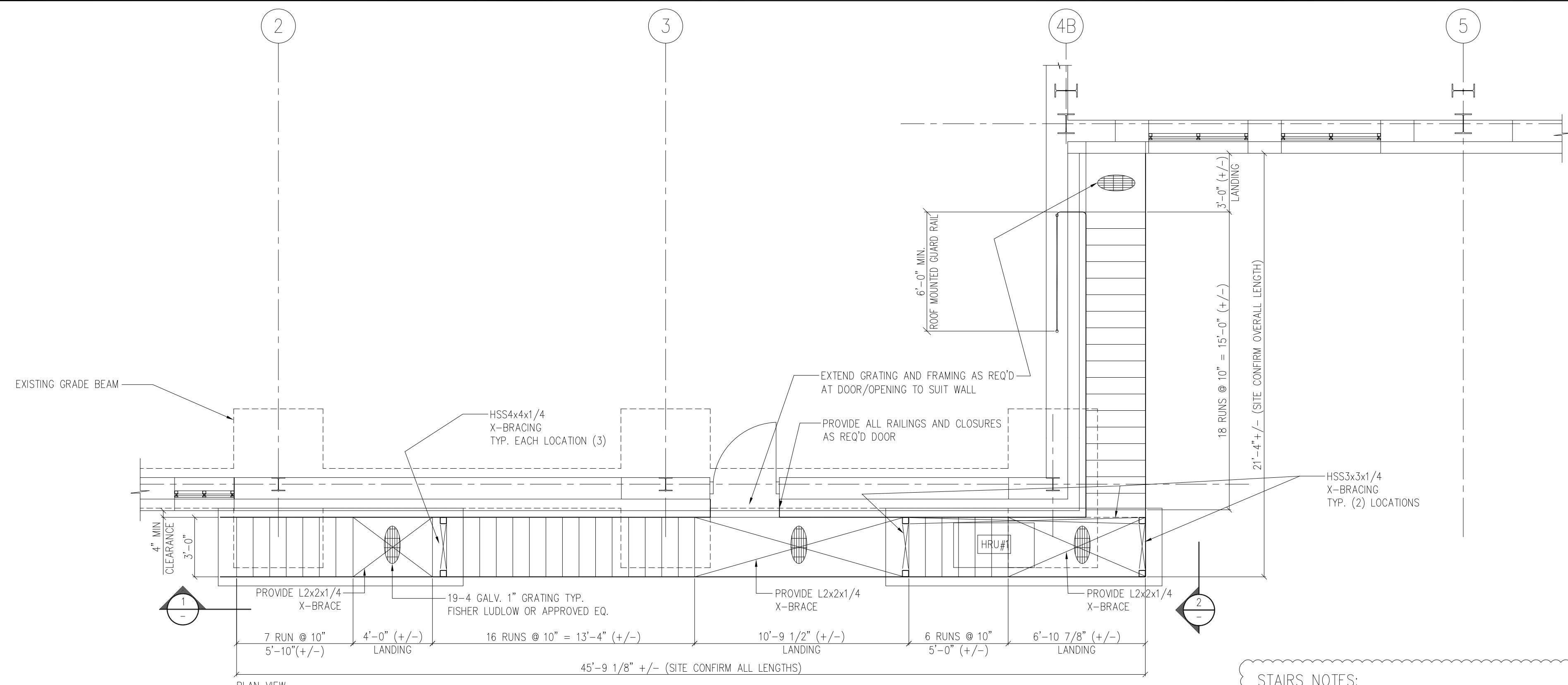


**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0961

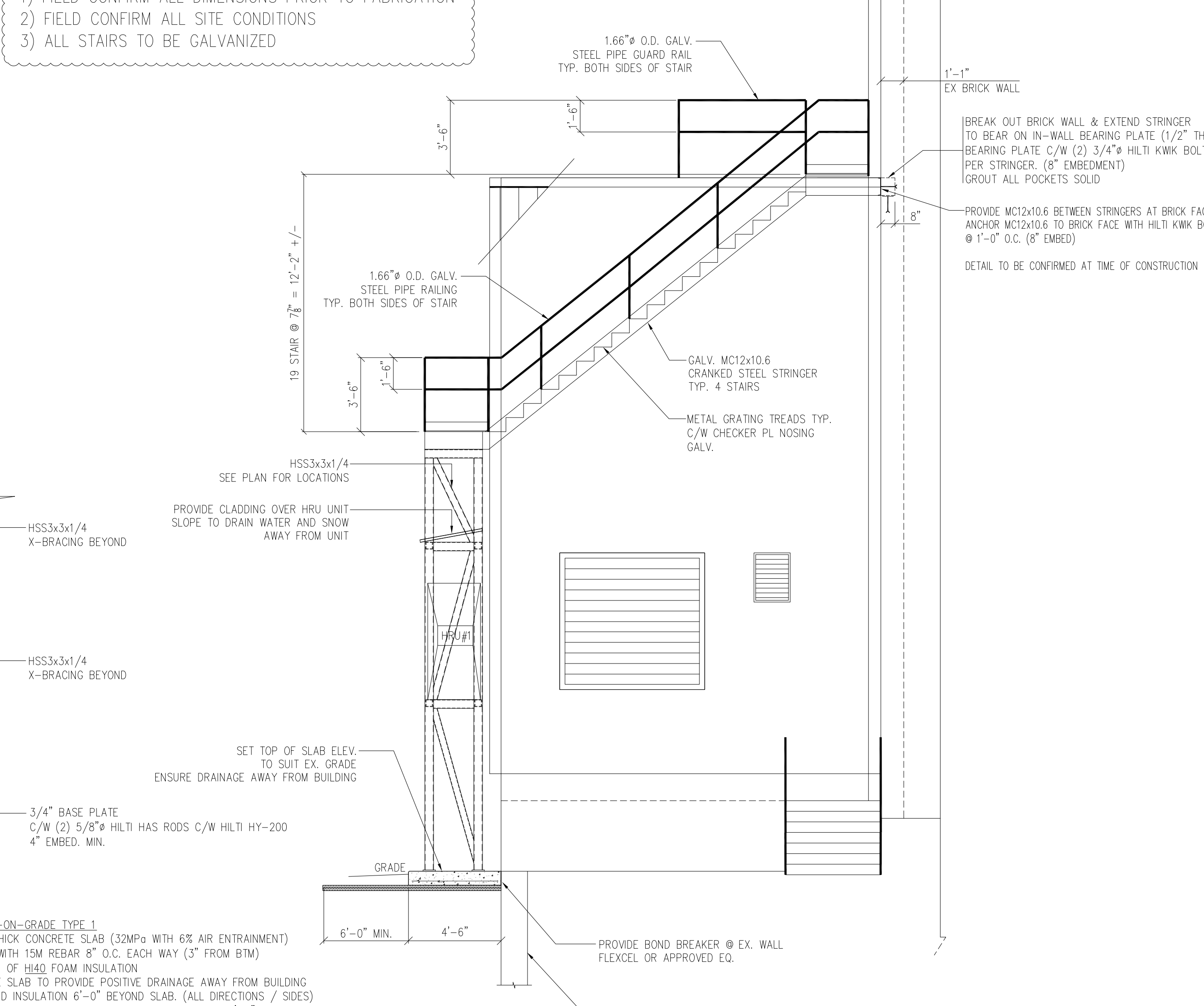
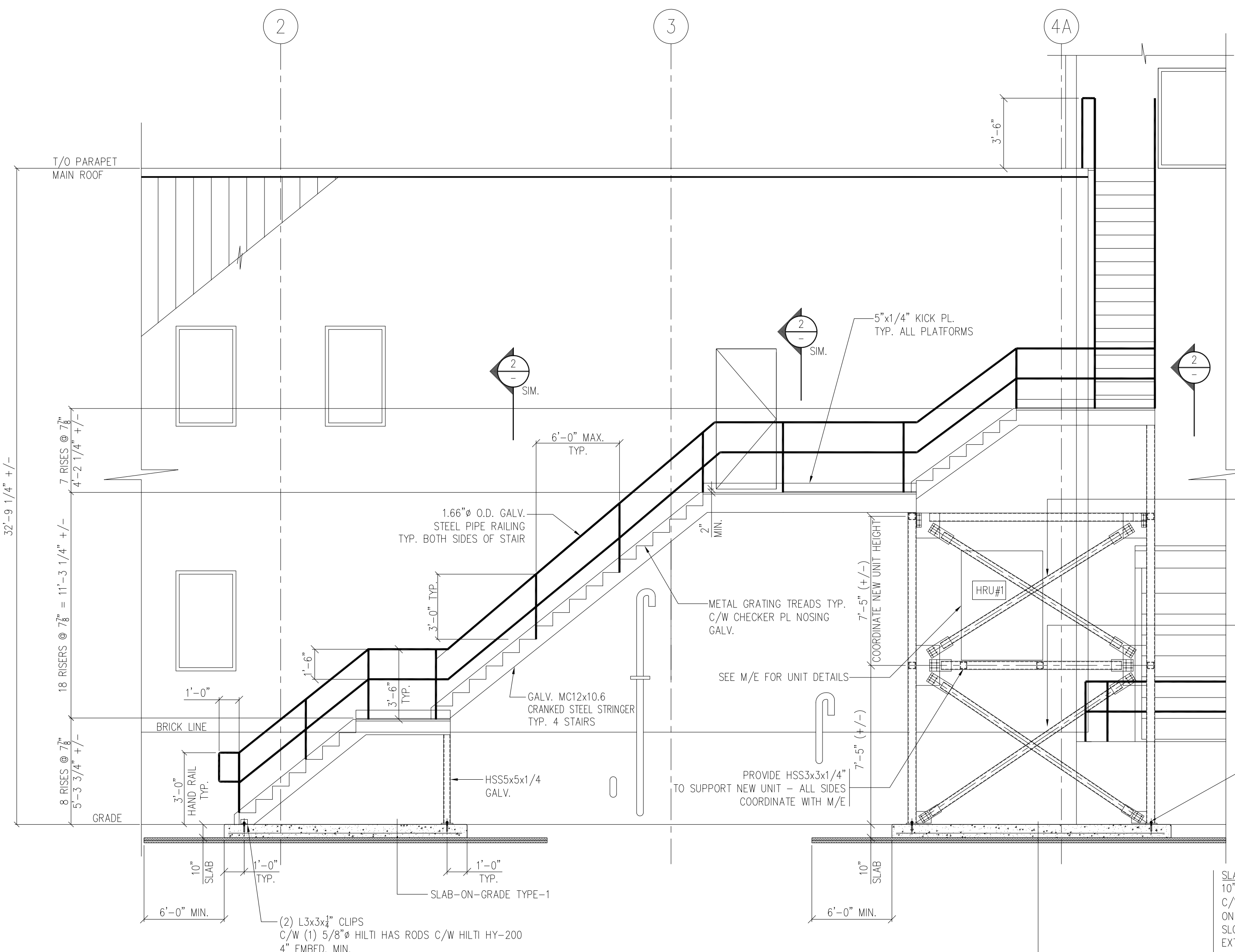
project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 McInnes St. E. NORTH BAY, ONTARIO  
 title: WINDOW & DOOR SCHEDULES

drawn by: BM  
 checked by: TIM T  
 scale: NTS  
 project no: 17944  
 date plotted: SEPT 16 2019  
 date revised: JUNE 12 2019

dwg no: A6.0



**STAIRS NOTES:**  
 1) FIELD CONFIRM ALL DIMENSIONS PRIOR TO FABRICATION  
 2) FIELD CONFIRM ALL SITE CONDITIONS  
 3) ALL STAIRS TO BE GALVANIZED



**SLAB-ON-GRADE TYPE 1**  
 10\"/>

1 REFER TO BUILDING ELEVATIONS FOR ADDITIONAL DETAILS

2 REFER TO BUILDING ELEVATIONS FOR ADDITIONAL DETAILS

revision	
3	ISSUED FOR CONSTRUCTION
2	RE-ISSUED FOR TENDER - ADDENDUM 2 MAY 31 19
1	ISSUED FOR TENDER



**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McLaughlin Ave.  
 NORTH BAY ONT.  
 705-495-0981

**project**  
 ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Melville St. E. NORTH BAY, ONTARIO

**title**  
 STAIR DETAIL

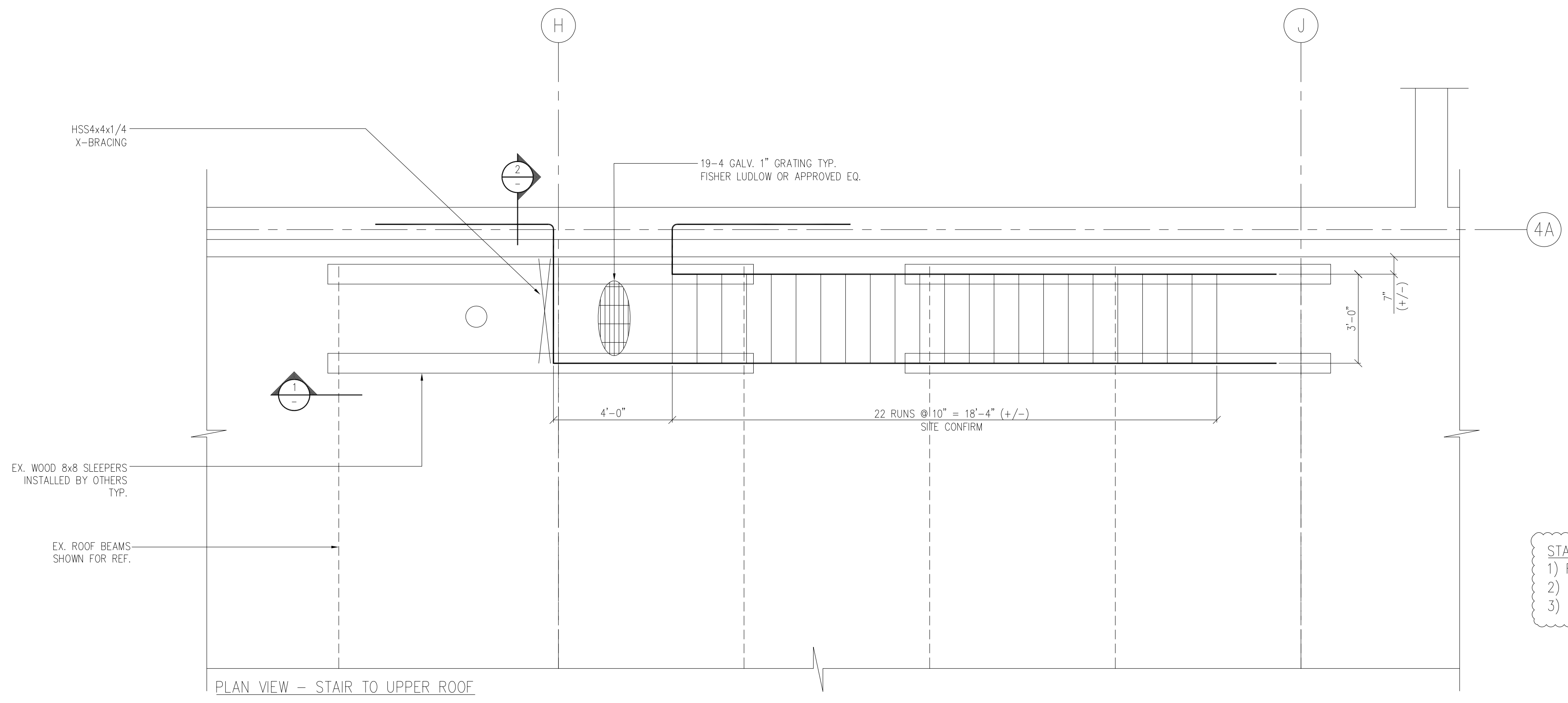
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**checked by:** TIM T

**scale:** NTS  
**project no:** 17944

**date plotted:** SEPT 16 2019

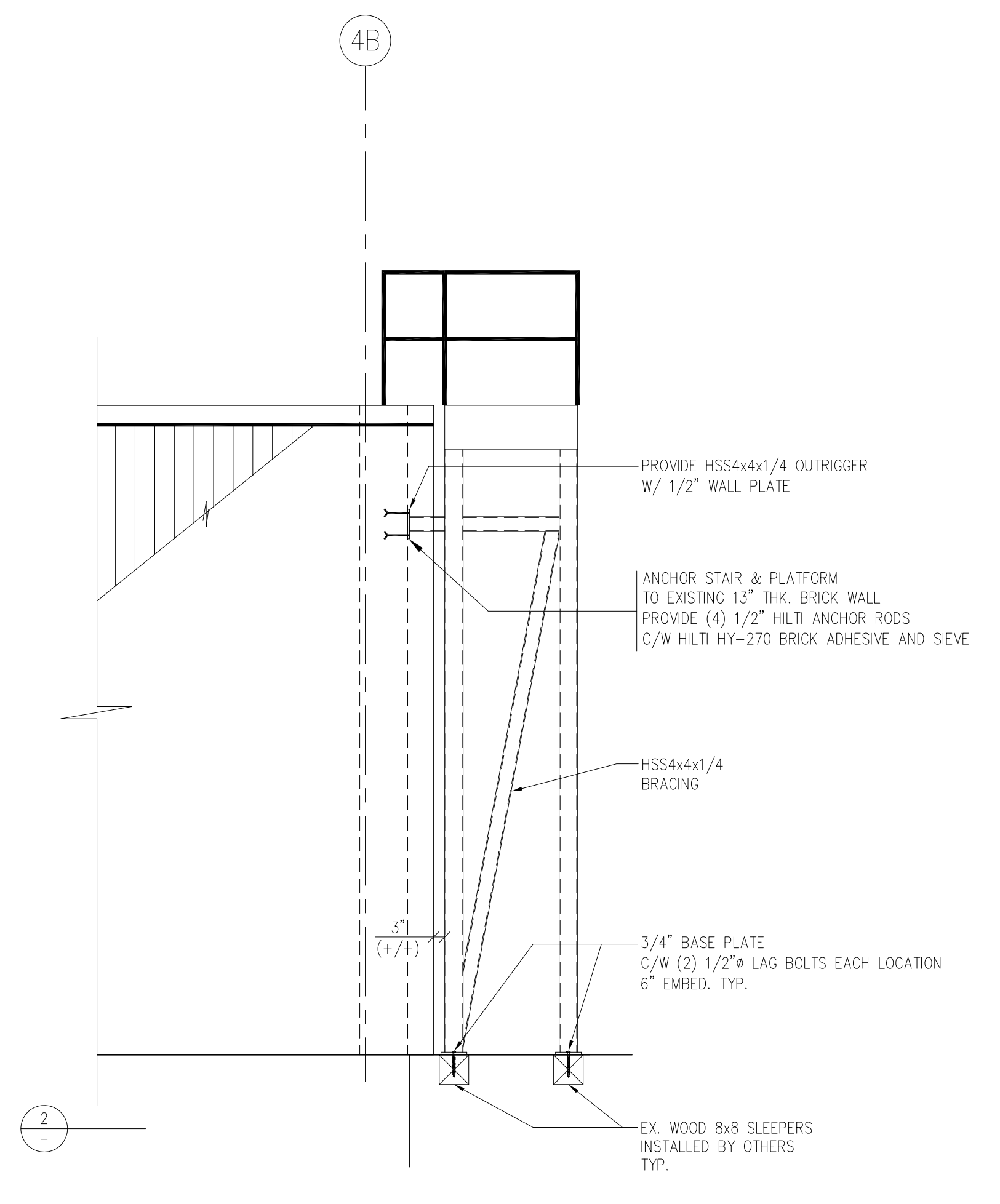
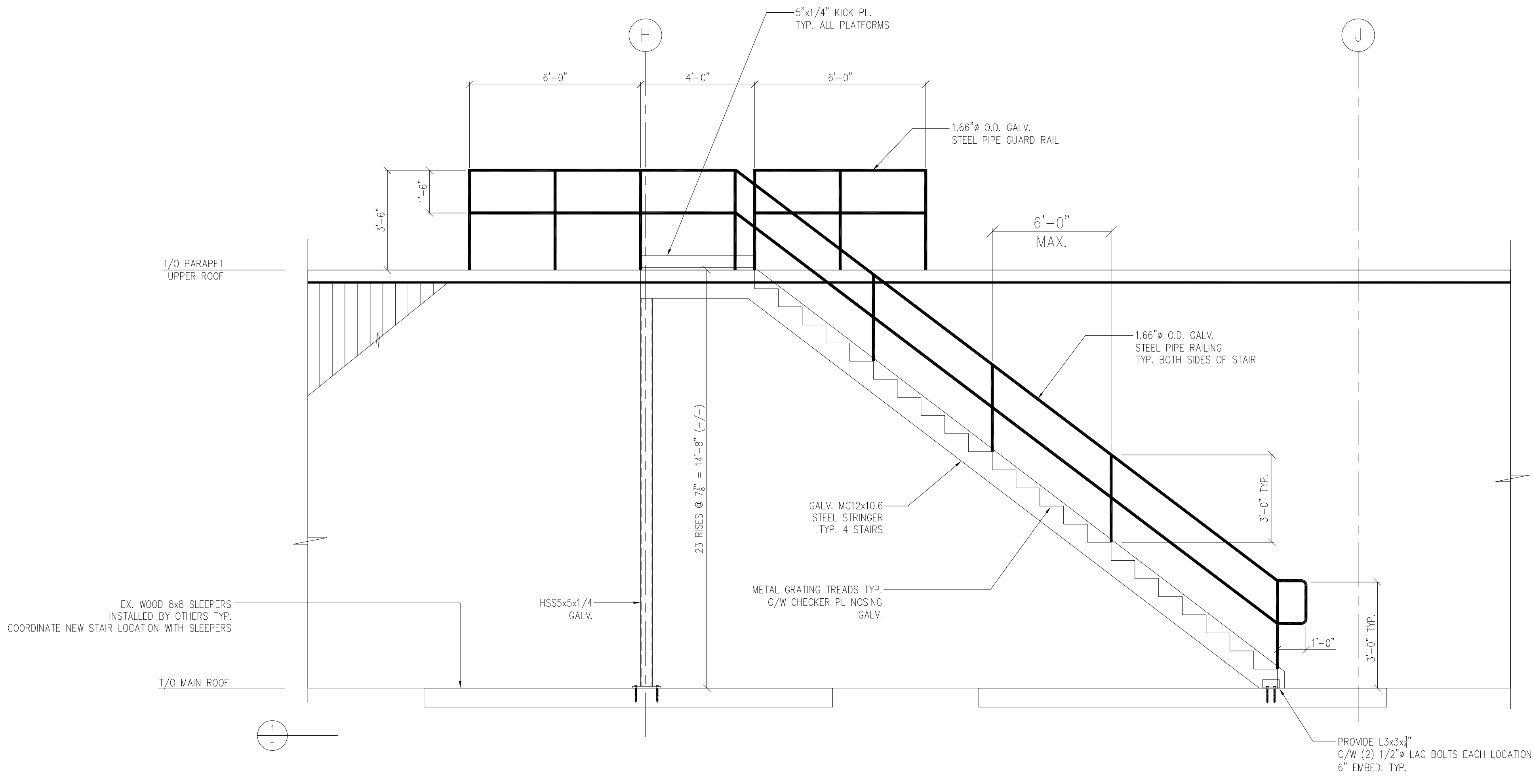
**date revised:** MAY 30 2019

**dwg no:** A7.0



PLAN VIEW - STAIR TO UPPER ROOF

STAIRS NOTES:  
 1) FIELD CONFIRM ALL DIMENSIONS PRIOR TO FABRICATION  
 2) FIELD CONFIRM ALL SITE CONDITIONS  
 3) ALL STAIRS TO BE GALVANIZED



revision
3. ISSUED FOR CONSTRUCTION SEPT 16 19
2. NOT USED
1. ISSUED FOR TENDER MAY 01 19

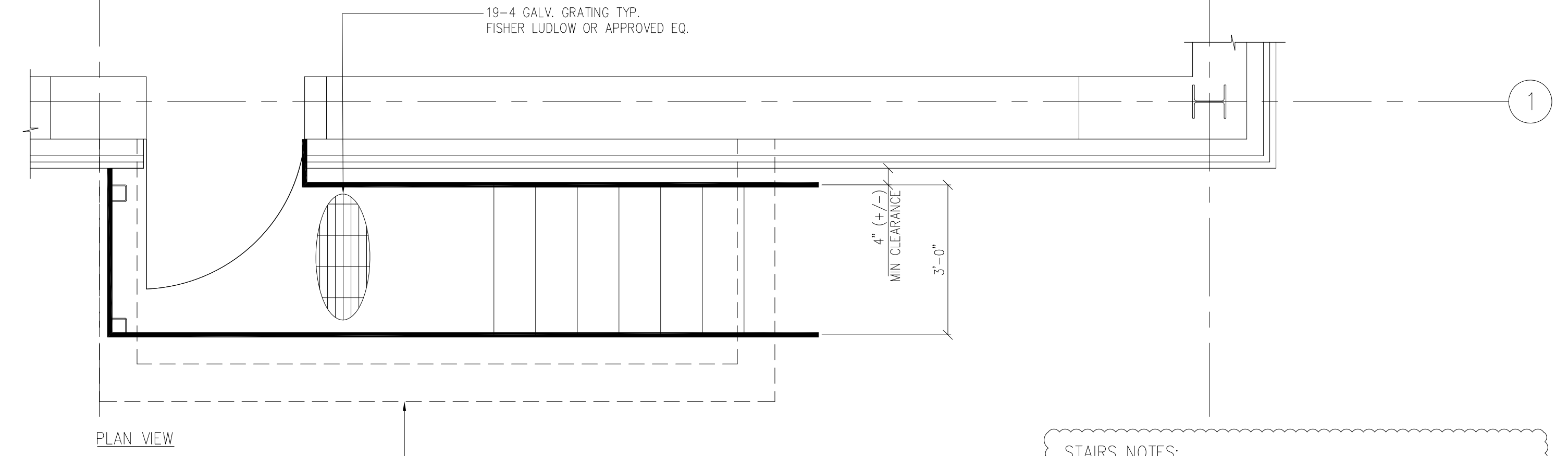
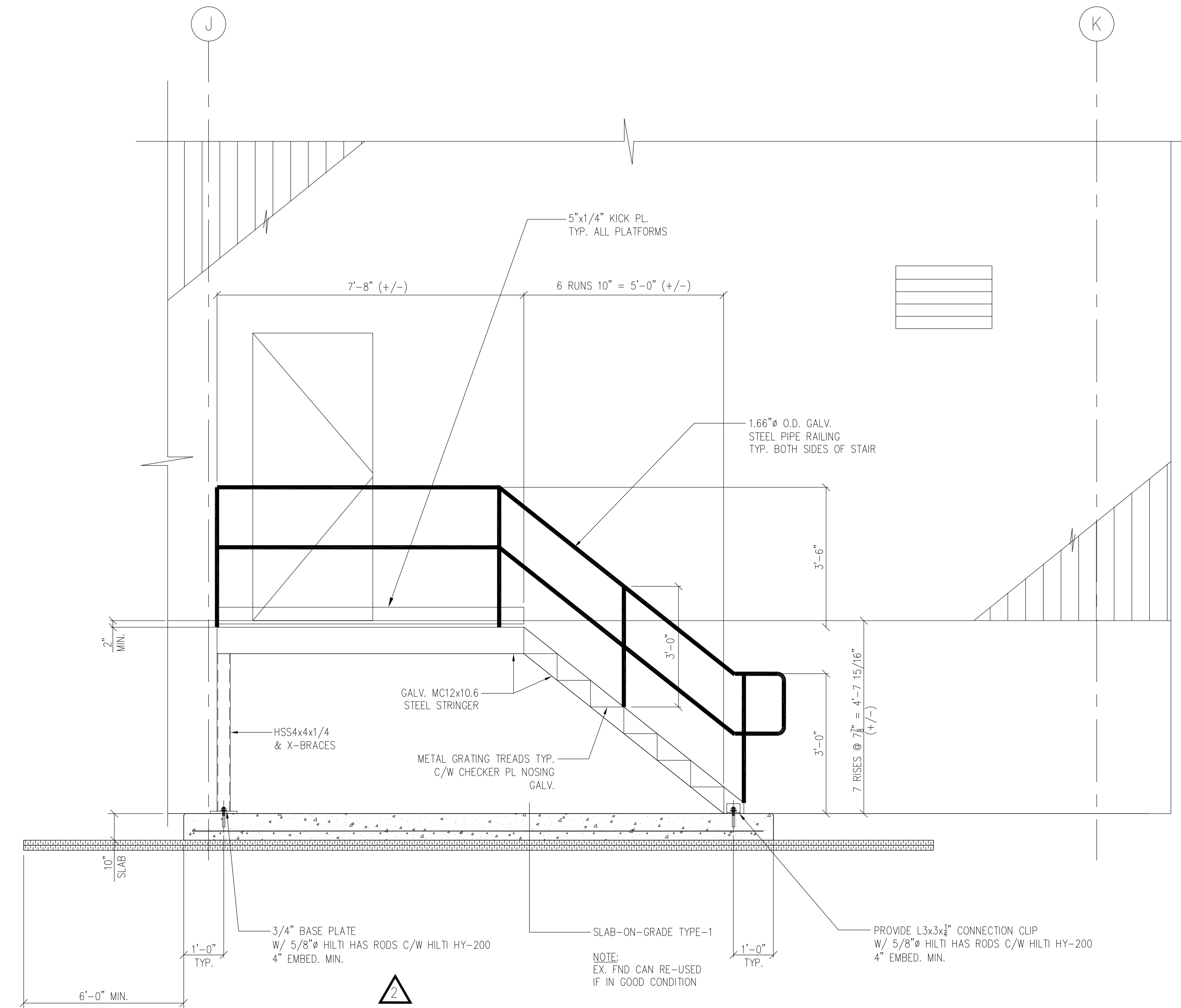
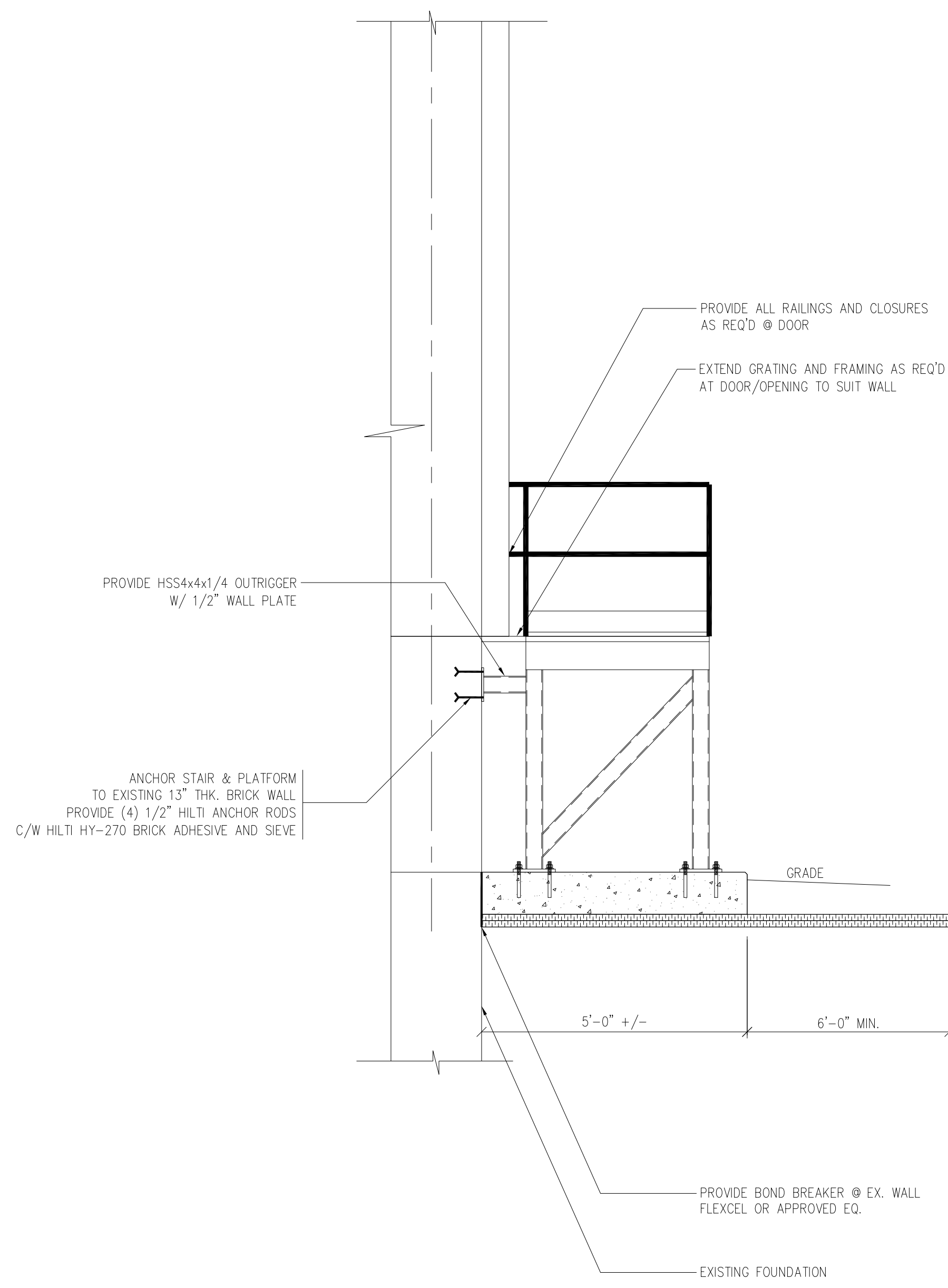


**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McLaughlin Ave.  
 NORTH BAY ONT.  
 705-495-0981

project: **ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR**  
 916 Melville St. E., NORTH BAY, ONTARIO  
 title: **STAIR DETAIL**

drawn by: **BM** checked by: **TIM T**  
 scale: **NTS** project no: **17944**  
 date plotted: **SEPT 16 2019**  
 date revised:

dwg no: **A7.1**



**STAIRS NOTES:**  
 1) FIELD CONFIRM ALL DIMENSIONS PRIOR TO FABRICATION  
 2) FIELD CONFIRM ALL SITE CONDITIONS  
 3) ALL STAIRS TO BE GALVANIZED

**PLAN VIEW**  
 EX. STAIR FOUNDATION  
 CONTRACTOR TO VERIFY IF EX. FOUNDATION STILL IN PLACE  
 -EXISTING FOUNDATION CAN WE RE-USED IF IN GOOD CONDITION

**NOTE:**  
 -1 LOCATION AS SHOWN  
 -2 LOCATIONS SIMILAR

SEPT 16 19	3. ISSUED FOR CONSTRUCTION	revision
MAY 31 19	2. RE-ISSUED FOR TENDER - ADDENDUM 2 MAY 31 19	
MAY 01 19	1. ISSUED FOR TENDER	



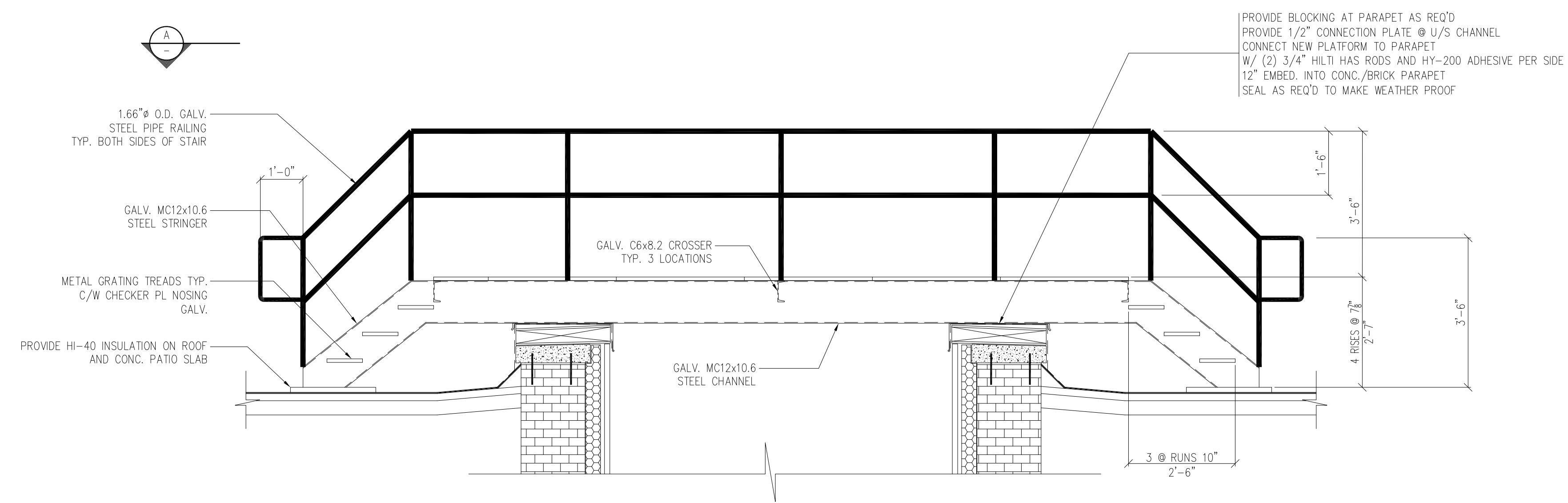
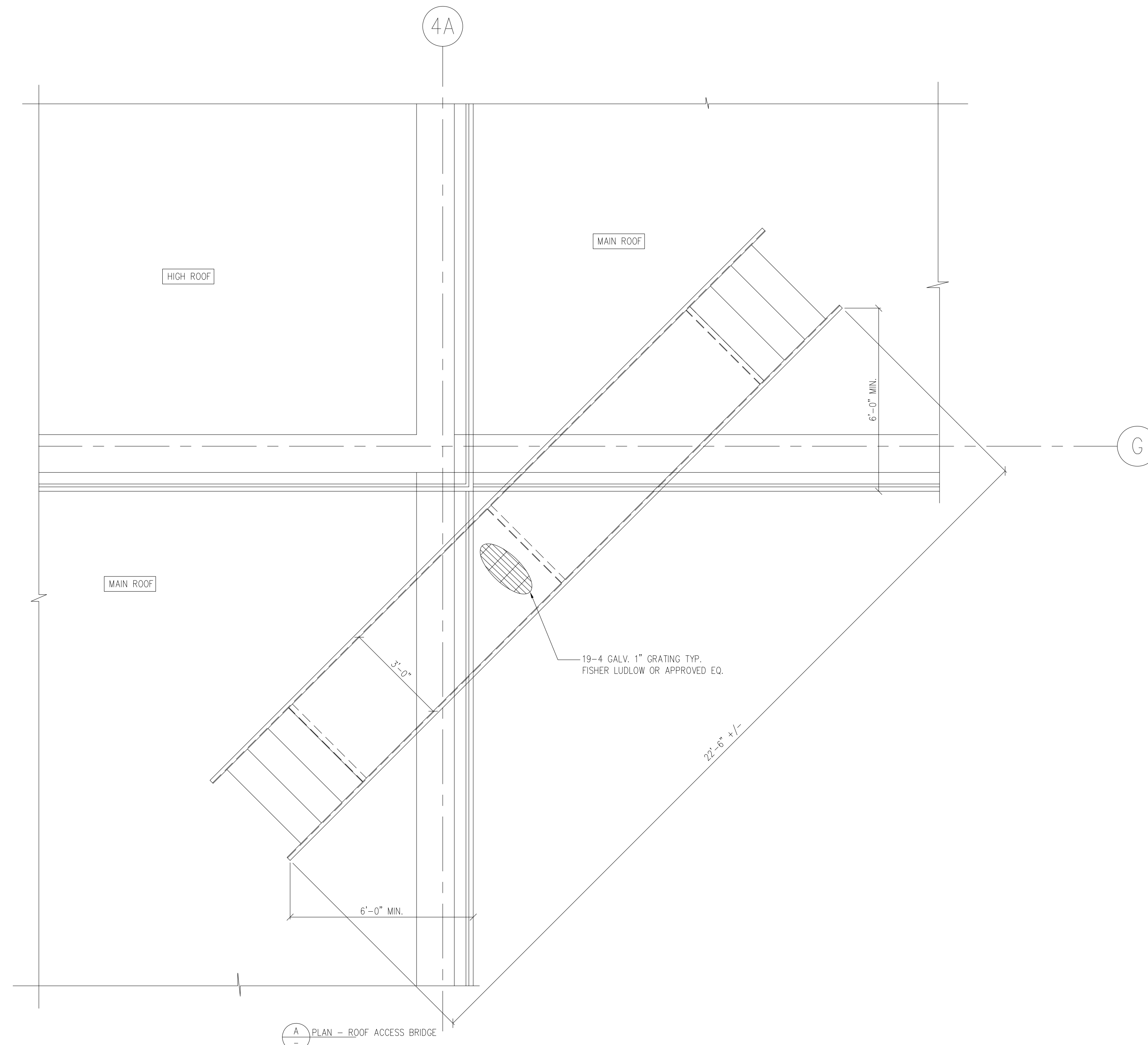
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0861

**project:** ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 Midway S.E., NORTH BAY, ONTARIO  
**title:** STAIR DETAIL

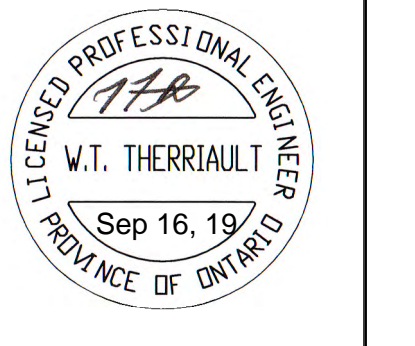
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**project no:** 17944  
**date plotted:** SEPT 16 2019  
**date revised:** MAY 30 2019

**dwg no:** A7.2





revision
3. ISSUED FOR CONSTRUCTION SEPT 16 19
2. NOT USED
1. ISSUED FOR TENDER MAY 01 19



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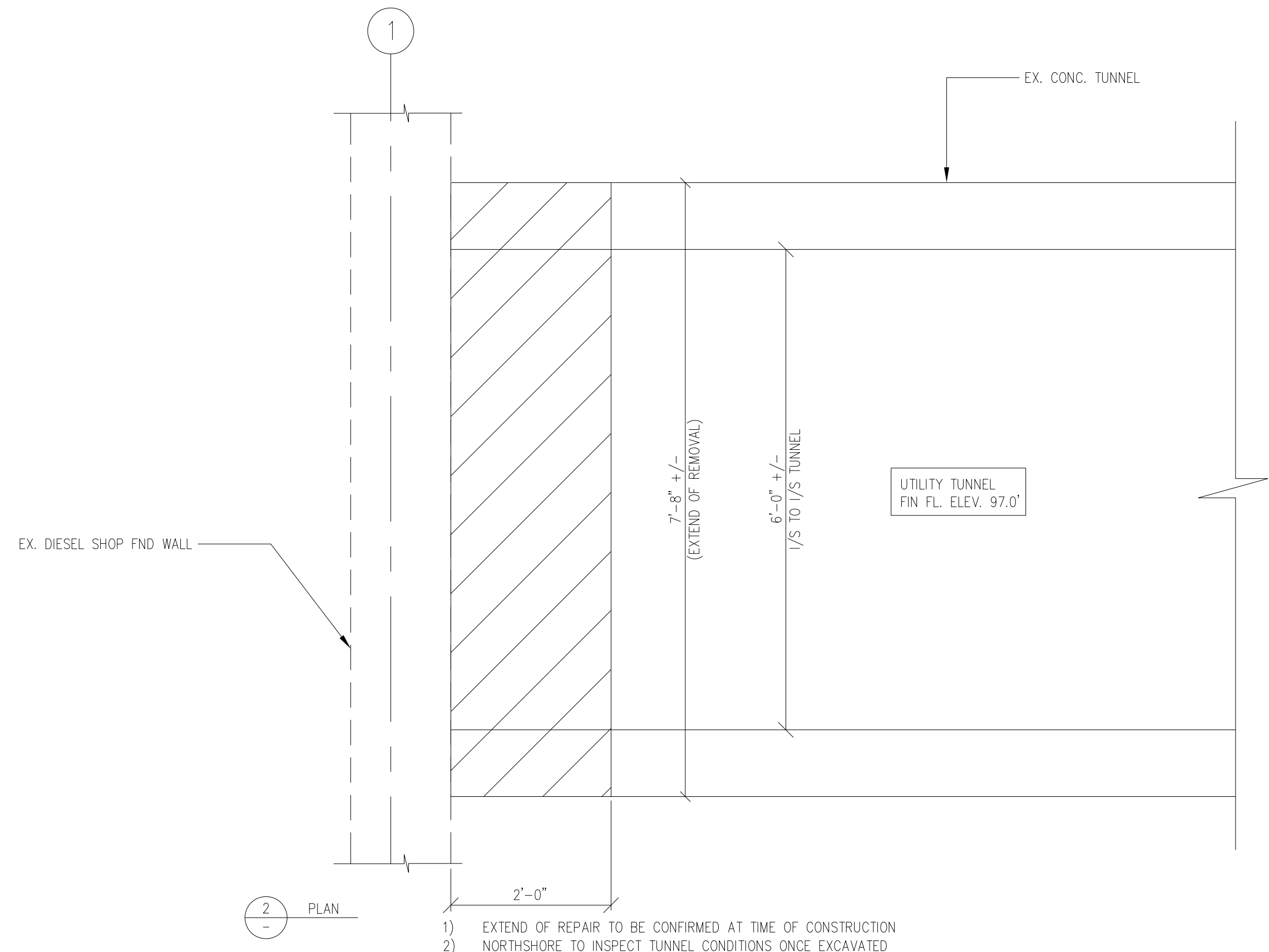
184 McNaughton Ave.  
NORTH BAY ONT.  
705-495-0981

project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Melville St. E. NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

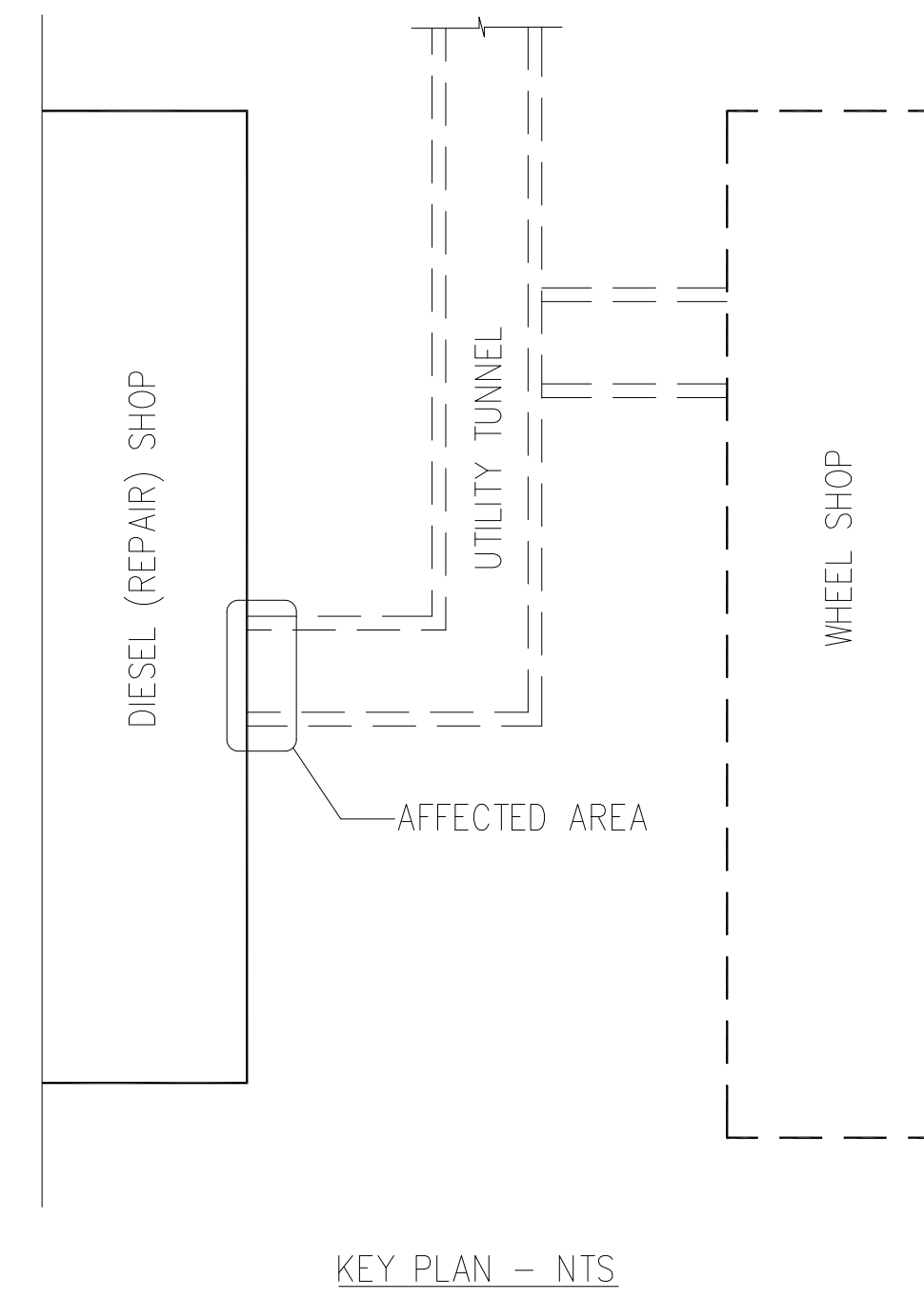
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scale: NTS project no: 17944  
date plotted: SEPT 16 2019  
date revised:

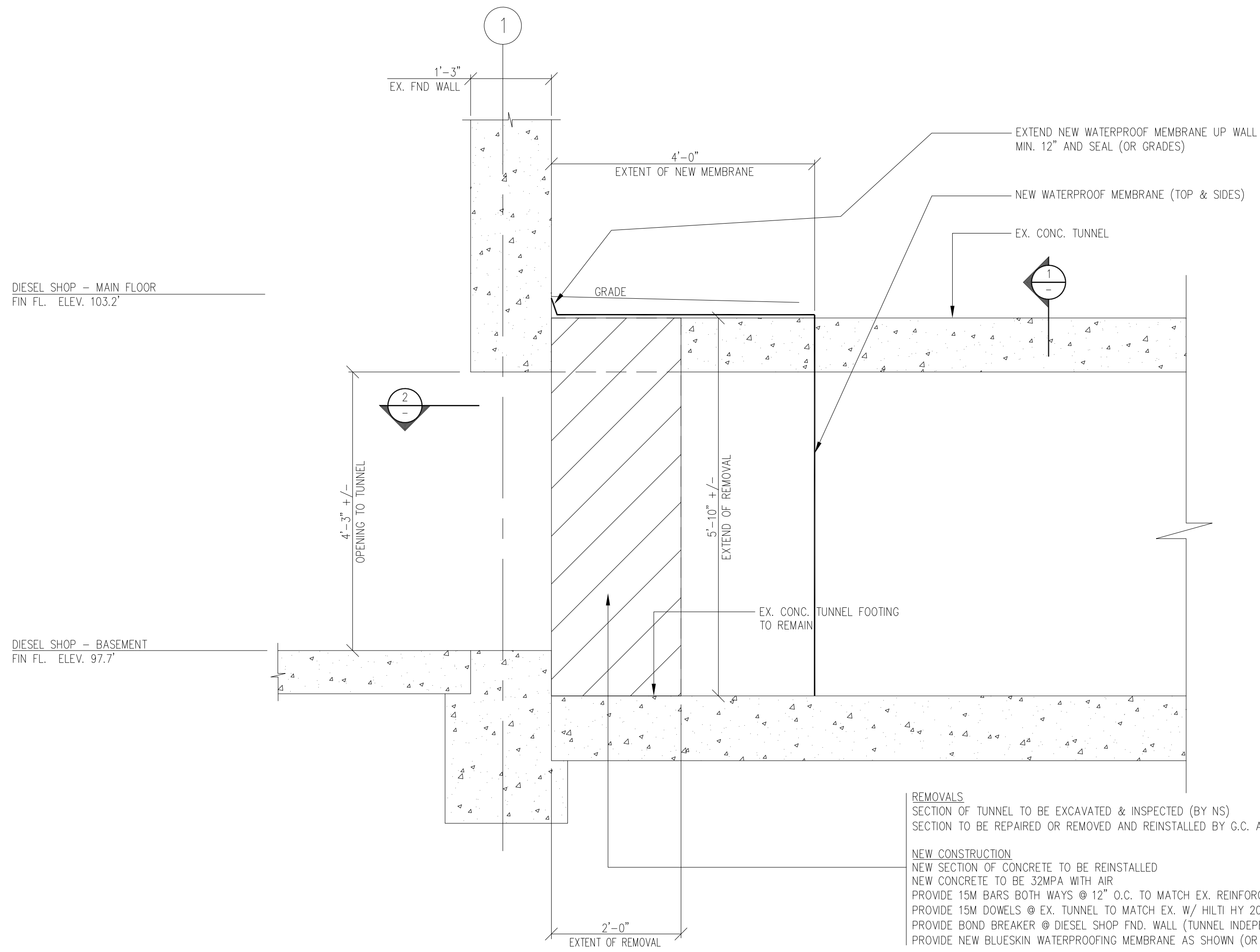
dwg no: A7.3



- 1) EXTEND OF REPAIR TO BE CONFIRMED AT TIME OF CONSTRUCTION  
 2) NORTHSHORE TO INSPECT TUNNEL CONDITIONS ONCE EXCAVATED



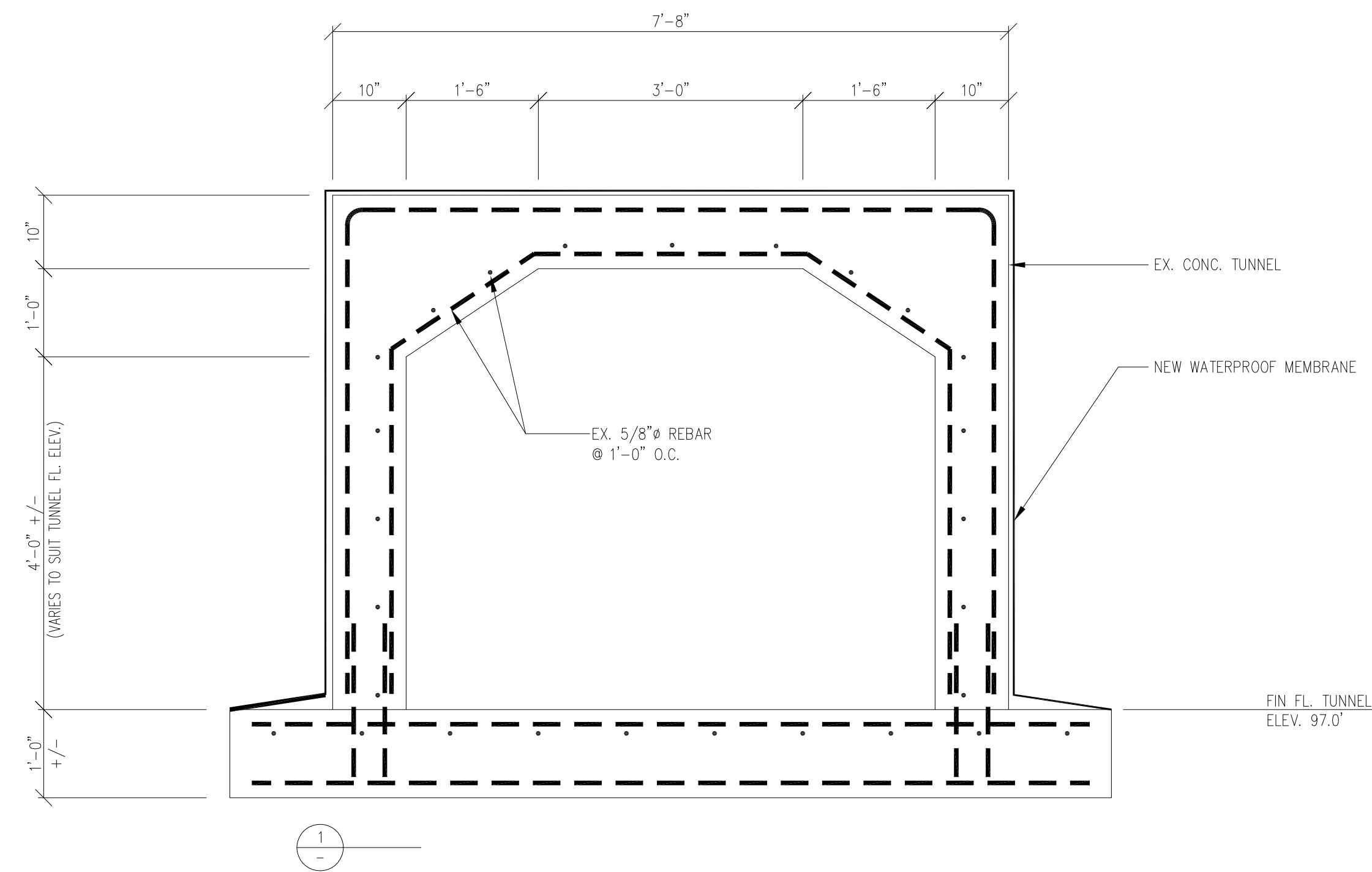
KEY PLAN - NTS



**REMOVALS**  
 SECTION OF TUNNEL TO BE EXCAVATED & INSPECTED (BY NS)  
 SECTION TO BE REPAIRED OR REMOVED AND REINSTALLED BY G.C. AS REQ'D

**NEW CONSTRUCTION**  
 NEW SECTION OF CONCRETE TO BE REINSTALLED  
 NEW CONCRETE TO BE 32MPA WITH AIR  
 PROVIDE 15M BARS BOTH WAYS @ 12\"/>

- NOTE:**  
 1) SAFE GUARD AND PROTECT ALL UTILITY ITEMS DURING CONSTRUCTION  
 2) TEMPORARY SUPPORT OR SHORE ALL UTILITIES AS REQ'D  
 3) G.C. TO ALLOW FOR REMOVAL OF 2'-0\"/>



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	2. NOT USED	
MAY 01 19	1. ISSUED FOR TENDER	



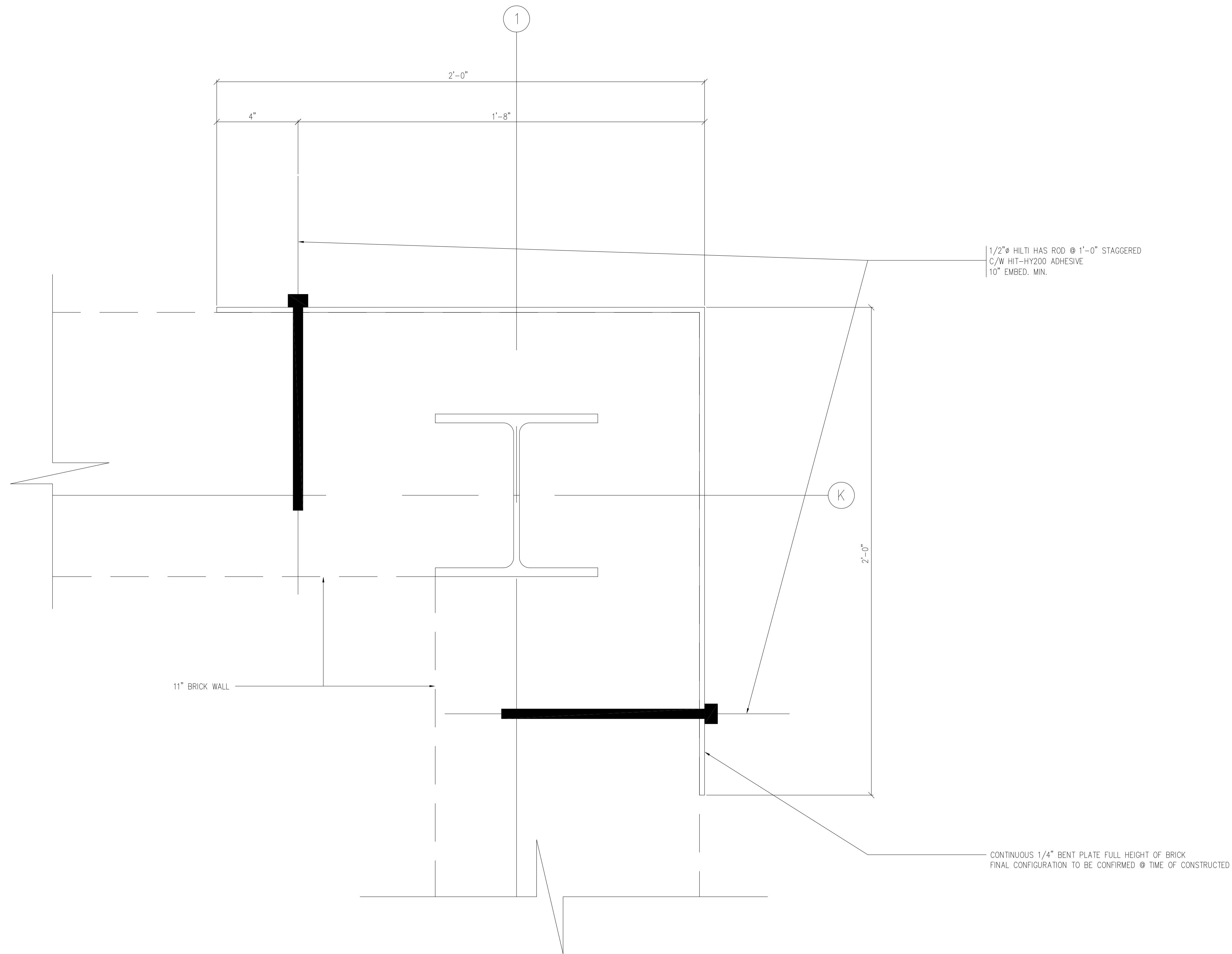
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 NORTH BAY ONT.  
 705-495-0861

**project:**  
 ONTARIO NORTHLAND  
 REPAIR SHOP - BLDG ENVELOPE REPAIR  
 916 McAvoy St. E., NORTH BAY, ONTARIO  
 NORTH BAY, ONTARIO

**title:**  
 TUNNEL REPAIR DETAIL

<b>drawn by:</b> BM	<b>checked by:</b> TIM T
<b>scale:</b> NTS	<b>project no.:</b> 17944
<b>date plotted:</b> SEPT 16 2019	
<b>date revised:</b>	

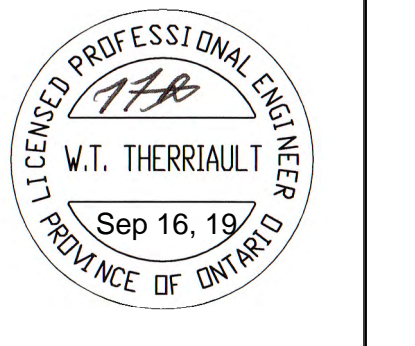
**dwg no.:**  
A8.0



**BRICK CORNER REPAIR – REINFORCING DETAIL**  
SEE PLAN FOR LOCATIONS

- NOTES:
- 1) SITE CONFIRM ALL DIMENSIONS
  - 2) EXTENT/LENGTH OF REINFORCING PLATE TO BE DETERMINED AT TIME OF CONSTRUCTION
  - 3) REMOVE AND RELOCATE HANGERS AND LIGHTNING CABLE/PROTECTOR AS REQ'D
  - 4) INSTALL ANCHORS AS PER HILTI SPECIFICATIONS
  - 5) NOTIFY NORTSHORE ENGINEERING FOR INSPECTION AFTER INSTALLATION
  - 6) ALL MATERIAL TO BE 300W

SEPT 16 19	3. ISSUED FOR CONSTRUCTION	
	2. NOT USED	
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project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 McInnes St. E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO  
title: BRICK CORNER REPAIR DETAIL

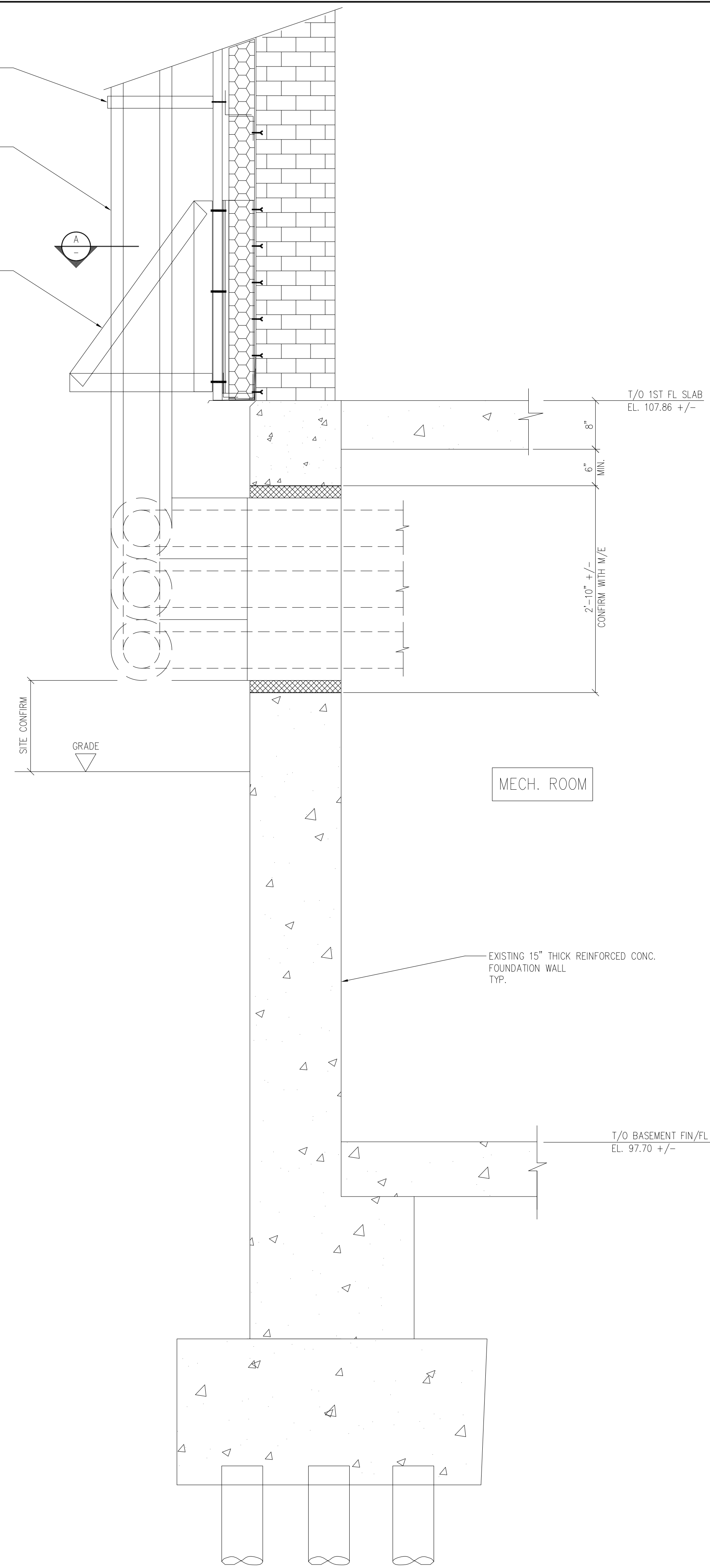
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scale: NTS  
date plotted: SEPT 16 2019  
checked by: TIM T  
project no: 17944  
date revised:

dwg no: A8.1

WALL GUIDE BY OTHERS  
TYP.

VENT PIPING AND ARRANGMENT  
BY OTHERS TYP.

SUPPORT BRACKET BY OTHERS  
TYP.

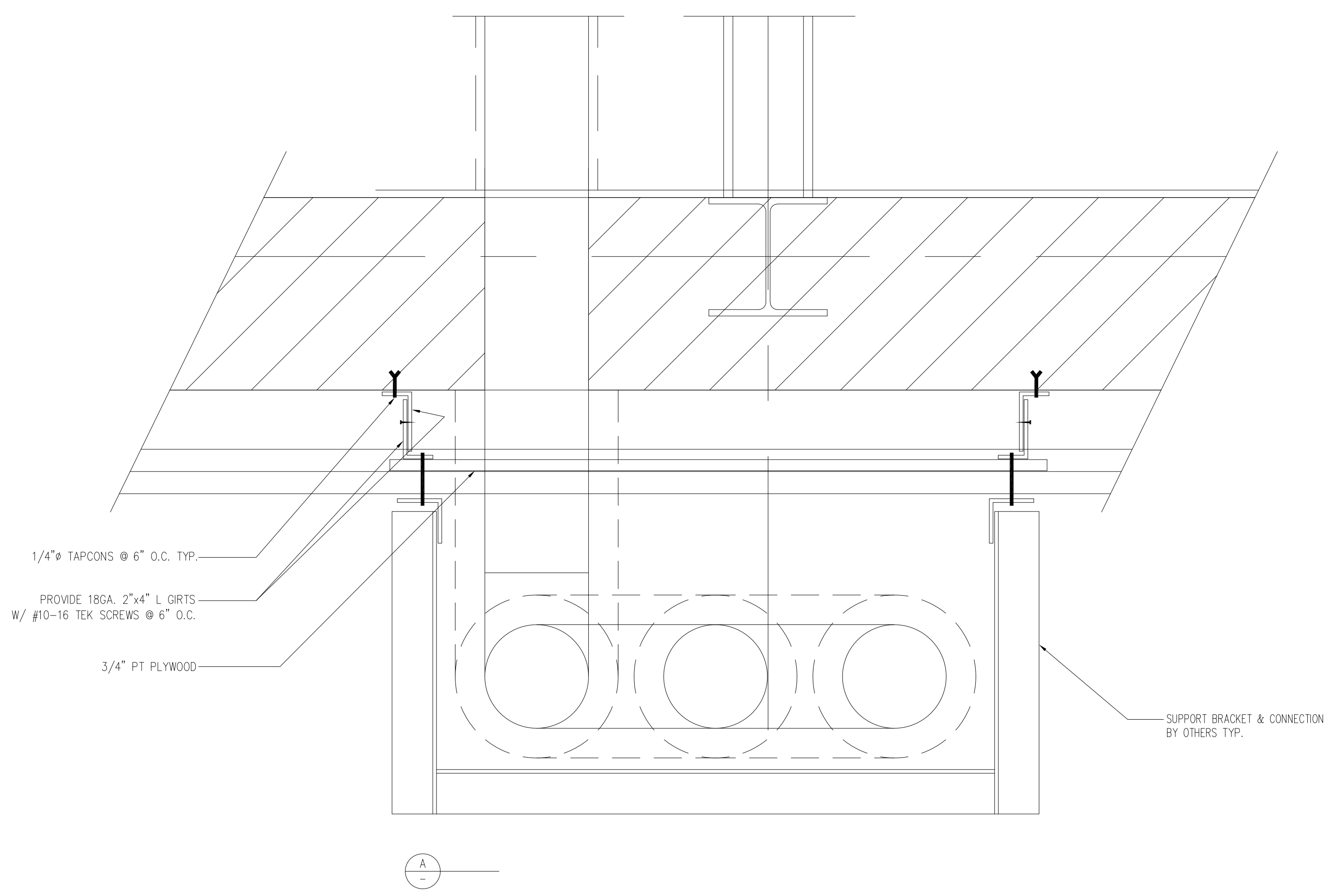


1  
A8.2

1/4" Ø TAPCONS @ 6" O.C. TYP.

PROVIDE 18GA. 2"x4" L GRIS  
W/ #10-16 TEK SCREWS @ 6" O.C.

3/4" PT PLYWOOD



SUPPORT BRACKET & CONNECTION  
BY OTHERS TYP.

revision
3. ISSUED FOR CONSTRUCTION SEPT 16 19
2. NOT USED
1. NOT USED



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NORTH BAY ONT.  
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project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE REPAIR  
916 Melville St., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

title: IN-WALL BLOCKING FOR PIPE SUPPORTS

drawn by: BM  
scale: NTS

checked by: TIM T  
project no: 17944

date plotted: SEPT 16 2019

date revised:

dwg no: A8.2

# ONTARIO NORTHLAND

## WHEEL SHOP – BLDG. ENVELOPE REPAIR

### 916 MCINTYRE STREET EAST, NORTH BAY, ONTARIO

#### DRAWING INDEX

##### GENERAL

GN0.0 COVER PAGE/GENERAL NOTES  
 GN1.0 GENERAL NOTES  
 GN2.0 GENERAL NOTES

##### ARCHITECTURAL

A0.0 SITE PLAN  
 A1.0 EXISTING FLOOR PLAN  
 A1.1 EXISTING EXTERIOR ELEVATIONS  
 A1.2 EXISTING EXTERIOR ELEVATIONS  
 A1.3 EXISTING WALL SECTIONS  
 A2.0 NEW REFERENCE FLOOR PLAN  
 A3.0 NEW EXTERIOR ELEVATIONS  
 A3.1 NEW EXTERIOR ELEVATIONS  
 A4.0 NEW WALL SECTIONS  
 A4.1 NEW WALL SECTIONS  
 A5.0 SECTION DETAILS  
 A6.0 WINDOWS & DOOR SCHEDULE

##### MECHANICAL (REFERENCE)

M101 MECHANICAL VENTILATION, HEATING & A/C  
 M102 LEGEND, NOTES, & FLOOR PLANS  
 M102 DETAILS & SCHEDULES

##### ELECTRICAL (REFERENCE)

E101 ELECTRICAL – POWER – NOTES & BLDG ENVELOPE PLAN  
 E102 ELECTRICAL – POWER – ROOF PLAN & ELEVATIONS  
 E103 ELECTRICAL – POWER – FLOOR PLANS  
 E104 ELECTRICAL – POWER – SITE PLAN AND NOTES

##### HVAC REFERENCE DRAWINGS

JL RICHARDS – ONTC HEATING AND VENTILATION UPGRADES

##### KEY PLAN

K01 – YARD LAYOUT – KEY PLAN

##### MECHANICAL

M10 TO M16

##### ELECTRICAL

E01 TO E03 & EM04

##### STRUCTURAL

S00 TO S03

##### REMOVALS

R10

#### GENERAL NOTES

- OBTAIN ALL PERMITS INCLUDING BUILDING AND OCCUPANCY PERMITS AND ARRANGE ALL INSPECTIONS.
- THE SCOPE OF WORK IS NOT LIMITED TO THIS DRAWING. MECHANICAL AND ELECTRICAL DRAWINGS AND ADDITIONAL SCOPE OF WORK. CONTRACTOR TO REPORT ANY DISCREPANCIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS PRIOR TO STARTING THE WORK.
- CO-ORDINATE ALL WORK, INCLUDING THE WORK OF ALL SUBTRADES AND SUBCONTRACTORS.
- AT THE COMPLETION OF ALL WORK ALL TEMPORARY FACILITIES SHALL BE REMOVED AND THE ENTIRE AREA SHALL BE CLEANED & THOROUGHLY RESTORED TO ORIGINAL CONDITIONS
- CO-ORDINATE INSTALLATION OF EQUIPMENT WITH MANUFACTURERS REQUIREMENTS, INSTRUCTIONS AND THEIR SITE REPRESENTATIVES, WHERE APPLICABLE.
- ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL REGULATIONS.
- SEE ROOM FINISH SCHEDULES FOR ALL FINISHES UNLESS OTHERWISE NOTED. SEE DOOR/FRAME & WINDOW SCHEDULE AND ELEVATIONS FOR ALL DOORS AND WINDOWS.
- ALL PENETRATIONS THROUGH RATED FIRE SEPARATIONS TO BE SEALED WITH A FIRE STOP SYSTEM.
- COORDINATE ALL WORK WITH ONTC SITE REPRESENTATIVE & OBEY ALL ONTC SITE SAFETY REGULATIONS & PROCEDURES.
- CONTRACTOR TO PROVIDE PROTECTION OF THE ROOF SYSTEM(S) IN ACCORDANCE AND AS APPROVED BY GARLAND. ALL ASSOCIATED COSTS FOR PRE AND POST INSPECTIONS AT EACH PHASE OF CONSTRUCTION, WARRANTY CERTIFICATION AND REPORTING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS IS APPLICABLE TO ANY AREAS OF ROOF TOP STAGING AND/OR WORK AREAS ON THE ROOF(S). CONTRACTOR TO PROVIDE PROTECTION PROCEDURE/PLAN ENDORSED BY GARLAND FOR CLIENT REPRESENTATIVE'S REVIEW AND APPROVAL.
- CONTRACTOR TO REVIEW DESIGNATED SUBSTANCES SURVEY PROVIDED IN THE ONTC CONTRACT DOCUMENTS (DSS). THERE ARE ITEMS LISTED IN THE DSS DOCUMENT THAT ARE AFFECTED BY THE REQUIRED DEMOLITION/CONSTRUCTION. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH ANY/ALL DSS ITEMS AFFECTED.

#### SCOPE OF WORK

GENERAL CONTRACTOR TO PROVIDE FOR ALL MATERIALS, LABOUR, SUPERVISION, EQUIPMENT/TOOLS, & PERMITS TO MAKE ALL WORK COMPLETE

THE FOLLOW IS A GENERAL SCOPE OF WORK AND ACTIVITIES REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR TO REVIEW ON SITE DURING THE PRETENDER & PRE-CONSTRUCTION MEETINGS ALL ITEMS AFFECTING THE WORK AND MAKE APPROPRIATE ALLOWANCES FOR THE COMPLEXITY OF THE PROJECT (INCLUDING BUT NOT LIMITED TO THE FOLLOWING ITEMS);

- SET UP AND CONTROL OF CONSTRUCTION ISLAND(S) AS REQUIRED
- COORDINATION OF STAGING OF WORK WITH ONTC (SEE DRAWING A.2.0)
- COORDINATE DAILY ACTIVITIES WITH ONTC
- DEMOLITION AND DISPOSAL OF ANY & ALL ITEMS OFFSITE AS REQ'D AND AS SHOWN ON THE DRAWING A1.0 TO A1.3 AND A3.0
- EXCAVATED MATERIAL SUCH AS SOIL, GRAVEL, CONCRETE, ETC TO BE DISPOSED OF ON SITE. CONTRACTOR TO ALLOW FOR RELOCATION OF MAT'L TO THE ON-SITE LOCATION
- METAL STUD WALL FRAMING, GAUGE METAL FRAMING, AND ALL ASSOCIATED SHEETING
- SPRAY FOAM INSULATION
- METAL SIDING AND LINER PANEL, INCLUDING FASTENERS, DRIPS, J-STRIP CLOSURES, FLASHING AND ALL ASSOCIATED ITEMS
- NEW WINDOWS AS SHOWN
- PATCH AND REPAIR ROOFING AT PARAPET AS REQUIRED (SEE DETAILS)
- PATCH AND REPAIR ALL ITEMS AFFECTED BY CONSTRUCTION TO ORIGINAL CONDITION AND TO SATISFACTION OF ONTC
- PAINT ALL AREAS INDICATED ON DRAWINGS
- M/E WORK AS OUTLINED ON PIOTROWSKI CONSULTANTS DRAWINGS
- CAULK AND SEAL ALL ITEMS AS REQUIRED & INSTRUCTED BY ENGINEER



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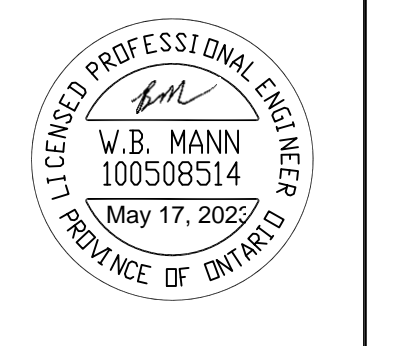
#### ENGINEERING CONSULTANTS

STRUCTURAL: NORTHSHORE ENGINEERING & DRAFTING SERVICES  
 184 MCNAUGHTON AVE  
 NORTH BAY, ONTARIO, P1C 1G7  
 T 705 495 0981, F 705 497 7425  
 NS@NORTHSHORE-ENG.COM

MECHANICAL & ELECTRICAL:

PIOTROWSKI CONSULTANTS LTD.  
 1820 BOND STREET  
 NORTH BAY, ONTARIO, P1B 4V6  
 T 705 472 2536. F 705 476 5105  
 PCL@ONLINK.NET

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ISSUED FOR TENDER	MAY 05 23



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project: ONTARIO NORTHLAND  
 WHEEL SHOP - BLDG ENVELOPE REPAIR  
 916 McIntyre St. E. North Bay, Ontario  
 north bay, ontario  
 title: COVER PAGE / DRAWING INDEX / NOTES

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BM	TIM T
scale:	project no:
NTS	211725
date plotted:	
MAY 05 23	
date revised:	
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 GNO.0

# SEE DRAWINGS FOR ADDITIONAL NOTES

## GENERAL NOTES

- THIS IS A GENERAL SPECIFICATION. SOME STATED ITEMS MY NOT APPLY.
- 1.0 GENERAL
- 1.1 DESIGN AND CONSTRUCTION IS TO CONFORM TO THE 2012 ONTARIO BUILDING CODE. REFER ALSO TO TYPICAL DETAILS, NOTES UNDER PLANS & SCHEDULE ON THE STRUCTURAL DRAWINGS, AND TO THE SPECIFICATION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATIONS REFERRED TO SHALL BE THE LATEST EDITIONS INCLUDING ALL REVISIONS AND ADDENDA. ALL DIMENSIONS, AND DETAILS OTHER THAN PURELY STRUCTURAL DIMENSIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST THE ARCHITECTURAL DRAWINGS AND ANY INCONSISTENCIES REPORTED TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS MUST NOT BE SCALED.
- 1.2 REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, SLEEVES, DEPRESSIONS, GROOVES AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DRAWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ABOVE ITEMS WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROXIMATELY AS TO SIZE AND LOCATION.
- 1.3 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISIONS HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY BRACINGS AND SHORING REQUIRED FOR STRESSES AND INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACINGS, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS TO SAFEGUARD ALL EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.
- 1.4 ALL LOADS SHOWN ON THESE DRAWINGS ARE FACTORED LOADS UNLESS OTHERWISE NOTED.
- 2.0 SHOP DRAWINGS, PLACING DRAWINGS & BAR LISTS: -
- 2.1 FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT COPIES OF SHOP DRAWINGS, FOR REVIEW BY THE STRUCTURAL CONSULTANT. SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING ITEMS AND REQUIRE AN ENGINEERING SEAL OF AN ENGINEER LICENSED IN ONTARIO & RESPONSIBLE FOR THE WORK. ALL STRUCTURAL STEEL, OWSJ, PRE-ENGINEERED
- WOOD TRUSS, HEAVY WOOD TIMBER CONNECTIONS, CONCRETE PRECAST CORE SLAB, REBAR, METAL ROOF & FLOOR DECK, PRE-ENGINEERED BUILD FRAME. SHOP DRAWINGS TO SHOW COMPLETE INFORMATION FOR THE FABRICATION AND ERECTION OF THE STRUCTURAL COMPONENTS.
- 2.2 REVIEW BY THE STRUCTURAL CONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR SEEING THAT THE WORK IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- 3.0 INSPECTION AND TESTING: -TESTING ITEMS MAY BE DELETED WITH ENGINEER PERMISSION
- 3.1 A SOILS CONSULTANT AND AN INDEPENDENT INSPECTION AND TESTING COMPANY ARE TO BE ENGAGED TO CARRY OUT THE FOLLOWING SERVICES: -
- 1 BEARING SOIL - REFER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO THE SOIL REPORT.
  - 2 FILL UNDER SLABS-ON-GRADE - CONFIRM THAT FILL MATERIAL USED IS SATISFACTORY AND THAT THE REQUIRED DEGREE OF COMPACTION HAS BEEN ATTAINED.
  - 3 CAST-IN-PLACE & PRECAST CONCRETE - ROUTINE INSPECTION OF MATERIALS, INCLUDING SLUMP CYLINDER AND AIR ENTRAINMENT TESTS & REINFORCING ROD TESTS WHEN REQUIRED AS DIRECTED IN ACCORDANCE WITH CAN/CSA-A23.2-M.
  - 4 THE PROJECT SUPERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTANT A MINIMUM OF 24 HOURS IN ADVANCE OF A CONCRETE POURS FOR A REVIEW OF PREPARATIONS.
  - 5 STRUCTURAL STEEL AND OWSJ - ROUTINE SHOP AND FIELD INSPECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF CAN/CSA-16.1-M
  - 6 MASONRY - WHEN REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TESTED IN ACCORDANCE WITH CAN3-A165-M SERIES; BRICKS IN ACCORDANCE WITH CSA CAN3-A82M; AND MORTAR AND/OR GROUT IN ACCORDANCE WITH CSA A179M.
- 3.2 ALL INSPECTION AND TESTING SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION AND WELDING, INSPECTORS ARE TO BE CERTIFIED BY THE CANADIAN BUREAU.
- 4.0 FOUNDATIONS
- 4.0 REFER TO NOTES UNDER FOUNDATION PLANS. ALL EXTERIOR FOOTINGS OR OTHER FOOTINGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL BE FOUNDED AT A MINIMUM 1700mm (5'-6") BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. ON THE DRAWINGS FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTING SHALL BE PROTECTED BY A MINIMUM OF 1200mm (4'-0") OF EARTH OR IT'S EQUIVALENT SUFFICIENT TO PREVENT FREEZING.
- 4.2 THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, MAXIMUM STEP APPROX. 600mm (2'-0").
- 4.3 CAP DEPTHS AND FOOTING ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THE STRUCTURAL DRAWINGS.
- 4.4 IF ACTUAL JOB SITE OR SOIL CONDITIONS VARY FROM THOSE STATED IN THE GEOTECHNICAL REPORT BY ENGLOBE OR SHOWN BY STRUCTURAL CONSULTANT IN ITS DRAWINGS. WRITTEN DIRECTIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.
- 4.5 KEEP EXCAVATIONS CONTINUOUSLY DRY BEFORE CONCRETE IS PLACED. IF THE SOIL IS SOFTENED BY WATER, THE EXCAVATION SHALL EXTENDED BELOW THE SOFTENED MATERIAL AND THE BOTTOM OF THE FOOTINGS LOWERED TO SUIT.
- 5.0 BACKFILLING AND COMPACTION: -
- 5.1 SLABS-ON-GRADE AND ALL STRUCTURAL ELEMENTS FRAMING INTO WALLS WHICH RETAIN EARTH MUST BE IN BEFORE BACKFILLING. BACKFILL & COMPACT EACH SIDE OF WALL SIMULTANEOUSLY.
- 5.2 AT FOUNDATION WALLS WITH GRADE BOTH SIDES, UNLESS ADEQUATELY SHORED, THE SUB-GRADE. (WHERE SUB-GRADE CONSISTS OF COMPACTED FILL, REFER TO SPECIFIC NOTES ON THE DRAWINGS).
- 5.3 UNDER SLABS-ON-GRADE, REMOVE SOFT SPOTS, ORGANIC AND FOREIGN MATTER AS REQUIRED, COORDINATE WITH NORTSHSHORE ENGINEERING

## GENERAL NOTES CONTINUED

- 5.4 BACKFILL UNDER SLAB-ON-GRADE, IN FOOTING EXCAVATIONS AND IN TRENCHES ONLY WITH APPROVED MATERIAL. UNLESS SPECIFICALLY NOTED OTHERWISE, BACKFILLING SHALL BE CARRIED OUT IN MAXIMUM OF 200mm (8") THICK LIFTS OF LOOSE FILL EACH COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- 5.5 UNLESS OTHERWISE NOTED, PROVIDE IMMEDIATELY UNDER SLABS-ON-GRADE A MINIMUM OF 150mm (8") OF COMPACTED GRANULAR "A" MATERIAL. COMPACTION TO ACHIEVE A MINIMUM OF 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

## STRUCTURAL STEEL

- 1.0 GENERAL
- 1.1 STRUCTURAL STEEL & CONNECTIONS SHALL CONFORM TO CAN/CSA-S16.1-M & SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER EXPERIENCED IN THIS TYPE OF WORK.
- 1.2 REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS & TO THE SPECIFICATION .
- 1.3 WELDING SHALL CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA W47.1. DIV 1 OF 2.1
- 1.4 BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAR CAPACITY UNLESS OTHERWISE NOTED, & IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR IMPLIED BY THE DRAWINGS. WHEN EVER POSSBLE USE STANDARD DOUBLE HEADED AND TYPE CONNECTIONS. ALL CONNECTION TO BE AT LEAST HALF THE DEPTH OF THE BEAMS. USE SAFE CONNECTIONS AS REQUIRED BY THE MINISTRY OF LABOUR.
- 2.0 PRODUCTS
- 2.1 ALL STRUCTURAL STEEL MEMBERS SHALL CONFORM TO CAN/CSA-G40.20/G20.21-M. PLATES, SAG RODS, STRAP ANCHORS & BARS SHALL BE TYPE 300W AND WIDE FLANGE SECTION AND HOLLOW STUTURAL SECTIONS SHALL BE TYPE 350W, CLASS C FOR SQUARE HSS & CLASS C FOR ROUND HSS.
- 2.2 BOLTS, NUTS & WASHERS FOR CONNECTIONS TO CONFORM TO ASTM A325 UNLESS NOTED.
- 2.4 ANCHOR BOLTS, NUTS & WASHERS FOR BASE PLATES, BEARING PLATES & WELD PLATES TO CONFORM TO ASTM A307 UNLESS NOTED.
- 2.5 SHEAR STUDS WHERE REQUIRED TO CONFORM TO ASTM A108, WELDING TO CONFORM TO CSA W59.
- 2.6 WELDING MATERIALS TO CONFORM TO CSA W48-M (SERIES).
- 2.7 POWER TOOL CLEAN ALL STEEL BEFORE PRIMING TO REMOVE ALL LOOSE MILL SCALE.
- 2.8 PRIMER PAINT TO CONFORM TO CAN/CGSB-1.40-M OR CISC/CPMA 2-75. TOP COAT TO BE INDUSTRIAL GRADE ENAMEL PAINT (AS PER ONTC REQUEST)
- 3.0 EXECUTION
- 3.1 FABRICATION, HANDLING & ERECTION TO CONFORM TO CAN/CSA-S16.1-M.
- 3.2 PROVIDE A MINIMUM OF 2-12mm (1/2") DIAMETER BY 250 (10") LONG WALL ANCHORS FOR ALL BEAM & OWSJ WALL PLATES ON MASONRY, OR AN APPROVED EQUAL, UNLESS OTHERWISE NOTED. BEAMS & JOIST SHOES TO BE WELDED TO BEARING PLATES.
- 3.3 PROVIDE ADJUSTABLE ANCHORS TO ALL STEEL TO BE BUILT INTO, ABUTTED BY, OR FACED WITH MASONRY (REFER ALSO TO DETAILS IF SHOWN). SPACING OF ANCHORS TO BE
- .1 FOR VERTICAL SPACING.....600 (24") MAX. CENTRES
  - .2 FOR HORIZONTAL SPACING.....5 TIMES WALL THICKNESS\* MAX. 1500 (5'-0") CENTRES
- (\*NOTE, USE BACK-UP WYTHE ONLY FOR CAVITY WALLS).
- .3 WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY (I.E. DOES NOT SUPPORT MASONRY) ANCHORS SHALL PERMIT DIFFERENTIAL VERTICAL MOVEMENT BETWEEN STRUCTURAL MEMBER & MASONRY. MINIMUM CLEARANCE SPAN/180 (MINIMUM 25mm 1")
- 3.4 CLEAN, PREPARE SURFACES AND SHOP PRIME STRUCTURAL STEEL COAT OF SPECIFIED PRIMER PAINT IN ACCORDANCE WITH CAN/CSA-S16.1-M, EXECPY WHERE MEMBERS ARE TO BE ENCASED IN CONCRETE. FIELD "TOUCH-UP" BOLTS, WELDS, BURNED OR SCRAPED SURFACES AFTER ERECTION.
- 3.6 PROVIDE ALL NECESSARY TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB. BRACING SHOWN ON STRUCTURAL DRAWINGS IS PERMANENT FOR FINISHED BUILDING ONLY.
- 3.7 CO-ORDINATE WITH MECHANICAL & ELECTRICAL CONSULTANTS & SUB-TRADES WHOSE WORK MAY EFFECT DETAILING, FABRICATION & ERECTION OF THE STEEL STRUCTURE.
- 3.8 TOLERANCES: VARIATION FROM PLUMB & LEVEL EXTERIOR COLUMNS AT ELEVATOR SHAFTS, & SPANDREL BEAMS INCLUDING ANGLES.....1:1000 MAX. 25mm (1/8" IN 10'-0" MAX.1") OTHER PIECES.....1:500 (1/4" IN 10'-0")
- 3.9 NO HOLES OTHER THAN THOSE SHOWN ON REVIEWED SHOP DRAWINGS SHALL BE MADE IN ANY STEEL MEMBER WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL CONSULTANT.
- 4.0 QUALITY CONTROL
- 4.1 SEE GENERAL NOTES, NOTES UNDER PLANS, &/OR SPECIFICATION FOR INSPECTION AND TESTING REQUIREMENT.??REFABRICATED WOOD TRUSS NOTES

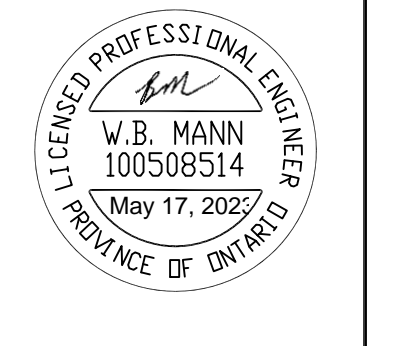
## WOOD CONSTRUCTION

- 1.0 GENERAL
- 1.1 TRUSSES, BRACING, BRIDGING AND CONNECTORS ARE TO BE DESIGNED AND FABRICATED BY THE TRUSS FABRICATOR TO THE REQUIREMENTS OOF CAN/CSA-086-M OR CAN/CSA-086.1-M UNLESS OTHERWISE NOTED, TO SAFELY CARRY THE LOADS, INCLUDING ACCUMULATED SNOW DRIFT LOADS AS INDICATED ON THE DRAWINGS, AND ALL WIND LOADS.
- 1.2 DEFLECTION UNDER LIVE LOAD ONLY SHALL NOT EXCEED 1/240TH OF THE SPAN, EXCEPT THAT WHERE PLASTER OR GYPSUM BOARD CEILINGS ARE HUNG DIRECTLY FROM THE TRUSSES, LIVE LOAD DEFLECTION SHALL NOT EXCEED 1/360TH OF THE SPAN.
- 1.3 IDENTIFY LUMBER BY OFFICIAL GRADE MARKS.
- 1.4 WOOD PRESERVATIVE (PRESSURE TREATED):- WHERE REQUIRED TO CONFORM TO CAN/CSA-080-M.
- 1.5 SHOP DRAWINGS
- .1 SUBMIT SHOP DRAWINGS FOR REVIEW AS DIRECTED BEARING THE STAMP OF THE LICENCED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN.
  - .2 CLEARLY INDICATE ON THE SHOP DRAWINGS, THE SPECIES, SIZES AND STRESS GRADES OF LUMBER USED.
  - .3 SHOW PITCH, SPAN, CAMBER CONFIGURATION, AND SPACING.
  - .4 INDICATE CONNECTOR TYPES, THICKNESSES, SIZES, LOCATION, DESIGN VALUES AND BRIDGING REQUIREMENTS.
  - .5 SHOW BEARING & WIND UPLIFT ANCHORAGE DETAILS.
  - .6 REVIEW OF THE SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR SEEING THAT THE WORK IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS.
- 2.0 MATERIALS
- 2.1 LUMBER:-UNLESS OTHERWISE NOTED, TO BE SPF SPECIES, GRADE NO. 2 CONFORMING TO CSA STANDARD 0141 WITH MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF FABRICATION.
- 2.2 CONNECTOR PLATES: - GALVANIZED SHEET STEEL TO ASTM A446 GRADE "A" WITH g90 "WIPE COAT" DESIGNATION, AND WITH HOLES, PLUGS, TEETH OR PRONGS UNIFORMLY SPACED AND FORMED.
- 2.3 NAILS:-ZINC COATED STEEL TO CSA STANDARD B111.
- 2.4 SCREW & LAG SCREWS:-CADMIUM PLATED STEEL TO CSA STANDARD B35.(SERIES)
- 2.5 SPLIT RINGS:-HOT ROLLED CARBON STEEL TO CAN/CSA-G40.20/G40.21-M, TYPE 260W.
- 2.6 PLYWOOD GUSSETS: - PLYWOOD TO CSA STANDARD 0121-M OR 0151-M.
- 3.0 EXECUTION
- 3.1 HOIST TRUSSES INTO POSITION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 3.2 INSTALL ALL NECESSARY TEMPORARY BRACING REQUIRED TO HOLD TRUSSES PLUMB UNTIL PERMANENT BRACING IS INSTALLED.
- 3.3 INSTALL PERMANENT BRACING AND RELATED COMPONENTS PRIOR TO APPLICATION OF LOADS TO TRUSSES.
- 3.4 TIGHTEN LOOSE CONNECTORS.
- 3.5 DO NOT CUT OR REMOVE CHORDS OR OTHER TRUSS MEMBERS. DO NOT NOTCH OR DRILL MEMBERS UNLESS SUCH NOTCHING OR DRILLING IS ALLOWED FOR IN THE DESIGN OF THE TRUSS.

## INSPECTION SCHEDULE

- 1.0 NOTIFY ENGINEER 24 HOURS PRIOR TO REQUIRED INSPECTIONS
- 1.1 INSPECTION REQUIRED AT THE FOLLOWING POINTS DURING CONSTRUCTION THE FOLLOWING IS A MINIMUM REQUIREMENT.
- BEFORE START OF PROJECT (PRE-CONSTRUCTION MEETING)
  - AFTER EXISTING WINDOWS & GLASS BLOCK ARE REMOVED (REVIEW OF EXISTING STRUCTURE)
  - AFTER INSTALLATION OF GAUGE METAL FRAMING (BEFORE SHEATHING)
  - AFTER INSTALLATION OF GAUGE METAL GIRTS (BEFORE SPRAYING INSULATION)
  - AFTER INSTALLATION OF SPRAY FOAM INSULATION
  - AFTER INSTALLATION OF NEW METAL SIDING / NEW PARAPET
  - AT COMPLETION OF PROJECT

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**NORTHSHORE ENGINEERING & DRAFTING SERVICES**

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project: ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 McInnes St. E. NORTH BAY, ONTARIO  
title: GENERAL NOTES

drawn by: BM	checked by: TIM T
scale: NTS	project no: 211725
date plotted: MAY 05 23	
date revised:	

dwg no: GN1.0

## CAST-IN-PLACE CONCRETE NOTES

- 1.0 GENERAL
- 1.1 PROVIDE ALL LABOUR MATERIAL, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WORK.
- 1.2 REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETAILS AND SPECIFICATION.
- 2.0 PRODUCTS
- 2.1 PORTLAND CEMENT, WATER AND AGGREGATES SHALL CONFORM TO CSA STANDARD A23.1.
- 2.2 PROVIDE AN APPROVED WATER REDUCING ADDITIVE IN ALL CONCRETE. PROVIDE AN APPROVED AIR ENTRAINING ADDITIVE IN ALL CONCRETE WHICH WILL BE EXPOSED TO A FREEZE/THAW CYCLE AND/OR THE ACTION OF DE-ICING SALT. ADMIXTURES SHALL CONFORM TO CSA STANDARD A23.5.
- 2.3 FORM WORK SHALL CONFORM TO CSA STANDARD A23.1, CSA STANDARD S269.3 AND FALSE WORK SHALL CONFORM TO CSA S269.1.
- 2.4 IF SO INSTRUCTED, THE DESIGNS FOR THE FORM WORK SHALL BE SUBMITTED FOR REVIEW BEFORE CONSTRUCTION. FORM WORK DRAWINGS AND DESIGN SHALL BEAR THE STAMP OF A LICENSED PROFESSIONAL ENGINEER.
- 2.5 UNLESS OTHERWISE NOTED PROVIDE SLAB & BEAM FORMS WITH AN UPWARD CAMBER OF 2mm/1000mm (1/4" PER 10'-0") OF SPAN, AND UPLIFT ENDS OF CANTILEVERED SLAB & BEAM FORMS 3mm/1000mm (1/4" PER 8'-0") OF CANTILEVER LENGTH.
- 2.6 PROVIDE STANDARD ADJUSTABLE MASONRY ANCHOR SLOTS FOR ALL MASONRY FACING OR ABUTTING CONCRETE FACES.
- 2.7 PROVIDE AND/OR INSTALL STANDARD ADJUSTABLE INSERTS & ALL OTHER CAST-IN INSERTS AS REQUIRED BY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS & SPECIFICATION.
- 2.8 REINFORCING STEEL UNLESS SPECIFICALLY NOTED, SHALL BE DEFORMED BARS CONFORMING TO CAN/CSA-G30.18-M GRADE 400 (58000 PSI).
- 2.9 WELDED WIRE FABRIC TO CONFORM TO CSA G30.5-M.
- 2.10 REINFORCING SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI STANDARD 315 AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA.
- 2.11 DRY-PACK GROUT TO BE 1 PART PORTLAND CEMENT TO 11/2 PARTS SAND TO 2 PARTS OF 8mm PEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN MIXTURE. COMPRESSIVE STRENGTH 50MPa AT 28 DAYS.
- 2.12 NON-SHRINK GROUT TO BE AN APPROVED PRE-MIXED PROPRIETARY PRODUCT.
- 2.13 PROVIDE APPROVED EXTRUDED PVC WATER STOPS OF SIZE & STYLES INDICATED, WITH PRE-WELDED CORNERS & INTERSECTIONS. SEE ALSO TYPICAL DETAILS.
- 2.14 CURING AND SEALING COMPOUNDS WHERE APPROVED FOR USE TO CONFORM TO ASTM STANDARD C309. GENERALLY, ALL CONCRETE SURFACES ARE TO BE SEALED UNLESS NOTED OTHERWISE. COMPOUNDS ARE TO BE COMPATIBLE WITH APPLIED FINISHES.
- 3.0 EXECUTION
- 3.1 MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE @ 28 DAYS SHALL BE AS FOLLOWS -25MPa FOR FOOTINGS  
-25MPa FOR WALL AND PIERS  
-25MPa FLOOR SLAB
- 3.2 SLUMP AT THE POINT OF DISCHARGE SHALL BE CONSISTENT AT 80mm +/-30mm (3" +/- 1 1/8") UNLESS NOTED OTHERWISE. GREATER SLUMPS ARE NOT ACCEPTABLE.
- 3.3 CONCRETE MIXING, TRANSPORTATION, HANDLING AND PLACING SHALL CONFORM TO CSA STANDARD A23.1.
- 3.4 CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10000mm (30'-0").
- 3.5 CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID-SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
- 3.6 INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE SO INSTALLED THAT THEY SHALL NOT REQUIRE THE CUTTING, BENDING, OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.

## CAST-IN-PLACE CONCRETE NOTES CONTINUED

- 3.7 ELECTRICAL CONDUIT SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM IN WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTRE UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
- 3.8 OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE PROCEEDING.
- 3.9 FINISHING, REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE. ALL HONEYCOMBING SHALL BE CUT OUT AND FILLED. FLOOR FINISHES SHALL BE AS REQUIRED BY THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND SHALL CONFORM TO CSA STANDARD A23.1 (CLASS A CONVENTIONAL SMOOTH CLASSIFICATION).
- 3.10 TOLERANCES FOR PLACING STRUCTURAL CONCRETE, REINFORCING STEEL, CAST-IN HARDWARE AND FOR FLOOR & ROOF FINISHES SHALL BE AS SPECIFIED IN CSA STANDARD A23.1.
- 3.11 MINIMUM REINFORCING FOR ANY CONCRETE WALL TO BE AS SHOWN ON TYPICAL DETAIL FOR CONCRETE WALLS.
- 3.12 MINIMUM REINFORCING FOR ANY SUSPENDED SLAB SHALL BE TEMPERATURE BARS BOTTOM EACH WAY PLUS 10M @ 400 (16") DOWELS 600x600 (2'-0" x 2'-0") TOP AROUND PERIMETER, REFER TO TYPICAL DETAIL OF ONE WAY SLAB.
- 4.0 QUALITY CONTROL
- 4.1 FOR INSPECTION AND TESTING, SEE GENERAL NOTES.

## METAL SIDING NOTES

- 1.0 DESIGN REQUIREMENTS
- 1.1 DESIGN METAL SIDING SYSTEM IN ACCORDANCE WITH CSA S136, S136.1 AND TO WITHSTAND LIVE, DEAD, LATERAL, WIND, SEISMIC, HANDLING, TRANSPORTATION, AND ERECTION LOADS
- 1.2 DESIGN METAL SIDING SYSTEM IN ACCORDANCE WITH FOLLOWING CLIMATE DESIGN DATA FOR NORTH BAY ONTARIO CONTAINED IN ONTARIO BUILDING CODE
  - a. DESIGN TEMPERATURE: JANUARY 1%, JULY 2 1/2%
  - b. WIND (HOURLY WIND PRESSURES): 0.34kPa 1 IN 50 YEAR OCCURRENCE GUST FACTOR: 2
  - c. EARTHQUAKE: SEISMIC DATA AS LISTED
- 1.3 DESIGN METAL SIDING SYSTEM TO LIMIT DEFLECTION UNDER DESIGN LOADS, TO L/240.
- 1.4 DESIGN METAL SIDING SYSTEM TO PREVENT RESTRICTION OF THERMAL INDUCED MOVEMENT WHICH WOULD INDUCE DEFORMATION SUCH AS WARPING, BUCKLING, AND FAILURE OF JOINT SEALS AND FASTENERS. DESIGN METAL SIDING TO PREVENT VIBRATION WHEN SUBJECT TO THE EFFECTS OF WIND.
- 1.5 DESIGN MISCELLANEOUS, ADDITIONAL STRUCTURAL FRAMING MEMBERS AND SAG RODS, REQUIRED TO COMPLETE METAL SIDING SYSTEM, WHERE NOT INDICATED ON CONTRACT DRAWINGS.
- 2.0 SUBMITTALS
- 2.1 SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING ELEVATIONS, DETAILS, PROFILES, DIMENSIONS, THICKNESS OF MATERIALS, FINISHES, METHODS OF JOINING, ARRANGEMENT OF SHEETS, JOINTS, AND SEAMS, SPECIAL SHAPES, METHODS OF ANCHORING, ANCHOR AND CLIP DETAILS, TYPES OF SEALANTS AND GASKETS, WATERPROOF CONNECTIONS TO ADJOINING WORK, DETAILS OF OTHER PERTINENT COMPONENTS OF THE WORK (I.E. WINDOWS, PENETRATIONS, MEMBRANES, ETC) AND COMPLIANCE WITH DESIGN CRITERIA AND REQUIREMENTS AS NOTED ON CONTRACT DRAWINGS.
- 2.2 MOCK UPS: SUBMIT MOCK UP OF TYPICAL DETAILS FOR CLIENT & CONSULTANT REVIEW AND APPROVAL
- 3.0 EXECUTION
- 3.1 INSTALL METAL SIDING IN ACCORDANCE WITH REVIEWED SHOP DRAWINGS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3.2 INSTALL METAL SIDING IN ONE PIECE, FULL HEIGHT, EXCEPT AS INDICATED OTHERWISE.
- 3.3 MAINTAIN JOINTS IN EXTERIOR SIDING, PLUMB, TRUE TO LINE, TIGHT FITTING, HAIRLINE JOINTS.
- 3.4 ATTACH METAL SIDING SYSTEM COMPONENTS TO PREVENT WARPING, BUCKLING, AND DEFORMATION INDUCED BY RESTRICTION OF THERMAL INDUCED MOVEMENT.
- 3.5 INSTALL CORNER PIECES, CLOSURES, FLASHING, ETC, WHERE SHOWN AND WHERE REQUIRED.
- 3.6 BED FLASHING, CLOSURES, AND CORNER PIECES IN SEALANT TO PROVIDE A WEATHER-TIGHT INSTALLATION
- 3.7 CAULK AND SEAL ALL AFFECTED ITEMS
- 3.8 ROUND OFF ALL SHARP EDGES WITHIN 6"-0" OFF GROUND LEVEL.
- 4.0 STORAGE, HANDLING AND PROTECTION
- 4.1 HANDLE AND STORE PRODUCTS IN MANNER TO PREVENT DAMAGE, ADULTERATION, DETERIORATION AND SOILING AND IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WHEN APPLICABLE.
- 4.2 STORE PACKAGED OR BUNDLED PRODUCTS IN ORIGINAL AND UNDAMAGED CONDITION WITH MANUFACTURER'S SEAL AND LABELS INTACT. DO NOT REMOVE FROM PACKAGING OR BUNDLING UNTIL REQUIRED IN WORK.
- 4.3 STORE PRODUCTS SUBJECT TO DAMAGE FROM WEATHER IN WEATHERPROOF ENCLOSURES.
- 4.4 STORE CLADDING AND ACCESSORIES IN A DRY, WELL VENTILATED AREA AND PROTECTED FROM MOISTURE AND CHEMICALS
- 4.5 REMOVE AND REPLACE DAMAGED PRODUCTS AT OWN EXPENSE AND TO SATISFACTION OF CONSULTANT.
- 4.6 TOUCH-UP DAMAGED FACTORY FINISHED SURFACES TO CONSULTANT'S SATISFACTION.

## SPRAYED FOAM INSULATION NOTES

- 1.0 MATERIALS
- 1.1 ALL MATERIALS UNDER WORK OF THIS SECTION, INCLUDING BUT NOT LIMITED TO, PRIMERS SEALANTS ARE TO HAVE LOW 'VOC' CONTENT LIMITS
- 1.2 SPRAYED FOAM INSULATION: SPRAYED/FROTHED POLYURETHANE FOAM CONFORMING TO CAN/ULC S705.1 AND CONTAINING NO FLUOROCARBONS AND CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:
  - a. AGED RSI FACTOR: 0.97 PER 25mm TO CAN/ULC S770.
  - b. CLOSED CELLS (ASTM D2856): 92%
  - c. COMPRESSIVE STRENGTH (ASTM D1621): 186 kPa (27.0 PSI).
  - d. WATER ABSORPTION (ASTM E96): 50mm SAMPLE 42 NG/Pa\*s\*M<sup>2</sup> (0.70 PERMS).
  - e. FLAME SPREAD: <500.
  - f. SMOKE DEVELOPED: <500.
  - g. BLOWING AGENT: PRODUCT TO UTILIZE ZERO ODS (OZONE DEPLETING SUBSTANCE) BLOWING.
  - h. RECYCLED CONTENT: >5% RECYCLED CONTENT BY MASS OF FINISHED PRODUCT.
  - i. SPRAYED URETHANE FOAM: "WALLTITE ECO V.2" BY BASF OR "HEATLOK SOYA" BY DEMILEC INC.
- 1.3 PRIMERS: AS RECOMMENDED BY SPRAYED FOAM INSULATION MANUFACTURER
- 2.0 PREPARATION
- 2.1 VERIFY SUBSTRATE SURFACES ARE SOLID, FREE FROM SURFACE WATER, FROZEN MATTER, DUST, OIL, GREASE, SCALING OR LAITANCE, PROJECTIONS AND ANY OTHER FOREIGN MATTER DETRIMENTAL TO PERFORMANCE.  
-TO SUIT MANUFACTURER'S APPROVED SUBSTRATE
- 2.2 SUPPLY AND INSTALL TEMPORARY PROTECTION TO ADJACENT SURFACES TO PREVENT DAMAGE RESULTING FROM WORK OF THIS SECTION.
- 2.3 IF REQUIRED, APPLY PRIMER TO SUBSTRATE SURFACES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTION.
- 3.0 EXECUTION
- 3.1 INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS
- 3.2 APPLY SPRAYED FOAM INSULATION TO THICKNESS INDICATED ON DRAWINGS. APPLY INSULATION TO WITHIN 6mm OF THICKNESS INDICATED ON DRAWINGS. PROVIDE ONE MEASURING PIN FOR EVERY 50M<sup>2</sup>.
- 3.3 INSULATION THICKNESS GREATER THAN 50mm SHALL BE COMPLETED IN A MINIMUM OF 2 STEPS
- 3.4 INSULATION TO BE CONTINUOUS, LEVEL, PLUMB, AND UNIFORM THICKNESS THROUGHOUT. INSULATION SHALL BE FREE OF VOIDS AND IMBEDDED FOREIGN MATERIALS.

## LOAD-BEARING METAL STUDS NOTES

- 1.0 DESIGN REQUIREMENTS
- 1.1 DESIGN LOAD-BEARING METAL STUDS TO WITHSTAND LIVE, DEAD, WIND, SEISMIC, HANDLING, TRANSPORTATION, AND ERECTION LOADS.
- 1.2 DESIGN LOAD-BEARING METAL STUDS BASED ON LIMIT STATES DESIGN PRINCIPLES USING FACTORED LOADS AND RESISTANCES. LOADS AND LOAD FACTORS TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE (NBC). RESISTANCE FACTORS TO BE DETERMINED IN ACCORDANCE WITH THE NBC AND CAN/CSA-S136-M.
- 1.3 DESIGN BRIDGING TO PREVENT MEMBER ROTATION AND MEMBER TRANSLATION PERPENDICULAR TO THE MINOR AXIS. PROVIDE FOR SECONDARY STRESS EFFECTS DUE TO TORSION BETWEEN LINES OF BRIDGING.
- 1.4 DESIGN LOAD-BEARING METAL STUDS IN ACCORDANCE WITH FOLLOWING CLIMATE DESIGN DATA FOR NORTH BAY ONTARIO CONTAINED IN THE ONTARIO BUILDING CODE:
  1. DESIGN TEMPERATURE: JANUARY 1%, JULY 2 1/2%
  2. WIND (HOURLY WIND PRESSURES): 0.34kPa 1 IN 50 YEAR OCCURRENCE.
- 1.5 DESIGN LOAD-BEARING METAL STUDS FOR THE FULL SPECIFIED DESIGN WIND LOAD WITH A DEFLECTION LIMIT OF L/360.
- 1.6 DESIGN LOAD-BEARING METAL STUDS WITHOUT RELYING ON SHEATHING OR GYPSUM BOARD TO RESIST TORSION AND WEAK AXIS BUCKLING.
- 2.0 SUBMITTALS
- 2.1 SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING: WALL CONSTRUCTION, LOAD BEARING METAL STUD WALL SYSTEM, DESIGN LOADS, MEMBER SIZES, MATERIALS, COMPONENT DETAILS, DEPTH AND GAUGE DESIGNATION EXCLUSIVE OF COATING, LOCATION, AND SPACINGS OF FRAMING MEMBERS, CONNECTION AND BRACING DETAILS, BEARING, ANCHORAGE, LOADINGS, TEMPORARY BRACING, TYPES AND LOCATIONS OF MECHANICAL FASTENERS, AND SHEATHING
- 3.0 EXECUTION
- 3.1 INSTALL LOAD-BEARING STUDS IN ACCORDANCE WITH REVIEWED SHOP DRAWINGS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3.2 ERECT STUDS PLUMB, ALIGNED AND SECURELY ATTACHED WITH 2 SCREWS MINIMUM AT EACH POINT OF ATTACHMENT. ANCHOR TRACKS SECURELY @ 400 O.C
  1. ALL SCREWS TO BE PANHEAD No 10 U.N.O
  2. ALL BRIDGING SCREWS TO BE No. 10 HEXHEAD SELF TAPPING FRAMING SCREWS
  3. USE HILTI 1/4" DIAMETER ZAMAC PIN BOLT TO FASTEN STUDS & TRACKS TO CONCRETE. MINIMUM EMBEDDMENT 32MM

LOADING DATA  
ROOF LOADS  
-SNOW S<sub>s</sub>=46 PSF (2.2 kPa)  
-SNOW S<sub>r</sub>=8.5 PSF (0.4 kPa)  
WIND LOADS  
-MINIMUM DESIGN WIND LOAD 1/50 q<sub>s</sub>= 7.1 PSF (0.34kPa)  
EARTHQUAKE LOADS  
-SITE SOIL CLASSIFICATION C  
-IMPORTANCE FACTOR 1  
SEISMIC DATA  
S<sub>a</sub> (0.2) = 0.29  
S<sub>a</sub> (0.5) = 0.150  
S<sub>a</sub> (1.0) = 0.068  
S<sub>a</sub> (2.0) = 0.022

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**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
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**project:** ONTARIO NORTHLAND  
WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 McIntyre St., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

**drawn by:** BM  
**checked by:** TIM T

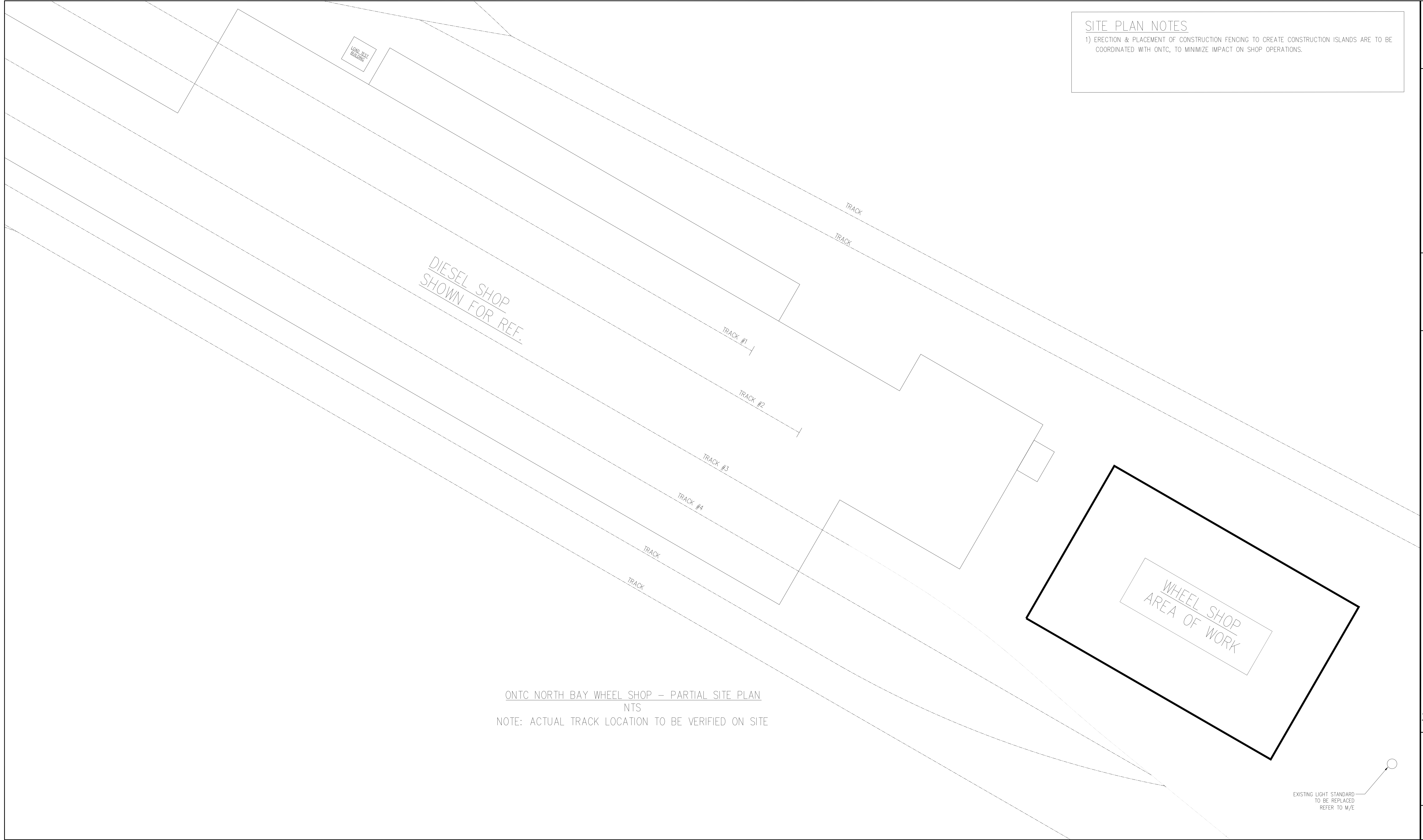
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**date plotted:** MAY 05 23

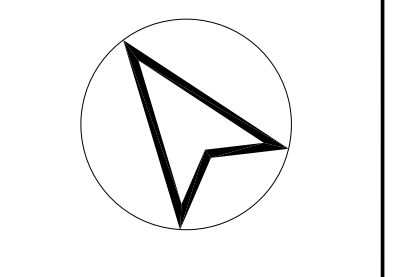
**date revised:**

**dwg no:**

GN2.0



**SITE PLAN NOTES**  
 1) ERECTION & PLACEMENT OF CONSTRUCTION FENCING TO CREATE CONSTRUCTION ISLANDS ARE TO BE COORDINATED WITH ONTC, TO MINIMIZE IMPACT ON SHOP OPERATIONS.



DATE	ISSUED FOR TENDER	REVISION
MAY 05 23		0



**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 Main Street, North Bay, Ont.  
 705-495-0981

**PROJECT:** ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR  
 916 Malhoye St E, North Bay, Ontario

**TITLE:** GENERAL SITE PLAN - REFERENCE

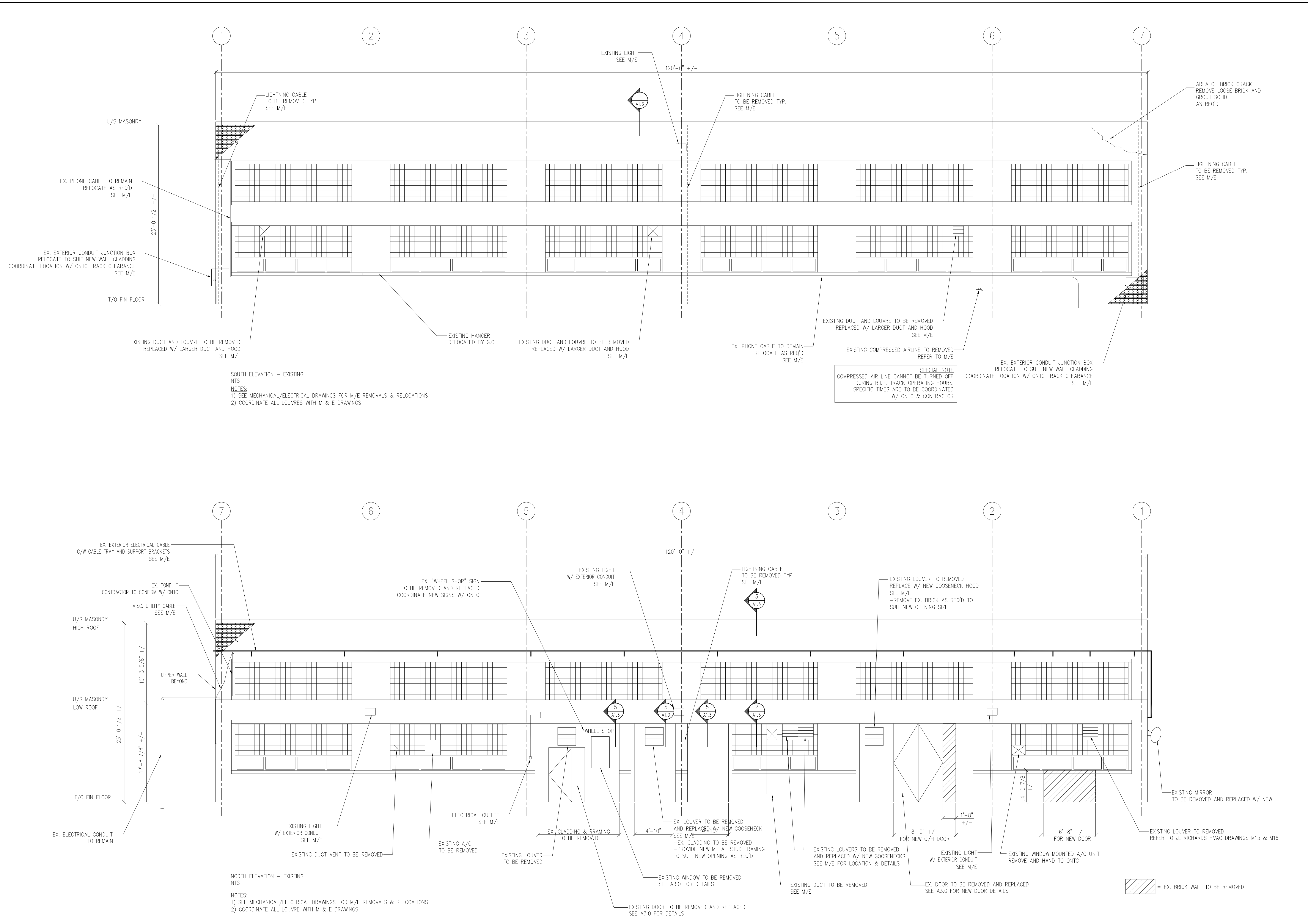
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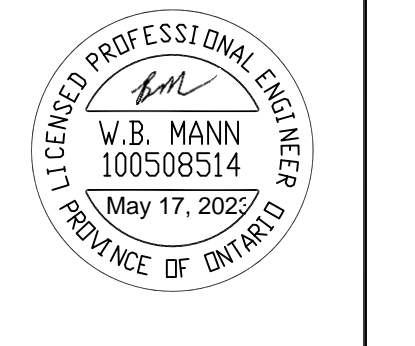
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revision	0
ISSUED FOR TENDER	MAY 05 23



**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
184 McNaughton Ave.  
NORTH BAY, ONT.  
705-495-0861

**project:** ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 Midway St. E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

**title:** EXISTING ELEVATIONS AND RELOCATIONS

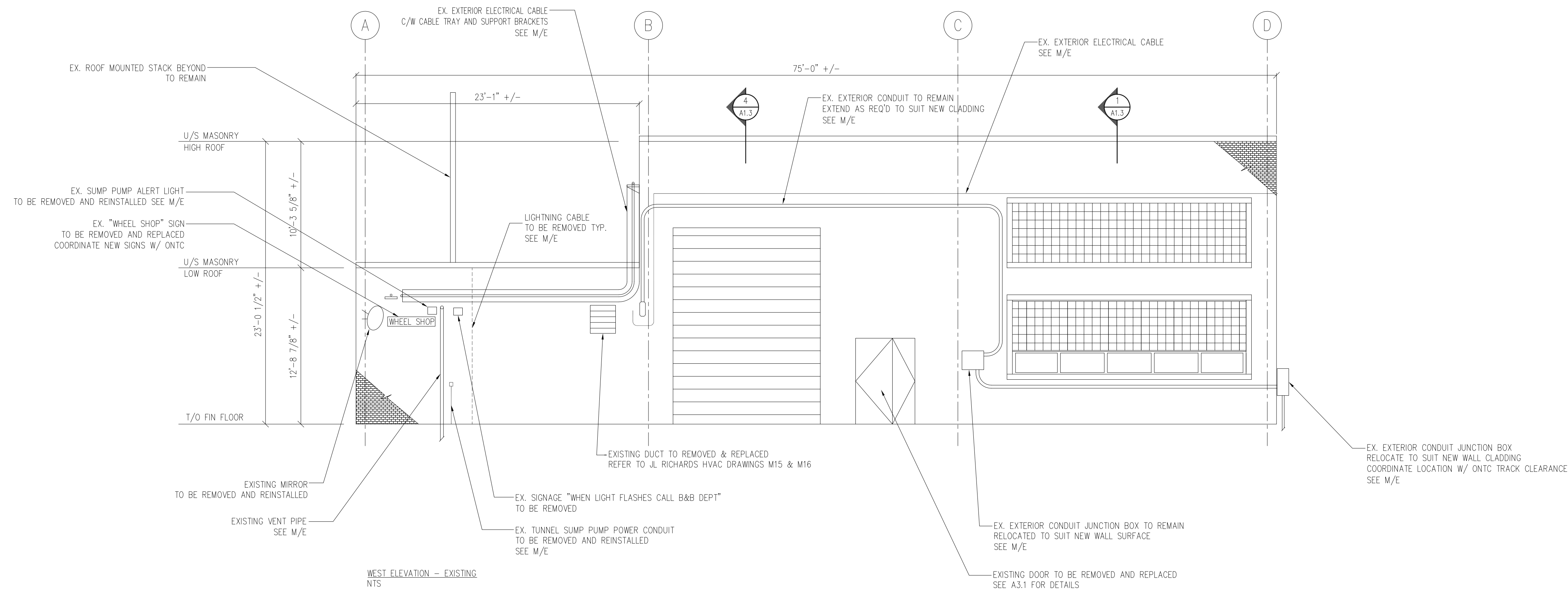
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**checked by:** [Signature]

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**date plotted:** MAY 05 23

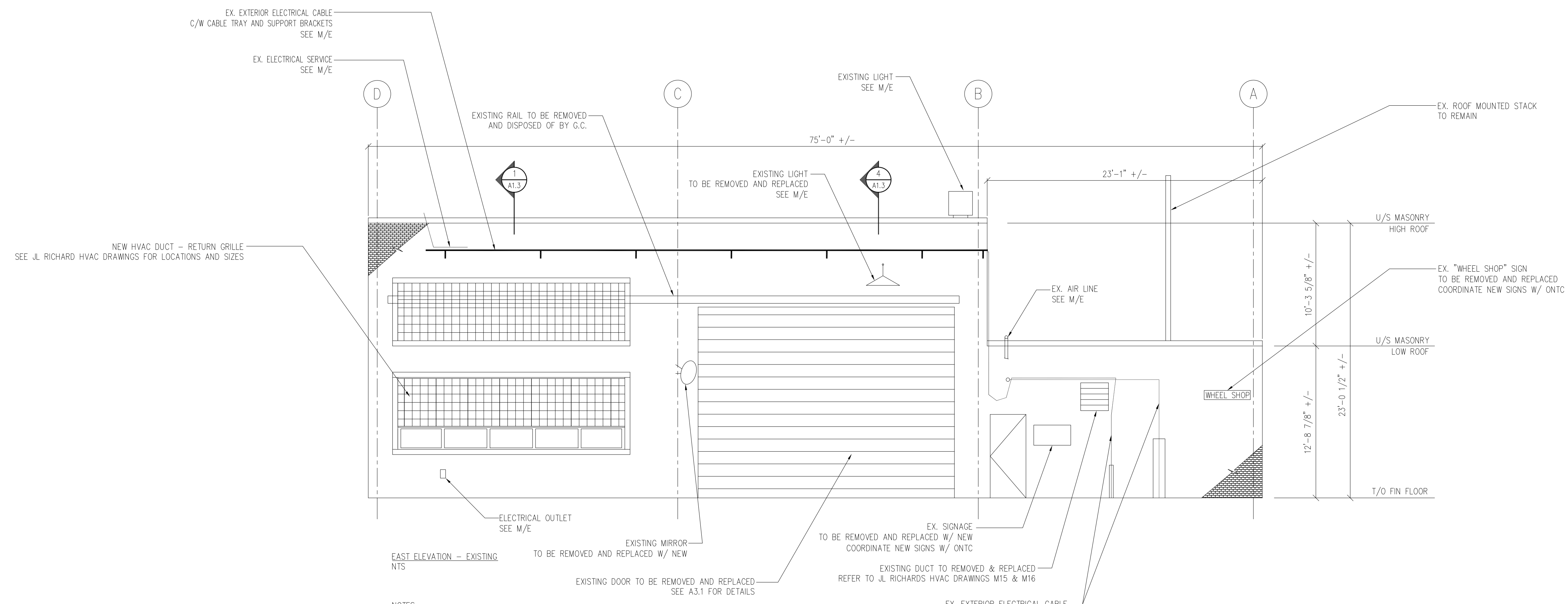
**date revised:**

**dwg no.:** A1.1



WEST ELEVATION - EXISTING  
NTS

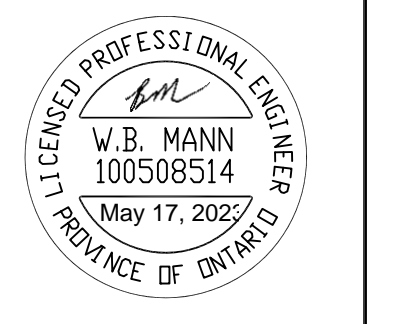
NOTES:  
1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS  
2) COORDINATE ALL LOUVRES WITH M & E DRAWINGS



EAST ELEVATION - EXISTING  
NTS

NOTES:  
1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS  
2) COORDINATE ALL LOUVRES WITH M & E DRAWINGS

revision	0
ISSUED FOR TENDER	MAY 05 23



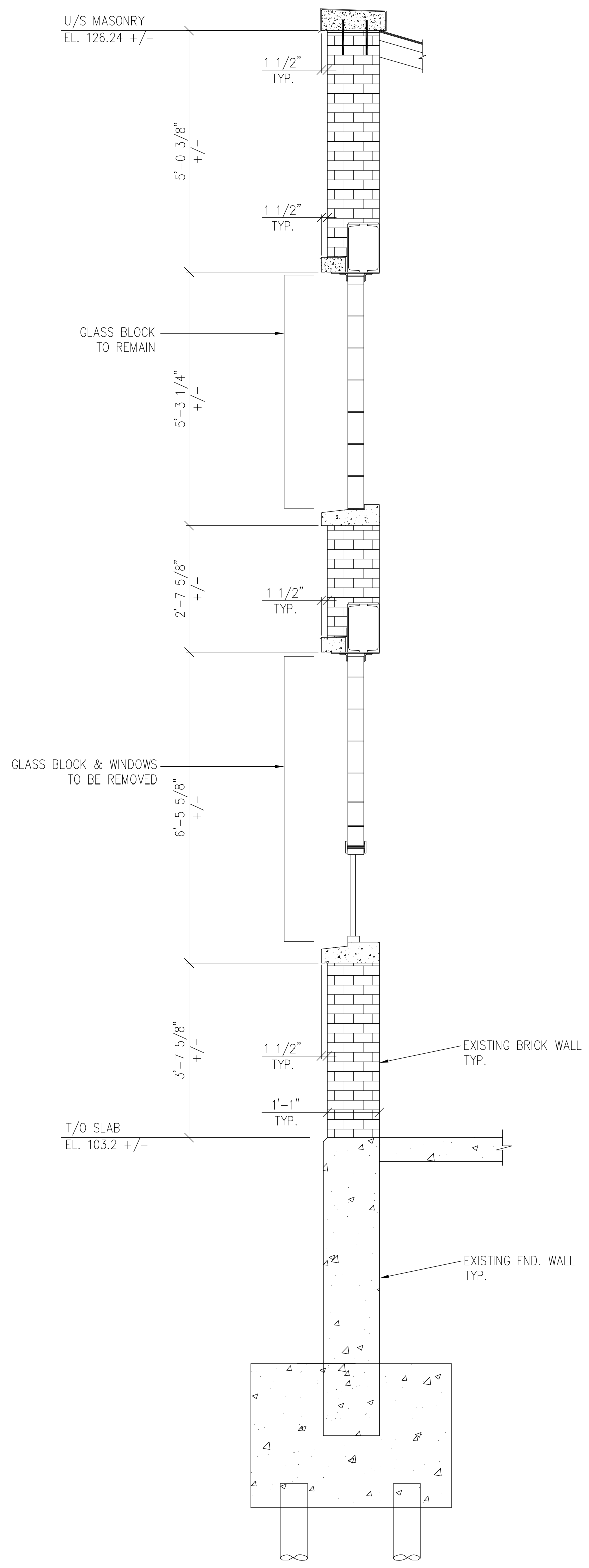
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
184 McNaughton Ave.  
NORTH BAY, ONT.  
705-495-0861

project: ONTARIO NORTHLAND  
WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 Midway St., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

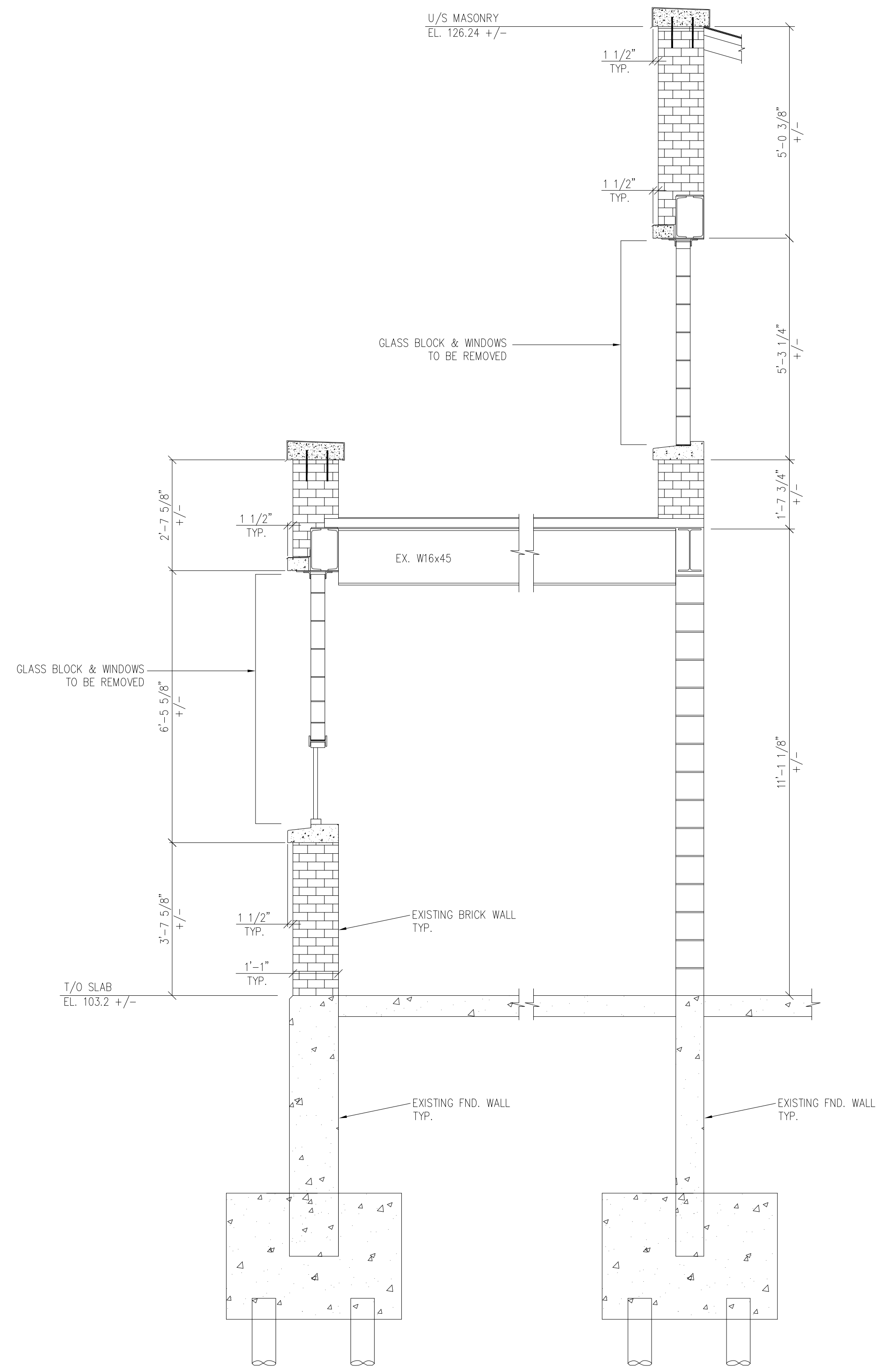
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drawn by: BM  
checked by: +  
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project no: 211725  
date plotted: MAY 05 23  
date revised:

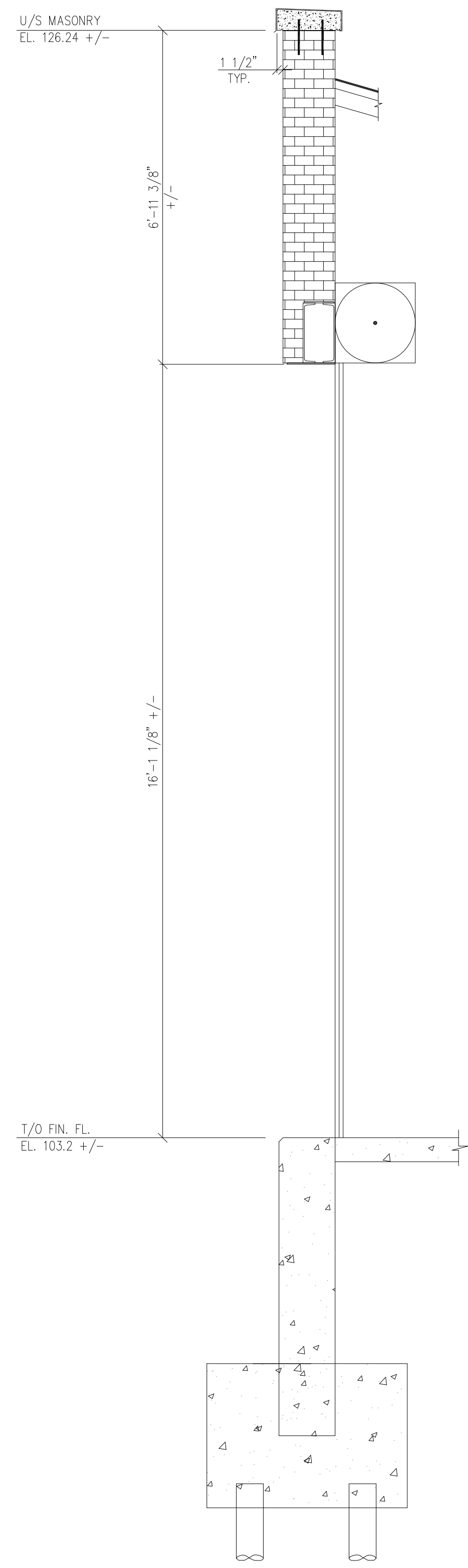
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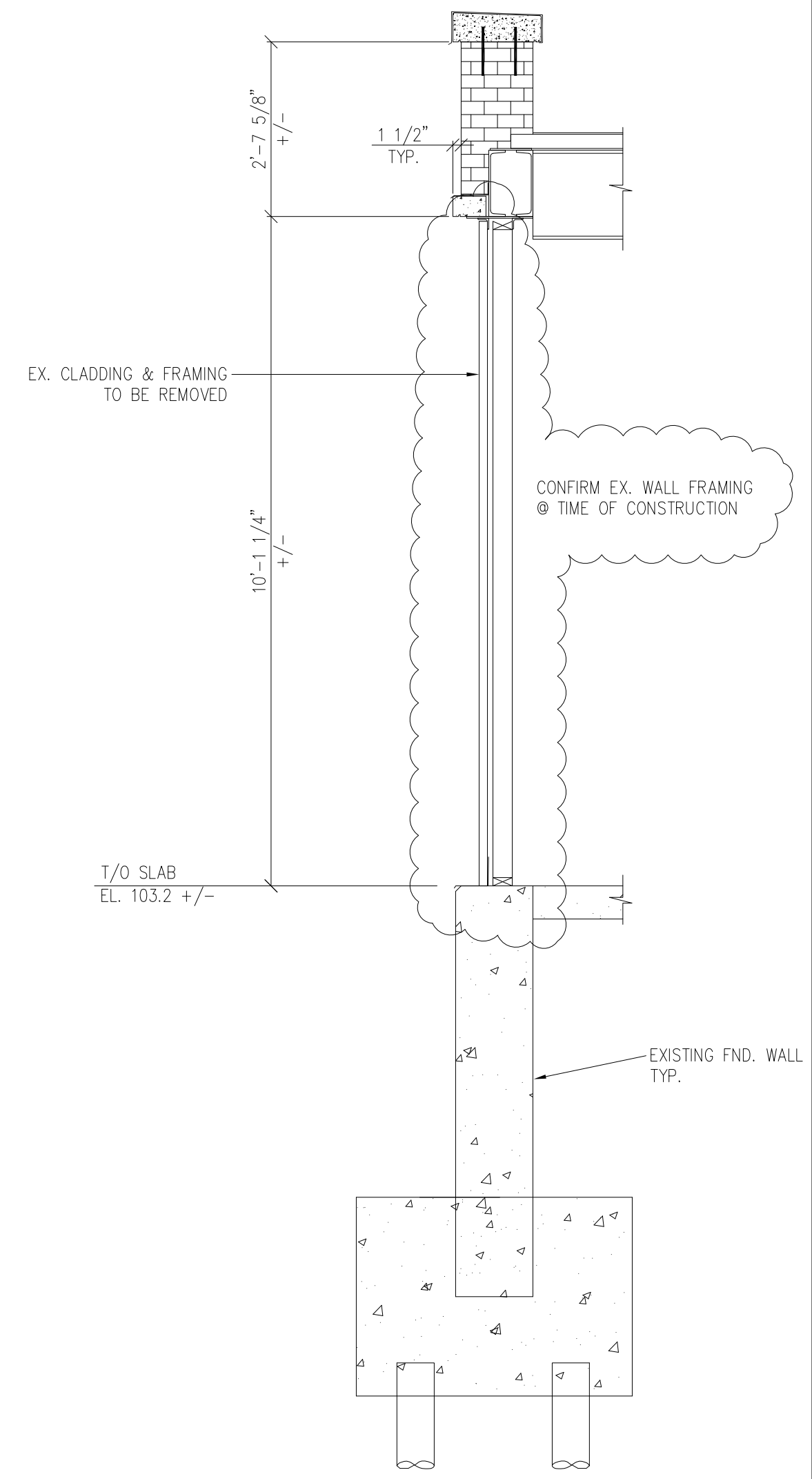
1 DIMENSIONS SHOWN FOR REF.  
A1.3



2 REFER TO SECTION 1/A1.0  
A1.3 FOR ADDITIONAL DETAILS

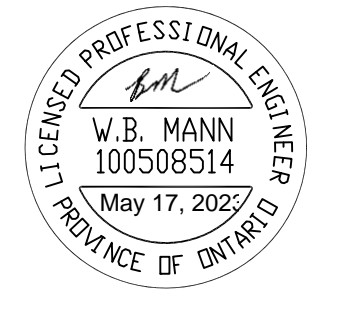


4 REFER TO SECTION 1/A1.0  
A1.3 FOR ADDITIONAL DETAILS



5 REFER TO SECTION 1/A1.0  
A1.3 FOR ADDITIONAL DETAILS

revision	0
ISSUED FOR TENDER	MAY 05 23



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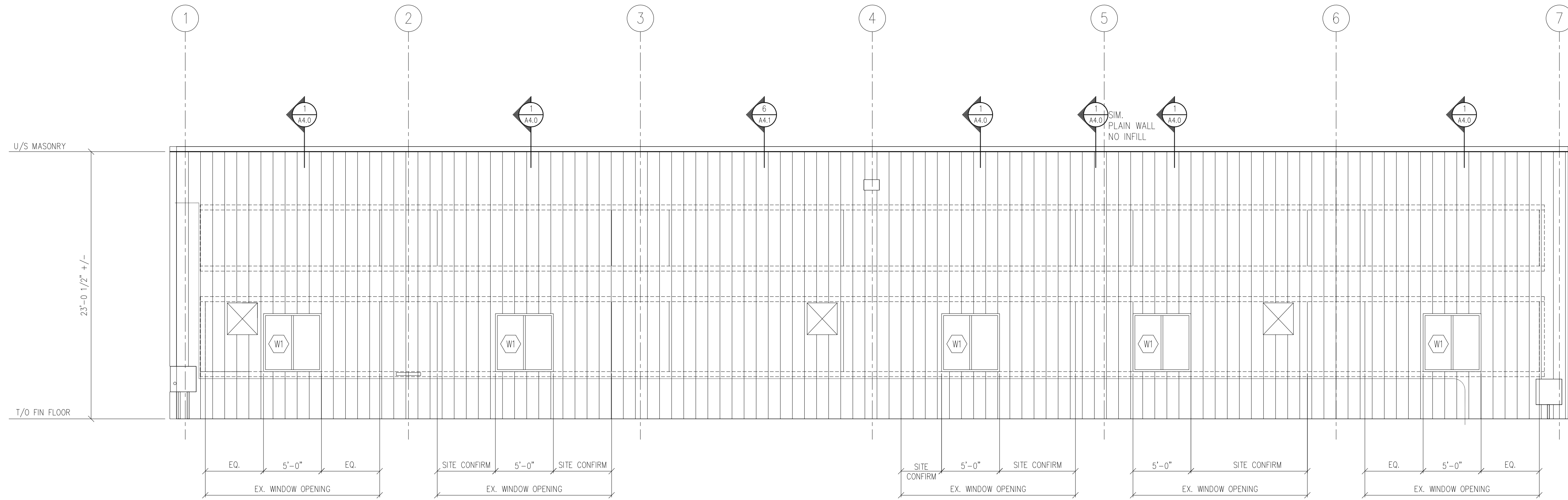
project: ONTARIO NORTHLAND  
WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 Midway S.E., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO

title: EXISTING WALL SECTIONS AND REMOVALS

drawn by: BM  
checked by: TIM T  
scale: NTS  
project no: 211725  
date plotted: MAY 05 23  
date revised:

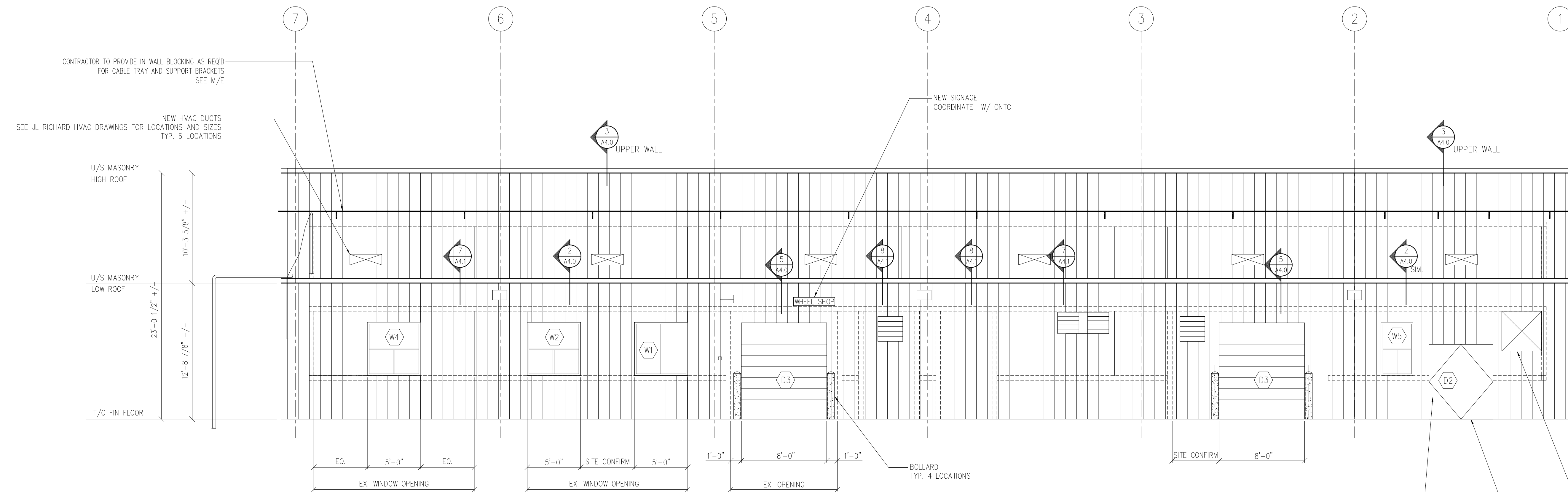
dwg no: A1.3





**SOUTH ELEVATION - NEW**  
NTS

- NOTES:**  
 1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E RELOCATIONS AND NEW OPENINGS  
 2) COORDINATE ALL LOUVRE AND DUCT LOCATIONS WITH M & E DRAWINGS



**NORTH ELEVATION - NEW**  
NTS

- NOTES:**  
 1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E RELOCATIONS AND NEW OPENINGS  
 2) COORDINATE ALL LOUVRE AND DUCT LOCATIONS WITH M & E DRAWINGS

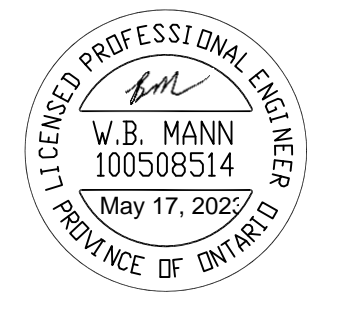
REFER TO A2.0 AND 5/A4.0 FOR BOLLARD DETAILS  
 @ NEW OVERHEAD DOORS

NEW DOUBLE DOOR  
 SAW CUT AND REMOVE EX. BRICK WALL AND PRECAST  
 AS REQ'D TO SUIT NEW DOOR  
 REMOVE EX. WALL UP TO EX. LINTEL  
 INFILL ABOVE DOOR W/ METAL STUDS

NEW LOUVER  
 COORDINATE LOCATION W/ J.L. RICHARDS DRAWINGS  
 REFER TO J.L. RICHARDS HVAC DRAWINGS M15 & M16

NEW DOOR SILL DETAIL TO SUIT EX. FLOOR SLAB  
 PATCH AND REPAIR AS REQ'D TO SUIT EXISTING

revision	0
ISSUED FOR TENDER	MAY 05 23

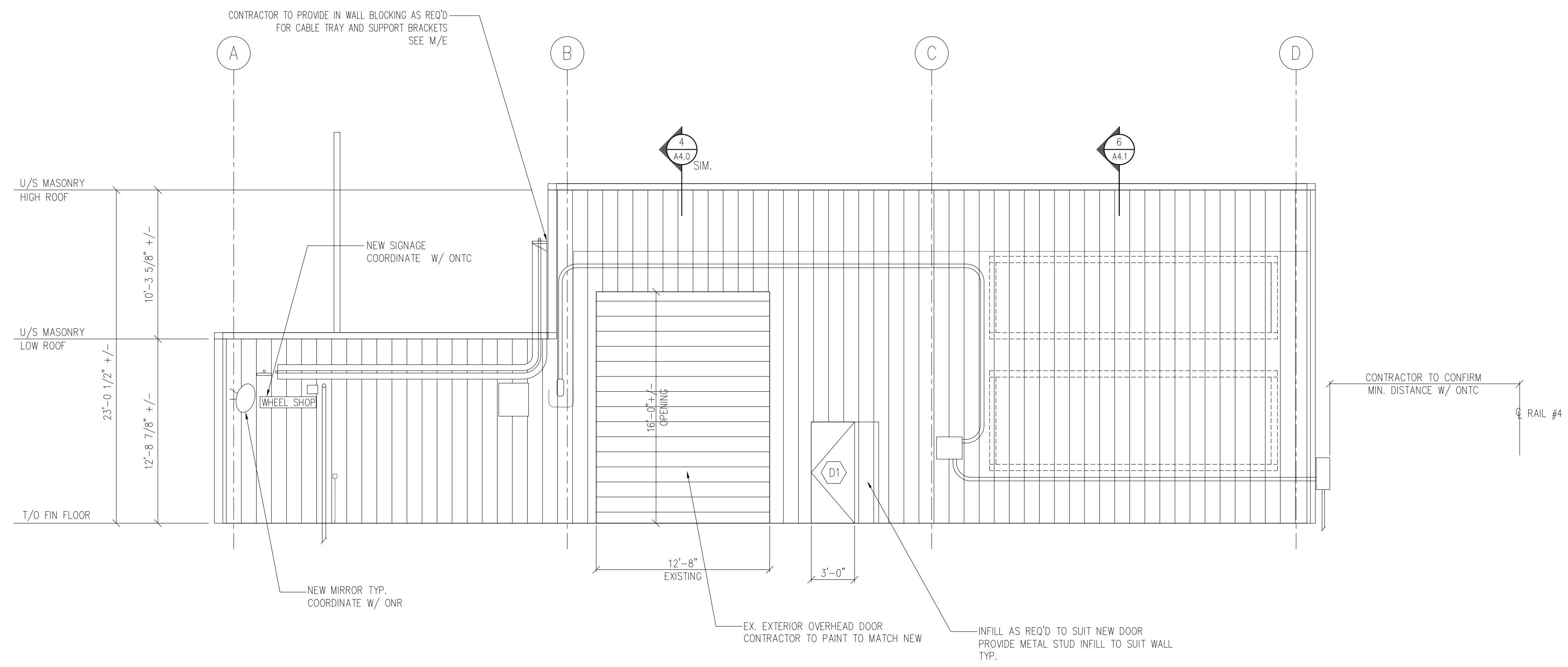


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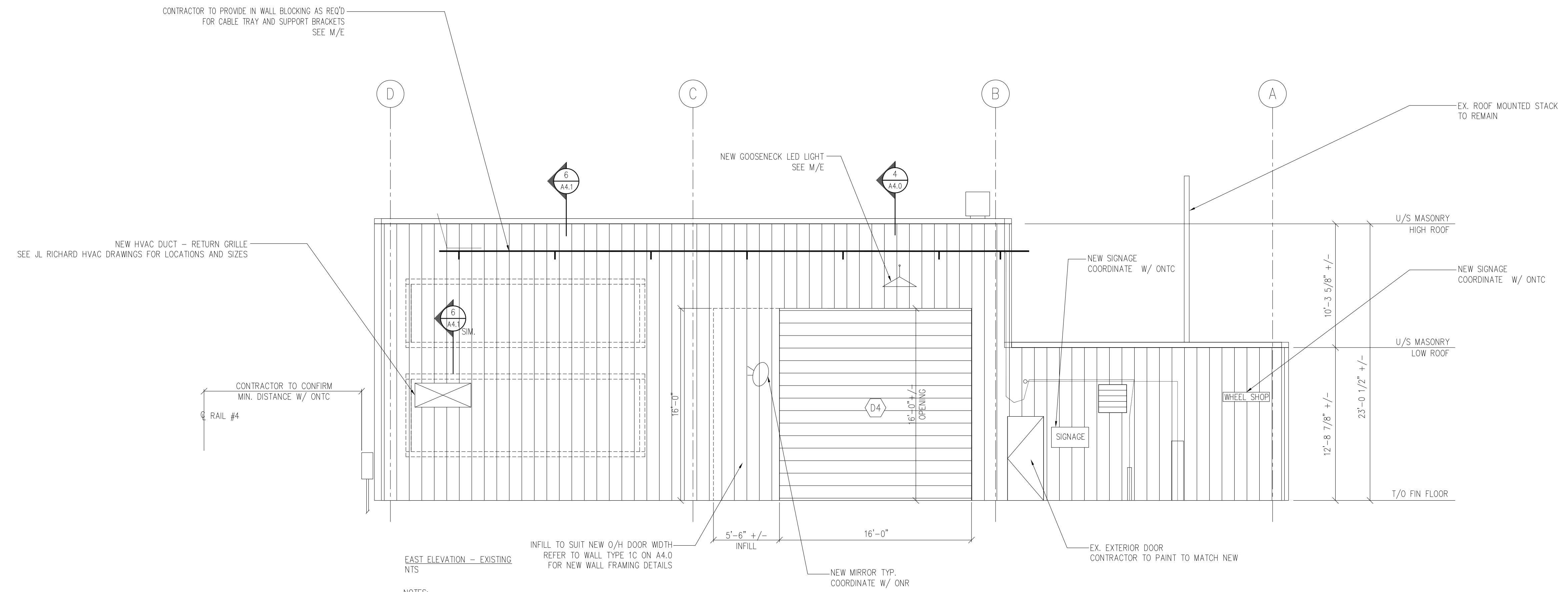
project: ONTARIO NORTHLAND  
 WHEEL SHOP - BLDG ENVELOPE REPAIR  
 916 Midway St., NORTH BAY, ONTARIO  
 NORTH BAY, ONTARIO  
 title: NEW - NEW ELEVATIONS

drawn by:	checked by:
BM	TIM T
scale:	project no:
NTS	211725
date plotted:	
MAY 05 23	
date revised:	

dwg no: A3.0



WEST ELEVATION - EXISTING  
 NTS  
 NOTES:  
 1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E RELOCATIONS AND NEW OPENINGS  
 2) COORDINATE ALL LOUVRE AND DUCT LOCATIONS WITH M & E DRAWINGS



EAST ELEVATION - EXISTING  
 NTS  
 NOTES:  
 1) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E RELOCATIONS AND NEW OPENINGS  
 2) COORDINATE ALL LOUVRE AND DUCT LOCATIONS WITH M & E DRAWINGS

revision	0
ISSUED FOR TENDER	MAY 05 23

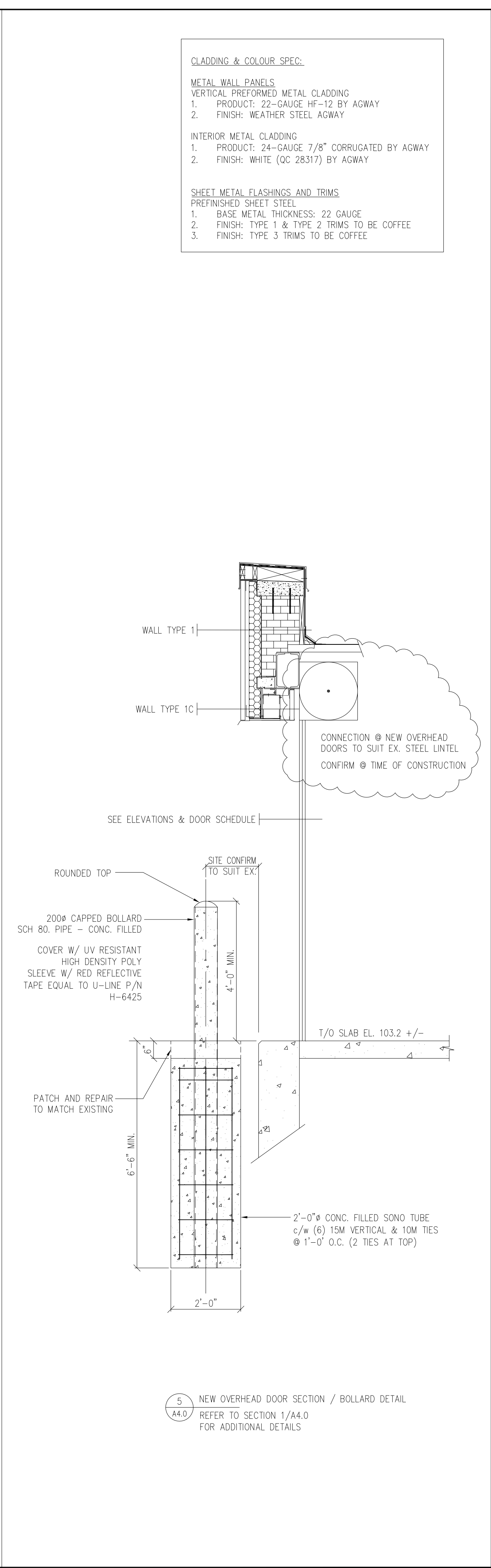
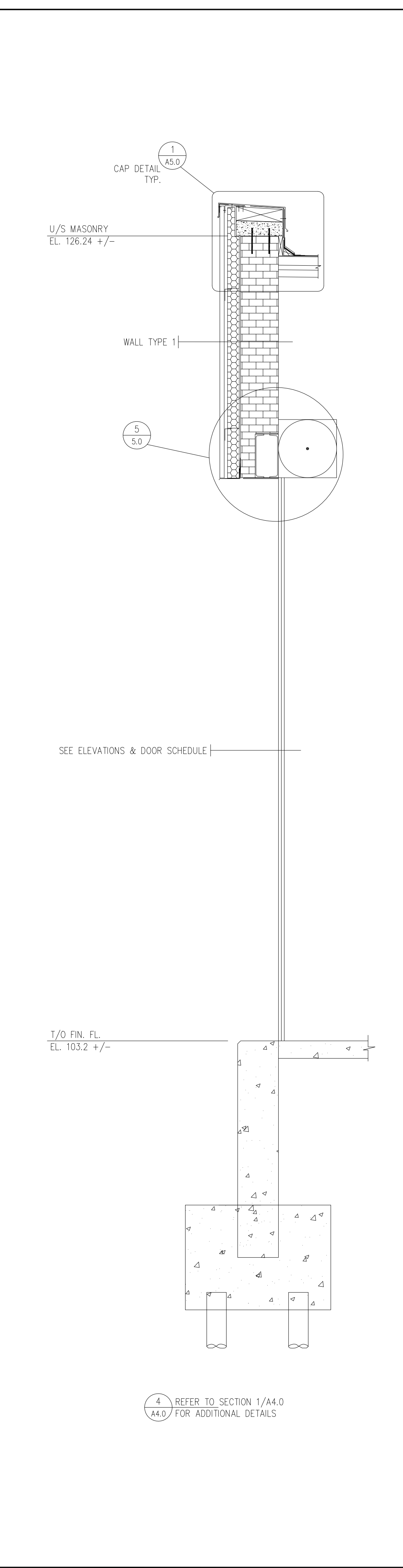
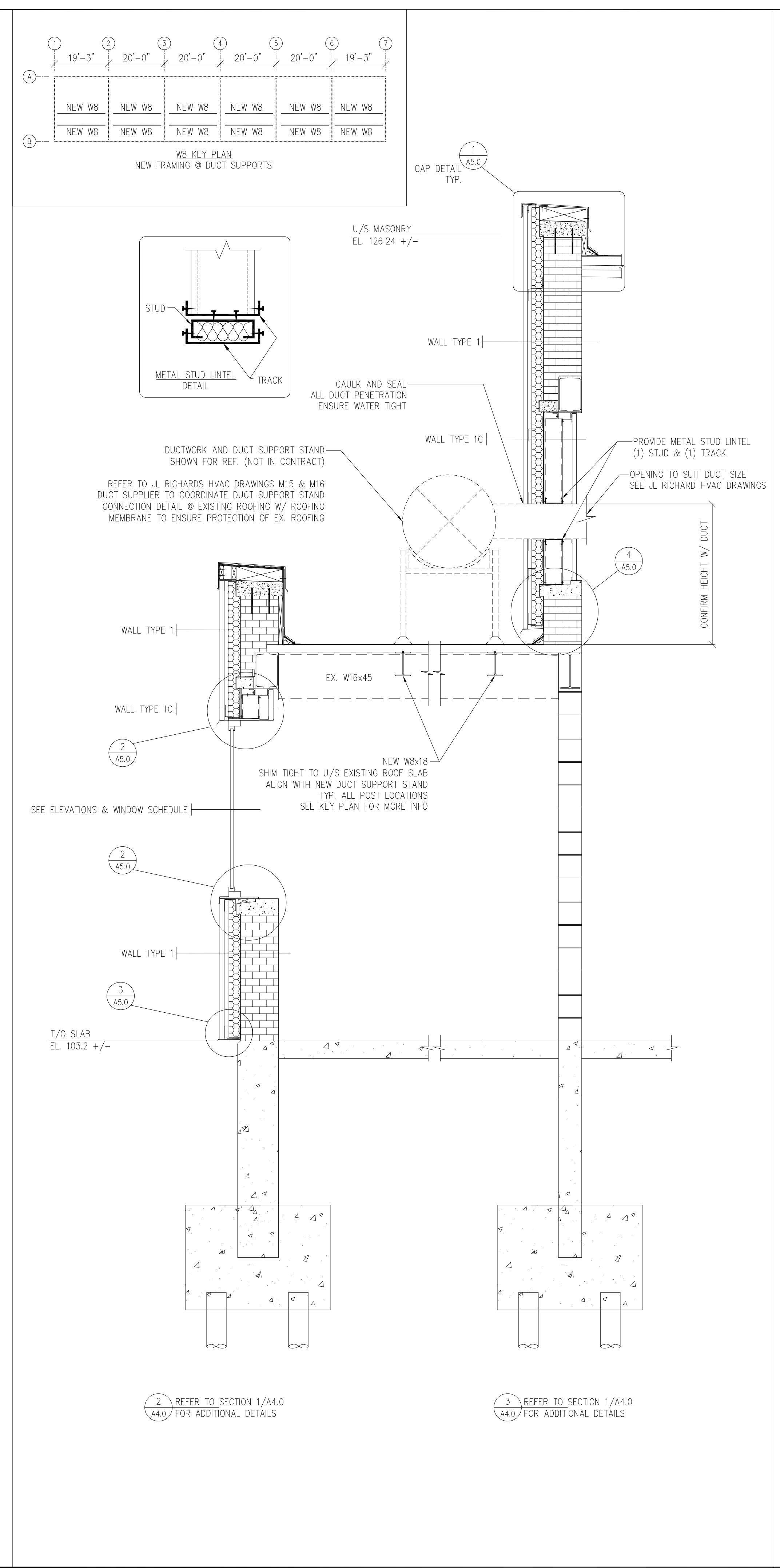
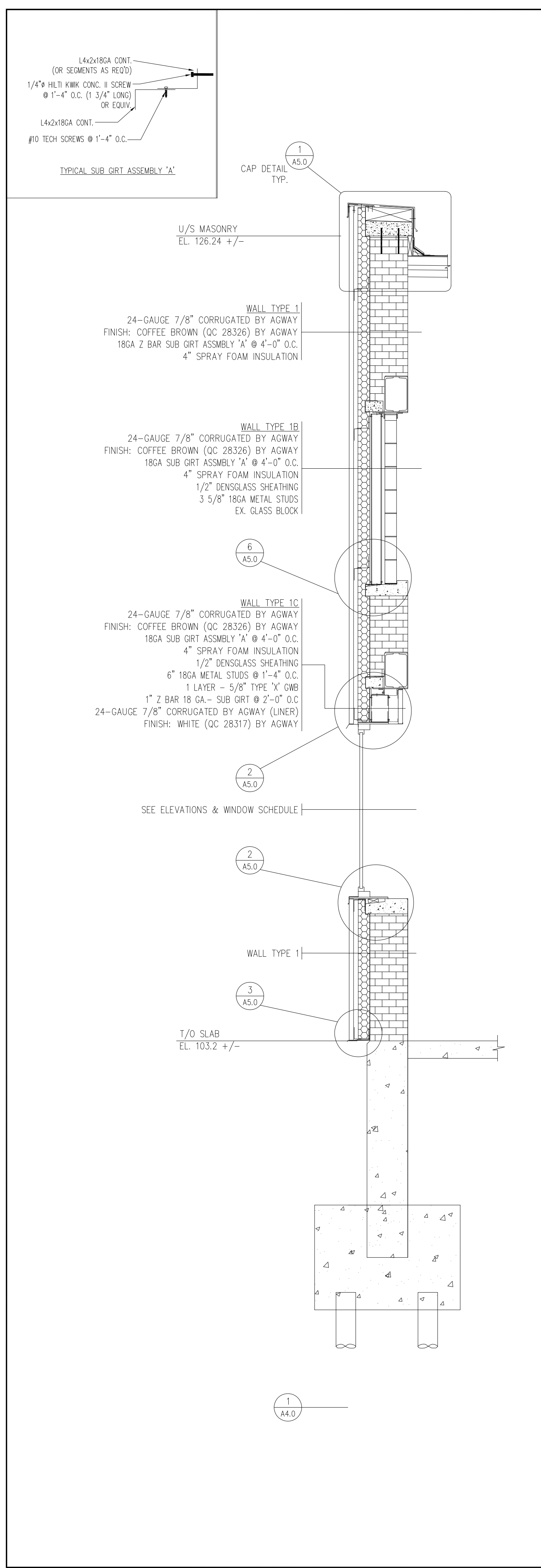


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project: **ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR**  
 916 Midway S.E., NORTH BAY, ONTARIO  
 title: **NEW - NEW ELEVATIONS**

drawn by:	checked by:
BM	TIM T
scale:	project no:
NTS	211725
date plotted:	
MAY 05 23	
date revised:	

dwg no: **A3.1**



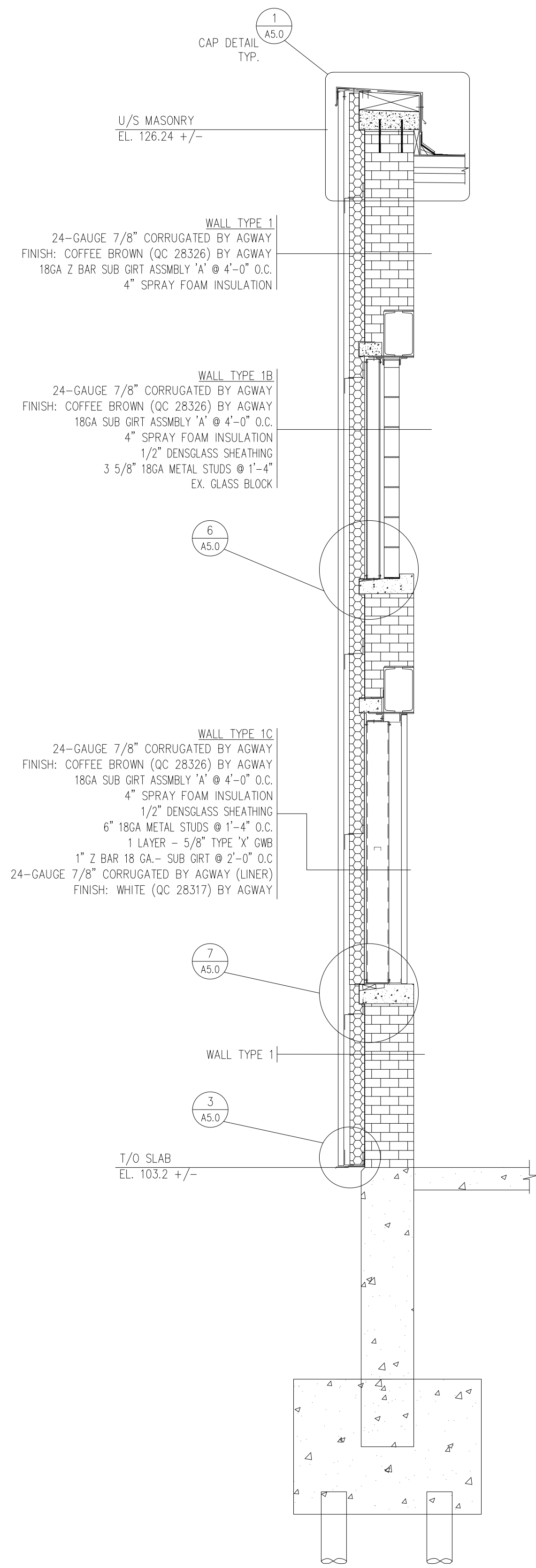
**CLADDING & COLOUR SPEC.**

**METAL WALL PANELS**  
 VERTICAL PREFORMED METAL CLADDING  
 1. PRODUCT: 22-GAUGE HF-12 BY AGWAY  
 2. FINISH: WEATHER STEEL AGWAY

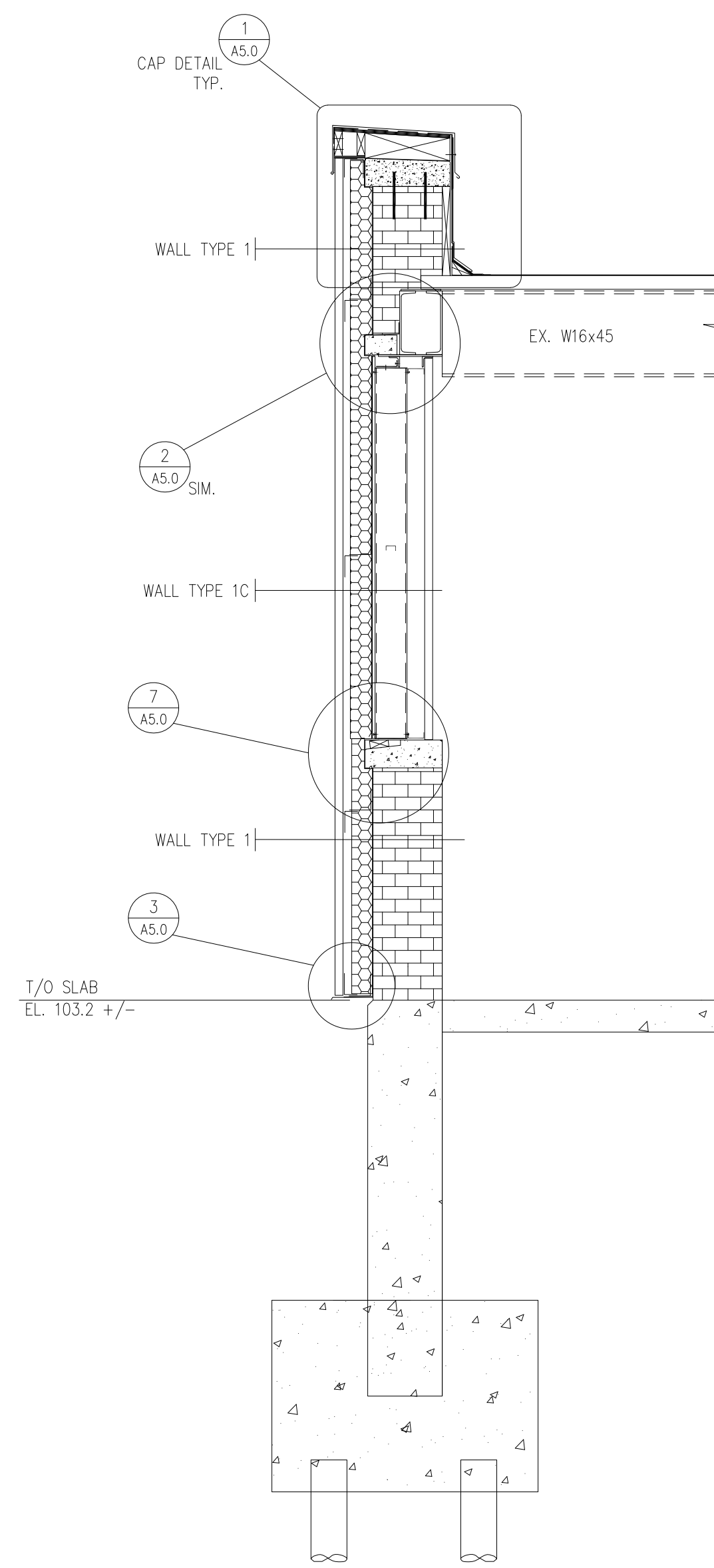
**INTERIOR METAL CLADDING**  
 1. PRODUCT: 24-GAUGE 7/8\"/>

<p>0 revisions</p>	
<p>MAY 05 23 ISSUED FOR TENDER</p>	
<p>PROFESSIONAL ENGINEER        W.B. MANN        100508514        May 17, 2023        PROVINCE OF ONTARIO</p>	
<p><b>NORTHSHORE ENGINEERING &amp; DRAFTING SERVICES</b>        184 McNaughton Ave.        NORTH BAY ONT.        705-495-0961</p>	
<p>project: <b>ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR</b>        916 McInnes St. NORTH BAY, ONTARIO        NORTH BAY, ONTARIO</p>	
<p>title: <b>NEW WALL SECTIONS</b></p>	
<p>drawn by: BM</p>	<p>checked by: TIM T</p>
<p>scale: NTS</p>	<p>project no: 211725</p>
<p>date plotted: MAY 05 23</p>	<p>date revised:</p>
<p>dwg no: A4.0</p>	

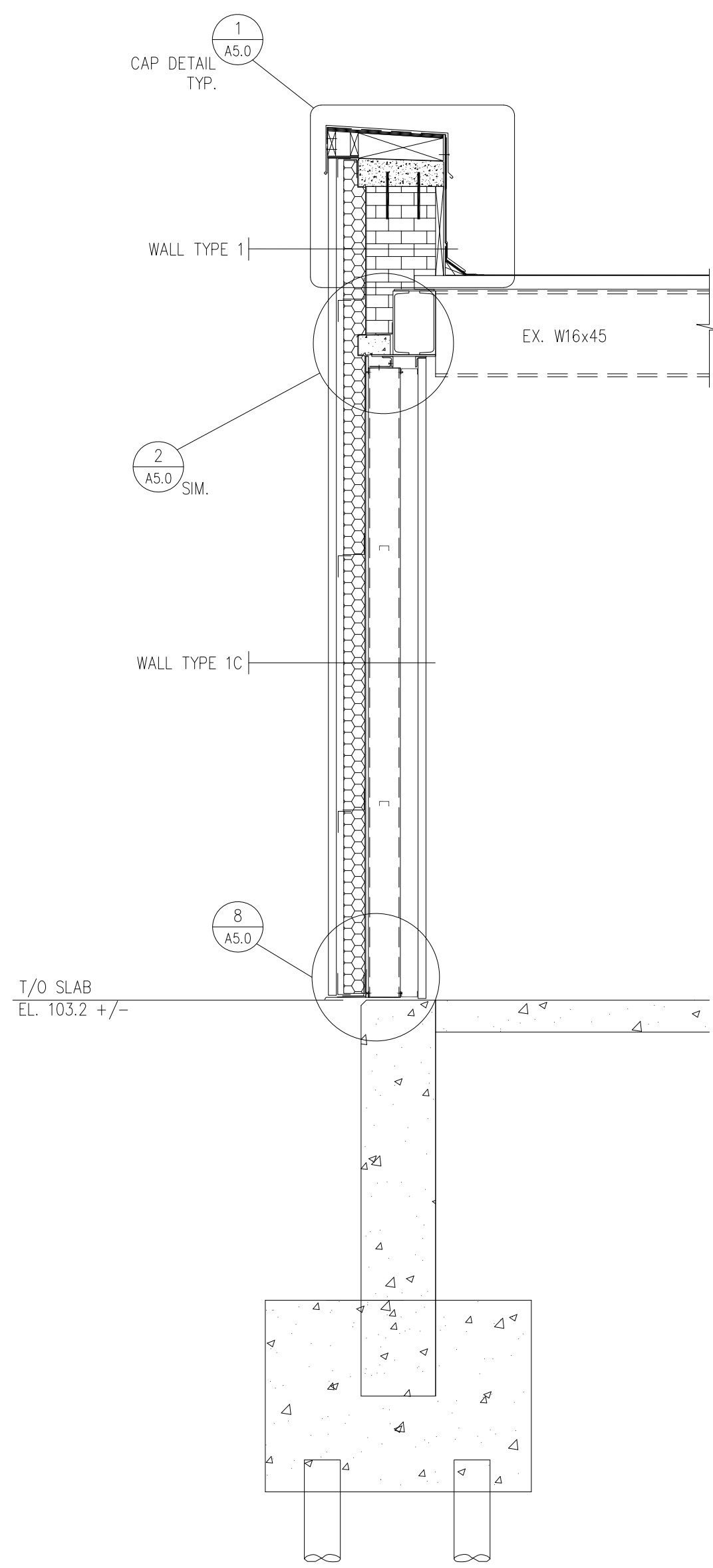




6 REFER TO SECTION 1/A4.0 FOR ADDITIONAL DETAILS



7 REFER TO SECTION 1/A4.0 FOR ADDITIONAL DETAILS



8 REFER TO SECTION 1/A4.0 FOR ADDITIONAL DETAILS

revision	0
ISSUED FOR TENDER	MAY 05 23



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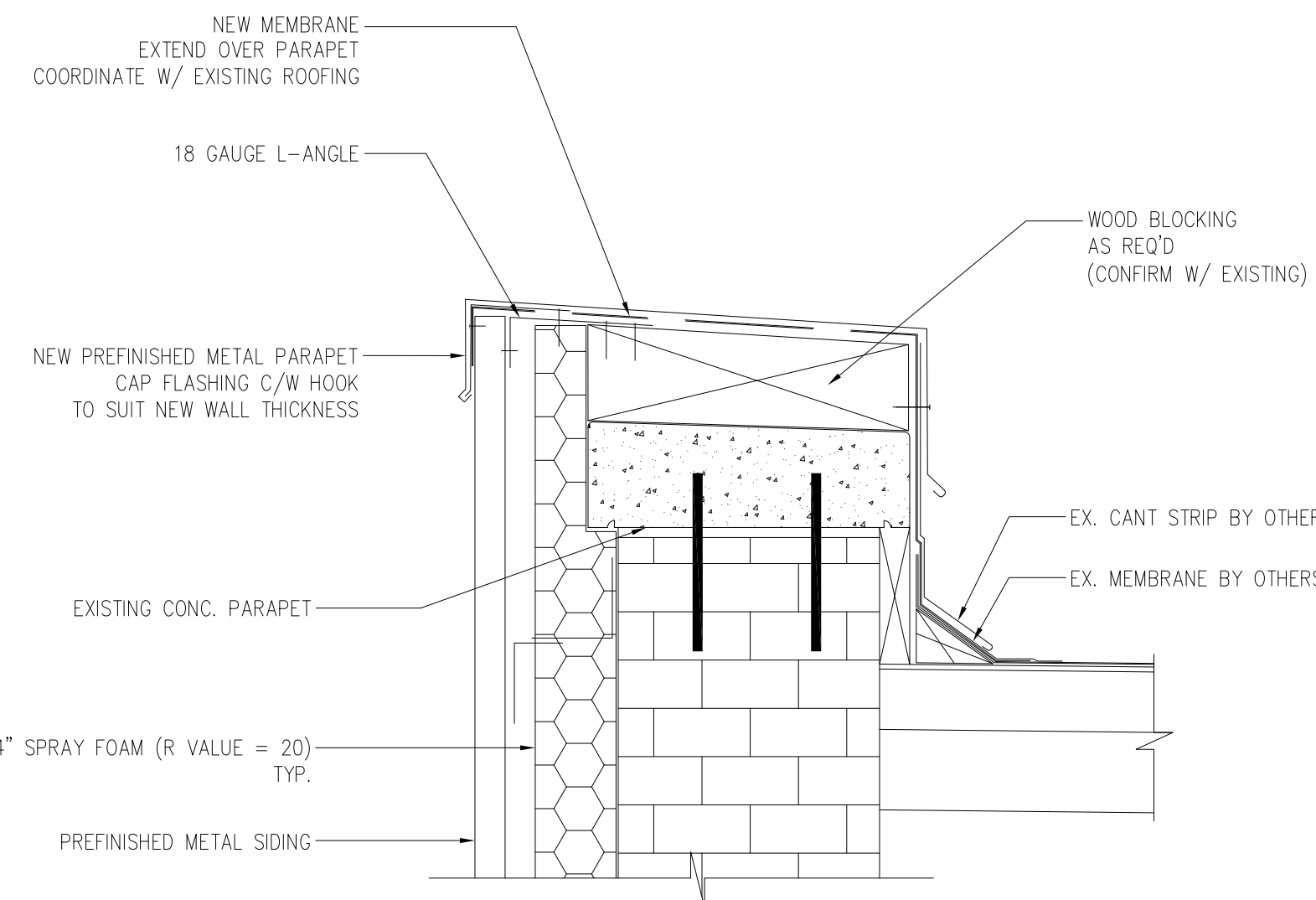
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 WHEEL SHOP - BLDG ENVELOPE REPAIR  
 916 Midway St., North Bay, Ontario  
 North Bay, Ontario

title: NEW WALL SECTIONS

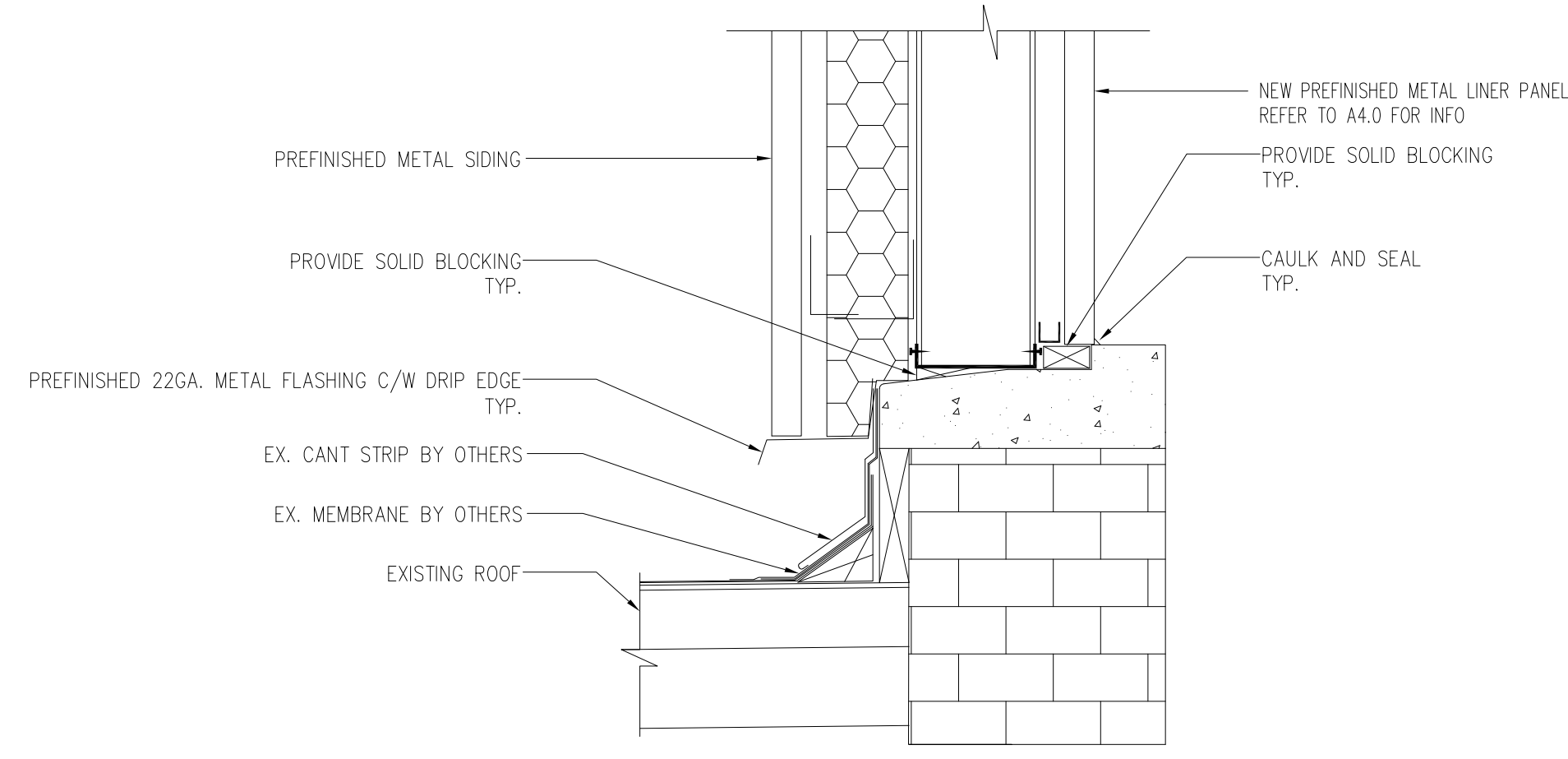
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 scale: NTS  
 date plotted: MAY 05 23  
 date revised:

checked by: TIM T  
 project no: 211725

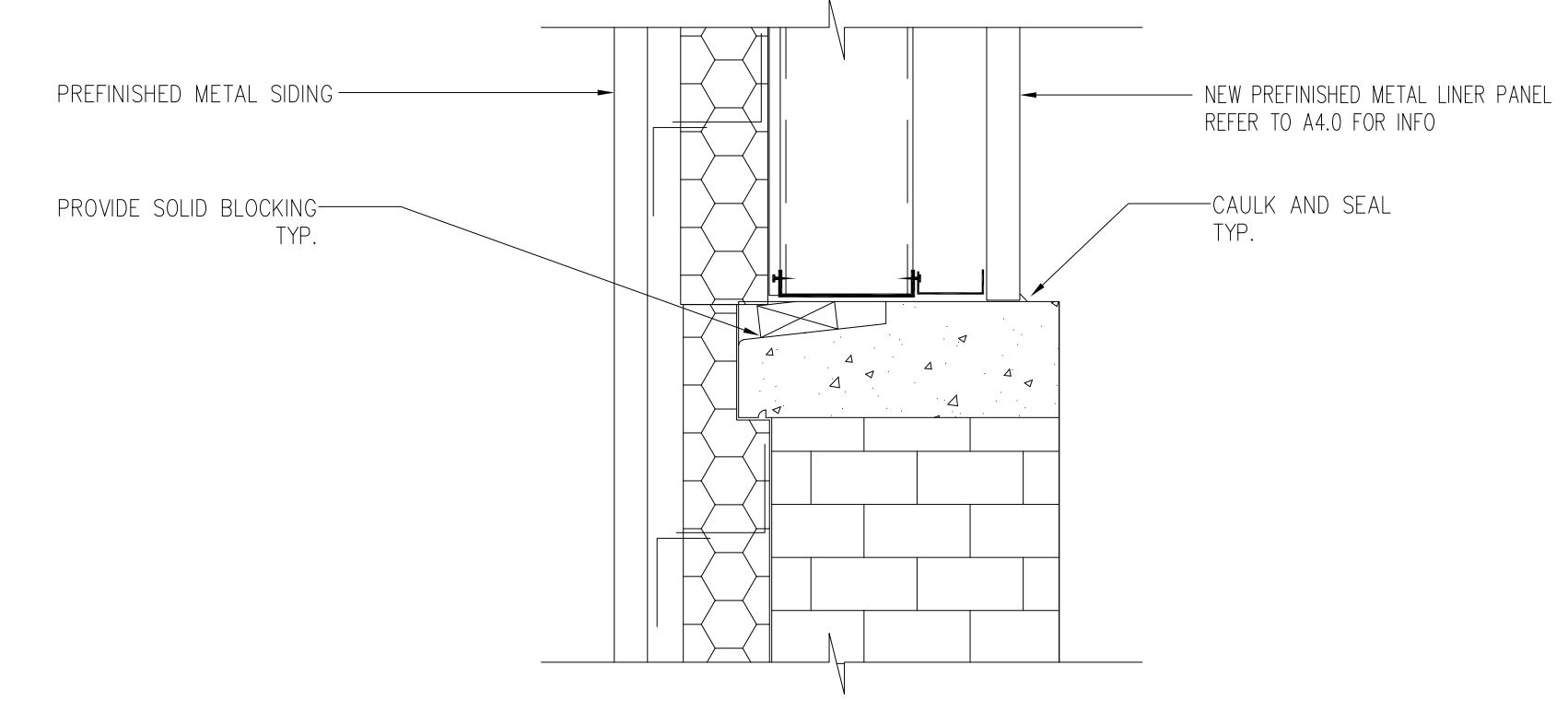
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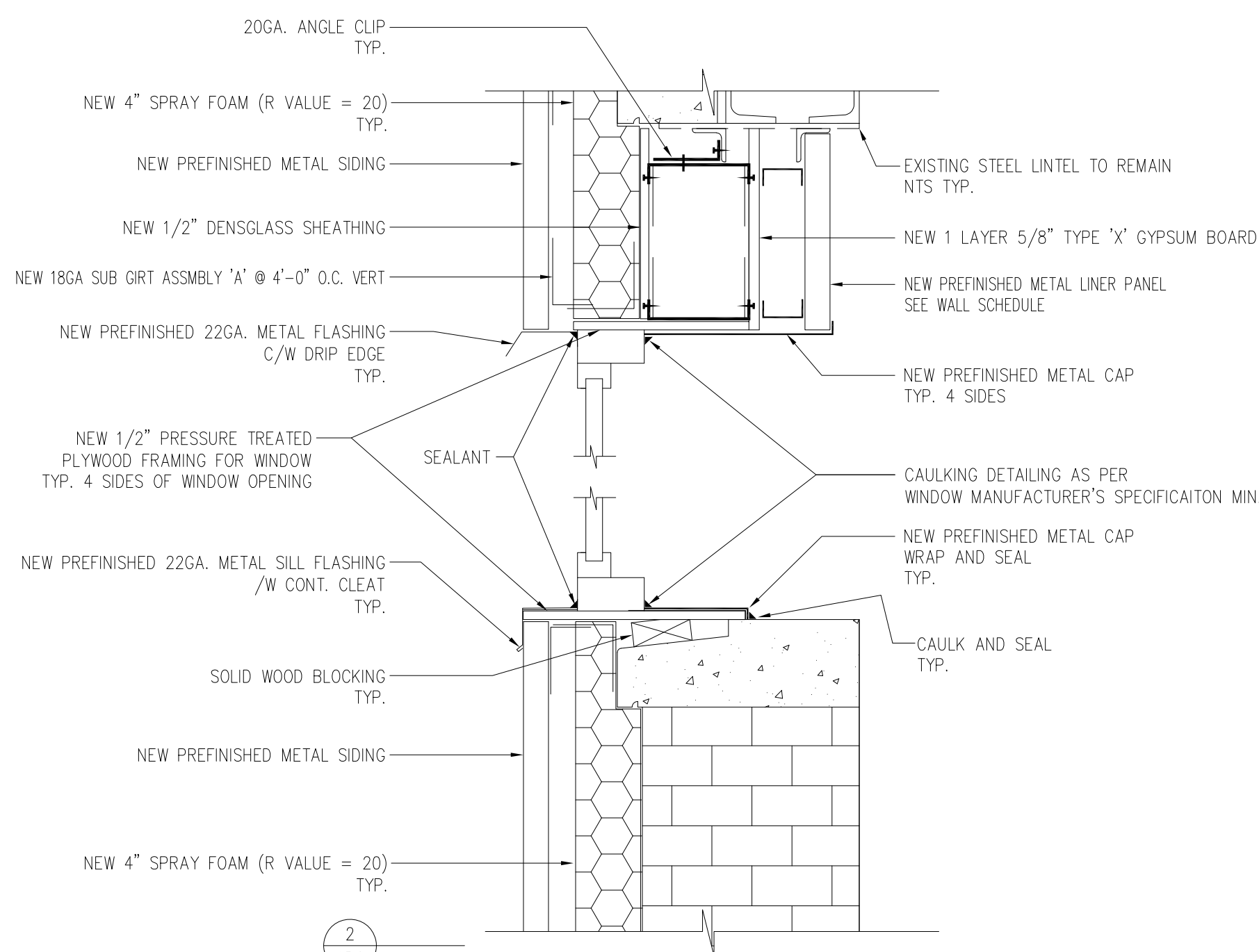
1  
A5.0  
@ PARAPET  
CAULK ALL JOINTS



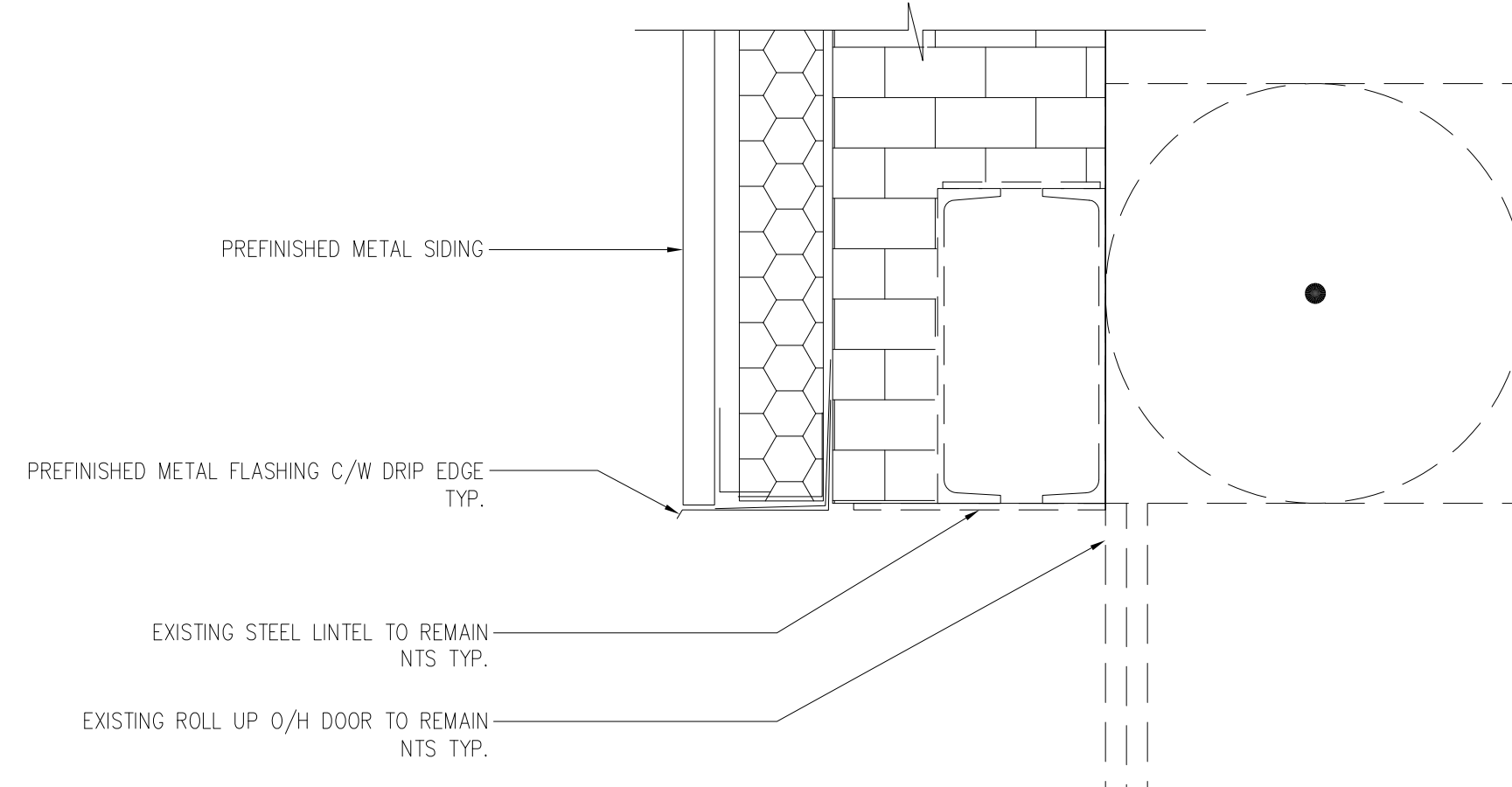
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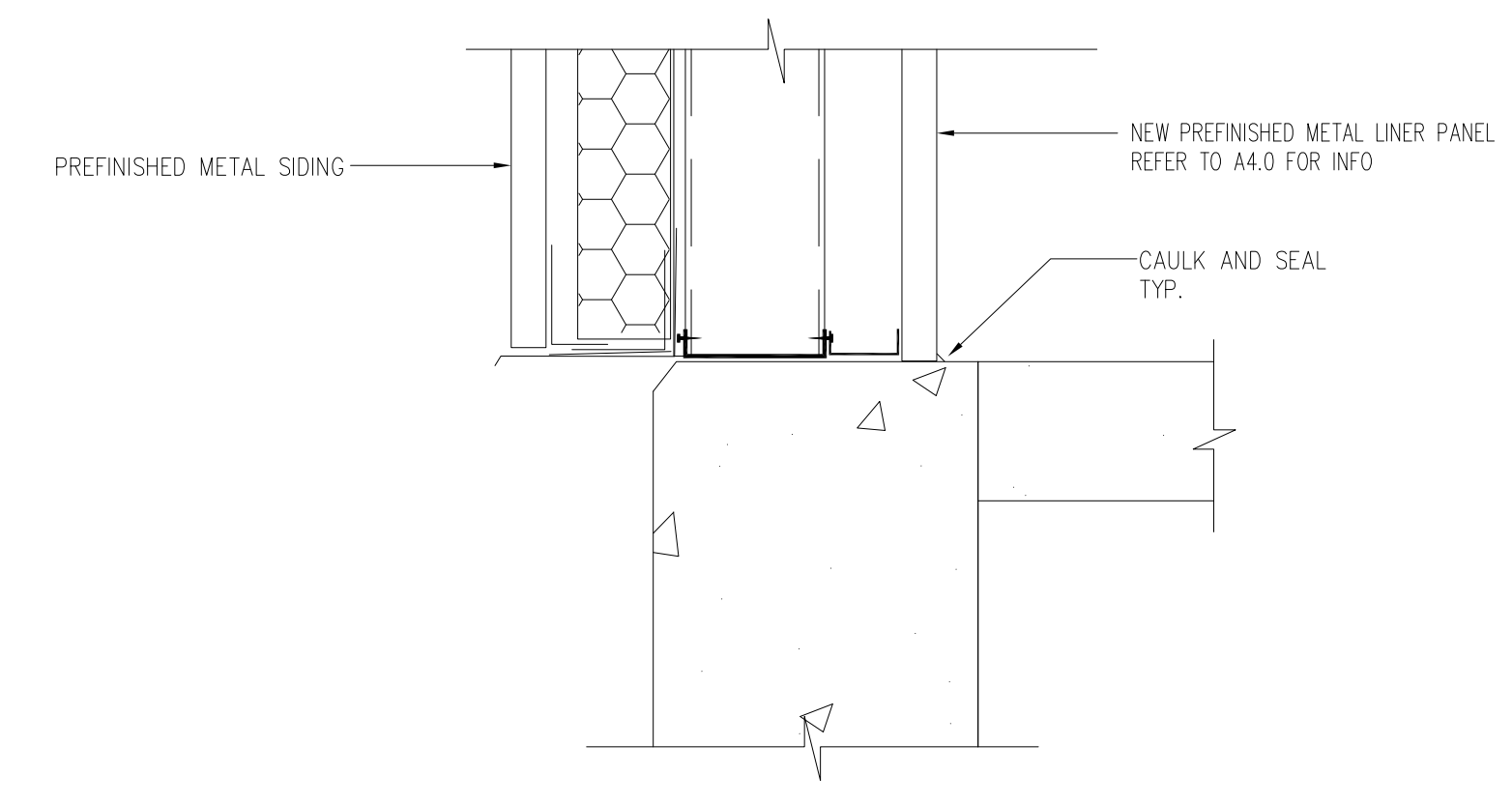
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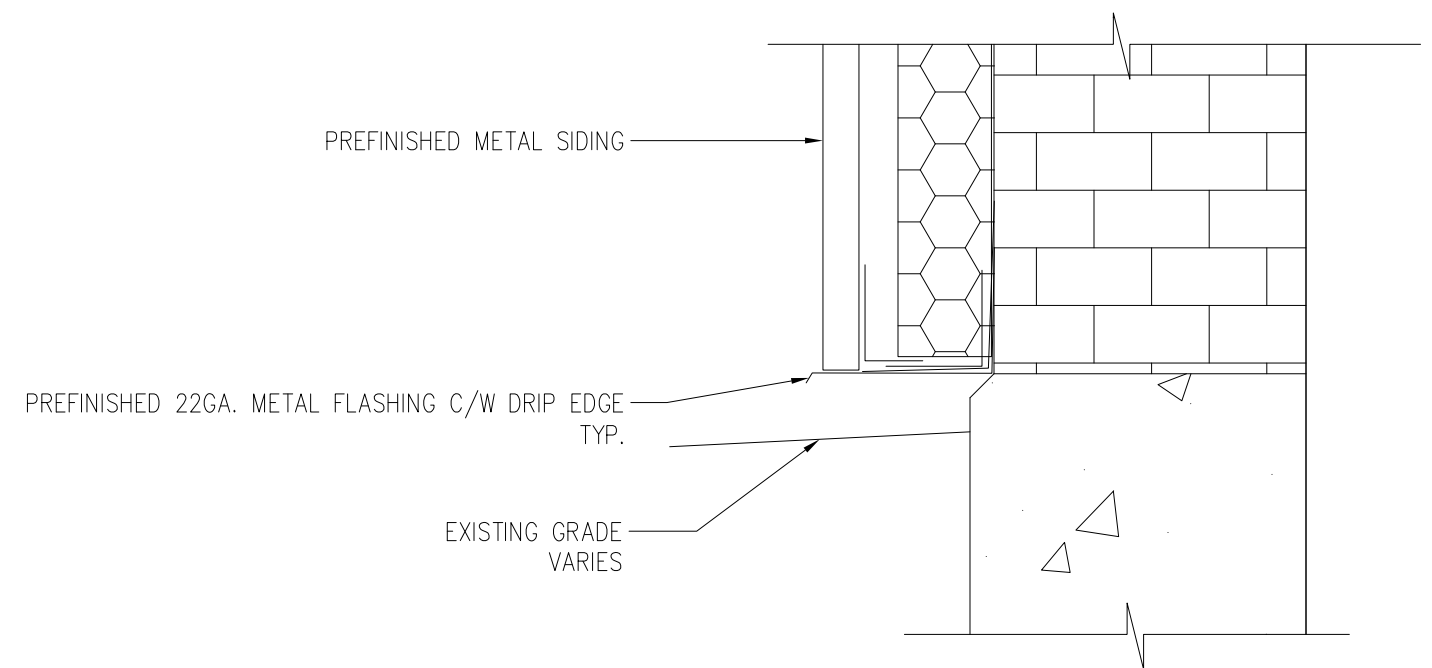
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A5.0



5  
A5.0

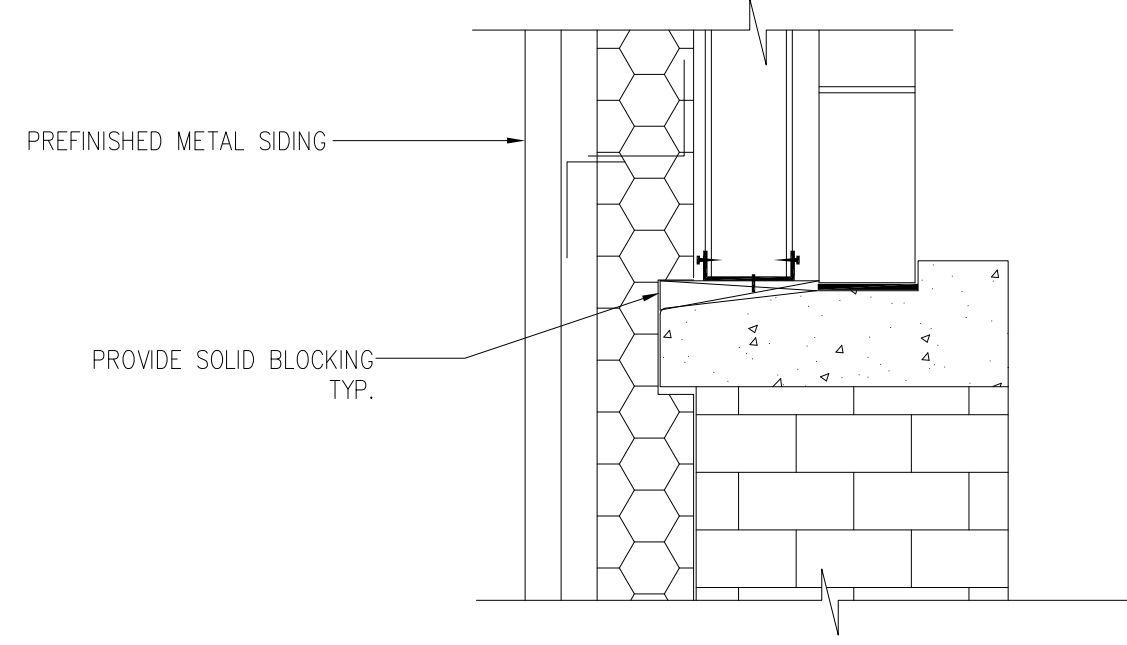


8  
A5.0



3  
A5.0

NOTE:  
1) ALL FLASHING TO BE C/W WATER PROOF MEMBRANE AND SEALED TO EXISTING BRICK



6  
A5.0

revision	0
ISSUED FOR TENDER	MAY 05 23

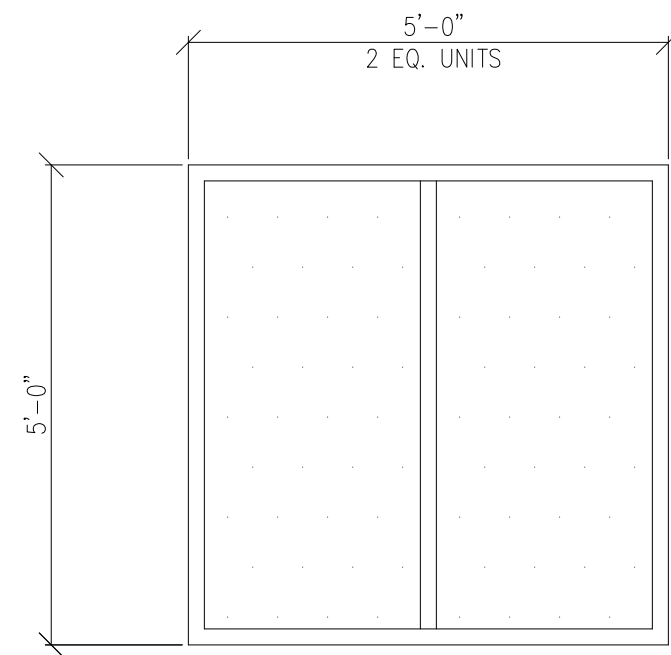


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705-495-0961

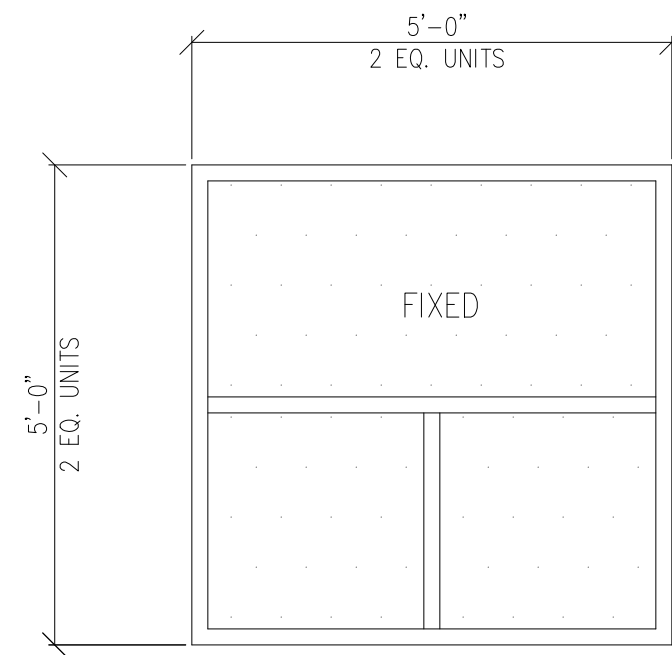
project: ONTARIO NORTHLAND  
WHEEL SHOP - BLDG ENVELOPE REPAIR  
916 Midway St., NORTH BAY, ONTARIO  
NORTH BAY, ONTARIO  
title: DETAILS

drawn by: BM  
scale: NTS  
date plotted: MAY 05 23  
checked by: TIM T  
project no: 211725  
date revised:

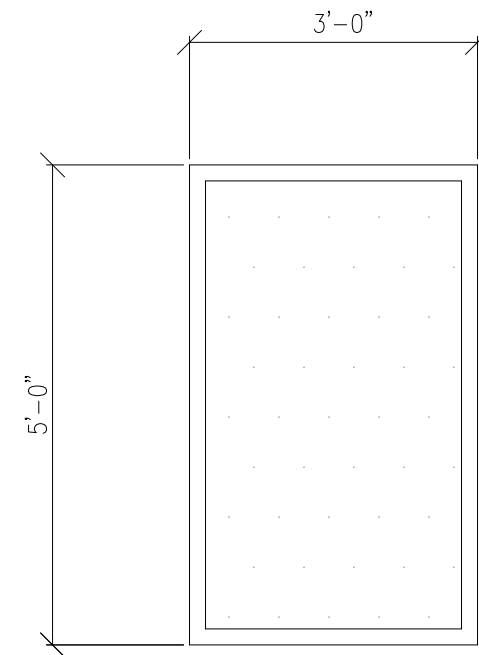
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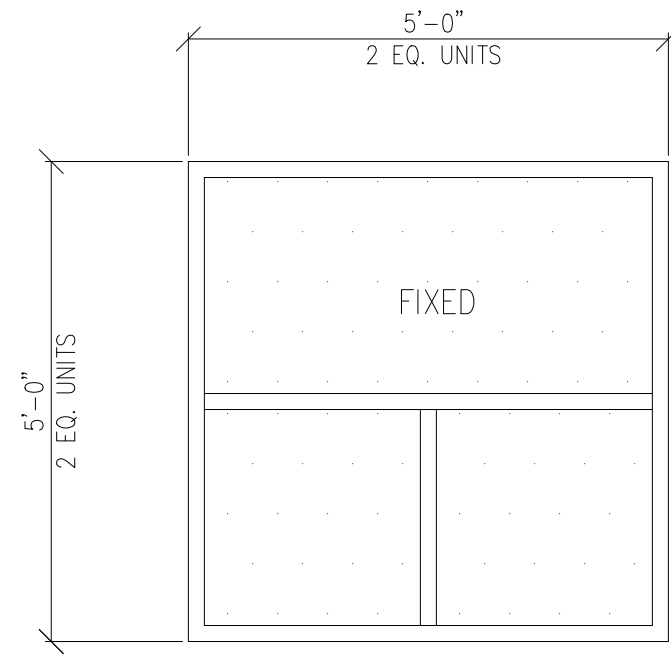
W1 FIXED THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR)



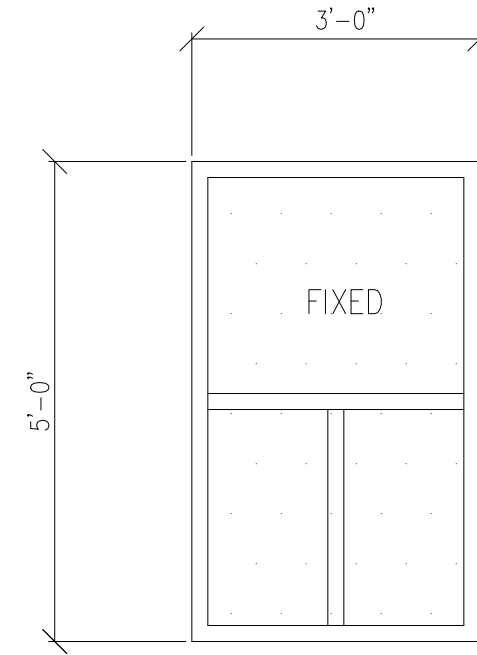
W2 HALF SLIDING GLASS THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN



W3 FIXED THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR)

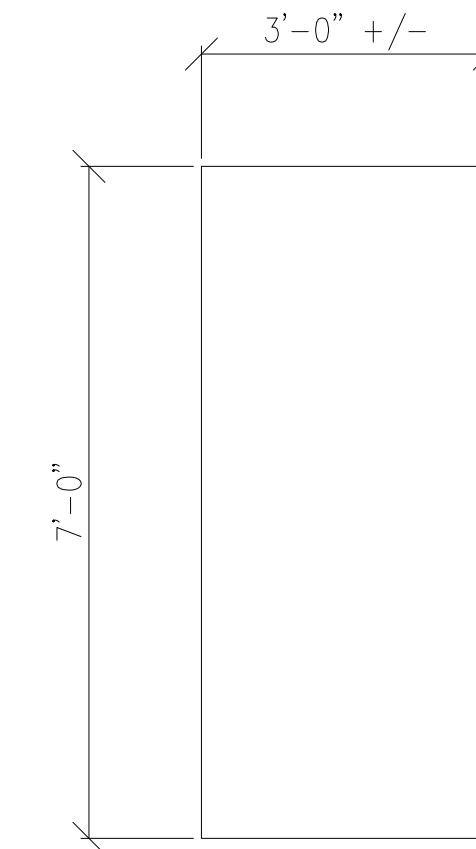


W4 HALF SLIDING GLASS THERMAL PANE GLASS - FROSTED (WASHROOMS/FIRST AIDE ROOM) ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN

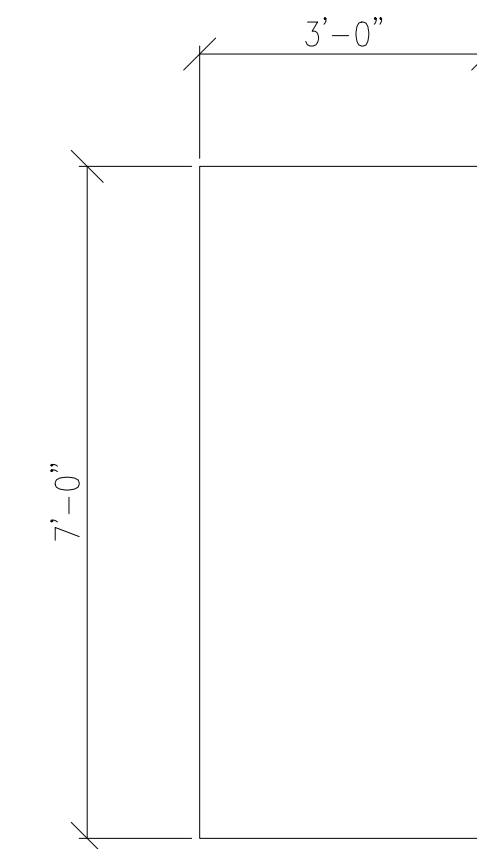


W5 HALF SLIDING GLASS THERMAL PANE GLASS ALUM. FRAME (ALUM. ANODIZED COLOUR) C/W SCREEN

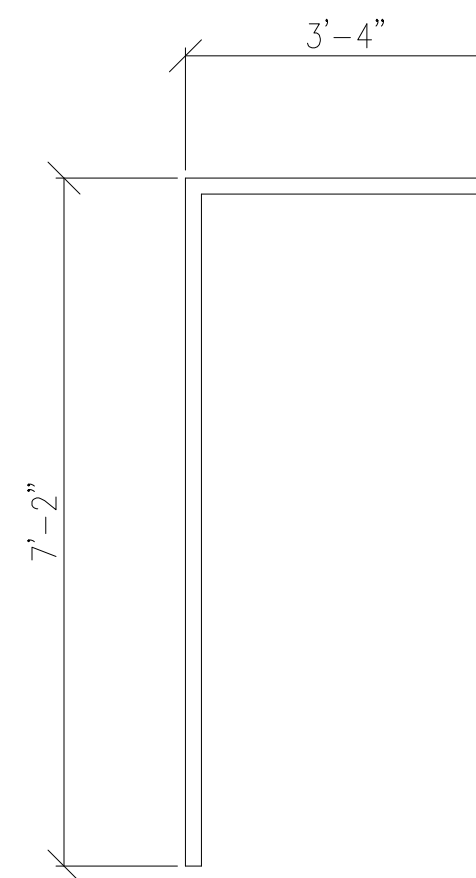
WINDOW NOTE:  
 1) ALL FIXED WINDOWS TO BE "ALUMICOR 230 FIXED" OR EQUIV.  
 2) ALL SLIDER WINDOWS TO BE "ALUMICOR 250 SLIDERS" OR EQUIV.  
 3) ALL WINDOW SILLS ARE TO HAVE A 3" JAM DEFLECTOR BOTH SIDES  
 4) ALL SLIDER WINDOWS ARE TO COME C/W FULL SCREENS AS NOTED  
 5) ALL WINDOWS ARE TO BE SUPPORTED WITH 1/2" PRESSURE TREATED PLYWOOD ALL AROUND  
 6) NO BLOCK OR CONNECTION @ TOP OF WINDOW (ALLOW FOR 1/2" DEFLECTION AT TOP)  
 7) PROVIDE FOAM INSULATE, CAULK AND SEAL AS REQ'D TO MAKE WORK COMPLETE



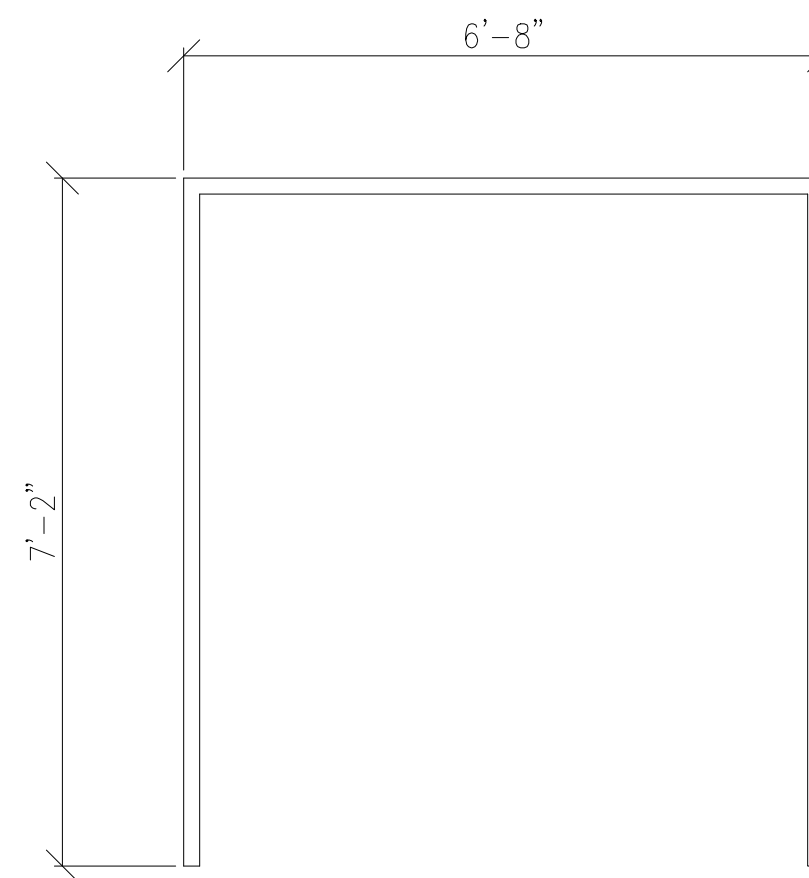
D1 DOOR D1 - HMI



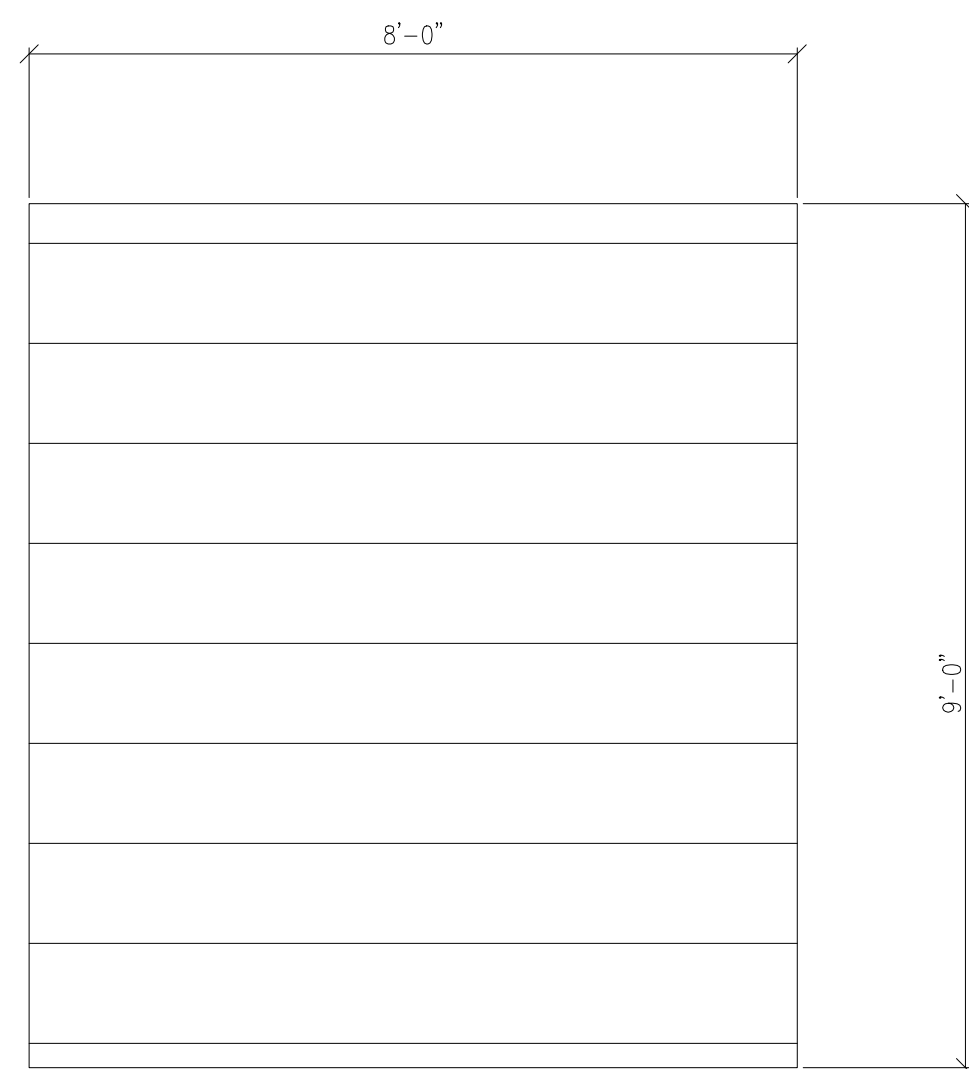
D2 DOOR D2 - HMI



FRAME F1



FRAME F2



D3 DOOR D3



D4 DOOR D4

SITE CONFIRM - TO MATCH EXISTING

DOOR & FRAME SCHEDULE									
DOOR					FRAME			REMARKS (ALL DOORS C/W ALL REQ'D HARDWARE)	
QTY.	TYPE	MAT	FIN	WIDTH	HEIGHT	TYPE	FIN	WALL THK.	
2	D1	HMI	PT	3'-0"	7'-0"	F1	PT		INSUL. DOOR & FRAME c/w WEATHER STRIP, SWEEP, AND CLOSER
1	D2	HMI	PT	2'-3"-0"	7'-0"	F2	PT		INSUL. DOUBLE DOOR & FRAME c/w WEATHER STRIP, SWEEP, CLOSER
2	D3	TBAL	PT	8'-0"	8'-0"	-	-		ROLL UP DOOR c/w POWER OPERATOR & ALL REQ'D HARDWARE
1	D4	TBAL	PT	16'-0"	16'-0"	-	-		ROLL UP DOOR c/w POWER OPERATOR & ALL REQ'D HARDWARE

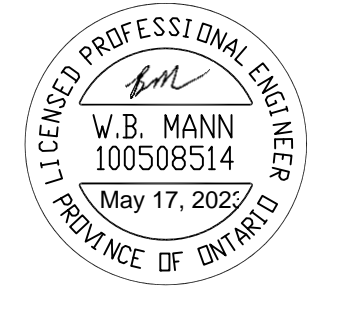
DOOR & FRAME NOTES

- SITE CONFIRM ALL WALL THICKNESSES AND OPENING SIZES WITH FRAMES BEFORE ORDERING
- ALL FRAMES HOLLOW METAL U.N.O.
- HARDWARE STANDARD COMMERCIAL GRADE
- HM FRAMES TO BE STANDARD 6" DEPTH AT ALL LOCATIONS U.N.O.
- HARDWARE TO INCLUDE:
  - 3 HINGES
  - DOOR CLOSURE
  - LOCK SET (KEYED TO ONR STANDARDS)
- DOOR AND HARDWARE TO MATCH EXISTING WHEEL SHOP DOOR HARDWARE
- PROVIDE FOAM INSULATE, CAULK AND SEAL AS REQ'D TO MAKE WORK COMPLETE

LEGEND

- HM - HOLLOW METAL
- HMI - HOLLOW METAL INSULATED
- WD - WOOD
- FR - FIRE RATED
- PT - PAINT
- ST - STAINED
- AL - ALUMINUM
- AL/G - ALUMINUM w/ GLASS
- TBAL - THERMALLY BROKEN ALUMINUM (OR APPROVED EQUAL.)

revision	0
ISSUED FOR TENDER	MAY 05 23



**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0961

project: ONTARIO NORTHLAND WHEEL SHOP - BLDG ENVELOPE REPAIR  
 916 Midway St. E., North Bay, Ontario  
 916 Midway St. E., North Bay, Ontario

drawn by: BM checked by: TIM T  
 scale: NTS project no: 211725  
 date plotted: MAY 05 23  
 date revised:

dwg no: A6.0

# ONTARIO NORTHLAND

## REPAIR SHOP – BLDG. ENVELOPE REPAIR

### 326 SECOND STREET, COCHRANE ONTARIO

#### DRAWING INDEX

##### GENERAL

G1.0 SITE PLAN / CONSTRUCTION STAGING  
 G2.0 NOTES 1  
 G3.0 NOTES 2

##### ARCHITECTURAL

A1.0 EXISTING UPPER FLOOR PLAN  
 A1.1 EXISTING EXTERIOR ELEVATIONS  
 A1.2 EXISTING EXTERIOR ELEVATIONS  
 A1.3 EXISTING WALL SECTIONS  
 A1.4 EXISTING WALL SECTIONS  
 A1.5 EXISTING WALL SECTIONS

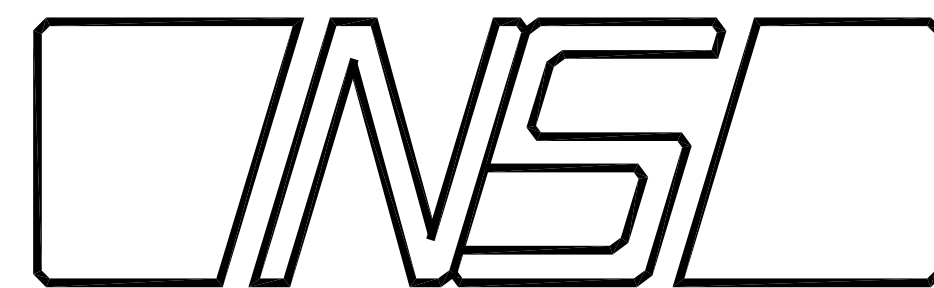
A2.0 NEW UPPER FLOOR PLAN  
 A3.1 NEW EXTERIOR ELEVATIONS  
 A3.2 NEW EXTERIOR ELEVATIONS  
 A4.1 NEW WALL SECTIONS  
 A4.2 NEW WALL SECTIONS  
 A4.3 NEW WALL SECTIONS  
 A4.4 NEW WALL SECTIONS  
 A5.1 WINDOWS & SCREENS  
 DT1 DETAILS  
 DT2 DETAILS

##### MECHANICAL

M101 LOWER FLOOR PLAN  
 M102 UPPER FLOOR PLAN

##### ELECTRICAL

E101 ELECTRICAL – POWER – SITE PLAN (1)  
 E102 ELECTRICAL – POWER – SITE PLAN (2)



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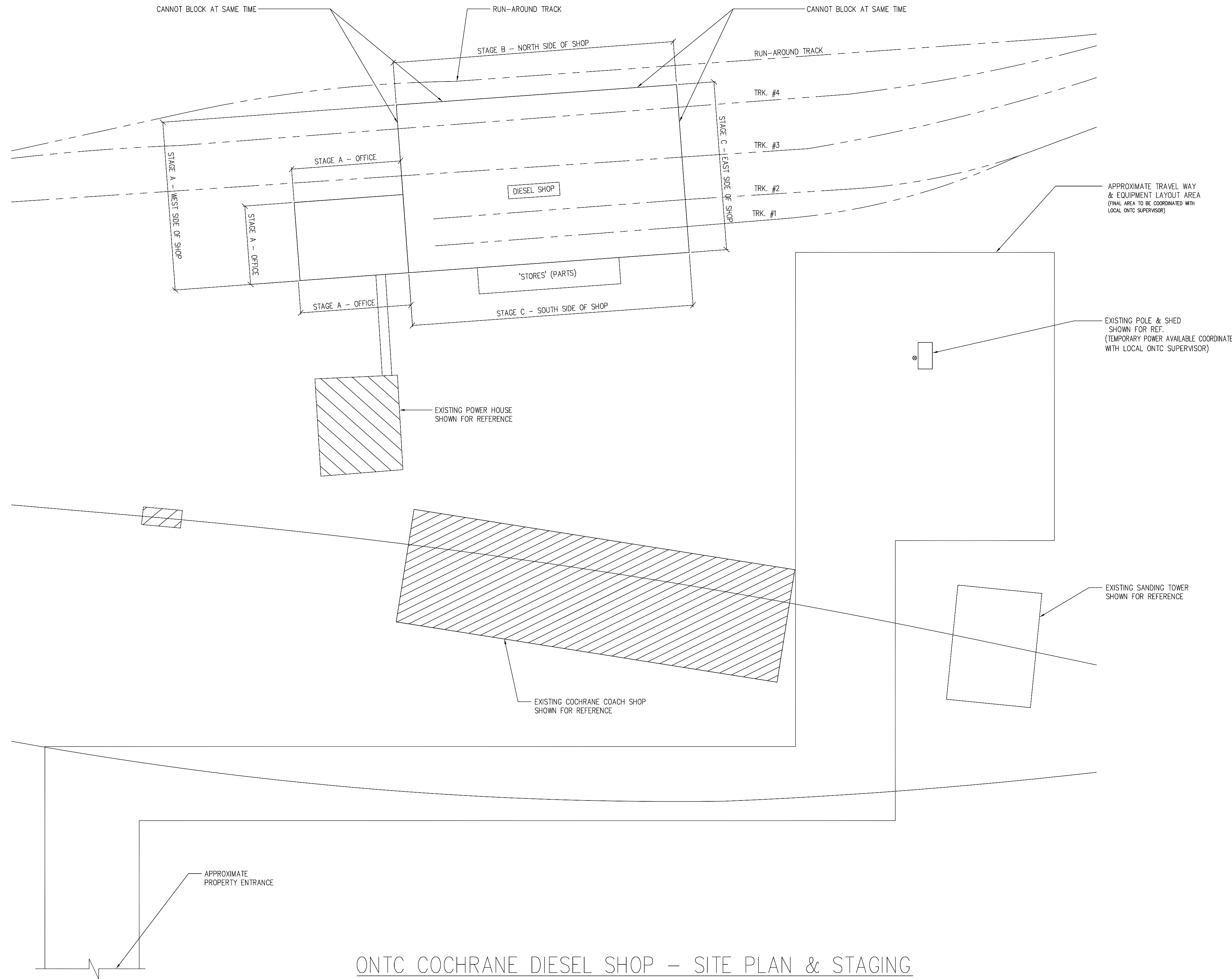
#### ENGINEERING CONSULTANTS

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ONTC COCHRANE DIESEL SHOP – SITE PLAN & STAGING  
NTS

**CONSTRUCTION STAGING REQUIREMENTS**

**STAGE 'A'**  
 1) CLOSE COORDINATION WITH ONTC REQUIRED FOR OFFICE, LUNCH ROOM + WASHROOM/LOCKER ROOM WORK  
 2) RUN-AROUND TRACK CANNOT BE BLOCKED AT ANY TIME DURING THIS STAGE  
 3) TRACKS #3 & #4 – WEST END TO BE BLUE FLAGGED (MARKED INACTIVE) WHEN WORK IS IN PROGRESS

**STAGE 'A' ACCESS NOTE:**  
 DURING STAGE 'A', ONTC ACCESS TO TRACKS #3 & #4 WILL BE FROM EAST END ONLY. RUN-AROUND TRACK CANNOT BE BLOCKED DURING THIS STAGE.

**STAGE 'B'**  
 1) CLOSE COORDINATION WITH ONTC REQUIRED TO PERMIT TRAIN MOVEMENT ON RUN-AROUND TRACK AS REQUIRED TO MAINTAIN SHOP OPERATIONS  
 2) RUN-AROUND TRACK MUST BE BLUE FLAGGED WHILE WORK IS IN PROGRESS. BLUE FLAGS TO BE REMOVED TO ALLOW TRAIN MOVEMENTS WHEN WORK NOT IN PROGRESS

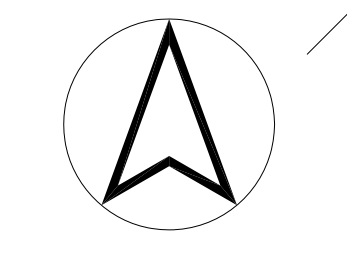
**STAGE 'C'**  
 1) TRACKS #1 TO #4 EAST END MUST BE BLUE FLAGGED WHEN WORK IS IN PROGRESS  
 2) CLOSE COORDINATION WITH ONTC REQUIRED TO PERMIT TRAIN MOVEMENTS INTO TRACKS #1 & #2 AS REQUIRED TO MAINTAIN SHOP OPERATIONS.  
 3) CLOSE COORDINATION WITH ONTC REQUIRED TO MINIMIZE DISRUPTION TO 'STORES' OPERATIONS

**STAGE 'C' ACCESS NOTE:**  
 DURING STAGE 'C', ONTC ACCESS TO TRACKS #3 & #4 WILL BE FROM WEST END ONLY. RUN-AROUND TRACK CANNOT BE BLOCKED DURING THIS STAGE.

**GENERAL STAGING NOTES:**  
 1) CONTRACTOR TO PROVIDE DETAILED STAGING PLAN TO ONTC FOR APPROVAL PRIOR TO CONSTRUCTION.  
 2) ERECTION & PLACEMENT OF CONSTRUCTION FENCING TO CREATE CONSTRUCTION ISLANDS ARE TO BE COORDINATED WITH ONTC, TO MINIMIZE IMPACT ON SHOP OPERATIONS.

**INSPECTION SCHEDULE**

- 1.0 NOTIFY ENGINEER 24 HOURS PRIOR TO REQUIRED INSPECTIONS
- 1.1 INSPECTION REQUIRED AT THE FOLLOWING POINTS DURING CONSTRUCTION THE FOLLOWING IS A MINIMUM REQUIREMENT.
  - BEFORE START OF PROJECT (PRE-CONSTRUCTION MEETING)
  - AFTER EXISTING WINDOWS & GLASS BLOCK ARE REMOVED (REVIEW OF EXISTING STRUCTURE)
  - AFTER INSTALLATION OF GAUGE METAL FRAMING (BEFORE SHEATHING)
  - AFTER INSTALLATION OF GAUGE METAL GIRTS (BEFORE SPRAYING INSULATION)
  - AFTER INSTALLATION OF SPRAY FOAM INSULATION
  - AFTER INSTALLATION OF NEW METAL SIDING / NEW PARAPET
  - AT COMPLETION OF PROJECT



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**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
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project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
 328 SECOND STREET, COCHRANE, ONTARIO  
 title: SITE PLAN & CONSTRUCTION STAGING

drawn by: BM  
 scale: NTS  
 date plotted: APRIL 29 2016  
 date revised: APRIL 4 2016

checked by: TIM T  
 project no: 15701  
 dwg no: G1.0

FILE No. 15701-061.0-Rx

SEE DRAWINGS FOR ADDITIONAL NOTES

GENERAL NOTES

THIS IS A GENERAL SPECIFICATION. SOME STATED ITEMS MY NOT APPLY.
1.0 GENERAL
1.1 DESIGN AND CONSTRUCTION IS TO CONFORM TO THE 2006 ONTARIO BUILDING CODE. REFER ALSO TO TYPICAL DETAILS, NOTES UNDER PLANS & SCHEDULE ON THE STRUCTURAL DRAWINGS, AND TO THE SPECIFICATION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATIONS REFERRED TO SHALL BE THE LATEST EDITIONS INCLUDING ALL REVISIONS AND ADDENDA. ALL DIMENSIONS, AND DETAILS OTHER THAN PURELY STRUCTURAL DIMENSIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST THE ARCHITECTURAL DRAWINGS AND ANY INCONSISTENCIES REPORTED TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS MUST NOT BE SCALED.
1.2 REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, SLEEVES, DEPRESSIONS, GROOVES AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DRAWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ABOVE ITEMS WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROXIMATELY AS TO SIZE AND LOCATION.
1.3 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISIONS HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY BRACINGS AND SHORING REQUIRED FOR STRESSES AND INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACINGS, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS TO SAFEGUARD ALL EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.
1.4 ALL LOADS SHOWN ON THESE DRAWINGS ARE FACTORED LOADS UNLESS OTHERWISE NOTED.
2.0 SHOP DRAWINGS, PLACING DRAWINGS & BAR LISTS:-
2.1 FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT COPIES OF SHOP DRAWINGS , FOR REVIEW BY THE STRUCTURAL CONSULTANT. SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING ITEMS AND REQUIRE AN ENGINEERING SEAL OF AN ENGINEER LICENSED IN ONTARIO & RESPONSIBLE FOR THE WORK. ALL STRUCTURAL STEEL, OWSJ, PRE-ENGINEERED BUILD FRAME, WOOD TRUSS, HEAVY WOOD TIMBER CONNECTIONS, CONCRETE PRECAST CORE SLAB, REBAR, METAL ROOF & FLOOR DECK, PRE-ENGINEERED BUILD FRAME. SHOP DRAWINGS TO SHOW COMPLETE INFORMATION FOR THE FABRICATION AND ERECTION OF THE STRUCTURAL COMPONENTS.
2.2 REVIEW BY THE STRUCTURAL CONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR SEEING THAT THE WORK IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
3.0 INSPECTION AND TESTING:-TESTING ITEMS MAY BE DELETED WITH ENGINEER PERMISSION
3.1 A SOILS CONSULTANT AND AN INDEPENDENT INSPECTION AND TESTING COMPANY ARE TO BE ENGAGED TO CARRY OUT THE FOLLOWING SERVICES:-
.1 BEARING SOIL - REFER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO THE SOIL REPORT.
.2 FILL UNDER SLABS-ON-GRADE - CONFIRM THAT FILL MATERIAL USED IS SATISFACTORY AND THAT THE REQUIRED DEGREE OF COMPACTION HAS BEEN ATTAINED.
.3 CAST-IN-PLACE & PRECAST CONCRETE - ROUTINE INSPECTION OF MATERIALS, INCLUDING SLUMP CYLINDER AND AIR ENTRAINMENT TESTS & REINFORCING ROD TESTS WHEN REQUIRED AS DIRECTED IN ACCORDANCE WITH CAN/CSA-A23.2-M.
.4 THE PROJECT SUPERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTANT A MINIMUM OF 24 HOURS IN ADVANCE OF A CONCRETE POURS FOR A REVIEW OF PREPARATIONS.
.5 STRUCTURAL STEEL AND OWSJ - ROUTINE SHOP AND FIELD INSPECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF CAN/CSA-16.1-M
.6 MASONRY - WHEN REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TESTED IN ACCORDANCE WITH CAN3-A165-M SERIES; BRICKS IN ACCORDANCE WITH CSA CAN3-A82M; AND MORTAR AND/OR GROUT IN ACCORDANCE WITH CSA A179M.
3.2 ALL INSPECTION AND TESTING SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION AND WELDING, INSPECTORS ARE TO BE CERTIFIED BY THE CANADIAN BUREAU.
4.0 FOUNDATIONS
4.0 REFER TO NOTES UNDER FOUNDATION PLANS. ALL EXTERIOR FOOTINGS OR OTHER FOOTINGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL BE FOUNDED AT A MINIMUM 1700mm (5'-6") BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. ON THE THE DRAWINGS FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTING SHALL BE PROTECTED BY A MINIMUM OF 1200mm (4'-0") OF EARTH OR IT'S EQUIVALENT SUFFICIENT TO PREVENT FREEZING.
4.2 THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, MAXIMUM STEP APPROX. 600mm (2'-0").
4.3 CAP DEPTHS AND FOOTING ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THE STRUCTURAL DRAWINGS.
4.4 IF ACTUAL JOB SITE OR SOIL CONDITIONS VARY FROM THOSE ASSUMED, THE WRITTEN DIRECTIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.
4.5 KEEP EXCAVATIONS CONTINUOUSLY DRY BEFORE CONCRETE IS PLACED. IF THE SOIL IS SOFTENED BY WATER, THE EXCAVATION SHALL EXTENDED BELOW THE SOFTENED MATERIAL AND THE BOTTOM OF THE FOOTINGS LOWERED TO SUIT.
5.0 BACKFILLING AND COMPACTION:-
5.1 SLABS-ON-GRADE AND ALL STRUCTURAL ELEMENTS FRAMING INTO WALLS WHICH RETAIN EARTH MUST BE IN BEFORE BACKFILLING.
5.2 AT FOUNDATION WALLS WITH GRADE BOTH SIDES, UNLESS ADEQUATELY SHORED, BACKFILL & COMPACT EACH SIDE OF WALL SIMULTANEOUSLY.
5.3 UNDER SLABS-ON-GRADE, REMOVE SOFT SPOTS, ORGANIC AND FOREIGN MATTER IN THE SUB-GRADE. (WHERE SUB-GRADE CONSISTS OF COMPACTED FILL, REFER TO SPECIFIC NOTES ON THE DRAWINGS).

GENERAL NOTES CONTINUED

5.4 BACKFILL UNDER SLAB-ON-GRADE, IN FOOTING EXCAVATIONS AND IN TRENCHES ONLY WITH APPROVED MATERIAL. UNLESS SPECIFICALLY NOTED OTHERWISE, BACKFILLING SHALL BE CARRIED OUT IN MAXIMUM OF 200mm (8") THICK LIFTS OF LOOSE FILL EACH COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
5.5 UNLESS OTHERWISE NOTED, PROVIDE IMMEDIATELY UNDER SLABS-ON-GRADE A MINIMUM OF 150mm (8") OF COMPACTED GRANULAR "A" MATERIAL. COMPACTION TO ACHIEVE A MINIMUM OF 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

STRUCTURAL STEEL

1.0 GENERAL
1.1 STRUCTURAL STEEL & CONNECTIONS SHALL CONFORM TO CAN/CSA-S16.1-M & SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER EXPERIENCED IN THIS TYPE OF WORK.
1.2 REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS & TO THE SPECIFICATION .
1.3 WELDING SHALL CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA W47.1. DIV 1 OF 2.1
1.4 BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAR CAPACITY UNLESS OTHERWISE NOTED, & IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR IMPLIED BY THE DRAWINGS. WHEN EVER POSSIBLE USE STANDARD DOUBLE HEADED AND TYPE CONNECTIONS. ALL CONNECTION TO BE AT LEAST HALF THE DEPTH OF THE BEAMS. USE SAFE CONNECTIONS AS REQUIRED BY THE MINISTRY OF LABOUR.
2.0 PRODUCTS
2.1 ALL STRUCTURAL STEEL MEMBERS SHALL CONFORM TO CAN/CSA-G40.20/G20.21-M. PLATES, SAG RODS, STRAP ANCHORS & BARS SHALL BE TYPE 300W AND WIDE FLANGE SECTION AND HOLLOW STRUCTURAL SECTIONS SHALL BE TYPE 350W, CLASS C FOR SQUARE HSS & CLASS C FOR ROUND HSS.
2.2 BOLTS, NUTS & WASHERS FOR CONNECTIONS TO CONFORM TO ASTM A325 UNLESS NOTED.
2.4 ANCHOR BOLTS, NUTS & WASHERS FOR BASE PLATES, BEARING PLATES & WELD PLATES TO CONFORM TO ASTM A307 UNLESS NOTED.
2.5 SHEAR STUDS WHERE REQUIRED TO CONFORM TO ASTM A108, WELDING TO CONFORM TO CSA W59.
2.6 WELDING MATERIALS TO CONFORM TO CSA W48-M (SERIES).
2.7 POWER TOOL CLEAN ALL STEEL BEFORE PRIMING TO REMOVE ALL LOOSE MILL SCALE.
2.8 PRIMER PAINT TO CONFORM TO CAN/CGSB-1.40-M OR CISC/CPMA 2-75. TOP COAT TO BE INDUSTRIAL GRADE ENAMEL PAINT (AS PER ONTC REQUEST)
3.0 EXECUTION
3.1 FABRICATION, HANDLING & ERECTION TO CONFORM TO CAN/CSA-S16.1-M.
3.2 PROVIDE A MINIMUM OF 2-12mm (1/2") DIAMETER BY 250 (10") LONG WALL ANCHORS FOR ALL BEAM & OWSJ WALL PLATES ON MASONRY, OR AN APPROVED EQUAL, UNLESS OTHERWISE NOTED. BEAMS & JOIST SHOES TO BE WELDED TO BEARING PLATES.
3.3 PROVIDE ADJUSTABLE ANCHORS TO ALL STEEL TO BE BUILT INTO, ABUTTED BY, OR FACED WITH MASONRY (REFER ALSO TO DETAILS IF SHOWN). SPACING OF ANCHORS TO BE
.1 FOR VERTICAL SPACING.....600 (24") MAX. CENTRES
.2 FOR HORIZONTAL SPACING.....5 TIMES WALL THICKNESS\* MAX. 1500 (5'-0") CENTRES
\*(NOTE, USE BACK-UP WYTHE ONLY FOR CAVITY WALLS).
.3 WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY (I.E. DOES NOT SUPPORT MASONRY) ANCHORS SHALL PERMIT DIFFERENTIAL VERTICAL MOVEMENT BETWEEN STRUCTURAL MEMBER & MASONRY. MINIMUM CLEARANCE SPAN/180 (MINIMUM 25mm 1")
3.4 CLEAN, PREPARE SURFACES AND SHOP PRIME STRUCTURAL STEEL COAT OF SPECIFIED PRIMER PAINT IN ACCORDANCE WITH CAN/CSA-S16.1-M, EXCEPT WHERE MEMBERS ARE TO BE ENCASED IN CONCRETE. FIELD "TOUCH-UP" BOLTS, WELDS, BURNED OR SCRAPED SURFACES AFTER ERECTION..
3.6 PROVIDE ALL NECESSARY TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB. BRACING SHOWN ON STRUCTURAL DRAWINGS IS PERMANENT FOR FINISHED BUILDING ONLY.
3.7 CO-ORDINATE WITH MECHANICAL & ELECTRICAL CONSULTANTS & SUB-TRADES WHOSE WORK MAY EFFECT DETAILING, FABRICATION & ERECTION OF THE STEEL STRUCTURE.
3.8 TOLERANCES: VARIATION FROM PLUMB & LEVEL EXTERIOR COLUMNS AT ELEVATOR SHAFTS, & SPANDREL BEAMS INCLUDING ANGLES.....1:1000 MAX. 25mm (1/8" IN 10'-0" MAX.1") OTHER PIECES.....1:500 (1/4" IN 10'-0")
3.9 NO HOLES OTHER THAN THOSE SHOWN ON REVIEWED SHOP DRAWINGS SHALL BE MADE IN ANY STEEL MEMBER WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL CONSULTANT.
4.0 QUALITY CONTROL
4.1 SEE GENERAL NOTES, NOTES UNDER PLANS, &/OR SPECIFICATION FOR INSPECTION AND TESTING REQUIREMENT.PREFABRICATED WOOD TRUSS NOTES

WOOD CONSTRUCTION

1.0 GENERAL
1.1 TRUSSES, BRACING, BRIDGING AND CONNECTORS ARE TO BE DESIGNED AND FABRICATED BY THE TRUSS FABRICATOR TO THE REQUIREMENTS OOF CAN/CSA-086-M OR CAN/CSA-086.1-M UNLESS OTHERWISE NOTED, TO SAFELY CARRY THE LOADS, INCLUDING ACCUMULATED SNOW DRIFT LOADS AS INDICATED ON THE DRAWINGS, AND ALL WIND LOADS.
1.2 DEFLECTION UNDER LIVE LOAD ONLY SHALL NOT EXCEED 1/240TH OF THE SPAN, EXCEPT THAT WHERE PLASTER OR GYPSUM BOARD CEILING ARE HUNG DIRECTLY FROM THE TRUSSES, LIVE LOAD DEFLECTION SHALL NOT EXCEED 1/360TH OF THE SPAN.
1.3 IDENTIFY LUMBER BY OFFICIAL GRADE MARKS.
1.4 WOOD PRESERVATIVE (PRESSURE TREATED):- WHERE REQUIRED TO CONFORM TO CAN/CSA-080-M.
1.5 SHOP DRAWINGS
.1 SUBMIT SHOP DRAWINGS FOR REVIEW AS DIRECTED BEARING THE STAMP OF THE LICENCED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN.
.2 CLEARLY INDICATE ON THE SHOP DRAWINGS, THE SPECIES, SIZES AND STRESS GRADES OF LUMBER USED.
.3 SHOW PITCH, SPAN, CAMBER CONFIGURATION, AND SPACING.
.4 INDICATE CONNECTOR TYPES, THICKNESSES, SIZES, LOCATION, DESIGN VALUES AND BRIDGING REQUIREMENTS.
.5 SHOW BEARING & WIND UPLIFT ANCHORAGE DETAILS.
.6 REVIEW OF THE SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR SEEING THAT THE WORK IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS.
2.0 MATERIALS
2.1 LUMBER:-UNLESS OTHERWISE NOTED, TO BE SPF SPECIES, GRADE NO. 2 CONFORMING TO CSA STANDARD O141 WITH MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF FABRICATION.
2.2 CONNECTOR PLATES: - GALVANIZED SHEET STEEL TO ASTM A446 GRADE "A" WITH g90 "WIPED COAT" DESIGNATION, AND WITH HOLES, PLUGS, TEETH OR PRONGS UNIFORMLY SPACED AND FORMED.
2.3 NAILS: -ZINC COATED STEEL TO CSA STANDARD B111.
2.4 SCREW & LAG SCREWS:-CADMIUM PLATED STEEL TO CSA STANDARD B35.(SERIES)
2.5 SPLIT RINGS:-HOT ROLLED CARBON STEEL TO CAN/CSA-G40.20/G40.21-M, TYPE 260W.
2.6 PLYWOOD GUSSETS: - PLYWOOD TO CSA STANDARD O121-M OR O151-M.
3.0 EXECUTION
3.1 HOIST TRUSSES INTO POSITION IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3.2 INSTALL ALL NECESSARY TEMPORARY BRACING REQUIRED TO HOLD TRUSSES PLUMB UNTIL PERMANENT BRACING IS INSTALLED.
3.3 INSTALL PERMANENT BRACING AND RELATED COMPONENTS PRIOR TO APPLICATION OF LOADS TO TRUSSES.
3.4 TIGHTEN LOOSE CONNECTORS.
3.5 DO NOT CUT OR REMOVE CHORDS OR OTHER TRUSS MEMBERS. DO NOT NOTCH OR DRILL MEMBERS UNLESS SUCH NOTCHING OR DRILLING IS ALLOWED FOR IN THE DESIGN OF THE TRUSS.

FILE No. 15701-062.0-Rx

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project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR
328 SECOND STREET, COCHRANE, ONTARIO
title: GENERAL NOTES

drawn by: BM checked by: TIM T
scale: NTS project no: 15701
date plotted: APRIL 29 2016
date revised: APRIL 4 2016
dwg no:

G2.0

Revision table with columns for revision number (1, 2, 0) and description (FOR TENDER).

## CAST-IN-PLACE CONCRETE NOTES

- 1.0 GENERAL
- 1.1 PROVIDE ALL LABOUR MATERIAL, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WORK.
- 1.2 REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETAILS AND SPECIFICATION.
- 2.0 PRODUCTS
- 2.1 PORTLAND CEMENT, WATER AND AGGREGATES SHALL CONFORM TO CSA STANDARD A23.1.
- 2.2 PROVIDE AN APPROVED WATER REDUCING ADDITIVE IN ALL CONCRETE. PROVIDE AN APPROVED AIR ENTRAINING ADDITIVE IN ALL CONCRETE WHICH WILL BE EXPOSED TO A FREEZE/THAW CYCLE AND/OR THE ACTION OF DE-ICING SALT. ADMIXTURES SHALL CONFORM TO CSA STANDARD A23.5.
- 2.3 FORM WORK SHALL CONFORM TO CSA STANDARD A23.1, CSA STANDARD S269.3 AND FALSE WORK SHALL CONFORM TO CSA S269.1.
- 2.4 IF SO INSTRUCTED, THE DESIGNS FOR THE FORM WORK SHALL BE SUBMITTED FOR REVIEW BEFORE CONSTRUCTION. FORM WORK DRAWINGS AND DESIGN SHALL BEAR THE STAMP OF A LICENSED PROFESSIONAL ENGINEER.
- 2.5 UNLESS OTHERWISE NOTED PROVIDE SLAB & BEAM FORMS WITH AN UPWARD CAMBER OF 2mm/1000mm (1/4" PER 10'-0") OF SPAN, AND UPLIFT ENDS OF CANTILEVERED SLAB & BEAM FORMS 3mm/1000mm (1/4" PER 8'-0") OF CANTILEVER LENGTH.
- 2.6 PROVIDE STANDARD ADJUSTABLE MASONRY ANCHOR SLOTS FOR ALL MASONRY FACING OR ABUTTING CONCRETE FACES.
- 2.7 PROVIDE AND/OR INSTALL STANDARD ADJUSTABLE INSERTS & ALL OTHER CAST-IN INSERTS AS REQUIRED BY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS & SPECIFICATION.
- 2.8 REINFORCING STEEL UNLESS SPECIFICALLY NOTED, SHALL BE DEFORMED BARS CONFORMING TO CAN/CSA-G30.18-M GRADE 400 (58000 PSI).
- 2.9 WELDED WIRE FABRIC TO CONFORM TO CSA G30.5-M.
- 2.10 REINFORCING SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI STANDARD 315 AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA.
- 2.11 DRY-PACK GROUT TO BE 1 PART PORTLAND CEMENT TO 11/2 PARTS SAND TO 2 PARTS OF 8mm PEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN MIXTURE. COMPRESSIVE STRENGTH 50MPa AT 28 DAYS.
- 2.12 NON-SHRINK GROUT TO BE AN APPROVED PRE-MIXED PROPRIETARY PRODUCT.
- 2.13 PROVIDE APPROVED EXTRUDED PVC WATER STOPS OF SIZE & STYLES INDICATED, WITH PRE-WELDED CORNERS & INTERSECTIONS. SEE ALSO TYPICAL DETAILS.
- 2.14 CURING AND SEALING COMPOUNDS WHERE APPROVED FOR USE TO CONFORM TO ASTM STANDARD C309. GENERALLY, ALL CONCRETE SURFACES ARE TO BE SEALED UNLESS NOTED OTHERWISE. COMPOUNDS ARE TO BE COMPATIBLE WITH APPLIED FINISHES.
- 3.0 EXECUTION
- 3.1 MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE @ 28 DAYS SHALL BE AS FOLLOWS -25MPa FOR FOOTINGS  
-25MPa FOR WALL AND PIERS  
-25MPa FLOOR SLAB
- 3.2 SLUMP AT THE POINT OF DISCHARGE SHALL BE CONSISTENT AT 80mm +/-30mm (3" +/- 1 1/8") UNLESS NOTED OTHERWISE. GREATER SLUMPS ARE NOT ACCEPTABLE.
- 3.3 CONCRETE MIXING, TRANSPORTATION, HANDLING AND PLACING SHALL CONFORM TO CSA STANDARD A23.1.
- 3.4 CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10000mm (30'-0").
- 3.5 CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID-SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
- 3.6 INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE SO INSTALLED THAT THEY SHALL NOT REQUIRE THE CUTTING, BENDING, OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.

## CAST-IN-PLACE CONCRETE NOTES CONTINUED

- 3.7 ELECTRICAL CONDUIT SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM IN WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTRE UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
- 3.8 OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE PROCEEDING.
- 3.9 FINISHING, REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE. ALL HONEYCOMBING SHALL BE CUT OUT AND FILLED. FLOOR FINISHES SHALL BE AS REQUIRED BY THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND SHALL CONFORM TO CSA STANDARD A23.1 (CLASS A CONVENTIONAL SMOOTH CLASSIFICATION).
- 3.10 TOLERANCES FOR PLACING STRUCTURAL CONCRETE, REINFORCING STEEL, CAST-IN HARDWARE AND FOR FLOOR & ROOF FINISHES SHALL BE AS SPECIFIED IN CSA STANDARD A23.1.
- 3.11 MINIMUM REINFORCING FOR ANY CONCRETE WALL TO BE AS SHOWN ON TYPICAL DETAIL FOR CONCRETE WALLS.
- 3.12 MINIMUM REINFORCING FOR ANY SUSPENDED SLAB SHALL BE TEMPERATURE BARS BOTTOM EACH WAY PLUS 10M @ 400 (16") DOWELS 600x600 (2'-0" x 2'-0") TOP AROUND PERIMETER, REFER TO TYPICAL DETAIL OF ONE WAY SLABS.
- 4.0 QUALITY CONTROL
- 4.1 FOR INSPECTION AND TESTING, SEE GENERAL NOTES.

## METAL SIDING NOTES

- 1.0 DESIGN REQUIREMENTS
- 1.1 DESIGN METAL SIDING SYSTEM IN ACCORDANCE WITH CSA S136, S136.1 AND TO WITHSTAND LIVE, DEAD, LATERAL, WIND, SEISMIC, HANDLING, TRANSPORTATION, AND ERECTION LOADS
- 1.2 DESIGN METAL SIDING SYSTEM IN ACCORDANCE WITH FOLLOWING CLIMATE DESIGN DATA FOR COCHRANE ONTARIO CONTAINED IN ONTARIO BUILDING CODE
  - a. DESIGN TEMPERATURE: JANUARY 1%, JULY 2 1/2%
  - b. WIND (HOURLY WIND PRESSURES): 0.35kPa 1 IN 50 YEAR OCCURRENCE GUST FACTOR: 2
  - c. EARTHQUAKE: SEISMIC DATA AS LISTED
- 1.3 DESIGN METAL SIDING SYSTEM TO LIMIT DEFLECTION UNDER DESIGN LOADS, TO L/240.
- 1.4 DESIGN METAL SIDING SYSTEM TO PREVENT RESTRICTION OF THERMAL INDUCED MOVEMENT WHICH WOULD INDUCE DEFORMATION SUCH AS WARPING, BUCKLING, AND FAILURE OF JOINT SEALS AND FASTENERS. DESIGN METAL SIDING TO PREVENT VIBRATION WHEN SUBJECT TO THE EFFECTS OF WIND.
- 1.5 DESIGN MISCELLANEOUS, ADDITIONAL STRUCTURAL FRAMING MEMBERS AND SAG RODS, REQUIRED TO COMPLETE METAL SIDING SYSTEM, WHERE NOT INDICATED ON CONTRACT DRAWINGS.
- 2.0 SUBMITTALS
- 2.1 SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING ELEVATIONS, DETAILS, PROFILES, DIMENSIONS, THICKNESS OF MATERIALS, FINISHES, METHODS OF JOINING, ARRANGEMENT OF SHEETS, JOINTS, AND SEAMS, SPECIAL SHAPES, METHODS OF ANCHORING, ANCHOR AND CLIP DETAILS, TYPES OF SEALANTS AND GASKETS, WATERPROOF CONNECTIONS TO ADJOINING WORK, DETAILS OF OTHER PERTINENT COMPONENTS OF THE WORK (I.E. WINDOWS, PENETRATIONS, MEMBRANES, ETC) AND COMPLIANCE WITH DESIGN CRITERIA AND REQUIREMENTS AS NOTED ON CONTRACT DRAWINGS.
- 3.0 EXECUTION
- 3.1 INSTALL METAL SIDING IN ACCORDANCE WITH REVIEWED SHOP DRAWINGS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3.2 INSTALL METAL SIDING IN ONE PIECE, FULL HEIGHT, EXCEPT AS INDICATED OTHERWISE.
- 3.3 MAINTAIN JOINTS IN EXTERIOR SIDING, PLUMB, TRUE TO LINE, TIGHT FITTING, HAIRLINE JOINTS.
- 3.4 ATTACH METAL SIDING SYSTEM COMPONENTS TO PREVENT WARPING, BUCKLING, AND DEFORMATION INDUCED BY RESTRICTION OF THERMAL INDUCED MOVEMENT.
- 3.5 INSTALL CORNER PIECES, CLOSURES, FLASHING, ETC, WHERE SHOWN AND WHERE REQUIRED.
- 3.6 BED FLASHING, CLOSURES, AND CORNER PIECES IN SEALANT TO PROVIDE A WEATHERTIGHT INSTALLATION

## SPRAYED FOAM INSULATION NOTES

- 1.0 MATERIALS
- 1.1 ALL MATERIALS UNDER WORK OF THIS SECTION, INCLUDING BUT NOT LIMITED TO, PRIMERS SEALANTS ARE TO HAVE LOW 'VOC' CONTENT LIMITS
- 1.2 SPRAYED FOAM INSULATION: SPRAYED/FROTHED POLYURETHANE FOAM CONFORMING TO CAN/ULC S705.1 AND CONTAINING NO FLUOROCARBONS AND CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:
  - a. AGED RSI FACTOR: 0.97 PER 25mm TO CAN/ULC S770.
  - b. CLOSED CELLS (ASTM D2856): 92%
  - c. COMPRESSIVE STRENGTH (ASTM D1621): 186 kPa (27.0 PSI).
  - d. WATER ABSORPTION (ASTM E96): 50mm SAMPLE 42 NG/Pa\*s\*M<sup>2</sup> (0.70 PERMS).
  - e. FLAME SPREAD: <500.
  - f. SMOKE DEVELOPED: <500.
  - g. BLOWING AGENT: PRODUCT TO UTILIZE ZERO ODS (OZONE DEPLETING SUBSTANCE) BLOWING.
  - h. RECYCLED CONTENT: >5% RECYCLED CONTENT BY MASS OF FINISHED PRODUCT.
  - i. SPRAYED URETHANE FOAM: "WALLTITE ECO V.2" BY BASF OR "HEATLOK SOYA" BY DEMILEC INC.
- 1.3 PRIMERS: AS RECOMMENDED BY SPRAYED FOAM INSULATION MANUFACTURER
- 2.0 PREPARATION
- 2.1 VERIFY SUBSTRATE SURFACES ARE SOLID, FREE FROM SURFACE WATER, FROZEN MATTER, DUST, OIL, GREASE, SCALING OR LAITANCE, PROJECTIONS AND ANY OTHER FOREIGN MATTER DETRIMENTAL TO PERFORMANCE.
  - TO SUIT MANUFACTURER'S APPROVED SUBSTRATE
- 2.2 SUPPLY AND INSTALL TEMPORARY PROTECTION TO ADJACENT SURFACES TO PREVENT DAMAGE RESULTING FROM WORK OF THIS SECTION.
- 2.3 IF REQUIRED, APPLY PRIMER TO SUBSTRATE SURFACES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTION.
- 3.0 EXECUTION
- 3.1 INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS
- 3.2 APPLY SPRAYED FOAM INSULATION TO THICKNESS INDICATED ON DRAWINGS. APPLY INSULATION TO WITHIN 6mm OF THICKNESS INDICATED ON DRAWINGS. PROVIDE ONE MEASURING PIN FOR EVERY 50M<sup>2</sup>.
- 3.3 INSULATION THICKNESS GREATER THAN 50mm SHALL BE COMPLETED IN A MINIMUM OF 2 STEPS
- 3.4 INSULATION TO BE CONTINUOUS, LEVEL, PLUMB, AND UNIFORM THICKNESS THROUGHOUT. INSULATION SHALL BE FREE OF VOIDS AND IMBEDDED FOREIGN MATERIALS.

## LOAD-BEARING METAL STUDS NOTES

- 1.0 DESIGN REQUIREMENTS
- 1.1 DESIGN LOAD-BEARING METAL STUDS TO WITHSTAND LIVE, DEAD, WIND, SEISMIC, HANDLING, TRANSPORTATION, AND ERECTION LOADS.
- 1.2 DESIGN LOAD-BEARING METAL STUDS BASED ON LIMIT STATES DESIGN PRINCIPLES USING FACTORED LOADS AND RESISTANCES. LOADS AND LOAD FACTORS TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE (NBC). RESISTANCE FACTORS TO BE DETERMINED IN ACCORDANCE WITH THE NBC AND CAN/CSA-S136-M.
- 1.3 DESIGN BRIDGING TO PREVENT MEMBER ROTATION AND MEMBER TRANSLATION PERPENDICULAR TO THE MINOR AXIS. PROVIDE FOR SECONDARY STRESS EFFECTS DUE TO TORSION BETWEEN LINES OF BRIDGING.
- 1.4 DESIGN LOAD-BEARING METAL STUDS IN ACCORDANCE WITH FOLLOWING CLIMATE DESIGN DATA FOR COCHRANE CONTAINED IN THE ONTARIO BUILDING CODE:
  1. DESIGN TEMPERATURE: JANUARY 1%, JULY 2 1/2%
  2. WIND (HOURLY WIND PRESSURES): 0.35kPa 1 IN 50 YEAR OCCURRENCE.
- 1.5 DESIGN LOAD-BEARING METAL STUDS FOR THE FULL SPECIFIED DESIGN WIND LOAD WITH A DEFLECTION LIMIT OF L/360.
- 1.6 DESIGN LOAD-BEARING METAL STUDS WITHOUT RELYING ON SHEATHING OR GYPSUM BOARD TO RESIST TORSION AND WEAK AXIS BUCKLING.
- 2.0 SUBMITTALS
- 2.1 SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING: WALL CONSTRUCTION, LOAD BEARING METAL STUD WALL SYSTEM, DESIGN LOADS, MEMBER SIZES, MATERIALS, COMPONENT DETAILS, DEPTH AND GAUGE DESIGNATION EXCLUSIVE OF COATING, LOCATION, AND SPACINGS OF FRAMING MEMBERS, CONNECTION AND BRACING DETAILS, BEARING, ANCHORAGE, LOADINGS, TEMPORARY BRACING, TYPES AND LOCATIONS OF MECHANICAL FASTENERS, AND SHEATHING
- 3.0 EXECUTION
- 3.1 INSTALL LOAD-BEARING STUDS IN ACCORDANCE WITH REVIEWED SHOP DRAWINGS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3.2 ERECT STUDS PLUMB, ALIGNED AND SECURELY ATTACHED WITH 2 SCREWS MINIMUM AT EACH POINT OF ATTACHMENT. ANCHOR TRACKS SECURELY @ 400 O.C
  1. ALL SCREWS TO BE PANHEAD No 10 U.N.O
  2. ALL BRIDGING SCREWS TO BE No. 10 HEXHEAD SELF TAPPING FRAMING SCREWS
  3. USE HILTI 1/4" DIAMETER ZAMAC PIN BOLT TO FASTEN STUDS & TRACKS TO CONCRETE. MINIMUM EMBEDMENT 32MM
  4. USE HILTI 3/16" DIAMETER RAMSET PINS FASTEN STUDS & TRACKS TO STEEL

FILE No. 15701-063.0-Rx

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
328 SECOND STREET, COCHRANE, ONTARIO

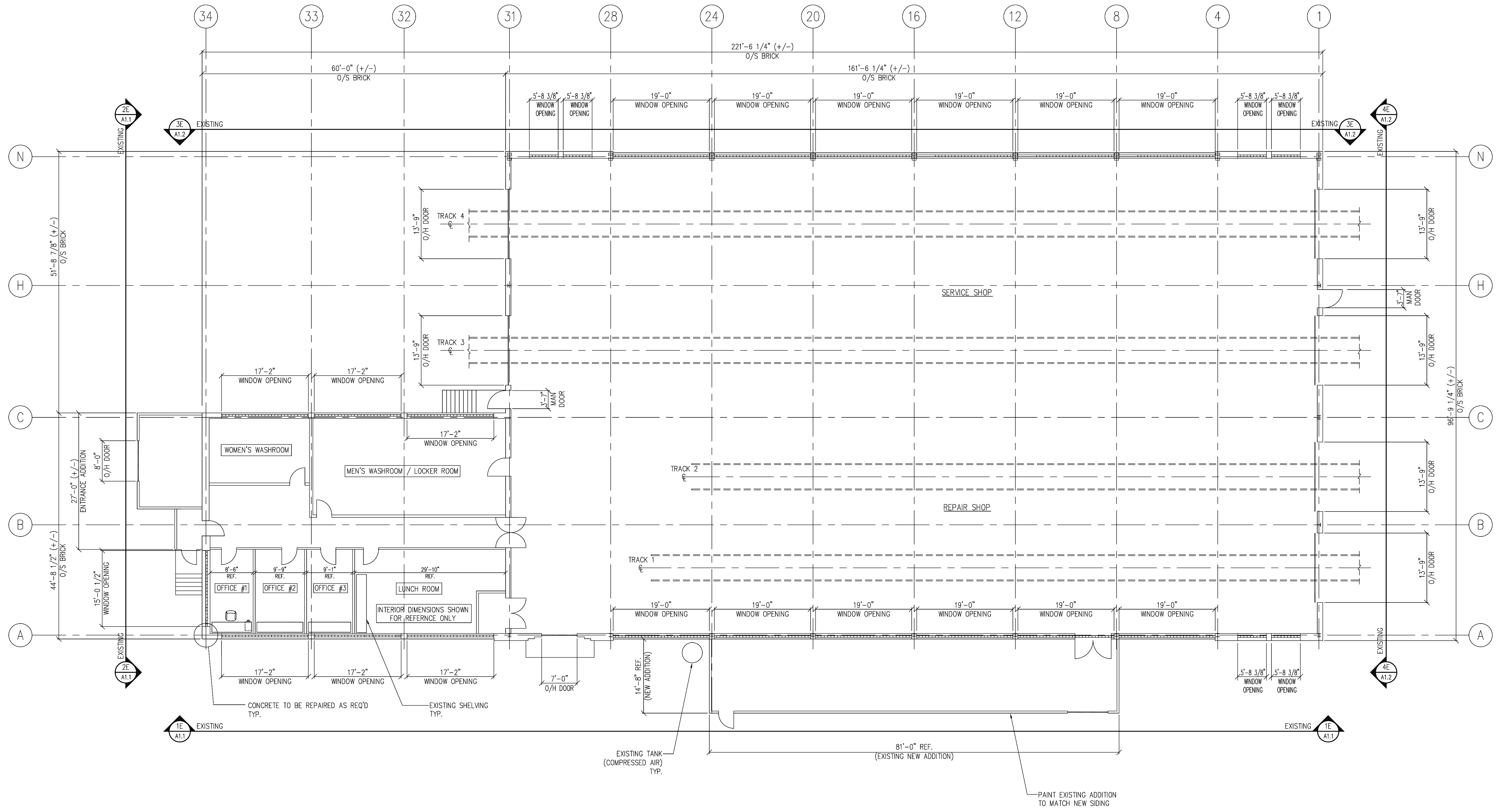
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184 McNaughton Ave.  
NORTH BAY ONT.  
705-495-0861

revision	0
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APRIL 29 16	
FOR TENDER	

title: GENERAL NOTES

drawn by: BM  
scale: NTS  
date plotted: APRIL 29 2016  
date revised: APRIL 4 2016  
dwg no:

G3.0

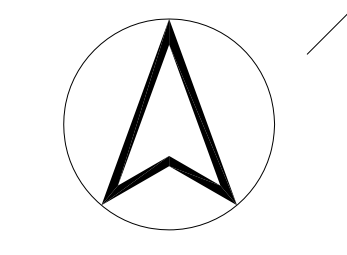


**EXISTING UPPER FLOOR PLAN  
BUILDING ENVELOPE REPAIRS**

NTS  
NOTES:  
1) ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY  
2) CONTRACTOR TO CONFIRM ALL DIMENSIONS AND SITE CONDITIONS  
3) INTERIOR WALLS AND DETAILS SHOWN FOR REFERENCE ONLY

**GENERAL NOTES:**  
1) CONTRACTOR TO PROVIDE SHOP DETAILS & MOCK UPS FOR ALL METAL STUDS, LINER PANEL, ROOF RAILINGS, METAL SIDING, WINDOWS, DOORS DETAILS  
4) ALL EXISTING DOORS TO BE PAINTED (COORDINATE WITH ONTC)  
5) REFER TO MECHANICAL DRAWINGS FOR LIGHTNING ROD LOCATIONS  
6) POLYURETHANE SPRAY FOAM INSULATION TO MEET CANADIAN STANDARDS (COORDINATE WITH ONTC)  
7) EXPOSED CONCRETE FOUNDATION WALLS TO BE PATCHED & REPAIRED (COORDINATE WITH ONTC)  
NOTE: SEE G2, G3 FOR STANDARD NOTES

**SCOPE OF WORK**  
GENERAL CONTRACTOR TO PROVIDE FOR ALL MATERIALS, LABOUR, SUPERVISION, EQUIPMENT/TOOLS, & PERMITS TO MAKE ALL WORK COMPLETE  
THE FOLLOW IS A GENERAL SCOPE OF WORK AND ACTIVITIES REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR TO REVIEW ON SITE DURING THE PRETENDER MEETING ALL ITEMS AFFECTING THE WORK AND MAKE APPROPRIATE ALLOWANCES FOR THE COMPLEXITY OF THE PROJECT. (INCLUDING BUT NOT LIMITED TO THE FOLLOWING ITEMS)  
-SET UP AND CONTROL OF CONSTRUCTION ISLAND(S) AS REQUIRED  
-COORDINATION OF STAGING OF WORK WITH ONTC  
-COORDINATE DAILY ACTIVITIES WITH ONTC  
-DEMOLITION AND DISPOSAL OF ITEMS OFFSITE AS SHOWN ON THE DRAWING.  
-METAL STUD WALL FRAMING, GAUGE METAL FRAMING, AND ALL ASSOCIATED SHEETING.  
-SPRAY FOAM INSULATION  
-METAL SIDING AND LINER PANEL, INCLUDING FASTENERS, DRIPS, JAY. CLOSURES. FLASHING AND ALL ASSOCIATES ITEMS  
-NEW WINDOWS AS SHOWN  
-PATCH AND REPAIR ROOFING AT PARAPET AS REQUIRED (SEE DETAILS)  
-PATCH AND REPAIR ALL ITEMS AFFECTED BY CONSTRUCTION TO ORIGINAL CONDITION AND TO SATISFACTION OF ONTC  
-PAINT ALL AREA INDICATED ON DRAWINGS.  
-WORK AS OUTLINE ON PIOTROWSKI CONSULTANTS DRAWINGS  
-CALK AND SEAL ALL ITEMS AS REQUIRED & INSTRUCTED BY ENGINEER



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APRIL 29 16	
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project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE REPAIR  
328 SECOND STREET, COCHRANE, ONTARIO  
title: EXISTING UPPER FLOOR PLAN

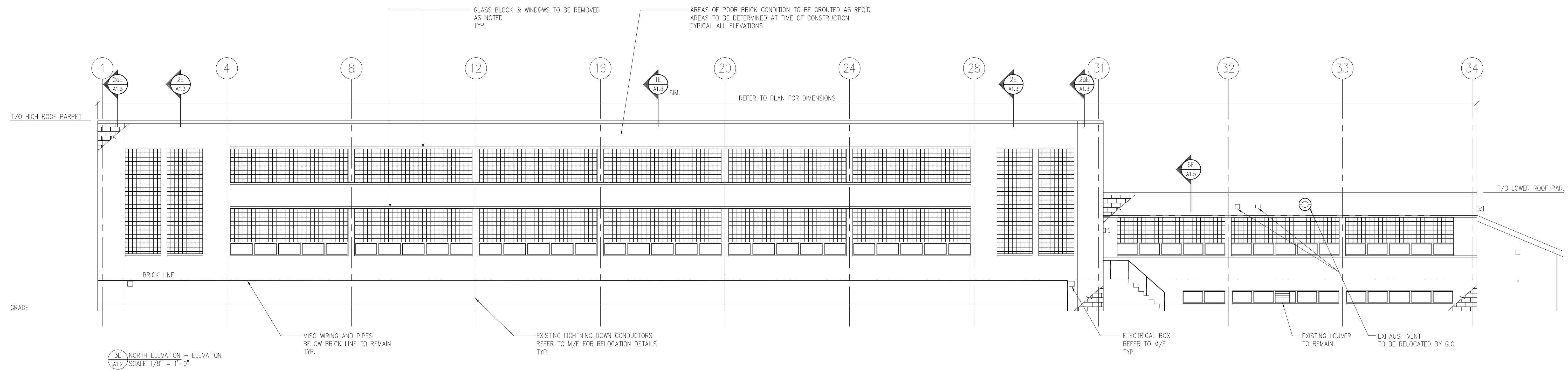
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date revised: FEB 11 16

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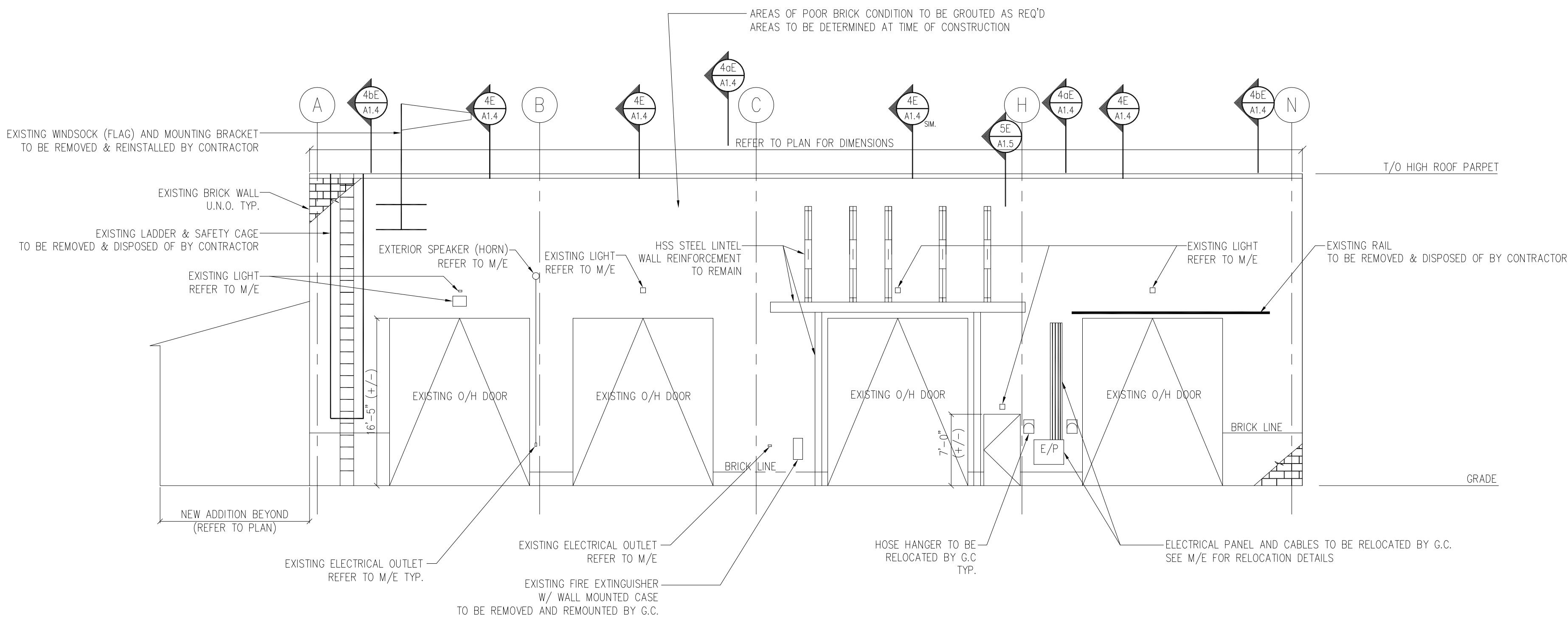






3E NORTH ELEVATION - ELEVATION  
A1.2 / SCALE 1/8" = 1'-0"

- NOTES:  
1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



4E EAST ELEVATION - EXISTING  
A1.2 / SCALE 1/8" = 1'-0"

- NOTES:  
1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

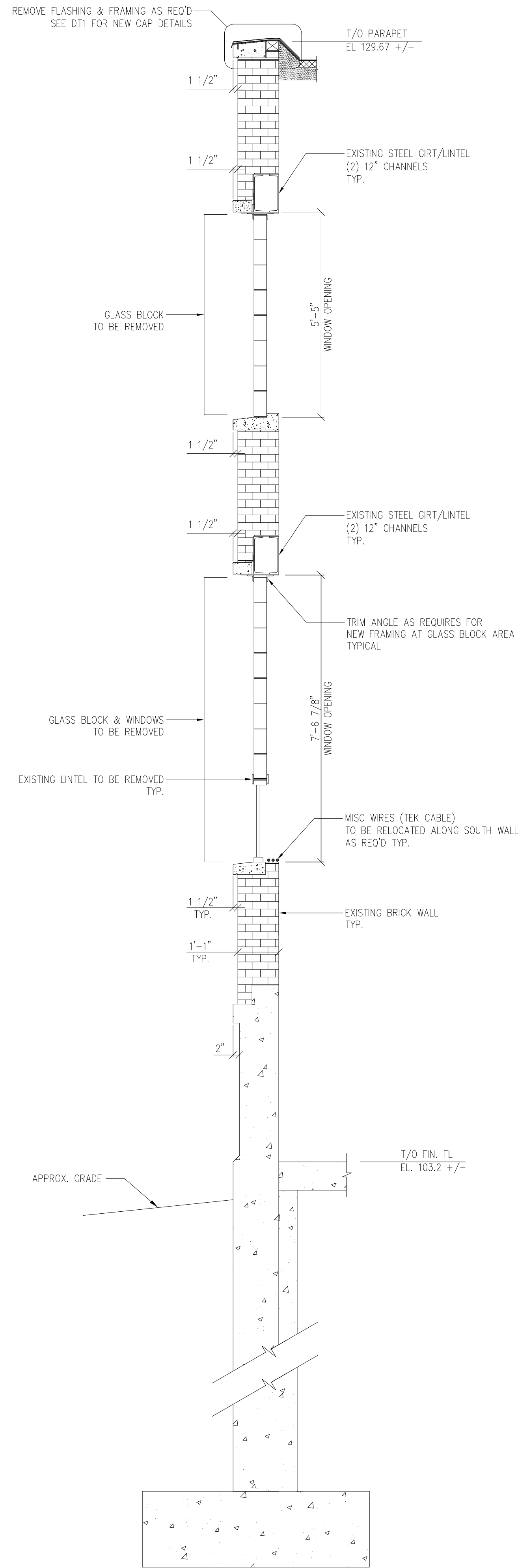
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APRIL 29 16	FOR TENDER

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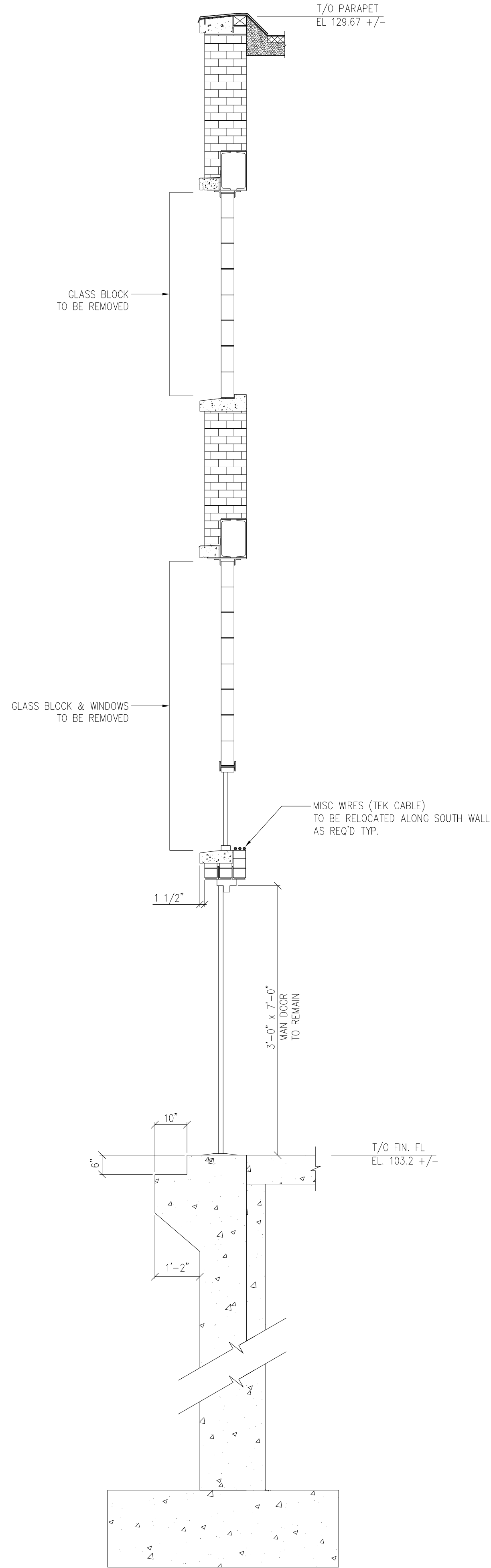
project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
326 SECOND STREET, COCHRANE, ONTARIO

title: EXISTING ELEVATIONS & REMOVE  
drawn by: BM  
checked by: TIM T  
scale: NTS  
project no: 15701  
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date revised: FEB 11 16  
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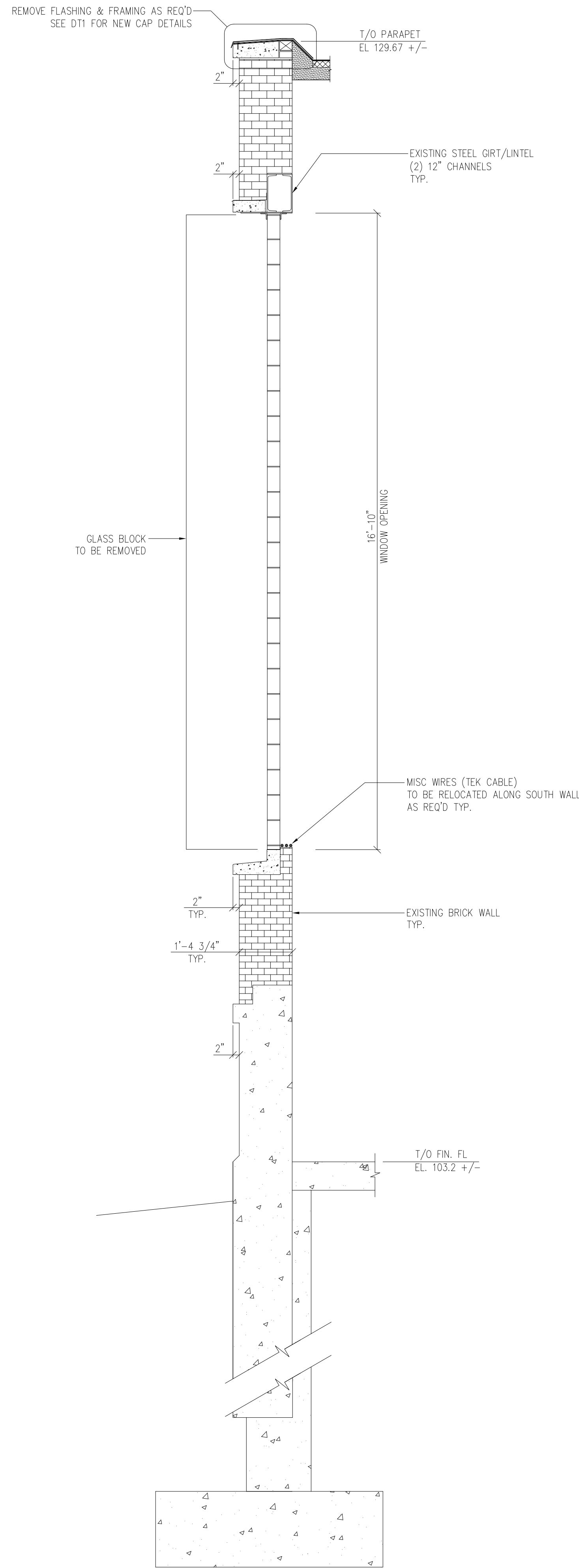
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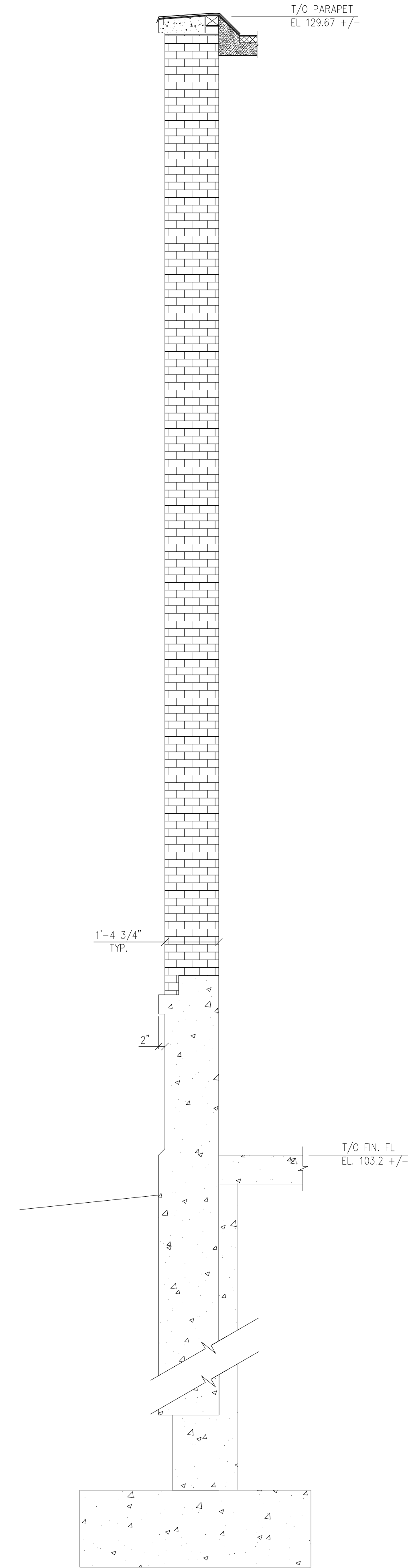
1E EXISTING  
A1.3 NOTE ALL DIMENSIONS ARE ASSUMED +/- TYPICAL



1GE EXISTING - @ SOUTH MAN DOOR ONLY  
A1.3 REFER TO SECTION 1E FOR ADDITIONAL DETAILS



2E EXISTING  
A1.3



2GE EXISTING  
A1.3 REFER TO SECTION 2E FOR ADDITIONAL DETAILS

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APRIL 29 16	FOR TENDER

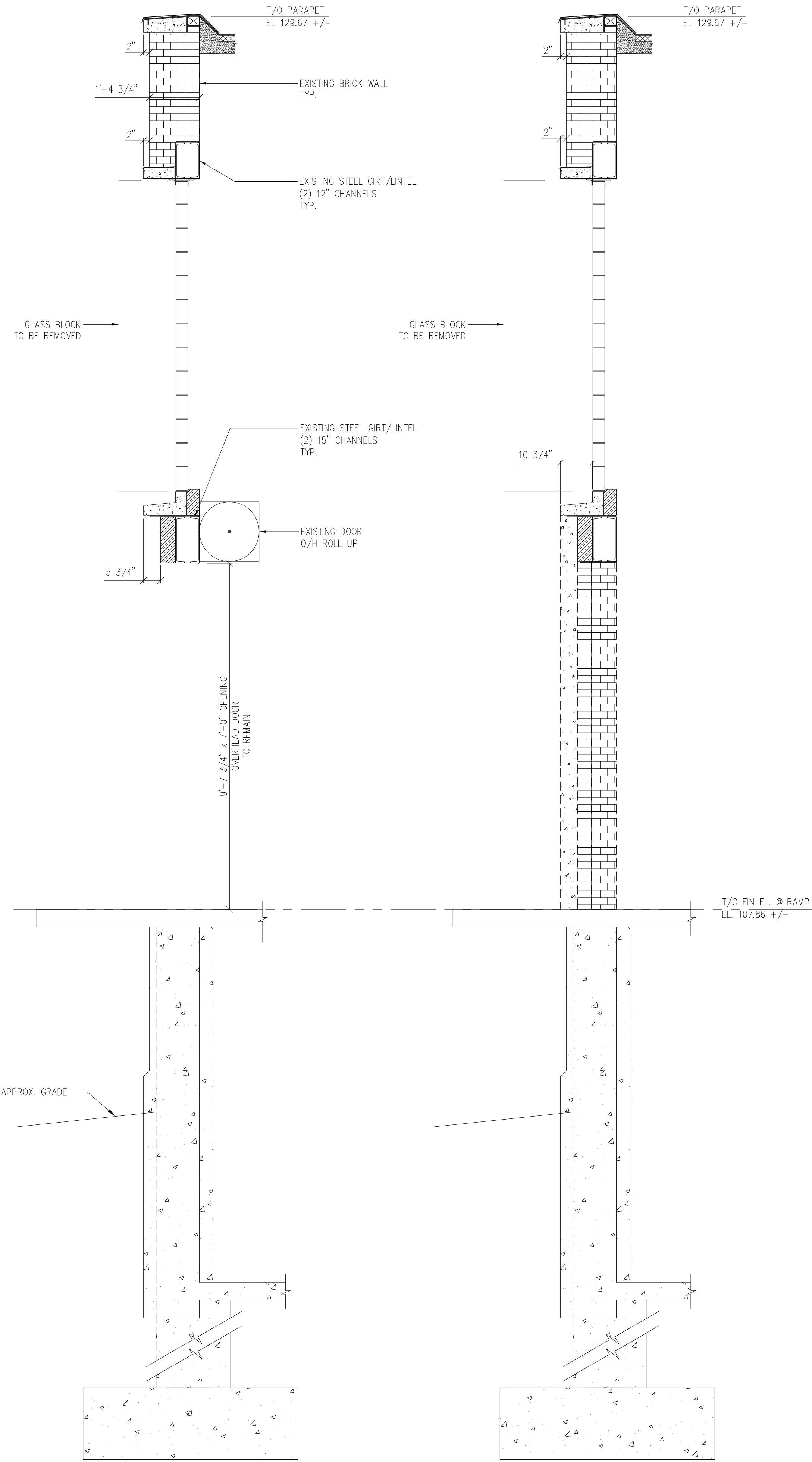
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project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

title: EXISTING SECTIONS & REMOVALS

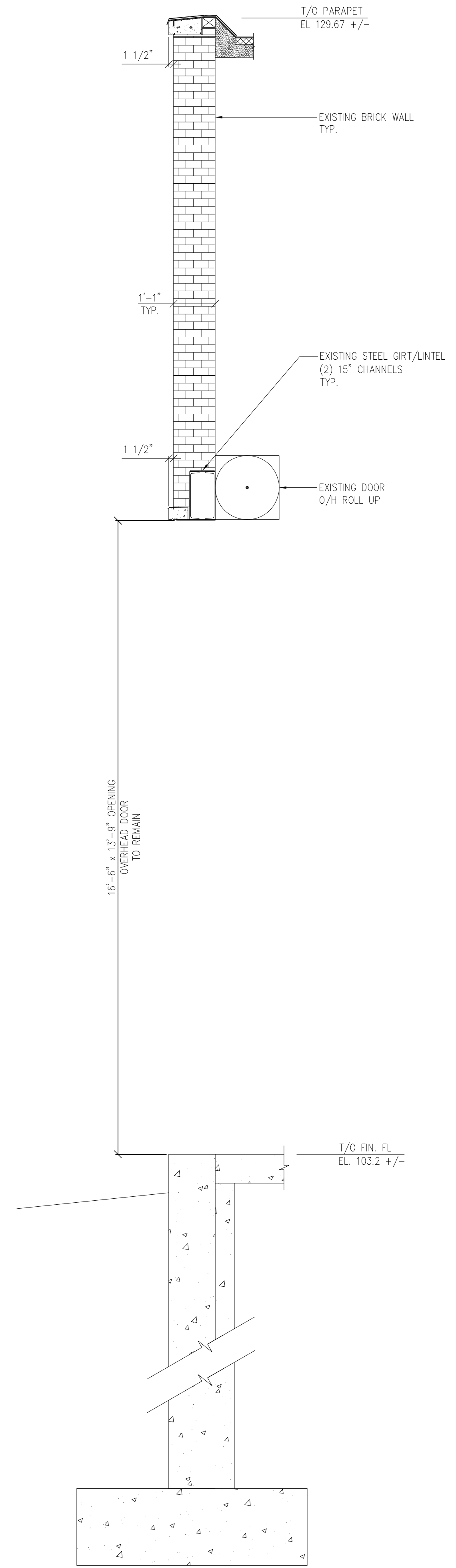
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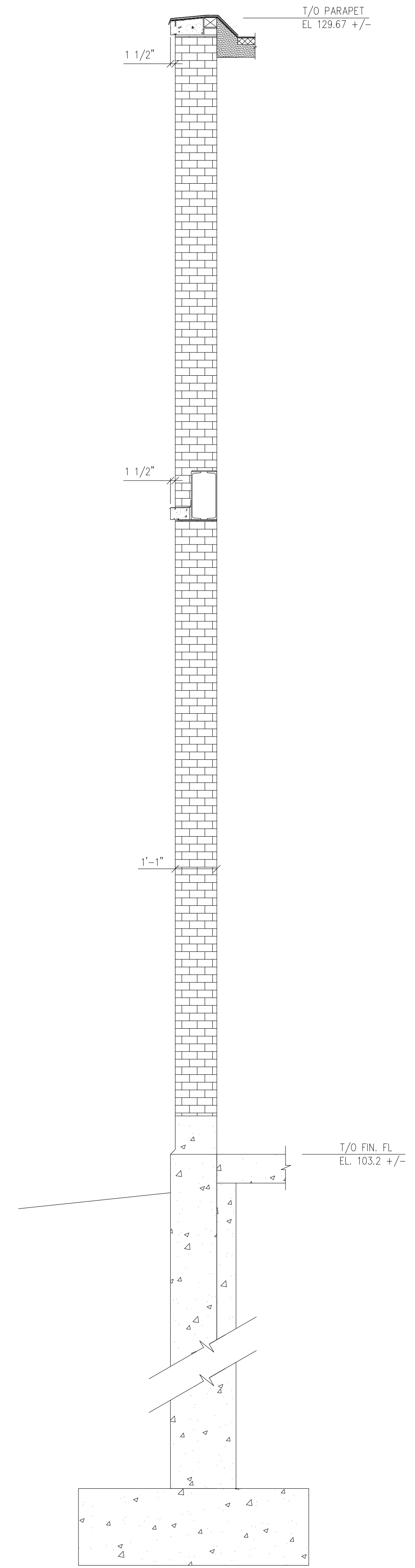


3E EXISTING - @ SOUTH O/H DOOR  
A1.4

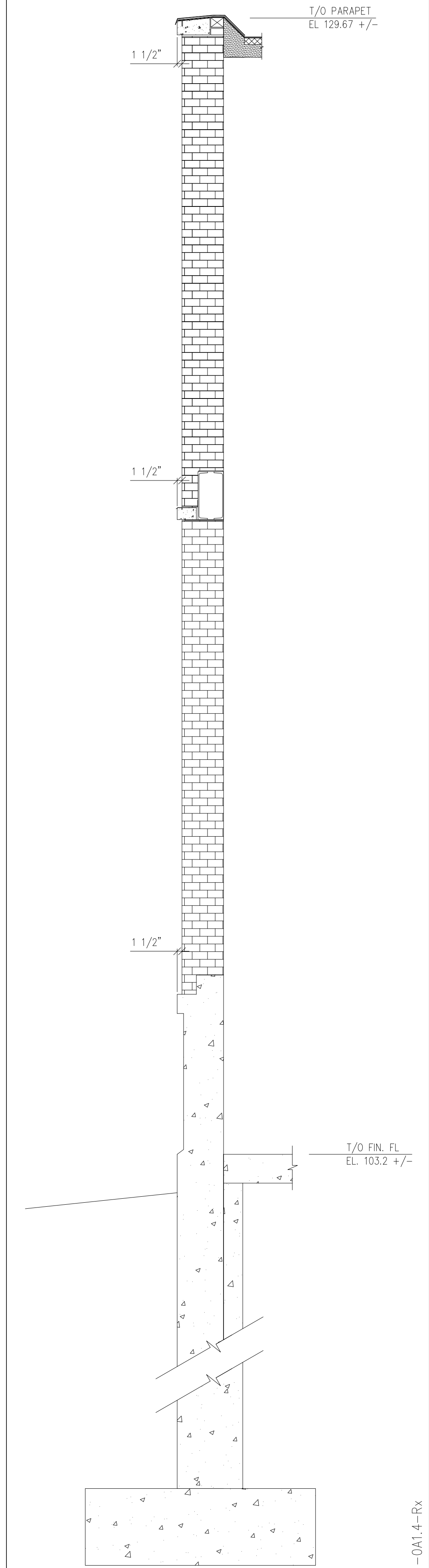
3aE EXISTING  
A1.4 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



4E EXISTING - @ WEST & EAST O/H DOORS  
A1.4



4aE EXISTING  
A1.4



4bE EXISTING  
A1.4

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APRIL 29 16	FOR TENDER

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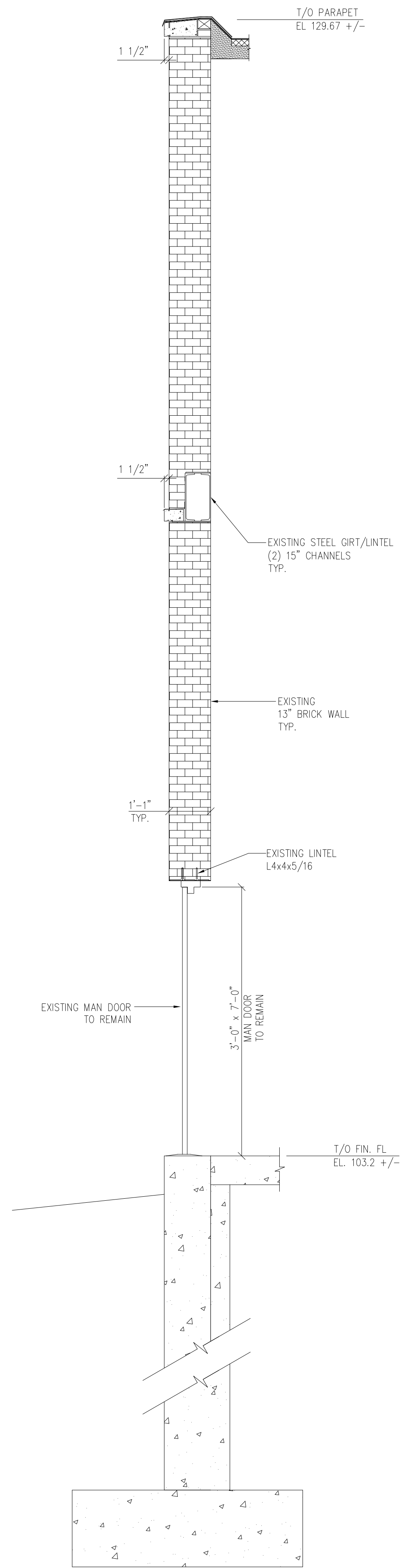
project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

title: EXISTING SECTIONS & REMOVALS

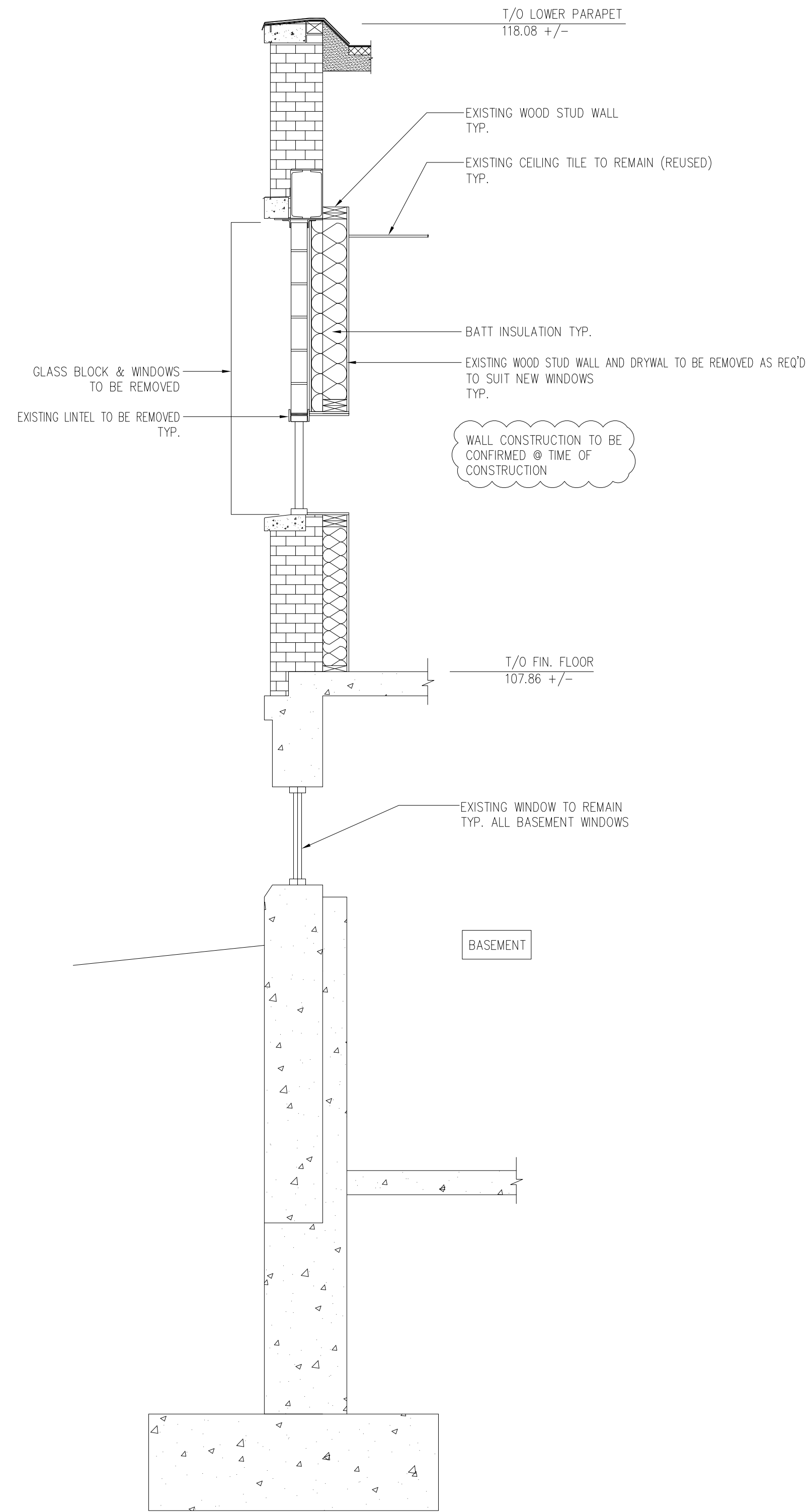
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date plotted: APRIL 29 16  
date revised: FEB 11 16

dwg no: A1.4

FILE No. 15701-0A1.4-Rx



5E EXISTING - @ EAST MAN DOORS  
A1.5



6E EXISTING - TYP. OFFICE AREA  
A1.5

FILE No. 15701-0A1.5-Rx

project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

title: EXISTING SECTIONS & REMOVALS

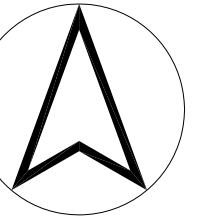
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date revised: FEB 11 16

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project no: 15701

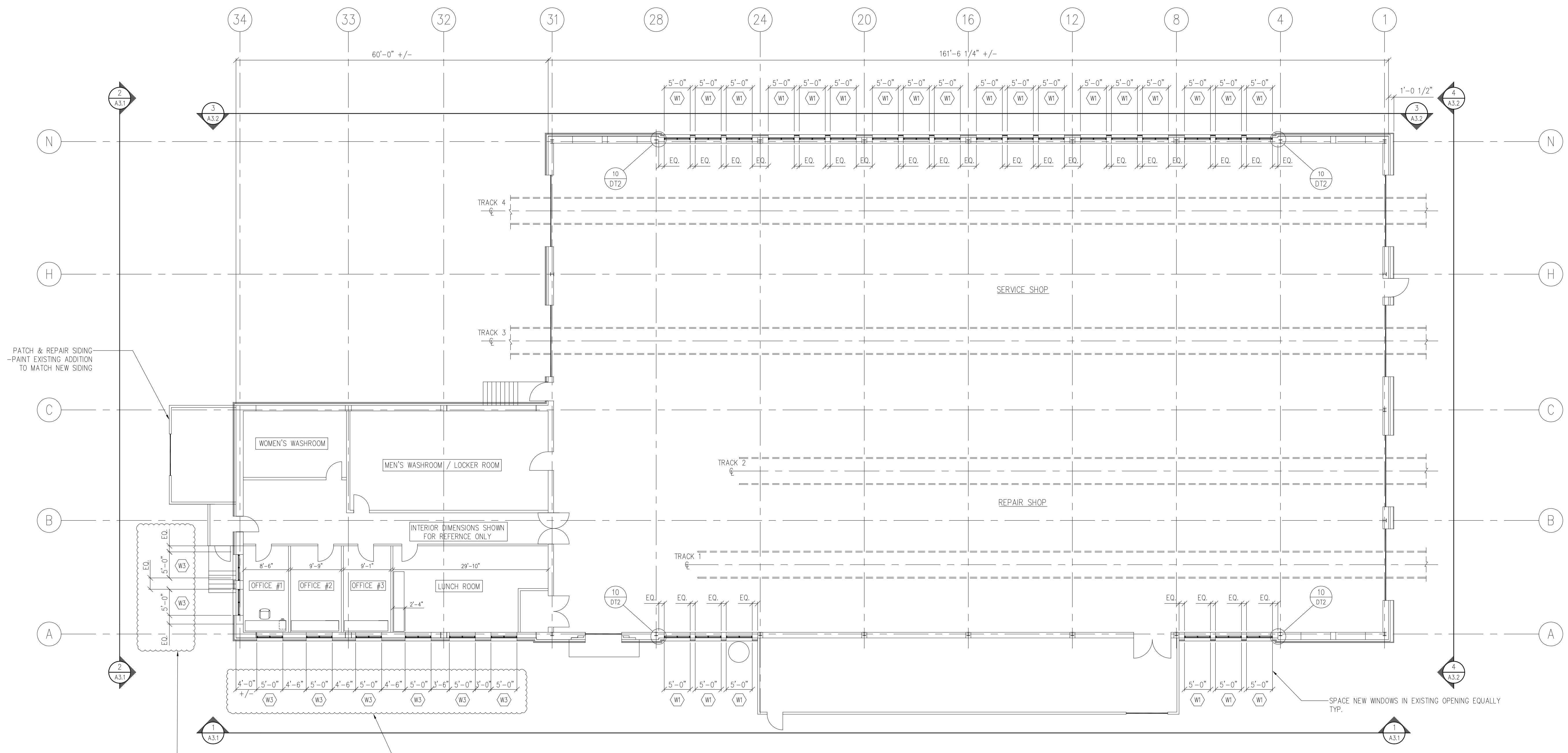
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APRIL 29 16	
FOR TENDER	



**NEW UPPER FLOOR PLAN**  
**BUILDING ENVELOPE REPAIRS**  
 NTS

- NOTES:  
 1) ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY  
 2) CONTRACTOR CONFIRM ALL DIMENSIONS AND SITE CONDITIONS  
 3) INTERIOR WALLS AND DETAILS SHOWN FOR REFERENCE ONLY  
 4) SEE WINDOW SCHEDULE ON A5.1 FOR WINDOW DETAILS

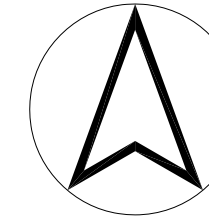
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 NORTH BAY ONT.  
 705-495-0861

project: ONTARIO NORTHLAND  
 REPAIR SHOP - BUILDING ENVELOPE REPAIR  
 COCHRANE, ONTARIO  
 title: NEW UPPER FLOOR PLAN

drawn by: BM	checked by: TIM T
scale: NTS	project no: 15701
date plotted: APRIL 29 16	
date revised: FEB 11 16	

dwg no: A2.0

FILE No. 15701-0A1.5-Rx



revision	2
1	WINDOWS ADDED AT WASHROOMS/LOCKER ROOM
0	FOR TENDER
APRIL 26 16	
SEPT 23 16	

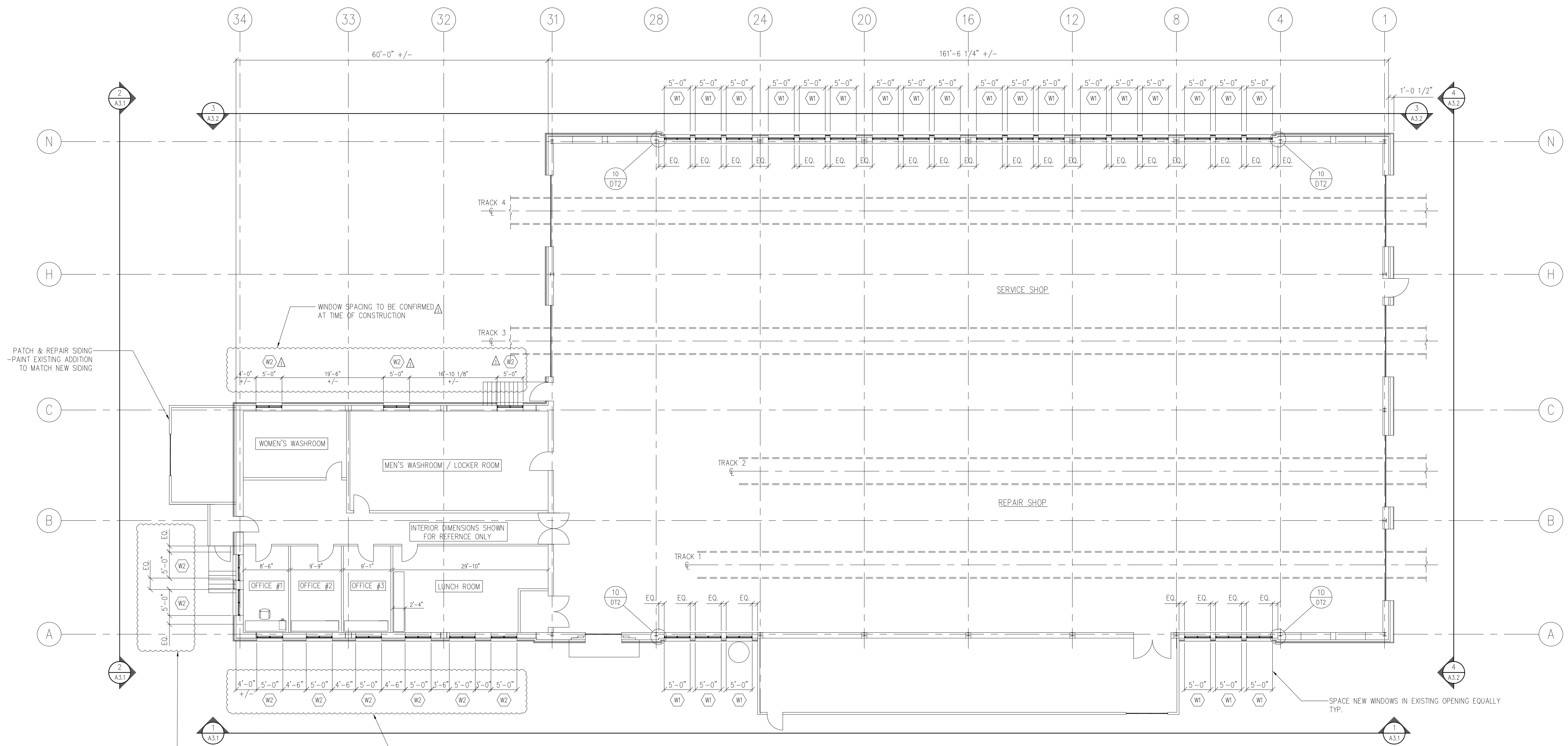


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project: ONTARIO NORTHLAND REPAIR SHOP - BUILDING ENVELOPE REPAIR COCHRANE, ONTARIO  
 title: FLOOR PLAN

drawn by: BM  
 scale: NTS  
 date plotted: SEPT 23 2016  
 date revised: SEPT 23 16  
 dwg no: A2.0 R1

checked by: TIM T  
 project no: 15701

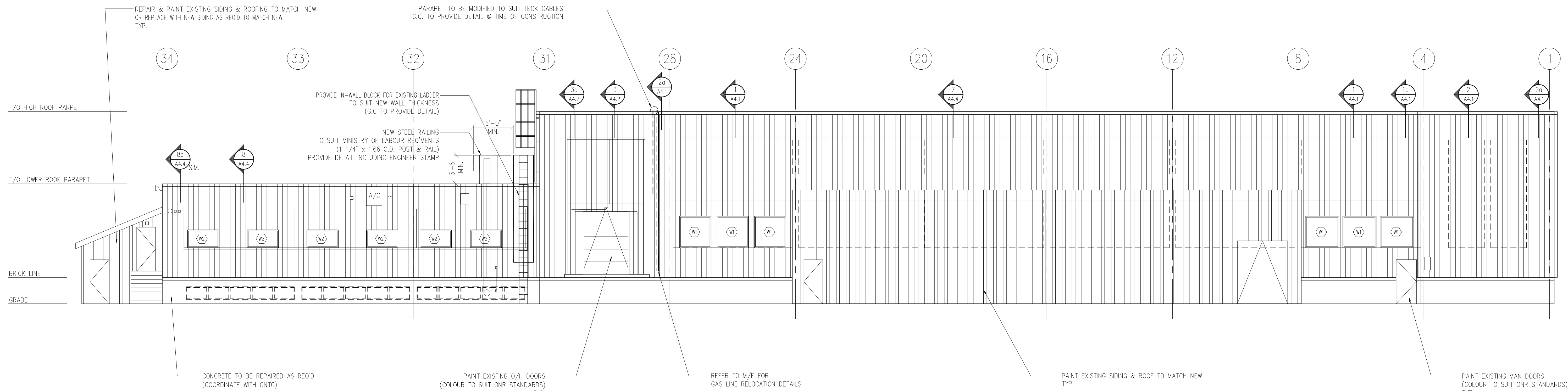


**NEW UPPER FLOOR PLAN  
 BUILDING ENVELOPE REPAIRS  
 NTS**

- NOTES:  
 1) ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY  
 2) CONTRACTOR CONFIRM ALL DIMENSIONS AND SITE CONDITIONS  
 3) INTERIOR WALLS AND DETAILS SHOWN FOR REFERENCE ONLY  
 4) SEE WINDOW SCHEDULE ON A5.1 FOR WINDOW DETAILS

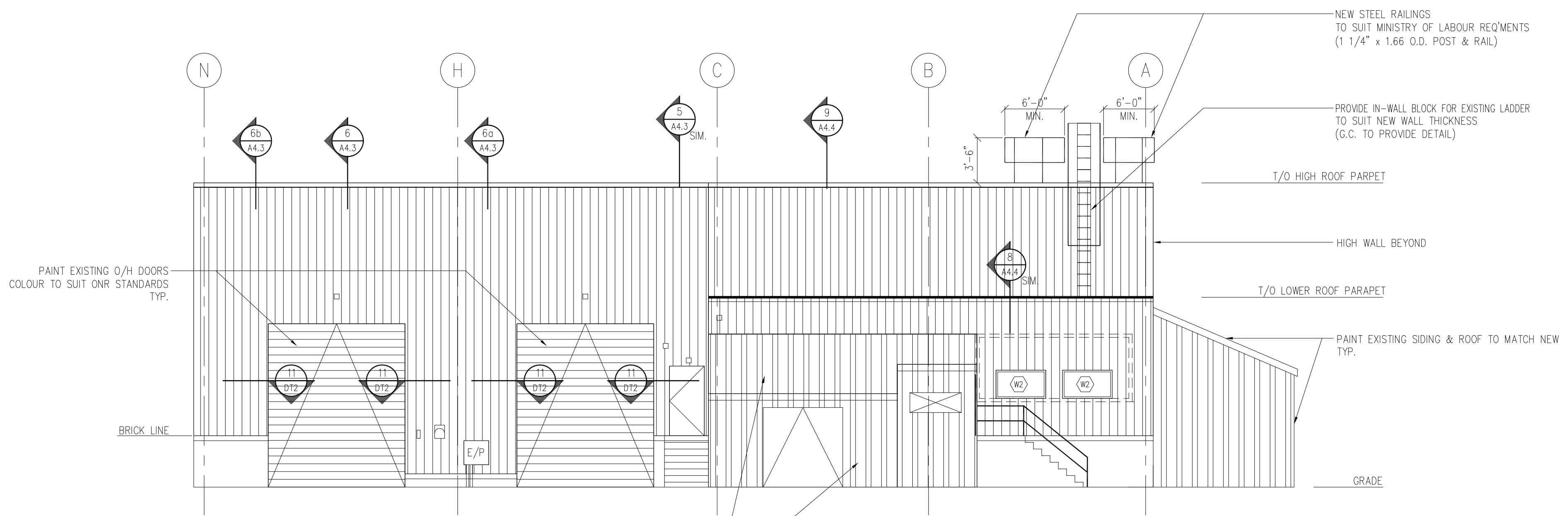
PATCH & REPAIR SIDING  
 -PAINT EXISTING ADDITION  
 TO MATCH NEW SIDING

FILE No. 15701-0A2.0-Rx



1 SOUTH ELEVATION - NEW  
A3.1 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 3) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



2 WEST ELEVATION - NEW  
A3.1 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 2) SOUTH ROOF ACCESS LADDER NOT SHOWN FOR CLARITY  
 3) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

revision	0
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APRIL 29 16	
FOR TENDER	

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project: ONTARIO NORTHLAND  
 REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO

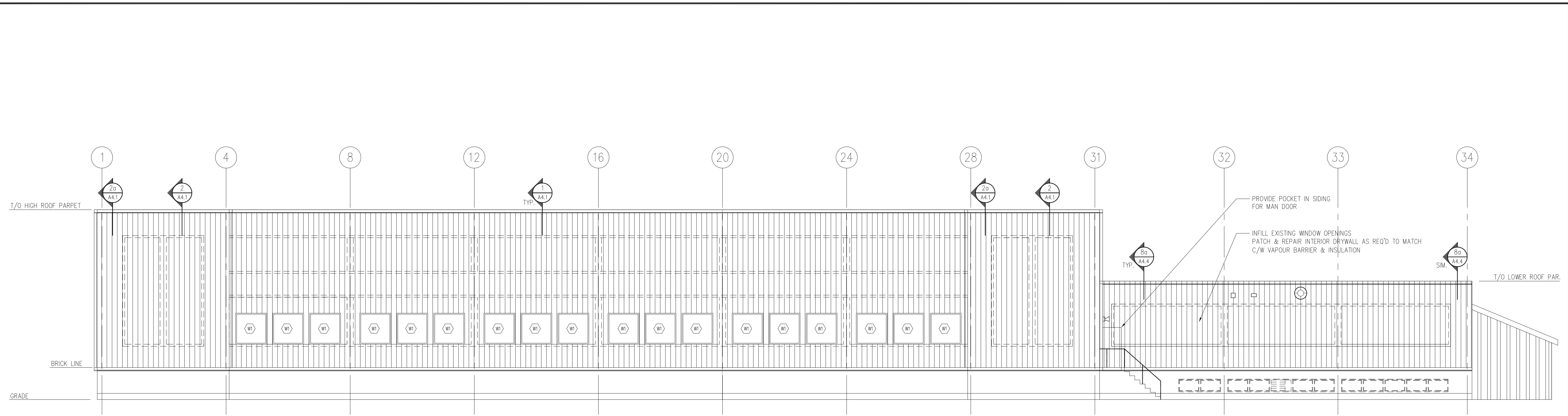
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drawn by:	checked by:
BM	TIM T
scale:	project no:
NTS	15701
date plotted:	
APRIL 29 16	
date revised:	
FEB 11 16	
dwg no:	

A3.1

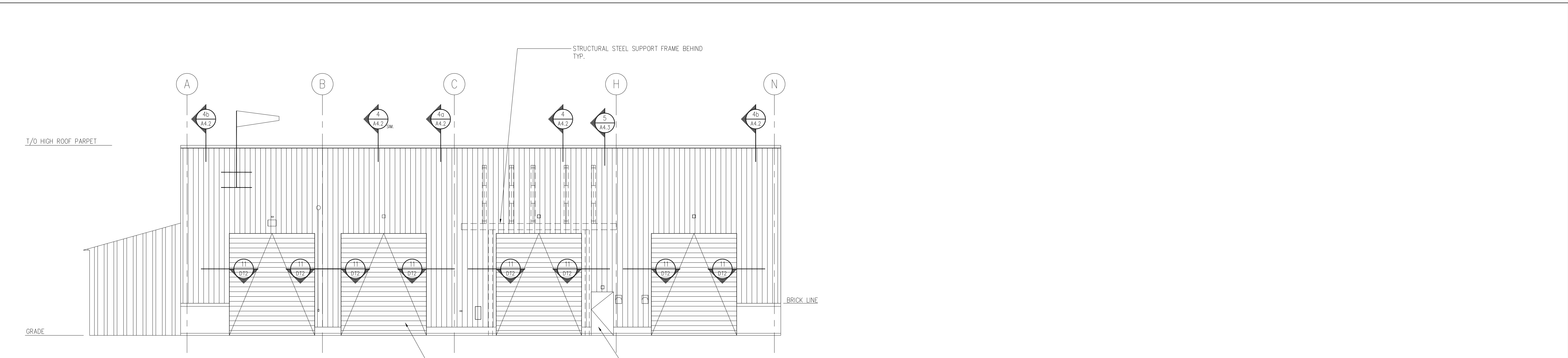
FILE No. 15701-0A1.5-Rx





3 NORTH ELEVATION - NEW  
A3.2 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 2) WEST ROOF ACCESS LADDER NOT SHOWN FOR CLARITY  
 3) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



4 EAST ELEVATION - NEW  
A3.2 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

revision	2
	1
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APRIL 29 16	FOR TENDER

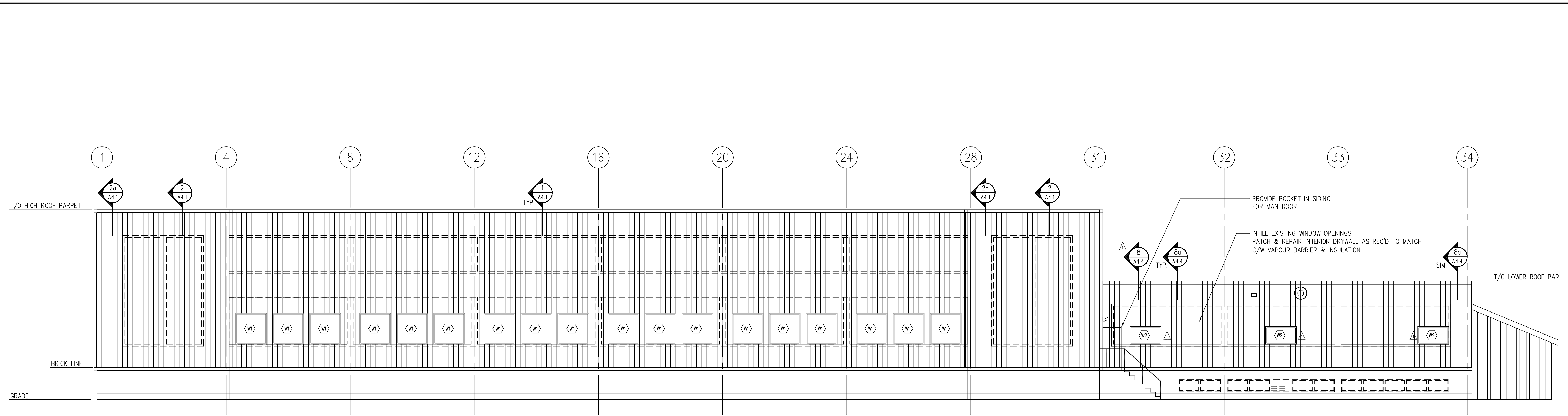
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0861

project: ONTARIO NORTHLAND  
 REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO

title: NEW ELEVATIONS

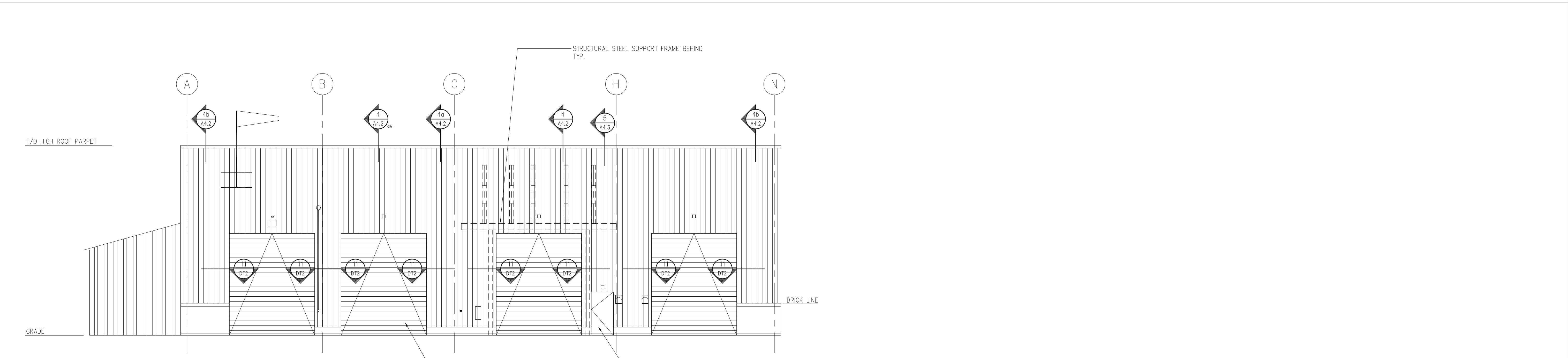
drawn by:	checked by:
BM	TIM T
scale:	project no:
NTS	15701
date plotted:	
APRIL 29 16	
date revised:	
FEB 11 16	

FILE No. 15701-0A1.5-Rx  
 dwg no: A3.2



3 NORTH ELEVATION - NEW  
A3.2 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 2) WEST ROOF ACCESS LADDER NOT SHOWN FOR CLARITY  
 3) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS



4 EAST ELEVATION - NEW  
A3.2 SCALE 1/8" = 1'-0"

- NOTES:  
 1) SEE PLAN & SECTIONS FOR WINDOW & DOOR DETAILS  
 2) SEE MECHANICAL/ELECTRICAL DRAWINGS FOR M/E REMOVALS & RELOCATIONS

revision	2
1	0
0	0
APRIL 26 16	FOR TENDER
SEPT 23 16	WINDOWS ADDED AT WASHROOMS/LOCKER ROOM



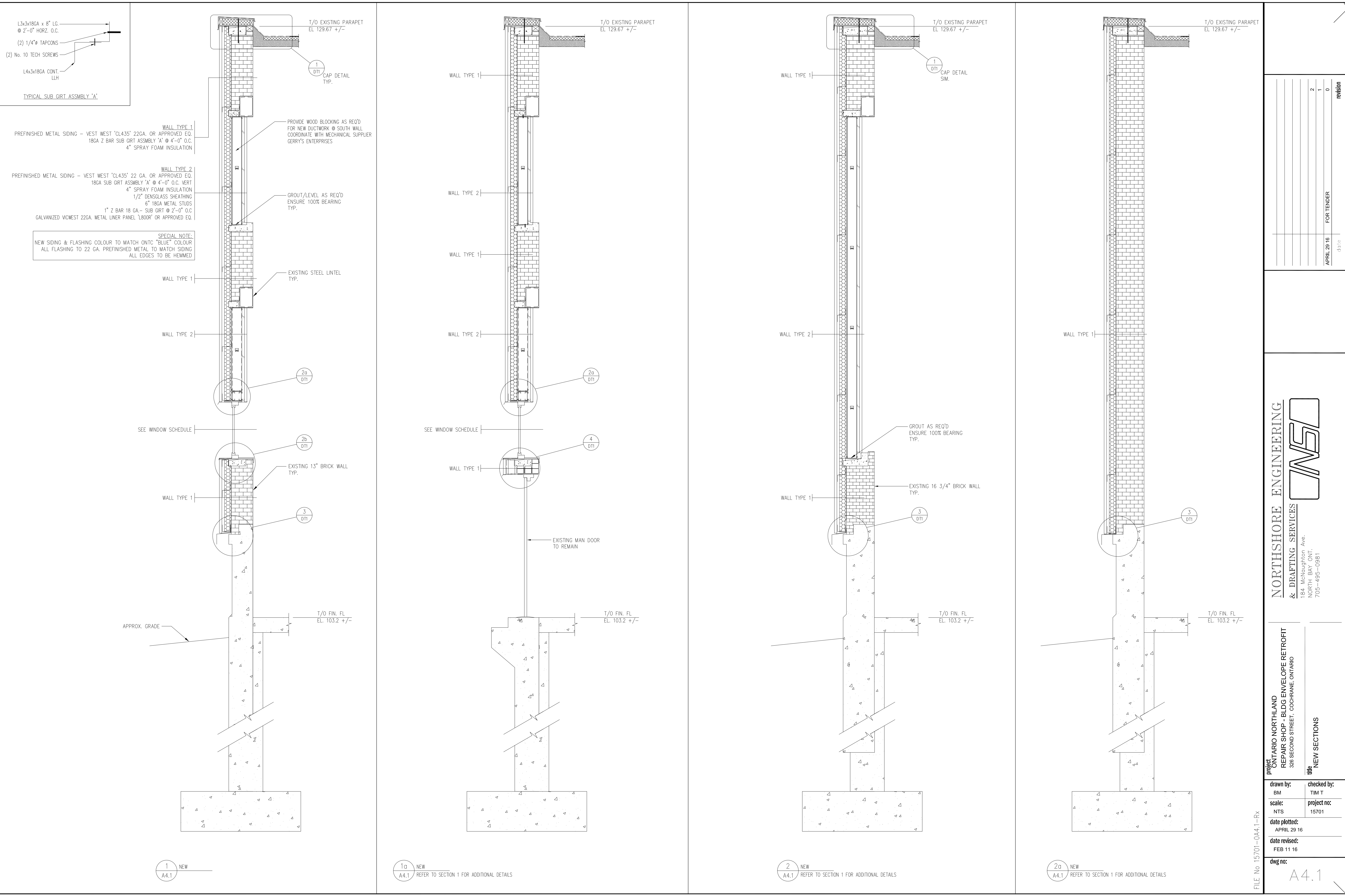
**NORTHSHORE ENGINEERING & DRAFTING SERVICES**  
 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0861

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO  
 title: NEW ELEVATIONS

drawn by:	checked by:
BM	TIM T
scale:	project no:
NTS	15701
date plotted:	
SEPT 23 2016	
date revised:	
SEPT 23 16	
dwg no:	

FILE No. 15701-0A3.2-Rx

A3.2 R1



2	1	0	revision
APRIL 29 16			FOR TENDER

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**project:** ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO

**title:** NEW SECTIONS

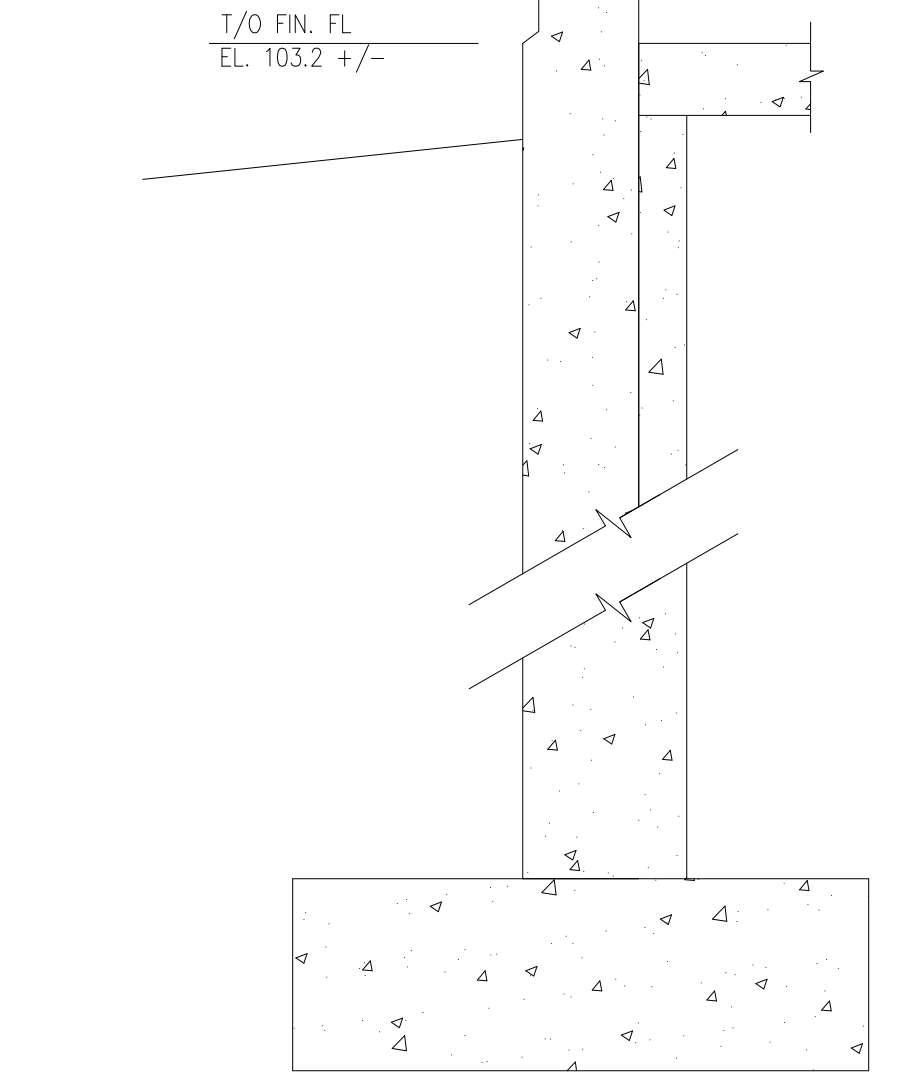
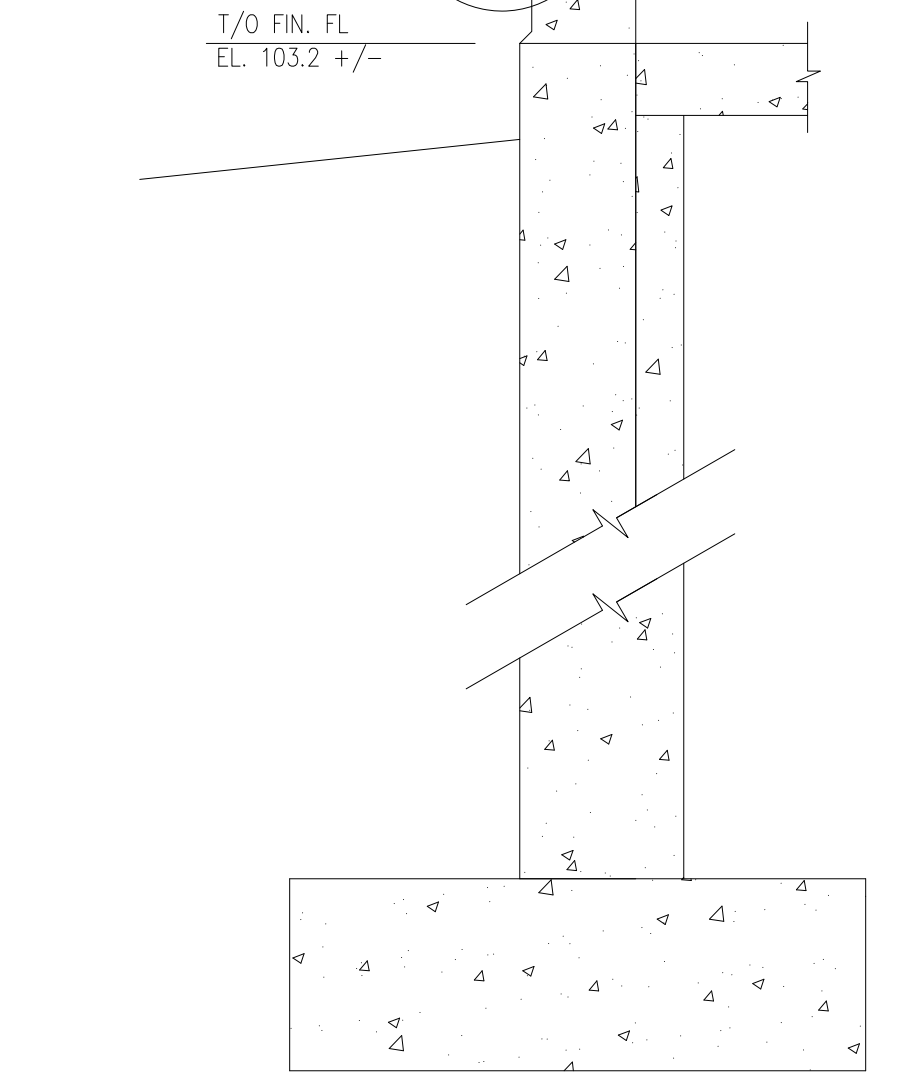
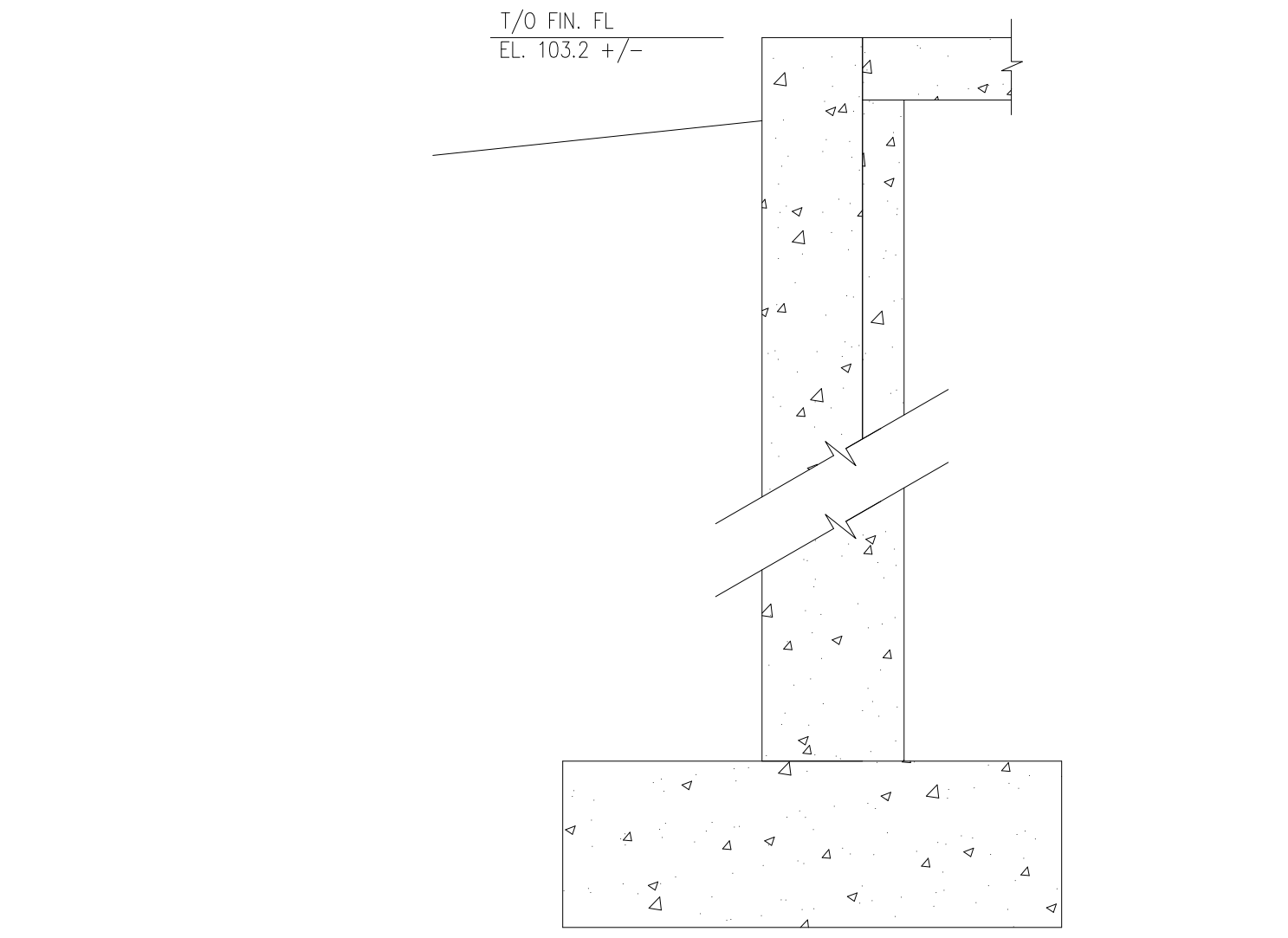
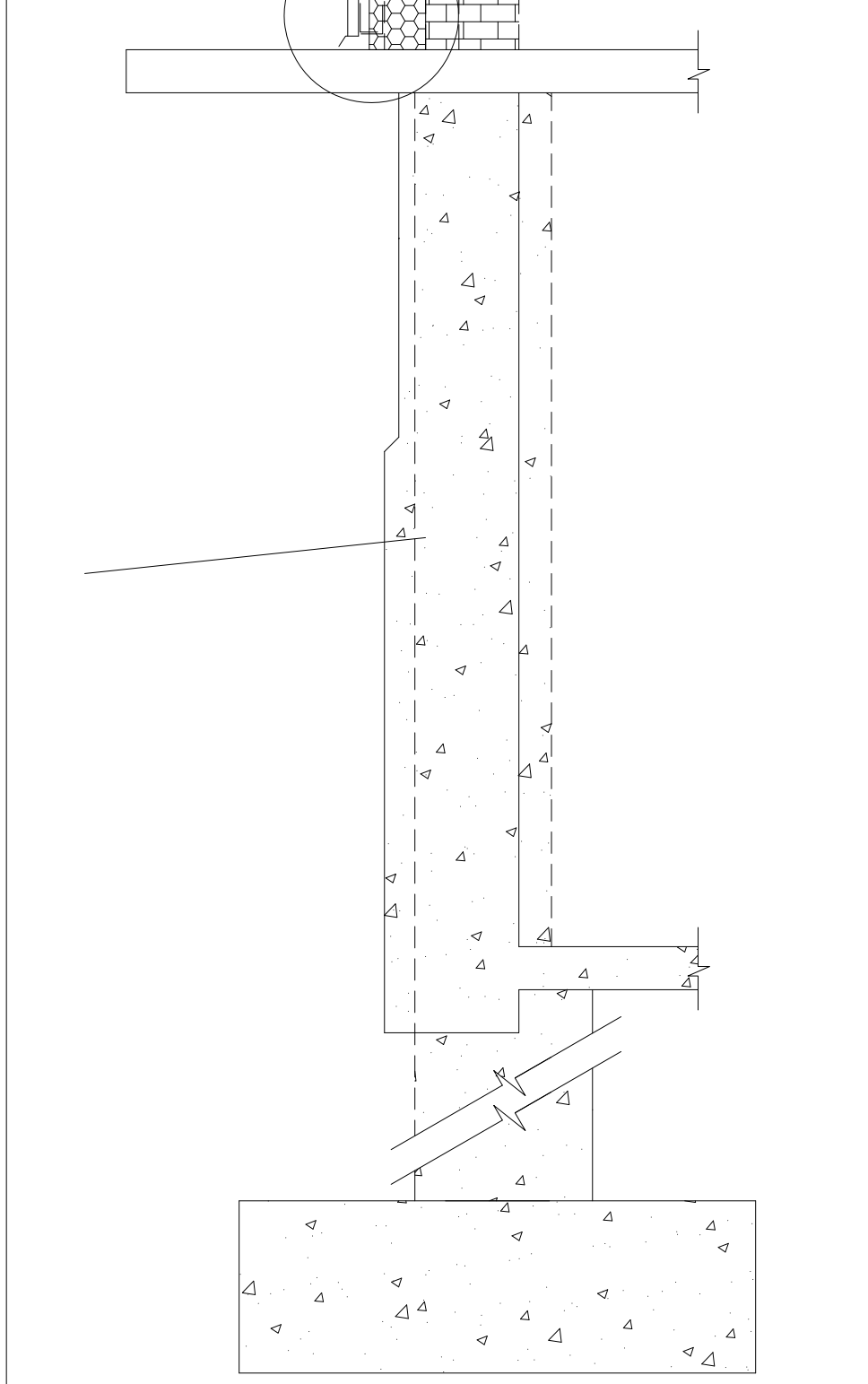
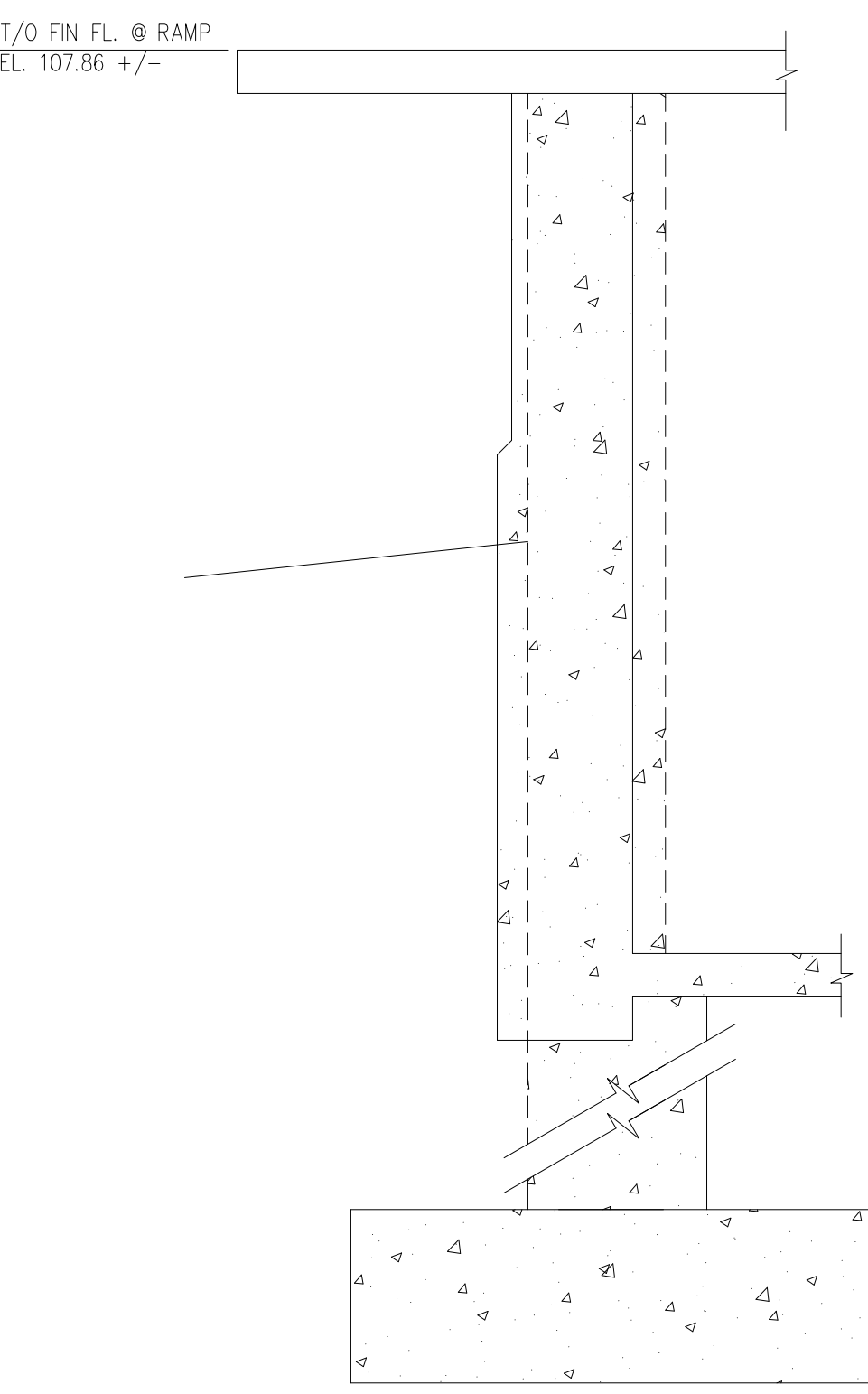
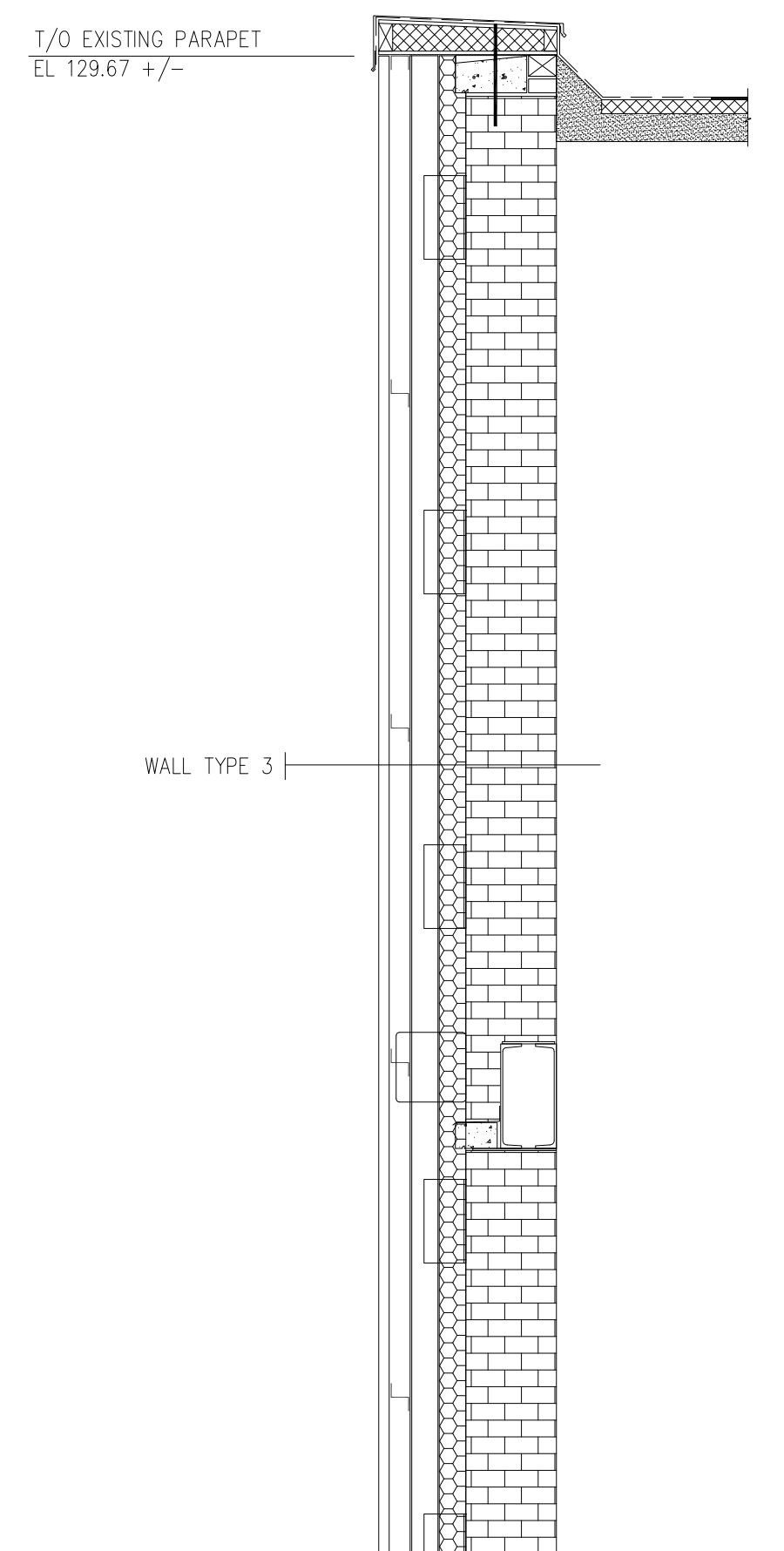
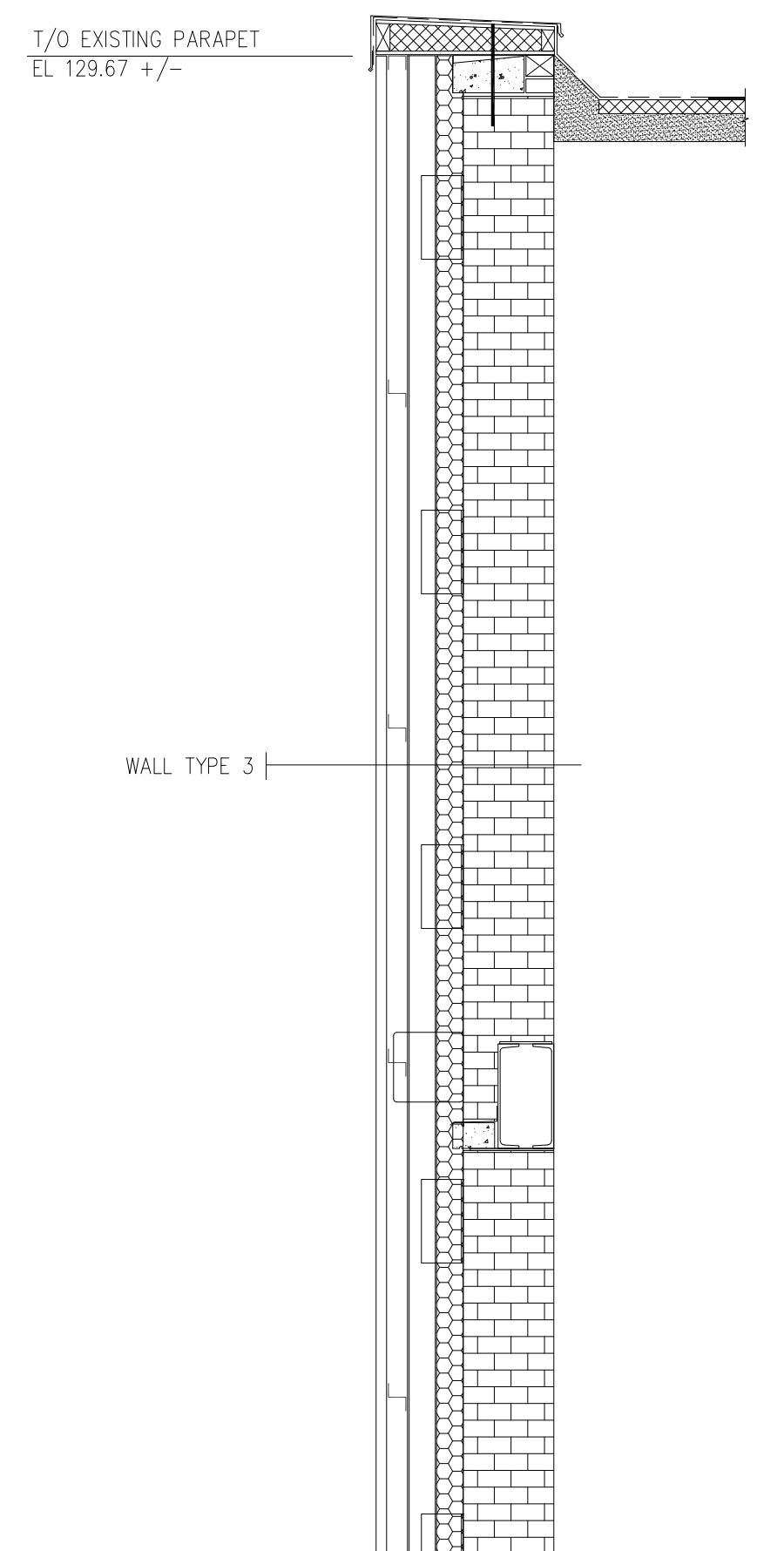
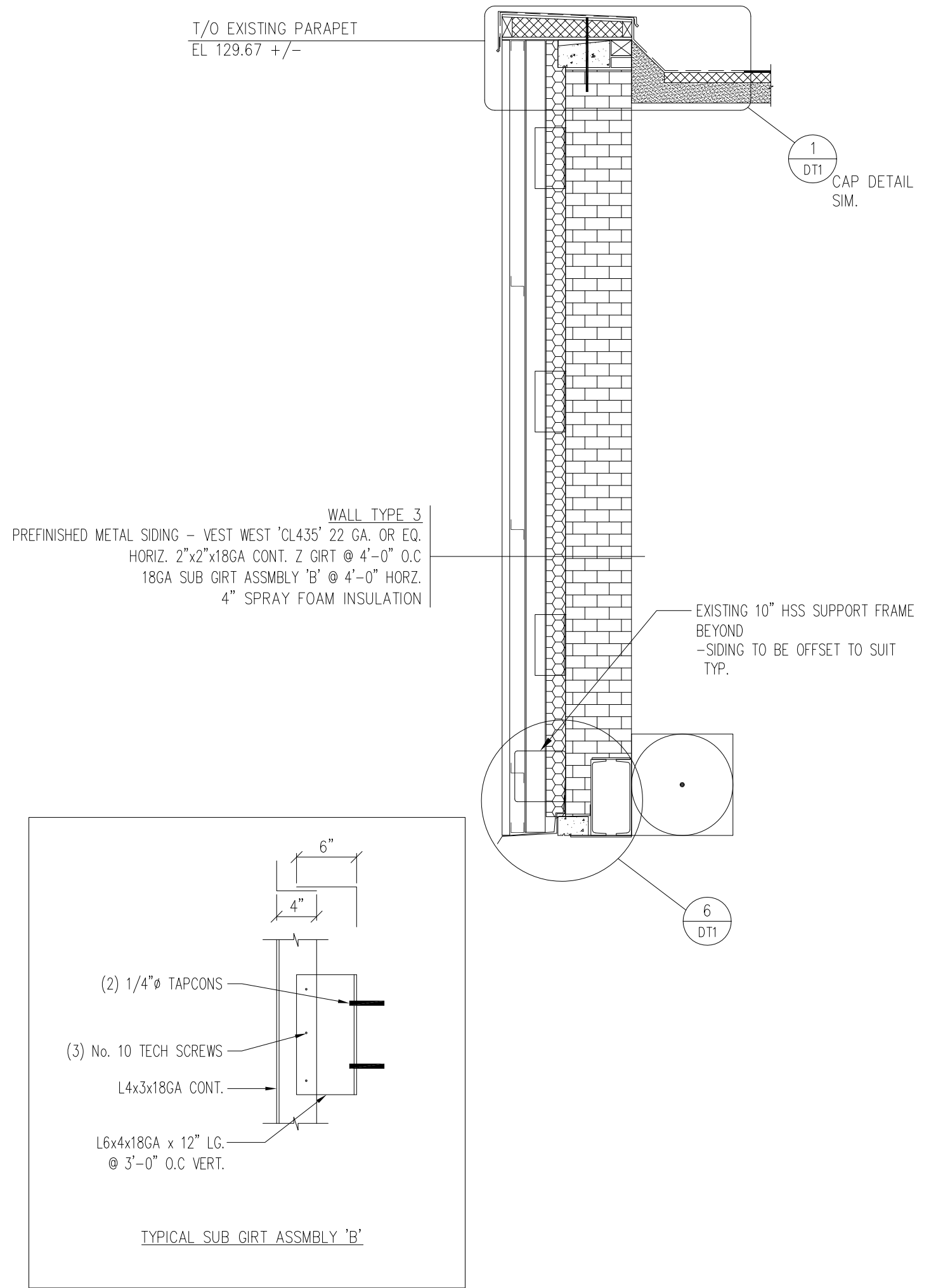
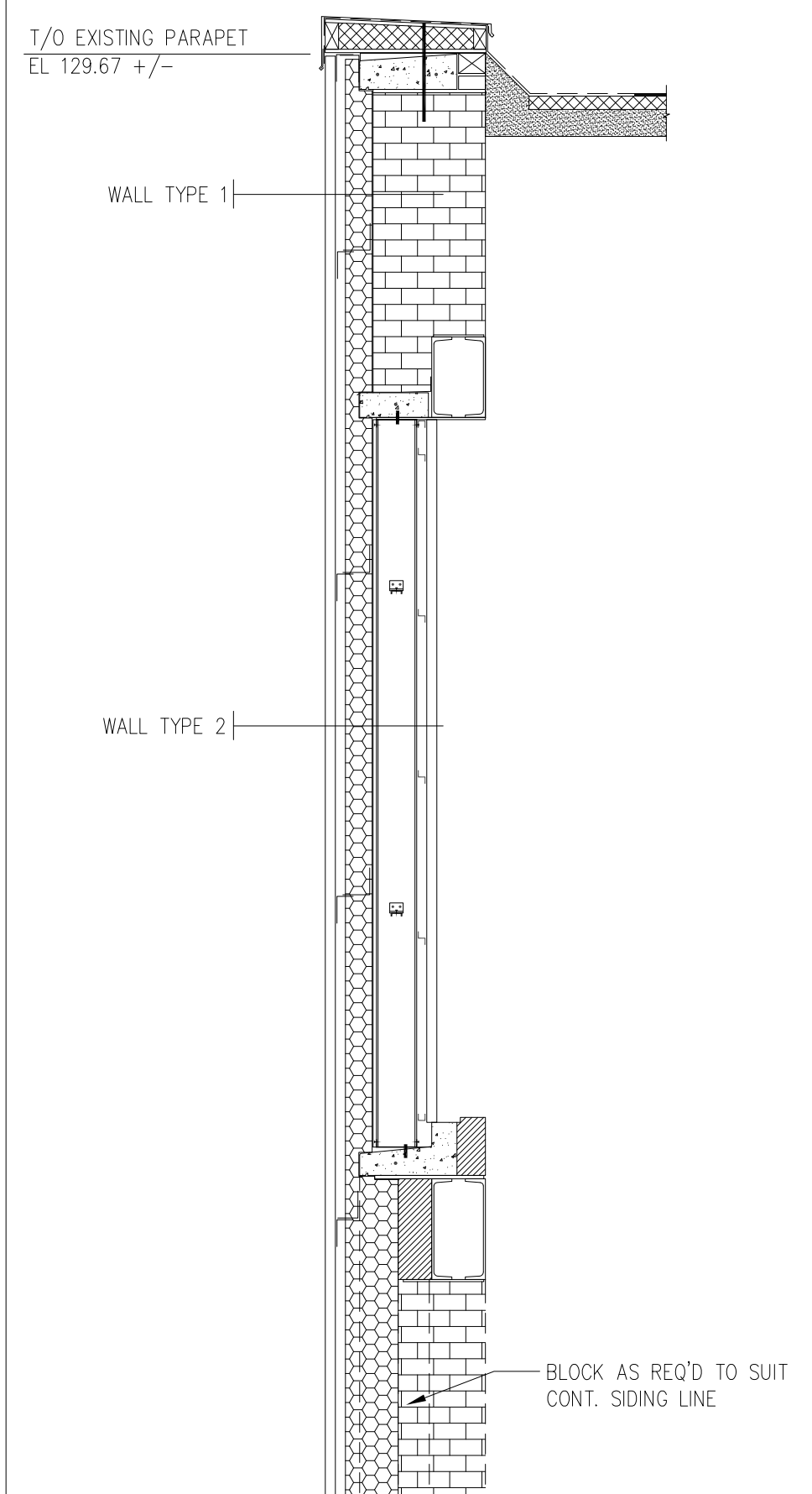
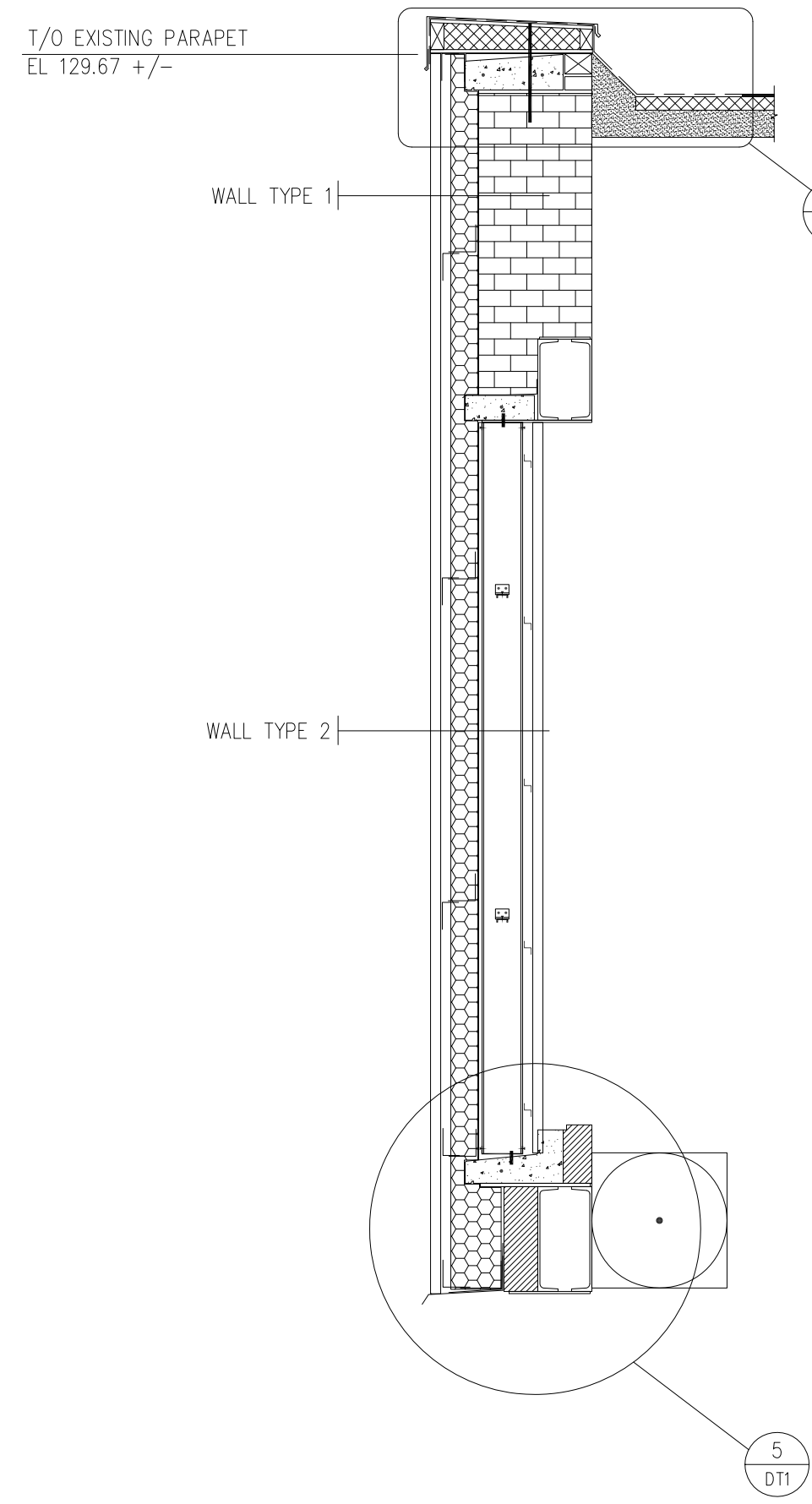
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**checked by:** TIM T

**scale:** NTS  
**project no.:** 15701

**date plotted:** APRIL 29 16

**date revised:** FEB 11 16

**FILE No:** 15701-0A4.1-Rx  
**dwg no.:** A4.1



2	revision
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APRIL 29 16 FOR TENDER	

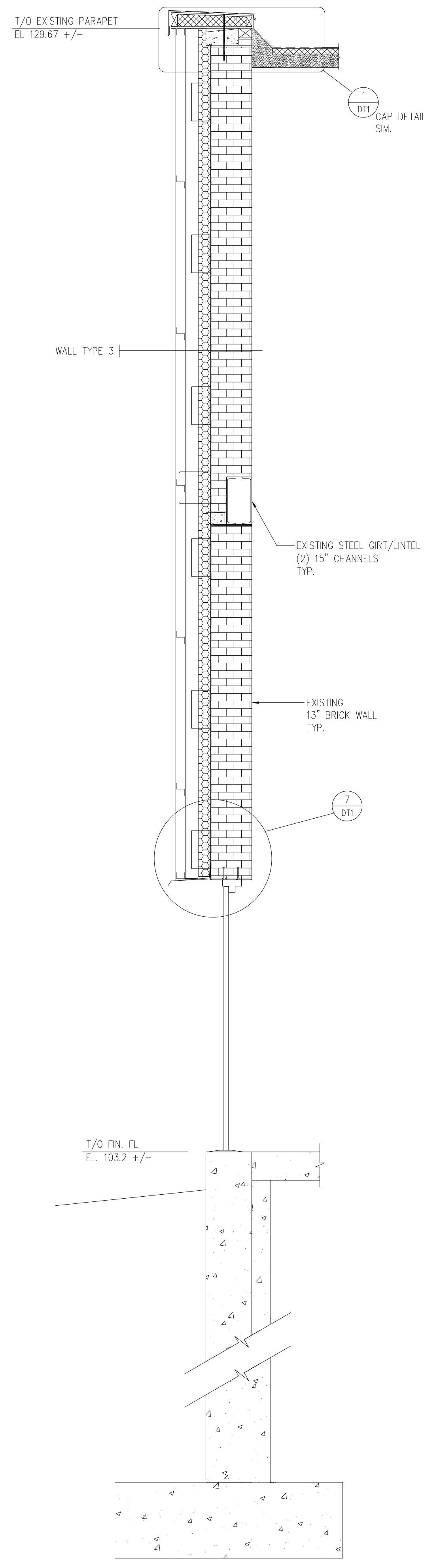
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 184 McNaughton Ave.  
 NORTH BAY ONT.  
 705-495-0861

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO  
 title: NEW SECTIONS

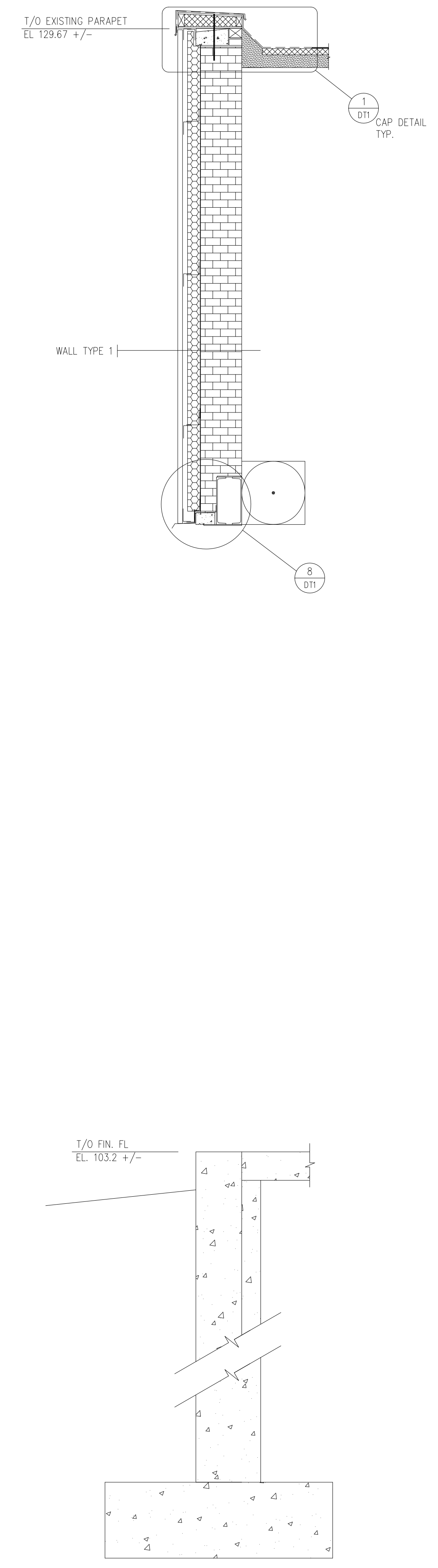
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 date revised: FEB 11 16

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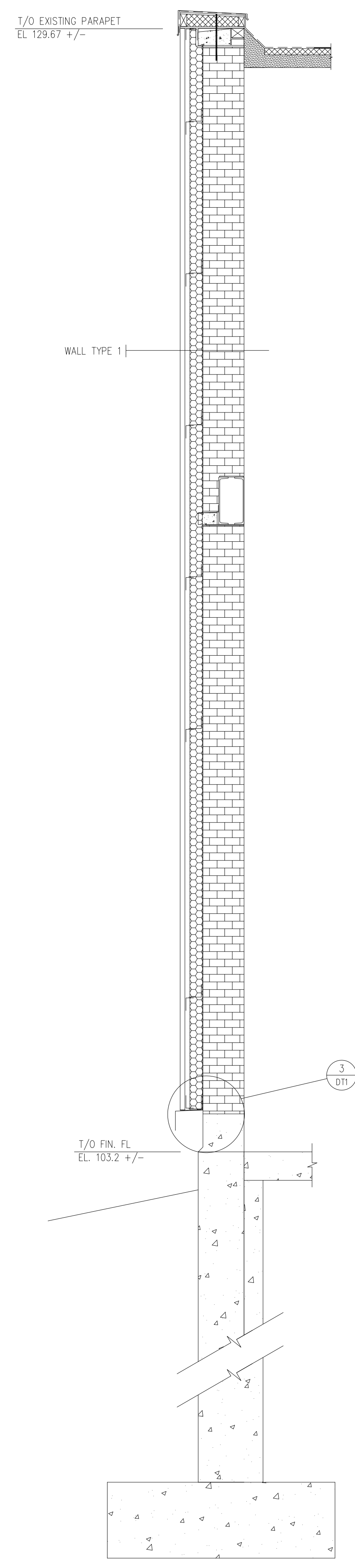
FILE No. 15701-04.2-Rx



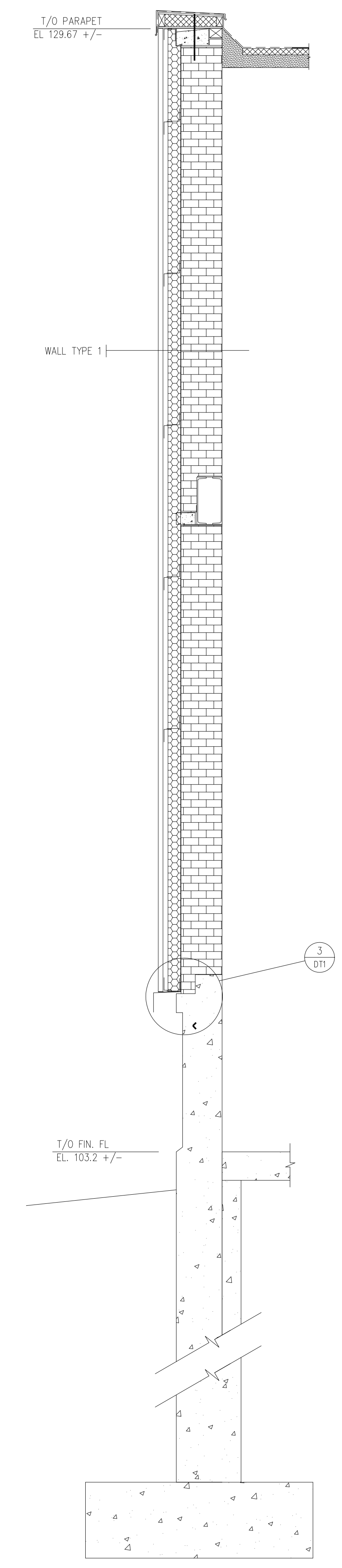
5 NEW  
A4.3 REFER TO SECTION 4 FOR ADDITIONAL DETAILS



6 NEW  
A4.3 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



6a NEW  
A4.3 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



6b NEW  
A4.3 REFER TO SECTION 1 FOR ADDITIONAL DETAILS

FILE No. 15701-044.3-Rx

project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

drawn by: BM  
scale: NTS  
date plotted: APRIL 29 16  
date revised: FEB 11 16

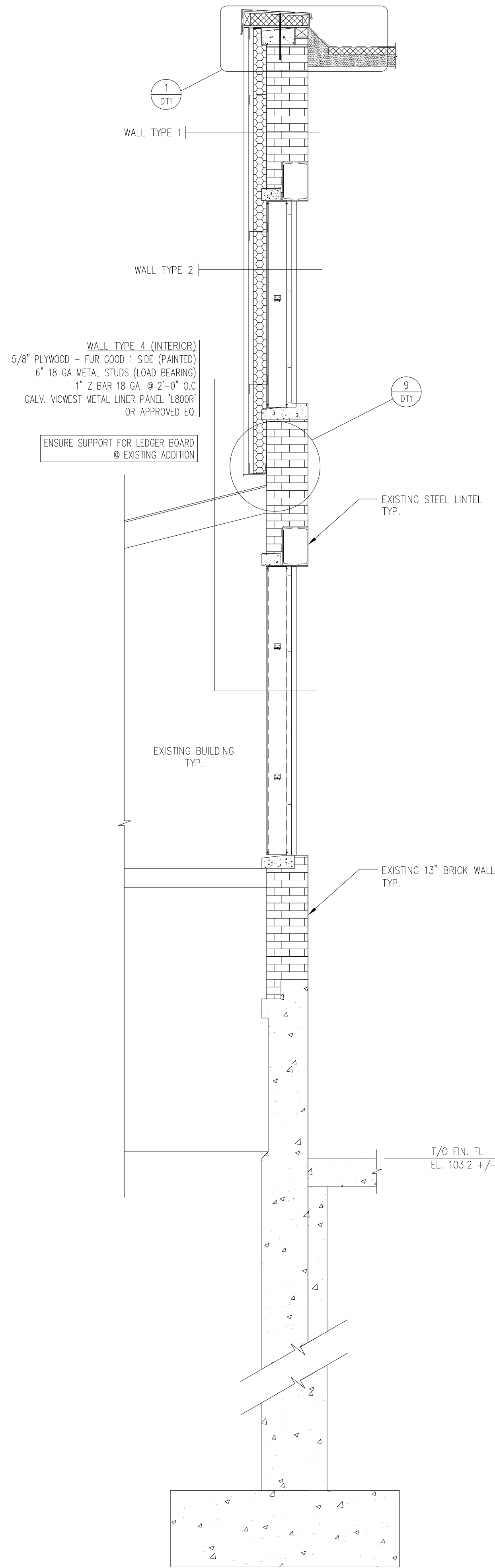
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A4.3

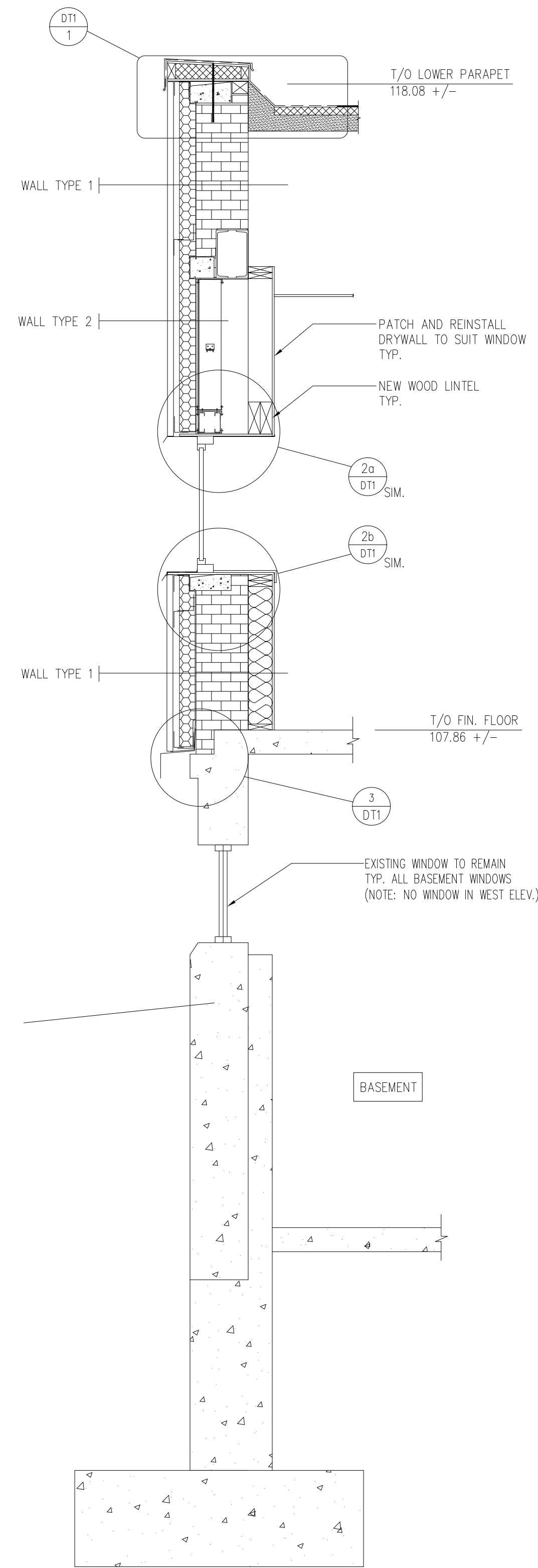
NORTHSHORE ENGINEERING  
& DRAFTING SERVICES  
184 McNaughton Ave.  
NORTH BAY ONT.  
705-495-0861

revision	date	FOR TENDER
2		
1		
0		

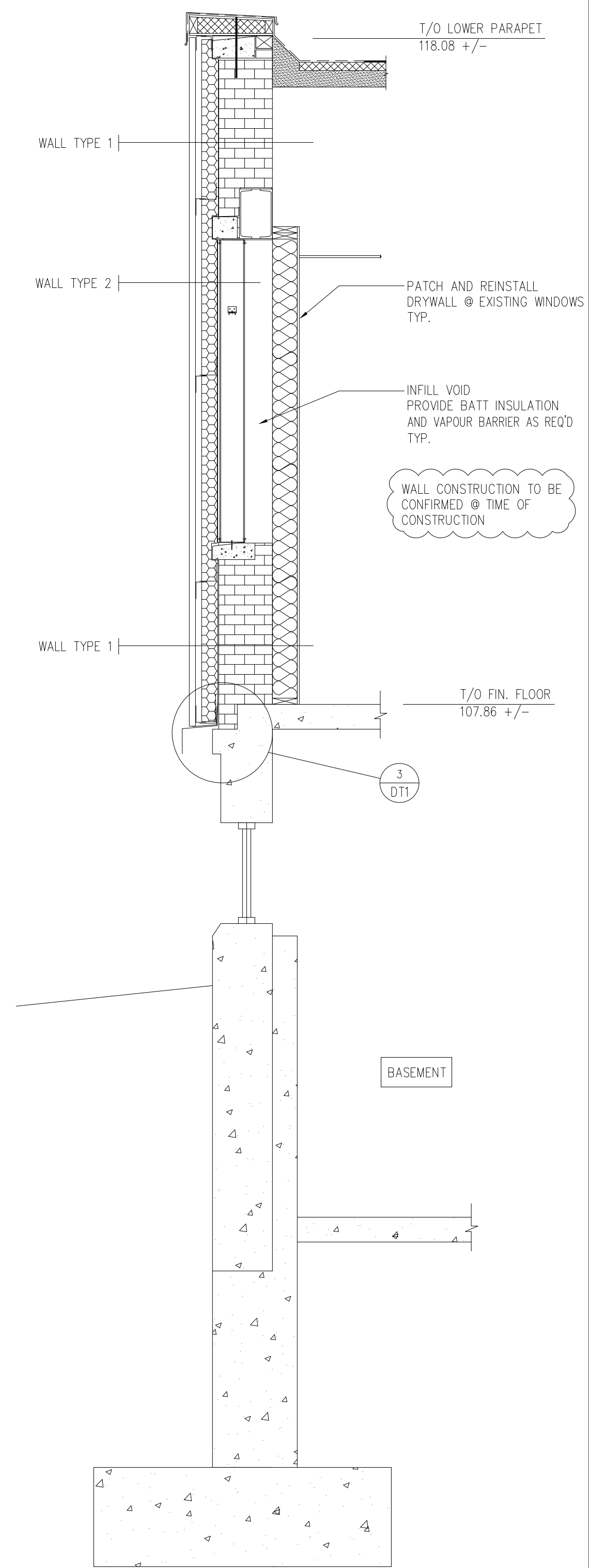
APRIL 29 16



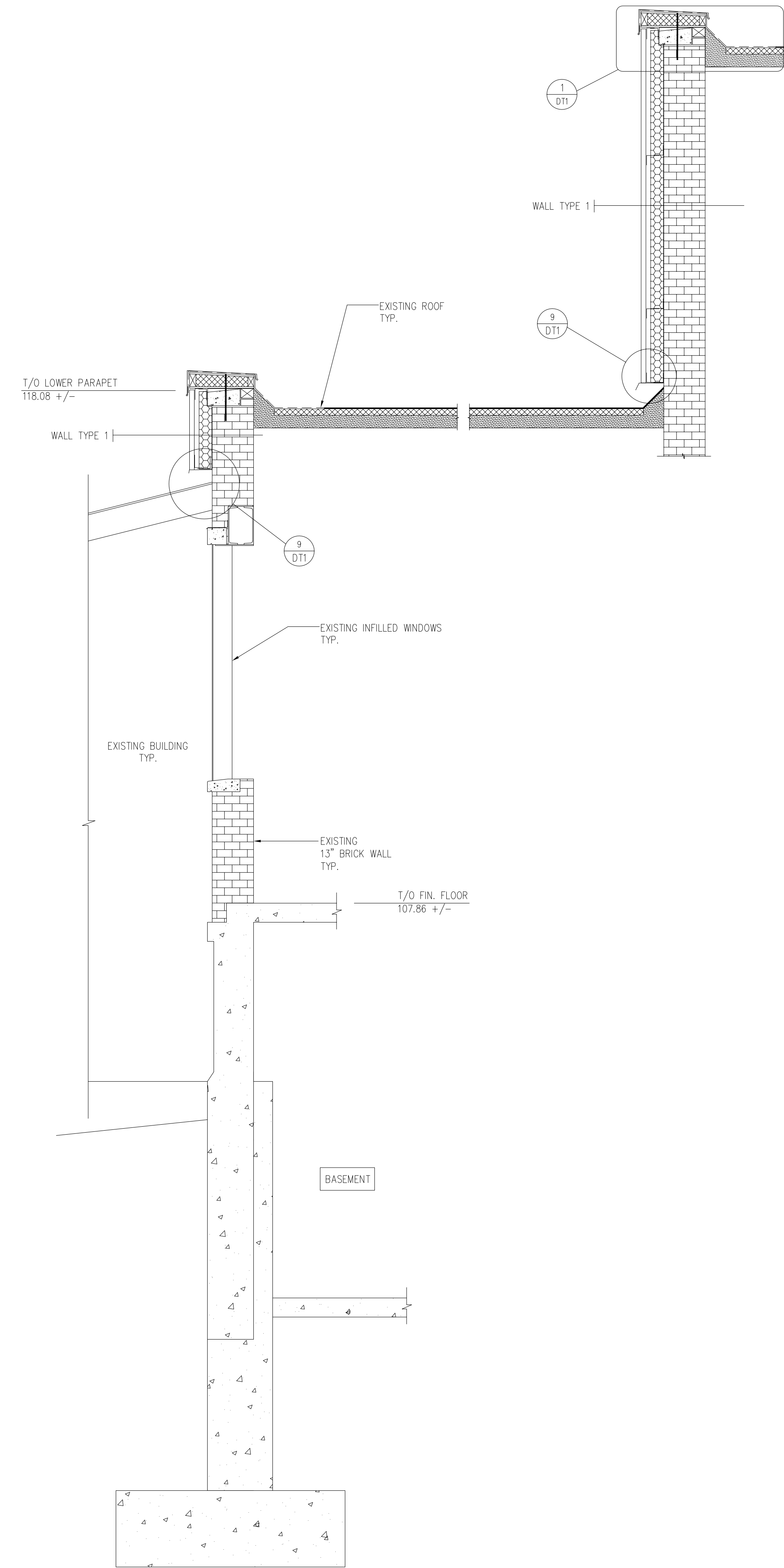
7 NEW  
A4.4 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



8 NEW  
A4.4 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



8a NEW  
A4.4 REFER TO SECTION 1 FOR ADDITIONAL DETAILS



9 NEW  
A4.3 REFER TO SECTION 1 FOR ADDITIONAL DETAILS

FILE No. 15701-0A4.4-Rx

1	revision
2	
1	
0	
	APRIL 29 16
	FOR TENDER

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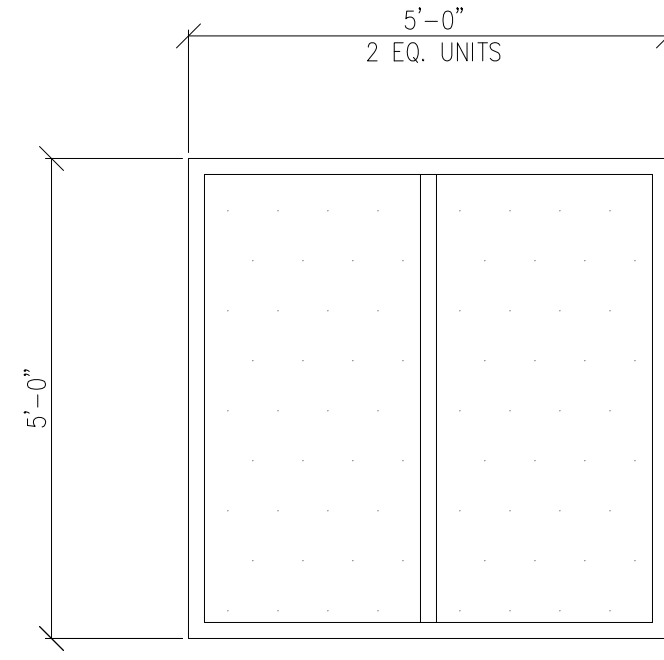
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 REPAIR SHOP - BLDG ENVELOPE RETROFIT  
 328 SECOND STREET, COCHRANE, ONTARIO

title: NEW SECTIONS

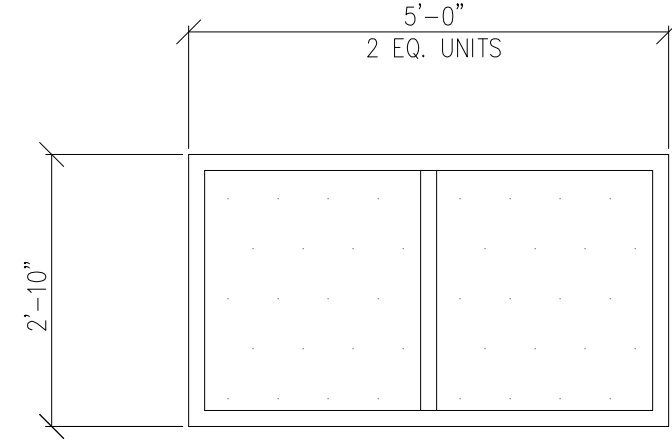
drawn by: BM  
 scale: NTS  
 date plotted: APRIL 29 16  
 date revised: FEB 11 16

checked by: TIM T  
 project no: 15701

dwg no: A4.4



W1 FIXED THERMAL PANE GLASS  
ALUM. FRAME (ALUM. IONIZED COLOUR)



W2 HALF SLIDING GLASS THERMAL PANE GLASS  
ALUM. FRAME (ALUM. IONIZED COLOUR)  
C/W FULL SCREEN

**WINDOW NOTE:**

- 1) ALL WINDOWS TO BE "FULTON 1200 SERIES" OR EQUIV.
- 1) ALL WINDOW SILLS ARE TO HAVE A 3" JAM DEFLECTOR BOTH SIDES
- 2) ALL SLIDER WINDOWS ARE TO COME C/W FULL SCREENS AS NOTED
- 3) ALL WINDOWS ARE TO BE SUPPORTED WITH 1/2" PRESSURE TREATED PLYWOOD ALL AROUND
- 4) NO BLOCK OR CONNECTION @ TOP OF WINDOW (ALLOW FOR 1/2" DEFLECTION AT TOP)

FILE No. 15701-0A5.1-Rx

project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

title: WINDOWS & SCREENS

drawn by: BM

scale: NTS

date plotted: APRIL 29 16

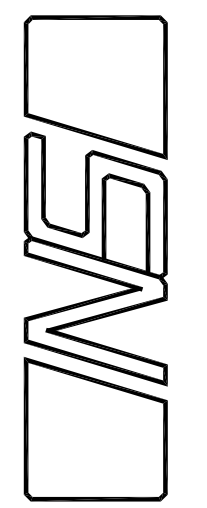
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dwg no:

checked by: TIM T

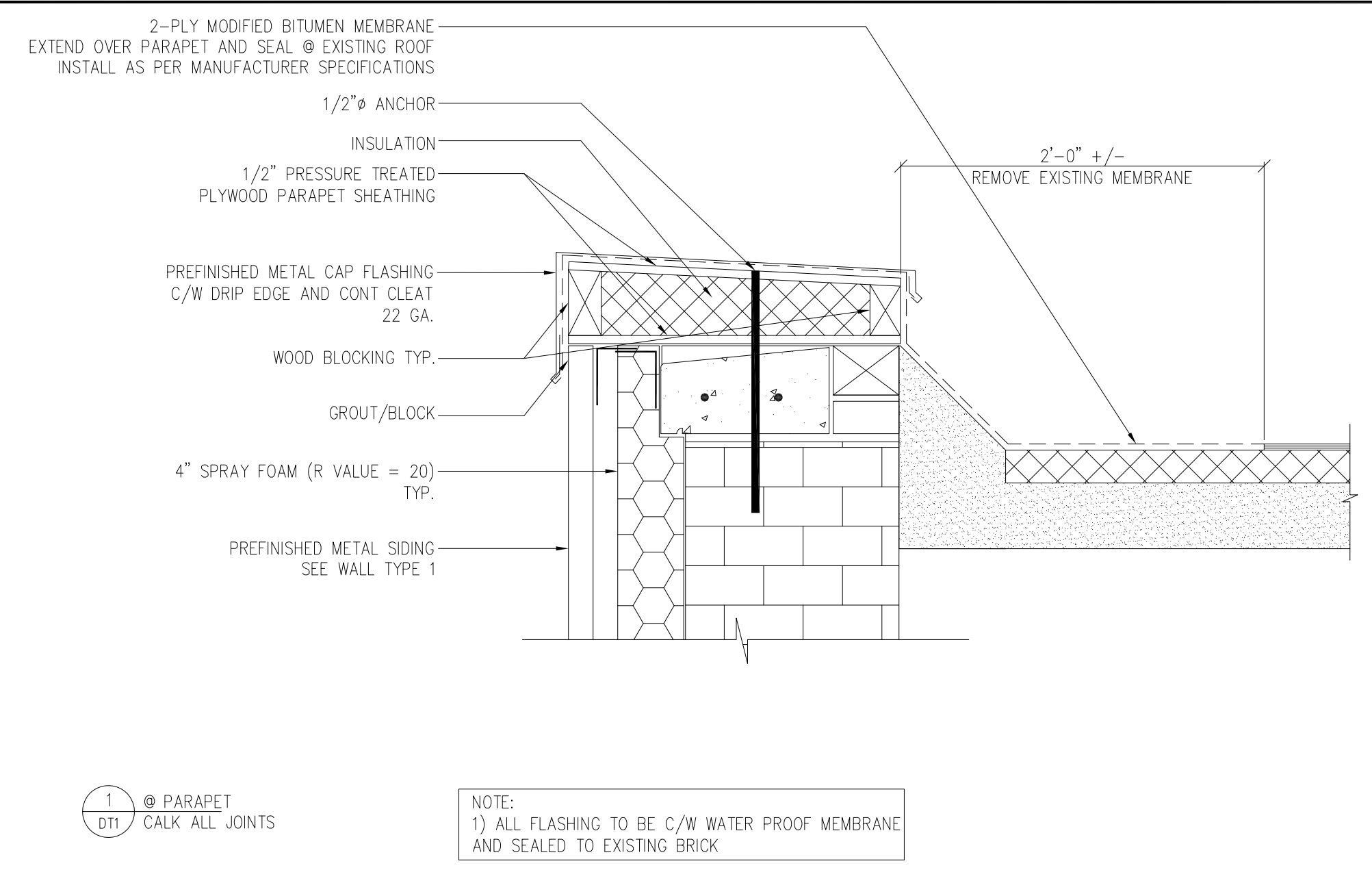
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**NORTHSHORE ENGINEERING**  
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184 McNaughton Ave.  
NORTH BAY ONT.  
705-495-0961

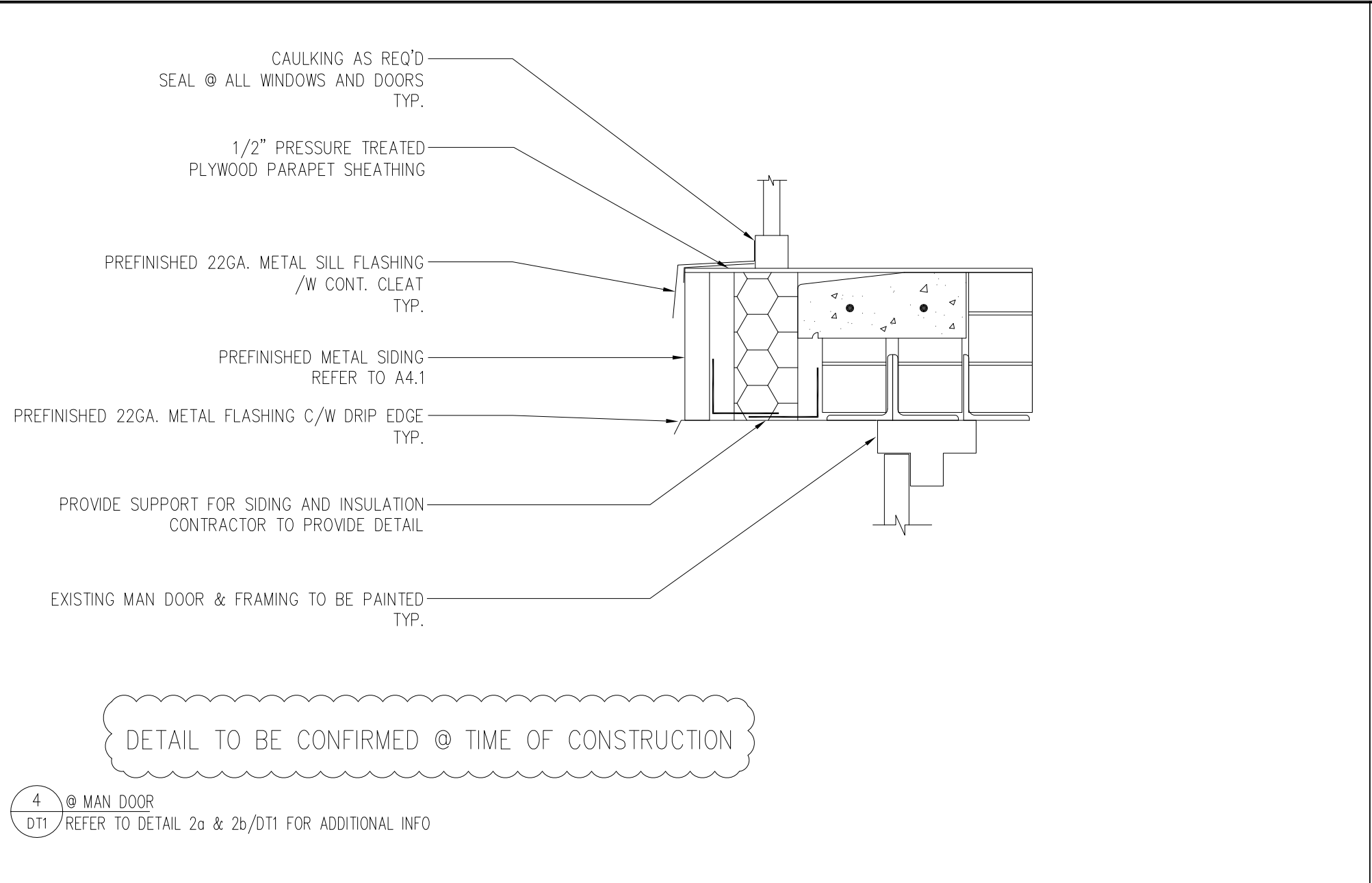


APRIL 29 16	FOR TENDER	revision
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		1
		2

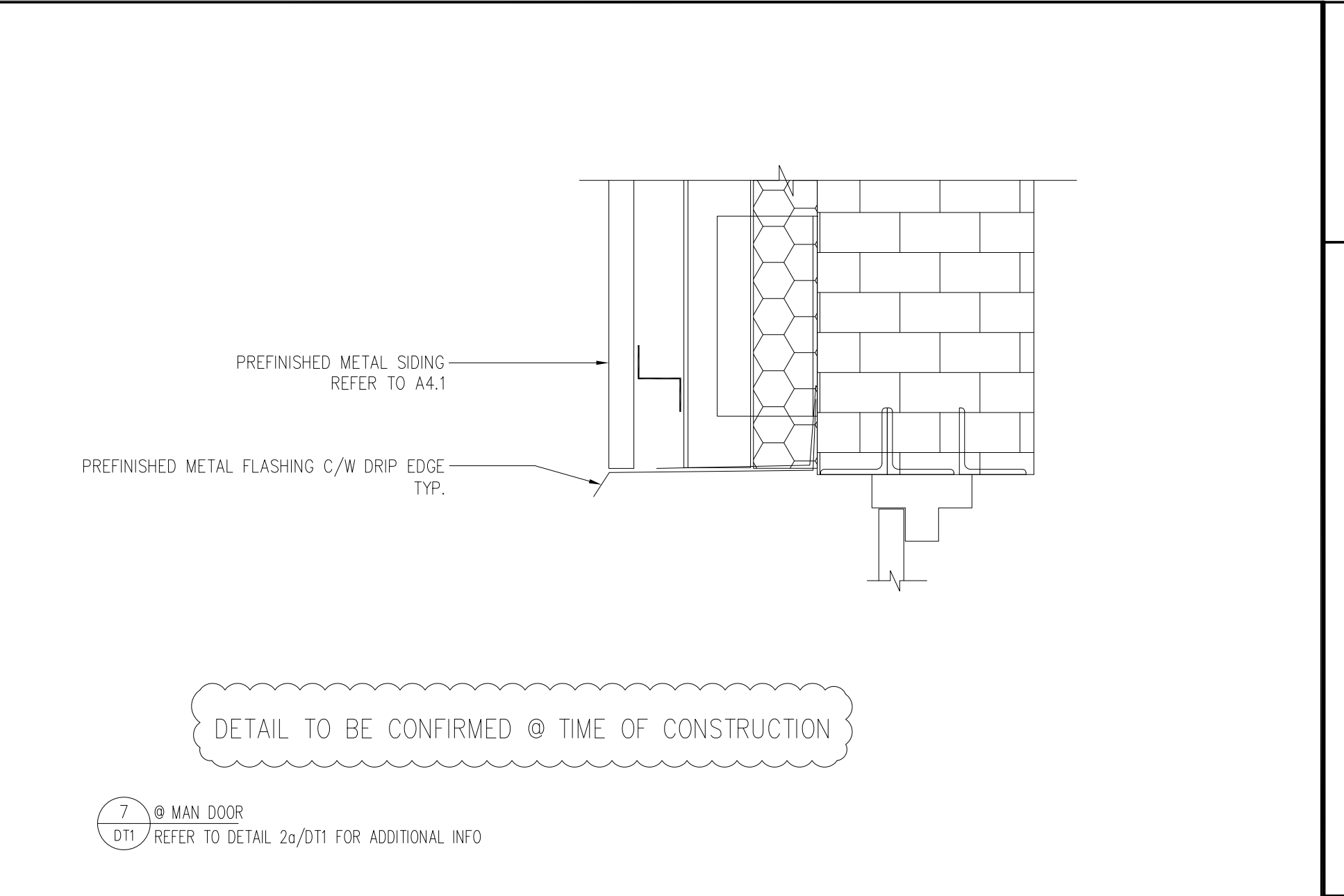
A5.1



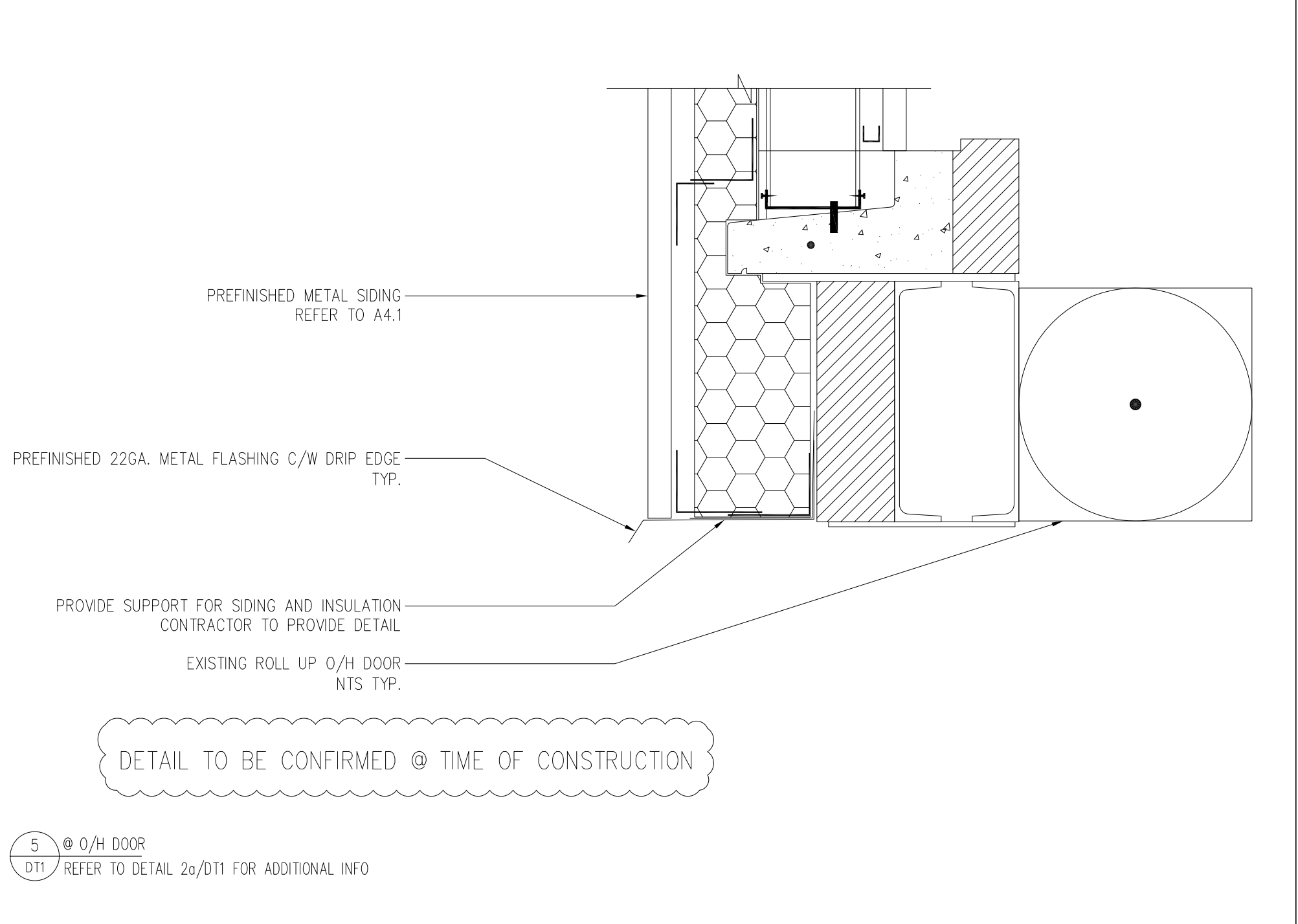
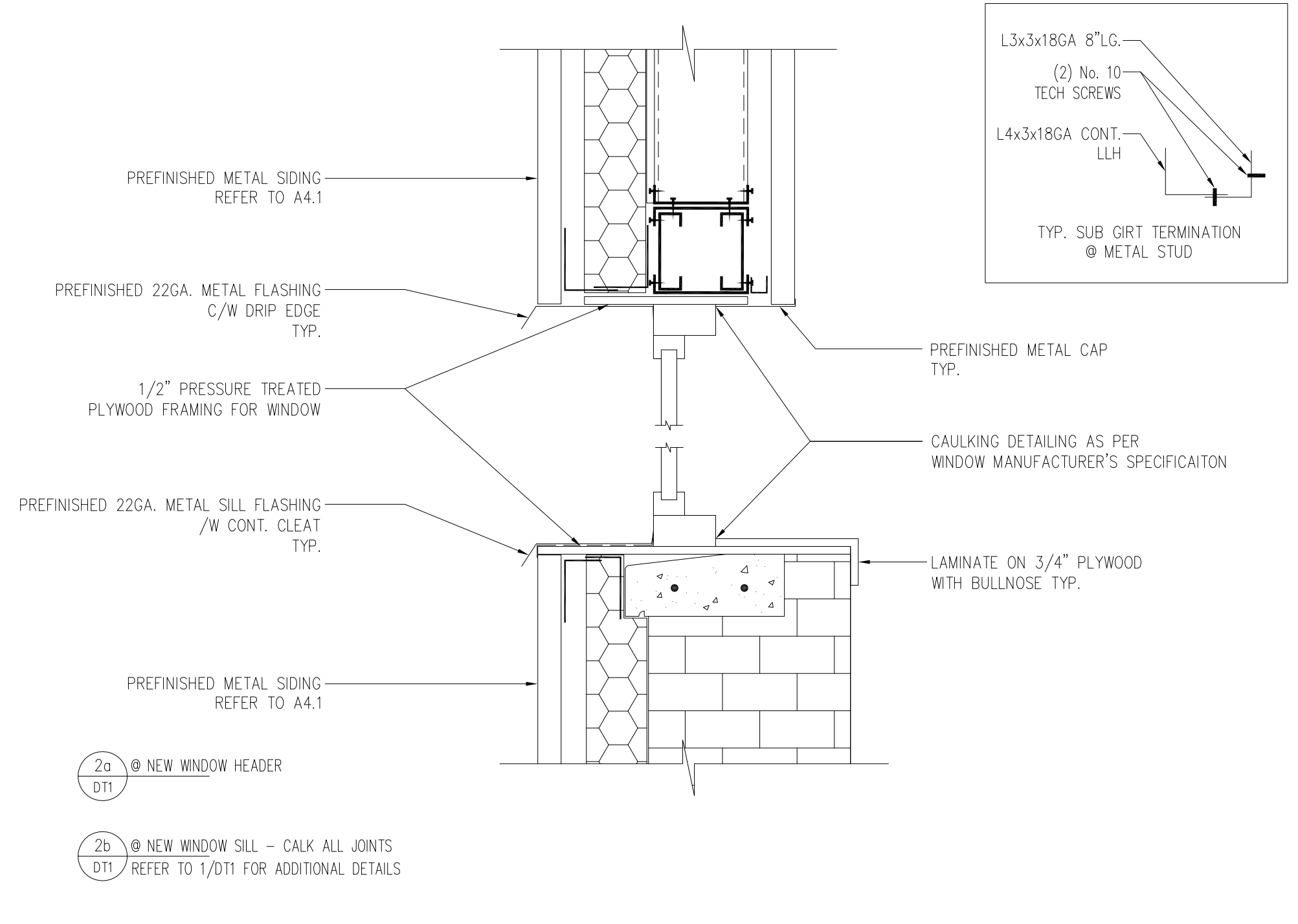
1 @ PARAPET  
DT1 / CALK ALL JOINTS



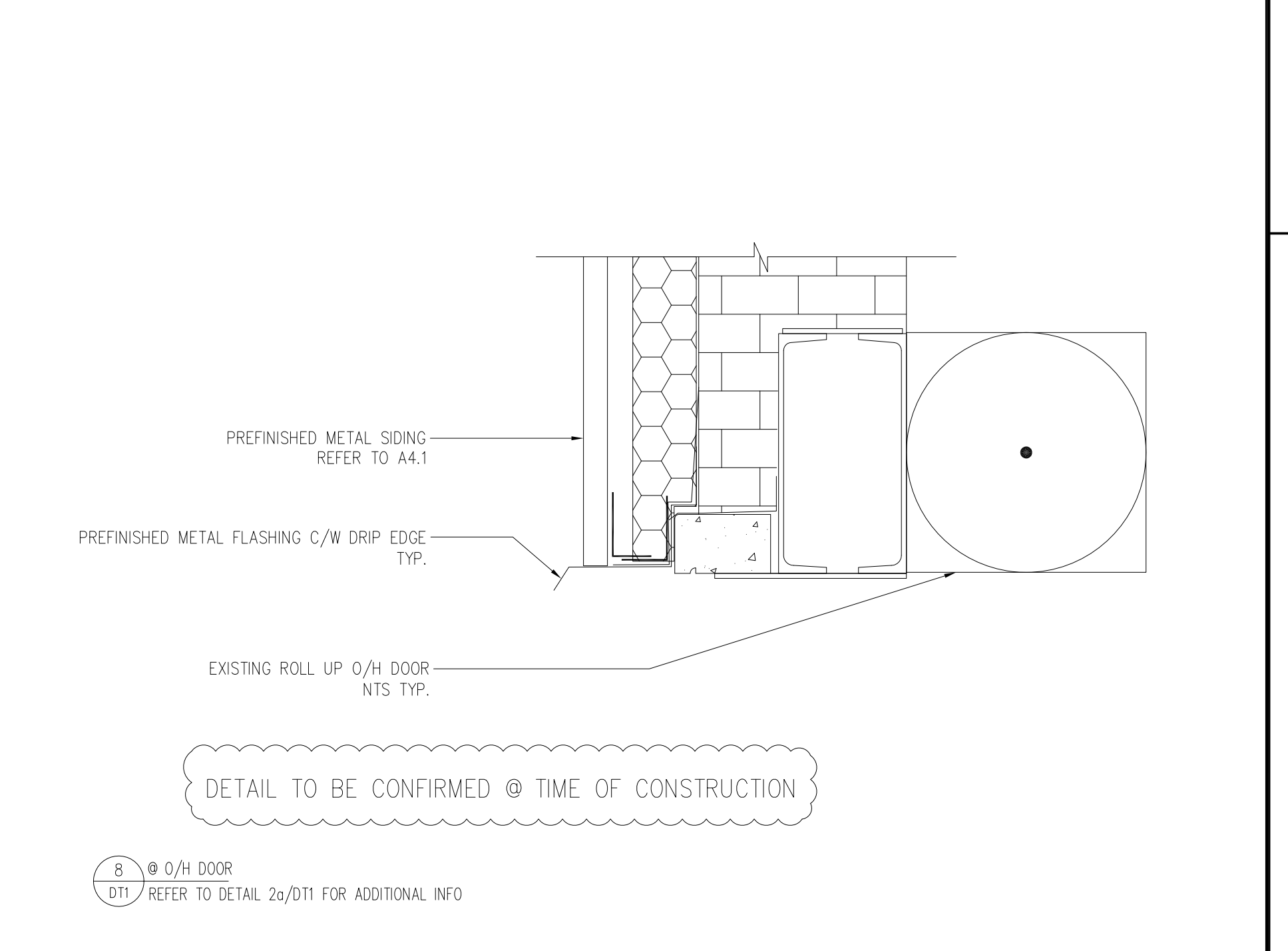
4 @ MAN DOOR  
DT1 / REFER TO DETAIL 2a & 2b/DT1 FOR ADDITIONAL INFO



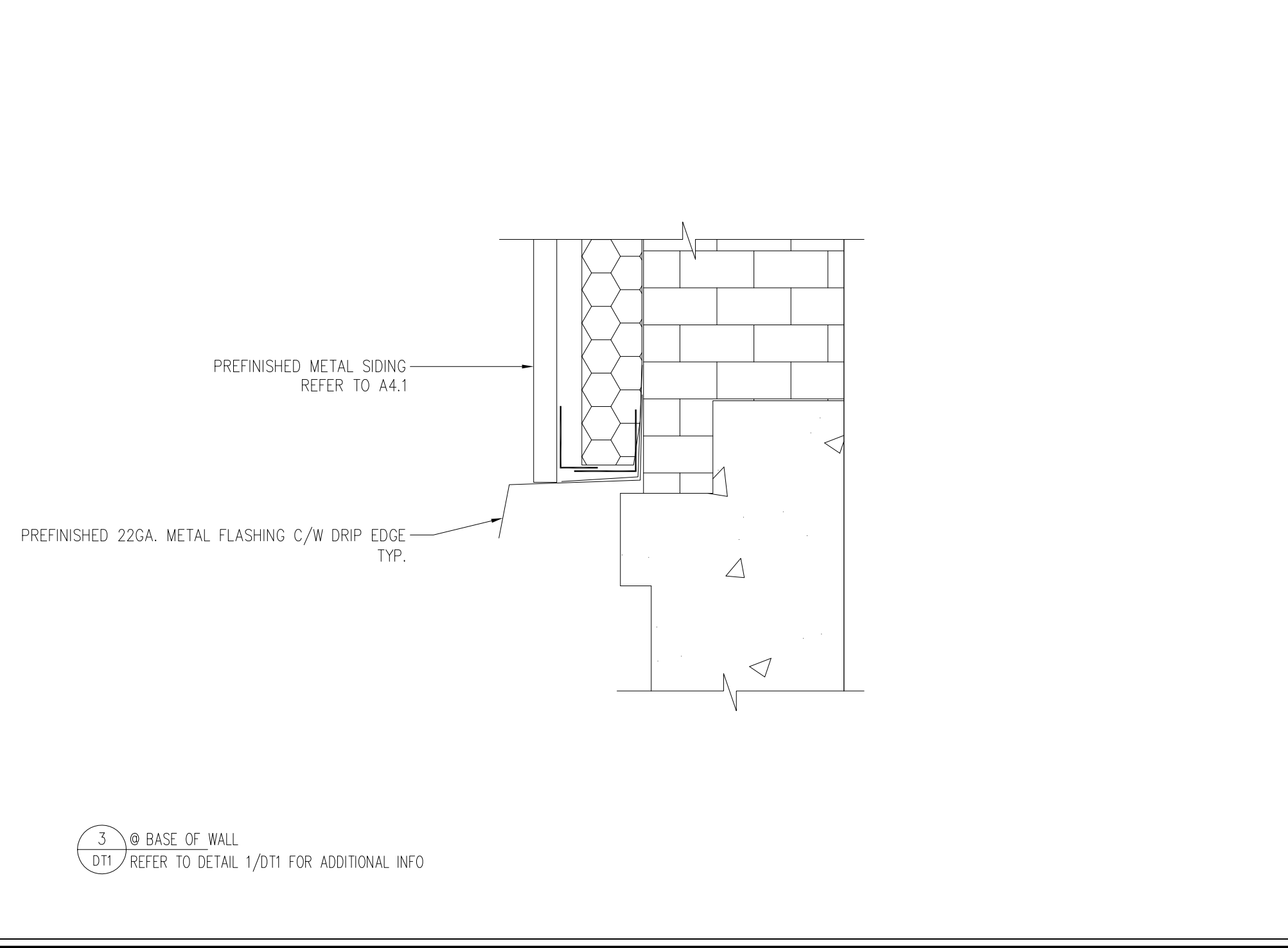
7 @ MAN DOOR  
DT1 / REFER TO DETAIL 2a/DT1 FOR ADDITIONAL INFO



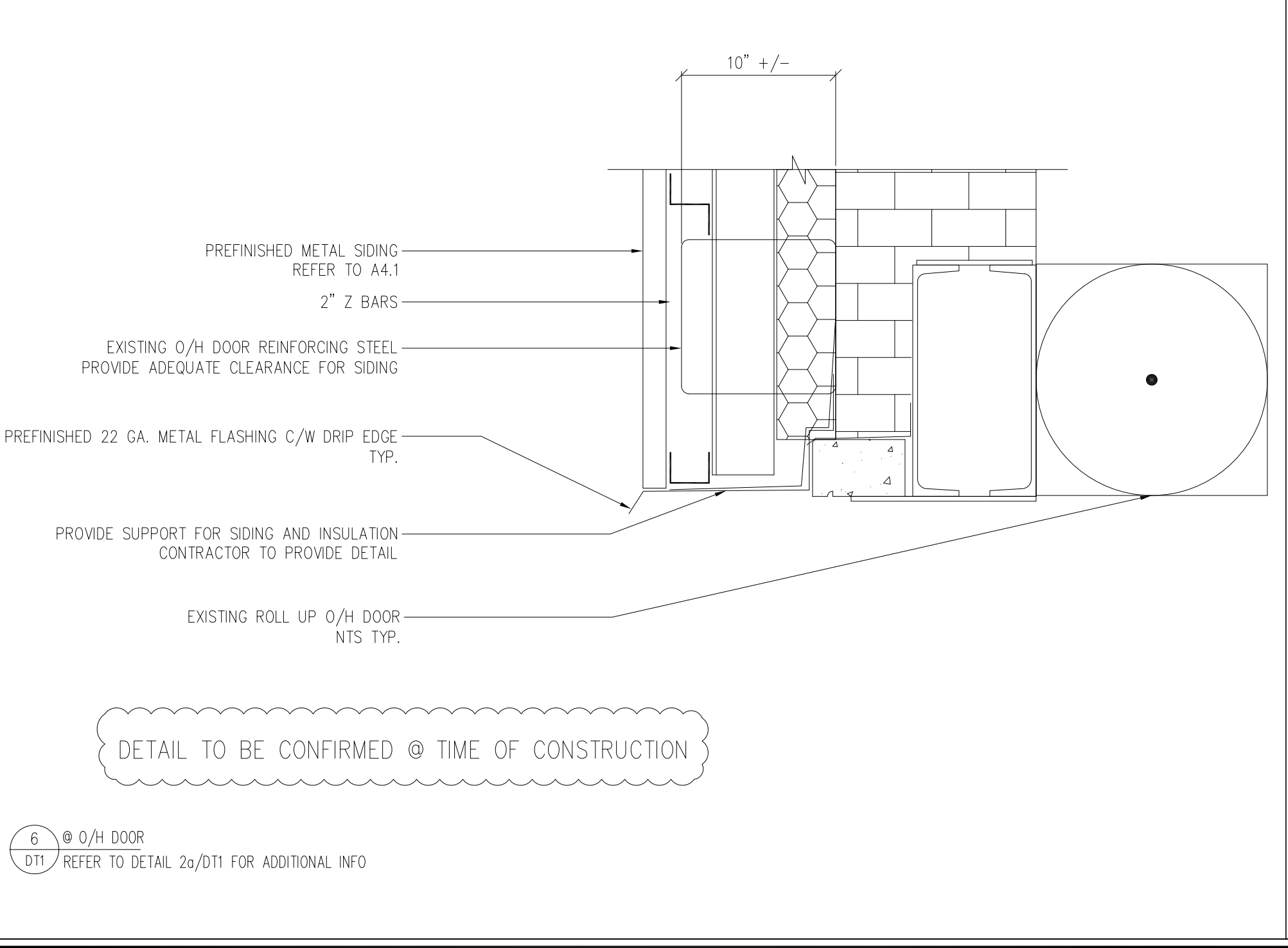
5 @ O/H DOOR  
DT1 / REFER TO DETAIL 2a/DT1 FOR ADDITIONAL INFO



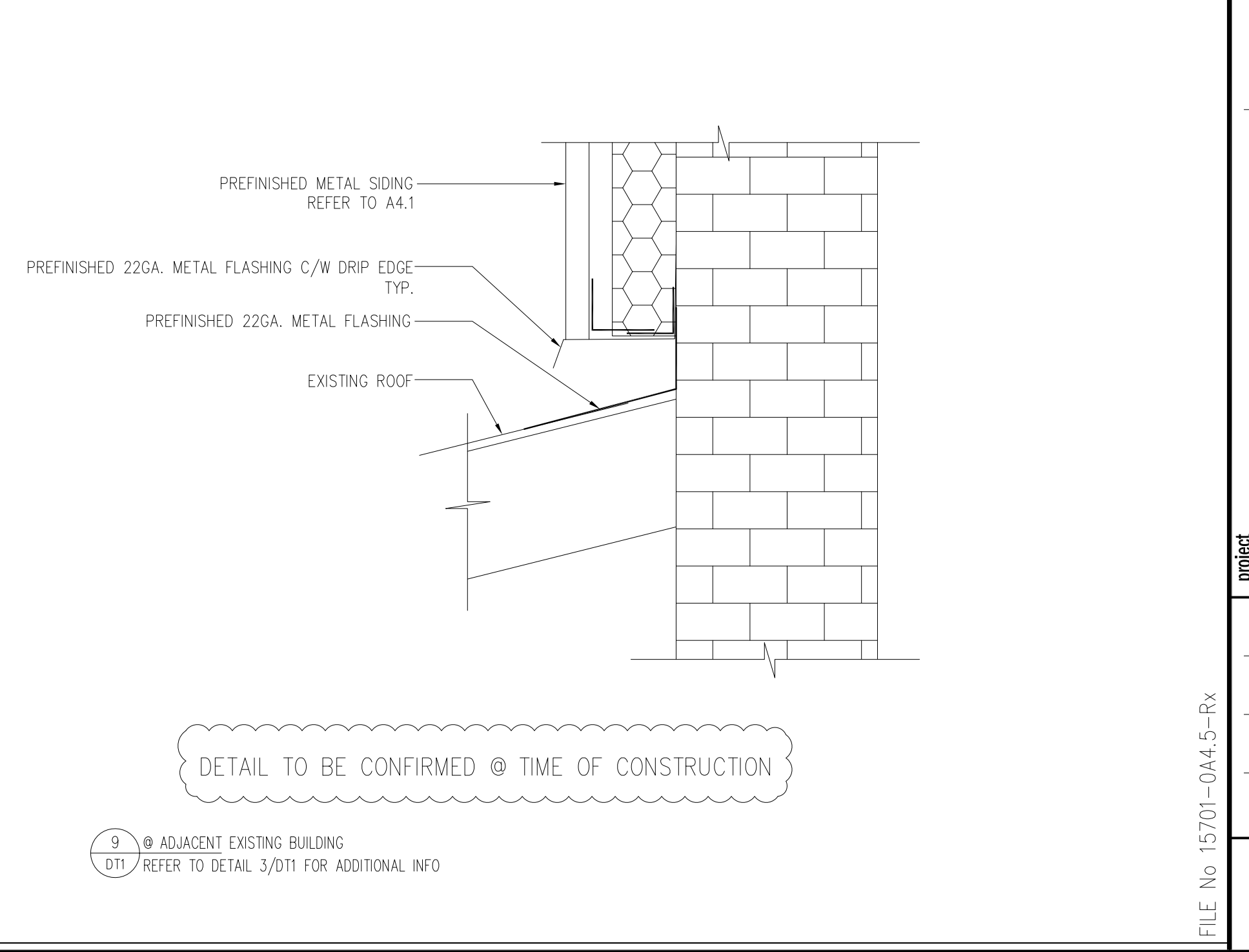
8 @ O/H DOOR  
DT1 / REFER TO DETAIL 2a/DT1 FOR ADDITIONAL INFO



3 @ BASE OF WALL  
DT1 / REFER TO DETAIL 1/DT1 FOR ADDITIONAL INFO



6 @ O/H DOOR  
DT1 / REFER TO DETAIL 2a/DT1 FOR ADDITIONAL INFO



9 @ ADJACENT EXISTING BUILDING  
DT1 / REFER TO DETAIL 3/DT1 FOR ADDITIONAL INFO

revision	2
	1
	0
APRIL 29 16	FOR TENDER

**NORTHSHORE ENGINEERING & DRAFTING SERVICES**

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705-495-0861

project: ONTARIO NORTHLAND REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

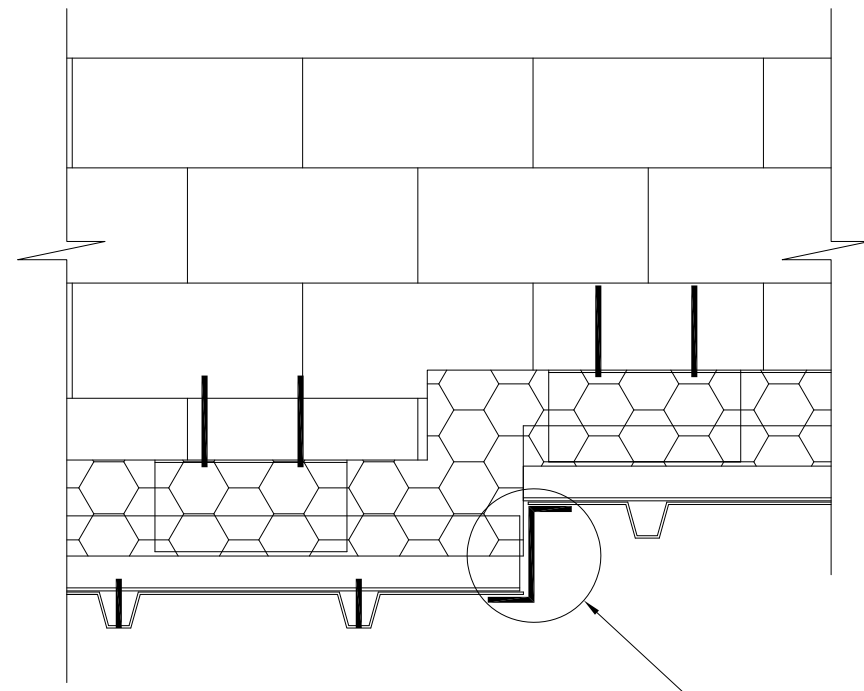
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drawn by: BM  
scale: NTS  
date plotted: APRIL 29 16  
date revised: FEB 11 16

checked by: TIM T  
project no: 15701

FILE No. 15701-044.5-Rx  
dwg no: DT1

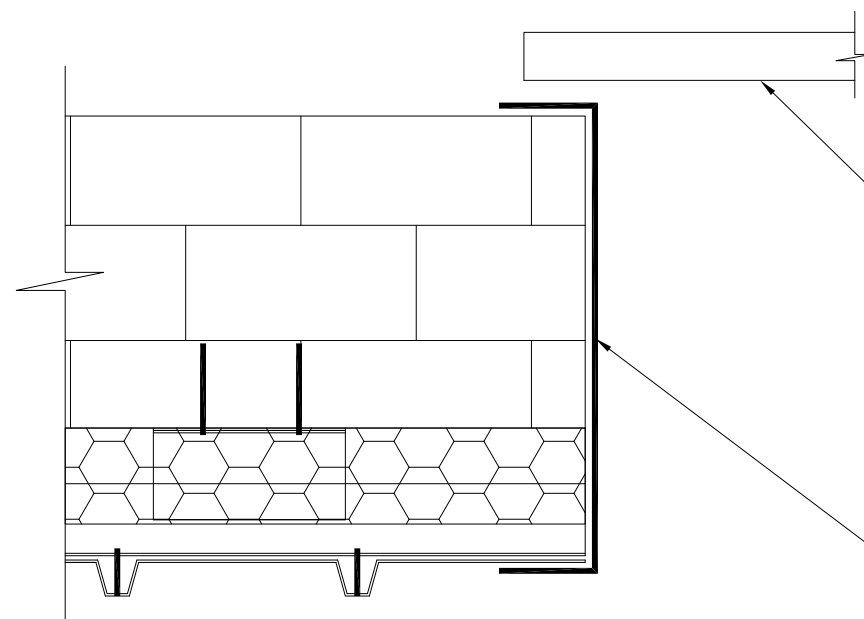




CONTRACTOR TO PROVIDE DETAIL @ WALL OFFSET CHANGE

FINAL DETAIL TO BE PROVIDED BY CONTRACTOR AND APPROVED BY ONTC

10  
DT2

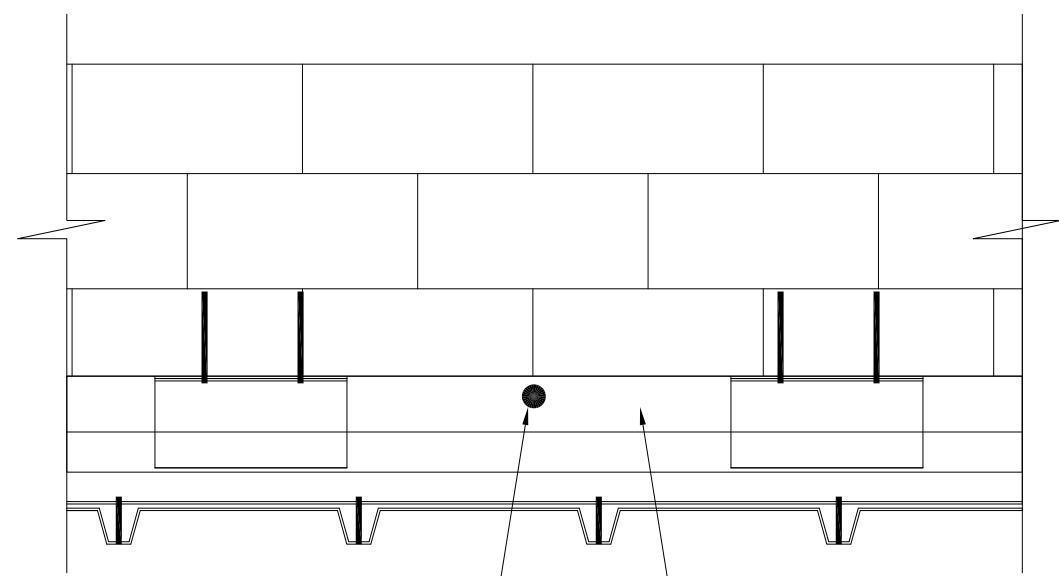


EXISTING OVERHEAD DOOR  
TYP.

NEW 18 GAUGE DOOR JAMB METAL CAP  
TYP. ALL OVERHEAD DOORS

FINAL DETAIL TO BE PROVIDED BY CONTRACTOR AND APPROVED BY ONTC

11  
DT2



1" CONDUIT

ENSURE CLEARANCE BEHIND SUB-GIRT FOR CONDUIT

ENSURE ALL OF THE NEW THE LIGHTNING DOWN CONDUCTORS ARE INSTALLED BEFORE SPRAY FOAM INSULATION

TYPICAL DETAIL  
LIGHTNING DOWN CONDUCTOR

REFER TO MECHANICALS FOR LIGHTNING DOWN CONDUCTOR LOCATIONS

APRIL 29 16	FOR TENDER	revision
		0
		1
		2

**NORTHSHORE ENGINEERING**  
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705-495-0861

project: ONTARIO NORTHLAND  
REPAIR SHOP - BLDG ENVELOPE RETROFIT  
328 SECOND STREET, COCHRANE, ONTARIO

title: DETAILS

drawn by: BM  
scale: NTS  
date plotted: APRIL 29 16  
date revised: FEB 11 16  
checked by: TIM T  
project no: 15701  
dwg no: DT2

FILE No. 15701-044.5-Rx