



CITY OF CLEVELAND
Mayor Justin M. Bibb

2025 City of Cleveland

Landmarks Commission

October 23rd, 2025

Julie Trott, Commission Chair
Daniel Musson, Secretary





CITY OF CLEVELAND
Mayor Justin M. Bibb

Certificates of Appropriateness

October 23rd, 2025



Case 25-081 Case 25-082

Certificate of Appropriateness

Warehouse Historic District

Shorehaus Lofts and +Detail 425 W Lakeside Avenue

Signage

Project Representatives: James Vacey, Signature Sign Company

Ward 3: Councilmember Welch



Shorehaus Lofts

Main Identity Exterior Signage

DESIGN INTENT AND SPECIFICATIONS FOR EXTERIOR SIGNAGE **FINAL 01.1**

ACCOUNT EXECUTIVE

Bruce Farkas

PROJECT MANAGER

Bruce Farkas

DESIGNER

Chris DiAlfredi

PROSPECT/CLIENT

Shorehaus Lofts

PROJECT

Main ID Exterior Signage

PROJECT LOCATION

425 W Lakeside Ave
Cleveland, OH 44113

DATE CREATED

10/07/2025



SIGNATURE SIGN Co.
CLEVELAND

Shorehaus Lofts

Main ID Exterior Signage - DESIGN INTENT AND SPECIFICATIONS - FINAL 01.1

DESIGN INTENT ONLY - NOT SUITABLE FOR PRODUCTION

01.1

EXTERIOR SIGNAGE - WEST ELEVATION - Current Condition - DAY ☀️

SCALE: N/A



Current Condition - East View



CURRENT CONDITION

DESIGN | MANUFACTURING | INSTALLATION | MAINTENANCE

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01.1
REVISIONS
10/07/2025 - Added a tenant sign at the Lakeside Avenue pedestrian entrance
SCALE
As Noted
PAGE
02 of 09



SIGNATURE SIGN Co.
CLEVELAND

1776 East 43rd Street
Cleveland, Ohio 44103
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www.signaturesigncompany.com



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EXTERIOR SIGNAGE - WEST ELEVATION - Conceptual Rendering - DAY

SCALE: N/A



Conceptual Rendering - East View



PROPOSED

DESIGN | MANUFACTURING | INSTALLATION | MAINTENANCE

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PAGE
03 of 09



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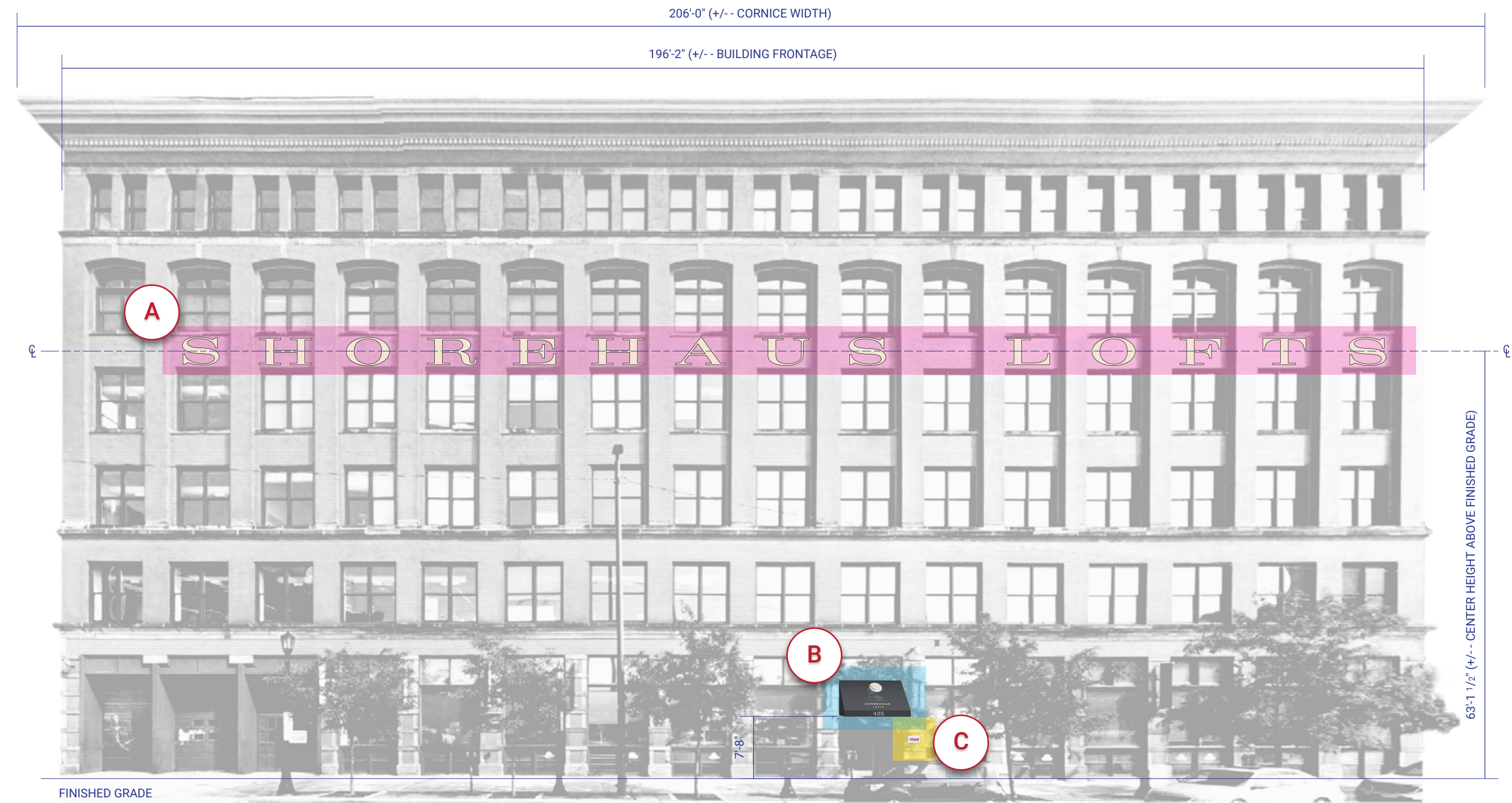
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01.1

EXTERIOR SIGNAGE - NORTH ELEVATION - Detail Drawing

SCALE: 1/16" = 1'-0"



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As Noted
PAGE
04 of 09



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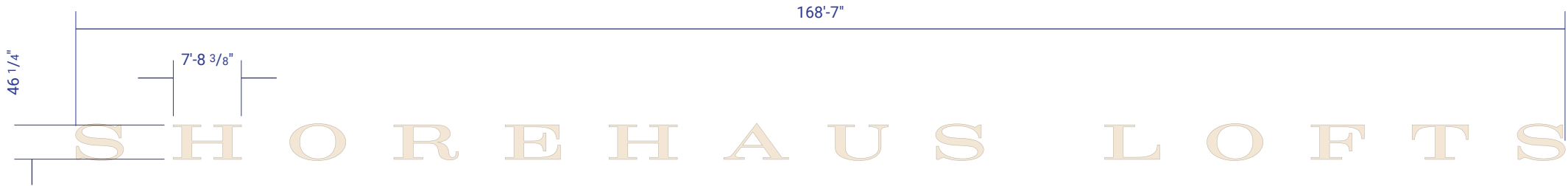
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DESIGN INTENT ONLY - NOT SUITABLE FOR PRODUCTION

01.1-A FLAT, CUT ALUMINUM LETTERS - Face Elevation

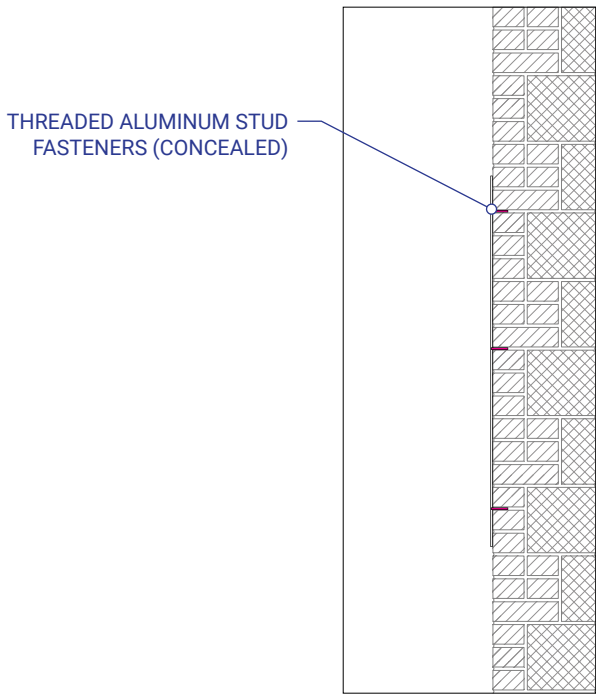
ONE (1) - SET OF 1/8" THICK, FLAT, CUT-OUT, ALUMINUM LETTERS, MOUNTED TO THE BUILDING VIA CONCEALED FASTENERS. LETTERS ARE LOCATED BETWEEN COLUMNS ON THE NORTHWEST FACE OF THE BUILDING, ON BRICK FASCIAS BETWEEN THE THIRD AND FOURTH FLOORS. LETTERS WILL BE EASILY VISIBLE FROM THE OHIO STATE ROUTE 2 (SHOREWAY) OVERPASS AND ARE TRADITIONAL BUILDING IDENTIFIERS THAT ARE AESTHETICALLY APPROPRIATE FOR BUILDINGS C. 1880-1930.

QTY: 1
SCALE: 1/16" = 1'-0"
PRIMARY PALETTE:
● CRISP LINEN (SW 6378)

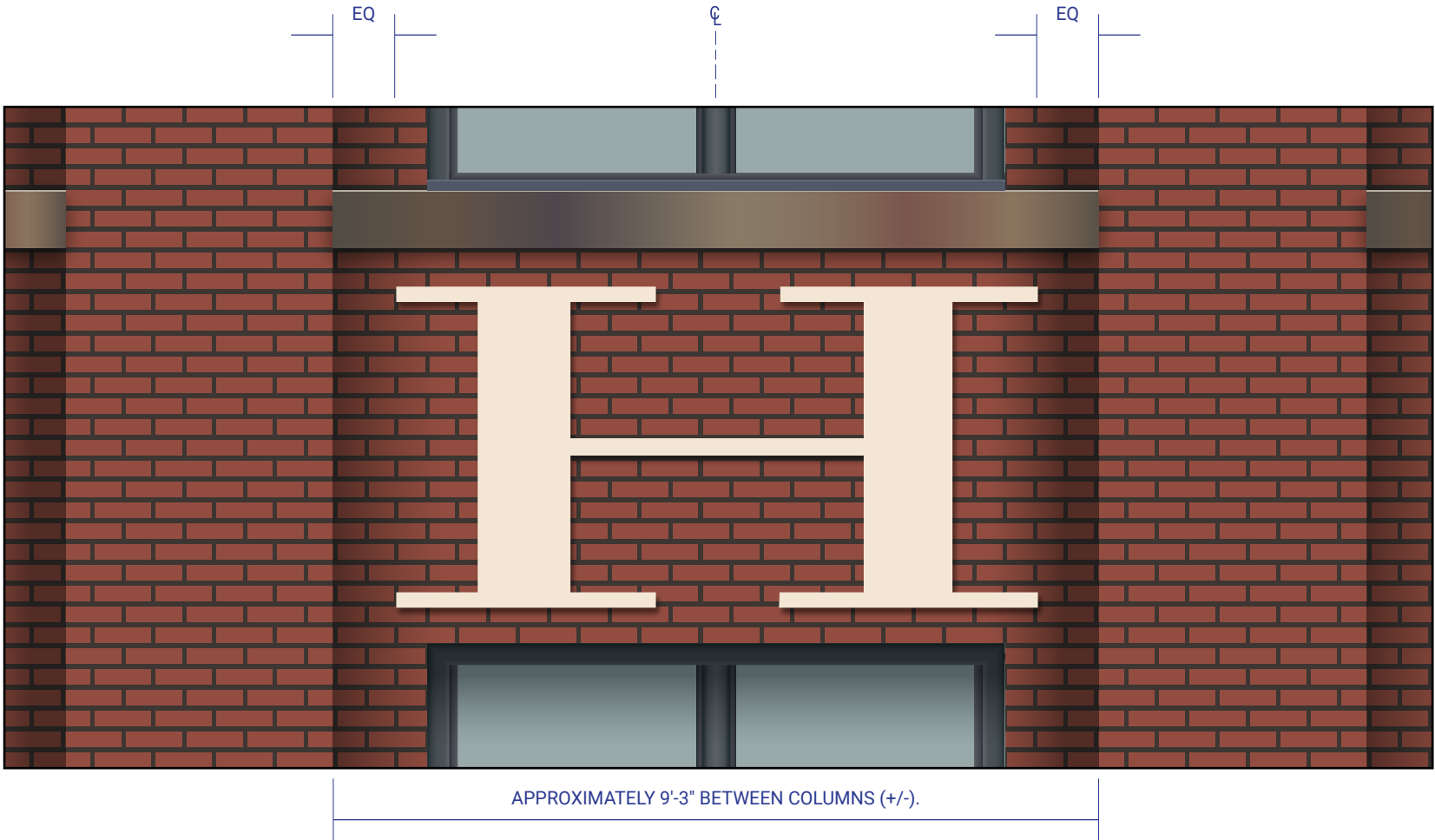


01.1-A FLAT, CUT ALUMINUM LETTERS - Letter Detail (TYP)

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



SECTION VIEW (TYP)



DESIGN | MANUFACTURING | INSTALLATION | MAINTENANCE

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PAGE

05 of 09



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01.1-B MAIN ENTRANCE AWNING - North Elevation, 3D View

ONE (1) - SHED-STYLE, NON-ILLUMINATED, FABRIC AWNING WITH REINFORCED, WELDED, ALUMINUM SQUARE TUBE FRAME. AWNING MOUNTED ABOVE THE PRIMARY PEDESTRIAN ENTRANCE ON LAKESIDE AVENUE.

QTY: 1

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

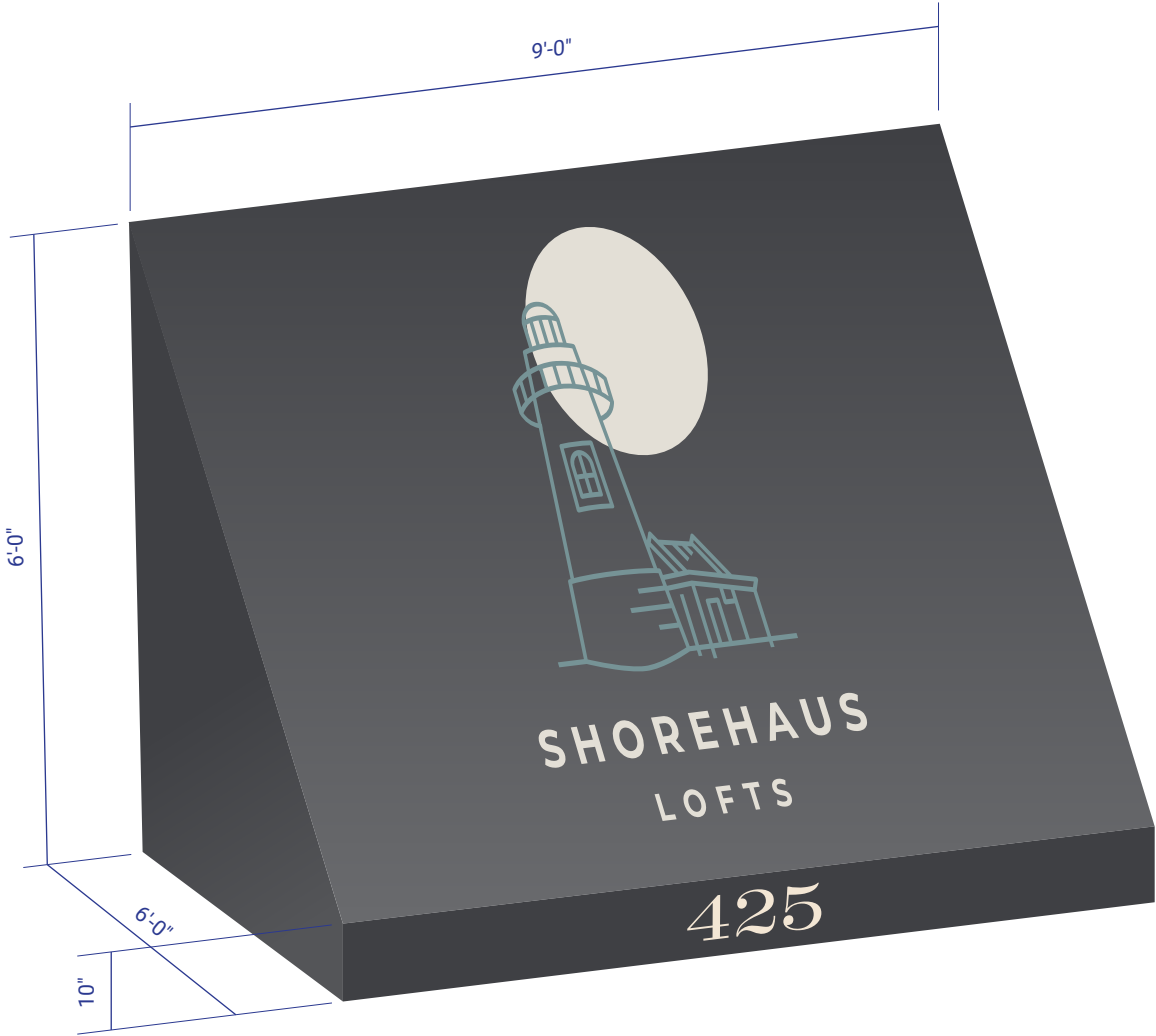
PRIMARY PALETTE:

- SUNBRELLA® SLATE (SKU: 4684-0000)
- CRISP LINEN (SW 6378)
- REFLECTING POOL (SW 6486)

TOP OF AWNING COINCIDES WITH TRANSOM WINDOW TOP MULLION (CONCEALED)

SHED-STYLE, FABRIC AWNING OVER MAIN ENTRANCE

SOFFIT (NOT SHOWN) CONTAINS EXISTING DOWNLIGHTING



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PAGE

06 of 09



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Main ID Exterior Signage - DESIGN INTENT AND SPECIFICATIONS - FINAL 01.1

DESIGN INTENT ONLY - NOT SUITABLE FOR PRODUCTION

- 01.1-**C**
- TENANT SIGN - North Elevation
- ONE (1) - 20 3/8"W x 12"H x 3 1/2"D (OVERALL) FABRICATED ALUMINUM, NON-ILLUMINATED SIGN CONSISTING OF A 2 1/2"D FABRICATED ALUMINUM PAN WITH 1" THICK, FLAT, LASER-CUT ACRYLIC LOGO LETTERS ATTACHED WITH CONCEALED FASTENERS. THE SIGN IS MOUNTED TO A BRICK COLUMN TO THE RIGHT OF PRIMARY PEDESTRIAN ENTRANCE ON LAKESIDE AVENUE.
- QTY: 1
- SCALE: 1/2" = 1'-0"
- PRIMARY PALETTE:
- WHITE

● HEADY PINK METALLIC (MP25338)

HEADY PINK METALLIC ACRYLIC
POLYURETHANE PAINT
(SEMI-GLOSS WITH VISIBLE
METAL FLAKE FINISH CLOSE-UP)



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As Noted
PAGE
07 of 09

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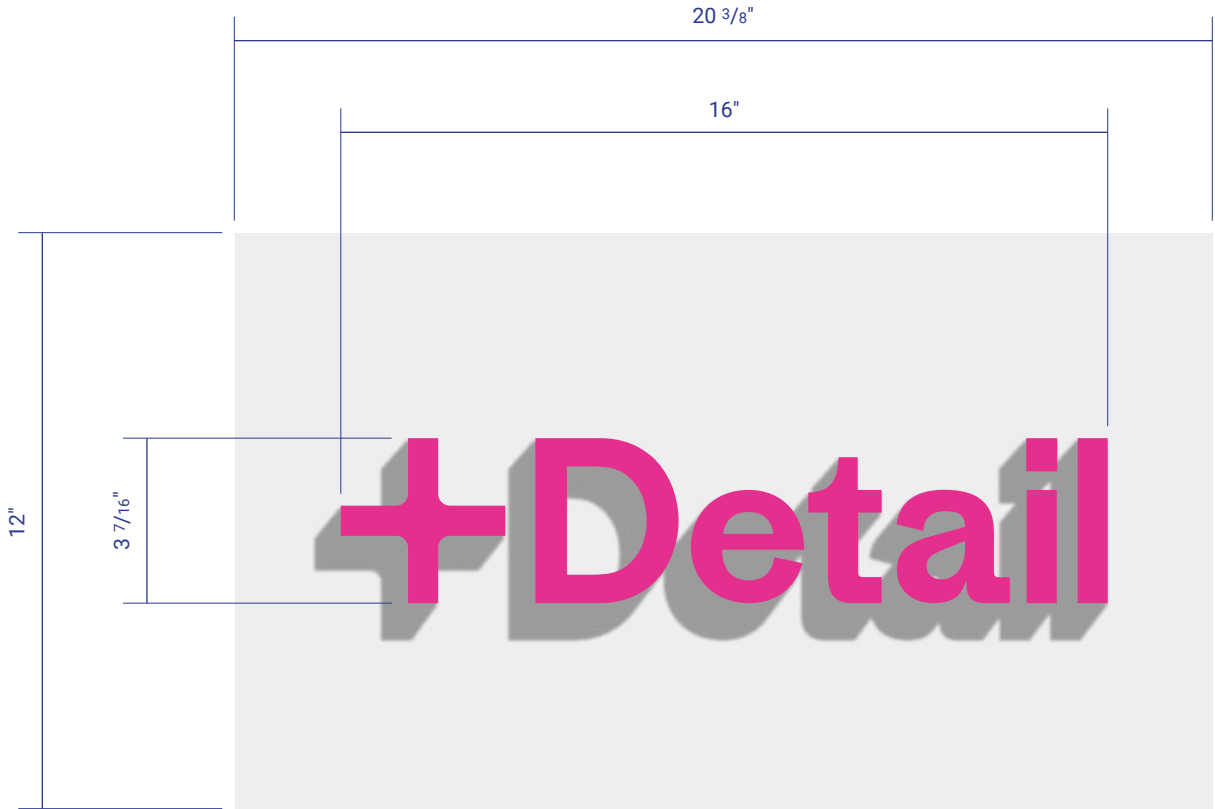
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SCALE
As Noted
PAGE
08 of 09

01.1-01

TENANT SIGN - Face Elevation

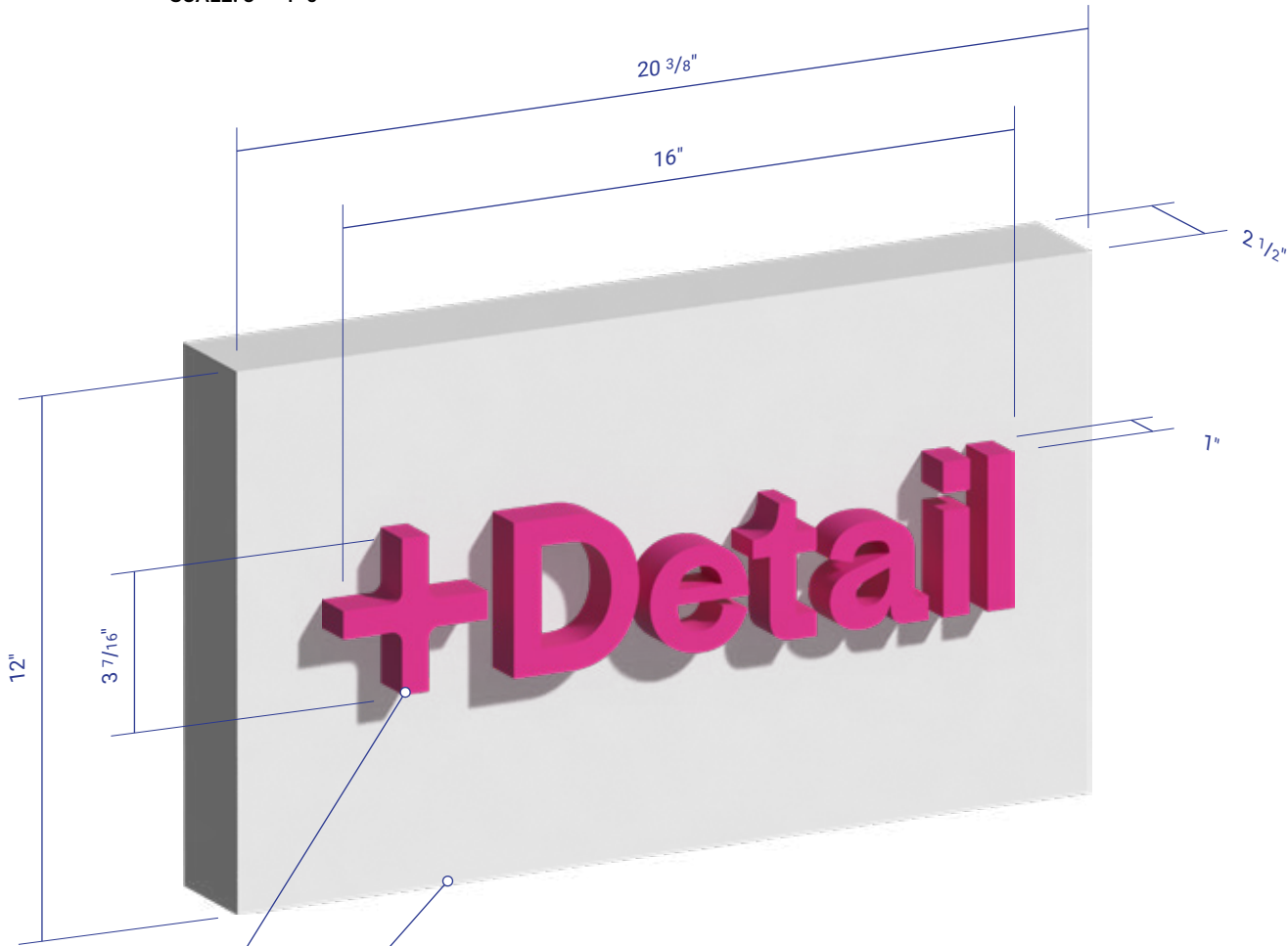
SCALE: 3" = 1'-0"



01.1-02

TENANT SIGN - Iso View

SCALE: 3" = 1'-0"



1" THICK, FLAT, LASER-CUT ACRYLIC LOGO LETTERS

20 3/8"W x 12"H x 2 1/2"D FABRICATED ALUMINUM, NON-ILLUMINATED PAN



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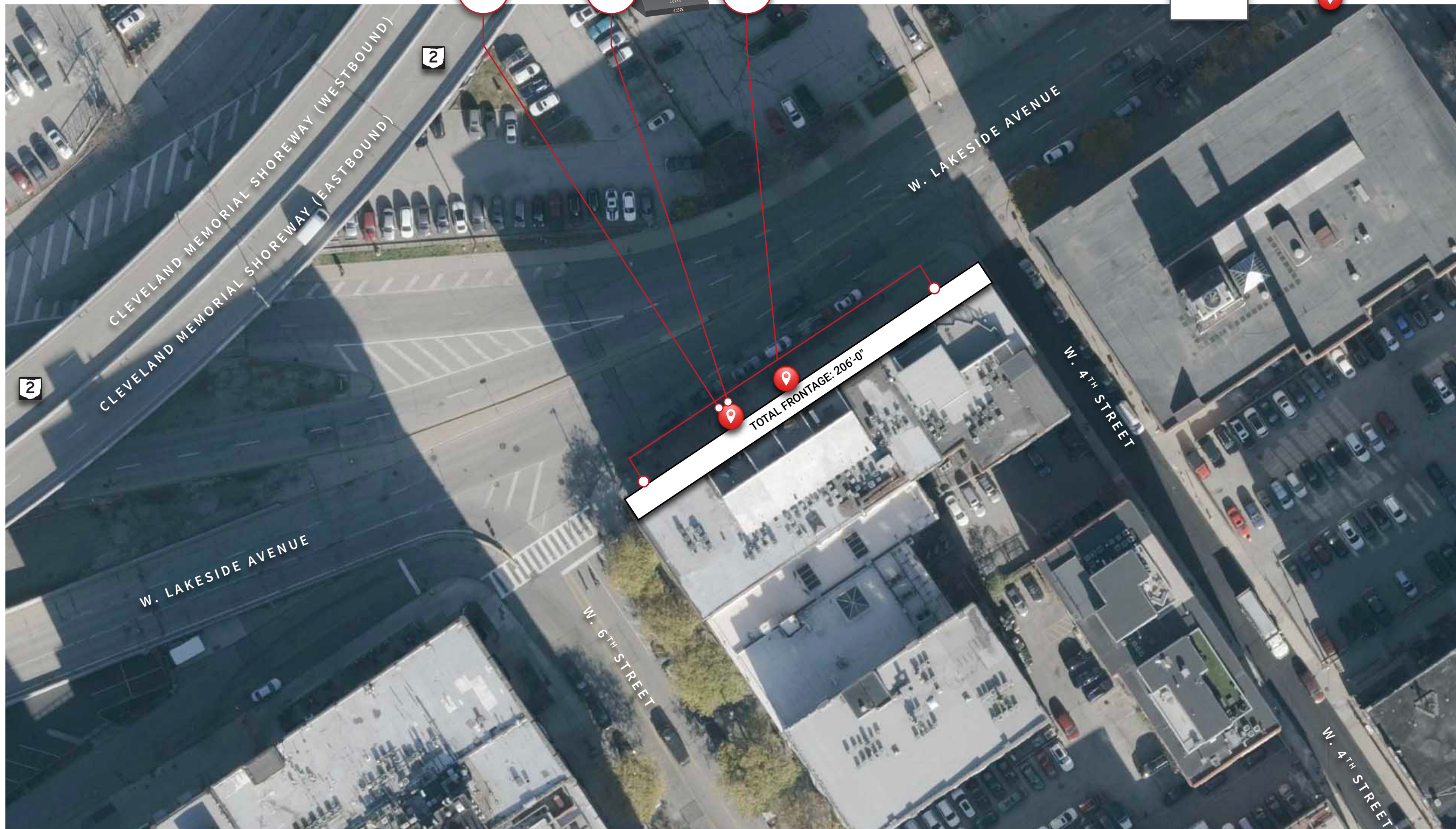
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DESIGN INTENT ONLY - NOT SUITABLE FOR PRODUCTION

SCALE: 1" = 50'-0"



09 of 09



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Case 25-083

Certificate of Appropriateness

**Cleveland Christian Home for
Children**

Cleveland Christian Home Campus
11401 Lorain Avenue

Renovations

Project Representatives: Lucas Moore, CPL Team
Ward 11: Councilmember Kelly





PROJECT DESCRIPTION:

BUILDING 1:

Interior renovation to a portion of each floor in an existing building. Renovated spaces will be used for the expansion of Cleveland Christian home services. Exterior updates include a ramp extension, perimeter fence, adding parking, and replacing windows to match existing.

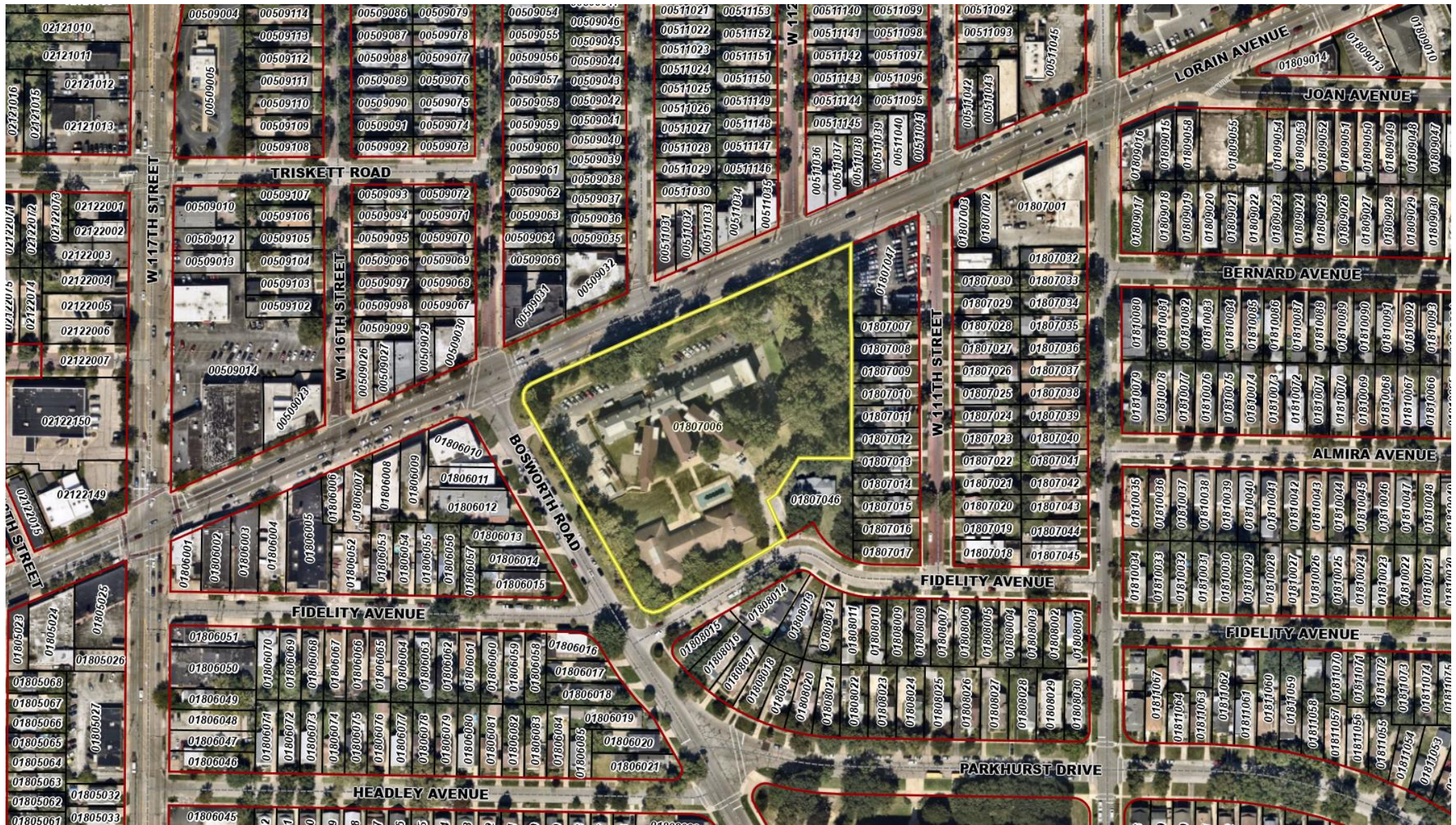
BUILDING 2:

Interior renovation to a portion of the main floor. Renovated spaces will be used for the expansion of the Hope Center services. Exterior updates include removing the swimming pool, replacing windows in-kind as necessary, new entry vestibule, and a new entry canopy.

INDEX:

1. SITE
2. CONTEXT
3. SITE PLAN
4. ELEVATIONS
5. FLOOR PLANS
6. RENDERINGS

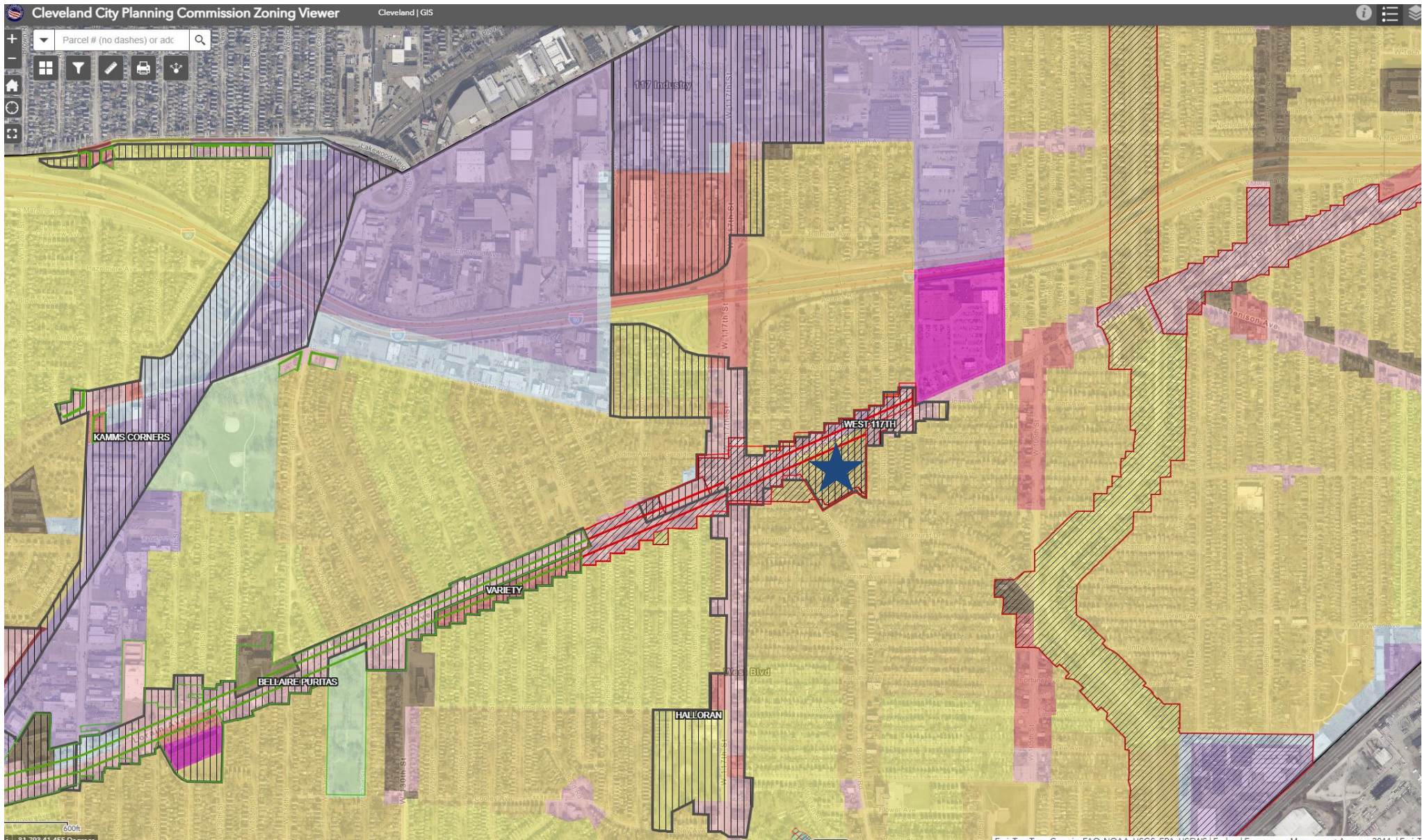




1. PROPERTY LOCATION

11401 Lorain Avenue
Cleveland, OH 44111





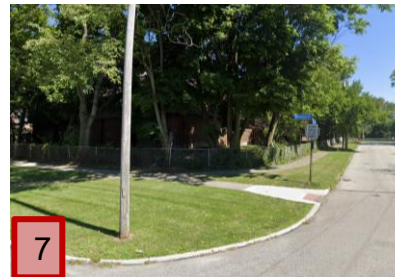
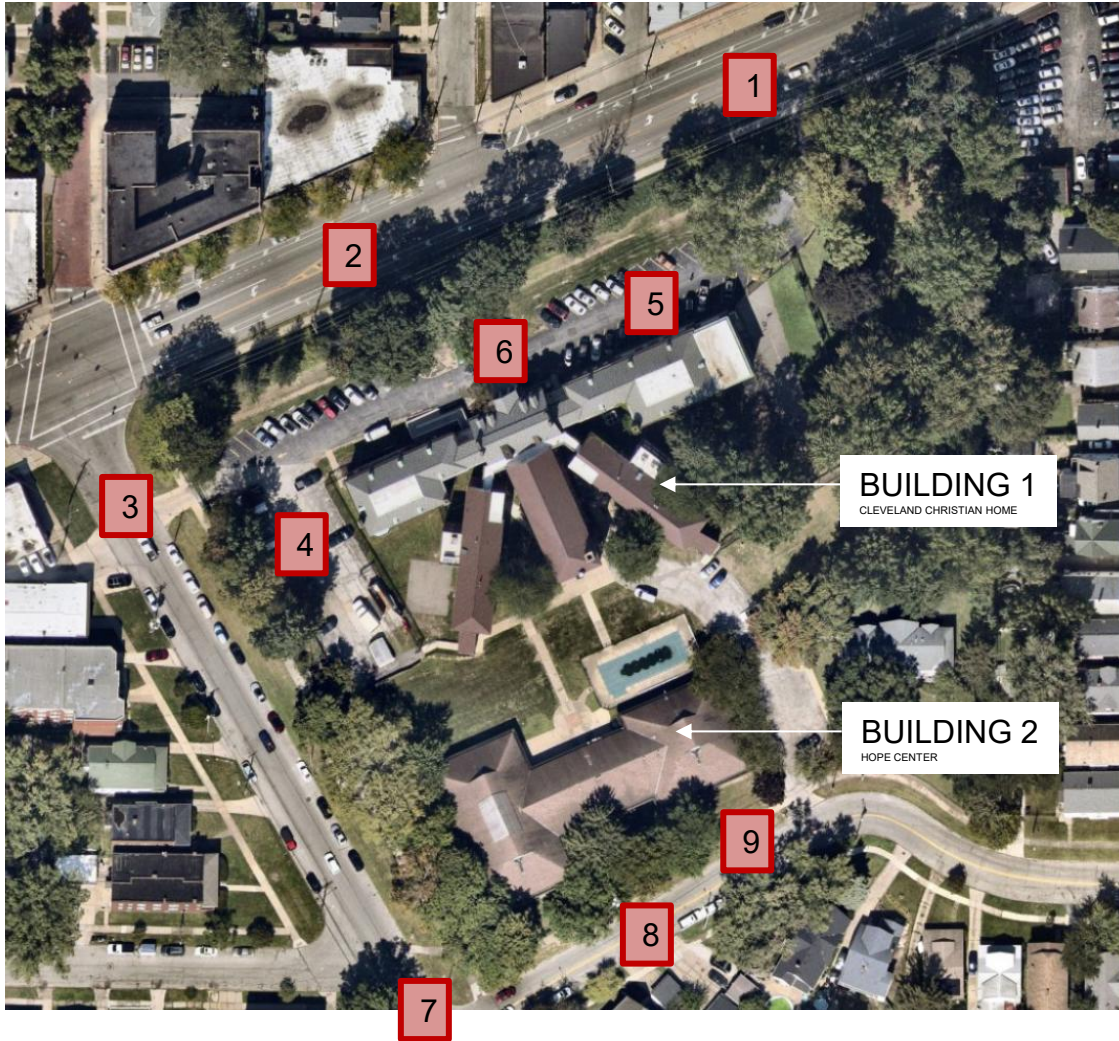
Zoning: 2F-B1
Area District: B
Use District: Two Family
PRO Street Frontage
Design Review District
Local Landmark District



1. PROPERTY LOCATION

 11401 Lorain Avenue
Cleveland, OH 44111







PRESENT



POSTCARD 1940



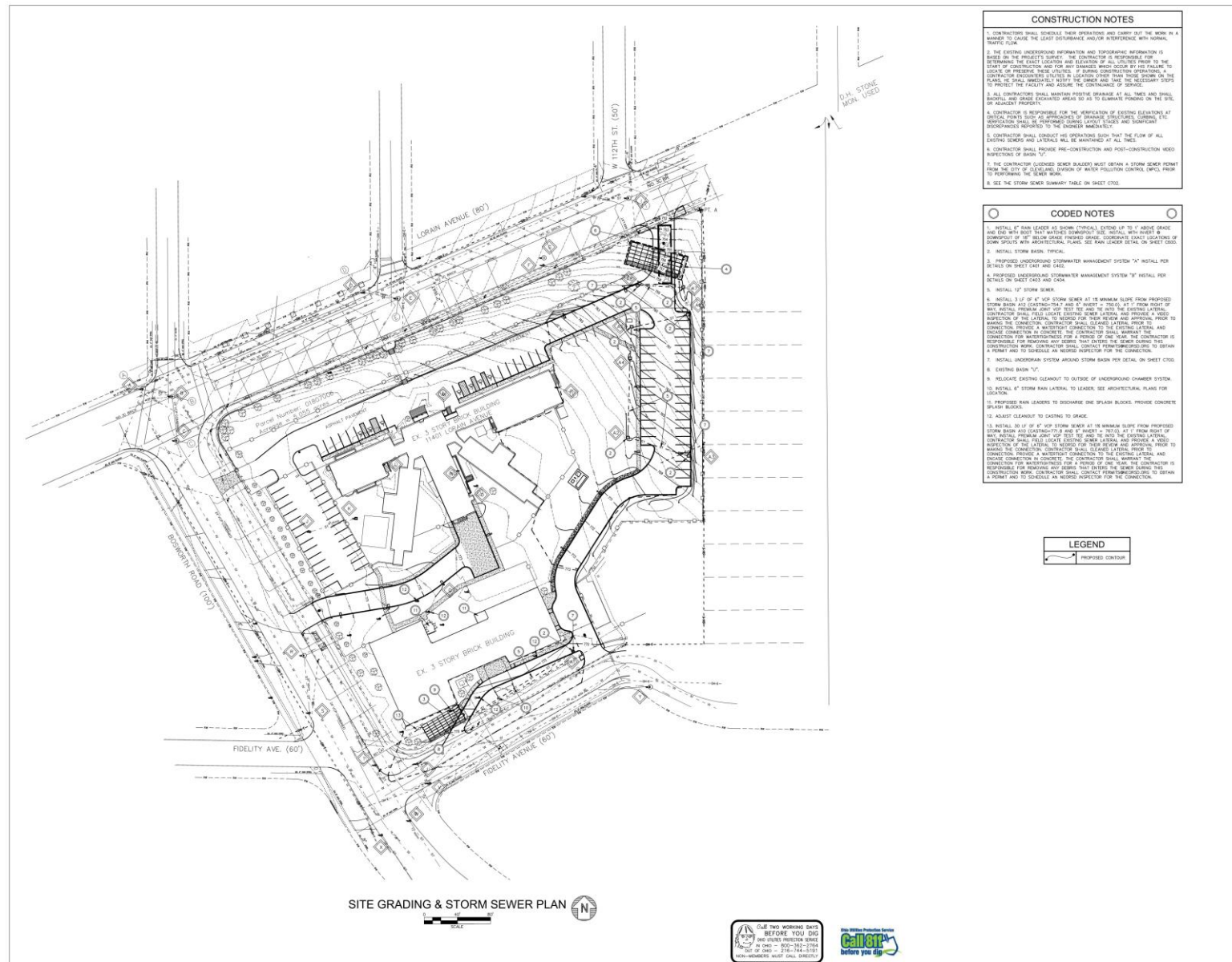
1929





3. SITE PLAN

EROSION CONTROL



- ### CONSTRUCTION NOTES
1. CONTRACTOR SHALL SCHEDULE THEIR OPERATIONS AND SARRY BUT THE WORK IN A MANNER TO CAUSE THE LEAST DISRUPTION AND INTERFERENCE WITH NORMAL TRAFFIC FLOW.
 2. THE EXISTING UNDERGROUND INFORMATION AND TOPOGRAPHIC INFORMATION IS BASED ON THE PROJECT'S SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS AND ELEVATIONS OF UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS. IF DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR DISCOVERS UTILITIES IN LOCATION OTHER THAN THOSE SHOWN ON THE PLAN, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND TAKE THE NECESSARY STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
 3. ALL CONSTRUCTION SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE TO THE STREET.
 4. CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF EXISTING ELEVATIONS AT ALL TIMES. POINTS SHALL BE PROVIDED BY THE OWNER. VERIFICATION SHALL BE PERFORMED DURING LAYOUT, STAGES AND SIGNIFICANT DISCREPANCIES REPORTED TO THE ENGINEER IMMEDIATELY.
 5. CONTRACTOR SHALL CONDUCT HIS OPERATIONS SUCH THAT THE FLOW OF ALL EXISTING SEWERS AND LATERALS WILL BE MAINTAINED AT ALL TIMES.
 6. CONTRACTOR SHALL PROVIDE PRE-CONSTRUCTION AND POST-CONSTRUCTION VIDEO INSPECTIONS OF BASIN "C".
 7. THE CONTRACTOR (LICENSED SENIOR SURVEYOR) MUST OBTAIN A STORM SEWER PERMIT FROM THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL (DWPC) PRIOR TO PERFORMING THE SENIOR WORK.
 8. SEE THE STORM SEWER SUMMARY TABLE ON SHEET C700.

- ### CODED NOTES
1. INSTALL 8\"/>

LEGEND

— PROPOSED CONTOUR



3. SITE PLAN

STORM WATER MANAGEMENT PLAN

PROPOSED LAYOUT		PROPOSED ELEVATIONS	
49	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	776.83
14	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	776.87
6	STONE ABOVE (IN)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)	776.17
6	STONE BELOW (IN)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)	776.17
42	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	776.17
	INSTALLED SYSTEM VOLUME (CF)		769.33
1892	PERIMETER STONE INCLUDED (COVER STONE INCLUDED)	TOP OF SC-310 CHAMBER	769.33
		8" x 8" TOP MANHOLE INVERT	767.79
		BASE STONE INCLUDED	767.50
1348	SYSTEM AREA (SF)	8" BOTTOM CONNECTION INVERT	767.50
160.8	SYSTEM PERIMETER (IN)	BOTTOM OF SC-310 CHAMBER	767.50
		UNDERDRAIN INVERT	767.50
		BOTTOM OF STONE	766.26

WQ: NEEDED BELOW ORIFICE = 648 CF. WQ: PROVIDED = 658.5 CF

PART TYPE		ITEM ON LAYOUT		DESCRIPTION		INVERT		MAX FLOW	
PRE-FABRICATED END CAP	A	12"	BOTTOM	PRE-FABRICATED END CAP, PART# SC310ECEZ / TYP OF ALL 12" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	767.50				
PRE-CORED END CAP	B	8"	TOP	PRE-CORED END CAP, PART# SC310EPCPTC / TYP OF ALL 8" TOP CONNECTIONS	767.50				
PRE-CORED END CAP	C	8"	BOTTOM	PRE-CORED END CAP, PART# SC310EPCBPC / TYP OF ALL 8" BOTTOM CONNECTIONS	767.50				
FLAMP	D	12"	ACCESS PIPE	INSTALL FLAMP ON 12" ACCESS PIPE / PART# SC310DAMP	767.50				
MANHOLE	E	8" x 8"	TOP	MANHOLE, MOLDED FITTINGS	767.50				
PIPE CONNECTION	F	8"	BOTTOM	PIPE CONNECTION	767.50				
INLET BASIN "A11"	G	CASTING	770.5	PROP. 12" INV (EAW) = 767.6	767.6				1.39 CFS IN
YARD BASIN "A10" THIS SHEET UNDERDRAIN	H	4"	ADS	N-12 DUAL WALL PERFORATED HOPE UNDERDRAIN					1.11 CFS OUT

SC-310 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-310.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLYETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION: a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 325 LBS/FT², THE ASC IS DEFINED IN SECTION 8.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANHOLE SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANHOLE COMPONENTS IN THE FIELD.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEKSTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

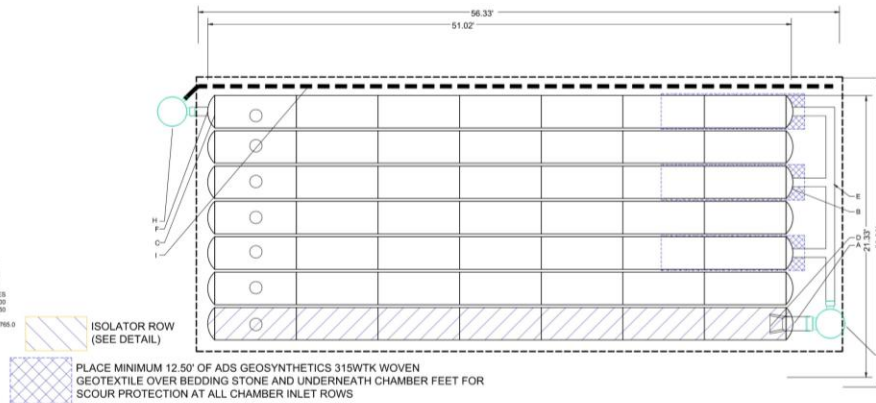
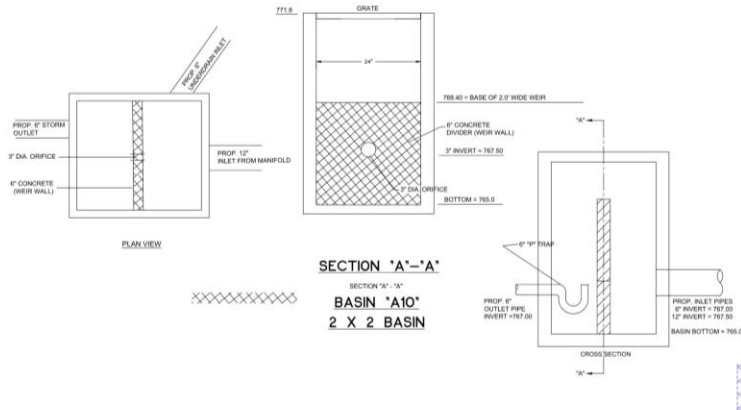
- STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 3" (80 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE: AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRE LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-621-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

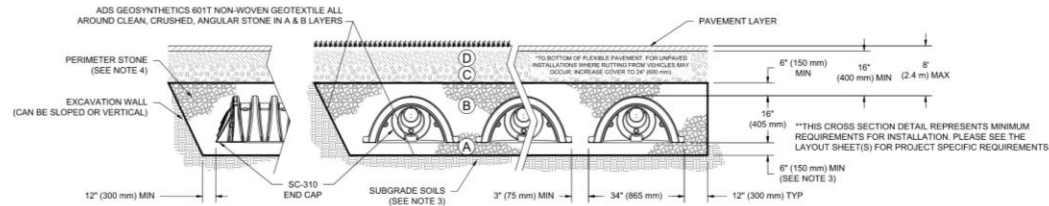


ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (460 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETES	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

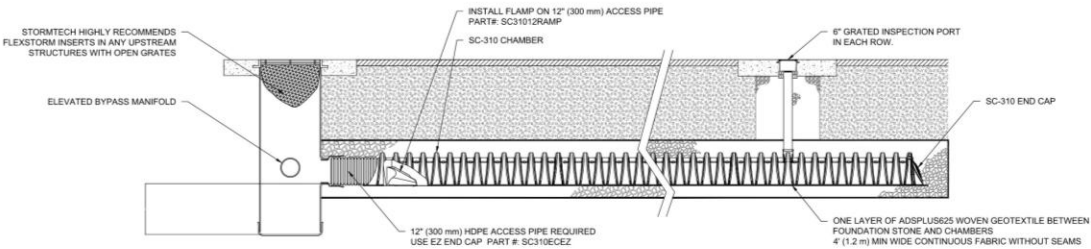
PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERSAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



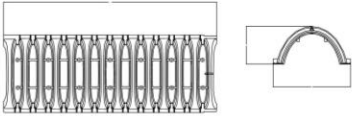
NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 325 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



SC-310 ISOLATOR ROW PLUS DETAIL
NTS

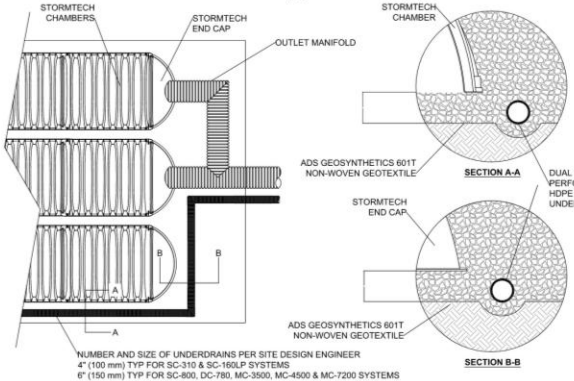
SC-310 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH) 34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE 14.7 CUBIC FEET (0.42 m³)
MINIMUM INSTALLED STORAGE 29.3 CUBIC FEET (0.83 m³)
WEIGHT 35.0 lbs. (16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND 3" (75 mm) BETWEEN CHAMBERS

UNDERDRAIN DETAIL
NTS



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SLUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS. RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



PROPOSED LAYOUT	PROPOSED ELEVATIONS
54 STORMTECH SC-800 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
52 STORMTECH SC-800 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
51 STONE BED (IN)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
49 STONE BELOW (IN)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)
48 STONE JOINT	MINIMUM ALLOWABLE GRADE (BASE OF 11.25% PAVEMENT)
4823 INSTALLED SYSTEM VOLUME (CF)	TOP OF STONE
PERIMETER STONE INCLUDED (CF)	TOP OF SC-800 CHAMBER
COVER STONE INCLUDED (CF)	12" x 12" TOP MANHOLE INVERT
BASE STONE INCLUDED (CF)	24" ISOLATOR ROW PLUS INVERT
2105 SYSTEM AREA (SF)	12" BOTTOM CONNECTION INVERT
205.2 SYSTEM PERIMETER (IN)	24" ISOLATOR ROW PLUS INVERT
	12" BOTTOM CONNECTION INVERT
	TOP OF SC-800 CHAMBER
	UNDERDRAIN INVERT
	BOTTOM OF STONE
	W/O: NEEDED BELOW ORIFICE = 1.470 CF, W/O: PROVIDED = 1.470 CF

SC-800 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-800.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT³. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE 46.32 FOR MANHOLE SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANHOLE COMPONENTS IN THE FIELD.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PREFABRICATED END CAP / PART# SC800CEZ / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.39'	
PRE-CORED END CAP	B	12" TOP PRE-CORED END CAP / PART# SC800PE12TPT / TOP OF ALL 12" TOP CONNECTIONS	14.40'	
PRE-CORED END CAP	C	12" BOTTOM PRE-CORED END CAP / PART# SC800PE12BPC / TYP OF ALL 12" BOTTOM CONNECTIONS	1.60'	
FLAMP	D	INSTALL FLAMP ON 24" ACCESS PIPE / PART# SC80024RAMP		
MANHOLE	E	12" x 12" TOP MANHOLE ADS N-12	14.40'	
PIPE CONNECTION	F	12" BOTTOM CONNECTION		
INLET BASIN "A13"	G	CASTING = 756.2, PROP. 12" INV (N4S) = 750.50, PROP 8" INV (W) = 750.5		3.24 CFS IN
UNDERDRAIN	H	8" ADS N-12 DUAL WALL PERFORATED HOPE UNDERDRAIN		2.35 CFS OUT

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

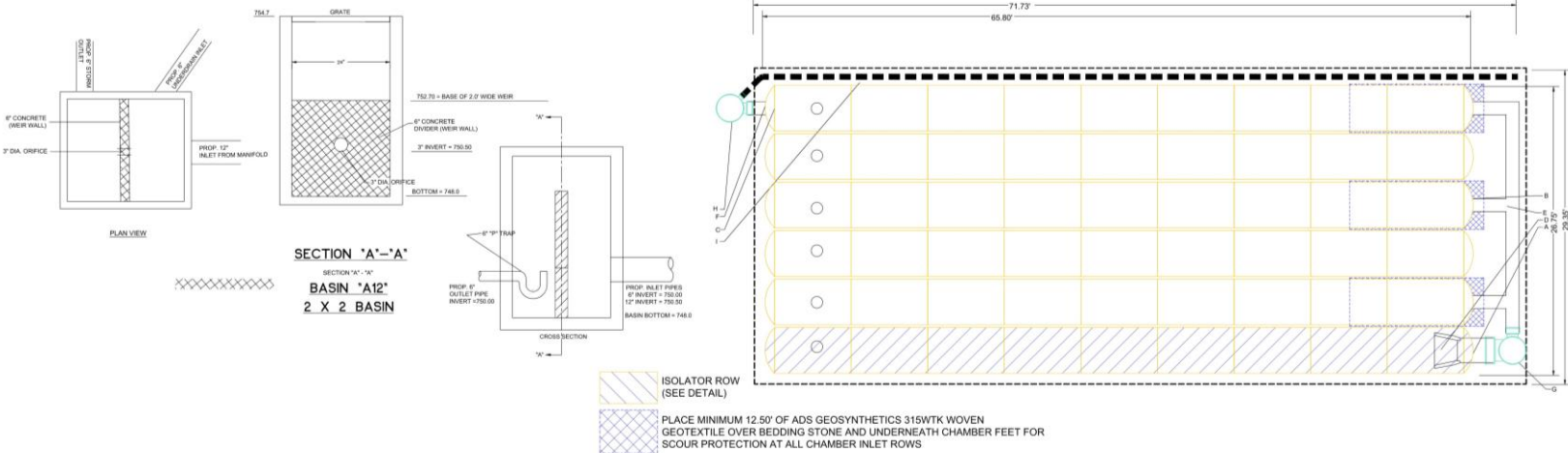
- STORMTECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310SC-740SC-800DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOTTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 3" (75 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE, AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310SC-740SC-800DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-800 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310SC-740SC-800DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310SC-740SC-800DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

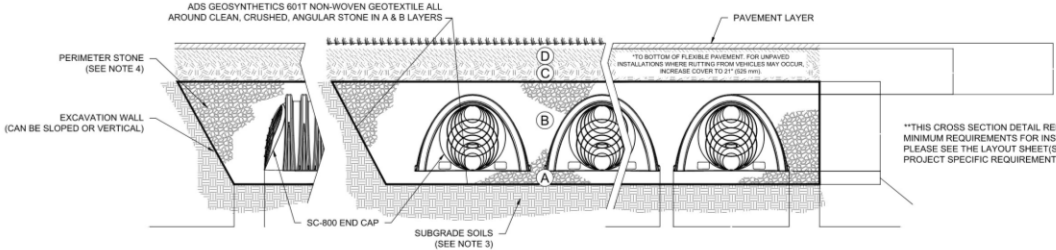
CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

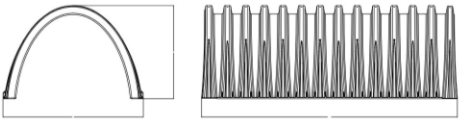
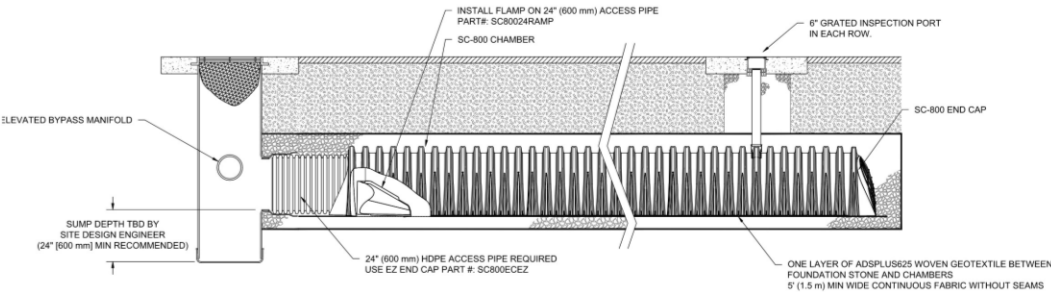
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (IF LAYER) TO 1" (25 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M141 ¹ A-1, A-2.4, A-3 OR AASHTO M33 ² 3, 397, 4, 487, 5, 56, 57, 6, 67, 68, 7, 78, 8, 88, 9, 10	BEGIN COMPACTIONS AFTER 1" (25 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 4" (102 mm) MAX LIFTS TO A MIN 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (X LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M33 ² 3, 397, 4, 487, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M33 ² 3, 397, 4, 487, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{1,2}

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M33) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'X' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 4" (102 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY ISOLATION CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'X' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION: a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT² AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



NOMINAL CHAMBER SPECIFICATIONS

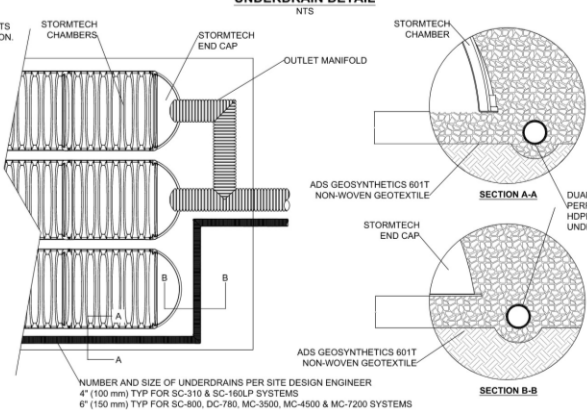
SIZE (W X H X INSTALLED LENGTH)	51.0" X 33.0" X 85.4"	(1295 mm X 838 mm X 2169 mm)
CHAMBER STORAGE	50.6 CUBIC FEET	(1.43 m ³)
MINIMUM INSTALLED STORAGE*	78.4 CUBIC FEET	(2.22 m ³)
WEIGHT	81.8 lbs.	(37.1 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	46.5" X 32.6" X 10.5"	(1181 mm X 828 mm X 267 mm)
END CAP STORAGE	3.4 CUBIC FEET	(0.09 m ³)
MINIMUM INSTALLED STORAGE**	14.7 CUBIC FEET	(0.42 m ³)
WEIGHT	15.7 lbs.	(7.1 kg)

* ASSUMES 6" (150 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS, 3" (75 mm) BETWEEN CHAMBERS
** ASSUMES 6" (150 mm) STONE ABOVE AND BELOW END CAPS, 3" (150 mm) BETWEEN ROWS, 12" (300 mm) BEYOND END CAPS

UNDERDRAIN DETAIL



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- INSPECTION PORTS
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.





2
A300
MAIN BUILDING, NORTH FACADE
1" = 10'-0"



3
A300
MAIN BUILDING, WEST FACADE
1" = 10'-0"



4
A300
MAIN BUILDING, EAST FACADE
1" = 10'-0"



1
A300
MAIN BUILDING, SOUTH FACADE
1" = 10'-0"



ELEVATION LEGEND

	CAST STONE		PRECAST CONCRETE
	CMU (RUNNING)		SIDING (HORIZONTAL)
	CMU (STACKED)		STACKED STONE
	BRICK (RUNNING)		STANDING SEAM ROOF
	BRICK (STACKED)		BUILDING EXPANSION JOINT (B/E)
	BRICK (SOLDIER)		EXPANSION JOINT (E/J)
			CONTROL JOINT (C/J)

ELEVATION KEYED NOTES

- (B1) EXISTING DORMER WINDOW TO BE RECONDITIONED. EXISTING GLASS PANE(S) TO BE REMOVED AND REPLACED WITH 6MM-8MM POLYCARBONATE. DEPENDENT ON EXISTING WINDOW CONSTRUCTION, WINDOW SASHES AND FRAMES TO BE CLEANED AND PREPARED FOR NEW WHITE PAINT FINISH TO MATCH EXISTING EXTERIOR TRIM. ANY OPERABILITY OF THE EXISTING WINDOW IS TO BECOME FIRED IN THE CLOSED POSITION AND CAULKED TO PROVIDE WEATHERIGHT BARRIER PRIOR TO PAINTING.
- (B2) EXISTING TRIM OF WINDOW/WINDOW SYSTEM TO BE REFINISHED TO MATCH WHITE TRIM OF EXISTING RENOVATED WINDOWS ON FIRST FLOOR.
- (B3) CLEAR EXISTING VEGETATION GROWN FROM SIDE OF BUILDING. REPAIR ANY REMAINING DAMAGE TO EXISTING FACADE. CLEAN AND PREPARE FOR REFINISHING WHERE NEEDED.
- (B4) EXISTING DOOR TO REMAIN IN PLACE. REPLACE OPERABLE DOOR HARDWARE WITH DOUBLE KEYED DEADBOLT LOCK SIMILAR TO EXISTING FINISH. THE INTERIOR OF THE DOOR TO RECEIVE VINYL LETTERING TO INDICATE "NOT AN EXIT". ALL EXTERIOR TRIM AND DOOR MATERIAL TO BE CLEANED AND PREPARED TO BE REFINISHED. FINAL FINISHES TO REPLICATE EXISTING AESTHETIC. PROVIDE CAULKING AT ALL GAPS AND MAKE DOOR AND FRAME WEATHERTIGHT.
- (B5) EXISTING CONCRETE STAIR TO BE REPAIRED AND REFINISHED. CLEAN, REPAIR, AND REFINISH ALL EXISTING STAIR TREADS, RISERS, AND LANDINGS. REMOVE ALL LOOSE, CRACKED, OR SPALLED MATERIAL. PATCH AND REPAIR DAMAGED AREAS WITH CEMENTITIOUS MORTAR COMPATIBLE WITH EXISTING STAIR MATERIALS. ENSURE THAT ALL PATCHED AREAS ARE TUSH WITH ADJACENT SURFACES AND MATCH SLOPE FOR DRAINAGE. FOLLOWING REPAIR, STAIR TO BE SEALED WITH NON-SLIP SEALANT THAT IS COMPATIBLE WITH EXISTING MATERIALS.
- (B6) EXISTING RAILING TO REMAIN. REMOVE EXISTING FINISH AND RUST. PRIME AND PREPARE FOR NEW WHITE PAINT.
- (B7) -
- (B8) -
- (B9) -
- (B10) -





NOTE: ALL INTERIOR WINDOWS LOCATED WITHIN 1 HR FIRE-RATED CORRIDOR WALLS TO BE RATED 45-MINUTES.

ALL EXTERIOR WINDOWS: ALUMINUM STOREFRONT WITH TOP SECTION VENTED IN AND BOTTOM SECTION TO HAVE FIXED INSULATED GLASS WITH BLINDS BETWEEN THE GLASS. ALL OPERABLE PARTS TO BE REMOVEABLE WHEN NOT IN USE.



A diagram of a window with a decorative pediment. The pediment is a triangle with a dashed line from the top vertex to the base. The window frame is a rectangle with a grid pattern. The grid has 2 columns and 2 rows of panes. The top row of panes is smaller than the bottom row. The entire window is set within a larger rectangular frame.

Diagram of a window unit. The top section is labeled "3'-4\"/>

Diagram of a rectangular sign with dimensions 3'-4" VARIES and 5'-0" +/- VARIES.

Diagram of a rectangular structure with dimensions and a triangular feature. The width is labeled 3'-4" VARIES. The height is labeled 5'-0" +/- VARIES. The structure consists of a large rectangle with a smaller rectangle inside it. The top of the inner rectangle is a triangle with dashed lines indicating its shape.

Depend on Tabulite® for detailed information on the performance, integrity, and weatherability of anodized finishes, and for specifications on the color retention, erosion resistance, and gloss retention of painted finishes.

Depend on Tabulite® for detailed information on the performance, integrity, and weatherability of anodized finishes, and for specifications on the color retention, erosion resistance, and gloss retention of painted finishes.

KEY	C ₁ = Color Retention	SS = Salt Spray	NOTE	Class I = Minimum 0.7 mil thickness
	C ₂ = Chalk Resistance	H ₂ = Humidity		Class II = Minimum 0.4 mil thickness
	G ₁ = Gloss Retention		✓ = Extended Warranty Available	
	R = Abrasion Resistance	= Tabrite Standard Color Palette		(Contact Tabrite Inc.)

Green-Friendly Finishes

Beyond being compliant, Tuffert's sister company Corus captures and destroys the Volatile Organic Compounds (VOCs) present in solvent based paints during the finishing process. 100% of the solvents are captured from the painting operation, and destroyed with a 2 million "boiler", which burns the VOCs at 1500 degrees heat, converting them to harmless water vapor. In doing so, our liquid paints are just as VOC-free as the end-product as powder or waterborne paints.

At Tuffert's anodizing operations, the process does not use heavy metals or acids and is environmentally friendly. Anodized aluminum is 100% recyclable and uses simple water-based chemistry that can be treated easily.

- Standard 2" (50.8mm) sight-line on verticals and horizontals
- 4-1/2" (114.3mm) system depth
- Single cavity pour and debridge thermal barrier with Azor's Lancer® mechanical lock
- EPDM wedge type gaskets for 1" glass or panel thickness

- Screw-spline or shear block connections.
- Steel reinforcing if required
- Easily integrates with standard or thermal doors, operable vent windows & sun shades
- 7 anodized and 19 painted standard finishes
- Curved Headers
- Non-thermal framing
- In-board, Centered, or Out-board glass plane
- Silicone Gasket Material

14000 I/O Series Product Specifications								
Applications: Low-rise commercial buildings, retail, office, healthcare, schools, etc.								
Description: 2" x 4-1/2" multiple open or insula Fluor-Glazed standard								
Face Width	System Depth	Glass	Air Infiltration	Water Infiltration	Structural	OWF	U Factor**	Acoustic
2"	4-1/2"	7-1/4" (3-1/8" - 1-1/8")	0.25 CFM75/ft. (0.12 CFM)	0.25 GPM/ft. (0.12 GPM)	30 PSI - Gage (0.12 GPM)	55.0 - Insula Fluor (0.12 GPM)	0.30 - Insula Fluor (0.12 GPM)	0.30 - Insula Fluor (0.12 GPM)

DISCLAIMER: Tubelite takes no responsibility for product selection or application, including, but not limited to, compliance with building codes, safety codes, laws, merchantability or fitness for a particular purpose and further disclaims all liability for the use, in whole or in part, of this Technical Guide in preparation of project specifications and/or other documents. Technical Guides are subject to change at any time, without notice, and at Tubelite's sole discretion. ©2017 Tubelite Inc.



EZ
vertical
COMMERCIAL WINDOWS

CVR.3700 | HRW.3700 | CW.3700 | EW.3700 | VW.3700 | HW.3700 | FW.3700 | Adapters & Inserts | Hardware & Screen



The industry standard and our most popular window, this is a project-out, conventional-style model. It is available with manual or rotary operation.

3700 Series Windows	VW3700
Application	Conventional Frame
Frame Joints	Seamless
Window Joints	Mitered-clip, Epoxy & Stake
Glass Thickness	1/4" & 1"
Face Width	2 3/8"
Frame Depth	2"
Hardware	HO Stainless Steel Clear or Black manual cam locks
Optional Hardware	Keys Operated, Custodial Locks, Pole Handles, Limit Stops
Air Infiltration	<0.1CFM/ft ²
Static Water	12 PSF
AAHA/WDRA/CSA 1001 5.3/AAAG-08, NAFS Testing	Class CW-90-75
Life Cycle Tested	2500 Cycles
U-Factor	.47
Screen	Wicket Screen (standard) Flat Screen (optional) Click here for more information



Anodized Finishes

Clear Class 2 C2 Clear Class 1 C1	Light Champagne LC	Champagne CH	Light Bronze LB	Medium Bronze MB
Dark Bronze DB	Extra Dark Bronze EB	Black BL	Copper CA	Bronzeau BD

Standard Painted Colors – 70% PVDF

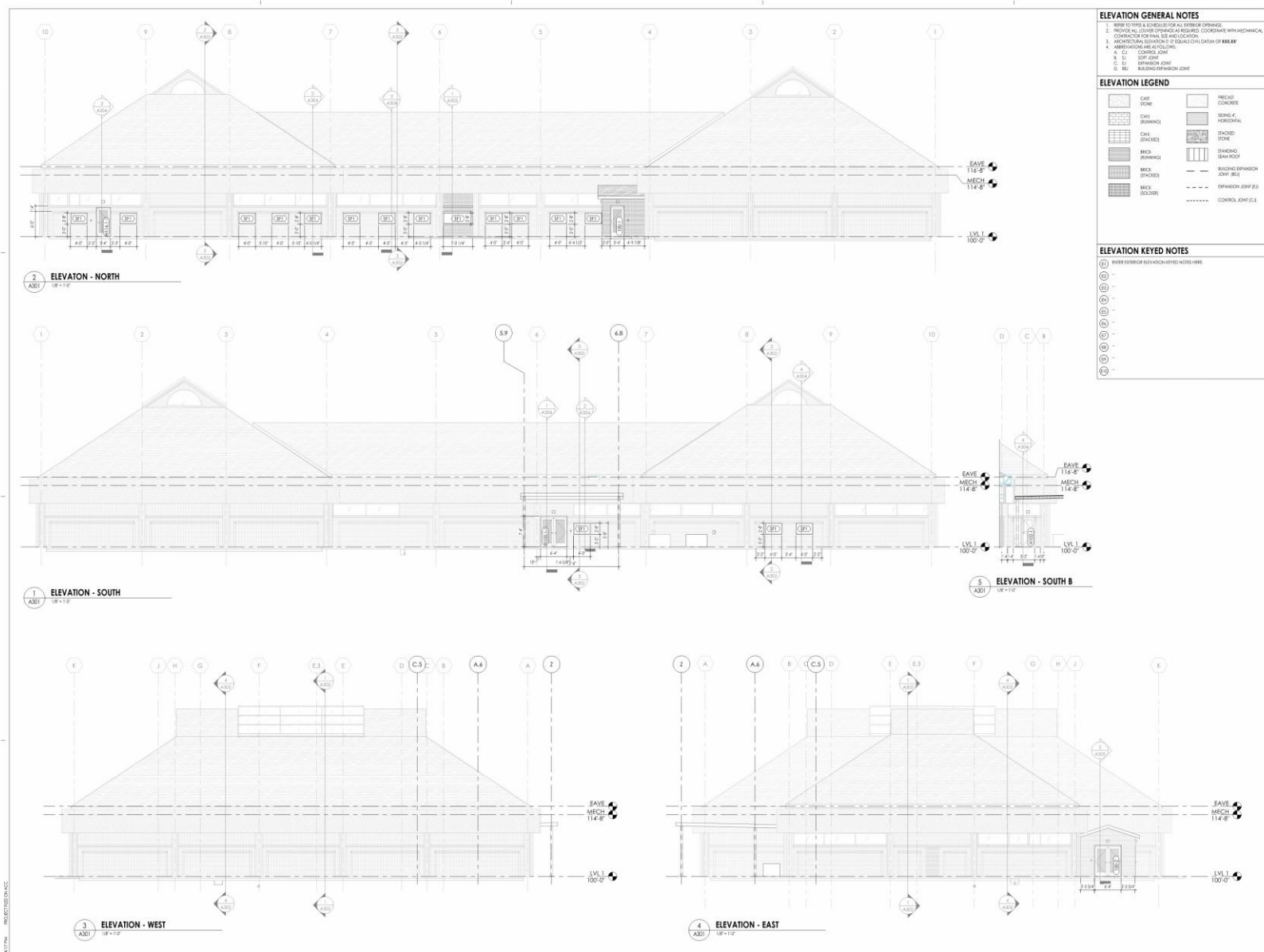
Bone White 1P (3009-70)	Colonial White NP L7640-70	Sandstone SP L7640-70	Burnt Sun 7P L7612-70	Antique Bronze 2P L7640-70
Beige BP L7640-70	Light Seawall Beige CP L7614-70	Dove Gray VP L7615-70	Slate Gray WP L7604-70	Charcoal Gray XP L7605-70
Patina Green SP L7616-70	Dark Ivy TP L7617-70	Hartford Green 2P L7606-70	Military Blue DP L7610-70	Black 3P L7607-70
Colonial Red BP	Berryberry 9P	Sage Brown 8P	Quaker Bronze 6P	

NOTE: Colors shown are not exact and are intended for planning purposes. For actual job, Tubelite® will supply Linetec color chips.

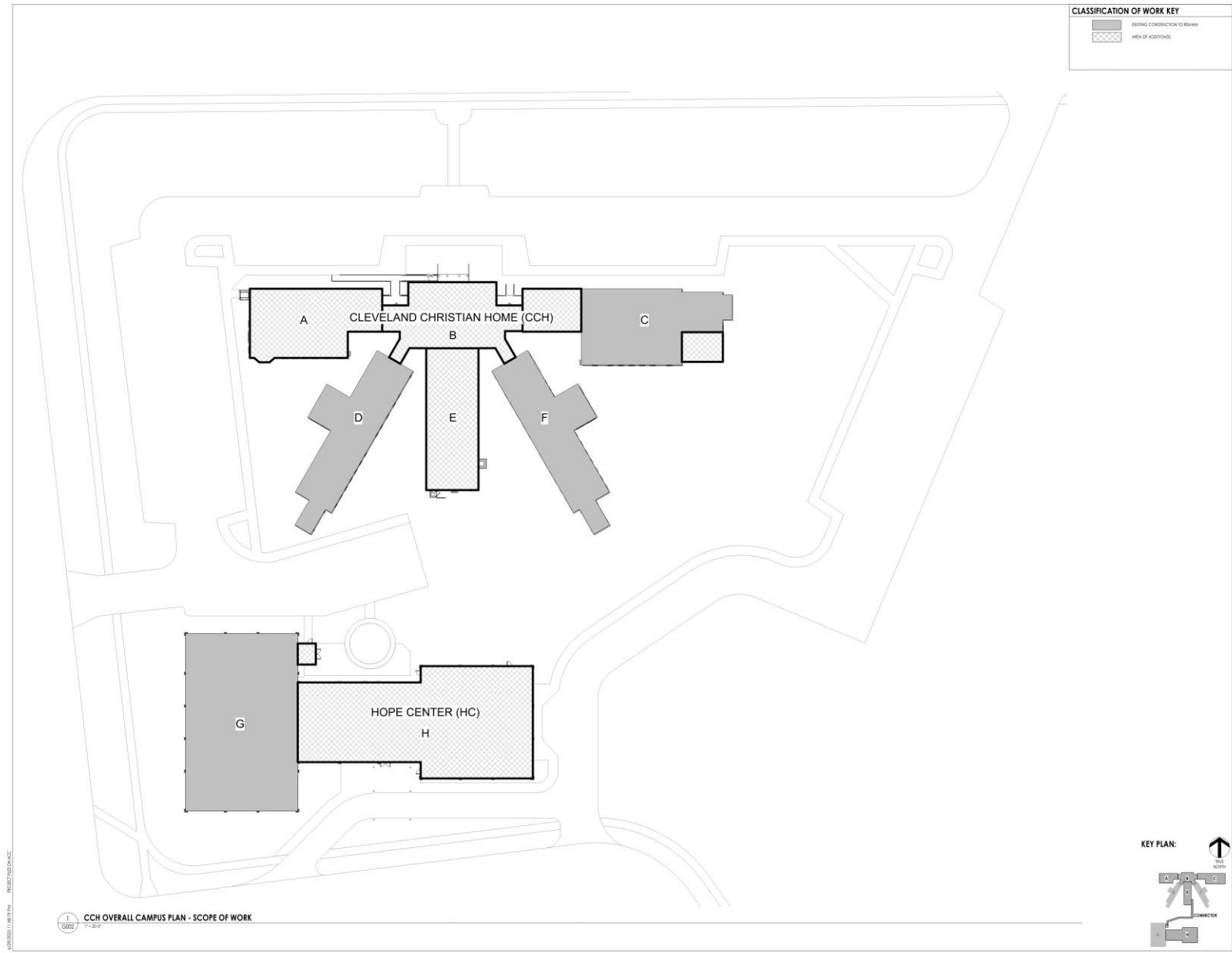


4. ELEVATIONS

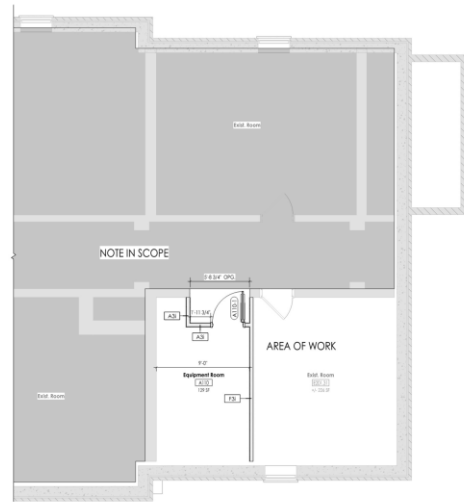
BUILDING 1 –
CLEVELAND CHRISTIAN HOME



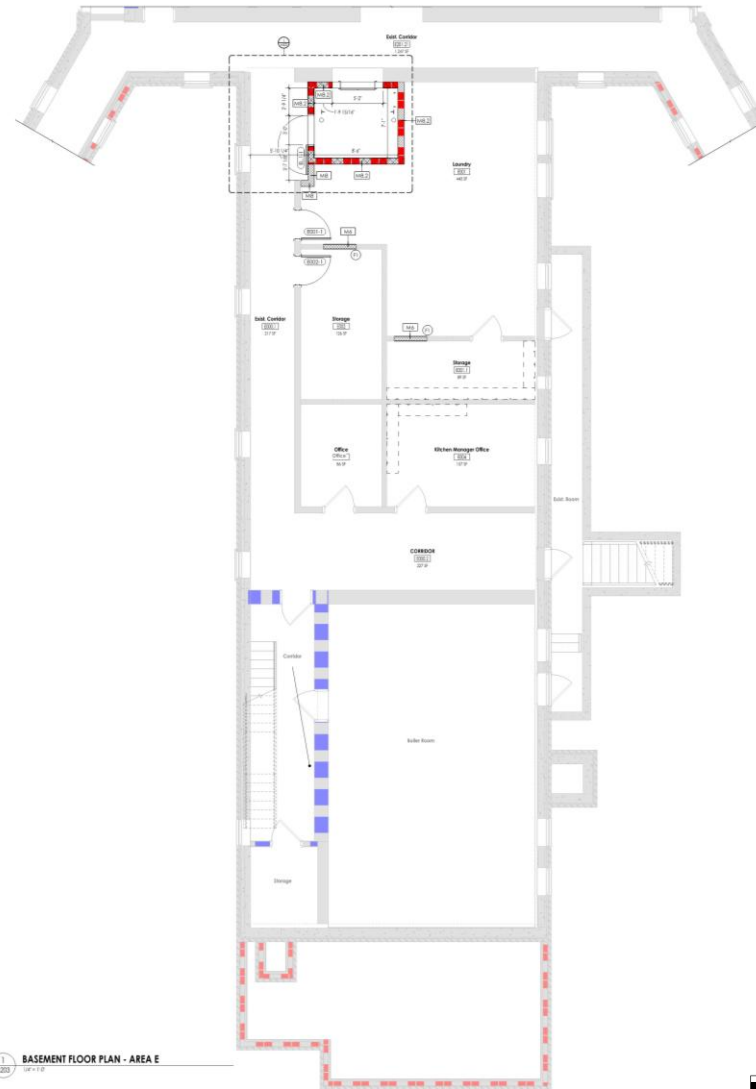
4. ELEVATIONS BUILDING 2 – HOPE CENTER PROPOSED



FLOOR PLAN KEYED NOTES	
11	ALIGN NEW WALL PARTITION WITH EXISTING WALL.
12	CONTRACTOR TO APPLY OPAQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL EXIST. TOWEL ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS: OPTICAL GLASS PRISM THREE LOW PROFILE OPTICAL.
13	CONTRACTOR TO APPLY OPAQUE PRIVACY FILM & SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL EXISTING PUBLIC TOWEL ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS: OPTICAL GLASS PRISM THREE LOW PROFILE OPTICAL. SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.
14	CONTRACTOR TO APPLY CLEAR SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL EXISTING PUBLIC ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.
15	INFILL EXISTING FLOOR OPENING WITH NEW #4 REINFORCED CONCRETE OVER 1-1/2" METAL DECK. REFER TO STRUCTURAL DRAWINGS.
16	INFILL WALL OPENING FROM DEMOLISHED DOOR AND FRAME WITH CONSTRUCTION EQUIVALENT TO ALUMINUM WALL CONSTRUCTION. FINAL CONSTRUCTION TO MAINTAIN WATERIGHT ASSEMBLY IN CONNECTION WITH ADJACENT WATERIGHT CONSTRUCTION.
17	NEW EXTERIOR DOOR LOCATION TO BE DETERMINED IN FIELD. COORDINATE FINAL LOCATION WITH EXISTING ARCHITECTURAL AND STRUCTURAL SITE CONDITIONS. WHINNING THE NEED FOR ADDITIONAL FLOORING/PAVING IN THE INTERIOR ATTIC SPACE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
18	NEW WINDOW AND FRAME WITH TRANSLATION DRAWER. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS: OPTICAL GLASS PRISM THREE LOW PROFILE OPTICAL. SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.



PARTIAL BASEMENT FLOOR PLAN - AREA C
1/4" = 1'-0"

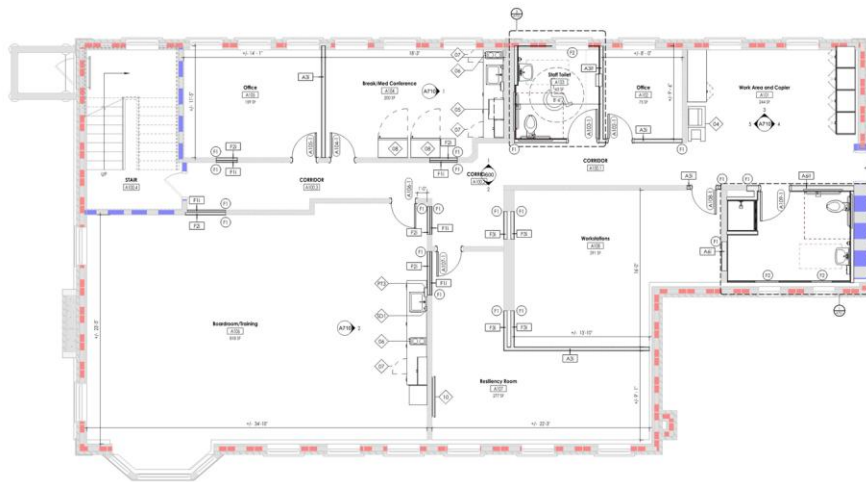


BASEMENT FLOOR PLAN - AREA E
1/4" = 1'-0"

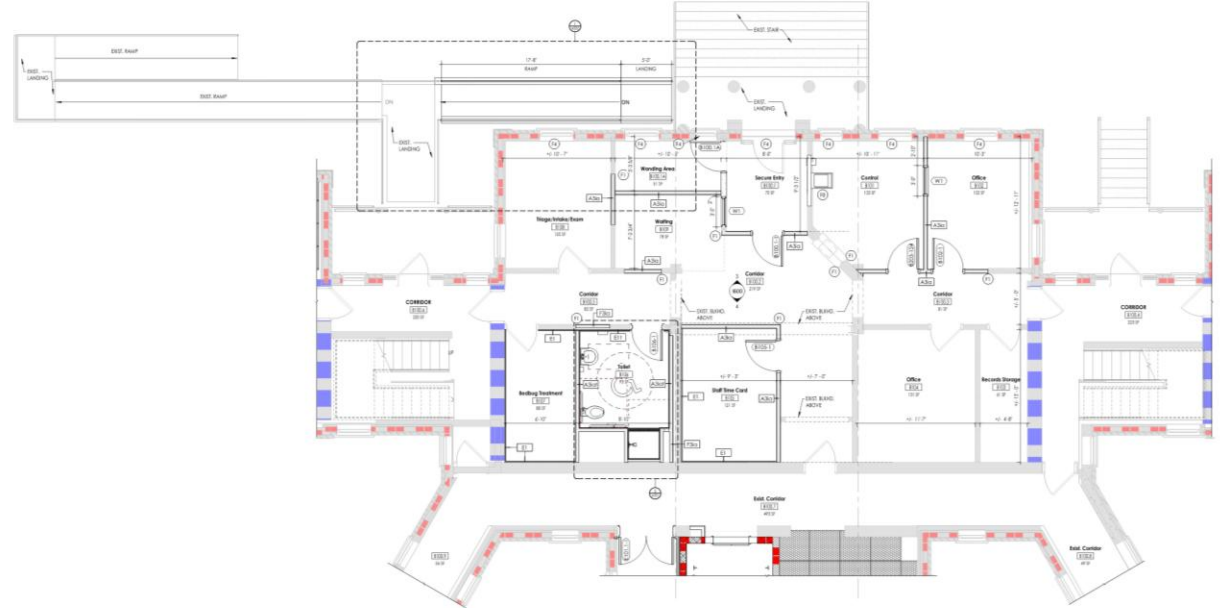


FLOOR PLAN KEYED NOTES

1. ALIGN NEW WALL PARTITION WITH EXISTING WALL.
2. CONTRACTOR TO APPLY OPAQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL STAFF TOILET ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS: CRISTAL GLASS TINTER THREE (SEE PRECED CRISTAL).
3. CONTRACTOR TO APPLY OPAQUE PRIVACY FILM & SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL STUDENT / PUBLIC TOILET ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS: CRISTAL GLASS TINTER THREE (SEE PRECED CRISTAL, SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHGARD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.
4. CONTRACTOR TO APPLY CLEAR SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL STUDENT / PUBLIC ROOMS THAT HAVE EXTERIOR WINDOWS. BASE OF DESIGN: SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHGARD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.
5. INFILL EXISTING FLOOR OPENING WITH NEW 4" REINFORCED CONCRETE OVER 1-1/2" METAL DECK. REFER TO STRUCTURAL DRAWINGS.
6. INFILL WALL OPENING FROM DEMOLISHED DOOR AND FRAME WITH CONCRETE OR BRICKWORK TO ADJACENT WALL. CONSTRUCTION: FINAL CONSTRUCTION TO MAINTAIN WEATHERIGHT ASSEMBLY IN CONNECTION WITH ADJACENT WEATHERIGHT CONSTRUCTION.
7. NEW EXTERIOR DOOR LOCATION TO BE DETERMINED IN FIELD. COORDINATE FINAL LOCATION WITH EXISTING ARCHITECTURAL AND STRUCTURAL CONDITIONS, MINIMIZING THE NEED FOR ADDITIONAL FLOORING/PARTITIONS IN THE INTERESTED SPACE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
8. NEW WINDOW AND FRAME WITH TRANSCOMM BRASSER. BASE OF DESIGN IS QUADRY PC-135 WINDOW WITH QP-7135 BRASSER. WINDOW TO BE FABRICATED WITH DOUBLE GLAZING, AND INTERCOM SYSTEM.



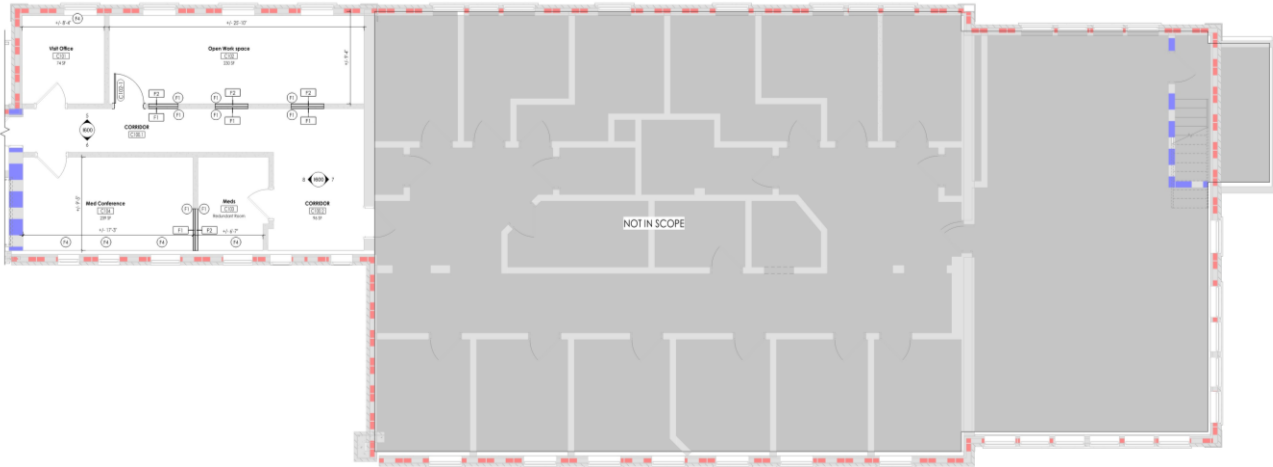
LEVEL 1 FLOOR PLAN - AREA A
1/4" = 1'-0"



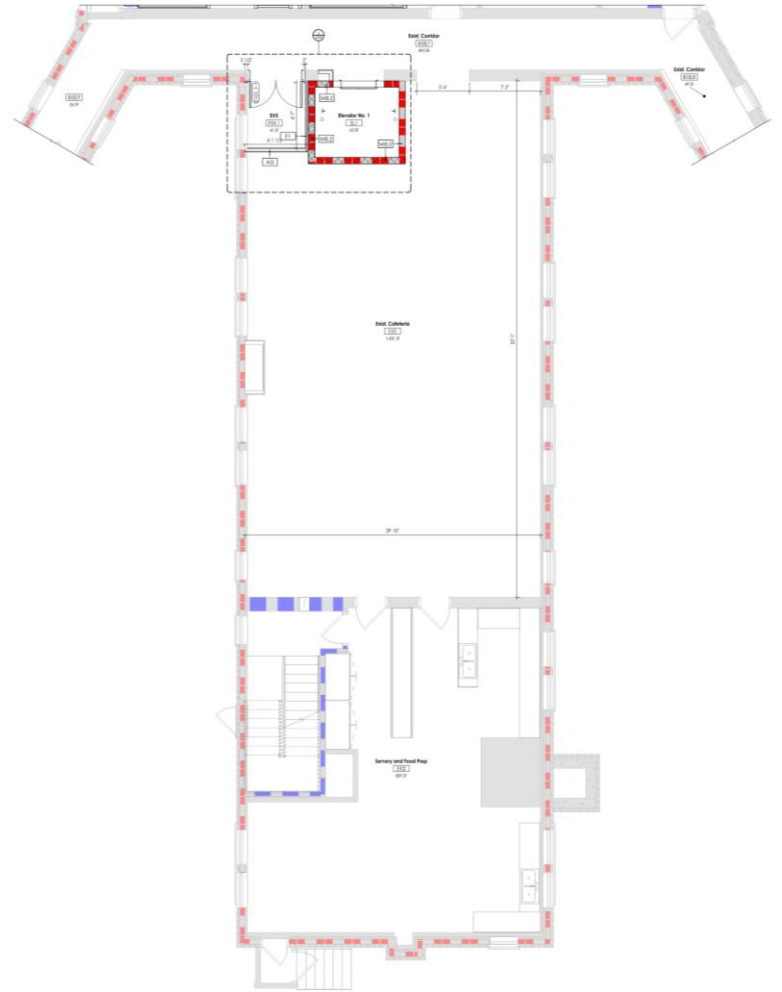
LEVEL 1 FLOOR PLAN - AREA B
1/4" = 1'-0"



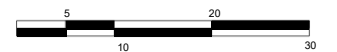
FLOOR PLAN KEYED NOTES	FI
(1) ADD NEW WALL PARTITION WITH EXISTING WALL.	1.
(2) CONTRACTOR TO APPLY OPAQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL START TIGHT ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS, CRISTAL, GLASS FINISH 77888-3M PROCEED CRISTAL.	2.
(3) CONTRACTOR TO APPLY OPAQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL STUDENT PUBLIC TIGHT ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS, CRISTAL, GLASS FINISH 77888-3M PROCEED CRISTAL, SECURITY FILM 3M ARCHITECTURAL PRODUCTS 3M 3000SHREDDED SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	3.
(4) CONTRACTOR TO APPLY CLEAR SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL STUDENT PUBLIC TIGHT ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS, CRISTAL, GLASS FINISH 77888-3M PROCEED CRISTAL, SECURITY FILM 3M ARCHITECTURAL PRODUCTS 3M 3000SHREDDED SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	4.
(5) INFILL EXISTING FLOOR OPENING WITH NEW 4" REINFORCED CONCRETE OVER 1-1/2" METAL DECK. REFER TO STRUCTURAL DRAWINGS.	5.
(6) INFILL WALL OPENING FROM DEMOLISHED DOOR AND REINFORCE WITH CONSTRUCTION EQUIVALENT TO ADJACENT WALL CONSTRUCTION. FINAL CONSTRUCTION TO MAINTAIN WATERPROOF ASSEMBLY IN CONNECTION WITH ADJACENT WATERPROOF CONSTRUCTION.	6.
(7) NEW EXTERIOR DOOR LOCATION TO BE DETERMINED IN FIELD. COORDINATE FINAL LOCATION WITH EXISTING ARCHITECTURAL AND STRUCTURAL SITE CONDITIONS, MINIMIZING THE NEED FOR ADDITIONAL FLOORING/GRADEWORKS IN THE INTERIOR AT-RISK SPACE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.	7.
(8) NEW WINDOW AND FRAME WITH TRANSACTION DRAWERS. BASE OF DESIGN: SQUABBY VCL 131 WINDOW WITH QSP-7133 DRAWER. WINDOW TO BE FABRICATED WITH LEVEL 1 BULLET RESISTANT GLAZING, AND INTERCOM SYSTEM.	8.
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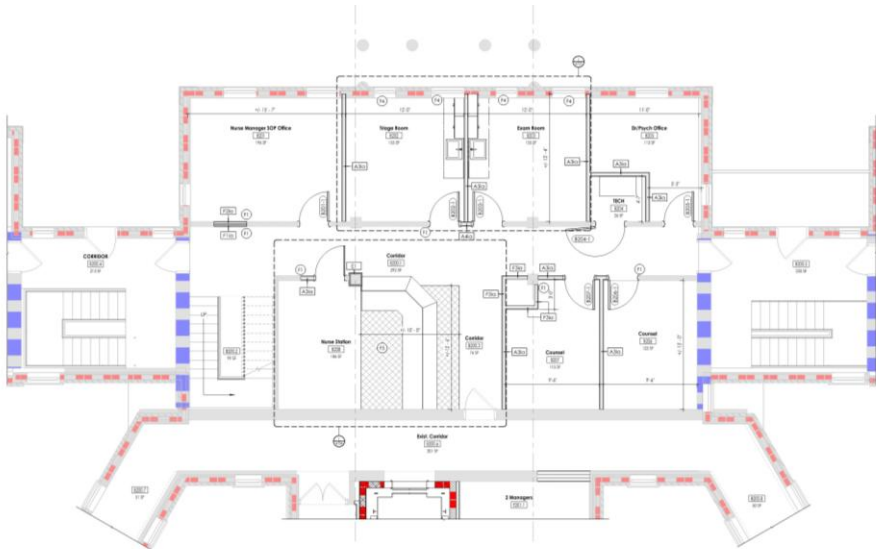
1 LEVEL 1 FLOOR PLAN - AREA C
1/4" = 1'-0"



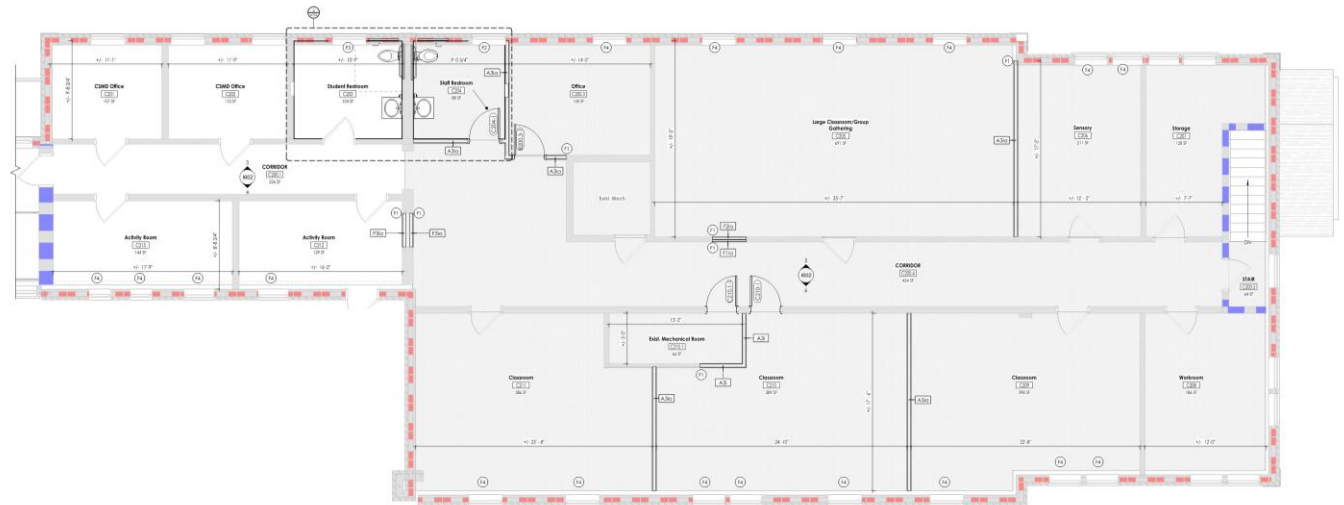
1 LEVEL 1 FLOOR PLAN - AREA E
1/4" = 1'-0"



FLOOR PLAN KEYED NOTES	PI
(1) ALIGN NEW WALL PARTITION WITH EXISTING WALL.	1
(2) CONTRACTOR TO APPLY OPAQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL STAFF TOILET ROOMS THAT HAVE EXTERIOR WINDOWS. BASIS OF DESIGN: 3M ARCHITECTURAL PRODUCTS: CRYSTAL GLASS FINISH 7785E 3M PROCEED CRYSTAL.	2
(3) CONTRACTOR TO APPLY OPAQUE PRIVACY FILM & SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL EXISTING PUBLIC TOILET ROOMS THAT HAVE EXTERIOR WINDOWS. BASIS OF DESIGN: 3M ARCHITECTURAL PRODUCTS: CRYSTAL GLASS FINISH 7785E 3M PROCEED CRYSTAL, SECURITY FILM 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	3
(4) CONTRACTOR TO APPLY CLEAR SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL EXISTING PUBLIC ROOMS THAT HAVE EXTERIOR WINDOWS. BASIS OF DESIGN: SECURITY FILM: 3M ARCHITECTURAL PRODUCTS: 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	4
(5) INFILL EXISTING FLOOR OPENING WITH NEW 4" REINFORCED CONCRETE OVER 1-1/2" METAL DECK. REFER TO STRUCTURAL DRAWINGS.	5
(6) INFILL WALL OPENING FROM DEVALUED DOOR AND FRAME WITH CONSTRUCTION EQUIVALENT TO ADJACENT WALL CONSTRUCTION. FINAL CONNECTION TO HANDBOOK ASSEMBLY IN CONNECTION WITH ADJACENT WATER-TIGHT CONSTRUCTION.	6
(7) NEW EXTERIOR DOOR LOCATION TO BE DETERMINED IN-FIELD. COORDINATE FINAL LOCATION WITH EXISTING ARCHITECTURAL AND STRUCTURAL USE CONDITIONS, MAINTAINING THE ASSESS FOR ADDITIONAL FLOORING/PAINTWAYS IN THE INTERIOR SPACE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.	7
(8) NEW WINDOW AND FRAME WITH TRANSACTION DRAWER. BASIS OF DESIGN: 3M QUINCY PCL 30 WINDOW WITH QRT 7150 DRAWER. WINDOW TO BE FABRICATED WITH LEVEL 1 BULLET RESISTANT GLAZING AND INTERCOM SYSTEM.	8



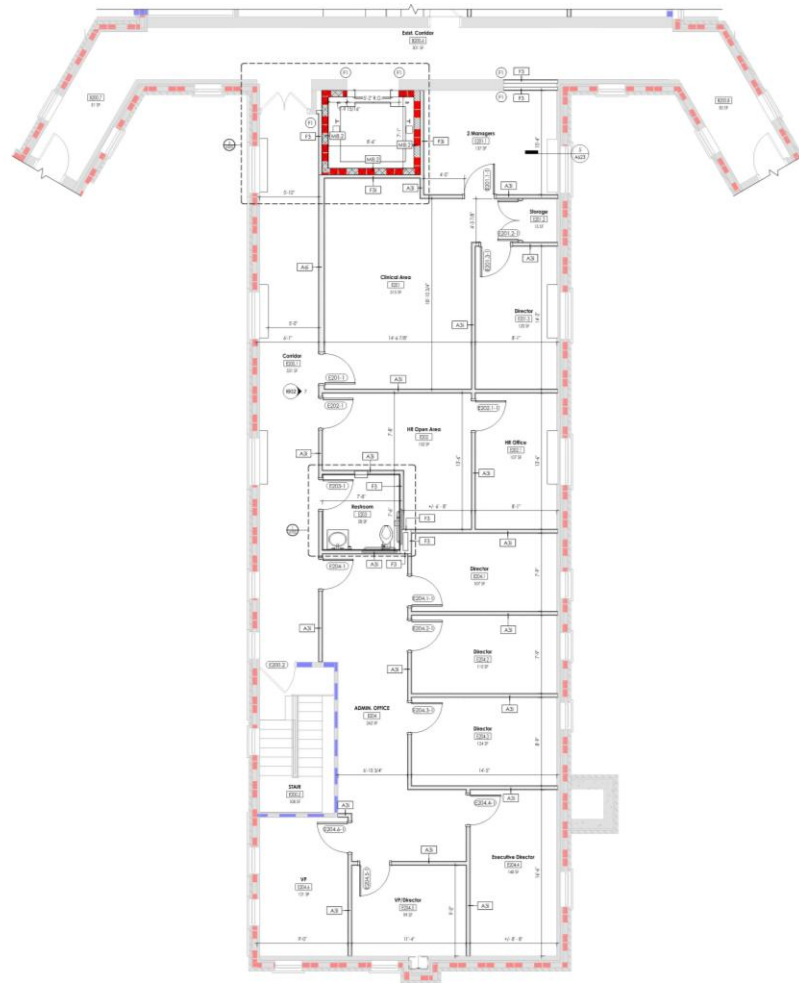
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A201
LEVEL 2 FLOOR PLAN - AREA B
1/8" = 1'-0"



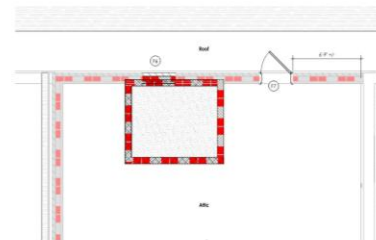
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A202
LEVEL 2 FLOOR PLAN - AREA C
1/8" = 1'-0"



FLOOR PLAN KEYED NOTES		PI
(1)	ALIGN NEW WALL PARTITION WITH EXISTING WALL.	1.
(2)	CONTRACTOR TO APPLY OPACQUE PRIVACY FILM TO INTERIOR SIDE OF EXISTING GLAZING AT ALL ENTRY TIGHT ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS CRYSTAL GLASS FROM THESE LOW PROFILE CRYSTAL.	2.
(3)	CONTRACTOR TO APPLY OPACQUE PRIVACY FILMS & SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL STUDENT PUBLIC TIGHT ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: 3M ARCHITECTURAL PRODUCTS CRYSTAL GLASS FROM THESE LOW PROFILE CRYSTAL. SECURITY FILM: 3M ARCHITECTURAL PRODUCTS 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	3.
(4)	CONTRACTOR TO APPLY CLEAR SECURITY FILM TO INTERIOR SIDE OF EXISTING WINDOW GLAZING AT ALL STUDENT PUBLIC ROOMS THAT HAVE EXISTING WINDOWS. BASE OF DESIGN: SECURITY FILM: 3M ARCHITECTURAL PRODUCTS 3M SCOTCHSHIELD SAFETY & SECURITY WINDOW FILM ULTRA SERIES.	4.
(5)	INFILL EXISTING FLOOR OPENING WITH NEW 4" REINFORCED CONCRETE OVER 1-1/2" METAL DECK. REFER TO STRUCTURAL DRAWINGS.	5.
(6)	INFILL WALL OPENING FROM DEVALUED DOOR AND REINACT WITH CONSTRUCTION EQUIVALENT TO ADJACENT WALL CONSTRUCTION. FINAL CONSTRUCTION TO HANDBOOK WATERPROOF ASSEMBLY IN CONNECTION WITH ADJACENT HANDSOME CONSTRUCTION.	6.
(7)	NEW EXTERIOR DOOR LOCATION TO BE DETERMINED IN FIELD. COORDINATE FINAL LOCATION WITH EXISTING ARCHITECTURAL AND STRUCTURAL SITE CONDITIONS. MAINTAINING THE NEED FOR ADDITIONAL FLOORING/PAVING IN THE INTERIOR ATTIC SPACE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.	7.
(8)	NEW WINDOW AND REINACT WITH TRANSCATION DRAWER. BASE OF DESIGN: 3/4 GLASSER PCL-12 WINDOW WITH 1/2" GLASS DRAWER. WINDOW TO BE FABRICATED WITH LEVEL 1 BULLET RESISTANT GLAZING AND INTERIOR SYSTEM.	8.
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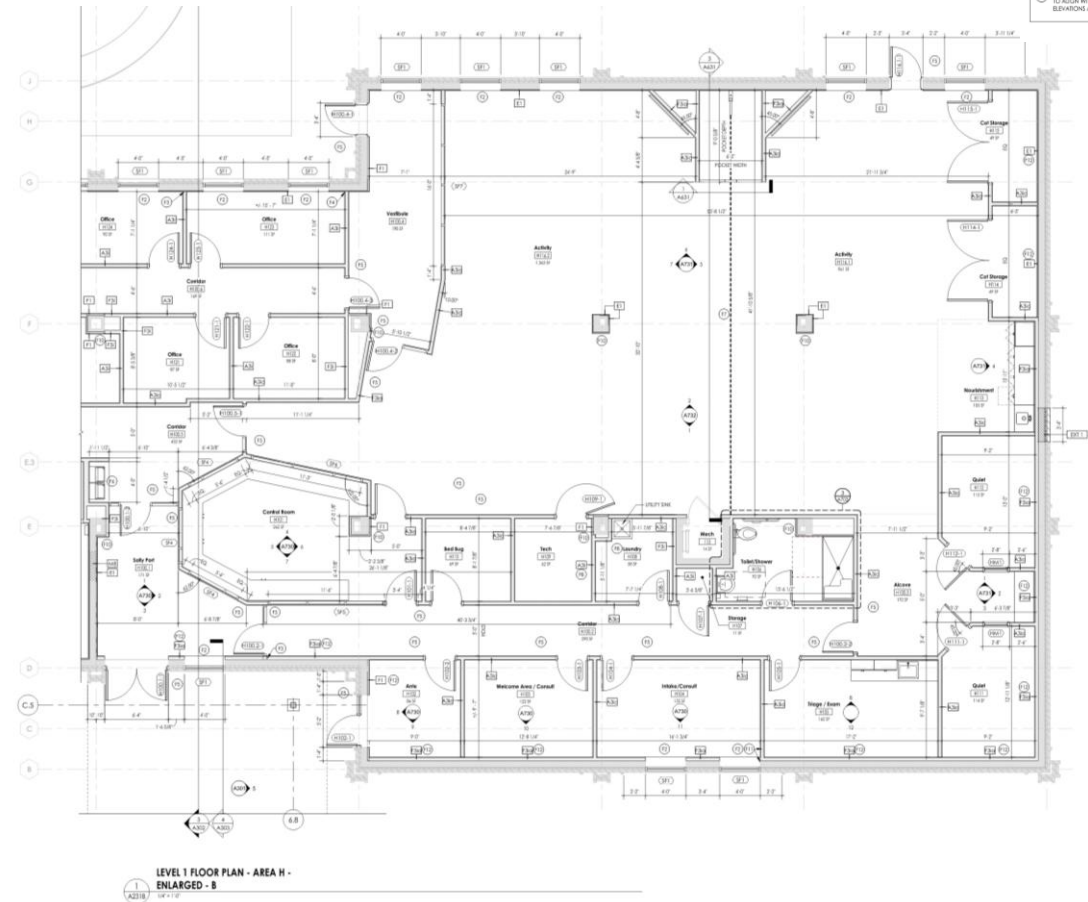
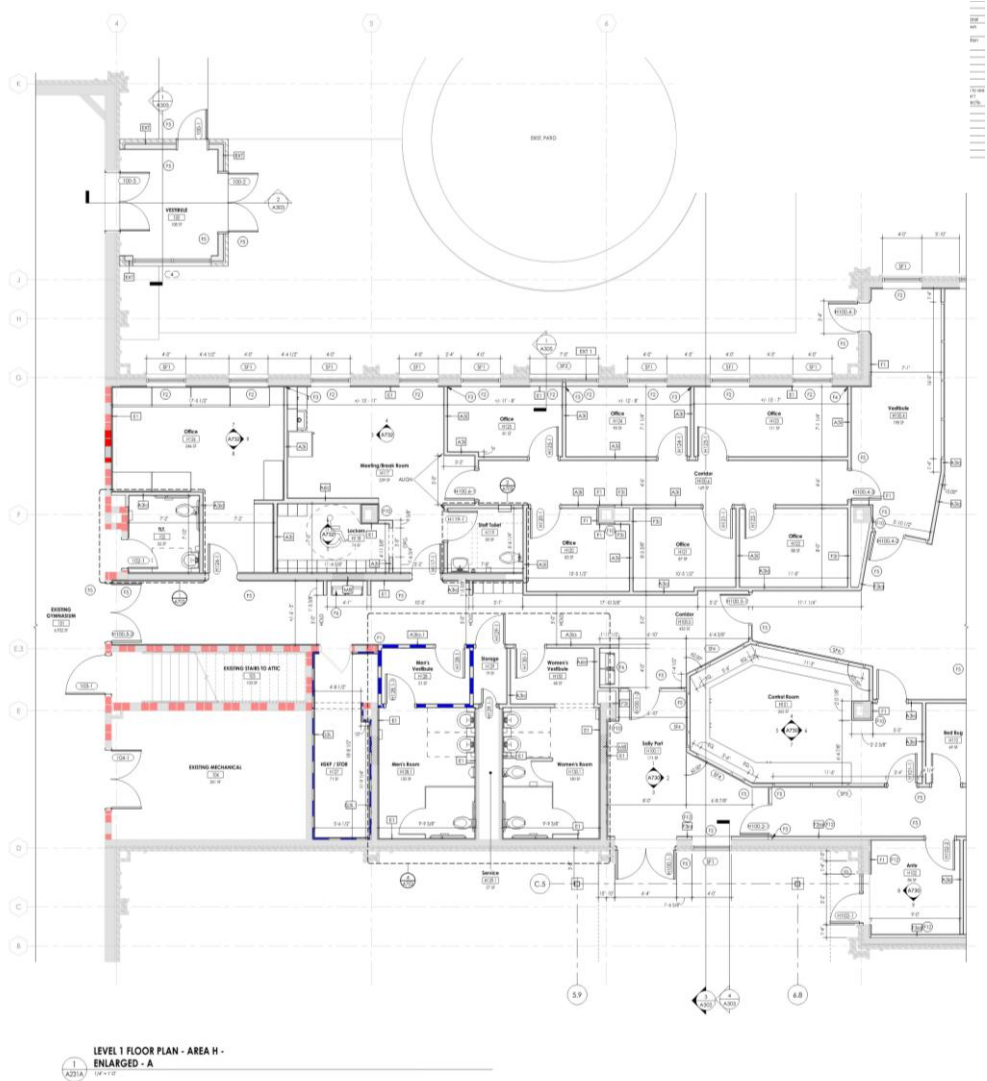
1 LEVEL 2 FLOOR PLAN - AREA E
1/4" = 1'-0"



2 PARTIAL ATTIC FLOOR PLAN - AREA E
1/4" = 1'-0"



- FLOOR PLAN KEYED NOTES**
- (1) ALIGN NEW WALL PARTITION WITH EXISTING WALL.
 - (2) SOLID SURFACE BELL
 - (3) ALIGN NEW WALL WITH WINDOW MULLION
 - (4) ALIGN NEW WALL WITH EXISTING HIGH WINDOW OPENING
 - (5) CARD READER INSTALLED BY OWNER. BOX AND CONDUIT TO ABOVE CEILING BY CONTRACTOR.
 - (6) HEAD ACCESSIBLE DRINKING FOUNTAIN BY F.C.
 - (7) OPERABLE PARTITION WALL: BASE OF DESIGN KNOCK-WALL MODEL, SEE COMPANION WALL FINISHES. REFER TO THE GENERAL NOTES AND SEE INTERIOR DRAWINGS FOR PARTITION COLORS (STYLE INFORMATION).
 - (8) FLOOR MOUNTED ACOF SINK BY F.C.
 - (9) FIRE EXTINGUISHER IN RECESSED CABINET AND PLASTIC SIGN - REFER TO DETAILS ON SHEET XXXX
 - (10) METAL NEW PARTITION WALL AS CLOSE TO EXISTING COLUMNS WALL AS POSSIBLE.
 - (11) ALIGN NEW PARTITION WALL WITH WINDOW FINISH.
 - (12) NEW INTERIOR PARTITION TO EXTEND 10" IF ANY. PROVIDE OPENINGS IN WALL TO ALIGN WITH NEW AND EXISTING WINDOW FRAMES. REFER TO INTERIOR ELEVATIONS AND SECTIONS.



5. FLOOR PLANS

BUILDING 2 – HOPE CENTER







CITY OF CLEVELAND
Mayor Justin M. Bibb

Schematic Plan Review

October 23rd, 2025



Case 25-084

Schematic Plan Review

**Cleveland Music School
Settlement/Magnolia-Wade Park
Historic District**

The Music Settlement 1560 Mistletoe Drive

Renovation and Addition

Project Representatives: Peter Bohan, Perspectus Architecture

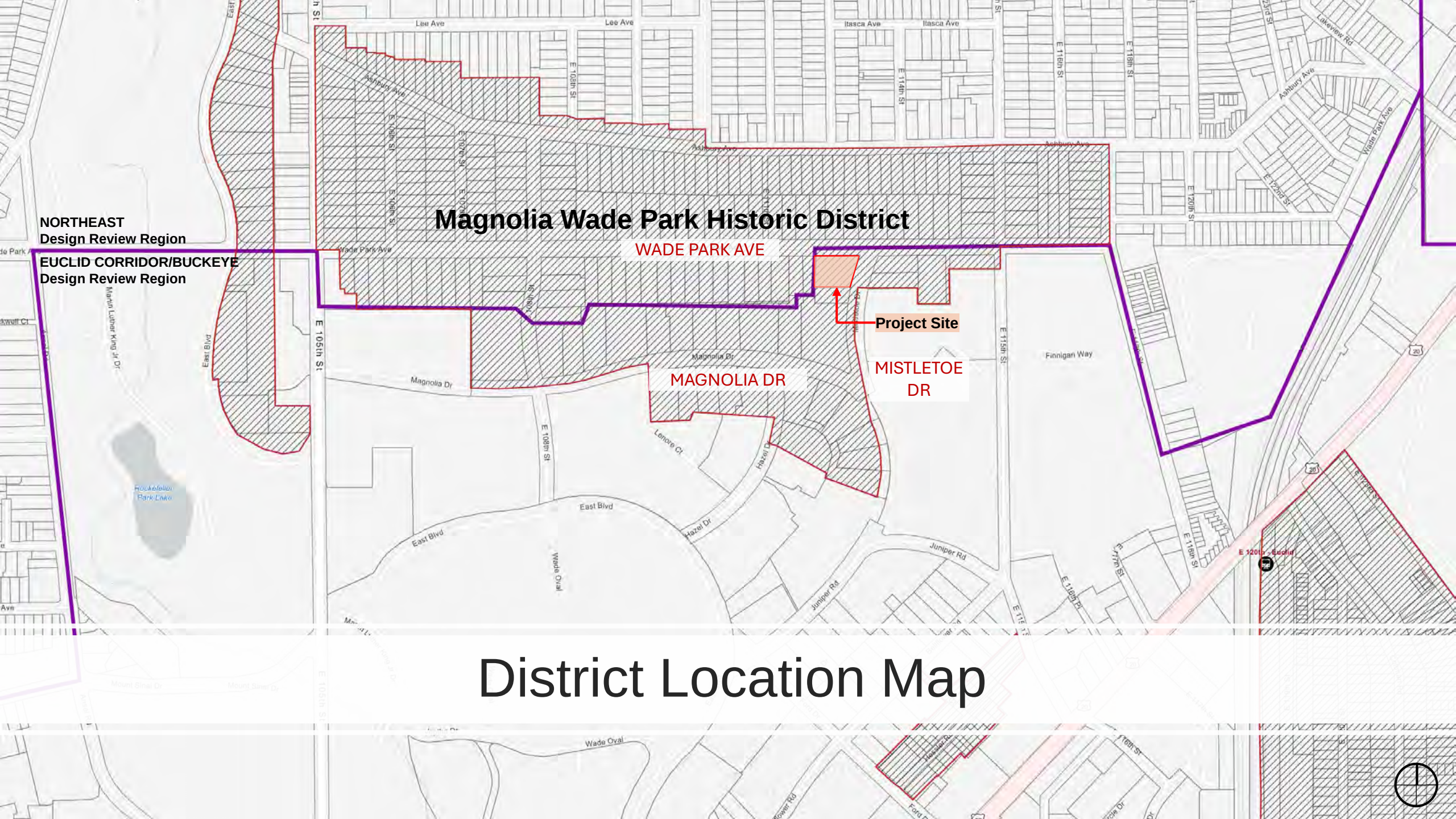
Ward 9: Councilmember Conwell





The Gries House Renovation and Addition for The Music Settlement

Cleveland Landmarks Commission
October 23, 2025



Magnolia Wade Park Historic District

**NORTHEAST
Design Review Region**
**EUCLID CORRIDOR/BUCKEYE
Design Review Region**

WADE PARK AVE

MAGNOLIA DR

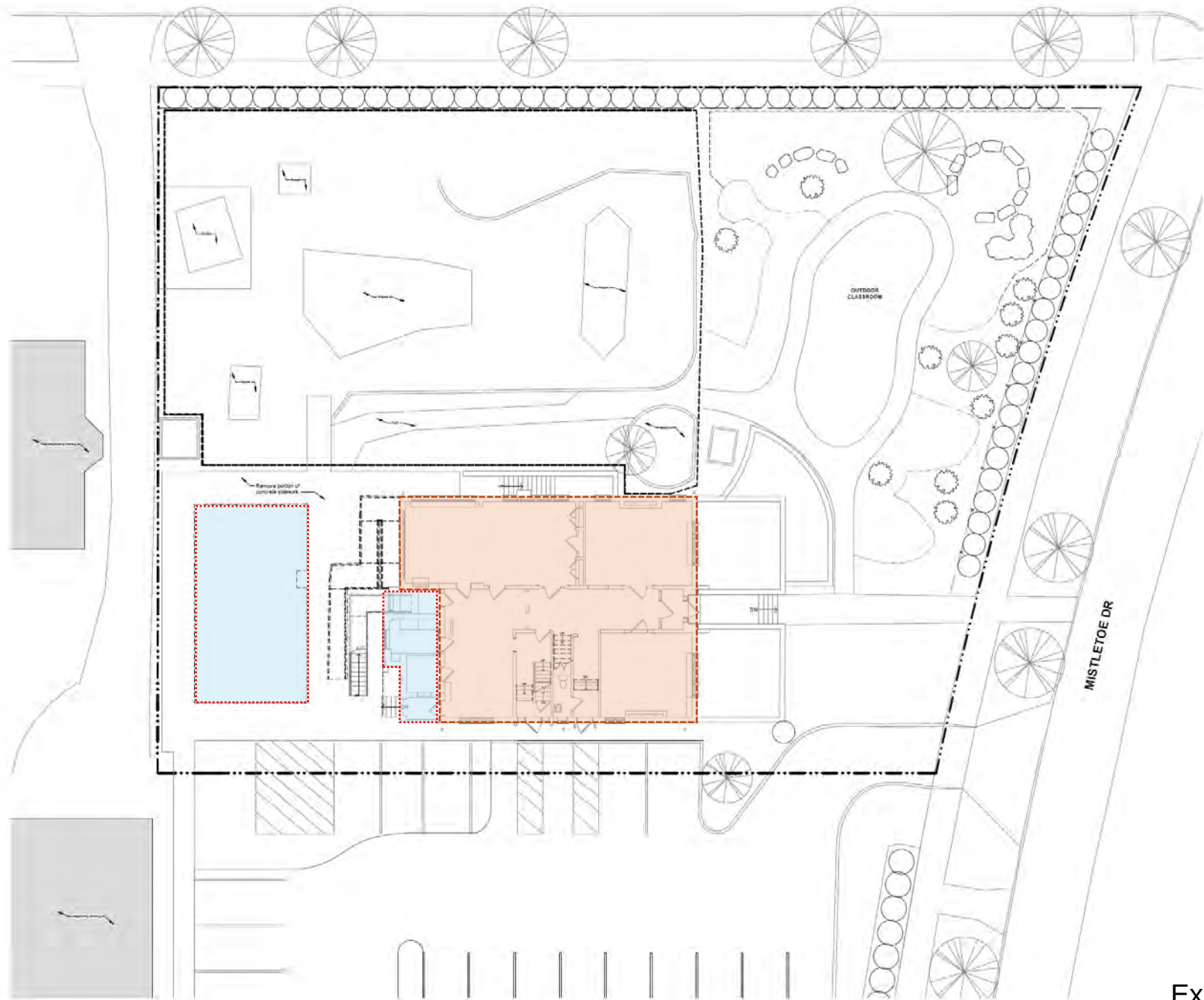
Project Site
**MISTLETOE
DR**

District Location Map



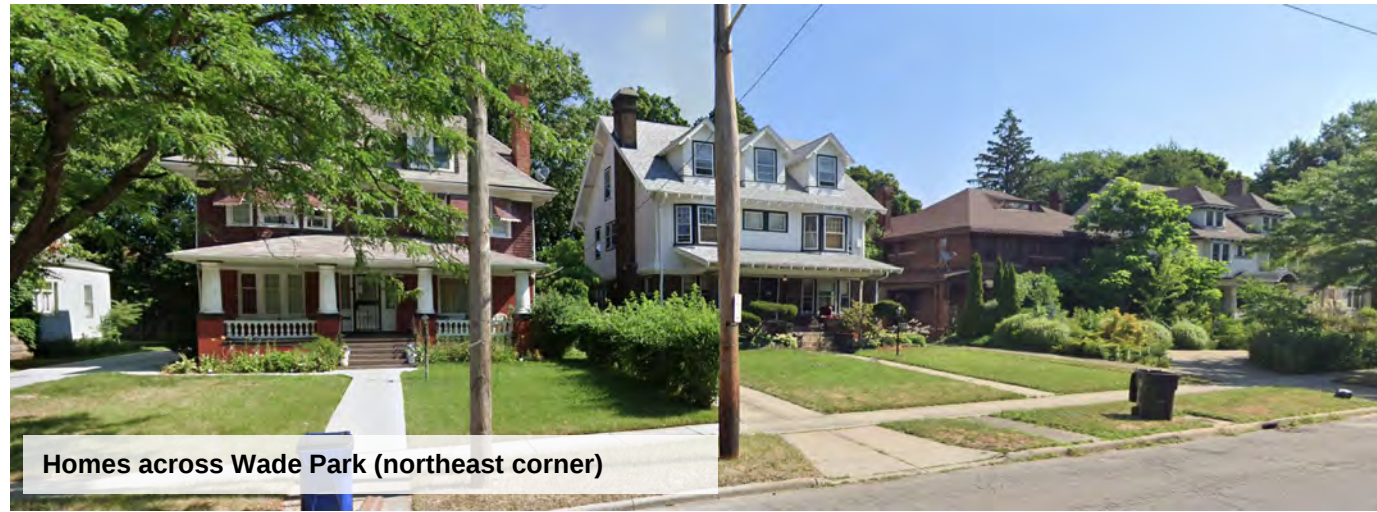
Site Context Plan







Homes across Wade Park (north)



Homes across Wade Park (northeast corner)



Homes adjacent to project on Wade Park (west)



Southeast Corner of Magnolia and Mistletoe

Nearby Buildings



Music School Settlement

Elements to be Demolished





Music School Settlement

Addition Footprint



Building Exterior

Exterior Materials and Features:

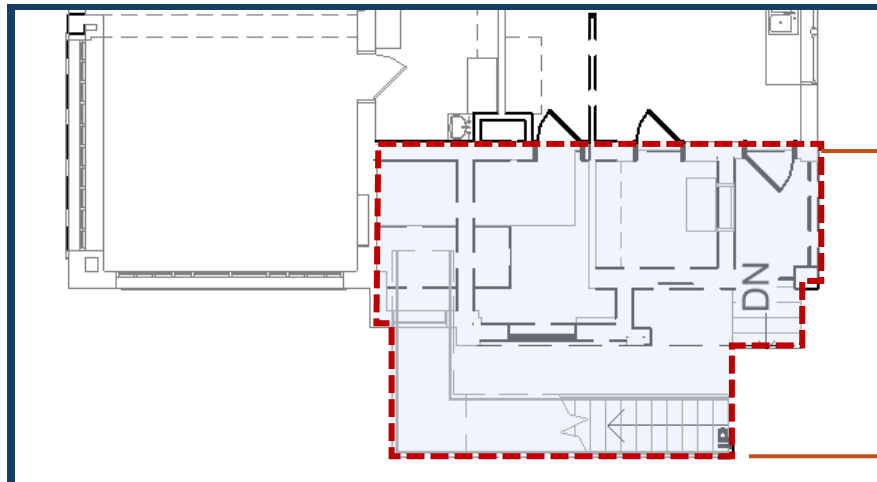
- Brick masonry exterior
- Existing wood windows
- Mansard roof with dormers
- Enclosed porch



Addition Removal

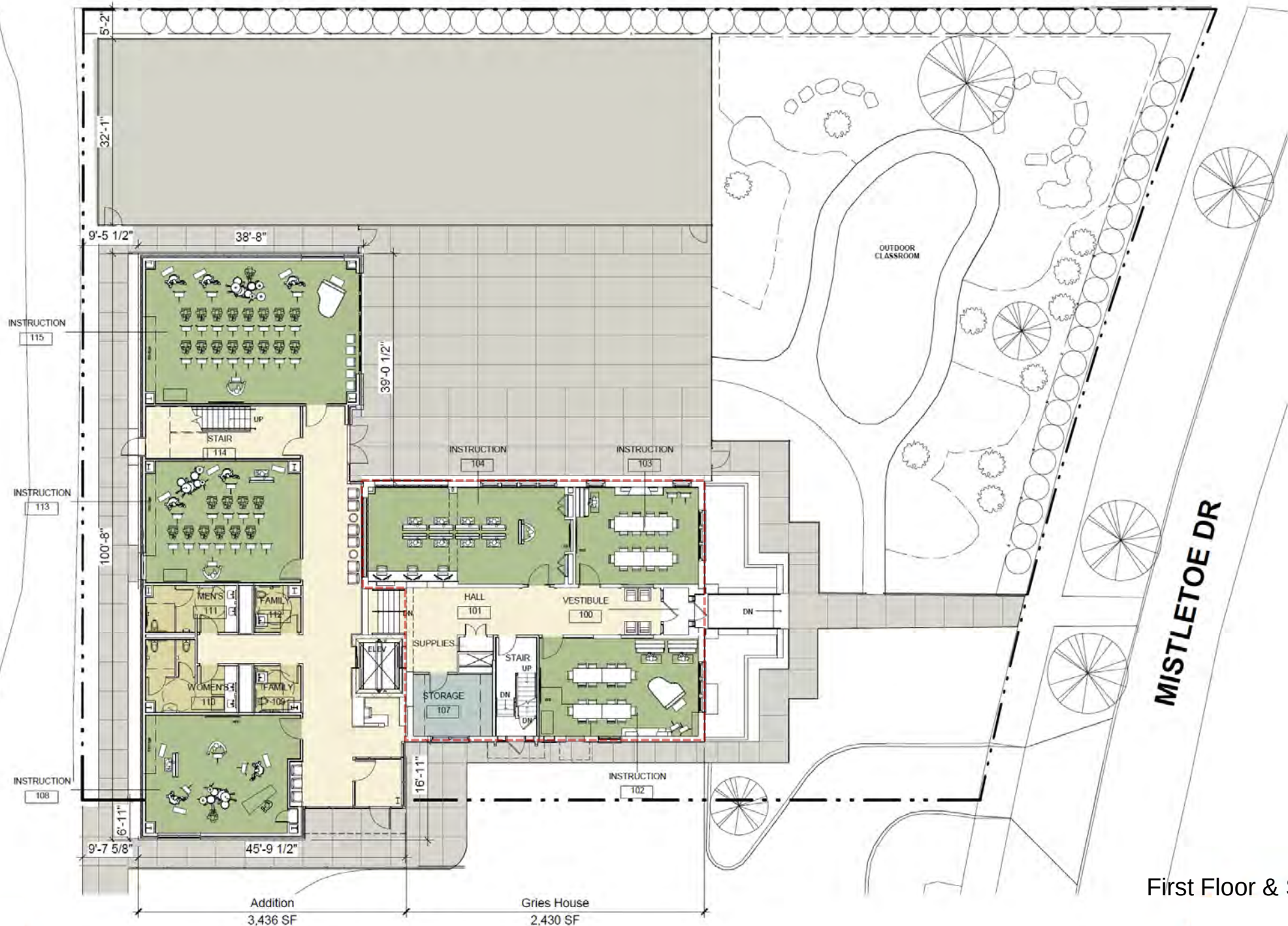
Materials and Features:

- Brick masonry exterior
- Shorter in height than the historic structure
- Added for egress

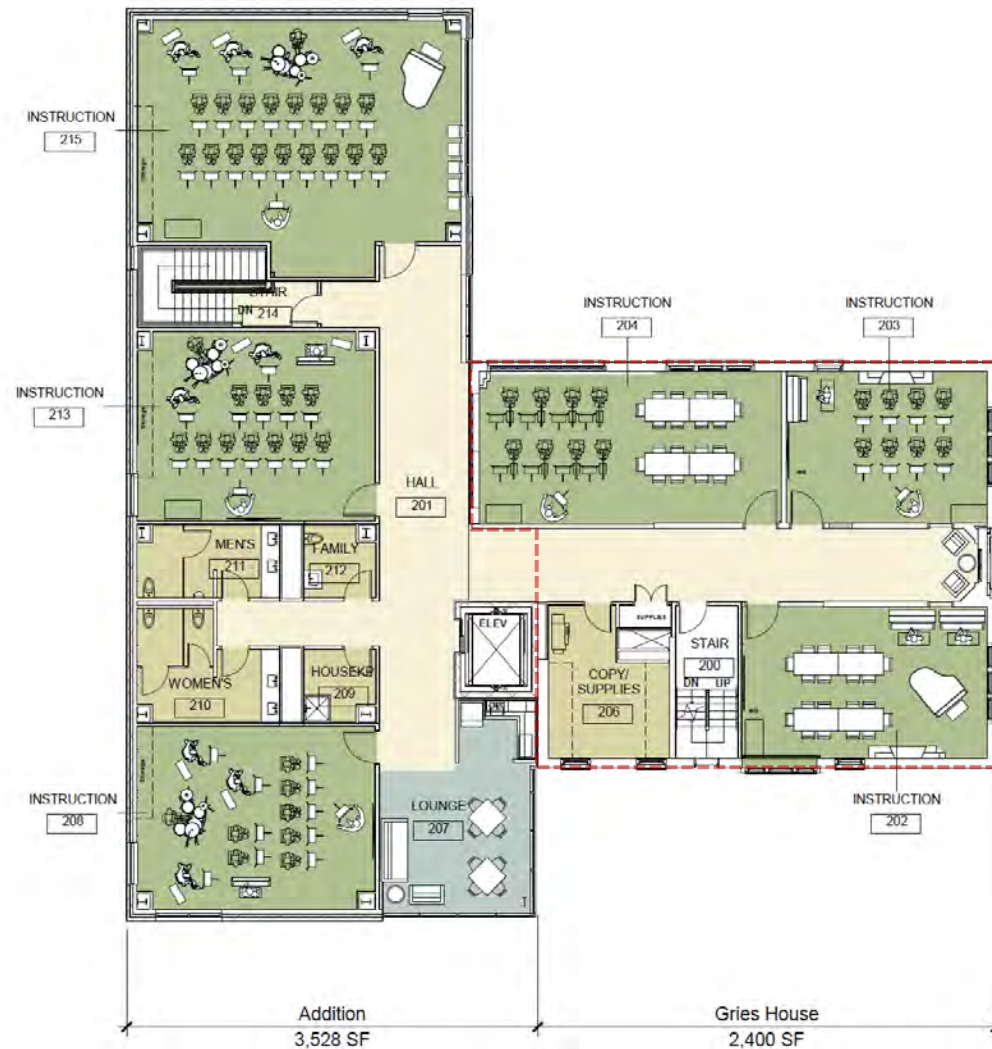


Later addition and modified portions of the structure to be removed.

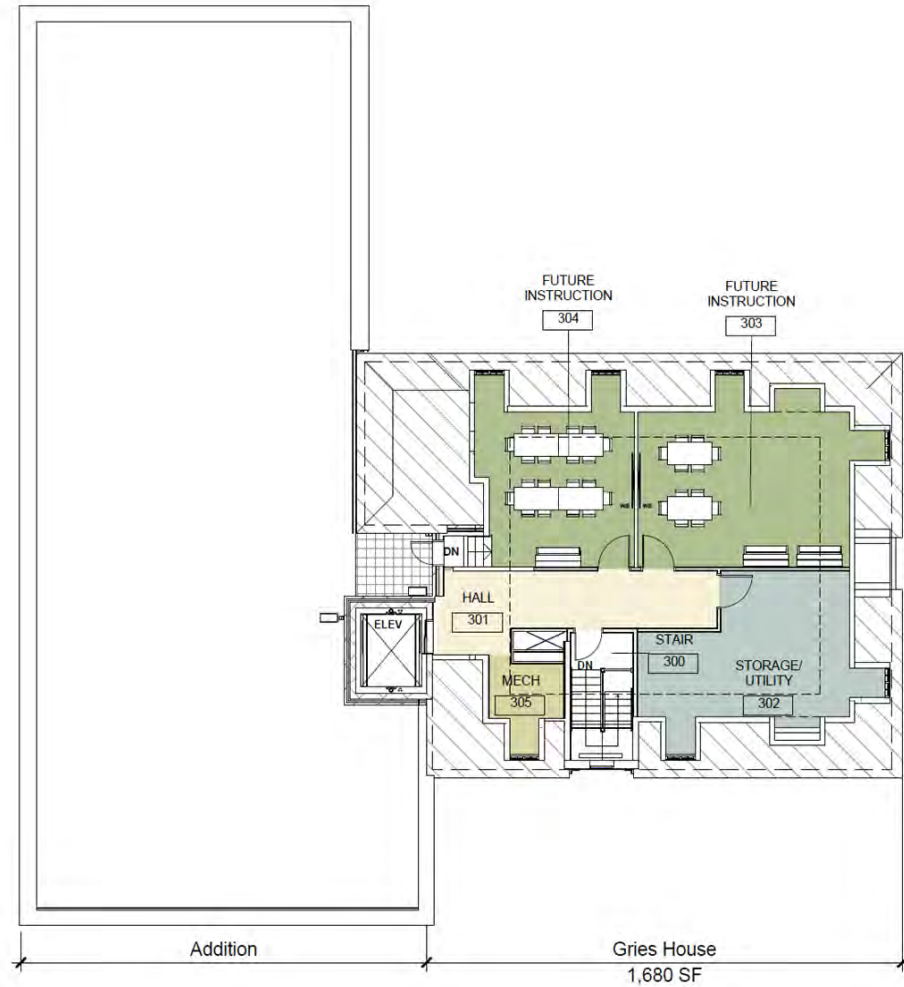


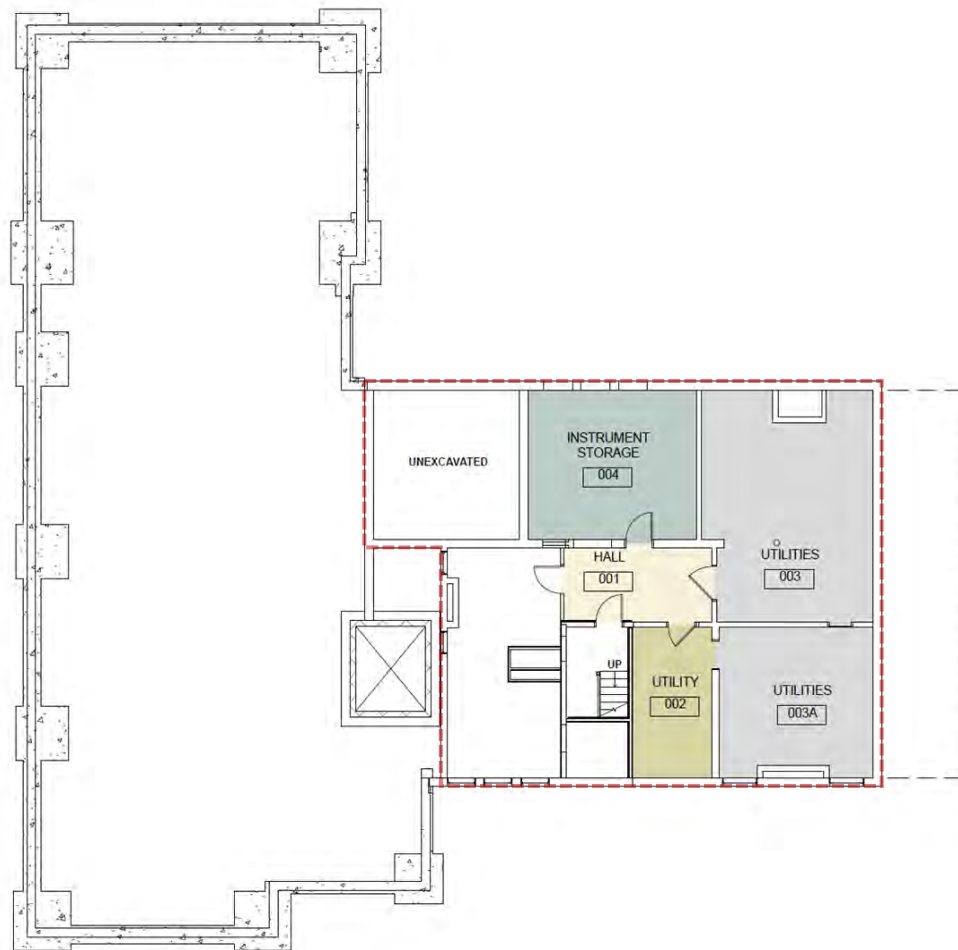


First Floor & Site Plan



Second Floor Plan





Burke Mansion

Early Childhood

Gries House



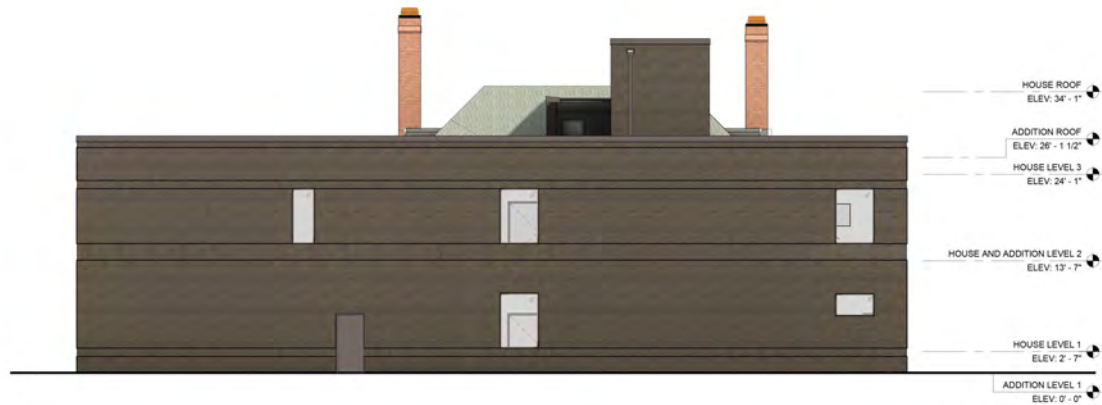
View of campus looking west



View from South of new Entry



View from North of Music Patio and Playground



4 WEST ELEVATION
A-201



3 SOUTH ELEVATION
A-201



2 EAST ELEVATION
A-201



1 NORTH ELEVATION
A-201



Proposed brick at
Burke Mansion



Proposed brick at
Early Childhood



Proposed brick at
Gries House

Materials

Addition:

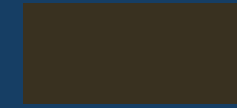
- Hebron Brick Company
Onyx Ironspot Smooth
- New Storefront windows basis of design:
Kawneer Trifab 451T
- Coping – Metalera Aged Bronze

Existing House:

- Replacement brick to be determined, color to match existing house
- Replacement dormer window basis of design:
Pella Traditional Reserve,
wood clad aluminum window



Addition brick



Aged Bronze

Addition Coping color

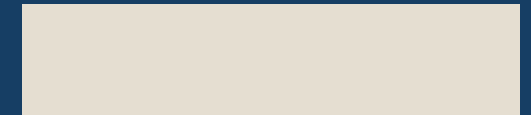


Existing brick



SEA WOLF

Addition storefront finish



House trim and window color



Trim and new window color on house to match building A, B, and C