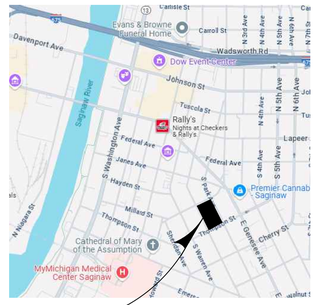
ADDITIONS & RENOVATIONS FOR:

EAST SIDE SOUP KITCHEN + HIDDEN HARVEST = The hunger solution CENTER [Building Expansion Project]

SAGINAW, MICHIGAN



LOCATION MAP

ARCHITECT:

TSSF ARCHITECTS, INC.

ARCHITECTS INTERIORS PLANNERS

122 N. WASHINGTON AVENUE SAGINAW , MICHIGAN

CIVIL

MLR Engineering

CIVIL ENGINEERING & CONSULTING SERVICES

134 S. Main Street, Suite 1, Freeland, Michigan 48623

Phone: (989)239-2384

www.mlrengineering.com

STRUCTURAL:

SNYDER & STALEY ENGINEERING, P.L.C.

CONSULTING ENGINEERS

3085 BAY ROAD, SUITE 6

SAGINAW, MI 48603

PH: (989) 797-1710 FX: (989) 797-1715

MECHANICAL / ELECTRICAL

MACMILLAN ASSOCIATES CONSULTING ENGINEERS

714 EAST MIDLAND STREET BAY CITY, MICHIGAN 48706

(989) 894-4300 WWW.MACMILLANASSOCIATES.COM SINCE 1963

FOOD SERVICE

Culinary Products, Inc.

160 East Morley Drive

Saginaw, Michigan 48601

989-754-2457

989-754-5640 Fax

GENERAL NOTES

1. FIELD VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK.
2. PLAN DIMENSIONS ARE TO FACE OF BASIC WALL MATERIAL (GYPSUM BOARD, PLASTER, OR CMU) AND DO NOT INCLUDE THICKNESS OF FINISH MATERIAL (CERAMIC TILE, PANELING, ETC.). AT AREAS WHERE GYP. BD. IS ADHERED TO CMU, THE DIMENSION IS TO THE CMU.
3. ENCAPSULATE ARCHITECTURAL, MECHANICAL, OR ELECTRICAL "BOXES" RECESSED IN FIRE RATED WALLS (I.E., ELECTRICAL AND COMMUNICATION PANELS, ALARM PANELS, FIRE EXTINGUISHER CABINETS, GAS VALVE SHUT-OFF BOXES, ETC.)
4. EXTEND ALL PARTITIONS TIGHT TO DECK UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH FLOORS, CORRIDOR WALLS WITH U.L. FIRE RATED MATERIAL. SCHEDULE INSPECTION OF CONCEALED AREA PRIOR TO INSTALLATION OF CEILING SYSTEM.
   1.) AT 50% COMPLETION
   2.) AT PROJECT FINISH, INSPECTION WITH BUILDING INSPECTOR
6. PROVIDE POLYURETHANE SEALANT AT ALL JUNCTURES OF DISSIMILAR MATERIALS (DOOR FRAMES, COUNTERTOPS, ETC.)
7. ALL CUTTING AND PATCHING IS THE RESPONSIBILITY OF THE TRADE REQUIRING THE WORK.
8. PROVIDE BLOCKING FOR ALL WALL HUNG EQUIPMENT AS REQUIRED. BLOCKING SHALL BE NON-COMBUSTIBLE
9. NO SMOKING IS ALLOWED ANYWHERE INSIDE OF THE BUILDING OR ON THE GROUNDS
10. THE ARCHITECT DOES NOT HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, IS NOT RESPONSIBLE FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK; AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THOSE DOCUMENTS PREPARED BY THE ARCHITECT.
11. ALL CONTRACTORS SHALL VISIT THE SITE AND AQUAINT THEMSELVES WITH THE CONDITIONS UNDER WHICH THE CONTRACT WILL BE PERFORMED.
12. PROVIDE 2x FIRE BLOCKING AT CONCEALED SPACES OF STUDS AND FURRING SPACES HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET AND VERTICALLY AT CEILING / FLOOR LEVELS.
13. FIRE BLOCKING SHALL BE INSTALLED 20 FEET O.C. IN CONCEALED EXTERIOR ELEMENTS SO NO AREA IS GREATER THAN 100 S.F.
14. PORTABLE FIRE EXTINGUISHERS (F.E.) SHALL BE PROVIDED IN BUILDINGS DURING CONSTRUCTION.
15. CONTRACTOR AND ALL SUBS SHOULD BID FROM FULL SET. IT IS THE RESPONSIBILITY OF EACH TRADE TO VERIFY THEY HAVE NOT MISSED ANYTHING.
16. UNDER NO CIRCUMSTANCE ARE DRAWINGS TO BE SCALED.

DRAWING INDEX:

COVER Title Sheet, Drawing Index, General Notes, & Abbreviations

CIVIL

C1.0 Survey plan with Aerial
C1.1 Topographical Survey Plan
C1.2 Demolition Plan
C2.0 Site Plan – Thompson Street Abandonment
C2.1 Site Plan
C2.2 SESC Plan
C2.3 Traffic Plan – Stacking
C2.4 Traffic Plan – Semi
C2.5 Traffic Plan – Box Truck #1
C2.6 Traffic Plan – Box Truck #2
C3.0 Grading Plan
C3.1 Tributary Plan
C4.0 Site Details

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A0.1 Code Review & Reference Floor Plan
A0.2 General Information, Wall Types, & Project Sign
A1.0 Site Plan & Sidewalk Detail
A1.1 Site Details
A1.2 Landscape Plan, Schedule, and Details
D2.0 Demolition Plan
A2.0 Floor Plan, Wall Types, Plan Details
A2.1 Plan Details Continued, Drain Detail
A3.0 Door & Finish Schedule, Door Details
A4.0 Roof Plan & Details
A5.0 Exterior Elevations
A6.0 Building Sections
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A7.0 Wall Sections
A7.1 Wall Sections
A7.2 Wall Sections
A9.0 Reflected Ceiling Plan

STRUCTURAL

S0.1 Structural Specifications & Schedules
S1.0 Foundation Plan & Details
S1.1 Roof Framing & Schedules
S2.0 Details
S2.1 Details

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M1.0 Sanitary & Vent Piping Demolition Plan
M1.1 Domestic Demolition Plan
M1.2 H.V.A.C. Demolition Plan
M2.0 Sanitary & Vent Piping Revisions Plan
M2.1 Domestic & Natural Gas Revisions Plan
M2.2 H.V.A.C. Revisions Plan
M2.3 Mechanical Roof Plan
M3.0 Mechanical Notes, Details and Schedules
M3.1 Mechanical Symbols and Details
FP1.0 Fire Protection Plan

ELECTRICAL

SE1.0 Electrical Site Plan
E1.0 Electrical Demolition
E2.0 Lighting Plan
E2.1 Power and Systems Plan
E2.2 Roof Power Plan
E3.0 Panel Schedule
E3.1 Panel Schedule
E3.2 Existing and New Riser Diagram
E3.3 Electrical Symbols, Notes & Details
E4.0 Emergency Lighting Plan

FOOD SERVICE EQUIPMENT

FS1 Food Service Equipment Plan
FS1P Food Service Equipment Plumbing Requirements
FS1E Food Service Equipment Electrical Requirements
FS2PE Food Service Equipment, Plumbing & Electrical Requirements

ISSUED FOR CONSTRUCTION
DATE: July 3, 2025
PROJECT NO. 2154

SURVEY PLAN WITH AERIAL

GRAPHIC SCALE

0 15 30 60

(IN FEET)
1 inch = 30 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	EXISTING MANHOLE / CATCHBASIN
	EXISTING MANHOLE
	EXISTING HYDRANT
	EXISTING VALVE
	EXISTING SANITARY SEWER
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	EXISTING WATERMAIN
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	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
	EXISTING TRANSFORMER PAD

PROPERTY DESCRIPTION

Part of 940 E. Genesee, Description per Warranty Deed recorded in Liber 2269, Page 1911:
the following described premises situated in the City of Saginaw, County of Saginaw and State of Michigan, to wit:
Lot 10, 11, 12, 13, 14, 15, 16, 17 and 18, inclusive, of DEMBOIS' SUBDIVISION of Block 9 of Glasby, Gallagher and Little's Addition to the City of East Saginaw, now a part of the City of Saginaw, Saginaw County, Michigan, according to the plat thereof recorded in Liber 38 on Page 209, Saginaw County Records.
Tax Code Number: 06 0097-000

Part of 940 E. Genesee, Description per Quit Claim Deed recorded in Liber 2269, Page 608:
the following-described premises situated in the City of Saginaw, County of Saginaw, State of ***Illinois***, and described as follows:
--- Lots 19, 20, 21 and 22, DEMBOIS' SUBDIVISION of Block 9, Glasby, Gallagher and Little's Addition, according to the plat thereof recorded in Liber 38 on Page 209, Saginaw County Records, subject to easements, restrictions, rights-of-way and mineral rights of record or in common use ---
Property Address: 329 South 4th Avenue, Saginaw, Michigan
Tax Code Number: 06 0098-000
NOTE: ***Illinois*** should read ***Michigan***

Part of 940 E. Genesee, Description per Warranty Deed recorded in Liber 2270, Page 1346:
the following-described premises situated in the City of Saginaw, County of Saginaw, State of Michigan, and described as follows:
---Lots 23, 24, 25 and 26, DEMBOIS' SUBDIVISION of Block 9, Glasby, Gallagher and Little's Addition, according to the plat thereof recorded in Liber 38 on Page 209, Saginaw County Records, subject to easements, restrictions, rights-of-way and mineral rights of record or in common use ---
Property Address: 315 South 4th Avenue, Saginaw, Michigan
Tax Code Number: 06 0100-000

1014 E. Genesee, Description per Quit Claim Deed #2017032086:
The following lands situated in CITY OF SAGINAW, County of Saginaw, and State of Michigan, to wit:
LOT 2 EXC N 33.726 FT, LOT 3, NW'LY 16 1/2 FT OF LOT 4, NW'LY 16 1/2 FT OF LOT 13, LOTS 14,15 & 16 BLK 8 GLASBY GALLAGHER AND LITTLE'S ADDITION
Further identified as permanent parcel ID number 90-60-0-29-5000-000

Vacated Alley per Liber 2568, Page 2177:
The City of Saginaw Ordains:
Section 1. That the alley lying between East Genesee Avenue and South Fourth Street, be and same is hereby vacated.
Section 2. That there is hereby reserved in the alley vacated an easement for public utilities, cable TV and telecommunications.
Section 3. The official map of the City of Saginaw is hereby amended accordingly.
Section 4. This ordinance shall take effect on May 27, 2004.
Enacted: May 17, 2004.

** SURVEY DONE BY ROSENBROCK LAND SURVEYING, INC. **

MLR Engineering
CIVIL ENGINEERING & CONSULTING SERVICES
134 S. Main Street, Suite 1, Freeland, Michigan 48623
Phone: (989) 507-3454
www.mlrengineering.com

TSSF ARCHITECTS, INC.
ARCHITECTS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.M.R.
DATE 7/3/25
APPROVED

SHEET NO.
C1.0

PROJECT NO.
2154

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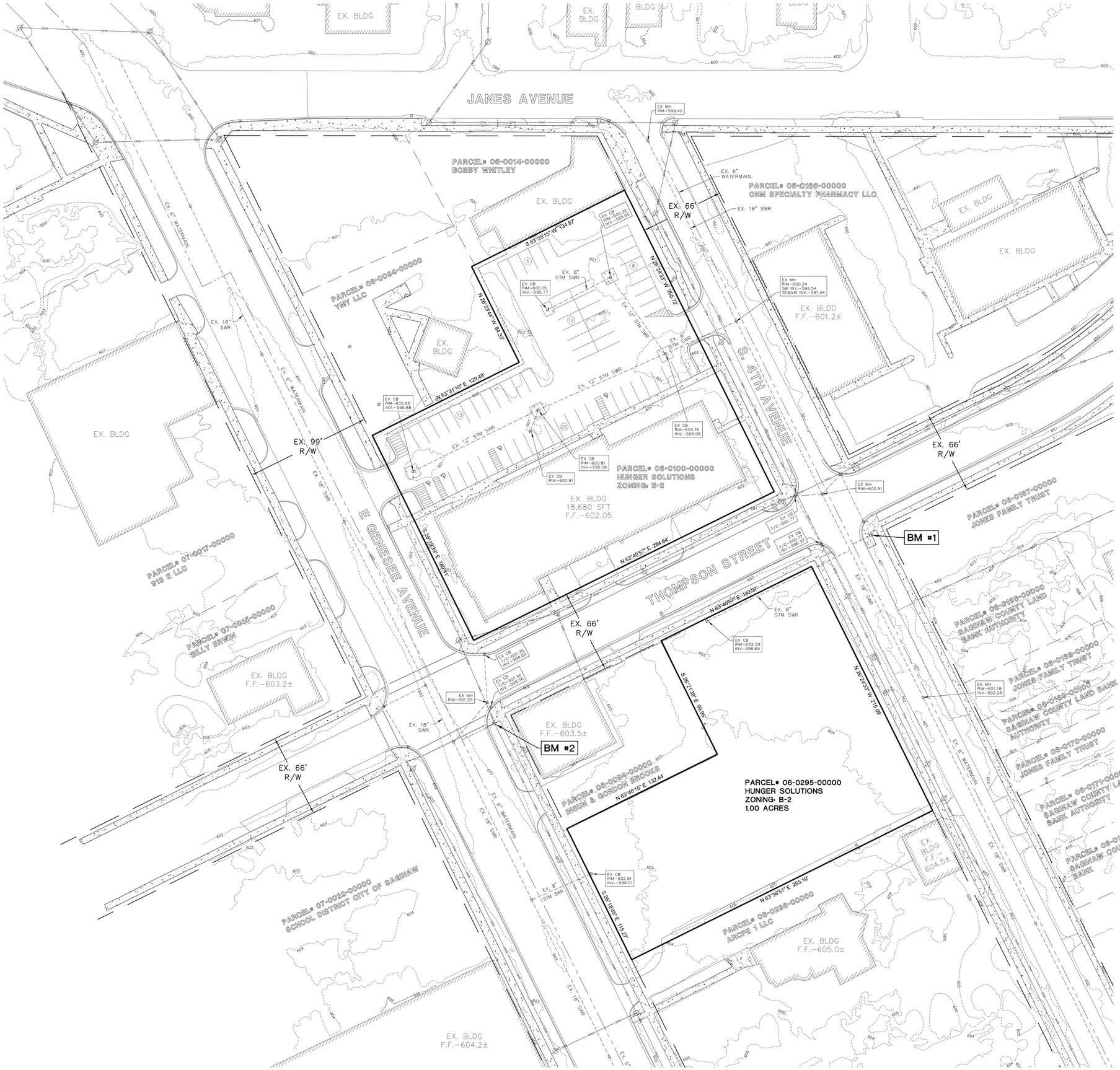

TOPOGRAPHICAL SURVEY PLAN

GRAPHIC SCALE

0 15 30 60

(IN FEET)
1 inch = 30 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	EXISTING MANHOLE / CATCHBASIN
	EXISTING MANHOLE
	EXISTING HYDRANT
	EXISTING VALVE
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	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
T	EXISTING TRANSFORMER PAD

BENCHMARKS

B.M. #1- TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF THOMPSON STREET AND SOUTH 4TH AVENUE INTERSECTION.
ELEV. 603.93 NAVD 88

B.M. #2- TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF EAST GENESEE AVENUE AND THOMPSON STREET INTERSECTION.
ELEV. 605.28 NAVD 88

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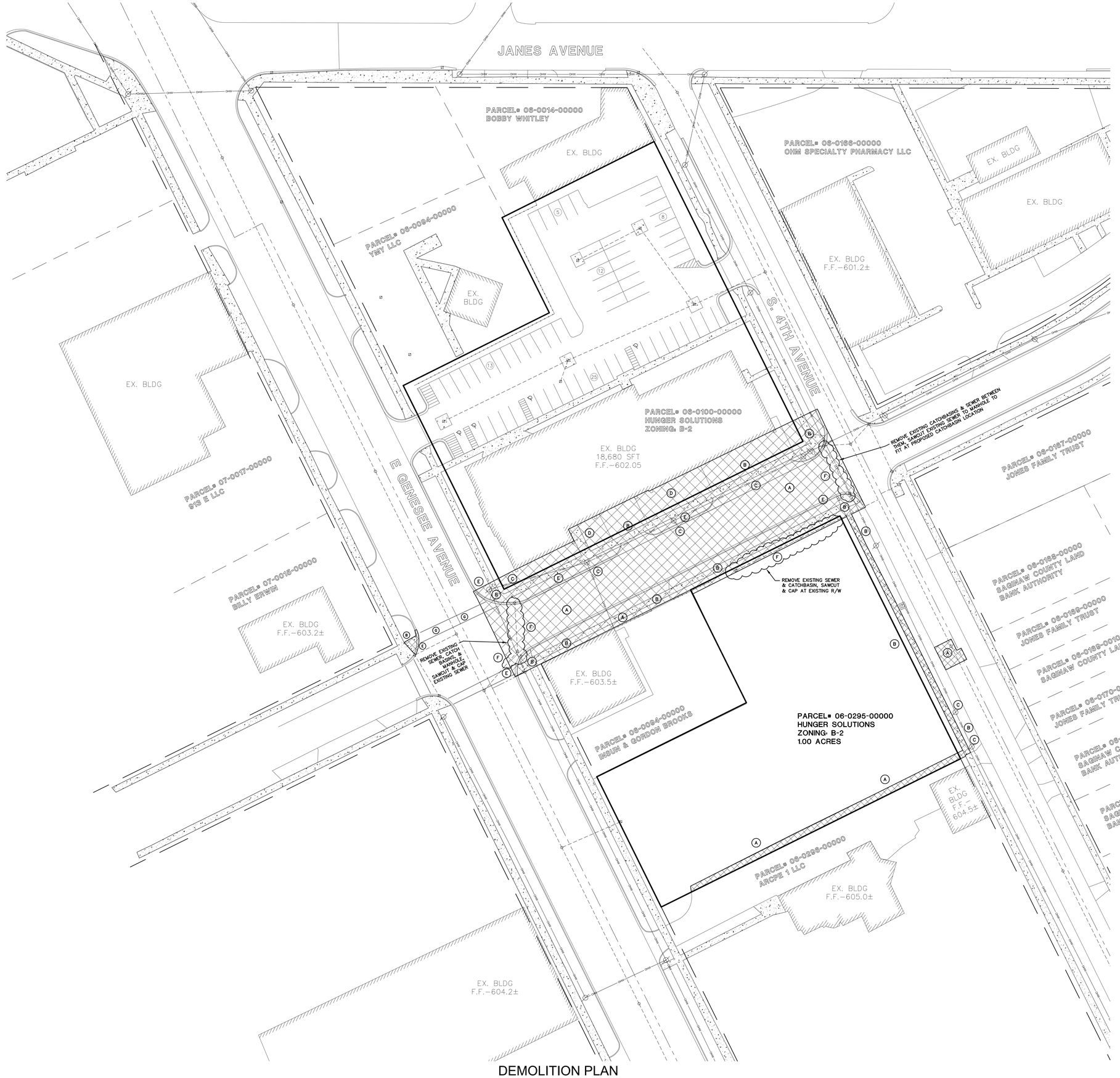

DEMOLITION PLAN

GRAPHIC SCALE

0 15 30 60

(IN FEET)
1 inch = 30 ft.

LOCATION MAP

LEGEND

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	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
T	EXISTING TRANSFORMER PAD

DEMO LEGEND

- (A) – SAWCUT & REMOVE EXISTING ASPHALT
- (B) – SAWCUT & REMOVE EXISTING CONCRETE
- (C) – RELOCATE EXISTING ELECTRIC
- (D) – REMOVE EXISTING LANDSCAPE
- (E) – SAWCUT & REMOVE EXISTING CURB
- (F) – REMOVE EXISTING SEWER
- (G) – REMOVE EXISTING CROSSWALK STRIPING

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SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.M.R.
DATE 7/3/25
APPROVED

SHEET NO.
C1.2

PROJECT NO.
2154

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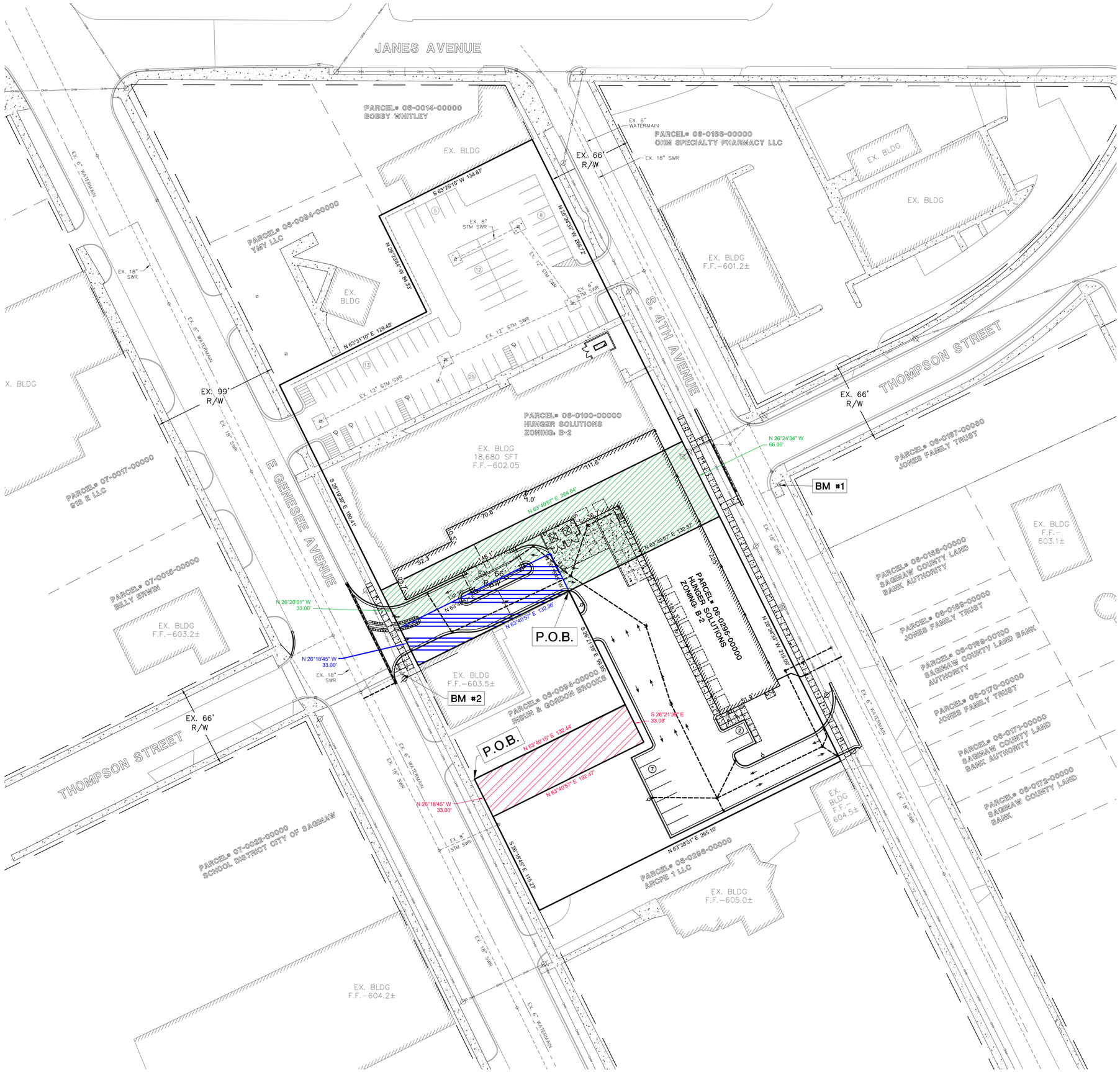

SITE PLAN - THOMPSON STREET ABANDONMENT

GRAPHIC SCALE

0 15 30 60

(IN FEET)
1 inch = 30 ft.

LOCATION MAP

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	EXISTING TRANSFORMER PAD
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATERMAIN
	PROPOSED LIGHT POLE
	PROPOSED DOWNSPOUT
	PROPOSED MODIFIED MOUNTABLE CURB
	VACATED R/W TO #06-0094-00000
	PROPOSED SWAP TO #06-0094-00000
	VACATED R/W TO HUNGER SOLUTIONS

BENCHMARKS

B.M. #1- TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF THOMPSON STREET AND SOUTH 4TH AVENUE INTERSECTION.
ELEV. 603.93 NAVD 88

B.M. #2- TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF EAST GENESEE AVENUE AND THOMPSON STREET INTERSECTION.
ELEV. 605.28 NAVD 88

PARCEL DESCRIPTIONS

VACATED R/W TO #06-0094-00000:
STARTING AT THE EXISTING NORTHWESTERLY PROPERTY CORNER OF PARCEL #06-0295-00000 AS POINT OF BEGINNING, THENCE S63°40'57"W, 132.36 FEET TO THE EASTERLY RIGHT OF WAY OF EAST GENESEE AVENUE; THENCE N26°18'45"W, 33.00 FEET ALONG SAID EASTERLY RIGHT OF WAY; THENCE N63°40'57"E, 132.36 FEET ALONG ABANDONED THOMPSON STREET CENTERLINE; THENCE S26°18'45"E, 33.00 FEET TO THE POINT OF BEGINNING.

PROPOSED PROPERTY SWAP TO PARCEL #06-0094-00000 FOR VACATED R/W:
STARTING AT THE SOUTHWESTERLY CORNER OF PARCEL #06-0295-00000, THENCE ALONG EAST GENESEE AVENUE WESTERL RIGHT OF WAY N26°18'45"W, 115.27 FEET TO THE POINT OF BEGINNING; THENCE N63°40'15"E, 132.44 FEET ALONG EXISTING PARCEL LINE, THENCE S26°21'39"E, 33.03 FEET; THENCE S63°40'57"W, 132.47 FEET TO EAST GENESEE AVENUE WESTERLY RIGHT OF WAY; THENCE N26°18'45"W, 33.00 FEET ALONG SAID RIGHT OF WAY TO THE POINT OF BEGINNING.

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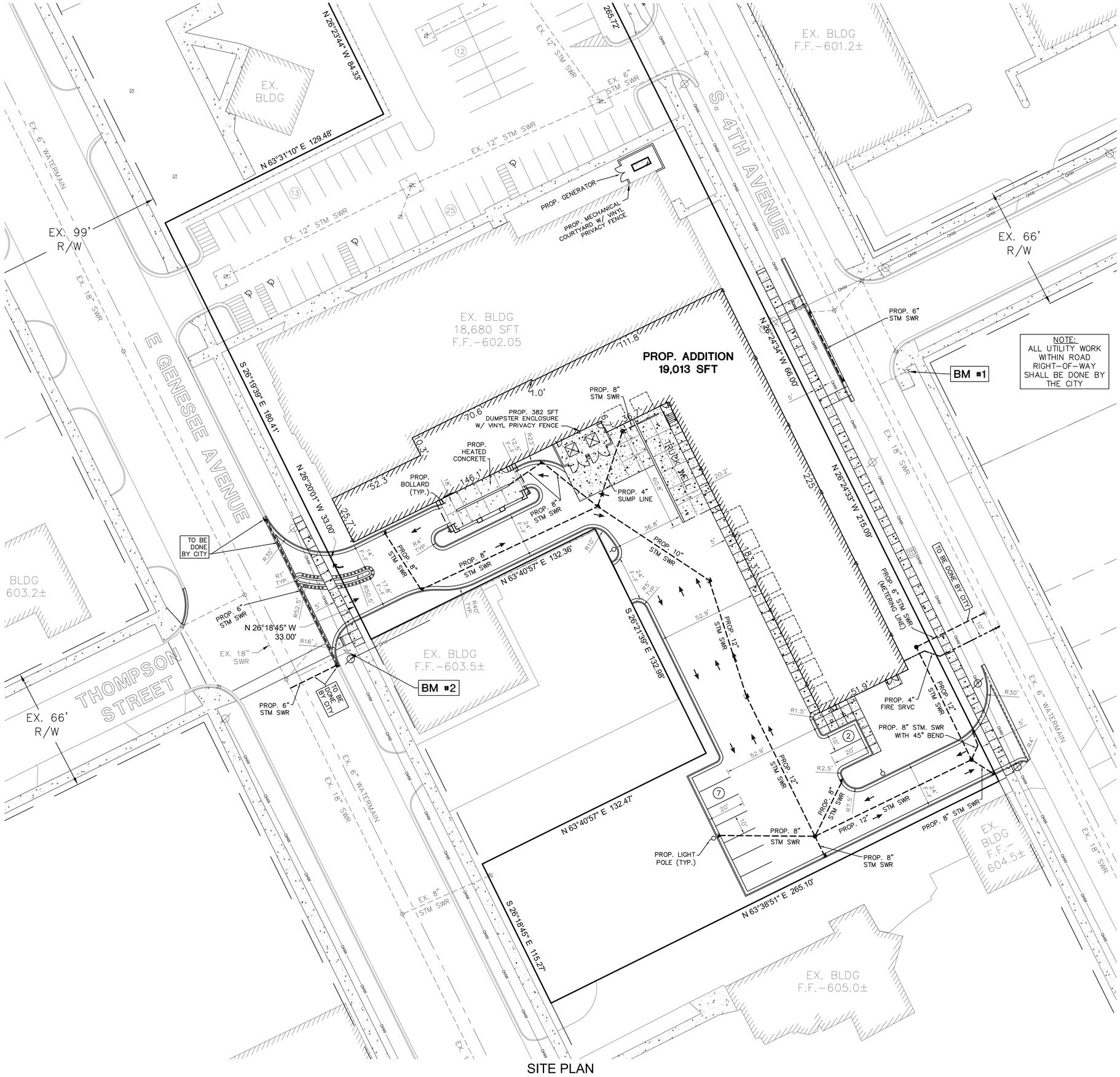
SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.M.R.
DATE 7/3/25
APPROVED

SHEET NO.
C2.0

PROJECT NO.
2154



SITE PLAN

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
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ELEV. 605.28 NAVD 88

DEVELOPMENT NOTES

SETBACKS -
ZONED - B-2

FRONT	SIDE	REAR
-	10'	-

PROPOSED LAND USE- FOOD SERVICE CENTER

PROPOSED SITE AREA: 1.31 ACRES

TRANSPORTATION: PRIVATE DRIVE & PARKING

SANITARY SEWER - EXISTING UTILITY WILL BE UTILIZED

WATER: EXISTING UTILITY WILL BE UTILIZED

FIRE: EX. FIRE HYDRANTS ALONG EAST GENESEE AVE. & 4TH AVE.

SIDEWALKS: PROPOSED 5' SIDEWALKS

GAS AND ELECTRIC: EXISTING PERIMETER UTILITIES AVAILABLE BY CONSUMERS ENERGY

FENCE AND WALLS: NONE PROPOSED

WETLAND: NONE

STORM WATER MANAGEMENT:
- 10 YEAR DESIGN
- PREVIOUS SITE USUAGE WAS 100% IMPERVIOUS
- 95% IMPERVIOUS FACTOR USED FOR ALLOWABLE DISCHARGE CALCULATIONS
- OUTLET TO 4TH AVENUE STM SWR RESTRICTED BY 6" METERING LINE & 3.186 CFS
- 919 CFT OF STORAGE PROVIDED IN PIPE AT 600.87 TOP OF STORAGE ELEVATION

FLOODPLAIN: OUTSIDE 100 YEAR FLOODPLAIN

REFUSE: PROPOSED ENCLOSED DUMPSTER

SIGNAGE - SIGNAGE TO BE PLACED ON PROPOSED BUILDING

LIGHTING - PROPOSED LIGHTPOLES

PARKING: ASPHALT SURFACE PROPOSED
WHOLESALE ESTABLISHMENTS- 1/1,700 SFT OF GROSS FLOOR AREA OR 1 FOR EACH EMPLOYEE, MAXIMUM OF 9 ADDITIONAL EMPLOYEES
REQUIRED = 9 SPACES, PROPOSED = 9 SPACES

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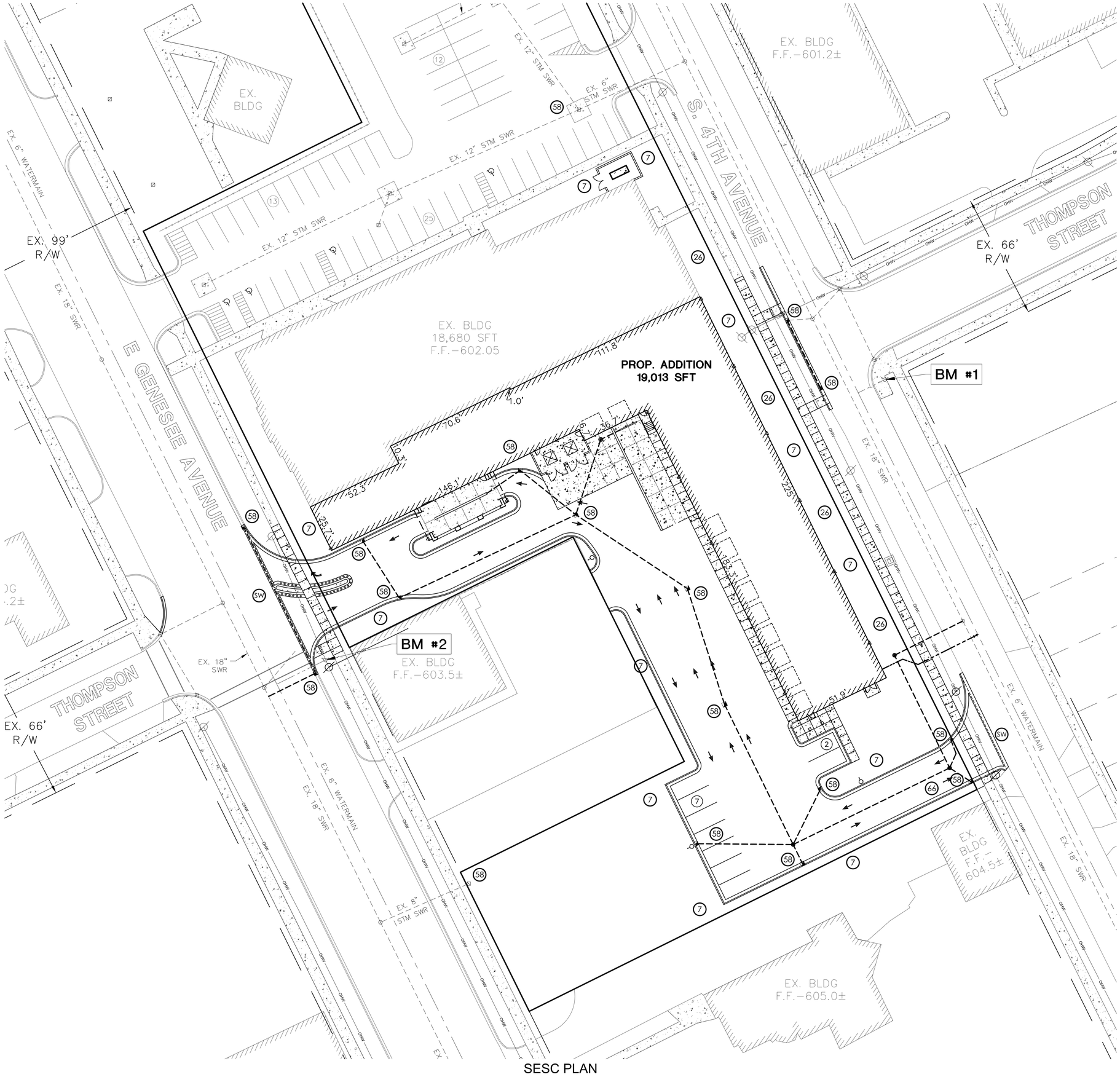

SESC PLAN

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 inch = 20 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
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	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
	EXISTING TRANSFORMER PAD
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATERMAIN
	PROPOSED LIGHT POLE
	PROPOSED DOWNSPOUT
	PROPOSED MODIFIED MOUNTABLE CURB

BENCHMARKS

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ELEV. 603.93 NAVD 88

B.M. #2- TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF EAST GENESEE AVENUE AND THOMPSON STREET INTERSECTION.
ELEV. 605.28 NAVD 88

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

7 Hydroseeding
EFFECTIVE ON LARGE AREAS. MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION UNTIL GRASS IS ROOTED. SHOULD INCLUDE PREPARED TOPSOIL BED.

26 Geotextile Silt Fence
USES GEOTEXTILE AND POSTS OR POLES AT 6'-0" MAXIMUM SPACING. MAY BE CONSTRUCTED OR PREPACKAGED. LOCATE AS NECESSARY. PERIODIC CLEANING OF MEASURE IS NECESSARY.

58 Storm Sewer Inlet Protection
USED WHERE SEDIMENT LADEN STORMWATER REQUIRES TREATEMENT BEFORE ENTERING STORMWATER SYSTEM. HANG FILTER FABRIC BAG INSIDE INLET, BENEATH THE GRATE. PERIODIC CLEANING OF MEASURE IS NECESSARY.

66 Temporary Access Road
AGGREGATE ARMORED AND STABILIZED ROADWAY WHICH ACTS AS A DEFINED POINT OF INGRESS AND EGRESS FROM A SITE WITH DISTURBED SOILS.

SW Street Sweeping
A SWEEPER SHALL BE USED DAILY TO REMOVE SEDIMENT TRACKED ONTO THE PAVEMENT. SWEEPERS MUST BE USED MORE FREQUENTLY, AS NEEDED, BASED ON SITE CONDITIONS.

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SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.M.R.
DATE 7/3/25
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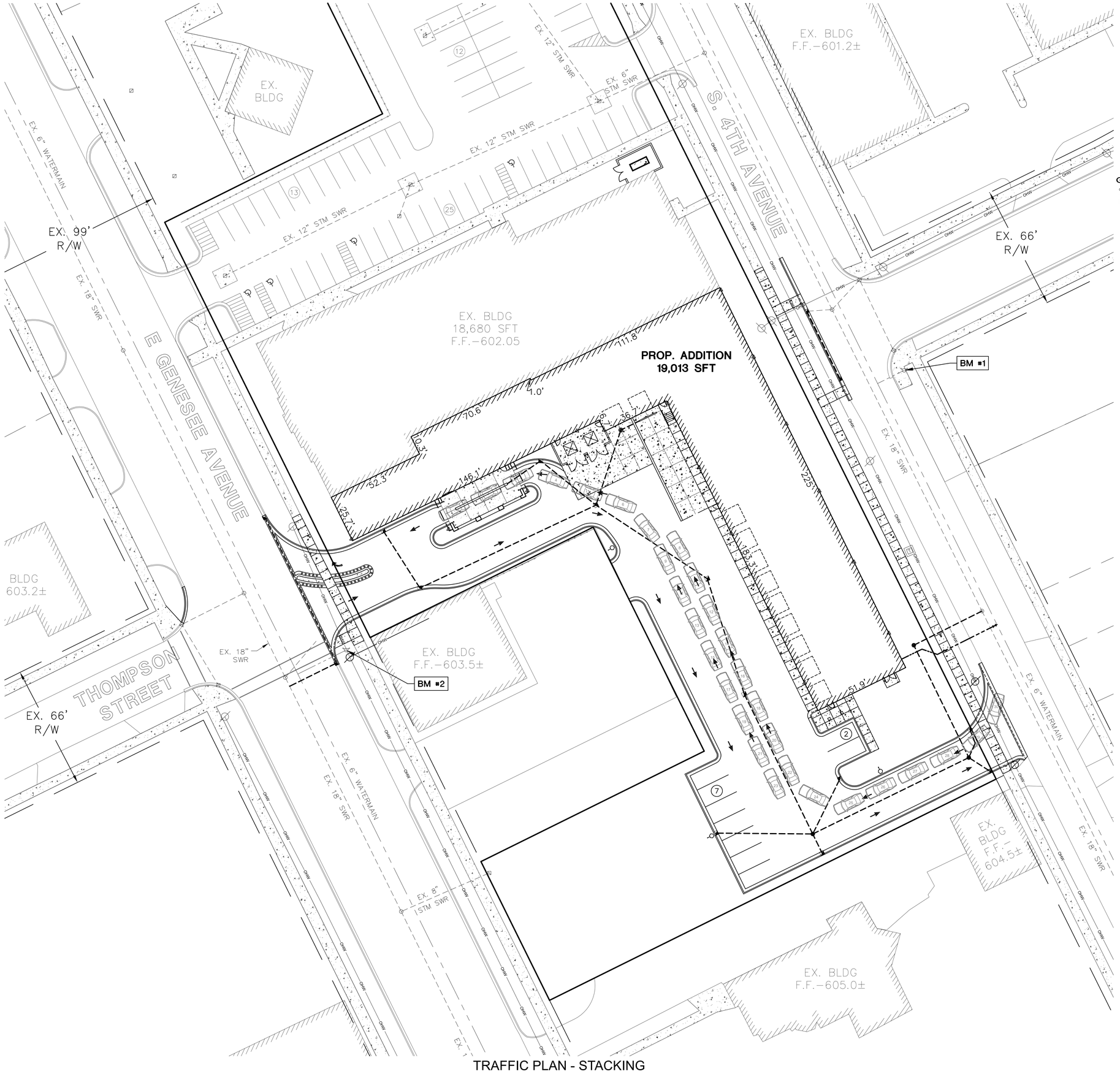

TRAFFIC PLAN - STACKING

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	EXISTING MANHOLE / CATCHBASIN
	EXISTING MANHOLE
	EXISTING HYDRANT
	EXISTING VALVE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	EXISTING CONTOUR
	EXISTING FENCE LINE
ELEC	UNDERGROUND ELECTRIC LINE
GAS	UNDERGROUND GAS LINE
TELE	UNDERGROUND TELEPHONE LINE
TV	UNDERGROUND CABLE T.V. LINE
OHW OHW	OVERHEAD ELECTRICAL WIRES
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	EXISTING SIGN
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ELEV. 605.28 NAVD 88

DEVELOPMENT NOTES

SETBACKS -
ZONED - B-2

FRONT	SIDE	REAR
–	10'	–

PROPOSED LAND USE– FOOD SERVICE CENTER

PROPOSED SITE AREA: 1.31 ACRES

TRANSPORTATION: PRIVATE DRIVE & PARKING

SANITARY SEWER – EXISTING UTILITY WILL BE UTILIZED

WATER: EXISTING UTILITY WILL BE UTILIZED

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WETLAND: NONE

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FLOODPLAIN: OUTSIDE 100 YEAR FLOODPLAIN

REFUSE: PROPOSED ENCLOSED DUMPSTER

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LIGHTING – PROPOSED LIGHTPOLES

PARKING: ASPHALT SURFACE PROPOSED
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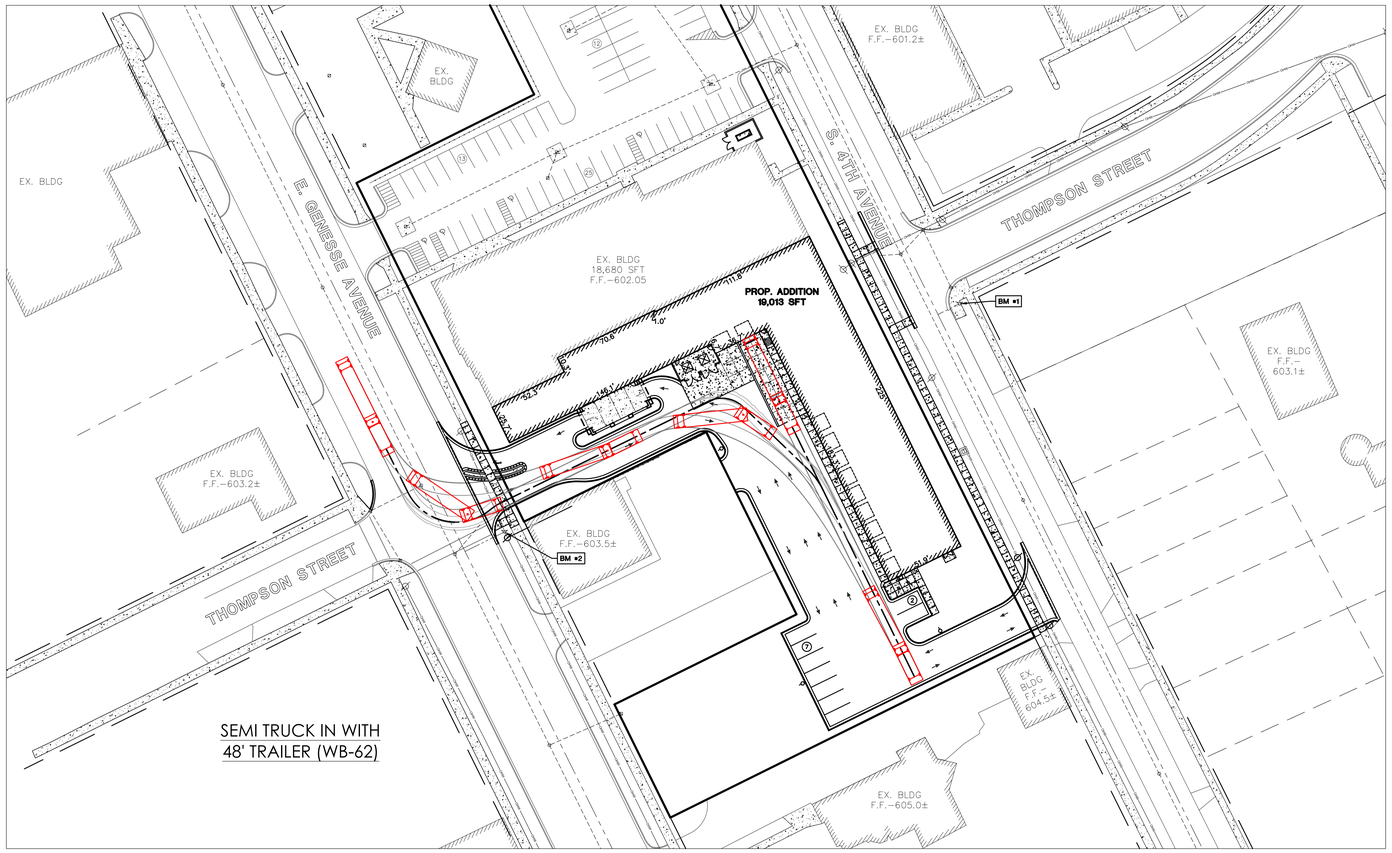

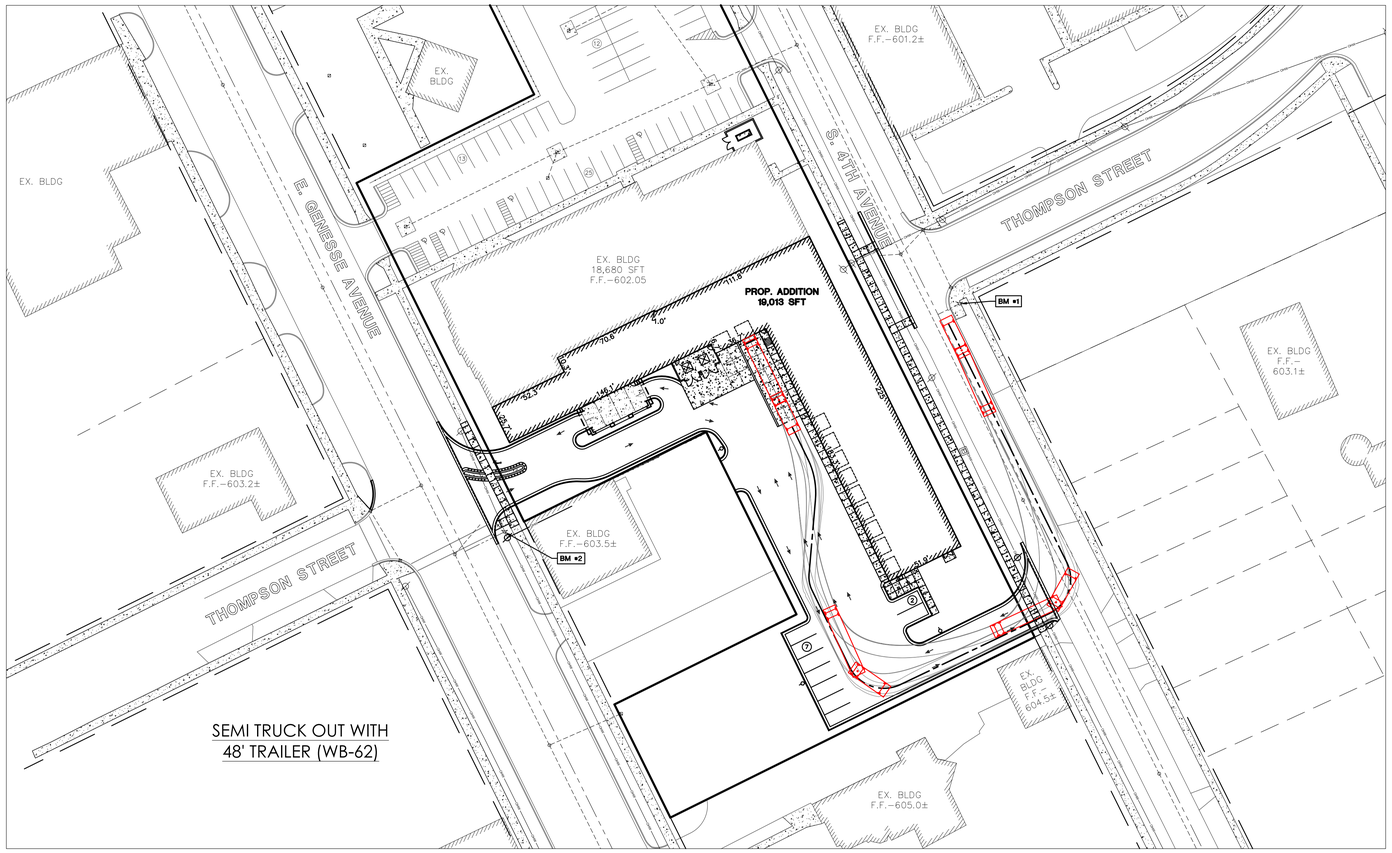

TRAFFIC PLANS - SEMI

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(IN FEET)
1 inch - 40 ft.

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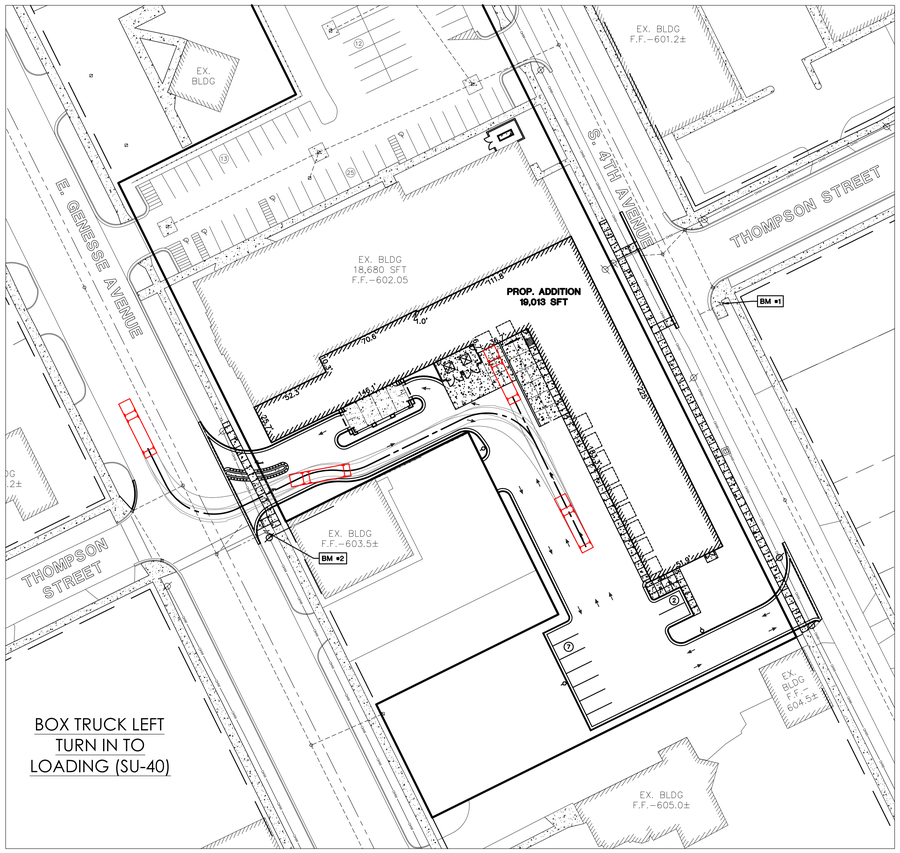
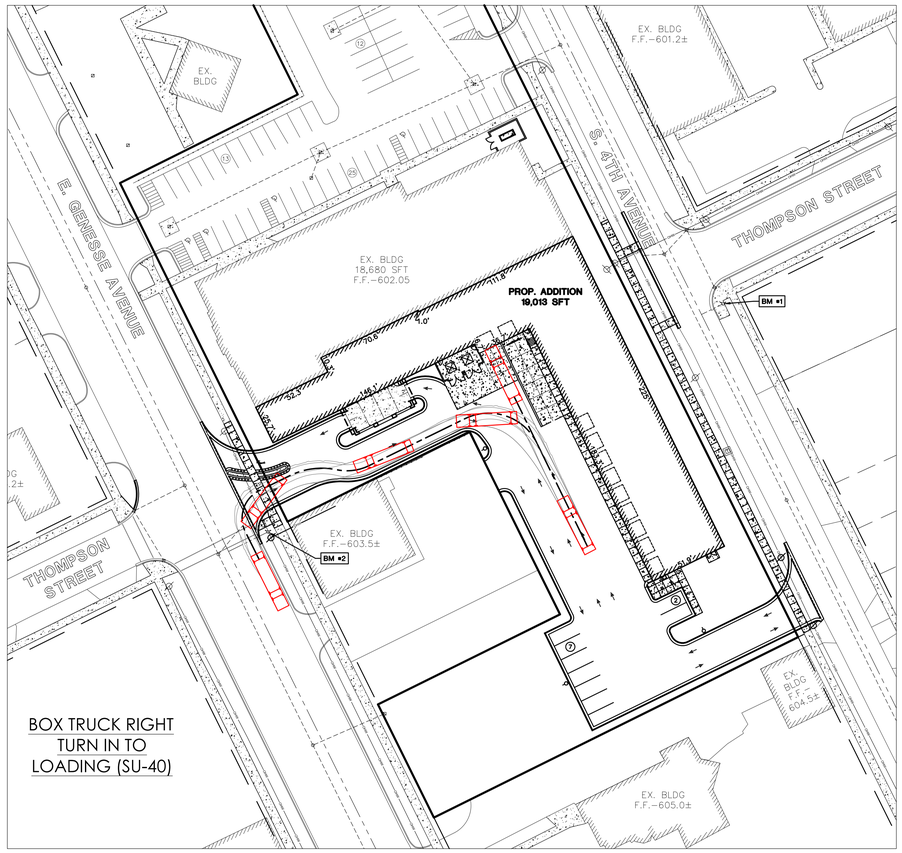


BOX TRUCK LEFT TURN IN TO LOADING (SU-40)



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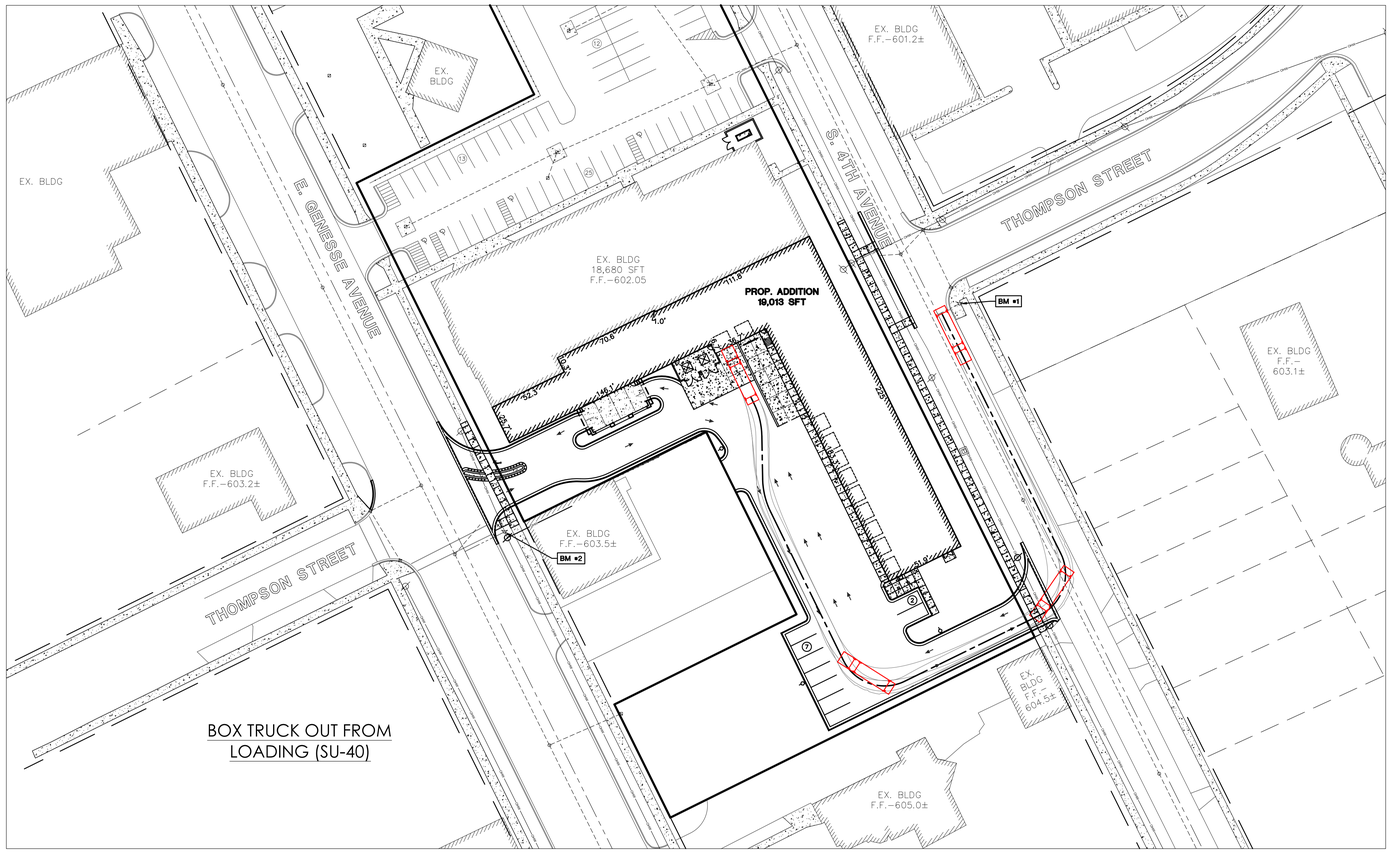

BOX TRUCK OUT FROM LOADING (SU-40)

TRAFFIC PLANS - BOX TRUCK #1

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

LOCATION MAP

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ELEV. 605.28 NAVD 88

DEVELOPMENT NOTES

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ZONED - B-2

FRONT	SIDE	REAR
–	10'	–

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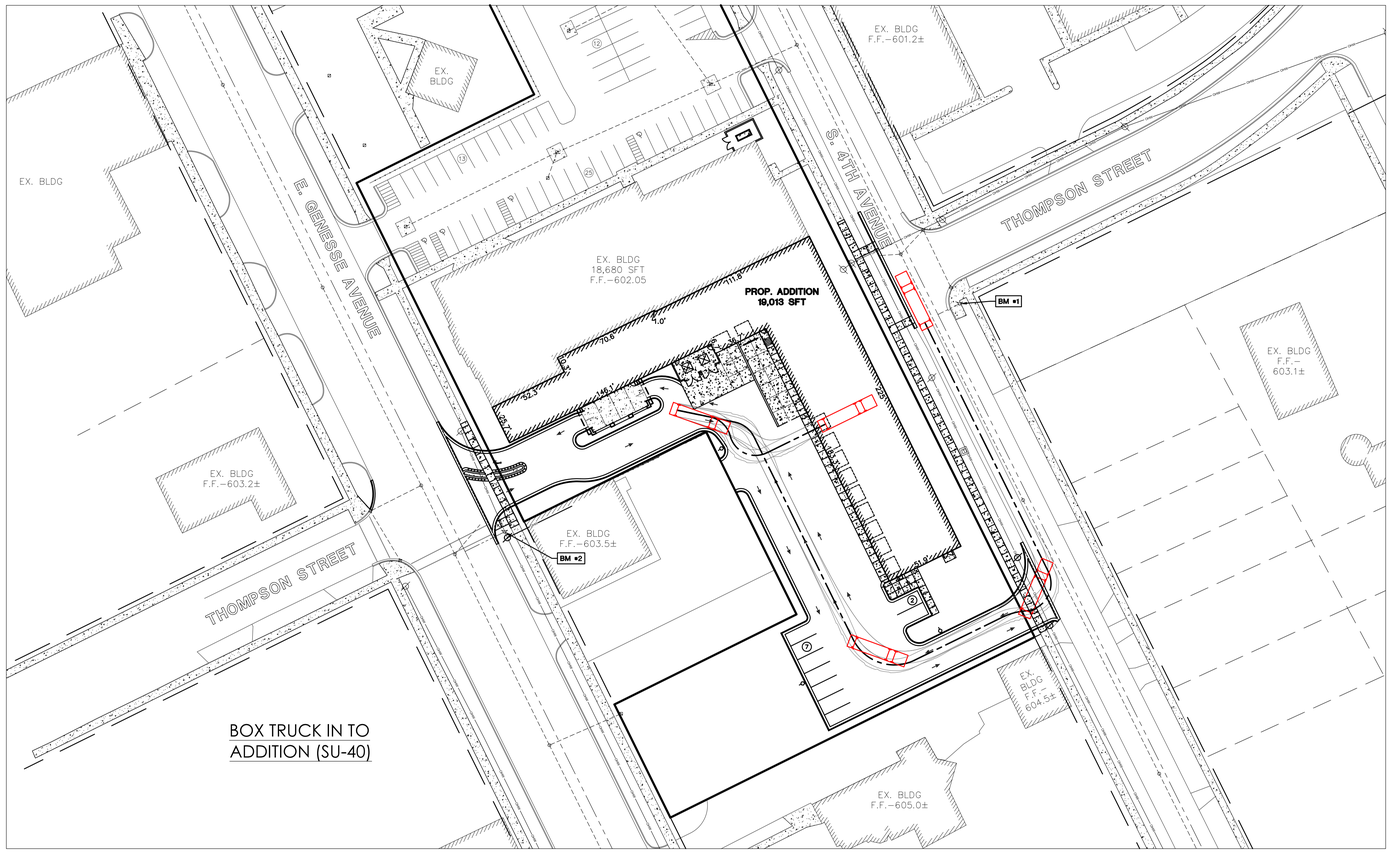
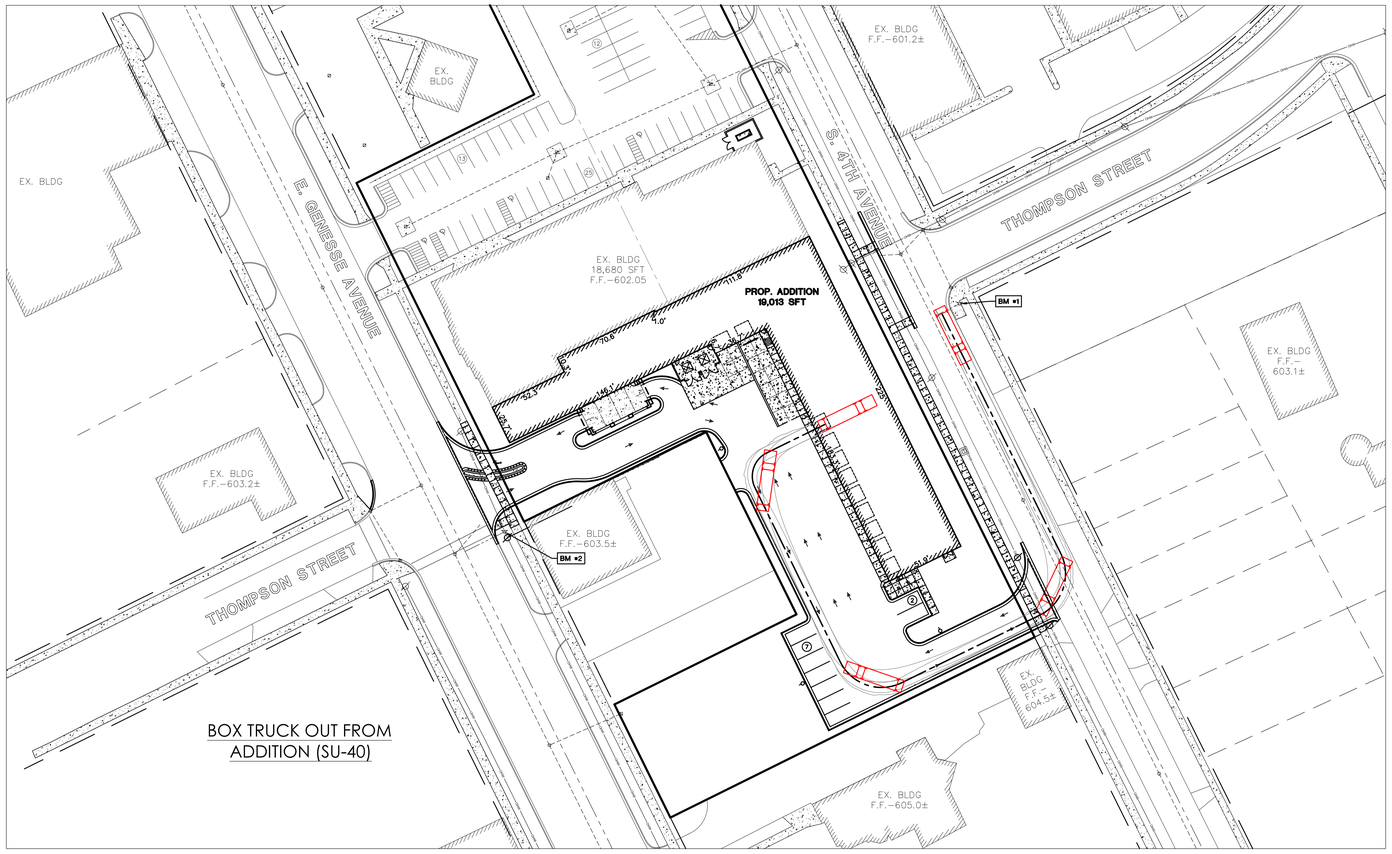


BOX TRUCK IN TO
ADDITION (SU-40)



BOX TRUCK OUT FROM
ADDITION (SU-40)

TRAFFIC PLANS - BOX TRUCK #2

GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 40 ft.

LOCATION MAP

LEGEND

⊕	MONUMENT / SECTION CORNER
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○	SET PROPERTY IRON
▨	EXISTING CATCHBASIN
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DEVELOPMENT NOTES

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ZONED - B-2

FRONT	SIDE	REAR
–	10'	–

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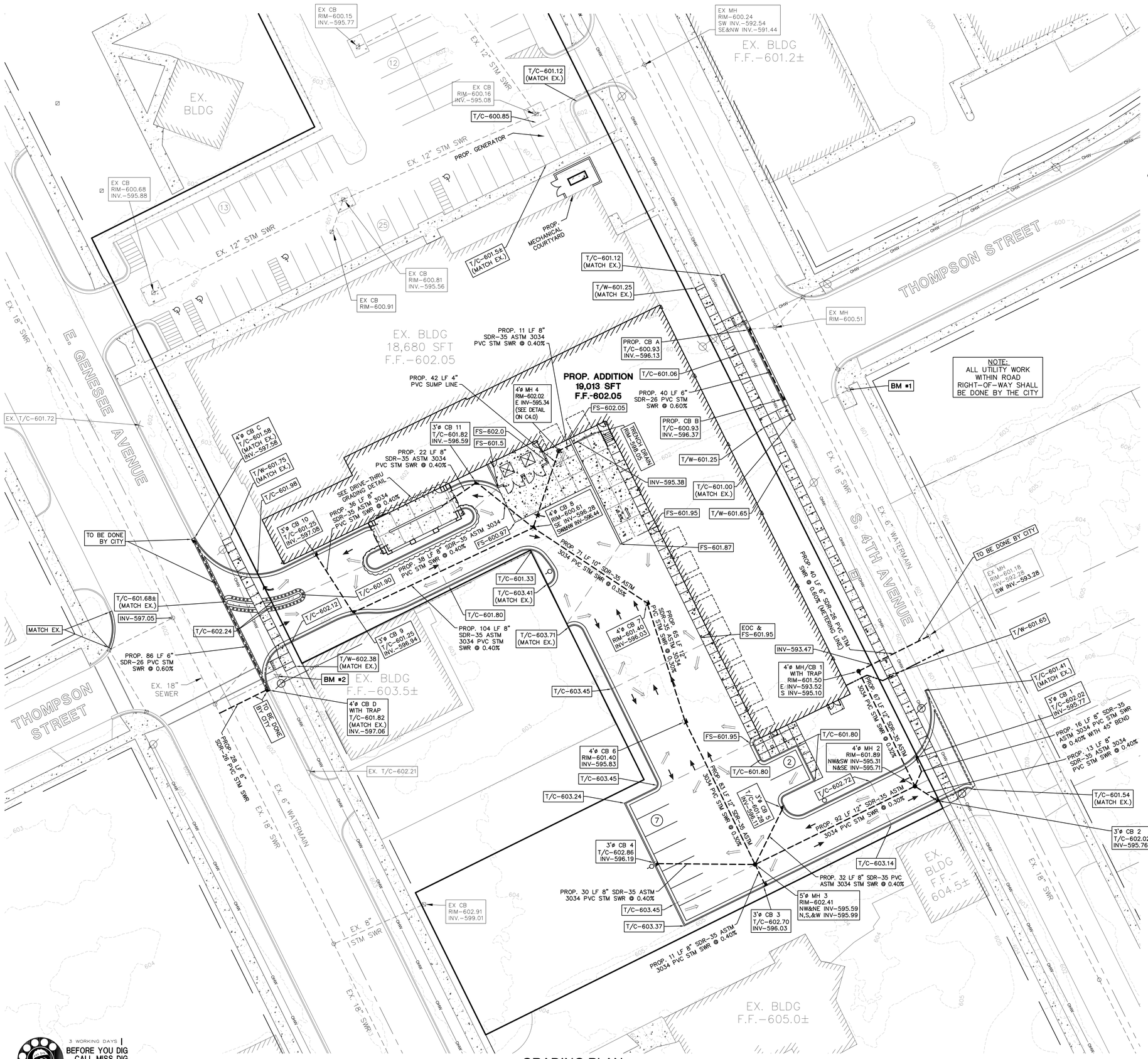

GRADING PLAN

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WHOLESALE ESTABLISHMENTS– 1/1,700 SFT OF GROSS FLOOR AREA OR 1 FOR EACH EMPLOYEE, MAXIMUM OF 9 ADDITIONAL EMPLOYEES
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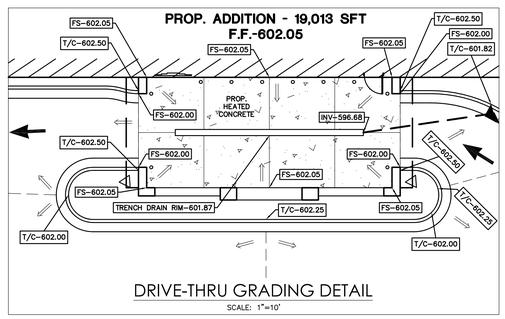

DRIVE-THRU GRADING DETAIL
SCALE: 1"=10'

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ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.M.R.
DATE 7/3/25
APPROVED
SHEET NO.
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PROJECT NO.
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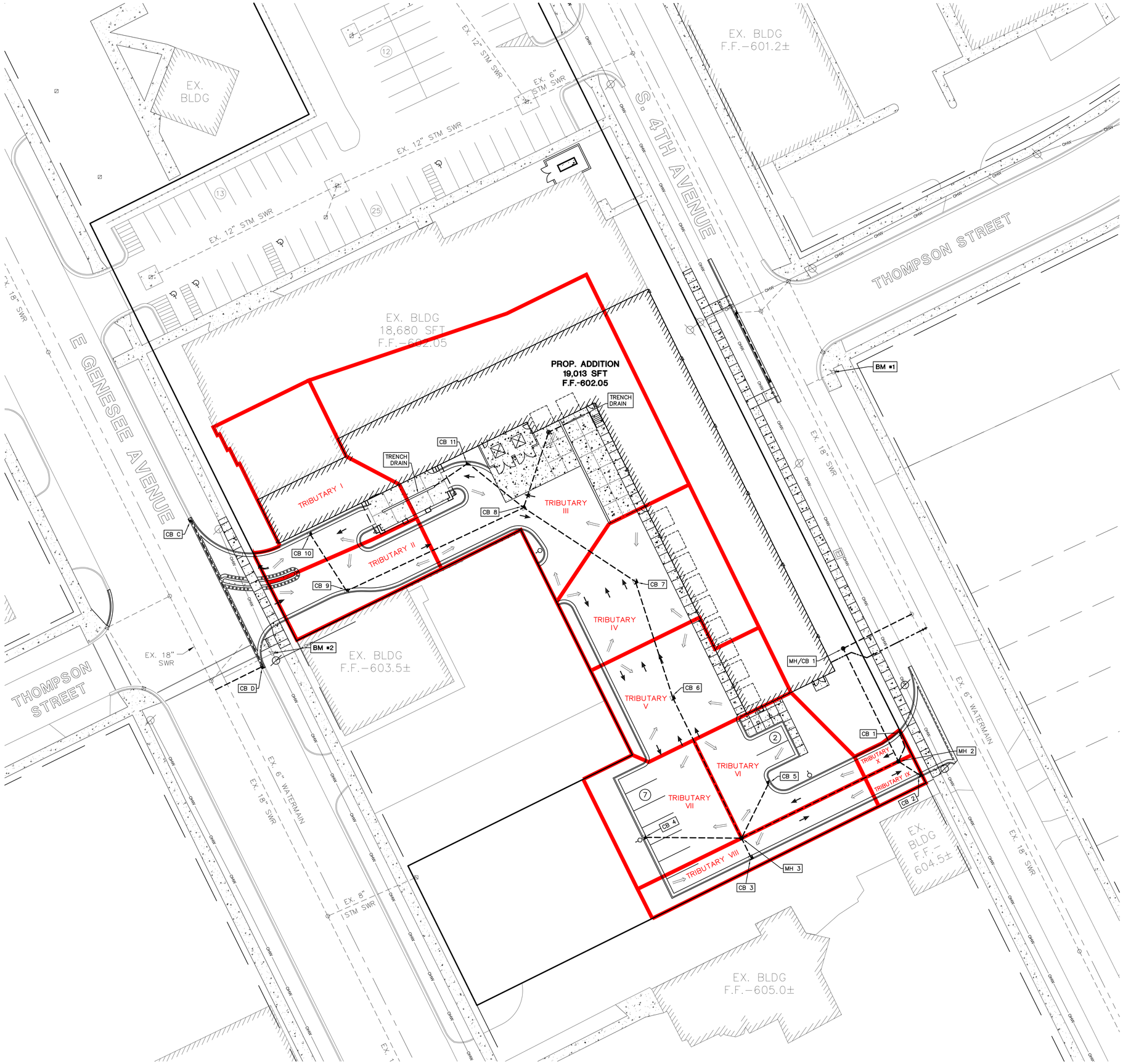

TRIBUTARY PLAN

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.

LOCATION MAP

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	EXISTING MANHOLE / CATCHBASIN
	EXISTING MANHOLE
	EXISTING HYDRANT
	EXISTING VALVE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	EXISTING CONTOUR
	EXISTING FENCE LINE
ELEC	UNDERGROUND ELECTRIC LINE
GAS	UNDERGROUND GAS LINE
TELE	UNDERGROUND TELEPHONE LINE
TV	UNDERGROUND CABLE T.V. LINE
OHW OHW	OVERHEAD ELECTRICAL WIRES
	EXISTING MAILBOX / NEWSPAPER BOX
	EXISTING SIGN
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
	EXISTING TRANSFORMER PAD
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATERMAIN
	PROPOSED LIGHT POLE
	PROPOSED DOWNSPOUT
	PROPOSED MODIFIED MOUNTABLE CURB

BENCHMARKS

B.M. #1– TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF THOMPSON STREET AND SOUTH 4TH AVENUE INTERSECTION.
ELEV. 603.93 NAVD 88

B.M. #2– TOP NUT ON HYDRANT LOCATED ON SOUTH EAST SIDE OF EAST GENESEE AVENUE AND THOMPSON STREET INTERSECTION.
ELEV. 605.28 NAVD 88

DEVELOPMENT NOTES

SETBACKS -
ZONED - B-2

FRONT	SIDE	REAR
–	10'	–

PROPOSED LAND USE– FOOD SERVICE CENTER

PROPOSED SITE AREA: 1.31 ACRES

TRANSPORTATION: PRIVATE DRIVE & PARKING

SANITARY SEWER – EXISTING UTILITY WILL BE UTILIZED

WATER: EXISTING UTILITY WILL BE UTILIZED

FIRE: EX. FIRE HYDRANTS ALONG EAST GENESEE AVE. & 4TH AVE.

SIDEWALKS: PROPOSED 5' SIDEWALKS

GAS AND ELECTRIC: EXISTING PERIMETER UTILITIES AVAILABLE BY CONSUMERS ENERGY

FENCE AND WALLS: NONE PROPOSED

WETLAND: NONE

STORM WATER MANAGEMENT:
–10 YEAR DESIGN
–PREVIOUS SITE USUAGE WAS 100% IMPERVIOUS
–95% IMPERVIOUS FACTOR USED FOR ALLOWABLE DISCHARGE CALCULATIONS
–OUTLET TO 4TH AVENUE STM SWR RESTRICTED BY 6" METERING LINE & 3.186 CFS
–919 CFT OF STORAGE PROVIDED IN PIPE AT 600.87 TOP OF STORAGE ELEVATION

FLOODPLAIN: OUTSIDE 100 YEAR FLOODPLAIN

REFUSE: PROPOSED ENCLOSED DUMPSTER

SIGNAGE – SIGNAGE TO BE PLACED ON PROPOSED BUILDING

LIGHTING – PROPOSED LIGHTPOLES

PARKING: ASPHALT SURFACE PROPOSED
WHOLESALE ESTABLISHMENTS– 1/1,700 SFT OF GROSS FLOOR AREA OR 1 FOR EACH EMPLOYEE, MAXIMUM OF 9 ADDITIONAL EMPLOYEES
REQUIRED = 9 SPACES, PROPOSED = 9 SPACES

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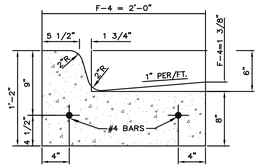
3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG®
1-800-482-7171
(TOLL FREE)

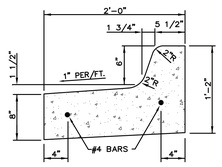
PIPE SIZE	TRENCH WIDTH MINIMUM	TRENCH WIDTH MAXIMUM
8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	46"
27"	45"	49"
30"	49"	53"
36"	56"	60"
LARGER THAN 36" I.D.	I.D. + 20"	I.D. + 24"

WIDTHS OF TRENCH EXCAVATION

STANDRD DETAIL #1

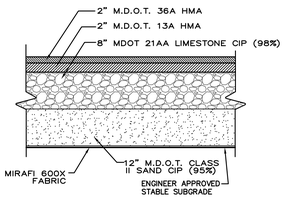


CONCRETE CURB & GUTTER
DETAIL M.D.O.T. F-4
NOT TO SCALE



CONCRETE CURB & GUTTER DETAIL
M.D.O.T. F-4 MODIFIED
SCALE: NONE

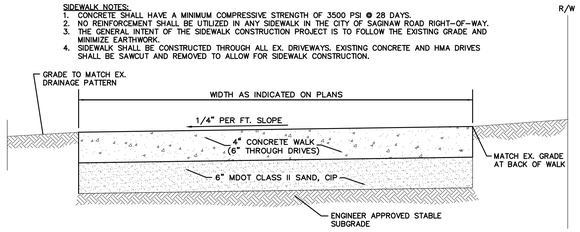
STANDRD DETAIL #2



PAVEMENT SECTION
FULL DEPTH CONSTRUCTION AREAS
SCALE: NONE

STANDRD DETAIL #3

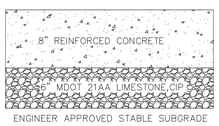
SIDEWALK NOTES:
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI @ 28 DAYS.
2. NO REINFORCEMENT SHALL BE UTILIZED IN ANY SIDEWALK IN THE CITY OF SAGINAW ROAD RIGHT-OF-WAY.
3. THE GENERAL INTENT OF THE SIDEWALK CONSTRUCTION PROJECT IS TO FOLLOW THE EXISTING GRADE AND MINIMIZE EARTHWORK.
4. SIDEWALK SHALL BE CONSTRUCTED THROUGH ALL EX. DRIVEWAYS. EXISTING CONCRETE AND HMA DRIVES SHALL BE SAWCUT AND REMOVED TO ALLOW FOR SIDEWALK CONSTRUCTION.



CONCRETE SIDEWALK
NTS

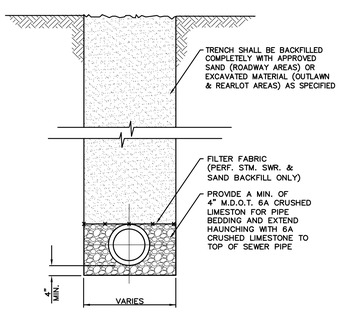
STANDRD DETAIL #4

NOTES:
1. 8" CONCRETE PAVEMENT WILL BE USED FOR THE DUMPSTER AND TRUCK WELL SLABS
2. MIN 30-DAY COMPRESSIVE STRENGTH, f'c = 3500 PSI
3. DOWEL NEW CONCRETE PAVEMENT INTO EXISTING CONCRETE PAVEMENT EVERY 2' (#4 EPOXY-COATED BARS)
4. REINFORCEMENT SHALL BE 6X6 W2.9/W2.9 WWF, PLACED 2" FROM TOP OF SLAB
5. CONTROL JOINTS SHALL BE SAWCUT 1/4" WIDE & 1-1/2" DEEP



PROP. 8" CONCRETE PAVEMENT SECTION
NOT TO SCALE

STANDRD DETAIL #5



D.W.P.E., P.E., PVC AND A/D 2000
SEWER TRENCH DETAIL
SCALE: NONE

STANDRD DETAIL #6

WALL THICKNESS "T"	
DEPTH	PRECAST OR BLOCK
0-10'	6"
10'-16'	8"

NOTE: ALL PERMANENT CASTINGS SHALL READ "DUMP NO WASTE"

NOTE: CASTING MUST BE SEALED TO STRUCTURE. SEALANT MATERIAL MUST EXTEND THROUGH ADJUSTING RINGS OR BLOCK. SEALANT MATERIAL CAN BE BOA TAPE OR APPROVED EQUAL, HEAT SHRINK WRAP, OR RUBBER SEALS WITH METAL RINGS.

CATCH BASIN FRAME AND SOLID COVER PER PLAN

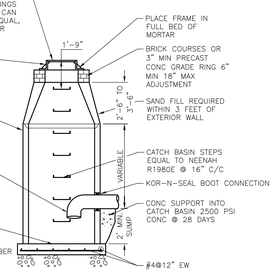
PLASTER COAT ENTIRE EXTERIOR SURFACE WITH 1/2" MORTAR CEMENT (BRICK OR BLOCK ONLY)

NOTE:
INSTALL 90° ELBOW TRAP IN CB #1 ON 6" OUTLET PIPE TO COMBINED SEWER

BOTTOM SLAB SHALL BE 8" THICK POURED IN PLACE OR PRECAST CONC BASE 3000 PSI AT 28 DAYS. IF PRECAST IS USED PLACE 3" MIN SAND SUBBASE

NOTE:
1. PIPE JOINTS SHALL BE RUBBER GASKET ASTM C-443-72 WITH INSIDE CEMENT POINTING

2. PRECAST CATCH BASIN JOINTS SHALL BE COLD MASTIC AND POINTED WITH MORTAR

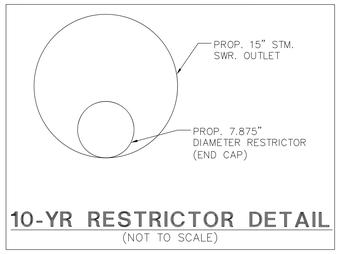


PLACE FRAME IN FULL BED OF MORTAR
BRICK COURSES OR 3" MIN PRECAST CONC GRADE RING 6" MIN 18" MAX ADJUSTMENT
SAND FILL REQUIRED WITHIN 3 FEET OF EXTERIOR WALL
CATCH BASIN STEPS EQUAL TO NEENAH R1980E @ 16" C/C
KOR-N-SEAL BOOT CONNECTION
CONC SUPPORT INTO CATCH BASIN 2500 PSI CONC @ 28 DAYS

ALL STRUCTURES ARE TO BE PRE-CAST STRUCTURES

CITY CATCH BASIN DETAIL
NO SCALE

STANDRD DETAIL #7



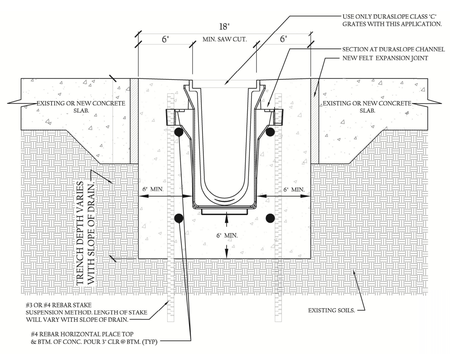
10-YR RESTRICTOR DETAIL
(NOT TO SCALE)

STANDRD DETAIL #8

TYPICAL PARKING SPACE
NTS

ADA PARKING SIGN DETAIL
NTS

STANDRD DETAIL #9



NOTE:
CHANNELS TO BE INSTALLED WITH BLANK GRATE. GRATE TO BE PROTECTED FROM CONCRETE POUR (COVER HOLES WITH TAPE).

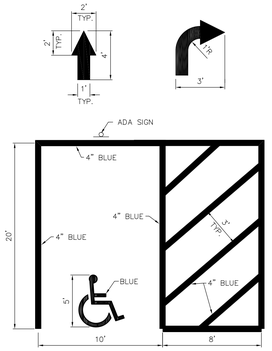
SET TRENCH DRAIN IN CHANNEL SURROUNDED BY 6" OF CONCRETE OR THICKNESS OF THE CONCRETE SLAB WITH A MINIMUM OF 3,500 P.S.I. AVOID FULL LOAD TRAFFIC FOR 28 DAYS OR UNTIL CONCRETE HAS COMPLETELY HARDENED.

NDS WE PUT WATER IN IT'S PLACE

PROP. TRENCH DRAIN DETAIL
NOT TO SCALE

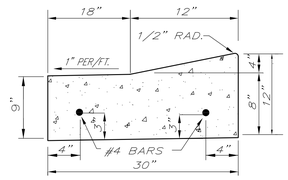
STANDRD DETAIL #10

PAVEMENT MARKING NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE WHITE PAINT UNLESS OTHERWISE NOTED.
2. PARKING STALL MARKINGS SHALL BE 4" WIDE PAINT UNLESS OTHERWISE NOTED.



PAVEMENT MARKING DETAILS
NTS

STANDRD DETAIL #11

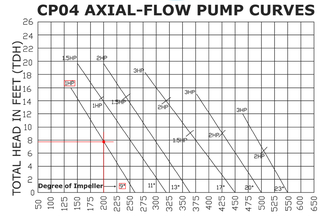


MODIFIED MOUNTABLE
CURB AND GUTTER
SCALE: NONE

STANDRD DETAIL #12

CARRY PUMPS

CP04 AXIAL-FLOW PUMP CURVES



PLOT YOUR POINT: Follow the flow in U.S. gallons per minute required horizontally on the chart to your GPM flow required; then follow up to your total head in feet required.

The location of the point plotted on the chart determines the horsepower of pump required.

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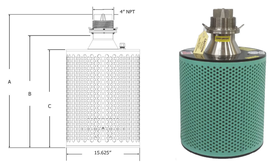
STANDRD DETAIL #13

CARRY PUMPS

CP04 SERIES HIGH-VOLUME AXIAL-FLOW PUMP DIMENSIONS
230V/1 PHASE



230V/1 PHASE				
HORSEPOWER	WEIGHT	(A) OVERALL HEIGHT	(B) MINIMUM SUBMERGENCE	(C) SCREEN HEIGHT
1 HP	69	20"	18"	14.5"
1.5 HP	79	24"	20.5"	16.5"
2 HP	76	26"	22.5"	18.75"
3 HP	104	30"	26.5"	23.5"

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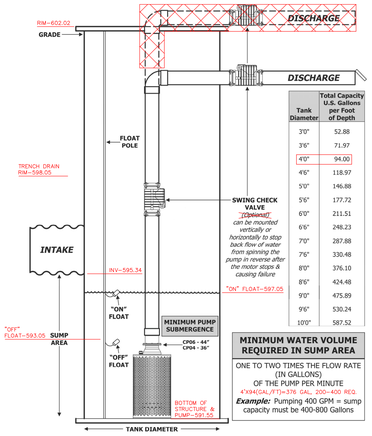
STANDRD DETAIL #14

CARRY PUMPS



Tank Diameter	Total Capacity U.S. Gallons per Foot of Depth
3'0"	52.88
3'6"	71.97
4'0"	94.00
4'6"	118.97
5'0"	146.88
5'6"	177.72
6'0"	211.51
6'6"	248.23
7'0"	287.88
7'6"	330.48
8'0"	376.10
8'6"	424.48
9'0"	475.89
9'6"	530.24
10'0"	587.52

[Optional] can be mounted vertically or horizontally to stop back flow of water from spinning the pump in reverse after the motor stops & causing failure

MINIMUM WATER VOLUME REQUIRED IN SUMP AREA

ONE TO TWO TIMES THE FLOW RATE (IN GALLONS) OF THE PUMP PER MINUTE
4'(48")DIA.FT²=376 GAL, 200-400 REQ.
Example: Pumping 400 GPM = sump capacity must be 400-800 Gallons

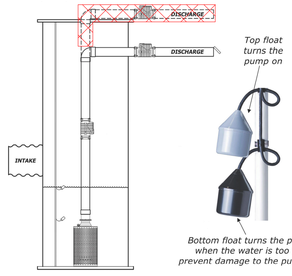
STANDRD DETAIL #15

CARRY PUMPS

PUMP CONTROL OPTIONS

DOUBLE FLOAT PUMP SWITCH APPLICATION

- Generally used with a 1 Phase Control Box in pump-down applications
- Contains a holding relay which allows for separate ON and OFF levels to prevent rapid cycling of the pump



STANDRD DETAIL #16

CARRY PUMPS

PUMP CONTROL OPTIONS

1 PHASE/230 VOLT CONTROL BOX

- Compatible with 1 Phase/230 Volt pumps

AVAILABLE HORSEPOWERS
1
1.5
2
3
5
7.5
10
15

NOTE: CONTROL PANEL BOX TO BE MOUNTED INSIDE PROPOSED ADDITION.

STANDRD DETAIL #17

SITE DETAIL PLAN

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CODE REVIEW

CHAPTER 3
Use Group and Occupancy Classification

310.3 Residential Group R-1

303.3 Assembly Group A-2 Basement Speak Easy Only

CHAPTER 4
Special Detailed Requirements Based on Use and Occupancy

420.1 General R-1

420.2 Separation walls, separating dwelling/sleep units shall be fire partitions per 788.

420.3 Horizontal floor assemblies separating dwelling/sleeping units from each other, and other occupancies shall be horizontal assemblies for 711.

420.5 Automatic sprinkler system shall be equipped throughout per 903.2.8

420.6 Fire alarm systems and smoke alarms shall be per 907.2.6, 907.2.8, 907.2.9, and 907.2.10.

CHAPTER 5
General Building Heights and Areas

501.2 Address identification shall be minimum 4-inch high, 1/2-inch width per character, and visible form road/street fronting the property.

504.3 Allowable building height above grade shall be 60 feet for sprinklered, Type VB
Actual: 52'-8"

504.4 Allowable number of stores above grade plane shall be three stories for sprinklered, Type VB.
Actual: 3 stories

506.2 Allowable Area per table 506.2 Type VB with Occupancy type R-1 is 28,000 SF
Actual: 13,994 SF

508.2.4 Separation of Occupancies shall be per exception 2 as required per Section 420.

509 Incidental Use Areas
Laundry Rooms over 100 square feet shall be 1 hour or provide automatic sprinkler system.

CHAPTER 6
Types of Construction

602.1 Fire resistance rating of building elements Table 601, Type VB.

Primary Structural Frame:	0
Bearing Wall Exterior	0
Non-Bearing Walls Interior	0
Floor Construction	0
Roof Construction	0

Table 602, Type VB, greater than 30 feet; 0 rating non-bearing exterior walls

CHAPTER 7
Fire and Smoke Partition Features

708.3 Fire Partitions shall be minimum 1/2 hour fire resistance rating per Exception 1 and 2

708.4 Continuity of fire partitions shall extend from floor/ceiling assembly to floor/ceiling assembly above.

711.2.4 Floor and roof assemblies shall be not less than 1/2-hour, separating dwelling/ sleeping uses and not less than 1-hour separating R.1 from A.3

718.2.2 Concealed wall spaces fire blocking be installed at ceiling/floor levels and horizontally at intervals not exceeding 10 feet. This included spaces with staggered studs.

718.3.2 Draft stopping in floors of R.1 is not required per Exception 1, due to building is sprinklered.

718.3.3 Draft stopping in other shall be per load square feet

718.4.2 Draft stopping in attics of R.1 is not required per Exception 2, due to fully sprinklered building.

CHAPTER 8
Interior Finishes

803.11 Interior wall ceiling finish
A.3 Interior exit stairways/ramps/passageways corridors, enclosure for exit access rooms/enclosed spaces

Rr.1 Interior exit stairways/ramps/passageways corridors, enclosure for exit access

804.4 Interior floor finish shall be not less than Class II for occupancy Group A and R.1

CHAPTER 9
Fire Protection Systems

903.2.1.2 Group A.2 automatic sprinkler system required

903.2.8 Group R.1 automatic sprinkler system required

906.1 Portable fire extinguishers shall be installed in Group A and R.1 occupancies

907.2.8 Automatic fire alarm/smoke detection required for R.1 and A.2 occupancies

912.1 Fire Department connection shall be located for Fire Department requirements, visible and accessible

CHAPTER 10
Means of Egress

1004.1.2 Basement Floor

Assembly, 15 sf net/tables/chairs	48
Server/ Tenders / Kitchen, 200 gross	5
Storage/Mechanical, 300 gross	5
	58

First Floor

Assembly, 15 sf net/tables/chairs	59
Residential, 200 sf gross	15
Storage, Mechanical, 300 sf gross	1
	75

Second Floor (Non-sleeping Area)

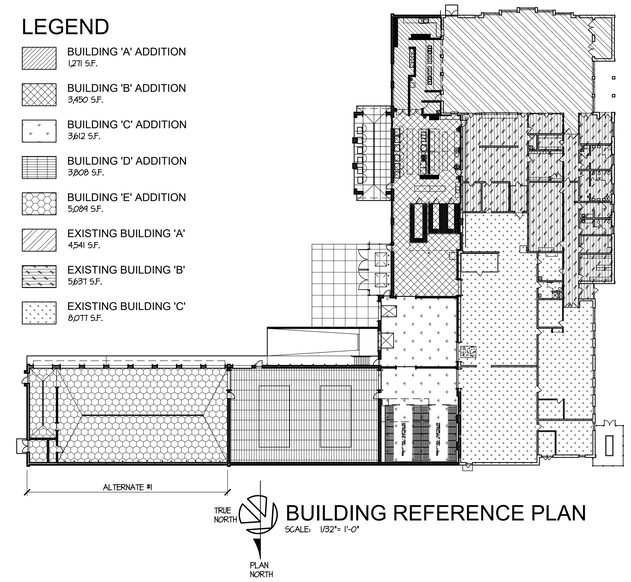
Residential, 200 sf gross	8
Storage/Mechanical, 300 sf gross	1
	9

Third Floor

Residential, 200 sf gross	8
Storage/Mechanical, 300 sf gross	1
	9

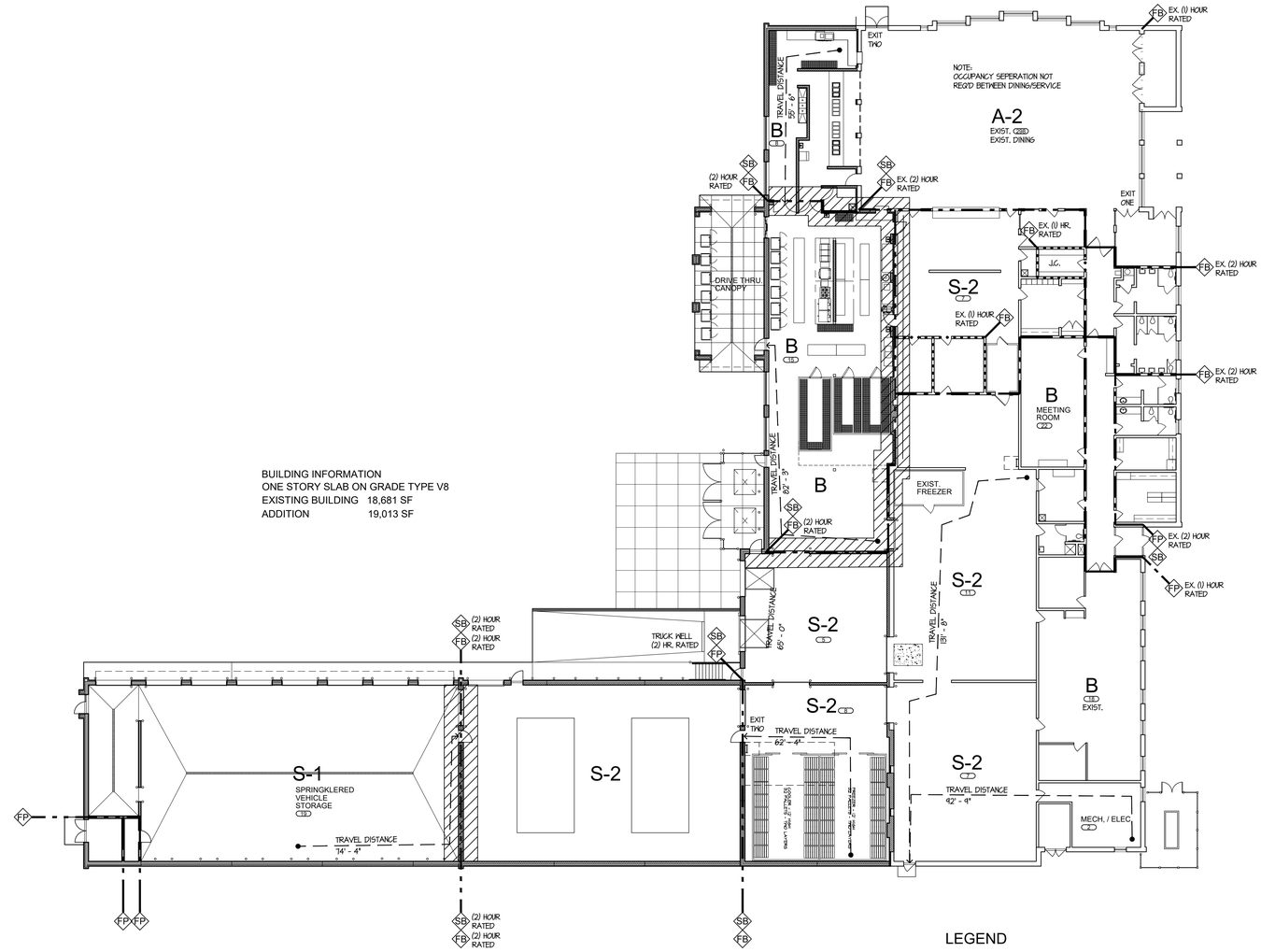
1006.2.1 Spaces with one exit, limited to 49 assembly occupants with common path of travel, maximum 75 LF

10 R.1 occupancy max



BUILDING REFERENCE PLAN

SCALE: 1/32"= 1'-0"



REFERENCE PLAN

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

LEGEND

(1) HOUR RATED FIRE PARTITION

(2) HOUR RATED FIRE/SMOKE BARRIER

48" OF FIRE-RATED MATERIAL ON UNDERSIDE OF STRUCTURE EACH SIDE OF WALL

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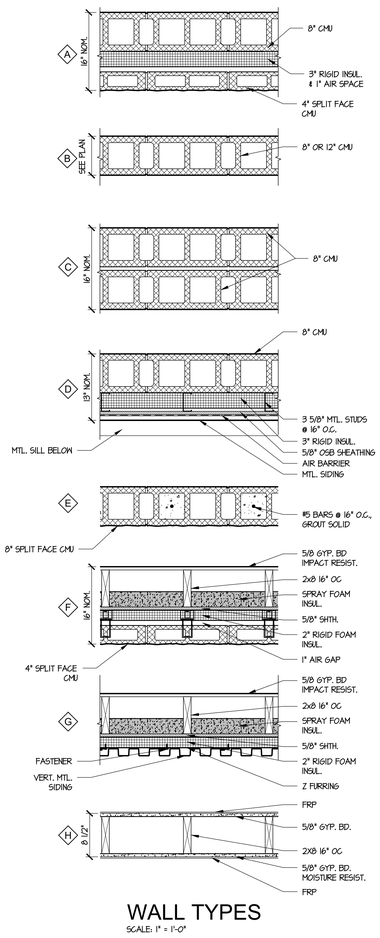


WALL TYPES

SCALE: 1" = 1'-0"

ACCESSORIES LEGEND	
1	CUP DISPENSER
2	FACIAL TISSUE DISPENSER
3	GRAB BAR
4	GRAB BAR (3' x 3' SHOWER)
5	GRAB BAR (ROLL-IN SHOWER)
9	HOOK
10	MEDICINE CABINET
11	MIRROR , 24" H X 36" H (U.N.O.)
12	MIRROR , 24" H X 60" H
14	MOP STRIP, WITH SHELF
17	SANITARY NAPKIN DISPOSAL
20	SHELF, 5" x 24"
21	SHOWER BENCH
22	SHOWER CURTAIN ROD
23	SHOWER CURTAIN
24	SOAP DISH
25	SOAP DISPENSER (OWNER SUPPLIED/CONTR. INSTALLED)
26	TOILET TISSUE DISPENSER
28	TOWEL BAR
30	TOWEL DISPENSER
31	TOWEL DISPENSER AND WASTE RECEPTACLE
32	WASTE RECEPTACLE
33	DIAPER CHANGING STATION (W/ LINER DISPEN)
40	SHARPS DISPOSAL

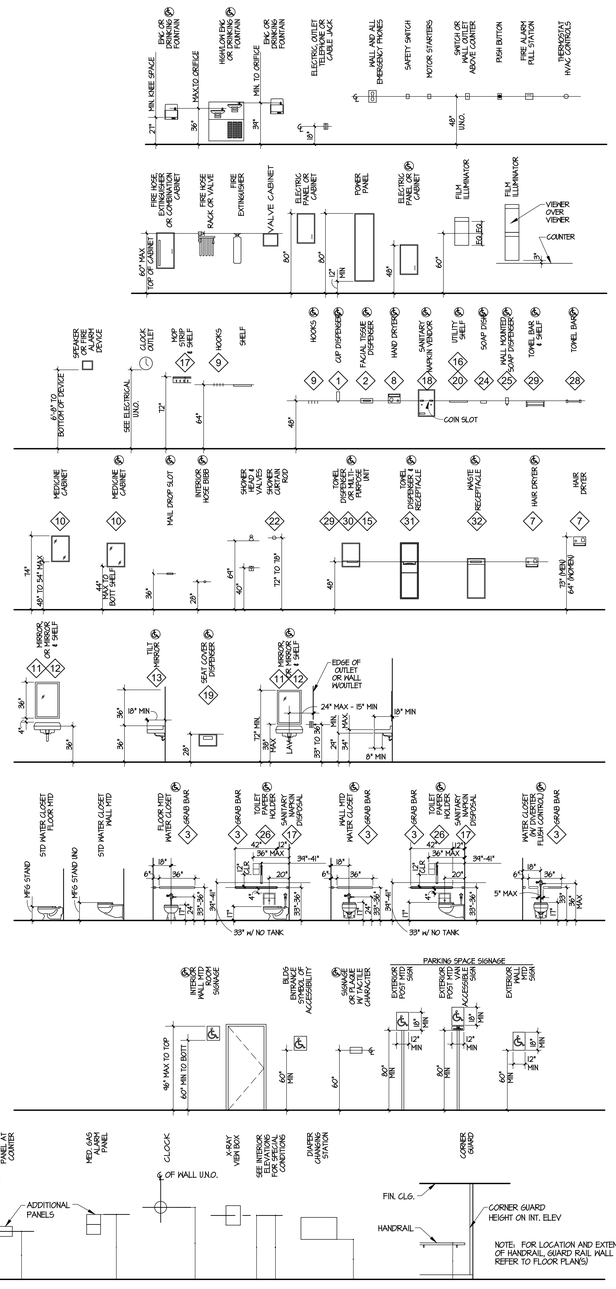
ABBREVIATIONS:

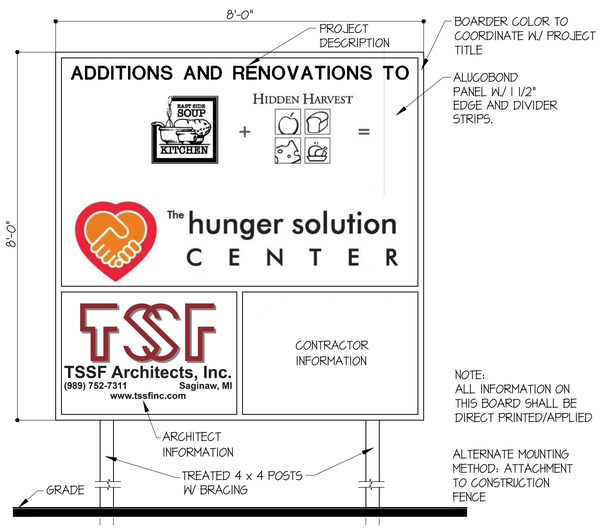
A.F.F.	ABOVE FINISH FLOOR
ALUM.	ALUMINUM
A/V	AUDIO- VISUAL
B.F.	BARRIER FREE
BIT.	BITUMINOUS
B.O.	BY OWNER / BOTTOM OF
C.J.	CONTROL JOINT
C.L.	CENTER LINE
CONC.	CONCRETE
C.T.	CERAMIC TILE
EA.	EACH
E.C.	ELECTRICAL CONTRACTOR
E.I.F.S.	EXTERIOR INSULATION FINISH SYSTEM
E.J.	EXPANSION JOINT
EQ.	EQUAL
F.D.	FLOOR DRAIN
FL.	FLOOR
F.T.	FOOT
G.C.	GENERAL CONTRACTOR
GYP. BD.	GYPSUM BOARD
H.C.W.	HOLLOW CORE WOOD
H.M.	HOLLOW METAL
I.D.	INSIDE DIAMETER
K.D.	KNOCK DOWN
LT.	LIGHT
MANUF.	MANUFACTURER
MET.	METAL
M.O.	MASONRY OPENING
N.I.C.	NOT IN CONTRACT
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
PART.	PARTITION
PL.	PLATE
P.O.N.C.	POINT OF NEW CONNECTION
PORC.	PORCELAIN CONNECTION
R.O.	ROUGH OPENING
S.A.F.B.	SOUND ABSORBING FIBERGLASS BATT
S.C.W.	SOLID CORE WOOD
S.S.	STAINLESS STEEL
STD.	STANDARD
SUSP.	SUSPENDED
T.O.	TOP OF
U.N.O.	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE OF DECK
V.	VENT
V.B.	VINYL BASE
V.C.T.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
V.T.R.	VENT THROUGH ROOF
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD

Mounting Dimensions

NOTE:
MOUNTING DIMENSIONS SHOW ACCESSIBLE AND NON-ACCESSIBLE CONDITIONS. WHEN ONLY ONE OPTION IS SHOWN - ALL ITEMS IN PROJECT SHALL BE ACCESSIBLE. WHEN ITEMS CAN BE ACCESSIBLE OR NON ACCESSIBLE DRAWINGS SHALL INDICATE LOCATION OF ACCESSIBLE ITEMS BY THIS SYMBOL Ⓐ

COORDINATE ITEMS SHOWN ON THIS DRAWING WITH PLANS AND SPECIFICATIONS FOR ACTUAL ITEMS USED ON THIS PROJECT.
EVERY ITEM SHOWN ON THIS DRAWING MAY NOT BE USED ON THIS PROJECT.
CONFIRM HEIGHTS OF ALL PAPER TOWEL DISPENSERS, SOAP DISPENSERS AND SHARPS DISPOSAL WITH OWNER PRIOR TO INSTALLATION.





NOTE:
ALL INFORMATION ON THIS BOARD SHALL BE DIRECT PRINTED/APPLIED

ALTERNATE MOUNTING METHOD: ATTACHMENT TO CONSTRUCTION FENCE

Reference Symbols

DETAIL AND SECTION IDENTIFICATION
X — SECTION IDENTIFICATION LETTER OR DETAIL IDENTIFICATION NUMBER
AX X — SHEET WHERE DETAIL OR SECTION IS REFERENCED FROM

BUILDING SECTION LOCATOR
X — SECTION IDENTIFICATION LETTER
AX X — SHEET WHERE SECTION IS DRAWN

DETAIL/SECTION LOCATOR
X — DETAIL IDENTIFICATION NUMBER
AX X — SHEET WHERE DETAIL/SECTION IS DRAWN

INTERIOR ELEVATION LOCATOR
A x A — ELEVATION IDENTIFICATION NUMBER
SHEET WHERE ELEVATION IS DRAWN

KEY NOTE
###

WINDOW SYMBOL
###

DOOR SYMBOL
###

WALL TYPE SYMBOL
###

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ARCHITECTS INTERIORS PLANNERS
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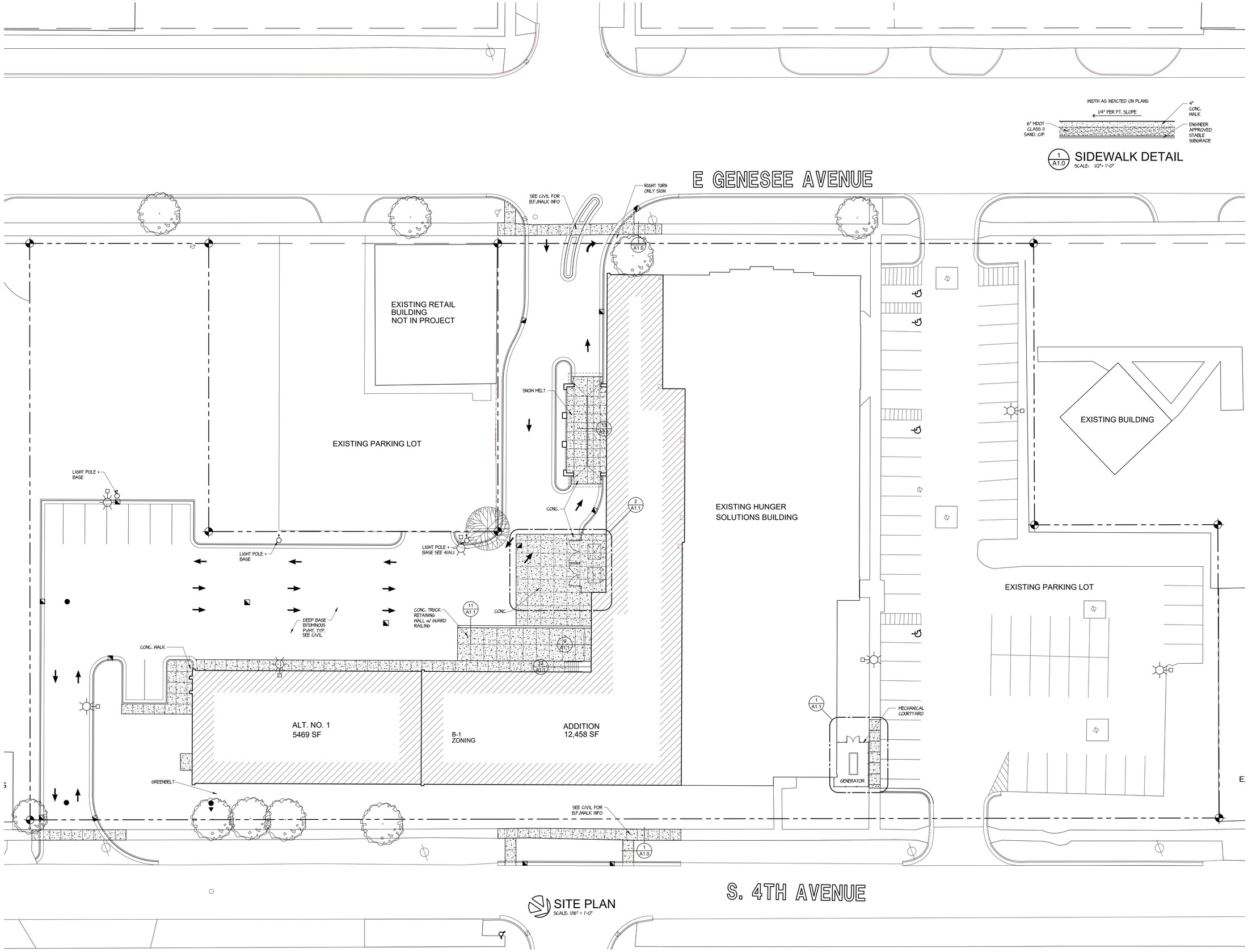
SAGINAW, MICHIGAN

NO.	DATE

DRAWN BY J.A.M.
DATE 07/03/25
APPROVED

SHEET NO.
A0.2

PROJECT NO.
2154



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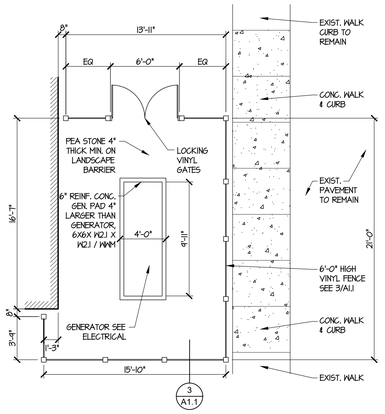
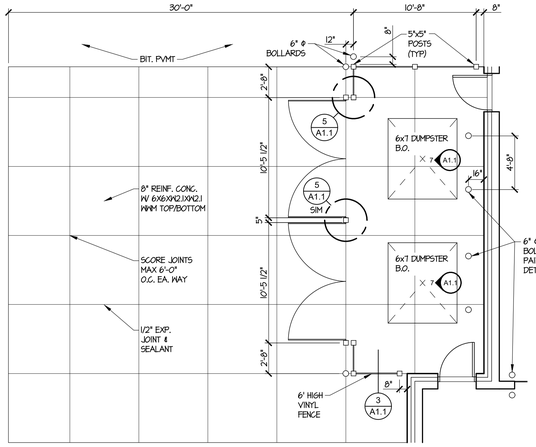


1 A1.1 GENERATOR COURTYARD
SCALE: 3/16"= 1'-0"



2 A1.1 DUMPSTER ENCLOSURE
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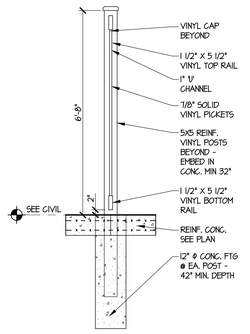

3 A1.1 VINYL SCREEN FENCE
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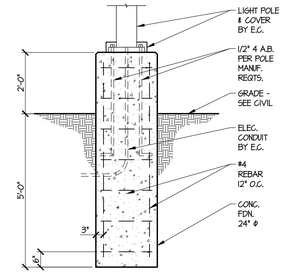
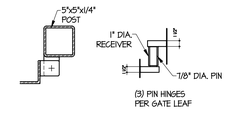
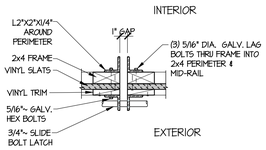


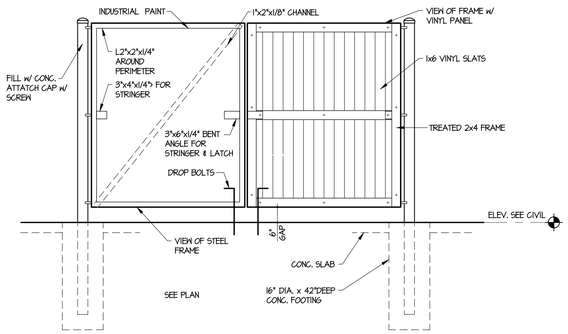
4 A1.1 LIGHT POLE BASE
SCALE: 1/2"= 1'-0"



5 A1.1 GATE HINGE
SCALE: 1 1/2" = 1'-0"



6 A1.0 GATE LATCH
SCALE: 1 1/2" = 1'-0"



7 A1.1 GATE ELEVATION (INTERIOR)
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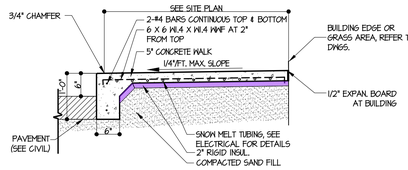
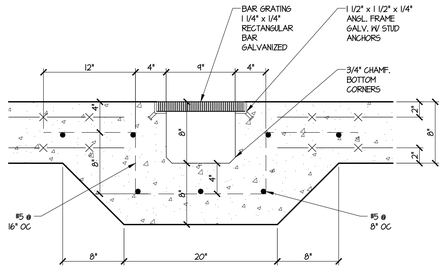
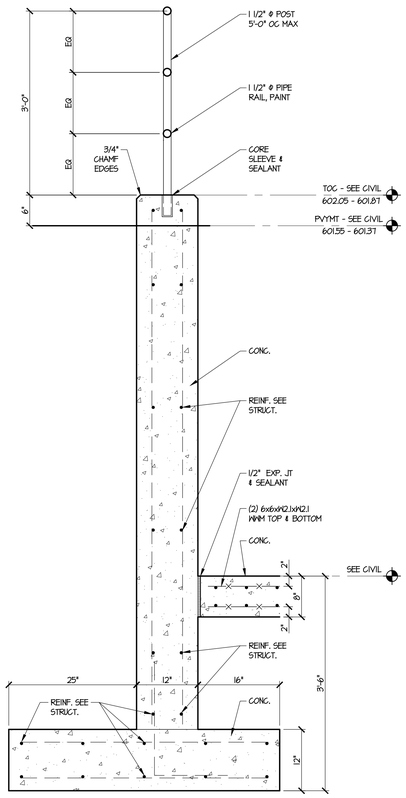


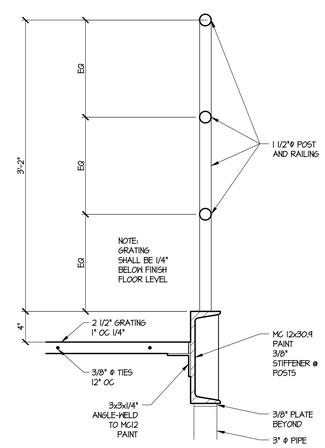
8 A1.1 SIDEWALK/CONC. W/ SNOW MELT SYSTEM
SCALE: 3/4" = 1'-0"



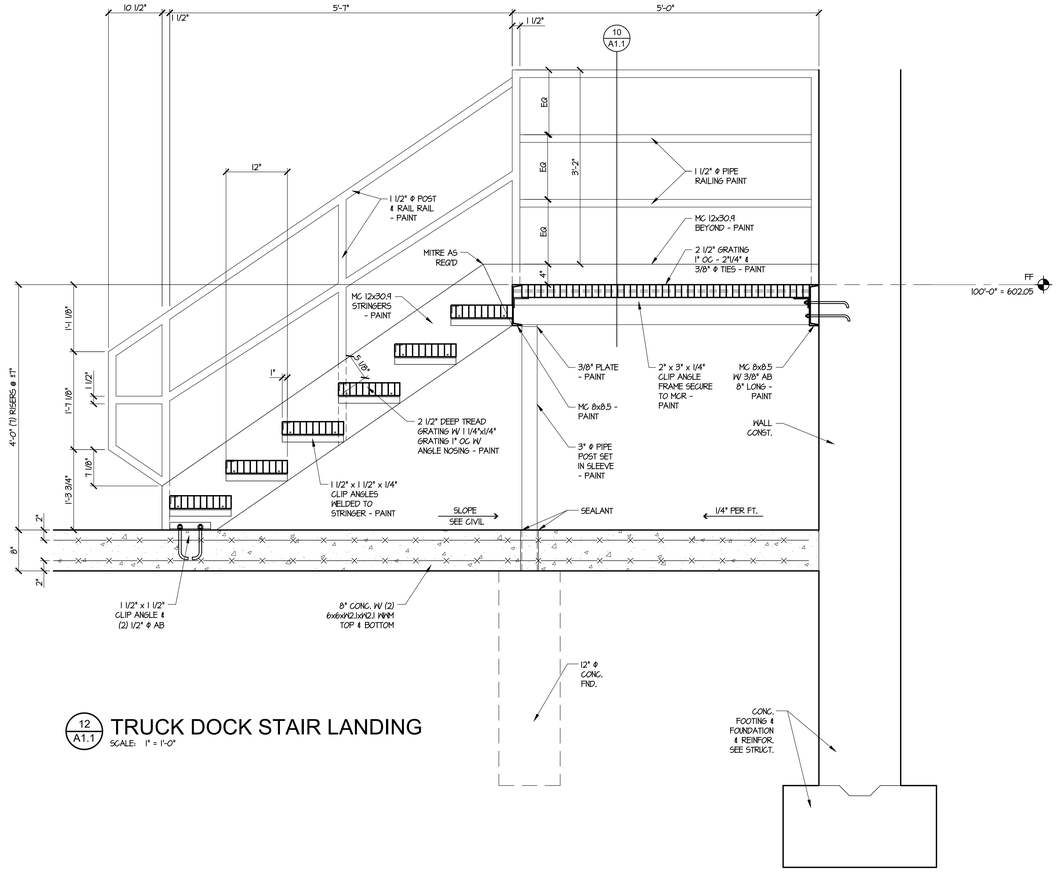
9 A1.1 TRUCK WELL DRAIN
SCALE: 1 1/2"" = 1'-0"



11 A1.1 TRUCK WELL DETAIL
SCALE: 1" = 1'-0"



10 A1.1 RAILING DETAIL
SCALE: 1 1/2" = 1'-0"



12 A1.1 TRUCK DOCK STAIR LANDING
SCALE: 1" = 1'-0"

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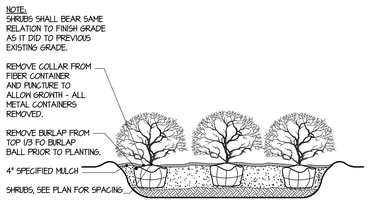
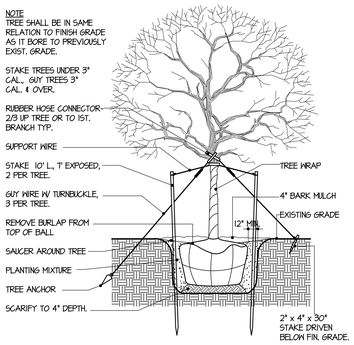
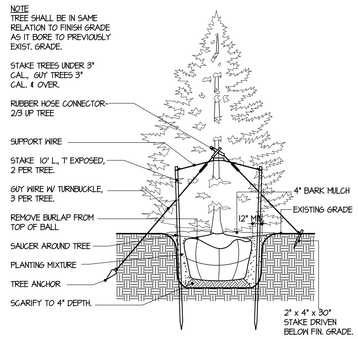


1 / A1.2 SHRUB PLANTING
NOT TO SCALE



2 / A1.2 DECIDUOUS PLANTING
NOT TO SCALE

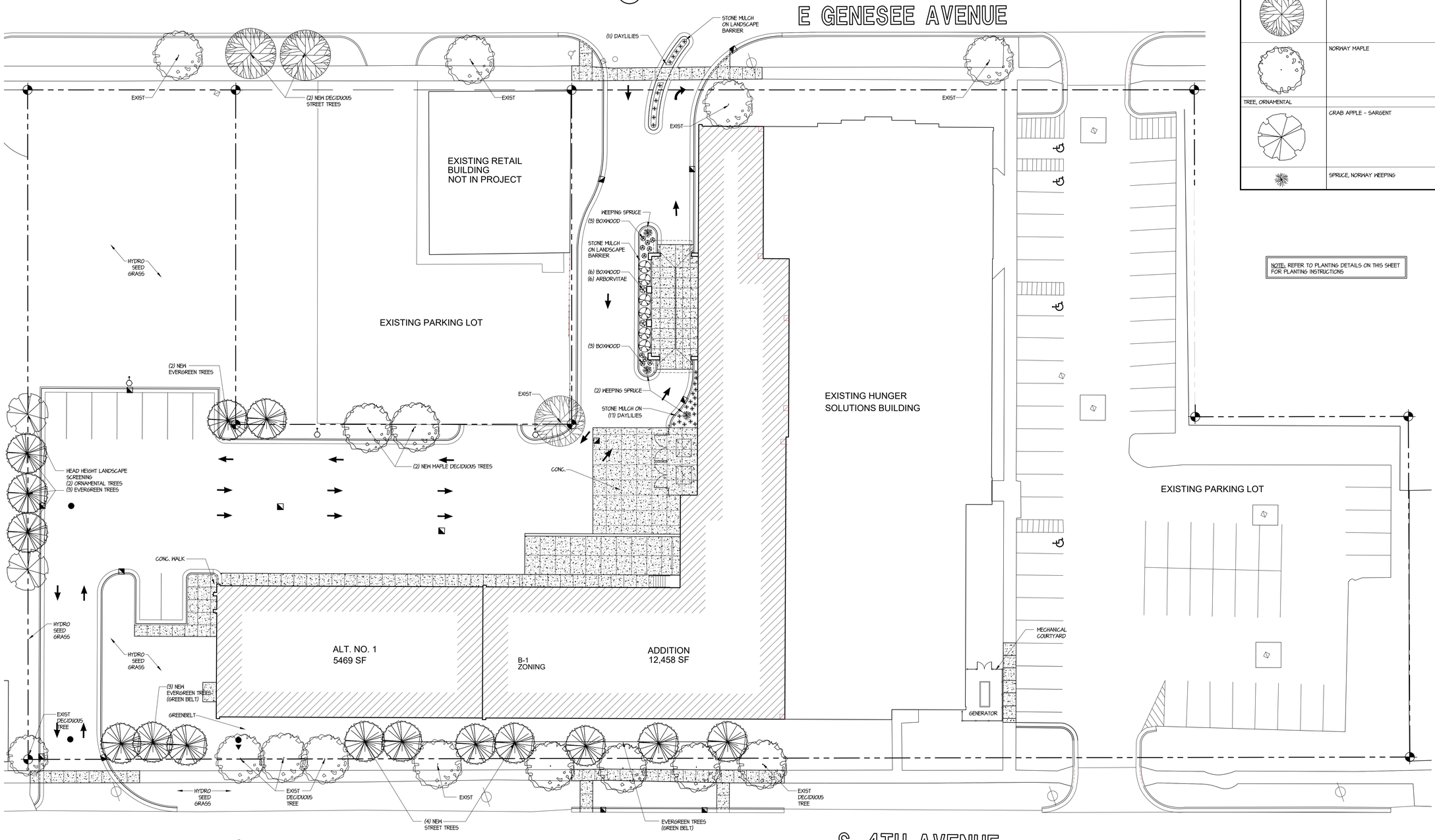


3 / A1.2 EVERGREEN PLANTING
NOT TO SCALE

LEGEND

TYPE/ SYMBOL	COMMON NAME	QTY.	SIZE
FLOWER - PERENNIAL			
+	DAYLILY, "HAPPY RETURNS"	12	1 GAL.
SHRUB, EVERGREEN BROADLEAF			
	BOXWOOD, GREEN VELVET	12	3 GAL.
SHRUB, EVERGREEN CONIFER			
	ARBORVITAE, EMERALD GREEN	6	5 GAL.
TREE, EVERGREEN			
	SPRUCE - COLORADO	15	6'
TREE, DECIDUOUS			
	LITTLE LEAF LINDEN	2	3" CAL.
	NORWAY MAPLE	6	3" CAL.
TREE, ORNAMENTAL			
	CRAB APPLE - SARGENT	2	1 1/2" CAL.
	SPRUCE, NORWAY WEEPING	3	6' TALL

NOTE: REFER TO PLANTING DETAILS ON THIS SHEET FOR PLANTING INSTRUCTIONS



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

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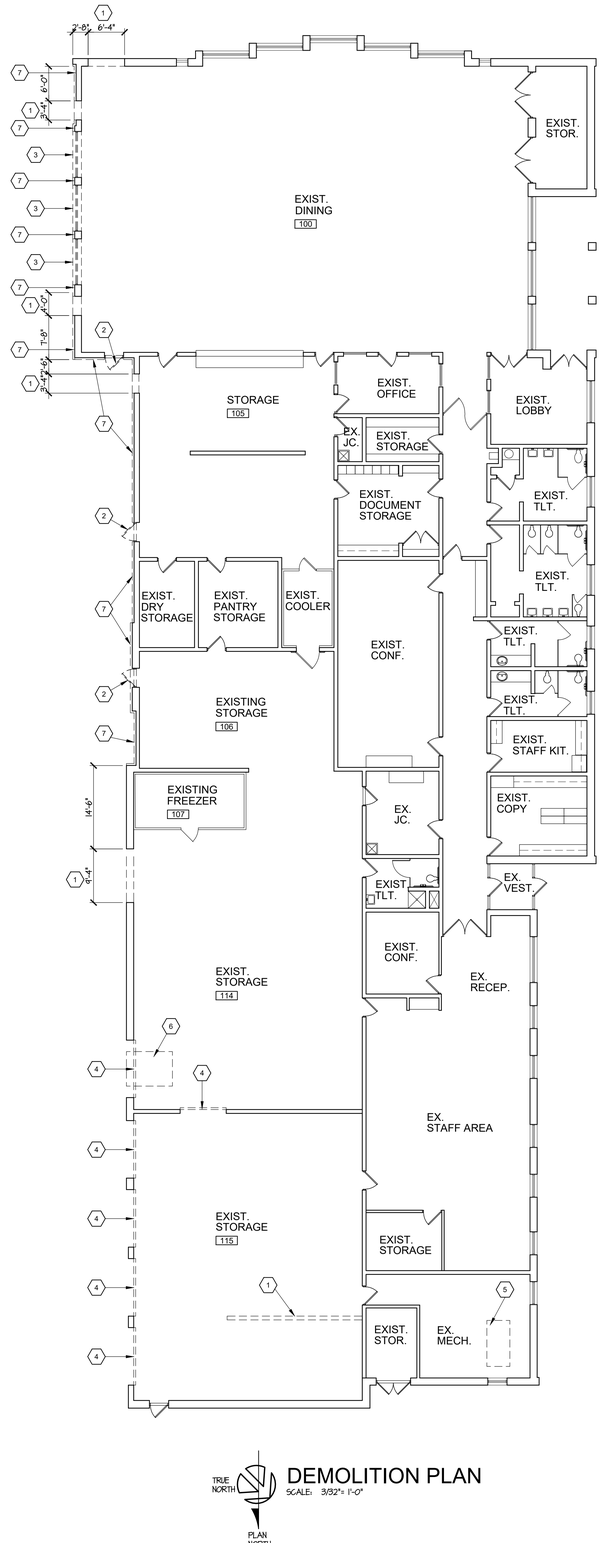

TRUE NORTH

PLAN NORTH

DEMOLITION PLAN

SCALE: 3/32"= 1'-0"

GENERAL DEMO NOTES:

1. NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES IN EXISTING CONDITIONS THAT MAY ALTER THE CONSTRUCTION PRIOR TO COMMENCING DEMOLITION / CONSTRUCTION.
2. CONTRACTOR TO REVIEW ALL DRAWINGS AND NOTES. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR ADDITIONAL INFORMATION REQUIRED FOR THE PROPER COMPLETION OF PROJECT BEFORE SUBMITTING A BID AND UNDERTAKING CONSTRUCTION.
3. CONTRACTOR SHALL PROVIDE AND INSTALL ALL FLASHING, CAULKING AND OTHER MATERIALS AS REQUIRED TO ENSURE A WATERTIGHT, LEAK-PROOF PERIMETER DURING AND AFTER THE DEMOLITION PHASE.
4. EXISTING STRUCTURE (COLUMNS, BEAMS, GIRTS, ETC., DOOR HEADERS, JAMBS, ETC.) TO BE PROTECTED DURING THE DEMOLITION PROCESS (U.N.O.)
5. REMOVE AND DISPOSE OF TEMPORARY PROTECTION AS REQUIRED FOR NEW CONSTRUCTION.
6. ALL MATERIALS ARE EXISTING UNLESS NOTED OTHERWISE.
7. MECHANICAL, ELECTRICAL ITEMS TO BE DEMOLISHED SHALL BE BY THE RESPECTIVE TRADE CONTRACTOR.
8. FOR ADDITIONAL ITEMS TO BE DEMOLISHED SEE COMPLETE MECHANICAL AND ELECTRICAL DRAWINGS.

DEMOLITION KEY NOTES:

1. REMOVE ALL OR A PORTION OF EXISTING WALL CONSTRUCTION.
2. REMOVE EXISTING DOOR, FRAME, HARDWARE AND/ OR GLAZING.
3. REMOVE EXISTING WINDOW FRAME AND GLAZING
4. REMOVE EXISTING OVERHEAD DOOR AND FRAME.
5. REMOVE EXISTING BUILT-IN SLOP SINK, SEE PLUMBING.
6. REMOVE EXISTING DOCK LIFT EQUIPMENT.
7. REMOVE EXISTING 4" SPLIT FACE CMU VENEER.

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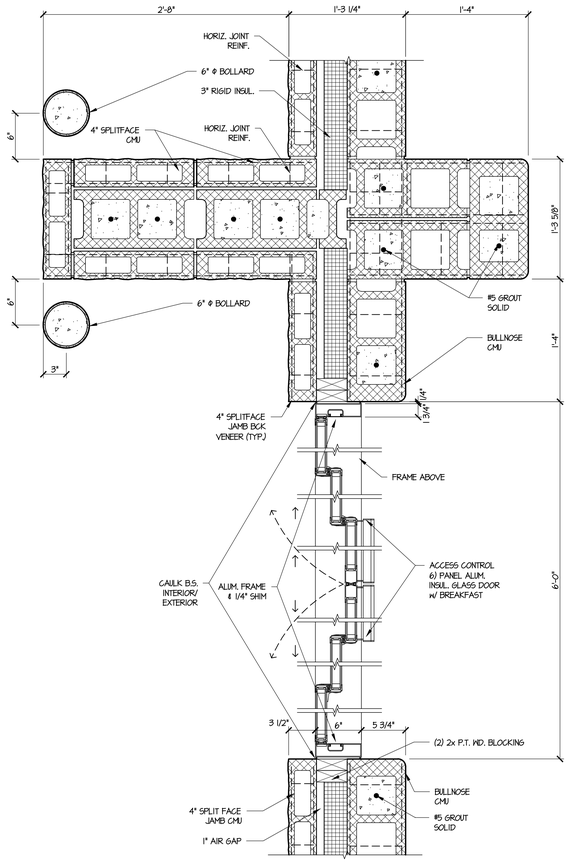
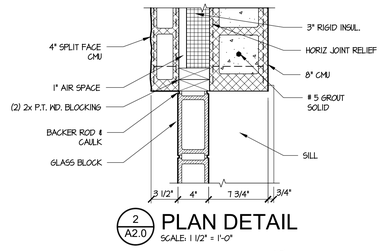
SHEET NO.
D2.0

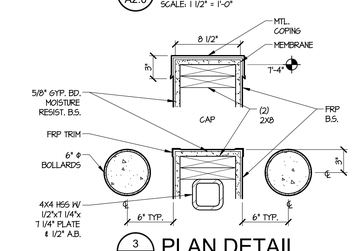
PROJECT NO.
2154



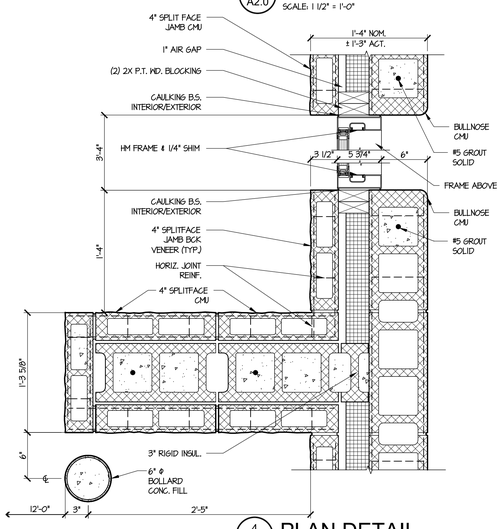
1 A2.0 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



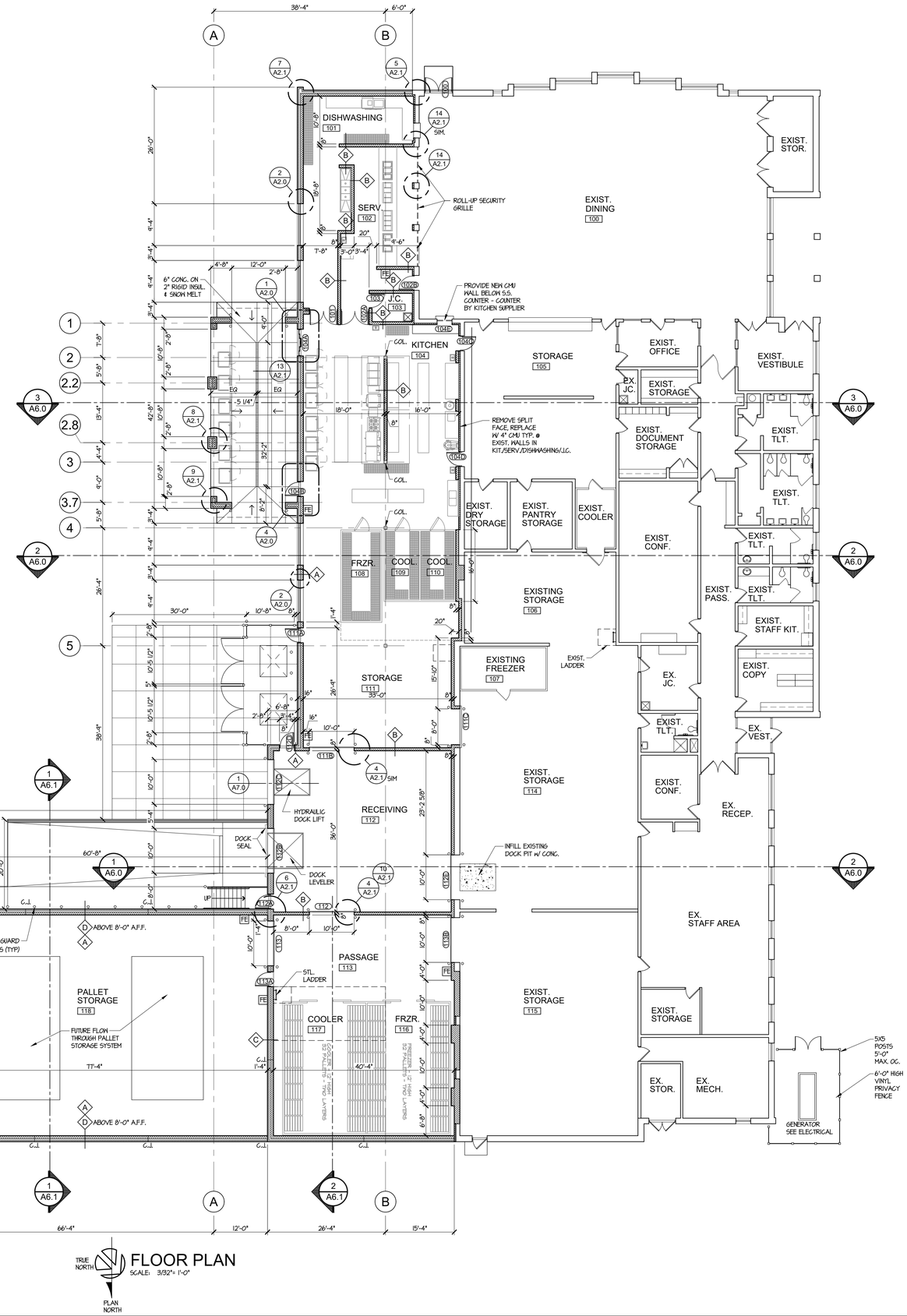
2 A2.0 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



3 A2.0 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



4 A2.0 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



TRUE NORTH
PLAN NORTH

FLOOR PLAN
SCALE: 3/32" = 1'-0"

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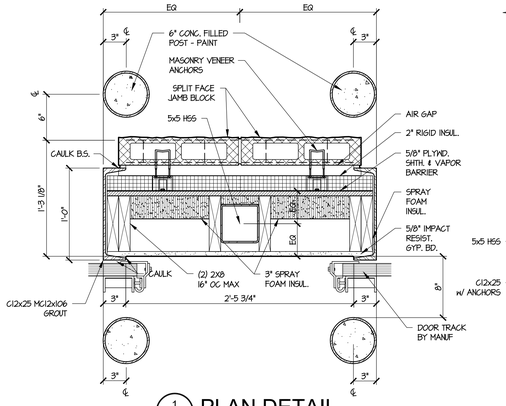
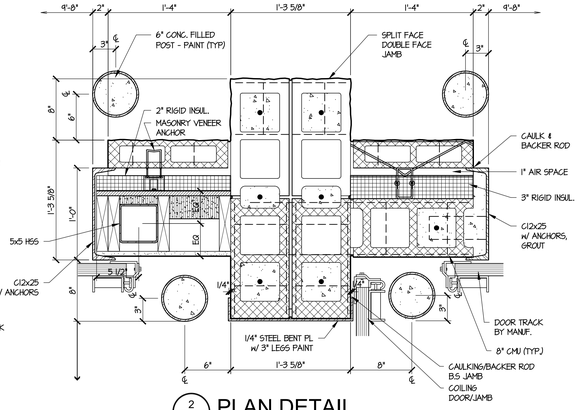
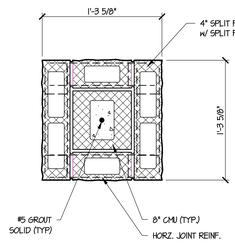


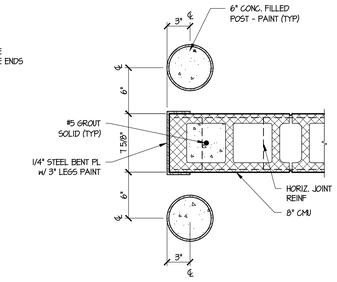
1 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



2 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



3 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



4 A2.1 PLAN DETAIL
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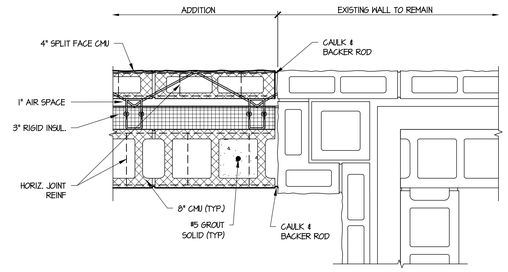

5 A2.1 PLAN DETAIL
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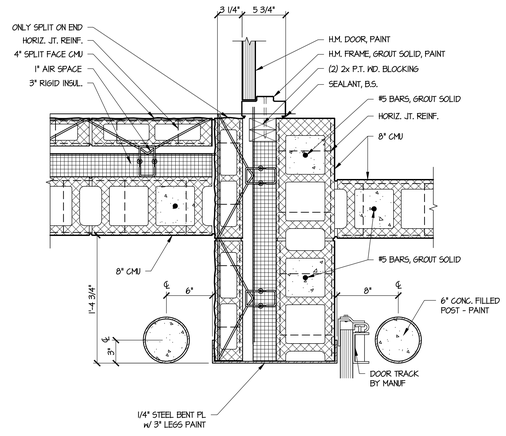
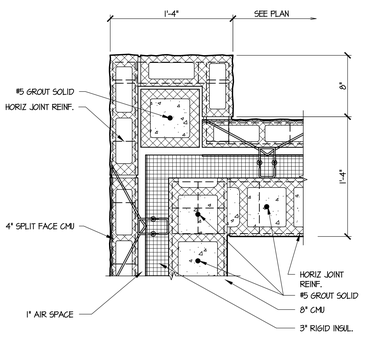
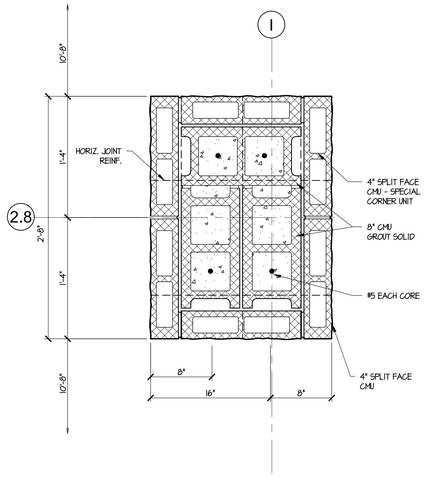


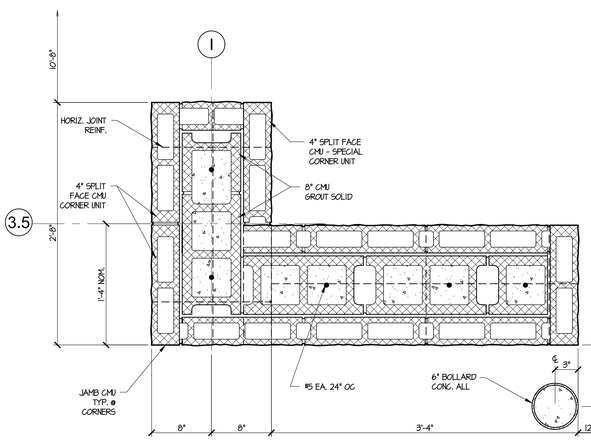
6 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



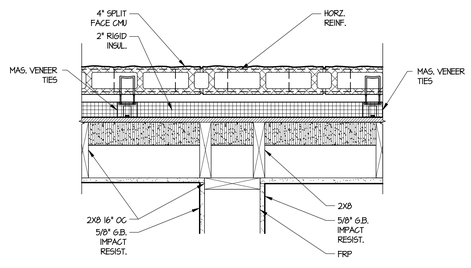
7 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



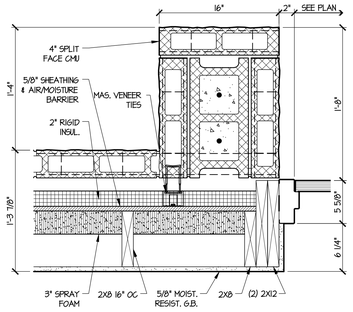
8 A2.1 CANOPY PIER DETAIL
SCALE: 1 1/2" = 1'-0"



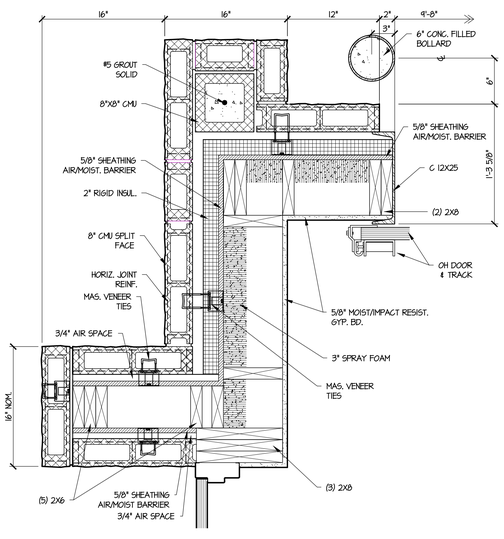
9 A2.1 CANOPY PIER DETAIL
SCALE: 1 1/2" = 1'-0"



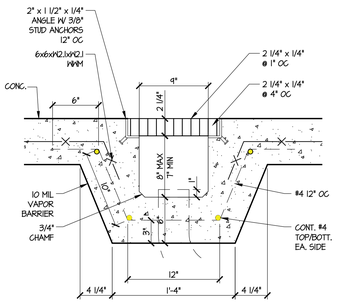
10 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



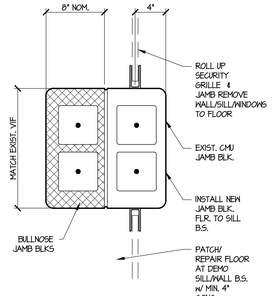
11 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



12 A2.1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



13 A2.1 DRAIN DETAIL
SCALE: 1 1/2" = 1'-0"



14 A2.1 PLAN DETAIL
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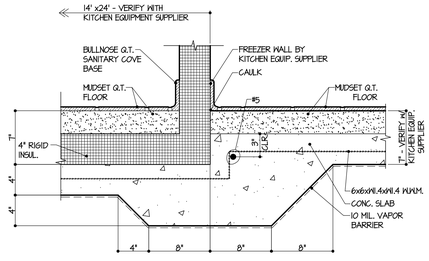


15 A2.1 DEPRESSED SLAB DETAIL
SCALE: 1 1/2"= 1'-0"

TSSF ARCHITECTS, INC.
ARCHITECTS INTERIORS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

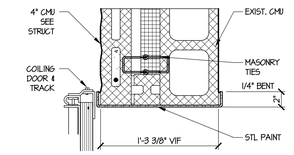
ADDITIONS AND RENOVATIONS TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE

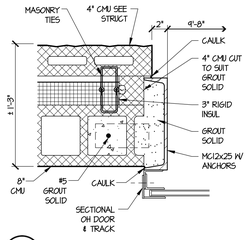
DRAWN BY C.M.B.
DATE 07/03/25
APPROVED

SHEET NO.
A2.1

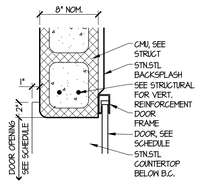
PROJECT NO.
2154



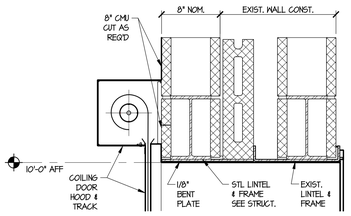
1 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



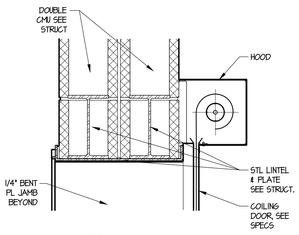
2 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



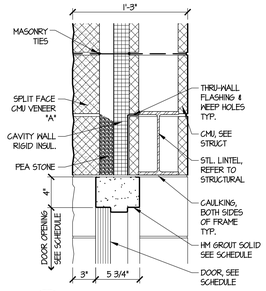
3 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



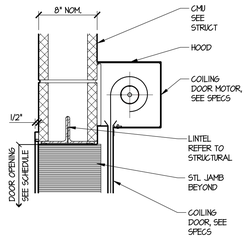
4 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



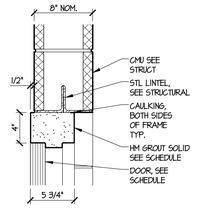
5 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



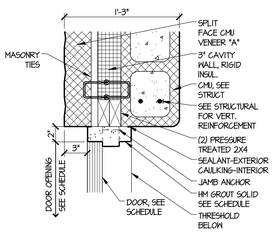
6 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



7 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



8 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



9 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"

FINISH SCHEDULE

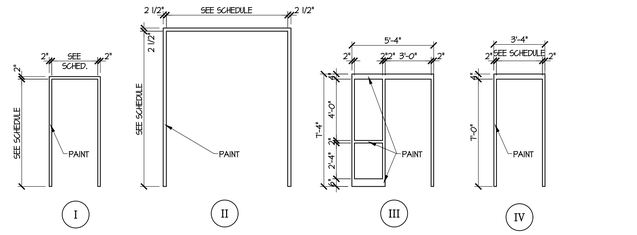
ROOM NO.	ROOM NAME	FLOORS		BASE	WALLS								CEILING		REMARKS
					NORTH		EAST		SOUTH		WEST				
		MATERIAL	FINISH		MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	TYPE	HEIGHT	
100	EXISTING DINING	EXIST.	SEALED	V	GYP	PT-1	GYP	PT-1	GYP	PT-1	GYP	PT-1	EXP	VARIES	1
101	DISHWASHING	CONC.	POLISHED	V	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	ACT-1	9'-4"	1
102	SERVING	CONC.	POLISHED	V	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	ACT-1	9'-4"	1
103	JANITOR CLOSET	CONC.	POLISHED	V	CMU	PT-1	CMU	PT-1	CMU	PT-1	EX/ CMU	PT-1	ACT-1	9'-4"	
104	KITCHEN	CONC.	POLISHED	V	CMU	PT-1	CMU	PT-1	CMU	PT-1	EX/ CMU	PT-1	ACT-1	9'-4"	
105	STORAGE	EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	
106	EXISTING STORAGE	EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	
107	EXISTING FREEZER	EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	
108	FREEZER	CONC.	POLISHED	-	-	-	-	-	-	-	-	-	-	-	
109	COOLER	CONC.	POLISHED	-	-	-	-	-	-	-	-	-	-	-	
110	COOLER	CONC.	POLISHED	-	-	-	-	-	-	-	-	-	-	-	
111	STORAGE	CONC.	POLISHED	-	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	ACT-1	9'-4"	
112	RECEIVING	CONC.	POLISHED	-	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	GYP.	16'-1"	3
113	PASSAGE	CONC.	POLISHED	-	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	GYP.	16'-1"	3
114	EXISTING STORAGE	EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	1
115	EXISTING STORAGE	EXIST.	-	-	EX. CMU	PT-1	EX. CMU	PT-1	EX. CMU	PT-1	EX. CMU	PT-1	EX. GYP.	-	1 2 3
116	FREEZER	CONC.	POLISHED	-	-	-	-	-	-	-	-	-	-	-	
117	COOLER	CONC.	POLISHED	-	-	-	-	-	-	-	-	-	-	-	
118	PALLET STORAGE	CONC.	POLISHED	-	CMU	PT-1	CMU	PT-1	CMU	PT-1	CMU	PT-1	GYP.	22'-1"	3
119	VEHICLE STORAGE	CONC.	SEALED	-	GB	PT-1	GB	PT-1	GB	PT-1	GB	PT-1	GYP.	22'-1"	3
120	WASH BAY	CONC.	SEALED	-	GB	FRP	GB	FRP	GB	FRP	GB	FRP	GYP.	22'-1"	3
121	RISER ROOM	CONC.	SEALED	-	GB	FRP	GB	FRP	GB	FRP	GB	FRP	GYP.	22'-1"	3
122	OUTDOOR STORAGE	CONC.	SEALED	-	GB	FRP	GB	FRP	GB	FRP	GB	FRP	GYP.	22'-1"	3

FINISHES KEY:

AGT - ACOUSTICAL CEILING TILE
BOS - BOTTOM OF STRUCTURE
CT - CERAMIC/PORCELAIN TILE
CPT - CARPET
GYP - GYPSUM BOARD
SEALED - SEALED CONC.
PT - PAINT
V - RESILIENT WALL BASE
VWC - WALL COVERING/ GRAPHIC
EXP - EXPOSED STRUCTURE
FRP - FIBERGLASS REINFORCED PANEL
SS - STAINLESS STEEL

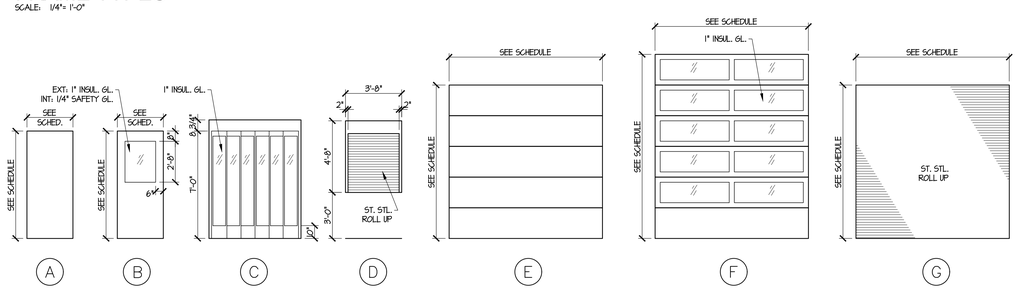
FINISH NOTES

1. PATCH/ REPAIR AND TOOTH IN NEW MASONRY RETURNS AT NEW OPENINGS
2. INFILL OPENINGS WITH CMU, PAINT
3. PAINT GYP. BD. CEILING



FRAME TYPES

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



DOOR TYPES

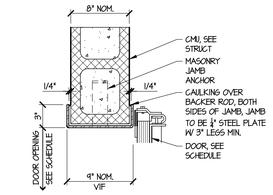
SCALE: 1/4"= 1'-0"

DOOR SCHEDULE

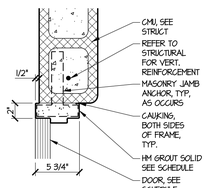
DOOR NO.	TYPE	MAT.	SIZE			FRAME		DETAILS			CLASS RATING	HDW. GROUP	REMARKS
			WIDTH	HT.	THICK	TYPE	MAT.	HEAD	JAMB	SILL			
100	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	6/A3.0	4/A3.0	T. HOLD	-	-	- 1 2
101	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	-	11/A3.0	-	90 MIN	-	- 1
101A	D	SS	3'-4"	4'-0"	-	–	SS	-	-	-	-	-	-
102A	B	HM	3'-0"	7'-0"	1 3/4"	IV	HM	-	11/A3.0				
102B	A	SCN	3'-0"	7'-0"	1 3/4"	IV	HM	-	11/A3.0	-	90 MIN	-	- 1
103	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	-	11/A3.0	-	45 MIN	-	-
104A	G	AL	6'-0"	7'-0"	1 3/4"	–	AL	-	1/A2.0	T. HOLD	-	-	- 4
104B	B	-	3'-0"	7'-0"	1 3/4"	IV	HM	6/A3.0	4/A3.0	T. HOLD	-	-	- 4
104C	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	6/A3.0	4/A3.0	T. HOLD	90 MIN	-	-
104D	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	6/A3.0	4/A3.0	T. HOLD	90 MIN	-	-
104E	D	SS	3'-4"	4'-0"	-	–	SS	14/A3.0	3/A3.0	-	90 MIN	-	- 3
111A	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	6/A3.0	4/A3.0	T. HOLD	-	-	- 2
111B	G	STL	10'-0"	10'-0"	1 3/4"	II	STL	7/A3.0	10/A3.0	-	90 MIN	-	-
111C	G	STL	8'-0"	10'-0"	1 3/4"	II	STL	7/A3.0	10/A3.0 SIM.	-	90 MIN	-	-
112A	A	HM	3'-0"	7'-0"	1 3/4"	I	HM	6/A3.0	9A3.0	T. HOLD	-	-	- 2
112B	E	STL	9'-8"	10'-0"	1 3/4"	II	STL	2/A1.0	2/A3.0	-	-	-	-
112C	E	STL	9'-8"	10'-0"	1 3/4"	II	STL	2/A1.0	2/A3.0	-	-	-	-
112D	A	HM	3'-0"	7'-0"	1 3/4"	I	HM	6/A3.0	9A3.0	-	90 MIN	-	- 2
112E	G	STL	10'-0"	10'-0"	1 3/4"	II	STL	4/A3.0	10/A3.0 SIM.	-	-	-	-
112F	G	STL	10'-0"	10'-0"	1 3/4"	II	STL	7/A3.0	10/A3.0	-	-	-	-
113	E	SS	10'-0"	10'-0"	1 3/4"	II	STL	5/A3.0	13/A3.0	-	-	-	- 5
113A	B	HM	3'-0"	7'-0"	1 3/4"	IV	HM	17/A3.0	1 SIM.	-	-	-	-
113B	G	STL	10'-0"	10'-0"	1 3/4"	II	STL	4/A3.0	16/A3.0	-	-	-	-
118A	E	STL	9'-8"	10'-0"	1 3/4"	II	STL	18/A3.0	2/A2.1	T. HOLD			
118B	G	SS	10'-0"	10'-0"	-	II	STL	5/A3.0	13/A3.0	-	90 MIN	-	- 5
118C	B	HM	3'-0"	7'-0"	1 3/4"	I	HM	6/A3.0	9/A3.0	T. HOLD	90 MIN	-	-
119A	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119B	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119C	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119D	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119E	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119F	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
119G	F	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	90 MIN	-	-
119H	A	HM	3'-0"	7'-0"	1 3/4"	IV	HM	17/A3.0	16/A3.0	-	-	-	-
120A	-	STL	9'-8"	14'-0"	1 3/4"	II	STL	2/A1.2	1/A2.1	-	-	-	-
120B	A	HM	3'-0"	7'-0"	1 3/4"	III	HM	6/A3.0	9A3.0	-	-	-	-
121	A	HM	3'-0"	7'-0"	1 3/4"	I	HM	-	-	-	45 MIN	-	-
122	A	HM	3'-0"	7'-0"	1 3/4"	I	HM	6/A3.0	9A3.0	-	-	-	- 1 2

DOOR SCHEDULE NOTES

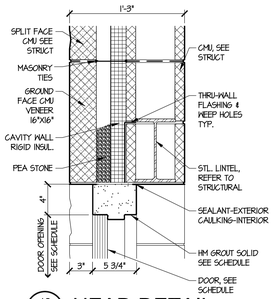
1. PAIR OF DOORS
2. GALVANIZED, INSULATED
3. FRAME BY ROLL-UP DOOR SUPPLIER
4. FRAME BY AUTO SLIDER DOOR SUPPLIER
5. COILING DOOR



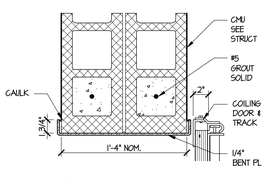
10 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



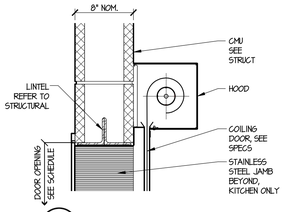
11 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



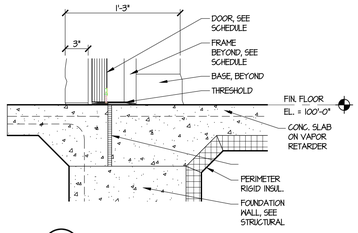
12 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



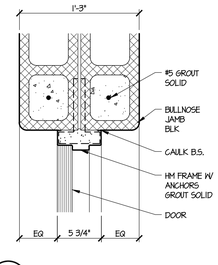
13 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



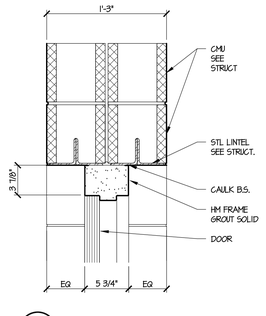
14 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



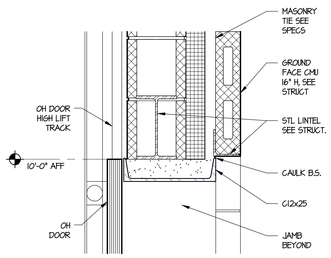
15 A3.0 SILL DETAIL
SCALE: 1-1/2"= 1'-0"



16 A3.0 JAMB DETAIL
SCALE: 1-1/2"= 1'-0"



17 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"



18 A3.0 HEAD DETAIL
SCALE: 1-1/2"= 1'-0"

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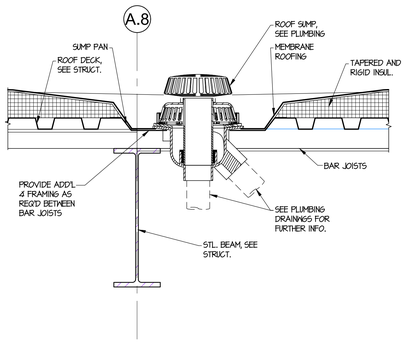
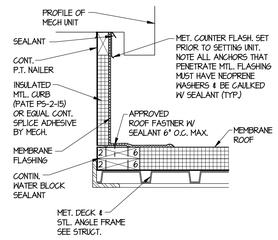
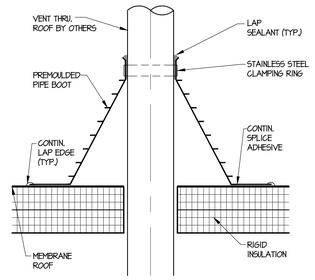


1 A4.0 ROOF SUMP DETAIL
SCALE: 1 1/2" = 1'-0"

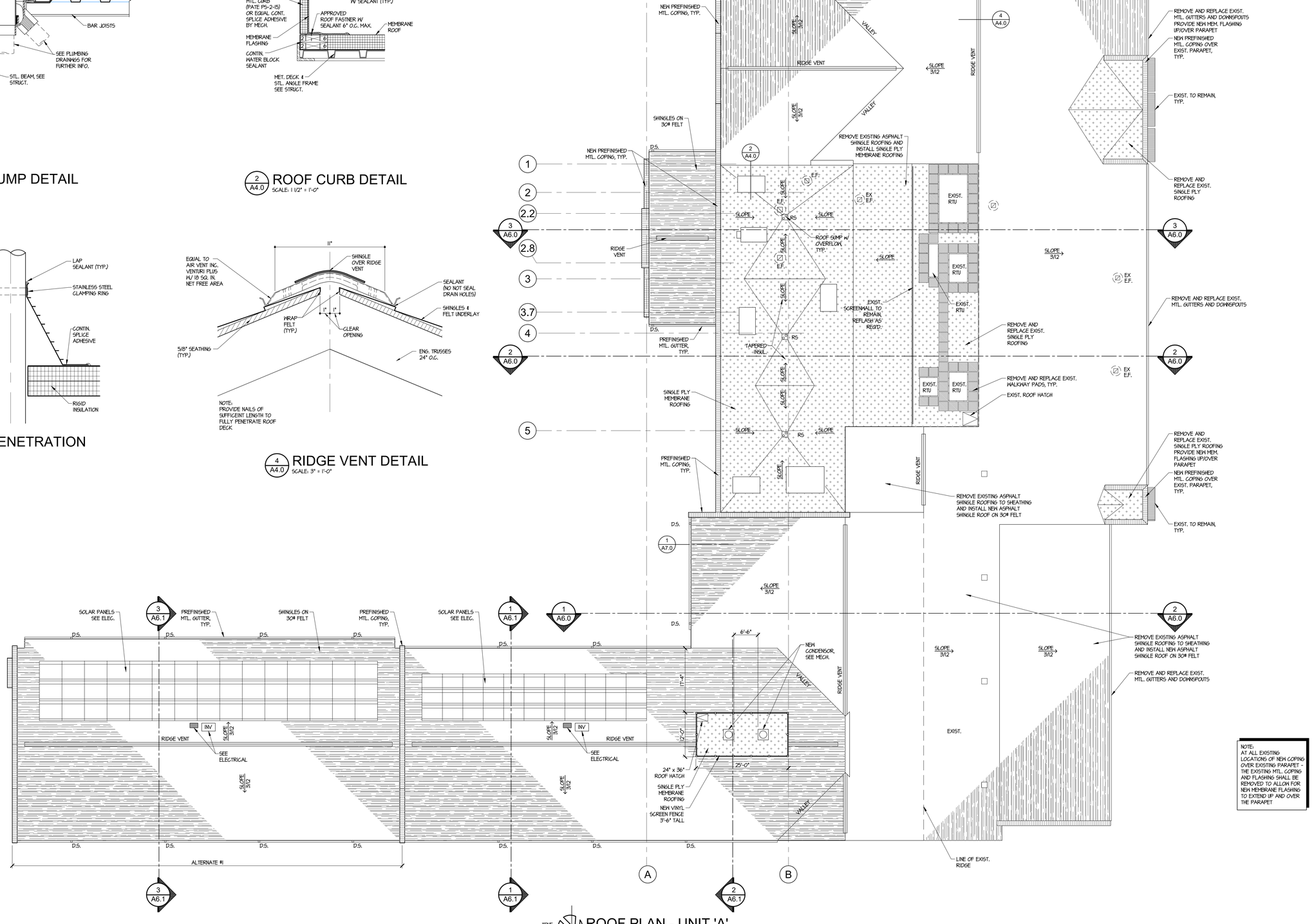


2 A4.0 ROOF CURB DETAIL
SCALE: 1 1/2" = 1'-0"



3 A4.0 ROOF PENETRATION
SCALE: 3" = 1'-0"

4 A4.0 RIDGE VENT DETAIL
SCALE: 3" = 1'-0"



NOTE:
AT ALL EXISTING LOCATIONS OF NEW COPING OVER EXISTING PARAPET - THE EXISTING MTL. COPING AND FLASHING SHALL BE REMOVED TO ALLOW FOR NEW MEMBRANE FLASHING TO EXTEND UP AND OVER THE PARAPET

TRUE NORTH
PLAN NORTH

ROOF PLAN - UNIT 'A'
SCALE: 3/32"= 1'-0"

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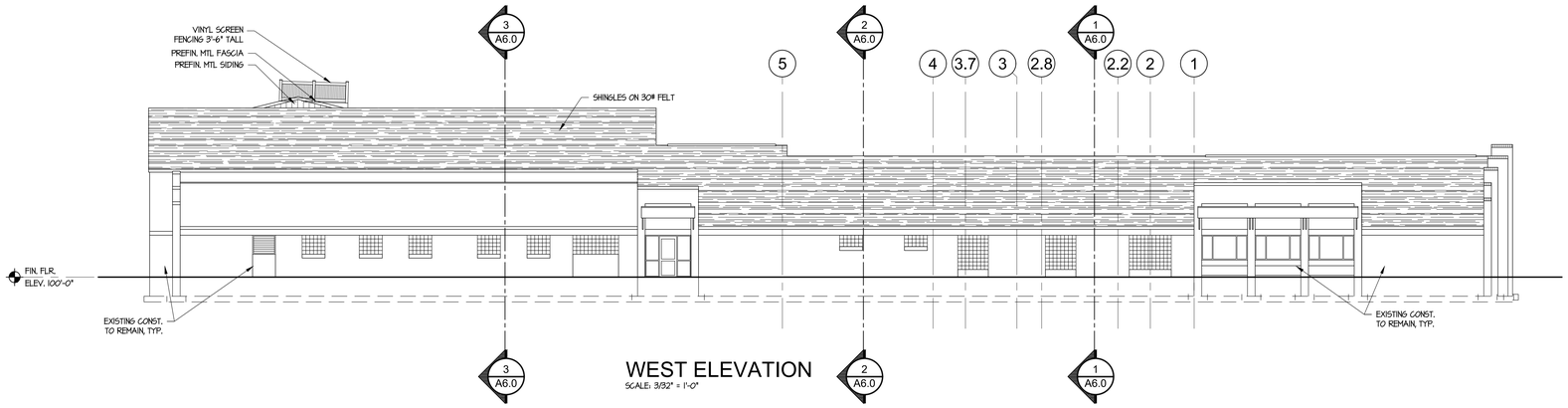
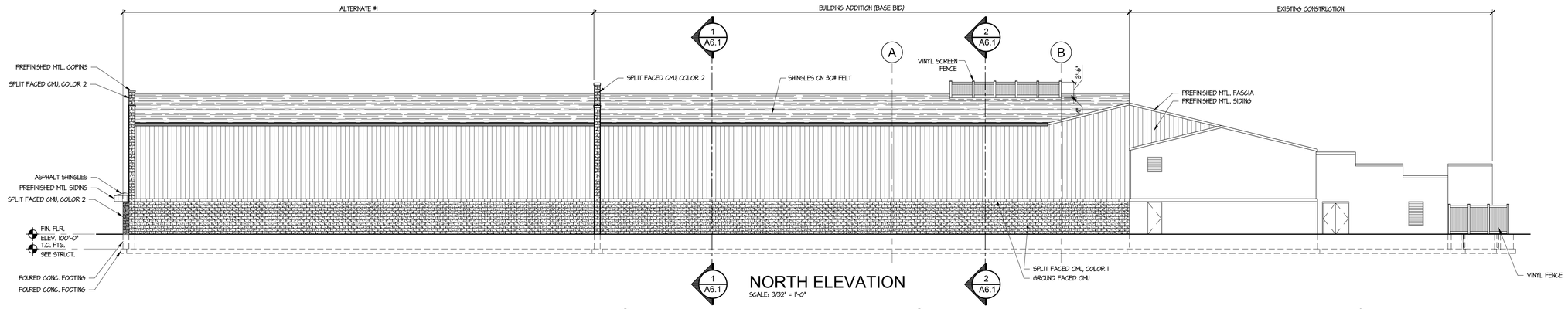
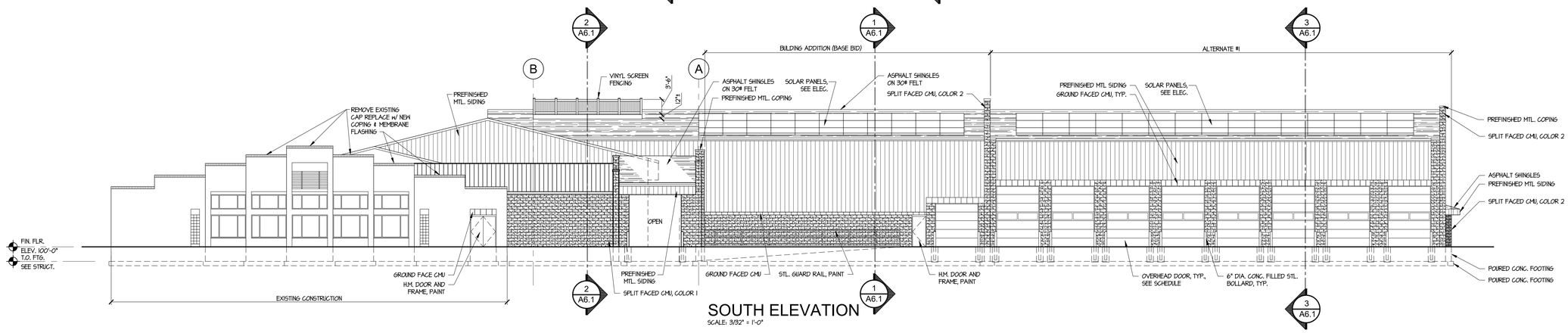


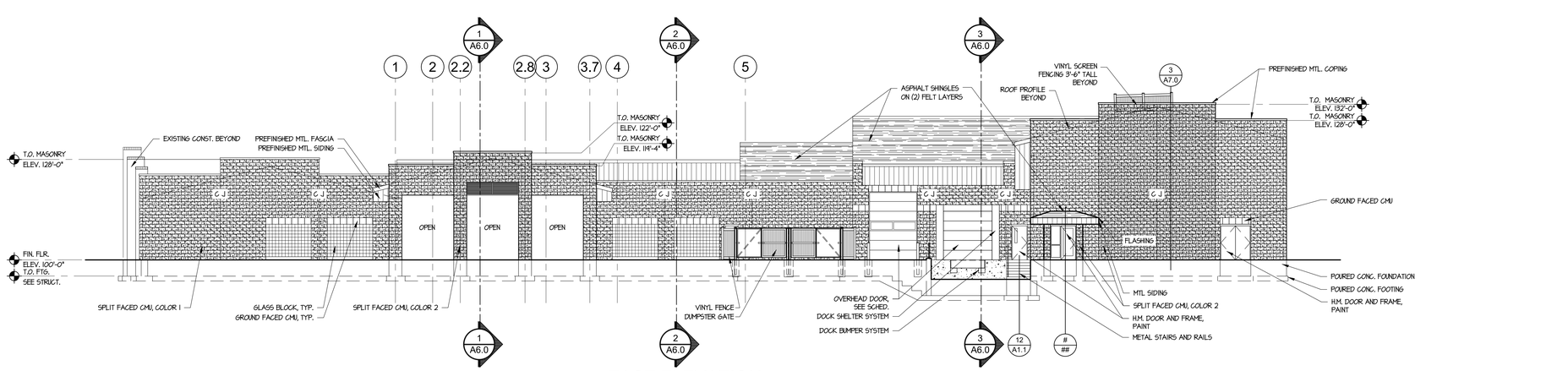
WEST ELEVATION
SCALE: 3/32" = 1'-0"



NORTH ELEVATION
SCALE: 3/32" = 1'-0"



SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



EAST ELEVATION
SCALE: 3/32" = 1'-0"

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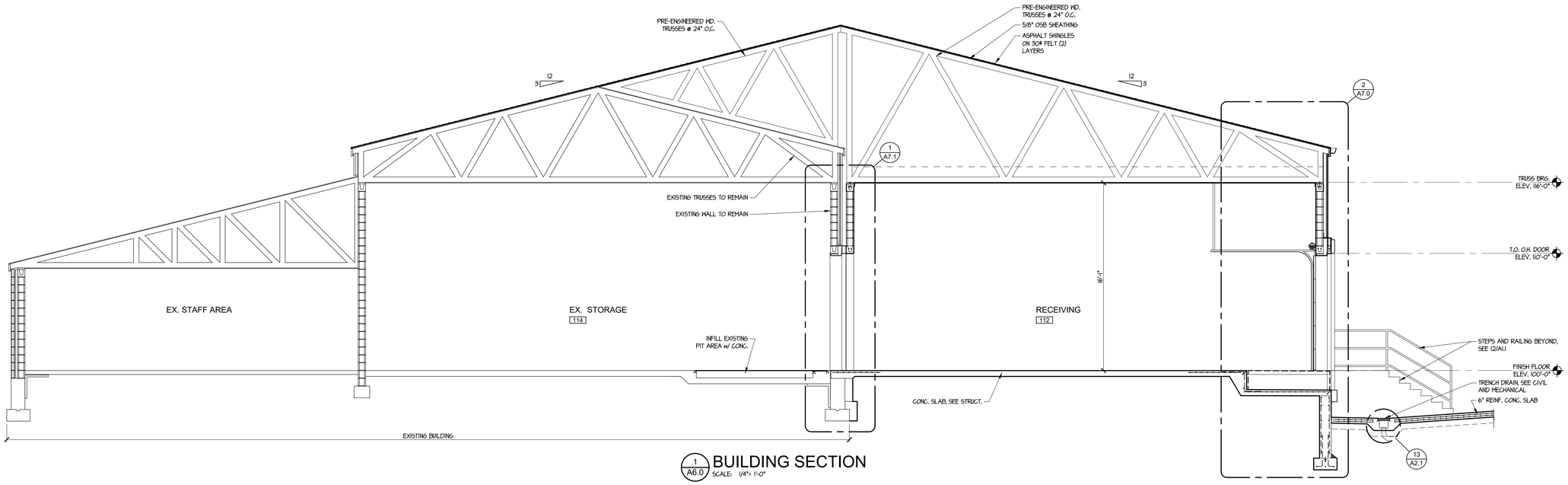
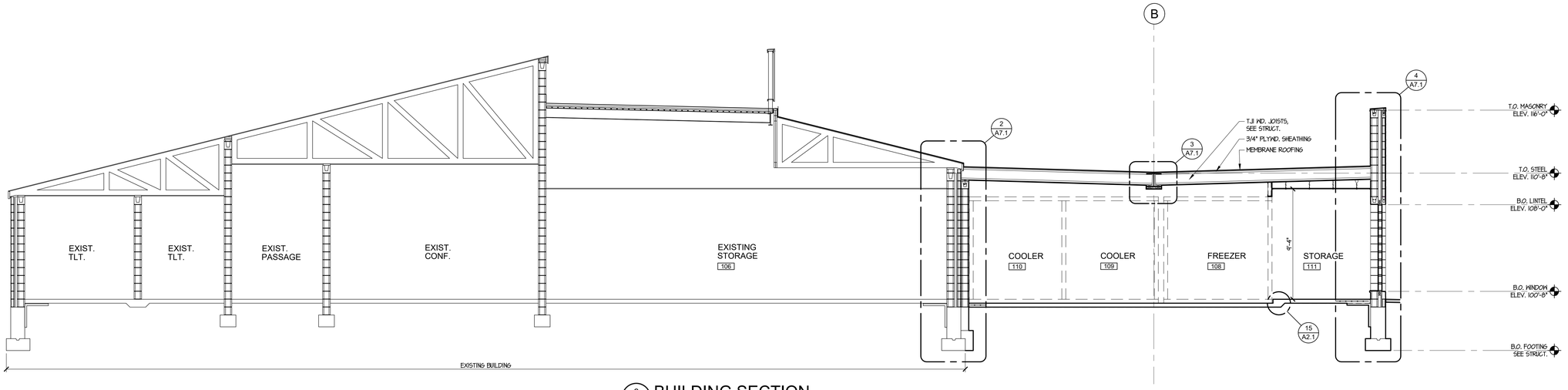
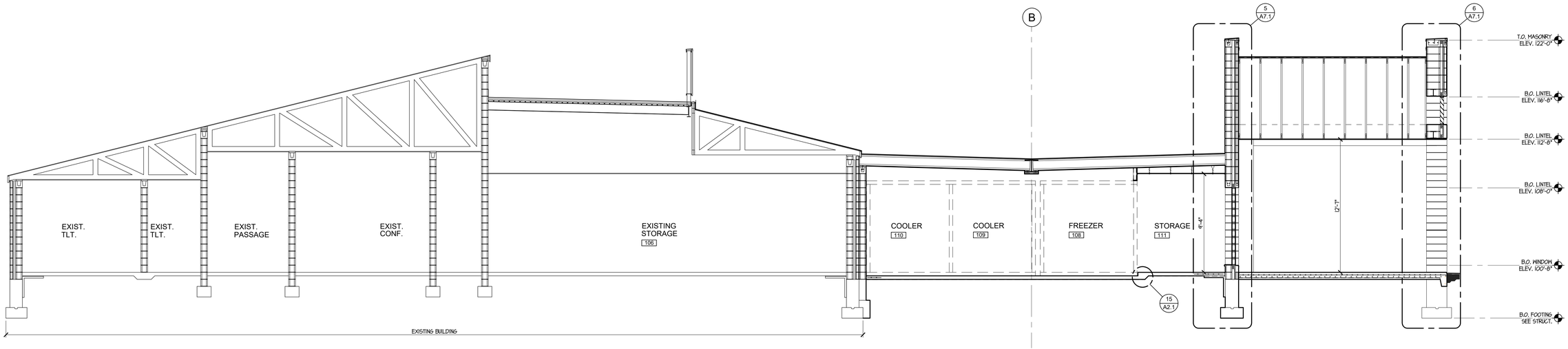


1 A6.0 BUILDING SECTION
SCALE: 1/4"= 1'-0"



2 A6.0 BUILDING SECTION
SCALE: 1/4"= 1'-0"



3 A6.0 BUILDING SECTION
SCALE: 1/4"= 1'-0"

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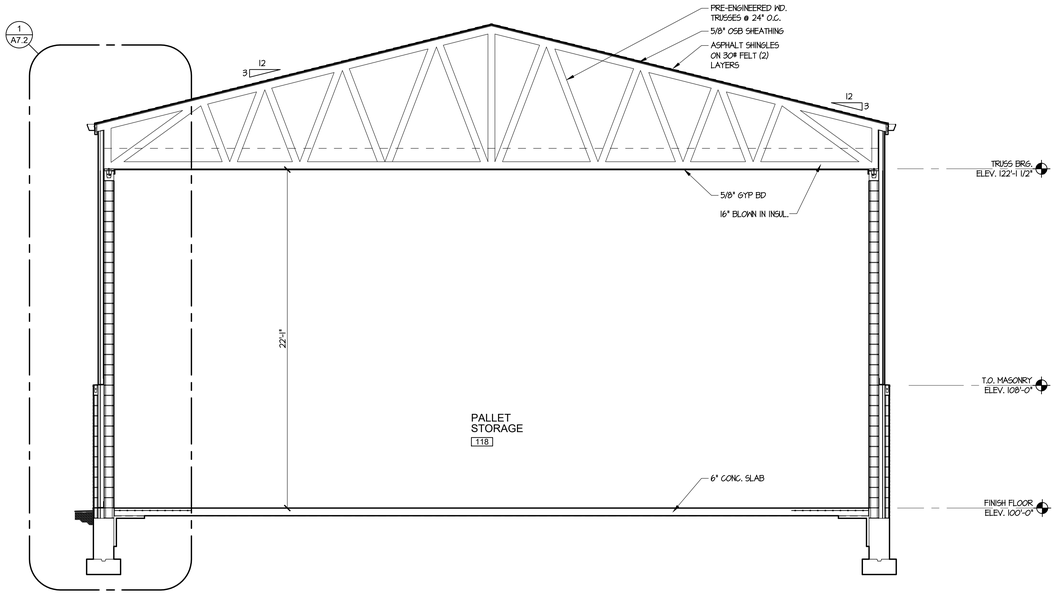
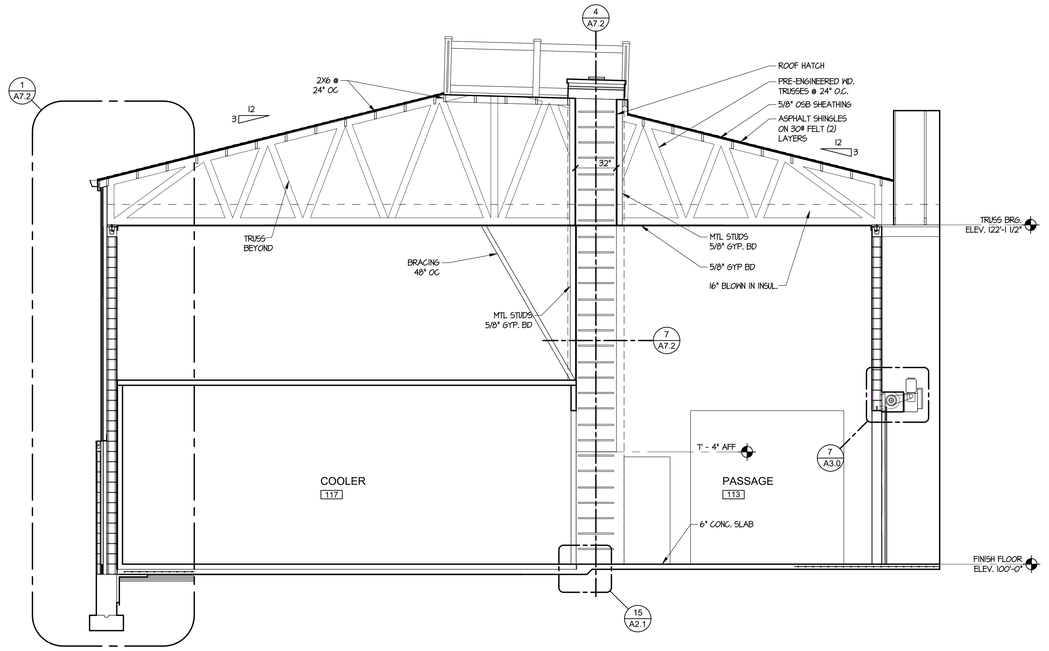
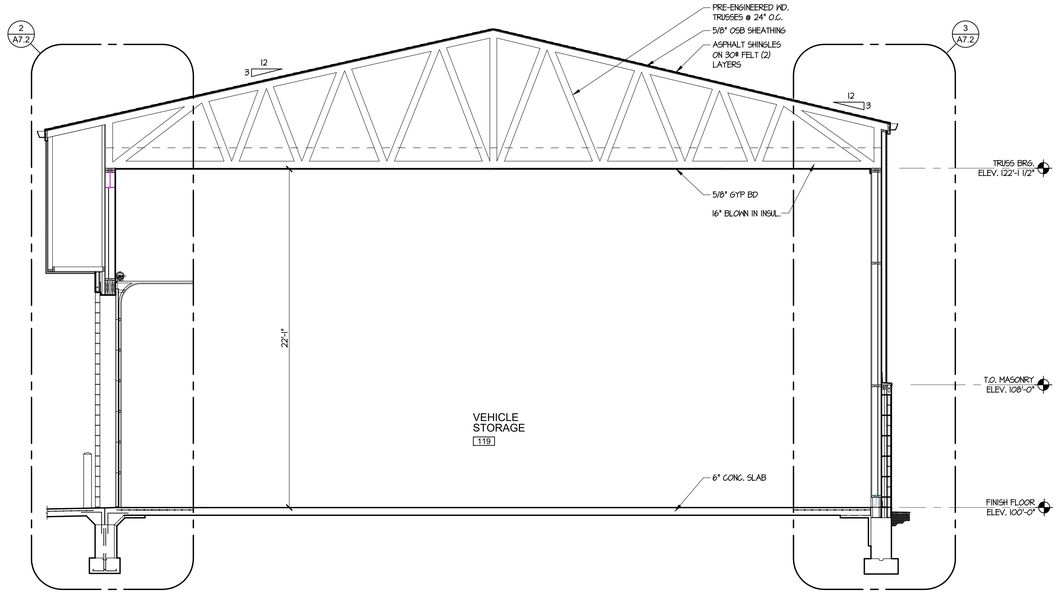


1 A6.1 BUILDING SECTION
SCALE: 1/4"= 1'-0"



2 A6.1 BUILDING SECTION
SCALE: 1/4"= 1'-0"



3 A6.1 BUILDING SECTION
SCALE: 1/4"= 1'-0"

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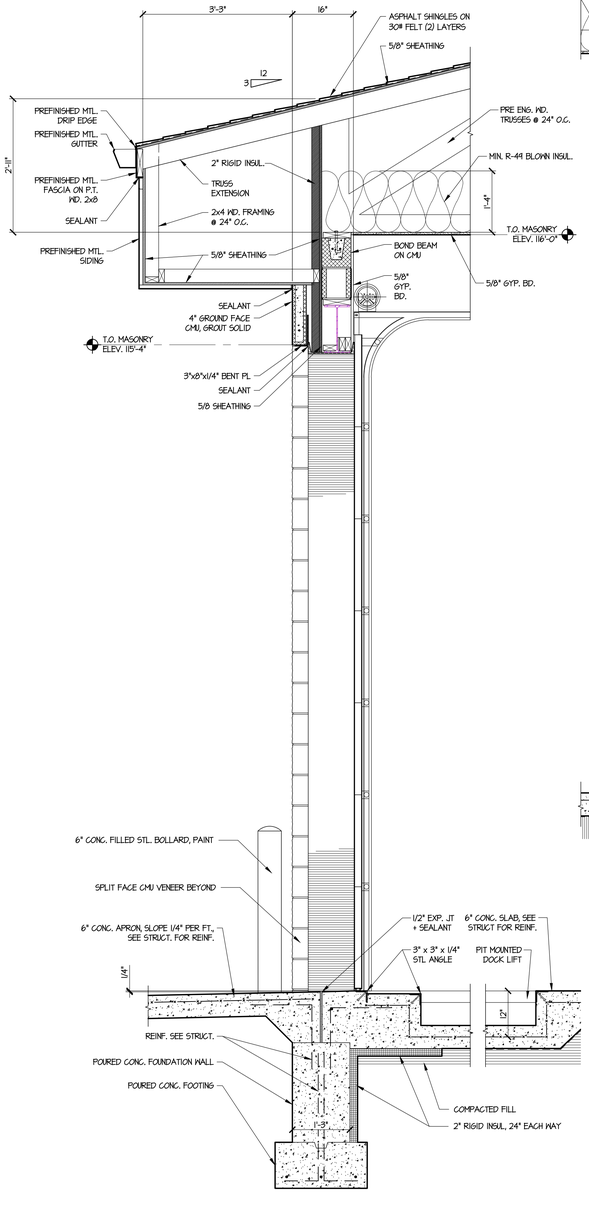
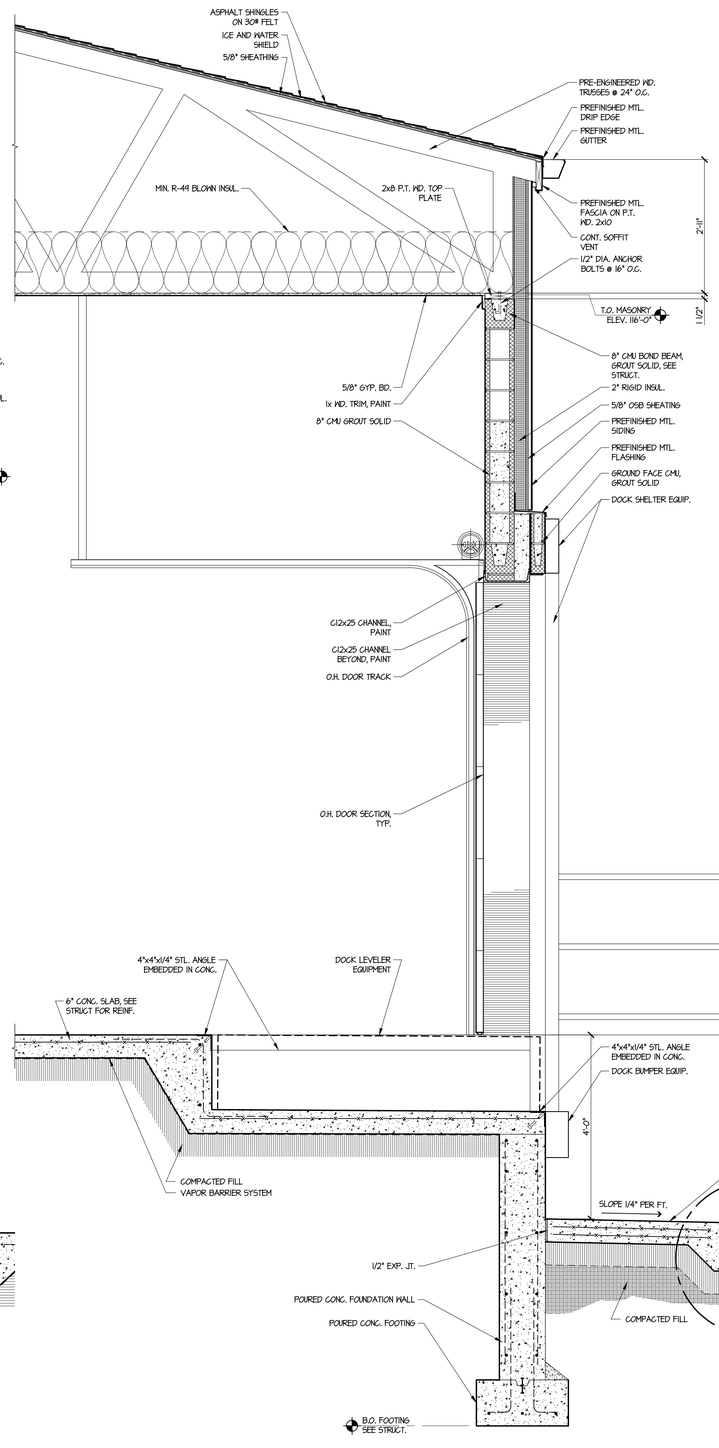
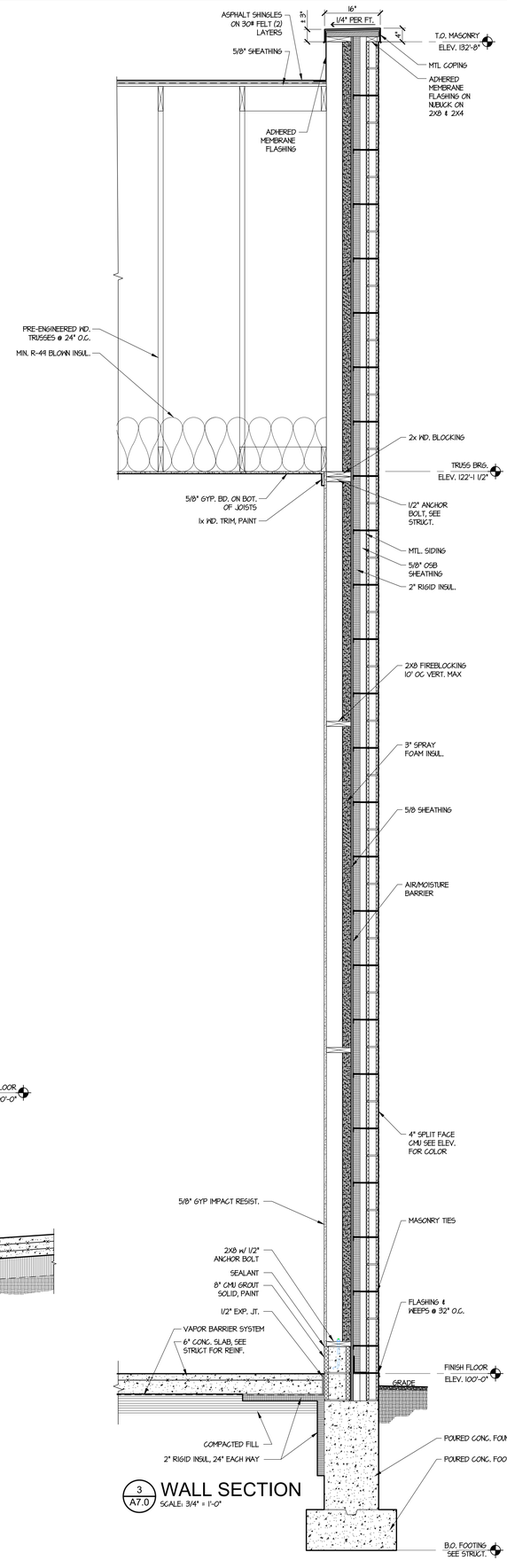


1 A7.0 WALL SECTION
SCALE: 3/4" = 1'-0"



2 A7.0 WALL SECTION
SCALE: 3/4" = 1'-0"



3 A7.0 WALL SECTION
SCALE: 3/4" = 1'-0"

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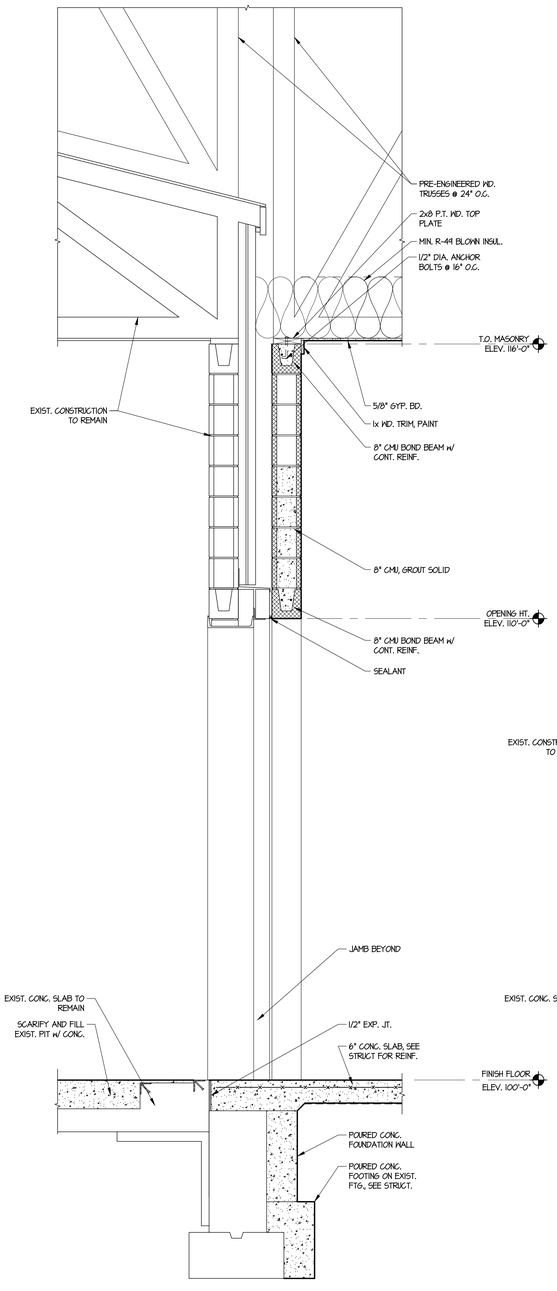
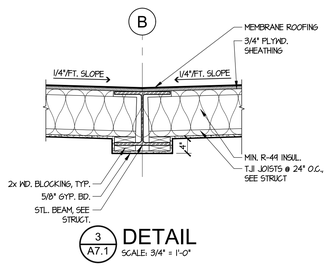
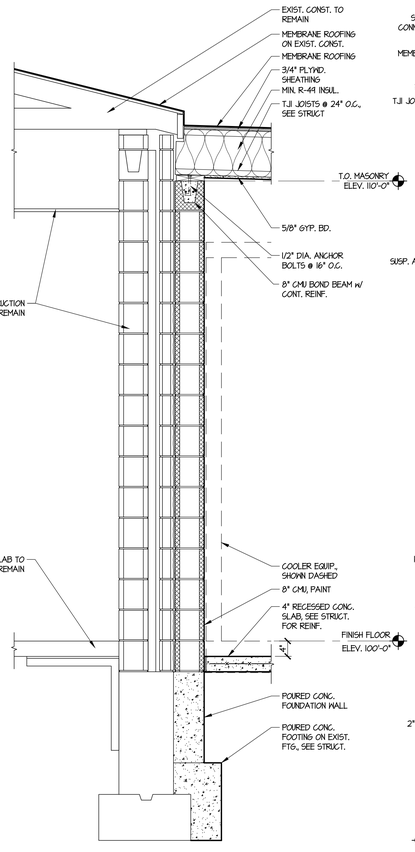


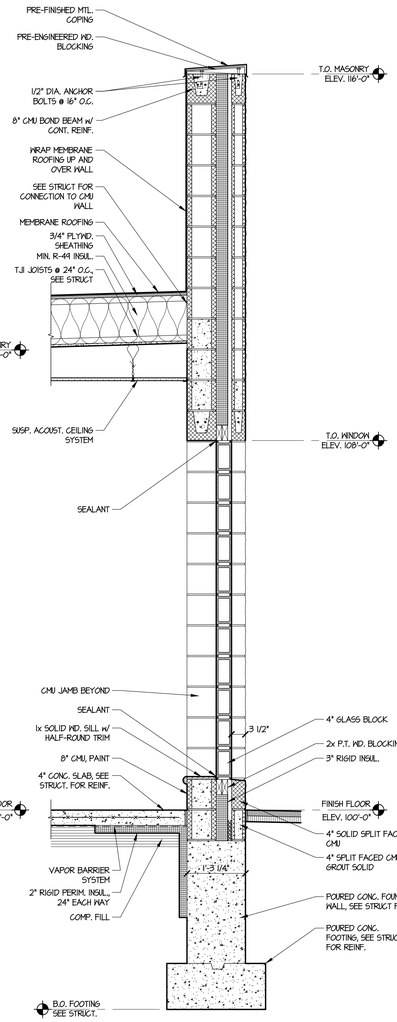
1 A7.1 WALL SECTION
SCALE: 3/4" = 1'-0"



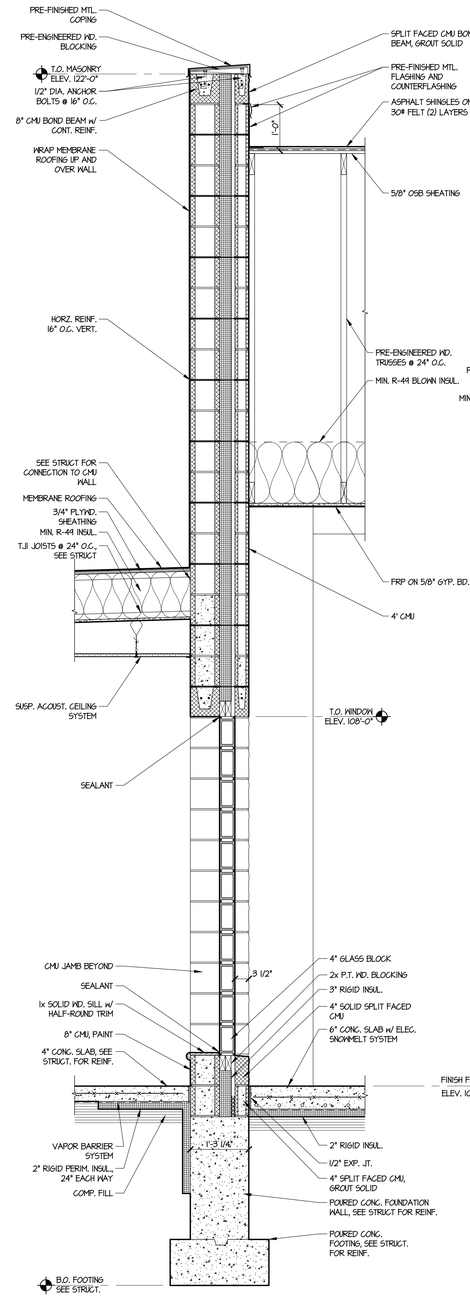
3 A7.1 DETAIL
SCALE: 3/4" = 1'-0"



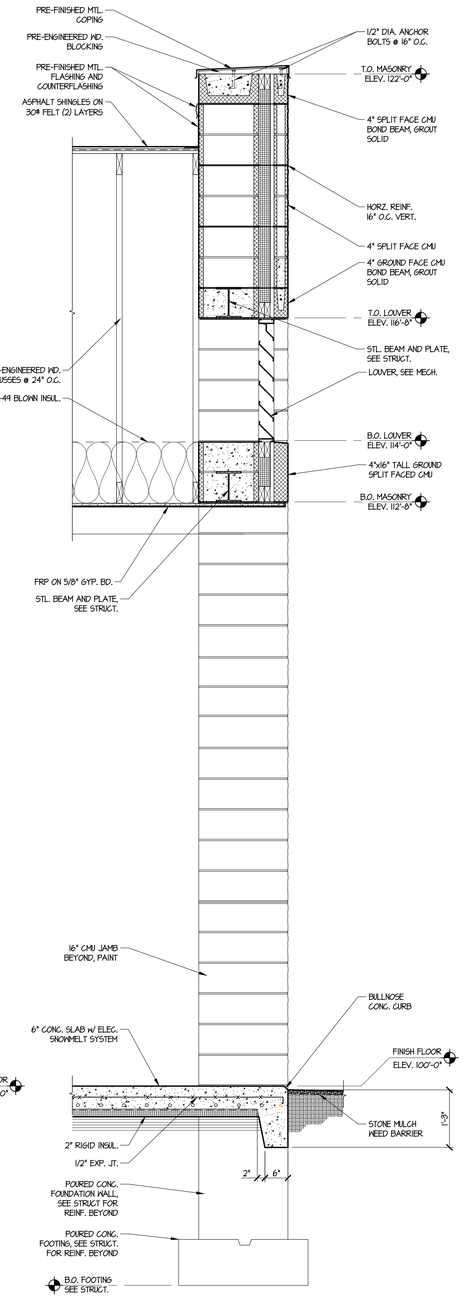
2 A7.1 WALL SECTION
SCALE: 3/4" = 1'-0"



4 A7.1 WALL SECTION
SCALE: 3/4" = 1'-0"



5 A7.1 WALL SECTION
SCALE: 3/4" = 1'-0"



6 A7.1 WALL SECTION
SCALE: 3/4" = 1'-0"

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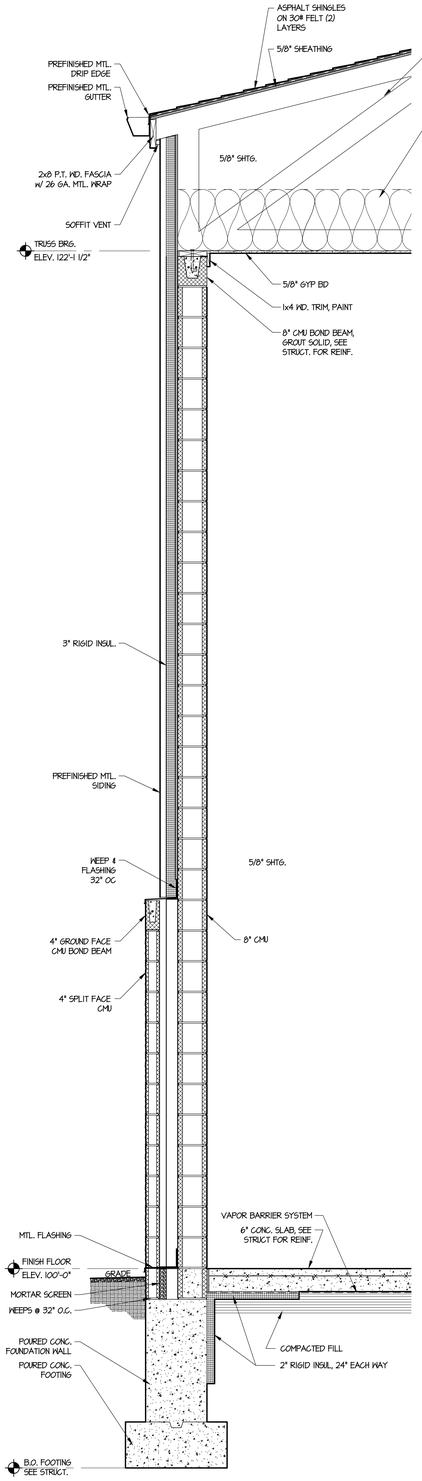
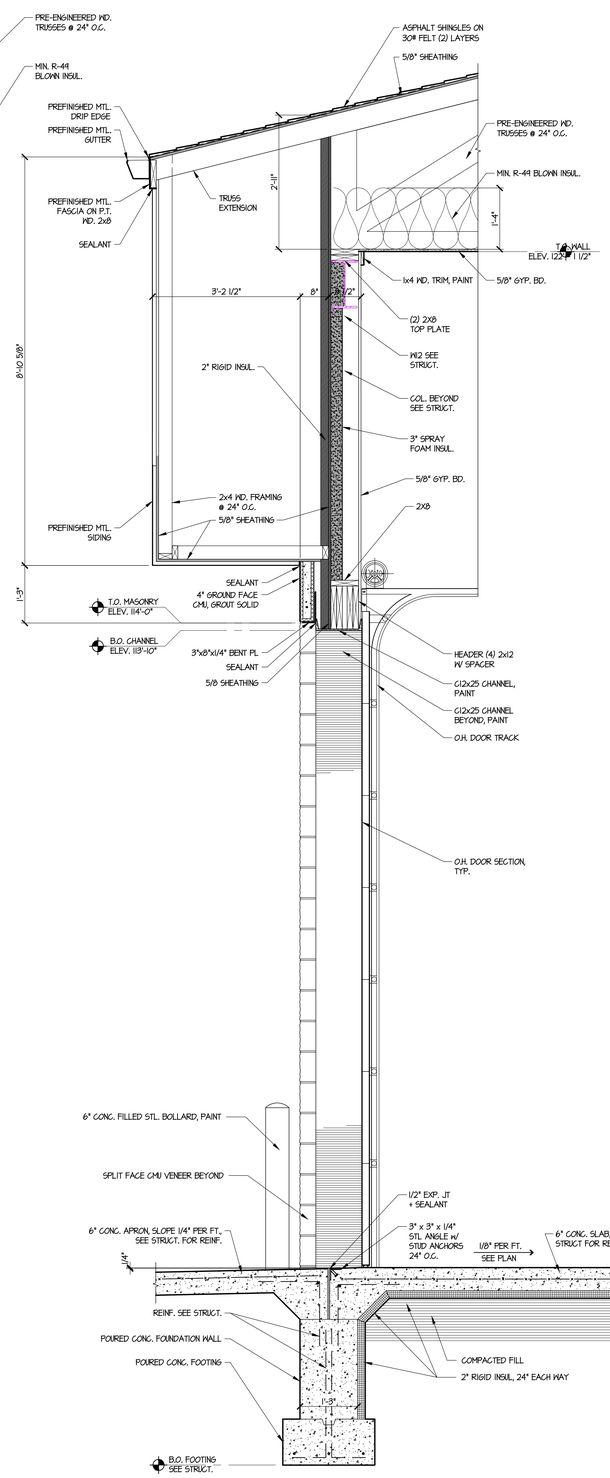
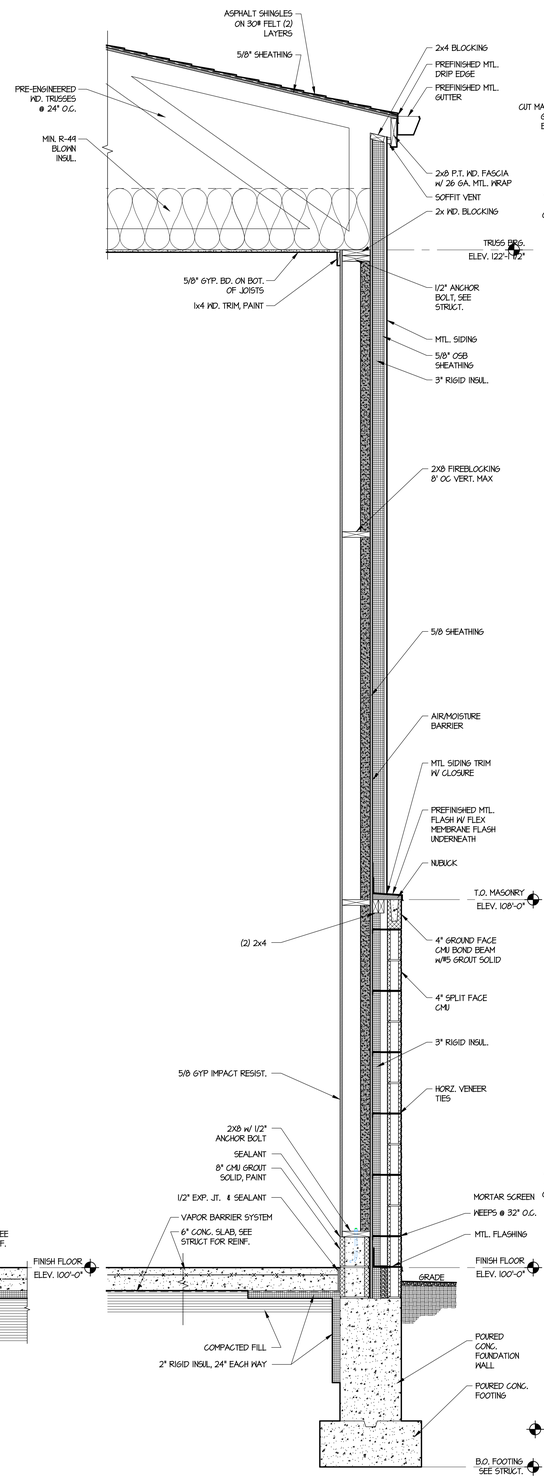


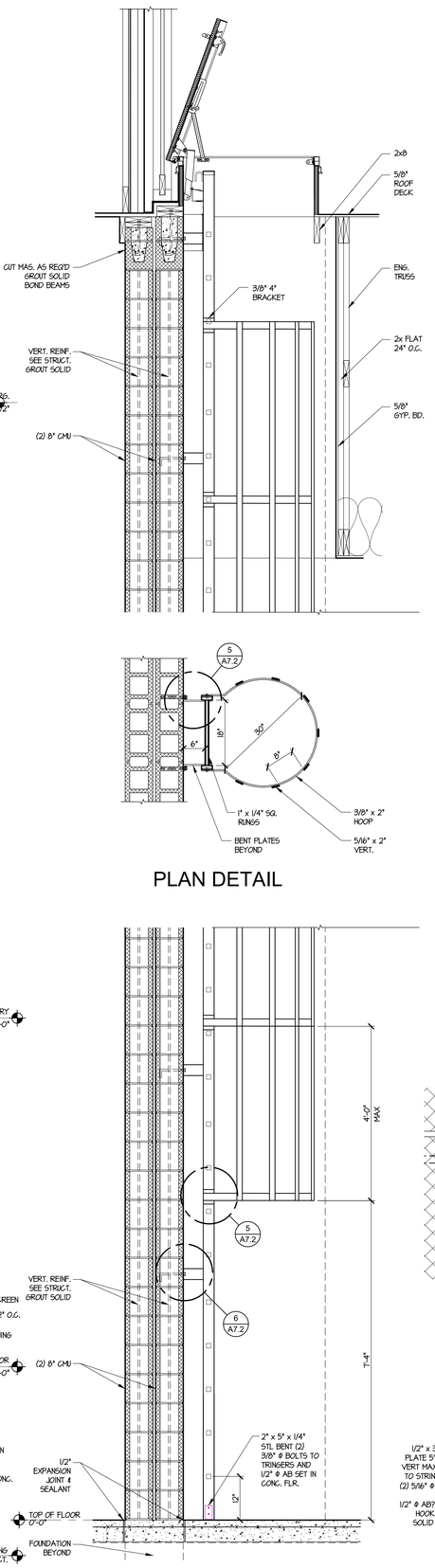
1 A7.2 WALL SECTION
SCALE: 3/4" = 1'-0"



2 A7.2 WALL SECTION
SCALE: 3/4" = 1'-0"

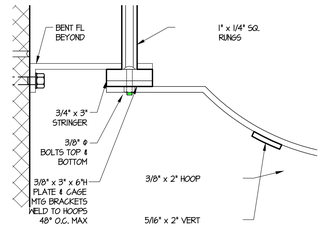


3 A7.2 WALL SECTION
SCALE: 3/4" = 1'-0"

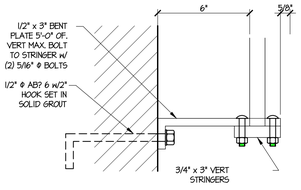


4 A7.2 WALL SECTION
SCALE: 3/4" = 1'-0"

PLAN DETAIL



5 A7.2 LADDER DETAIL
SCALE: 3" = 1'-0"



6 A7.2 LADDER DETAIL
SCALE: 3" = 1'-0"

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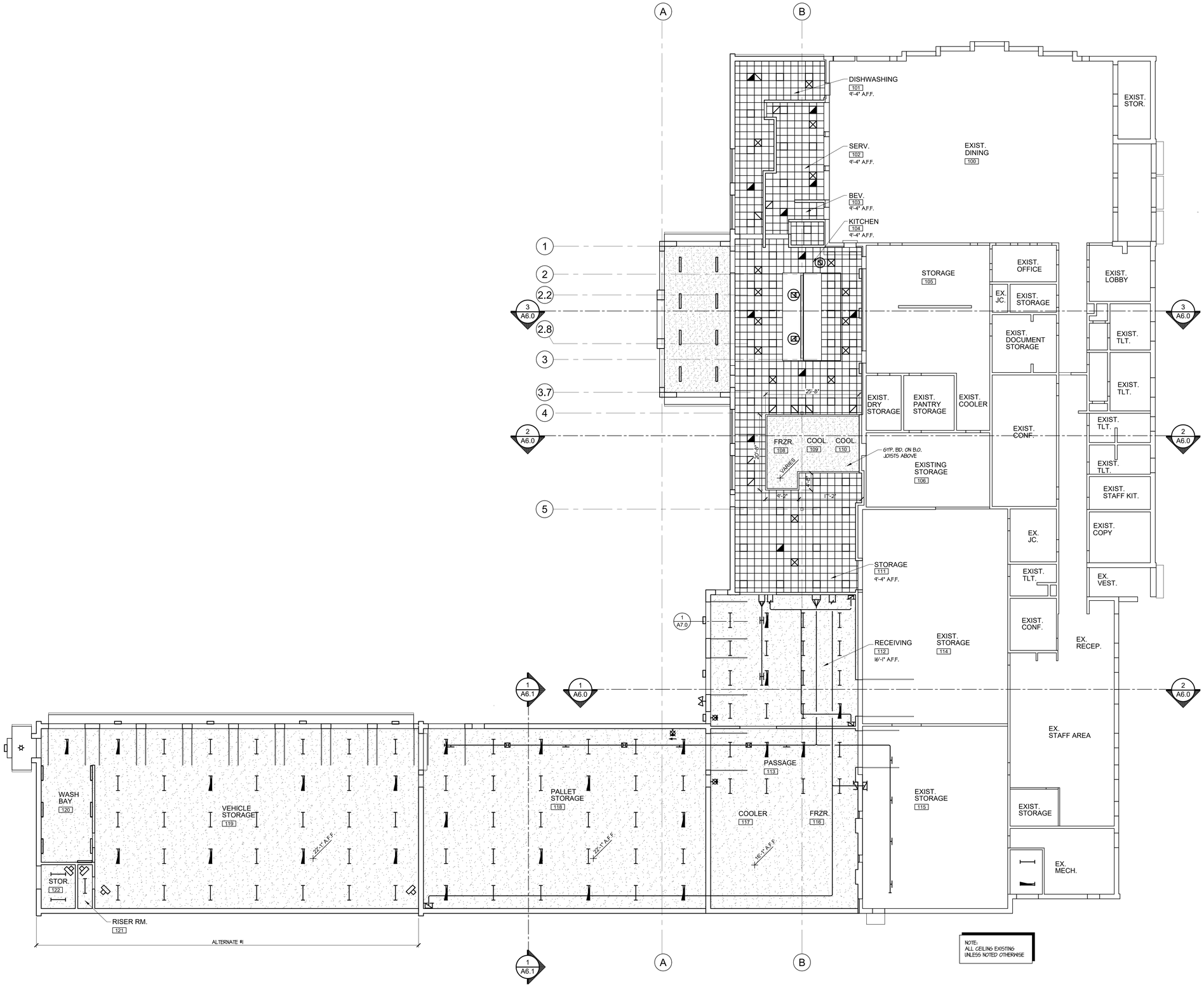

TRUE NORTH

PLAN NORTH

REFLECTED CEILING PLAN

SCALE: 3/32"= 1'-0"

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GENERAL

1. THIS BUILDING HAS BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE, 2015 EDITION

1.A. DESIGN LOADS

1.A.A. FLOOR LIVE LOADS:
1.A.A.A. CLASSROOMS = 40 PSF (MBC TABLE 1607.1)
1.A.A.B. CORRIDORS = 100 PSF (MBC TABLE 1607.1)

1.A.B. ROOF LIVE LOAD = 20 PSF (MBC 1607.12)

1.A.C. SNOW LOADS (MBC 1608)

1.A.C.A. GROUND SNOW LOAD, Pg = 35 PSF (MBC FIG. 1608.2)
1.A.C.B. SNOW EXPOSURE FACTOR, Ce = 1.0 (ASCE 7-10 7.3.1)
1.A.C.C. THERMAL FACTOR, Ct = 1.0 (ASCE7-10 TABLE 7-3)
1.A.C.D. BUILDING CATEGORY II (MBC TABLE 1604.5)
1.A.C.E. IMPORTANCE FACTOR, Is = 1.0 (ASCE7-10 TABLE 1.5-2)
1.A.C.F. FLAT ROOF SNOW LOAD, Pf = 25 PSF + DRIFTING (ASCE7-10 7.3)
1.A.C.G. DRIFTING CALCULATED PER ASCE 7-10

1.A.C.H. WIND LOADS (MBC 1609)

1.A.C.A. BASIC WIND SPEED V = 115 MPH (3-SECOND GUST) (ASCE7-10 SECTION 26.5.1)
1.A.C.B. BUILDING CATEGORY II (MBC TABLE 1604.5)
1.A.C.C. IMPORTANCE FACTOR, Iw = 1.0 (ASCE7-10 TABLE 1.5-2)
1.A.C.D. EXPOSURE CATEGORY C (MBC 1609.4.3)
1.A.C.E. INTERNAL PRESSURE COEFFICIENT ±0.18
1.A.C.F. COMPONENTS AND CLADDING LOAD PRESSURE:
1.A.C.F.A. ROOF (50ft²) -29.7, 16 PSF (ZONE 1)
1.A.C.F.B. ROOF (50ft²) -39.8, 25.9 PSF (ZONE 2)
1.A.C.F.C. ROOF (50ft²) -39.8, 25.9 PSF (ZONE 3)
1.A.C.F.D. WALLS (50ft²) -28.3 PSF (ZONE 4)
1.A.C.F.E. WALLS (50ft²) -32.6 PSF (ZONE 5)

1.A.D. EARTHQUAKE LOADS (MBC 1613)

1.A.D.A. SEISMIC RISK CATEGORY II (MBC 1613.3.5)
1.A.D.B. SEISMIC IMPORTANCE FACTOR, Ie = 1.0 (ASCE7-10 FIG 1.5-2)
1.A.D.C. Ss = 0.065 (ASCE7-10 FIG. 22-1); S1 = 0.04 (ASCE7-10 FIG. 22-2)
1.A.D.D. SITE CLASS = D (ASCE 7-10 TABLE 20.3-1)
1.A.D.E. Fa = 1.6 (MBC TABLE 1613.3.3(1)); Fv = 2.4 (MBC TABLE 1613.3.3(2))
1.A.D.F. Sms = Fa*Ss = 0.104 (MBC 1613.3.3); Sm1 = Fv*S1 = 0.095 (MBC 1613.3.3)
1.A.D.G. Sds = (2/3)*Sms = 0.069 (MBC 1613.3.4); Sd1 = (2/3)*Sm1 = 0.063 (MBC 1613.3.3)
1.A.D.H. SEISMIC DESIGN CATEGORY = A (MBC TABLES 1613.3.5(1) AND 1613.3.5(2))
1.A.D.I. SEISMIC RESISTING SYSTEM: LIGHT-FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE (ASCE7-10 TABLE 12.14-1)
1.A.D.J. DESIGN BASE SHEAR = 0.019W (ASCE7-10 SECTION 12.8.1)
1.A.D.K. SEISMIC RESPONSE COEFFICIENT, Cs = 0.01 (ASCE7-10 SECTION 12.8.1.1)
1.A.D.L. RESPONSE MODIFICATION FACTOR, R = 6 -1/2 (ASCE7-10 TABLE 12.2.1)
1.A.D.M. EARTHQUAKE LOADS CALCULATED PER ASCE 7-10 SECTION 1.4.3 "MINIMUM LATERAL FORCE PROCEDURE"
1.A.D.N. DEFLECTION AMPLIFICATION FACTOR, Cd = 4.5 (ASCE7-10 TABLE 12.2.1)

1.A.E. GUARD/HANDRAIL LOADS= 50 PLF LOAD APPLIED IN ANY DIRECTION AT THE TOP AND 200 POUND CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. LOADS NOT ASSUMED TO ACT CONCURRENTLY.

2. THE ARCHITECTURAL DRAWINGS SHALL BE WORKED WITH THE STRUCTURAL DRAWINGS. SOME STRUCTURAL INFORMATION HAS BEEN INCORPORATED IN THE ARCHITECTURAL DRAWINGS.

3. THE STRUCTURE SHALL BE CONSIDERED TO BE IN AN UNSTABLE CONDITION UNTIL ALL WALL AND ROOF STRUCTURES ARE COMPLETED. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR STABILITY AND TO RESIST LATERAL LOADS DURING ERECTION.

4. ALL NON LOAD BEARING WALLS SHALL BE CONSTRUCTED TO ALLOW FOR THE VERTICAL DEFLECTION OF THE STRUCTURE ABOVE.

FOUNDATION

1. FOUNDATIONS ARE DESIGNED FOR A MAXIMUM ALLOWABLE BEARING CAPACITY OF 5,000 PSF PER THE RECOMMENDATIONS IN THE SOIL EVALUATION REPORT PREPARED BY SNYDER & STALEY ENGINEERING, PLC, DATED AUGUST 27, 2024. FOUNDATIONS SHALL BEAR ON NATURAL CLAY UNDISTURBED SOIL OR ENGINEERED FILL PROPERLY PLACED UPON THESE CLAY SOILS.

2. THE CONTRACTOR WILL RETAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO MONITOR THE FOUNDATION WORK & DETERMINE THE QUALITY OF THE SOIL AT ALL FOOTING LOCATIONS. IF UNSUITABLE MATERIALS ARE ENCOUNTERED AT THE FOOTING LOCATIONS, THE UNSUITABLE MATERIALS SHALL BE REMOVED & REPLACED WITH COMPACTED ENGINEERED FILL OR THE FOOTING LOWERED AT THE DIRECTION OF THE ARCHITECT OR ENGINEER.

3. CONTRACTORS SHALL BE AWARE OF AND VERIFY LOCATION OF ALL UNDERGROUND UTILITIES, TANKS, ETC. DUE CARE SHALL BE EXERCISED DURING EXCAVATION SO THAT EXISTING UTILITIES ARE NOT DAMAGED

4. THE AREA OF PROPOSED CONSTRUCTION SHALL BE STRIPPED OF THE EXISTING TOP SOIL & PAVEMENT MATERIALS. ALL REMNANTS OF PREVIOUS STRUCTURES OCCUPYING THE SITE SHALL BE REMOVED AND BACKFILLED WITH ENGINEERED FILL, PROPERLY PLACED AND COMPACTED. FOLLOWING THE REMOVAL OF THE ABOVE ITEMS, IF COHESIVE MATERIALS ARE EXPOSED AT THE SUBGRADE ALL AREAS OF PROPOSED DEVELOPMENT SHALL BE THOROUGHLY PROOFROLLED UNDER THE OBSERVATION OF A QUALIFIED SOILS ENGINEER. THE PROOF ROLLING SHOULD BE PERFORMED WITH A FULLY LOADED DUMP TRUCK OR OTHER HEAVILY LOADED PNEUMATIC TIRED VEHICLE MAKING CONTINUOUS SIDE-BY-SIDE PASSES ACROSS THE ENTIRE AREA. SUBGRADE AREAS THAT DEFLECT EXCESSIVELY OR PUMP DURING PROOF ROLLING SHOULD BE EXCAVATED AND BACK FILLED WITH ACCEPTABLE ENGINEERED FILL. IF EXISTING GRANULAR FILL MATERIALS ARE EXPOSED UPON STRIPPING OPERATIONS AT THE SUBGRADE, THE AREA SHOULD BE THOROUGHLY DENSIFIED WITH A LARGE DRUM ROLLER SUCH THAT THE TOP 12 INCHES IS COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY ASTM STANDARD D-1557 (MODIFIED PROCTOR)

5. UPON COMPLETION OF THE SUB GRADE PREPARATION, THE SITE CAN BE RAISED TO THE PROPER ELEVATION WITH PROPERLY PLACED AND COMPACTED ENGINEERED FILL. ALL COMPACTED BACKFILL SHALL BE A CLEAN, UNIFORM GRADED, GRANULAR MATERIAL AND FREE OF FROZEN CHUNKS, ORGANICS, DEBRIS OR OTHER DELETERIOUS MATERIALS. ALL COMPACTED BACKFILL SHALL BE PLACED IN NO MORE THAN 10" LOOSE LIFTS AND COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR). THIS MAY BE DECREASED TO 90% IN THOSE AREAS TO BE LANDSCAPED & NOT SUPPORTING STRUCTURE OR PAVEMENT.

CONCRETE

1. THE FOLLOWING CODES GOVERN THE DESIGN, DETAILING, FABRICATION AND CONSTRUCTION OF ALL REINFORCED CONCRETE:
1.A. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14)

2. ALL CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:
2.A. FOOTINGS & PIERS 3000 PSI
2.B. SLAB ON GRADE 4000 PSI
2.C. ALL EXTERIOR EXPOSED CONCRETE SHALL BE ENTRAINED.

3. BEFORE PLACING CONCRETE REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS FOR LOCATIONS OF PIPE SLEEVES, EMBEDDED ITEMS, OPENINGS, EQUIPMENT PADS, ELECTRICAL CONDUITS, RECESSES, DRAINS, ETC. ALL OPENINGS FOR PIPE, CONDUITS, ETC. SHALL BE SLEEVED. MINIMUM SLEEVE SPACING SHALL BE 3 SLEEVE DIAMETERS.

4. ALL DEFORMED BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60.

5. ALL DEFORMED BAR REINFORCING SHALL BE SPLICED A MINIMUM OF 32 BAR DIAMETERS.

6. ALL WELDED WIRE FABRIC SHALL BE ASTM A185-01 SHEETS SHALL BE LAPPED A MINIMUM OF WIRE SPACING + 2".

7. PROVIDE RIGHT CORNER BARS W/ STD LAP @ CORNER OF ALL CONC. WALLS. LAP W/ TYPICAL WALL REINFORCING. SIZE OF BAR TO MATCH TYPICAL HORIZONTAL REINFORCING.

8. CONTRACTOR TO PROVIDE VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION PER 2015 MBC CODE TABLE 1705.3

CONCRETE MASONRY

1. THE FOLLOWING CODES GOVERN THE DESIGN, DETAILING & CONSTRUCTION OF ALL MASONRY:
1.A. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-13)
1.B. SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-13)

2. ALL MASONRY SHALL HAVE A COMPRESSIVE STRENGTH, f'm = 2,000 PSI.

3. ALL MORTAR FOR LOAD BEARING AND EXTERIOR CONCRETE MASONRY SHALL BE TYPE S, ABOVE GRADE AND TYPE M BELOW GRADE PROPORTIONED BY VOLUME ACCORDING TO ASTM C-270.

4. ALL GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI, AND SHALL BE PROPORTIONED BY VOLUME ACCORDING TO ASTM C-476.

5. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C-90 GRADE N, TYPE I UNITS MEDIUM WEIGHT UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR FURTHER DETAILS WITH REGARD TO FACE FINISH.

6. ALL MASONRY WALLS SHALL HAVE HORIZONTAL JOINT REINFORCEMENT (LADDER TYPE) AT 16" O.C. PROVIDE PREFABRICATED CORNER PIECES AT ALL CORNERS & INTERSECTIONS OF WALLS.

7. ALL DEFORMED BAR REINFORCING SHALL BE ASTM A-615 GRADE 60. LAP SPLICES IN WALLS SHALL BE A MINIMUM OF 48 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

8. REINFORCE ALL MASONRY WALLS AS SHOWN ON SCHEDULE AND DETAILS. PLACE BAR ON CENTERLINE OF WALL IN FULLY GROUTED CELL FULL HEIGHT OF THE WALL. LAP REINFORCEMENT WITH TYPICAL FOOTING DOWEL, SEE WALL SECTION FOR DOWELS REQUIREMENTS.

9. SEE ARCHITECTURAL DRAWINGS FOR MASONRY JOINT LOCATIONS.

10. CONTRACTOR TO PROVIDE VERIFICATION AND INSPECTION OF MASONRY CONSTRUCTION PER 2015 MBC CODE SECTION 1705.4.

STRUCTURAL STEEL

1. THE FOLLOWING CODE SHALL GOVERN THE DETAILING, FABRICATION & ERECTION OF ALL STEEL:
1.A. MANUAL OF STEEL CONSTRUCTION, 14TH EDITION (AMERICAN INSTITUTE OF STEEL CONSTRUCTION)

WIDE FLANGE SHAPES	--- ASTM A-992, Fy = 50 KSI
STEEL PLATE, CHANNELS & ANGLES	--- ASTM A-36
HSS SQ / RECT.	--- ASTM A-500 GRADE B, Fy = 46KSI
PIPES	--- ASTM A53 TYPE E OR S GRADE B
HSS ROUND	--- ASTM A-500 GRADE B, Fy = 42KSI

2. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1 / D1.1 M:2017 STRUCTURAL WELDING CODE. E70XX ELECTRODES SHALL BE USED FOR WELDED SHOP & FIELD CONNECTIONS.

3. ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4"Ø ASTM F3125 GR. A325 BOLTS. ALL BOLTED CONNECTIONS SHALL BE CONSIDERED AS BEARING UNLESS NOTED OTHERWISE.

4. ALL BEAM CONNECTIONS ARE TO CONFORM TO AISC STANDARD TWO ANGLE WEB CONNECTIONS. NO CONNECTION SHALL CONSIST OF LESS THAN TWO 3/4"Ø BOLTS OR A WELD DEVELOPING LESS THAN 10 KIPS.

MINIMUM BOLT CONNECTION	
W8 /W10 /W12	(2) 3/4" Ø BOLTS
W14 /W16	(3) 3/4" Ø BOLTS
W18 /W21	(4) 3/4" Ø BOLTS
W24	(5) 3/4" Ø BOLTS
W27	(6) 3/4" Ø BOLTS

THIS TABLE IS TO BE USED FOR STANDARD CONNECTIONS UNLESS NOTED OTHERWISE

5. ALL FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE. FIELD WELDING IS NOT ALLOWED EXCEPT WHERE SPECIFICALLY INDICATED OR APPROVED.

6. ALL GROUT PADS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 7 DAYS.

7. ALL ANCHOR BOLTS SHALL BE ASTM F1554 GR. 36.

8. PROVIDE AND HAVE IN PLACE ADEQUATE LATERAL BRACING & VERTICAL SUPPORTS FOR THE SAFE ERECTION AND TRUE ALIGNMENT OF THE STRUCTURAL STEEL. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE SAFE ERECTION & TEMPORARY BRACING OF STRUCTURAL STEEL.

9. VERIFY NUMBER AND SIZE OF OPENINGS IN ROOF, WALLS, AND FLOOR WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. SEE STRUCTURAL DRAWINGS AND SPECIFICATIONS, FOR STRUCTURAL REQUIREMENTS. VERIFY ALL DETAILS & INFORMATION WITH THE APPROPRIATE CONTRACTOR.

10. WELD ALL STEEL BEAMS TO BEARING PLATES W/ 5/16x 4" LONG FILLET WELD, EACH SIDE OF BEAM U.N.O.

11. CONTRACTOR TO PROVIDE VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION PER 2015 MBC CODE.

PREFABRICATED WOOD TRUSSES

1. ALL WOOD TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
1.A. TOP CHORD DEAD LOAD ---------- 10 PSF + WEIGHT OF TRUSS
1.B. BOTTOM CHORD DEAD LOAD ---------- 10 PSF + WEIGHT OF TRUSS
1.C. TOP CHORD LIVE LOAD---------- REFER TO GENERAL NOTES SECTION

2. THE EXTENT OF ROOF TRUSSES SHOWN ON THE PLANS IS FOR REFERENCE ONLY. THE FABRICATOR SHALL VERIFY ALL DIMENSIONS, TRUSS LAYOUT, CONFIGURATION, NUMBER OF EACH TYPE OF TRUSS REQUIRED, LOADING AND DETAILS.

3. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND INSTALLED PER TRUSS PLATE INSTITUTE, INC. SPECIFICATIONS AND NFPA NATIONAL, INC. SPECIFICATIONS AND NFPA NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.

4. ALL TRUSSES SHALL BE ANCHORED TO SUPPORTS AS INDICATED AND IF NOT INDICATED, PER MANUFACTURERS RECOMMENDATIONS.

5. DEFLECTION OF TRUSSES SHALL BE LIMITED TO MAXIMUM LIVE LOAD DEFLECTION OF SPAN/360.

6. SUBMITTALS:

6.A. SHOP DRAWINGS SHOWING SIZES, DESIGN VALUES, MATERIALS, AND DIMENSIONAL RELATIONSHIPS OF COMPONENTS AS WELL AS BEARING AND ANCHORAGE DETAILS.

6.B. TO EXTENT ENGINEERING DESIGN CONSIDERATIONS ARE FABRICATOR'S RESPONSIBILITY, SUBMIT DESIGN ANALYSIS AND TEST REPORTS INDICATING TRUSS PERFORMANCE CHARACTERISTICS. COMPLY WITH REQUIREMENTS.

6.C. CALCULATIONS AND SUBMITTALS OF REQUIRED CONNECTORS TO CONNECT TRUSSES TO GIRDER TRUSSES.

6.D. PROVIDE SHOP DRAWINGS WHICH HAVE BEEN SIGNED AND STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF MICHIGAN.

7. DESIGN AND SPECIFICATION OF TEMPORARY AND PERMANENT WOOD TRUSS BRACING BY TRUSS MANUFACTURER AND SHOWN ON SHOP DRAWINGS. TRUSS INSTALLER SHALL PROVIDE AND INSTALL BRACING PER SHOP DRAWINGS.

WOOD FRAMING

1. DIMENSIONAL FRAMING MATERIAL SHALL BEAR THE GRADE MARK OF AN ALSC APPROVED AGENCY AND SHALL HAVE MET THE REQUIREMENTS FOR:
1.A. PLATES AND BLOCKING - SPF No. 2 OR BETTER
1.B. REFER TO PLANS FOR THE LOAD BEARING STUD WALL SPECIFICATIONS.

2. ROOF SHEATHING AT THE SLOPED ROOF AREAS SHALL BE 1/2 INCH APA RATED WITH A PANEL SPAN RATING OF 32/16 AND SHALL BE EXTERIOR GRADE.

3. NAIL ROOF DECK TO SUPPORTS WITH 8d NAILS SPACED AT 6 INCHES O.C. AT SUPPORTED EDGES AND AT 12 INCHES O.C. AT INTERMEDIATE SUPPORTS.

4. WALL SHEATHING TO BE 1/2 INCH APA RATED WITH A PANEL SPAN RATING OF 32/16 AND SHALL BE EXTERIOR GRADE.

5. ALL FRAMING SHALL BE ANCHORED TO SUPPORTS USING SIMPSON STRONG TIE CONNECTORS OR EQUAL. SEE DETAILS FOR SPECIFIC REQUIREMENTS.

6. ALL NAILS FOR NAILING OF STRUCTURAL LUMBER SHALL BE COMMON NAILS. ALL NAILING SHALL COMPLY WITH THE RECOMMENDED NAILING SCHEDULE *TABLE 2304.10.1. OF MBC 2015

7. ALL FRAMING SHALL BE ERECTED TRUE LEVEL AND/OR PLUMB. MEMBERS SHALL BE SECURELY NAILED OR BOLTED IN PLACE AS DETAILED AT THE PROPER LOCATIONS OR SPACINGS INDICATED. ALL FRAMING MEMBERS SHALL BE OF FULL LENGTH WITHOUT PIECES ADDED OR SPLICED. FURRING, BLOCKING, NAILERS, ETC. SHALL BE SECURELY ANCHORED IN PLACE.

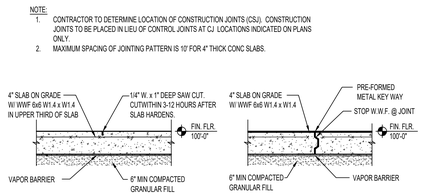
8. COMPLY WITH THE RECOMMENDATIONS AND PRACTICES OF THE AITC, NFPA AND AWC FOR THE INSTALLATION OF ALL WOOD FRAMING.

9. ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE SHALL BE TREATED.

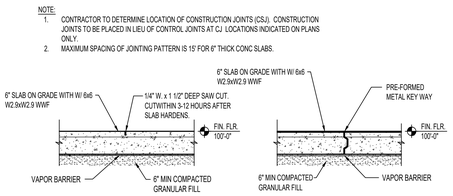
10. PROVIDE ONE TRIMMER AND END SUPPORTS AS SPECIFIED ON HEADER SCHEDULE AT THE END OF ALL HEADERS. PROVIDE FILL PLATES AS NEEDED UNLESS NOTED OTHERWISE. IN EXTERIOR WALLS. PROVIDE ONE FULL HEIGHT STUD TRIMMER FOR EACH 3'-0" OF WIDTH AT EACH END. SUFFICIENTLY ANCHOR ALL BEAMS AT EACH BEARING END.

11. WHERE (2) OR MORE UNITS OF STANDARD LUMBER ARE TO BE USED AS A HEADER:
11.A. (2) PLYS SHALL BE NAILED TOGETHER WITH (2) ROWS OF 8d NAILS AT 12" O.C.
11.B. (3) PLYS SHALL BE NAILED TOGETHER WITH (2) ROWS OF 16d NAILS AT 12" O.C.

12. ALL WOOD PROVIDED SHALL BE SEASONED WITH A MAXIMUM MOISTURE CONTENT
12.A. 19% AT THE TIME OF DRESSING FOR SAWN LUMBER
12.B. 16% AT THE TIME OF DRESSING FOR ENGINEERED LUMBER PRODUCTS

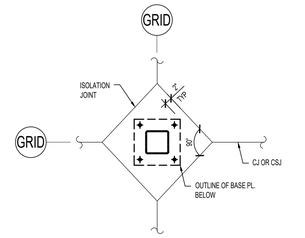


4" THICKNESS

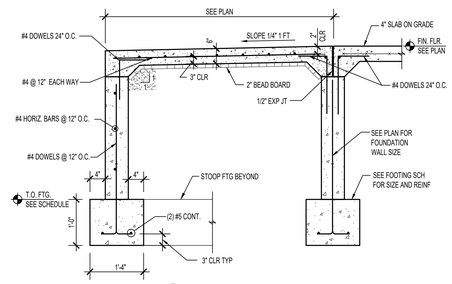


6" THICKNESS

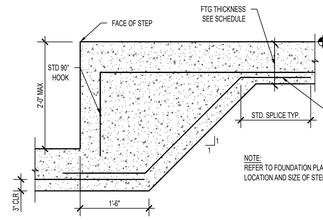
1 S0.1 SLAB ON GRADE DETAILS
SCALE: NOT TO SCALE



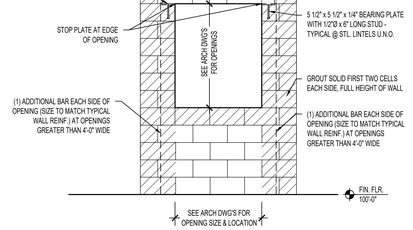
2 S0.1 TYP. ISOLATION JOINT
SCALE: 3/4" = 1'-0"



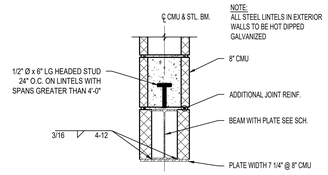
3 S0.01 SECTIONS
SCALE: 3/4" = 1'-0"



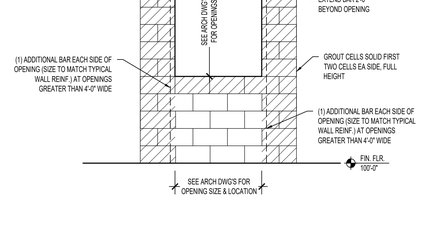
4 S0.1 STEPPED FOOTING DETAIL
SCALE: 3/4" = 1'-0"



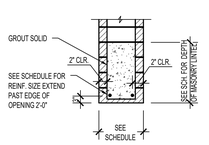
5 S0.1 TYP. MASONRY OPENING DTL. (STL. LINTEL)
SCALE: NOT TO SCALE



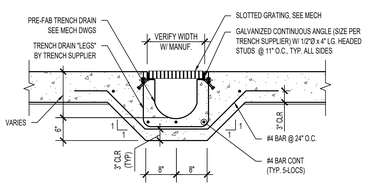
6 S0.1 TYP. STL. LINTEL SECTION
SCALE: 1 1/2" = 1'-0"



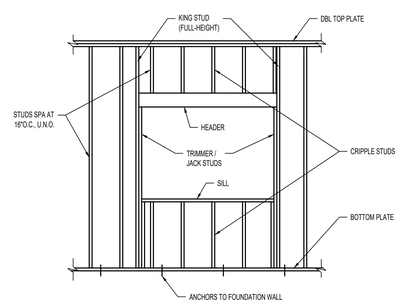
7 S0.1 TYP. MASONRY OPENING DETAIL
SCALE: NOT TO SCALE



8 S0.1 TYP. MASONRY LINTEL SECTION
SCALE: 1 1/2" = 1'-0"



9 S0.1 TRENCH DETAIL
SCALE: 3/4" = 1'-0"



10 S0.1 SECTION
SCALE: 3/4" = 1'-0"

TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

BID SET

NO.	DATE
	07/03/25

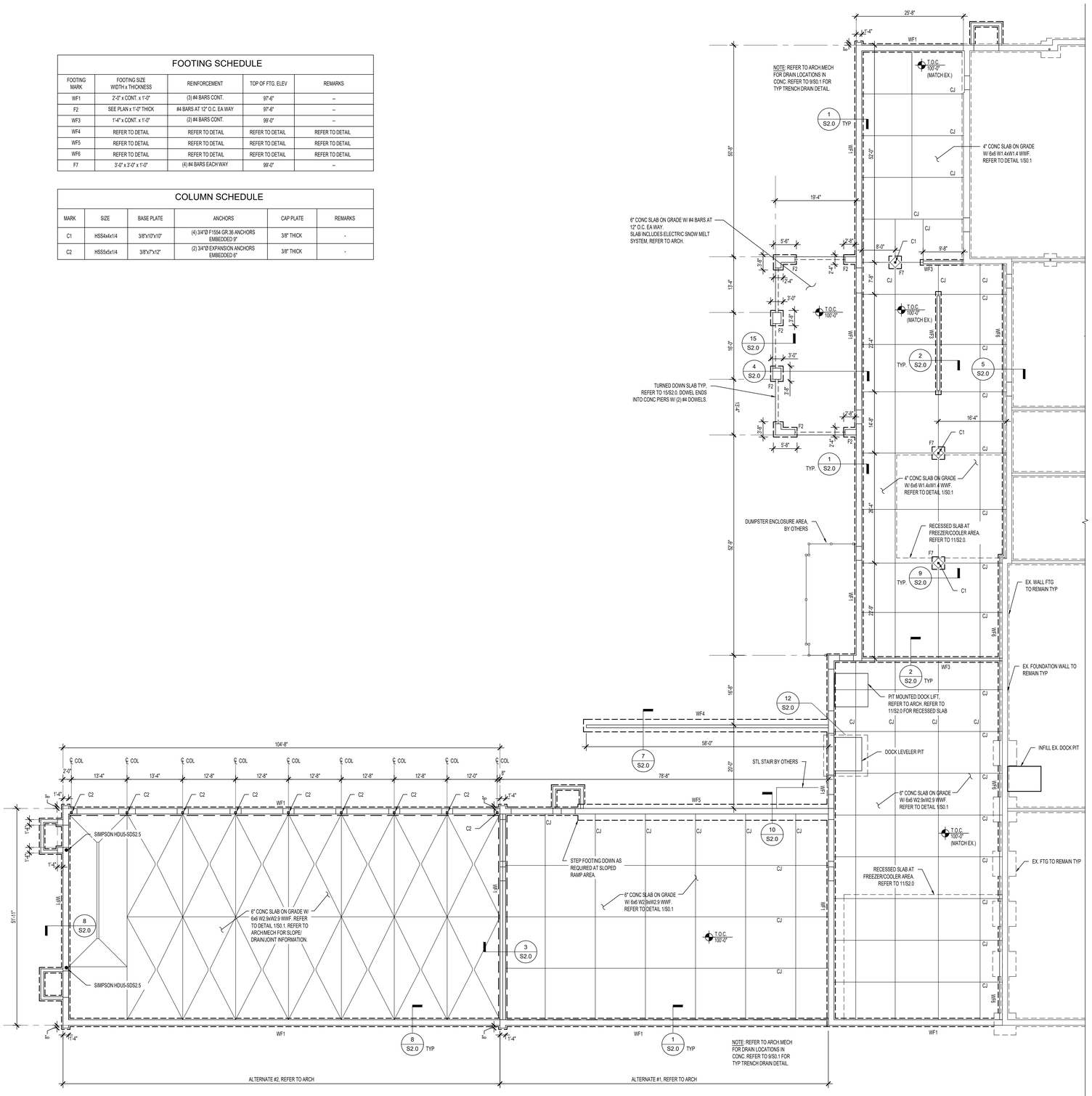
DRAWN BY MEW
DATE 7-3-25
APPROVED

SHEET NO.
S0.1

PROJECT NO.
2154

FOOTING SCHEDULE				
FOOTING MARK	FOOTING SIZE WIDTH x THICKNESS	REINFORCEMENT	TOP OF FTG. ELEV	REMARKS
WF1	2'-0" x CONT. x 1'-0"	(3) #4 BARS CONT.	97'-6"	--
F2	SEE PLAN x 1'-0" THICK	#4 BARS AT 12" O.C. EA WAY	97'-6"	--
WF3	1'-4" x CONT. x 1'-0"	(2) #4 BARS CONT.	99'-0"	--
WF4	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL
WF5	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL
WF6	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL	REFER TO DETAIL
F7	3'-0" x 3'-0" x 1'-0"	(4) #4 BARS EACH WAY	99'-0"	--

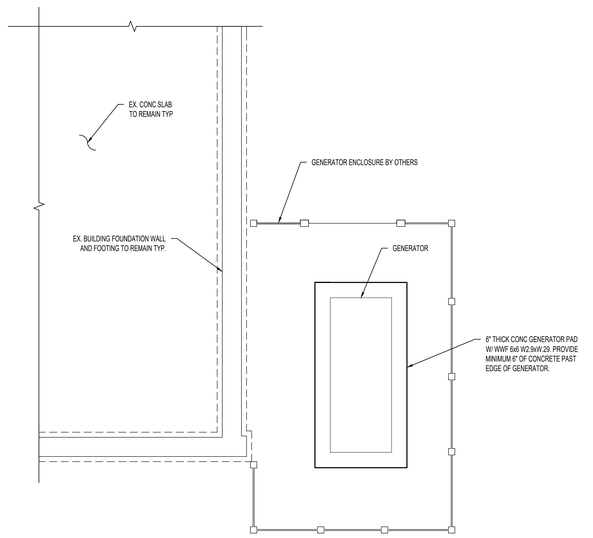
COLUMN SCHEDULE					
MARK	SIZE	BASE PLATE	ANCHORS	CAP PLATE	REMARKS
C1	HSS4x4x1/4	3/8"x10"x10"	(4) 3/4"Ø F1554 GR.36 ANCHORS EMBEDDED 9"	3/8" THICK	-
C2	HSS5x5x1/4	3/8"x7"x12"	(2) 3/4"Ø EXPANSION ANCHORS EMBEDDED 6"	3/8" THICK	-



NORTH

FOUNDATION PLAN

SCALE 3/32" = 1'-0"



NORTH

GENERATOR PAD PLAN

SCALE 1/4" = 1'-0"

TSSF ARCHITECTS, INC.
ARCHITECTS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

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NO.	DATE
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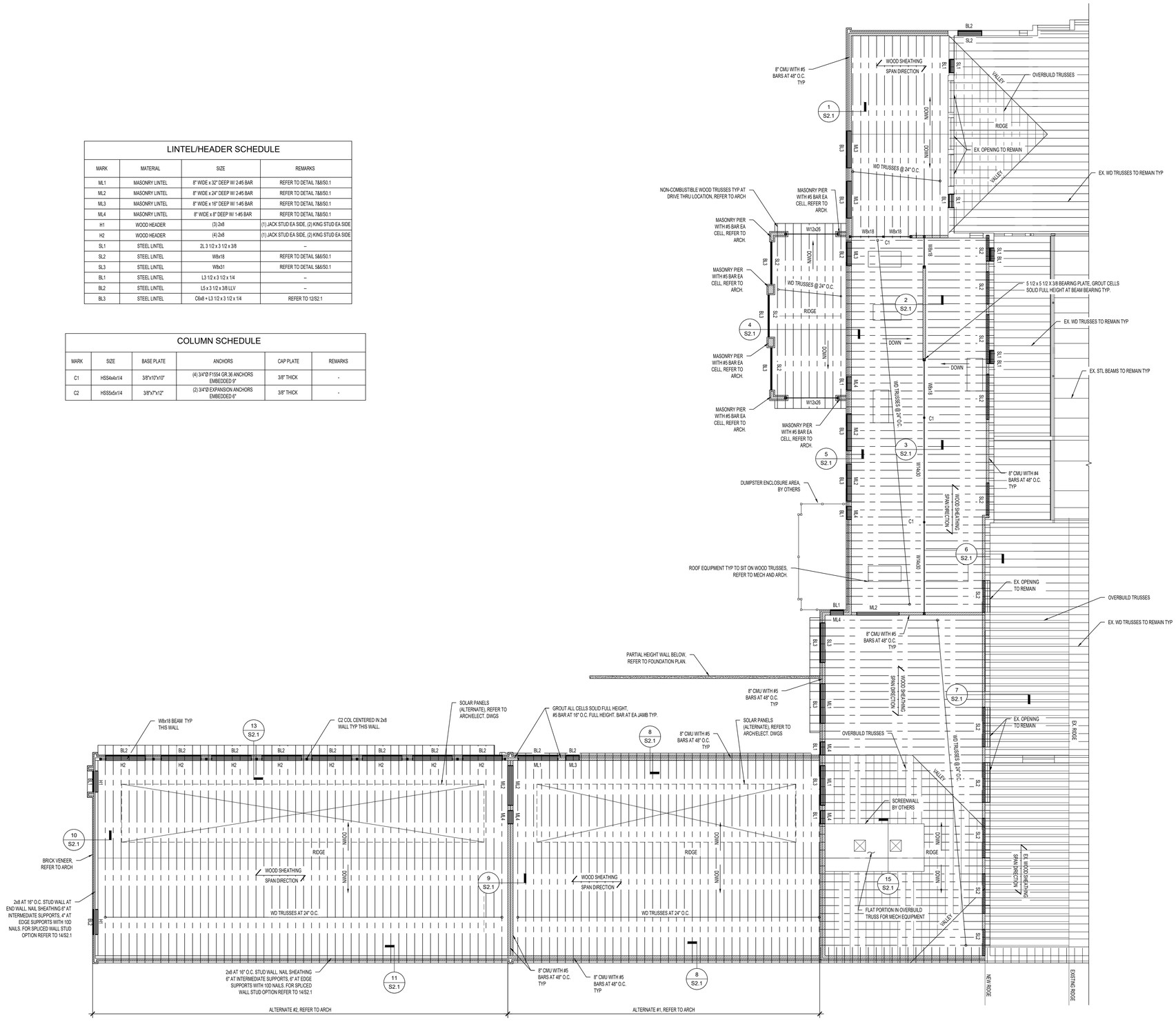
DRAWN BY MEW
DATE 7-3-25
APPROVED

SHEET NO.
S1.0

PROJECT NO.
2154

LINTEL/HEADER SCHEDULE			
MARK	MATERIAL	SIZE	REMARKS
ML1	MASONRY LINTEL	8" WIDE x 32" DEEP W/ 2-#5 BAR	REFER TO DETAIL 7&8/S0.1
ML2	MASONRY LINTEL	8" WIDE x 24" DEEP W/ 2-#5 BAR	REFER TO DETAIL 7&8/S0.1
ML3	MASONRY LINTEL	8" WIDE x 16" DEEP W/ 1-#5 BAR	REFER TO DETAIL 7&8/S0.1
ML4	MASONRY LINTEL	8" WIDE x 8" DEEP W/ 1-#5 BAR	REFER TO DETAIL 7&8/S0.1
H1	WOOD HEADER	(3) 2x8	(1) JACK STUD EA SIDE, (2) KING STUD EA SIDE
H2	WOOD HEADER	(4) 2x8	(1) JACK STUD EA SIDE, (2) KING STUD EA SIDE
SL1	STEEL LINTEL	2L 3 1/2 x 3 1/2 x 3/8	--
SL2	STEEL LINTEL	W8x18	REFER TO DETAIL 5&6/S0.1
SL3	STEEL LINTEL	W8x31	REFER TO DETAIL 5&6/S0.1
BL1	STEEL LINTEL	L3 1/2 x 3 1/2 x 1/4	--
BL2	STEEL LINTEL	L5 x 3 1/2 x 3/8 LLV	--
BL3	STEEL LINTEL	C6x8 + L3 1/2 x 3 1/2 x 1/4	REFER TO 12/S2.1

COLUMN SCHEDULE					
MARK	SIZE	BASE PLATE	ANCHORS	CAP PLATE	REMARKS
C1	HSS4x4x1/4	3/8"x10"x10"	(4) 3/4"Ø F1554 GR.36 ANCHORS EMBEDDED 9"	3/8" THICK	-
C2	HSS5x5x1/4	3/8"x7"x12"	(2) 3/4"Ø EXPANSION ANCHORS EMBEDDED 6"	3/8" THICK	-



NORTH

ROOF FRAMING PLAN

SCALE 3/32" = 1'-0"

TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

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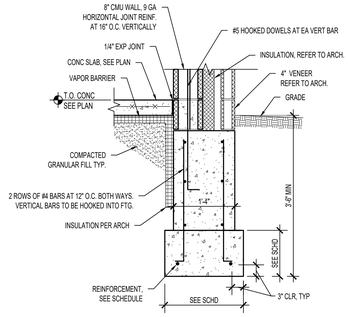
SHEET NO.
S1.1

PROJECT NO.
2154



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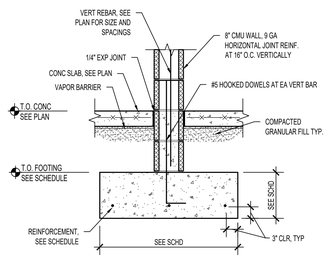

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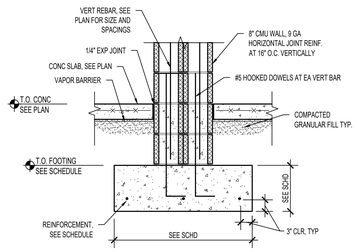

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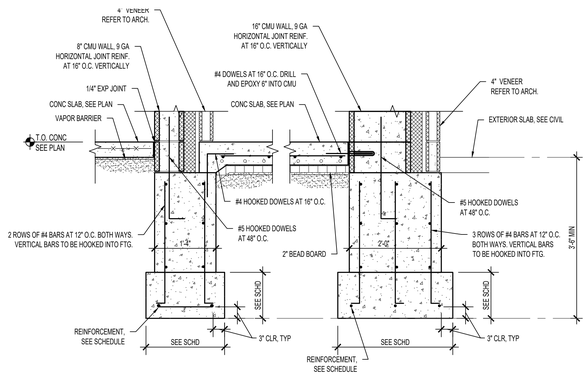

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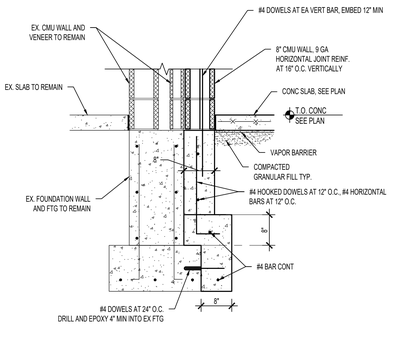

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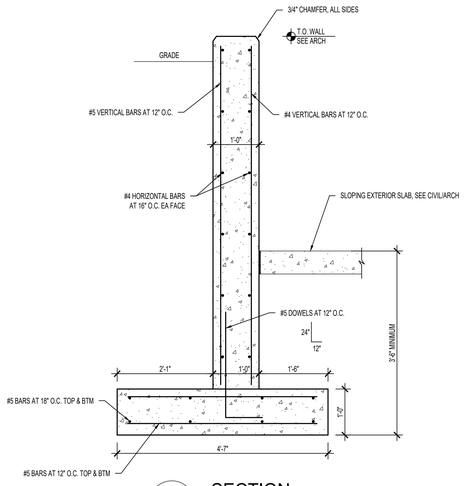

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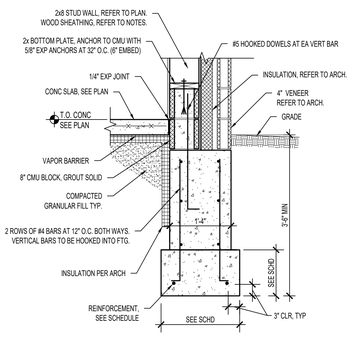

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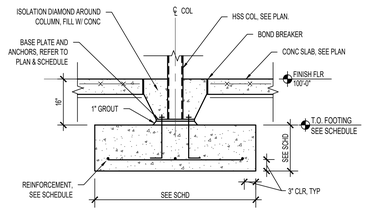

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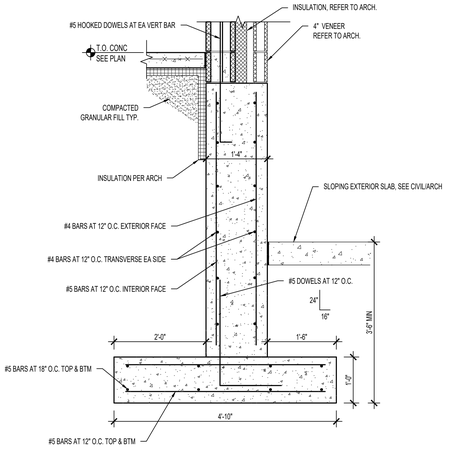

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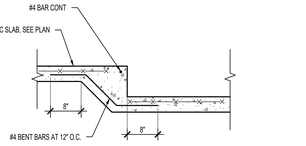

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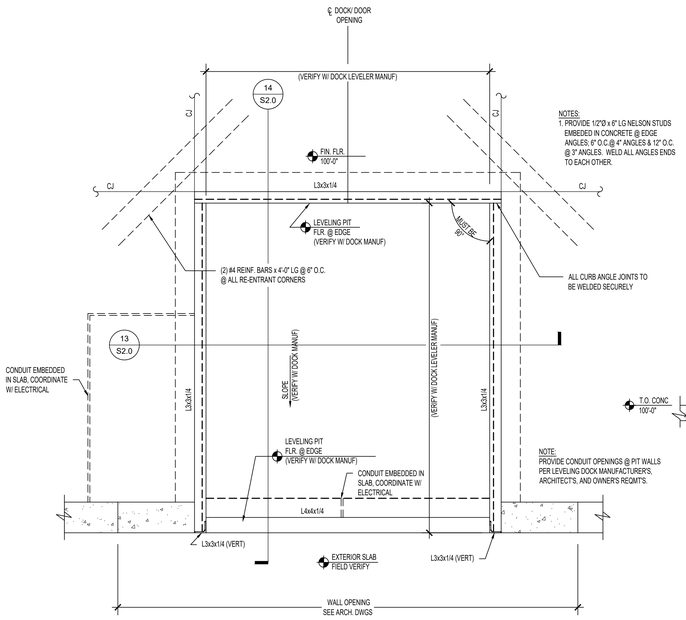

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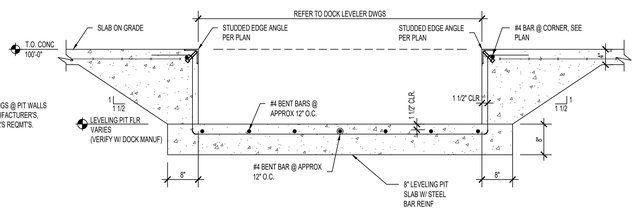

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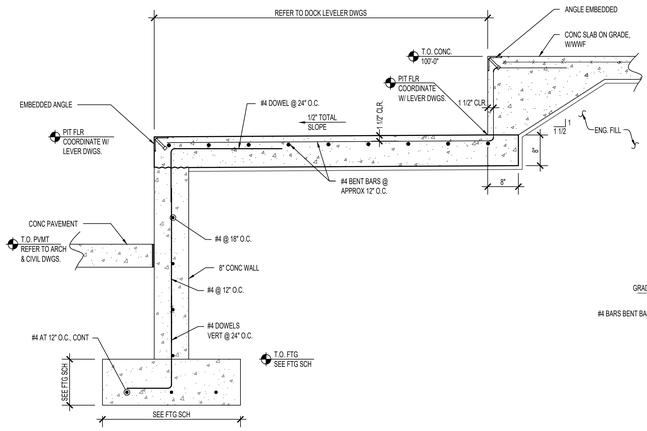

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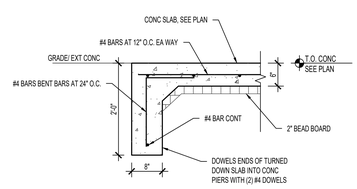


15 S2.0 **SECTION**
SCALE: 3/4" = 1'-0"

TSSF ARCHITECTS, INC.
ARCHITECTS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

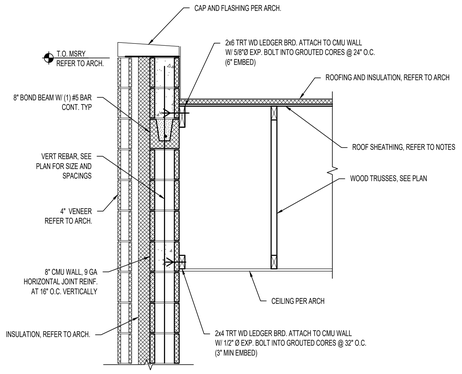
ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE
BD SET	07/03/25

DRAWN BY MEW
DATE 7-3-25
APPROVED

SHEET NO.
S2.0

PROJECT NO.
2154



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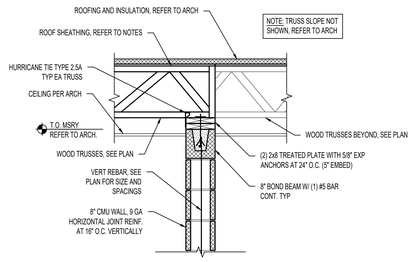

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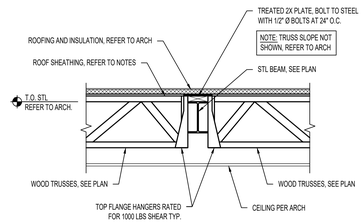

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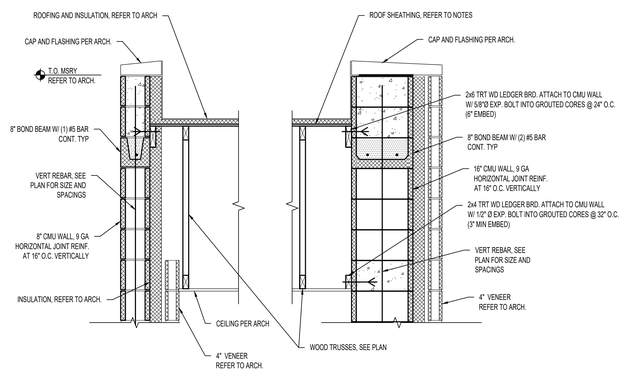

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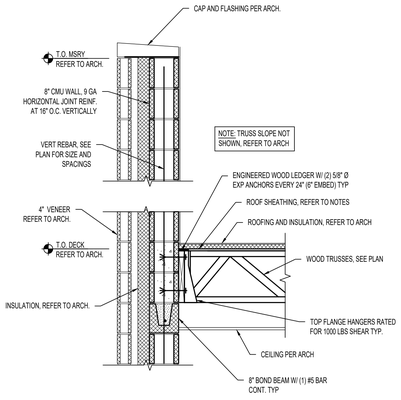

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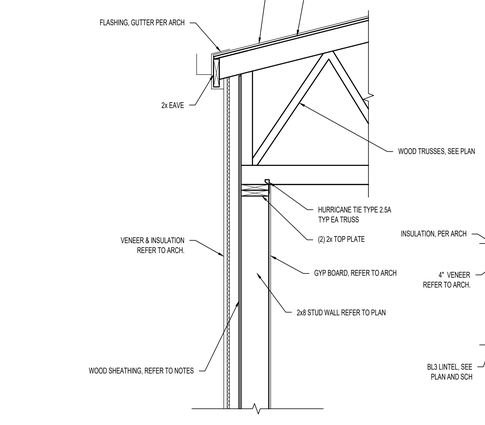

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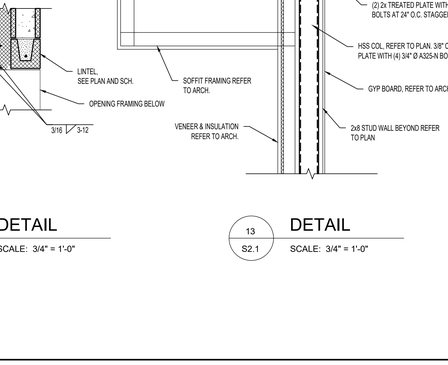

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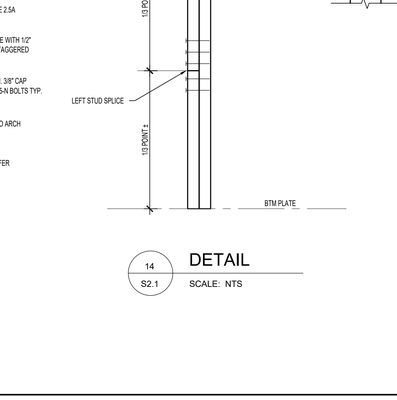

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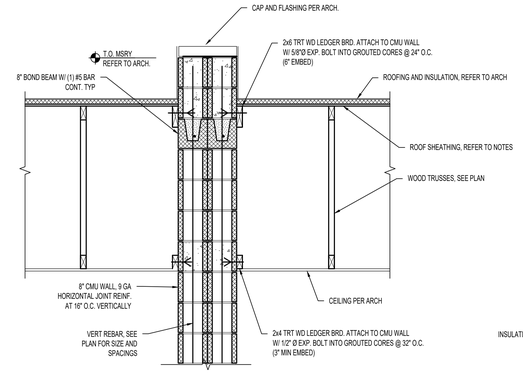

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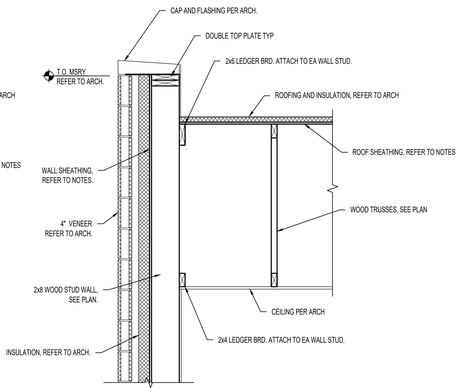

10 S2.1 DETAIL
SCALE: 3/4" = 1'-0"

11 S2.1 DETAIL
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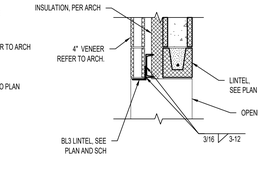

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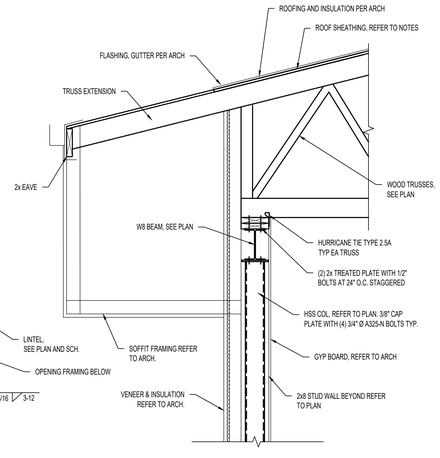

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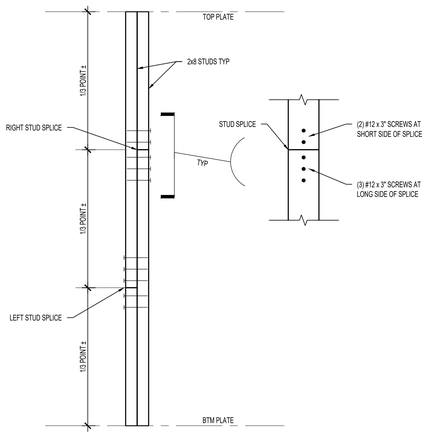

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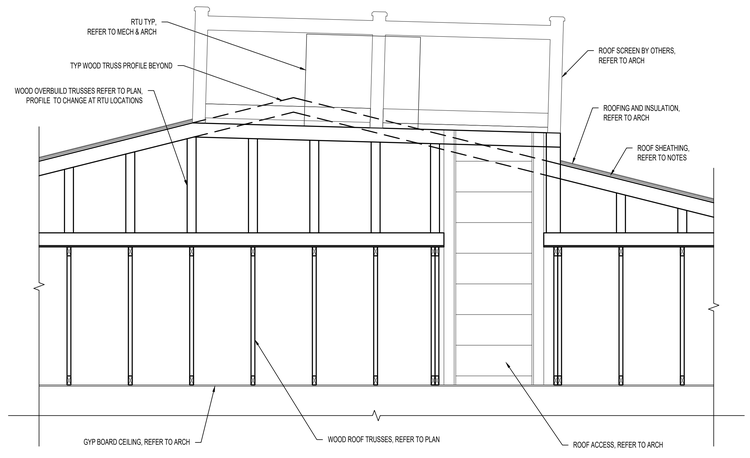

15 S2.1 DETAIL
SCALE: 1/2" = 1'-0"

TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

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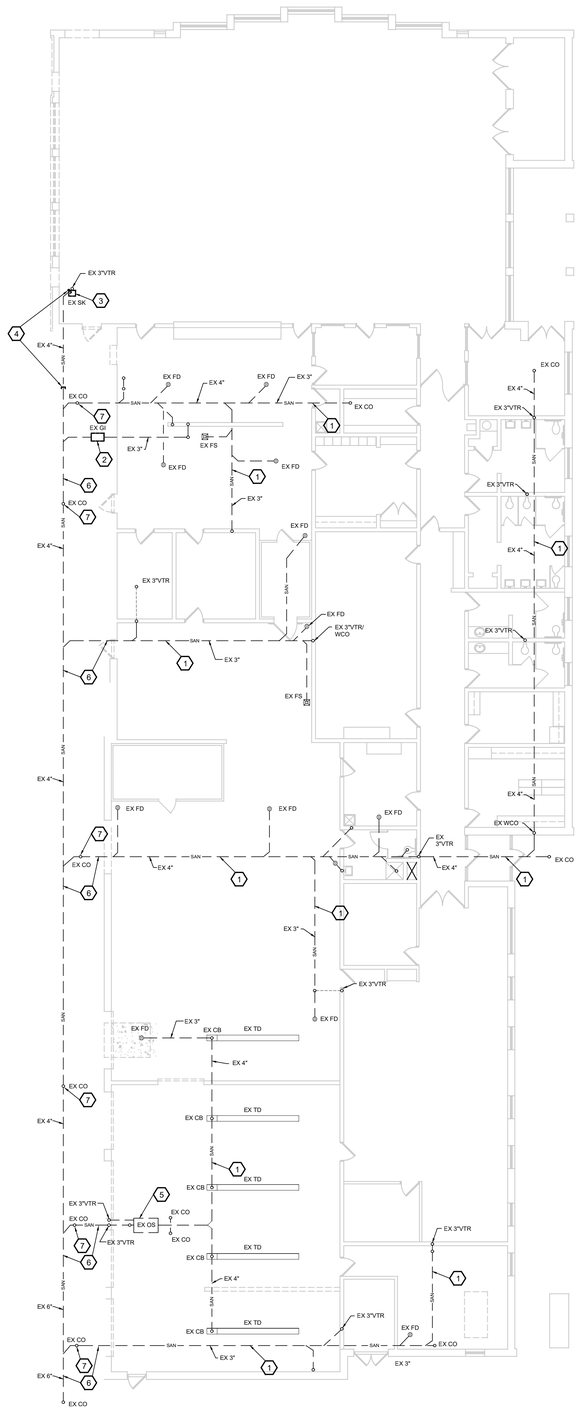
SAGINAW, MICHIGAN

NO.	DATE
BID SET	07/03/25

DRAWN BY MEW
DATE 7-3-25
APPROVED

SHEET NO.
S2.1

PROJECT NO.
2154



FLOOR PLAN - SANITARY & VENT PIPING DEMOLITION
3/32"=1'-0"

KEYED NOTES

1. EXISTING SANITARY PIPING BELOW GRADE TO REMAIN. (TYP.)
2. REMOVE EXISTING GREASE INTERCEPTOR. PIPING SHALL REMAIN FOR NEW GREASE INTERCEPTOR INSTALLED IN SAME LOCATION. COORDINATE REMOVAL/REPLACEMENT WITH OWNER TO REDUCE DOWN TIME.
3. REMOVE EXISTING SINGLE COMPARTMENT COUNTERTOP SINK. CAP SANITARY PIPING BELOW FLOOR. REMOVE VENT PIPING THROUGH ROOF. ROOF IS BEING REPLACED AS PART OF THIS PROJECT. GENERAL CONTRACTOR SHALL INFILL OPENING WITH 20 GAUGE SHEET METAL OR SHEETING TO MATCH EXISTING CONSTRUCTION.
4. ABANDON SECTION OF EXISTING SANITARY PIPING BELOW FLOOR. CAP BELOW GRADE AS SHOWN.
5. EXISTING OIL INTERCEPTOR TO REMAIN.
6. EXISTING SANITARY PIPING TO BE PROTECTED BY MECHANICAL CONTRACTOR, SITE CIVIL CONTRACTOR AND GENERAL CONTRACTOR DURING CONSTRUCTION. REPAIR AND REPLACE ANY DAMAGED PIPING. FIELD VERIFY EXACT LOCATION AND SIZE OF PIPING. THE EXISTING BUILDING TO REMAIN OPEN DURING CONSTRUCTION WITH THE INTENT FOR THIS SANITARY PIPING TO REMAIN OPERATIONAL. THE EXISTING SANITARY PIPING SHALL HAVE A CAMERA ROUTED WITHIN THE SANITARY SEWER PIPING CURRENTLY OUTDOORS WHERE THE NEW BUILDING ADDITION WILL BE LOCATED. SEE SANITARY SEWER INSPECTION NOTE ON THIS SHEET.
7. REMOVE EXISTING SANITARY CLEANOUT AS NECESSARY TO RAISE NEW CLEAN OUT UP TO NEW BUILDING FLOOR LEVEL.

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL MATERIALS AND EQUIPMENT SHOWN TO BE REMOVED BEFORE STARTING WORK.
2. COORDINATE ALL DEMOLITION WORK WITH NEW WORK, ESPECIALLY IN REGARDS TO NEW CONNECTIONS.
3. THE INTENT OF THE DRAWING IS TO REMOVE ALL MATERIALS AND EQUIPMENT WITH A DASHED AND DARKER LINE TYPE.
4. PIPING REMOVED SHALL ALSO INCLUDE THE REMOVAL AND REPLACEMENT OF ALL FITTINGS, SUPPORTS, AND INSULATION ASSOCIATED WITH PORTIONS OF PIPE SHOWN TO BE REMOVED.

EXISTING SANITARY SEWER/BUILDING DRAIN CAMERA SCOPE INSPECTION NOTE

CAMERA/SCOPE AND INSPECT EXISTING SANITARY SEWER/BUILDING DRAIN PIPING THAT IS CURRENTLY OUTSIDE OF THE BUILDING WHERE NEW BUILDING WILL BE CONSTRUCTED. CAMERA/SCOPE INSPECTION SHALL BE COMPLETED TO DETERMINE CONDITION OF EXISTING PIPING, SIZING, SLOPE AND INVERT. THE PLUMBING CONTRACTOR SHALL PROVIDE A DRAWING TO THE ARCHITECT/ENGINEER DENOTING THE LOCATION OF THE EXISTING SANITARY PIPING, SIZE, INVERT AND CONDITION OR ANY ISSUES FOUND AND LOCATION OF THE ISSUE ON THE DRAWING. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER TO DETERMINE THE FINAL COURSE OF ACTION FOR THE INSTALLATION OF THE NEW SANITARY PIPING AND BEFORE ANY NEW WORK IS STARTED.

MACMILLAN ASSOCIATES CONSULTING ENGINEERS
716 EAST MIDLAND STREET • BAY CITY, MICHIGAN 48706
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TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
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NO.	REVISION	DATE
	ISSUED FOR CONSTRUCTION	7/3/25

DRAWN BY STM
DATE 7/03/25
APPROVED GRS

SHEET NO.
M1.0

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
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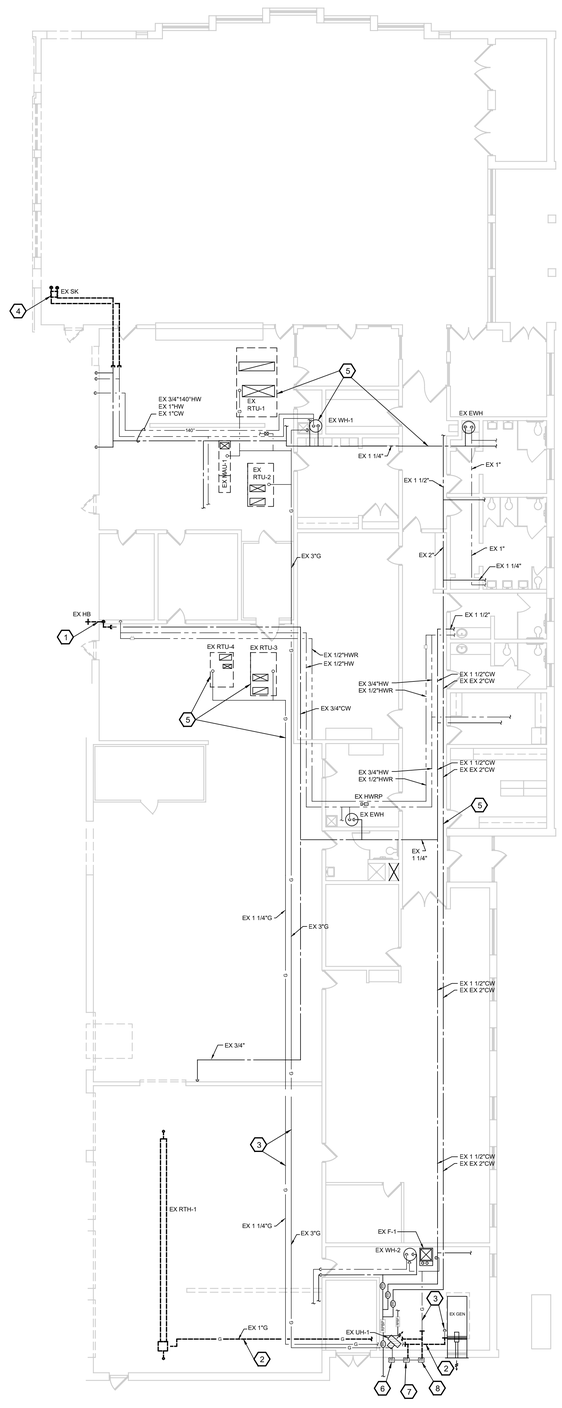

FLOOR PLAN - DOMESTIC WATER AND NATURAL GAS PIPING DEMOLITION

3/32"=1'-0"

KEYED NOTES:

1. REMOVE EXISTING EXTERIOR HOSE BIB. REMOVE DOMESTIC COLD WATER BACK TO LOCATION SHOWN AND CAP.
2. REMOVE EXISTING NATURAL GAS PIPING BACK TO LOCATION SHOWN.
3. EXISTING NATURAL GAS PIPING TO REMAIN. (TYP.)
4. REMOVE EXISTING SINGLE COMPARTMENT COUNTERTOP SINK. REMOVE DOMESTIC COLD WATER AND HOT WATER BACK TO LOCATION SHOWN AND CAP. REMOVE PIPING SO THERE IS NO DEAD LEG OR INACTIVE PIPING.
5. EXISTING PIPING, EQUIPMENT, ETC. TO REMAIN (TYP.).
6. EXISTING GAS METER #1, EXISTING 3" MAIN COMING INTO BUILDING FROM EXISTING METER TO REMAIN. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED ACCORDINGLY FOR THE NEW GAS LOAD. SEE SHEET M2.1 FOR NEW GAS LOAD TABLE.
7. EXISTING GAS METER #2, EXISTING 1 1/2" MAIN COMING INTO BUILDING FROM EXISTING METER SHALL BE REMOVED TO LOCATION SHOWN ON THIS DRAWING. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED ACCORDINGLY FOR THE NEW GAS LOAD. SEE SHEET M2.1 FOR NEW GAS LOAD TABLE.
8. EXISTING GAS METER #3, EXISTING 1 1/2" MAIN COMING INTO BUILDING FROM EXISTING METER SHALL BE REMOVED TO LOCATION SHOWN ON THIS DRAWING. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED ACCORDINGLY FOR THE NEW GAS LOAD. SEE SHEET M2.1 FOR NEW GAS LOAD TABLE.

NATURAL GAS METER/PIPING NOTE:

THE BUILDING CURRENTLY HAS (3) GAS METERS. EXISTING GAS METER #1 SERVES EAST SIDE SOUP KITCHEN ONLY. EXISTING GAS METER #2 IS SHARED BETWEEN EAST SIDE SOUP KITCHEN AND HIDDEN HARVEST. EXISTING GAS METER #3 SERVES HIDDEN HARVEST ONLY.

GAS METER #1 (EAST SIDE SOUP KITCHEN)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING RTU-1	4.5-14"WC	400
EXISTING RTU-2	4.5-14"WC	150
EXISTING WH-1	3.5-14"WC	200
EXISTING MAU-1	N/A	242
EX KITCHEN EQUIP	N/A	686
TOTAL EXISTING LOAD		**1678**

NOTES:
1. EXISTING GAS LOADS SHOWN ON THIS SHEET FOR REFERENCE ONLY. SEE SHEET M2.1 FOR NEW TOTAL COMBINED GAS LOADS.

GAS METER #2 (COMBINED HIDDEN HARVEST & EAST SIDE SOUP KITCHEN)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING GENERATOR	7-13.6"WC	494
EXISTING UH-1	4.5-14"WC	30
EXISTING RTU-3	4.5-14"WC	150
EXISTING RTU-4	4.5-14"WC	80
TOTAL EXISTING LOAD		**754**

NOTES:
1. EXISTING GAS LOADS SHOWN ON THIS SHEET FOR REFERENCE ONLY. SEE SHEET M2.1 FOR NEW TOTAL COMBINED GAS LOADS.

GAS METER #3 (HIDDEN HARVEST)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING F-1	4-14"WC	100
EXISTING WH-2	4.5-12"WC	150
EXISTING RTH-1	4-14"WC	150
TOTAL EXISTING LOAD		**400**

NOTES:
1. EXISTING GAS LOADS SHOWN ON THIS SHEET FOR REFERENCE ONLY. SEE SHEET M2.1 FOR NEW TOTAL COMBINED GAS LOADS.

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TSSF ARCHITECTS, INC.
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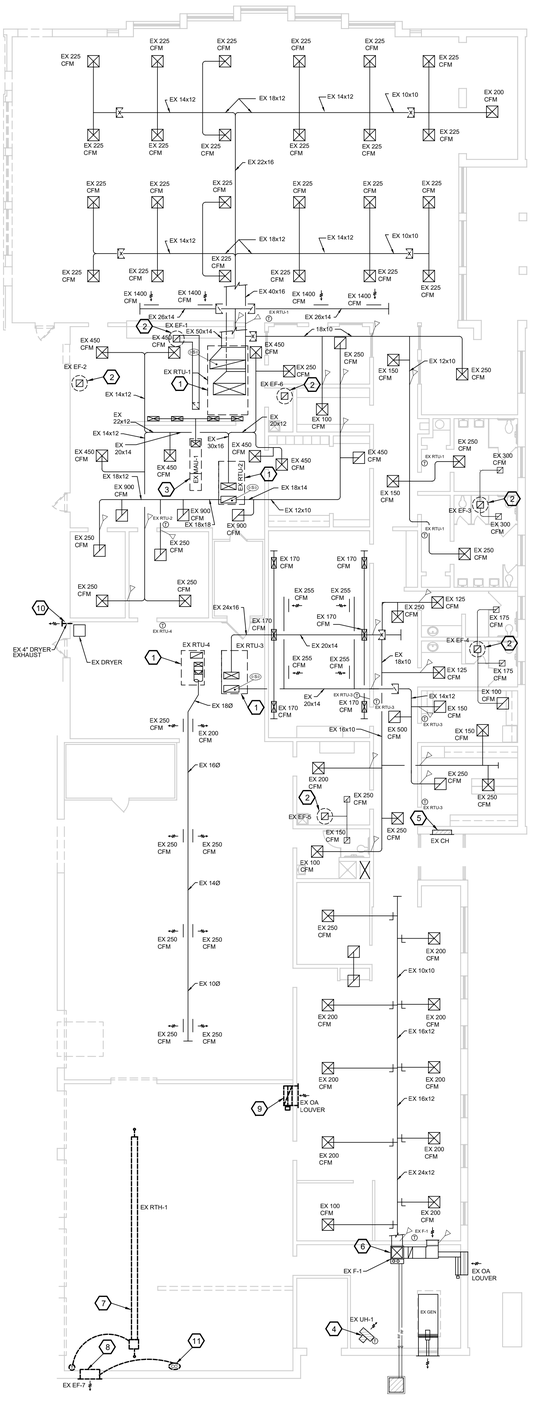
APPROVED GRS

SHEET NO.
M1.1

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

7/3/2025 12:41 AM SHANNE MACIJAKE (SMACIJAKE@MACMILLANASSOCIATES.COM) F:\21-TSSF\2154-2701 HUNGER SOLUTIONS CENTER\2154-2701-MAP-1 - DOMESTIC.DWG



FLOOR PLAN - HVAC DEMOLITION

3/32"=1'-0"

KEYED NOTES:

1. EXISTING ROOFTOP UNIT TO REMAIN.
2. EXISTING EXHAUST FAN TO REMAIN.
3. EXISTING MAKE-UP AIR UNIT TO REMAIN.
4. EXISTING UNIT HEATER TO REMAIN.
5. EXISTING CABINET HEATER TO REMAIN.
6. EXISTING FURNACE TO REMAIN.
7. REMOVE EXISTING RADIANT TUBE HEATER INCLUDING VENTING, CONTROLS, THERMOSTAT, ETC. PATCH EXISTING VENT OPENINGS IN ROOF AND DRYWALL CEILING. ROOF IS BEING REPLACED AS PART OF THIS PROJECT. GENERAL CONTRACTOR SHALL INFILL OPENING WITH 20 GAUGE SHEET METAL OR SHEETING TO MATCH EXISTING CONSTRUCTION.
8. REMOVE EXISTING WALL MOUNTED EXHAUST FAN AND CONTROLS. GENERAL CONTRACTOR SHALL PATCH OPENING IN WALL TO MATCH EXISTING CONSTRUCTION.
9. REMOVE EXISTING INTAKE LOUVER, DAMPER AND CONTROLS. GENERAL CONTRACTOR SHALL PATCH OPENING IN WALL TO MATCH EXISTING CONSTRUCTION.
10. REMOVE EXISTING DRYER EXHAUST DUCTWORK. GENERAL CONTRACTOR SHALL PATCH OPENING IN WALL TO MATCH EXISTING CONSTRUCTION.
11. REMOVE EXISTING CARBON MONOXIDE DETECTOR AND ASSOCIATED WIRING.

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TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

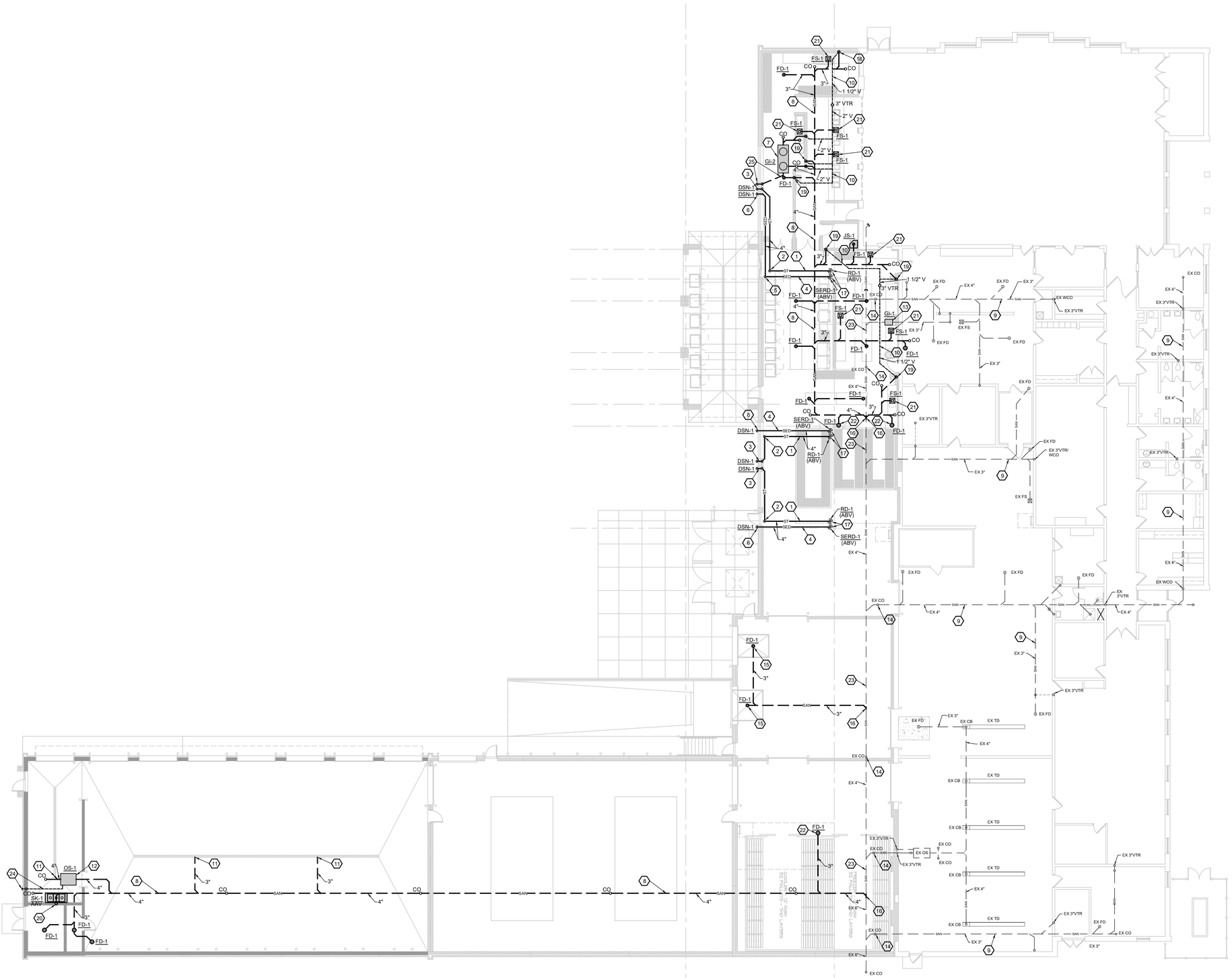
DRAWN BY STM
DATE 7/03/25
APPROVED GRS

SHEET NO.
M1.2

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\21-TSSF\2024-7701-M-ANDER-SOLUTIONS CENTER\004-7701-M-M1.2-HVAC-DEMO
SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
7/3/2025 10:13 PM



KEYED NOTES

1. NEW PRIMARY STORM DRAINAGE PIPING ROUTED HIGH AS POSSIBLE BETWEEN ROOF JOIST NEAR ROOF DECK (TYP).
2. DROP NEW PRIMARY STORM DRAINAGE PIPING DOWN FROM JOIST SPACE TO CEILING SPACE. ROUTE PIPING TIGHT TO WALL IN CEILING SPACE.
3. DROP NEW PRIMARY STORM CONDUCTOR PIPING DOWN WALL TO DOWNSPOUT NOZZLE AT 2'-0" ABOVE GRADE. COORDINATE EXACT TERMINATION LOCATION WITH CIVIL DRAWINGS TO BE NEAR A CATCH BASIN.
4. NEW SECONDARY EMERGENCY DRAINAGE PIPING ROUTED HIGH AS POSSIBLE BETWEEN ROOF JOIST NEAR ROOF DECK (TYP).
5. DROP NEW SECONDARY EMERGENCY DRAINAGE PIPING DOWN FROM JOIST SPACE TO CEILING SPACE. ROUTE PIPING TIGHT TO WALL IN CEILING SPACE.
6. NEW SECONDARY EMERGENCY DRAINAGE DOWNSPOUT NOZZLE AT 9'-6" ABOVE GRADE.
7. FURNISH AND INSTALL NEW GREASE INTERCEPTOR RECESSED IN FLOOR. INSTALL PER MANUFACTURERS REQUIREMENTS.
8. NEW SANITARY PIPING BELOW GRADE. (TYP.)
9. EXISTING SANITARY PIPING BELOW GRADE. EXISTING PIPING IS SHOWN FOR COORDINATION PURPOSES. FIELD VERIFY EXACT LOCATION IN FIELD. (TYP.)
10. NEW VENT PIPING IN CEILING SPACE. (TYP.)
11. CONNECT NEW SANITARY PIPING TO NEW TRENCH DRAIN FURNISHED AND INSTALLED BY GENERAL TRADES.
12. FURNISH AND INSTALL NEW OIL SEPARATOR RECESSED IN FLOOR. INSTALL PER MANUFACTURERS REQUIREMENTS.
13. FURNISH AND INSTALL NEW GREASE INTERCEPTOR RECESSED IN FLOOR. INSTALL PER MANUFACTURERS REQUIREMENTS. THIS GREASE INTERCEPTOR WILL BE USED DURING CONSTRUCTION FOR EXISTING 3-COMPARTMENT SINK. EXISTING 3-COMPARTMENT SINK WILL BE REMOVED AFTER NEW KITCHEN IS OPERATIONAL, THIS NEW GREASE INTERCEPTOR WILL REMAIN ABANDONED.
14. EXISTING CLEAN OUT CURRENTLY LOCATED OUTDOORS. EXTEND EXISTING CLEAN OUT UP TO NEW FINISHED FLOOR ELEVATION AND PROVIDE NEW CLEAN OUT COVER.
15. FURNISH AND INSTALL NEW FLOOR DRAIN IN DOCK LEVELER PIT.
16. CONNECT NEW SANITARY PIPING TO EXISTING SANITARY PIPING BELOW GRADE. FIELD VERIFY EXISTING SIZE, INVERT AND EXACT LOCATION OF PIPING BELOW FLOOR.
17. STORM AND SECONDARY EMERGENCY DRAIN PIPING UP TO ROOF DRAIN ABOVE.
18. PROVIDE 2" SANITARY ROUGH IN AT 16" A.F.F. FOR DISPOSAL. DISPOSAL SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
19. PROVIDE 1 1/2" SANITARY ROUGH IN AT 16" A.F.F. FOR HAND SINK. HAND SINK SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
20. VENT SINK SK-1 WITH AIR ADMITTANCE VALVE.
21. FURNISH AND INSTALL FLOOR SINK FOR INDIRECT DRAIN FROM KITCHEN EQUIPMENT FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL DRAIN PIPING BETWEEN EQUIPMENT AND FLOOR SINK PER MANUFACTURERS REQUIREMENTS. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT DRAWINGS.
22. FURNISH AND INSTALL FLOOR DRAIN FOR INDIRECT DRAIN FROM COOLER FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL DRAIN PIPING BETWEEN COOLER CONDENSATE DRAIN PAN AND FLOOR DRAIN PER MANUFACTURERS REQUIREMENTS. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT DRAWINGS.
23. EXISTING SANITARY PIPING TO BE PROTECTED BY MECHANICAL CONTRACTOR, SITE CIVIL CONTRACTOR AND GENERAL CONTRACTOR DURING CONSTRUCTION. REPAIR AND REPLACE ANY DAMAGED PIPING. FIELD VERIFY EXACT LOCATION AND SIZE OF PIPING. THE EXISTING BUILDING TO REMAIN OPEN DURING CONSTRUCTION WITH THE INTENT FOR THIS SANITARY PIPING TO REMAIN OPERATIONAL. COORDINATE WITH ARCHITECT/ENGINEER ONCE CAMERA SCOPE NOTED ON SHEET M1.0 IS COMPLETE TO DETERMINE COURSE OF ACTION FOR INSTALLATION OF NEW SANITARY PIPING.
24. ROUTE NEW 3" VENT PIPING FROM OIL SEPARATOR TANK BELOW FLOOR TO EXTERIOR WALL. ROUTE UP WALL AND PENETRATE TO OUTDOORS 20'-0" A.F.F. PROTECT VENT OPENING AS REQUIRED BY CODE.
25. ROUTE NEW 3" PVC PIPING BELOW FLOOR FROM GREASE INTERCEPTOR TO EXTERIOR WALL. ROUTE PIPING UP INSIDE EXTERIOR WALL TO PUMP-OUT PORT ON EXTERIOR OF BUILDING. PUMP OUT PORT SHALL BE INSTALLED AT 3'-0" A.F.F. UTILIZE FITTINGS AND DEVICES PROVIDED BY GREASE INTERCEPTOR MANUFACTURER. INSTALL PER MANUFACTURERS REQUIREMENTS.

GENERAL NOTES

1. THE MECHANICAL TRADE SHALL BE RESPONSIBLE FOR COORDINATION OF ALL KITCHEN EQUIPMENT AND MANUFACTURER SUPPLIED PLUMBING FIXTURES AND THEIR ASSOCIATED ROUGH-IN LOCATIONS, SIZES, ETC. ALL PLUMBING FIXTURES SHALL BE VENTED AND INSTALLED TO MEET ALL CODES AND SPECIFICATIONS.
2. MECHANICAL CONTRACTOR TO PROVIDE ROUGH-IN CONNECTIONS AS SHOWN ON THIS DRAWING. THE FOOD SERVICE COMPANY WILL PROVIDE EQUIPMENT. MECHANICAL CONTRACTOR TO RECEIVE EQUIPMENT FROM KITCHEN EQUIPMENT SUPPLIER, PLACE AND MAKE ALL FINAL PLUMBING CONNECTIONS.
3. ALL PLUMBING, PIPING, VENTING, ETC. SHALL BE INSTALLED PER STATE/LOCAL CODES.
4. COORDINATE ALL PIPING LOCATIONS ABOVE THE FLOOR WITH ALL OTHER TRADES WITH SPECIAL ATTENTION TO THE SHEET METAL TRADES. ROUTE PIPING AS NECESSARY TO AVOID CONFLICTS WITH ALL OTHER TRADES.
5. SANITARY PIPING SHALL BE SLOPED AT A MINIMUM 1/8" PER FOOT SLOPE UNLESS OTHERWISE NOTED.
6. NO PIPING SHALL BE LOCATED DIRECTLY ABOVE ELECTRICAL PANELS OR DEVICES. NO PIPING SHALL BE ALLOWED WITHIN 3'-0" OF PANELS, UNLESS PIPING IS HIGHER THAN 7'-0" ABOVE FINISHED FLOOR. VERIFY ALL PIPE ROUTING WITH ELECTRICAL TRADES.

FLOOR PLAN - SANITARY & VENT PIPING REVISIONS
3/32"=1'-0"

0.0" 0.5" 1.0" 1.5" 2.0"

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APPROVED GRS
SHEET NO. M2.0
PROJECT NO. 2154

F:\21-7\SSF-2154-270 - HUNGER SOLUTIONS CENTER\2154-270-M40.0-SAN+VENT REVISIONS
7/3/2025 11:39 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)

GAS METER #1 (EAST SIDE SOUP KITCHEN)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING RTU-1	4.5-14"WC	400
EXISTING RTU-2	4.5-14"WC	150
EXISTING WH-1	3.5-14"WC	200
EXISTING MAU	N/A	242
EX KITCHEN EQUIP	N/A	686
TOTAL EXISTING GAS LOAD		**750**
NEW RTU-5	4.5-14"WC	150
NEW RTU-6	4.5-14"WC	240
NEW RTU-7	4.5-14"WC	150
NEW MAU	7-14"WC	542
NEW KITCHEN EQUIP	X-XX"WC	1030
TOTAL NEW GAS LOAD		**2112**
COMBINED TOTAL GAS LOAD		**2862 @ 11"WC**

NOTES:

1. EXISTING GAS LOADS SHOWN CROSSED OUT ARE LOADS THAT WILL BE REMOVED ONCE THE NEW KITCHEN EQUIPMENT IS OPERATIONAL. TOTAL LOADS SHOWN DO NOT INCLUDE THESE LOADS.
2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY COORDINATION WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED APPROPRIATELY FOR THE COMBINED TOTAL GAS LOAD SHOWN ABOVE. THE OWNER WILL PAY ALL GAS COMPANY CHARGES ASSOCIATED WITH GAS SERVICE DIRECTLY TO THE GAS COMPANY IF ADDITIONAL WORK IS NECESSARY.

GAS METER #2 (COMBINED HIDDEN HARVEST & EAST SIDE SOUP KITCHEN)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING GENERATOR	7-13.6"WC	494
EXISTING UH-1	4.5-14"WC	30
EXISTING RTU-3	4.5-14"WC	150
EXISTING RTU-4	4.5-14"WC	80
TOTAL EXISTING GAS LOAD		**754**
NEW RTU-8	4.5-14"WC	150
NEW GENERATOR	6-13"WC	970
TOTAL NEW GAS LOAD		**1120**
COMBINED TOTAL GAS LOAD		**1874 @ 11"WC**

NOTES:

1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY COORDINATION WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED APPROPRIATELY FOR THE COMBINED TOTAL GAS LOAD SHOWN ABOVE. THE OWNER WILL PAY ALL GAS COMPANY CHARGES ASSOCIATED WITH GAS SERVICE DIRECTLY TO THE GAS COMPANY IF ADDITIONAL WORK IS NECESSARY.

GAS METER #3 (HIDDEN HARVEST)		
EQUIPMENT	**PRESSURE**	**LOAD (CFH)**
EXISTING F-1	4-14"WC	100
EXISTING WH-2	4.5-12"WC	150
EXISTING RTH-1	4-14"WC	150
TOTAL EXISTING GAS LOAD		**250**
NEW RTU-9	4.5-14"WC	400
NEW UH-1	6-7"WC	250
NEW UH-2	6-7"WC	250
NEW WH-1	4-14"WC	150
TOTAL NEW GAS LOAD		**1050**
COMBINED TOTAL GAS LOAD		**1300 @ 7"WC**

NOTES:

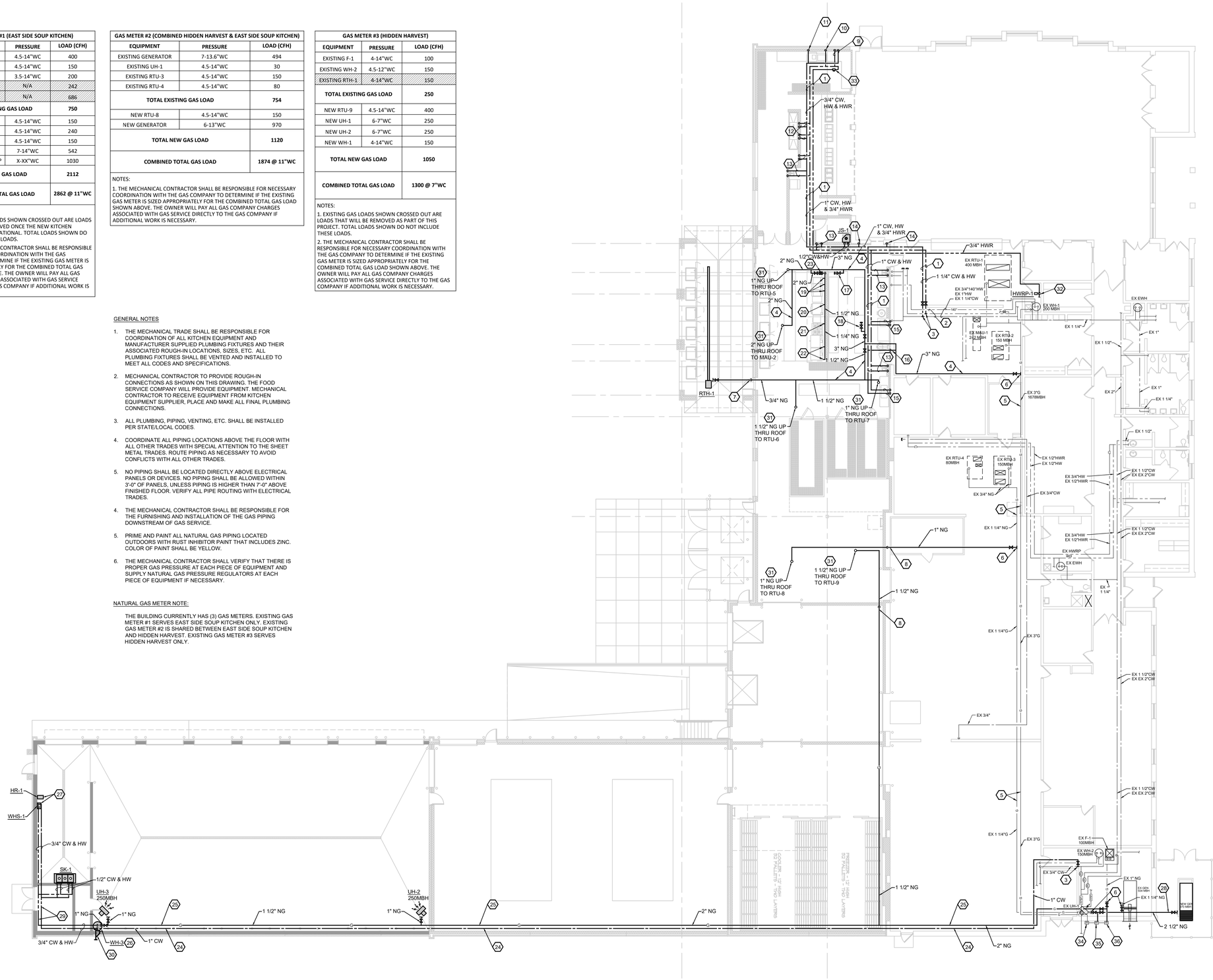
1. EXISTING GAS LOADS SHOWN CROSSED OUT ARE LOADS THAT WILL BE REMOVED AS PART OF THIS PROJECT. TOTAL LOADS SHOWN DO NOT INCLUDE THESE LOADS.
2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY COORDINATION WITH THE GAS COMPANY TO DETERMINE IF THE EXISTING GAS METER IS SIZED APPROPRIATELY FOR THE COMBINED TOTAL GAS LOAD SHOWN ABOVE. THE OWNER WILL PAY ALL GAS COMPANY CHARGES ASSOCIATED WITH GAS SERVICE DIRECTLY TO THE GAS COMPANY IF ADDITIONAL WORK IS NECESSARY.

GENERAL NOTES

1. THE MECHANICAL TRADE SHALL BE RESPONSIBLE FOR COORDINATION OF ALL KITCHEN EQUIPMENT AND MANUFACTURER SUPPLIED PLUMBING FIXTURES AND THEIR ASSOCIATED ROUGH-IN LOCATIONS, SIZES, ETC. ALL PLUMBING FIXTURES SHALL BE VENTED AND INSTALLED TO MEET ALL CODES AND SPECIFICATIONS.
2. MECHANICAL CONTRACTOR TO PROVIDE ROUGH-IN CONNECTIONS AS SHOWN ON THIS DRAWING. THE FOOD SERVICE COMPANY WILL PROVIDE EQUIPMENT. MECHANICAL CONTRACTOR TO RECEIVE EQUIPMENT FROM KITCHEN EQUIPMENT SUPPLIER, PLACE AND MAKE ALL FINAL PLUMBING CONNECTIONS.
3. ALL PLUMBING, PIPING, VENTING, ETC. SHALL BE INSTALLED PER STATE/LOCAL CODES.
4. COORDINATE ALL PIPING LOCATIONS ABOVE THE FLOOR WITH ALL OTHER TRADES WITH SPECIAL ATTENTION TO THE SHEET METAL TRADES. ROUTE PIPING AS NECESSARY TO AVOID CONFLICTS WITH ALL OTHER TRADES.
5. NO PIPING SHALL BE LOCATED DIRECTLY ABOVE ELECTRICAL PANELS OR DEVICES. NO PIPING SHALL BE ALLOWED WITHIN 3'-0" OF PANELS, UNLESS PIPING IS HIGHER THAN 7'-0" ABOVE FINISHED FLOOR. VERIFY ALL PIPE ROUTING WITH ELECTRICAL TRADES.
4. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLATION OF THE GAS PIPING DOWNSTREAM OF GAS SERVICE.
5. PRIME AND PAINT ALL NATURAL GAS PIPING LOCATED OUTDOORS WITH RUST INHIBITOR PAINT THAT INCLUDES ZINC. COLOR OF PAINT SHALL BE YELLOW.
6. THE MECHANICAL CONTRACTOR SHALL VERIFY THAT THERE IS PROPER GAS PRESSURE AT EACH PIECE OF EQUIPMENT AND SUPPLY NATURAL GAS PRESSURE REGULATORS AT EACH PIECE OF EQUIPMENT IF NECESSARY.

NATURAL GAS METER NOTE:

THE BUILDING CURRENTLY HAS (3) GAS METERS. EXISTING GAS METER #1 SERVES EAST SIDE SOUP KITCHEN ONLY. EXISTING GAS METER #2 IS SHARED BETWEEN EAST SIDE SOUP KITCHEN AND HIDDEN HARVEST. EXISTING GAS METER #3 SERVES HIDDEN HARVEST ONLY.



FLOOR PLAN - DOMESTIC & NATURAL GAS REVISIONS

3/32"=1'-0"

KEYED NOTES:

1. NEW DOMESTIC WATER PIPING ROUTED THROUGH CEILING SPACE. (TYP.)
2. EXISTING DOMESTIC WATER PIPING TO REMAIN. (TYP.)
3. CONNECT NEW DOMESTIC WATER PIPING TO EXISTING DOMESTIC WATER PIPING. PROVIDE SHUT-OFF VALVE AT CONNECTION (TYP.)
4. NEW NATURAL GAS PIPING ROUTED THROUGH CEILING SPACE. (TYP.)
5. EXISTING NATURAL GAS PIPING TO REMAIN. (TYP.)
6. CONNECT NEW NATURAL GAS PIPING TO EXISTING NATURAL GAS PIPING. PROVIDE SHUT-OFF VALVE AT CONNECTION (TYP.)
7. NEW NATURAL GAS PIPING ROUTED TIGHT TO BOTTOM OF STRUCTURE IN CANOPY. DROP PIPING DOWN WALL AND PENETRATE WALL INTO KITCHEN CEILING SPACE.
8. NEW NATURAL GAS PIPING ROUTED HIGH IN SPACE. DROP PIPING DOWN WALL AND PENETRATE WALL INTO KITCHEN CEILING SPACE.
9. PROVIDE 3/4" CW AND 1/2" HW ROUGH-IN WITH BACKFLOW PREVENTOR AT 18" A.F.F. FOR DISPOSAL. BACKFLOW PREVENTOR SHALL MEET ALL STATE AND LOCAL CODES. DISPOSAL SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
10. PROVIDE 1/2" HW ROUGH-IN WITH BACKFLOW PREVENTOR AT 68" A.F.F. FOR DISHWASHER. BACKFLOW PREVENTOR SHALL MEET ALL STATE AND LOCAL CODES. DISHWASHER SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
11. PROVIDE 1/2" CW ROUGH-IN WITH BACKFLOW PREVENTOR AT 6" A.F.F. FOR DISHWASHER DRAIN TEMPERING VALVE. BACKFLOW PREVENTOR SHALL MEET ALL STATE AND LOCAL CODES. DRAIN TEMPERING VALVE SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
12. PROVIDE 1/2" CW AND HW ROUGH-IN WITH AT 18" A.F.F. FOR 3-COMPARTMENT SINK. 3-COMPARTMENT SINK SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
13. PROVIDE 1/2" CW AND HW ROUGH-IN WITH AT 18" A.F.F. FOR HAND SINK. HAND SINK SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
14. PROVIDE 1/2" CW ROUGH-IN WITH BACKFLOW PREVENTOR AT 18" A.F.F. FOR BEVERAGE COUNTER. BACKFLOW PREVENTOR SHALL MEET ALL STATE AND LOCAL CODES. BEVERAGE COUNTER SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
15. PROVIDE 1/2" CW AND HW ROUGH-IN WITH AT 18" A.F.F. FOR PREP TABLE. PREP TABLE SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
16. PROVIDE 1/2" CW ROUGH-IN WITH WITH FILTER AND BACK FLOW PREVENTOR AT 60" A.F.F. FOR ICE MAKER. BACKFLOW PREVENTOR SHALL MEET ALL STATE AND LOCAL CODES. ICE MAKER AND FILTER SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
17. PROVIDE 2" NATURAL GAS VALVE AND CAPPED STUB FOR FUTURE KITCHEN EQUIPMENT.
18. PROVIDE 2" NATURAL GAS VALVE AND CAPPED STUB FOR FUTURE MAKE-UP AIR UNIT.
19. PROVIDE 1/2" NG ROUGH-IN WITH VALVE AT 12" A.F.F. FOR FRYER. FRYER SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
20. PROVIDE 3/4" NG ROUGH-IN WITH VALVE AT 12" A.F.F. FOR SKILLET. THIS IS EXISTING EQUIPMENT THAT SHALL BE REMOVED FROM EXISTING KITCHEN AND RE-INSTALLED IN THIS LOCATION BY MECHANICAL CONTRACTOR.
21. PROVIDE 3/4" NG ROUGH-IN WITH VALVE AT 12" A.F.F. FOR RANGE. RANGE SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
22. PROVIDE 3/4" NG ROUGH-IN WITH VALVE AT 12" A.F.F. FOR CONVECTION OVEN. CONVECTION OVEN SHALL BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
23. INSTALL 2" SOLENOID SHUT OFF VALVE TO SHUT OFF GAS TO ALL EQUIPMENT UNDER HOOD. SOLENOID VALVE SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. WIRING BETWEEN SOLENOID VALVE AND HOOD CONTROLLER SHALL BE FURNISHED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR.
24. NEW DOMESTIC WATER PIPING ROUTED HIGH IN SPACE.
25. NEW NATURAL GAS PIPING ROUTED HIGH IN SPACE.
26. FURNISH AND INSTALL NEW WATER HEATER 4" THICK HOUSEKEEPING PAD. EXTEND DRAIN PAN, CONDENSATE DRAIN AND T&P VALVE PIPING TO AIR GAP AT FLOOR DRAIN. SEE DETAIL ON SHEET M3.1.
27. FURNISH AND INSTALL NEW WASHDOWN HOSE STATION AND HOSE REEL. MECHANICAL CONTRACTOR SHALL PROVIDE VACUUM BREAKER AND HOSE BETWEEN WASHDOWN HOSE STATION AND HOSE REEL. DOMESTIC WATER FEEDING WASHDOWN HOSE STATION SHALL BE ROUTED EXPOSED ON INTERIOR OF EXTERIOR WALL. VERIFY HOSE REEL MOUNTING HEIGHT WITH OWNER.
28. ROUTE 2 1/2" NATURAL GAS PIPING TO GENERATOR. PROVIDE 2 1/2" SHUT OFF VALVE AT GENERATOR. CONNECT 2 1/2" SCHEDULE 40 STEEL PIPE TO FLEXIBLE GAS CONNECTION ON GENERATOR. REDUCE GAS PIPE SIZE AT GENERATOR AS REQUIRED. FIELD INSTALL Y-STRAINER AT GENERATOR AND INSTALL ALL GAS PIPING PER MANUFACTURER'S RECOMMENDATIONS. FIELD VERIFY EXACT GAS CONNECTION LOCATION ON GENERATOR.
29. ROUTE NEW DOMESTIC WATER PIPING TIGHT TO WALL 12'-0" A.F.F.
30. 3" COMBUSTION AND 3" VENT PIPING TO TERMINATE OUTDOORS AT EXTERIOR WALL A MINIMUM OF 10'-0" A.F.F. TERMINATE WITH MANUFACTURERS CONCENTRIC VENT KIT.
31. ROUTE NATURAL GAS PIPING UP THROUGH ROOF TO ROOFTOP UNIT. PROVIDE SHUT-OFF VALVE AT UNIT SAME SIZE AS PIPING SHOWN ON THIS DRAWING. COORDINATE EXACT CONNECTION SIZE AND LOCATION TO RTU IN THE FIELD.
32. FURNISH AND INSTALL NEW DOMESTIC HOT WATER RECIRCULATION PUMP. PUMP SHALL BE CONTROLLED BY AQUASTAT. SEE HWRP SCHEDULE FOR INFORMATION. CONNECT OUTLET OF PUMP TO INCOMING COLD WATER PIPING TO EXISTING WATER HEATER DOWNSTREAM OF EXISTING EXPANSION TANK AND CHECK VALVE.
33. BALANCE AUTOMATIC FLOW CONTROL VALVE TO 0.5 GPM.
34. GAS METER #1. EXISTING 3" MAIN COMING INTO BUILDING FROM METER TO REMAIN.
35. GAS METER #2. NEW 3" MAIN COMING INTO BUILDING FROM METER. CONNECT NEW 3" MAIN TO EXISTING PIPING IN BUILDING AS SHOWN.
36. GAS METER #3 NEW 2 1/2" MAIN COMING INTO BUILDING FROM METER. CONNECT NEW 2 1/2" MAIN TO EXISTING PIPING IN BUILDING AS SHOWN.

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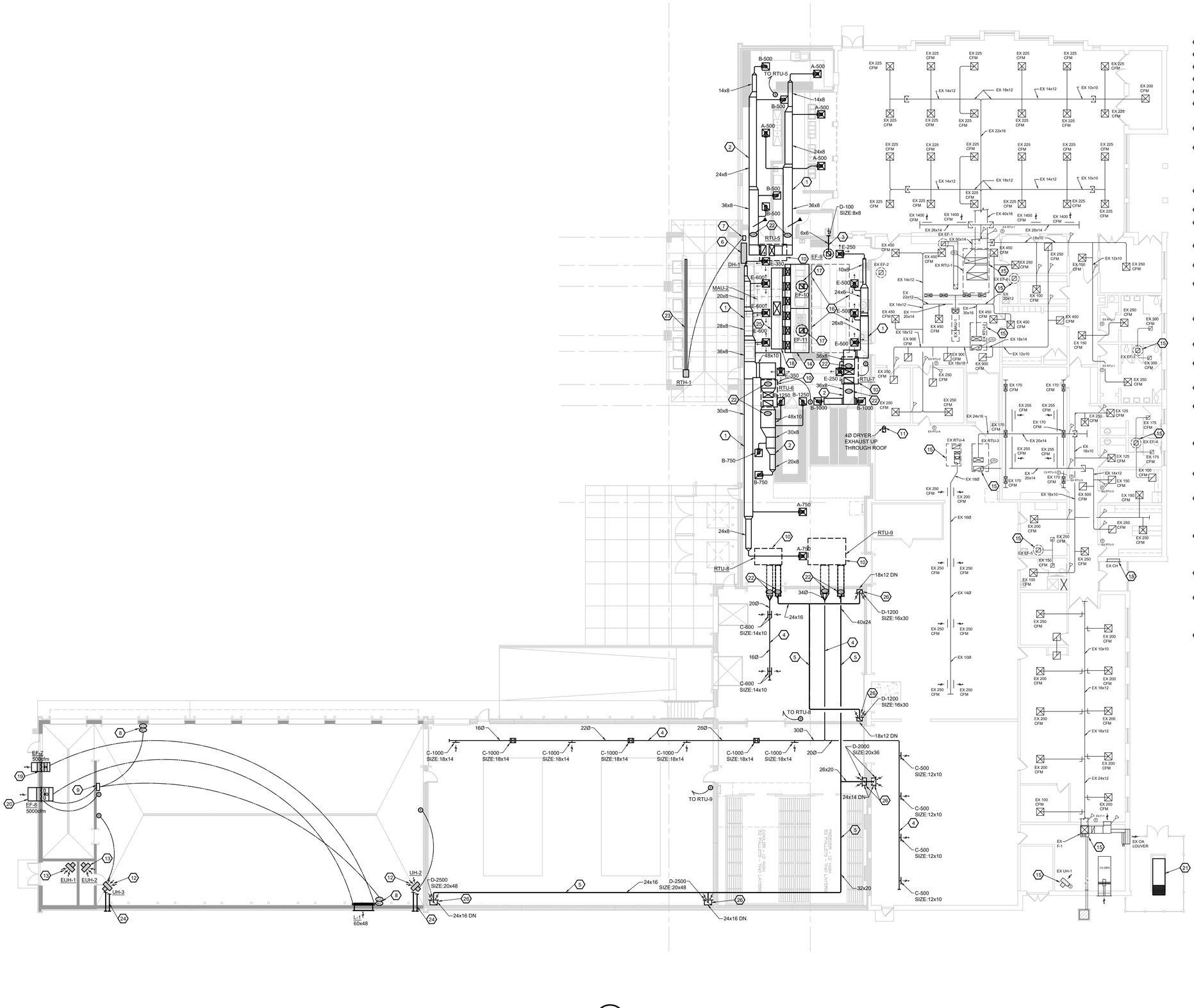
DATE 7/03/25
APPROVED GRS

SHEET NO.
M2.1

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\21-TSSF\2024-2151 HUNGER SOLUTIONS CENTER\DOCS\21-2154M2.1 DOMESTIC AND NATURAL GAS
7/3/2025 10:16 PM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)



FLOOR PLAN - HVAC REVISIONS
3/32"=1'-0"

KEYED NOTES:

1. NEW SUPPLY AIR DUCTWORK ROUTED IN CEILING SPACE.
2. NEW RETURN AIR DUCTWORK ROUTED IN CEILING SPACE.
3. NEW EXHAUST DUCTWORK ROUTED IN CEILING SPACE.
4. NEW SUPPLY DUCTWORK ROUTED HIGH IN SPACE.
5. NEW RETURN DUCTWORK ROUTED HIGH IN SPACE.
6. FURNISH AND INSTALL NEW SURFACE MOUNTED AIR CURTAIN ABOVE DOOR. AIR CURTAIN SHALL BE CONTROLLED BY DOOR SWITCH FURNISHED WITH UNIT.
7. FURNISH AND INSTALL TIMER SWITCH CONTROL FOR RADIANT TUBE HEATER RTH-1 IN LOCATION SHOWN.
8. FURNISH AND INSTALL CARBON MONOXIDE AND NITROGEN DIOXIDE (CO/NO2) SENSOR IN LOCATION SHOWN. INSTALL PER MANUFACTURERS REQUIREMENTS FOR PROPER COVERAGE. INSTALL AT 5'-0" A.F.F. CONDUIT FOR CONTROL WIRING SHALL ENTER BOTTOM OF HOUSING TO PROTECT AGAINST INGRESS OF CONDENSATION.
9. FURNISH AND INSTALL CO/NO2 MONITORING PANEL IN LOCATION SHOWN.
10. ROOFTOP UNIT ABOVE. (TYP.)
11. ROUTE NEW 4" DRYER EXHAUST DUCTWORK UP THROUGH ROOF. TERMINATE WITH GOOSENECK. KEEP LENGTH AND AMOUNT OF FITTINGS TO A MINIMUM.
12. FURNISH AND INSTALL NEW GAS FIRED UNIT HEATER 12'-0" A.F.F. INSTALL HEATER PER MANUFACTURERS REQUIREMENTS.
13. FURNISH AND INSTALL ELECTRIC UNIT HEATER 8'-0" A.F.F. INSTALL PER MANUFACTURERS REQUIREMENTS.
14. INSTALL KITCHEN HOOD. HOOD SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. WIRING BETWEEN HOOD, MAKE-UP AIR UNIT, EXHAUST FAN, ANSUL SYSTEM AND SOLENOID GAS VALVE SHALL BE FURNISHED AND INSTALLED BY TEMPERATURE CONTROL CONTRACTOR.
15. TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ALL DEVICES REQUIRED TO INTEGRATE THIS EXISTING STAND ALONE EQUIPMENT INTO NEW CONTROL SYSTEM.
16. KEEP THIS AREA CLEAR OF DUCTWORK, PIPING, ETC. TO ALLOW ADDITIONAL KITCHEN HOOD TO BE INSTALLED IN THE FUTURE.
17. OFFSET NEW EXHAUST DUCTWORK 18" IN CEILING SPACE BETWEEN KITCHEN HOOD AND EXHAUST FAN TO ALLOW CLEARANCE FOR ADDITIONAL FANS FOR FUTURE KITCHEN HOOD.
18. FURNISH AND INSTALL SUPPLY DUCTWORK BETWEEN NEW MAKE-UP AIR UNIT AND KITCHEN HOOD SUPPLY PLENUM.
19. FURNISH AND INSTALL NEW SIDEWALL EXHAUST FAN WITH DISCHARGE HOOD. WALL OPENING FOR FAN SHALL BE 27 1/2" SQUARE. INTERLOCK FAN WITH 12"x48" SECTION OF LOUVER L-1. THIS FAN IS USED FOR GENERAL EXHAUST AND OPERATE DURING ALL OCCUPIED HOURS.
20. FURNISH AND INSTALL NEW SIDEWALL EXHAUST FAN WITH DISCHARGE HOOD. WALL OPENING FOR FAN SHALL BE 33 3/4" SQUARE. INTERLOCK FAN WITH 48"X48" SECTION OF LOUVER L-1. THIS FAN SHALL BE CONTROLLED BY CO/NO2 SENSORS.
21. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALATION OF GENERATOR IN FIELD TO MAINTAIN A MINIMUM OF 10'-0" FROM EXISTING OUTSIDE AIR INTAKE TO EXHAUST ON GENERATOR.
22. DUCT SMOKE DETECTOR AND CONTROL WIRING SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF SENSING TUBE AND CONTROL WIRING FOR SHUT DOWN OF UNIT WITH ELECTRICAL CONTRACTOR. (TYP.)
23. FURNISH AND INSTALL RADIANT TUBE HEATER IN LOCATION SHOWN. HEATER SHALL BE MOUNTED AT AN ANGLE OF 0°, 12'-0" A.F.F. MECHANICAL CONTRACTOR SHALL INSTALL SIDE SHIELD ON SIDE OPPOSITE KITCHEN. HEATER SHALL BE INSTALLED VENTLESS AS AREA IS OPEN TO THE OUTDOORS.
24. 6" COMBUSTION AND 6" VENT TO TERMINATE OUTDOORS AT EXTERIOR WALL. INSTALL VENTING PER MANUFACTURERS REQUIREMENTS.
25. 36"x8" MAKE-UP SUPPLY AIR PLENUM WITH (6) 24"x8" BRANCH DUCTS AT LOCATIONS SHOWN. CONNECT 24"x12" DUCT CONNECTIONS ON KITCHEN HOOD TO BOTTOM OF 24"x8" BRANCH DUCTS. USE DAMPERS SUPPLIED WITH HOOD TO BALANCE EACH OF THE (6) OUTLETS TO 800 CFM EACH.
26. RETURN AIR DUCT ROUTED TIGHT TO WALL DOWN TO 1'-0" A.F.F. FURNISH AND INSTALL RETURN AIR GRILLE WITH BOTTOM OF GRILLE AT 1'-0" A.F.F.

GENERAL NOTES

1. FOOD SERVICE SUPPLIER TO FURNISH HOOD, EXHAUST FANS, MAKE-UP AIR UNIT AND CONTROL PANEL. MECHANICAL CONTRACTOR TO INSTALL HOOD, EXHAUST FANS AND MAKE-UP AIR UNIT. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL DUCTWORK.
2. TEMPERATURE CONTROL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING BETWEEN HOOD, HOOD CONTROLLERS, EXHAUST FANS, MAKE-UP AIR UNITS, ANSUL SYSTEM AND GAS SHUT OFF VALVES. TEMPERATURE CONTROL SYSTEM SHALL TIE HOOD CONTROLLERS INTO THE BUILDING MANAGEMENT SYSTEM. FOOD SERVICE SUPPLIER TO PROGRAM HOOD CONTROLLER AND ANSUL SYSTEM TO OPERATE PER CODE.
3. THE EXISTING TEMPERATURE CONTROL SYSTEM IS ALL STAND ALONE CONTROLS. IT IS THE DESIGN INTENT TO PUT ALL EXISTING AND NEW HVAC EQUIPMENT ON A NEW TEMPERATURE CONTROL SYSTEM. THE NEW DDC SYSTEM SHALL HAVE A "FRONT END" WITH COLOR GRAPHICS, ADJUSTABLE USER INTERFACE, ETC. SEE SPECIFICATIONS FOR MORE INFORMATION
4. COORDINATE ROUTES/LOCATIONS OF ALL DUCTWORK, DIFFUSERS, ETC. WITH ALL CONDITIONS, OTHER TRADES, ETC. THE MECHANICAL TRADES SHALL BE RESPONSIBLE FOR ROUTING DUCT BETWEEN JOIST AS REQUIRED TO AVOID CONFLICTS WITH OTHER SYSTEMS, DUCTWORK, ETC. FURNISH AND INSTALL ALL FITTINGS, DUCTWORK, ETC. TO OFFSET DUCTWORK UP AND DOWN AS REQUIRED TO ACHIEVE INSTALLATION OF DUCT SYSTEM. SPECIAL ATTENTION TO DUCTWORK ABOVE KITCHEN CEILING AS CEILING SPACE IS TIGHT IN THIS AREA.
5. SEE SPECIFICATION FOR KITCHEN EXHAUST DUCTWORK FABRICATION INFORMATION. IN ADDITION TO FABRICATION PROCESS LISTED IN THE SPECIFICATION, PRE-MANUFACTURED KITCHEN EXHAUST DUCTWORK IS ALSO ACCEPTABLE GIVEN IT MEETS ALL APPLICABLE CODES.
6. FURNISH AND INSTALL MANUAL BALANCING DAMPERS ON ALL SUPPLY AIR, RETURN AIR, AND EXHAUST BRANCH DUCTWORK TO ALLOW BALANCING OF EACH INDIVIDUAL AIR OUTLET. THIS INCLUDES GRILLES MOUNTED DIRECTLY TO DUCTS, WHICH SHOULD BE INSTALLED WITH ENOUGH DUCTWORK AT GRILLE TO INSTALL DAMPER.
7. FOR BRANCH DUCTS ROUTED TO DIFFUSERS OR GRILLES THAT DO NOT SHOW SIZES ON DRAWINGS, DUCT SIZE SHALL MATCH DIFFUSER OR GRILLE NECK SIZE NOTED ON DIFFUSER AND GRILLE SCHEDULE.

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TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE
SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	REVISION	DATE
	ISSUED FOR CONSTRUCTION	7/3/25

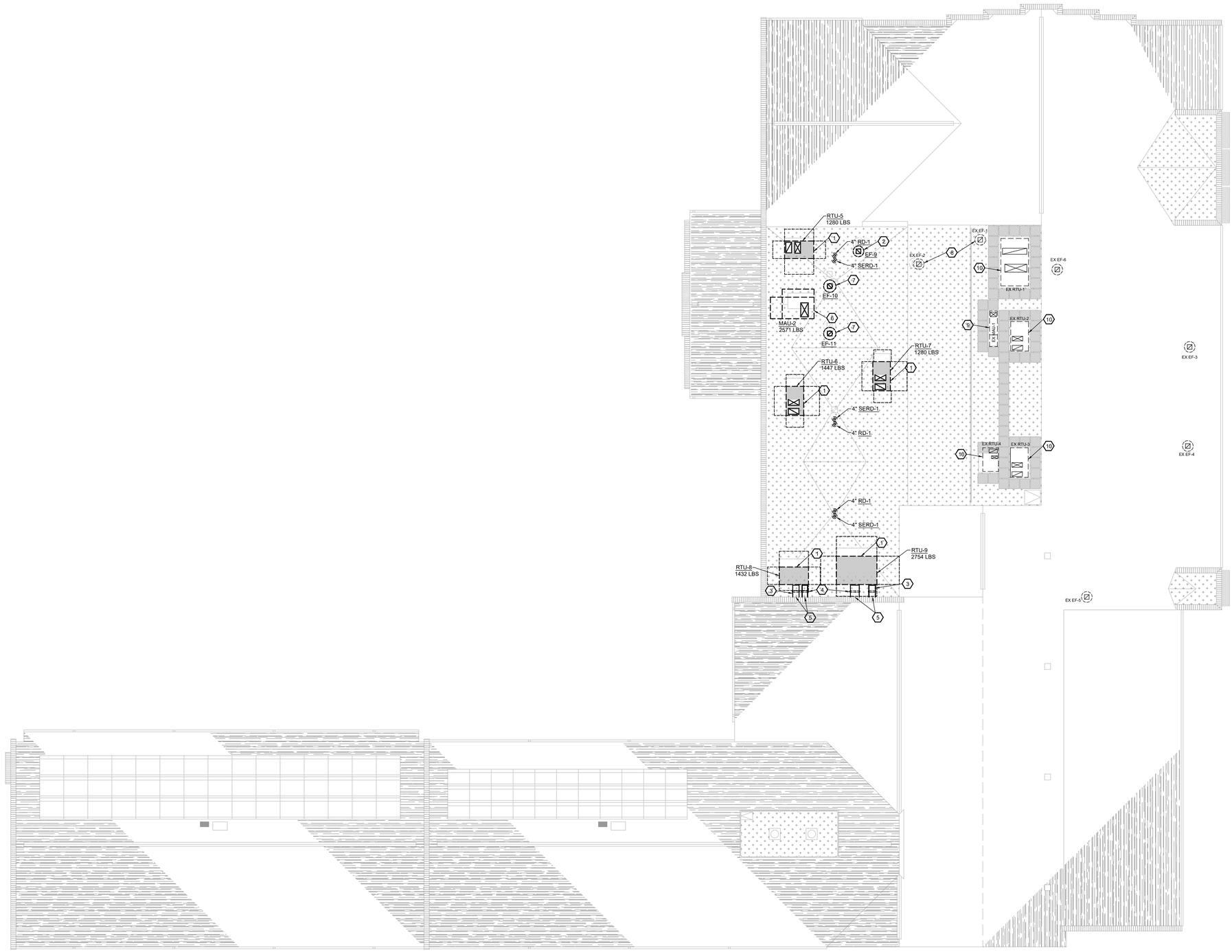
DRAWN BY STM
DATE 7/03/25
APPROVED GRS
SHEET NO. M2.2
PROJECT NO. 2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\2-TSSF\2025\J-2701-HUNGER SOL I\TDWG\CENTER\2054-2701-M-M2.2-HVAC-REVISIONS

SHAYNE MAAHS (SMAAHS@MACMILLANASSOCIATES.COM)

7/3/2025 3:23 PM



ROOF PLAN - MECHANICAL
3/32"=1'-0"

KEYED NOTES:

1. FURNISH AND INSTALL NEW ROOF TOP UNIT ON 24" TALL ROOF CURB.
2. FURNISH AND INSTALL NEW ROOF MOUNTED EXHAUST FAN ON 18" TALL ROOF CURB.
3. INSULATE ALL EXTERIOR DUCTWORK WITH 2" THICK ARMAFLEX INSULATION WRAPPED WITH VENTURECLAD. PROVIDE FLEXIBLE DUCT CONNECTION AT SUPPLY AND RETURN CONNECTION ON UNIT. (TYP.)
4. FURNISH AND INSTALL PATE RAIL TYPE DUCT SUPPORTS. (TYP.)
5. ROUTE DUCTS THROUGH WALL INTO HIGH ROOF PORTION OF THE BUILDING (RECEIVING). FLASH WALL OPENING AS DETAILED BY ARCHITECTURAL DRAWINGS. (TYP.)
6. NEW MAKE-UP AIR UNIT FOR NEW KITCHEN HOOD. MAKE-UP AIR UNIT SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
7. NEW EXHAUST FAN FOR NEW KITCHEN HOOD. EXHAUST FAN SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR.
8. EXISTING EXHAUST FAN TO REMAIN.
9. EXISTING MAKE-UP AIR UNIT TO REMAIN.
10. EXISTING ROOF TOP UNIT TO REMAIN.

0.0" 0.5" 1.0" 1.5" 2.0"

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SHEET NO.
M2.3

PROJECT NO.
2154

7/3/2025 8:58 AM SWAINE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM) F:\23-TSSF\2154-2701 N HUNGER SOLUTIONS CENTER\2154-2701-MA-M2.3-ROOF PLAN

GENERAL MECHANICAL NOTES

1. THE MECHANICAL TRADES SHALL FAMILIARIZE THEMSELVES WITH ALL EXISTING AND NEW CONDITIONS, THESE DRAWINGS, ADDENDA & RELATED SPECIFICATIONS. THEY SHALL COMPLETELY SATISFY THEMSELVES AS TO THE CONDITIONS TO WHICH THE WORK IS TO BE PERFORMED BEFORE SUBMITTING THEIR BID. NO ALLOWANCES OR CONSIDERATIONS WILL BE GIVEN AT A LATER DATE FOR ALLEGED MISUNDERSTANDINGS AS TO THE REQUIREMENTS OF THE WORK, MATERIALS TO BE FURNISHED, OR CONDITIONS REQUIRED BY THE NATURE OF THIS PROJECT SITE DUE TO NEGLECT ON THE BIDDERS PART TO MAKE SUCH AN EXAMINATION AND COORDINATION.
2. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW APPROXIMATE LOCATION AND GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT. DRAWINGS SHALL NOT BE SCALED FOR LOCATION OF SYSTEMS, EQUIPMENT, ETC. ALL LOCATIONS OF SYSTEMS AND EQUIPMENT SHALL BE VERIFIED IN FIELD AND COORDINATED WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS. SOME SYSTEMS (PIPING, DUCTWORK, ETC.) AND EQUIPMENT LOCATIONS MAY REQUIRE CHANGES IN LOCATION DUE TO FIELD CONDITIONS AND COORDINATION WITH OTHER TRADES. THESE CHANGES SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER. FAILURE TO VERIFY AND COORDINATE WILL BE NO REASON FOR ADDITIONAL COMPENSATION.
3. THE INSTALLATION OF ALL SYSTEMS, EQUIPMENT, ETC., IS SUBJECT TO CLARIFICATION WITH SUBMITTED SHOP DRAWINGS AND FIELD COORDINATION REQUIREMENTS. EQUIPMENT OUTLINES SHOWN ON DRAWINGS OR DIMENSIONED ON DRAWINGS ARE LIMITING DIMENSIONS. ANY EQUIPMENT THAT REDUCES THE INDICATED CLEARANCES OR EXCEEDS SPECIFIED OR SCHEDULED EQUIPMENT DIMENSIONS SHALL NOT BE USED.
4. THE MECHANICAL CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL EQUIPMENT WITH PIPING, DUCTWORK, ETC., AT THE TIME OF ROUGH-IN. ALL EQUIPMENT TO BE SERVICEABLE. ABOVE CEILING EQUIPMENT SHALL BE WITHIN 18" OF CEILING WITHOUT ANY OBSTRUCTIONS AND SHALL HAVE ALL SERVICE AND ACCESS SPACES KEPT CLEAR. PERFORM ABOVE CEILING COORDINATION WITH ALL TRADES.
5. THESE DRAWINGS AND THE ASSOCIATED SPECIFICATIONS ARE INTENDED TO PROVIDE COMPLETELY FURNISHED, INSTALLED AND OPERATIONAL MECHANICAL SYSTEM (HEATING, VENTILATING, AIR CONDITIONING, PLUMBING AND PIPING, ETC.). IF THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS HAVE INFORMATION OMITTED THAT WOULD NOT ALLOW A COMPLETELY OPERATIONAL SYSTEM AS IS THE INTENT OF THE ENGINEER, THE BIDDER SHALL NOTIFY THE ENGINEER A MINIMUM ONE WEEK PRIOR TO THE BID DATE TO ALLOW FOR ADDENDA. ONCE BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL, LABOR, ETC., TO FURNISH AND INSTALL A COMPLETELY OPERATIONAL MECHANICAL SYSTEM AS IS THE INTENT OF THESE DRAWINGS AND ASSOCIATED SPECIFICATION. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. IF ANY DISCREPANCIES ARE ON DRAWINGS, AS COMPARED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND INSTALL EQUIPMENT AS REQUIRED AT NO ADDITIONAL COST TO THE PROJECT.
6. THE MECHANICAL TRADES SHALL TAKE OUT ALL PERMITS AND ARRANGE FOR NECESSARY INSPECTIONS AND SHALL PAY ALL FEES AND COSTS.
7. THE MECHANICAL TRADES SHALL VERIFY AMOUNT OF EXISTING PIPING, VALVES, DUCTWORK, ETC. TO BE REMOVED OR RELOCATED TO ALLOW FOR INSTALLATION OF NEW PIPING, DUCTWORK, VALVES, EQUIPMENT, WALLS, ETC. ALL ABANDONED PIPING, VALVES, ETC., SHALL BE REMOVED.
8. THE MECHANICAL TRADES SHALL COORDINATE ALL WORK WITH OTHER TRADES AND SHALL COORDINATE ANY SYSTEMS SHUT-DOWN WITH THE ARCHITECT/ENGINEER AND OWNER.
9. ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. THAT IS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL REMOVE AND LOCATE THIS MATERIAL THAT REMAINS THE PROPERTY OF THE OWNER TO A LOCATION DETERMINED BY THE OWNER SOMEWHERE ON SITE. IF THE OWNER DOES NOT WANT TO MAINTAIN POSSESSION OF THE REMOVED MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING MATERIAL FROM THE SITE AND DISPOSING OF THIS MATERIAL AS NECESSARY TO MEET ALL CODES AND REQUIREMENTS AND SHALL PAY ALL COSTS AS REQUIRED FOR ANY DISPOSAL FEES, INSPECTIONS, PERMITS, ETC.
10. ATTACHMENTS OF MECHANICAL OR ELECTRICAL EQUIPMENT TO STRUCTURAL MEMBERS ARE THE RESPONSIBILITY OF THE INSTALLING TRADE. STRUCTURAL MEMBERS SHALL NOT BE FIELD CUT, WELDED OR OTHERWISE MODIFIED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. ATTACHMENT TO STEEL JOISTS SHALL BE MADE AT PANEL POINTS WHENEVER POSSIBLE. STEEL JOISTS SHALL BE REINFORCED FOR NON-PANEL POINT CONCENTRATED LOADS IN ACCORDANCE WITH THE STRUCTURAL DETAILS; THIS WORK SHALL BE PERFORMED BY CERTIFIED WELDERS AND IS THE RESPONSIBILITY OF THE TRADE INSTALLING THE SUBJECT LOAD. STRUCTURAL MEMBERS SHALL NOT BE OVERLOADED AS A RESULT OF ATTACHMENTS. ATTACHMENT/EQUIPMENT LOADING FOR ALL TRADES RESULTING IN TOTAL LOAD GREATER THAN AN EQUIVALENT UNIFORM 5 PSF FOR ANY MEMBER SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW.
11. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH RATING AS NECESSARY. THE GENERAL TRADES SHALL INSTALL ACCESS DOORS.
12. FURNISH PREFABRICATED ROOF CURB FOR EACH EXHAUST FAN, WITH HEIGHT OF CURB TO GIVE MINIMUM 12" CLEAR FROM FINISHED ROOF TO EXHAUST FAN CURB CAP. THE MECHANICAL TRADE SHALL FURNISH THE ROOF CURB TO THE GENERAL TRADE. THE GENERAL TRADE SHALL LEVEL CURB, PERFORM ALL ROOFING AND FLASHING ETC.
13. SEE SPECIFICATION FOR FURTHER INFORMATION.

SPECIFIED AND SCHEDULED EQUIPMENT NOTE

EQUIPMENT MANUFACTURERS AND MATERIALS SPECIFIED OR SCHEDULED ON THESE PROJECT DRAWINGS AND SPECIFICATIONS SHALL BE INCLUDED UNDER THE BASE BID PRICE. SUBSTITUTE OR ALTERNATE EQUIPMENT SHALL BE PRICED AS AN ADD OR DEDUCT PRICE TO THE CONTRACTOR'S BASE BID PRICE. IF ONE OR MORE SUBSTITUTIONS ARE ACCEPTED WITH THE PROPOSAL AT THE CORRESPONDING ALTERNATE PRICE, IT SHALL BE UNDERSTOOD THAT APPROVAL OF SAID EQUIPMENT SHALL BE SUBJECT TO STRICT ADHERENCE TO THE PLANS AND SPECIFICATIONS. SHOULD ANY OF THE SUBSTITUTE EQUIPMENT FAIL TO MEET THE SPECIFICATIONS AFTER THE PROPOSAL HAS BEEN ACCEPTED, REGARDLESS IF EQUIPMENT HAS BEEN SHIPPED TO THE SITE AND INSTALLED, THE CONTRACTOR SHALL FURNISH AT NO EXTRA COST TO THE OWNER, THE SPECIFIED EQUIPMENT MEETING THE REQUIREMENTS AS STATED IN THESE SPECIFICATIONS AND COVER ALL COSTS NECESSARY FOR REMOVAL AND REINSTALLATION OF EQUIPMENT.

PLUMBING FIXTURE SCHEDULE

TAG/ DESCRIPTION	MANUFACTURER	MODEL #	NOTES
FD-1	ZURN	ZN-415B	CAST IRON FLOOR DRAIN WITH FLANGE, INTEGRAL REVERSIBLE CLAMPING COLLAR 5" DIAMETER SATIN NICKEL BRONZE STRAINER. FURNISH A DEEP SEAL TRAP,WITH TRAP SEAL FOR EACH FLOOR DRAIN.
RD-1	ZURN	Z100-EADP	ROOF DRAIN: DURA-COATED CAST IRON BODY AND DOME, WITH FLASHING, CLAMP/GRAVEL GUARD, TOP-SET DECK PLATE, ADJUSTABLE EXTENSION, AND 18" SQUARE ROOF DRAIN RECIEVER.
SERD-1	ZURN	Z100-EADP	ROOF DRAIN: DURA-COATED CAST IRON BODY AND DOME, WITH FLASHING, CLAMP/GRAVEL GUARD, TOP-SET DECK PLATE, ADJUSTABLE EXTENSION, AND 18" SQUARE ROOF DRAIN RECIEVER. PROVIDE WITH -W2 2" INTERNAL WATER DAM.
DSN-1	ZURN	Z199	DOWNSPOUT NOZZLE: ALL NICKEL BRONZE BODY, DECORATIVE FACE,REMOVABLE STAINLESS SCREEN, OPTIONAL THREADED OR NO HUB INLET, OR PVC CONNECTION.
CO	ZURN	Z-1400	CLEANOUTS: PROVIDE ZURN Z-1400 SERIES DURA-COATED CAST IRON CLEANOUTS WITH BRONZE PLUG AS FOLLOWS: EXTERIOR: ZB-1400 POLISHED BRONZE ROUND TOP FINISHED FLOORS: ZN-1400 NICKEL BRONZE ROUND TOP CERAMIC TILE: ZN-1400-T NICKEL BRONZE SQUARE TOP CARPETED FLOORS: ZN-1400-CM NICKEL BRONZE WITH CARPET MARKER ROUND TOP WALL CLEANOUTS: ZS-1469 STAINLESS STEEL ACCESS AS REQUIRED BY PIPE SIZE HEAVY DUTY CLEANOUTS: (AT LOCATIONS OF VEHICLE/FORKLIFT TRAFFIC) ZN-1400HD
UNDER LAVATORY PROTECTIVE PIPE COVERS	ZURN	Z8946	TRAP AND STOP/RISER INSULATED COVERS SHALL BE FURNISHED AND INSTALLED ON ALL EXPOSED PIPING AND VALVES BELOW LAVATORIES TO MEET ADA REQUIREMENTS. THIS SHALL INCLUDE DRAIN, CW AND HW PIPING, FITTINGS, VALVES, ETC.
FS-1	ZURN	ZN-1901-2	12"X 12"X8" DEEP, CAST IRON SQUARE FLOOR SINK WITH A.R.E. INTERIOR, ALUMINUM DOME STRAINER AND NICKEL BRONZE FRAME AND 1/2 NICKEL BRONZE GRATE. FURNISH A DEEP SEAL TRAP.
JS-1	FLORESTONE	#96 242412	TERRAZZO, 24"X24"X12" NEO ANGLE WITH DROPPED FRONT, STAINLESS STEEL THRESHOLD, TILING FLANGES AND STAINLESS STEEL SPLASH CATCHER PANELS. DRAIN BODY SHALL BE 3" STAINLESS STEEL CAST INTEGRAL WITH REMOVABLE FLAT TYPE 16 GAUGE #302 STAINLESS STEEL STRAINER. RECEPTOR SHALL BE COMPOSED OF MARBLE CHIPS AND WHITE PORTLAND CEMENT GROUND SMOOTH, GROUTED AND SEALED TO RESIST STAINS. FITTINGS SHALL BE MOP SERVICE SINK FAUCET WITH HOSE END OUTLET, INTEGRAL STOPS, VACUUM BREAKER, ADJUSTABLE TOP BRACE PAIL HOOK AND ROUGH CHROME FINISH. PROVIDE MOP HANGER, HOSE AND HOSE BRACKET, AND SILICONE SEALANT. REINFORCE WALL FOR FAUCET AS REQUIRED.
SK-1	ELKAY	RNSF83544	RIGIDBUILT, #16 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL, SEAMLESS DRAWN COMPARTMENTS WITH 1.75" RADIUS, CHANNEL RIMS, STRAIGHT LINE STYLING, 8" HIGH FULL LENGTH BACKSPLASH WITH 13 1/2" DEEP COMPARTMENTS. SINK TO BE POLISHED TO A UNIFORM LUSTROUS SATIN FINISH. DRAIN BOARDS SHALL BE CHANNELED REINFORCED. COMPARTMENTS COME WITH CENTER OUTLETS PITCHED TO DRAIN. UNDERSIDE OF COMPARTMENTS AND DRAIN BOARDS SHALL BE UNDERCOATED. SINKS SHALL BE SUPPORTED ON FOUR #LK251 STAINLESS STEEL TUBULAR LEGS, 1 5/8" O.D. WITH ADJUSTABLE BULLET SHAPED STAINLESS STEEL FEET. FURNISH TWO ELKAY #LK66B CHROME PLATED BACK MOUNT SINK FAUCET WITH 6" SWING SPOUT (8 3/4" FROM WALL TO SPOUT OUTLET) WITH AE13A, 2.2 GPM AERATOR, ADJUSTABLE 8" CENTER TO CENTER FLANGED FEMALE 1/2" I.P.S. INLETS AND BUILT IN CHECK VALVES. ALSO INCLUDE LK-35 STAINLESS STEEL CONICAL STRAINER BASKET WITH NEOPRENE STOPPER, TAILPIECES, P-TRAPS, WHEEL HANDLE STOPS, ETC. SINK SHALL HAVE LEFT AND RIGHT HAND SIDE DRAIN BOARDS. MAXIMUM UNIT SIZE TO BE 67 1/2" LONG X 29 3/4" WIDE.
HR-1	REELCRAFT	H19000	HOSE REEL FOR 3/4" INSIDE DIAMETER GARDEN HOSE. REEL INLET AND OUTLET SHALL BE 3/4" GHT. REEL SHALL HAVE 90' HOSE LENGTH CAPACITY.
WHS-1	LEONARD	SS-HA-2-LF	WASHDOWN HOSE STATION ASSEMBLY: DUAL TEMPERATURE, STAINLESS STEEL, MANUAL BLENDER TO MIX HOT AND COLD WATER. 316 STAINLESS STEEL CONSTRUCTION, 3/4" NPT INLETS WITH STOP AND CHECK VALVES, 3/4" GHT OUTLET WITH DIAL THERMOMETER, STAINLESS STEEL MOUNTING PLATE.
HWRP-1	BELL & GOSSETT	SERIES PR	ALL BRONZE INLINE BOOSTER RATED 1 GPM @ 16' HD, MOTOR 1/6 HP @ 115 VOLT. INSTALL PUMP APPROXIMATELY 4'-0" AF IN VERTICAL PIPE. MECHANICAL CONTRACTOR SHALL FURNISH AND SET A HONEYWELL L6006C1018 STRAP-ON AQUASTAT AND ADJUST TO START PUMP WHEN PIPE TEMPERATURE FALLS BELOW 126 DEGREES AND STOP PUMP WHEN PIPE TEMPERATURE RISES ABOVE 135 DEGREES. ELECTRICAL TRADES WILL PROVIDE STARTER WITH THERMAL OVERLOAD ELEMENTS AND ALL WIRING.
GI-1	SCHIER	GB1	GREASE INTERCEPTOR SHALL BE LIFETIME GUARANTEED AND MADE IN USA OF SEAMLESS, ROTATIONALLY-MOLDED POLYETHYLENE WITH MINIMUM 5/16" UNIFORM WALL THICKNESS.INTERCEPTOR SHALL HAVE A 4" INLET AND OUTLET. INTERCEPTOR SHALL BE FURNISHED BELOW GRADE INSTALLATION. INTERCEPTOR SHALL BE CERTIFIED TO ASME A112.14.3 (TYPE C) AND CSA B481.1, WITH FIELD CUT RISER SYSTEM, BUILT-IN FLOW CONTROL AND THREE OUTLET OPTIONS. INTERCEPTOR FLOW RATE SHALL BE 20 OR 25 GPM. INTERCEPTOR GREASE CAPACITY SHALL BE 70 LBS. @ 20 GPM OR 64.9 LBS. @ 25 GPM. COVER SHALL PROVIDE WATER/GASTIGHT SEAL AND HAVE MINIMUM 450 LBS. LOAD CAPACITY.
GI-2	SCHIER	GB-250	GREASE INTERCEPTOR SHALL BE LIFETIME GUARANTEED AND MADE IN USA OF SEAMLESS, ROTATIONALLY-MOLDED POLYETHYLENE WITH MINIMUM 3/8" UNIFORM WALL THICKNESS. INTERCEPTOR SHALL HAVE A 4" INLET AND OUTLET. INTERCEPTOR SHALL BE FURNISHED FOR BELOW-GRADE INSTALLATION WITH ADJUSTABLE COVER ADAPTERS, SAFETY STAR® ACCESS RESTRICTOR BUILT INTO EACH COVER ADAPTER, BUILT-IN FLOW CONTROL AND THREE OUTLET OPTIONS. INTERCEPTOR SHALL BE CERTIFIED TO ASME A112.14.3 (TYPE D FOR 100 GPM, TYPE C FOR 200 GPM) AND CSA B481.1. INTERCEPTOR FLOW RATE SHALL BE 100 GPM OR 200 GPM. INTERCEPTOR GREASE CAPACITY SHALL BE 1,895 LBS. @ 100 GPM OR 1,196 LBS. @ 200 GPM. COVER SHALL PROVIDE WATER/GAS-TIGHT SEAL AND HAVE MINIMUM 16,000 LBS. LOAD CAPACITY. FURNISH WITH SCHIER MODEL PP3 PUMPOUT PORT KIT.
OS-1	STRIEM	OS-75	HIGH EFFICIENCY OIL/WATER SEPARATOR SHALL BE LIFETIME GUARANTEED AND MADE IN THE USA. SEPARATOR SHALL BE CERTIFIED TO IAPMO IGC 325 AND CARRY A UPC LISTING. SEPARATOR SHALL HAVE A 4" INLET AND OUTLET, 3" VENT CONNECTION. SEPARATOR SHALL BE CONSTRUCTED OF POLYETHYLENE. SEPARATOR SHALL BE MANUFACTURED FOR BELOWGRADE INSTALLATION. FIELD-ADJUSTABLE RISER SYSTEM IS SHALL BE PROVIDED AS NECESSARY TO BRING MANHOLE COVER TO GRADE. SEPARATOR FLOW RATE SHALL BE 75 GPM. SEPARATOR LIQUID HOLDING CAPACITY SHALL BE 110 GALLONS AND OIL CAPACITY SHALL BE 27.5 GALLONS. SOLIDS CAPACITY SHALL BE 11 GALLONS. COVER SHALL PROVIDE WATER/GAS-TIGHT SEAL AND HAVE A MAXIMUM 16,000 LBS. LOAD CAPACITY.

NATURAL GAS UNIT HEATER SCHEDULE

MARK	SERVING	TYPE	FUEL TYPE	MBH INPUT	MBH OUTPUT	CFM	TEMP RISE (F)	ELECTRICAL				BASIS OF DESIGN		NOTES
								MOTOR AMPS	HP	V/Hz/PH	AMPS	MAKE	MODEL	
UH-2	VEHICLE STORAGE	SEPERATED COMBUSTION	NATURAL GAS	250	205	3994	47	4.6	1/3	120/60/1	7.15	MODINE	PTX250	1,2,3,4,5,6
UH-3	VEHICLE STORAGE	SEPERATED COMBUSTION	NATURAL GAS	250	205	3994	47	4.6	1/3	120/60/1	7.15	MODINE	PTX250	1,2,3,4,5,6

NOTES:

1. FURNISH WITH 409SS HEAT EXCHANGER, SEPERATED COMBUSTION WITH 6" VENT AND 6" COMBUSTION PIPING.
2. INTEGRATED DIRECT SPARK CONTROL BOARD, SINGLE STAGE GAS VALVE, STEP DOWN TRANSFORMER, AND CONTROLS RELAY. WALL MOUNTED 24V THERMOSTAT
3. FLAME SENSOR, FLAME ROLLOUT SWITCH, HIGH LIMIT SWITCH, AND DIRECT SPARK IGNITER.
4. FURNISH ALL MOUNTING HARDWARE REQUIRED FOR SUSPENDED UNIT HEATER INSTALLATION.
5. FURNISH AND INSTALL VENTING AND VENT TERMINATION KIT, AS REQUIRED BY MANUFACTURER.
6. INSTALL UNIT HEATERS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AN ALL APPLICABLE CODES.

LOUVER SCHEDULE

MARK	SERVING	DIMENSIONS			CFM	PRESS DROP (IN W.C.)	VELOCITY	BPWP	FREE AREA	FRAME	DAMPER	BASIS OF DESIGN		NOTES
		WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)			FPM	FPM	S.F.	TYPE	TYPE	MAKE	MODEL	
L-1	VEHICLE STORAGE	60"	48"	6"	5,500	0.039	475	1250	11.59	CHANNEL	MOTORIZED	GREENHECK	ESD-635	1,2,3,4,5

NOTES:

1. PROVIDE WITH BIRDSCREEN.
2. LOUVER SHALL BE GREENHECK MODEL #ESD-635 EXTRUDED ALUMINUM, 6" DEEP, DRAINABLE TYPE BLADES. FRAME SHALL BE 6" DEEP, .125" THICK 6063-T5 EXTRUDED ALUMINUM ALLOY. BIRDSCREEN SHALL BE PROVIDED ON THE INTERIOR, BE REMOVABLE FOR CLEANING AND CONSIST OF 1/2" EXPANDED ALUMINUM WITH EXTRUDED ALUMINUM FRAME. LOUVER SHALL CARRY THE AMCA CERTIFIED RATINGS SEAL FOR BOTH WATER PENETRATION AND AIR PERFORMANCE. FURNISH FACTORY FINISH ENAMEL PAINT WITH COLOR SELECTED BY THE ARCHITECT/ENGINEER.
3. LOUVER SHALL BE SEPARATED INTO (2) SECTIONS WITH AN INDIVIDUAL DAMPER AND ACTUATOR ON EACH SECTION. SECTION 1 SHALL BE 12"x48", SECTION 2 SHALL BE 48"X48"
4. DAMPERS SHALL BE GREENHECK MODEL #VCD-23 DAMPER, 16 GA GALVANIZED STEEL 3V TYPE WITH THREE LONGITUDINAL GROOVES FOR REINFORCEMENT. BLADE SEALS SHALL BE TPE. LINKAGE SHALL BE BLADE TO BLADE CONCEALED IN JAMB. DAMPER FRAME SHALL BE 16 GA GALVANIZED STEEL FORMED INTO A STRUCTURAL HAT CHANNEL. BEARINGS SHALL BE CORROSION RESISTANT. DAMPER SHALL HAVE EXTERNAL MOUNT FOR ELECTRIC ACTUATOR.
5. DAMPER ACTUATORS SHALL BE 24V. SECTION 1 DAMPER ACTUATOR SHALL BE NORMALLY CLOSED AND OPEN WHEN EXHAUST FAN EF-7 IS OPERATING. SECTION 2 DAMPER ACTUATOR SHALL BE NORMALLY CLOSED AND OPEN WHEN EXHAUST FAN EF-8 IS OPERATING. DAMPER SHALL FAIL IN THE NORMALLY OPEN POSITION.

GAS-FIRED INFRARED TUBE HEATER SCHEDULE

MARK	SERVING	TYPE	HIGH HEATING CAPACITY (BTUH)	LOW HEATING CAPACITY (BTUH)	LENGTH	REC'D MOUNT HEIGHT	VOLTS/PH/HZ	MANUFACTURER MODEL NUMBER	WEIGHT (LBS)	REMARKS
RTH-1	CANOPY	NATURAL GAS	200,000	65,000	31'-4"	12' - 20'	120/1/60	RE-VERBER-RAY #HL2-30-100	195	1,2,3

NOTES:

1. ELECTRICAL TRADES SHALL FURNISH AND INSTALL DISCONNECT SWITCH. UNIT SHALL BE POWERED BY CORD AND PLUG.
2. TUBE HEATERS SHALL BE MOUNTED WITH 6" CLEARANCE ABOVE AT A 0 DEGREE ANGLE. SIDE SHEILD SHALL BE FIELD INSTALLED ON SIDE OPPOSITE KITCHEN.
3. MECHANICAL CONTRACTOR SHALL INCLUDE TIMER SWITCH CONTROL MODEL WEP-TS. TIME SWITCH SHALL INCLUDE TIMER AND SWITCH FOR 2 STAGE OPERATION. MECHANICAL CONTRACTOR TO WIRE 24V POWER FROM UNIT TO TIMER AND UNIT HIGH/LOW SWITCH.

SINGLE PACKAGE ROOFTOP GAS HEAT/ELECTRIC COOLING UNIT

MARK	MANUFACTURER	MODEL NO	TOTAL AIRFLOW	MIN. OUTSIDE AIR FLOW	EXT STATIC PRESSURE	COOLING CAPACITY: NOMINAL COOLING	NET COOLING CAPACITY	NET SENS CAPACITY	EER	EAT Db	EAT Wb	LAT Db	LAT Wb	OSA DESIGN TEMP	COMP Kw	HEATING CAPACITY: GAS INPUT	GAS OUTPUT	HEATING STAGES	EAT Db	LAT Db	ELECTRICAL DATA: INDOOR FAN HP	INDOOR FAN BHP	UNIT POWER CONNECTION MCA	MOP	PHASE	VOLT	AIRFLOW CONFIGURATION
			CFM	CFM	IN	TONS	MBH	MBH		°F	°F	°F	°F	°F		MBH	MBH		°F	°F	HP	BHP	MCA	MOP	PHASE	VOLT	
RTU-5	TRANE	YHK060A3	2,000	350	1.0	5	60.41	45.08	13	80	67	57.6	46.4	95	3.86	150	121.5	MODULATING	54	109.5	3	0.685	40	50	[3]	208	DOWNFLOW
RTU-6	TRANE	YHK120A3	4,000	475	1.25	10	121.77	90.85	12	80	67	59.5	57.38	95	8.84	240	194.4	MODULATING	58.7	107.5	3	2.55	66	90	[3]	208	DOWNFLOW
RTU-7	TRANE	YHK060A3	2,000	275	1.0	5	60.41	45.08	13	80	67	57.6	46.4	95	3.86	150	121.5	MODULATING	57.3	112.8	3	0.685	40	50	[3]	208	DOWNFLOW
RTU-8	TRANE	YHK072A3	2,400	200	1.0	6	80.14	59.58	12.2	80	67	57.5	56.3	95	4.79	150	121.5	MODULATING	61.5	107.8	3	1.181	44	50	[3]	208	HORIZONTAL
RTU-9	TRANE	YHK300A3	9,000	800	1.5	25	266.05	193.76	10.8	80	67	60.5	57.7	95	20.65	400	324	MODULATING	61	94.1	2 @ 4.6	6.42	128	175	[3]	208	HORIZONTAL

NOTES:

1. HIGH STATIC MOTOR
2. UNIT SHALL BE FURNISHED WITH 40% POWERED EXHAUST
3. UNIT SHALL BE FURNISHED WITH POWERED CONVENENCE OUTLET
4. UNIT SHALL BE FURNISHED WITH REFERENCE ENTHALPY ECONOMIZER
5. TWO DUCT SMOKE DETECTORS AND REMOTE WIRING SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL TRADES. MECHANICAL TRADES SHALL COORDINATE INSTALLATION OF SENSING TUBES AND CONTROL WIRING FOR SHUT DOWN OF UNIT WITH ELECTRICAL TRADES. THE ELECTRICAL CONTRACTOR SHALL WIRE FROM THE RTU AND TO THE FIRE ALARM PANEL AS NEEDED.
6. UNIT SHALL HAVE STAINLESS STEEL DRAIN PAN AND HEAT EXCHANGER.
7. UNIT SHALL HAVE PLEATED 4" THICK MERV 8 FILTERS.
8. RTU SHALL INCLUDE:
   A. FACTORY MOUNTED DISCONNECT
   B. LOUVERED HAIL GUARDS
   C. SCROLL COMPRESSORS
   D. THROUGH THE BASE ELECTRICAL PROVISIONS.
   E. SLOPED STAINLESS STEEL DRAIN PAN
9. FURNISH 5 YEAR COMPRESSOR WARRANTY FOR RTU.
10. RTU-5,7&8 SHALL BE SINGLE ZONE VAV WITH HOT GAS REHEAT OPTION, DUCT MOUNTED HUMIDITY SENSOR.
11. RTU-6&9 SHALL BE CONSTANT VOLUME WITH HOT GAS REHEAT OPTION, DUCT MOUNTED HUMIDITY SENSOR.
12. FURNISH ONE YEAR OF COMPLETE WARRANTY OF ROOFTOP UNIT. INCLUDE CHECK TEST AND START-UP OF ROOFTOP UNIT AND CONTROL SYSTEM. PROVIDE FACTORY AND FIELD WIRING DIAGRAMS, AND PROVIDE TECHNICAL ASSISTANCE AS REQUIRED TO ASSURE FIRST CLASS OPERATING SYSTEM.
13. RTU SHALL BE FURNISHED WITH 24" TALL ROOF CURB.

ELECTRIC UNIT HEATER SCHEDULE

MARK	SERVING	TYPE	KW	MBH	FAN HP	AMPS	VOLTS/P H/HZ	MANUFACTURER MODEL NUMBER	REMARKS
EUH-1	STORAGE 122	ELECTRIC	3	10.2	1/100	14.5	208/1/60	QMARK MUH03-81	1, 2, 3, 4
EUH-2	RISER 121	ELECTRIC	3	10.2	1/100	14.5	208/1/60	QMARK MUH03-81	1, 2, 3, 4

NOTES:

1. FURNISH UNIT WITH FACTORY PROVIDED DISCONNECT. DISCONNECT SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR.
2. FURNISH ALL MOUNTING HARDWARE REQUIRED FOR WALL MOUNTED UNIT HEATER INSTALLATION.
3. INSTALL UNIT HEATERS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ALL APPLICABLE CODES.
4. CONTROLS SHALL INCLUDE INTERNAL THERMOSTAT.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

TYPE: TAG	SERVICE AND TYPE	MODEL NUMBERS	DEFLECTION	NECK SIZE	REMARKS
A	SQUARE CEILING DIFFUSER	PRICE SMDA-4 OR EQUAL TITUS	4 WAY	0-125 CFM: 6" x 6" (6" DIA) 126-250 CFM: 9" x 9" (8" DIA) 251-350 CFM: 12" x 12" (10" DIA) 351-450 CFM: 12" x 12" (12" DIA) 451-600 CFM: 15" x 15" (14" DIA) 601-900 CFM: 18" x 18" (16" DIA) 901-1200 CFM: 21" x 21"	ALL STEEL CONSTRUCTION, ADJUSTABLE HORIZONTAL TO VERTICAL AIRFLOW PATTERN, (OPPOSED BLADE DAMPER), BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AND DIFFUSER PANEL SHALL MATCH GRID AND CEILING TYPE FOR LAY IN CEILING. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25.
B	SQUARE CEILING RETURN AIR GRILLE	PRICE SMD-4 OR EQUAL TITUS	4 WAY	0-125 CFM: 6" x 6" (6" DIA) 126-250 CFM: 9" x 9" (8" DIA) 251-350 CFM: 12" x 12" (10" DIA) 351-450 CFM: 12" x 12" (12" DIA) 451-600 CFM: 15" x 15" (14" DIA) 601-900 CFM: 18" x 18" (16" DIA) 901-1200 CFM: 21" x 21"	ALL STEEL CONSTRUCTION, (OPPOSED BLADE DAMPER), BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AND DIFFUSER PANEL SHALL MATCH GRID AND CEILING TYPE FOR LAY IN CEILING. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25.
C	SUPPLY AIR REGISTER	PRICE 520DL OR EQUAL CARNES OR T&B	DOUBLE DEFLECTION BLADES	SEE DRAWING	ALL STEEL CONSTRUCTION, BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT, ONE SET OF HORIZONTAL BLADES SET AT 0 DEGREES. FRAME SHALL BE "BORDER F" FLAT FACE FRAME WITH SCREW HOLES FOR MOUNTING.
D	RETURN OR EXHAUST GRILLE	PRICE 530DL (530DS) OR EQUAL CARNES OR T&B	1 WAY (35 DEGREES)	SEE DRAWING	ALL STEEL CONSTRUCTION, BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT, ONE SET OF HORIZONTAL BLADES. FRAME SHALL BE "BORDER F" FLAT FACE FRAME WITH SCREW HOLES FOR MOUNTING.
E	SQUARE CEILING DIFFUSER	PRICE SMDA-3 OR EQUAL TITUS	3 WAY	0-125 CFM: 6" x 6" (6" DIA) 126-250 CFM: 9" x 9" (8" DIA) 251-350 CFM: 12" x 12" (10" DIA) 351-450 CFM: 12" x 12" (12" DIA) 451-600 CFM: 15" x 15" (14" DIA) 601-900 CFM: 18" x 18" (16" DIA) 901-1200 CFM: 21" x 21"	ALL STEEL CONSTRUCTION, ADJUSTABLE HORIZONTAL TO VERTICAL AIRFLOW PATTERN, (OPPOSED BLADE DAMPER), BAKED ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AND DIFFUSER PANEL SHALL MATCH GRID AND CEILING TYPE FOR LAY IN CEILING. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25. NO FLOW SIDE OF DIFFUSER SHALL FACE KITCHEN HOOD.

EXHAUST FAN SCHEDULE

MARK	SERVING	TYPE	MAX CFM	BALANCED CFM	E.S.P. (IN. W.C.)	FAN RPM	DRIVE	SONES	ELECTRICAL				BASIS OF DESIGN		NOTES
									BHP	HP	V/Hz/PH	FLA	MAKE	MODEL	
EF-7	VEHICLE STORAGE	WALL MOUNTED	600	500	0.15	659	DIRECT	5.8	0.03	1/4	115/1PH	2.85	GREENHECK	AER-20-VG	1,2,3,5,6,7,8,10
EF-8	VEHICLE STORAGE	WALL MOUNTED	5,500	5,000	0.381	995	DIRECT	14.6	0.73	2	208/1PH	12.5	GREENHECK	AER-24-VG	1,2,3,4,5,6,7,11
EF-9	JANITORS CLOSET	ROOF MOUNTED	150	100	0.25	1,269	DIRECT	2.6	0.01	1/15	115/1PH	1.3	GREENHECK	G-070-VG	1,2,5,6,7,8
EF-10	KITCHEN HOOD	ROOF MOUNTED	-	2,400	0.85	988	DIRECT	9.8	0.743	1.5	208/3PH	6.6	CAPTIVEAIRE	DU180HFA	9
EF-11	KITCHEN HOOD	ROOF MOUNTED	-	2,400	0.85	988	DIRECT	9.8	0.743	1.5	208/3PH	6.6	CAPTIVEAIRE	DU180HFA	9

NOTES:

1. FURNISH GREENHECK MODEL WD-320 GRAVITY BACKDRAFT DAMPER TO BE INSTALLED IN DUCTWORK BETWEEN FAN AND LOUVER.
2. FURNISH SPEED CONTROLLER TO BE MOUNTED ON FAN HOUSING TO ALLOW AIR BALANCING OF EXHAUST FAN.
3. FURNISH WITH 45° WEATHER HOOD AND WALL HOUSING WITH INLET/DISCHARGE GUARD.
4. FURNISH EF-8 WITH (2) ARMSTRONG AMC-1222 CO/NO2 SENSORS AND (1) ARMSTRONG AMC-1BZ MONITOR PANEL. EF-8 SHALL BE CONTROLLED BY THE MONITOR PANEL TO TURN ON WHEN CONCENTRATION OF CO LEVELS EXCEED 25PPM OR NO2 LEVELS EXCEED 3PPM. EF-8 SHALL ALSO HAVE A LOCAL 24V REVERSE ACTING THERMOSTAT OVERRIDE TO PROVIDE ADDITIONAL VENTILATION FOR COOLING.
5. FANS SHALL BE RATED FOR CONTINUOUS OPERATION.
6. NEMA 1 DISCONNECT SWITCH, MOUNTED AND WIRED.
7. FAN SHALL BE U.L.-705 LISTED.
8. EXHAUST FANS EF-7 AND EF-9 SHALL BE CONTROLLED BY THE BMS AND OPERATE DURING ALL OCCUPIED HOURS.
9. EXHAUST FANS EF-10 AND EF-11 SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANCIAL CONTRACTOR. INFORMATION SHOWN HERE IS FOR REFERENCE ONLY. SEE KITCHEN EQUIPMENT DRAWING FOR MORE INFORMATION
10. EXHAUST FAN, EF-7 SHALL FUNCTION AS GENERAL VENTILATION AND OPERATE DURING OCCUPIED HOURS. EF-7 SHALL BE INTERLOCKED TO A 12"X48" DAMPER SECTION FOR LOUVER, L-1.
11. EXHAUST FAN, EF-8 SHALL BE CONNECTED TO CARBON MONOXIDE/NITROGEN DIOXIDE(CO/NO2) SENSOR(S) AND TURN ON IF CO EXCEEDS 25 PPM OR NO2 EXCEEDS 3 PPM. FAN SHALL ALSO BE CONTROLLED BY A LOCAL THERMOSTAT TO PROVIDE ADDITIONAL VENTILATION FOR COOLING. EF-8 SHALL BE INTERLOCKED TO A 48"X48" DAMPER SECTION FOR LOUVER, L-1.

WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	INPUT (MBH)	GPH @ 100F RISE	CAPACAITY (GAL)	TURN DOWN	COMBUSTION AND VENT SIZE	DIMENSIONS (DIA x H)	ELECTRICAL	NOTES
WH-3	LOCHINVAR	SWR125N	CONDENSING TANK	125	145	65	5:1	3"	28"x66"	120/1PH, 5.0 A	SEE BELOW

NOTES:

1. SELECTION BASED ON LOCHINVAR. AO SMITH CYCLONE SHALL BE CONSIDERED EQUAL IF ALL REQUIREMENTS ARE MATCHED OR EXCEEDED.
2. 95% THERMAL EFFICIENCY.
3. 150 PSI WORKING PRESSURE. PROVIDE WITH ASME TEMPERATURE AND PRESSURE RELIEF VALVE.
4. PROVIDE CONDENSATE NEUTRALIZATION KIT.
5. STAINLESS STEEL HEAT EXCHANGER. GLASS-LINED STEEL TANK. MAGNESIUM ANODE RODS.
6. INSTALL AND UTILIZE VENT MATERIAL AND SIZES AS REQUIRED BY MANUFACTURER.
7. PROVIDE WITH LOCHINVAR "SMART CONTROL" SYSTEM WITH LCD DISPLAY SCREEN, AND "CON-X-US" REMOTE CONNECTIVITY
8. MANUFACTURER PROVIDED 8-FOOT POWER CORD FOR STANDARD 120/60/1 GFI RECEPTACLE.
9. FURNISH AND INSTALL B&G PT-12 EXPANSION TANK. REFER TO PIPING DETAIL.
10. GLASS-LINED STEEL TANK. HIGH CAPACITY ANODE.
11. 3-YEAR LIMITED WARRANTY. 1-YEAR PARTS WARRANTY.

HEATED AIR CURTAIN (ELECTRIC)

MARK	DOOR OPENING W X H (FT.)	BASIS OF DESIGN: MFR.	MODEL	AVG. OUTLET VELOCITY HIGH SPEED (FPM)	AIR VOLUME HIGH SPEED (SCFM)	ELECTRIC HEATER: kW	HEATER OUTPUT (MBH)	ENTERING AIR (°F)	LEAVING AIR (°F)	MOTOR: QTY.	SPEEDS	HP	ELECTRICAL: VOLTAGE	FULL LOAD AMPS	MAX RATING BRANCH CIRCUIT PROTECTION DEVICE (AMPS)	WEIGHT (LBS.)	COMMENTS	ACCESSORIES
DH-1	6X7	BERNER	CLC08-1072EX-150	1,707	2,010	15.0	51.2	65.0	88.0	1	2	0.2	208/3/60	43.3	60.0	77	1, 2 ,3, 4, 5, 6, 7	1, 2, 3,

NOTES:

1. FACTORY INSTALLED FAN ON/OFF/FAN & HEAT AND HIGH/MEDIUM/LOW FAN SPEED ROCKER SWITCHES.
2. FRONT AIR INLET.
3. WHITE ALUMINUM EXTERIOR COVER HOUSING.
4. WALL MOUNTING PLATE.
5. cULus LISTED (INDOOR MOUNTING ONLY).
6. SINGLE STAGE ELECTRIC HEATERS INSTALLED ON THE INLET OPENING OF EACH BLOWER HOUSING. ELECTRIC HEATER INSTALLED IN THE OUTLET OF THE BLOWER HOUSING OR THE AIR OUTLET NOZZLE NOT PERMITTED.
7. AIR CURTAIN CABINET INCLUDING MOTORS, BLOWERS AAND ELECTRIC HEATER SHALL BE SHIPPED AS A SINGLE FULLY ASSEMBLED AND TESTED SYSTEM.

ACCESSORIES:

1. WALL MOUNTING PLATE FIELD INSTALLED.
2. TOGGLE DISCONNECTS FACTORY WIRED/INSTALLED.
3. TWO MAGNETIC REED DOOR SWITCHES FIELD INSTALLED/WIRED MY MECHANICAL CONTRACTOR.

MAKE-UP AIR UNIT - GAS HEAT/ELECTRIC COOLING UNIT

MARK	MANUFACTURER	MODEL NO	SUPPLY AIRFLOW	RETURN AIRFLOW	EXT STATIC PRESSURE	COOLING CAPACITY: TOTAL COOLING CAPACITY	TOTALSENS CAPACITY	IEER	EAT Db	EAT Wb	LAT Db	LAT Wb	HEATING CAPACITY: GAS INPUT	GAS NET OUTPUT	EAT Db	LAT Db	ELECTRICAL DATA: UNIT POWER CONNECTION HP	MCA	MOP	PHASE	VOLT	REMARKS
			CFM	CFM	IN	MBH	MBH		°F	°F	°F	°F	MBH	MBH	°F	°F	HP	MCA	MOP	PHASE	VOLT	
MAU-2	CAPTIVEAIRE	CAS-HVAC3-I.685-24-12.5T-MPU	4,800	0	0.500	149.4	73.1	21.3	83.5	75.1	69	66.7	541.6	438.7	-10	66	5	67.8	80	[3]	208	1

NOTES:

1. MAU-2 SHALL BE FURNISHED BY KITCHEN EQUIPMENT SUPPLIER AND INSTALLED BY MECHANICAL CONTRACTOR. INFORMATION SHOWN HERE IS FOR REFERENCE ONLY. SEE KITCHEN EQUIPMENT DRAWING FOR MORE INFORMATION.

0.0" 0.5" 1.0" 1.5" 2.0"

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TSSF ARCHITECTS, INC.
ARCHITECTS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

DRAWN BY STM
DATE 7/03/25
APPROVED GRS
SHEET NO.
M3.0
PROJECT NO.
2154

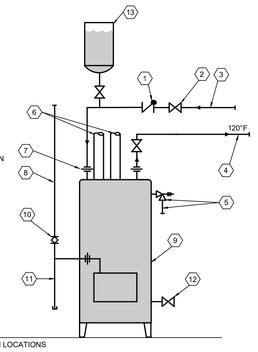
F:\27-TSSF\2024-2701 HUNGER SOLUTIONS CENTER\2024-2701-M-M3.0 MECHANICAL SCHED & NOTES
SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
7/9/2025 5:12 PM

MECHANICAL SYMBOL LIST

SAN	SANITARY PIPING BELOW FLOOR OR GRADE
SAN	SANITARY PIPING ABOVE FLOOR
ST	STORM PIPING BELOW FLOOR OR GRADE
ST	STORM PIPING ABOVE FLOOR
SED	SECONDARY EMERGENCY DRAINAGE PIPING
SAN	CO ABOVE FLOOR
SAN	CO UP TO GRADE
SAN	CO UP TO FLOOR
G	NATURAL GAS PIPING
V	VENT PIPING
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RETURN PIPING
FP	FIRE PROTECTION PIPING
	REDUCER
	CAP
	UNION
	CHECK VALVE
	ISOLATION GATE VALVE
	KITCHEN MASTER GAS VALVE
	GAS REGULATOR
	FLOW ARROW
	GRISWOLD AUTOMATIC FLOW LIMITING VALVE
RPBP	REDUCED PRESURE BACKFLOW PREVENTER
	VALVE IN RISER
	ELBOW RISING UP
	ELBOW DROPPING DOWN
	TEE WITH PIPE UP
	TEE WITH PIPE DOWN
	TEMPERATURE & PRESSURE RELIEF VALVE
	INLINE PUMP
	SERVICE SINK
	LAVATORY OR SINK
	FLOOR SINK
	FLOOR DRAIN
CO	CARBON MONOXIDE SENSOR
MD	CARBON MONOXIDE SENSOR
	THERMOSTAT OR WALL SENSOR
	ROOF DRAIN BELOW ROOF (FLOOR PLAN)
	ROOF DRAIN ON ROOF (ROOF PLAN)
EF	EXHAUST FAN WITH FAN ABOVE (FLOOR PLAN)
EF	EXHAUST FAN ON ROOF (ROOF PLAN)

	EX. VERTICAL FIRE DAMPER
	EX. HORIZONTAL FIRE DAMPER
	VERTICAL FIRE DAMPER
	HORIZONTAL FIRE DAMPER
['A-250']	SUPPLY AIR DIFFUSER - TYPE "A", 250 CFM
['B-250']	RETURN OR EXHAUST AIR GRILLE - TYPE "B", 250 CFM
	MANUAL DAMPER
	MOTORIZED DAMPER
DSD	DUCT SMOKE DETECTOR
AAV	AIR ADMITTANCE VALVE
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
BF	BARRIER FREE
BFG	BELOW FINISHED GRADE
CA	COMPRESSED AIR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CO	CLEAN OUT
COND	CONDENSATE
CP	CIRCULATING PUMP
CW	COLD WATER
EA	EXHAUST AIR
EF	EXHAUST FAN
EL	ELEVATION
EWC	ELECTRIC WATER COOLER
EX	EXISTING
FD	FLOOR DRAIN
FS	FLOOR SINK
GI	GREASE INTERCEPTOR
GPM	GALLONS PER MINUTE
HB	INTERIOR HOSE BIB
HW	HOT WATER
HWR	HOT WATER RETURN
JS	JANITORS SINK
L	LAVATORY
MBD	MANUAL BALANCING DAMPER
MAU	MAKE UP AIR UNIT
NC	NORMALLY CLOSED
NG	NATURAL GAS
NO	NORMALLY OPENED
OA	OUTSIDE AIR
OS	OIL SEPARATOR
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RAR	RETURN AIR REGISTER
RC	RAIN WATER CONDUCTOR
RD	ROOF DRAIN
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SAR	SUPPLY AIR REGISTER
SED	SECONDARY EMERGENCY DRAINAGE
SERC	SECONDARY EMERGENCY RAIN WATER CONDUCTOR
SERD	SECONDARY EMERGENCY ROOF DRAIN
SK	SINK
SP	STATIC PRESSURE
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VENT
VA	VALVE
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THRU ROOF
WCO	WALL CLEAN OUT
WH	WATER HEATER
WHYD	EXTERIOR WALL HYDRANT

1. CHECK VALVE
2. SHUT-OFF VALVE (TYP)
3. DOMESTIC COLD WATER PIPING
4. DOMESTIC HOT WATER PIPING
5. A.S.M.E. TEMPERATURE & PRESSURE RELIEF VALVE W/ DRAIN PIPING EXTENDED TO JANITORS SINK OR FLOOR DRAIN
6. FLUE VENT AND COMBUSTION AIR INTAKE EXTENDED TO CONCENTRIC VENT TERMINATION THRU WALL-SEE DRAWINGS & SPECIFICATIONS
7. UNION (TYP)
8. NATURAL GAS SUPPLY PIPING
9. NATURAL GAS WATER HEATER
10. NATURAL GAS SHUT-OFF VALVE
11. DIRT LEG
12. HOSE END DRAIN VALVE
13. EXPANSION TANK (E.T.) (E.T. SHALL NOT BE SUPPORTED BY PIPING, SUPPORT FROM FLOOR OR STRUCTURE ABOVE)

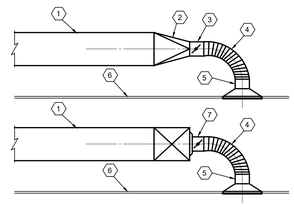


NOTES: 1. VERIFY TANK PIPE CONNECTION LOCATIONS
2. SEE PLANS FOR PIPE SIZES
3. ADJUST WATER HEATER THERMOSTAT TO MAINTAIN 120°F

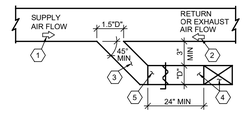
NOTE: FURNISH AND INSTALL GAS TRAIN PRESSURE RELIEF VALVE VENT PIPING TO OUTSIDE AS REQUIRED

CONDENSING GAS WATER HEATER DETAIL
NO SCALE

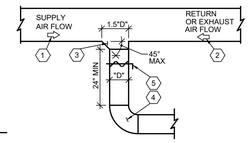
1. BRANCH DUCT
2. TRANSITION
3. DAMPER WITH POSITIVE LOCKING WING NUT
4. FLEXIBLE INSULATED DUCT SIMILAR TO FLEXMASTER TYPE 3 OR APPROVED EQUAL MAXIMUM 5'-0" LENGTH
5. DIFFUSER OR GRILLE W/ ROUND NECK OR SQUARE TO ROUND NECK ADAPTER
6. LAY-IN CEILING
7. TAKE-OFF FITTING SIMILAR TO FLEXMASTER MODEL #CB-D CONICAL BELL MOUTH FITTING WITH DAMPER AND POSITIVE LOCKING WING NUT



BRANCH DUCT CONNECTION TO DIFFUSER OR GRILLE DETAIL
NO SCALE



BOTTOM OF DUCT TAKE-OFF



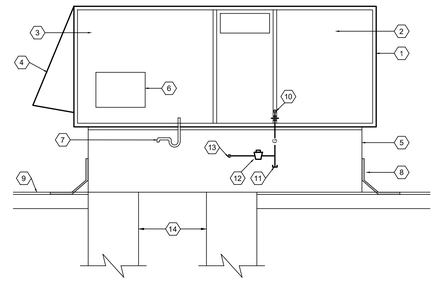
SIDE OF DUCT TAKE-OFF

1. DIRECTION OF AIR FLOW FOR A SUPPLY AIR DUCT.
2. DIRECTION OF AIR FLOW FOR A RETURN AIR OR EXHAUST AIR DUCT.
3. ANGLED SHEET METAL TAP INTO DUCT MAIN.
4. MINIMUM 24" STRAIGHT DUCT BEFORE DUCT ELBOW.
5. MANUAL BALANCED DAMPER INSTALLED IN MINIMUM 24" STRAIGHT DUCT.

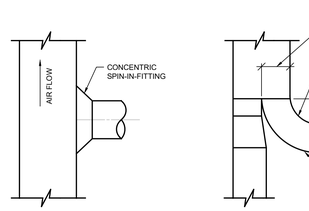
GENERAL NOTE:
ALL DUCT JOINTS, FITTINGS, ETC. SHALL BE EXTERNALLY SEALED. SEE SPECIFICATION FOR SEALANT INFORMATION.

BRANCH DUCT TAKE-OFF DETAIL
NO SCALE

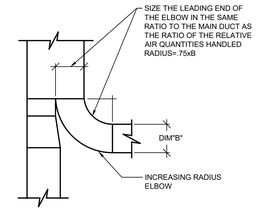
1. ROOF TOP AIR HANDLING UNIT
2. CONTROL AND COMPRESSOR ACCESS PANEL
3. EVAPORATOR SECTION ACCESS PANEL
4. ECONOMIZER HOOD
5. PRE-FAB INSULATED ROOF CURB (BY RTU MANUFACTURER) INSTALLED BY GENERAL TRADE
6. BAROMETRIC OR POWER RELIEF (SEE SCHEDULE OR SPECIFICATIONS FOR OPTIONS)
7. TRAPPED CONDENSATE DRAIN-DRIP TO ROOF
8. FLASHING, ETC BY GENERAL TRADES
9. ROOF CONSTRUCTION
10. GAS PIPE CONNECTION
11. 6" LONG DIRT LEG WITH CAP (LOCATE AT ELEVATION CHANGES)
12. SHUT OFF VALVE
13. GAS PIPING INTO CURB (SEAL AROUND)
14. SUPPLY AND RETURN DUCTS TO CEILING SPACE



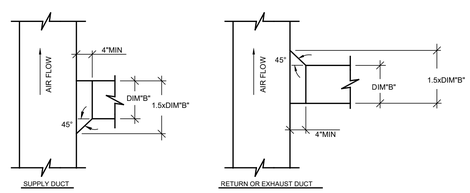
ROOF TOP UNIT DETAIL
NO SCALE



RECTANGULAR TO ROUND DUCT



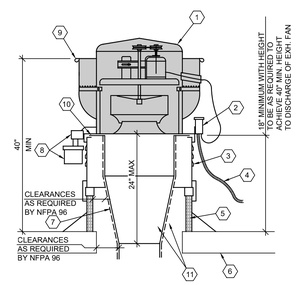
SUPPLY, RETURN OR EXHAUST DUCT
FOR USE WHEN A BRANCH TAKE-OFF IS TO HANDLE MORE THAN 25% OF THE AIR HANDLED BY THE MAIN DUCT



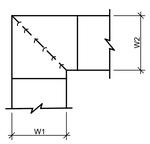
RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS
NO SCALE

1. UPBLAST ROOF EXHAUST FAN UL LISTED FOR GREASE REMOVAL AND TESTED UNDER HIGH TEMPERATURE EXHAUST (300°F) AND ABNORMAL FLARE-UP (600°F) CONDITIONS.
2. NEMA 3R DISCONNECT SWITCH FURNISHED AND FIELD WIRED BY ELECTRICAL TRADES TO MOTOR TO DISCONNECT THROUGH BREATHER TUBE.
3. VENTED CURB EXTENSION.
4. LIQUID TIGHT FLEXIBLE CONDUIT BY ELECTRICAL TRADES.
5. MINIMUM 12" HIGH INSULATED ROOF CURB.
6. ROOF DECK.
7. MIN. 18 GA. WELDED LIQUID-TIGHT S.S. DUCTWORK INSTALLED TO MIN. 18" ABOVE ROOF DECK.
8. REMOVABLE GREASE TRAP TO DRAIN CONNECTION PIPE.
9. MINUMUM 40" HEIGHT ABOVE ROOF DECK TO DISCHARGE OF EXHAUST FAN.
10. HINGED CURB CAP TO ALLOW ENTIRE FAN TO SWING AWAY FOR ACCESS TO DUCT AND FAN WHEEL.
11. DUCT TRANSITION TO EXH. FAN THROAT TO BE MAX 24" FROM FAN OPENING, EXH. DUCTWORK SHALL HAVE A MINIMUM 2 HOUR RATED ENCLOSURE AS NOTED IN SPECIFICATION & TO MEET ALL STATE, LOCAL, & NFPA-96 REQUIREMENTS.

NOTE: FAN INSTALLATION, CONSTRUCTION, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 96 AND ALL LOCAL AND STATE CODES.



KITCHEN HOOD EXHAUST FAN DETAIL
NO SCALE



NOTE

1 ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.

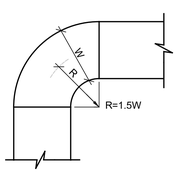
2 WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.

3 ALL SINGLE THICKNESS VANES SHALL HAVE A 2'' RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.

4 WHEN W EQUALS W2 AND W1 IS GREATER THAN 20", VANES SHALL BE DOUBLE VANE TYPE.

5 NO MITERED ELBOW WITHOUT VANES SHALL BE INSTALLED.

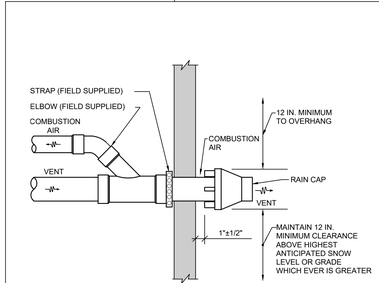
DUCTWORK SQUARE VANE MITERED ELBOWS
NO SCALE



NOTE

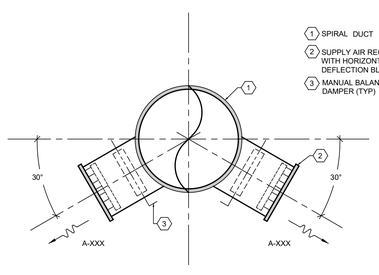
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH A SQUARE VANE MITERED ELBOW.
3. NO MITERED ELBOWS WITHOUT VANES SHALL BE INSTALLED.

DUCTWORK RADIUS ELBOW
NO SCALE



CONCENTRIC VENT THRU SIDE WALL DETAIL
NO SCALE

1. SPIRAL DUCT
2. SUPPLY AIR REGISTER WITH HORIZONTAL & VERTICAL DEFLECTION BLADES
3. MANUAL BALANCING DAMPER (TYP)



DUCT SECTION
NO SCALE

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PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE
SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	ISSUED FOR CONSTRUCTION REVISION
	7/3/25	

DRAWN BY STM
DATE 7/03/25
APPROVED GRS

SHEET NO.
M3.1

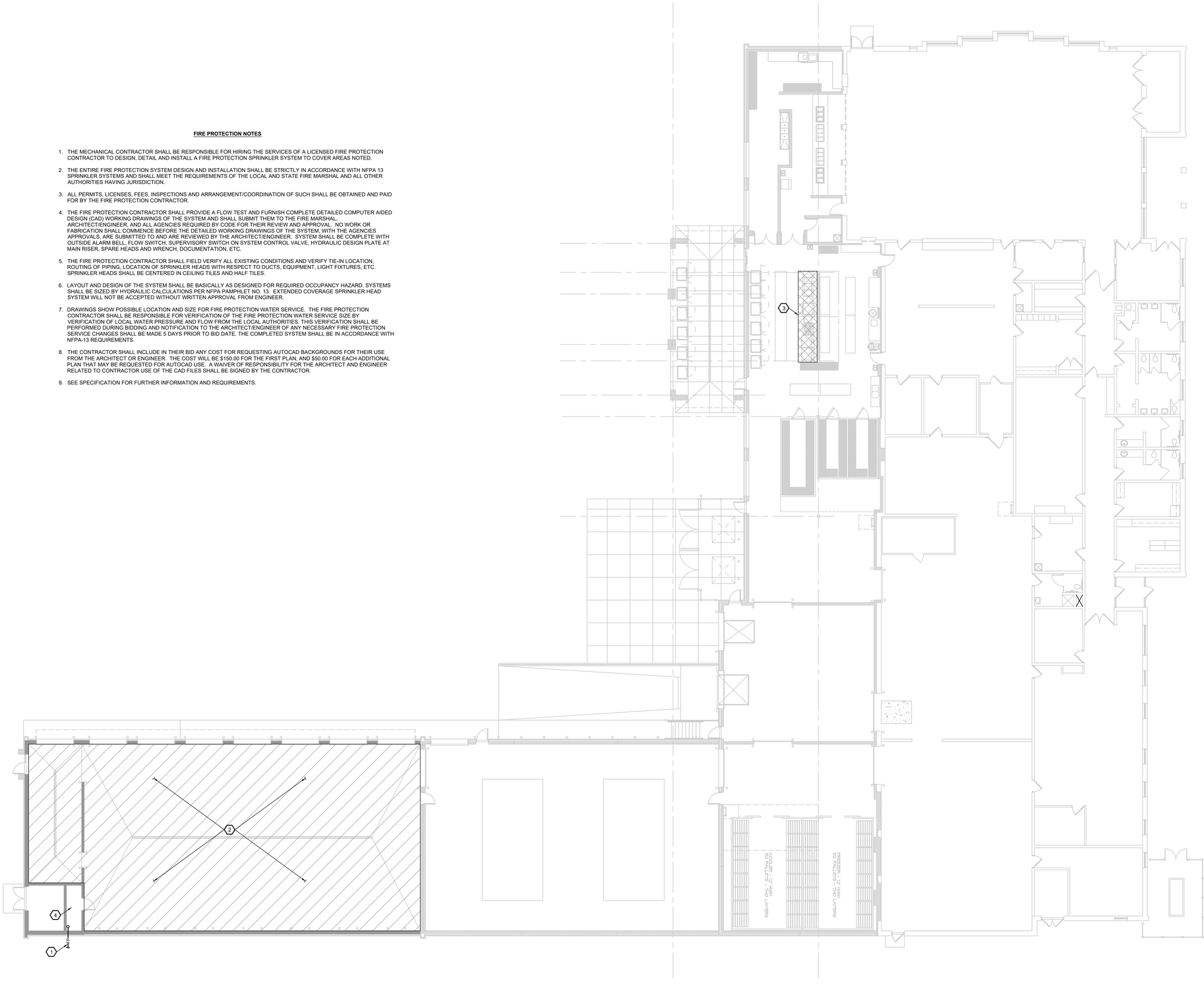
PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

SAWNIE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
F:\21-TSSF\2025\4-270-HUNGER SOLUTIONS CENTER\2025-4-270-1-MAR-1 MECHANICAL SYMBOLS & SCHEDULES.DWG
7/15/2025 3:39 PM

FIRE PROTECTION NOTES

1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING THE SERVICES OF A LICENSED FIRE PROTECTION CONTRACTOR TO DESIGN, DETAIL AND INSTALL A FIRE PROTECTION SPRINKLER SYSTEM TO COVER AREAS NOTED.
2. THE ENTIRE FIRE PROTECTION SYSTEM DESIGN AND INSTALLATION SHALL BE STRICTLY IN ACCORDANCE WITH NFPA 13 SPRINKLER SYSTEMS AND SHALL MEET THE REQUIREMENTS OF THE LOCAL AND STATE FIRE MARSHAL AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
3. ALL PERMITS, LICENSES, FEES, INSPECTIONS AND ARRANGEMENT/COORDINATION OF SUCH SHALL BE OBTAINED AND PAID FOR BY THE FIRE PROTECTION CONTRACTOR.
4. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE A FLOW TEST AND FURNISH COMPLETE DETAILED COMPUTER AIDED DESIGN (CAD) WORKING DRAWINGS OF THE SYSTEM AND SHALL SUBMIT THEM TO THE FIRE MARSHAL, ARCHITECT/ENGINEER, AND ALL AGENCIES REQUIRED BY CODE FOR THEIR REVIEW AND APPROVAL. NO WORK OR FABRICATION SHALL COMMENCE BEFORE THE DETAILED WORKING DRAWINGS OF THE SYSTEM, WITH THE AGENCIES APPROVALS, ARE SUBMITTED TO AND ARE REVIEWED BY THE ARCHITECT/ENGINEER. SYSTEM SHALL BE COMPLETE WITH OUTSIDE ALARM BELL, FLOW SWITCH, SUPERVISORY SWITCH ON SYSTEM CONTROL VALVE, HYDRAULIC DESIGN PLATE AT MAIN RISER, SPARE HEADS AND WRENCH, DOCUMENTATION, ETC.
5. THE FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND VERIFY TIE-IN LOCATION, ROUTING OF PIPING, LOCATION OF SPRINKLER HEADS WITH RESPECT TO DUCTS, EQUIPMENT, LIGHT FIXTURES, ETC. SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILES AND HALF TILES.
6. LAYOUT AND DESIGN OF THE SYSTEM SHALL BE BASICALLY AS DESIGNED FOR REQUIRED OCCUPANCY HAZARD. SYSTEMS SHALL BE SIZED BY HYDRAULIC CALCULATIONS PER NFPA PAMPHLET NO. 13. EXTENDED COVERAGE SPRINKLER HEAD SYSTEM WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL FROM ENGINEER.
7. DRAWINGS SHOW POSSIBLE LOCATION AND SIZE FOR FIRE PROTECTION WATER SERVICE. THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE FIRE PROTECTION WATER SERVICE SIZE BY VERIFICATION OF LOCAL WATER PRESSURE AND FLOW FROM THE LOCAL AUTHORITIES. THIS VERIFICATION SHALL BE PERFORMED DURING BIDDING AND NOTIFICATION TO THE ARCHITECT/ENGINEER OF ANY NECESSARY FIRE PROTECTION SERVICE CHANGES SHALL BE MADE 5 DAYS PRIOR TO BID DATE. THE COMPLETED SYSTEM SHALL BE IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
8. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ANY COST FOR REQUESTING AUTOCAD BACKGROUNDS FOR THEIR USE FROM THE ARCHITECT OR ENGINEER. THE COST WILL BE $150.00 FOR THE FIRST PLAN, AND $50.00 FOR EACH ADDITIONAL PLAN THAT MAY BE REQUESTED FOR AUTOCAD USE. A WAIVER OF RESPONSIBILITY FOR THE ARCHITECT AND ENGINEER RELATED TO CONTRACTOR USE OF THE CAD FILES SHALL BE SIGNED BY THE CONTRACTOR.
9. SEE SPECIFICATION FOR FURTHER INFORMATION AND REQUIREMENTS.



FLOOR PLAN - FIRE PROTECTION
3/32"=1'-0"

KEYED NOTES:

1. NEW FIRE PROTECTION WATER SERVICE TO 5'-0" BEYOND THE BUILDING WALL SHALL BE BY THE FIRE PROTECTION CONTRACTOR. FIRE PROTECTION WATER SERVICE MORE THAN 5'-0" FROM THE BUILDING WALL SHALL BE BY THE SITE CIVIL CONTRACTOR. REFER TO CIVIL DRAWINGS FOR FIRE PROTECTION WATER SERVICE BEYOND 5'-0" FROM OUTSIDE OF BUILDING. THE FIRE PROTECTION CONTRACTOR SHALL VERIFY EXACT LOCATION AND INVERT OF SERVICE WITH THE GENERAL CONTRACTOR.
2. THE SHADED AREA (VEHICLE STORAGE) SHALL BE COVERED BY A WET FIRE PROTECTION SPRINKLER SYSTEM. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING THE SERVICES OF A LICENSED FIRE PROTECTION CONTRACTOR TO DESIGN, DETAIL AND INSTALL A FIRE PROTECTION SPRINKLER SYSTEM TO COVER THIS AREA.
3. THE FIRE PROTECTION CONTRACTOR SHALL INSTALL NEW ANSUL SYSTEM FOR NEW KITCHEN HOOD. ANSUL SYSTEM SHALL BE PROVIDED BY KITCHEN EQUIPMENT SUPPLIER.
4. INSTALL NEW FIRE PROTECTION RISER IN CLOSET PROVIDED.

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ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

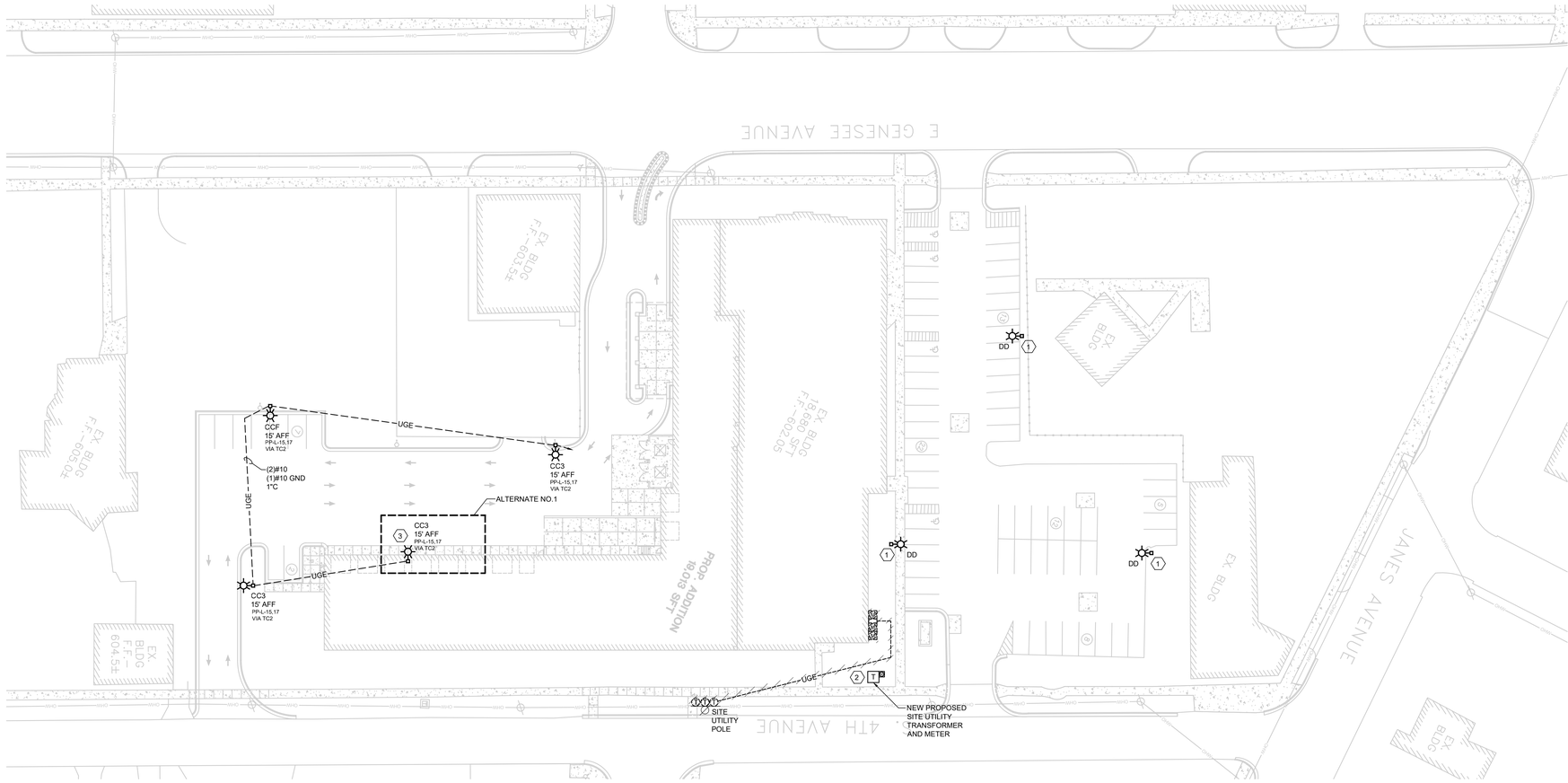
DRAWN BY STM
DATE 7/03/25
APPROVED GRS

SHEET NO.
FP1.0

PROJECT NO.
2154

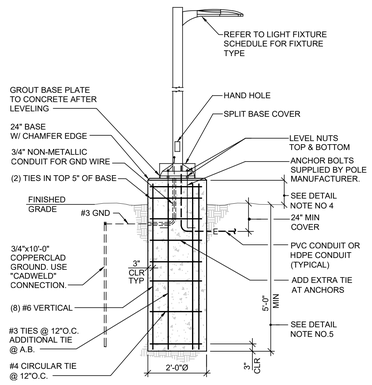
0.0" 0.5" 1.0" 1.5" 2.0"

F:\21-TSSF\2154-7701-HUNGER SOLUTIONS CENTER\2154-7701-M-FP1.0 FIRE PROTECTION
SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
7/3/2025 10:39 PM



ELECTRICAL SITE PLAN

1"=30'-0"



TYPICAL LIGHT POLE BASE DETAIL

NO SCALE

GENERAL POLE BASE NOTES:

1. CONNECT THE GROUND WIRE TO THE POLE'S GROUND LUG. THE POLE'S BASE PLATE AND ANCHOR BOLTS FORM THE GROUND PATH CONTINUITY.
2. PROVIDE WATERTIGHT CONNECTORS FOR ALL POLES. USE "BUCHANAN" 82 SERIES FUSED TAP AND RUN AND "BUCHANAN" 65 SERIES FUSED BREAKAWAY.
3. POLE/LIGHT FIXTURE SHALL BE EPA RATED FOR GEOGRAPHIC AREA. LIGHTING MANUFACTURER SHALL SUPPLY PROPER POLE GAGE SIZES. LIGHT POLE BASE DEPTH AND DIAMETER SHOWN MEETS THE GEOGRAPHIC WIND LOAD. ANY DEVIATION REQUIRES REVIEW BY THE STRUCTURAL ENGINEER.
4. 36" ABOVE GRADE AT CURBS AREAS AND 12" ABOVE GRADE AT SIDEWALKS.
5. BASE DETAIL MIN OF 5'-0" BELOW GRADE FOR 12' POLES. ADJUST THE BASE DEPTH WITH OTHER POLE HEIGHTS. OBTAIN REVIEW BY THE PROJECT STRUCTURAL ENGINEER.
6. USE THE CONCRETE BASE CENTERLINE DIMENSION FOR THE 36" SETBACK DISTANCE FROM THE CURBS EDGE.

GENERAL NOTES

1. ALL POWER WIRING SHALL BE INSTALLED IN CONDUIT.

KEYED NOTES

(1) ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING POLE LIGHT WITH NEW FIXTURE TYPE SHOWN. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING LIGHTING CIRCUIT AND CONTROLS FOR NEW LED SITE LIGHTS.

(2) ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING METER BANK AND UGE BACK TO EXISTING SITE UTILITY POLE. UTILITY COMPANY SHALL REMOVE EXISTING POLE MOUNTED TRANSFORMERS, SITE POLE TO REMAIN. UTILITY SHALL PROVIDE NEW UTILITY TRANSFORMER AND METER IN PROPOSED LOCATION. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY ON SERVICE REMOVAL. SEE SHEET E3.2 FOR SERVICE REMOVAL TIME LINE.

(3) NEW SITE LIGHT SHALL ONLY BE INCLUDED IF ALTERNATE 1 DEDUCT IS TAKEN.

0.0" 0.5" 1.0" 1.5" 2.0"

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DATE 7/03/25
APPROVED JWF

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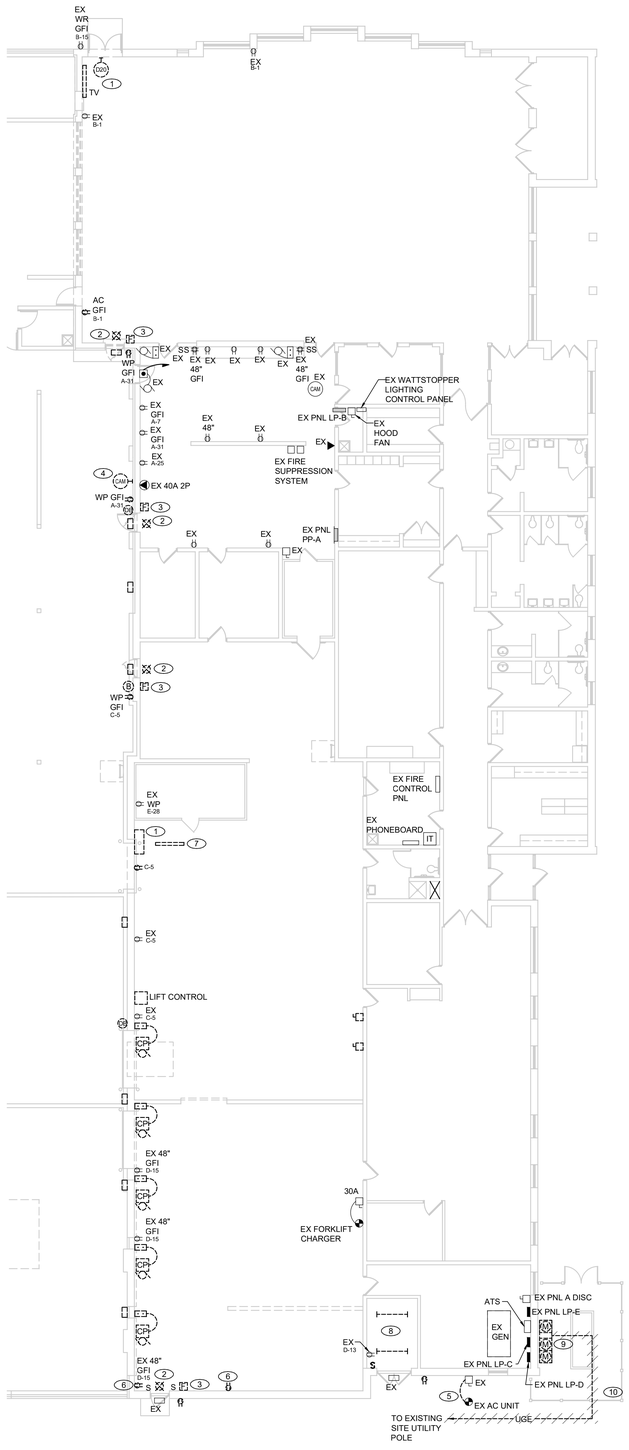
PROJECT NO.
2154

F:\2*TSSF\2024\270 HUNGER SOLUTIONS CENTER\2024-0-SE1.0 ELEC SITE PLAN
7/3/2025 9:41 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)



FLOOR PLAN - ELECTRICAL DEMOLITION
3/32"=1'-0"

GENERAL NOTES - DEMOLITION

1. ELECTRICAL PANELS SHOWN ON THE DEMO PLAN ARE SHOWN FOR REFERENCE. DO NOT REMOVE PANELS UNLESS NOTED OTHERWISE. ALL PANELS AND TRANSFORMERS BEING REMOVED SHALL BE RETAINED BY THE COUNTY FOR REUSE. REFER TO POWER DRAWINGS.
2. ELECTRICAL CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL FIXTURES, LAMPS, BALLASTS AND WIRING SHOWN FOR DEMOLITION.
3. ELECTRICAL CONTRACTOR SHALL REMOVE ALL BLANK COVERS ON BOXES TO CONFIRM THE TYPE OF WIRING, POWER OR LOW VOLTAGE. REMOVE ALL WIRING, BOXES IF EMPTY SHALL BE REMOVED FOR WALL PATCHING.
4. ALL ITEMS SHOWN DASHED SHALL BE REMOVED UNLESS OTHERWISE NOTED.
5. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE FOR ALL DEVICES SHOWN TO BE REMOVED.
6. REMOVE ALL DATA CABLES BACK TO THE IDF RACK FOR ALL DATA OUTLETS. A COMPLETE NEW LOW VOLTAGE SYSTEM SHALL BE INSTALLED.
7. REMOVE ALL FIRE ALARM DEVICES AS NOTED EXISTING MAIN FIRE ALARM CONTROL PANEL AND ASSOCIATED DEVICES IN AREA WITH LIMITED DEMOLITION SHALL REMAIN. IDENTIFY, PROTECT AND MARK EXISTING CABLING.
8. REMOVE ALL HANGERS, SUPPORTS AND STRAPS ASSOCIATED WITH ITEMS BEING REMOVED.
9. ALL CIRCUITS BEING REMOVED AS PART OF THE DEMOLITION SHALL BE TAKEN BACK TO THE SOURCE AND MARK THE EXISTING CIRCUIT BREAKER AS SPARE. ELECTRICAL CONTRACTOR SHALL PROVIDE UPDATED PANEL SCHEDULES UPON COMPLETION OF CONSTRUCTION.

KEYED NOTES - DEMOLITION

(1) ELECTRICAL CONTRACTOR SHALL DISCONNECT REMOVE AND RETURN EQUIPMENT TO OWNER.

(2) ELECTRICAL CONTRACTOR SHALL TEST EXIT SIGN BEFORE REMOVING. IF EXIT SIGN IS FUNCTIONAL, IT SHALL BE REINSTALLED IN NEW ADDITION. IF EXIT SIGN IS NOT FUNCTIONAL IT SHALL BE REMOVED. SEE LIGHTING PLAN FOR EXIT SIGN LOCATIONS.

(3) ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE FIRE PULL STATION. EXISTING PULL STATION DEVICE SHALL BE REINSTALLED IN NEW ADDITION. EXISTING ROUGH-IN SHALL HAVE A NEW COVER PLATE INSTALLED.

(4) ELECTRICAL CONTRACTOR SHALL DISCONNECT REMOVE AND RETURN EXISTING CAMERA BACK TO OWNER.

(5) ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRE TO CONDENSING UNIT. REPLACE WITH NEW CONDUIT AND WIRE 1 FOR 1.

(6) ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING DEVICE LOCATION SHOWN 1 FOR 1.

(7) ELECTRICAL CONTRACTOR SHALL REPLACE DAMAGED FIXTURE 1 FOR 1.

(8) ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING LIGHT FIXTURE AND SWITCH DEVICE IN LOCATION SHOWN. LIGHTING CIRCUIT SHALL REMAIN TO BE REUSED.

(9) EXISTING ELECTRICAL SERVICE SHALL REMAIN IN SERVICE DURING CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE CHANGE WITH UTILITY COMPANY PRIOR TO DEMOLITION. SEE SHEET E3.2 GENERAL NOTE 2 FOR DESIGN INTENT FOR SERVICE CHANGE.

(10) ELECTRICAL CONTRACTOR SHALL REMOVE METER BANK AND UGE BACK TO EXISTING UTILITY POLE. COORDINATE REMOVAL WITH UTILITY COMPANY PRIOR TO DEMOLITION. SEE SHEET E3.2 GENERAL NOTE 2 FOR DESIGN INTENT FOR SERVICE CHANGE.

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SHEET NO.
E1.0

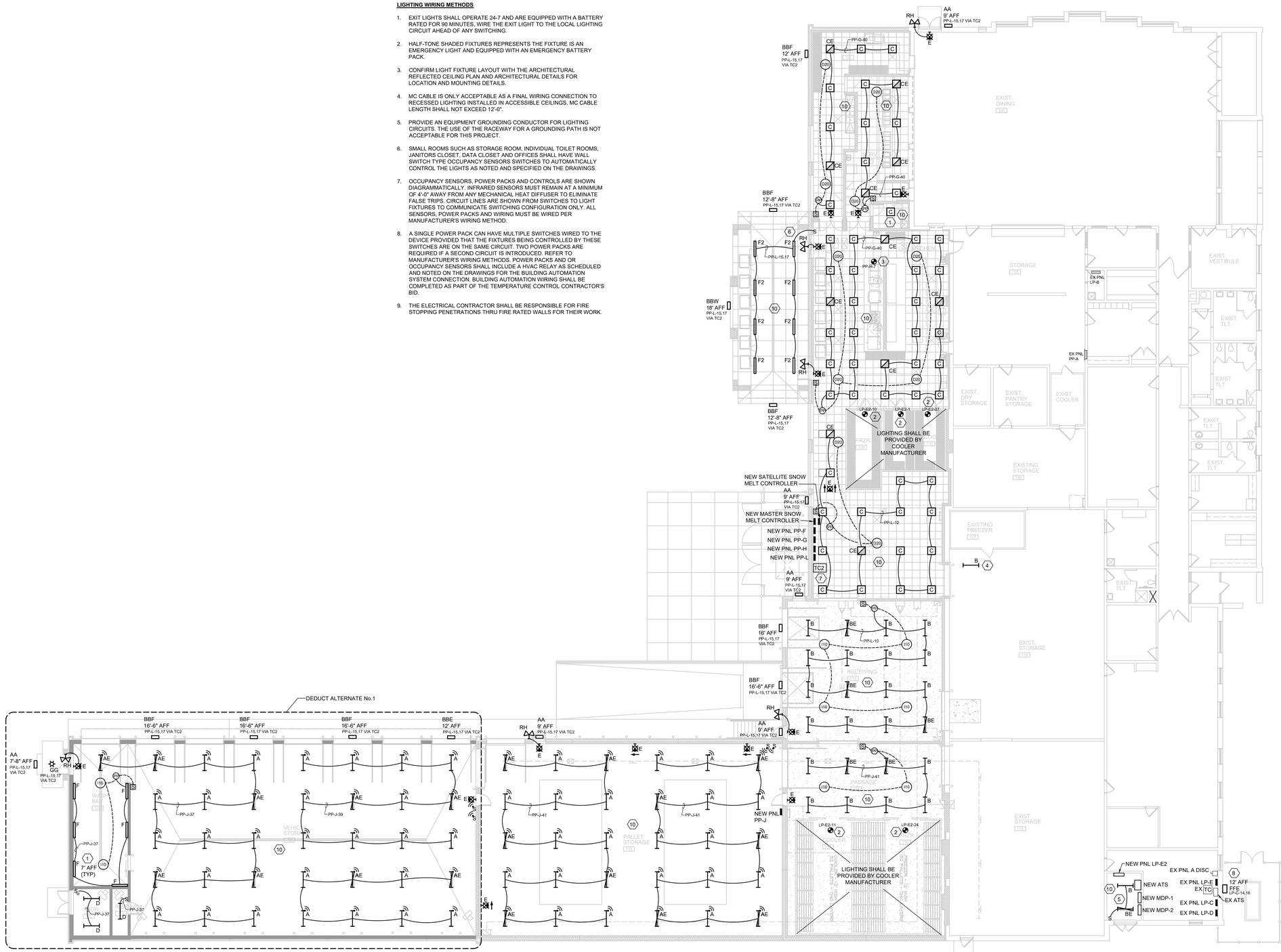
PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

E:\2-TSSF\2024-2151 HUNGER SOLUTIONS CENTER\DGN\2151-E1.0 ELECTRICAL DEMOLITION PLAN
7/3/2025 9:36 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)

LIGHTING WIRING METHODS

1. EXIT LIGHTS SHALL OPERATE 24-7 AND ARE EQUIPPED WITH A BATTERY RATED FOR 90 MINUTES, WIRE THE EXIT LIGHT TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING.
2. HALF-TONE SHADED FIXTURES REPRESENTS THE FIXTURE IS AN EMERGENCY LIGHT AND EQUIPPED WITH AN EMERGENCY BATTERY PACK.
3. CONFIRM LIGHT FIXTURE LAYOUT WITH THE ARCHITECTURAL REFLECTED CEILING PLAN AND ARCHITECTURAL DETAILS FOR LOCATION AND MOUNTING DETAILS.
4. MC CABLE IS ONLY ACCEPTABLE AS A FINAL WIRING CONNECTION TO RECESSED LIGHTING INSTALLED IN ACCESSIBLE CEILINGS. MC CABLE LENGTH SHALL NOT EXCEED 12'-0".
5. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR FOR LIGHTING CIRCUITS. THE USE OF THE RACEWAY FOR A GROUNDING PATH IS NOT ACCEPTABLE FOR THIS PROJECT.
6. SMALL ROOMS SUCH AS STORAGE ROOM, INDIVIDUAL TOILET ROOMS, JANITORS CLOSET, DATA CLOSET AND OFFICES SHALL HAVE WALL SWITCH TYPE OCCUPANCY SENSORS SWITCHES TO AUTOMATICALLY CONTROL THE LIGHTS AS NOTED AND SPECIFIED ON THE DRAWINGS.
7. OCCUPANCY SENSORS, POWER PACKS AND CONTROLS ARE SHOWN DIAGRAMMATICALLY. INFRARED SENSORS MUST REMAIN AT A MINIMUM OF 4'-0" AWAY FROM ANY MECHANICAL HEAT DIFFUSER TO ELIMINATE FALSE TRIPS. CIRCUIT LINES ARE SHOWN FROM SWITCHES TO LIGHT FIXTURES TO COMMUNICATE SWITCHING CONFIGURATION ONLY. ALL SENSORS, POWER PACKS AND WIRING MUST BE WIRED PER MANUFACTURER'S WIRING METHOD.
8. A SINGLE POWER PACK CAN HAVE MULTIPLE SWITCHES WIRED TO THE DEVICE PROVIDED THAT THE FIXTURES BEING CONTROLLED BY THESE SWITCHES ARE ON THE SAME CIRCUIT. TWO POWER PACKS ARE REQUIRED IF A SECOND CIRCUIT IS INTRODUCED. REFER TO MANUFACTURER'S WIRING METHODS. POWER PACKS AND OR OCCUPANCY SENSORS SHALL INCLUDE A HVAC RELAY AS SCHEDULED AND NOTED ON THE DRAWINGS FOR THE BUILDING AUTOMATION SYSTEM CONNECTION. BUILDING AUTOMATION WIRING SHALL BE COMPLETED AS PART OF THE TEMPERATURE CONTROL CONTRACTOR'S BID.
9. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE STOPPING PENETRATIONS THRU FIRE RATED WALLS FOR THEIR WORK.



KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL MODIFY AND EXTEND EXISTING LIGHTING CIRCUIT IN DINING HALL TO LIGHT FIXTURE SHOWN. LIGHT FIXTURE SHALL BE CONTROLLED WITH DINING HALL LIGHTS.
2. ELECTRICAL CONTRACTOR SHALL MOUNT AND PROVIDE POWER TO 48" LED LIGHT FIXTURES IN COOLER/FREEZER. LIGHT FIXTURES SHALL BE PROVIDED BY FOOD SERVICE CONTRACTOR. SEE FOOD SERVICE DRAWINGS FOR MORE DETAILS.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO EXHAUST HOOD LIGHTS. SEE FOOD SERVICE DRAWINGS FOR MORE DETAILS.
4. ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING LINEAR WITH FIXTURE TYPE INDICATED. TIE INTO EXISTING CIRCUIT AND LOCAL LIGHTING CONTROLS.
5. ELECTRICAL CONTRACTOR SHALL TIE NEW LED LIGHT FIXTURES INTO EXISTING LOCAL LIGHTING CIRCUIT. MODIFY AND EXTEND CIRCUIT AS NEEDED.
6. DRIVE THRU LIGHTS SHALL BE CONTROLLED DUSK TO DAWN VIA TIME CLOCK IN ELECTRICAL ROOM TO MATCH EXTERIOR LIGHTING CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE MANUAL OVERRIDE SWITCH AT KITCHEN DOOR AS SHOWN.
7. ELECTRICAL CONTRACTOR SHALL INSTALL NEW 208V TIME CLOCK IN LOCATION SHOWN. TIME CLOCK SHALL CONTROL NEW EXTERIOR SITE LIGHTING. TIME CLOCK SETTINGS SHALL MATCH EXISTING TIME CLOCK CONTROLS IN ELECTRICAL ROOM.
8. ELECTRICAL CONTRACTOR SHALL TIE NEW LED WALLPACK INTO EXISTING SITE LIGHTING CIRCUIT, LP-C-14,16. MODIFY AND EXTEND CIRCUIT AS NEEDED.
9. ELECTRICAL CONTRACTOR SHALL WALL MOUNT LIGHT FIXTURE F IN THE NEW WASHBAY. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
10. LIGHT FIXTURES IN LOCATION SHOWN SHALL BE SURFACE MOUNTED TO NEW CEILING.

FLOOR PLAN - LIGHTING
3/32"=1'-0"

0.0" 0.5" 1.0" 1.5" 2.0"

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ADDITION AND RENOVATION TO
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

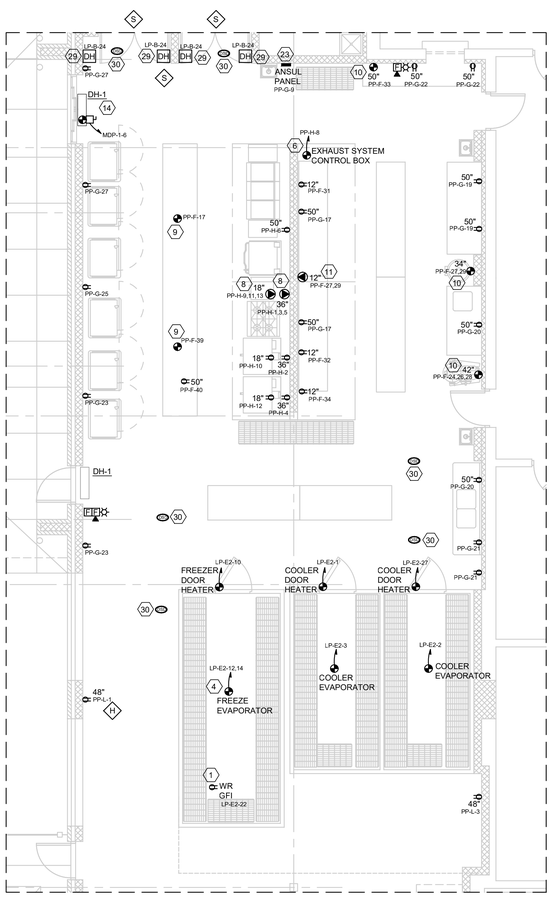
NO.	REVISION	DATE
	ISSUED FOR CONSTRUCTION	7/03/25

DRAWN BY RLM
DATE 7/03/25
APPROVED JWF

SHEET NO.
E2.0

PROJECT NO.
2154

F:\21TSSF\2024-2151 HUNGER SOLUTIONS CENTER\DGN\2151-E-E2.0 LIGHTING PLAN.DWG
7/7/2025 7:40 AM SHAUNE MAGUIRE (SMAGUIRE@MACMILLAN-ASSOCIATES.COM)

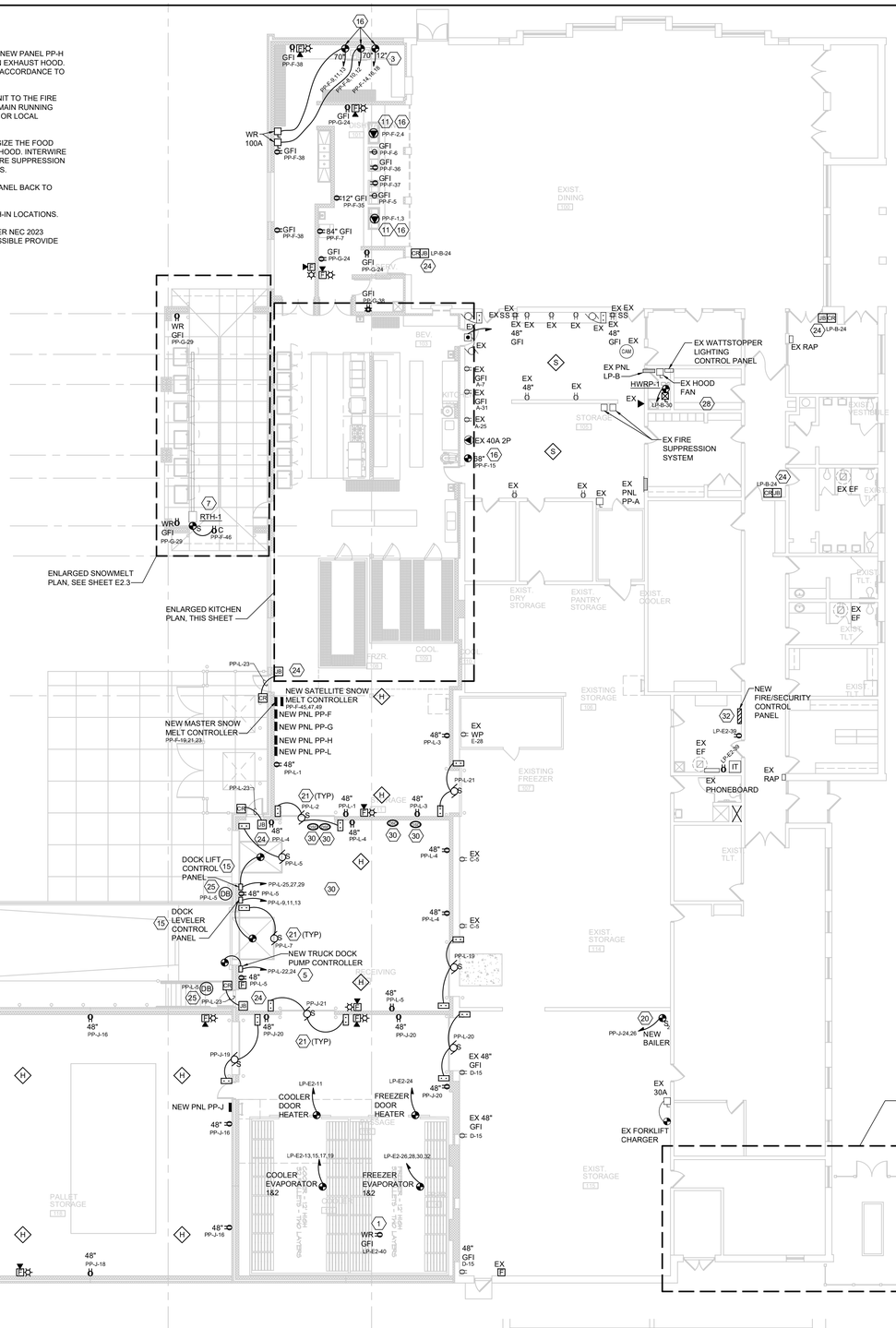


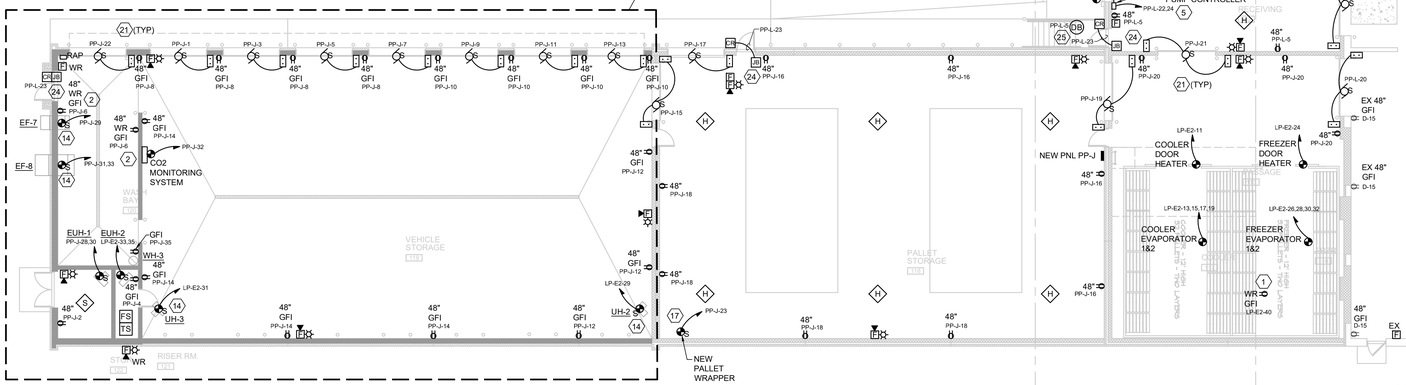
ENLARGED KITCHEN FLOOR PLAN - POWER AND SYSTEMS

3/16"=1'-0"

GENERAL KITCHEN NOTES

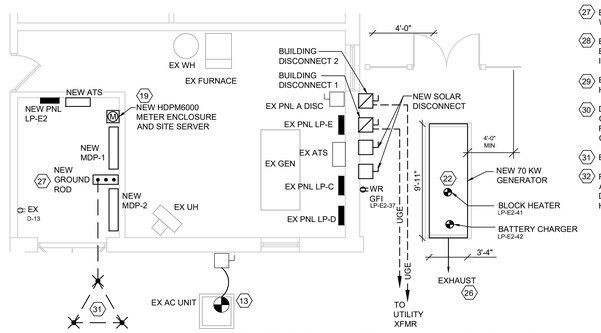
1. FURNISH AND INSTALL MAIN SHUNT TRIP BREAKER IN NEW PANEL PP-H FOR THE EQUIPMENT INSTALLED UNDER THE KITCHEN EXHAUST HOOD. ELECTRICAL SHUTDOWN OF EQUIPMENT SHALL BE IN ACCORDANCE TO MEET NFPA REQUIREMENTS.
2. CONTRACTOR SHALL INTERWIRE THE MAKE-UP AIR UNIT TO THE FIRE SUPPRESSION SYSTEM. THE EXHAUST FAN SHALL REMAIN RUNNING UNLESS THE OFFICE OF FIRE SAFETY FIELD REP. AND OR LOCAL AUTHORITIES GOVERNS OTHERWISE.
3. THE DESIGN INTENT IS TO AUTOMATICALLY DE-ENERGIZE THE FOOD SERVICE EQUIPMENT LOCATED UNDER THE KITCHEN HOOD. INTERWIRE MAIN SHUNT TRIP BREAKER IN NEW PANEL PP-H TO FIRE SUPPRESSION SYSTEM FOR COMPLIANCE WITH NFPA REQUIREMENTS.
4. ELECTRICAL CONTRACTOR SHALL WIRE THE ANSUL PANEL BACK TO THE FIRE ALARM SYSTEM.
5. REFER TO FOOD SERVICE DRAWINGS FOR ALL ROUGH-IN LOCATIONS.
6. ALL KITCHEN RECEPTACLES SHALL BE GFCI RATED PER NEC 2023 SECTION 210.8(B)(2). IF RECEPTACLE WILL BE INACCESSIBLE PROVIDE GFCI PROTECTION AT THE CIRCUIT BREAKER.





FLOOR PLAN - POWER AND SYSTEMS

3/32"=1'-0"



ENLARGED FLOOR PLAN - POWER AND SYSTEMS

3/16"=1'-0"

POWER & SYSTEMS WIRING METHODS

1. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH RECEPTACLE CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
2. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR EACH RECEPTACLE. PROVIDE A #12 MINIMUM GROUNDING CONDUCTOR IN EACH RACEWAY. THE USE OF METAL CONDUIT OR RACEWAY FOR A BOND PATH IS NOT ACCEPTABLE FOR THIS PROJECT. PROVIDE ISOLATED GROUND CONDUCTOR FOR THE A/V CIRCUITS AS NOTED AND SPECIFIED.
3. ALL POWER WIRING SHALL BE INSTALLED IN CONDUIT.
4. ALL NEW RECEPTACLES AND VOICE/DATA OUTLETS SHALL BE MOUNTED AT A MINIMUM OF 16" TO THE BOTTOM OF BOX ABOVE THE FINISHED FLOOR, UNLESS NOTED OTHERWISE. 18" IS ONLY AN ACCEPTABLE MOUNTING HEIGHT PENDING FOR MASONRY COARSE LINE INSTALLATION. COORDINATE ALL DEVICE HEIGHTS WITH ARCHITECT.
5. ELECTRICAL TRADES SHALL CONFIRM VOICE/DATA AND RECEPTACLE LOCATION WITH THE OWNER'S FURNITURE LAYOUTS AND INSTALLATION.
6. GENERAL PURPOSE DUPLEX RECEPTACLES SHALL BE WHITE, GRAY OR IVORY AS ADVISED BY THE ARCHITECT.
7. FIRE ALARM WIRING INSTALLED ABOVE THE FINISHED CEILING IS ACCEPTABLE TO USE THE FREE-AIR METHOD. USE "J" HOOKS OR "D" RINGS FOR SUPPORT METHODS. PROVIDE PLENUM RATED CABLE FOR THE ENTIRE PROJECT.
8. FIRE ALARM DEVICE MOUNTING HEIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 NATIONAL FIRE ALARM CODE, BUREAU OF FIRE SERVICES, 2003 MICHIGAN BARRIER FREE DESIGN MANUAL AND OTHER APPLICABLE CODES. MOUNTING HEIGHT REQUIREMENTS:
   - WALL MOUNTED AUDIO/VISUAL UNITS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FINISHED FLOOR. CEILING MOUNTED DEVICES ARE ACCEPTABLE AND ARE NOTED ON THE DRAWINGS.
   - MANUAL PULL STATIONS SHALL BE MOUNTED 48" MAXIMUM TO THE TOP OF BOX FROM THE FINISHED FLOOR.
9. ALL BRANCH DEVICES SHALL USE A 4" SQUARE STEEL BOX WITH A SINGLE GANG TRIM RING FOR INTERIOR GYPSUM BOARD WALLS. MASONRY BOXES ARE ACCEPTABLE FOR MASONRY WALL INSTALLATION. NON-METALLIC BOXES ARE NOT ACCEPTABLE FOR THIS PROJECT.
10. J-HOOKS AND D-RINGS SHALL BE USED FOR THE LOW-VOLTAGE SYSTEM WIRING INCLUDING BUT NOT LIMITED TO: FIRE ALARM, VOICE, LIGHTING CONTROL, ETC.
11. USE MINIMUM 1" CONDUIT SIZE FOR VOICE/DATA OUTLET DROPS. EXTEND THE CONDUIT TO THE ADJACENT CORRIDOR ACCESSIBLE CEILING SPACE.
12. MC CABLE IS ONLY ACCEPTABLE FOR FINAL LIGHT FIXTURE CONNECTIONS ABOVE THE LAY-IN CEILING ON THIS PROJECT, UNLESS SPECIFICALLY NOTED.

KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL SURFACE MOUNT ALL WEATHER RECEPTACLE FOR DRAIN LINE HEAT TAPE. FIELD COORDINATE LOCATION WITH FOOD SERVICE CONTRACTOR PRIOR TO INSTALLATION.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE RECEPTACLES COVERS WITH MINIMUM IP RATING OF IP66.
3. ELECTRICAL CONTRACTOR SHALL INTERWIRE DISPOSER, CONTROL PANEL, AND SOLENOID VALVE. FIELD COORDINATE LOCATION WITH FOOD SERVICE CONTRACTOR PRIOR TO INSTALLATION.
4. ELECTRICAL CONTRACTOR RUN (6) #12 CONDUCTORS FROM EVAPORATOR COIL TO CONDENSER LOCATION.
5. CIVIL CONTRACTOR SHALL FURNISH NEW TRUCK WELL PUMP AND CONTROL BOX. ELECTRICAL CONTRACTOR SHALL MOUNT AND WIRE CONTROL BOX AND PUMP. COORDINATE PUMP LOCATION WITH CIVIL DRAWINGS PRIOR TO INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONNECTIONS BETWEEN THE EXHAUST CONTROL BOX, EXHAUST FANS, MAKE-UP AIR UNIT, EXHAUST HOOD, DUCT SENSORS, AND FIRE SUPPRESSION SYSTEM. SEE FOODSERVICE DRAWINGS FOR MORE DETAILS.
7. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY LOCATION OF MECHANICAL EQUIPMENT PRIOR TO INSTALLATION. ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA 3R DISCONNECT SWITCH.
8. ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA RATED RECEPTACLE #L15-30R.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE STUB UP INTO WORK TABLE. CONNECT TO CONVENIENCE OUTLET ON WORK TABLE.
10. ELECTRICAL CONTRACTOR SHALL VERIFY REQUIRED ELECTRICAL CONNECTION PRIOR TO INSTALLATION OF KITCHEN EQUIPMENT.
11. ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA RATED RECEPTACLE #6-30R.
12. ELECTRICAL CONTRACTOR SHALL PROVIDE UGE FROM UTILITY TRANSFORMER TO BUILDING DISCONNECT 1 AND BUILDING DISCONNECT 2. COORDINATE FINAL TRANSFORMER LOCATION WITH UTILITY COMPANY PRIOR TO INSTALLATION.
13. ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING FEED FROM ELECTRICAL DISCONNECT TO MECHANICAL EQUIPMENT 1 FOR 1.
14. NON-FUSED DISCONNECT SWITCH SHALL COME FACTORY FURNISHED WITH MECHANICAL EQUIPMENT. PROVIDE SINGLE POINT POWER CONNECTION.
15. PRIOR TO ROUGH-IN, ELECTRICAL CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENTS WITH SHOP DRAWINGS AND SUPPLIER.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE GFI CIRCUIT BREAKER FOR CIRCUIT SHOWN.
17. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO OWNER PROVIDED EQUIPMENT. COORDINATE FINAL POWER LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
18. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO OWNER PROVIDED EQUIPMENT. FURNISH AND INSTALL NON-FUSED DISCONNECT SWITCH. COORDINATE FINAL POWER LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
19. STARTUP/COMMISSIONING FOR NEW TENANT METERING PACKAGE SHALL INCLUDE MOUNTING, WIRING OF NEW METER, SITE SERVER, AND ETHERNET TO EXISTING IT DATA RACK. NEW METER PACKAGE SHALL INCLUDE CLOUD BASED PACKAGE FOR TENANT BILLING.
20. ELECTRICAL CONTRACTOR SHALL SUPPLY 2 POLE TOGGLE SWITCH FOR NEW OWNER EQUIPMENT.
21. ELECTRICAL CONTRACTOR SHALL PROVIDE 1/2" CONDUIT FOR DOOR SENSORS AT EACH OVERHEAD DOOR. COORDINATE FINAL LOCATION WITH DOOR CONTRACTOR.
22. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V CIRCUITS FROM LP-E2 FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER. PROVIDE 1" CONDUIT FROM GENERATOR TO ATS FOR CONTROLS.
23. PROVIDE CONTROL WIRING FROM ANSUL PANEL TO PP-H FOR SHUNT TRIP SHUTOFF.
24. ELECTRICAL CONTRACTOR SHALL PROVIDE (1) 1/2" CONDUIT FROM POWER SUPPLY TO CARD READER AND (1) 1/2" CONDUIT FROM CARD READER TO DOOR LOCK SET. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR 120V POWER FEED TO POWER SUPPLY. SEE INFORMATION SHEET FOR CARD READER DETAIL.
25. ELECTRICAL CONTRACTOR SHALL PROVIDE DOORBELL KIT WITH LOW VOLTAGE TRANSFORMER AND CHIME. COORDINATE MOUNTING LOCATION WITH OWNER PRIOR TO INSTALLATION.
26. ELECTRICAL CONTRACTOR SHALL ORIENTATE THE NEW GENERATOR WITH THE EXHAUST DIRECTED AWAY FROM THE NEARBY WALL MOUNTED INTAKE.
27. ELECTRICAL CONTRACTOR SHALL PROVIDE (1)GROUND BAR MOUNTED VERTICALLY ON THE WALL ABOVE MDP-1/MDP-2.
28. ELECTRICAL CONTRACTOR SHALL PROVIDE TOGGLE SWITCH DISCONNECT FOR MECHANICAL EQUIPMENT. COORDINATE MOUNTING LOCATION WITH MECHANICAL DRAWINGS PRIOR TO INSTALLATION.
29. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO ELECTRIC DOOR HOLDER. DOOR HOLDER SHALL BE TIED INTO FIRE ALARM SYSTEM.
30. DUCT SMOKE DETECTOR SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL INSTALL DEVICE IN DUCT. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRING AND LOW VOLTAGE TO DEVICE, MECHANICAL UNIT, AND CONNECTING INTO THE NEW FACP.
31. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW 10' COPPER GROUND RODS, 20' APART.
32. FIRE ALARM VENDOR SHALL REPLACE EXISTING BOSCH FIRE ALARM PANEL WITH NEW FIRE ALARM/SECURITY CONTROL PANEL. FIRE ALARM VENDOR SHALL TIE EXISTING FIRE ALARM DEVICES INTO NEW FIRE ALARM/SECURITY CONTROL PANEL. HONEYWELL #VISTA128FBPT OR EQUAL.

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SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

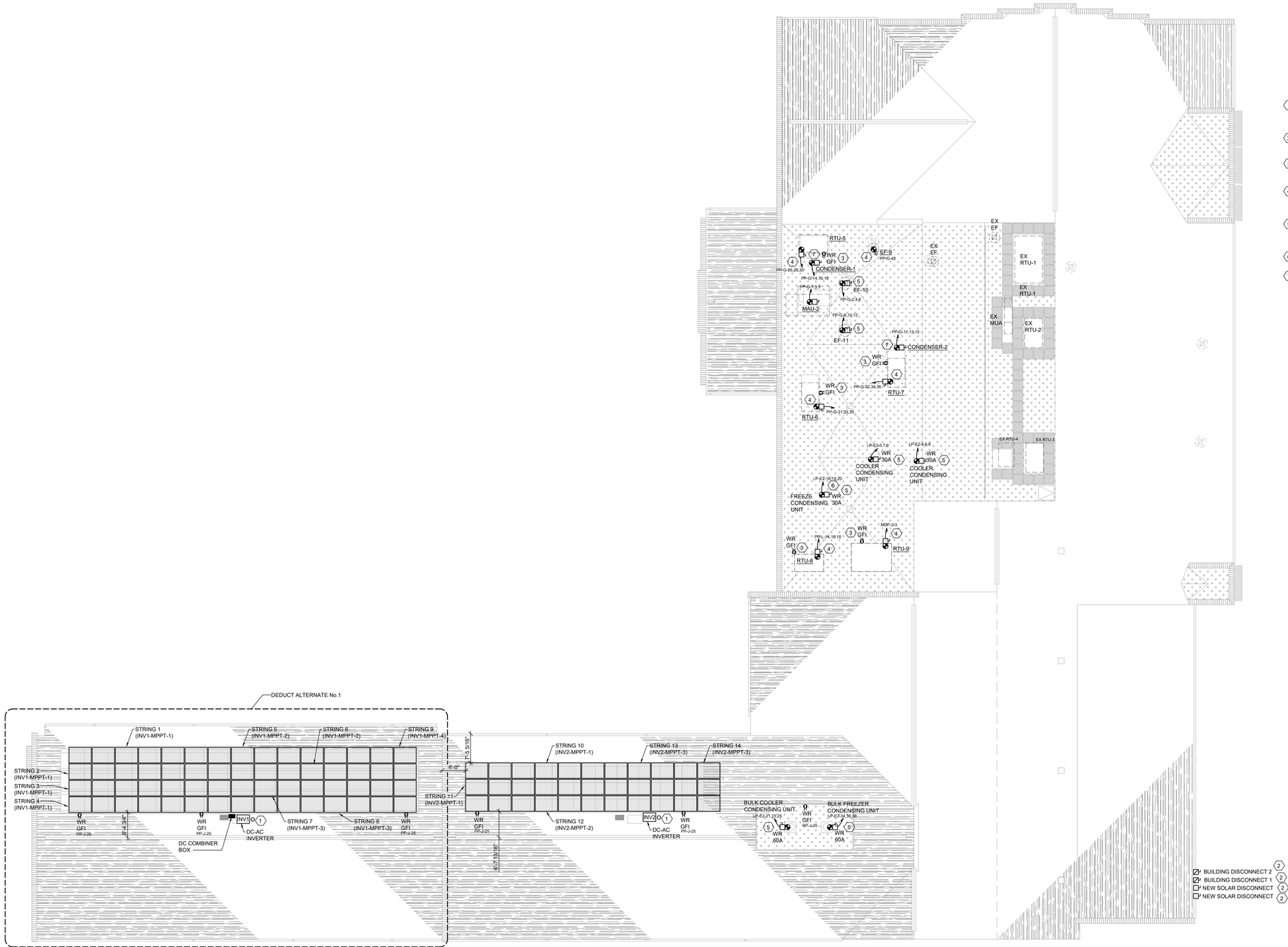
DRAWN BY RLM
DATE 7/03/25
APPROVED JWF

SHEET NO.
E2.1

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

E:\21-TSSF\2154-2701 HUNGER SOLUTIONS CENTER\2154-270 V-E2.1 POWER AND SYSTEMS PLAN
7/3/2025 10:38 AM SAWYNE.MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)



ROOF PLAN - POWER
3/32"=1'-0"

SOLAR GENERAL NOTES

1. PV CABLES BETWEEN SOLAR PANELS ARE PERMITTED TO BE INSTALLED IN FREE AIR. THE FINAL RUN TO BOTH THE DC COMBINER BOX AND INVERTER SHALL BE INSTALLED IN RIGID GALVANIZED STEEL.
2. ELECTRICAL CONTRACTOR SHALL BOND EACH PV MODULE. SEE 2023 NEC SECTION 690 FOR ALL REQUIREMENTS.
3. ELECTRICAL CONTRACTOR SHALL INSTALL ELECTRICAL PANELS A MINIMUM DISTANCE OF 6' FROM ROOF EDGE.

KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL RUN CONDUIT THROUGH ATTIC SPACE TO ROOF BOOT FOR INVERTER CIRCUIT. ELECTRICAL CONTRACTOR SHALL SEAL ROOF PENETRATION.
2. SOLAR DISCONNECTS SHALL BE WALL MOUNTED NEAR EXISTING ELECTRICAL METER TO ALLOW FOR DISCONNECT BY FIRE DEPARTMENT.
3. WEATHER RESISTANT GFI RECEPTACLE SHALL COME FACTORY FURNISHED AND WIRED WITH MECHANICAL EQUIPMENT.
4. NON-FUSED DISCONNECT SWITCH SHALL COME FACTORY FURNISHED WITH MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE POINT POWER CONNECTION.
5. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NON-FUSED DISCONNECT FOR MECHANICAL EQUIPMENT. COORDINATE EQUIPMENT LOCATION WITH MECHANICAL DRAWINGS PRIOR TO INSTALLATION.
6. ELECTRICAL CONTRACTOR SHALL RUN (6) #12 CONDUCTORS TO TIME CLOCK AND EVAPORATOR COIL.
7. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY LOCATION OF MECHANICAL EQUIPMENT PRIOR TO INSTALLATION. ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA 3R DISCONNECT SWITCH.

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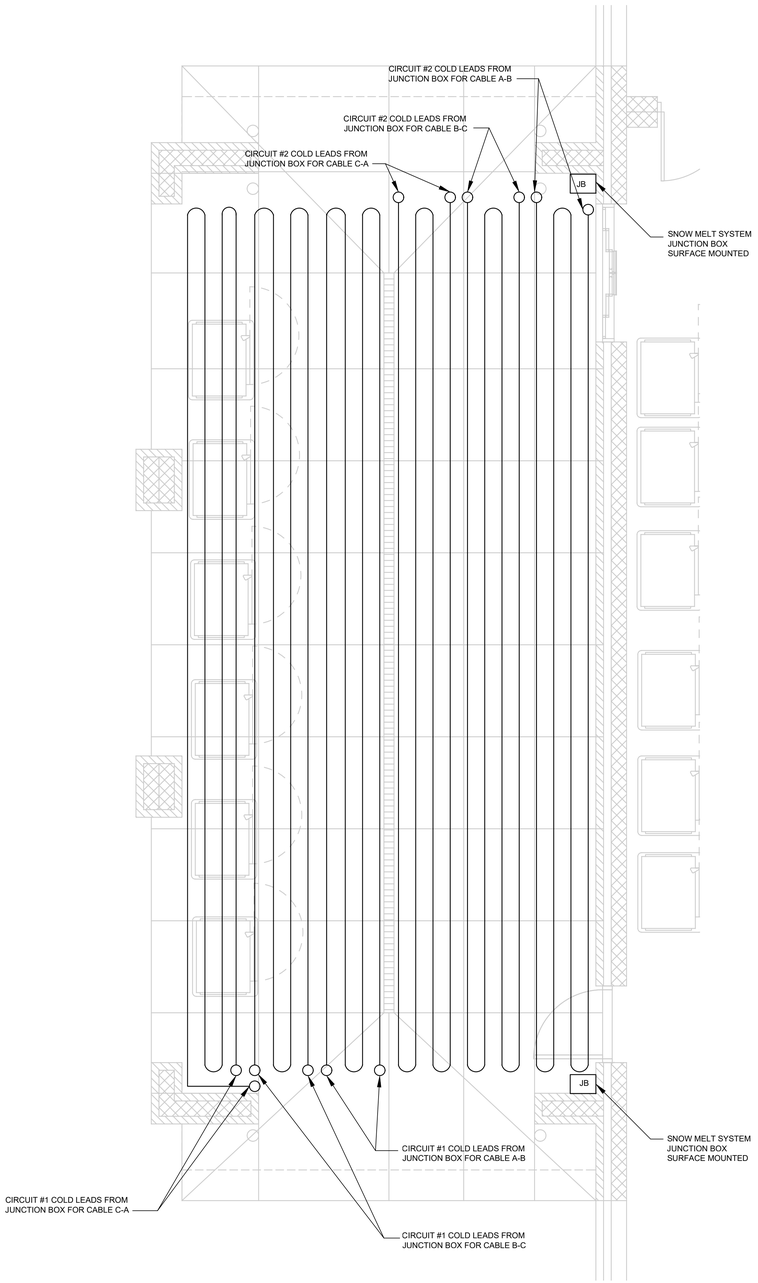
APPROVED JWF
SHEET NO.
E2.2
PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

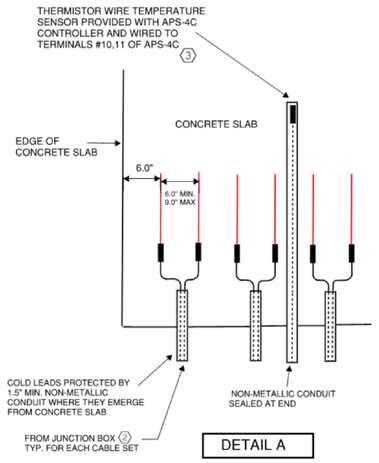
F:\2-TSSF\2024-270 HUNGER SOLUTIONS CENTER\2024-270-E-E2-2 SOLAR PLAN
SHAWNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
7/2/2025 10:26 AM



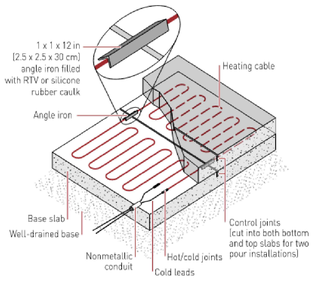
ENLARGED PLAN - SNOWMELT
3/16"=1'-0"

SNOW MELT SYSTEM INSTALLATION NOTES:

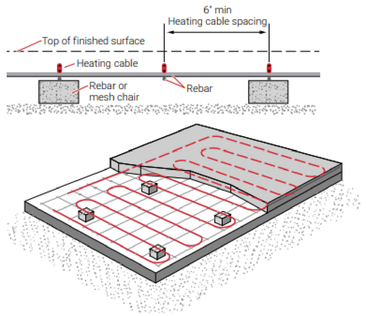
1. CABLE SPACING MIN 6" - MAX 9".
2. LOCATE CABLE 6" MIN - 9" MAX FROM EDGE OF CONCRETE PAD AND FROM BUILDING EXTERIOR.
3. THIS INSTALLATION DOES NOT ASSUME ANY CONTROL JOINTS POURED IN THE CONCRETE. IF CONTROL JOINTS ARE PRESENT REFER TO DETAIL SHOWN THIS PAGE.
4. SLAB TEMPERATURE SENSOR MUST BE INSTALLED IN CONCRETE TO PREVENT OVERHEATING OF SLAB. REFER TO DETAIL A.
5. CONTRACTOR TO PROVIDE STANDOFFS FOR 2"MIN-3"MAX IN CONCRETE .



HEATING CABLE ENTRY DETAIL
NO SCALE



CONTROL JOINT DETAIL
NO SCALE



HEATING CABLE TYPICAL LAYOUT DETAIL
NO SCALE

BILL OF MATERIAL

QTY	CATALOG NUMBER	DESCRIPTION
6	CHEMELEX SUB4502	HDPE JACKETED COPPER SHEATHED MI CABLE
2	CHEMELEX MIUB1086A	MI JUNCTION BOX
1	CHEMELEX APS-4C	AUTOMATIC SNOW MELTING CONTROLLER - 208V
1	CHEMELEX SC-40C	SATELLITE CONTACTOR CONTROLLER-208V
1	CHEMELEX SNOW OWL	AERIAL MOISTURE SENSOR
1	CHEMELEX SMCS	SNOW MELT CAUTION SIGN
3 Rolls	CHEMELEX SPACERGALV	GALVANIZED PRE-PUNCHED STRAPPING

HEAT TRACE DATA

HEATER CABLE NO.	CABLE LENGTH	WATTS/FT REQUIRED	WATTS/FT SUPPLIED	SAFETY FACTOR	NO. OF PHASES	CABLE VOLTS	S/S AMPS	S/U AMPS	TOTAL WATTS	SYSTEM VOLTS	CABLE PART NUMER	CONTROLLER NO.	BREAKER PANEL NO.	CIRCUIT BKR. SIZE	CIRCUIT PHASE WIRING
ESM-001-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	1	PP-F	50A	A-B
ESM-002-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	1	PP-F		B-C
ESM-003-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	1	PP-F		C-A
ESM-004-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	2	PP-F	50A	A-B
ESM-005-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	2	PP-F		B-C
ESM-006-HT	160'-0"	35W/FT2	38W/FT2	1.08	1	208	21.6	21.6	4.5KW	208V/3PH	SUB4502	2	PP-F		C-A

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SHEET NO. E2.3
PROJECT NO. 2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\2-TSSF\2025\2504-2701-HUNGER SOLUTIONS CENTER\2504-2701-E-E2.3 SNOW MELT PLAN
7/3/2025 10:10 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)

EXISTING
PP-A
SQ-D NQ PANEL

MAIN: SIZE & TYPE: **400** A **MLO**
BUS RATING: **400** A
VOLTAGE: **120 / 208** V **3** Ø, **4** WIRE
MOUNTING: **FLUSH**

PANEL LOCATION: **KITCHEN**
FEEDER SIZE: **400A**
FED FROM: **PP-A DISC, SERVICE**
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	LOAD (KVA) A	B	C	AMPS / POLES	CKT #	LOAD TYPE	CKT #	AMPS / POLES	LOAD (KVA) A	B	C	CIRCUIT DESCRIPTION	CKT #
1	RTU-1				125A	1		2	20/1				KITCHEN LIGHTS	2
3	RTU-1				/	3		4	20/1				KITCHEN LIGHTS	4
5	RTU-1				/	5		6	50A				RTU-2	6
7	RTU-1				/	7		8	/				RTU-2	8
9	RTU-1				/	9		10	3P				RTU-2	10
11	RTU-1				3P	11		12	15A				EF-1	12
13	DISPOSER				20A	13		14	/				EF-1	14
15	DISPOSER				/	15		16	3P				EF-1	16
17	DISPOSER				3P	17		18	15A				MAV-1	18
19	DISHWASHER				20/1	19		20	/				MAV-1	20
21	COFFEE SERVER				30A/	21		22	3P				MAV-1	22
23	COFFEE SERVER				2P	23		24	50A				OUTDOOR RECP	24
25	SPARE				20/1	25		26	2P				OUTDOOR RECP	26
27	MIXER				20/1	27		28	50A				OUTDOOR RECP	28
29	SLICER				20/1	29		30	2P				OUTDOOR RECP	30
31	KITCHEN RECP				20/1	31		32	100A				PANEL B	32
33	SPARE				20/1	33		34	/				PANEL B	34
35	WORK TABLE				20/1	35		36	3P				PANEL B	36
37	WORK TABLE				20/1	37		38	40A/				COFFEE BREWER	38
39	WORK TABLE				20/1	39		40	2P				COFFEE BREWER	40
41	KITCHEN RECP				20/1	41		42	40A				AVANTCO MIXER	42
43	SPARE				20/1	43		44	/				AVANTCO MIXER	44
45	SPARE				20/1	45		46	3P				AVANTCO MIXER	46
47						47		48						48
49						49		50						50
51						51		52						52
53						53		54						54

NOTES:

EXISTING
LP-B
SQ-D NQ PANEL

MAIN: SIZE & TYPE: **100** A **MLO**
BUS RATING: **100** A
VOLTAGE: **120 / 208** V **3** Ø, **4** WIRE
MOUNTING: **SURFACE**

PANEL LOCATION: **KITCHEN CLOSET**
FEEDER SIZE: **100A**
FED FROM: **PP-A**
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	LOAD (KVA) A	B	C	AMPS / POLES	CKT #	LOAD TYPE	CKT #	AMPS / POLES	LOAD (KVA) A	B	C	CIRCUIT DESCRIPTION	CKT #
1	RECPS DINING ROOM				20/1	1		2	20/1				SOFFIT LIGHTS	2
3	RECPS LOBBY/RESTROOMS				20/1	3		4	20/1				SOFFIT LIGHTS	4
5	RECPS MANAGERS				20/1	5		6	20/1				SOFFIT LIGHTS	6
7	RECPS MANAGERS				20/1	7		8	20/1				SOFFIT LIGHTS	8
9	COPIER				20/1	9		10	20/1				DINING LIGHTS	10
11	RECPS STAFF/DOCUMENTS				20/1	11		12	20/1				DINING LIGHTS	12
13	DEDICATED RECP				20/1	13		14	20/1				LOBBY LIGHTS	14
15	OUTDOOR RECP				20/1	15		16	20/1				LIGHTS OFFICE	16
17	EF-3				20/1	17		18	20/1				SPACE	18
19	WH-1				20/1	19		20	20/1				EWH-1	20
21	COILING DOOR				20/1	21		22	20/1				SPACE WARMER	22
23	COUNTER RECPS				20/1	23		24	20/1				SPACE	24
25	COUNTER RECPS				20/1	25		26	30A/				STEAMER	26
27	HAND DRYER				30/1	27		28	2P				STEAMER	28
29	HAND DRYER				30/1	29		30					SPACE	30

NOTES:

EXISTING
LP-C
SQ-D NQ PANEL

MAIN: SIZE & TYPE: **400** A **MCB**
BUS RATING: **400** A
VOLTAGE: **120 / 208** V **3** Ø, **4** WIRE
MOUNTING: **SURFACE**

PANEL LOCATION: **MECHANICAL ROOM**
FEEDER SIZE: **400A**
FED FROM: **SERVICE**
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	LOAD (KVA) A	B	C	AMPS / POLES	CKT #	LOAD TYPE	CKT #	AMPS / POLES	LOAD (KVA) A	B	C	CIRCUIT DESCRIPTION	CKT #
1	TRANS SWITCH				125A	1		2	20/1				RESTROOM LIGHTS	2
3	TRANS SWITCH				/	3		4	20/1				CONF. LIGHTS	4
5	TRANS SWITCH				/	5		6	20/1				CONF. LIGHTS	6
7	TRANS SWITCH				/	7		8	20/1				CONF. LIGHTS	8
9	TRANS SWITCH				/	9		10	20/1				COFFEE MAKER	10
11	TRANS SWITCH				3P	11		12	20/1				MICROWAVE	12
13	REFRIGERATOR				20/1	13		14	20A/				LIGHT POLES	14
15	OUTDOOR LIGHTS				20/1	15		16	2P				LIGHT POLES	16
17	OUTDOOR LIGHTS				20A/	17		18	20/1				WORK ROOM RECPS	18
19	OUTDOOR LIGHTS				2P	19		20	20/1				WORK ROOM RECPS	20
21	EWH-1				20/1	21		22	20/1				WORK ROOM RECPS	22
23	ICE MAKER				20/1	23		24	40A				RTU-3	24
25	WASHER				20/1	25		26	/				RTU-3	26
27	DRYER				30A/	27		28	3P				RTU-3	28
29	DRYER				2P	29		30	35A				RTU-4	30
31	SECURITY BACK BOARD				20/1	31		32	/				RTU-4	32
33	TELE. BACK BOARD				20/1	33		34	3P				RTU-4	34
35	DOCK LIFT				30A	35		36	20/1				EF-4	36
37	DOCK LIFT				/	37		38	20/1				RESTROOM RECPS	38
39	DOCK LIFT				3P	39		40	20/1				RECPS	40
41	EF-5				20/1	41		42	20/1				RECPS	42
43	EXISTING LOAD				20/1	43		44	20/1				RECPS WAREHOUSE	44
45	EXISTING LOAD				20/1	45		46						46
47						47		48						48
49						49		50						50
51						51		52						52
53						53		54						54

NOTES:

EXISTING
LP-D
SQ-D NQ PANEL

MAIN: SIZE & TYPE: **200** A **MCB**
BUS RATING: **225** A
VOLTAGE: **120 / 208** V **3** Ø, **4** WIRE
MOUNTING: **SURFACE**

PANEL LOCATION: **MECHANICAL ROOM**
FEEDER SIZE: **200A**
FED FROM: **SERVICE**
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	LOAD (KVA) A	B	C	AMPS / POLES	CKT #	LOAD TYPE	CKT #	AMPS / POLES	LOAD (KVA) A	B	C	CIRCUIT DESCRIPTION	CKT #
1	RECPS WAITING				20/1	1		2	20/1				LIGHTS COPY ROOM	2
3	RECPS WORKSTATION				20/1	3		4	20/1				LIGHTS OFFICE	4
5	RECPS WORKSTATION				20/1	5		6	20/1				LIGHTS OFFICE	6
7	RECPS SMALL CONF.				20/1	7		8	30/1				REFRIG TRUCK PLUG	8
9	RECPS WORKSTATION				20/1	9		10	20/1				LIGHTS W. GARAGE	10
11	RECPS MECH ROOM				20/1	11		12	20/1				LIGHTS E. GARAGE	12
13	RECPS GARAGE				20/1	13		14	20A				GARBAGE	14
15	RECPS GARAGE				20/1	15		16	/				DISPOSER	16
17	GARAGE DOOR OPENER #2				20/1	17		18	3P				DISPOSER	18
19	GARAGE DOOR OPENER				20/1	19		20	20/1				RH-1	20
21	GARAGE DOOR OPENER				20/1	21		22	30A				ACCU-1	22
23	GARAGE DOOR OPENER				20/1	23		24	/				ACCU-1	24
25	DEDICATED RECP				20/1	25		26	3P				ACCU-1	26
27	DEDICATED RECP				20/1	27		28	20/1				F-1	28
29	ECH-1				20A/	29		30	20/1				VH-1	30
31	ECH-1				2P	31		32	20/1				WH-2	32
33	EF-7				20/1	33		34	30A/				REFRIG 220V TRUCK PLUG	34
35	SPARE					35		36	2P				REFRIG 220V TRUCK PLUG	36
37	WAREHOUSE LIGHTS				20/1	37		38	20/1				FLAGPOLE	38
39	WAREHOUSE LIGHTS				20/1	39		40	20/1				SIGN	40
41	WAREHOUSE LIGHTS				20/1	41		42	20/1				SIGN RECP	42

NOTES:

EXISTING
LP-E
SQ-D NQ PANEL

MAIN: SIZE & TYPE: **225** A **MLO**
BUS RATING: **225** A
VOLTAGE: **120 / 208** V **3** Ø, **4** WIRE
MOUNTING: **SURFACE**

PANEL LOCATION: **MECHANICAL ROOM**
FEEDER SIZE: **125A**
FED FROM: **ATS, LP-C**
MIN RMS AMPS:

CKT #	CIRCUIT DESCRIPTION	LOAD (KVA) A	B	C	AMPS / POLES	CKT #	LOAD TYPE	CKT #	AMPS / POLES	LOAD (KVA) A	B	C	CIRCUIT DESCRIPTION	CKT #
1	GEN. WATER PUMP				20/1	1		2	20/1				TRUCK COOLING UNIT	2
3	GEN. BATT. CHARGER				20/1	3		4	20/1				TRUCK COOLING UNIT	4
5	GEN. LOUVER				20/1	5		6	20/1				TRUCK COOLING UNIT	6
7	WALK-IN COOLER				20A	7		8	20/1				WALK-IN COOLER	8
9	WALK-IN COOLER				/	9		10	20/1				WALK-IN COOLER FANS & LITES	10
11	WALK-IN COOLER				3P	11		12	20A				WALK-IN COOLER	12
13	WALK-IN COOLER				20A/	13		14	/				WALK-IN COOLER	14
15	WALK-IN COOLER				2P	15		16	3P				WALK-IN COOLER	16
17	REACH-IN FREEZER				20/1	17		18	20/1				REACH-IN FREEZER	18
19	CHEST FREEZER				20/1	19		20	20/1				WALK-IN FREEZER	20
21	SPARE				20A/	21		22	20/1				ENGINE BLOCK HEATER	22
23	SPARE				2P	23		24	20/1				EMERG. LIGHTING	24
25	UPRIGHT FREEZER				20/1	25		26	20/1				EMERG. LIGHTING	26
27	UPRIGHT FREEZER				20/1	27		28	20/1				FREEZER HEAT TAPE	28
29	TIME CLOCK				20/1	29		30	20/1				WALK-IN COOLER FANS & LITES	30
31	GARAGE DOOR OPENER				20/1	31		32	20A				WALK-IN FREEZER	32
33	RECHARGE STATION				20/1	33		34	/				WALK-IN FREEZER	34
35	GARAGE DOOR OPENER				20/1	35		36	3P				WALK-IN FREEZER	36
37	MASTER BUILT FREEZER				20A/	37		38	30A				FORK TRK CHARGER	38
39	MASTER BUILT FREEZER				2P	39		40	/				FORK TRK CHARGER	40
41						41		42	3P				FORK TRK CHARGER	42

NOTES:

GENERAL NOTE

1. ELECTRICAL CONTRACTOR SHALL PROVIDE UPDATED EXISTING PANEL SCHEDULES UPON THE COMPLETION OF THE PROJECT. ALL EXISTING CIRCUITS THAT ARE BEING REMOVED AS PART OF THE DEMOLITION SHALL BE TAKEN BACK TO THE SOURCE AND LABELED AS A SPARE, UNLESS NOTED OTHERWISE.

MACMILLAN ASSOCIATES CONSULTING ENGINEERS
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TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	REVISION	DATE
	ISSUED FOR CONSTRUCTION	7/3/25

DRAWN BY RLM
DATE 7/03/25
APPROVED JWF

SHEET NO.
E3.0

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\2-TSSF\2024-270 HUNGER SOLUTIONS CENTER\2024-270-E-E3 ELECTRICAL PANEL SCHEDULES
7/3/2025 8:42 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)

NEW MDP-1

SQ-D I-LINE PANEL

MAIN: SIZE & TYPE:	1200 A	PANEL LOCATION:	ELECTRICAL RM
BUS RATING:	1200 A	FEEDER SIZE:	1200A
VOLTAGE:	120 / 208 V 3 PH 4 W	FED FROM:	BUILDING DISC 1
MOUNTING:	SURFACE	MIN RMS AMPS:	65 KAIC

CKT #	CIRCUIT DESCRIPTION	AMPS / POLES	LOAD (KVA) A	LOAD (KVA) B	LOAD (KVA) C
1	PANEL PP-A	400A/3P	21.590	21.590	21.590
2	PANEL PP-H	225A/3P	6.095	6.095	6.095
3	PANEL PP-F	400A/3P	36.024	36.024	36.024
4	PANEL PP-G	400A/3P	26.161	26.161	26.161
5	SOLAR DISCONNECT 2	60A/3P			
6	DH-1	60A/3P	5.200	5.200	5.200
7	SPARE	45A/3P			
8	SPARE	30A/3P			
9	SPARE	60A/3P			
10	PREPARED SPACE				
11	PREPARED SPACE				
12	PREPARED SPACE				

LOAD SUMMARY	KVA CONNECTED A	B	C	KVA SUMMARY TOTAL	
TOTAL KVA	95.070	95.070	95.070	285.211	kVA
VOLTS / PHASE	120	120	120	208	VOLTS
AMPS / PHASE	792.252	792.252	792.252	791.7	AMPS

NOTES: 1. ELECTRICAL CONTRACTOR SHALL PROVIDE SURGE SUPPRESSION DEVICE.

NEW MDP-2

SQ-D I-LINE PANEL

MAIN: SIZE & TYPE:	800 A	PANEL LOCATION:	ELECTRICAL RM
BUS RATING:	800 A	FEEDER SIZE:	800A
VOLTAGE:	120 / 208 V 3 PH 4 W	FED FROM:	BUILDING DISC 2
MOUNTING:	SURFACE	MIN RMS AMPS:	65 KAIC

CKT #	CIRCUIT DESCRIPTION	AMPS / POLES	LOAD (KVA) A	LOAD (KVA) B	LOAD (KVA) C
1	PANEL LP-C (EXISTING LOAD)	400A/3P	13.194	13.194	13.194
2	PANEL LP-D (EXISTING LOAD)	200A/3P	6.597	6.597	6.597
3	PANEL PP-L	225A/3P	10.668	10.668	10.668
4	PANEL PP-J	225A/3P	10.084	10.084	10.084
5	SOLAR DISCONNECT 1	100A/3P			
6	RTU-9	175A/3P	12.297	12.297	12.297
7	PANEL LP-E2	200A/3P	16.341	16.341	16.341
8	SPARE	30A/3P			
9	SPARE	60A/3P			
10	PREPARED SPACE				
11	PREPARED SPACE				
12	PREPARED SPACE				

LOAD SUMMARY	KVA CONNECTED A	B	C	KVA SUMMARY TOTAL	
TOTAL KVA	69.181	69.181	69.181	207.544	kVA
VOLTS / PHASE	120	120	120	208	VOLTS
AMPS / PHASE	576.511	576.511	576.511	576.1	AMPS

NOTES: 1. ELECTRICAL CONTRACTOR SHALL PROVIDE SURGE SUPPRESSION DEVICE.

NEW PP-F

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	400 A MCB	PANEL LOCATION:	STORAGE 111
BUS RATING:	400 A	FEEDER SIZE:	400A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-1
MOUNTING:	SURFACE	MIN RMS AMPS:	22 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	#1-SERVING COUNTER-HOT (GFI)	2.000			30A/	1	R	R	2	30A/	2.000			#1-SERVING COUNTER-HOT (GFI)	2
3	#1-SERVING COUNTER-HOT (GFI)		2.000		2P	3	R	R	4	2P		2.000		#1-SERVING COUNTER-HOT (GFI)	4
5	#1-SERVING COUNTER-COLD			1.872	20/1	5	R	R	6	20/1			1.872	#1-SERVING COUNTER-COLD	6
7	#3-REFRIGERATOR (GFI)	0.960			20/1	7	R	O	8	100A	9.355			#7-WAREWASHER-LARGE (GFI)	8
9	#7-WAREWASHER-SMALL (GFI)		6.956		80A	9	O	O	10	/		9.355		#7-WAREWASHER-LARGE (GFI)	10
11	#7-WAREWASHER-SMALL (GFI)			6.956	/	11	O	O	12	3P			9.355	#7-WAREWASHER-LARGE (GFI)	12
13	#7-WAREWASHER-SMALL (GFI)	6.956			3P	13	O	O	14	15A	0.935			#9-DISPOSER,GARBAGE (GFI)	14
15	#11-ICE MAKER (GFI)		2.136		25/1	15	O	O	16	/		0.935		#9-DISPOSER,GARBAGE (GFI)	16
17	#20 - WORK TABLE STUB UP			0.180	20/1	17	R	O	18	3P			0.935	#9-DISPOSER,GARBAGE (GFI)	18
19	MASTER SNOW MELT	4.500			50A	19	O		20	20/1				SPARE	20
21	MASTER SNOW MELT		4.500		/	21	O	O	22	20/1		0.240		#18-TILT SKILLET	22
23	MASTER SNOW MELT			4.500	3P	23	O	R	24	20A			0.815	#24-MIXER, FLOOR	24
25	SPARE				20/1	25		R	26	/	0.815			#24-MIXER, FLOOR	26
27	#27-POTATO PEELER		0.832		15A/	27	R	R	28	3P		0.815		#24-MIXER, FLOOR	28
29	#27-POTATO PEELER			0.832	2P	29	R	R	30	20/1				SPARE	30
31	#34-REFRIGERATOR, UNDER	0.696			20/1	31	R	R	32	20/1	0.696			#34-REFRIGERATOR,UNDER	32
33	SPARE					33		R	34	20/1		1.752		#37-CABINET,MOBILE,HOT	34
35	#37-CABINET, MOBILE, HOT			1.752	20/1	35	R	R	36	20/1			0.180	#1-SERVING OUTLET	36
37	#1-SERVING OUTLET	0.180			20/1	37	R	R	38	20/1	0.540			GEN DISHWASHING RECEPTS	38
39	#20A - WORK TABLE STUB UP		0.180		20/1	39	R	R	40	20/1		1.700		#20A - TABLE HOT CABINET	40
41	#32 HOT FOOD COUNTER			1.737	25A/	41	O	O	42	40A/			2.985	#36 - COFFEE MAKER (GFI)	42
43	#32 HOT FOOD COUNTER	1.737			2P	43	O	O	44	2P	2.985			#36 - COFFEE MAKER (GFI)	44
45	SATELLITE SNOW MELT		4.500		50A	45	O	O	46	20/1		0.180		RTH-1	46
47	SATELLITE SNOW MELT			4.500	/	47	O		48	20/1				SPARE	48
49	SATELLITE SNOW MELT	4.500			3P	49	O		50	20/1				SPARE	50
51	SPARE				20/1	51			52	20/1				SPARE	52
53	SPARE				20/1	53			54	20/1				SPARE	54

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	7.887	9.279	7.503	24.669		17.335	
LIGHTING	L	0.000	0.000	0.000	0.000	1.000	0.000	
HVAC	H	0.000	0.000	0.000	0.000	0.950	0.000	
OTHER	O	30.968	28.802	30.968	90.738	1.000	90.738	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		38.855	38.081	38.471	115.407		108.073	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		323.792	317.342	320.592	320.347		299.988	AMPS

NOTES: 1. CIRCUIT DESCRIPTIONS LABELED "(GFI)" SHALL HAVE GFI CIRCUIT BREAKER.

NEW PP-G

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	400 A MCB	PANEL LOCATION:	STORAGE 111
BUS RATING:	400 A	FEEDER SIZE:	400A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-1
MOUNTING:	SURFACE	MIN RMS AMPS:	22 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	KITCHEN MAU-2	6.506			80A	1	H	H	2	15A	0.792			KITCHEN EF-10	2
3	KITCHEN MAU-2		6.506		/	3	H	H	4	/		0.792		KITCHEN EF-10	4
5	KITCHEN MAU-2			6.506	3P	5	H	H	6	3P			0.792	KITCHEN EF-10	6
7	SHUNT TRIP CONTROL PWR	0.100			20/1	7	O	H	8	15A	0.792			KITCHEN EF-11	8
9	ANSEL PANEL		0.100		20/1	9	O	H	10	/		0.792		KITCHEN EF-11	10
11	KITCHEN CONDENSER-2			2.053	35A	11	H	H	12	3P			0.792	KITCHEN EF-11	12
13	KITCHEN CONDENSER-2	2.053			/	13	H	H	14	35A	2.053			KITCHEN CONDENSER-1	14
15	KITCHEN CONDENSER-2		2.053		3P	15	H	H	16	/		2.053		KITCHEN CONDENSER-1	16
17	CONV. OUTLET KITCHEN			0.360	20/1	17	R	H	18	3P			2.053	KITCHEN CONDENSER-1	18
19	CONV. OUTLET KITCHEN	0.360			20/1	19	R	R	20	20/1	0.360			CONV. OUTLET KITCHEN	20
21	CONV. OUTLET KITCHEN		0.360		20/1	21	R	R	22	20/1		0.360		CONV. OUTLET KITCHEN	22
23	KITCHEN FOOD WARMER (GFI)			0.360	20/1	23	R	R	24	20/1			0.540	SERVICE AREA RECEPTS	24
25	KITCHEN FOOD WARMER (GFI)	0.180			20/1	25	R	H	26	50A	3.838			RTU-5	26
27	KITCHEN FOOD WARMER (GFI)		0.360		20/1	27	R	H	28	/		3.838		RTU-5	28
29	CANOPY RECEPTS			0.360	20/1	29	R	H	30	3P			3.838	RTU-5	30
31	RTU-6	5.757			80A	31	H	H	32	50A	3.838			RTU-7	32
33	RTU-6		5.757		/	33	H	H	34	/		3.838		RTU-7	34
35	RTU-6			5.757	3P	35	H	H	36	3P			3.838	RTU-7	36
37	SPARE				20/1	37		R	38	20/1	0.360			JANITOR CLOSET QUAD	38
39	SPARE				20/1	39		L	40	20/1		1.134		KITCHEN,DISHS, SERVING LTS	40
41	SPARE				20/1	41		H	42	20/1			0.156	EF-9	42
43	SPARE				20/1	43			44	20/1				SPARE	44
45	SPARE				20/1	45			46	20/1				SPARE	46
47	SPARE				20/1	47			48	20/1				SPARE	48
49	SPARE				20/1	49			50	20/1				SPARE	50
51	SPARE				20/1	51			52	20/1				SPARE	52
53	SPARE				20/1	53			54	20/1				SPARE	54
55	SPARE				20/1	55			56	20/1				SPARE	56
57	SPARE				20/1	57			58	20/1				SPARE	58
59	SPARE				20/1	59			60	20/1				SPARE	60
61	SPARE				20/1	61			62	20/1				SPARE	62
63	SPARE				20/1	63			64	20/1				SPARE	64
65	SPARE				20/1	65			66	20/1				SPARE	66
67	SPARE				20/1	67			68	20/1				SPARE	68
69						69			70						70
71						71			72						72

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	1.260	1.080	1.620	3.960		3.960	
LIGHTING	L	0.000	1.134	0.000	1.134	1.000	1.134	
HVAC	H	25.629	25.629	25.785	77.042	0.950	73.190	
OTHER	O	0.100	0.100	0.000	0.200	1.000	0.200	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		26.989	27.943	27.405	82.336		78.484	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		224.905	232.858	228.373	228.550		217.857	AMPS

NOTES: 1. CIRCUIT DESCRIPTIONS LABELED "(GFI)" SHALL HAVE GFI CIRCUIT BREAKER.

NEW PP-H

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	225 A MCB	PANEL LOCATION:	STORAGE 111
BUS RATING:	225 A	FEEDER SIZE:	225A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-1-8
MOUNTING:	SURFACE	MIN RMS AMPS:	10 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	#17 STEAMER 1(GFI)	3.358			40A	1	R	R	2	20/1	0.720			#15 - OVEN (GFI)	2
3	#17 STEAMER 1(GFI)		3.358		/	3	R	R	4	20/1		0.720		#15 - OVEN (GFI)	4
5	#17 STEAMER 1(GFI)			3.358	3P	5	R	R	6	20/1			0.180	CONV OUTLET UNDER HOOD	6
7	#14 EXHAUST HOOD LTS	0.960			20/1	7	L	O	8	20/1	0.720			#14 EX HOOD CONTROL BOX	8
9	#17 STEAMER 2(GFI)		3.358		40A	9	R	R	10	20/1		0.720		#15 - OVEN (GFI)	10
11	#17 STEAMER 2(GFI)			3.358	/	11	R	R	12	20/1			0.720	#15 - OVEN (GFI)	12
13	#17 STEAMER 2(GFI)	3.358			3P	13	R		14						14
15						15			16						16
17						17			18						18
19						19			20						20
21						21			22						22
23						23			24						24
25						25			26						26
27						27			28						28
29						29			30						30
31						31			32						32
33						33			34						34
35						35			36						36
37						37			38						38
39						39			40						40
41						41			42						42

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	7.436	8.156	7.616	23.208		16.604	
LIGHTING	L	0.960	0.000	0.000	0.960	1.000	0.960	
HVAC	H	0.000	0.000	0.000	0.000	0.950	0.000	
OTHER	O	0.720	0.000	0.000	0.720	1.000	0.720	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		9.116	8.156	7.616	24.888		18.284	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		75.967	67.967	63.467	69.084		50.753	AMPS

NOTES:
1. PROVIDE SHUNT TRIP MAIN CIRCUIT BREAKER. PROVIDE CONTROL CIRCUIT FROM PP-G-7
2. CIRCUIT DESCRIPTIONS LABELED "(GFI)" SHALL HAVE GFI CIRCUIT BREAKER.

NEW PP-J

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	225 A MCB	PANEL LOCATION:	PALLET STORAGE 118
BUS RATING:	225 A	FEEDER SIZE:	225A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-2
MOUNTING:	SURFACE	MIN RMS AMPS:	14 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	VEHICLE STOR OVHD DOOR #1	0.864			15/1	1	O	R	2	20/1	0.180			STOR 122 RECEPT	2
3	VEHICLE STOR OVHD DOOR #2		0.864		15/1	3	O	R	4	20/1		0.180		RISER 121 GFI RECEPT	4
5	VEHICLE STOR OVHD DOOR #3			0.864	15/1	5	O	R	6	20/1			0.360	WASH BAY 120 RECEPT	6
7	VEHICLE STOR OVHD DOOR #4	0.864			15/1	7	O	R	8	20/1	0.720			VEHICLE STOR 119 RECEP S.W.	8
9	VEHICLE STOR OVHD DOOR #5		0.864		15/1	9	O	R	10	20/1		0.720		VEHICLE STOR 119 RECEPT W.	10
11	VEHICLE STOR OVHD DOOR #6			0.864	15/1	11	O	R	12	20/1			0.540	VEHICLE STOR 119 RECEP N.W.	12
13	VEHICLE STOR OVHD DOOR #7	0.864			15/1	13	O	R	14	20/1	0.720			VEHICLE STOR 119 RECEPT E.	14
15	VEH/PAL STOR OVHD DOOR		0.864		15/1	15	O	R	16	20/1		0.720		PALLET STOR 118 RECEPT W.	16
17	PALLET STOR OVHD DOOR EXT.			0.864	15/1	17	O	R	18	20/1			0.720	PALLET STOR 118 RECEPT E.	18
19	PALLET/PASSAGE OVHD DOOR	0.864			15/1	19	O	R	20	20/1	0.540			PASSAGE 113 RECEPTS	20
21	PASSAGE/REC OVHD DOOR		0.864		15/1	21	O	O	22	15/1		0.864		WASH BAY GARAGE DOOR	22
23	PALLET WRAPPER			1.800	20/1	23	O	O	24	20A/			1.040	BALER	24
25	ROOFTOP RECEPTS	1.080			20/1	25	R	O	26	2P	1.040			BALER	26
27	SPARE				20/1	27		H	28	25A/		1.508		EUH-1	28
29	EF-7			0.696	15/1	29	H	H	30	2P			1.508	EUH-1	30
31	EF-8	1.300			25A/	31	H	O	32	20/1	0.200			CO2 MONITORING SYSTEM	32
33	EF-8		1.300		2P	33	H		34	20/1				SPARE	34
35	WH-3			0.180	20/1	35	R		36	20/1				SPARE	36
37	WASHBAY,STOR, RISER LTS	0.967			20/1	37	L		38	20/1				SPARE	38
39	VEH STOR N. LIGHTS		0.752		20/1	39	L		40	20/1				SPARE	40
41	PALLET STOR & PASSAGE LTS			1.429	20/1	41	L		42	20/1				SPARE	42
43	SPARE				20/1	43			44	20/1				SPARE	44
45	SPARE				20/1	45			46	20/1				SPARE	46
47	SPARE				20/1	47			48	20/1				SPARE	48
49						49			50						50
51						51			52						52
53						53			54						54

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	3.240	1.620	1.800	6.660		6.660	
LIGHTING	L	0.967	0.752	1.429	3.148	1.000	3.148	
HVAC	H	1.300	2.808	2.204	6.312	0.950	5.996	
OTHER	O	4.696	4.320	5.432	14.448	1.000	14.448	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		10.203	9.500	10.865	30.568		30.252	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		85.025	79.167	90.542	84.851		83.975	AMPS

NOTES:

NEW LP-E2

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	200 A MLO	PANEL LOCATION:	ELECTRICAL ROOM
BUS RATING:	200 A	FEEDER SIZE:	200A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-1, ATS PP-K
MOUNTING:	SURFACE	MIN RMS AMPS:	14 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	PROTIEN COOLER-LTS & HEAT	1.800			20/1	1	L	L	2	20/1	0.600			PRODUCE COOLER-EVAP. COIL	2
3	PROTIEN COOLER-EVAP. COIL		0.600		20/1	3	H	H	4	20A		0.671		PRODUCE COOLER-COND. UNIT	4
5	PROTIEN COOLER-COND. UNIT			0.671	20A	5	H	H	6	/			0.671	PRODUCE COOLER-COND. UNIT	6
7	PROTIEN COOLER-COND. UNIT	0.671			/	7	H	H	8	3P	0.671			PRODUCE COOLER-COND. UNIT	8
9	PROTIEN COOLER-COND. UNIT		0.671		3P	9	H	L	10	20/1		1.800		FREEZER-LTS & DOOR HEATER	10
11	BULK COOLER- LTS & HEATER			1.800	20/1	11	L	H	12	25A/			1.872	FREEZER-EVAP. COIL	12
13	BULK COOLER-EVAP COIL	0.312			20A/	13	H	H	14	2P	1.872			FREEZER-EVAP. COIL	14
15	BULK COOLER-EVAP COIL		0.312		2P	15	H	H	16	25A		1.861		FREEZER-COND. UNIT	16
17	BULK COOLER-EVAP COIL			0.312	20A/	17	H	H	18	/			1.861	FREEZER-COND. UNIT	18
19	BULK COOLER-EVAP COIL	0.312			2P	19	H	H	20	3P	1.861			FREEZER-COND. UNIT	20
21	BULK COOLER-COND UNIT		2.878		40A	21	H	R	22	20/1		0.480		FREEZER-RECEPT	22
23	BULK COOLER-COND UNIT			2.878	/	23	H	L	24	20/1			1.800	BULK FREEZER-LTS & HEAT	24
25	BULK COOLER-COND UNIT	2.878			3P	25	H	H	26	20A/	0.332			BULK FREEZER-EVAP COIL	26
27	PRODUCE COOLER-LTS & HEAT		1.800		20/1	27	L	H	28	2P		0.332		BULK FREEZER-EVAP COIL	28
29	UH-2			0.858	15/1	29	H	H	30	20A/			0.332	BULK FREEZER-EVAP COIL	30
31	UH-3	0.858			15/1	31	H	H	32	2P	0.332			BULK FREEZER-EVAP COIL	32
33	EUH-2		1.508		25A/	33	H	H	34	40A		2.850		BULK FREEZER-COND UNIT	34
35	EUH-2			1.508	2P	35	H	H	36	/			2.850	BULK FREEZER-COND UNIT	36
37	GENERATOR SERVICE RECEPT	0.180			20/1	37	R	H	38	3P	2.850			BULK FREEZER-COND UNIT	38
39	IT ROOM EM RECEPT		0.360		20/1	39	R	R	40	20/1		0.480		BULK FREEZER-RECEPT	40
41	GEN BLOCK HEATER			1.000	20/1	41	O	O	42	20/1			0.200	BATTERY CHARGER	42
43	SPARE				20/1	43		O	44	20/1	0.200			TEMP CONTROL SYSTEM (BAS)	44 [1]
45	SPARE				20/1	45			46	20/1				SPARE	46
47	SPARE				20/1	47			48	20/1				SPARE	48
49	SPARE				20/1	49			50	30A				SPD	50
51						51			52	/				SPD	52
53						53			54	3P				SPD	54

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	0.180	1.320	0.000	1.500		1.500	
LIGHTING	L	2.400	3.600	3.600	9.600	1.000	9.600	
HVAC	H	12.949	11.683	13.813	38.445	0.950	36.523	
OTHER	O	0.200	0.000	1.200	1.400	1.000	1.400	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		15.729	16.603	18.613	50.945		49.023	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		131.075	138.360	155.108	141.414		136.078	AMPS

NOTES:
1. ELECTRICAL CONTRACTOR SHALL PROVIDE 3 POLE, 100KAIC SURGE SUPPRESSION DEVICE PER NEC 700 & 701. REMOTE MOUNTED, SHIPPED LOOSE.
2. TEMP CONTROL SYSTEM (LP-E2-44) AND ANY ADDITIONAL POWER TO TEMPERATURE CONTROLS SHALL BE ON EMERGENCY POWER.

NEW PP-L

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	225 A MCB	PANEL LOCATION:	STORAGE 111
BUS RATING:	225 A	FEEDER SIZE:	225A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	MDP-2
MOUNTING:	SURFACE	MIN RMS AMPS:	10 KAIC

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	STOR 111 RECEPT S. WALL	0.540			20/1	1	R	O	2	15/1	0.864			REC/STOR OVHD DOOR	2
3	STOR 111 RECEPT N. WALL		0.540		20/1	3	R	R	4	20/1		0.760		RECEIVING 112 RECEPT	4
5	DOCK LIFT OVHD DOOR			0.864	15/1	5	O	R	6	20/1			0.540	RECEIVING 112 RECEPT	6
7	DOCK LEVELER OVHD DOOR	0.864			15/1	7	O		8	20/1				SPARE	8
9	DOCK LEVELER		0.576		15A	9	O	L	10	20/1		0.602		RECEIVING 112 LIGHTS	10
11	DOCK LEVELER			0.576	/	11	O	L	12	20/1			0.432	STORAGE 111 LIGHTS	12
13	DOCK LEVELER	0.576			3P	13	O	H	14	50A	4.227			RTU-8	14
15	SITE LIGHTS		0.657		20A/	15	L	H	16	/		4.227		RTU-8	16
17	SITE LIGHTS			0.657	2P	17	L	H	18	3P			4.227	RTU-8	18
19	REC/ EX STOR OVHD DOOR	0.864			15/1	19	O	O	20	15/1	0.864			PASSAGE/EX STOR OVHD DOOR	20
21	STOR/EX STOR OVHD DOOR		0.864		15/1	21	O	O	22	15A/		0.960		TRUCK DOCK PUMP	22
23	CARD READERSIN ADDITION			0.100	20/1	23	O	O	24	2P			0.960	TRUCK DOCK PUMP	24
25	DOCK LIFT	2.099			35A	25	O		26	20/1				SPARE	26
27	DOCK LIFT		2.099		/	27	O		28	20/1				SPARE	28
29	DOCK LIFT			2.099	3P	29	O		30	20/1				SPARE	30
31	SPARE				20/1	31			32	20/1				SPARE	32
33	SPARE				20/1	33			34	20/1				SPARE	34
35	SPARE				20/1	35			36	20/1				SPARE	36
37						37			38						38
39						39			40						40
41						41			42						42

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	0.540	1.300	0.540	2.380		2.380	
LIGHTING	L	0.000	1.259	1.089	2.348	1.000	2.348	
HVAC	H	4.227	4.227	4.227	12.682	0.950	12.048	
OTHER	O	6.131	4.499	4.599	15.229	1.000	15.229	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		10.898	11.285	10.455	32.639		32.005	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		90.818	94.043	87.127	90.598		88.838	AMPS

NOTES:

REVISED LP-B

SQ-D NQ PANEL

MAIN: SIZE & TYPE:	100 A MLO	PANEL LOCATION:	KITCHEN CLOSET
BUS RATING:	100 A	FEEDER SIZE:	100A
VOLTAGE:	120 / 208 V 3 Ø, 4 WIRE	FED FROM:	PP-A
MOUNTING:	SURFACE	MIN RMS AMPS:	

CKT #	CIRCUIT DESCRIPTION	A	B	C	AMPS / POLES	CKT #	LOAD TYPE		CKT #	AMPS / POLES	A	B	C	CIRCUIT DESCRIPTION	CKT #
1	RECPS DINING ROOM				20/1	1			2	20/1				SOFFIT LIGHTS	2
3	RECPS LOBBY/RESTROOMS				20/1	3			4	20/1				SOFFIT LIGHTS	4
5	RECPS MANAGERS				20/1	5			6	20/1				SOFFIT LIGHTS	6
7	RECPS MANAGERS				20/1	7			8	20/1				SOFFIT LIGHTS	8
9	COPIER				20/1	9			10	20/1				DINING LIGHTS	10
11	RECPS STAFF/DOCUMENTS				20/1	11			12	20/1				DINING LIGHTS	12
13	DEDICATED RECP				20/1	13			14	20/1				LOBBY LIGHTS	14
15	OUTDOOR RECP				20/1	15			16	20/1				LIGHTS OFFICE	16
17	EF-3				20/1	17			18	20/1				SPACE	18
19	WH-1				20/1	19			20	20/1				EWH-1	20
21	COILING DOOR				20/1	21			22	20/1				SPACE WARMER	22
23	COUNTER RECPS				20/1	23		O	24	20/1			0.200	CARD READERS & DOORS	24
25	COUNTER RECPS				20/1	25			26	30A/				STEAMER	26
27	HAND DRYER				30/1	27			28	2P				STEAMER	28
29	HAND DRYER				30/1	29		H	30	15/1			0.528	RCP-1	30

LOAD SUMMARY		KVA CONNECTED A	B	C	KVA SUMMARY TOTAL		DEMAND	
RECEPTACLES	R	0.000	0.000	0.000	0.000		0.000	
LIGHTING	L	0.000	0.000	0.000	0.000	1.000	0.000	
HVAC	H	0.000	0.000	0.528	0.528	0.950	0.502	
OTHER	O	0.000	0.000	0.200	0.200	1.000	0.200	
EXISTING	E	0.000	0.000	0.000	0.000	1.000	0.000	
TOTAL KVA		0.000	0.000	0.728	0.728		0.702	TOTAL ESTIMATE KVA
VOLTS / PHASE		120	120	120	208		208	SYSTEM VOLTAGE
AMPS / PHASE		0.000	0.000	6.067	2.021		1.948	AMPS

NOTES:
1. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW 20A/1P CIRCUIT BREAKER IN EXISTING PANEL LP-B FOR CIRCUIT LP-B-30.
2. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING SPARE CIRCUIT BREAKER FOR NEW LOAD, LP-B-24.

PANEL SCHEDULE KEYED NOTES

[1] ELECTRICAL CONTRACTOR SHALL PROVIDE 20A/1P CIRCUIT BREAKER FOR BAS SYSTEM IN EMERGENCY PANEL. ALL POWER FOR BAS CONTROL SYSTEM SHALL BE FROM LP-E2 EMERGENCY POWER.

0.0" 0.5" 1.0" 1.5" 2.0"

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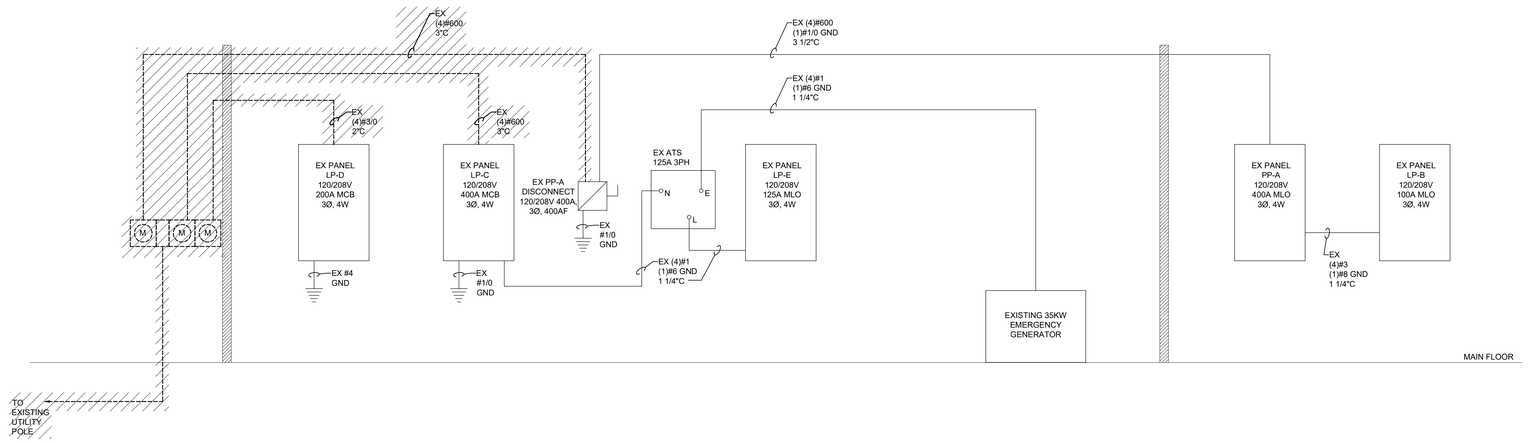
TSSF ARCHITECTS, INC.
ARCHITECTS PLANNERS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

DRAWN BY RLM
DATE 7/03/25
APPROVED JWF
SHEET NO. E3.1
PROJECT NO. 2154

7/17/2025 7:34 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM) F:\27-TSSF\2024-2701 HUNGER SOLUTIONS CENTER\2024-2701-E-E3.1 ELECTRICAL PANEL SCHEDULES



EXISTING RISER DIAGRAM

LOAD SUMMARY	
RECEPTACLE	36.19*
LIGHTING	17.19
HVAC	186.97
OTHER	122.74
EXISTING	124.14
TOTAL: 487.23 KVA @ 208V 3PH = 1352.45 AMPS	

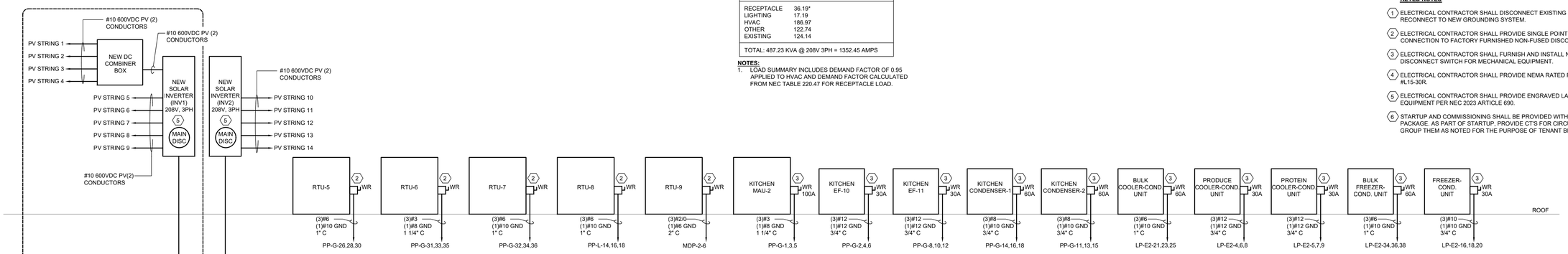
NOTES:
1. LOAD SUMMARY INCLUDES DEMAND FACTOR OF 0.95 APPLIED TO HVAC AND DEMAND FACTOR CALCULATED FROM NEC TABLE 220.47 FOR RECEPTACLE LOAD.

GENERAL NOTES

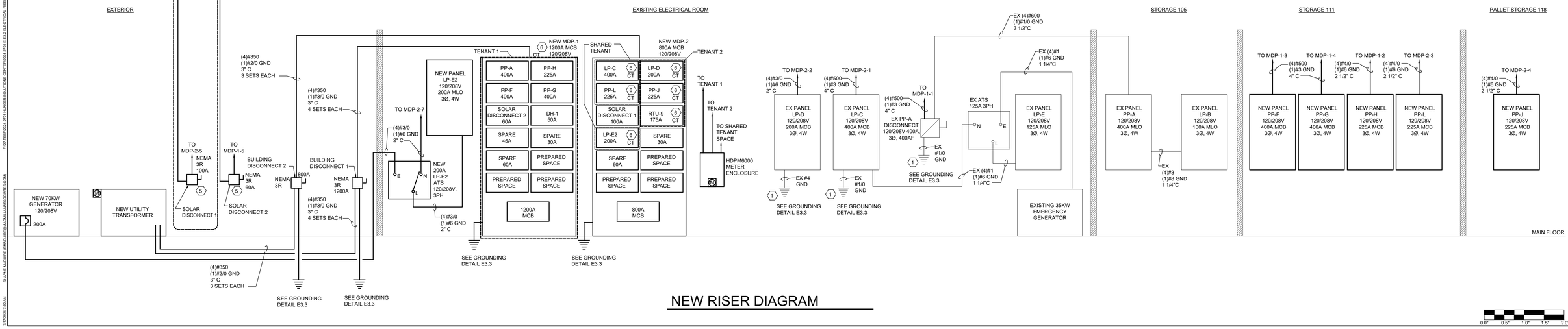
1. HATCHED LINES SHOWS EXISTING ELECTRICAL TO BE REMOVED.
2. DESIGN INTENT FOR THE TIME LINE OF DEMOLITION FOR ELECTRICAL SERVICE IS THAT THE EXISTING SERVICE SHALL REMAIN IN SERVICE DURING CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL INSTALL NEW DISTRIBUTION PANELS MDP-1 & MDP-2, ALL NEW FEEDERS TO EXISTING PANELS, AND CONDUIT TO NEW TRANSFORMER. THE INTENT IS TO MINIMIZE DOWNTIME AND HAVE ALL NEW EQUIPMENT IN PLACE PRIOR TO SWITCH TO NEW SERVICE.

KEYED NOTES

1. ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING GROUND AND RECONNECT TO NEW GROUNDING SYSTEM.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE POINT POWER CONNECTION TO FACTORY FURNISHED NON-FUSED DISCONNECT SWITCH.
3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL NON-FUSED DISCONNECT SWITCH FOR MECHANICAL EQUIPMENT.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA RATED RECEPTACLE #L15-30R.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE ENGRAVED LABEL FOR PV EQUIPMENT PER NEC 2023 ARTICLE 690.
6. STARTUP AND COMMISSIONING SHALL BE PROVIDED WITH THE METER PACKAGE. AS PART OF STARTUP, PROVIDE CT'S FOR CIRCUITS SHOWN AND GROUP THEM AS NOTED FOR THE PURPOSE OF TENANT BILLING.



EXISTING ELECTRICAL ROOM



NEW RISER DIAGRAM

MAC MILLAN ASSOCIATES CONSULTING ENGINEERS
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TSSF ARCHITECTS, INC.
PLANNERS
ARCHITECTS
122 N. WASHINGTON AVENUE SAGINAW, MICHIGAN

ADDITION AND RENOVATION TO:
HUNGER SOLUTION CENTER
SAGINAW, MICHIGAN

NO.	DATE	REVISION
	7/3/25	ISSUED FOR CONSTRUCTION

DRAWN BY RLM
DATE 7/03/25
APPROVED JWF

SHEET NO.
E3.2

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

E:\21758\P2024-2311 HUNGER SOLUTIONS CENTER\DGN\2310-E3.2 ELECTRICAL RISER DIAGRAM.DWG
7/1/2025 7:39 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)

ELECTRICAL SOLAR EQUIPMENT SCHEDULES

- **SOLAR PANEL SCHEDULE**
  REC ALPHA PURE-RX SERIES SOLAR PANEL, 88 HALF-CUT BIFACIAL REC HETEROJUNCTION CELLS, 3.2 MM SOLAR GLASS, HIGHLY RESISTANT BLACK POLYMER BACKSHEET, ANODIZED ALUMINUM BLACK FRAME, 1728MM X 1205MM X 300MM (MEASUREMENTS IN MILLIMETERS), 470W POWER OUTPUT, 55.4 NOMINAL VOLTAGE, 8.49 NOMINAL CURRENT, 22.6 PANEL EFFICIENCY, SYSTEM VOLTAGE OF 1000V
  REC # REC470AA PURE-RX OR EQUAL

- **SOLAR INVERTER SCHEDULE**
  SOL-ARK 30000W MAXIMUM PV ARRAY POWER, 500V MAX INPUT VOLTAGE, 36A DC CURRENT PER MPPT, NEMA 3R, WALL MOUNTED, 120/208 3 PH, 96.5% EFFICIENCY, LOCKABLE ENCLOSURE, RAPID SHUTDOWN, EQUIPPED WITH ARC FAULT CIRCUIT PROTECTION, EQUIPPED WITH GFI, PV DC DISCONNECT SWITCH
  SOL-ARK # 30K-3P-208V-N OR EQUAL

- **DC COMBINER BOX**
  PV COMBINER BOX, 6 CIRCUIT, 600VDC FUSE HOLDERS, NEMA 3R ENCLOSURE, LOCKABLE ENCLOSURE, #14-2/0 OUTPUT TERMINALS, VERTICAL WALL MOUNT, PROVIDE (6) 20A 600VDC FUSES
  OUTBACK POWER SYSTEMS # FWPV6-FH600 OR EQUAL

- **PV CABLES**
  CU 600V XLPE INSULATION. RHH/RHW-2 PV, SINGLE CONDUCTOR PHOTOVOLTAIC POWER CABLE, 600V COPPER, XLPE INSULATION, 10AWG, HEAT RESISTANT, MOISTURE RESISTANT, SUNLIGHT RESISTANT, 90°C
  SOUTHWIRE # 567949 OR EQUAL

GENERATOR SCHEDULE

KW(KVA) RATING 75 (88) STANDBY
NATURAL GAS SOUND ATTENUATED LEVEL 1 ENCLOSURE
120/208V 3 PHASE, 1000W, BLOCK HEATER, BATTERY CHARGER, REMOTE SHUTOFF
CUMMINS #C75N6

ATS SCHEDULE

CUMMINS POWERCOMMAND GTEC AUTOMATIC TRANSFER SWITCH, 200A CIRCUIT BREAKER PROTECTION, C FRAME, IP32
CUMMINS #GT3 0200 U N 7 2 OR EQUAL

ENERGY METER

HDPM6000 MULTIPLE MODULE UNITS WITH ENCLOSURE, SEPARATE 120VAC CONTROL POWER, HEAD UNIT WITH 24 CT POINTS, WITHOUT WAVEFORM CAPTURE, NO DISPLAY, NO ANTENNA, 8 PORT SWITCH, NO GATEWAY
SQ D #FAEHD6CB042R4USN OR EQUAL

TENANT MONITORING SOFTWARE

GENERATE TENANT BILLS FOR USER DEFINED CIRCUITS, PROVIDE MONTHLY KWH, CLOUD-HOSTED SOFTWARE, COMMUNICATES WITH HDPM6000 METER AND USER IT RACK
SQ D ENERGY HUB (EEH) OR EQUAL

ELECTRICAL SYMBOLS

LIGHTING

- HALF SHADED FIXTURES ARE EMERGENCY FIXTURES
- A — 2'X2' LIGHT FIXTURE, TYPE INDICATED
- 4' LED VAPOR TIGHT, TYPE INDICATED
- A — 4' LED STRIP LIGHT, TYPE INDICATED
- DOWNLIGHT OR SURFACE LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE, TYPE INDICATED
- E — EXIT LIGHT
- E — MOUNTED EXIT LIGHT
- POLE MOUNTED LIGHT FIXTURE, TYPE INDICATED
- TWIN REMOTE HEAD EMERGENCY LIGHT FIXTURE

LIGHTING CONTROLS

- S — SINGLE POLE SWITCH
- LOW VOLTAGE ON/OFF BUTTON SWITCH
  ACUITY #NPODMA SERIES OR EQUAL
- WIRELESS SWITCH, LINE VOLTAGE POWERED
  ACUITY #RPODLA SERIES OR EQUAL
- PP — POWER RELAY PACK
  ACUITY #NPP16 D SERIES OR EQUAL
- (110) — PASSIVE INFRARED, CEILING MOUNTED, LARGE-MOTION DETECTION, HIGH MOUNT, 1000 SQFT RADIAL COVERAGE SENSOR
  ACUITY #NCM 6 SERIES OR EQUAL
- (1000) — DUAL TECH, CEILING MOUNTED, LARGE-MOTION DETECTION, 2000 SQFT RADIAL COVERAGE SENSOR
  ACUITY #NCM PDT 10 SERIES OR EQUAL
- (020) — WALL MOUNTED OCCUPANCY SENSOR
- TC — 120V TIMECLOCK
- TC2 — 208V 2 POLE TIMECLOCK, 24 HOUR, INDOOR METAL ENCLOSURE, 1HOUR INTERVAL
  INTERMATIC #T104 OR EQUAL

POWER

- DUPLEX RECEPTACLE
- QUADPLEX RECEPTACLE
- SPECIAL RECEPTACLE
- GFCI — GFCI RECEPTACLE
- GFI — FEED THROUGH GFCI DEVICE
- CIRCUIT BREAKER DISCONNECT
- DEVICE CONNECTION
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT
- FLUSH MOUNTED PANEL
- PANELBOARD
- SWITCHBOARD
- T — TRANSFORMER
- INV — DC-AC INVERTER
- SINGLE PHASE MOTOR
- THREE PHASE MOTOR
- PUSH BUTTON STATION
- GROUND ROD WITH EXOTHERMIC CONNECTION
- GROUND
- EXOTHERMIC GROUND CONNECTION
- MECHANICAL GROUND CONNECTION
- 2 POLE TOGGLE SWITCH
- (DB) — DOORBELL KIT, 10VA TRANSFORMER, CHIMEKIT, WHITE PUSH-BUTTON, 2-NOTE TONE (DOOR/OVERHEAD DOOR)
  TAMLITE LIGHTING #DB3-2WH OR EQUAL
- SOLAR PANEL
- M — METER
- CP — EXISTING OVERHEAD DOOR CONTROL PANEL
- GROUND ROD
- JB — JUNCTION BOX
- DC COMBINER BOX

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
EX	EXISTING
GFI	GROUND FAULT CIRCUIT INTERRUPTER
WR	WEATHER RESISTANT
MDP	MAIN DISTRIBUTION PANEL
PP	POWER PANEL
LP	LIGHTING PANEL
RP	RECEPTACLE PANEL
GND	GROUND
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH
RAP	REMOTE ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
KWH/DAY	KILO WATT HOURS PER DAY
KWH/YEAR	KILO WATT HOURS PER YEAR
UGE	UNDERGROUND ELECTRICAL

FIRE ALARM

- FACP — FIRE ALARM/SECURITY CONTROL PANEL
  HONEYWELL #VISTA128FBPT OR EQUAL
- S — SMOKE DETECTOR CEILING MOUNTED
- H — HEAT DETECTOR
- WALL MOUNTED FIRE ALARM STROBE ONLY
- WALL MOUNTED FIRE ALARM AUDIO/STROBE COMBO
- REMOTE ANNUNCIATOR PANEL/KEYPAD FOR FIRE ALARM AND SECURITY
- DSD — DUCT SMOKE DETECTOR
- DH — ELECTRIC DOOR HOLDER
- FS — FIRE ALARM FLOW SWITCH
- TS — FIRE ALARM TAMPER SWITCH
- F — FIRE ALARM PULL STATION

COMMUNICATIONS

- DATA OUTLET ROUGH-IN, (2 CAT6), 1" CONDUIT ROUTED TO ACCESSIBLE CEILING
- PHONE OUTLET
- CR — CARD READER ROUGH-IN
- CAM — SECURITY CAMERA ROUGH-IN, 1" CONDUIT ROUTED TO ACCESSIBLE CEILING

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION
A	4' LED STRIP LIGHT, 80CRI, SURFACE MOUNTED, 4000K, 5800 LUMENS, 120-277V, FLAT FROSTED ACRYLIC LENS, WIDE DISTRIBUTION, 0-10V DIMMING, INTEGRATED HIGH BAY SENSOR, WIRELESS LIGHTING CONTROLS, WHITE FINISH, 37.6 WATTS COLUMBIA #MPS 4 40 HL F W ED U NXCS OR EQUAL
AE	SAME AS A EXCEPT WITH 10W EMERGENCY BACKUP BATTERY COLUMBIA #MPS 4 40 HL F W ED U ELL14 NXCS OR EQUAL
B	4' LED STRIP LIGHT, 80CRI, SURFACE MOUNTED, 4000K, 5800 LUMENS, 120-277V, FLAT FROSTED LENS, WIDE DISTRIBUTION, 0-10V DIMMING, WHITE FINISH, 37.6 WATTS COLUMBIA #MPS 4 40 HL F W ED U OR EQUAL
BE	SAME AS B EXCEPT WITH 10W EMERGENCY BACKUP BATTERY COLUMBIA #MPS 4 40 HL F W ED U ELL14 OR EQUAL
C	2'X2' LED FLAT PANEL, 3600 LUMEN (SELECTABLE), 80CRI, 4000K (SELECTABLE), DIFFUSED LENS, 120-277V, 0-10V DIMMING, DEEP SURFACE MOUNT KIT, SELECTABLE DRIVER SWITCH COVER, 27 WATTS COLUMBIA #CBT 22 A LSCS EDD, DSMK22, OR EQUAL
CE	SAME AS FIXTURE C EXCEPT WITH 10W EMERGENCY BATTERY PACK COLUMBIA #CBT 22 A LSCS EDD ELL14, DSMK22, OR EQUAL
D	4' LED STRIP LIGHT, 80CRI, CHAIN HANG, 4000K, 4000 LUMENS, 120-277V, FLAT FROSTED LENS, WIDE DISTRIBUTION, 0-10V DIMMING, WHITE FINISH, 26.9 WATTS COLUMBIA #MPS 4 40 LW F W ED U, CSHC OR EQUAL
DE	SAME AS FIXTURE D EXCEPT WITH 10W EMERGENCY BATTERY PACK COLUMBIA #MPS 4 40 LW F W ED U ELL14, CSHC OR EQUAL
E	EMERGENCY THERMOPLASTIC EXIT SIGN, 120/277V, RED LETTER COLOR, WALL MOUNTED, NIMH BATTERY, WHITE HOUSING, 12 WATT REMOTE CAPACITY. NO LAMP HEADS. DUAL LITE #EVCHL U R W 12 0 OR EQUAL
F	LED ENCLOSED AND GASKETED, 4' STRIP LIGHT, 4000K, 6200 LUMENS, RIBBED FROSTED ACRYLIC LENS, 0-10V DIMMING, 120-277V, IP66 RATED, 47.4 WATTS COLUMBIA #LXEM 4 40 HL RFA ED U OR EQUAL
F2	LED ENCLOSED AND GASKETED, 4' STRIP LIGHT, 4000K, 7764 LUMENS, RIBBED FROSTED ACRYLIC LENS, 0-10V DIMMING, 120-277V, IP66 RATED, 61.6 WATTS COLUMBIA #LXEM 4 40 VL RFA ED U OR EQUAL
RH	EXTERIOR LED REMOTE HEAD, POWERED FROM INTERIOR BATTERY POWERED EXIT SIGN, ROUND TWIN HEAD, BLACK HOUSING DUAL LITE #EVO D B OR EQUAL
AA	LED WALLPACK WITH LOW GLARE LENS, DIE-CAST ALUMINUM HOUSING, TRAPEZOID FAMILY, 20WATT, 4000K, 70CRI, FORWARD THROW DIFFUSED DISTRIBUTION, 120-277V, DARK BRONZE MATTE TEXTURED FINISH BEACON # TRP2 D-20 4K7 FT UNV DBT OR EQUAL
BBF	LED WALLPACK WITH LOW GLARE LENS, DIE-CAST ALUMINUM HOUSING, TRAPEZOID FAMILY, 50WATT, 4000K, 70CRI, FORWARD THROW DIFFUSED DISTRIBUTION, 120-277V, DARK BRONZE MATTE TEXTURED FINISH BEACON # TRP2 D-50 4K7 FT UNV DBT OR EQUAL
BBW	LED WALLPACK WITH LOW GLARE LENS, DIE-CAST ALUMINUM HOUSING, TRAPEZOID FAMILY, 50WATT, 4000K, 70CRI, WIDE THROW DIFFUSED DISTRIBUTION, 120-277V, DARK BRONZE MATTE TEXTURED FINISH BEACON # TRP2 D-50 4K7 WT UNV OR EQUAL
CC3	ASL MICROSTRIKE SERIES, 9000 LUMENS, 4000K, 70CRI, TYPE 3 DISTRIBUTION, UNIVERSAL 120-277V, SQUARE POLE MOUNT, S2 DRILL PATTERN, PIR OCCUPANCY/DAYLIGHT SENSOR, DARK BRONZE MATTE TEXTURED, HOUSE SIDE SHIELD ON BACK, 68.4 WATTS EXO #ASL1 160L-70 4K7 3 UNV A BTS15F DBT, ASL1-HSS-90-B-DBT OR EQUAL SQUARE STRAIGHT STEEL POLE, 12' HEIGHT, 4" SHAFT, 0.125" WALL THICKNESS, SINGLE ARM MOUNT, DARK BRONZE MATTE TEXTURED, UL CERTIFIED CURRENT #SSSA 12 4 A 1 DBT UL
CCF	SAME AS FIXTURE CC3 EXCEPT WITH FORWARD THROW DISTRIBUTION, 68.4 WATTS EXO #ASL1 160L-70 4K7 4F UNV A BTS15F DBT, ASL1-HSS-90-B-DBT OR EQUAL
DDF	ASL MICROSTRIKE SERIES, 15000 LUMENS, 4000K, 70CRI, FORWARD THROW DISTRIBUTION, UNIVERSAL 120-277V, SQUARE POLE MOUNT RETROFIT, PIR OCCUPANCY/DAYLIGHT SENSOR, DARK BRONZE MATTE TEXTURED, HOUSE SIDE SHIELD ON BACK, 109.7 WATTS EXO #ASL1 160L-115 4K7 4F UNV A BTS22F DBT, ASL1-HSS-90-B-DBT OR EQUAL
DDW	SAME AS FIXTURE DDF EXCEPT WITH WIDE THROW DISTRIBUTION, 109.7 WATTS EXO #ASL1 160L-115 4W 4F UNV A BTS22F DBT, ASL1-HSS-90-B-DBT OR EQUAL
FFE	LED WALLPACK, DIE-CAST ALUMINUM HOUSING, TRAPEZOID FAMILY, 50 WATT, 4000K,70 CRI, FORWARD THROW, 120-277V, DARK BRONZE MATTE TEXTURED FINISH, BATTERY BACK WITH HEATER (-20°C) BEACON #TRP2 160L-50 4K7 4F UNV DBT EH OR EQUAL
GG	6" WET LOCATION LED DOWNLIGHT, 1900 LUMEN, 4000K, 120-277V, WIDE DISTRIBUTION, LITEBOX PRO TRIM, DIFFUSE CLEAR ANODIZED REFLECTOR, 23.5 WATTS PRESCOLITE #LBRP-M-LS ML 40K9 WD LBRP 6RD T D

LIGHTING CONTROL SUMMARY

EXTERIOR LIGHTING
SHALL BE CONTROLLED VIA TIMECLOCK SET TO MATCH EXISTING TIMECLOCK IN ELECTRICAL ROOM, SITE POLE LIGHTING SHALL DIM DOWN TO 50% VIA INTEGRATED MOTION SENSORS AFTER 15 MINUTES OF VACANCY

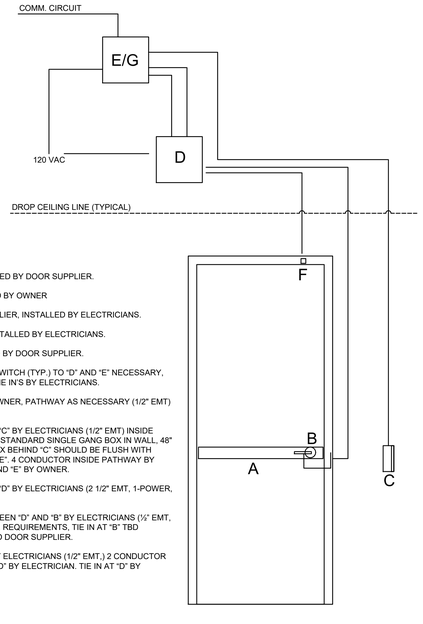
KITCHEN, SERVING, & DISH-WASHING AREA
PARTIAL AUTOMATIC ON TO 50% UPON MOTION DETECTED, 100% ON WITH MANUAL SWITCH, AUTOMATIC FULL OFF AFTER 20 MINUTES OF VACANCY

VEHICLE STORAGE AND PALLET STORAGE
LOCAL MANUAL OVERRIDE SWITCH, AUTOMATIC ON TO 100% UPON MOTION DETECTED VIA INTEGRATED WIRELESS OCCUPANCY SENSORS, AUTOMATIC FULL OFF AFTER 20 MINUTES OF VACANCY

STORAGE ROOMS, PASSAGE, AND RECEIVING
LOCAL MANUAL OVERRIDE SWITCH, AUTOMATIC ON TO 100% UPON MOTION DETECTED, AUTOMATIC FULL OFF AFTER 20 MINUTES OF VACANCY

RISER ROOM
MANUAL ON/OFF VIA LOCAL SWITCH

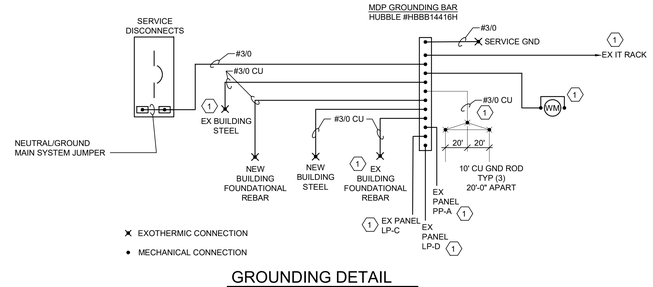
A EXIT DEVICE
B POWER TRANSFER (ELECTRIC CRASH BAR, STRIKE, OR LATCH)
C CARDSLOT/SHROUD/MOUNTING PLATE
D POWER SUPPLY
(ONLY NEEDED WITH CRASH BARS AND/OR DOORS WITH HANDICAP OPENERS)
E ENCLOSURE AND POWER SUPPLY
F DOOR POSITION SWITCH
G MASTER/DOOR CONTROLLER



- "A, B" SUPPLIED AND INSTALLED BY DOOR SUPPLIER.
- "C" SUPPLIED AND INSTALLED BY OWNER
- "D" SUPPLIED BY DOOR SUPPLIER, INSTALLED BY ELECTRICIANS.
- "E" SUPPLIED BY OWNER, INSTALLED BY ELECTRICIANS.
- "F" SUPPLIED AND INSTALLED BY DOOR SUPPLIER.
- 120 VAC SUPPLY THROUGH SWITCH (TYP.) TO "D" AND "E" NECESSARY, CAN BE SAME CIRCUIT. ALL TIE IN'S BY ELECTRICIANS.
- "COMM CIRCUIT" TO "E" BY OWNER, PATHWAY AS NECESSARY (1/2" EMT) BY ELECTRICIANS.
- PATHWAY BETWEEN "E" AND "C" BY ELECTRICIANS (1/2" EMT) INSIDE WALL (TYP.) TERMINATES TO STANDARD SINGLE GANG BOX IN WALL, 48" ON CENTER, "BEHIND" "C", BOX BEHIND "C" SHOULD BE FLUSH WITH EXTERIOR BUILDING SURFACE", 4 CONDUCTOR INSIDE PATHWAY BY ELECTRICIAN. TIE IN AT "C" AND "E" BY OWNER.
- PATHWAY BETWEEN "E" AND "D" BY ELECTRICIANS (2 1/2" EMT, 1-POWER, 1-COMM.)
- PATHWAY AND WIRING BETWEEN "D" AND "B" BY ELECTRICIANS (½" EMT, WIRE BASED ON DOOR SPEC. REQUIREMENTS, TIE IN AT "B" TBD BETWEEN ELECTRICIANS AND DOOR SUPPLIER.
- PATHWAY FROM "D" TO "F" BY ELECTRICIANS (1/2" EMT,) 2 CONDUCTOR WIRING FROM "E" TO "F" VIA "D" BY ELECTRICIAN. TIE IN AT "D" BY OWNER".

CARD READER SCHEMATIC

NO SCALE



GROUNDING DETAIL

NOTE: MOUNT GROUND BAR 8'-0" OFF OF FINISHED FLOOR.

KEYED NOTES

(1) ELECTRICAL CONTRACTOR SHALL TIE EXISTING GROUND INTO NEW MDP GROUNDING BAR. REMOVE CONNECTION TO EXISTING GROUND BAR. SPLICE AND EXTEND TO NEW GROUND BAR.

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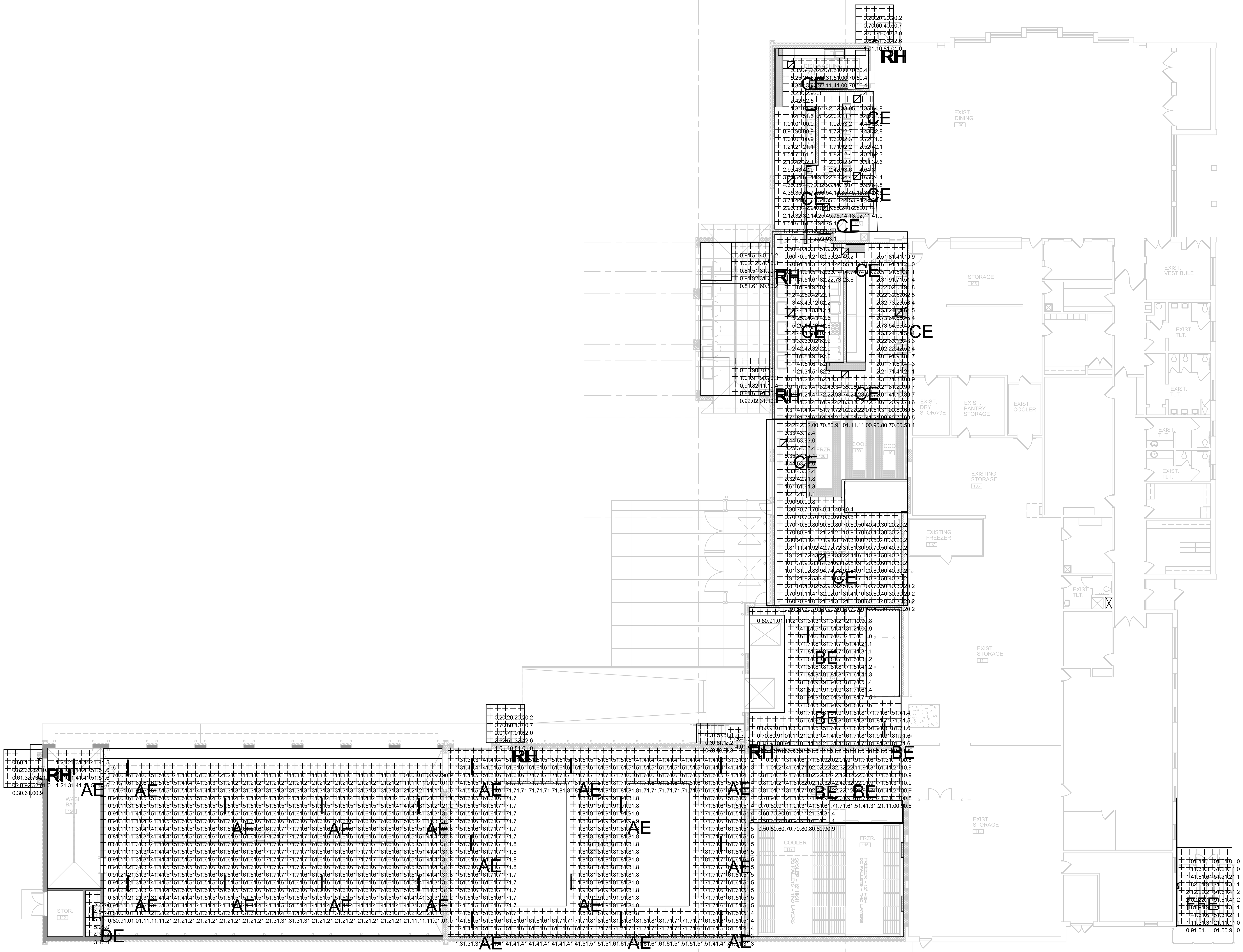
SHEET NO.
E3.3

PROJECT NO.
2154

0.0" 0.5" 1.0" 1.5" 2.0"

F:\2-TSSF\2024-2\01-HUNGER SOLUTIONS CENTER\2024-2\01-E-E3.3 ELECTRICAL INFORMATION
7/1/2025 7:43 AM SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)



FLOOR PLAN - EMERGENCY LIGHTING POINT BY POINT

3/32"=1'-0"

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DINING EXIT DOOR	+	1.1 fc	2.6 fc	0.2 fc	13.0:1	5.5:1
DISHWASHING	+	2.4 fc	5.4 fc	0.4 fc	13.5:1	6.0:1
DRIVE THROUGH	+	1.1 fc	2.3 fc	0.1 fc	23.0:1	11.0:1
FIRE RISER RM	+	4.3 fc	5.1 fc	3.4 fc	1.5:1	1.3:1
GENERATOR EM	+	1.4 fc	2.2 fc	0.9 fc	2.4:1	1.6:1
KITCHEN	+	2.2 fc	5.4 fc	0.3 fc	18.0:1	7.3:1
LOADING DOCK EXT STAIRS		1.3 fc	4.0 fc	0.3 fc	13.3:1	4.3:1
PALLET STORAGE	+	1.6 fc	1.9 fc	1.2 fc	1.6:1	1.3:1
PASSAGE	+	1.4 fc	2.4 fc	0.5 fc	4.8:1	2.8:1
PS EXTERIOR DOOR	+	1.1 fc	2.6 fc	0.2 fc	13.0:1	5.5:1
RECIEVING	+	1.5 fc	2.0 fc	0.6 fc	3.3:1	2.5:1
SERVING	+	3.5 fc	5.9 fc	1.0 fc	5.9:1	3.5:1
STORAGE	+	1.4 fc	5.3 fc	0.2 fc	26.5:1	7.0:1
VEH STRG EXT DOOR	+	1.4 fc	3.8 fc	0.1 fc	38.0:1	14.0:1
VEHICLE STORAGE	+	1.4 fc	1.7 fc	0.8 fc	2.1:1	1.8:1
WASHBAY	+	1.4 fc	1.6 fc	1.2 fc	1.3:1	1.2:1

0.0" 0.5" 1.0" 1.5" 2.0"

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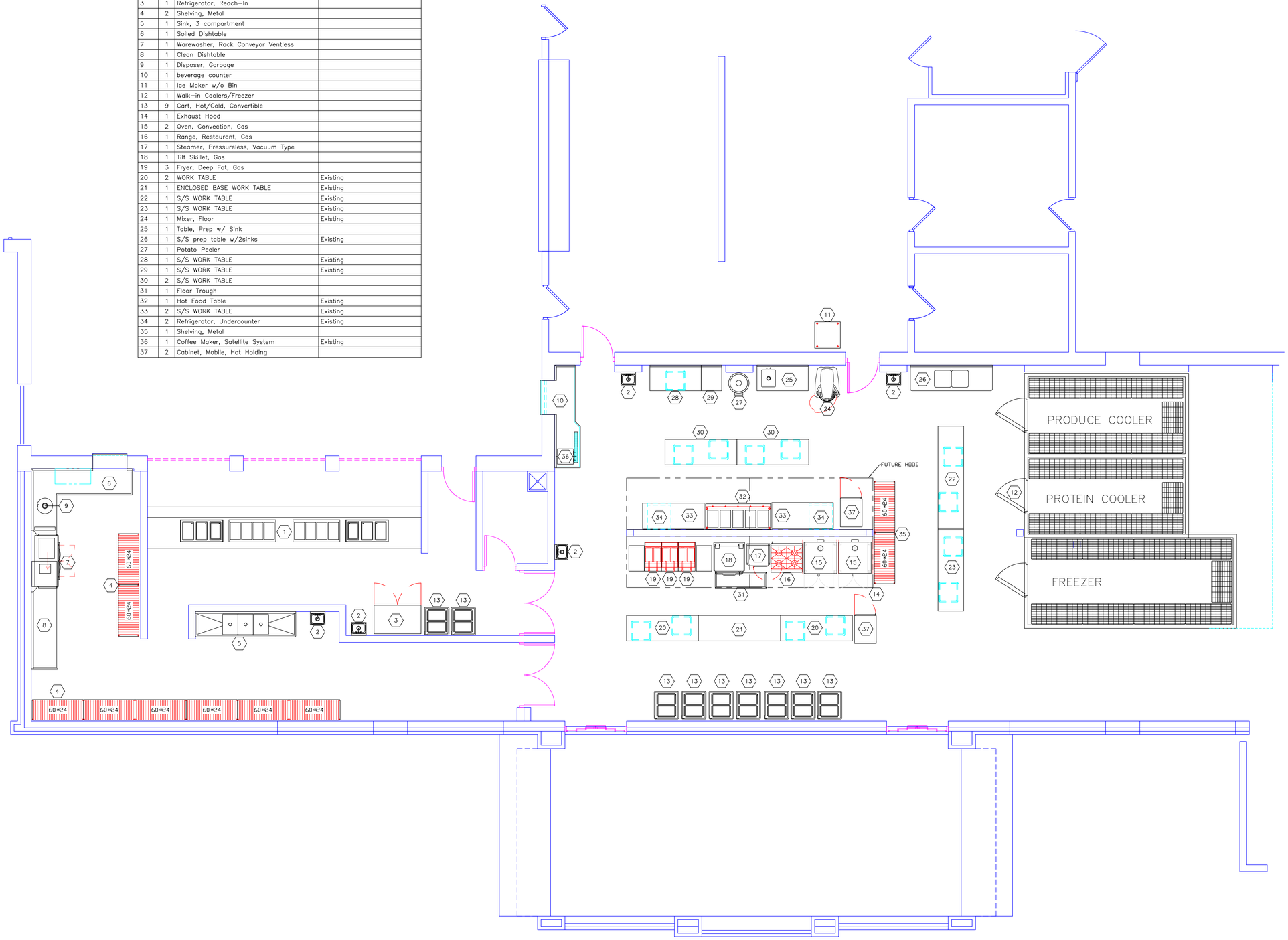
2154

7/3/2025 9:41 AM
SHAYNE MAGUIRE (SMAGUIRE@MACMILLANASSOCIATES.COM)
F:\27-TSSF\2024-2701 HUNGER SOLUTIONS CENTER\2024-2701-E-E4.0 EMERGENCY LIGHTING PT BY PT PLAN

EQUIPMENT SCHEDULE			
Item No	Qty	Equipment Category	Equipment Remarks
1	1	Serving Counter	
2	5	Hand Sink	
3	1	Refrigerator, Reach-In	
4	2	Shelving, Metal	
5	1	Sink, 3 compartment	
6	1	Soiled Dishtable	
7	1	Warewasher, Rack Conveyor Ventless	
8	1	Clean Dishtable	
9	1	Disposer, Garbage	
10	1	beverage counter	
11	1	Ice Maker w/o Bin	
12	1	Walk-in Coolers/Freezer	
13	9	Cart, Hot/Cold, Convertible	
14	1	Exhaust Hood	
15	2	Oven, Convection, Gas	
16	1	Range, Restaurant, Gas	
17	1	Steamer, Pressureless, Vacuum Type	
18	1	Tilt Skillet, Gas	
19	3	Fryer, Deep Fat, Gas	
20	2	WORK TABLE	Existing
21	1	ENCLOSED BASE WORK TABLE	Existing
22	1	S/S WORK TABLE	Existing
23	1	S/S WORK TABLE	Existing
24	1	Mixer, Floor	Existing
25	1	Table, Prep w/ Sink	
26	1	S/S prep table w/2sinks	Existing
27	1	Potato Peeler	
28	1	S/S WORK TABLE	Existing
29	1	S/S WORK TABLE	Existing
30	2	S/S WORK TABLE	
31	1	Floor Trough	
32	1	Hot Food Table	Existing
33	2	S/S WORK TABLE	Existing
34	2	Refrigerator, Undercounter	Existing
35	1	Shelving, Metal	
36	1	Coffee Maker, Satellite System	Existing
37	2	Cabinet, Mobile, Hot Holding	



FOOD SERVICE EQUIPMENT PLAN

SCALE 1/4" = 1'-0"

SHEET NUMBER FS1

PROJECT 24-640

DATE 6-30-25

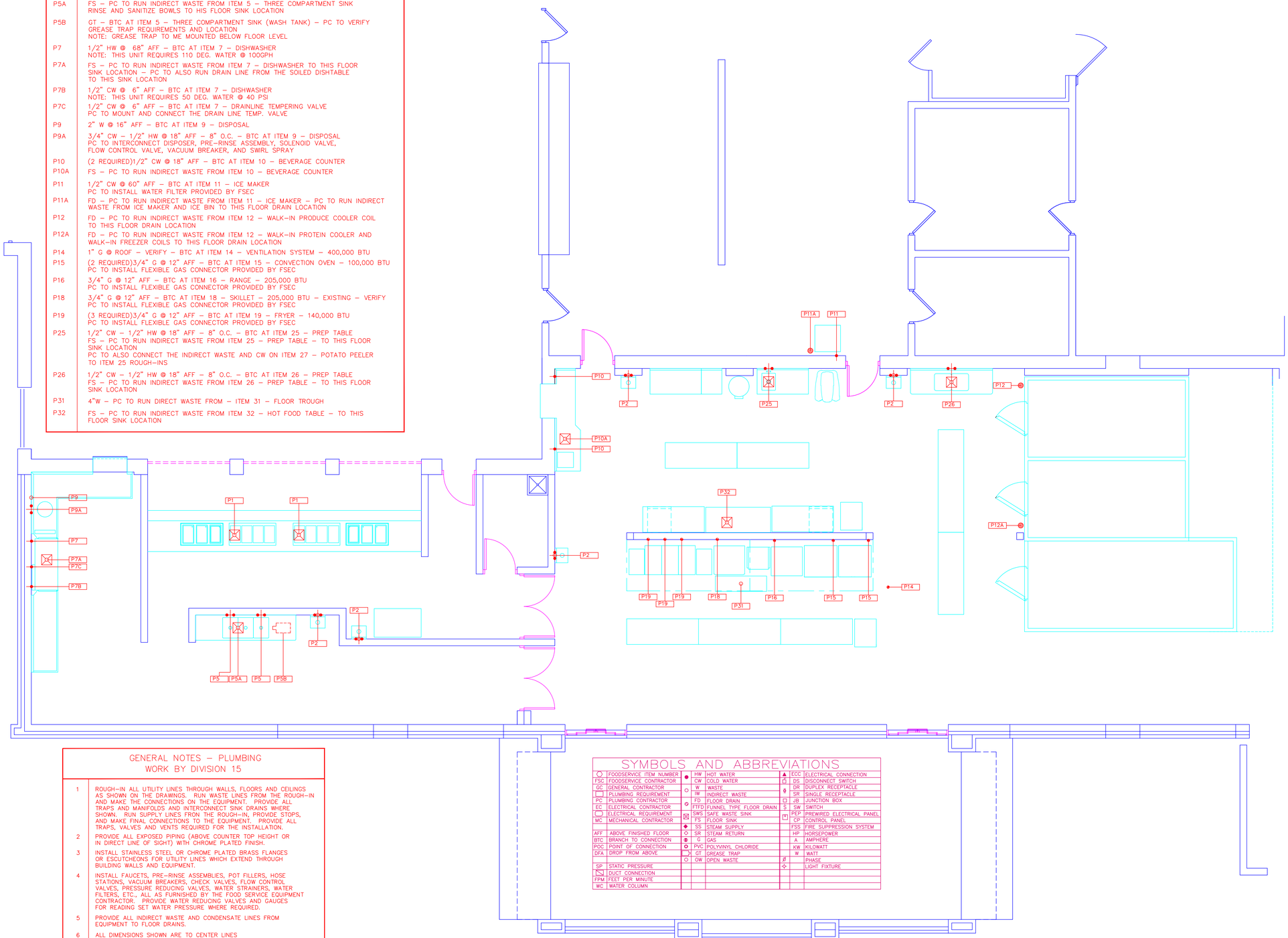
PROJECT TITLE HUNGER SOLUTION CENTER SAGINAW - MICHIGAN

SHEET TITLE FLOOR PLAN KITCHEN (FOODSERVICE AREA)

CPI
Culinary Products, Inc.
160 East Morley Drive
Saginaw, Michigan 48601
989-754-2457
989-754-5640 Fax

FOODSERVICE PLUMBING REQUIREMENTS

P1	FS – PC TO RUN INDIRECT WASTE FROM ITEM 1 – SERVING COUNTER – TO THIS FLOOR SINK LOCATION
P2	(5 REQUIRED)1/2" CW – 1/2" HW @ 18"AFF 4"O.C. – 1 1/2" W @ 24" AFF – BTC AT ITEM 2 – HAND SINK
P5	(2 REQIRED)1/2" CW – 1/2" HW @ 18"AFF 8"O.C. – BTC AT ITEM 5 – THREE COMPARTMENT SINK
P5A	FS – PC TO RUN INDIRECT WASTE FROM ITEM 5 – THREE COMPARTMENT SINK RINSE AND SANITIZE BOWLS TO HIS FLOOR SINK LOCATION
P5B	GT – BTC AT ITEM 5 – THREE COMPARTMENT SINK (WASH TANK) – PC TO VERIFY GREASE TRAP REQUIREMENTS AND LOCATION NOTE: GREASE TRAP TO ME MOUNTED BELOW FLOOR LEVEL
P7	1/2" HW @ 68" AFF – BTC AT ITEM 7 – DISHWASHER NOTE: THIS UNIT REQUIRES 110 DEG. WATER @ 100GPH
P7A	FS – PC TO RUN INDIRECT WASTE FROM ITEM 7 – DISHWASHER TO THIS FLOOR SINK LOCATION – PC TO ALSO RUN DRAIN LINE FROM THE SOILED DISHTABLE TO THIS SINK LOCATION
P7B	1/2" CW @ 6" AFF – BTC AT ITEM 7 – DISHWASHER NOTE: THIS UNIT REQUIRES 50 DEG. WATER @ 40 PSI
P7C	1/2" CW @ 6" AFF – BTC AT ITEM 7 – DRAINLINE TEMPERING VALVE PC TO MOUNT AND CONNECT THE DRAIN LINE TEMP. VALVE
P9	2" W @ 16" AFF – BTC AT ITEM 9 – DISPOSAL
P9A	3/4" CW – 1/2" HW @ 18" AFF – 8" O.C. – BTC AT ITEM 9 – DISPOSAL PC TO INTERCONNECT DISPOSER, PRE-RINSE ASSEMBLY, SOLENOID VALVE, FLOW CONTROL VALVE, VACUUM BREAKER, AND SWIRL SPRAY
P10	(2 REQUIRED)1/2" CW @ 18" AFF – BTC AT ITEM 10 – BEVERAGE COUNTER
P10A	FS – PC TO RUN INDIRECT WASTE FROM ITEM 10 – BEVERAGE COUNTER
P11	1/2" CW @ 60" AFF – BTC AT ITEM 11 – ICE MAKER PC TO INSTALL WATER FILTER PROVIDED BY FSEC
P11A	FD – PC TO RUN INDIRECT WASTE FROM ITEM 11 – ICE MAKER – PC TO RUN INDIRECT WASTE FROM ICE MAKER AND ICE BIN TO THIS FLOOR DRAIN LOCATION
P12	FD – PC TO RUN INDIRECT WASTE FROM ITEM 12 – WALK-IN PRODUCE COOLER COIL TO THIS FLOOR DRAIN LOCATION
P12A	FD – PC TO RUN INDIRECT WASTE FROM ITEM 12 – WALK-IN PROTEIN COOLER AND WALK-IN FREEZER COILS TO THIS FLOOR DRAIN LOCATION
P14	1" G @ ROOF – VERIFY – BTC AT ITEM 14 – VENTILATION SYSTEM – 400,000 BTU
P15	(2 REQUIRED)3/4" G @ 12" AFF – BTC AT ITEM 15 – CONVECTION OVEN – 100,000 BTU PC TO INSTALL FLEXIBLE GAS CONNECTOR PROVIDED BY FSEC
P16	3/4" G @ 12" AFF – BTC AT ITEM 16 – RANGE – 205,000 BTU PC TO INSTALL FLEXIBLE GAS CONNECTOR PROVIDED BY FSEC
P18	3/4" G @ 12" AFF – BTC AT ITEM 18 – SKILLET – 205,000 BTU – EXISTING – VERIFY PC TO INSTALL FLEXIBLE GAS CONNECTOR PROVIDED BY FSEC
P19	(3 REQUIRED)3/4" G @ 12" AFF – BTC AT ITEM 19 – FRYER – 140,000 BTU PC TO INSTALL FLEXIBLE GAS CONNECTOR PROVIDED BY FSEC
P25	1/2" CW – 1/2" HW @ 18" AFF – 8" O.C. – BTC AT ITEM 25 – PREP TABLE FS – PC TO RUN INDIRECT WASTE FROM ITEM 25 – PREP TABLE – TO THIS FLOOR SINK LOCATION PC TO ALSO CONNECT THE INDIRECT WASTE AND CW ON ITEM 27 – POTATO PEELER TO ITEM 25 ROUGH-INS
P26	1/2" CW – 1/2" HW @ 18" AFF – 8" O.C. – BTC AT ITEM 26 – PREP TABLE FS – PC TO RUN INDIRECT WASTE FROM ITEM 26 – PREP TABLE – TO THIS FLOOR SINK LOCATION
P31	4"W – PC TO RUN DIRECT WASTE FROM – ITEM 31 – FLOOR TROUGH
P32	FS – PC TO RUN INDIRECT WASTE FROM ITEM 32 – HOT FOOD TABLE – TO THIS FLOOR SINK LOCATION



GENERAL NOTES – PLUMBING
WORK BY DIVISION 15

1. ROUGH-IN ALL UTILITY LINES THROUGH WALLS, FLOORS AND CEILINGS AS SHOWN ON THE DRAWINGS. RUN WASTE LINES FROM THE ROUGH-IN AND MAKE THE CONNECTIONS ON THE EQUIPMENT. PROVIDE ALL TRAPS AND MANIFOLDS AND INTERCONNECT SINK DRAINS WHERE SHOWN. RUN SUPPLY LINES FROM THE ROUGH-IN, PROVIDE STOPS, AND MAKE FINAL CONNECTIONS TO THE EQUIPMENT. PROVIDE ALL TRAPS, VALVES AND VENTS REQUIRED FOR THE INSTALLATION.
2. PROVIDE ALL EXPOSED PIPING (ABOVE COUNTER TOP HEIGHT OR IN DIRECT LINE OF SIGHT) WITH CHROME PLATED FINISH.
3. INSTALL STAINLESS STEEL OR CHROME PLATED BRASS FLANGES OR ESCUTCHEONS FOR UTILITY LINES WHICH EXTEND THROUGH BUILDING WALLS AND EQUIPMENT.
4. INSTALL FAUCETS, PRE-RINSE ASSEMBLIES, POT FILLERS, HOSE STATIONS, VACUUM BREAKERS, CHECK VALVES, FLOW CONTROL VALVES, PRESSURE REDUCING VALVES, WATER STRAINERS, WATER FILTERS, ETC. ALL AS FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR. PROVIDE WATER REDUCING VALVES AND GAUGES FOR READING SET WATER PRESSURE WHERE REQUIRED.
5. PROVIDE ALL INDIRECT WASTE AND CONDENSATE LINES FROM EQUIPMENT TO FLOOR DRAINS.
6. ALL DIMENSIONS SHOWN ARE TO CENTER LINES
7. INSTALL GAS SHUT OFF VALVE UP-STREAM OF ANY COOKING EQUIPMENT AS REQUIRED FOR FIRE SUPPRESSION SYSTEM

SYMBOLS AND ABBREVIATIONS

○	FOODSERVICE ITEM NUMBER	●	HW	HOT WATER	▲	ECC	ELECTRICAL CONNECTION
FSC	FOODSERVICE CONTRACTOR		CW	COLD WATER		DS	DISCONNECT SWITCH
GC	GENERAL CONTRACTOR	○	W	WASTE		DR	DUPLEX RECEPTACLE
	PLUMBING REQUIREMENT		IW	INDIRECT WASTE		SR	SINGLE RECEPTACLE
PC	PLUMBING CONTRACTOR		FD	FLOOR DRAIN		JB	JUNCTION BOX
EC	ELECTRICAL CONTRACTOR		FTFD	FUNNEL TYPE FLOOR DRAIN	S	SW	SWITCH
	ELECTRICAL REQUIREMENT		SWS	SAFE WASTE SINK		PEP	PREWIRED ELECTRICAL PANEL
MC	MECHANICAL CONTRACTOR		FS	FLOOR SINK		CP	CONTROL PANEL
		◆	SS	STEAM SUPPLY		FSS	FIRE SUPPRESSION SYSTEM
AFF	ABOVE FINISHED FLOOR	◇	SR	STEAM RETURN		HP	HORSEPOWER
BTC	BRANCH TO CONNECTION		G	GAS		A	AMPHERE
POC	POINT OF CONNECTION		PVC	POLYVINYL CHLORIDE		KW	KILOWATT
DFA	DROP FROM ABOVE		GT	GREASE TRAP		W	WATT
		○	OW	OPEN WASTE	Ø		PHASE
SP	STATIC PRESSURE				◇		LIGHT FIXTURE
	DUCT CONNECTION						
FPM	FEET PER MINUTE						
WC	WATER COLUMN						

FOOD SERVICE EQUIPMENT PLUMBING REQUIREMENTS

SCALE 1/4" = 1'-0"

SHEET NUMBER FS1P

PROJECT 24-640

DATE 6-30-25

PROJECT TITLE HUNGER SOLUTION CENTER SAGINAW – MICHIGAN

SHEET TITLE FOOD EQUIPMENT PLUMBING REQUIREMENTS

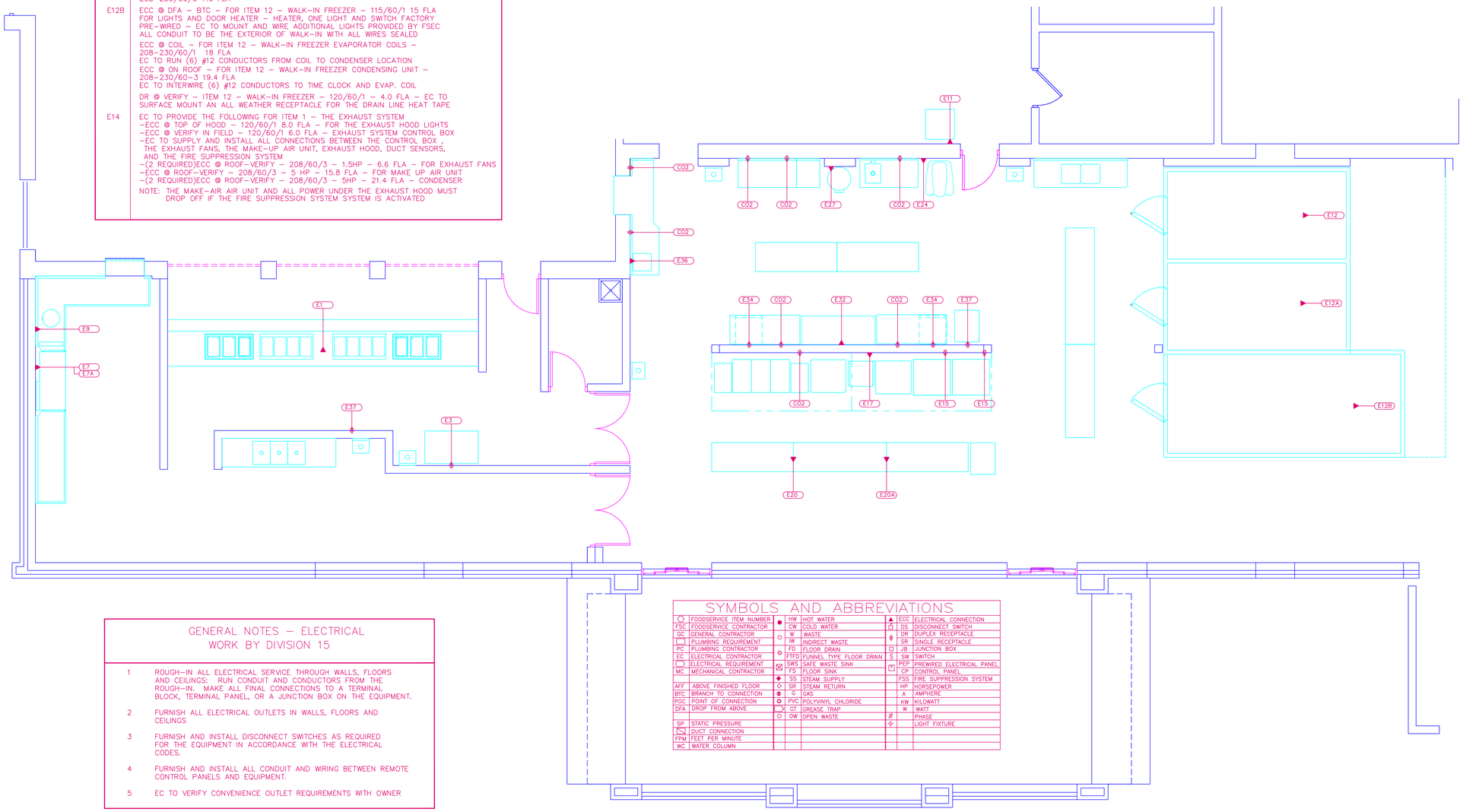
CPI
Culinary Products, Inc.
160 East Morley Drive
Saginaw, Michigan 48601
989-754-2457
989-754-5640 Fax

FOODSERVICE ELECTRICAL REQUIREMENTS

E1	ECC @ STUB-UP – SERVING COUNTER – EC TO COORDINATE WITH FSEC AND PROVIDE FOR AND CONNECT TO THE FOLLOWING – SR(2 REQUIRED) – HOT FOOD WELLS – 208-240/60/1 – 14.4 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #6-30P – SR(2 REQUIRED) – HOT/COLD WELLS – 120/60/1 – 15.6 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #5-20P – DR(2 REQUIRED) – CONVENIENCE OUTLET – 120/60/1 – 20 AMPS CIRCUIT
E3	DR @ 84" AFF – ITEM 3 – REACH-IN REFRIGERATOR – 120/60/1 – 8 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #5-15P
E7	ECC @ 70" AFF – ITEM 7 – DISHWASHER – 208/60/3 – 15KW – 78.0 FLA
E7A	ECC @ 70" AFF – ITEM 7 – DISHWASHER – 208/60/3 – 21KW – 59.0 FLA
E9	ECC @ 12" AFF – ITEM 9 – DISPOSER – 208/60/3 – 2HP – 6.5 FLA EC TO INTERWIRE DISPOSER, CONTROL PANEL, AND SOLENOID VALVE
E11	ECC @ 68" AFF – ITEM 11 – ICE MACHINE – 120/60/1 – 17.8 FLA
E12	ECC @ DFA – FOR ITEM 12 – WALK PRODUCE COOLER – 115/60/1 15 FLA FOR LIGHTS AND DOOR HEATER – HEATER, ONE LIGHT AND SWITCH FACTORY PRE-WIRED – EC TO MOUNT AND WIRE ADDITIONAL LIGHTS PROVIDED BY FSEC ALL CONDUIT TO BE THE EXTERIOR OF WALK-IN WITH ALL WIRES SEALED ECC @ COIL – FOR ITEM 12 – WALK-IN PRODUCE COOLER EVAPORATOR COIL – 120/60/1 5.0 FLA ECC @ ON ROOF – FOR ITEM 12 – WALK-IN PRODUCE COOLER CONDENSING UNIT – 208-230/60/3 7.0 FLA
E12A	ECC @ DFA – FOR ITEM 12 – WALK PROTIEN COOLER – 115/60/1 15 FLA FOR LIGHTS AND DOOR HEATER – HEATER, ONE LIGHT AND SWITCH FACTORY PRE-WIRED – EC TO MOUNT AND WIRE ADDITIONAL LIGHTS PROVIDED BY FSEC ALL CONDUIT TO BE THE EXTERIOR OF WALK-IN WITH ALL WIRES SEALED ECC @ COIL – FOR ITEM 12 – WALK-IN PROTIEN COOLER EVAPORATOR COIL – 120/60/1 5.0 FLA ECC @ ON ROOF – FOR ITEM 12 – WALK-IN PROTIEN COOLER CONDENSING UNIT – 208-230/60/3 7.0 FLA
E12B	ECC @ DFA – BTC – FOR ITEM 12 – WALK-IN FREEZER – 115/60/1 15 FLA FOR LIGHTS AND DOOR HEATER – HEATER, ONE LIGHT AND SWITCH FACTORY PRE-WIRED – EC TO MOUNT AND WIRE ADDITIONAL LIGHTS PROVIDED BY FSEC ALL CONDUIT TO BE THE EXTERIOR OF WALK-IN WITH ALL WIRES SEALED ECC @ COIL – FOR ITEM 12 – WALK-IN FREEZER EVAPORATOR COILS – 208-230/60/1 18 FLA EC TO RUN (6) #12 CONDUCTORS FROM COIL TO CONDENSER LOCATION ECC @ ON ROOF – FOR ITEM 12 – WALK-IN FREEZER CONDENSING UNIT – 208-230/60-3 19.4 FLA EC TO INTERWIRE (6) #12 CONDUCTORS TO TIME CLOCK AND EVAP. COIL DR @ VERIFY – ITEM 12 – WALK-IN FREEZER – 120/60/1 – 4.0 FLA – EC TO SURFACE MOUNT AN ALL WEATHER RECEPTACLE FOR THE DRAIN LINE HEAT TAPE
E14	EC TO PROVIDE THE FOLLOWING FOR ITEM 1 – THE EXHAUST SYSTEM –ECC @ TOP OF HOOD – 120/60/1 8.0 FLA – FOR THE EXHAUST HOOD LIGHTS –ECC @ VERIFY IN FIELD – 120/60/1 6.0 FLA – EXHAUST SYSTEM CONTROL BOX –EC TO SUPPLY AND INSTALL ALL CONNECTIONS BETWEEN THE CONTROL BOX , THE EXHAUST FANS, THE MAKE-UP AIR UNIT, EXHAUST HOOD, DUCT SENSORS, AND THE FIRE SUPPRESSION SYSTEM –(2 REQUIRED)ECC @ ROOF-VERIFY – 208/60/3 – 1.5HP – 6.6 FLA – FOR EXHAUST FANS –ECC @ ROOF-VERIFY – 208/60/3 – 5 HP – 15.8 FLA – FOR MAKE UP AIR UNIT –(2 REQUIRED)ECC @ ROOF-VERIFY – 208/60/3 – 5HP – 21.4 FLA – CONDENSER NOTE: THE MAKE-AIR AIR UNIT AND ALL POWER UNDER THE EXHAUST HOOD MUST DROP OFF IF THE FIRE SUPPRESSION SYSTEM SYSTEM IS ACTIVATED

FOODSERVICE ELECTRICAL REQUIREMENTS

E15	DR(2 REQUIRED) 1@18" & 1@36" AFF – ITEM 15 – CONVECTION OVEN – 120/60/1 6 FLA – UNIT PROVIDED WITH CORD AND PLUG NEMA #5-15P
E17	DR(2 REQUIRED) 1@18" & 1@36" AFF – ITEM 17 – STEAMER – 208/60/3 – 28 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #L15-30P
E20	ECC @ STUB-UP – ITEM 20 – WORK TABLE – 120/60/1 – 20 AMP CIRCUIT EC TO CONNECT TO CONVENIENCE OUTLET ON WORK TABLE
E20A	ECC @ STUB-UP – ITEM 20 – WORK TABLE – 120/60/1 – 20 AMP CIRCUIT EC TO CONNECT TO CONVENIENCE OUTLET ON WORK TABLE EC ALSO PROVIDE FOR DR @ 50" AFF – ITEM 37 – HOT CABINET – 120/60/1 – 1.7KW 13.8 FLA – UNIT PROVIDED WITH CORD AND PLUG NEMA #5-15P
E24	ECC @ 42" AFF – ITEM 24 – MIXER – 208/60/3 – 2.5HP – 6.8 FLA – EXISTING VERIFY
E27	ECC @ 34" AFF – ITEM 27 – POTATO PEELER – 120/60/1 – 1HP – 13.4 FLA
E32	SR @ 12" AFF – ITEM 32 – HOT FOOD COUNTER – 208/60/1 – 3KW – 16.7 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #6-30P – EXISTING VERIFY
E34	DR @ 12" AFF – ITEM 34 – UNDERCOUNTER REF. – 120/60/1 – 1/7 HP – 2.5 FLA UNIT PROVIDED WITH CORD AND PLUG NEMA #5-15P – EXISTING VERIFY
E36	ECC @ 50" AFF – ITEM 36 – COFFEE MAKER – 120/208/60/1 – 6.9 – 28.7 FLA EXISTING VERIFY
E37	(2 REQUIRED)DR @ 12" AFF – ITEM 37 – HOT FOOD CABINET – 120/60/1 – 1.7KW 13.8 FLA – UNIT PROVIDED WITH CORD AND PLUG NEMA #5-15P
CO2	DR @ 50" AFF – CONVENIENCE OUTLET– 120/60/1



GENERAL NOTES – ELECTRICAL WORK BY DIVISION 15

1. ROUGH-IN ALL ELECTRICAL SERVICE THROUGH WALLS, FLOORS AND CEILINGS: RUN CONDUIT AND CONDUCTORS FROM THE ROUGH-IN. MAKE ALL FINAL CONNECTIONS TO A TERMINAL BLOCK, TERMINAL PANEL, OR A JUNCTION BOX ON THE EQUIPMENT.
2. FURNISH ALL ELECTRICAL OUTLETS IN WALLS, FLOORS AND CEILINGS
3. FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED FOR THE EQUIPMENT IN ACCORDANCE WITH THE ELECTRICAL CODES.
4. FURNISH AND INSTALL ALL CONDUIT AND WIRING BETWEEN REMOTE CONTROL PANELS AND EQUIPMENT.
5. EC TO VERIFY CONVENIENCE OUTLET REQUIREMENTS WITH OWNER

SYMBOLS AND ABBREVIATIONS

FOODSERVICE ITEM NUMBER	HW	HOT WATER	ECC	ELECTRICAL CONNECTION
FSC	FOODSERVICE CONTRACTOR	CW	COLD WATER	DS	DISCONNECT SWITCH
GC	GENERAL CONTRACTOR	W	WASTE	DR	DUPLEX RECEPTACLE
PC	PLUMBING REQUIREMENT	IW	INDIRECT WASTE	SR	SINGLE RECEPTACLE
EC	PLUMBING CONTRACTOR	FD	FLOOR DRAIN	JB	JUNCTION BOX
ER	ELECTRICAL CONTRACTOR	FTFD	FUNNEL TYPE FLOOR DRAIN	SW	SWITCH
MC	ELECTRICAL REQUIREMENT	SWS	SAFE WASTE SINK	PEP	PREWIRED ELECTRICAL PANEL
	MECHANICAL CONTRACTOR	FS	FLOOR SINK	CP	CONTROL PANEL
AFF	ABOVE FINISHED FLOOR	SS	STEAM SUPPLY	FSS	FIRE SUPPRESSION SYSTEM
BTC	BRANCH TO CONNECTION	SR	STEAM RETURN	HP	HORSEPOWER
POC	POINT OF CONNECTION	G	GAS	A	AMPHERE
DFA	DROP FROM ABOVE	PVC	POLYVINYL CHLORIDE	KW	KILOWATT
		GT	GREASE TRAP	W	WATT
SP	STATIC PRESSURE	OW	OPEN WASTE		PHASE
	DUCT CONNECTION				LIGHT FIXTURE
FPM	FEET PER MINUTE				
WC	WATER COLUMN				

FOOD SERVICE EQUIPMENT ELECTRICAL REQUIREMENTS

SCALE 1/4" = 1'-0"

SHEET NUMBER FS1E

PROJECT 24-640

DATE 10-09-24

PROJECT TITLE HUNGER SOLUTION CENTER SAGINAW – MICHIGAN

SHEET TITLE FOOD EQUIPMENT ELECTRICAL REQUIREMENTS

Culinary Products, Inc.
160 East Morley Drive
Saginaw, Michigan 48601
989-754-2457
989-754-5640 Fax

FOODSERVICE ELECTRICAL REQUIREMENTS

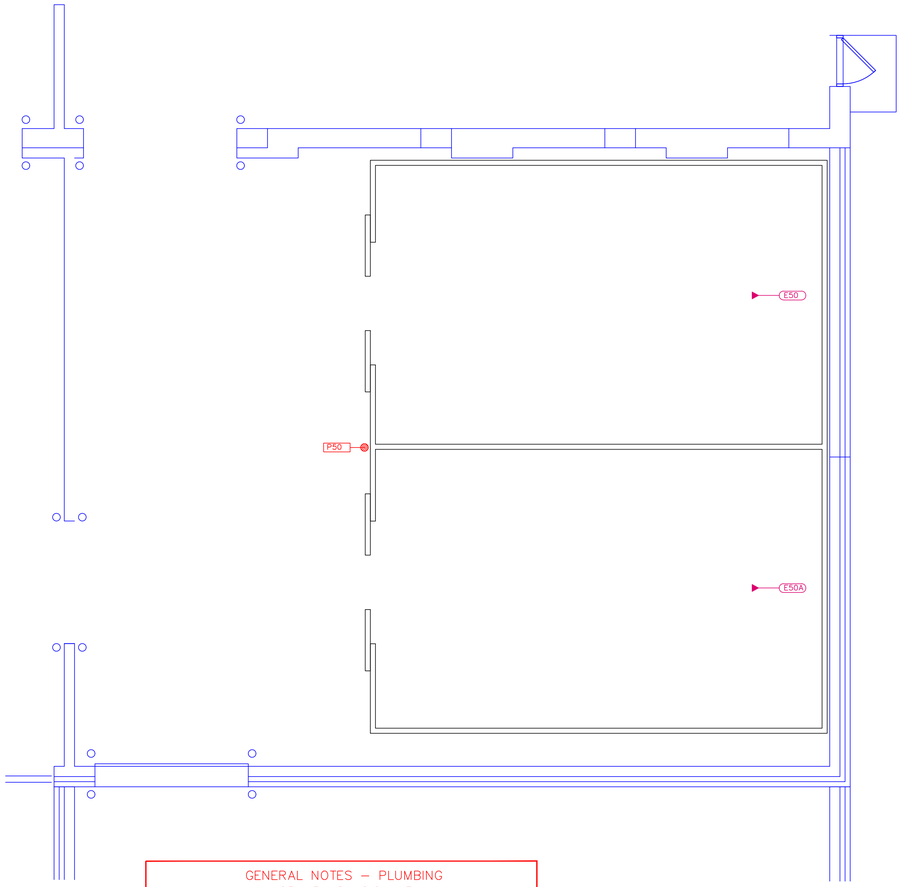
E50	ECC @ DFA – FOR ITEM 50 – WALK–IN COOLER BULK FOOD – 115/60/1 15 FLA FOR LIGHTS AND DOOR HEATER – HEATER, ONE LIGHT AND SWITCH FACTORY PRE–WIRED EC TO MOUNT AND WIRE 8(EACH) ADDITIONAL 48" LED LIGHT FIXTURES – 120/60/1 .5 FLA(EACH) FIXTURES PROVIDED BY FSEC ALL CONDUIT TO BE THE EXTERIOR OF WALK–IN WITH ALL WIRES SEALED ECC(2 REQUIRED) @ COIL – FOR ITEM 50 – WALK–IN COOLER EVAPORATOR COILS – 208–230/60/1 3.0 FLA ECC @ ON ROOF – FOR ITEM 50 – WALK–IN COOLER CONDENSING UNIT – 208–230/60/3 30 FLA
E50A	ECC @ DFA – BTC – FOR ITEM 50 – WALK–IN FREEZER BULK FOOD – 115/60/1 15 FLA FOR LIGHTS AND DOOR HEATER – HEATER, ONE LIGHT AND SWITCH FACTORY PRE–WIRED EC TO MOUNT AND WIRE 8(EACH) ADDITIONAL 48" LED LIGHT FIXTURES – 120/60/1 .5 FLA(EACH) FIXTURES PROVIDED BY FSEC ALL CONDUIT TO BE THE EXTERIOR OF WALK–IN WITH ALL WIRES SEALED ECC(2 REQUIRED) @ COIL – FOR ITEM 50 – WALK–IN FREEZER EVAPORATOR COILS – 208–230/60/1 3.2 FLA EC TO RUN (6) #12 CONDUCTORS FROM COIL TO CONDENSER LOCATION ECC @ ON ROOF – FOR ITEM 50 – WALK–IN FREEZER CONDENSING UNIT – 208–230/60/3 29.7 FLA EC TO INTERWIRE (6) #12 CONDUCTORS TO TIME CLOCK AND EVAP. COIL DR @ VERIFY – ITEM 50 – WALK–IN FREEZER – 120/60/1 – 4.0 FLA – EC TO SURFACE MOUNT AN ALL WEATHER RECEPTACLE FOR THE DRAIN LINE HEAT TAPE

FOODSERVICE PLUMBING REQUIREMENTS

P50	FD – PC TO RUN INDIRECT WASTE FROM ITEM 50 – WALK–IN COOLER/FREEZER COILS TO THIS FLOOR DRAIN LOCATION

GENERAL NOTES – ELECTRICAL WORK BY DIVISION 15

1. ROUGH–IN ALL ELECTRICAL SERVICE THROUGH WALLS, FLOORS AND CEILINGS. RUN CONDUIT AND CONDUCTORS FROM THE ROUGH–IN. MAKE ALL FINAL CONNECTIONS TO A TERMINAL BLOCK, TERMINAL PANEL, OR A JUNCTION BOX ON THE EQUIPMENT.
2. FURNISH ALL ELECTRICAL OUTLETS IN WALLS, FLOORS AND CEILINGS
3. FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED FOR THE EQUIPMENT IN ACCORDANCE WITH THE ELECTRICAL CODES.
4. FURNISH AND INSTALL ALL CONDUIT AND WIRING BETWEEN REMOTE CONTROL PANELS AND EQUIPMENT.
5. EC TO VERIFY CONVENIENCE OUTLET REQUIREMENTS WITH OWNER



GENERAL NOTES – PLUMBING WORK BY DIVISION 15

1. ROUGH–IN ALL UTILITY LINES THROUGH WALLS, FLOORS AND CEILINGS AS SHOWN ON THE DRAWINGS. RUN WASTE LINES FROM THE ROUGH–IN AND MAKE THE CONNECTIONS ON THE EQUIPMENT. PROVIDE ALL TRAPS AND MANIFOLDS AND INTERCONNECT SINK DRAINS WHERE SHOWN. RUN SUPPLY LINES FROM THE ROUGH–IN, PROVIDE STOPS, AND MAKE FINAL CONNECTIONS TO THE EQUIPMENT. PROVIDE ALL TRAPS, VALVES AND VENTS REQUIRED FOR THE INSTALLATION.
2. PROVIDE ALL EXPOSED PIPING (ABOVE COUNTER TOP HEIGHT OR IN DIRECT LINE OF SIGHT) WITH CHROME PLATED FINISH.
3. INSTALL STAINLESS STEEL OR CHROME PLATED BRASS FLANGES OR ESCUTCHEONS FOR UTILITY LINES WHICH EXTEND THROUGH BUILDING WALLS AND EQUIPMENT.
4. INSTALL FAUCETS, PRE–RINSE ASSEMBLIES, POT FILLERS, HOSE STATIONS, VACUUM BREAKERS, CHECK VALVES, FLOW CONTROL VALVES, PRESSURE REDUCING VALVES, WATER STRAINERS, WATER FILTERS, ETC., ALL AS FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR. PROVIDE WATER REDUCING VALVES AND GAUGES FOR READING SET WATER PRESSURE WHERE REQUIRED.
5. PROVIDE ALL INDIRECT WASTE AND CONDENSATE LINES FROM EQUIPMENT TO FLOOR DRAINS.
6. ALL DIMENSIONS SHOWN ARE TO CENTER LINES
7. INSTALL GAS SHUT OFF VALVE UP–STREAM OF ANY COOKING EQUIPMENT AS REQUIRED FOR FIRE SUPPRESSION SYSTEM

SYMBOLS AND ABBREVIATIONS

○	FOODSERVICE ITEM NUMBER	●	HW	HOT WATER	▲	ECC	ELECTRICAL CONNECTION
FSC	FOODSERVICE CONTRACTOR		CW	COLD WATER	□	DS	DISCONNECT SWITCH
GC	GENERAL CONTRACTOR	○	W	WASTE		DR	DUPLEX RECEPTACLE
	PLUMBING REQUIREMENT		IW	INDIRECT WASTE		SR	SINGLE RECEPTACLE
PC	PLUMBING CONTRACTOR	⊘	FD	FLOOR DRAIN	□	JB	JUNCTION BOX
EC	ELECTRICAL CONTRACTOR		FTFD	FUNNEL TYPE FLOOR DRAIN	S	SW	SWITCH
	ELECTRICAL REQUIREMENT	⊠	SWS	SAFE WASTE SINK	▭	PEP	PREWIRED ELECTRICAL PANEL
MC	MECHANICAL CONTRACTOR		FS	FLOOR SINK		CP	CONTROL PANEL
		◆	SS	STEAM SUPPLY		FSS	FIRE SUPPRESSION SYSTEM
AFF	ABOVE FINISHED FLOOR	◇	SR	STEAM RETURN		HP	HORSEPOWER
BTC	BRANCH TO CONNECTION	⊕	G	GAS		A	AMPHERE
POC	POINT OF CONNECTION	○	PVC	POLYVINYL CHLORIDE		KW	KILOWATT
DFA	DROP FROM ABOVE		GT	GREASE TRAP		W	WATT
		○	OW	OPEN WASTE	ø		PHASE
SP	STATIC PRESSURE				✧		LIGHT FIXTURE
	DUCT CONNECTION						
FPM	FEET PER MINUTE						
WC	WATER COLUMN						

FOOD SERVICE EQUIPMENT PLUMBING/ELECTRICAL REQUIREMENTS

SCALE 1/4" = 1'–0"

SHEET NUMBER FS2PE

PROJECT 24–640

DATE 6–30–24

PROJECT TITLE HUNGER SOLUTION CENTER
SAGINAW – MICHIGAN

SHEET TITLE FOOD EQUIPMENT PLUMBING–
ELECTRICAL REQUIREMENTS

Culinary Products, Inc.
160 East Morley Drive
Saginaw, Michigan 48601
989–754–2457
989–754–5640 Fax