

FORT HENRY NATIONAL HISTORIC SITE 2023 MASONRY REHABILITATION REDOUBT BLOCKS 1,2,11

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CRAIG SIMS
HERITAGE BUILDING CONSULTANT

22216-S000	COVER PAGE
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS			
NO.	DATE	DESCRIPTION	Drawn by / Approved Dessine par / Approuve
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A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

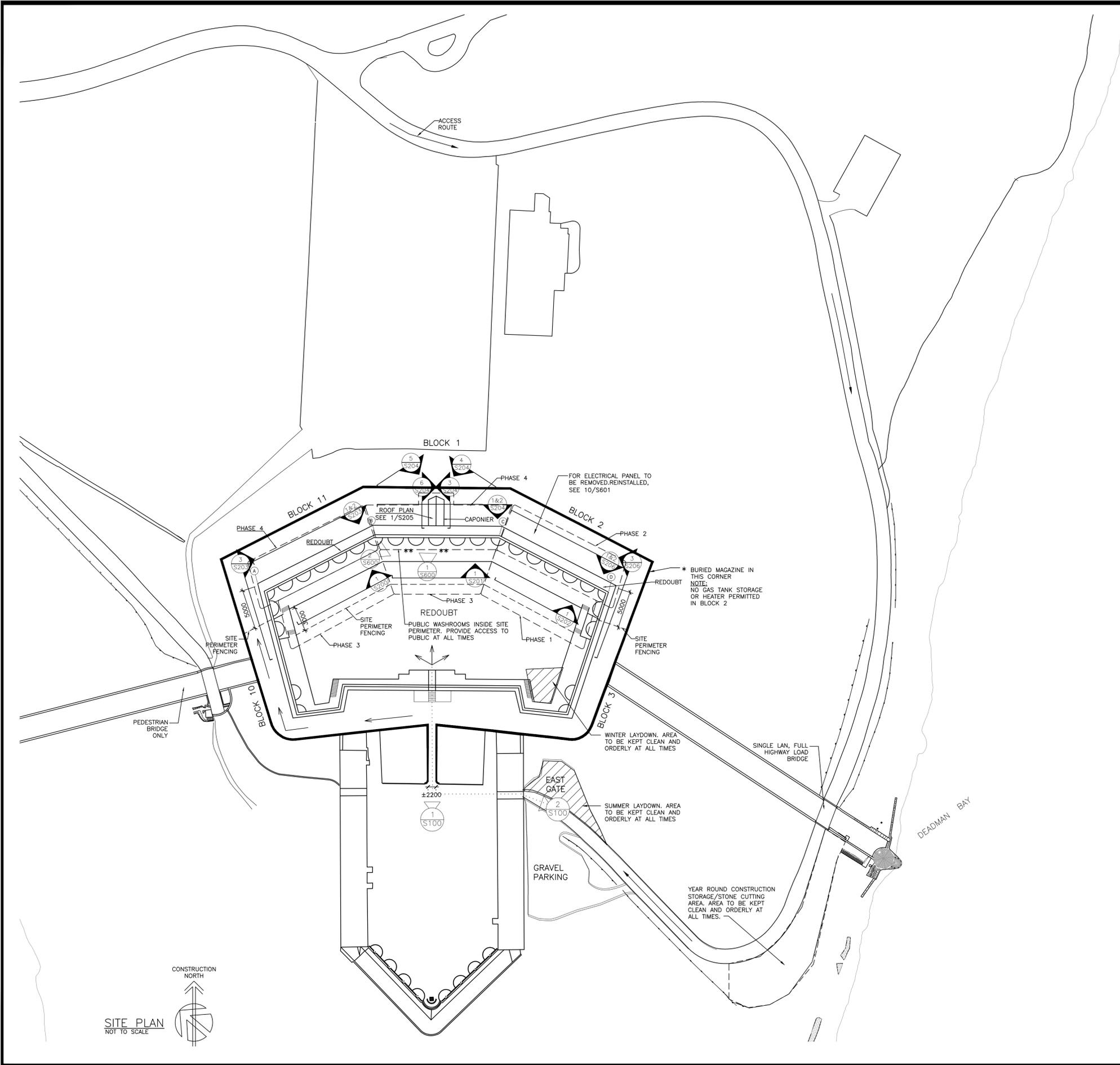
Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet
**FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2, & 11**

Drawing title / Titre du dessin
COVER PAGE

Plot Scale / Echelle 1:1 (A1 Plot Size)		
Drawn by / Dessine par	Date	
Field Recording by / Releve-Termin par N.M. & J.C.	Date 2022/05/23	
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Project No./ No. du projet 22216	Asset No.	Sheet No./ Feuille No. S000
Drawing Re No./No. du Dessin 22216-S000-ROO		



LEGEND:

- ** - PUBLIC WASHROOMS
- BLOCK 11 - SEE DRAWINGS S200 & S203
- BLOCK 1 - SEE DRAWINGS S201, S204 AND S205
- BLOCK 2 - SEE DRAWINGS S202 & 206
- ACCESS ROUTE
- DIRECTION OF ACCESS TO ENCLOSED SITE. COORDINATE WITH PCA AT ALL TIMES.
- DIRECTION OF SITE ACCESS AS THESE AREAS ARE OPEN TO THE PUBLIC. REFER TO SPECIFICATIONS FOR PROTOCOL WHEN DEALING WITH PUBLIC.
- ▨ CONTRACTOR STAGING AND STORAGE AREA

NOTES:

1. SCHEDULE:
 - 1. CONSTRUCTION YEAR 1: PHASE 1 - INTERIOR BLOCK 2
 - 2. CONSTRUCTION YEAR 2: PHASE 2 - EXTERIOR BLOCK 2
 - 3. CONSTRUCTION YEAR 3: PHASE 3 - INTERIOR BLOCKS 11&1
 - 4. CONSTRUCTION YEAR 4: PHASE 4 - EXTERIOR BLOCKS 11&1
2. FOR SAMPLE CORE OF STONE WALL SHOWING 1930'S CONCRETE GROUT SEE 12/S601

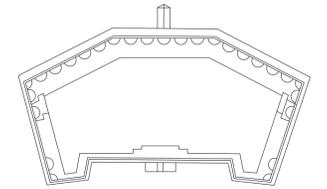
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KEY PLAN NOT TO SCALE

22216-S100 PLAN

DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

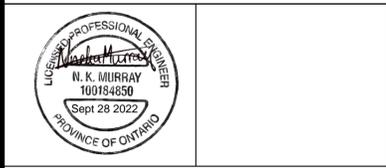
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SITE PLAN

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date C.P.

Field Recording by / Releve-Termin par Date N.M. & J.C. 2022/05/23

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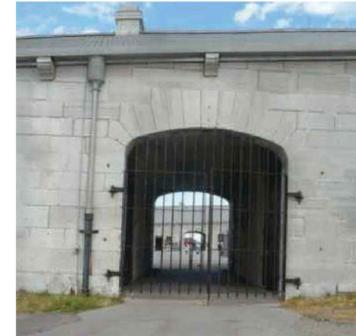
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Drawing Re No./No. du Dessin 22216-S100-ROO S100



ENTRANCE CUT 1 S100 NTS



EAST ENTRANCE 2 S100 NTS

CONSTRUCTION NORTH
S100
SITE PLAN NOT TO SCALE

A. GENERAL NOTES:

- CHECK ALL DIMENSIONS ON STRUCTURAL DRAWINGS. REPORT ANY INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE THESE DRAWINGS.
- BEFORE SUBMITTING BID FOR THE WORK, THE CONTRACTOR SHALL VISIT AND EXAMINE THE SITE. AN ARRANGED SITE VISIT FOR JOB SHOWING IS PART OF THE BID PACKAGE. IF THE CONTRACTOR WISHES TO VISIT THE SITE, ARRANGEMENTS MUST BE MADE WITH THE DEPARTMENTAL REPRESENTATIVE. MINIMUM 24 HOURS PRIOR TO VISITING THE SITE..
- CONSTRUCTION TO BE IN CONFORMANCE WITH DETAILS IDENTIFIED AS BEING "TYPICAL", UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- THE DEPARTMENTAL REPRESENTATIVE WILL CONDUCT PERIODIC INSPECTIONS AND PROVIDE CONSTRUCTION REVIEW REPORTS (CRR), OUTLINING PROGRESS OF WORK AS OUTLINED IN THE SPECIFICATIONS AND STATING WHETHER OR NOT WORK CONFIRMS TO THE CONTRACT DOCUMENTS.
- INDEPENDENT INSPECTION AND TESTING: THE DEPARTMENTAL REPRESENTATIVE WILL APPOINT AN INDEPENDENT INSPECTION AND TESTING AGENCY. THE COST OF INSPECTION SHALL BE PAID BY THE DEPARTMENTAL REPRESENTATIVE. WORK WILL BE INSPECTED AS REQUIRED BY THE DEPARTMENTAL REPRESENTATIVE TO DETERMINE CONFORMANCE TO THE DRAWINGS AND SPECIFICATIONS.
- MATERIALS AND WORKMANSHIP NOT CONFIRMING TO THE SPECIFICATIONS SHALL BE REJECTED.
- THESE DRAWINGS SHOW THE COMPLETED STRUCTURE, THE CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN, ERECTION, OPERATION, MAINTENANCE, AND REMOVAL OF TEMPORARY SUPPORTS, EXCAVATION SHORING, STRUCTURES, AND FACILITIES, AND THE DESIGN AND EXECUTION OF CONSTRUCTION METHODS REQUIRED IN THEIR USE.
- THE USE OF THESE DRAWINGS SHALL BE STRICTLY LIMITED TO THE INSTRUCTIONS IN THE REVISION BLOCK. BUILDING FROM THESE DRAWINGS SHALL PROCEED ONLY WHEN "ISSUED FOR CONSTRUCTION".
- THE SCOPE OF THE WORK DEPENDS ON THE SITE CONDITIONS, NOTIFY THE DEPARTMENTAL REPRESENTATIVE WHERE ON-SITE CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONTRACT DOCUMENTS.
- BEFORE ALL EXCAVATION, THE CONTRACTOR MUST VERIFY THE EXISTENCE OF PUBLIC UTILITY OR OTHER UNDERGROUND SERVICES AND THEIR ELEVATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DIVERTING OR RELOCATING OF CONDUITS, WATER, SEWER OR POWER LINES WHICH INTERFERE WITH THE EXECUTION OF THE WORKS AND OBTAINING THE AUTHORIZATION OF THE PROPER ORGANIZATION.
- INSTALLATION OF ALL POST-INSTALLED ANCHORS TO BE IN CONFORMANCE WITH MANUFACTURER'S DIRECTIONS, INCLUDING BUT NOT LIMITED TO: DRILL BIT SIZE AND TYPE, HOLE CLEANING, TEMPERATURE, CURING, AND TORQUE.
- DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE 2020.
- DESIGN AND CONSTRUCT GUARDS AND HANDRAILS IN ACCORDANCE WITH THE NATIONAL BUILDING CODE 2020.

2. MASONRY

- DO NOT USE MASONRY CEMENT. USE PORTLAND CEMENT AND LIME ONLY.
- ALL STONE SIZES TO BE MEASURED PRIOR TO ORDER. NEW STONES TO MATCH EXISTING STONE DIMENSIONS.
- INCLUDE FOR REMOVAL OF CAULKING, METAL NAILS OR PINS THAT MAY BE PRESENT IN THE JOINTS TO BE RAKED OUT.

3. JOINT SEALING

- APPLY SEALANT IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
- CLEAN BONDING JOINT SURFACES OR HARMFUL MATTER SUBSTANCES INCLUDING DUST, RUST, OIL, GREASE AND OTHER WATER WHICH MAY IMPAIR WORK.
- INSTALL COMPLETE WITH PRIMERS AS RECOMMENDED BY MANUFACTURER FOR SPECIFIED SUBSTRATE.
- APPLY BOND BREAKER TAPE WHERE REQUIRED TO MANUFACTURER'S INSTRUCTIONS. INSTALL JOINT FILLER TO ACHIEVE CORRECT JOINT DEPTH AND SHAPE, WITH APPROXIMATELY 30% COMPRESSION SHAPE.
- FORM SURFACE OF SEALANT WITH FULL BEAD, SMOOTH, FREE FROM RIDGES, WRINKLES, SAGS, AIR POCKETS, EMBEDDED SURFACES BEFORE SKINNING BEGINS TO GIVE SLIGHTLY CONCAVE SHAPE.
- REMOVE EXCESS COMPOUND PROMPTLY AS WORK PROGRESSES AND UPON COMPLETION.
- CURE SEALANT IN ACCORDANCE WITH SEALANT MANUFACTURER'S INSTRUCTIONS.

B. MATERIAL AND DESIGN DATA

UNLESS NOTED OTHERWISE ON DRAWINGS OR ON SPECIFICATIONS, THE MATERIALS LISTED BELOW APPLY TO THIS PROJECT AND THE DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS, ALL STANDARDS TO LATEST EDITION, UNLESS NOTED.

REFER TO SPECIFICATIONS FOR ALL OTHER APPLICABLE STANDARDS.

MATERIAL	DESIGN DATA	STANDARD
MASONRY MATERIALS		
ABOVE GRADE MORTAR:	TYPE "O" U/N.	CAN/CSA-A179-14
MASONRY ANCHORS		
STAINLESS STEEL ANCHORS:	TYPE 304	
ADHESIVE ANCHORS:	TYPE 304	ASTM A666
SEALANTS		
CAULKING/SEALANTS:	N/A	ASTM C920-18

C. CODES AND STANDARDS

DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE 2020 AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.

REFER TO SPECIFICATIONS FOR ALL OTHER APPLICABLE STANDARDS.

GENERAL	CODES / STANDARDS
MASONRY CONSTRUCTION FOR BUILDINGS:	CSA S304.1-14
CONNECTORS FOR MASONRY:	CAN/CSA-A370-14

MASONRY REPAIR NOTES:

- 100% RAKE OUT AND REPOINTING OF ALL STONE MASONRY WALLS INCLUDED IN THE CONTRACT, INCLUDING REMOVAL OF CAULKING IN THE JOINTS, UNLESS INDICATED OTHERWISE ON THE ELEVATIONS. RAKING OUT AND REPOINTING AS PER 1/5400 & 2/5400. FOR APPROX COURSING DETAILS SEE ELEVATIONS. CONTRACTOR RESPONSIBLE FOR VERIFYING COURSING AND PROVIDING UPDATED RECORD DRAWINGS. AS THE WALLS ARE VISIBLE TO THE CONTRACTORS DURING THE BID PERIOD, NO CLAIM FOR ADDITION OF WORK WILL BE ENTERAINED DUE TO ANY DISCREPANCY BETWEEN ACTUAL CONDITIONS AND WHAT IS DEPICTED ON THE DRAWINGS.
- FOR STONE REPLACEMENT ASSUMED DEPTH IS SHOWN ON 1/5400. STONE SIZE SHOWN ON ELEVATIONS ARE APPROX. FOR PRICING PURPOSE ONLY. STONE SIZE TO BE MEASURED PRIOR TO ORDER. ALL REPLACEMENT STONES TO MATCH EXISTING.
- FOR ROUNDED JOINTS, WHERE STONE ARRIS IS WEATHERED FINISH PART JOINTS AS PER 16/5400.
- INCLUDE FOR SOUNDING ALL STONES AFTER JOINTS ARE RAKED OUT. NOTIFY DEPARTMENTAL REPRESENTATIVE IF LOOSE STONE, FACEBEDDED STONE, OR FRACTURED STONE, NOT INDICATED ON DRAWING, ARE IDENTIFIED. TYPICAL FOR ALL ELEVATIONS.
- EXISTING STONE TYPE : LIMESTONE
- AFTER MASONRY RESTORATION IS COMPLETE, CLEAN STONE AS SPECIFIED. NOTIFY DEPARTMENTAL REPRESENTATIVE FOR FINAL INSPECTION AFTER CLEANING IS COMPLETE.
- REMOVE EXISTING CAULKING OR MORTAR AROUND WINDOW FRAMES AND BETWEEN FRAMES AND SASHES, PRIOR TO RAKING OUT JOINTS, MORTAR OR RECALCUL AFTER ALL MASONRY RESTORATION IS COMPLETE, SEE 12/5400.
- NEW FINISH POINT MORTAR COLOR TO MATCH THE EXISTING MORTAR ON BLOCKS 6&7 (INTERIOR SOUTH ELEVATION). PREPARE MOCK-UP SAMPLES FOR APPROVAL BY DEPARTMENTAL REPRESENTATIVE AS PER SPECIFICATIONS. FOR STANDARD FINISH AND QUALITY OF FINISH POINT SEE DETAIL 2/5400.
- ANCHOR ALL REINSTALLED STONE TO BACK UP MASONRY AS PER 10/5400 OR 11/5400.
- DUTCHMAN REPAIRS: WHERE A SINGLE DUTCHMAN REPAIR EXCEEDS ONE THIRD OF THE STONE HEIGHT, OR ONE HALF OF THE STONE WIDTH, REPLACE WITH FULL FACE DUTCHMAN REPAIR. WHERE THERE WILL BE TWO OR MORE DUTCHMAN ON ONE STONE FACE, REVIEW WITH DEPARTMENTAL REP. PRIOR TO PROCEEDING WITH DUTCHMAN REPAIRS.
- AT ROUNDED CORNERS OF STONE JOINTS, REFER TO DETAIL 16/5400, FOR GUIDE AS TO WHEN THE CORNER WILL BE POINTED, OR REPAIRED BY DUTCHMAN OR RESTORATION MORTAR REPAIR.
- FOR FINISHING ON ALL NEW DUTCHMAN REPAIRS AND NEW STONES, SEE DRAWING S401, UNLESS NOTED. FOR NEW DUTCHMAN REPAIRS AND NEW STONE DEMARCATON SEE 3/5401.
- AT LOCATION OF ALL STONE REMOVALS, FOR STONE REPLACEMENT, FRACTURE REPAIRS, DUTCHMAN REPAIRS, AND TO INSTALL ANCHORS, USE THE FOLLOWING PROCEDURE:
 - ONCE EXISTING STONE IS REMOVED, REMOVE ALL LOOSE AND DETERIORATED MORTAR, AND LOOSE MATERIAL IN THE WALL CORE BACK TO FIRM MATERIAL. NOTIFY DEPARTMENTAL REPRESENTATIVE FOR INSPECTION OF WALL CORE TO DETERMINE IF WORK MUST BE EXPANDED.
 - ONCE APPROVED, CONSOLIDATE ALL VOIDS, REBUILD WALL CORE WITH SMALLER STONES AND MORTAR. INSTALL ANCHORS AS REQUIRED. NOTIFY DEPARTMENTAL REPRESENTATIVE FOR INSPECTION.
 - INSTALL NEW STONE/REPAIRED EXISTING STONE/DUTCHMAN REPAIR.

SITE-SPECIFIC NOTES:

- ACCESS TO THE SITE IS RESTRICTED DUE TO SPACE AND WEIGHT CONSTRAINTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL DIMENSIONS, CLEARANCES AND CONDITIONS ALONG THE ACCESS ROUTES PRIOR TO MOBILIZATION.
- INSTALL SITE PERIMETER FENCING AS NOTED ON PLANS.
- EXISTING PUBLIC WASHROOMS ARE NOT PERMITTED FOR CONTRACTOR USE.
- THE EXACT LOCATION OF THE CONSTRUCTION STAGING AND STORAGE AREA, INCLUDING THE SITE TRAILER, IS SUBJECT TO THE APPROVAL OF DEPARTMENTAL REPRESENTATIVE. THE AREA USED FOR STAGING AND STORAGE SHALL BE MINIMIZED.
- CONTRACTOR TO PROVIDE HOARDED ACCESS TO WASHROOMS FOR PUBLIC TO ACCESS AT ALL TIMES.
- CONTRACTOR RESPONSIBLE FOR PROTECTING THE ASPHALTIC WATERPROOFING MEMBRANE ON THE REDOUBT TERREPLEIN.
- ACCESS ROADS ARE NOT FOR THE CONTRACTOR'S SOLE USE. THE CONTRACTOR SHALL MAINTAIN AND ALLOW ACCESS BY OTHERS. ROADS ARE NOT TO BE OBSTRUCTED AT ANY TIME. THE CONTRACTOR SHALL MAKE GOOD ALL DAMAGES TO ROADWAYS AND/OR BRIDGES AND ENTRANCES DUE TO USE OF THE SITE.
- VEHICLE ACCESS TO SITE NOT PERMITTED AFTER 9:30AM DURING OPERATION SEASON UNLESS OTHERWISE AUTHORIZED BY DEPARTMENTAL REPRESENTATIVE.
- CANNONS ARE FIRED AT THE SITE DURING THE OPERATING SEASONS (APPROXIMATE TIMES ARE 12 NOON, 3:10PM AND 4:30PM). MUSKETS ARE DISCHARGED ON A REGULAR BASIS.
- CAREFULLY RECORD AND PHOTOGRAPH LOCATION OF ALL WALL ATTACHMENTS INCLUDING LIGHT FIXTURES, PIPING, CONTROL BOXES AND SIGNS. SUBMIT THIS INFORMATION TO DEPARTMENTAL REPRESENTATIVE. GET APPROVAL FROM DEPARTMENTAL REPRESENTATIVE TO REMOVE FIXTURES. REMOVE FROM WALL, STORE AND PROTECT FOR DURATION OF CONSTRUCTION AND RESTORE ON SITE AFTER CONTRACT IS COMPLETE. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REPAIRING ALL DAMAGES CAUSED BY CONSTRUCTION OPERATIONS.
- CONSTRUCT WINTER PROTECTION ENCLOSURE, AND PROVIDE HEATING AS REQUIRED TO COMPLETE THE WORK WITHIN THE REQUIREMENTS OF THE PROJECT SCHEDULE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING SNOW FROM THE SITE.
- ALL SIGNAGE AND MISCELLANEOUS FURNITURE INSIDE THE CONSTRUCTION AREA TO BE PROTECTED.
- ALL LOOP HOLES TO BE COVERED TO PROTECT THE INTERIOR FROM DUST, FOR DURATION OF WORK.
- PROTECT THE PARADE SUBSURFACE DRAINAGE SYSTEM. ENSURE MORTAR AND STONE DEBRIS IS NOT WASHED INTO STORM DRAIN.

MASONRY REPAIR PROCEDURES:

- SAWCUT AND RAKE OUT DEFECTIVE MORTAR IN ALL JOINTS. CLEAN OUT JOINTS, SHIM LOOSE STONE AS REQUIRED. REQUEST INSPECTION BY DEPARTMENTAL REPRESENTATIVE.
- INSPECT WALL TO IDENTIFY ALL STONE REPAIRS WITH DEPARTMENTAL REPRESENTATIVE.
- COMPLETE BACKPOINTING IN LAYERS, IN ALL AREAS NOT IDENTIFIED FOR REMOVALS OR REPAIRS, ALLOWING FOR DEPARTMENTAL REPRESENTATIVE INSPECTIONS AS NOTED IN SPECIFICATION.
- DO ALL STONE REMOVALS, WALL CONSOLIDATION AND RESETTING OF STONE. COMPLETE ALL STONE REPAIRS BACKPOINT ALL REMAINING JOINTS.
- GROUT MASONRY WALLS, WHERE REQUIRED AND APPROVED BY DEPARTMENTAL REPRESENTATIVE.
- DO FINISHPOINTING, ONLY WHEN ALL OTHER WORK IS COMPLETE.
- SKYWARD FACING JOINTS IN CAPSTONES INCLUDED IN SCOPE. INSTALL CHINKING IN JOINTS AS PER 13/5400.



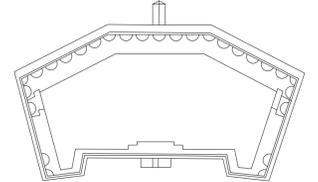
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KEY PLAN
NOT TO SCALE

22216-S101 GENERAL NOTES

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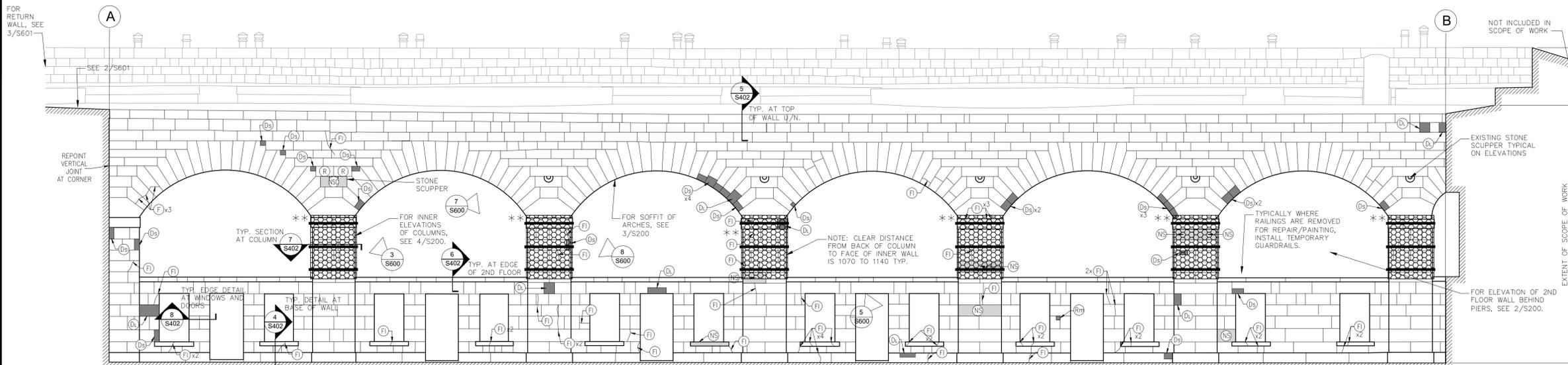
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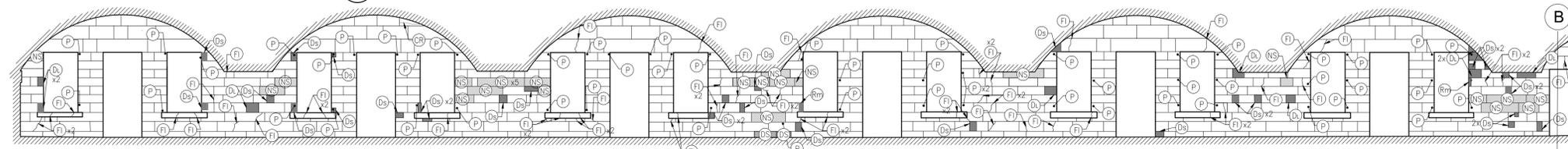
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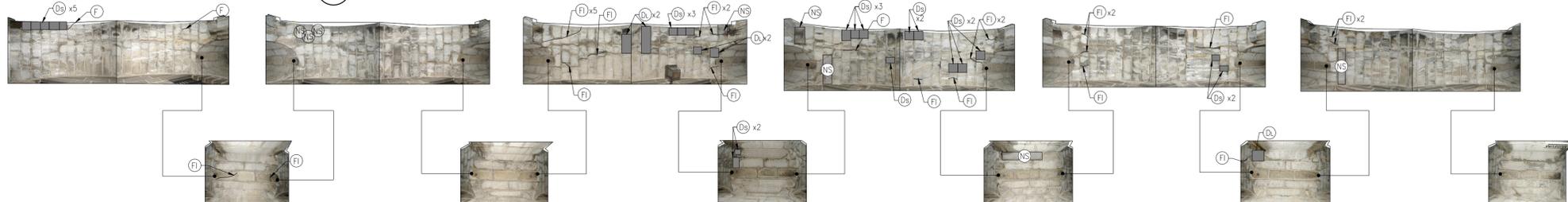
BLOCK 11 INTERIOR ELEVATION COLUMN 1 COLUMN 2 COLUMN 3 COLUMN 4 COLUMN 5 COLUMN 6

SCALE: 1:75



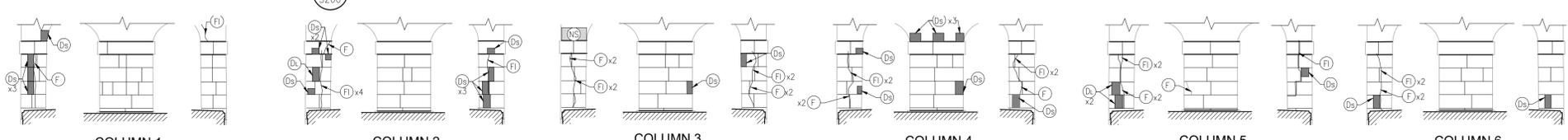
BLOCK 11 2ND FLOOR INTERIOR ELEVATIONS

SCALE: 1:75



BLOCK 11 UNDERSIDE OF ARCHES

SCALE: 1:75



BLOCK 11 INTERIOR ELEVATIONS OF COLUMNS

SCALE: 1:75

LEGEND OF REPAIR:

- (CR) CRACK REPAIR (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- (RM) STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
- (F) REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE (R)
- (FI) REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- (DL) REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING, AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- (Ds) REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING, AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- (DE) REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm. SEE DETAIL 8/S400.
- (Dc) DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE (Ds) - FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- (R) REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- (CL) CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- (NS) REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE. RESET AND ANCHOR AS FOR LEGEND NOTE (R). FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- (NSC) NEW STONE WITH CARVED ELEMENT, SEE (NS)
- (P) STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER (RM) OR PLUG DUTCHMAN.
- (DSc) DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- (RS) RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- (SH) SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S200:
1. (CR) ALLOW FOR 10 ADDITIONAL REPAIRS.
 2. (RM) INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 10 ADDITIONAL REPAIRS.
 3. (F) ALLOW FOR 15 ADDITIONAL REPAIRS.
 4. (FI) ALLOW FOR 30 ADDITIONAL REPAIRS.
 5. (DL) ALLOW FOR ADDITIONAL 10m² OF LARGE DUTCHMAN REPAIR.
 6. (Ds) ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
 7. (DE) ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR
 8. (Dc) ALLOW FOR 0.5m² ADDITIONAL REPAIRS
 9. (R) FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09,10 AND 11/S400.
 10. (NS) ALLOW FOR AN ADDITIONAL 4m² ADDITIONAL REPAIRS.
 11. (NSC) ALLOW FOR AN ADDITIONAL 0.5m² OF ADDITIONAL REPLACEMENT
 12. (P) ALLOW FOR 10 INSERTS TO BE REMOVED.
 13. (DSc) ALLOW FOR 5m² OF DESCALING.
 14. (RS) ALLOW FOR 5m² OF RESURFACING
 15. (SH) FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.
- REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.
- ** DENOTES COLUMNS THAT ARE STRAPPED WITH PLYWOOD, SCAFFOLD MESH AND RATCHET TIE-DOWNS. STRAPPING TO BE REMOVED TO FACILITATE MASONRY REPAIRS. RATCHET TIE-DOWNS TO BE GIVEN TO THE DEPARTMENTAL REPRESENTATIVE ONCE REMOVED.

Parcs Canada Parks Canada

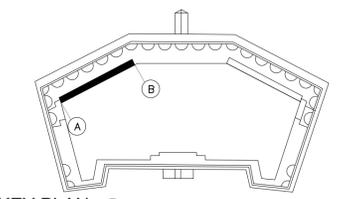
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22216

CRAIG SIMS HERITAGE BUILDING CONSULTANT



KEY PLAN NOT TO SCALE

22216-S200 BLOCK 11 INTERIOR ELEVATION
DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

(A)	A Detail number	A Numero de detail
(B)	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres

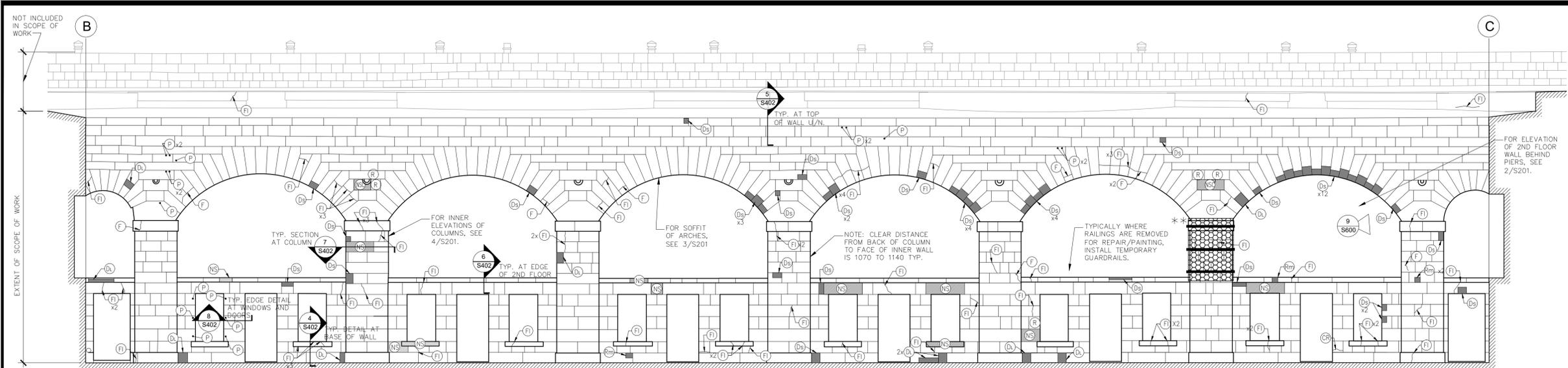
Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

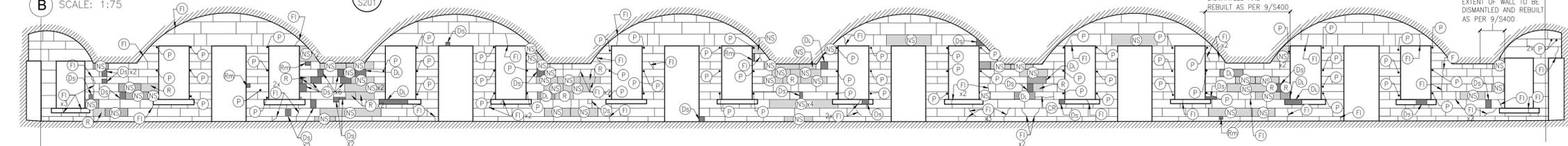
Drawing title / Titre du dessin

BLOCK 11 INTERIOR ELEVATION (PHASE 3)

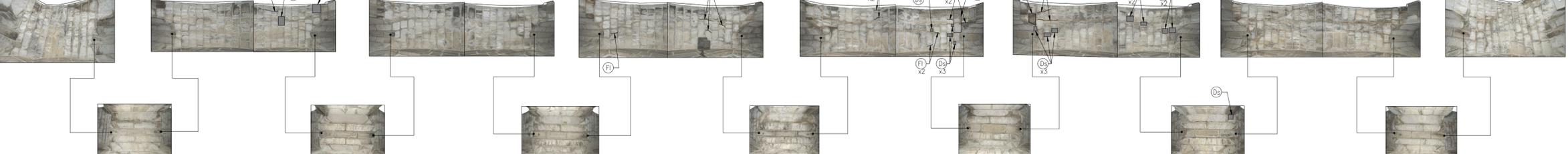
Plot Scale / Echelle		
1:1 (A1 Plot Size)		
Drawn by/ Dessine par	Date	
C.P.		
Field Recording by / Releve-Termin par	Date	
N.M. & J.C.	2022/05/23	
Approved by / Approuve par	Date	
N.M.	2022/09/28	
Checked by/ Verifie par	Date	
J.C.	2022/09/28	
Project No./ No. du projet	Asset No.	Sheet No./ Feuille No.
22216		S200
Drawing Re No./No. du Dessin		
22216-S200-ROO		



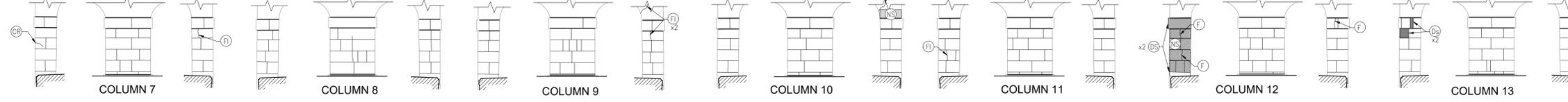
BLOCK 1 INTERIOR ELEVATION
SCALE: 1:75



BLOCK 1 2ND FLOOR INTERIOR ELEVATIONS
SCALE: 1:75



BLOCK 1 UNDERSIDE OF ARCHES
SCALE: 1:75



BLOCK 1 INTERIOR ELEVATIONS OF COLUMNS
SCALE: 1:75

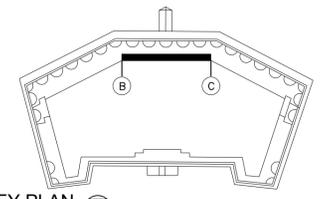
LEGEND OF REPAIR:

- (CR)** CRACK REPAIR (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- (RM)** STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
- (F)** REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE (R)
- (FI)** REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- (DL)** REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING, AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- (DS)** REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING, AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- (DE)** REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm. SEE DETAIL 8/S400.
- (DC)** DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE (DS) - FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- (R)** REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- (CL)** CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- (NS)** REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE. RESET AND ANCHOR AS FOR LEGEND NOTE (R). FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- (NSC)** NEW STONE WITH CARVED ELEMENT, SEE (NS)
- (P)** STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER (RM) OR PLUG DUTCHMAN.
- (DSC)** DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- (RS)** RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- (SH)** SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S201:
1. (CR) ALLOW FOR 10 ADDITIONAL REPAIRS.
 2. (RM) INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 10 ADDITIONAL REPAIRS.
 3. (F) ALLOW FOR 10 ADDITIONAL REPAIRS.
 4. (FI) ALLOW FOR 30 ADDITIONAL REPAIRS.
 5. (DL) ALLOW FOR ADDITIONAL 9m² OF LARGE DUTCHMAN REPAIR.
 6. (DS) ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
 7. (DE) ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR
 8. (DC) ALLOW FOR 0.5m² ADDITIONAL REPAIRS
 9. (R) FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09,10 AND 11/S400.
 10. (NS) ALLOW FOR AN ADDITIONAL 7m² ADDITIONAL REPLACEMENT.
 11. (NSC) ALLOW FOR AN ADDITIONAL 0.5m² OF ADDITIONAL REPLACEMENT
 12. (P) ALLOW FOR 10 INSERTS TO BE REMOVED.
 13. (DSC) ALLOW FOR 5m² OF DESCALING.
 14. (RS) ALLOW FOR 5m² OF RESURFACING
 15. (SH) FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.
- REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.
- ** DENOTES COLUMNS THAT ARE STRAPPED WITH PLYWOOD, SCAFFOLD MESH AND RATCHET TIE-DOWNS. STRAPPING TO BE REMOVED TO FACILITATE MASONRY REPAIRS. RATCHET TIE-DOWNS TO BE GIVEN TO THE DEPARTMENTAL REPRESENTATIVE ONCE REMOVED.

CRAIG SIMS HERITAGE BUILDING CONSULTANT



KEY PLAN
NOT TO SCALE

22216-S201 BLOCK 11 INTERIOR ELEVATION
DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS				
NO.	DATE	DESCRIPTION	Drawn by	Approved

Linear dimensions in millimeters		Dimensions lineaires en millimetres	
(A)	A Detail number	A	Numero de detail
(B)	B Sheet number	B	Sur feuille numero



Project title / Titre du projet
FORT HENRY 2023 MASONRY REHABILITATION

REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin
BLOCK 1 INTERIOR ELEVATION (PHASE 3)

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par
C.P.

Field Recording by / Releve-Termin par
N.M. & J.C.

Approved by / Approuve par
N.M.

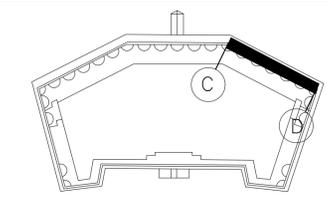
Checked by/ Verifie par
J.C.

Project No./ No. du projet
22216

Asset No.
22216-S201-ROO

Sheet No./ Feuille No.
S201

CRAIG SIMS
HERITAGE BUILDING CONSULTANT



KEY PLAN
NOT TO SCALE

22216-S202 BLOCK 2 INTERIOR ELEVATION

DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

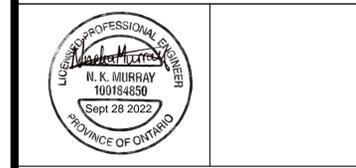
NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

NO.	DATE	DESCRIPTION	Drawn by	Approved

REVISIONS

A	A Detail number	A Numero de detail
B <td>B Sheet number</td> <td>B Sur feuille numero</td>	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin

BLOCK 2 INTERIOR ELEVATION
(PHASE 1)

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par: C.P. Date: 2022/05/23

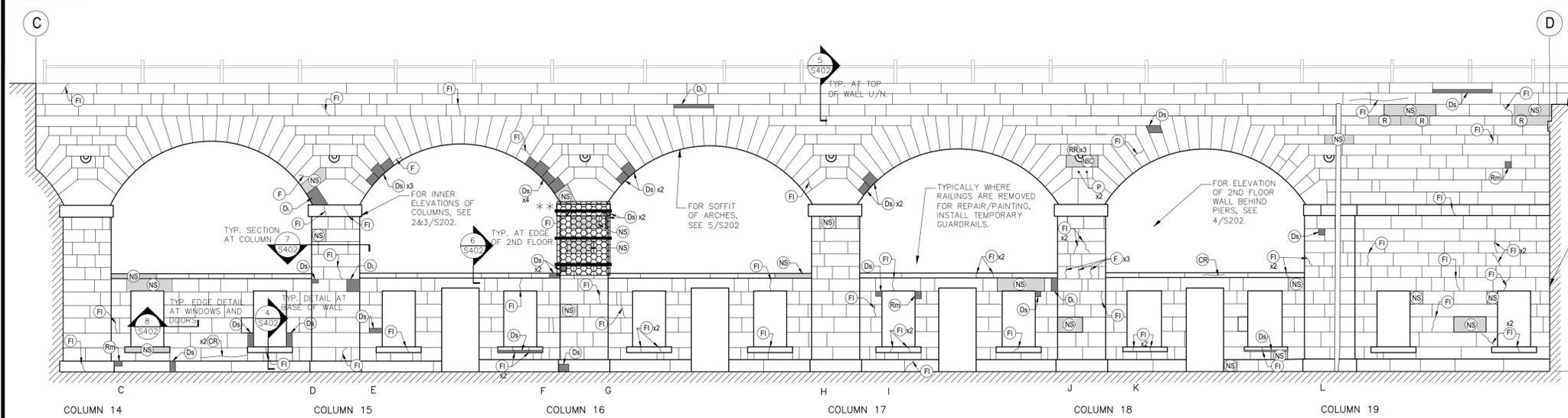
Field Recording by / Relevé-Termin par: N.M. & J.C. Date: 2022/09/28

Approved by / Approuve par: N.M. Date: 2022/09/28

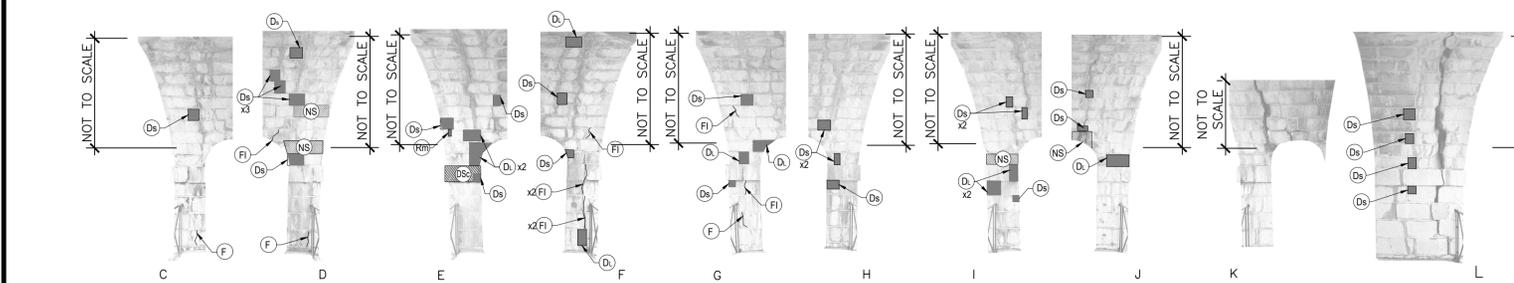
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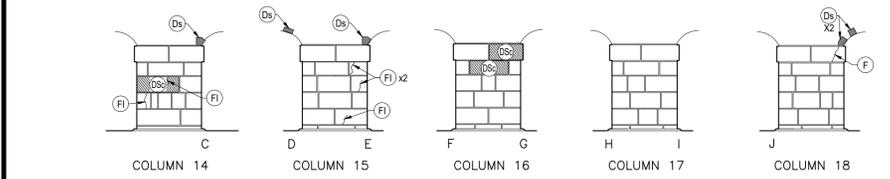
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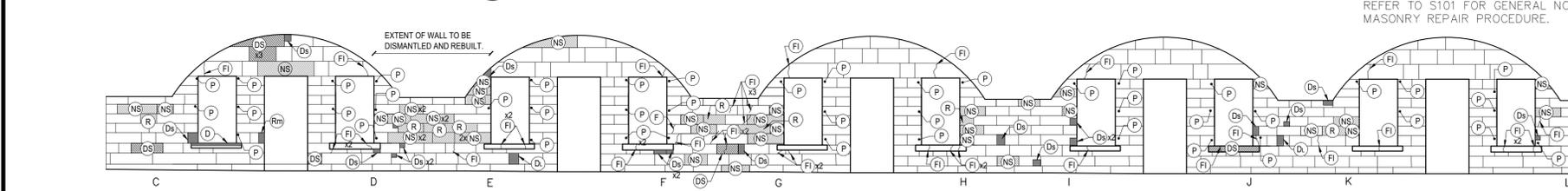
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SCALE: 1:75



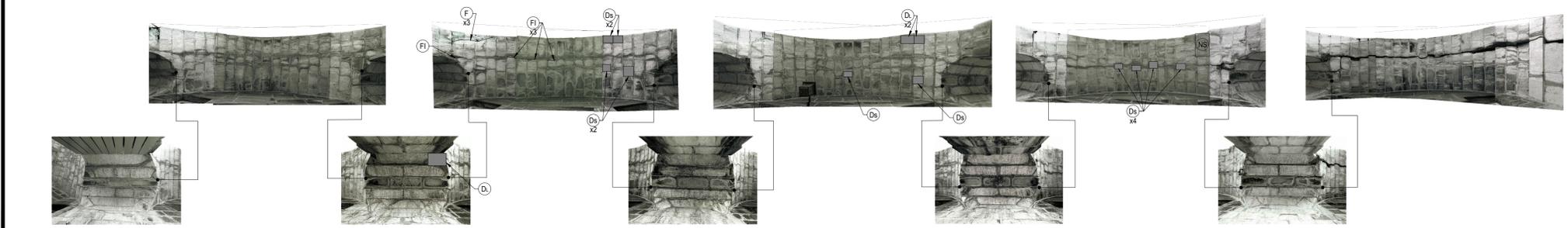
BLOCK 2 SIDE ELEVATIONS OF COLUMNS
SCALE: 1:75



BLOCK 2 INTERIOR ELEVATIONS OF COLUMNS
SCALE: 1:75



BLOCK 2 ARCADE GALLERY ELEVATIONS
SCALE: 1:75



BLOCK 2 UNDERSIDE OF ARCADE GALLERY
SCALE: 1:75

ADDITIONAL REPAIRS:

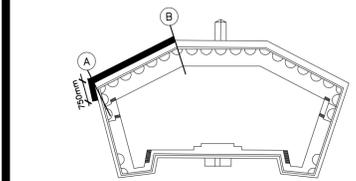
FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S202:

1. CR ALLOW FOR 10 ADDITIONAL REPAIRS.
2. RM INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 10 ADDITIONAL REPAIRS.
3. F ALLOW FOR 10 ADDITIONAL REPAIRS.
4. FI ALLOW FOR 25 ADDITIONAL REPAIRS.
5. DL ALLOW FOR ADDITIONAL 7.5m² OF LARGE DUTCHMAN REPAIR.
6. DE ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
7. DC ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR.
8. C ALLOW FOR 0.5m² ADDITIONAL REPAIRS
9. R FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09,10 AND 11/S400.
10. NS ALLOW FOR AN ADDITIONAL 5m² ADDITIONAL REPLACEMENT.
11. NSC ALLOW FOR AN ADDITIONAL 0.5m² OF ADDITIONAL REPLACEMENT
12. P ALLOW FOR 5 INSERTS TO BE REMOVED.
13. DSc ALLOW FOR 5m² OF DESCALING.
14. RS ALLOW FOR 5m² OF RESURFACING
15. SH FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.

REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.

LEGEND OF REPAIR:

- CR CRACK REPAIR (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
 - RM STONE RESTORATION SMALL CHIPS/VOIDS/ EXISTING PATCHES/ MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
 - F REPAIR FRACTURED STONE: REMOVE DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE (R)
 - FI REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
 - DL REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING, AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
 - DE REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING, AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
 - DC DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE (Ds). FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
 - R REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
 - CL CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE EDGES AND FACE OF STONE AS PER SPECIFICATIONS.
 - NS REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE, RESET AND ANCHOR AS FOR LEGEND NOTE (R). FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
 - NSC NEW STONE WITH CARVED ELEMENT, SEE (NS)
 - P STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER (RM) OR PLUG DUTCHMAN.
 - DSc DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
 - RS RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
 - SH SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.
- ** DENOTES COLUMNS THAT ARE STRAPPED WITH PLYWOOD, SCAFFOLD MESH AND RATCHET TIE-DOWNS. STRAPPING TO BE REMOVED TO FACILITATE MASONRY REPAIRS. RATCHET TIE-DOWNS TO BE GIVEN TO THE DEPARTMENTAL REPRESENTATIVE ONCE REMOVED.



KEY PLAN NOT TO SCALE

22216-S203 BLOCK 11 EXTERIOR ELEVATION

DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS				
NO.	DATE	DESCRIPTION	Drawn by	Approved

REVISIONS				
NO.	DATE	DESCRIPTION	Drawn by	Approved

Linear dimensions in millimeters	Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

BLOCK 11 EXTERIOR ELEVATION
(PHASE 4)

Plot Scale / Echelle	1:1 (A1 Plot Size)
Drawn by/ Dessine par	Date
C.P.	

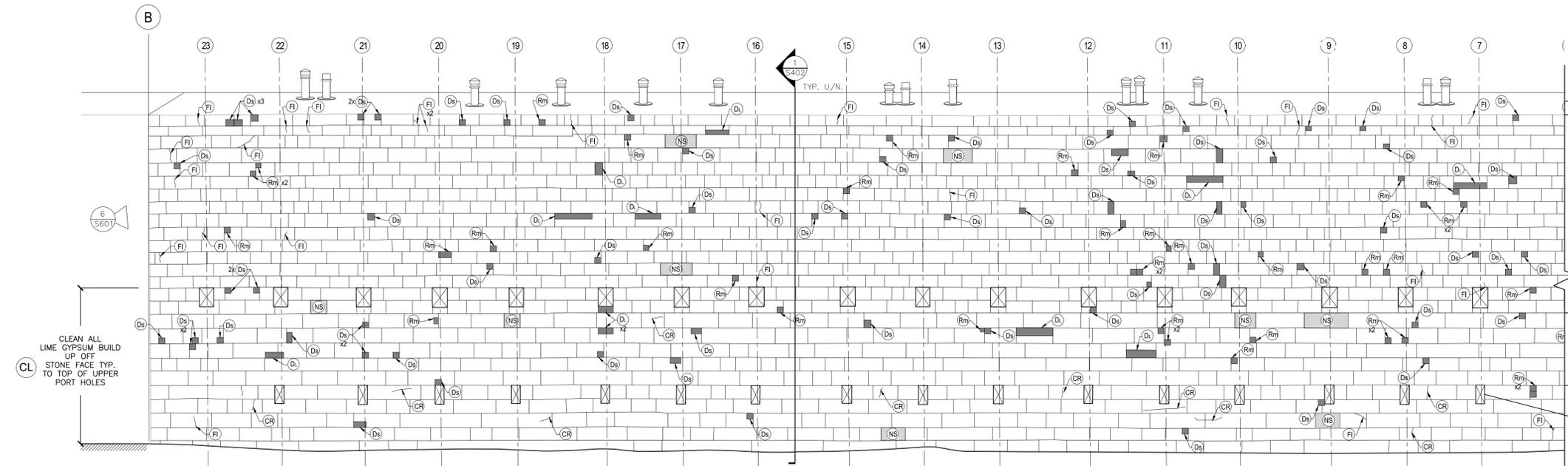
Field Recording by / Relevé-Terminé par	Date
N.M. & J.C.	2022/05/23

Approved by / Approuvé par	Date
N.M.	2022/09/28

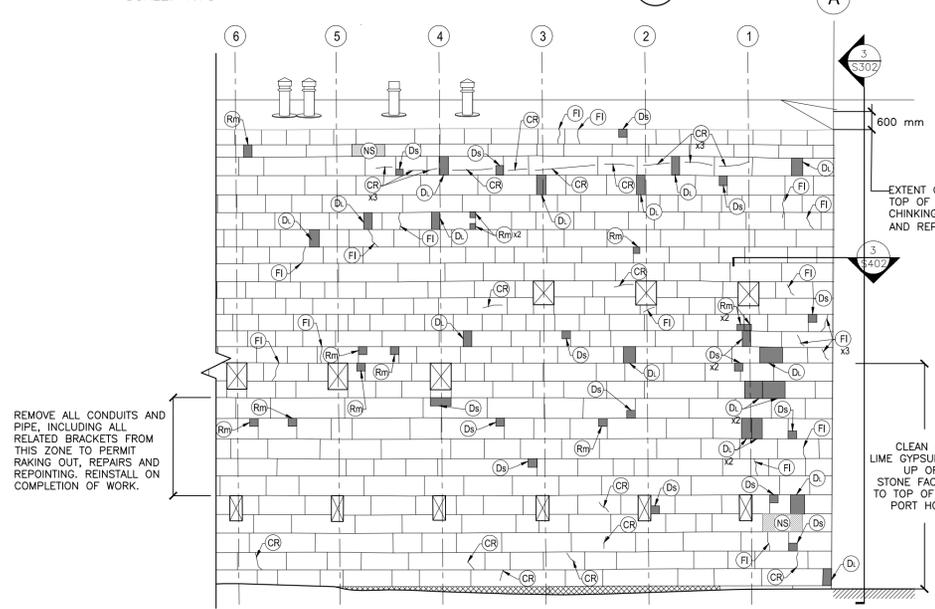
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J.C.	2022/09/28

Project No./ No. du projet	Asset No.	Sheet No./ Feuille No.
22216		S203

Drawing Re No./No. du Dessin	22216-S203-ROO
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BLOCK 11 EXTERIOR ELEVATION - EAST SIDE
SCALE: 1:75



BLOCK 11 EXTERIOR ELEVATION - WEST SIDE
SCALE: 1:75

LEGEND OF REPAIR:

- CR** CRACK REPAIR (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- RM** STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
- F** REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE (R)
- FI** REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- DL** REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING. AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- DS** REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING. AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- DE** REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm, SEE DETAIL 8/S400.
- DC** DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE (DS) - FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- R** REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- CL** CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- NS** REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE. RESET AND ANCHOR AS FOR LEGEND NOTE (R). FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- NSC** NEW STONE WITH CARVED ELEMENT, SEE (NS)
- P** STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER (RM) OR PLUG DUTCHMAN.
- DSC** DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- RS** RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- SH** SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S203:
- CR** ALLOW FOR 15 ADDITIONAL REPAIRS.
 - RM** INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS. ALLOW FOR 15 ADDITIONAL REPAIRS.
 - F** ALLOW FOR 5 ADDITIONAL REPAIRS.
 - FI** ALLOW FOR 10 ADDITIONAL REPAIRS.
 - DL** ALLOW FOR ADDITIONAL 9m² OF LARGE DUTCHMAN REPAIR.
 - DS** ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
 - DE** ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR
 - DC** ALLOW FOR 0.5m² ADDITIONAL REPAIRS
 - R** FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09, 10 AND 11/S400.
 - NS** ALLOW FOR AN ADDITIONAL 2m² ADDITIONAL REPAIRS.
 - P** ALLOW FOR 5 INSERTS TO BE REMOVED.
 - DSC** ALLOW FOR 5m² OF DESCALING.
 - RS** ALLOW FOR 5m² OF RESURFACING
 - SH** FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.

EXTENT OF WORK ON TOP OF REDOUBT WALL. CHINKING TO BE REMOVED AND REPLACED, SEE 1/S402. DEEP RAKE OUT, BACKPOINT OF EXISTING MORTAR JOINTS, BEFORE CHINKING.

REMOVE ALL CONDUITS AND PIPE, INCLUDING ALL RELATED BRACKETS FROM THIS ZONE TO PERMIT RAKING OUT, REPAIRS AND REPOINTING. REINSTALL ON COMPLETION OF WORK.

EXISTING GUN HOLES, SEE 6/S601.

EXISTING CONTROL JOINT. CUT AND REMOVE SEALANT. REPLACE WITH POINTING MORTAR. INCLUDE FOR 8-FI'S TO REPAIR STONES CUT FOR CONTROL JOINT.

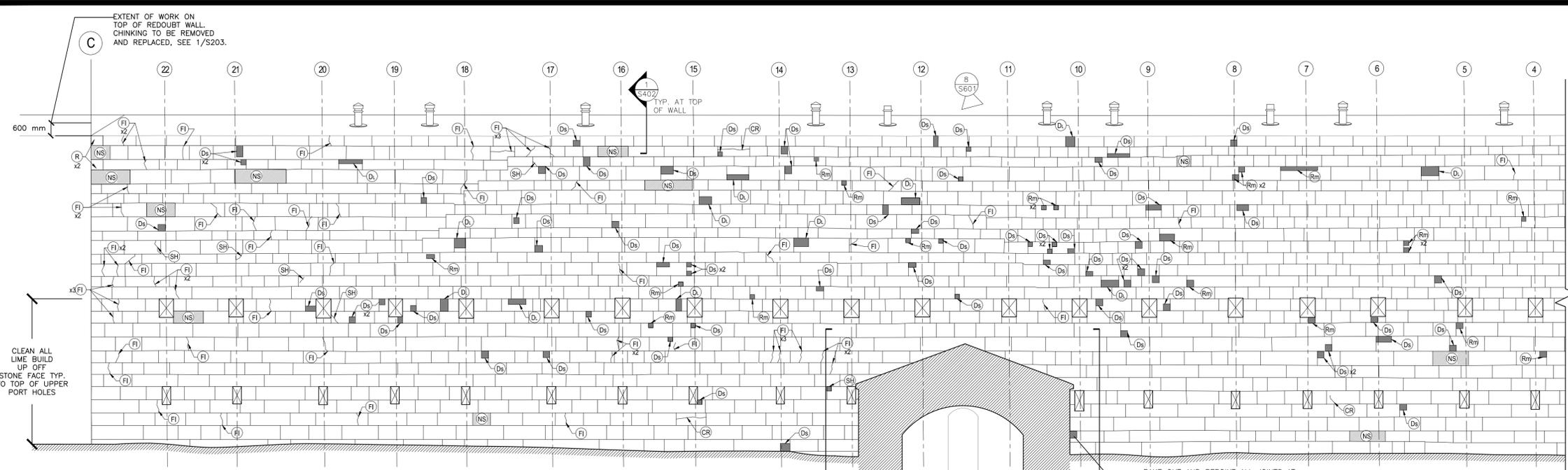
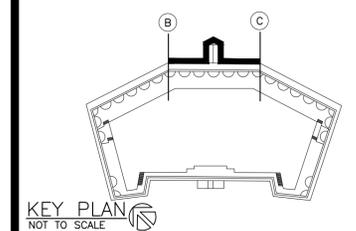
INSTALL GROUTED ANCHORS AT 400 O.C. IN ALTERNATE DIRECTIONS, SEE DETAIL 3/S402.

INCLUDE TO REPLACE 5 LARGE QUIN STONES WHICH WERE CUT TO INSTALL CONTROL JOINT, WITH NEW LIMESTONE QUINOS TO MATCH EXISTING.

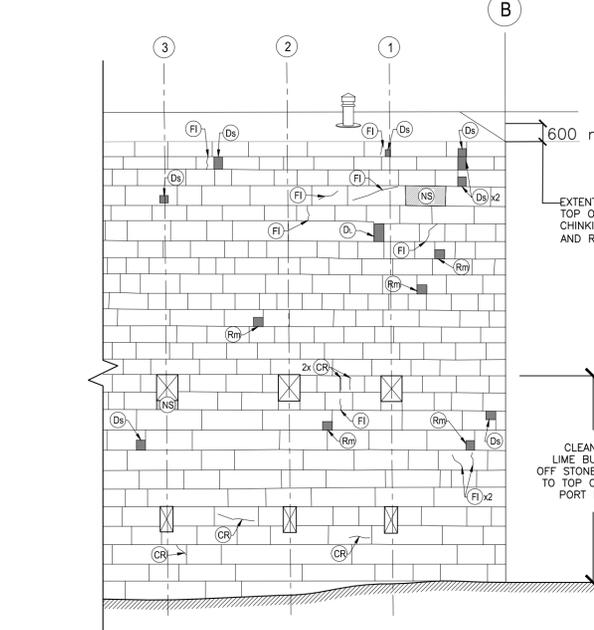
EXTENT OF WORK ON TOP OF REDOUBT WALL. CHINKING TO BE REMOVED AND REPLACED, SEE 1/S203.

CLEAN ALL LIME GYPSUM BUILD UP OFF STONE FACE TYP. TO TOP OF UPPER PORT HOLES

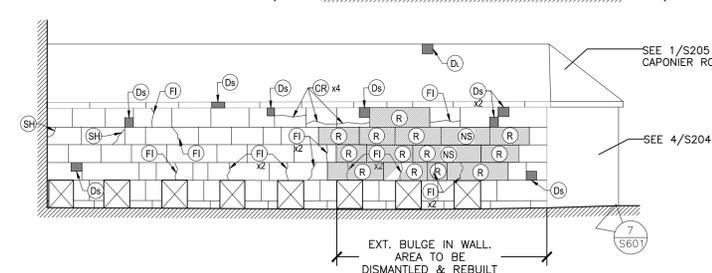
CRAIG SIMS
HERITAGE BUILDING CONSULTANT



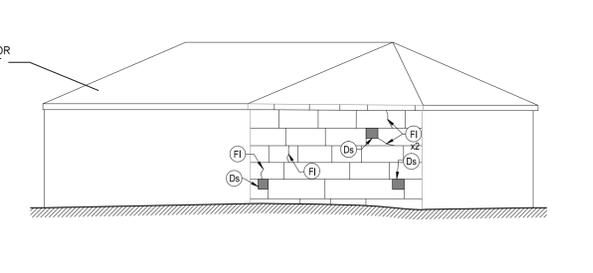
BLOCK 1 EXTERIOR ELEVATION - EAST SIDE
SCALE: 1:75



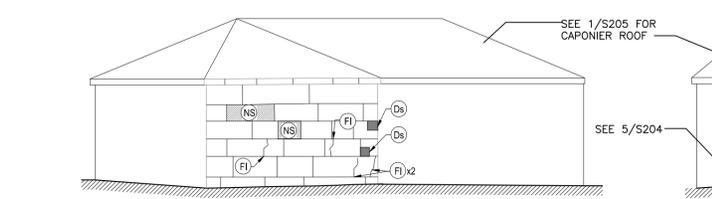
BLOCK 2 EXTERIOR ELEVATION - WEST SIDE
SCALE: 1:75



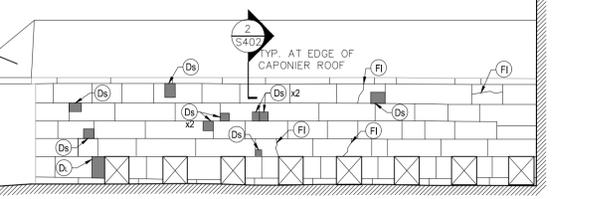
CAPONIER - EAST ELEVATION
SCALE: 1:75



CAPONIER - NORTH-EAST ELEVATION
SCALE: 1:75



CAPONIER - NORTH-WEST ELEVATION
SCALE: 1:75



CAPONIER - WEST ELEVATION
SCALE: 1:75

LEGEND OF REPAIR:

- CR** CRACK REPAIR: (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- RM** STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION.
- F** REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE **R**.
- FI** REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- DL** REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING, AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- Ds** REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING, AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- De** REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm, SEE DETAIL 8/S400.
- Dc** DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE **Ds**. FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- R** REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- CL** CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- NS** REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE, RESET AND ANCHOR AS FOR LEGEND NOTE **R**. FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- NSC** NEW STONE WITH CARVED ELEMENT, SEE **NS**.
- P** STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER **RM** OR PLUG DUTCHMAN.
- Dsc** DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- RS** RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- SH** SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S204:
1. **CR** ALLOW FOR 10 ADDITIONAL REPAIRS.
 2. **RM** INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 15 ADDITIONAL REPAIRS.
 3. **F** ALLOW FOR 10 ADDITIONAL REPAIRS.
 4. **FI** ALLOW FOR 15 ADDITIONAL REPAIRS.
 5. **DL** ALLOW FOR ADDITIONAL 9m² OF LARGE DUTCHMAN REPAIR.
 6. **Ds** ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
 7. **De** ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR.
 8. **Dc** ALLOW FOR 0.5m² ADDITIONAL REPAIRS.
 9. **R** FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09, 10 AND 11/S400.
 10. **NS** ALLOW FOR AN ADDITIONAL 2m² ADDITIONAL REPAIRS.
 11. **P** ALLOW FOR 5 INSERTS TO BE REMOVED.
 12. **Dsc** ALLOW FOR 5m² OF DESCALING.
 13. **RS** ALLOW FOR 5m² OF RESURFACING.
 14. **SH** FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.
- REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.

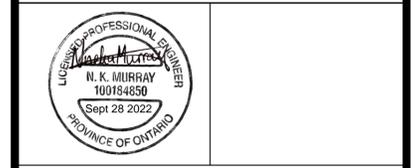
22216-S204 BLOCK 1 EXTERIOR ELEVATION
DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS			

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS			
A	A Detail number	A Numero de detail	
B	B Sheet number	B Sur feuille numero	

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

BLOCK 1 EXTERIOR ELEVATION & CAPONIER ELEVATIONS
(PHASE 4)

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par
C.P.

Field Recording by / Relevé-Terminé par
N.M. & J.C.

Approved by / Approuve par
N.M.

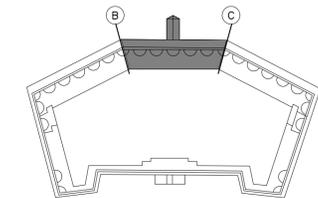
Checked by/ Verifiee par
J.C.

Project No./ No. du projet
22216

Asset No.
22216-S204-ROO

Sheet No./ Feuille No.
S204

CRAIG SIMS
HERITAGE BUILDING CONSULTANT



KEY PLAN
NOT TO SCALE

22216-S205 BLOCK 1 PARAPET PLANS
DRAWING NO. DRAWING NAME

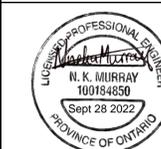
REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

A	B	A	B
A Detail number	B Sheet number	A Numéro de détail	B Sur feuille numéro

Linear dimensions in millimeters / Dimensions linéaires en millimètres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin

CAPONIER ROOF PLAN
(PHASE 4)

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessiné par
C.P.

Field Recording by / Releve-Terminé par
N.M. & J.C.

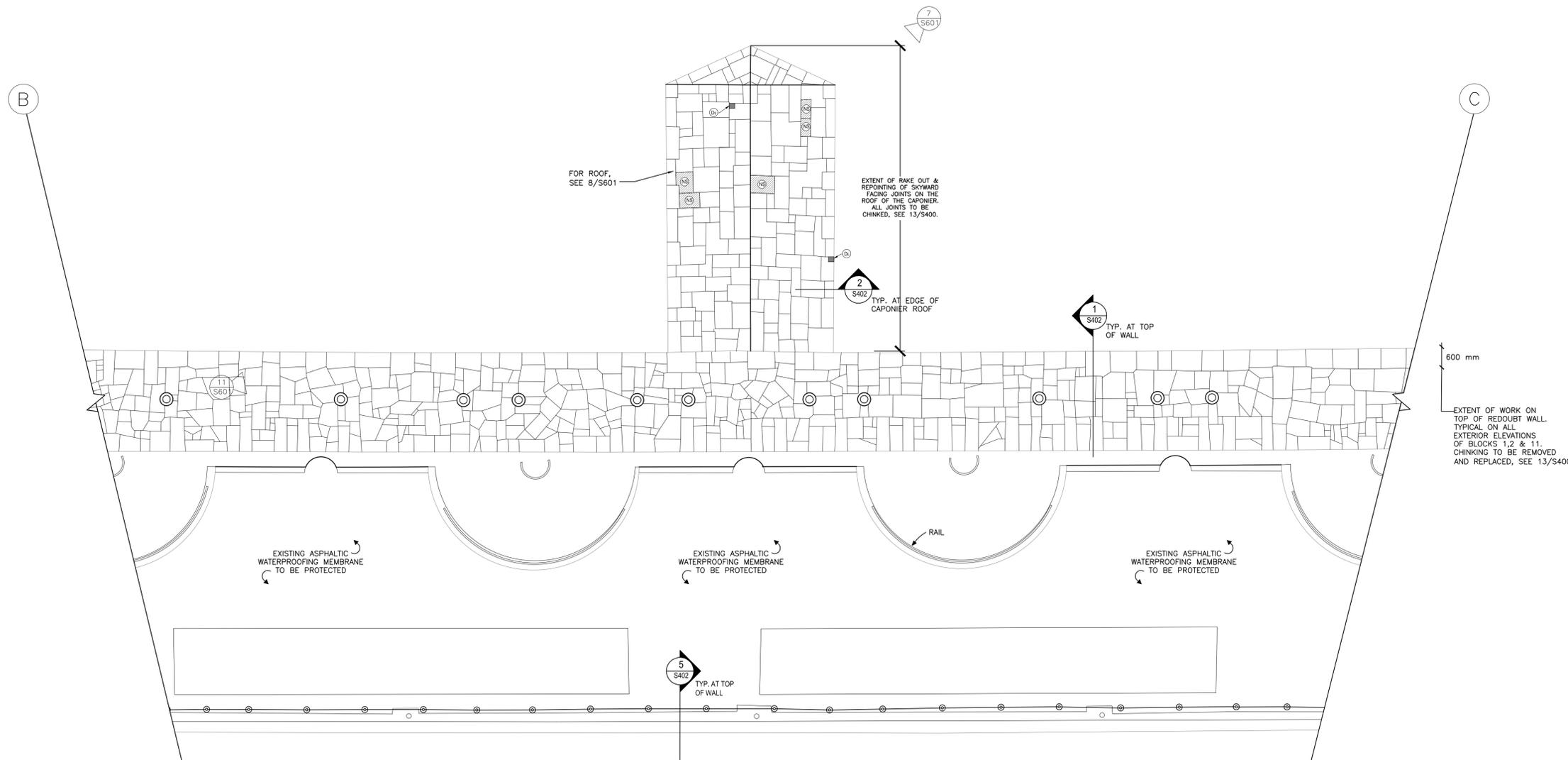
Approved by / Approuvé par
N.M.

Checked by/ Vérifié par
J.C.

Project No./ No. du projet
22216

Asset No. / Feuille No.
S205

Drawing Re No./No. du Dessin
22216-S205-ROO



BLOCK 1 - CAPONIER ROOF PLAN
SCALE: 1:75

LEGEND OF REPAIR:

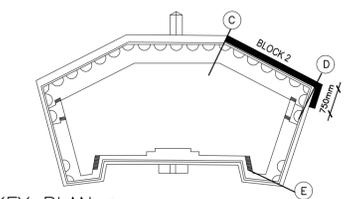
- CR** CRACK REPAIR (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- RM** STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
- F** REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE **R**
- FI** REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- DL** REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING. AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- DS** REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING. AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- DE** REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm. SEE DETAIL 8/S400.
- DC** DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE **Dc**. FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- R** REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- CL** CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- NS** REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE. RESET AND ANCHOR AS FOR LEGEND NOTE **R**. FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- NSC** NEW STONE WITH CARVED ELEMENT, SEE **NS**
- P** STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER **RM** OR PLUG DUTCHMAN.
- DSc** DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- RS** RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- SH** SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S205. THESE ADDITIONAL REPAIRS INCLUDE THE FULL EXTENT OF THE TOP OF PARAPET WORK FOR DRAWINGS S205:
- CR** ALLOW FOR 15 ADDITIONAL REPAIRS.
 - RM** INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 15 ADDITIONAL REPAIRS.
 - F** ALLOW FOR 10 ADDITIONAL REPAIRS.
 - FI** ALLOW FOR 20 ADDITIONAL REPAIRS.
 - DL** ALLOW FOR ADDITIONAL 2m² OF LARGE DUTCHMAN REPAIR.
 - DS** ALLOW FOR ADDITIONAL 2m² OF SMALL DUTCHMAN REPAIR.
 - DE** ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR
 - Dc** ALLOW FOR 0.5m² ADDITIONAL REPAIRS
 - R** FOR LOOSE STONES: ALLOW FOR 2m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09/S400.
 - NS** ALLOW FOR AN ADDITIONAL 2m² ADDITIONAL REPAIRS.
 - P** ALLOW FOR 10 INSERTS TO BE REMOVED.
 - DSc** ALLOW FOR 5m² OF DESCALING.
 - RS** ALLOW FOR 5m² OF RESURFACING
 - SH** FOR SHARD REPAIRS, ALLOW FOR 10 ADDITIONAL REPAIRS.

REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.

CRAIG SIMS
HERITAGE BUILDING CONSULTANT



KEY PLAN NOT TO SCALE

22216-S206 BLOCK 2 EXTERIOR ELEVATION
DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

A	B	A	B
A	A	Detail number	Número de detail
B	B	Sheet number	Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

BLOCK 2 EXTERIOR ELEVATION
(PHASE 2)

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par
C.P.

Field Recording by / Releve-Terminé par
N.M. & J.C.

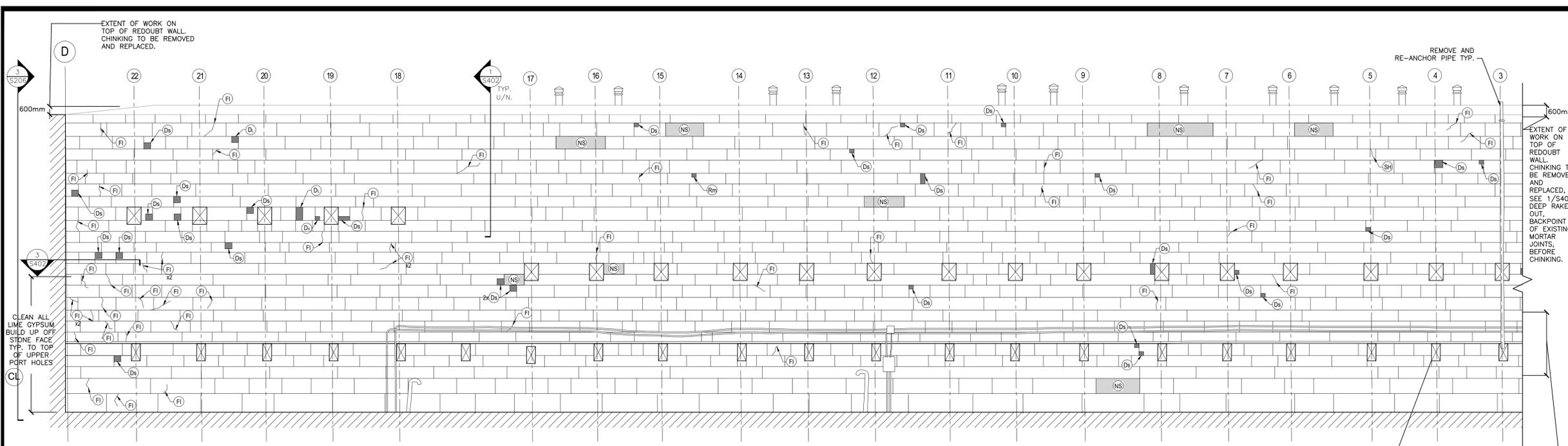
Approved by / Approuve par
J.C.

Checked by/ Verifié par
J.C.

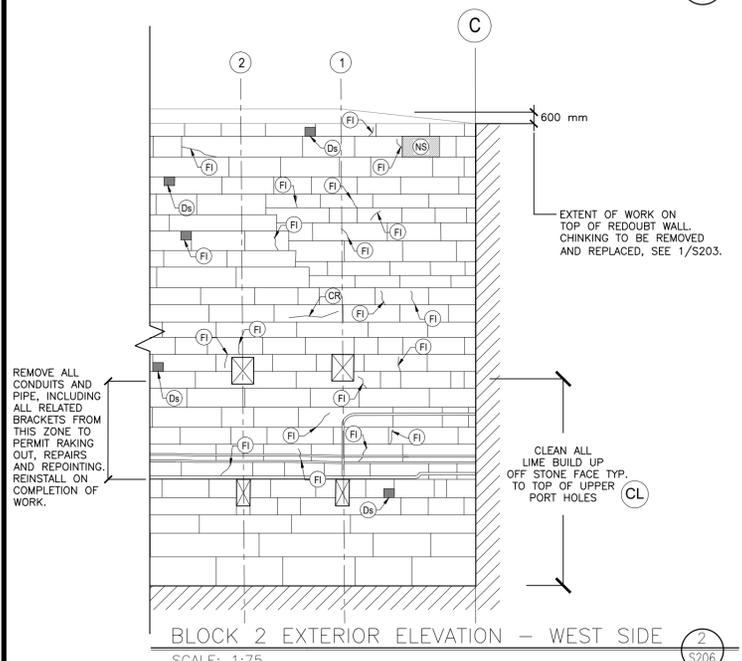
Project No./ No. du projet
22216

Asset No.
22216-S206-ROO

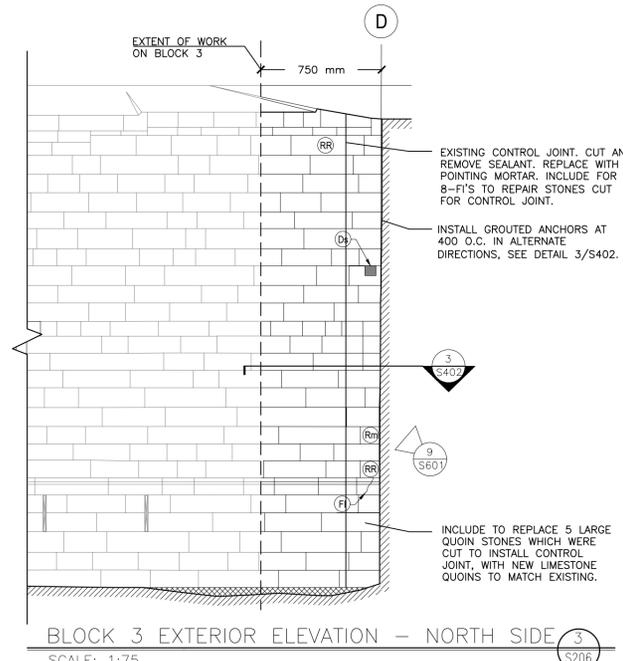
Sheet No./ Feuille No.
S206



BLOCK 2 EXTERIOR ELEVATION - EAST SIDE
SCALE: 1:75



BLOCK 2 EXTERIOR ELEVATION - WEST SIDE
SCALE: 1:75



BLOCK 3 EXTERIOR ELEVATION - NORTH SIDE
SCALE: 1:75

LEGEND OF REPAIR:

- CR** CRACK REPAIR: (300mm LONG/UNIT) FOR CRACKS IN STONE, SEE SPECIFICATIONS.
- RM** STONE RESTORATION: SMALL CHIPS/VOIDS/EXISTING PATCHES/MINOR SPALLS IN FACE OF STONE: FOR REPAIR, SEE SPECIFICATION
- F** REPAIR FRACTURED STONE: REMOVE, DOWEL, GROUT AND RESET STONE AS 04 & 05/S400. ANCHOR STONE TO BACKUP AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS AND LEGEND NOTE **R**
- FI** REPAIR OF FRACTURED STONE IN-SITU: DOWEL AND GROUT FRACTURED STONE. REFER TO DETAIL 03/S400.
- DL** REPAIR OF STONE USING LARGE DUTCHMAN REPAIR: SEE 07/S400 FOR PRICING. AVERAGE REPAIR IS 700mm BY 350mm (0.25m²) BY 150mm Dp.
- DS** REPAIR OF STONE USING SMALL DUTCHMAN REPAIR: SEE 06/S400 FOR PRICING. AVERAGE REPAIR IS 250mm BY 200mm (0.05m²) BY 100mm Dp.
- De** REPAIR OF STONE USING EDGE DUTCHMAN REPAIR: APPLY TO STONE ARRIS OF EXISTING STONE, TO REDUCE WIDTH OF MORTAR JOINT WHEN IT EXCEEDS 35mm, SEE DETAIL 8/S400.
- Dc** DUTCHMAN REPAIR WITH CARVED DETAIL: REPAIR AS FOR LEGEND NOTE **Ds**. FINISH SURFACE TO MATCH SURROUNDING CARVED DETAIL.
- R** REMOVE AND RESET AND ANCHOR TO BACKUP. PROVIDE STAINLESS STEEL CRAMP ANCHORS TO BACK UP WALL AT MIN. 600c/c TOP AND BOTTOM. ALTERNATIVELY, ON EACH SIDE, PROVIDE 2 ANCHORS MIN. PER SIDE, AND PIN TO ADJACENT STONE AS PER SPECIFICATIONS, REFER TO DETAILS 09, 10 AND 11/S400. ASSUME AVERAGE STONE SIZE OF 350x700x500mm THICK/UNIT.
- CL** CLEANING REPAIR: CLEAN BIRD DROPPINGS, MOSS AND OTHER DEBRIS FROM STONE LEDGES AND FACE OF STONE AS PER SPECIFICATIONS.
- NS** REMOVE EXISTING STONE AND REPLACE WITH NEW STONE: SEE SPECIFICATIONS FOR NEW STONE. RESET AND ANCHOR AS FOR LEGEND NOTE **R**. FOR PRICING ASSUME STONE IS 500mm AVERAGE THICK UNLESS NOTED.
- NSC** NEW STONE WITH CARVED ELEMENT, SEE **NS**
- P** STEEL INSERT REPAIR: REMOVE EXISTING STEEL INSERT AND REPAIR AS PER **RM** OR PLUG DUTCHMAN.
- DSc** DESCALING: REMOVE LOOSE PORTIONS OF MASONRY BY IMPACT WITH BUSH HAMMER. INCLUDE RESURFACING OF COMPLETE STONE. SEE SPECIFICATIONS.
- RS** RESURFACING: RESURFACE SPALLED STONE AS PER SPECIFICATIONS.
- SH** SHARD REPAIR: AS PER SPECIFICATIONS AND DETAIL 15/S400.

ADDITIONAL REPAIRS:

- FOR PRICING, ALLOW THE FOLLOWING ADDITIONAL QUANTITIES BEYOND THOSE SHOWN ON DRAWING S206:
- CR** ALLOW FOR 10 ADDITIONAL REPAIRS.
 - RM** INCLUDING SPALL REPAIRS AT TOP OF WINDOW SILLS, ALLOW FOR 10 ADDITIONAL REPAIRS.
 - F** ALLOW FOR 10 ADDITIONAL REPAIRS.
 - FI** ALLOW FOR 15 ADDITIONAL REPAIRS.
 - DL** ALLOW FOR ADDITIONAL 4m² OF LARGE DUTCHMAN REPAIR.
 - DS** ALLOW FOR ADDITIONAL 1m² OF SMALL DUTCHMAN REPAIR.
 - De** ALLOW FOR ADDITIONAL 1m² OF EDGE DUTCHMAN REPAIR
 - Dc** ALLOW FOR 0.5m² ADDITIONAL REPAIRS
 - R** FOR LOOSE STONES: ALLOW FOR 7.5m² OF ADDITIONAL STONE TO BE REMOVED AND RESET AS PER DETAIL 09, 10 AND 11/S400.
 - NS** ALLOW FOR AN ADDITIONAL 2m² ADDITIONAL REPAIRS.
 - P** ALLOW FOR 5 INSERTS TO BE REMOVED.
 - DSc** ALLOW FOR 5m² OF DESCALING.
 - DS** ALLOW FOR 5m² OF RESURFACING
 - SH** FOR SHARD REPAIRS, ALLOW FOR 5 ADDITIONAL REPAIRS.

REFER TO S101 FOR GENERAL NOTES, CONSERVATION NOTES AND MASONRY REPAIR PROCEDURE.

REMOVE ALL CONDUITS AND PIPE, INCLUDING ALL RELATED BRACKETS FROM THIS ZONE TO PERMIT RAKING OUT, REPAIRS AND REPOINTING. REINSTALL ON COMPLETION OF WORK.

EXISTING GUN HOLES. SEE 6/S601.

EXISTING CONTROL JOINT. CUT AND REMOVE SEALANT. REPLACE WITH POINTING MORTAR. INCLUDE FOR 8-FI'S TO REPAIR STONES CUT FOR CONTROL JOINT.

INCLUDE TO REPLACE 5 LARGE QUOIN STONES WHICH WERE CUT TO INSTALL CONTROL JOINT, WITH NEW LIMESTONE QUOINS TO MATCH EXISTING.

CLEAN ALL LIME GYPSUM BUILD UP OFF STONE FACE TYP. TO TOP OF UPPER PORT HOLES

EXTENT OF WORK ON TOP OF REDOUBT WALL. CHINKING TO BE REMOVED AND REPLACED, SEE 1/S203.

CLEAN ALL LIME BUILD UP OFF STONE FACE TYP. TO TOP OF UPPER PORT HOLES

EXTENT OF WORK ON TOP OF REDOUBT WALL. CHINKING TO BE REMOVED AND REPLACED, SEE 1/S402. DEEP RAKE OUT. BACKPOINT OF EXISTING MORTAR JOINTS, BEFORE CHINKING.

REMOVE AND RE-ANCHOR PIPE TYP.

LEGEND
N.I.C. - NOT IN CONTRACT

Parcs Canada Parks Canada



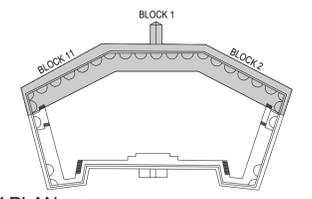
Canada

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OTTAWA, ON 17 FITZGERALD RD., SUITE 200 K2H 9G1 (613) 226-8718
HAMILTON, ON 57-B JOHN ST., SUITE 2 L8N 2B9 (289) 288-3638

22216

CRAIG SIMS
HERITAGE BUILDING CONSULTANT



KEY PLAN
NOT TO SCALE

22216-S300 WINDOWS & DOORS PLAN
DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1, 2 & 11

Drawing title / Titre du dessin

WINDOWS & DOORS PLAN

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

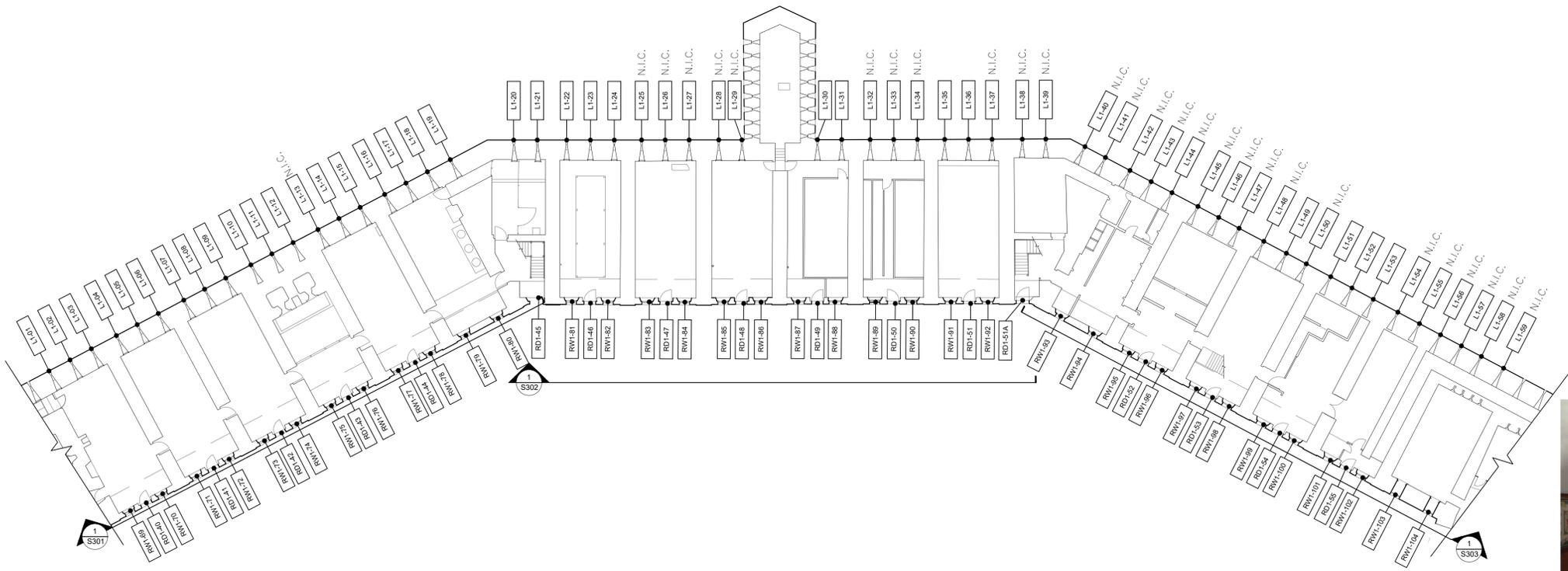
Field Recording by / Releve-Temoin par C.S. & Z.E. Date 2022/05/23

Approved by / Approuve par C.S. Date 2022/09/28

Checked by/ Verifie par C.S. Date 2022/09/28

Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

Drawing Re No./No. du Dessin 22216-S300-R00 **S300**

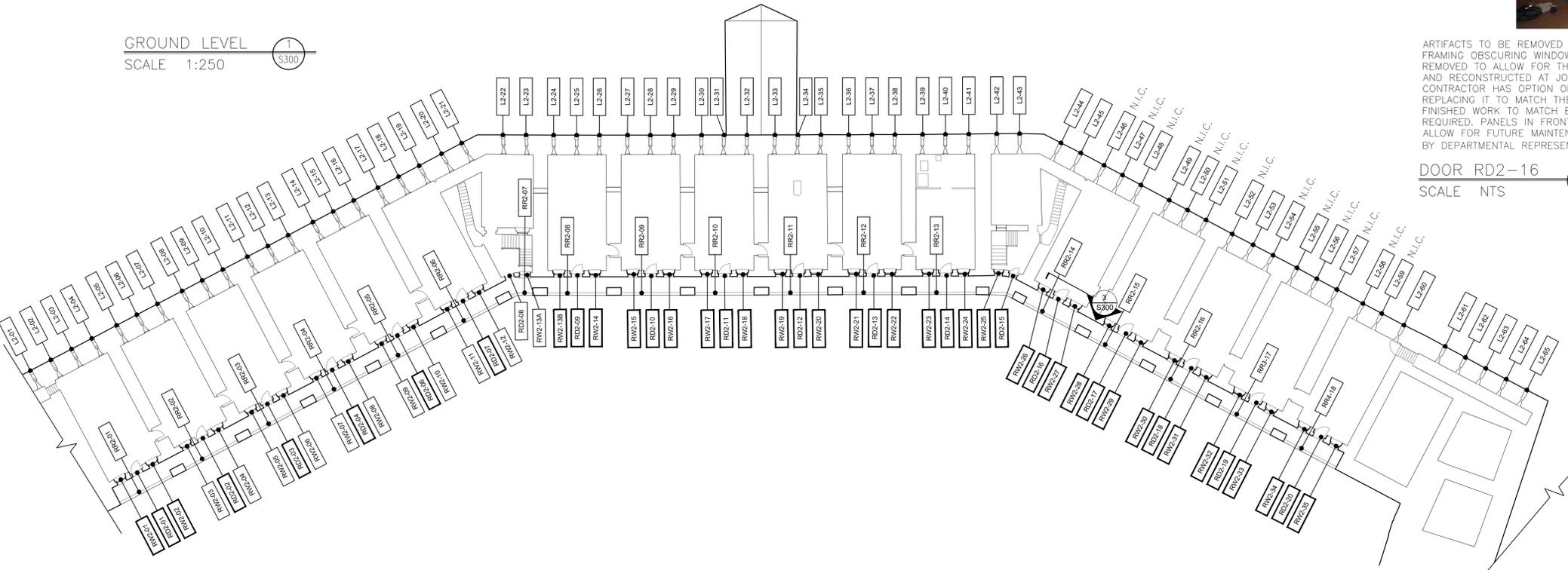


GROUND LEVEL
SCALE 1:250

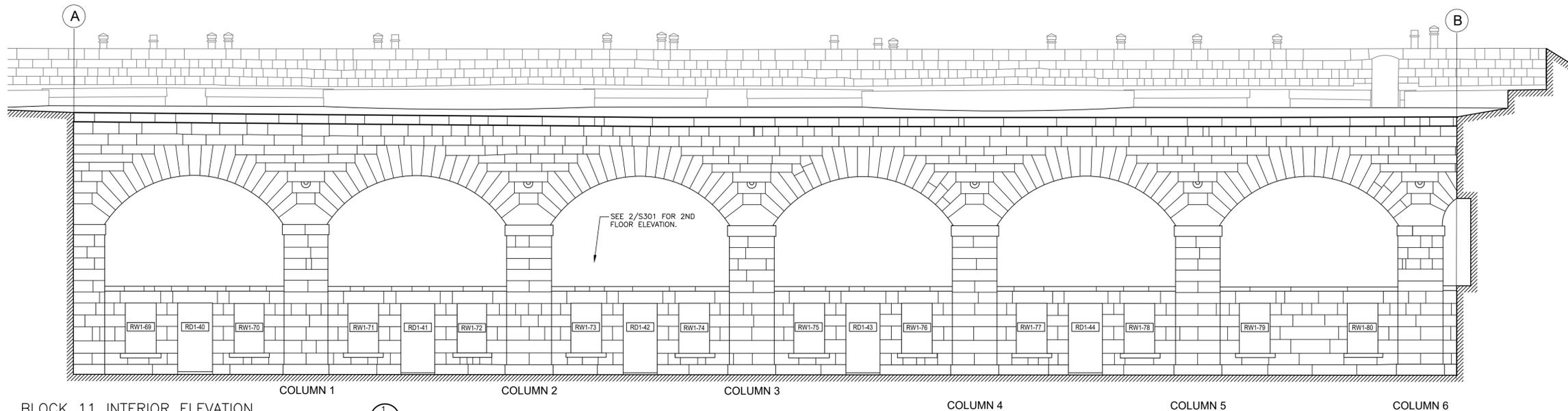


ARTIFACTS TO BE REMOVED AND STORED BY CLIENT. THE PANELING AND FRAMING OBTAINING WINDOWS RW2-26 & 27 IS TO BE CAREFULLY REMOVED TO ALLOW FOR THE RESTORATION OF THE WINDOWS AND DOOR AND RECONSTRUCTED AT JOB END.
CONTRACTOR HAS OPTION OF REUSING MATERIAL IN GOOD CONDITION OR REPLACING IT TO MATCH THE CURRENT APPEARANCE. STAIN AND VARNISH FINISHED WORK TO MATCH EXISTING. DISCONNECT ELECTRICAL AS REQUIRED. PANELS IN FRONT OF WINDOWS ARE TO BE REMOVABLE TO ALLOW FOR FUTURE MAINTENANCE. PROVIDE SHOP DRAWINGS FOR REVIEW BY DEPARTMENTAL REPRESENTATIVE, REVISE AND RESUBMIT AS REQUIRED."

DOOR RD2-16
SCALE NTS



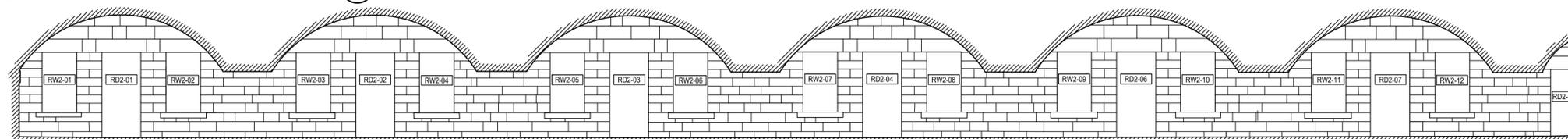
SECOND LEVEL
SCALE 1:250



BLOCK 11 INTERIOR ELEVATION

SCALE: 1:75

1
S301

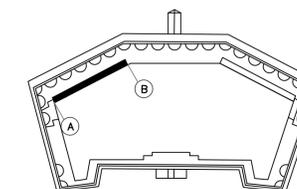


BLOCK 11 2ND FLOOR INTERIOR ELEVATIONS

SCALE: 1:75

2
S301

CRAIG SIMS
HERITAGE BUILDING CONSULTANT



KEY PLAN
NOT TO SCALE

22216-S301 BLOCK 11 INTERIOR ELEVATION

DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by Dessine par	Approved Approuve
0	2022/09/28	ISSUED FOR TENDER		

NO. DATE DESCRIPTION Drawn by Approved

REVISIONS

A	B	A Detail number	A Numero de detail
		B Sheet number	B Sur feuille numero

Linear dimensions in millimeters
Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin

BLOCK 11
INTERIOR ELEVATION
WINDOWS AND DOORS
(PHASE 3)

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par

Date

Field Recording by /
Releve-Temoin par
C.S.

Date
2022/05/23

Approved by / Approuve par
C.S.

Date
2022/09/28

Checked by/ Verifie par
C.S.

Date
2022/09/28

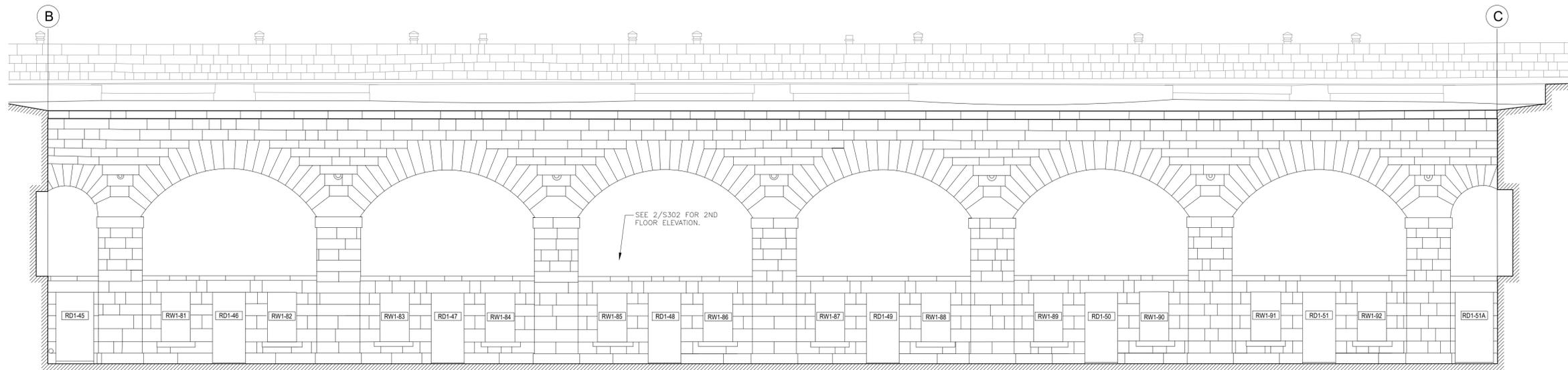
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22216

Asset No.

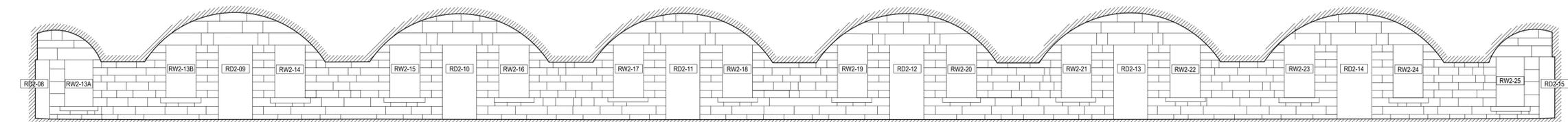
Sheet No./
Feuille No.

Drawing Re No./No. du Dessin
22216-S301-R00

S301

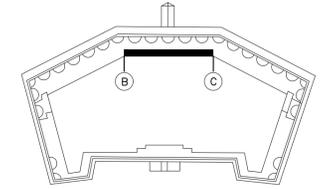


BLOCK 1 INTERIOR ELEVATION
 SCALE: 1:75



BLOCK 1 2ND FLOOR INTERIOR ELEVATIONS
 SCALE: 1:75

CRAIG SIMS
 HERITAGE BUILDING CONSULTANT



KEY PLAN
 NOT TO SCALE

22216-S302 BLOCK 1 INTERIOR ELEVATION
 DRAWING NO. DRAWING NAME

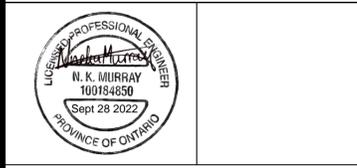
REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by Dessine par	Approved Approuve
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

A	B
A Detail number	A Numero de detail
B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
 REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin

BLOCK 1
 INTERIOR ELEVATION
 WINDOWS AND DOORS
 (PHASE 3)

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

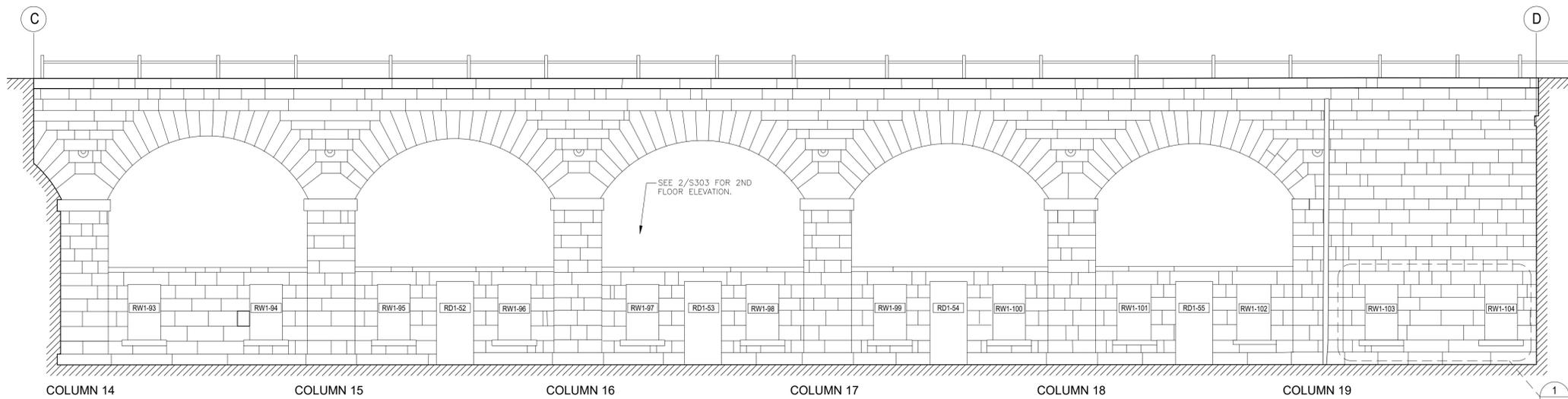
Field Recording by / Releve-Temoin par C.S. Date 2022/05/23

Approved by / Approuve par C.S. Date 2022/09/28

Checked by/ Verifie par C.S. Date 2022/09/28

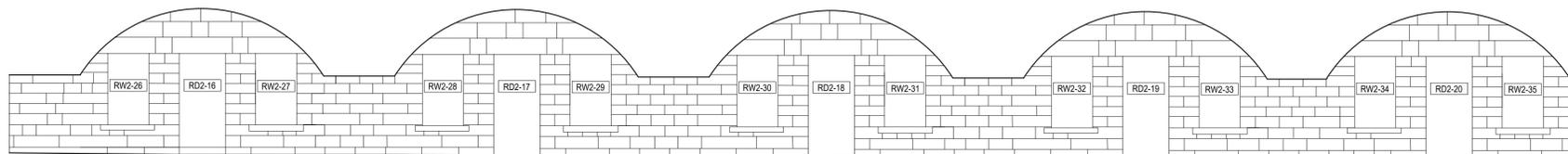
Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

Drawing Re No./No. du Dessin 22216-S302-R00 **S302**



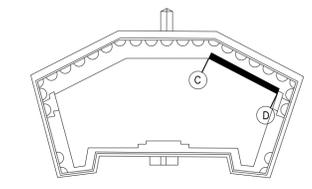
BLOCK 2 INTERIOR ELEVATION
SCALE: 1:75

1
S303



BLOCK 2 ARCADE GALLERY ELEVATIONS
SCALE: 1:75

2
S303



KEY PLAN
NOT TO SCALE

22216-S303	BLOCK 2 INTERIOR ELEVATION
DRAWING NO.	DRAWING NAME

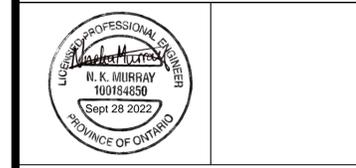
REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION	Drawn by Dessine par	Approved Approuve
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin

BLOCK 2
INTERIOR ELEVATION
WINDOWS AND DOORS
(PHASE 1)

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

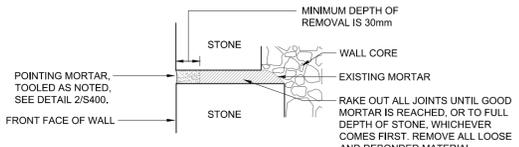
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Approved by / Approuve par C.S. Date 2022/09/28

Checked by/ Verifie par C.S. Date 2022/09/28

Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

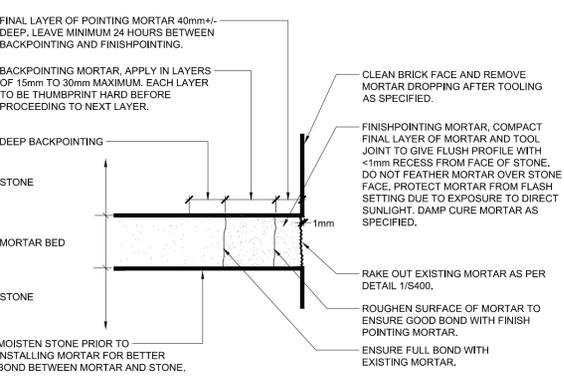
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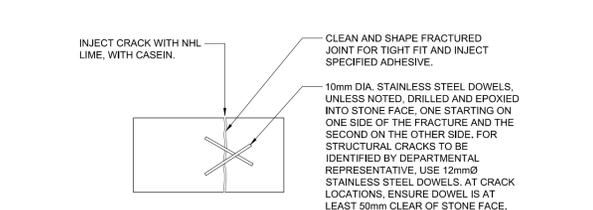
- RAKING OUT PROCEDURE:**
1. RAKE OUT EXISTING MORTAR SQUARE TO STONE.
 2. REMOVE ALL OVERPOINTING FROM STONE FACE.
 3. CLEAN OUT JOINT USING COMPRESSED AIR, OR WASH OUT JOINTS USING PRESSURIZED WATER, PRIOR TO REPOINTING.
 4. REMOVE ALL RESIDUE FROM STONE FACE TO ALLOW NEW MORTAR TO BOND TO STONE.

- NOTES:**
- DO NOT CHIP OR OTHERWISE DAMAGE EDGE OF STONE DURING REMOVALS.
 - GRINDERS OR SAW BLADES MUST NOT TOUCH STONE FACE. CUT CENTRE OF JOINT CAREFULLY, WITHOUT MARKING STONE. REMOVE REMAINDER OF MORTAR USING HAND TOOLS. MECHANICAL TOOLS ONLY TO BE USED WHEN APPROVED TO MAKE RELIEF CUTS IN THE CENTRE OF JOINTS.
 - ALL CRACKED MORTAR, MORTAR DEBONDED FROM STONE, OR DETERIORATED MORTAR, MUST BE REMOVED FROM JOINT PRIOR TO REPOINTING.
 - INTENT IS TO REMOVE ALL PORTLAND CEMENT BASED MORTARS FROM JOINTS.
 - REFER TO SCOPE OF WORK, DEFINED ELSEWHERE, FOR PROJECT REQUIREMENTS.
 - REMOVE ALL CAULKING, WHERE PRESENT IN JOINTS.
 - NOTIFY DEPARTMENTAL REPRESENTATIVE WHERE STONE BECOMES LOOSE.
 - WHERE FULL DEPTH REMOVALS IN HORIZONTAL JOINTS ARE NECESSARY, EXERCISE CAUTION SO AS NOT TO DESTABILIZE THE WALL. IN THIS CASE, REMOVE MORTAR IN ONLY SMALL PORTIONS OF THE WALL AND REPOINT EXCEPT FOR FINAL LAYER BEFORE PROCEEDING WITH RAKING OUT.

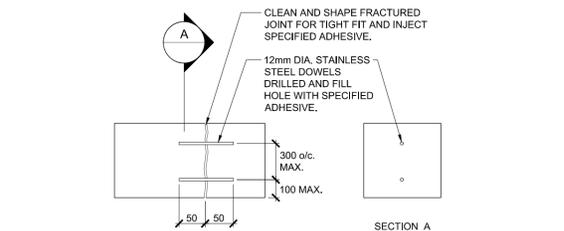
- FOR PRICING, ASSUME THE FOLLOWING:**
1. AVERAGE DEPTH OF STONE: 500mm.
 2. ASSUME AVERAGE JOINT WIDTH IS 25mm.
 3. ASSUME OUTER 70mm OF THE EXISTING MORTAR CONSISTS OF HARD CEMENTITIOUS MORTAR.
 4. 20% OF REMOVALS FOR VERTICAL JOINTS ARE IN THE ORDER OF 30 TO 40mm DEEP AND THE REMAINDER ARE FULL DEPTH REMOVALS.
 5. 60% OF REMOVALS FOR HORIZONTAL JOINTS ARE IN THE ORDER OF 30 TO 40mm DEEP AND THE REMAINDER ARE FULL DEPTH REMOVALS.



- NOTES:**
- BACKPOINTING / DEEP BACKPOINTING: REQUEST INSPECTION TO REVIEW PRIOR TO BACKPOINTING. REQUEST INSPECTION FOR REVIEW OF COMPLETED BACKPOINTING BEFORE PROCEEDING TO MASONRY REPAIRS AND FINISHPOINTING. WHERE RAKE OUT OF JOINT IS GREATER THAN 120mm IN DEPTH, DEEP BACKPOINT JOINT TO DEPTH OF 75mm FROM STONE FACE AND CONTACT CONSULTANT FOR ADDITIONAL REVIEW OF DEEP BACKPOINTING PRIOR TO PROCEEDING TO BACKPOINT THE REMAINDER OF THE JOINT TO APPROX. 30mm FROM STONE FACE.
 - GROUTING: WHERE VOIDS ARE NOTED DEEP IN THE WALL CORE WHICH CANNOT BE ACCESSED, INSTALL GROUT TUBE INTO VOID AT TOP OF JOINT AS THE BACKPOINTING IS COMPLETED. AFTER ALL JOINTS ARE BACKPOINTED, PROCEED WITH GROUTING FROM BOTTOM TO TOP, ONE COURSE EVERY 4 HOURS MAX, INCLUDE FOR 15L OF GROUT.



- IN-SITU FRACTURED STONE REPAIR PROCEDURE:**
- DRILL 11 OR 13mm Ø HOLES, SPACED AT 300 O.C. MAXIMUM, MINIMUM 2 ANCHORS PER STONE. EXTEND 60mm BEYOND FRACTURE. MINIMUM LENGTH OF HOLE TO BE 140mm.
 - INSERT 10 OR 12mm Ø STAINLESS STEEL DOWELS, 100mm LONG AND APPLY EPOXY ADHESIVE. LET SET FOR 24 HOURS MAXIMUM.
 - DRILL PORT HOLES @ 100mm O.C. INTO CRACK TO INJECT ADHESIVE MIX INTO CRACK.
 - INSPECTION OF CRACK INJECTION BY DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING TO REPAIR SURFACE OF FRACTURE.
 - REPAIR SURFACE OF FRACTURE AND DOWEL HOLES WITH RESTORATION MORTAR TO MATCH THE SURROUNDING STONE, AND TOOL FOR TEXTURE.



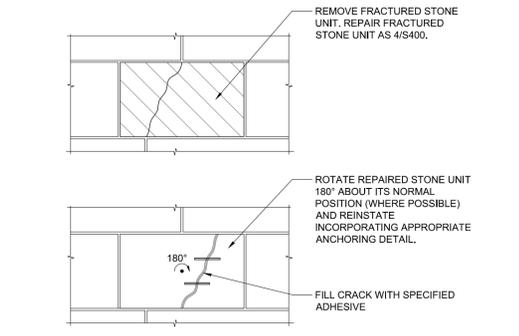
- FRACTURED STONE REPAIR PROCEDURE:**
- REMOVE FRACTURED STONE WITHOUT LOSING PIECES OR WORSENING DAMAGE OR DAMAGING ADJACENT UNITS.
 - DRILL 13mm Ø HOLES, 80mm LONG IN EACH SECTION, SPACED AT 300 O.C. MAXIMUM. HOLES MUST BE CENTERED IN STONE THICKNESS.
 - INSERT 12mm Ø STAINLESS STEEL DOWELS, 100mm LONG AND APPLY EPOXY ADHESIVE. GLUE STONE FACES TOGETHER USING SPECIFIED ADHESIVE, OR APPROVED GROUT. LET SET FOR 24 HOURS MAXIMUM.
 - REINSTATE REPAIRED STONE INTO WORK AND REPOINT WITH SPECIFIED MORTAR TO WITHIN 30 TO 40mm OF POINTING SURFACE. ALLOW MORTAR TO SET 24 HOURS. POINT TO SURFACE IN TWO LAYERS.
 - GROUT SOLID ALL VOIDS BEHIND STONE USING SPECIFIED GROUT OR PROVIDE SOLID MORTAR BED TO FULLY FILL THE VOID BETWEEN THE FACE OF THE BACKUP MASONRY, AND THE BACK OF THE RESET STONE.
 - REPAIR SURFACE OF FRACTURE WITH RESTORATION MORTAR TO MATCH THE SURROUNDING STONE, AND TOOL FOR TEXTURE.

TYPICAL RAKE OUT DETAIL
NTS (1) S400

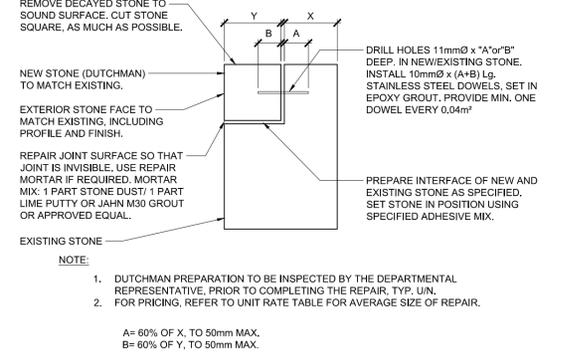
TYPICAL REPOINTING DETAIL
NTS (2) S400

TYPICAL IN-SITU FRACTURE DETAIL
NTS (3) S400

TYPICAL FRACTURED STONE DETAIL
NTS (4) S400



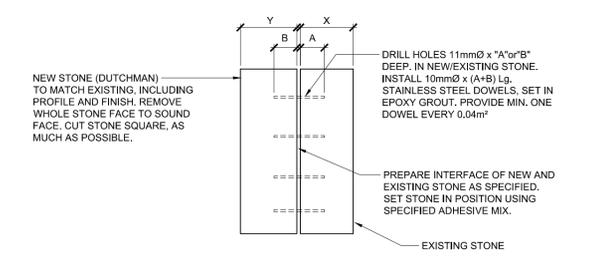
NOTE:
THIS DETAIL ONLY APPLIES WHEN FRACTURE LINES UP WITH MORTAR JOINTS ABOVE AND BELOW FRACTURE, (ROTATED).



NOTE:

1. DUTCHMAN PREPARATION TO BE INSPECTED BY THE DEPARTMENTAL REPRESENTATIVE, PRIOR TO COMPLETING THE REPAIR, TYP. UN.
2. FOR PRICING, REFER TO UNIT RATE TABLE FOR AVERAGE SIZE OF REPAIR.

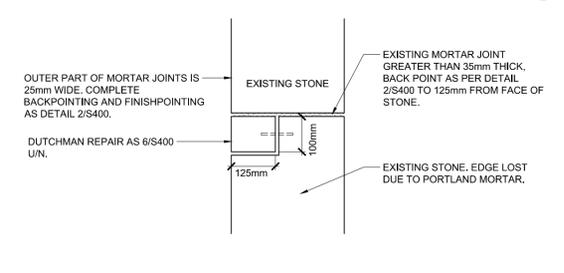
A= 60% OF X, TO 50mm MAX.
B= 60% OF Y, TO 50mm MAX.



NOTE:

1. DUTCHMAN PREPARATION TO BE INSPECTED BY THE DEPARTMENTAL REPRESENTATIVE, PRIOR TO COMPLETING THE REPAIR, TYP. UN.
2. FOR PRICING, REFER TO UNIT RATE TABLE FOR AVERAGE SIZE OF REPAIR.

A= 60% OF X, TO 50mm MAX.
B= 60% OF Y, TO 50mm MAX.



NOTE:

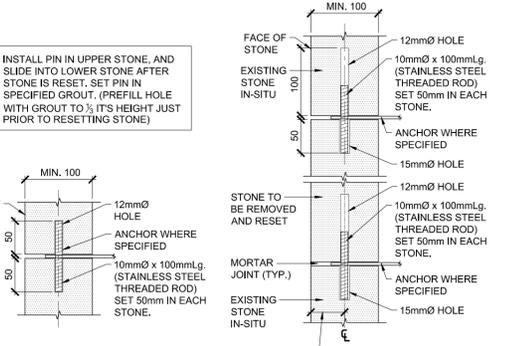
1. DUTCHMAN PREPARATION TO BE INSPECTED BY THE DEPARTMENTAL REPRESENTATIVE, PRIOR TO COMPLETING THE REPAIR, TYP. UN.
2. FOR PRICING, REFER TO UNIT RATE TABLE FOR AVERAGE SIZE OF REPAIR.
3. THIS DETAIL IS TO BE USED ANYWHERE THE MORTAR JOINT EXCEEDS 35mm WIDE, UNLESS OTHERWISE NOTED BY DEPARTMENTAL REPRESENTATIVE.

FRACTURED STONE REMOVAL AND REPAIR
NTS (5) S400

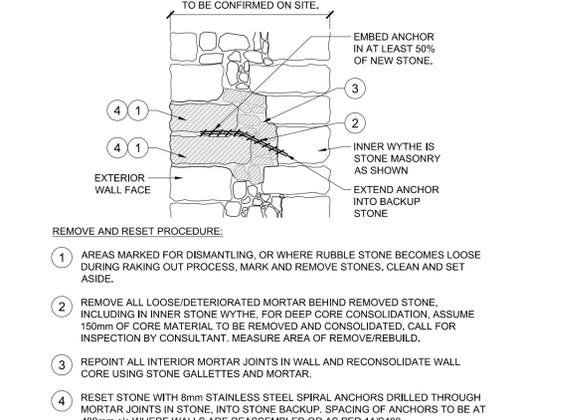
SMALL DUTCHMAN REPAIR DETAIL
NTS (6) S400

LARGE DUTCHMAN REPAIR DETAIL
NTS (7) S400

EDGE DUTCHMAN REPAIR DETAIL
NTS (8) S400



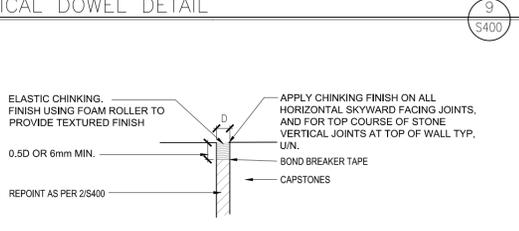
TYPICAL DOWEL DETAIL
NTS (9) S400



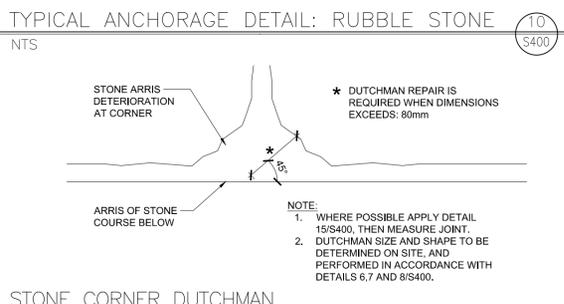
TYPICAL ANCHORAGE DETAIL: RUBBLE STONE
NTS (10) S400

TYPICAL ANCHORAGE DETAIL: ASHLAR STONE
NTS (11) S400

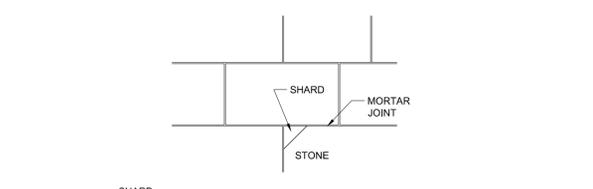
TYPICAL FILLER DETAIL AROUND WINDOWS/DOORS
NTS (12) S400



CHINKING DETAIL
NTS (13) S400

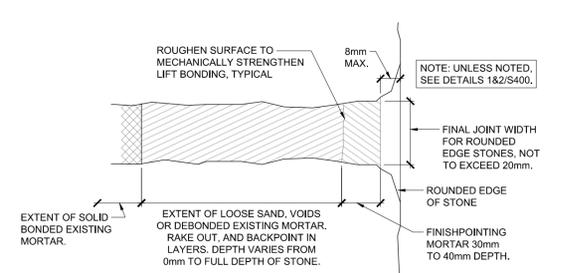


STONE CORNER DUTCHMAN REPAIR QUALIFICATION
NTS (14) S401



- REPAIR PROCEDURE:**
1. WHEN SHARD COMES LOOSE, RETAIN FOR REATTACHMENT IMMEDIATELY AFTER JOINT IS RAKED OUT.
 2. CLEAN SURFACE OF SHARD AND SURFACE OF PARENT STONE AT THE CRACK INTERFACE.
 3. REATTACH STONE USING SPECIFIED ADHESIVE.

SHARD REPAIR DETAIL
NTS (15) S401



JOINT TREATMENT AT LOCATIONS WHERE STONE EDGES ARE ROUNDED
NTS (16) S401

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CRAIG SIMS
HERITAGE BUILDING CONSULTANT

22216-S400	MASONRY REPAIR DETAILS			
DRAWING NO.	DRAWING NAME			
REFERENCE DRAWINGS				
0	2022/09/28 ISSUED FOR TENDER			
NO.	DATE	DESCRIPTION	Drawn by	Approved
			Dessine par	Approuve

REVISIONS	
A	A Detail number
B	B Sheet number
Linear dimensions in millimeters	
Dimensions lineaires en millimetres	

Professional Engineer
N. K. MURRAY
100184850
Sept 28 2022
PROVINCE OF ONTARIO

Project title / Titre du projet
FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin
MASONRY REPAIR DETAILS

Plot Scale / Echelle	1:1 (A1 Plot Size)
Drawn by/ Dessine par	C.P.
Field Recording by / Relevé-Terminé par	N.M. & J.C.
Approved by / Approuve par	N.M.
Checked by/ Verifie par	J.C.
Date	2022/05/23
Date	2022/09/28
Date	2022/09/28

Project No./ No. du projet	Asset No.	Sheet No./ Feuille No.
22216		S400
Drawing Re No./No. du Dessin		22216-S400-ROO

REFERENCE DRAWINGS				
NO.	DATE	DESCRIPTION	Drawn by / Dessiné par	
0	2022/09/28	ISSUED FOR TENDER		
REVISIONS				
NO.	DATE	DESCRIPTION	Drawn by / Dessiné par	Approved / Approuvé

A	A Detail number	A Numéro de détail
B	B Sheet number	B Sur feuille numéro

Linear dimensions in millimeters / Dimensions linéaires en millimètres



Project title / Titre du projet
**FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11**

Drawing title / Titre du dessin
**MASONRY REPAIR
DETAILS 2**

Plot Scale / Echelle	1:1 (A1 Plot Size)		
Drawn by/ Dessiné par	C.P.	Date	
Field Recording by / Relevé-Terminé par	N.M. & J.C.	Date	2022/05/23
Approved by / Approuvé par	J.C.	Date	2022/09/28
Checked by/ Vérifié par	J.C.	Date	2022/09/28

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22216		S401
Drawing Re No./No. du Dessin		
22216-S401-ROO		

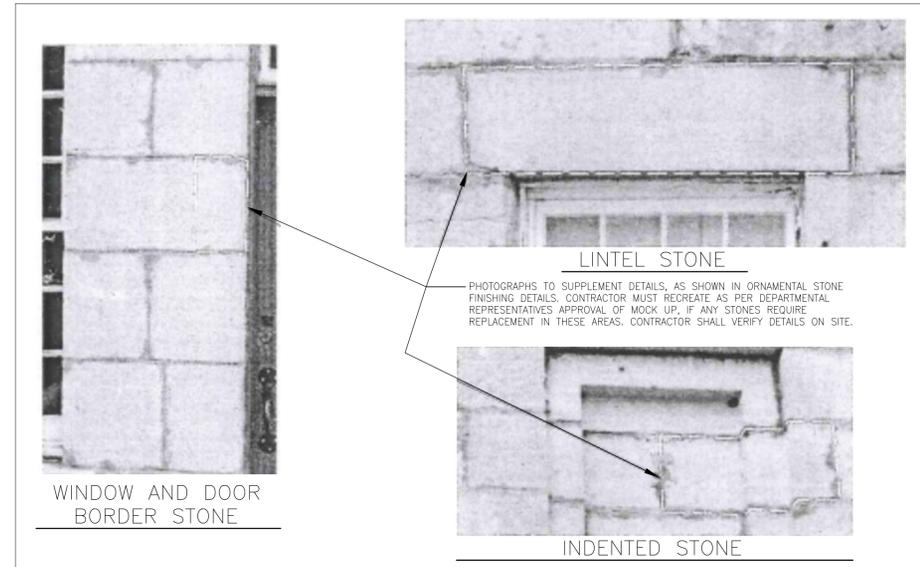
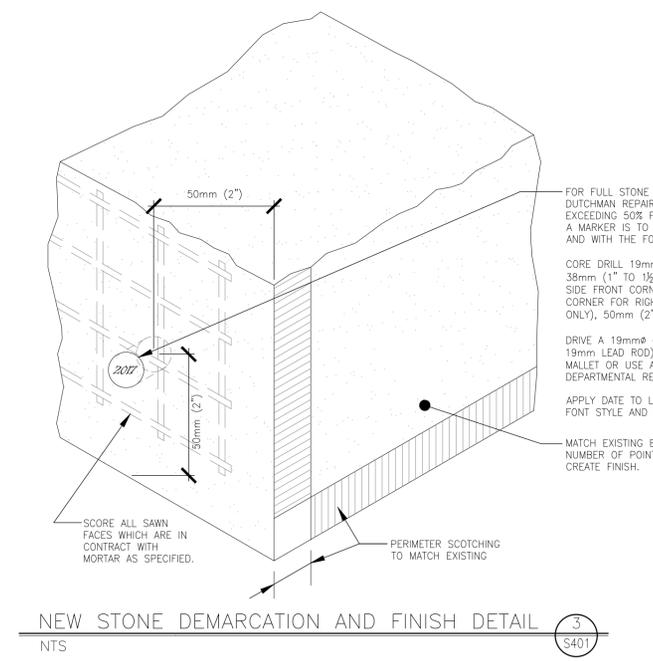
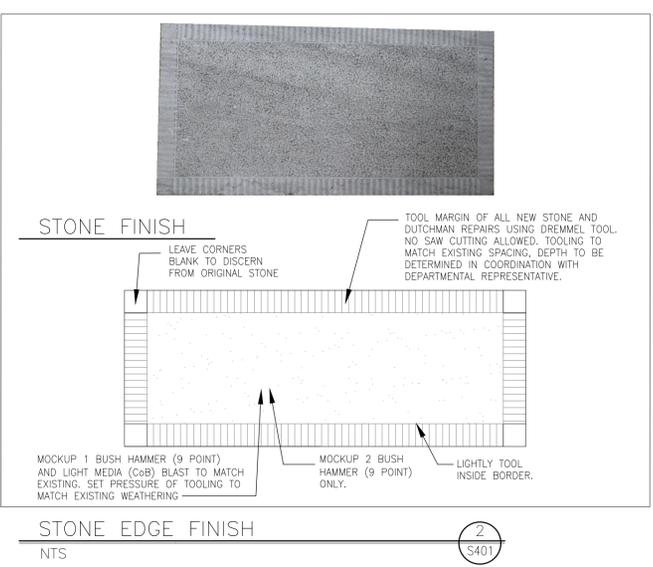
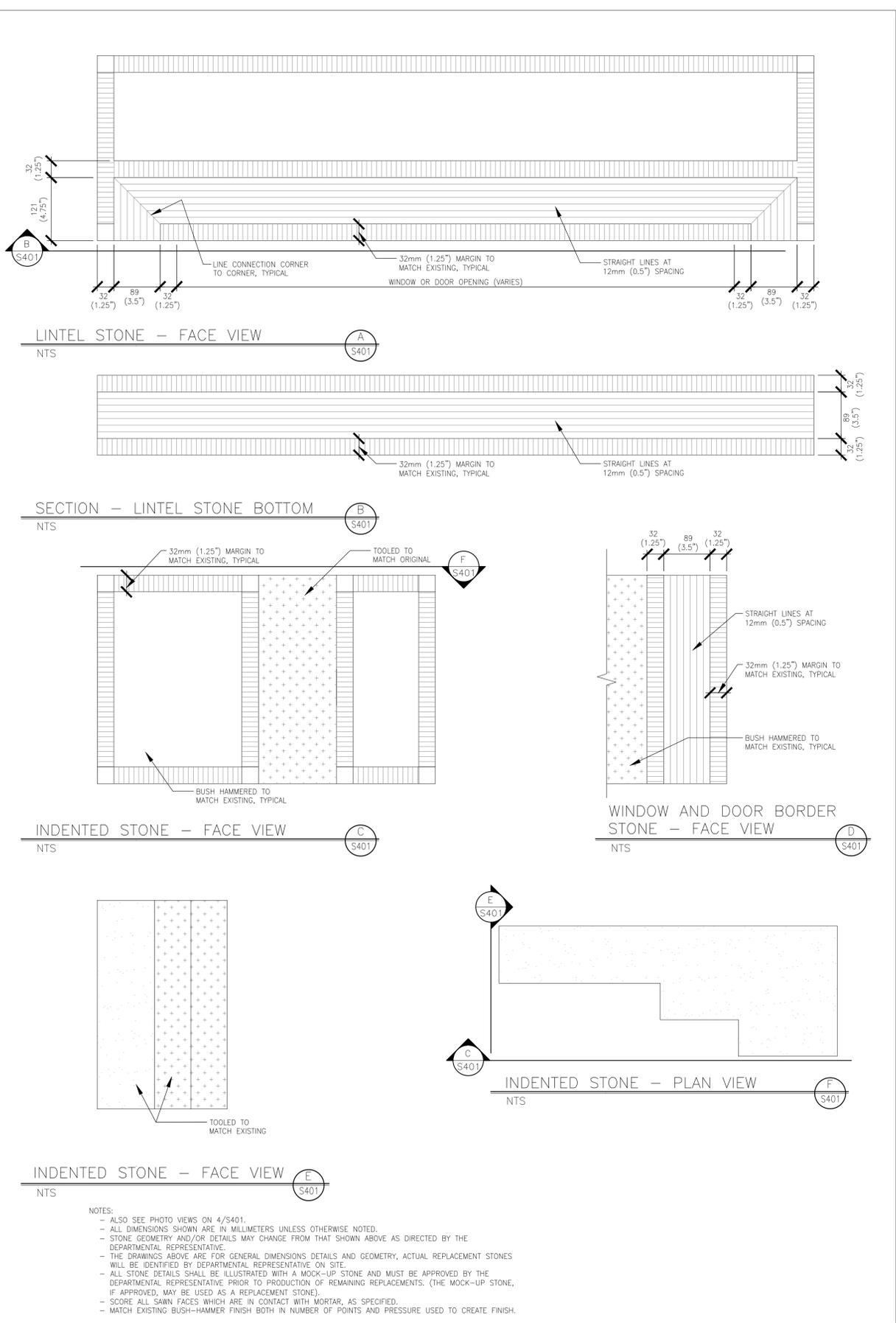


PHOTO VIEWS (4 S401)
NTS

ORNAMENTAL STONE FINISHING DETAILS (1 S401)
NTS

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

A	B	A Detail number	A Numero de detail
		B Sheet number	B Sur feuille numero

Linear dimensions in millimeters Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

MASONRY REPAIR SECTIONS

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par
C.P.

Field Recording by /
Releve-Termin par
N.M. & J.C.

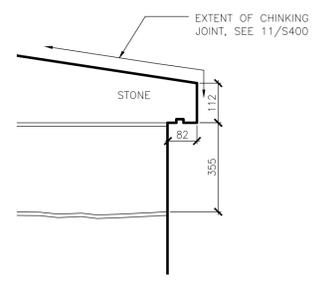
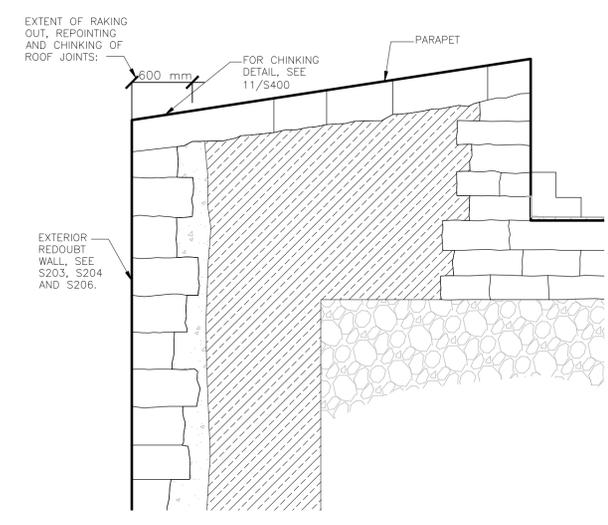
Approved by / Approuve par
J.C.

Checked by/ Verifie par
J.C.

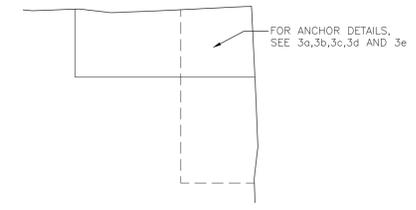
Project No./ No. du projet
22216

Asset No.
22216-S402-ROO

Sheet No./
Feuille No.
S402

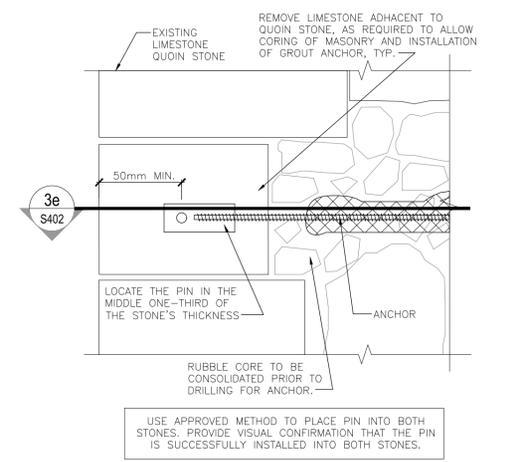
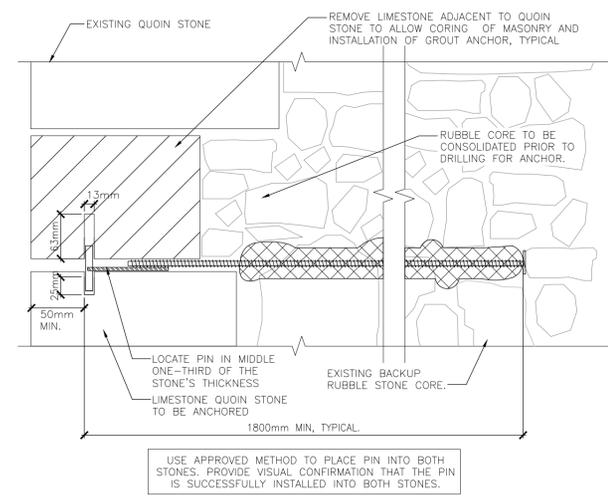


EAVES DETAIL AT CAPONIER 2 S402



CORNER ANCHOR DETAIL FOR REDOUBT WALLS, BLOCK 11 AND 2 3 S402

REDOUBT WALL SECTION 1 S402

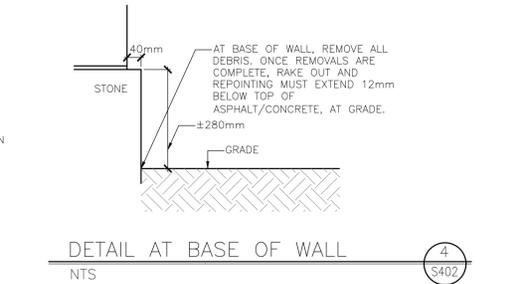
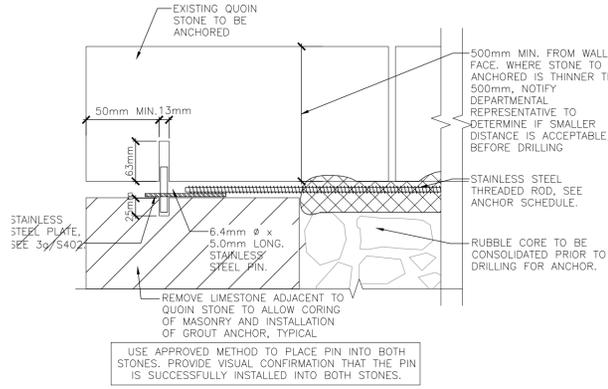


CORNER ANCHOR PLACEMENT DETAIL, DROP IN PIN 3c S402

CORNER ANCHOR PLACEMENT DETAIL, SIDE PIN 3d S402

CORNER ANCHOR PLACEMENT DETAIL, DROP IN PIN 3c S402

CORNER ANCHOR PLACEMENT DETAIL, SIDE PIN 3d S402



DETAIL AT BASE OF WALL 4 S402

CORNER ANCHOR PLACEMENT DETAIL, SIDE PIN 3e S402

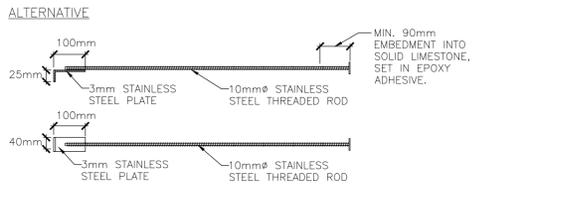
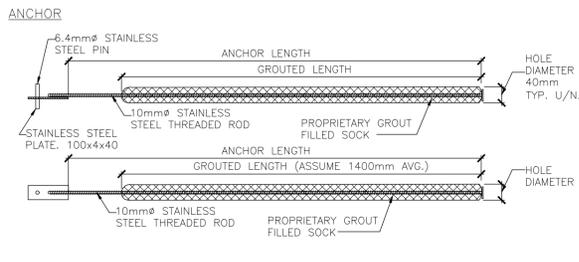
CORNER ANCHORS

NOTE: ALL ANCHORS TO BE SPACED AT 1200mm c/c EACH DIRECTION UNLESS NOTED OR IDENTIFIED ON SITE BY THE DEPARTMENTAL REPRESENTATIVE. PROVIDE ±600mm BETWEEN ANCHORS IN OPPOSITE DIRECTIONS WHERE POSSIBLE.

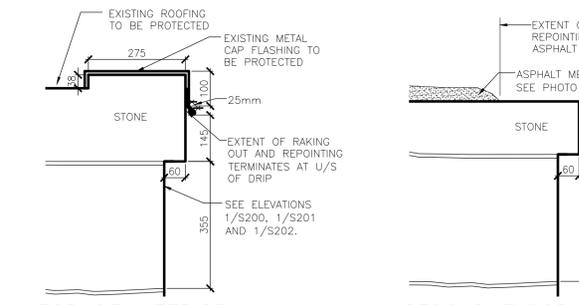
ALL ANCHORS ARE TO BE INSTALLED INTO THE TOP OF THE QUIN STONES WITH A DROP IN PIN, AS DETAILED IN 3c/S402. IF THE ORIENTATION OF THE STONES DOES NOT ALLOW FOR THE SPECIFIED SPACING TO BE MAINTAINED, ANCHORS MAY BE INSTALLED WITH A SIDE PIN, AS DETAILED IN 3d/S402, AT THE DISCRETION OF THE DEPARTMENTAL REPRESENTATIVE.

WHEN ANCHORING, THERE IS A PRIMARY AND SECONDARY STONE TO BE ANCHORED. IF A SITUATION ARISES WHERE PINNING INTO THE SECONDARY STONE TO BE ANCHORED WILL CAUSE DAMAGE TO THE STONE, IT IS ACCEPTABLE TO ONLY ANCHOR TO THE PRIMARY STONE AT THE DISCRETION OF THE DEPARTMENTAL REPRESENTATIVE.

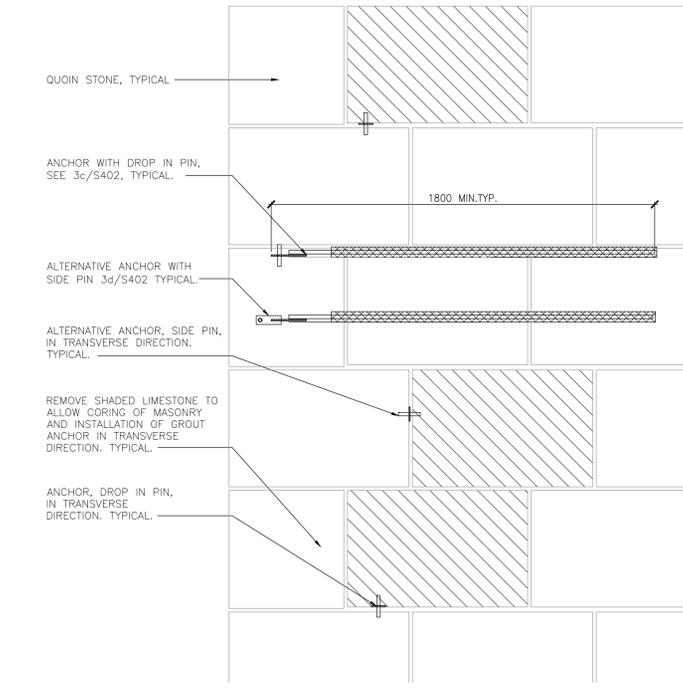
1. IDENTIFY PROPOSED LOCATION OF ANCHORS AND STONE REMOVALS TO DEPARTMENTAL REPRESENTATIVE PRIOR TO BEGINNING REMOVALS.
2. REMOVE SHADED LIMESTONE AS REQUIRED SUFFICIENT TO CORE HOLE INTO QUIN STONE, SEE 3b/S402.
3. PERFORM CONSOLIDATION. SEE GENERAL NOTES ON DRAWING S101.
4. DRILL 40mmØ CORE TO A MINIMUM DEPTH OF 1800mm. LOCATE THE CORE APPROXIMATELY 500mm FROM THE WALL FACE IN THE DIRECTION OF DRILLING. WHERE WINDOWS OR DOORS INTERFERE WITH THE SPECIFIED DEPTH, DRILL CORE TO A DEPTH 300mm SHORTER THAN THE DISTANCE TO THE FACE OF THE JAMB STONE. CONFIRM LENGTH WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO DRILLING.
5. CORE THE STONES TO RECEIVE THE ANCHOR PIN AND INSTALL THE ANCHOR AS DETAILED. ADDITIONAL REMOVALS OF LIMESTONE MAY BE REQUIRED TO PLACE THE PIN PROPERLY.
6. RESET THE LIMESTONE AS DETAILED.



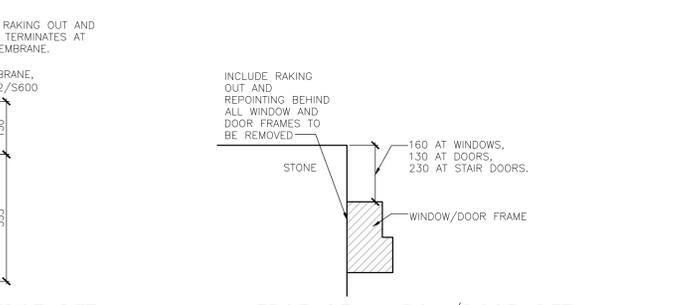
ANCHOR INSTALLATION PROCEDURES 3a S402



TOP OF INTERIOR WALL 5 S402



CORNER ANCHORS 3b S402



SECOND FLOOR EDGE DETAIL 6 S402

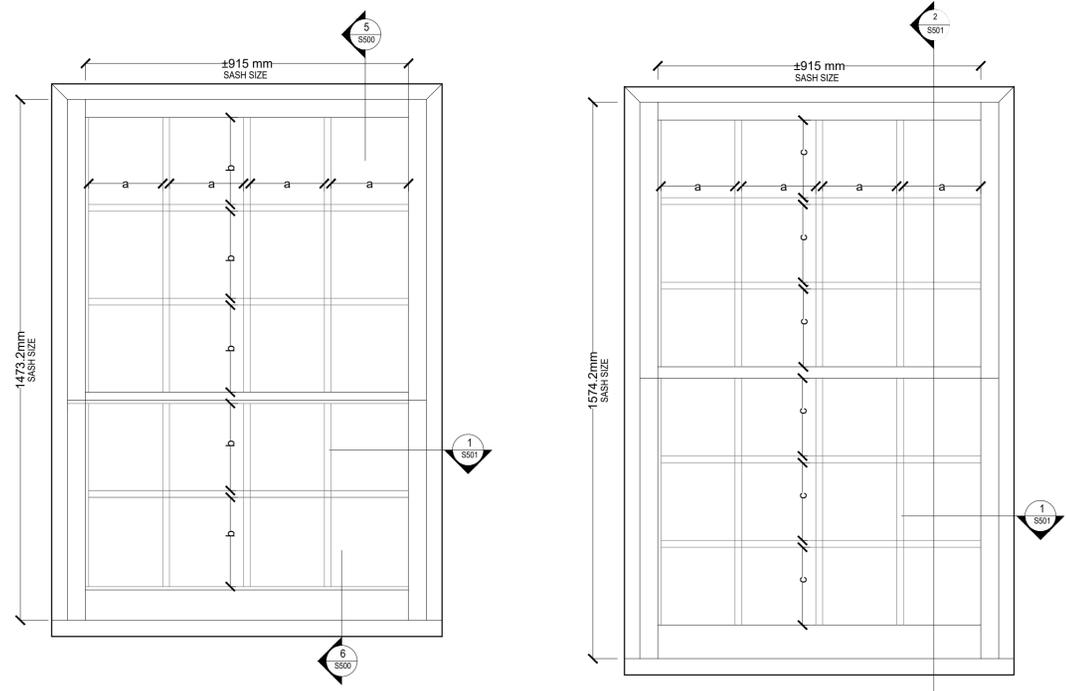


EDGE OF WINDOW/DOOR DETAIL 8 S402

TYPICAL STONE COLUMN SECTION 7 S402

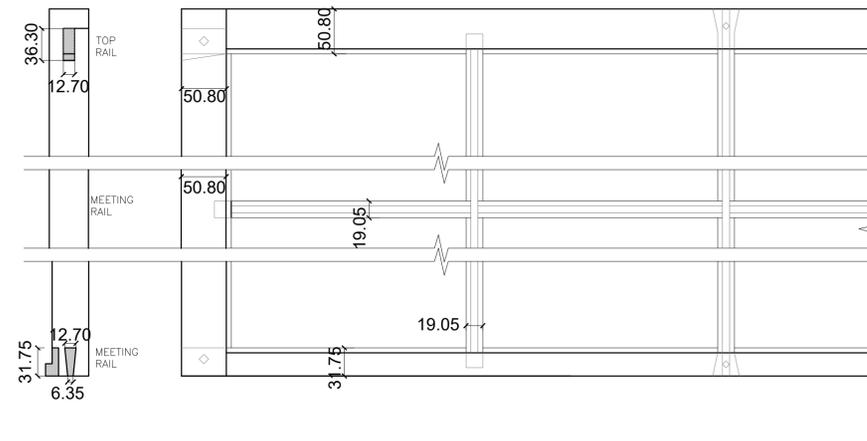


TYPICAL STONE COLUMN SECTION 7 S402

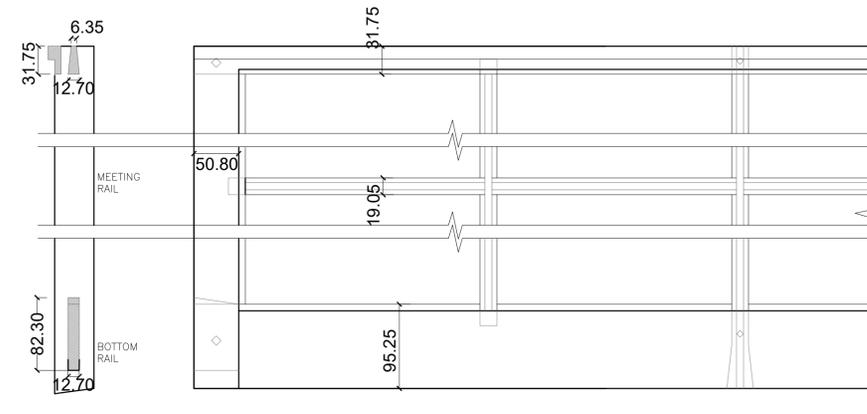


TYPICAL WINDOW- GROUND FLOOR
SCALE 1:10

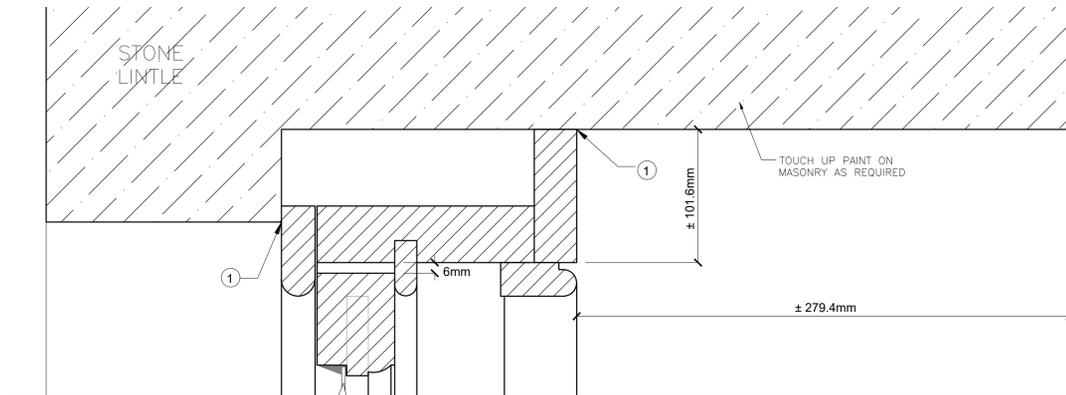
TYPICAL WINDOW- GALLERY LEVEL
SCALE 1:10



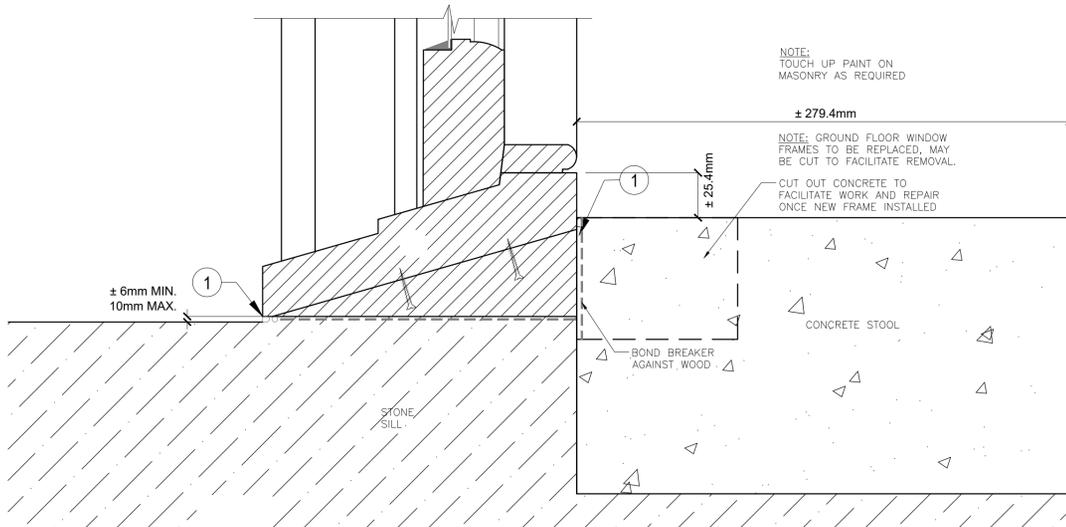
UPPER SASH JOINERY DETAILS
SCALE 1:4



LOWER SASH JOINERY DETAILS
SCALE 1:4



TYPICAL WINDOW HEAD - GROUND FLOOR LEVEL
SCALE 1:2



TYPICAL WINDOW SILL - GROUND FLOOR LEVEL
SCALE 1:2

GENERAL NOTES:

- SITE MEASURE FOR EACH OPENING AND CONFIRM ALL DIMENSIONS BEFORE RESTORATION/FABRICATION BEGINS.
- NOTE THAT THESE WINDOW DETAILS APPLY TO THE NEW REPLACEMENT WINDOWS AS WELL AS WINDOWS WHICH ARE TO BE REMOVED AND RESTORED.
- READ DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND WORK SHEETS

SASH JOINERY:

- JOINERY IS TYPICALLY THROUGH MORTICE & TENONS WEDGED AND PEGGED. PEGS TO BE WHITE OAK, DIAMOND SHAPE IN CROSS SECTION AND DRAWBORED.
- HORIZONTAL MUNTINS ARE TO BE PIECED WITH STUB TENONS.
- ALL VERTICAL MUNTINS TO BE CONTINUOUS. MIDDLE MUNTIN BAR IS TO BE THROUGH MORTICE & TENON WEDGED AND PEGGED AND DRAWBORED TO ACT IN TENSION.

DRAWING NOTES:

- CAREFULLY REMOVE EXISTING CAULKING AND MORTAR. APPLY "PERMA-CHINK" OVER FOAM ROPE AND NEATLY TOOL- MASK STONE AND WOOD TO AVOID SEALANT ON FACE.
- NEATLY SCRIBE JAMB EXTENSION TO WITHIN 3 MM OF STONE AND NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK"
- "BLUESKIN"™ DAMP PROOF COURSE. KEEP LEADING EDGE 18 MM BACK FROM FACE OF SILL.
- THE ONLY PERMISSIBLE LAMINATION IN THE SILL IS THIS LOCATION; GLUE WITH EPOXY ADHESIVE AND FASTEN WITH STAINLESS STEEL SCREWS, COUNTER SUNK.
- TWO LOCKING PINS PER MEETING RAIL, AS SUPPLIED BY KILLIAN HARDWARE.
- CAREFULLY REMOVE SOFFIT TO FACILITATE WINDOW REMOVAL, REINSTALL AFTER WINDOW REINSTALLATION. NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK".
- CAREFULLY REMOVE STOOL AND APRON TO FACILITATE WINDOW REMOVAL, REINSTALL AFTER WINDOW REINSTALLATION. NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK".
- TWO WESTERN RED CEDAR GROUNDS AT THE 1/2 AND 3/4 POINTS, SLIGHTLY DOVETAILED IN CROSS SECTION AND SECURELY MORTARED INTO PLACE. ALL "6 SIDES" TO BE TREATED WITH TWO COATS OF PINE TAR PRIOR TO INSTALLATION.
- NEW CAST IRON HINGES 38mm LONG FASTENED WITH FLAT HEAD SLOT STAINLESS STEEL SCREWS. CUT TOP SCREWS SHORT SO THEY DO NOT PENETRATE JAMBS.
- PAINT/TREAT ALL SURFACES PRIOR TO ASSEMBLY AND INSTALLATION (SECTION 09 91 00 PAINTING WOODWORK) AND TOUCH UP AFTERWARD, TYPICAL U/N.

CRAIG SIMS
HERITAGE BUILDING CONSULTANT

22216-S500	WINDOW DETAILS
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS

0	2022/09/28	ISSUED FOR TENDER		
NO.	DATE	DESCRIPTION	Drawn by	Approved

REVISIONS

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

WINDOW DETAILS

Plot Scale / Echelle	
1:1 (A1 Plot Size)	
Drawn by/ Dessine par	Date
C.P.	
Field Recording by / Releve-Temoin par	Date
C.S.	2022/05/23
Approved by / Approuve par	Date
C.S.	2022/09/28
Checked by/ Verifie par	Date
C.S.	2022/09/28

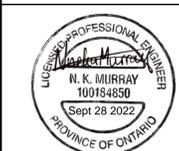
Project No./ No. du projet	Asset No.	Sheet No./ Feuille No.
22216		S500
Drawing Re No./No. du Dessin		
22216-S500-ROO		

NO.	DATE	DESCRIPTION	Drawn by	Approved
0	2022/09/28	ISSUED FOR TENDER		

REVISIONS				
NO.	DATE	DESCRIPTION	Drawn by	Approved

REVISIONS				
A	A Detail number		A Numero de detail	
B	B Sheet number		B Sur feuille numero	

Linear dimensions in millimeters Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

WINDOW DETAILS 2

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par Date
C.P.

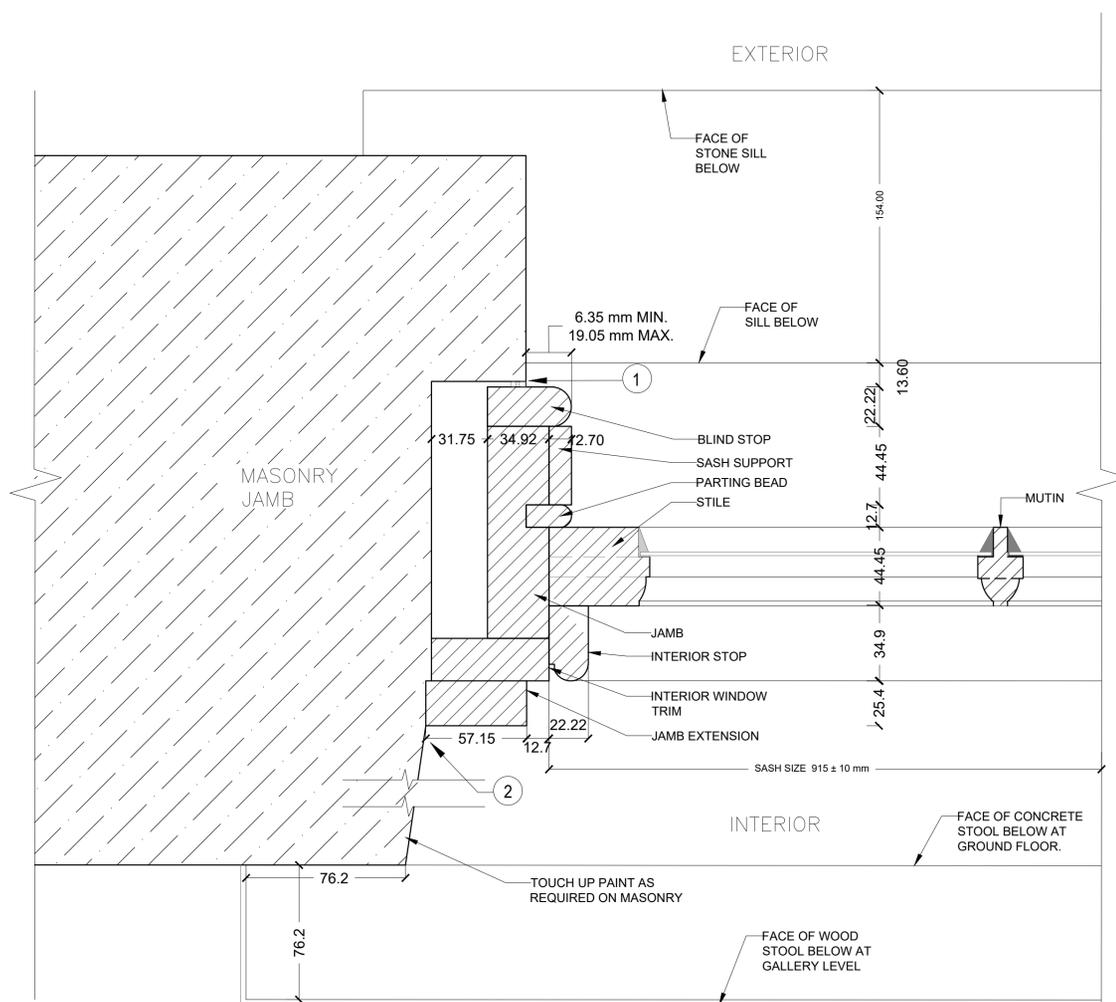
Field Recording by / Releve-Temoin par Date
C.S. 2022/05/23

Approved by / Approuve par Date
C.S. 2022/09/28

Checked by/ Verifie par Date
C.S. 2022/09/28

Project No./ No. du projet Asset No. Sheet No./ Feuille No.
22216 22216-S501-R00 S501

Drawing Re No./No. du Dessin
22216-S501-R00



TYPICAL WINDOW UNIT-JAMB

SCALE 1:2

GENERAL NOTES:

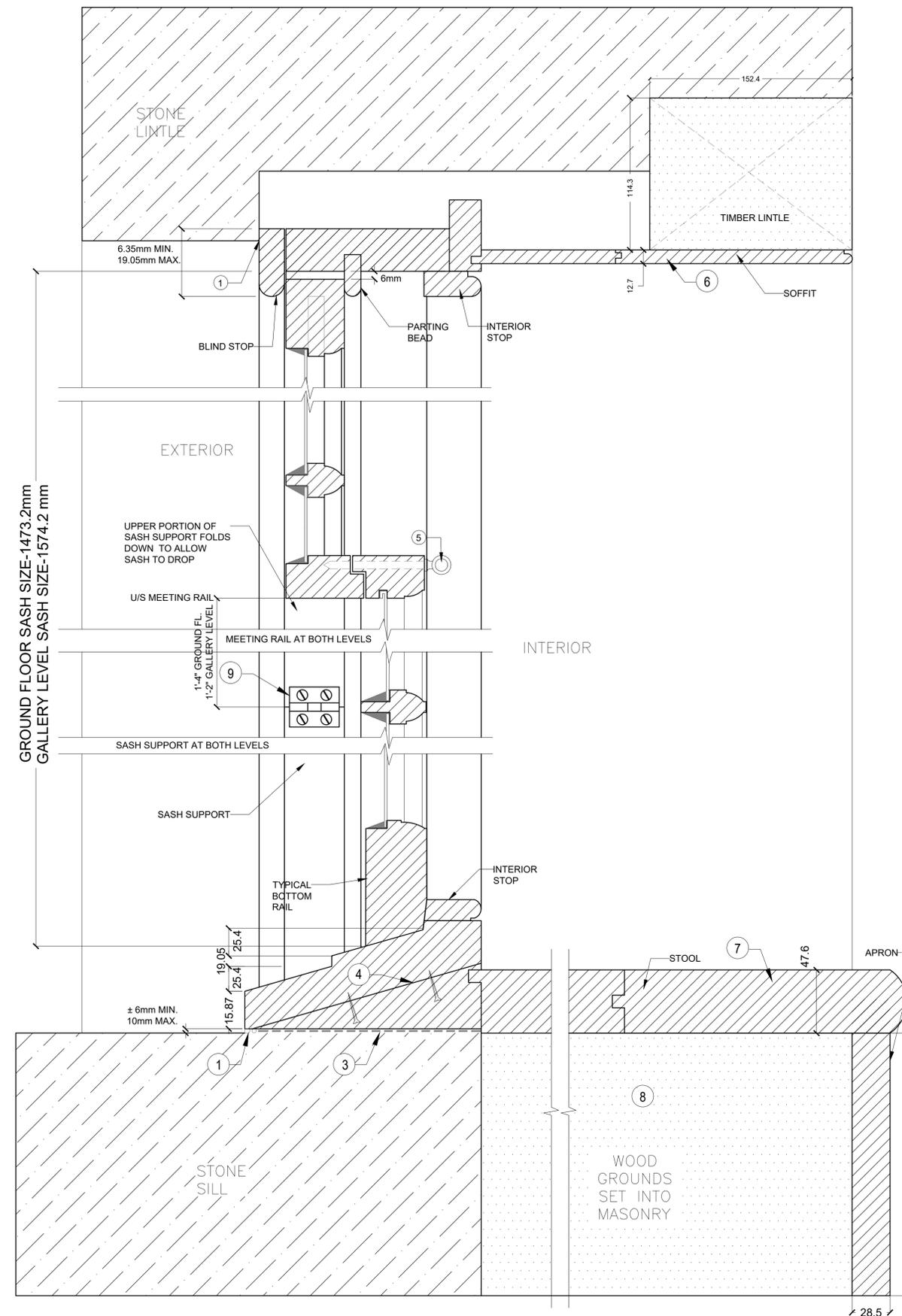
- A. SITE MEASURE FOR EACH OPENING AND CONFIRM ALL DIMENSIONS BEFORE RESTORATION/FABRICATION BEGINS.
- B. NOTE THAT THESE WINDOW DETAILS APPLY TO THE NEW REPLACEMENT WINDOWS AS WELL AS WINDOWS WHICH ARE TO BE REMOVED AND RESTORED.
- C. READ DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND WORK SHEET.

SASH JOINERY:

- A. JOINERY IS TYPICALLY THROUGH MORTICE & TENONS WEDGED AND PEGGED. PEGS SHALL BE WHITE OAK, DIAMOND SHAPE IN CROSS SECTION AND DRAWBORED.
- B. HORIZONTAL MUNTINS ARE TO BE PIECED WITH STUB TENONS.
- C. ALL VERTICAL MUNTINS TO BE CONTINUOUS. MIDDLE MUNTIN BAR IS TO BE THROUGH MORTICE & TENON WEDGED AND PEGGED AND DRAWBORED TO ACT IN TENSION.

DRAWING NOTES:

- 1 CAREFULLY REMOVE EXISTING CAULKING AND MORTAR. APPLY "PERMA-CHINK" OVER FOAM ROPE AND NEATLY TOOL- MASK STONE AND WOOD TO AVOID SEALANT ON FACE.
- 2 NEATLY SCRIBE JAMB EXTENSION TO WITHIN 3 MM OF STONE AND NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK"
- 3 "BLUESKIN"™ DAMP PROOF COURSE, KEEP LEADING EDGE 18 MM BACK FROM FACE OF SILL.
- 4 THE ONLY PERMISSIBLE LAMINATION IN THE SILL IS THIS LOCATION; GLUE WITH EPOXY ADHESIVE AND FASTEN WITH STAINLESS STEEL SCREWS, COUNTER SUNK.
- 5 TWO LOCKING PINS PER MEETING RAIL, AS SUPPLIED BY KILLIAN HARDWARE.
- 6 CAREFULLY REMOVE SOFFIT TO FACILITATE WINDOW REMOVAL, REINSTALL AFTER WINDOW REINSTALLATION. NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK".
- 7 CAREFULLY REMOVE STOOL AND APRON TO FACILITATE WINDOW REMOVAL, REINSTALL AFTER WINDOW REINSTALLATION. NEATLY POINT AGAINST MASONRY WITH "PERMA-CHINK".
- 8 TWO WESTERN RED CEDAR GROUNDS AT THE 1/4 AND 3/4 POINTS, SLIGHTLY DOVETAILED IN CROSS SECTION AND SECURELY MORTARED INTO PLACE. ALL "6 SIDES" TO BE TREATED WITH TWO COATS OF PINE TAR PRIOR TO INSTALLATION.
- 9 NEW CAST IRON HINGES 38mm LONG FASTENED WITH FLAT HEAD SLOT STAINLESS STEEL SCREWS. CUT TOP SCREWS SHORT SO THEY DO NOT PENETRATE JAMBS.
- 10 PAINT/TREAT ALL SURFACES PRIOR TO ASSEMBLY AND INSTALLATION (SECTION 09 91 00 PAINTING WOODWORK) AND TOUCH UP AFTERWARD, TYPICAL U/N.

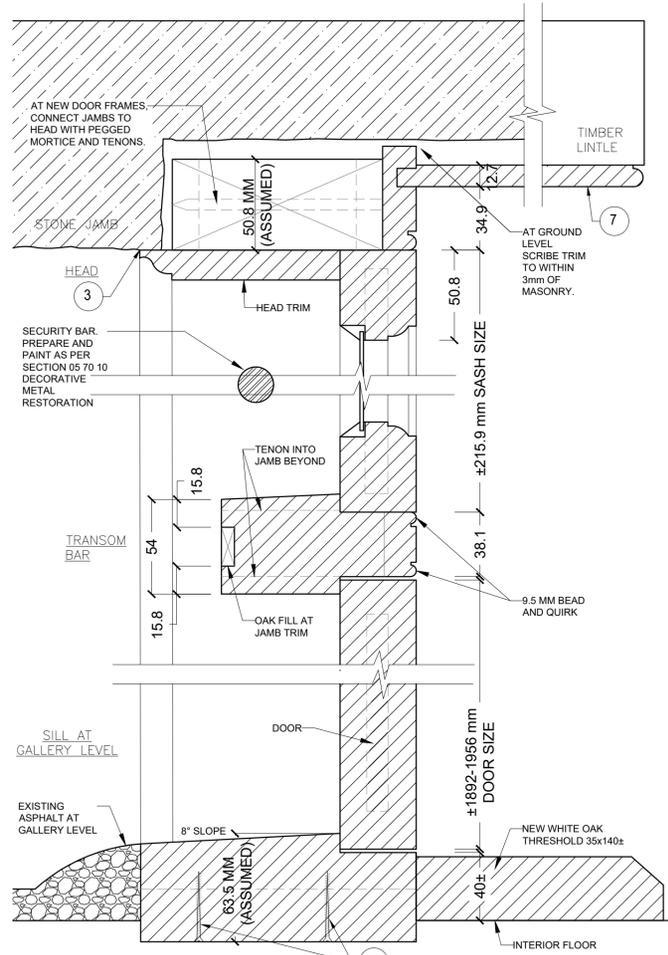


TYPICAL WINDOW UNIT-HEAD, SILL & MEETING RAIL AT GALLERY LEVEL

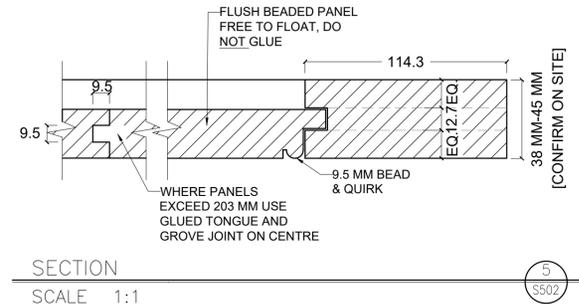
SCALE 1:2



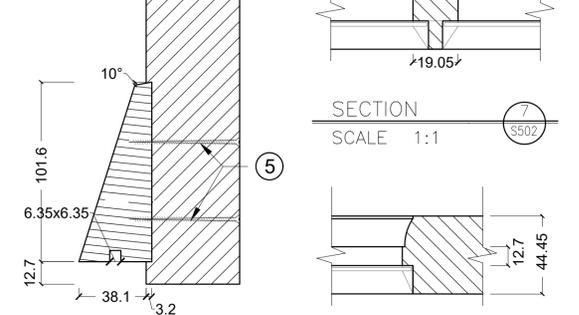
DOOR
SCALE N.T.S.



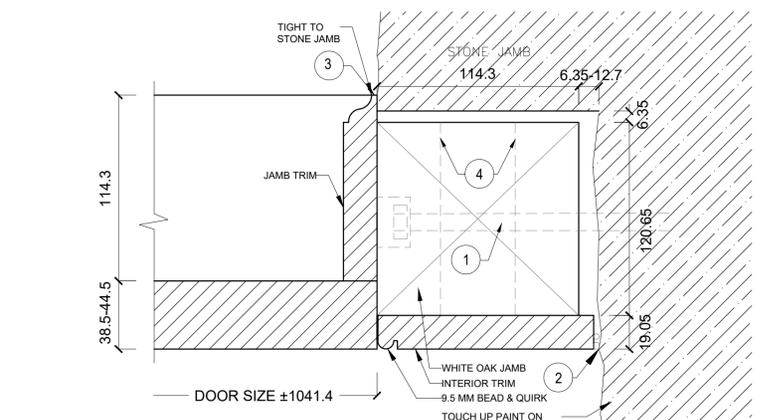
SECTION - STANDARD DOOR
SCALE 1:2



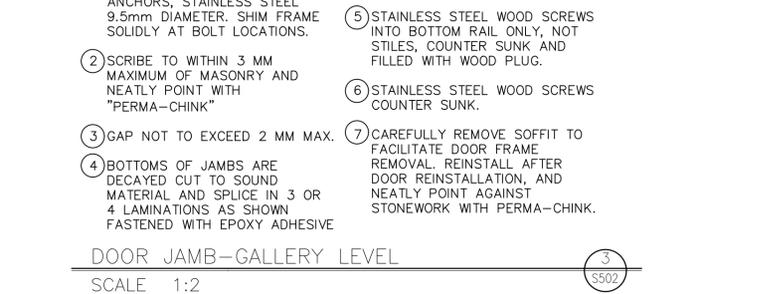
SECTION - DRIP
SCALE 1:1



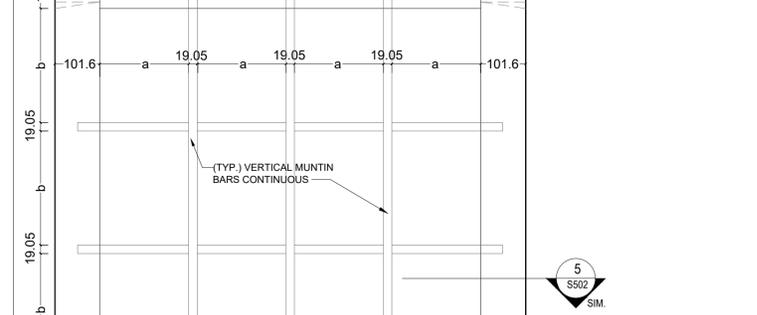
SECTION - SILL AT GROUND FLOOR DOORS
SCALE 1:1



DOOR JAMB - GALLERY LEVEL
SCALE 1:2



NEW GLAZED DOOR RD2 - 18,19,20
SCALE 1:8



SECTION - SILL AT GROUND FLOOR DOORS
SCALE 1:2

GENERAL NOTES:
SEE SPECIFICATIONS AND WORK SHEET.

A. SITE MEASURE FOR EACH OPENING AND CONFIRM ALL DIMENSIONS BEFORE RESTORATION/FABRICATION BEGINS.

B. NOTE THAT DOOR THICKNESS VARY FROM 38 TO 45mm, FOR REPRODUCTION DOORS COPY ORIGINAL THICKNESS. DOOR HEIGHTS RANGE FROM ABOUT 1892 TO ABOUT 1956mm - NO MORE THAN 6mm FROM TOP OR BOTTOM RAIL MAY BE TRIMMED FROM DOOR HEIGHT IN FITTING; OTHERWISE ALL ADJUSTMENTS TO HEIGHT ARE TO BE DONE BY ADJUSTING UPPER PANEL HEIGHT DURING FABRICATION AND AS SHOWN ON DRAWINGS. SIMILARLY, FOR ADJUSTING THE DOOR WIDTH NO MORE THAN 6mm MAY BE TRIMMED FROM EACH STILE, OTHERWISE ADJUSTMENTS TO WIDTH ARE TO BE DONE BY ADJUSTING PANEL WIDTHS DURING FABRICATION AND AS SHOWN ON DRAWINGS.

C. NOTE THAT THESE DOOR DETAILS APPLY TO THE NEW REPLACEMENT DOORWAYS AS WELL AS RESTORED DOORWAYS.

D. CAREFULLY REMOVE HARDWARE TO FACILITATE WORK. INSTALL NEW/RESTORED HARDWARE AFTER FINAL PAINTING.

E. RESTORE/REPLACE TRANSOM SASH AND HARDWARE AS INDICATED IN WORK SHEET AND SPECIFICATIONS.

F. REPLACEMENT FRAME COMPONENTS AND MATERIAL USED FOR REPAIR FOR HEAD, TRANSOM BAR, SILLS AND JAMBS SHALL BE CLEAR 1/4 CUT WHITE OAK.

G. INTERIOR TRIM SHALL BE EASTERN WHITE PINE, 'C' SELECT.

H. REPLACEMENT DOORS, JAMB TRIM AND TRANSOM LIGHTS SHALL BE QUARTER CUT DOUGLAS FIR, 'C' SELECT.

I. NOTE THAT PASSAGE DOORS RD1-45 AND RD1-51A ARE ±1219mm (±48") WIDE.

J. PAINT/TREAT ALL SURFACES PRIOR TO INSTALLATION (SECTION 09 91 00 PAINTING WOODWORK) AND TOUCH UP AFTERWARDS.

JOINERY NOTES:

1. JOINERY IS TYPICALLY THROUGH MORTICE & TENONS WEDGED AND PEGGED. PEGS SHALL BE WHITE OAK, DIAMOND SHAPE IN CROSS SECTION AND DRAWBORED.

2. THE ONLY PERMISSIBLE LAMINATIONS ARE THOSE SHOWN FOR PANELS WHICH EXCEED 203 MM WIDTH.

Parcs Canada Parks Canada

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22216

CRAIG SIMS
HERITAGE BUILDING CONSULTANT

DRAWING NO.	DRAWING NAME
22216-S502	DOOR DETAILS

REVISIONS			
NO.	DATE	DESCRIPTION	Drawn by / Dessiné par
0	2022/09/28	ISSUED FOR TENDER	

REVISIONS			
NO.	DATE	DESCRIPTION	Drawn by / Dessiné par
0	2022/09/28	ISSUED FOR TENDER	

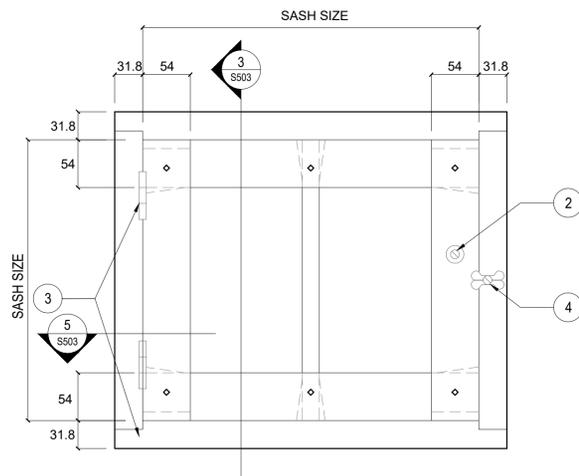
Linear dimensions in millimeters / Dimensions linéaires en millimètres

Professional Engineer
N. K. MURRAY
100184850
Sept 28 2022
PROVINCE OF ONTARIO

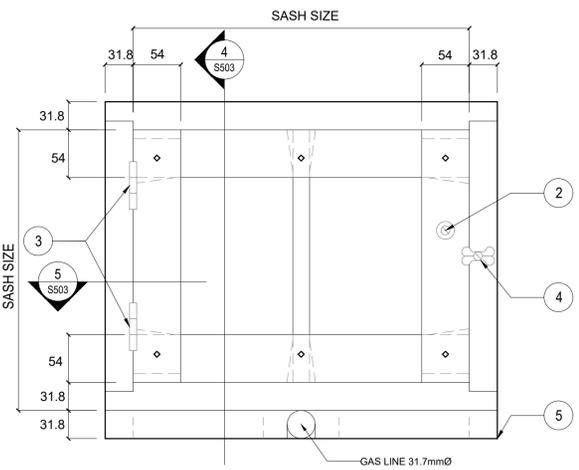
Project title / Titre du projet
**FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11**

Drawing title / Titre du dessin
DOOR DETAILS

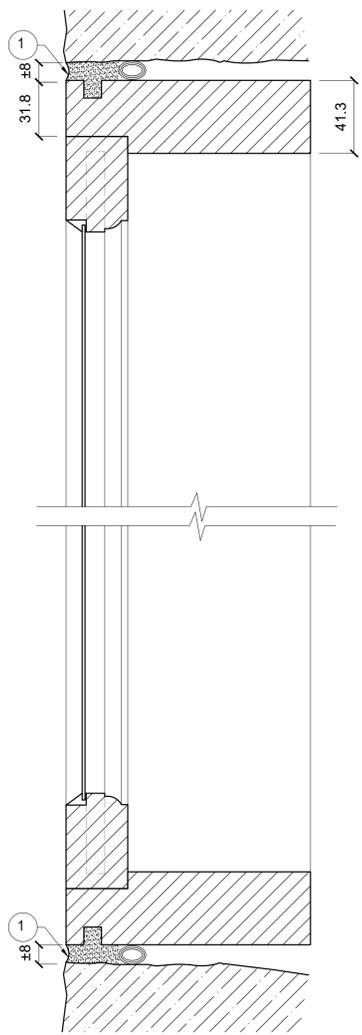
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Field Recording by / Releve-Temoin par C.S.	Approved by / Approuve par C.S.	Date 2022/05/23
Checked by/ Verifie par C.S.	Approved by / Approuve par C.S.	Date 2022/09/28
Project No./ No. du projet 22216	Asset No.	Sheet No./ Feuille No. S502
Drawing Re No./No. du Dessin 22216-S502-ROO		



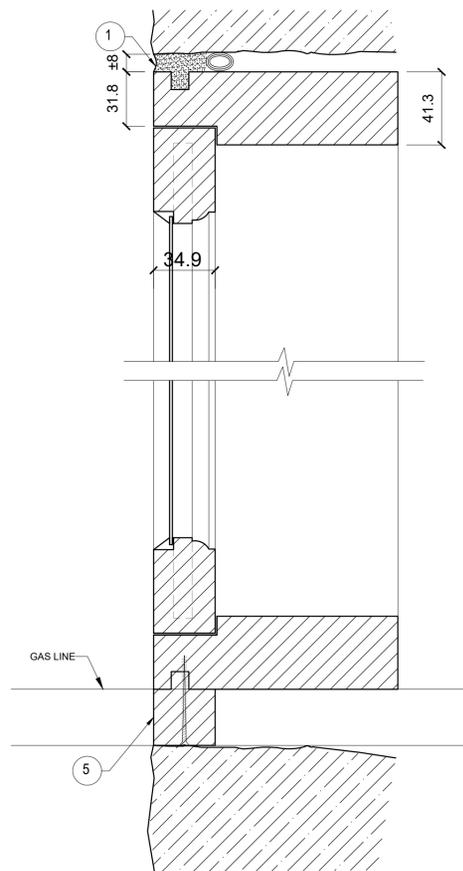
TYPICAL INTERIOR ELEVATION
SCALE N.T.S. (1) S503



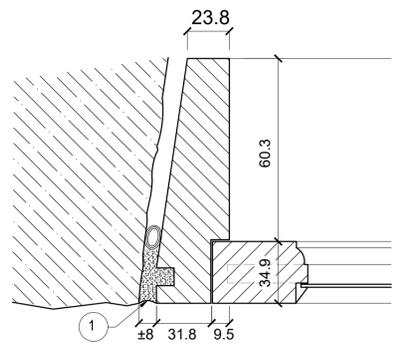
TYPICAL INTERIOR ELEVATION AT GAS LINE
SCALE N.T.S. (2) S503



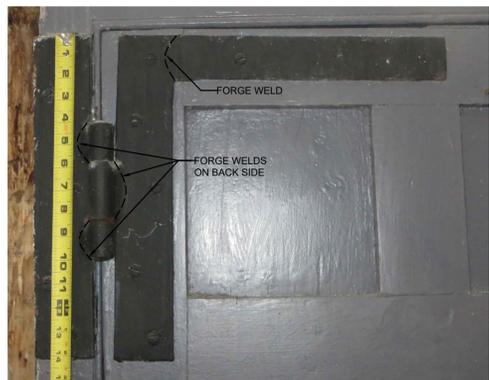
LOOP HOLE COVER SECTION
SCALE N.T.S. (3) S503



LOOP HOLE COVER SECTION WITH GAS LINE
SCALE N.T.S. (4) S503



JAMB SECTION
SCALE N.T.S. (5) S503



NOTES:

- ONE NEW PAIR OF REPRODUCTION HL HINGES ARE REQUIRED FOR BOTH RD1-47 & 48
- MATCH OVERALL SIZE OF EXISTING HINGES AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.
- MATERIAL SHALL BE MILD STEEL.
- FORGE WELDS AT HINGE KNUCKLE TO BE DONE ON BACK SIDE IN TRADITIONAL MANNER.
- NOTE THAT UPPER AND LOWER HINGES ARE MIRROR IMAGE OF ONE ANOTHER.

HL HINGES
SCALE N.T.S. (6) S503

SCOPE OF WORK:
SEE SPECIFICATIONS FOR ADDITION INFORMATION.

- ASSUME THERE ARE 90 LOOP HOLE COVERS CONSISTING OF A TWO LIGHT CASEMENT SASH IN A FRAME WITH ASSOCIATED HARDWARE.
- ALL FRAMES ARE TO BE REPLACED.
- ASSUME 15 OF THE SASHES ARE RETAINED AND RESTORED, THE REMAINDER ARE TO BE REPRODUCED AS DESCRIBED IN SPECIFICATIONS AND SHOWN ON DRAWINGS. STILES, RAIL AND MUNTIN PROFILES TO MATCH EXISTING. ASSUME 20 OF THE WOOD PULLS AND BOLT ARE RECLAIMED AND RESTORED FOR THESE SASHES. NOTE THAT TOTAL STRIPPING OF PAINT FOR RESTORED SASHES IS NOT REQUIRED. SCRAPE AND SAND AND THEN PAINT AS OUTLINED IN SPECIFICATIONS.
- SITE MEASURE FOR EACH OPENING AS ALL VARY. IN FITTING SASHES NO MORE THAN 6.35mm (1/4") CAN BE TRIMMED FROM EACH STILE OR RAIL, OTHERWISE GLASS SIZE IS TO VARY. AS AN APPROXIMATE GUIDE THE GALLERY LEVEL SASH SIZES ARE ABOUT 318mm (12 1/2") HIGH ± 12.7mm (1/2") AND ABOUT 381mm (15") WIDE ± 25mm (1") - AND THE GROUND FLOOR LEVEL SASH SIZES ARE ABOUT 292mm (11 1/2") HIGH ± 12.7mm (1/2") BY 457mm (18") WIDE ± 12.7mm (1/2").
- ASSUME THERE ARE 60 CAST IRON TURN BUTTONS TO RESTORE AND THAT THE REMAINDER ARE TO BE REPLACED IN KIND AND IN CAST IRON.
- ASSUME ALL HINGES ARE REPLACED WITH NEW CAST IRON 50mmx50mm (2" X 2") WITH STAINLESS STEEL, FLAT HEAD, SLOT HEAD SCREWS.
- ASSUME 40 OF THE FRAMES HAVE THE SPACER AS SHOWN IN TYPE 2, TO ACCOMMODATE GAS LINE. NOTE THAT IN SOME CASES THE LINE IS AT THE TOP OF THE FRAME. ASSUME 20 UNITS HAVE A LINE TOP AND BOTTOM.
- PAINT/TREAT ALL SURFACES PRIOR TO ASSEMBLY AND INSTALLATION (SECTION 09 91 00 PAINTING WOODWORK) AND TOUCH UP AFTERWARDS.
- FASTEN CORNERS OF FRAMES WITH TWO STAINLESS STEEL SCREWS.
- SHIM AT CORNERS ONLY USING CEDAR. KEEP SHIMS BACK 25 MM FROM FACE OF FRAME.
- ASSUME CABINETRY AND OTHER FURNITURE IS MOVED BY CLIENT.
- SASH JOINERY THROUGH MORTICE AND TENONS WEDGED, DRAWBORED AND PEGGED.

DRAWING NOTES:

- NEATLY REMOVE CAULKING/MORTAR FROM BETWEEN FRAME AND MASONRY. AFTER INSTALLATION OF NEW FRAMES POINT PERIMETER IN LIME BASED MORTAR 1:2:9 MIX, (SEE SECTION 04 03 08 MORTARING), 30 MM DEEP, AGAINST FOAM ROPE.
- RESTORED WOOD PULL WITH NUT AND BOLT OR MATCHING WOOD PULL WITH ROUND HEAD SLOT HEAD BOLT AND NUT.
- NEW CAST IRON HINGES WITH NEW STAINLESS STEEL FLAT HEAD SLOT HEAD STAINLESS STEEL SCREWS.
- RESTORED/MATCHING CAST IRON TURN BUTTONS.
- FASTEN SHIM FOR GAS LINE USING A TOTAL OF 4 STAINLESS STEEL SCREWS.

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22216

CRAIG SIMS
HERITAGE BUILDING CONSULTANT

22216-S503	LOOP HOLE COVER DETAILS
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS			
NO.	DATE	DESCRIPTION	Drawn by / Dessine par
0	2022/09/28	ISSUED FOR TENDER	

REVISIONS			
NO.	DATE	DESCRIPTION	Drawn by / Dessine par

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres

PROFESSIONAL ENGINEER
N. K. MURRAY
100184850
Sept 28 2022
PROVINCE OF ONTARIO

Project title / Titre du projet

**FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11**

Drawing title / Titre du dessin

LOOP HOLE COVER DETAILS

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par C.P. Date

Field Recording by / Releve-Temoin par C.S. Date 2022/05/23

Approved by / Approuve par C.S. Date 2022/09/28

Checked by/ Verifie par C.S. Date 2022/09/28

Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

Drawing Re No./No. du Dessin 22216-S503-ROO

S503

CONSERVATION PROCEDURE:

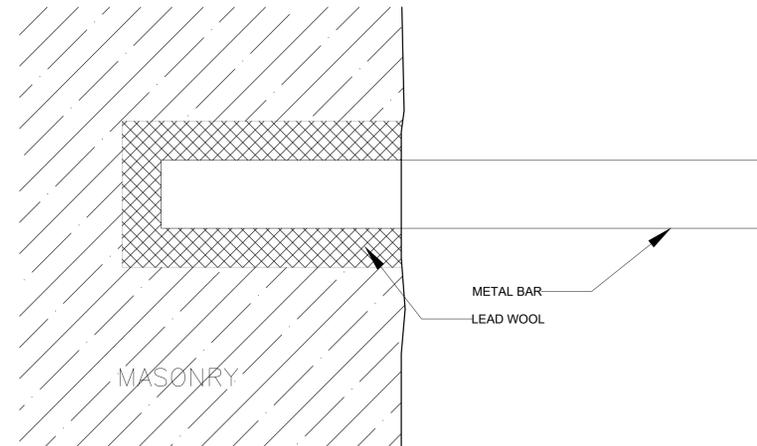
- AFTER WINDOW IS REMOVED:
1. CAREFULLY CHISEL OUT MORTAR AND LEAD FROM RAIL ENDS.
 2. DRILL OUT RIVETS AND CAREFULLY REMOVE RAIL ENDS.
 3. STRIP ALL PAINT AND CORROSION PRODUCTS
 4. REPAINT ALL AND REINSTALL, AFTER WINDOW IS REINSTALLED
 5. NEW MORTICES ARE REQUIRED IN REPLACEMENT STONE FOR RAIL ENDS.

FOR ADDITIONAL INFORMATION ON IRON CONSERVATION, SEE SPECIFICATION SECTION 05 70 10 DECORATIVE METAL RESTORATION.

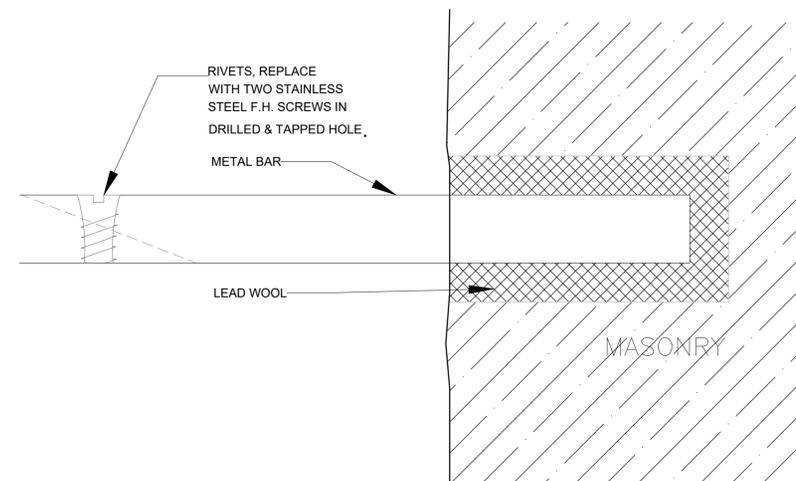
THESE BARS ARE LOCATED AT WINDOWS RW2-01,02,03,04,05 & 06



IRON WINDOW BAR-TYPICAL
SCALE N.T.S.



DETAIL A-TYPICAL
SCALE 1:1



DETAIL B-TYPICAL
SCALE 1:1

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22216

CRAIG SIMS
HERITAGE BUILDING CONSULTANT

22216-S504 METAL WORK- WINDOW BARS

DRAWING NO. DRAWING NAME

REFERENCE DRAWINGS

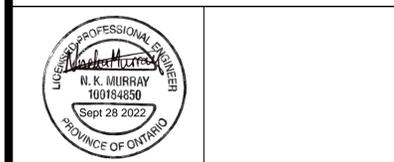
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0	2022/09/28	ISSUED FOR TENDER		

NO.	DATE	DESCRIPTION	Drawn by Dessine par	Approved Approuve

REVISIONS

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

METAL WORK
WINDOW BARS

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

Field Recording by / Releve-Temoin par C.S. Date 2022/05/23

Approved by / Approuve par C.S. Date 2022/09/28

Checked by/ Verifie par C.S. Date 2022/09/28

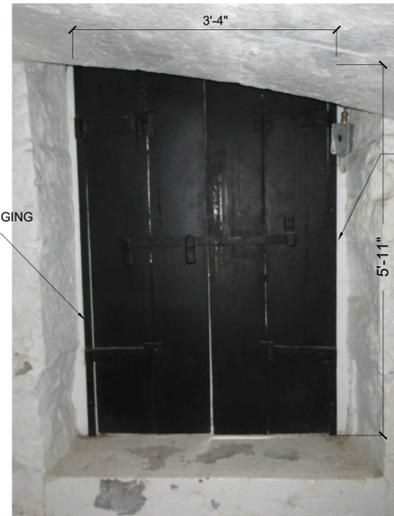
Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

Drawing Re No./No. du Dessin 22216-S504-R00 S504



WINDOWS RW1-103 AND RW1-104
SCALE N.T.S.

1
S505



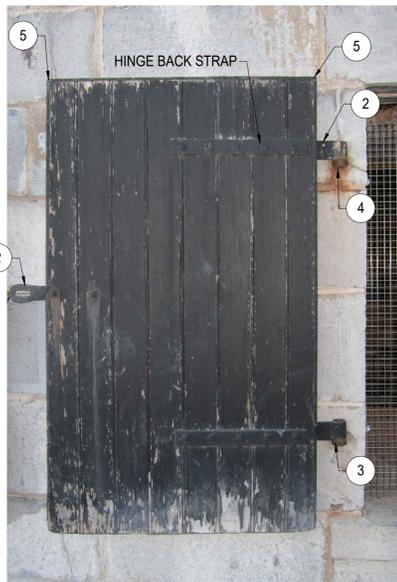
TYPICAL INTERIOR IRON SHUTTER
SCALE N.T.S.

6
S505



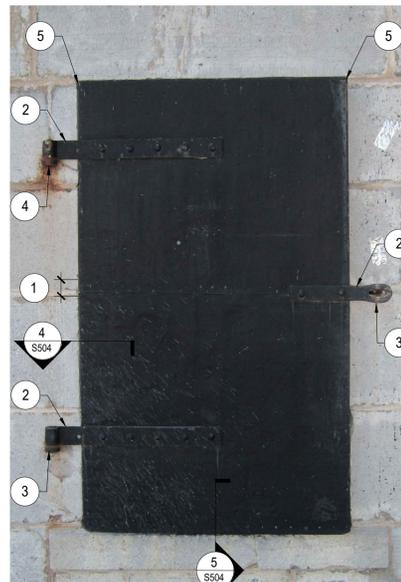
TYPICAL SHUTTER BAR
ONE PER PAIR
SCALE N.T.S.

8
S505



TYPICAL COPPER CLAD SHUTTER IN OPEN POSITION
SCALE N.T.S.

2
S505



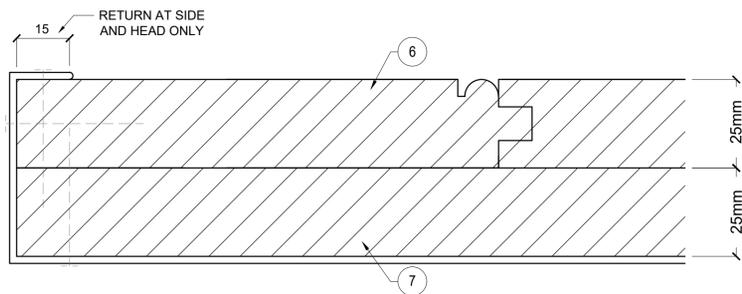
TYPICAL COPPER CLAD SHUTTER IN CLOSED POSITION
SCALE N.T.S.

3
S505



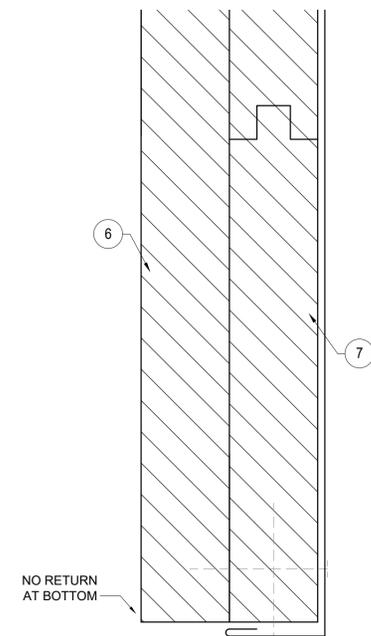
TYPICAL HINGE
2 PER SHUTTER
SCALE N.T.S.

7
S505



SECTION
SCALE N.T.S.

4
S505



SECTION
SCALE N.T.S.

5
S505

INTERIOR WROUGHT IRON SHUTTERS
DRAWING NOTES:

1. LABEL AND REMOVE SHUTTERS PRIOR TO REMOVING WINDOWS.
2. RESTORE SHUTTERS IN ACCORDANCE WITH SECTION 05 70 10: DECORATIVE METAL RESTORATION EXCEPT FOR PAINTING DESCRIBED BELOW
3. STRIP AND PAINT AS PER SECTION 05 70 10 DECORATIVE METAL RESTORATION
4. AFTER FINAL PAINTING LUBRICATE MOVING PORTIONS OF HINGES AND SHUTTER BAR WITH SMALL AMOUNT OF LIGHT MACHINE OIL
5. REPLACE ALL WOOD SCREWS TO MATCH EXISTING SIZE, FLAT SLOT HEAD, STAINLESS STEEL, LIGHTLY BLAST HEADS AND PAINT BLACK.

REPAIRS:

IN ACCORDANCE WITH SECTION 05 70 10: DECORATIVE METAL RESTORATION WELD REPLACEMENT PORTION TO BOTTOM OF EAST HANGING STILE RW1-86 APPROXIMATELY 9.5mm (3/8") x 31.8mm (1 1/4") x 127mm (5")± AND DRILL COUNTER SINK FOR NEW SCREW.

SHUTTER LOCATIONS:

- | | |
|--------------------------|--------|
| RW1-69 | RW1-84 |
| RW1-70 | RW1-85 |
| RW1-80 LEFT SIDE MISSING | RW1-86 |
| RW1-81 | RW1-87 |
| RW1-82 | RW1-88 |
| RW1-83 | RW1-89 |

GENERAL NOTES:

1. CONFIRM DIMENSIONS ON SITE
2. COPPER CLAD SHUTTERS ARE TO CLEAR THE STONE JAMBS BY 6mm EACH SIDE, 6mm AT THE HEAD, AND 13mm AT THE SILL
3. NOTE THAT THERE ARE TWO SHUTTERS REQUIRED AND THAT THEY ARE MIRROR IMAGES OF EACH OTHER
4. SHUTTERS TO BE CLAD IN 16oz. SHEET COPPER
5. EXISTING NAILING PATTERN TO BE MATCHED, NAILS TO BE TEMPERED COPPER 38mm LONG AND BARBED
6. TIMBER CORE OF SHUTTERS TO BE CUSTOM MILLED FROM QUARTER CUT DOUGLAS FIR MAXIMUM MOISTURE CONTENT OF 10%
7. BACKSIDE OF SHUTTERS TO BE PRIMED WITH LINSEED OIL AND PAINTED THREE COATS OF LINSEED OIL PAINT, COLOUR GREY TO MATCH DOORS, PRIOR TO INSTALLATION OF COPPER.
8. PRIOR TO APPLYING COPPER CLADDING EDGES OF SHUTTERS TO BE PRIMED WITH WARMED LINSEED OIL AND PINE TAR, TWO COATS, AS PER SPECIFICATIONS.
9. NUTS, BOLTS, WASHERS AND HINGE BACK STRAPS TO BE REPLACED TO MATCH EXISTING IN SIZE WITH ROUND HEAD AND SQUARE NUTS BUT IN STAINLESS STEEL. LIGHTLY SAND BLAST PRIOR TO PAINTING. ZINC RICH PRIMER NOT REQUIRED.
10. FOR ADDITIONAL INFORMATION ON IRON CONSERVATION, SEE SPECIFICATION SECTION 05 70 10 DECORATIVE METAL RESTORATION.

COPPER CLAD SHUTTERS:

1. HEAD LAP IN COPPER TO BE 75mm.
2. STRAP HINGES AND HASP TO BE CAREFULLY REMOVED, PREPARED, PAINTED AND REINSTALLED AS PER SPECIFICATIONS.
3. BOTTOM HINGES AND EYE TO BE RESTORED IN SITU.
4. CAREFULLY REMOVE UPPER PINTLES AND PREPARE, PAINT AND REINSTALL AS PER SPECIFICATIONS. SET INTO NEW MORTICES IN NEW STONES AND PACK SECURELY WITH LEAD WOOL.
5. COPPER CAPS, TIN, SOLDER AND SWEAT TO RENDER UPPER CORNERS WATER TIGHT.
6. VERTICAL T & G BOARDS WITH 10mm BEAD & QUIRK, ABOUT 115mm EXPOSED FACE.
7. HORIZONTAL BOARDS, SAME SIZE AS (6) BUT WITHOUT BEAD & QUIRK. FASTEN TO VERTICAL BOARDS WITH 40 MM STAINLESS STEEL FLAT HEAD SCREWS.

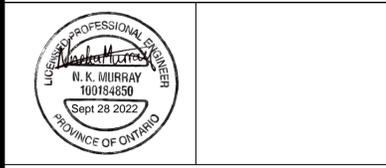
22216-S505	METAL WORK-- SHUTTER DETAILS
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS			
NO.	DATE	DESCRIPTION	Drawn by / Dessine par
0	2022/09/28	ISSUED FOR TENDER	

REVISIONS			
NO.	DATE	DESCRIPTION	Drawn by / Dessine par

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters	Dimensions lineaires en millimetres
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Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

METAL WORK
SHUTTER DETAILS

Plot Scale / Echelle

1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

Field Recording by / Releve-Temoin par C.S. Date 2022/05/23

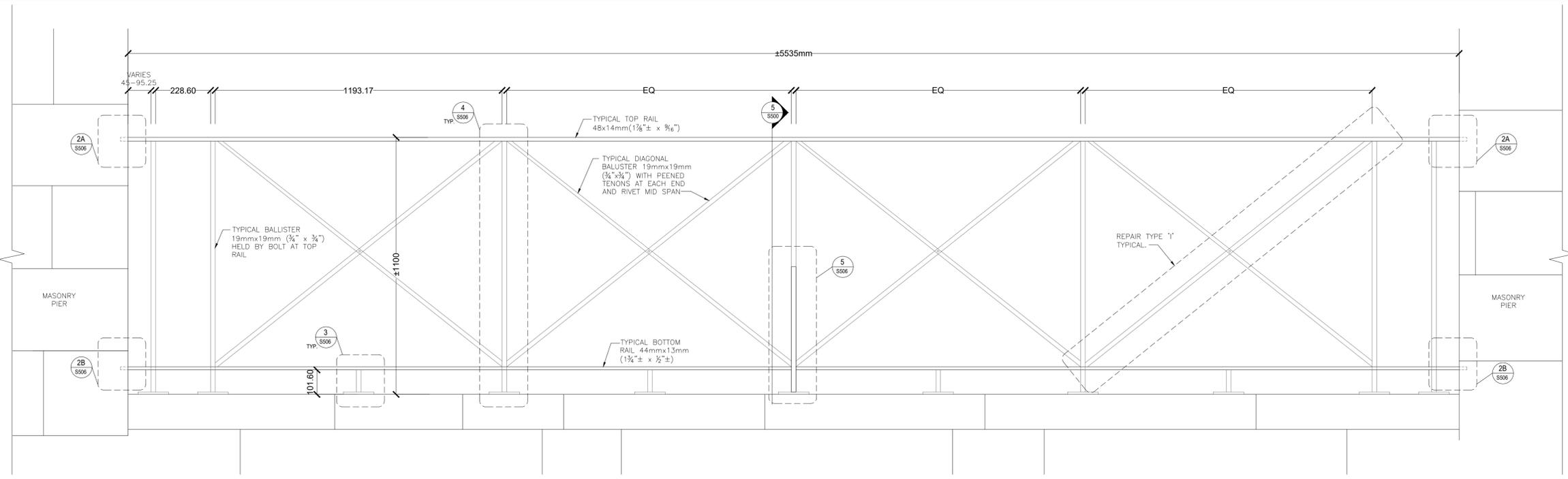
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Checked by/ Verifie par C.S. Date 2022/09/28

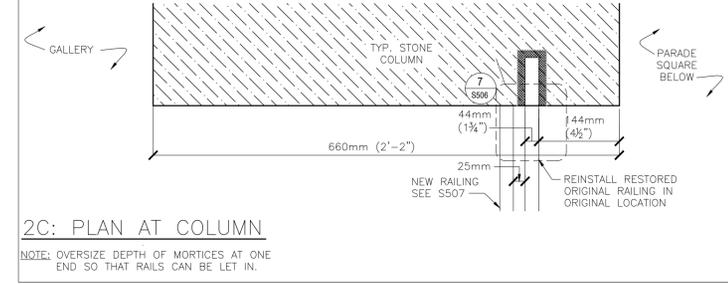
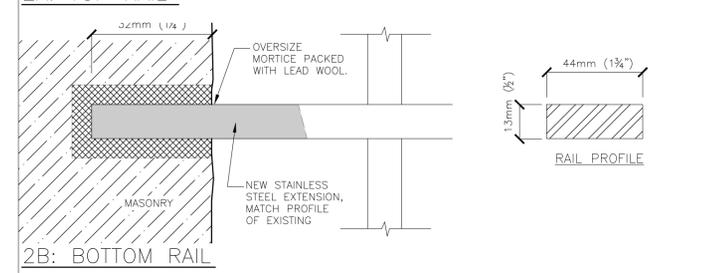
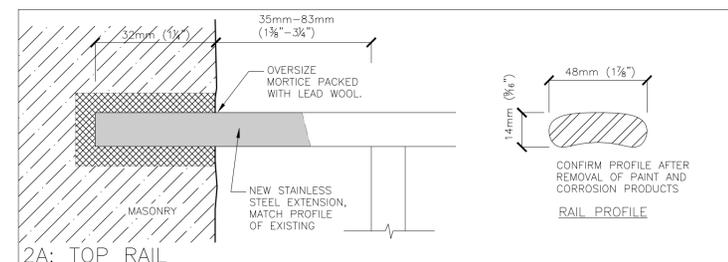
Project No./ No. du projet 22216 Asset No. Sheet No./ Feuille No.

Drawing Re No./No. du Dessin 22216-S505-ROO S505

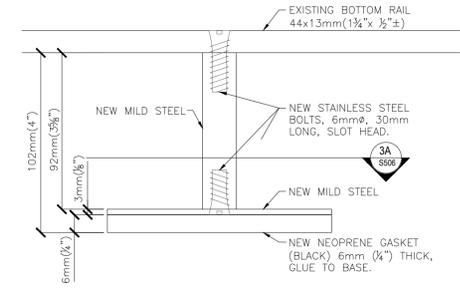
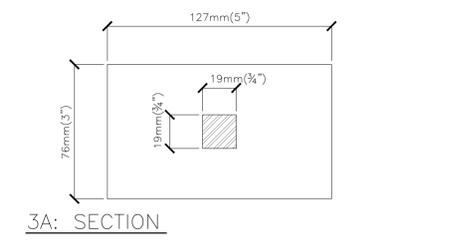
CRAIG SIMS
HERITAGE BUILDING CONSULTANT



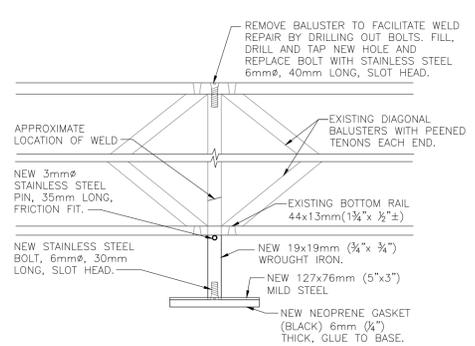
ORIGINAL IRON RAILINGS - EXTERIOR ELEVATION - GALLERY LEVEL - TYPICAL
SCALE 1:10



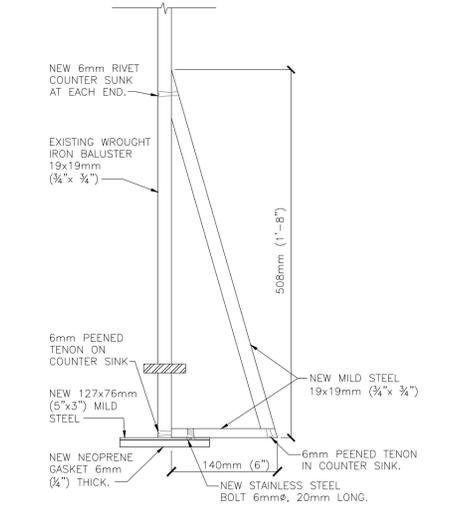
RAIL EXTENSION (REPAIR TYPE 'C')
SCALE VARIES



NEW FOOT (REPAIR TYPE 'F')
SCALE 1:2



NEW BALUSTER EXTENSION AND FOOT (REPAIR TYPE 'G')
SCALE 1:5



NEW MID SPAN BRACE (REPAIR TYPE 'H')
SCALE 1:5

DRAWING NOTES FOR RAILINGS:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SPECIFICATION SECTION 05 70 10: DECORATIVE MEDAL RESTORATION.
2. DRAWINGS SHOW 6mm NEOPRENE SHIMS BENEATH ALL FEET BUT THIS SHALL BE REDUCED OR INCREASED IN THICKNESS AS REQUIRED TO FIT TIGHTLY AGAINST MASONRY/ASPHALT

HISTORIC RAILINGS:

1. LABEL, PHOTOGRAPH AND CAREFULLY REMOVE TO SHOP.
2. REMOVE PAINT AND CORROSION PRODUCTS BY ELECTROLYTIC REDUCTION.
3. REVIEW SCOPE OF WORK WITH DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH RESTORATION.
4. REPAIR TYPE 'A' - REMOVE SLOPPY MODERN WELD REPAIRS BY GRINDING AND FILING SMOOTH, ASSUME ALL FOUR FACES OF MULTIPLE COMPONENTS WHEREVER COMPONENTS INTERSECT, FILL WASTED AREAS WITH WELD AND GRIND SMOOTH. THIS TYPE OF REPAIR IS TYPICALLY REQUIRED WHERE FEET ARE ATTACHED TO BALUSTERS, WHERE FEET ARE ATTACHED TO BOTTOM RAILS, WHERE BALUSTERS HAVE BEEN REPAIRED AT BOTTOM, AND WHERE BALUSTERS AND DIAGONAL BALUSTERS MEET TOP AND BOTTOM RAILS. ASSUME 30 LOCATIONS ON AVERAGE PER RAILING SECTION.
5. REPAIR TYPE 'B' - WHERE COMPONENTS HAVE BEEN WASTED BY CORROSION PUDDLE IN WROUGHT IRON TO REBUILD PROFILES AND FILE AND GRIND SMOOTH, ASSUME ALL FOUR SIDES. ASSUME TWO LOCATIONS ON AVERAGE PER RAILING SECTION EACH AVERAGING 150mm SQUARE.
6. REPAIR TYPE 'C' - THIS REQUIRES CUTTING BACK TO SOUND MATERIAL, ADDING NEW STAINLESS STEEL EXTENSIONS OF CORRECT MATCHING SIZE AND PROFILE BY WELDING, AND GRINDING AND FILING SMOOTH. THIS REPAIR IS REQUIRED AT EACH RAIL END - ASSUME 4 LOCATIONS ON AVERAGE PER SECTION.
7. REPAIR TYPE 'D' - STRAIGHTENING RAILS OR BALUSTERS. THIS IS LIMITED TO STRAIGHTENING COMPONENTS THAT HAVE BEEN DEFORMED AND IS TO BE DONE COLD. ASSUME TWO COMPONENTS ON AVERAGE PER RAILING SECTION.
8. REPAIR TYPE 'E' - THIS REQUIRES THE FILLING OF MISCELLANEOUS REDUNDANT HOLES, PUDDLE IN WROUGHT IRON WELD MATERIAL AND GRIND AND FILE SMOOTH. ASSUME ON AVERAGE TWO LOCATIONS PER RAILING SECTION.
9. REPAIR TYPE 'F' - THIS REPAIR REQUIRES THE REMOVAL OF EXISTING NON-ORIGINAL FEET AND THE REPLACEMENT WITH NEW. ASSUME 4 ON AVERAGE PER SECTION.
10. REPAIR TYPE 'G' - THIS REPAIR IS REQUIRED AT THE BOTTOM OF EACH BALUSTER - ASSUME 7 LOCATIONS ON AVERAGE PER SECTION. EACH BALUSTER ALSO REQUIRES A NEW BEARING PLATE, SEE DETAILS. BALUSTERS ARE TO BE REMOVED TO FACILITATE WORK - CAREFULLY REMOVE MODERN WELD AT BOTTOM RAIL - AT TOP DRILL OUT BOLT AND REPLACE IN STAINLESS STEEL.
11. REPAIR TYPE 'H' - THIS REPAIR REQUIRES THE REMOVAL OF EXISTING MODERN MID-SPAN BRACES AND THE INSTALLATION OF NEW UTILIZING TRADITIONAL PEENED TENONS AND RIVET AS SHOWN. ASSUME ONE PER RAILING SECTION.
12. REPAIR TYPE 'I' - THIS REPAIR IS FOR THE DIAGONAL BALUSTERS AND REQUIRES THE REPLACEMENT OF THE MID SPAN RIVET, ASSUME 4 LOCATIONS PER RAILING SECTION, AS WELL AS THE BUILDING UP OF PEENED OVER TENONS WHERE THEY ARE STRUCTURALLY COMPROMISED, ASSUME 8 PER RAILING SECTION.

22216-S506	METAL WORK- ORIGINAL RAILINGS
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS			

0	2022/09/28	ISSUED FOR TENDER		
NO.	DATE	DESCRIPTION	Drawn by	Approved
			Dessine par	Approuve

REVISIONS			
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Linear dimensions in millimeters / Dimensions lineaires en millimetres



Project title / Titre du projet
FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin
METAL WORK ORIGINAL RAILINGS

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par _____ Date _____

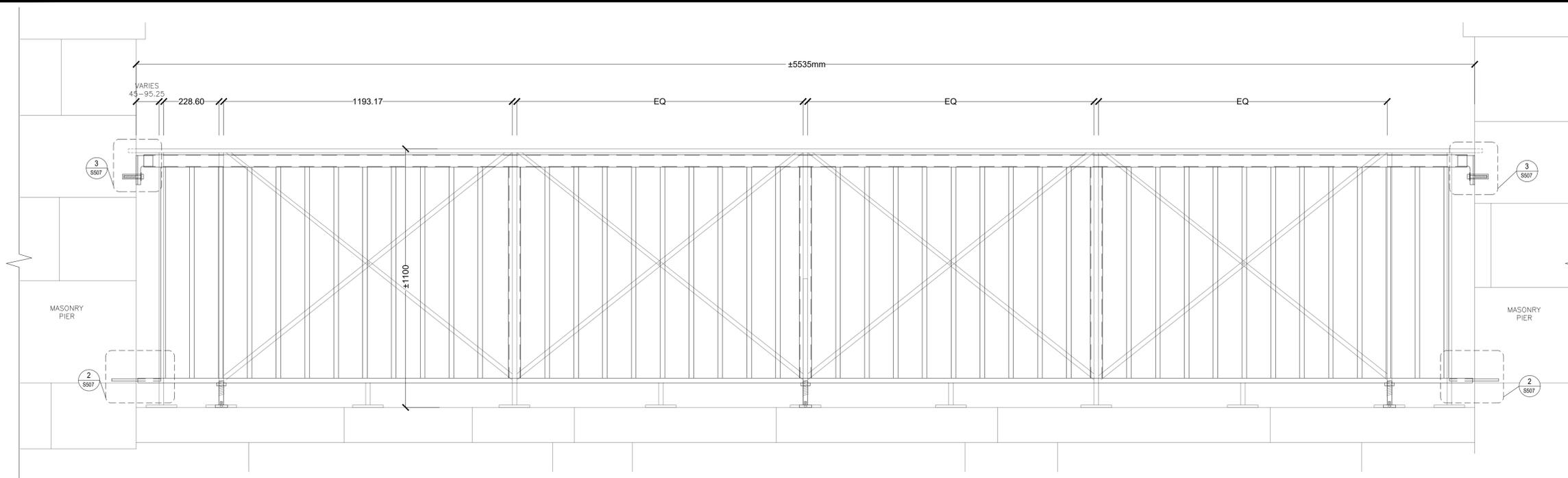
Field Recording by / Releve-Temoin par C.S. Date 2022/05/23

Approved by / Approuve par C.S. Date 2022/09/28

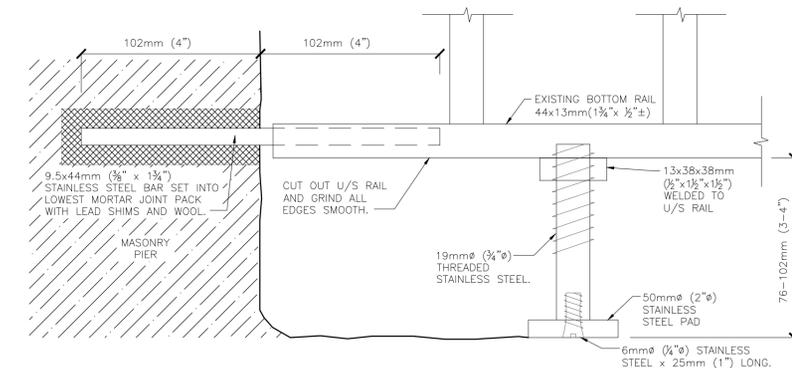
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Drawing Re No./No. du Dessin 22216-S506-R00

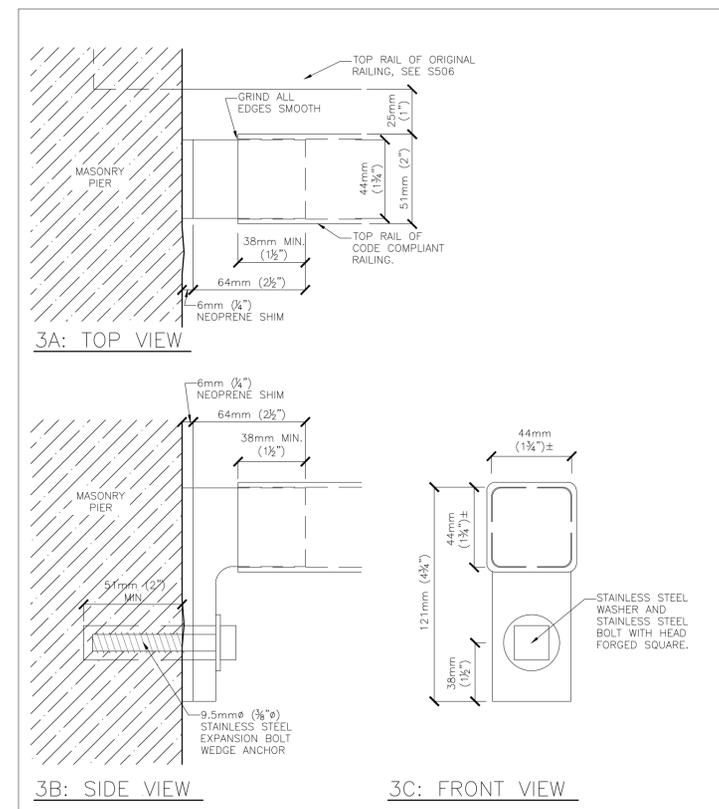
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MODERN CODE COMPLIANT IRON RAILINGS – INTERIOR ELEVATION – GALLERY LEVEL – TYPICAL
SCALE 1:10



MODERN GUARDRAIL
BOTTOM RAIL ELEVATION
SCALE 1:2



DETAIL FOR NEW ANCHOR IN DUCTILE CAST IRON
SCALE VARIES

MODERN CODE COMPLIANT RAILINGS:

1. THERE ARE A TOTAL OF 19 MODERN RAILING SECTIONS, 17 THAT ARE ABOUT 5535 MM LONG AND TWO THAT ARE SHORTER BUT ANGLED.
2. ASSUME THAT ALL HAVE A SCOPE OF WORK SIMILAR TO THAT DESCRIBED.
3. LABEL, PHOTOGRAPH AND CAREFULLY REMOVE TO SHOP.
4. REMOVE PAINT AND CORROSION PRODUCTS.
5. NOTE THAT FOR THE TWO ANGLED SECTIONS THE PORTIONS WITH THE LONGER RAILS WILL NEED TO BE LENGTHENED BY WELDING HOLLOW TUBE EXTENSIONS OF THE EXACT SAME SIZE TO THE TOP AND BOTTOM RAILS, AN ADDITIONAL MATCHING BALUSTER WILL ALSO BE REQUIRED AT EACH.
6. AT HOLLOW TUBE TOP AND BOTTOM RAILS, GRIND WALLS OF TUBE ENDS AND CUTOUTS SMOOTH.
7. INSTALL STAINLESS STEEL RAIL EXTENSIONS INTO MORTICES IN MASONRY AS SHOWN.
8. ADD THREE NEW ADJUSTABLE FEET AS SHOWN.
9. PAINT AS DESCRIBED IN SPECIFICATION AND INSTALL AS SHOWN IN DETAILS, COORDINATE WITH MASONRY WORK.
10. PAINT INSIDE OF HOLLOW STEEL RAILS AS FAR AS POSSIBLE.

22216-S507	METAL WORK – MODERN GUARDRAIL
DRAWING NO.	DRAWING NAME

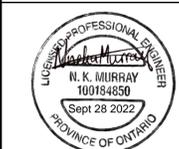
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NO.	DATE	DESCRIPTION	Drawn by Dessine par	Approved Approuve

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Linear dimensions in millimeters
Dimensions lineaires en millimetres



Project title / Titre du projet

FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2 & 11

Drawing title / Titre du dessin

METAL WORK
MODERN GUARDRAIL

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par Date

Field Recording by /
Releve-Temoin par
C.S. Date
2022/05/23

Approved by / Approuve par
C.S. Date
2022/09/28

Checked by/ Verifie par
C.S. Date
2022/09/28

Project No./ No. du projet 22216 Asset No. Sheet No./
Feuille No.

Drawing Re No./No. du Dessin 22216-S506-R00 S507



PHOTO #1
NTS BLOCK 1 ELEVATION - INNER COURTYARD



PHOTO #2
NTS BLOCK 1 & 2 ELEVATION - INNER COURTYARD



PHOTO #3
NTS WEST END OF ELEVATION 11 (COLUMN 1)



PHOTO #4
NTS FIXTURES

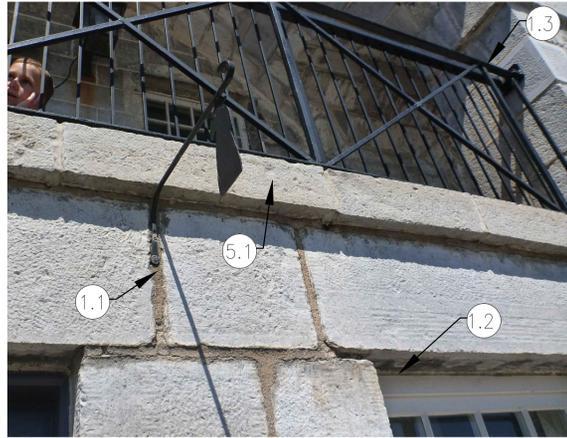


PHOTO #5
NTS FIXTURES



PHOTO #6
NTS FIXTURES



PHOTO #7
NTS HEAD OF COLUMN, TYPICAL

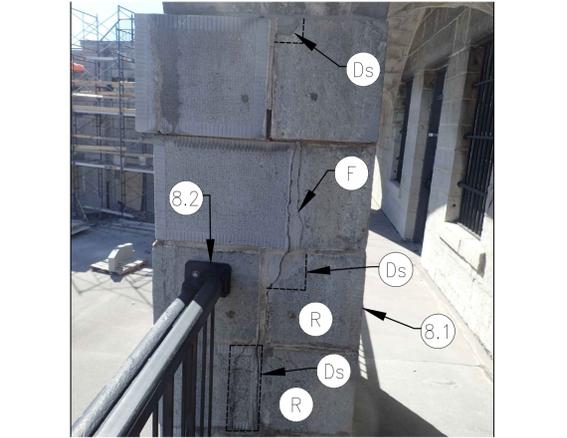


PHOTO #8
NTS PARTIAL COLUMN DISMANTLE/REBUILD

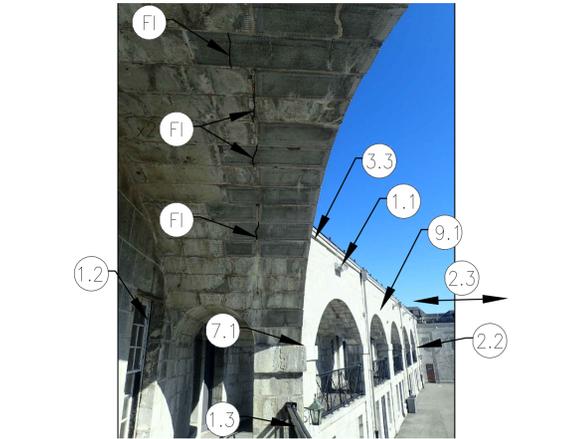


PHOTO #9
NTS TYPICAL UPPER ARCH/INNER WALL ON 2ND FLOOR



PHOTO #10
NTS DUTCHMAN REPAIR



PHOTO #11
NTS RAILING CONNECTION



PHOTO #12
NTS 2ND FLOOR AT RAILING

PHOTOGRAPH NOTES:

- PHOTO 1**
- 1.1 FIXTURE TO BE REMOVED TO ALLOW WORK AND RE-INSTALLED, TYP. SEE PHOTOS 4 & 6/S600.
 - 1.2 WINDOW AND DOORFRAMES TO BE REMOVED/REPAIRED AND REINSTALLED. SEE S300 AND S500 SERIES DRAWINGS. ALLOW FOR RAKING OUT AND REPOINTING OF ALL MORTAR JOINTS BEHIND DOOR FRAMES. SEE 1/S601 FOR EXAMPLE.
 - 1.3 METAL RAILINGS TO BE REMOVED, REPAIRED AND REINSTALLED. SEE S500 SERIES DRAWINGS. SEE PHOTO 11/S600.
 - 1.4 BLEACHERS TO BE MOVED OUTSIDE OF CONSTRUCTION FENCE. COORDINATE WITH DEPARTMENTAL REPRESENTATIVE.
 - 1.5 PROVIDE PROTECTED ACCESS TO PUBLIC WASHROOMS FOR PUBLIC.
- PHOTO 2**
- 2.1 ARRANGE WITH DEPARTMENTAL REPRESENTATIVE TO RELOCATE CANNONS AND OTHER ARTIFACTS, BOTH INSIDE AND OUTSIDE OF BUILDING FOR THE DURATION OF THE WORK.
 - 2.2 EXTENT OF WORK INCLUDES REPOINTING THE MASONRY JOINTS IN THE

- CORNER WITH INTERSECTING ELEVATIONS NOT IN CONTRACT.
- 2.3 ELEVATION NOT IN CONTRACT
- PHOTO 3**
- 3.1 NEW CARVED STONE, TO REPLACE BROKEN SCUPPER.
 - 3.2 EXISTING DUTCHMAN REPAIRS TO BE REDONE WITH NEW STONE. EXISTING STONE TO BE SALVAGED FOR USE ON SMALLER DUTCHMAN REPAIRS. SEE EXAMPLE ON PHOTO 10/S600.
 - 3.3 EXISTING METAL FLASHING AT ROOF LEVEL TO BE PROTECTED. EXTENT OF MASONRY WORK TO TERMINATE UNDER DRIP IN FLASHING. SEE 5/S402.
- PHOTO 5**
- 5.1 LEDGE DETAIL AT 2ND FLOOR, SEE 6/S402.
- PHOTO 7**
- 7.1 COLUMN CAPITAL.
 - 7.2 BACKSIDE OF COLUMN.
- PHOTO 8**
- 8.1 PARTIAL COLUMN DISMANTLE. DEPARTMENTAL REPRESENTATIVE TO INSPECT DISMANTLED COLUMN TO DETERMINE CAUSE OF FRACTURE.

- TYPICAL FOR ALL FRACTURED COLUMNS. SHORE ARCH EACH SIDE OF COLUMN PRIOR TO DISMANTLE. REBUILD AFTER APPROVAL FROM DEPARTMENTAL REPRESENTATIVE.
- 8.2 DISCONNECT, REPAIR MASONRY AND RECONNECT RAILINGS AS PER S500 SERIES DRAWINGS. INCLUDE REPAIRING ON EXISTING MORTICES WITH DUTCHMAN STONE PLUGS AND MAKING NEW MORTICES FOR NEW RAILING CONNECTIONS.
- 8.3 DISMANTLE STONE MASONRY AS NECESSARY TO REMOVE EXISTING HISTORIC RAILINGS. DO NOT DAMAGE EXISTING RAILINGS
- 8.4 COORDINATE WITH METAL TRADES TO SET RAIL ENDS INTO MORTICES WITHIN MASONRY FOR NEW AND EXISTING RAILINGS. SEE DRAWING S506 AND S507.
- PHOTO 9**
- 9.1 ELEVATION, BLOCK 2.
- PHOTO 10**
- 10.1 INCORRECTLY EXECUTED DUTCHMAN REPAIR TO BE REMOVED. RECUT STONE AND COMPLETE DUTCHMAN REPAIR AS PER 7/S400. SALVAGE EXISTING DUTCHMAN FOR OTHER REPAIRS. TYPICAL FOR ALL RECENT DUTCHMAN REPAIRS TO BE REDONE.

- PHOTO 12**
- 12.1 EDGE OF 2ND FLOOR, SEE 6/S402.
- PHOTO 15**
- 15.1 TRIANGULAR SECTION OF WALL ABOVE STAIRS IS PART OF BLOCK 11, WEST END. COMPLETE ALL MASONRY WORK AS FOR BLOCK 11.
- PHOTO 17**
- 17.1 TRIANGULAR SECTION OF WALL ABOVE STAIRS IS PART OF BLOCK 2, EAST END. COMPLETE ALL MASONRY WORK AS FOR BLOCK 2.
- PHOTO 18**
- 18.1 PART ELEVATION OF REDOUBT WALL BLOCK 11. SEE STONE COURSING. SEE ELEVATION DRAWING S203 FOR REPAIRS.
 - 18.2 REMOVE CONDUIT, PIPES ETC. AS NOTED IN DWG. S203.
 - 18.3 PROTECT GUNPORTS ETC. AS NOTED ON DWG. S203.
 - 18.4 CLEAN MASONRY AS NOTED ON DWG. S203.
- PHOTO 19**
- 19.1 CAPONIER PORTION OF EAST WALL IS BULGED. DISMANTLE.

- CONSOLIDATE CORE AND REBUILD.
- 19.2 REDOUBT PART ELEVATION, BLOCK 1.
- PHOTO 20**
- 20.1 ALL ROOF JOINTS TO BE CHINKED.
- PHOTO 21**
- 21.1 REFER TO DRAWINGS S203, S206 AND S402 FOR ANCHORAGE AND REPAIR DETAILS AT EAST RETURN OF BLOCK 2, AND WEST RETURN OF BLOCK 11. WHERE CONTROL JOINT WAS PREVIOUSLY INSTALLED.
- PHOTO 22**
- 22.1 REMOVE ELECTRICAL PANEL TO DO MASONRY WORK BEHIND, ONCE MASONRY WORK IS APPROVED BY DEPARTMENTAL REPRESENTATIVE, REINSTALL PANEL.
- PHOTO 23**
- 23.1 INCLUDE RAKING OUT, BACKPOINTING, MASONRY REPAIRS AND CHINKING FOR 600mm FROM FACE OF WALL.
- PHOTO 24**
- 24.1 FACE STONE.
 - 24.2 CONCRETE GROUT IN CORE OF WALL. FROM 1930'S STABILIZATION.

22216-S600	PHOTOGRAPHS
DRAWING NO.	DRAWING NAME

REFERENCE DRAWINGS

0	2022/09/28	ISSUED FOR TENDER		
NO.	DATE	DESCRIPTION	Drawn by	Approved
			Dessine par	Approuve

REVISIONS

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Project title / Titre du projet
**FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11**

Drawing title / Titre du dessin
PHOTOGRAPHS

Plot Scale / Echelle
1:1 (A1 Plot Size)

Drawn by/ Dessine par _____ Date _____

Field Recording by / Releve-Temoin par N.M. & J.C. Date 2022/05/23

Approved by / Approuve par J.C. Date 2022/09/28

Checked by/ Verifie par J.C. Date 2022/09/28

Project No./ No. du projet 22216 Asset No. _____ Sheet No./ Feuille No. _____

Drawing Re No./No. du Dessin 22216-S600-ROO **S600**

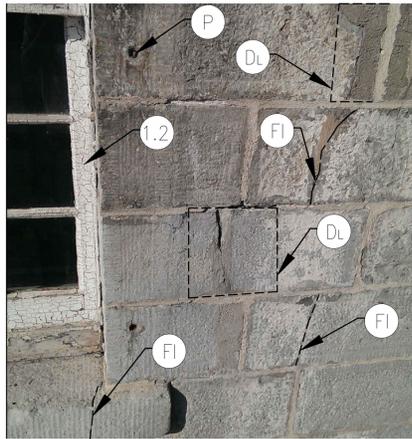


PHOTO #13
NTS TYPICAL WOOD WINDOW AT 2ND FLOOR

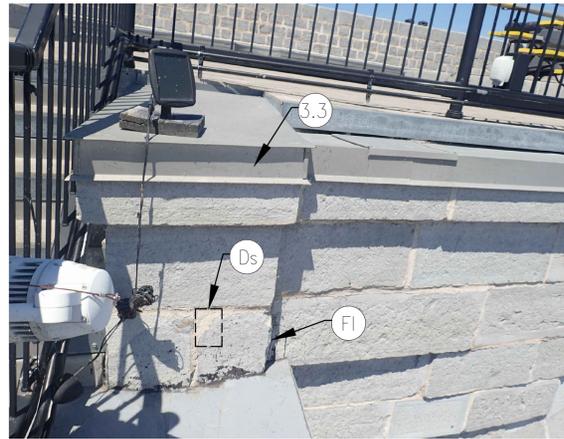


PHOTO #14
NTS PORTION OF BLOCK 11 WALL ABOVE 2ND FLOOR ROOF - WEST END



PHOTO #15
NTS WEST END OF BLOCK 11 AT ROOF



PHOTO #16
NTS PORTION BLOCK 2 WALL ABOVE 2ND FLOOR - EAST END



PHOTO #17
NTS EAST END OF BLOCK 2 AT ROOF

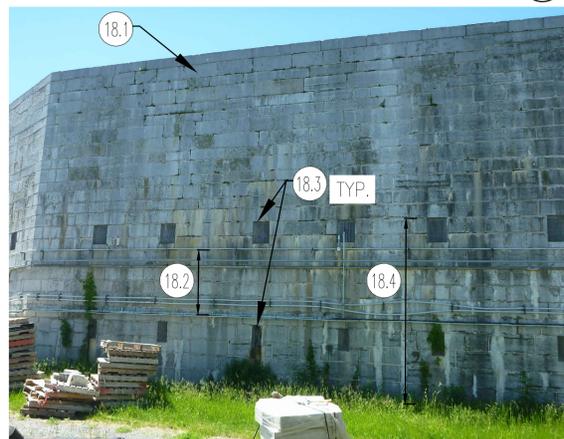


PHOTO #18
NTS PARTIAL ELEVATION, REDOUBT BLOCK 11



PHOTO #19
NTS CAPONIER, EAST ELEVATION

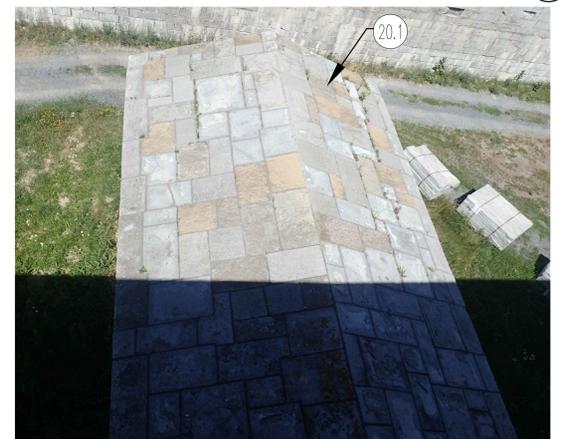


PHOTO #20
NTS CAPONIER ROOF

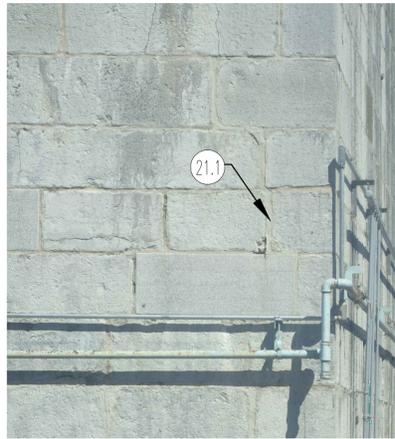


PHOTO #21
NTS CONTROL JOINT AT EAST END OF BLOCK 2

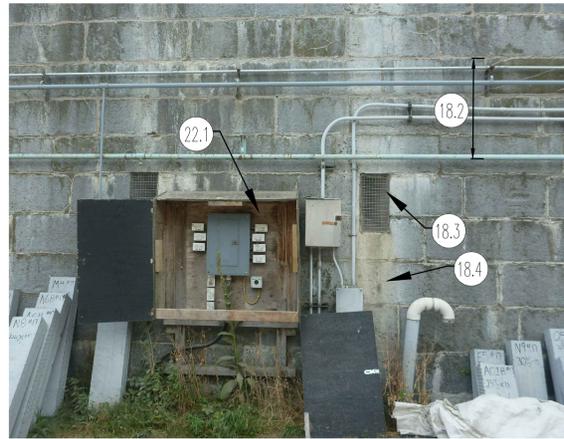


PHOTO #22
NTS ELECTRICAL PANEL ON REDOUBT WALL



PHOTO #23
NTS TOP OF REDOUBT WALL



PHOTO #24
NTS CORE SAMPLE OF STONE WALL

PHOTOGRAPH NOTES:

- PHOTO 1**
- 1.1 FIXTURE TO BE REMOVED TO ALLOW WORK AND RE-INSTALLED, TYP. SEE PHOTOS 4 & 6/S601.
 - 1.2 WINDOW AND DOORFRAMES TO BE REMOVED/REPAIRED AND REINSTALLED. SEE S300 AND S500 SERIES DRAWINGS. ALLOW FOR RAKING OUT AND REPOINTING OF ALL MORTAR JOINTS BEHIND DOOR FRAMES. SEE 1/S601 FOR EXAMPLE.
 - 1.3 METAL RAILINGS TO BE REMOVED, REPAIRED AND REINSTALLED. SEE S500 SERIES DRAWINGS. SEE PHOTO 11/S601.
 - 1.4 BLEACHERS TO BE MOVED OUTSIDE OF CONSTRUCTION FENCE. COORDINATE WITH DEPARTMENTAL REPRESENTATIVE.
 - 1.5 PROVIDE PROTECTED ACCESS TO PUBLIC WASHROOMS FOR PUBLIC.
- PHOTO 2**
- 2.1 ARRANGE WITH DEPARTMENTAL REPRESENTATIVE TO RELOCATE CANNONS AND OTHER ARTIFACTS, BOTH INSIDE AND OUTSIDE OF BUILDING FOR THE DURATION OF THE WORK.
 - 2.2 EXTENT OF WORK INCLUDES REPOINTING THE MASONRY JOINTS IN THE

- CORNER WITH INTERSECTING ELEVATIONS NOT IN CONTRACT.
- 2.3 ELEVATION NOT IN CONTRACT
- PHOTO 3**
- 3.1 NEW CARVED STONE, TO REPLACE BROKEN SCUPPER.
 - 3.2 EXISTING DUTCHMAN REPAIRS TO BE REDONE WITH NEW STONE. EXISTING STONE TO BE SALVAGED FOR USE ON SMALLER DUTCHMAN REPAIRS. SEE EXAMPLE ON PHOTO 10/S601.
 - 3.3 EXISTING METAL FLASHING AT ROOF LEVEL TO BE PROTECTED. EXTENT OF MASONRY WORK TO TERMINATE UNDER DRIP IN FLASHING. SEE 5/S402.
- PHOTO 5**
- 5.1 LEDGE DETAIL AT 2ND FLOOR, SEE 6/S402.
- PHOTO 7**
- 7.1 COLUMN CAPITAL.
 - 7.2 BACKSIDE OF COLUMN.
- PHOTO 8**
- 8.1 PARTIAL COLUMN DISMANTLE. DEPARTMENTAL REPRESENTATIVE TO INSPECT DISMANTLED COLUMN TO DETERMINE CAUSE OF FRACTURE.

- TYPICAL FOR ALL FRACTURED COLUMNS. SHORE ARCH EACH SIDE OF COLUMN PRIOR TO DISMANTLE. REBUILD AFTER APPROVAL FROM DEPARTMENTAL REPRESENTATIVE.
- 8.2 DISCONNECT, REPAIR MASONRY AND RECONNECT RAILINGS AS PER S500 SERIES DRAWINGS. INCLUDE REPAIRING ON EXISTING MORTICES WITH DUTCHMAN STONE PLUGS AND MAKING NEW MORTICES FOR NEW RAILING CONNECTIONS.
 - 8.3 DISMANTLE STONE MASONRY AS NECESSARY TO REMOVE EXISTING HISTORIC RAILINGS. DO NOT DAMAGE EXISTING RAILINGS
 - 8.4 COORDINATE WITH METAL TRADES TO SET RAIL ENDS INTO MORTICES WITHIN MASONRY FOR NEW AND EXISTING RAILINGS. SEE DRAWING S506 AND S507.
- PHOTO 9**
- 9.1 ELEVATION, BLOCK 2.
- PHOTO 10**
- 10.1 INCORRECTLY EXECUTED DUTCHMAN REPAIR TO BE REMOVED. RECUT STONE AND COMPLETE DUTCHMAN REPAIR AS PER 7/S400. SALVAGE EXISTING DUTCHMAN FOR OTHER REPAIRS. TYPICAL FOR ALL RECENT DUTCHMAN REPAIRS TO BE REDONE.

- PHOTO 12**
- 12.1 EDGE OF 2ND FLOOR, SEE 6/S402.
- PHOTO 15**
- 15.1 TRIANGULAR SECTION OF WALL ABOVE STAIRS IS PART OF BLOCK 11, WEST END. COMPLETE ALL MASONRY WORK AS FOR BLOCK 11.
- PHOTO 17**
- 17.1 TRIANGULAR SECTION OF WALL ABOVE STAIRS IS PART OF BLOCK 2, EAST END. COMPLETE ALL MASONRY WORK AS FOR BLOCK 2.
- PHOTO 18**
- 18.1 PART ELEVATION OF REDOUBT WALL BLOCK 11. SEE STONE COURSING. SEE ELEVATION DRAWING S203 FOR REPAIRS.
 - 18.2 REMOVE CONDUIT, PIPES ETC. AS NOTED IN DWG. S203.
 - 18.3 PROTECT GUNPORTS ETC. AS NOTED ON DWG. S203.
 - 18.4 CLEAN MASONRY AS NOTED ON DWG. S203.
- PHOTO 19**
- 19.1 CAPONIER PORTION OF EAST WALL IS BULGED. DISMANTLE.

- CONSOLIDATE CORE AND REBUILD.
- 19.2 REDOUBT PART ELEVATION, BLOCK 1.
- PHOTO 20**
- 20.1 ALL ROOF JOINTS TO BE CHINKED.
- PHOTO 21**
- 21.1 REFER TO DRAWINGS S203, S206 AND S402 FOR ANCHORAGE AND REPAIR DETAILS AT EAST RETURN OF BLOCK 2, AND WEST RETURN OF BLOCK 11. WHERE CONTROL JOINT WAS PREVIOUSLY INSTALLED.
- PHOTO 22**
- 22.1 REMOVE ELECTRICAL PANEL TO DO MASONRY WORK BEHIND, ONCE MASONRY WORK IS APPROVED BY DEPARTMENTAL REPRESENTATIVE, REINSTALL PANEL.
- PHOTO 23**
- 23.1 INCLUDE RAKING OUT, BACKPOINTING, MASONRY REPAIRS AND CHINKING FOR 600mm FROM FACE OF WALL.
- PHOTO 24**
- 24.1 FACE STONE.
 - 24.2 CONCRETE GROUT IN CORE OF WALL. FROM 1930'S STABILIZATION.

22216-S601	PHOTOGRAPHS
DRAWING NO.	DRAWING NAME

REVISIONS			
NO.	DATE	DESCRIPTION	Drawn by / Approved Dessine par / Approuve
0	2022/09/28	ISSUED FOR TENDER	

A	A Detail number	A Numero de detail
B	B Sheet number	B Sur feuille numero

Linear dimensions in millimeters	Dimensions lineaires en millimetres
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Project title / Titre du projet
FORT HENRY 2023 MASONRY REHABILITATION
REDOUBT BLOCKS 1,2,& 11

Drawing title / Titre du dessin
PHOTOGRAPHS

Plot Scale / Echelle 1:1 (A1 Plot Size)		
Drawn by/ Dessine par	Date	
Field Recording by / Releve-Termin par N.M. & J.C.	Date 2022/05/23	
Approved by / Approuve par J.C.	Date 2022/09/28	
Checked by/ Verifie par J.C.	Date 2022/09/28	
Project No./ No. du projet 22216	Asset No.	Sheet No./ Feuille No. S601
Drawing Re No./No. du Dessin 22216-S601-ROO		