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LA PORTE, IN 46350

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## SHEET INDEX

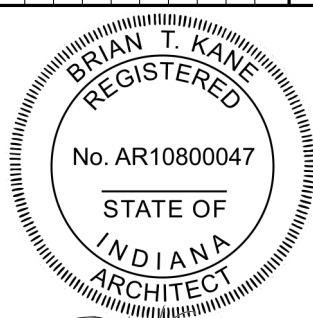
## GENERAL

G101	TITLE SHEET/ DRAWING INDEX
G102	SPECIFICATIONS

## ARCHITECTURAL

A201 EXTERIOR ELEVATIONS - NEW

REV	DESCRIPTION	BY	DATE
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05/27/2025

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Fort Wayne, IN  
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# LPCPL MASONRY RESTORATION

LA PORTE COUNTY PUBLIC LIBRARY

TITLE SHEET/ DRAWING INDEX

DESIGNED BY:  
BTK

REVIEWED BY:  
EJK

DRAWN BY:  
BTK

DATE: 05/27/2025

JOB NUMBER: 2025-01547

SCALE:  
1/4" = 1'-0"

G101

C-TERMS AND ABBREVIATIONS

D-TERMS AND ABBREVIATIONS

G-TERMS AND ABBREVIATIONS

M-TERMS AND ABBREVIATIONS

P-TERMS AND ABBREVIATIONS

R-TERMS AND ABBREVIATIONS

S-TERMS AND ABBREVIATIONS

T-TERMS AND ABBREVIATIONS

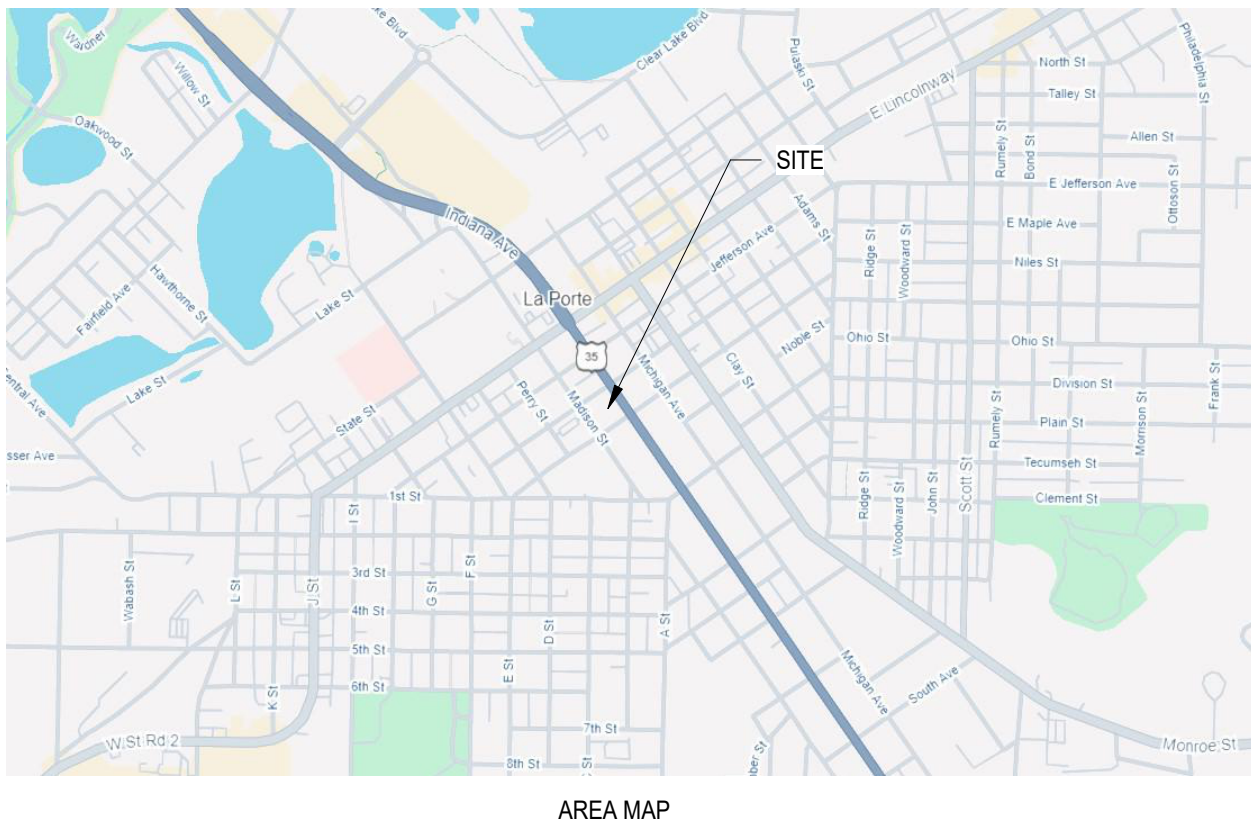
## LOCAL CODE INFORMATION

BUILDING CODE:	2014 INDIANA BUILDING CODE (2012 IBC)
MECHANICAL CODE:	2014 INDIANA MECHANICAL CODE (2012 IBC)
PLUMBING CODE:	2012 INDIANA PLUMBING CODE (2012 IPC)
ELECTRICAL CODE:	2009 INDIANA ELECTRIC CODE (NFPA-70-2008)
FIRE CODE:	2014 INDIANA FIRE CODE (2012 IFC)
ENERGY CODE:	2010 IECC (ASHRAE 90.1-2007)
BARRIER FREE CODE:	2012 INDIANA BUILDING CODE (2009 ADAAG) (ANSI-A117.1 2003)

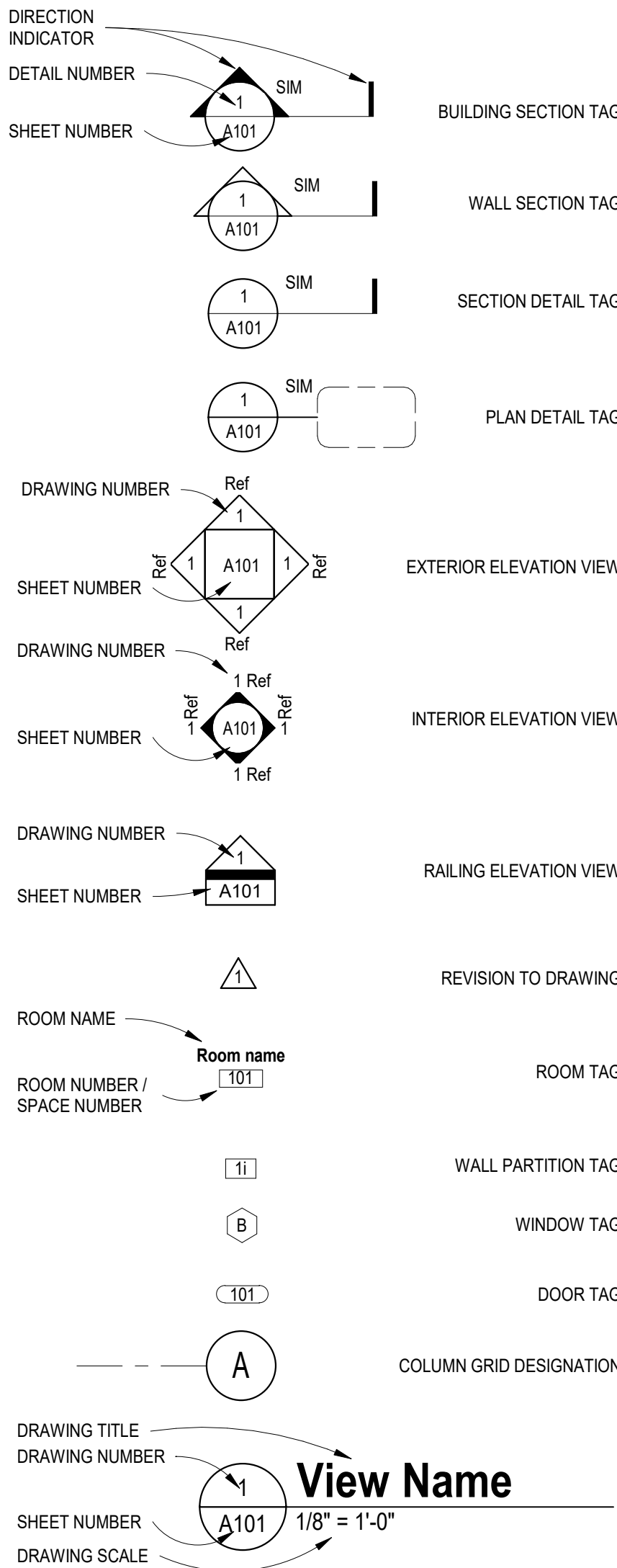
## GENERAL NOTES

1. THESE DRAWINGS ARE GENERAL DESCRIPTIONS OF THE MATERIALS AND PRODUCTS TO BE USED TO COMPLETE THIS REHABILITATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE, COMPARE EXISTING CONDITIONS WITH PROPOSED PLANS AND SPECS AND PROVIDE SITE PREPARATION AND ANY OTHER COMPONENT REQUIRED TO COMPLETE THE PROPOSED CONSTRUCTION. CONTACT ARCHITECT IMMEDIATELY WHERE INCONSISTENCIES ARE NOTED FOR PERIODIC VERIFICATION.
2. EXISTING MATERIALS AND CONDITIONS INDICATED ON THESE DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND ARE NOT WARRANTED TO ACTUALLY EXIST MATERIALS AND CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL EXISTING MATERIALS AND CONDITIONS. CONTRACTOR SHALL NOTIFY ARCHITECT UPON DISCOVERY OF ANY MATERIALS AND CONDITIONS THAT HAVE A SIGNIFICANT VARIATION FROM THE DRAWINGS OR WHICH AFFECT THE DESIGN OF THE PROPOSED CONSTRUCTION.
3. CONTRACTOR TO PROVIDE PRODUCT SUBMITTALS OF ALL MATERIALS TO ARCHITECT FOR REVIEW WITH OWNER. ALL MATERIALS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. PRODUCT SAMPLES TO BE PROVIDED TO ARCHITECT FOR REVIEW AS REQUESTED.

## LOCATION MAP



## DRAWING SYMBOLS LEGEND





SECTION 040120.61 - BRICK MASONRY AND STONE REPAIR

PART 1 - GENERAL

1.1

SUMMARY

A. Section Includes:

1. Repairing brick masonry.

2. Repairing stone masonry.

3. Removing abandoned anchors.

Painting steel uncovered during the work.

1.2

UNIT PRICES

A. Work of this Section is affected by unit prices.

1. Unit prices apply to additions to and deletions from Work as authorized by Change Orders.

1.3

DEFINITIONS

A. Rebuilding (Setting) Mortar: Mortar used to set and anchor masonry in a structure, distinct from pointing mortar installed after masonry is set in place.

B. Rift: The most pronounced direction of splitting or cleavage of a stone.

C. Saturation Coefficient: Ratio of the weight of water absorbed during immersion in cold water to weight absorbed during immersion in boiling water; used as an indication of resistance of bricks to freezing and thawing.

D. Stone Terminology: ASTM C 119.

1.4

SEQUENCING AND SCHEDULING

A. Order sand and gray portland cement for colored mortar immediately after approval of Samples. Take delivery of and store at Project site enough quantity to complete Project.

B. Work Sequence: Perform brick masonry repair work in the following sequence, which includes work specified in this and other Sections:

1. Inspect masonry for open mortar joints and point them before cleaning to prevent the intrusion of water and other cleaning materials into the wall.

2. Remove paint.

3. Clean masonry and/or stone.

4. Replace mortar from joints surrounding masonry and/or stone to be replaced and from joints adjacent to masonry repairs along joints.

5. Repair masonry and/or stonework, including replacing existing masonry with new masonry materials.

6. Rake out mortar from joints to be repointed.

7. Point mortar and sealant joints.

8. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.

9. Where water repellents are to be used on or near masonry or stonework, delay application of these chemicals until after pointing and cleaning.

C. As scaffolding is removed, patch anchor holes used to attach scaffolding.

1.5

ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

2. Include recommendations for product application and use.

3. Include test data substantiating that products comply with requirements.

1.6

QUALITY ASSURANCE

A. Brick Masonry and Stone Repair Specialist Qualifications: Engage an experienced brick and limestone masonry repair firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience in only installing masonry is insufficient experience for masonry repair work.

B. Mockups: Prepare mockups of brick and/or stonework repair to demonstrate aesthetic effects and to set quality standards for materials and execution and for fabrication and installation.

1. Masonry and Stone Repair: Prepare sample areas for each type of masonry repair work performed. If not otherwise indicated, size each mockup not smaller than two adjacent whole units or approximately 48 inches in least dimension. Construct sample areas in locations in existing walls where directed by Architect unless otherwise indicated. Demonstrate quality of materials, workmanship, and blending with existing work. Include the following as a minimum:

a. Replacement: Four brick units replaced, one stone unit.

b. Patching: Three small holes at least 1 inch in diameter for each type of brick indicated to be patched.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

1.7

DELIVERY, STORAGE, AND HANDLING

A. Deliver bricks to Project site strapped together in suitable packs or pallets or in heavy-duty cartons and protected against impact and chipping.

B. Deliver packaged materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

D. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.

E. Store sand where grading and other required characteristics can be maintained and contamination avoided.

F. Handle bricks to prevent oversteering, chipping, defacement, and other damage.

1.8

FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit brick masonry repair work to be performed according to product manufacturers' written instructions and specified requirements.

B. Temperature Limits: Repair brick masonry only when air temperature is between 40 and 90 deg F and is predicted to remain so for at least seven days after completion of the Work unless otherwise indicated.

C. Cold-Weather Requirements: Comply with the following procedures for masonry repair unless otherwise indicated:

1. When air temperature is below 40 deg F, heat mortar ingredients, masonry repair materials, and existing masonry walls to produce temperatures between 40 and 120 deg F.

2. When mean daily air temperature is below 40 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for seven days after repair.

D. Hot-Weather Requirements: Protect masonry repairs when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks, and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temperatures of 90 deg F and above unless otherwise indicated.

E. For manufactured repair materials, perform within the environmental limits set by each manufacturer.

PART 2 - PRODUCTS

2.1

PERFORMANCE REQUIREMENTS

A. Source Limitations: Obtain each type of material for repairing brick masonry (brick, cement, sand, etc.) from single source with resources to provide materials of consistent quality in appearance and physical properties.

2.2

MASONRY MATERIALS

A. Face Brick: As required to complete brick masonry repair work.

1. Brick Matching Existing: Units with colors, color variation within units, surface texture, size, and shape that match existing brickwork.

B. Building Brick: ASTM C 62, of same vertical dimension as face brick, for masonry work concealed from view.

2.3

STONE MATERIALS

1. Stone Matching Existing: Natural building stone of variety, color, texture, grain, veining, finish, size, and shape that match existing stone and with physical properties within 10 percent of those determined from preconstruction testing of selected existing stone.

2. Cutting new stone: Cut each new stone so that, when it is set in final position, the fit or natural bedding planes will match the rift orientation of existing stone.

2.3

MORTAR MATERIALS

A. Portland Cement: ASTM C 150/C 150M, Type I or Type II, except Type III may be used for cold-weather construction; gray where required for color matching of mortar.

B. Mortar Sand: ASTM C 144.

1. Exposed Mortar: Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.

C. Water: Potable.

2.4

MANUFACTURED REPAIR MATERIALS

A. Brick and/or Stone Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching brick masonry and/or stone.

1. Use formulation that is vapor and water permeable (equal to or more than the brick), exhibits low shrinkage, has lower modulus of elasticity than bricks or stone units being repaired, and develops high bond strength to all types of masonry.

2. Formulate patching compound in colors, textures, and grain to match masonry or stone being patched.

2.5

ACCESSORY MATERIALS

A. Setting Buttons and Shims: Resilient plastic, nonstaining to masonry, sized to suit joint thicknesses and bed depths of bricks, less the required depth of pointing materials unless restored before pointing.

B. Masking Tape: Nonstaining, nonabsorbent material, compatible with mortar, joint primers, sealants, and surfaces adjacent to joints; and that easily comes off entirely, including adhesive.

C. Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkylid primer according to MPI #23 (surface-tolerant, anticorrosive metal primer) or SSPC-Paint 20 or SSPC-Paint 29 zinc-rich coating.

2.6

MORTAR MIXES

A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.

B. Do not use admixtures in mortar unless otherwise indicated.

C. Mixes: Mix mortar materials in the following proportions:

1. Rebuilding (Setting) Mortar by Volume: ASTM C 270, Proportion Specification, 1 part portland cement, 1 part lime, and 6 parts sand.

PART 3 - EXECUTION

3.1

PROTECTION

A. Prevent mortar from staining face of surrounding masonry and other surfaces.

1. Cover sills, ledges, and other projecting items to protect them from mortar droppings.

2. Keep wall area wet below pointing work to discourage mortar from adhering.

3. Immediately remove mortar splatters in contact with exposed masonry and other surfaces.

B. Remove downspouts and associated hardware adjacent to masonry and stone during masonry repair. Reinstall when repairs are complete.

1. Provide temporary rain drainage during work to direct water away from building.

3.2

MASONRY AND/OR REPAIR, GENERAL

A. Appearance Standard: Repaired surfaces are to have a uniform appearance as viewed from 20 feet (15 m) away by Architect.

3.3

ABANDONED ANCHOR REMOVAL

A. Remove abandoned anchors, brackets, wood nails, and other extraneous items no longer in use unless indicated to remain.

1. Remove items carefully to avoid spalling or cracking masonry.

2. Notify Architect before proceeding if an item cannot be removed without damaging surrounding masonry. Do the following where directed:

SECTION 040120.62 - BRICK MASONRY AND STONE REPOINTING

PART 1 - GENERAL

1.1

SUMMARY

A. Section Includes:

1. Repointing joints with mortar.

2. Repointing joints with sealant.

1.2

UNIT PRICES

A. Work of this Section is affected by unit prices.

1. Unit prices apply to additions to and deletions from Work as authorized by Change Orders.

1.3

DEFINITIONS

A. Rift: The most pronounced direction of splitting or cleavage of a stone.

1.4

SEQUENCING AND SCHEDULING

A. Order sand and gray portland cement for pointing mortar immediately after approval of Samples. Take delivery of and store at Project site enough quantity to complete Project.

B. Work Sequence: Perform brick masonry and stone repointing work in the following sequence, which includes work specified in this and other Sections:

1. Inspect masonry and stonework for open mortar joints and permanently or temporarily point them before cleaning to prevent the intrusion of water and other cleaning materials into the wall.

2. Remove paint.

3. Clean masonry.

4. Rake out mortar from joints surrounding masonry or stonework to be replaced and from joints adjacent to masonry repairs along joints.

5. Repair masonry/stone units, including replacing existing masonry/stone units with new masonry/stone materials.

6. Rake out mortar from joints to be repointed.

7. Point mortar and sealant joints.

8. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.

9. Where water repellents are to be used on or near masonry work, delay application of these chemicals until after pointing and cleaning.

C. As scaffolding is removed, patch anchor holes used to attach scaffolding.

2.1

CUT OR GRIND OFF ITEM APPROXIMATELY 3/4 INCH BENEATH SURFACE AND CORE DRILL A RECESS OF SAME DEPTH IN SURROUNDING MASONRY AS CLOSE AROUND ITEM AS PRACTICAL.

2.2

IMMEDIATELY PAINT EXPOSED END OF ITEM WITH TWO COATS OF ANTI-RUST COATING, FOLLOWING COATING MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDED DRY FILM THICKNESS PER COAT. KEEP PAINT OFF SIDES OF RECESS.

3. PATCH HOLE WHERE EACH ITEM WAS REMOVED UNLESS DIRECTED TO REMOVE AND REPLACE BRICKS.

3.4

BRICK AND STONE REMOVAL AND REPLACEMENT

A. At locations indicated, remove bricks and/or stone that is/are damaged, spalled, or deteriorated or are to be reused. Carefully remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.

1. When removing single bricks, remove material from center of brick and work toward outside edges.

B. Support and protect remaining masonry that surrounds removal area.

C. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.

D. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.

E. Remove in an undamaged condition as many whole bricks or whole stone units as possible.

1. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.

2. Remove sealants by cutting close to brick with utility knife and cleaning with solvents.

3. Store brick or stone for reuse. Store off ground, on skids, and protected from weather.

4. Deliver cleaned brick or stone not required for reuse to Owner unless otherwise indicated.

F. Clean masonry and stone surrounding removal areas by removing mortar, dust, and loose particles in preparation for brick replacement.

G. Replace removed damaged brick or stone with other removed brick or stone in good condition, where possible, or with new brick or stone matching existing brick. Do not use broken units unless they can be cut to usable size.

H. Install replacement brick or stone into bonding and coursing pattern of existing brick or stone. If cutting is required, use a motor-driven saw designed to cut masonry or stone with clean, sharp, unchipped edges.

1. Maintain joint width for replacement units to match existing joints.

2. Use setting buttons or shims to set units accurately spaced with uniform joints.

I. Lay replacement brick or stone with rebuilding (setting) mortar and with completely filled bed, head, and collar joints. Butter ends with enough mortar to fill head joints and shove into place. Butter vertical joints for full width before setting and set units in full bed of mortar unless otherwise indicated. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.

1. Rake out mortar used for laying brick before mortar sets. Point at same time as repointing of surrounding area.

2. When mortar is hard enough to support units, remove shims and other devices interfering with pointing of joints.

J. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.

1. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

3.5

PAINTING STEEL UNCOVERED DURING THE WORK

A. Notify Architect if steel is exposed during masonry removal. Where Architect determines that steel is structural, or for other reasons cannot be totally removed, prepare and paint it as follows:

1. Antirust Coating: Immediately apply two coats of antirust coating, following coating manufacturer's written instructions and without exceeding manufacturer's recommended rate of application (dry film thickness per coat).

B. If on inspection and rust removal, the thickness of a steel member is found to be reduced from rust by more than 1/16 inch, notify Architect before proceeding.

3.6

BRICK MASONRY AND STONE PATCHING

A. Patch the following bricks or stone units unless another type of repair or replacement is indicated:

1. Bricks/units indicated to be patched.

2. Bricks/units with holes.

3. Bricks/units with chipped edges or corners. Patch chipped edges or corners measuring more than 3/4 inch in least dimension.

4. Bricks/units with small areas of deep deterioration. Patch deep deteriorations measuring more than 3/4 inch in least dimension and more than 1/4 inch deep.

B. Patching Bricks/ Stone Units:

1. Remove loose material from masonry surface. Carefully remove additional material so patch does not have feathered edges but has square or slightly undercut edges on area to be patched and is at least 1/4 inch thick, but not less than recommended in writing by patching compound manufacturer.

2. Mask adjacent mortar joint or rake out for repointing if patch extends to edge of brick.

3. Rinse surface to be patched and leave damp, but without standing water.

4. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.

5. Place patching compound in layers as recommended in writing by patching compound manufacturer, but not less than 1/4 inch or more than 2 inches thick. Roughen surface of each layer to provide a key for next layer.

a. Trowel, scrape, or carve surface of patch to match texture and surrounding surface plane or contour of brick. Shape and finish surface before or after curing, as determined by testing, to best match existing brick.

6. Keep each layer damp for 72 hours or until patching compound has set.

7. Remove and replace patches with hairline cracks or that show separation from brick at edges, and those that do not match adjoining brick in color or texture.

3.7

PARTIAL STONE REPLACEMENT

A. Remove defective portion of existing stone unit (backing stone). Carefully remove defective portion of stone by making vertical and horizontal saw cuts at face of backing stone and removing defective material to depth required for fitting partial replacement (dutchman).

1. Make edges of backing stone at cuts smooth and square to each other and to finished surface; essentially rectangular. Make back of removal area flat and parallel to stone face.

2. Do not overcut at corners and intersections. Hand trim to produce clean sharp corners with no rounding and no damage to existing work to remain.

3. If backing stone becomes further damaged, remove damaged area and enlarge partial replacement as required.

B. Remove mortar from joints that abut area of stone removed to same depth as stone was removed. Remove loose mortar particles and other debris from surfaces to be bonded and surfaces of adjacent stone units that will receive mortar by cleaning with stiff-bristle brush.

C. Cut and trim partial replacement to accurately fit area where material was removed from backing stone. Fabricate to size required to produce joints between partial replacement and backing stone of no more than 1/16 inch in width, and to produce joints between partial replacement and other stones that match existing joints between stones. Cut partial replacement so that, when it is set in final position, natural bedding planes will match the orientation of bedding planes of the backing stone unless otherwise indicated.

D. Apply stone-to-stone adhesive according to adhesive manufacturer's written instructions. Coat bonding surfaces of backing stone and partial replacement, completely filling all crevices and voids.

E. Apply partial replacement while adhesive is still tacky and hold securely in place until adhesive has cured. Use temporary shims, clamps, wedges, or other devices as necessary to align face of partial replacement with face of backing stone.

3.8

CRACK INJECTION

A. General: Comply with cementitious crack-filler manufacturer's written instructions.

B. Drill 1/4-inch-diameter injection holes as follows:

1. Transverse Cracks Less Than 3/8 Inch Wide: Drill holes through center of crack at 12 to 18 inches o.c.

2. Transverse Cracks More Than 3/8 Inch Wide: Drill holes through center of crack at 18 to 36 inches o.c.

3. Delaminations: Drill holes at approximately 18 inches o.c. both vertically and horizontally.

4. Drill holes 2 inches deep.

C. Clean out drill holes and cracks with compressed air and water. Remove dirt and organic matter, loose material, sealants, and failed crack repair materials.

D. Place plastic injection ports in drilled holes and seal face of backing between injection ports with clay or other nonstaining, removable plugging material. Leave openings at upper ends of cracks for air release.

E. Inject cementitious crack filler through ports sequentially, beginning at one end of area and working to opposite end; where possible, begin at lower end of injection area and work upward. Inject filler until it extrudes from adjacent ports. After port has been injected, plug with clay or other suitable material and begin injecting filler at adjacent port, repeating process until all ports have been injected.

F. Clean cementitious crack filler from face of stone before it sets by scrubbing with water.

G. After cementitious crack filler has set, remove injection ports, plugging material, and excess filler. Patch injection holes and surface of cracks as specified in "Stone Patching" Article.

3.9

FINAL CLEANING

A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water applied by low-pressure spray (50psi max.).

1. Do not use metal scrapers or brushes.

2. Do not use acidic or alkaline cleaners.

G. Clean adjacent nonmasonry surfaces. Use detergent and soft brushes or cloths.

H. Remove masking materials, leaving no residues that could trap dirt.

END OF SECTION

SECTION 040120.62 - BRICK MASONRY AND STONE REPOINTING

PART 1 - GENERAL

1.1

SUMMARY

A. Section Includes:

1. Repointing joints with mortar.

2. Repointing joints with sealant.

1.2

UNIT PRICES

A. Work of this Section is affected by unit prices.

1. Unit prices apply to additions to and deletions from Work as authorized by Change Orders.

1.3

DEFINITIONS

A. Rift: The most pronounced direction of splitting or cleavage of a stone.

1.4

SEQUENCING AND SCHEDULING

A. Order sand and gray portland cement for pointing mortar immediately after approval of Samples. Take delivery of and store at Project site enough quantity to complete Project.

B. Work Sequence: Perform brick masonry and stone repointing work in the following sequence, which includes work specified in this and other Sections:

1. Inspect masonry and stonework for open mortar joints and permanently or temporarily point them before cleaning to prevent the intrusion of water and other cleaning materials into the wall.

2. Remove paint.

3. Clean masonry.

4. Rake out mortar from joints surrounding masonry or stonework to be replaced and from joints adjacent to masonry repairs along joints.

5. Repair masonry/stone units, including replacing existing masonry/stone units with new masonry/stone materials.

6. Rake out mortar from joints to be repointed.

7. Point mortar and sealant joints.

8. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.

9. Where water repellents are to be used on or near masonry work, delay application of these chemicals until after pointing and cleaning.

C. As scaffolding is removed, patch anchor holes used to attach scaffolding.

1.5

ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

2. Include recommendations for product application and use.

3. Include test data substantiating that products comply with requirements.

B. Samples for Initial Selection: For the following:

1. Pointing Mortar: Submit sets of mortar for pointing in the form of sample mortar strips, 6 inches long by 1/4 inch (13 mm) wide, set in aluminum or plastic channels.

a. Have each set contain a color close range of at least four Samples of different mixes of colored sands and cements that produce a mortar matching existing, cleaned mortar when cured and dry.

2. Sealant materials.

1.6

DELIVERY, STORAGE, AND HANDLING

A. Deliver packaged materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.

B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

C. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.

D. Store sand where grading and other required characteristics can be maintained and contamination avoided.

1.7

FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit repointing work to be performed according to product manufacturers' written instructions and specified requirements.

B. Temperature Limits: Report mortar joints only when air temperature is between 40 and 90 deg F and is predicted to remain so for at least seven days after completion of the Work unless otherwise indicated.

C. Cold-Weather Requirements: Comply with the following procedures for mortar-joint pointing unless otherwise indicated:

1. When air temperature is below 40 deg F, heat mortar ingredients and existing masonry walls to produce temperatures between 40 and 120 deg F.

2. When mean daily air temperature is below 40 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for seven days after pointing.

D. Hot-Weather Requirements: Protect mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar materials. Provide artificial shade and wind breaks, and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temperatures of 90 deg F and above unless otherwise indicated.

PART 2 - PRODUCTS

2.1

PERFORMANCE REQUIREMENTS

A. Source Limitations: Obtain each type of material for repointing brick masonry or stonework (cement, sand, etc.) from single source with resources to provide materials of consistent quality in appearance and physical properties.

2.2

MORTAR MATERIALS

A. Portland Cement: ASTM C 150/C 150M, Type I or Type II, except Type III may be used for cold-weather construction; gray where required for color matching of mortar.

B. Water: Potable.

2.3

ACCESSORY MATERIALS

A. Sealant Materials:

1. Sealant manufacturer's standard elastomeric sealant(s) of base polymer, single-component, nonsag urethane sealant.

2. Colors: Provide colors of exposed sealants to match colors of mortar adjoining installed sealant unless otherwise indicated.

B. Joint-Sealant Backing:

1. Cylindrical Sealant Backings: ASTM C 1330, [Type C (closed-cell material with a surface skin)] [or] [Type B (bicellular material with a surface skin)], and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

2. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended in writing by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

C. Masking Tape: Nonstaining, nonabsorbent material; compatible with mortar, joint primers, sealants, and surfaces adjacent to joints; and that easily comes off entirely, including adhesive.

D. Other Products: Select materials and methods of use based on the following, subject to approval of a mockup:

1. Previous effectiveness in performing the work involved.

2. Minimal possibility of damaging exposed surfaces.

3. Consistency of each application.

4. Uniformity of the resulting overall appearance.

5. Do not use products or tools that could leave residue on surfaces.

2.4

MORTAR MIXES

A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.

B. Do not use admixtures in mortar unless otherwise indicated.

C. Mixes: Mix mortar materials in the following proportions:

1. Pointing Mortar by Volume: ASTM C 270, Proportion Specification, 1 part portland cement, 1 part lime, and 6 parts sand.

PART 3 - EXECUTION

3.1

PROTECTION

A. Prevent mortar from staining face of surrounding masonry/stone and other surfaces.

1. Cover sills, ledges, and other projecting items to protect them from mortar droppings.

2. Keep wall area wet below pointing work to discourage mortar from adhering.

3. Immediately remove mortar splatters in contact with exposed masonry and other surfaces.

B. Remove downspouts and associated hardware adjacent to masonry and stone during masonry repointing. Reinstall when repointing is complete.

1. Provide temporary rain drainage during work to direct water away from building.

3.2

MASONRY/STONE REPOINTING, GENERAL

A. Appearance Standard: Repointed surfaces are to have a uniform appearance as viewed from 20 feet (15 m) away by Architect.

3.3

REPOINTING

A. Rake out and repoint joints to the following extent:

1. All joints in areas indicated.

2. Joints indicated as sealant-filled joints.

3. Joints at locations of the following defects:

a. Holes and missing mortar.

b. Cracks that can be penetrated 1/4 inch or more by a knife blade 0.027 inch thick.

c. Cracks (1/8 mm) (1/8 inch) or more in width and of any depth.

d. Hollow-sounding joints when tapped by metal object.

e. Eroded surfaces 1/4 inch or more deep.

f. Deterioration to point that mortar can be easily removed by hand, without tools.

g. Joints filled with substances other than mortar.

B. Do not rake out and repoint joints where not required.

C. Rake out joints as follows, according to procedures demonstrated in approved mockup:

1. Remove mortar from joints to depth of 2 times joint width and not less than that required to expose sound, unweathered mortar. Do not remove unsound mortar more than [2 inches] <insert dimension> deep; consult Architect for direction.

2. Remove mortar from brick and other masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.

3. Do not spall edges of brick or other masonry units or widen joints. Replace or patch damaged brick or other masonry units as directed by Architect.

D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.

E. Pointing with Mortar:

1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.

2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch until a uniform depth is formed. Fully compact each layer, and allow it to become thumbprint hard before applying next layer.

3. After deep areas have been filled to same depth as remaining joints, point joints by placing mortar in layers not greater than 3/8 inch. Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to feather edge the mortar.

4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.

5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.

6. Hairline cracking within mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

F. Pointing with Sealant:

1. After raking out, keep joints dry and free of mortar and debris.

2. Clean and prepare joint surfaces. Prime joint surfaces unless sealant manufacturer recommends against priming. Do not allow primer to spill or migrate onto adjoining surfaces.

3. Fill sealant joints with specified joint sealant.

a. Install cylindrical sealant backing beneath the sealant. Where space is insufficient for cylindrical sealant backing, install bond-breaker tape.

b. Install sealant using only proven installation techniques that ensure that sealant is deposited in a uniform, continuous ribbon, without gaps or air pockets, and with complete wetting of the joint bond surfaces equally on both sides. Fill joint flush with surrounding masonry and matching the contour of adjoining mortar joints.

c. Install sealant as recommended in writing by sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead:

i. Fill joints to a depth equal to joint width, but not more than 1/2 inch deep or less than 1/4 inch deep.

d. Tool sealant to form smooth, uniform beads, slightly concave. Remove excess sealant from surfaces adjacent to joint.

G. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.

3.4

FINAL CLEANING

A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water applied by low-pressure spray (50psi max.).

1. Do not use metal scrapers or brushes.

2. Do not use acidic or alkaline cleaners.

B. Clean adjacent nonmasonry surfaces. Use detergent and soft brushes or cloths.

C. Clean mortar and debris from roof, remove debris from gutters and downspouts. Rinse off roof and flush gutters and downspouts.

D. Remove masking materials, leaving no residues that could trap dirt.

END OF SECTION

DESIGNED BY: BTK

REVIEWED BY: EJK

DRAWN BY: BTK

DATE: 05/27/2025

JOB NUMBER: 2025-01547

SCALE:

LPCL MASONRY RESTORATION

LA PORTE COUNTY PUBLIC LIBRARY

SPECIFICATIONS

Elkhart, IN p: 574.293.762

South Bend, IN p: 574.232.4988

For: Wayne, IN p: 260.422.2522

REGISTERED ARCHITECT No. AR10800047 STATE OF INDIANA

05/27/2025

DESCRIPTION

REV

BY

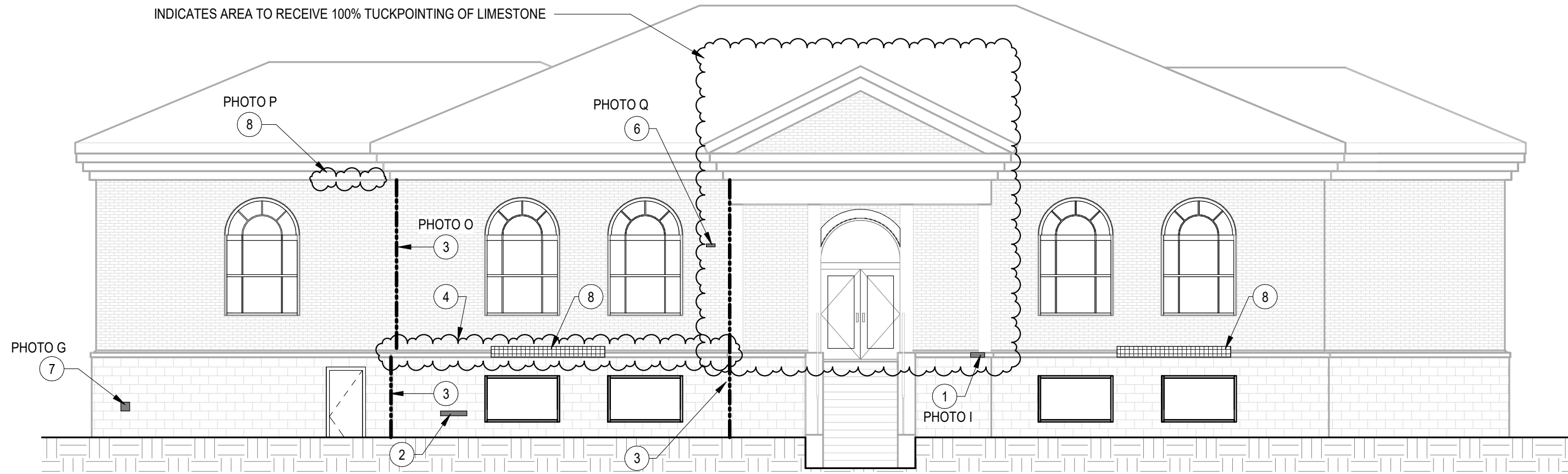
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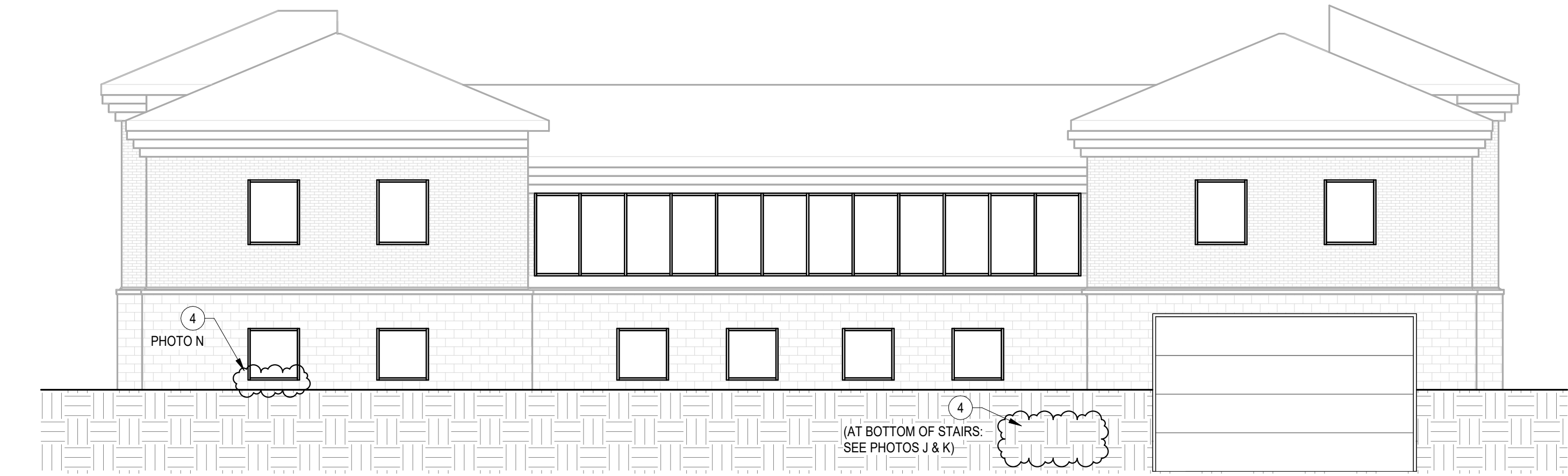
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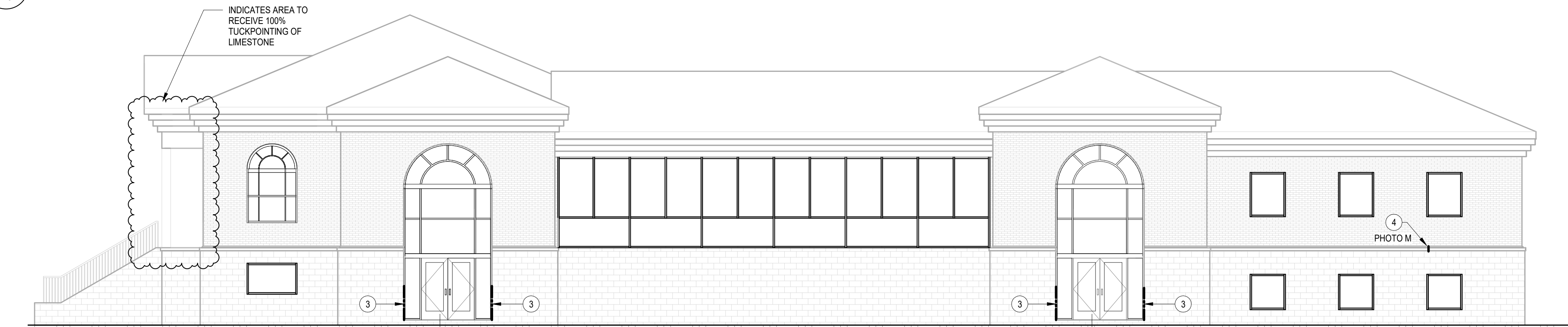
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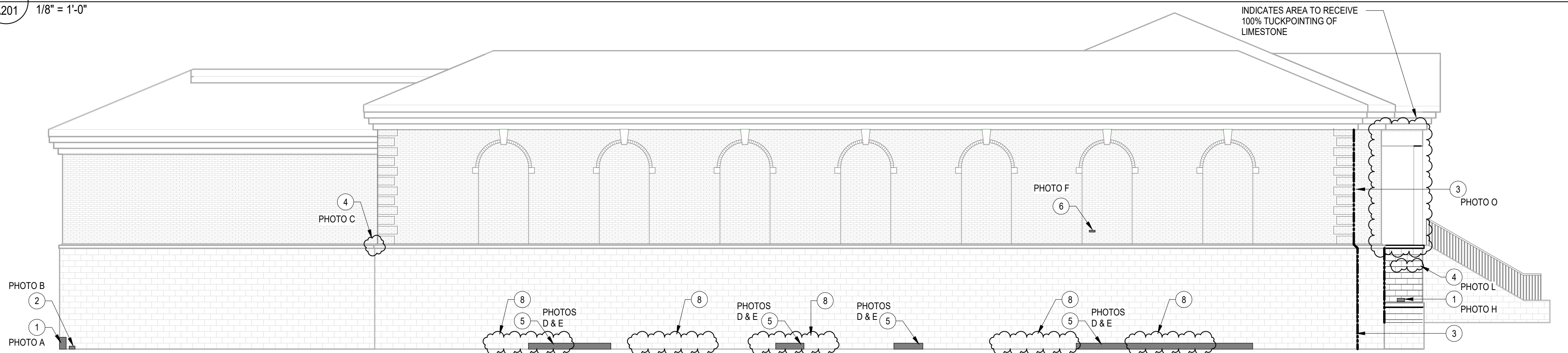
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A201  
INDIANA AVE ELEVATION  
1/8" = 1'-0"



2  
A201  
MADISON ST ELEVATION  
1/8" = 1'-0"



3  
A201  
MAPLE AVE ELEVATION  
1/8" = 1'-0"



4  
A201  
LIBRARY PARK ELEVATION  
1/8" = 1'-0"



A.



B.



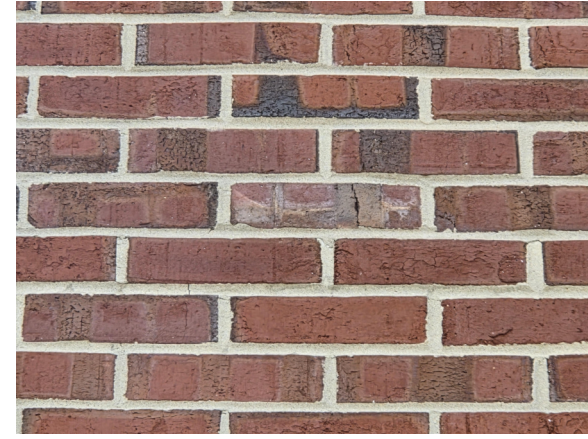
C.



D.



E.



F.



G.



H.



I.

- GENERAL NOTES**
- EACH BIDDER MUST VISIT THE SITE OF PROPOSED WORK AND FULLY ACQUAINT THEMSELVES WITH CONDITIONS RELATING TO CONSTRUCTION AND LABOR SO THAT THEY MAY FULLY UNDERSTAND THE FACILITY, DIFFICULTIES AND RESTRICTIONS AFFECTING THE COMPLETION OF THE WORK INCLUDED UNDER THE CONTRACT.
  - FIELD VERIFY AND COORDINATE ITEMS, DIMENSIONS, CONDITIONS, AND QUANTITIES, ETC. REVIEW ANY DISCREPANCIES WITH ARCHITECT.
  - MAINTAIN REQUIRED EXITS FROM THE EXISTING BUILDING THROUGH SUBSTANTIAL COMPLETION.
  - EXISTING ITEMS ARE TO REMAIN, UNO.
  - PROPERLY PROTECT EXISTING BUILDING, CONCRETE WALKS, CURBS, PAVING, GRASS, LANDSCAPING, ETC. REPLACE ANY DISTURBED AND DAMAGED AREAS WITH NEW LIKE MATERIALS, SOD, LANDSCAPING, ETC. MATCH EXISTING.
  - PROVIDE MATERIALS AND PERFORM WORK TO PROVIDE A COMPLETE WATERTIGHT CONDITION.
  - PATCH AND REPAIR EXISTING CONSTRUCTION AFFECTED BY THE WORK WITH MATERIALS AND FINISHES CONSISTENT WITH EXISTING CONSTRUCTION WHETHER OR NOT INCLUDED ON DRAWINGS, TYP., UNO.
  - RESTORE ITEMS/DAMAGED AREAS AT STAGING AREA, ETC. TO ORIGINAL FULLY FUNCTIONAL CONDITION. COORDINATE STAGING AREA/LOCATIONS WITH OWNER.
  - TUCKPOINT 100% OF MORTAR JOINTS IN THE FACE BRICK WHERE INDICATED AND SELECTIVELY SHRINKAGE CRACKS, SEPARATION CRACKS, HEAVY EROSION, UNSOUND MORTAR, AND ANY OTHER FORM OF DETEIORATION.
  - CONTRACTOR TO PROVIDE UNIT COST (PER SQUARE FOOT), FOR THE FOLLOWING:
    - A. BASE BID: ADDITIONAL MASONRY TUCKPOINTING NOT INCLUDED ON THE CONSTRUCTION DRAWINGS.
    - B. BASE BID: ADDITIONAL MAJOR (MORE THAN 1/8" WIDE) MASONRY CRACKING/REPLACEMENT NOT INCLUDED IN THE CONSTRUCTION DRAWINGS.
    - C. BASE BID: ADDITIONAL BRICK MASONRY FOR CRACKED/DAMAGED BRICK MASONRY NOT INCLUDED ON DRAWINGS.
    - D. BASE BID: ADDITIONAL STONE UNITS FOR CRACKED/DAMAGED STONE UNITS NOT INCLUDED ON DRAWINGS.
    - E. BASE BID: CHEMICAL CLEANING OF ALL STONE SURFACES NOT INCLUDED ON DRAWINGS.



J.



K.



L.



M.



N.



O.



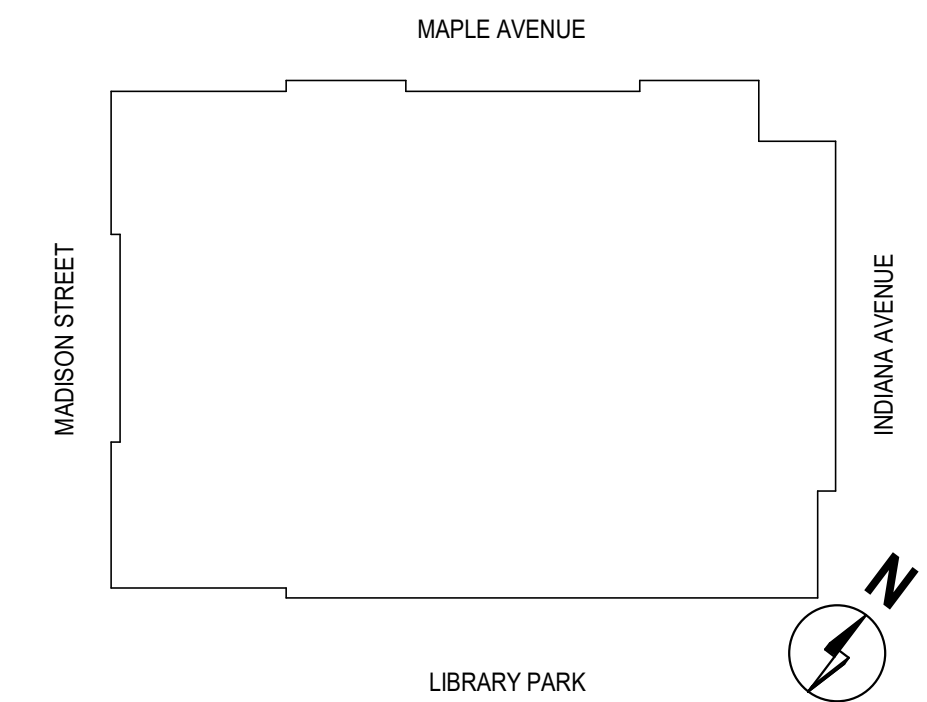
P.



Q.

# KEYNOTES

- REPLACE/REPAIR MISSING LIMESTONE
- REPAIR CRACKED LIMESTONE
- REMOVE PORTION OF EXISTING CAULK, ETC AT EXISTING CONTROL JOINT AND PROVIDE NEW BACKER ROD AND CAULK- COLOR TO MATCH EXISTING CAULK.
- INSPECT, GRIND, AND REPOINT MORTAR
- REPAIR/REPLACE DRAINAGE MAT
- REPAIR CRACKED BRICK
- CAULK WALL PENETRATION
- SEAL GAP BETWEEN TRIM AND BRICK. PROVIDE NEW BACKER ROD AND CAULK- COLOR TO MATCH EXISTING WOOD TRIM
- CLEAN MASONRY



KEY PLAN  
1/16" = 1'-0"

REV	DESCRIPTION	BY	DATE
1			



JONES  
PETRIE  
RAFINSKI  
LPCPL MASONRY RESTORATION  
LA PORTE COUNTY PUBLIC LIBRARY  
EXTERIOR ELEVATIONS - NEW  
DESIGNED BY: BTK  
REVIEWED BY: EJK  
DRAWN BY: BTK  
DATE: 05/27/2025  
JOB NUMBER: 2025-01547  
SCALE: As indicated  
A201