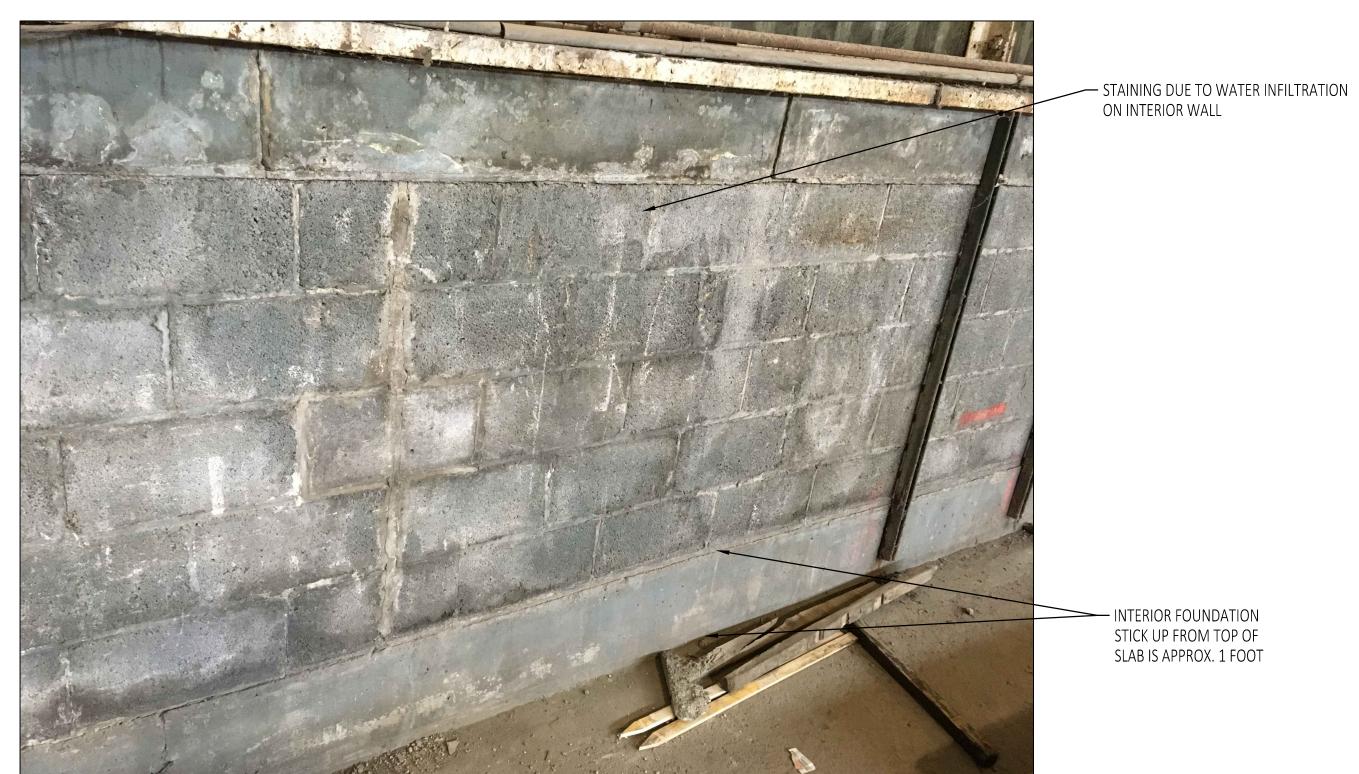


- HEIGHT OF CMU BLOCK WALL; 43 INCHES FROM TOP OF CONCRETE FOUNDATION TO BOTTOM OF LINTEL

1 HEIGHT OF CMU BLOCK WALL R-100 NOT TO SCALE



— INTERIOR FOUNDATION STICK UP FROM TOP OF SLAB IS APPROX. 1 FOOT

2 TYPICAL INTERIOR OF WAREHOUSE R-100 NOT TO SCALE

ALTERNATE 1

DTMB FILE NO. 591_22274.MNB



STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY

STATE FACILITIES ADMINISTRA

DESIGN AND CONSTRA

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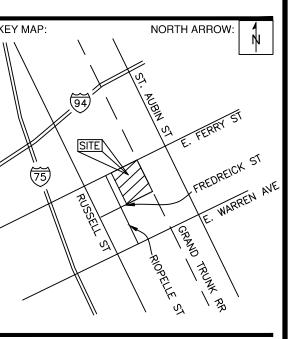
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REVISION BLOCK REV DATE: DESCRIPTION

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 DATE
 PACKAGE NAME

 2023-12-19
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 2024-03-06
 90% DRAWINGS

 2025-01-31
 ISSUED FOR BID

MDOT DETROIT GARAGE

STORM SEWER RECONSTRUCTION

PROJECT LOCATION: 1500 E. FERRY STREET DETROIT, MICHIGAN

DESIGNED BY:	NTH PROJECT NO.:
MAA	23001451
DRAWN BY:	SHEET SIZE:
MAA	ARCH D (24"x36")
CHECKED BY:	DATE:
JBS	08/19/2024
CAD FILE NAME:	
23001451	

SHEET TITLE: TYPICAL DEFECT PHOTOS

SHEET NUMBER:



1 TYPICAL BROKEN LINTEL

R-101 NOT TO SCALE

DETERIORATED SEALANT — AT THE SIDING AND WALL INTERFACE



DETERIORATED VERTICAL **EXPANSION JOINT**





TYPICAL BROKEN CMU BLOCK R-101 NOT TO SCALE



4 TYPICAL SPALLED CONCRETE FOUNDATION R-101 NOT TO SCALE

ALTERNATE 1

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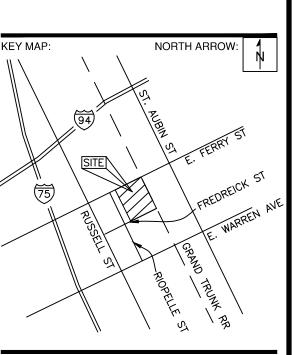
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MDOT DETROIT GARAGE

PROJECT LOCATION: 1500 E. FERRY STREET DETROIT, MICHIGAN

RECONSTRUCTION

STORM SEWER

NTH PROJECT NO.: 23001451 MAA DRAWN BY: SHEET SIZE: ARCH D (24"x36") CHECKED BY: JBS CAD FILE NAME: 08/19/2024 23001451

TYPICAL DEFECT PHOTOS

SHEET NUMBER:

A. GENERAL REQUIREMENTS

- 1. ELEVATIONS AND DIMENSIONS OF EXISTING STRUCTURES ARE BASED ON PRELIMINARY INSPECTIONS. AS SUCH, FIELD VERIFY ALL DIMENSIONS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS FOR EACH WORK AREA BEFORE SELECTIVE DEMOLITION, ORDERING PRODUCT, ETC. IMMEDIATELY NOTIFY THE OWNER REPRESENTATIVE OF ANY CONFLICT THAT WILL AFFECT WORK PROGRESS.
- 2. DETAILS OF EXISTING STRUCTURES, SUBSURFACES, SURFACES, AND/OR EQUIPMENT INCLUDED IN THESE PLANS ARE CONCEPTUAL AND MAY NOT BE THE SAME AS ENCOUNTERED IN THE FIELD. THEY ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF PREPARATION OF THESE DOCUMENTS AND NON-DESTRUCTIVE INVESTIGATIONS IN THE FIELD. NTH HAS CONDUCTED ALL REASONABLE INVESTIGATION INTO THE FIELD CONDITIONS OF THE STRUCTURE TO PROVIDE THE CONTRACTOR WITH ACCURATE INFORMATION. ANY ERRORS OR OMISSIONS ARE UNINTENTIONAL AND THE CONTRACTOR IS ADVISED TO DOCUMENT SUCH VARIATIONS AND SUBMIT TO OWNER FOR REVIEW VIA PHOTOS, SKETCHES, OR OTHER APPROPRIATE MEANS.
- 3. NOTIFY OWNER'S REPRESENTATIVE AT LEAST 24 HOURS BEFORE THE START OF WORK.
- 4. SUBMIT A WORK PLAN AND SCHEDULE FOR REVIEW PRIOR TO STARTING WORK AND WILL NOTIFY THE OWNER AND OWNER'S REPRESENTATIVES OF ANY DEVIATIONS FROM THAT PLAN OR SCHEDULE AS SOON AS THEY ARE APPARENT.
- 5. ABIDE BY ALL OWNER'S SAFETY AND CONDUCT REGULATIONS WHILE ON SITE.
- 6. CONTRACTOR IS RESPONSIBLE FOR ALL WORK INCIDENTAL TO OR INDICATED IN THESE PLANS AND PERFORMED OR CONDUCTED BY THEMSELVES, THEIR SUB-CONTRACTORS, OR THEIR AGENTS.
- 7. CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, PROCEDURES AND SEQUENCING OF WORK.
- 8. PROVIDE FIRE WATCH COMPLYING WITH THE OWNER'S REQUIREMENTS DURING ALL HOT WORK SUCH AS CUTTING, WELDING, GRINDING, ETC.
- 9. PROTECT OWNER PROPERTY NOT INCLUDED IN THIS WORK BUT IN THE IMPACTED AREA FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
- 10. MONITOR THE STRUCTURES FOR SIGNS OF DISTRESS DURING ALL PHASES OF WORK AND NOTIFY THE ENGINEER IMMEDIATELY SHOULD SIGNS OF DISTRESS BE FOUND.
- 11. ENSURE ALL WORK IS CONDUCTED WITHIN THE REQUIREMENTS OF APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS.
- 12. REPLACE IN KIND, ANY EQUIPMENT, MATERIALS OR PROPERTY DAMAGED BY THE CONTRACTOR OR THEIR AGENTS AT NO ADDITIONAL CHARGE TO OWNER.
- 13. NOTIFY THE ENGINEER AND THE OWNER OF EXISTING CONDITIONS THAT REQUIRE MODIFICATIONS TO THE DESIGN OF THE PROPOSED CONSTRUCTION.
- 14. MAINTAIN A TIDY WORK AREA. ENSURE REFUSE AND SCRAPS WITHIN WORK AREAS ARE ROUTINELY DISPOSED OF PROPERLY. WORK AREA SHOULD BE CLEAN AT THE END OF EACH SHIFT AS MESSY WORK AREAS MAY LEAD TO

B. SELECTIVE DEMOLITION

- 1. PERFORM WORK IN ACCORDANCE WITH SPECIFICATIONS SECTION 02 4116.
- 2. COORDINATE DEMOLITION WORK WITH OWNER TO MINIMIZE DISRUPTIONS OF FACILITY OPERATIONS.
- 3. MEET WITH OWNER AND ENGINEER PRIOR TO BEGINNING WORK TO DETERMINE RESPONSIBILITIES OF REMOVAL OF SPECIFIC PIECES OF EQUIPMENT NOTED OR OTHERWISE.
- 4. VERIFY PREFERRED/REQUIRED SEQUENCE OF VARIOUS TASKS WITH OWNER AND VENDORS BEFORE STARTING WORK.
- 5. COORDINATE SEQUENCE OF WORK, SCHEDULE, UTILITY SHUTDOWNS, STAGING AREAS, ETC., WITH OWNER AND ENGINEER FOR ALL EQUIPMENT INVOLVED IN OR AFFECTED BY THE CONTRACTOR'S WORK.
- 6. CONTRACTOR TO VERIFY ALL FIELD CONDITIONS AND ITEMS NECESSARY TO BE DEMOLISHED.
- 7. SUBMIT A DEMOLITION PLAN AND SCHEDULE FOR REVIEW PRIOR TO STARTING WORK AT OWNER REQUEST.
- 8. VERIFY LOCATIONS OF CONCEALED EXISTING UTILITIES AND CONDUITS BEFORE START OF DEMOLITION WORK.
- 9. EXISTING/REMOVED EQUIPMENT, TO BE TURNED OVER TO OWNER, SHALL BE CAREFULLY REMOVED, HANDLED, AND STORED TO PREVENT DAMAGE FOR POSSIBLE REUSE, UNLESS DIRECTED OTHERWISE.
- 10. FOR SELECTIVE DEMOLITION OF CONCRETE, PNEUMATIC HAMMERS OR OTHER METHODS CAUSING EXCESSIVE VIBRATIONS TO THE BUILDING STRUCTURE ARE NOT PERMITTED.

C. SUBMITTALS.

- 1. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM THE ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS THAT ARE CLOUDED OR FLAGGED BY SUBMITTING PARTIES SHALL NOT BE CONSIDERED APPROVED AFTER OWNER'S REVIEW, UNLESS SPECIFICALLY NOTED
- 2. ALLOW A MINIMUM OF SEVEN (7) WORKING DAYS FOR REVIEW OF SUBMITTALS, SHOP DRAWINGS, AND / OR SUBSTITUTION REQUESTS BY THE ENGINEER OR OWNER.

D. PROPRIETARY EQUIPMENT

- 1. PROPRIETARY EQUIPMENT INDICATED ON THESE PLANS ARE INTEGRAL TO THE DESIGN. SUBSTITUTIONS MAY REQUIRE ALTERATIONS TO ONE OR MORE COMPONENTS OF THE DESIGN. DESIGNER MUST BE NOTIFIED SHOULD SUBSTITUTIONS BE REQUIRED.
- 2. CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF THESE ITEMS. CONTRACTOR IS RESPONSIBLE FOR ALL MANUFACTURER REQUIRED DIMENSIONS USED FOR FABRICATION OF PROPRIETARY ITEMS.
- 3. OWNER WILL RECEIVE A COPY OF ALL MAINTENANCE, WARRANTY AND CARE LITERATURE PROVIDED BY THE MANUFACTURER. OWNER WILL BE MADE AWARE OF ANY REQUIRED MAINTENANCE AND THE REQUIRED MAINTENANCE INTERVALS IF APPLICABLE.

D. MASONRY RESTORATION

- 1. SEE SPECIFICATIONS SECTION 04 0120.91 FOR MASONRY RESTORATION.
- 2. COLD WEATHER AND HOT WEATHER CONSTRUCTION: COMPLY WITH MSJC FOR REQUIREMENTS DURING PREPARATION, DURING CONSTRUCTION, AND FOR PROTECTION.

3. MASONRY MORTAR MATERIALS

- 3.1 PORTLAND CEMENT: ASTM C150, TYPE I OR II. PROVIDE NATURAL COLOR OR WHITE CEMENT AS REQUIRED TO PRODUCE MORTAR COLOR TO MATCH ADJACENT EXISTING MORTAR.
- 3.2 HYDRATED LIME: ASTM C207, NON-AIR-ENTRAINED, TYPE S.
- 3.3 SAND: SIMILAR IN SIZE AND GRADATION TO EXISTING MORTAR SAND; ASTM C144 OTHERWISE.
- 3.4 CHEMICAL ADDITIVES: NONE PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE ENGINEER.
- 3.5 WATER: CLEAN, CLEAR AND SUITABLE FOR DRINKING, FREE OF CHEMICALS THAT MAY BE DELETERIOUS TO MASONRY AND MORTAR.

4. MORTAR MIXES

- 4.1 GENERAL: DO NOT ADD ADMIXTURES INCLUDING COLORING PIGMENTS, AIR-ENTRAINING
- 4.2 AGENTS, ACCELERATORS, RETARDERS, WATER REPELLENT AGENTS, ANTIFREEZE COMPOUNDS, OR OTHER ADMIXTURES, UNLESS SPECIFICALLY APPROVED IN WRITING BY ENGINEER.
- 4.3 REPOINTING MORTAR AND MORTAR FOR LAYING NEW UNITS: TYPE N MORTAR PER ASTM C270, PROPORTION SPECIFICATION. LIMIT CEMENTITIOUS MATERIALS TO PORTLAND CEMENT AND LIME. AIR ENTRAINMENT IS NOT PERMITTED.

5. JOINT PREPARATION FOR REPOINTING

- 5.1 PRODUCE MORTAR COLOR TO MATCH ADJACENT EXISTING MORTAR.CUT OUT MORTAR JOINTS DESIGNATED FOR REPOINTING, REMOVING UNSOUND MORTAR UNTIL ONLY SOUND MATERIAL REMAINS; MINIMUM DEPTH 3/4" INCH AND MAXIMUM DEPTH 1 3/4 INCHES FROM THE BRICK OUTSIDE SURFACE. CUT OUT JOINTS TO A SQUARE PROFILE AND UNIFORM DEPTH; FURROW-SHAPED JOINTS ARE NOT ACCEPTABLE.
- 5.2 EMPLOY MORTAR REMOVAL METHODS THAT DO NOT DAMAGE MASONRY UNITS.
- 5.3 REMOVE LOOSE PARTICLES, DUST AND DEBRIS FROM JOINTS, USING AN OIL-FREE AIR JET OR A WATER STREAM.
- 6. BATCHING REPOINTING MORTAR
- 6.1 PRODUCE MORTAR COLOR TO MATCH ADJACENT EXISTING MORTAR.DRY MIX SAND AND CEMENTITIOUS MATERIALS. ACCURATELY PROPORTION MIX MATERIALS BY VOLUME. PROVIDE CALIBRATED CONTAINERS AND SCALES AT SITE FOR PROPER PROPORTIONING.
- 6.2 ADD ONLY ENOUGH WATER TO PRODUCE A DAMP MIX THAT WILL RETAIN ITS SHAPE WHEN PRESSED INTO A BALL BY
- 6.3 MIX FOR AT LEAST THREE (3) AND NOT MORE THAN SEVEN (7) MINUTES IN A MECHANICAL MIXER. HAND MIXING IS NOT ACCEPTABLE.
- 6.4 PERMIT MIXED MORTAR TO STAND FOR A MINIMUM OF ONE (1) HOUR AND A MAXIMUM OF 1-1/2 HOURS FOR PRE-HYDRATION OF CEMENTITIOUS MATERIALS TO REDUCE SHRINKAGE.
- 6.5 ADD SUFFICIENT WATER TO BRING MORTAR TO PROPER CONSISTENCY FOR TUCKPOINTING, SOMEWHAT DRIER THAN MORTAR USED FOR LAYING MASONRY UNITS. MIX BY HAND FOR THREE (3) TO FIVE (5) MINUTES.
- 6.6 USE MORTAR WITHIN 2-1/2 HOURS OF ITS INITIAL MIXING. RETEMPER MORTAR WITHIN THIS TIME LIMIT AS NEEDED TO REPLACE EVAPORATED WATER BUT NOT AFTER MORTAR HAS BEGUN TO SET. DISCARD MORTAR THAT IS NOT USED WITHIN 2-1/2 HOURS OF INITIAL MIXING (1 TO 1-1/2 HOURS AFTER PRE-HYDRATION) AND PROPERLY DISPOSE OF

7. APPLICATION OF REPOINTING MORTAR

- 7.1 PRODUCE MORTAR COLOR TO MATCH ADJACENT EXISTING MORTAR.USE A TUCKPOINTING TROWEL THAT IS SLIGHTLY NARROWER THAN THE MORTAR JOINTS BEING FILLED.
- 7.2 POINT HEAD JOINTS BEFORE POINTING BED JOINTS.
- 7.3 SPREAD MORTAR INTO JOINT IN APPROXIMATELY 1/4-INCH LAYERS. TIGHTLY COMPRESS EACH LAYER TO PREVENT VOIDS. FILL JOINTS TO THE OUTSIDE SURFACE OF THE BRICK UNITS.
- 7.4 WHEN MORTAR IS THUMBPRINT HARD, COMPACT JOINTS WITH A CONCAVE TOOL THAT IS WIDER THAN JOINT.
- 7.5 PROTECT FRESHLY PLACED MORTAR FROM SUN AND DRYING WINDS. WHEN AMBIENT TEMPERATURE EXCEEDS 100 DEGREES F, OR EXCEEDS 90 DEGREES F WITH WINDS IN EXCESS OF 8 MILES PER HOUR, COVER MASONRY WITH PLASTIC SHEETING OR APPLY A FINE WATER-FOG SPRAY FOR FOUR (4) DAYS.

8. CLEANING

- 8.1 PRODUCE MORTAR COLOR TO MATCH ADJACENT EXISTING MORTAR.REMOVE LOOSE MORTAR PARTICLES WITH A SOFT BRISTLE BRUSH AFTER MORTAR HAS DRIED BUT NOT HARDENED.
- 8.2 SCRAPE OFF HARDENED MORTAR WITH A PIECE OF SIMILAR MASONRY UNIT OR A WOODEN PADDLE. USE OF METAL SCRAPERS OR BRUSHES IS NOT PERMITTED.
- 8.3 AFTER MORTAR HAS CURED, CLEAN WITH WATER AND A STIFF BRUSH, IF NEEDED. DO NOT USE ACID SOLUTIONS OR MASONRY CLEANING SOLUTIONS UNLESS APPROVED IN WRITING BY ENGINEER.

9. APPLICATION OF PENETRATING CONCRETE SURFACE COATING

- 9.1 APPLY THE COATING TO ALL EXPOSED EXTERIOR MASONRY AND CONCRETE SURFACES.
- 9.2 REFER TO SPECIAL PROVISIONS FOR DETAILS.

LIST OF REPAIR ITEMS:

ITEM	DESCRIPTION	DETAIL (S)	*QUANTITIES	SPEC. SECTION (S)
1	REMOVE & REPLACE DETERIORATED AND/OR CRACKED CMU BLOCKS	2/R-108	140 EA	04 0120.91
2	REPOINT DETERIORATED AND/OR CRACKED MORTAR JOINTS AT CMU BLOCKS	5/R-108	10500 LF	04 0120.91
3	REMOVE AND REPLACE BROKEN LINTELS (48" X 8" X 4")	N/A	70 EA	N/A
4	REMOVE SEALANT AT THE SIDING AND WALL INTERFACE AND INSTALL Z-FLASHING	3/R-108	1128 LF	07 9213
5	REMOVE AND REPLACE SEALANT AT VERTICAL EXPANSION JOINT	1/R-108	185 LF	07 9213
6	REMOVE AND REPLACE SEALANT AT EXPANSION JOINT ALONG BUILDING PERIMETER	4/R-108	628 LF	07 9213
7	INSTALL CLEAR PENETRATING SEALER ON CMU BLOCK WALL	1/R-109	7720 SF	07 0713
8	INSTALL TAR-BASED WATERPROOFING ON CONCRETE FOUNDATION	1/R-109	1340 SF	07 1416
9	PATCH CRACKED AND SPALLED CONCRETE ON EXPOSED FOUNDATION AT BUILDING PERIMETER	6/R-108	25 SF	03 3130

*FOR GENERAL INFORMATION ONLY. BASED ON THE DESIGN PLANS, AND FIELD OBSERVATION, AND MEASUREMENTS TAKEN AT THE TIME OF THE PRE-BID MEETING / INSPECTION, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE QUANTITIES TO USE FOR BIDDING PURPOSES.

ALTERNATE 1

DTMB FILE NO. 591 22274.MNB



STATE OF MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET STATE FACILITIES ADMINISTRATION DESIGN AND CONSTRUCTION DIVISION ADAM P. LACH, RA, DIRECTOR

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Environmental Services

Facilities Engineering

BEFORE YOU DIG CALL MISS DIG. 1-800-482-7171 For free location of public utility lines. ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING: IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES ... CALL MISS DIG



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REVISION BLOCK DATE: DESCRIPTION

SUBMITTAL LOG DATE PACKAGE NAME 2023-12-19 75% DRAWINGS 2024-03-06 90% DRAWINGS 2025-01-31 ISSUED FOR BID

MDOT DETROIT GARAGE STORM SEWER

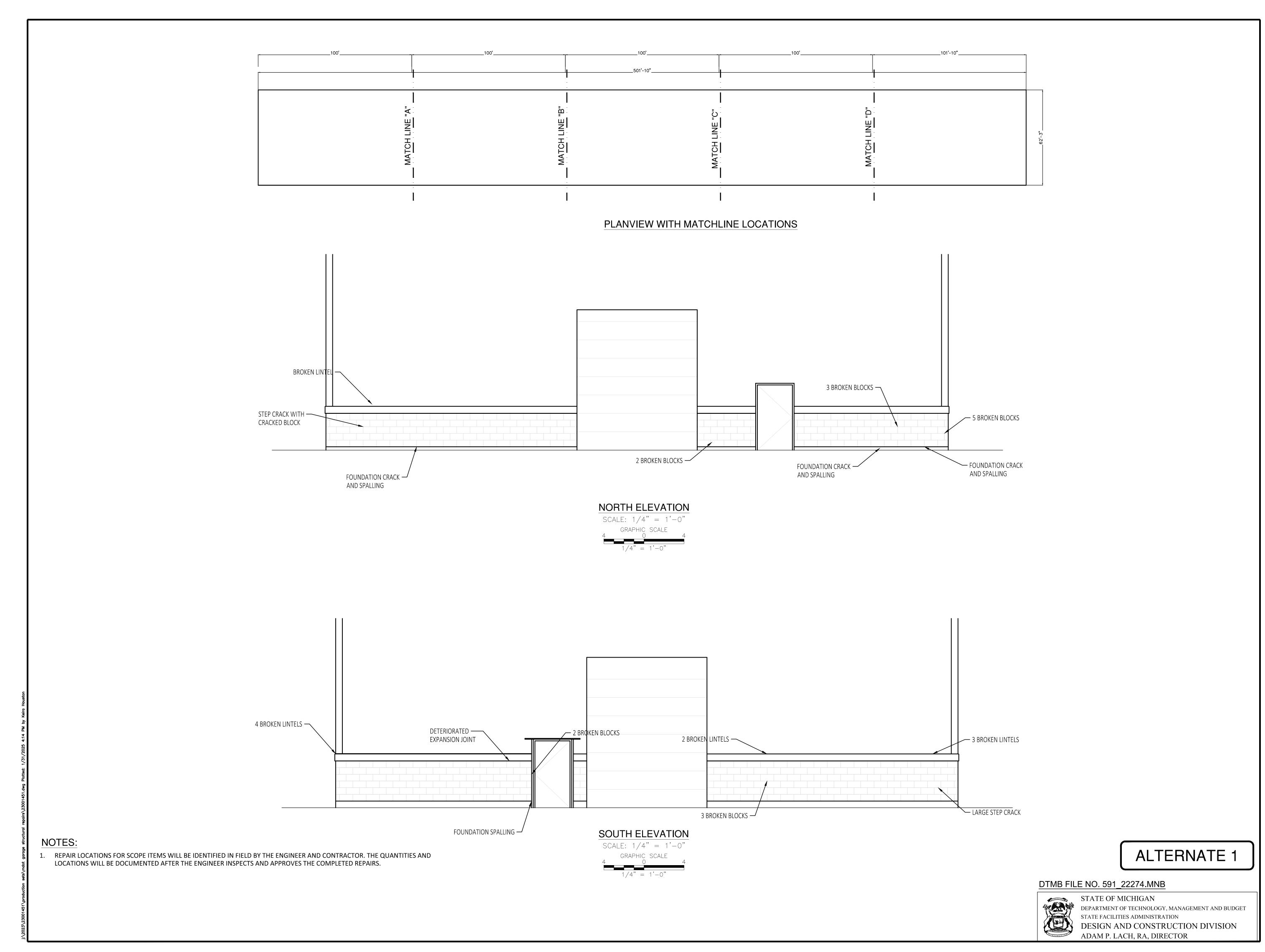
PROJECT LOCATION: 1500 E. FERRY STREET DETROIT, MICHIGAN

RECONSTRUCTION

NTH PROJECT NO.: DESIGNED BY: 23001451 DRAWN BY SHEET SIZE: ARCH D (24"x36") CHECKED BY: 08/19/2024 CAD FILE NAME: 23001451

GENERAL NOTES

SHEET NUMBER:



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MDOT DETROIT GARAGE
STORM SEWER
RECONSTRUCTION

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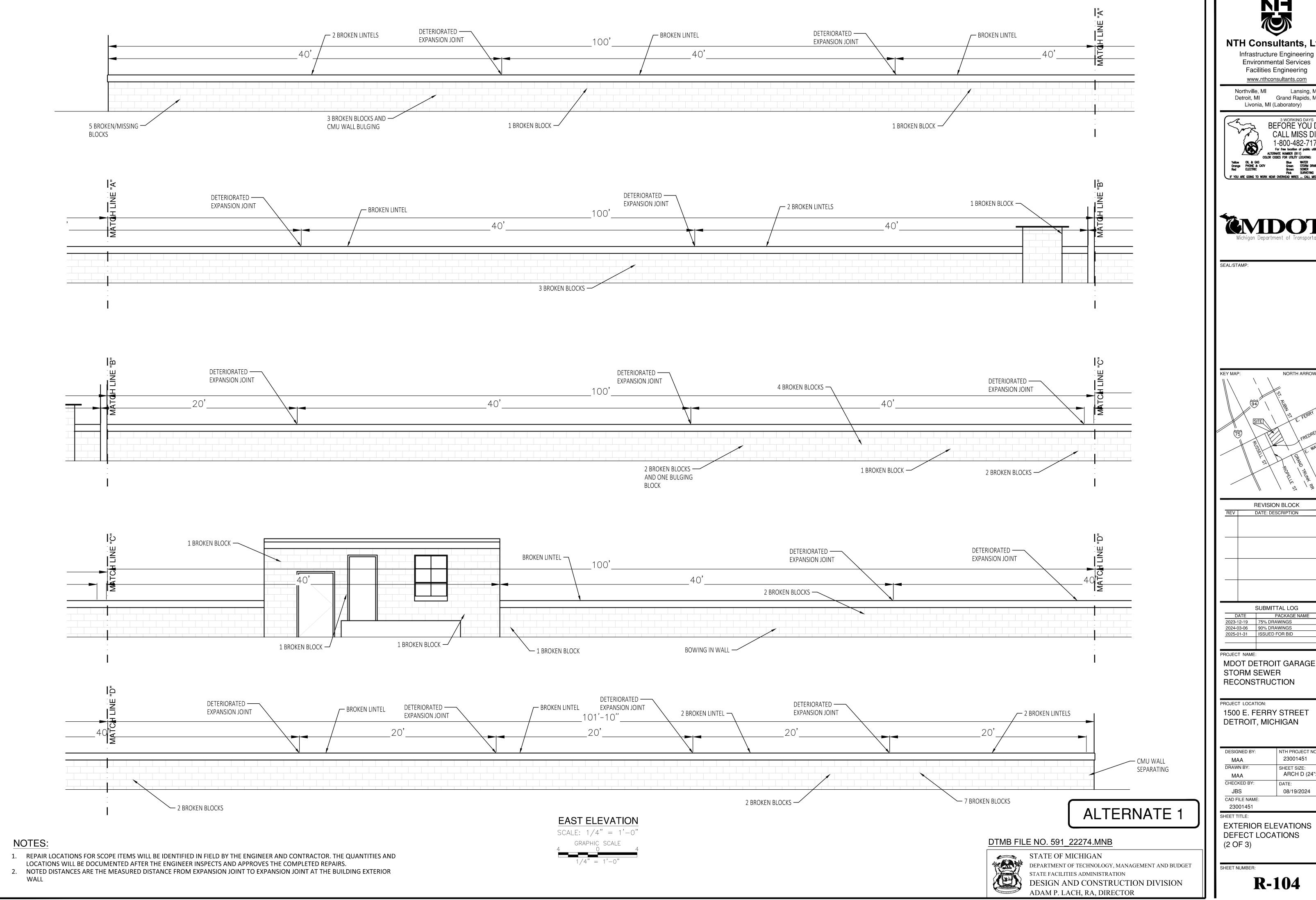
1500 E. FERRY STREET

DETROIT, MICHIGAN

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EXTERIOR ELEVATIONS DEFECT LOCATIONS (1 OF 3)

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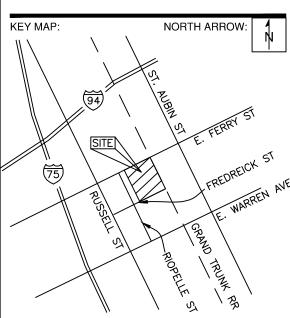
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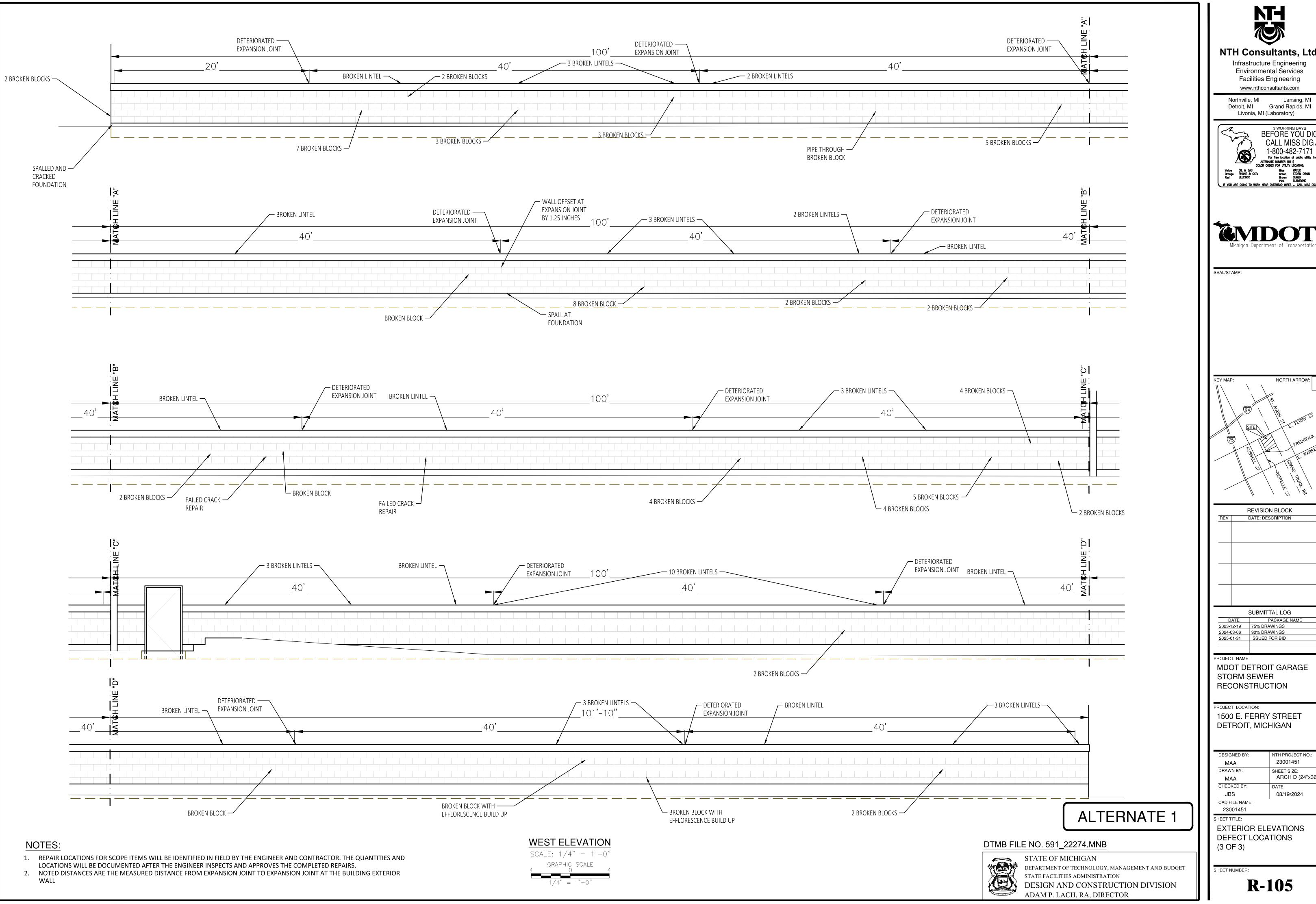
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MDOT DETROIT GARAGE STORM SEWER RECONSTRUCTION

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EXTERIOR ELEVATIONS DEFECT LOCATIONS



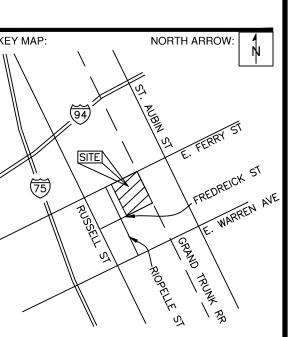
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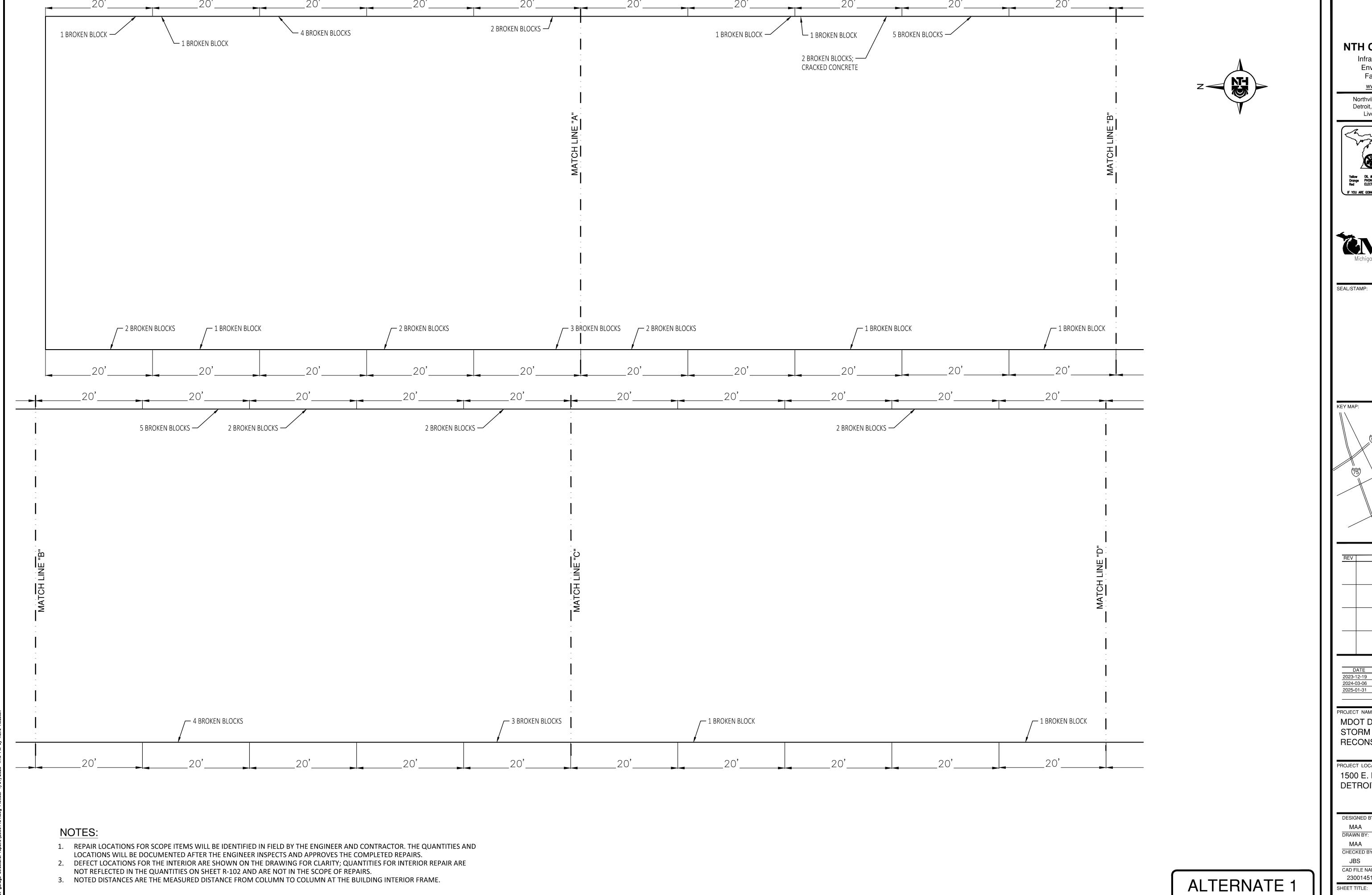
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MDOT DETROIT GARAGE RECONSTRUCTION

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EXTERIOR ELEVATIONS DEFECT LOCATIONS



DTMB FILE NO. 591_22274.MNB



STATE OF MICHIGAN

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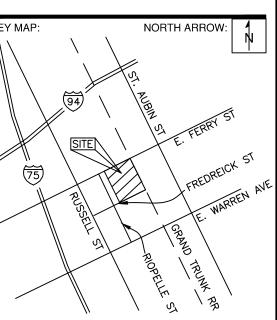
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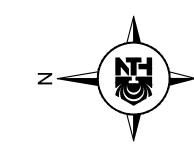
MDOT DETROIT GARAGE STORM SEWER RECONSTRUCTION

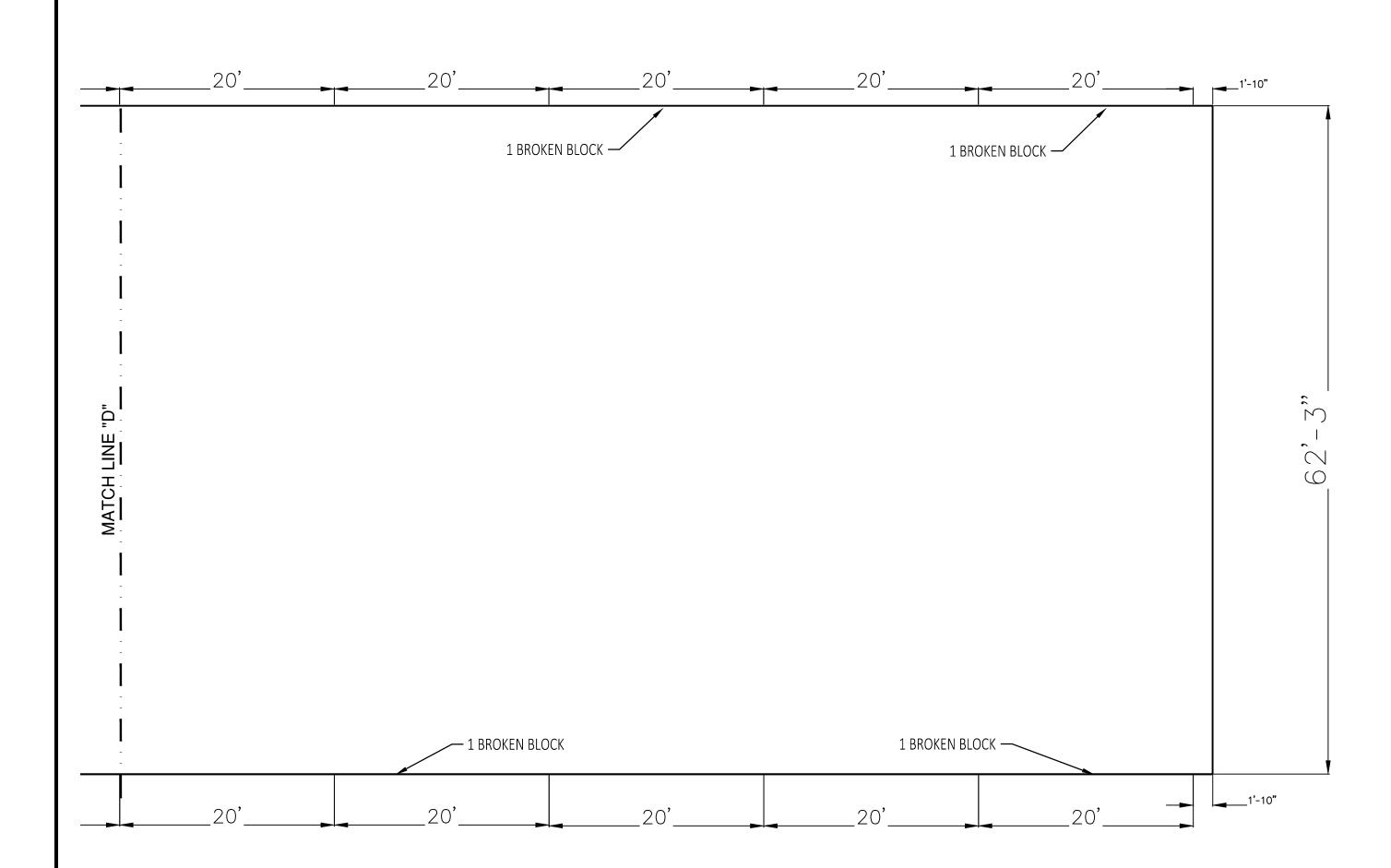
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INTERIOR ELEVATIONS **DEFECT LOCATIONS** (1 OF 2)

SHEET NUMBER:





NOTES:

- 1. REPAIR LOCATIONS FOR SCOPE ITEMS WILL BE IDENTIFIED IN FIELD BY THE ENGINEER AND CONTRACTOR. THE QUANTITIES AND
- LOCATIONS WILL BE DOCUMENTED AFTER THE ENGINEER INSPECTS AND APPROVES THE COMPLETED REPAIRS. 2. DEFECT LOCATIONS FOR THE INTERIOR ARE SHOWN ON THE DRAWING FOR CLARITY; QUANTITIES FOR INTERIOR REPAIR ARE
- NOT REFLECTED IN THE QUANTITIES ON SHEET R-102 AND ARE NOT IN THE SCOPE OF REPAIRS.
- 3. NOTED DISTANCES ARE THE MEASURED DISTANCE FROM COLUMN TO COLUMN AT THE BUILDING INTERIOR FRAME.

ALTERNATE 1

DTMB FILE NO. 591_22274.MNB



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DESIGN AND CONSTRUCTION DIVISION

ADAM P. LACH, RA, DIRECTOR ADAM P. LACH, RA, DIRECTOR

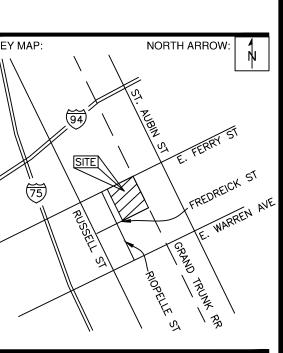
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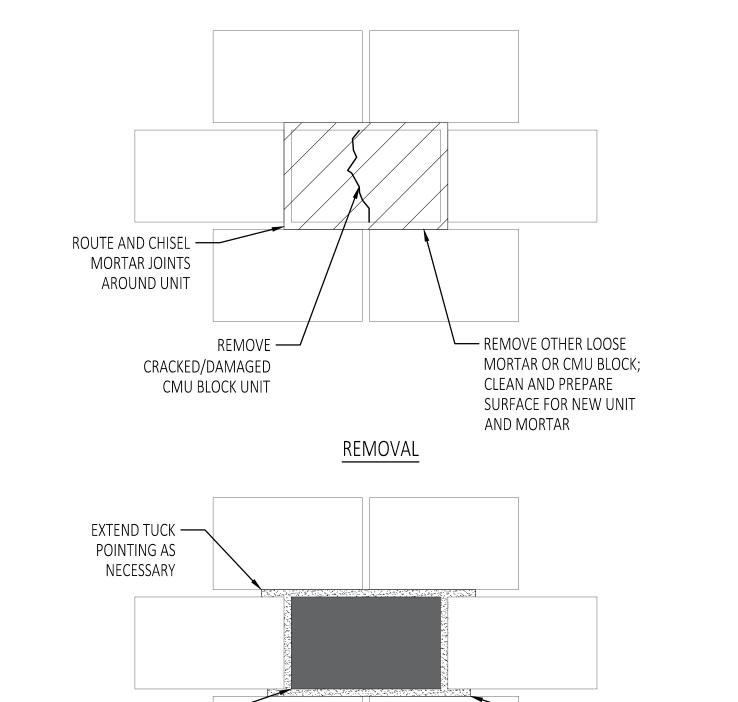
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SHEET TITLE:

INTERIOR ELEVATIONS DEFECT LOCATIONS (2 OF 2)

SHEET NUMBER:

CMU BLOCK FACADE CONTROL JOINT



NOTES:

MATCH EXISTING

REPLACE CMU BLOCK UNIT

WITH COLOR AND TYPE TO

- 1. SELECTIVE DEMOLITION AND REMOVAL SHALL BE IN ACCORDANCE WITH SECTION 02 41 16.
- 2. MASONRY REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 04 01 20.91

REPLACEMENT

² CMU BLOCK REPLACEMENT DETAIL R-108 NOT TO SCALE

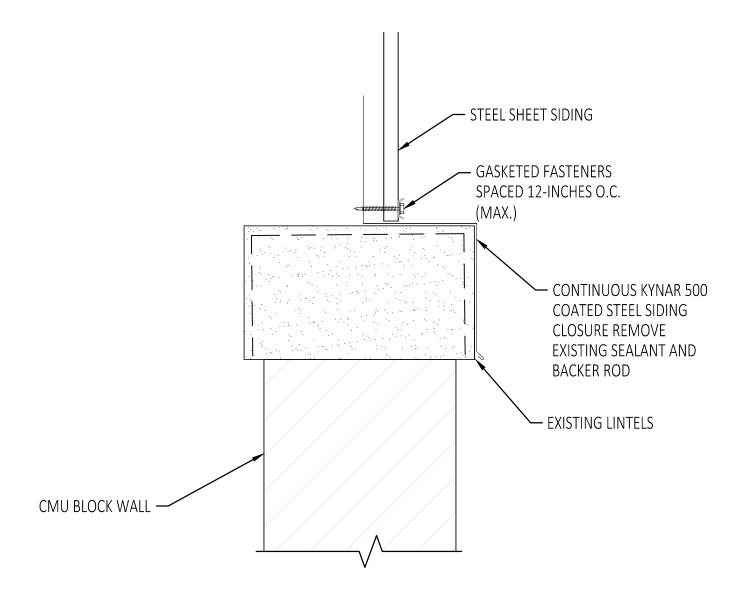
- PLACE MORTAR FOR THE

JOINTS AS NECESSARY;

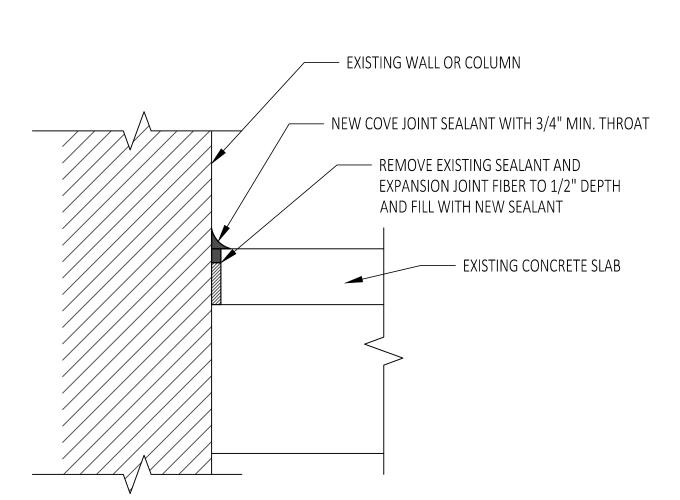
MORTAR COLOR AND

NEW UNIT AND TUCK POINT

PROFILE TO MATCH EXISTING



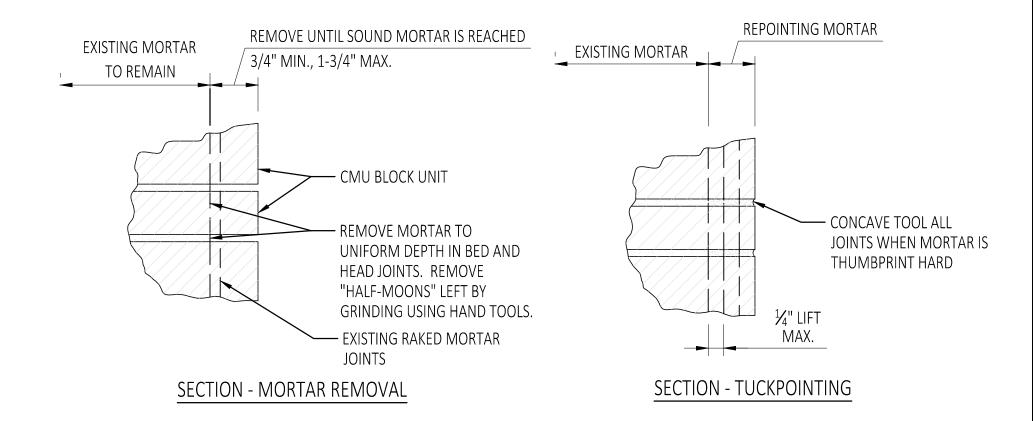
PARAPET COPING SEALANT R-108 NOT TO SCALE



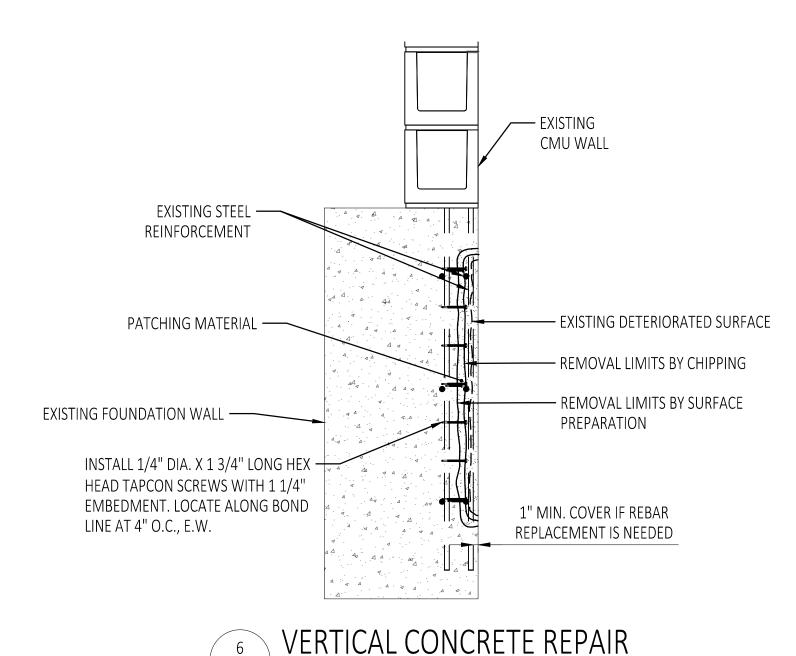
SEALANT REPLACEMENT NOTES:

- REMOVE EXISTING SEALANT MATERIAL AND CLEAN JOINT OF DEBRIS OR OTHER RESIDUE FROM EXISTING SEALANT.
- PREPARE CONCRETE SURFACES TO RECEIVE SEALANT IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS.
- 3. IF JOINT CONTAINS EXPANSION FIBER MATERIAL, REMOVE EXCESS FIBER AS SHOWN





TUCKPOINTING DETAIL R-108 / NOT TO SCALE



R-108 NOT TO SCALE

<u>NOTES</u>

- 1) SAW CUT PERIMETER OF REPAIR AREA (1/2-INCH DEPTH). DO NOT CUT REINFORCING BARS. REMOVE CONCRETE UP TO 2-INCHES DEEP OR UNTIL THE EXISTING STEEL REINFORCEMENT IS EXPOSED.
- 2) PREPARE EXPOSED REINFORCING TO WHITE METAL CONDITION AND COAT ALL EXPOSED STEEL REINFORCEMENT WITH ANTI-CORROSION COATING AND ADD SUPPLEMENTAL STEEL WHERE DETERMINED NECESSARY BY THE ENGINEER (SEE DETAIL 5/6 FOR SUPPLEMENTAL STEEL).
- 3) INSTALL 1/4" DIA. X 1 3/4" LONG, HEX HEAD TAPCON SCREWS AT 4" O.C. EACH WAY WITH 1 1/4" EMBEDMENT (MIN. 1/2" CONCRETE COVER) AT PREPARED SURFACE AND AS ACCEPTABLE BY THE ENGINEER.
- 4) APPLY BONDING AGENT TO CLEAN CONCRETE AND AND CLEAN STEEL SURFACE IMMEDIATELY BEFORE PLACING REPAIR MORTAR.
- 5) PLACE MORTAR IN REPAIR AREA (MIX, POUR, AND CURE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS).

ALTERNATE 1

DTMB FILE NO. 591 22274.MNB



STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOG

STATE FACILITIES ADMINISTRA

DESIGN AND CONSTI DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET STATE FACILITIES ADMINISTRATION DESIGN AND CONSTRUCTION DIVISION ADAM P. LACH, RA, DIRECTOR

NTH Consultants, Ltd. Infrastructure Engineering

Environmental Services

Facilities Engineering

Detroit, MI Grand Rapids, MI Livonia, MI (Laboratory)

www.nthconsultants.com Northville, MI Lansing, MI

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SUBMITTAL LOG
 DATE
 PACKAGE NAME

 2023-12-19
 75% DRAWINGS

 2024-03-06
 90% DRAWINGS

 2025-01-31
 ISSUED FOR BID

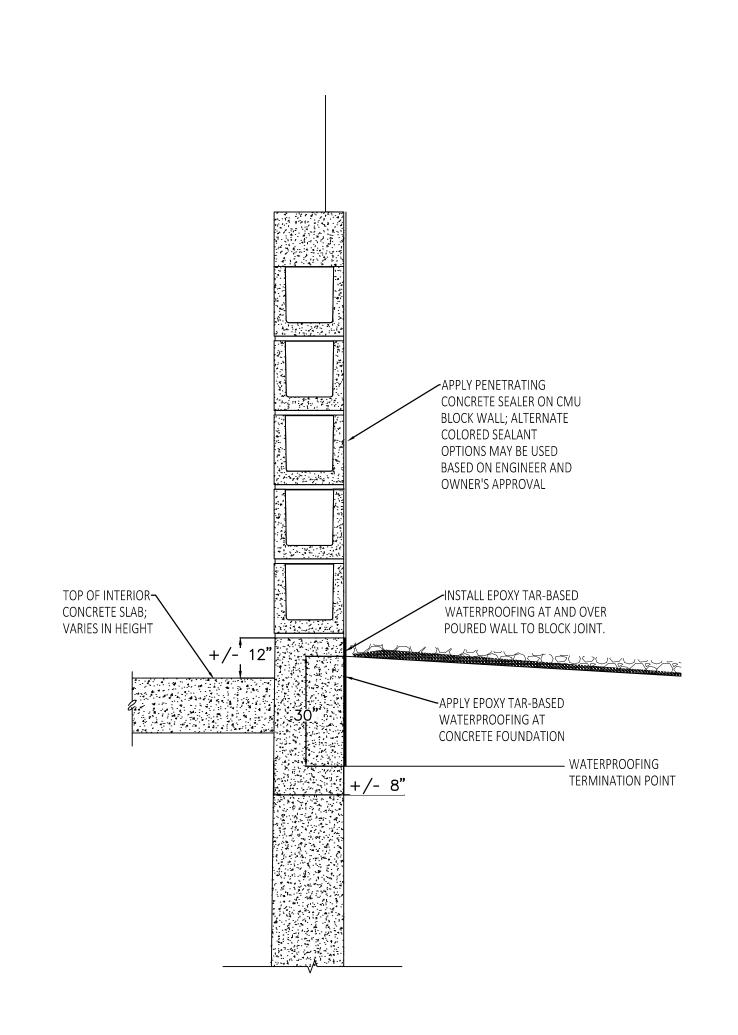
PROJECT NAME: MDOT DETROIT GARAGE STORM SEWER RECONSTRUCTION

PROJECT LOCATION: 1500 E. FERRY STREET DETROIT, MICHIGAN

DESIGNED BY: NTH PROJECT NO.: 23001451 DRAWN BY SHEET SIZE: ARCH D (24"x36") CHECKED BY: 08/19/2024 CAD FILE NAME: 23001451

REPAIR DETAILS

SHEET NUMBER:



WATERPROOFING DETAIL R-109 NOT TO SCALE

ALTERNATE 1

DTMB FILE NO. 591_22274.MNB



STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

STATE FACILITIES ADMINISTRATION

DESIGN AND CONSTRUCTION DIVISION

ADAM P. LACH, RA, DIRECTOR ADAM P. LACH, RA, DIRECTOR

NTH Consultants, Ltd.

Infrastructure Engineering Environmental Services

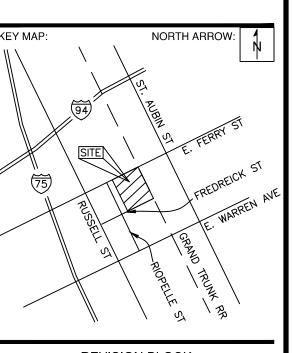
Facilities Engineering www.nthconsultants.com Northville, MI Lansing, MI Detroit, MI Grand Rapids, MI

Livonia, MI (Laboratory)





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	2023-	12-19	75% DRAWINGS		
	2024-0	03-06	90% DRAWINGS		
	2025-0	01-31	ISSUED FOR BID		

MDOT DETROIT GARAGE STORM SEWER RECONSTRUCTION

PROJECT LOCATION: 1500 E. FERRY STREET DETROIT, MICHIGAN

DESIGNED BY:	NTH PROJECT NO.:
MAA	23001451
DRAWN BY:	SHEET SIZE:
MAA	ARCH D (24"x36")
CHECKED BY:	DATE:
JBS	08/19/2024
CAD FILE NAME:	
23001451	

SHEET TITLE:
REPAIR DETAILS

SHEET NUMBER: