NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 1 TO PROJECT NO. 47298

CONSTRUCTION, HVAC AND ELECTRICAL WORK
REPLACE ROOFS, SIGNAL SHOP
DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY 13212-4103

February 28, 2025

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

FILE ERROR

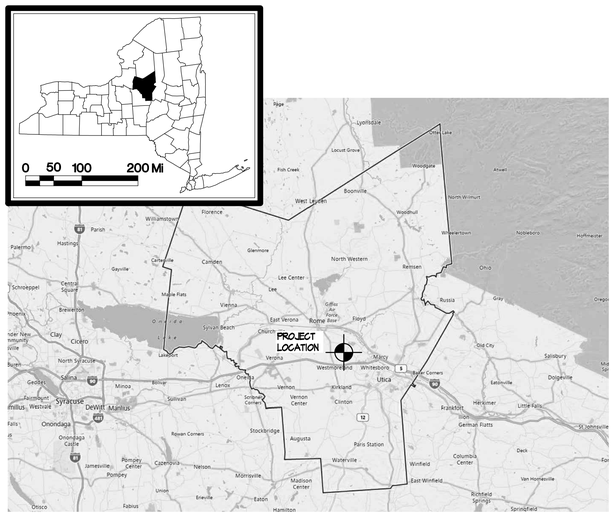
1. The Project Drawings file originally issued were not viewable in some document viewer programs. The accompanying Project Drawings are the same drawings originally issued.

END OF ADDENDUM

Brady Sherlock, P.E.
Director, Division of Design
Design & Construction

REPLACE ROOFS, SIGNAL SHOP
DOT REGION 3, ONONDAGA COUNTY

143 SAND RD
NORTH SYRACUSE, NY
O.G.S. PROJECT NOS. 47298-C, H, E



LOCATION PLAN SCALE: N.T.S.

NORTH

NEW YORK STATE OF OPPORTUNITY. | Office of General Services

DESIGN & CONSTRUCTION

DRAWING LIST

NO.	SHEET TITLE
G-001	COVER SHEET
G-101	CODE DATA, WIND UPLIFT DESIGN CRITERIA, AND GENERAL NOTES
H-101	GENERAL REMOVALS AND HAZMAT ABATEMENT PLAN AND NOTES
S-001	DESIGN DATA
S-002	GENERAL NOTES
S-101	ROOF PLAN
S-501	SECTIONS AND DETAILS
A-101	ROOF PLAN, GENERAL NOTES AND ABBREVIATIONS
A-102	FLOOR PLAN
A-501	DETAILS
A-502	DETAILS
A-503	DETAILS
P-101	FLOOR PLAN - PLUMBING
P-102	ROOF PLAN, DETAILS AND SYMBOLS LIST - PLUMBING
M-001	SCHEDULES AND SYMBOLS LIST - HVAC
MD-101	ROOF PLAN - HVAC REMOVALS
M-101	FLOOR PLAN - HVAC
M-102	ROOF PLAN - HVAC
M-501	HVAC DETAILS
E-001	SCHEDULES AND SYMBOLS LIST - ELECTRICAL
E-101	ROOF PLAN - ELECTRICAL

REGISTERED ARCHITECT
DOUGLAS K. ARENA
032669
STATE OF NEW YORK

REGISTRATION EXPIRES: 08/31/2025

20 DEC. 2024
BID DOCUMENTS

DRAWING NUMBER: **G-001**

SHEET 1 OF 21

BUILDING CODE SUMMARY DATA

BUILDING NAME AND LOCATION	DOT REGION 3, ONONDAGA COUNTY 143 SAND RD NORTH SYRACUSE, NY ONONDAGA COUNTY
CODE REFERENCE	2020 NYS UNIFORM FIRE PREVENTION AND BUILDING CODE (INCORPORATING THE 2018 INTERNATIONAL CODES)

ITEM (SECTION)	EXISTING	REQ.	PROVIDED	REMARKS
ALTERATION CLASSIFICATION TYPE (EBCNYS CHAPTER 5)			ALTERATION LEVELS 1 & 2	ALTERATION LEVEL 2 WORK IS LIMITED TO ROOF AREA B MECHANICAL EQUIPMENT AND ASSOCIATED STRUCTURAL FRAMING
USE & OCCUPANCY GROUP (BCNYS CHAPTER 3)	S-2 STORAGE		N/C	-
CONSTRUCTION TYPE (BCNYS CHAPTER 6)	II B	N/C	N/C	
BUILDING HEIGHT (BCNYS 504.3)	-	N/C	N/C	
BUILDING AREA (BCNYS 506.2)	-	N/C	N/C	
BUILDING NO. STORIES (BCNYS TBL 504.4)	-	N/C	N/C	
MIXED USE AND OCCUPANCIES	N/A	N/A	N/A	
SEPARATION OF OCCUPANCIES (BCNYS 508.4)	N/C	N/C	N/C	
INCIDENTAL USES (BCNYS 509)	N/C	N/C	N/C	
ACCESSORY USE AREAS (BCNYS 508.2)	N/C	N/C	N/C	
SPECIAL USE & OCCUPANCY (BCNYS CHAPTER 4)	N/C	N/C	N/C	
MEANS OF EGRESS (BCNYS CHAPTER 10)	N/C	N/C	N/C	
ACCESSIBILITY (BCNYS CHAPTER 11)	N/C	N/C	N/C	

N/A - NOT APPLICABLE **N/C - NO CHANGE** **N/R - NOT REQUIRED** **N/P - NOT PROVIDED**

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONALS KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE

ECCCNYS COMPLIANCE DATA

COUNTY CLIMATE ZONE COMMERCIAL / RESIDENTIAL	ONONDAGA COUNTY ZONE 5A COMMERCIAL
COMPLIANCE METHOD (ECCC SECTION C401)	(ECCNYS CHAPTER 4)
ENVELOPE SCOPE OF WORK	REPLACEMENT OF ROOF SYSTEMS AND THE INSTALLATION OF POWERED VENTILATION EQUIPMENT IN THE HIGH BAY STORAGE AREA

ITEM (SECTION)	EXISTING	REQ.	PROVIDED	REMARKS
ROOF INSULATION				
INSULATION ABOVE ROOF DECK	R-15	R-30	R-30	SEE DRAWING A-101
ATTIC INSULATION	N/A	N/A	N/A	
WALLS ABOVE GRADE	N/C	N/C	N/C	
WALLS BELOW GRADE	N/C	N/C	N/C	
SLAB ON GRADE	N/C	N/C	N/C	
FENESTRATION				
VERTICAL FENESTRATION (MAX30%)	N/C	N/C	N/C	
U-FACTOR (FIXED)	N/C	N/C	N/C	
U-FACTOR (OPERABLE)	N/C	N/C	N/C	
SHGC	N/C	N/C	N/C	
U-VALUE (SKYLIGHTS)	N/C	N/C	N/C	
AIR LEAKAGE	N/C	N/C	N/C	
VAPOR RETARDER	N/C	N/C	N/C	
AIR BARRIER	N/C	N/C	N/C	

N/A - NOT APPLICABLE **N/C - NO CHANGE** **N/R - NOT REQUIRED** **N/P - NOT PROVIDED**

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONALS KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

GENERAL DESIGN NOTES:

1. THIS PROJECT IS DESIGNED IN ACCORDANCE WITH 2020 BUILDING CODE OF NEW YORK STATE (REFERENCING THE 2018 INTERNATIONAL CODES).
2. EXPOSED MATERIALS THAT WERE ANTICIPATED TO BE WITHIN THE SCOPE OF THIS PROJECT AT THE TIME OF DESIGN HAVE BEEN TESTED FOR ASBESTOS, PCB'S AND LEAD PAINT CONTENT. SEE THE HAZARDOUS MATERIAL SURVEY REPORT APPENDED TO THE PROJECT MANUAL FOR A LIST OF TESTED MATERIALS, AND THEIR RESULTS. IN SUMMARY, PCB AND LEAD BASED MATERIALS ARE NOT ANTICIPATED TO BE DISTURBED.
3. THE SCOPE OF WORK GENERALLY INCLUDES THE FOLLOWING:
   - 3.1. COMPLETE REMOVAL AND REPLACEMENT OF THE EXISTING ROOF ASSEMBLY DOWN TO THE GYPSUM DECK AND ASSOCIATED ROOF FLASHINGS.
   - 3.2. THE CONSTRUCTION OF A ROOF OVERBUILD STRUCTURE (ROOF AREA A).
   - 3.3. INSTALLATION OF INSULATED ROOF ASSEMBLY.
   - 3.4. THE EXTENSION OF EXISTING PIPING, FLUES AND DUCTWORK.
   - 3.5. THE INSTALLATION OF POWERED VENTILATION EQUIPMENT IN THE HIGH BAY STORAGE AREA
   - 3.6. INCIDENTAL REPLACEMENTS OF ROOF DRAINS AND ROOFTOP ELECTRICAL COMPONENTS,
   - 3.7. RELATED BUILDING/ OCCUPANT PROTECTION AND SITE RESTORATION,
4. ROOF DIAPHRAGM EVALUATION (IN ACCORDANCE WITH THE 2020 EBC CHPT 707.3.2)
   - 4.1. PROVIDE THE DIRECTORS REPRESENTATIVES AND THE DESIGN CONSULTANT/ STRUCTURAL ENGINEER SAFE ACCESS TO EVALUATE THE CONDITION OF THE STRUCTURAL ROOF DECK, DIAPHRAGM, FRAMING AND CONNECTIONS AS REQUIRED BY THE EXISTING BUILDING CODE OF NYS.
   - 4.2. THE DIRECTOR'S REPRESENTATIVE SHALL BE GIVEN A MINIMUM OF TWO (2) WEEKS NOTICE OF REMOVALS.
   - 4.3. DURING REMOVALS, EXPOSE REPRESENTATIVE LOCATIONS OR CONDITIONS FOR REVIEW.
   - 4.4. BE RESPONSIBLE FOR PROVIDING WEATHERTIGHTNESS AT EACH REMOVAL LOCATION.

STRUCTURAL DESIGN DATA:

1.	RISK CATEGORY:	(SEE S-001)
2.	ROOF LIVE LOAD:	(SEE S-001)
3.	ROOF SNOW LOAD:	(SEE S-001)
4.	WIND LOAD:	(SEE S-001)
5.	EARTHQUAKE DESIGN DATA (EXISTING BUILDINGS):	(SEE S-001)

DESIGN WIND UPLIFT NOTES

1. DESIGN WIND UPLIFT PRESSURES ARE DERIVED IN ACCORDANCE WITH ASCE 7-16 AND/OR THE 2020 NYS UNIFORM FIRE PREVENTION AND BUILDING CODE.
2. WIND PRESSURES ARE CONSERVATIVELY BASED ON AN EFFECTIVE COMPONENT & CLADDING AREA OF 10 SQUARE FEET OR LESS. PRESSURES ARE APPLIED NORMAL TO THE SURFACE OF THE COMPONENT OR CLADDING.
3. THE ROOFING MANUFACTURER SHALL PROVIDE A TOTAL SYSTEM CAPABLE OF RESISTING THE WIND UPLIFT PRESSURES AT THE DEPICTED LOCATIONS ON SHEET S-100, APPLYING A MINIMUM 2.0x FACTOR OF SAFETY.
4. THE MANUFACTURER OF METAL EDGE COMPONENTS FOR THE ROOF PERIMETER SHALL PROVIDE SYSTEMS CAPABLE OF RESISTING THE WIND UPLIFT PRESSURES AT THE DEPICTED LOCATIONS, APPLYING A MINIMUM 1.67x FACTOR OF SAFETY.
5. MISCELLANEOUS FASTENERS ANCILLARY TO THE PROPRIETARY SYSTEMS OF THE ROOFING AND METAL EDGE COMPONENT MANUFACTURERS SHALL BE CAPABLE OF RESISTING THE WIND UPLIFT PRESSURES AT THE DEPICTED LOCATIONS, APPLYING A MINIMUM 4.0x FACTOR OF SAFETY.

CONSTRUCTION SAFEGUARDS NOTES:

1. PEDESTRIANS AND EGRESS PATHWAYS SHALL REMAIN UNOBSTRUCTED AND PROTECTED DURING THE WORK. COMPLY WITH THE FOLLOWING MINIMUM REQUIREMENTS:
   - 1.1. OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
   - 1.2. 2020 BUILDING CODE OF NYS, CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION
   - 1.3. 2020 EXISTING BUILDING CODE OF NYS, CHAPTER 15 CONSTRUCTION SAFEGUARDS.
   - 1.4. 2020 FIRE CODE OF NYS, CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.
3. THE BUILDING WILL BE OCCUPIED DURING THE CONSTRUCTION PERIOD. PROVIDE OVERHEAD PROTECTION AT ALL INGRESS/ EGRESS DOORS (ENTRANCES, OVERHEAD DOORS AND EXIT DOORS) IN THE VICINITY OF THE WORK AREA AND MAINTAIN FOR THE DURATION OF THE WORK AS FOLLOWS:
   - A. PROVIDE APPROPRIATE OVERHEAD SCAFFOLDING/BRIDGING FOR OCCUPANTS ENTERING AND EXITING THE BUILDING TO PROTECT FROM FALLING DEBRIS DURING THE WORK. SUCH SCAFFOLDING MAY ALSO DOUBLE FOR CONTRACTOR ACCESS TO THE WORK. STORAGE OF MATERIALS ON SCAFFOLDING SHALL ONLY BE PERMITTED IF THE SYSTEM IS DESIGNED AND ENGINEERED FOR MATERIAL STORAGE.
   - B. CONSTRUCT SYSTEM IN ACCORDANCE WITH NYS UNIFORM FIRE PREVENTION AND BUILDING CODE AND OSHA REGULATIONS.
   - C. WHERE SUBJECT TO IMPACT FROM VEHICLES OR EQUIPMENT, PROVIDE BARRIERS TO PROTECT THE SYSTEMS FROM IMPACT.
   - D. POST TEMPORARY SIGNAGE ON THE PROTECTION COMPONENTS INDICATING ROOF CONSTRUCTION WORK.
   - E. PROVIDE A MINIMUM 1 FOOTCANDLE (Fc) TEMPORARY CONSTRUCTION LIGHTING AT DOOR LOCATIONS BELOW OVERHEAD PROTECTION SCAFFOLDING.
   - F. SUCH SYSTEMS SHALL BE PREPARED, DESIGNED AND STAMPED BY A NYS LICENSED PROFESSIONAL ENGINEER AND SUBMITTED FOR REVIEW AND APPROVAL. COORDINATE ALL WORK WITH THE DIRECTORS REPRESENTATIVE. INCLUDE THE OVERHEAD PROTECTION SYSTEM AS PART OF THE SUBMITTED SAFETY PLAN.
   - G. REPAIR/ RESTORE SYSTEM ANCHORAGE OR ATTACHMENT POINTS ON THE BUILDING.
2. PROVIDE TEMPORARY CONSTRUCTION BARRIERS AT OTHER AREAS AROUND THE WORK AREA TO PROTECT PEDESTRIANS IN ACCORDANCE WITH THE FOLLOWING:

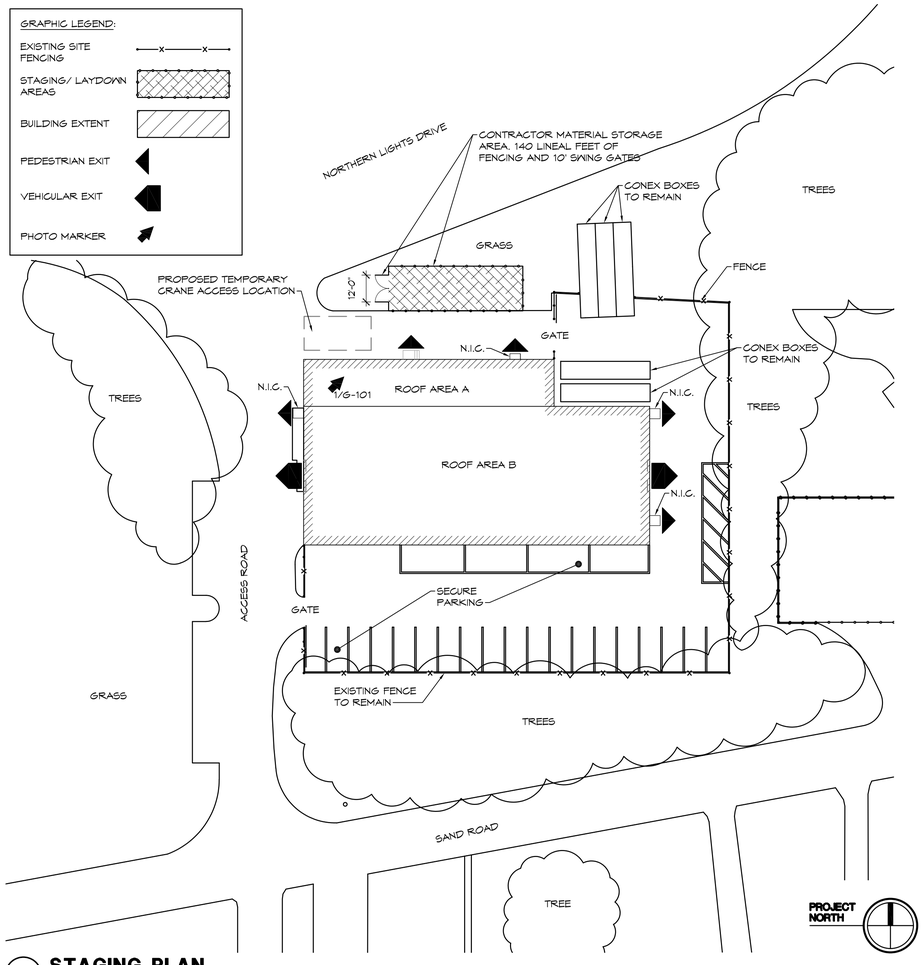
PROTECTION OF PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE OF CONSTRUCTION TO LOT LINE OR WALKWAY	TYPE OF PROTECTION REQUIRED
MORE THAN 8 FEET	LESS THAN 5 FEET	BARRIER AND OVERHEAD PROTECTION
	5 FEET OR MORE, BUT NOT MORE THAN ONE-FOURTH THE HEIGHT OF CONSTRUCTION	BARRIER AND OVERHEAD PROTECTION
	5 FEET OR MORE, BUT BETWEEN ONE-FOURTH AND ONE-HALF THE HEIGHT OF CONSTRUCTION	BARRIER
	5 FEET OR MORE, BUT EXCEEDING ONE-HALF THE HEIGHT OF CONSTRUCTION	NONE (FENCE)
PROVIDE OVERHEAD PROTECTION AT ENTRANCE/ EXIT COMPLYING WITH BCNYS CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION AND EBCNYS CHAPTER 15 CONSTRUCTION SAFEGUARDS.		

SITE GENERAL NOTES:

1. CONTRACTOR PARKING:
   - 1.1. PARKING IS AVAILABLE ON SITE.
   - 1.2. ON-SITE CONTRACTOR PARKING IS LIMITED.
2. MATERIAL STAGING & LAYDOWN AREAS AND CRANE ACCESS LOCATIONS ARE INDICATED ON THE DRAWINGS. COORDINATE FINAL CRANE STAGING CONTRACTOR STAGING AREA, ACCESS, PARKING, DELIVERY & STORAGE WITH DIRECTORS REPRESENTATIVE PRIOR TO MOBILIZATION.
   - 2.1. PROVIDE A CRANE PICK PLAN SUBMITTAL FOR REVIEW FOR ALL CRANE OPERATIONS. INCLUDE CRANE LOADING INFORMATION, OPERATOR CERTIFICATIONS, LAYDOWN AND PICK SITE PLAN FOR ARCHITECT AND DIRECTORS REPRESENTATIVE PRIOR TO WORK.
   - 2.2. PROVIDE A FLAGMAN TO DIRECT TRAFFIC WHEN ACCEPTING MATERIAL DELIVERIES OR EQUIPMENT MOVEMENT TO PROVIDE SAFE PASSAGE TO CONSTRUCTION AREAS. TEMPORARY ROAD CLOSURES MUST BE COORDINATED IN ADVANCE. MAINTAIN ROAD ACCESS WIDTH IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS BUT NOT LESS THAN 14'-0" WIDE.
3. BARRICADE, IN THE FORM OF A 8'-0" HIGH CHAIN LINK FENCE, THE PERIMETER OF ALL STAGING AREAS TO PREVENT PUBLIC ACCESS. THE BARRICADE SHALL HAVE A LOCKABLE 12'-0" WIDE DOUBLE GATE.
   - 3.1. PROVIDE TEMPORARY WAYFINDING AND CONSTRUCTION CAUTION SIGNAGE TO DIRECT PEDESTRIAN TRAFFIC AROUND BUILDING TO AVAILABLE ENTRANCES; SIGNAGE SIZE: 12"X 24", COROPLAST BOARD OR OTHER APPROVED MATERIAL, MOUNTED TO TEMPORARY CONSTRUCTION FENCE WITH HEAVY DUTY NYLON CABLE TIES THROUGH (4) EYELETS AT CORNERS.
   - 3.2. PROVIDE INTERIOR SIGNAGE AND THROUGHOUT THE BUILDING DIRECTING PEDESTRIAN TRAFFIC AS NEEDED BASED ON TEMPORARY STAGING TO ALTERNATE EXIT LOCATIONS.
   - 3.3. PROVIDE RUBBER PARKING WHEEL BLOCKS AT ALL ADJACENT PARKING SPACES ABUTTING THE FENCING TO PROTECT FROM IMPACT.
   - 3.4. FENCE POSTS LOCATED IN GRASS AREAS MAY BE DRILLED. POSTS AND BASE OF FENCE ON IMPERVIOUS SURFACES TO BE BALLASTED WITH OUTRIGGERS ADEQUATELY DESIGNED TO WITHSTAND WIND LOADS FROM OVERTURNING THE FENCE. CALL UFPO DIG SAFELY TO SURVEY AND MARK AREA FOR UTILITIES.
4. SITE PLAN INFORMATION IS BASED ON RECORD INFORMATION PROVIDED. NOT ALL EXISTING UTILITIES, TREES, LANDSCAPING, SIDEWALKS, PAVEMENTS, EQUIPMENT, FIXTURES AND TOPOGRAPHIC INFORMATION MAY BE SHOWN. FIELD VERIFY AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS. REPAIR AND RESTORE ANY DAMAGE TO EXISTING CONSTRUCTION AND SITE WORK RESULTING FROM THE WORK OF THIS PROJECT INCLUDING BUT NOT LIMITED TO: GRASSED OR LANDSCAPED AREAS, CURBS, WALKWAYS, CATCH BASINS, PAVEMENT, ETC. CAUSED BY THE WORK OF THIS PROJECT. REPAIRS ARE TO MATCH ORIGINAL/ADJACENT SURFACES UNLESS NOTED OTHERWISE. TAKE PHOTOGRAPHS OF SITE PRIOR TO START OF WORK AND SUBMIT TO DIRECTORS REPRESENTATIVE.
5. EXTERIOR EGRESS PATHS, WALKWAYS AND ENTRANCES SHALL REMAIN UNOBSTRUCTED AND PROTECTED. REFER TO CONSTRUCTION SAFEGUARD NOTES ON G-101. PROVIDE ALTERNATE CIRCULATION AS NEEDED TO ACCESS THE WORK.
6. PROVIDE A PROJECT SIGN, 24" X 36" CONTAINING PROJECT INFORMATION / RENDERING IN ACCORDANCE WITH THE PROJECT DIVISION 01 SPECIFICATIONS.

PHOTO 1/G-101



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

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT
bell & spina ARCHITECTS

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

- PRELIMINARY - NOT FOR CONSTRUCTION

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C, H, E
DESIGNED BY:	CHECKEDBY
DRAWN BY:	DRAWNBY
FIELD CHECK:	---
APPROVED:	---

SHEET TITLE:
CODE DATA, WIND UPLIFT DESIGN CRITERIA, AND GENERAL NOTES

DRAWING NUMBER:
G-101

SHEET 2 OF 21

HAZARDOUS MATERIAL ABATEMENT NOTES:
GENERAL

1. THE DRAWINGS ARE A GRAPHIC REPRESENTATION OF AREAS THAT HAZARDOUS MATERIALS ARE TO BE ABATED. THE LOCATIONS AND APPROXIMATE QUANTITIES ARE BASED ON VISUAL OBSERVATIONS, SAMPLING AND TESTING. TESTING REPORT(S) CAN BE FOUND IN THE PROJECT MANUAL.
2. ABATEMENT OF AREAS/MATERIALS SHOWN ARE IDENTIFIED IN THE LEGEND.
3. LOCATIONS AND QUANTITIES INDICATED ON THE CONTRACT DOCUMENTS TAKE PRECEDENCE OVER THE QUANTITIES INDICATED IN THE REPORTS FOUND IN THE PROJECT MANUAL.
4. IF ADDITIONAL SUSPECT MATERIALS ARE DISCOVERED AND/OR DISTURBED, NOTIFY THE ARCHITECT / SITE REPRESENTATIVE IMMEDIATELY. THE ON-SITE PROJECT MONITORING FIRM WILL BE RESPONSIBLE FOR SAMPLING.
5. RESTORE/REPAIR AND/OR REPLACE ANY DAMAGE TO ANY AREA OR BUILDING FINISHES AS A RESULT OF TEMPORARY PROTECTION REQUIRED FOR ABATEMENT.
6. THE DIRECTOR'S REPRESENTATIVE SHALL PROCURE A NYSDOL CERTIFIED PROJECT MONITOR WHO WILL HAVE THE AUTHORITY TO HALT THE WORK IF SUCH WORK IS NOT BEING CONDUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS/VARIANCES OR LOCAL, STATE, FEDERAL, RULES, REGULATIONS OR GUIDELINES.
7. COORDINATE THE LOCATION OF ANY REMOTE PERSONNEL AND/OR DECONTAMINATION UNIT, SITE STORAGE OF MATERIAL, EQUIPMENT, WASTE TRAILER/DUMPSTER WITH THE DIRECTOR'S REPRESENTATIVE.
8. ALL ON SITE HAZARDOUS MATERIALS ARE TO BE STORED IN A LOCKABLE CONTAINER(S). ALL REGULATED HAZMAT MATERIAL IS TO HAVE A MANIFEST SIGNED BY THE DIRECTOR'S REPRESENTATIVE PRIOR TO LEAVING THE SITE. A COPY OF THE PROGESSED MANIFEST MUST BE RETURNED TO THE DIRECTOR'S REPRESENTATIVE AND PROJECT MONITOR WITHIN THIRTY DAYS.
9. WORK SHALL BE CONDUCTED IN CONFORMANCE WITH THE FOLLOWING CODES AND REGULATIONS:

1.A. PART 56 OF TITLE 12 OF THE OFFICIAL COMPILATION OF CODES, RULE AND REGULATIONS OF THE STATE OF NEW YORK (CITED AS 12 NYCRR PART 56)

1.B. CODE OF FEDERAL REGULATIONS 29 CFR 1926.1101 CONSTRUCTION STANDARD FOR ASBESTOS - OSHA

1.C. CODE OF FEDERAL REGULATIONS 29 CFR 1926.58 & 1910.1200 HAZARD COMMUNICATION STANDARD - OSHA

1.D. CODE OF FEDERAL REGULATIONS 40 CFR 763 SUBPART F - EPA AHERA

1.E. CODE OF FEDERAL REGULATIONS 49 CFR SUBPART M NATIONAL EMISSION STANDARD FOR ASBESTOS - NESHAPS

HAZARDOUS MATERIAL ABATEMENT NOTES: ROOFING

1. REMOVE BROWN/BLACK ROOF FLASHING ON CONCRETE MASONRY UNITS. MEANS OF REMOVAL SHALL NOT DAMAGE EXISTING MATERIALS TO REMAIN.

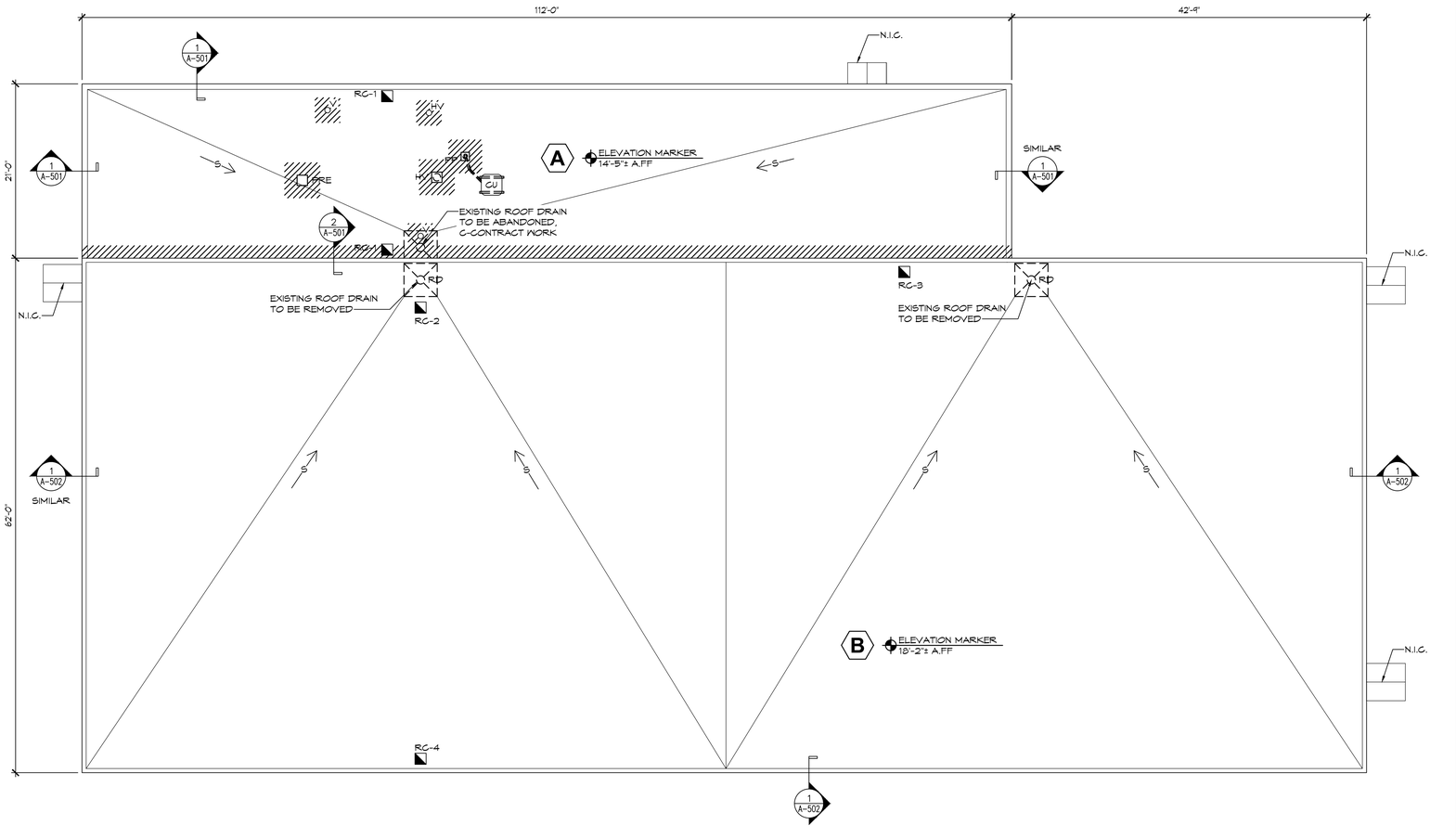
ABBREVIATION LEGEND:

ACM = ASBESTOS CONTAINING MATERIAL

SF = SQUARE FEET

GRAPHIC LEGEND:

ACM = 336 SQUARE FEET OF BROWN/BLACK ROOF FLASHING ON CONCRETE MASONRY UNITS



1 **REMOVALS ROOF PLAN**
SCALE: 1/8" = 1'-0"

GENERAL REMOVAL ROOF NOTES:

1. REMOVE EXISTING ROOF SYSTEM, IN ITS ENTIRETY, DOWN TO THE DECK, INCLUDING ALL METAL FLASHINGS, ROOF GRAVEL STOPS & WALL FLASHINGS UNLESS NOTED OTHERWISE. DECK TYPE AS NOTED ON PLANS. (SEE ROOF TEST CUTS FOR EXISTING ROOF SYSTEM INFORMATION.)
2. DIMENSIONS GIVEN ARE FOR REFERENCE ONLY. FIELD VERIFYING THE EXISTING BUILDING EXTENT AND MEASUREMENTS IS SOLELY THE CONTRACTOR'S RESPONSIBILITY.
3. FIELD VERIFY ALL EXISTING CONDITIONS AND CONFIRM THAT DETAILS AS SHOWN WILL INTERFACE WITH THOSE CONDITIONS.
4. WATER DAMAGE NOTE:
   KEEP THE BUILDING DRY DURING ROOFING OPERATIONS. ANY WATER OR DEBRIS ENTERING THE BUILDING CAUSED BY REROOFING WORK SHALL BE CLEANED UP BY THE CONTRACTOR. ANY DAMAGE TO THE BUILDING OR ITS CONTENTS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE STATE. IF WORK AFFECTS THE INTERIOR OF THE BUILDING, PRECAUTIONS SHALL BE TAKEN TO PROTECT THE BUILDING AND IT'S CONTENTS. FOR EXAMPLE: PROTECTION OF A GYM FLOOR.
5. MECHANICAL
   A. REMOVE AND REINSTALL EXISTING MECHANICAL EQUIPMENT AS REQUIRED FOR INSTALLATION OF NEW ROOF SYSTEM & TO ACHIEVE SPECIFIED CLEARANCES, ie; RAISE AND / OR FLASH PER DETAILS, IF REQUIRED.
   B. DISCONNECT ANY POWER OR PNEUMATIC CONNECTIONS, RECONNECT THE SAME USING ADDITIONAL MATERIAL AS NECESSARY TO REINSTALL. PRIOR TO ROOF REPLACEMENT WORK, THE DIRECTOR'S REPRESENTATIVE SHALL INSPECT ALL UNITS w/ CONTRACTOR AND IDENTIFY ANY NON-OPERATING UNITS, OWNER SHALL SUPPLY REPLACEMENTS.
   C. COORDINATE ALL TEMPORARY ELECTRIC, GAS OR MECHANICAL UNIT etc. SHUTDOWNS WITH DIRECTOR'S REPRESENTATIVE.
   D. PAINT NON-ALUMINUM/COPPER UNITS AND STEEL SUPPORT STRUCTURES WITH PRIME AND 2 FINISH COATS OF ENAMEL PAINT. IDENTIFY UNITS (STENCIL) PER DIRECTOR'S IDENTIFICATION SCHEDULE.
   E. REPLACE ANY EXTERIOR GAS, REFRIGERANT CONDUIT, CONTROL WIRING, ETC. AS REQUIRED TO ELIMINATE PITCH POCKETS. SERVICES TO BE INSTALLED IN PRE-FABRICATED PIPE/CONDUIT CURBS AS DETAILED / SPECIFIED.
6. ROOF DRAINS
   A. FLOW TEST PRIOR TO ANY WORK ON ROOF AREA. ALL ROOF DRAINS TO BE REMOVED/REPLACED BY C TRADE UNLESS NOTED OTHERWISE.
   B. AT COMPLETION OF ROOFING OPERATIONS CLEAN ALL ROOF DRAINS FROM ROOF TO LEADER.
   C. TEST ROOF DRAINS FOR LEAKS AND FLOW UPON COMPLETION OF CONSTRUCTION. LEAK TEST: PLUG EACH ROOF DRAIN BELOW CONNECTION TO THE ROOF DRAIN LEADER. OBSERVE THE FLOW OF EACH LINE. PROVIDE A WRITTEN REPORT OF THE RESULTS TO THE DIRECTOR'S REPRESENTATIVE.

TYPICAL ABBREVIATIONS:

A.F.F	ABOVE FINISHED FLOOR
CJ	CONTROL JOINT
EF	EXHAUST FAN
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EJ	EXPANSION JOINT
GV	GRAVITY VENT
HP	HIGH POINT
HV	HOT VENT
LP	LOW POINT
MPH	MILES PER HOUR
N.I.C.	NOT-IN-CONTRACT
N.T.S.	NOT TO SCALE
PP	PIPE PENETRATION
PRE	POWER ROOF EXHAUST
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RD	ROOF DRAIN
RTU	ROOF TOP UNIT
SF	SQUARE FOOT
V	PLUMBING VENT (COLD)
V.I.F.	VERIFY IN FIELD

ROOF GRAPHIC SYMBOLS LEGEND

- RC-# - ROOF CUT LOCATION
- E/A-### - PHOTO LOCATION
- DETAIL TAG
- DETAIL TAG
- S - SLOPE TO DRAIN PROVIDED BY SLOPED STRUCTURAL DECK

ROOF A - ROOF CUTS (EXISTING SYSTEM CONSTRUCTION)

ROOF CUT #1 (DRY)
- 060 EPDM MEMBRANE (ADHERED); OVER
- (2) LAYERS OF 1½" POLYISOCYANURATE INSULATION (MECHANICALLY ATTACHED); OVER
- 4 PLY BUILT-UP ASPHALT MEMBRANE WITH FLOOD COAT AND GRAVEL (SPUDDED BACK); OVER
- GYPSUM PLANK ROOF DECK

ROOF CUT #2 - AT WALL FLASHING (DRY)
- 060 EPDM MEMBRANE (ADHERED); OVER
- ASPHALTIC BLACK/BROWN FLASHING; OVER
- CONCRETE MASONRY UNITS

ROOF B - ROOF CUTS #3 THRU #5 (#4 & #5 WET) (EXISTING SYSTEM CONSTRUCTION)

- 060 EPDM MEMBRANE (ADHERED); OVER
- (2) LAYERS OF 1½" POLYISOCYANURATE INSULATION (MECHANICALLY ATTACHED); OVER
- 4 PLY BUILT-UP ASPHALT MEMBRANE WITH FLOOD COAT AND GRAVEL (SPUDDED BACK); OVER
- GYPSUM PLANK ROOF DECK

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT

bell & spina ARCHITECTS

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

REGISTERED ARCHITECT DOUGLAS K. AREND 032669 STATE OF NEW YORK
REGISTRATION EXPIRES: 08/31/2025

CONTRACT: CONSTRUCTION

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C, H, E
DESIGNED BY:	DKA
DRAWN BY:	JDT
FIELD CHECK:	---
APPROVED:	---

SHEET TITLE: GENERAL REMOVALS AND HAZMAT ABATEMENT PLAN AND NOTES

DRAWING NUMBER: H-101

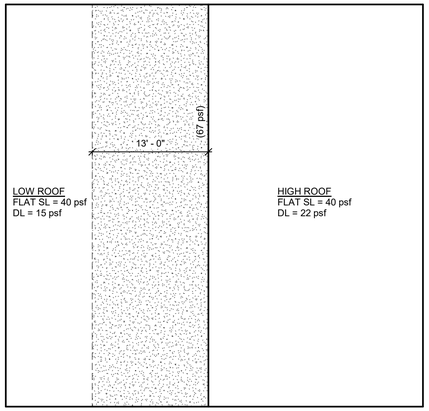
SHEET 3 OF 21

DESIGN DATA

DESIGN CODE:		2020 BUILDING CODE OF NEW YORK STATE (BCNYS)
RISK CATEGORY:		II
EXPOSURE CATEGORY:		C
LATERAL (SEISMIC/WIND) FORCE-RESISTING SYSTEM:		
NORTH-SOUTH:		ORDINARY PLAIN MASONRY SHEAR WALLS
EAST-WEST:		ORDINARY PLAIN MASONRY SHEAR WALLS
SNOW & RAIN LOADS	GROUND SNOW LOAD (Pg):	50 psf
	FLAT ROOF SNOW LOAD (Pf):	40 psf
	EXPOSURE FACTOR (Ce):	1.0
	THERMAL FACTOR (Ct):	1.12
	SNOW IMPORTANCE FACTOR (Is):	1.0
	SLOPE FACTOR (Cs):	NA
	SLOPED ROOF SNOW LOAD (Ps):	NA
	FLAT ROOF SNOW LOAD AT EXTERIOR CANOPY (Pf), Ct = 1.2:	42 psf
	RAIN LOAD (7.5 INCHES OF ACCUMULATION):	40 psf
	15-MIN RAIN INTENSITY:	5.20 in/hr
	60-MIN RAIN INTENSITY:	2.38 in/hr
	A CODE COMPLIANT SECONDARY DRAINAGE SYSTEM SHALL BE PROVIDED TO LIMIT THE ACCUMULATED DEPTH OF WATER TO AMOUNT NOTED OR LESS.	
	RAIN-ON-SNOW SURCHARGE LOAD:	NA
	DRIFTED, UNBALANCED, AND SLOPED ROOF SLIDING SNOW IN ACCORDANCE WITH ASCE 7-16. SEE 1/S-001 FOR SNOW LOADING DIAGRAM.	
WIND LOADS	MAIN WIND FORCE RESISTING SYSTEM HAS BEEN DESIGNED TO ASCE 7-16, AS REFERENCED IN 2020 BCNYS SECTION 1609.1 USING THE FOLLOWING PROCEDURE: [PICK PROCEDURE FROM NOTES BELOW]	
	ULTIMATE WIND SPEED (3-SECOND GUST) (Vult):	109 mph
	NOMINAL WIND SPEED (3-SECOND GUST) (Vasd):	85 mph
	ENCLOSURE CLASSIFICATION:	ENCLOSED
	DIRECTIONALITY FACTOR (Kd):	0.85
	TOPOGRAPHIC FACTOR (Kzt):	1.0
	GROUND ELEVATION FACTOR (Ke):	1.0
	HEIGHT OF MAIN ROOF:	17 ft
	GUST-EFFECT FACTOR (G):	0.85
	INTERNAL PRESSURE COEFFICIENT (GCpi):	(±0.18)
	WIND DESIGN BASE SHEAR (V):	12.2K (N-S) DIRECTION
		22.7K (E-W) DIRECTION
	SEE 2/S-001 FOR ADDITIONAL WIND LOAD DATA FOR ROOFS, OVERHANGS, COMPONENTS AND CLADDING, ROOF-TOP STRUCTURES, AND CANOPIES. NET UPLIFT LOAD ON ROOF FRAMING COMPONENTS SHALL BE DETERMINED BY DEDUCTING 10 psf DEAD LOAD FROM THE TABULATED ROOF WIND LOADS FOR COMPONENTS AND CLADDING. NET UPLIFT VALUE SHALL BE A MINIMUM OF 10 psf.	
SEISMIC LOADS	SITE CLASS:	D
	SEISMIC IMPORTANCE FACTOR (Ie):	1.0
	SHORT-PERIOD MAPPED SPECTRAL RESPONSE (Ss):	0.143
	ONE-SECOND MAPPED SPECTRAL RESPONSE (S1):	0.051
	SHORT-PERIOD DESIGN ACCELERATION (Sds):	0.152
	ONE-SECOND DESIGN ACCELERATION (Sd1):	0.082
	SHORT-PERIOD SITE COEFFICIENT (Fa):	1.6
	LONG-PERIOD SITE COEFFICIENT (Fv):	2.4
	MAPPED LONG-PERIOD TRANSITION PERIOD (TL):	6
	SEISMIC DESIGN CATEGORY:	B
	ANALYSIS PROCEDURE:	ELFS
	RESPONSE MODIFICATION COEFFICIENT (R):	1.5
		1.5
	SEISMIC RESPONSE COEFFICIENT (Cs):	0.101
		0.101
	SEISMIC DESIGN BASE SHEAR (V):	54.35K (N-S) DIRECTION
		54.35K (E-W) DIRECTION

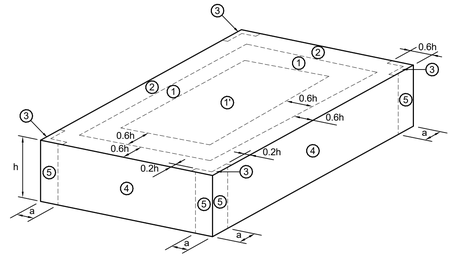
CODE COMPLIANCE FOR EXISTING STRUCTURES

DESIGN CODE:	2020 EXISTING BUILDING CODE OF NEW YORK STATE (EBCNYS)
COMPLIANCE METHOD:	WORK AREA
CLASSIFICATION OF WORK:	ALTERATION-LEVEL 1
EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS HAVE BEEN EVALUATED TO CARRY THE GRAVITY LOADS REQUIRED BY THE BCNYS FOR NEW STRUCTURES IF THE ALTERATION CAUSES AN INCREASE IN THE DESIGN DEAD, LIVE, OR SNOW LOAD, INCLUDING SNOW DRIFT EFFECTS, OF MORE THAN 5 PERCENT OR THE CAPACITY OF ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT IS DECREASED AS PART OF THE ALTERATION.	
EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENTS ARE NO LESS CONFORMING TO THE PROVISIONS OF THE 2020 EBCNYS WITH RESPECT TO SEISMIC DESIGN THAN THEY WERE PRIOR TO THIS WORK. THEREFORE, LATERAL LOADS HAVE NOT BEEN EVALUATED FOR THIS STRUCTURE.	



NOTES:
1. - DENOTES DRIFTED SNOW LOADS IN ADDITION TO FLAT SNOW LOADS SHOWN.
2. SEE PLAN (PSF) — DRIFTED SNOW LOAD — FLAT SNOW LOAD

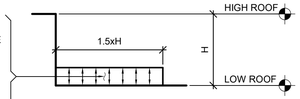
1 S-001 ROOF SNOW LOADING PLAN
NOT TO SCALE



FLAT / HIP / GABLE (0° ≤ Θ ≤7°)

2 S-001 COMPONENTS AND CLADDING WIND PRESSURE ZONE DESIGNATIONS
NOT TO SCALE
NOTE:
a = 6.8"

WITHIN THIS ZONE THE FOLLOWING DESIGN PRESSURES SHALL APPLY:
1. FOR PRESSURE TOWARDS SURFACE USE SAME AS WALL PRESSURE ZONE 4 AND 5.
2. FOR PRESSURE AWAY FROM SURFACE USE SAME AS ROOF PRESSURES EXCEPT ZONE 2 SHALL BE TREATED AS ZONE 1, AND ZONE 3 SHALL BE TREATED AS ZONE 2.



3 S-001 SECTION - COMPONENTS AND CLADDING ROOF WIND PRESSURE ZONE DESIGNATIONS AT ROOF STEPS
NOT TO SCALE

ULTIMATE WIND PRESSURE FOR EXTERIOR COMPONENTS AND CLADDING MATERIALS

BASIC WIND: Vult→110 mph EXPOSURE: B H (ft) = 20 Kzt = 1

ROOF TYPE	SURFACE	EFFECTIVE WIND AREA (sf)	WIND PRESSURE TOWARD SURFACE (psf)	WIND PRESSURE AWAY FROM SURFACE (psf)
0° to 7°	ZONE 1 ROOF	10	16.0	-42.3
		20	16.0	-39.5
		50	16.0	-35.9
		100	16.0	-33.0
	ZONE 1' ROOF CENTER	10	16.0	-24.3
		20	16.0	-24.3
		50	16.0	-24.3
		100	16.0	-24.3
	ZONE 1&1' ROOF OVERHANGS AT MIDDLE OF ROOF	10	NA	-38.3
		20	NA	-37.6
		50	NA	-36.7
		100	NA	-36.0
	ZONE 2 ROOF EDGES	10	16.0	-55.7
		20	16.0	-55.2
		50	16.0	-47.4
		100	16.0	-43.9
	ZONE 2 ROOF OVERHANGS AT ROOF EDGES	10	NA	-51.7
		20	NA	-47.0
		50	NA	-40.6
		100	NA	-35.9
	ZONE 3 ROOF CORNERS	10	16.0	-76.0
		20	16.0	-68.9
		50	16.0	-59.4
		100	16.0	-52.2
	ZONE 3 ROOF OVERHANGS AT ROOF CORNERS	10	NA	-72.0
		20	NA	-63.7
		50	NA	-52.6
		100	NA	-44.1
	ZONE 4 WALL	10	26.6	-28.8
		20	25.4	-27.6
		50	23.8	-26.0
		100	22.6	-24.9
	ZONE 5 WALL CORNERS	10	26.6	-35.5
		20	25.4	-33.2
		50	23.8	-30.0
		100	22.6	-27.6

NOTE:
MULTIPLY WIND PRESSURE BY 0.6 TO DETERMINE SERVICE (ASD) LEVEL WIND PRESSURES.

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT:
bell & spina ARCHITECTS
RYAN BIGGS CLARK DAVIS ENGINEERING & SURVEYING
CERTIFICATE OF AUTHORIZATION #: 0018226

STATE OF NEW YORK · KYLE J. OBERDORF · 098269 · LICENSED PROFESSIONAL ENGINEER
REGISTRATION EXPIRES: 09/30/2025

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C
DESIGNED BY:	KJO
DRAWN BY:	KJO
FIELD CHECK:	---
APPROVED:	JLD

SHEET TITLE:
DESIGN DATA

DRAWING NUMBER:
S-001

SHEET 4 OF 21

GENERAL NOTES

1. DIMENSIONS TO, OF, AND IN EXISTING STRUCTURE SHALL BE VERIFIED IN FIELD BY CONTRACTOR.
2. DO NOT SCALE DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DIMENSIONS BETWEEN EXISTING CONDITIONS AND/OR ARCHITECTURAL DRAWINGS AND THE STRUCTURAL DRAWINGS.
3. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
4. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED.
5. THE NOTES ON THIS DRAWING ARE TYPICAL UNLESS OTHERWISE INDICATED.
6. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION OF CONSTRUCTION AND TO SUPPORT ONLY THE DESIGN LOADS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS AND SEQUENCE OF CONSTRUCTION AND FOR THE ADEQUACY OF THE STRUCTURE TO SUPPORT TEMPORARY LOADS OCCURING DURING CONSTRUCTION. TEMPORARILY BRACE BUILDING UNTIL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: (FLOOR DECK, ROOF DECK, BRACING MEMBERS, SHEAR WALLS, MOMENT CONNECTIONS, ETC.).
7. NOTIFY THE DIRECTORS REPRESENTATIVE IN WRITING OF PROPOSED DEVIATIONS OR SUBSTITUTIONS FROM DIMENSIONS, MATERIALS, OR EQUIPMENT SHOWN ON THE DRAWINGS AND MAKE ONLY THOSE DEVIATIONS OR SUBSTITUTIONS ACCEPTED BY ENGINEER.
8. DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR DAMAGES WHICH MIGHT OCCUR AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE EXISTING UTILITIES.
9. COORDINATE NUMBER AND LOCATION OF ROOF DRAINS AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
10. DO NOT SUSPEND MECHANICAL, ELECTRICAL, OR PLUMBING ITEMS FROM ROOF DECK. REFER TO THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR HANGERS AND SUPPLEMENTAL FRAMING REQUIRED TO ATTACH THESE ITEMS TO THE MAIN ROOF FRAMING.
11. LOCATE REINFORCEMENT IN EXISTING STRUCTURAL WALLS USING NON-DESTRUCTIVE METHODS PRIOR TO DRILLING HOLES FOR POST-INSTALLED ANCHORS. DO NOT DRILL INTO AND DAMAGE EXISTING REINFORCEMENT. NOTIFY DIRECTORS REPRESENTATIVE IF ANCHOR LOCATIONS CONFLICT WITH EXISTING REINFORCEMENT.
12. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY.

MASONRY NOTES

1. MASONRY WALLS SHALL HAVE STANDARD WEIGHT JOINT REINFORCEMENT EVERY SECOND COURSE AND TOP TWO COURSES UNLESS NOTED OTHERWISE. PROVIDE LADDER TYPE JOINT REINFORCING FOR REINFORCED MASONRY WALLS. LAP SPLICE JOINT REINFORCEMENT A MINIMUM OF 8 INCHES, TYPICAL. USE PREFABRICATED CORNERS AND TEES.
2. SUBMIT GROUTING PROGRAM FOR GROUTING CONCRETE MASONRY WALLS. GROUTING SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF NCMA-TEK 3-2A, "GROUTING CONCRETE MASONRY WALLS." STOP GROUT 2 INCHES BELOW TOP OF BLOCK AT EACH POUR TO ENABLE AN INTERLOCK WITH NEXT POUR. GROUT CORES SOLID AT REINFORCING BARS AND AS INDICATED IN DRAWINGS.
3. FILL BEAM POCKETS WITH MASONRY AFTER BEAM IS ERECTED.

BAR LAP LENGTHS IN CMU WITH f'm = 2,000 psi			
LOCATION	#4	#5	#6
(1) BAR AT CENTER OF 6" CMU CORE OR BOND BEAM	18"	28"	53"
(1) BAR AT CENTER OF 8" CMU CORE OR BOND BEAM	18"	22"	38"
(1) BAR AT CENTER OF 12" CMU CORE OR BOND BEAM	18"	22"	34"
(2) BARS IN 8" CMU CORE LOCATED 5" FROM EACH FACE SHELL	24"	39"	79"
(2) BARS IN 12" CMU CORE LOCATED 9" FROM EACH FACE SHELL	19"	30"	57"
(2) BARS IN 8", 10", 12" CMU BOND BEAM (SEE NOTE BELOW)	22"	35"	64"

NOTE:
LOCATE REINFORCING BARS 3/4-INCH CLEAR FROM INSIDE FACE OF FACE SHELL (EXCEPT CENTER REINFORCING IN BOND BEAMS DETAILED TO HAVE ONLY ONE BAR).

LINTEL NOTES

1. COORDINATE WALL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. NOT ALL OPENINGS ARE SHOWN IN THE STRUCTURAL DRAWINGS.
2. FOR OPENINGS NOT OTHERWISE DETAILED OR SCHEDULED, INCLUDING DOORS, WINDOWS, AND MECHANICAL OPENINGS, MINIMUM LINTELS SHALL BE (FOR EACH 4 INCHES OF MASONRY WIDTH) ONE L3 1/2X3 1/2X 5/16 FOR SPANS UP TO 4 FEET; ONE L4 X 3 1/2X 5/16 (LLV) FOR SPANS UP TO 6 FEET; ONE L5X3 1/2X5/16 (LLV) FOR SPANS UP TO 8 FEET. FOR SPANS LESS THAN 2 FEET, PROVIDE A 5/16-INCH PLATE.

   FOR 6-INCH MASONRY WALLS, USE TWO L3 1/2X2 1/2X 5/16 (LLV) FOR SPANS UP TO 4 FEET, AND A BUILT-UP PLATE SECTION FOR SPANS UP TO 8 FEET. BUILT-UP SECTION SHALL CONSIST OF A HORIZONTAL PLATE 5/16 INCH BY 5 INCHES AND A VERTICAL PLATE 1/2 INCH BY 5 INCHES WELDED TOGETHER WITH 3/16-INCH FILLET WELDS, 3 INCHES LONG AND 6 INCHES ON CENTER ON EACH SIDE OF THE VERTICAL PLATE, TO FORM AN INVERTED TEE.

   FOR 10-INCH MASONRY WALLS, USE TWO L5X5X5/16 FOR SPANS UP TO 6 FEET AND TWO L6X6X5/16 FOR SPANS UP TO 8 FEET. TRIM HORIZONTAL LEG ON EACH ANGLE TO 4 1/2 INCHES WIDE.
3. WELD TOGETHER BACK TO BACK LINTELS. MAXIMUM WELD SPACING SHALL NOT EXCEED 18 INCHES ON CENTER.
4. BEAR LINTELS A MINIMUM OF 8 INCHES EACH END UNLESS NOTED OTHERWISE.
5. HOT-DIP GALVANIZE LINTELS IN EXTERIOR WALLS.

COLD WEATHER MASONRY CONSTRUCTION REQUIREMENTS

	CONSTRUCTION - BASED UPON AMBIENT TEMPERATURES	PROTECTION - BASED UPON ANTICIPATED MINIMUM DAILY TEMPERATURES
ABOVE 40°F	1. NORMAL MASONRY PROCEDURES.	1. NORMAL MASONRY PROCEDURES.
40°F - 32°F	1. HEAT MORTAR SAND OR MIXING WATER TO PRODUCE MORTAR TEMPERATURE BETWEEN 40°F AND 120°F AT TIME OF MIXING. MAINTAIN MORTAR ABOVE 40°F UNTIL USED IN MASONRY. 2. KEEP GROUT AGGREGATES ABOVE 32°F.	1. COVER TOP 2 FEET OF UNFINISHED MASONRY WORK WITH A WATER-RESISTIVE MEMBRANE FOR AT LEAST 24 HOURS AND AT THE END OF EACH DAY'S WORK.
32°F - 25°F	1. HEAT MORTAR SAND OR MIXING WATER TO PRODUCE MORTAR TEMPERATURE BETWEEN 40°F AND 120°F AT TIME OF MIXING. MAINTAIN MORTAR ABOVE 40°F UNTIL USED IN MASONRY. 2. KEEP GROUT AGGREGATES AND MIXING WATER TO PRODUCE GROUT TEMPERATURE BETWEEN 70°F AND 120°F AT TIME OF PLACEMENT. 3. MAINTAIN GROUT TEMPERATURES ABOVE 70°F AT TIME OF PLACEMENT.	1. COVER TOP 2 FEET OF UNFINISHED MASONRY WORK WITH A WATER-RESISTIVE MEMBRANE FOR AT LEAST 24 HOURS AND AT THE END OF EACH DAY'S WORK.
25°F - 20°F	1. HEAT MORTAR SAND OR MIXING WATER TO PRODUCE MORTAR TEMPERATURE BETWEEN 40°F AND 120°F AT TIME OF MIXING. MAINTAIN MORTAR ABOVE 40°F UNTIL USED IN MASONRY. 2. KEEP GROUT AGGREGATES AND MIXING WATER TO PRODUCE GROUT TEMPERATURE BETWEEN 70°F AND 120°F AT TIME OF PLACEMENT. 3. MAINTAIN GROUT TEMPERATURES ABOVE 70°F AT TIME OF PLACEMENT. 4. HEAT MASONRY SURFACES UNDER CONSTRUCTION TO 40°F, AND USE WIND BREAKS OR ENCLOSURES WHEN WIND VELOCITY EXCEEDS 15 MPH. 5. HEAT MASONRY TO A MINIMUM OF 40° F PRIOR TO GROUTING.	1. COVER NEWLY CONSTRUCTED MASONRY (LESS THAN 48 HOURS OLD) COMPLETELY WITH WEATHER-RESISTIVE INSULATING BLANKETS, OR EQUAL PROTECTION, FOR AT LEAST 48 HOURS AFTER CONSTRUCTION OF WORK.
Below 20°F	1. HEAT MORTAR SAND OR MIXING WATER TO PRODUCE MORTAR TEMPERATURE BETWEEN 40°F AND 120°F AT TIME OF MIXING. MAINTAIN MORTAR ABOVE 40°F UNTIL USED IN MASONRY. 2. KEEP GROUT AGGREGATES AND MIXING WATER TO PRODUCE GROUT TEMPERATURE BETWEEN 70°F AND 120°F AT TIME OF PLACEMENT. 3. MAINTAIN GROUT TEMPERATURES ABOVE 70°F AT TIME OF PLACEMENT. 4. HEAT MASONRY SURFACES UNDER CONSTRUCTION TO 40°F, AND USE WIND BREAKS OR ENCLOSURES WHEN WIND VELOCITY EXCEEDS 15 MPH. 5. HEAT MASONRY TO A MINIMUM OF 40° F PRIOR TO GROUTING. 6. PROVIDE AN ENCLOSURE AND AUXILIARY HEAT TO MAINTAIN AIR TEMPERATURE ABOVE 40°F IN ENCLOSURE.	1. COVER NEWLY CONSTRUCTED MASONRY (LESS THAN 48 HOURS OLD) COMPLETELY WITH WEATHER-RESISTIVE INSULATING BLANKETS, OR EQUAL PROTECTION, FOR AT LEAST 48 HOURS AFTER CONSTRUCTION OF WORK. 2. MAINTAIN NEWLY CONSTRUCTED MASONRY (LESS THAN 48 HOURS OLD) ABOVE 32°F FOR AT LEAST 48 HOURS AFTER BEING CONSTRUCTED USING HEATED ENCLOSURES OR OTHER ACCEPTABLE METHODS. 3. PROVIDE HIGH-LOW RECORDING THERMOMETERS TO DOCUMENT TEMPERATURES OF MASONRY.

NOTES:
1. DO NOT LAY MASONRY UNITS HAVING EITHER A TEMPERATURE BELOW 40°F OR CONTAINING FROZEN MOISTURE, VISIBLE ICE, OR SNOW ON THEIR SURFACE.
2. REMOVE VISIBLE ICE AND SNOW FROM THE TOP SURFACE OF EXISTING FOUNDATIONS AND MASONRY TO RECEIVE NEW CONSTRUCTION. HEAT THESE SURFACES ABOVE FREEZING USING METHODS THAT DO NOT RESULT IN DAMAGE.

HOT WEATHER MASONRY CONSTRUCTION REQUIREMENTS

	CONSTRUCTION - BASED UPON AMBIENT TEMPERATURES	PROTECTION - BASED UPON ANTICIPATED MINIMUM DAILY TEMPERATURES
BELOW 90°F	1. NORMAL MASONRY PROCEDURES.	1. NORMAL MASONRY PROCEDURES.
90°F - 105°F	1. MAINTAIN SAND PILES IN A DAMP LOOSE CONDITION. 2. PROVIDE NECESSARY CONDITIONS AND EQUIPMENT TO PRODUCE MORTAR HAVING A TEMPERATURE BELOW 120°F (48.9°C). 3. MAINTAIN TEMPERATURE OF MORTAR AND GROUT BELOW 120°F (48.9°C). 4. FLUSH MIXER, MORTAR TRANSPORT CONTAINER, AND MORTAR BOARDS WITH COOL WATER BEFORE THEY COME INTO CONTACT WITH MORTAR INGREDIENTS OR MARTAR. 5. MAINTAIN MORTAR CONSISTENCY BY RETEMPERING WITH COOL WATER. 6. USE MORTAR WITHIN 2 HOURS OF INTIAL MIXING.	1. FOG SPRAY NEWLY CONSTRUCTED MASONRY UNTIL DAMP. AT LEAST THREE TIMES A DAY UNTIL THE MASONRY IS THREEE DAYS OLD.
ABOVE 105°F	1. MAINTAIN SAND PILES IN A DAMP LOOSE CONDITION. 2. PROVIDE NECESSARY CONDITIONS AND EQUIPMENT TO PRODUCE MORTAR HAVING A TEMPERATURE BELOW 120°F (48.9°C). 3. SHADE MATERIALS AND MIXING EQUIPMENT FROM DIRECT SUNLIGHT. 4. USE COOL MIXING WATER FOR MORTAR AND GROUT. ICE IS PERMITTED IN THE MIXING WATER PRIOR TO USE. DO NOT PERMIT ICE IN THE MIXING WATER WHEN ADDED TO THE OTHER MORTAR OR GROUT MATERIALS.	

STRUCTURAL STEEL NOTES

1. DO NOT BEGIN STEEL ERECTION UNTIL SUPPORTING MASONRY OR CONCRETE OBTAINS 75 PERCENT OF THE MATERIAL STRENGTHS NOTED IN DESIGN DATA NOTES.
2. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
3. STEEL BEAMS BEARING ON MASONRY SHALL HAVE A MINIMUM OF 6 INCHES OF BEARING. PROVIDE BEARING PLATES WITH WALL ANCHORS UNLESS NOTED OTHERWISE.
4. WHERE FILLET WELD SIZES ARE NOTE SPECIFICALLY NOTED. THE FABRICATOR SHALL DETAIL A MINIMUM SIZE FILLET WELD IN ACCORDANCE WITH AWS STANDARDS OR AS REQUIRED TO PROVIDE REQUIRED CONNECTION CAPACITY FOR DELEGATED CONNECTION DESIGN. THE ACTUAL SIZES SHALL BE SHOWN ON THE SHOP DRAWINGS.
5. GALVANIZING WHERE NOTED IN THE DRAWINGS SHALL BE HOT-DIP GALVANIZING IN ACCORDANCE WITH ASTM A123, UNLESS NOTED OTHERWISE.

STRUCTURAL OBSERVATION NOTES

1. THE REGISTERED DESIGN PROFESSIONAL WILL MAKE VISITS TO THE SITE AT APPROPRIATE INTERVALS FOR THE PURPOSE OF OBSERVING THE CONSTRUCTION FOR GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE FOLLOWING LIST INCLUDES SOME APPROPRIATE TIMES FOR VISITING THE SITE. THE CONTRACTOR SHALL NOTIFY THE DIRECTORS REP AT LEAST 48 HOURS PRIOR TO PERFORMING THESE ACTIVITIES SO THAT SITE VISITS CAN BE SCHEDULED.
   - INITIAL ERECTION OF STRUCTURAL STEEL AND METAL DECK.
   - INITIAL PLACEMENT OF REINFORCING BARS AND GROUTING OF CONCRETE MASONRY WALLS.
   - COMPLETION OF THE STRUCTURAL SYSTEM.
   - OTHER TIMES AS REQUIRED DUE TO FIELD CONDITIONS OR SPECIAL CONSTRUCTION TYPES.
2. THE REGISTERED DESIGN PROFESSIONAL MAY VISIT THE SITE AT TIMES OTHER THAN THOSE LISTED IN NOTE 1.
3. THE REGISTERED DESIGN PROFESSIONAL WILL PREPARE A FIELD OBSERVATION REPORT FOR EACH SITE VISIT MADE TO OBSERVE CONSTRUCTION. PART II OF EACH REPORT IS FOR CONTRACTOR VERIFICATION AND IS MANDATORY. PART II MUST BE COMPLETED (SIGNED BY THE CONTRACTOR VERIFYING THAT THE REQUIRED ACTION WAS TAKEN AND LISTING THE DATE COMPLETED) AND RETURNED TO THE ENGINEER IN A TIMELY MANNER.

SPECIAL INSPECTION NOTES

1. THE DIRECTOR'S REPRESENTATIVE WILL ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR FOR THIS PROJECT, WHO WILL PROVIDE AND/OR COORDINATE INSPECTION AND TESTING REQUIREMENTS AS NECESSARY IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE BCNYS.
2. THE REGISTERED DESIGN PROFESSIONAL HAS PREPARED A STATEMENT OF SPECIAL INSPECTIONS AND THE SCHEDULE OF SPECIAL INSPECTIONS . THESE DOCUMENTS WILL BE SUBMITTED WITH THE CONTRACT DOCUMENTS AND THE APPLICATION FOR BUILDING PERMIT TO THE CODE ENFORCEMENT OFFICIAL.
3. SPECIAL INSPECTIONS AND TESTING SHALL BE CONTINUOUS OR PERIODIC DURING THE PERFORMANCE OF THE WORK, AS NOTED.
4. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE REGISTERED DESIGN PROFESSIONAL, SPECIAL INSPECTOR, TESTING AGENCY, AND AFFECTED SUB-CONTRACTORS TO REVIEW THE REQUIRED SPECIAL INSPECTION AND TESTING REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL DISTRIBUTE CONSTRUCTION SCHEDULES TO EACH ATTENDEE.
5. THE SPECIAL INSPECTOR SHALL SUBMIT INTERIM REPORTS AND, AT THE COMPLETION OF SPECIAL INSPECTIONS, A FINAL STATEMENT OF SPECIAL INSPECTIONS. REPORTS SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER.
6. THE SPECIAL INSPECTOR SHALL NOTIFY THE CONTRACTOR IMMEDIATELY OF DISCREPANCIES. SUBSEQUENT REPORTS SHALL NOTE WHEN AND HOW DEFICIENCIES WERE CORRECTED. THE SPECIAL INSPECTOR SHALL NOTIFY THE DIRECTOR'S REPRESENTATIVE AND THE CODE ENFORCEMENT OFFICIAL OF DISCREPANCIES WHICH HAVE NOT BEEN CORRECTED.
7. THE CONTRACTOR SHALL COOPERATE WITH THE SPECIAL INSPECTOR INCLUDING ADVANCE NOTIFICATION OF REQUIRED INSPECTION OR TEST, INCIDENTAL LABOR, AND SAFE ACCESS TO THE WORK AREAS, AND ACCESS TO CONTRACT DOCUMENTS SO THAT INSPECTIONS AND TESTING MAY BE PERFORMED WITHOUT HINDRANCE.
8. THE SPECIAL INSPECTION PROGRAM SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR FROM IMPLEMENTING AN EFFECTIVE QUALITY CONTROL PROGRAM.
9. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT

bell & spina ARCHITECTS

RYAN BIGGS CLARK DAVIS ENGINEERING & SURVEYING
CERTIFICATE OF AUTHORIZATION #: 0018226

STATE OF NEW YORK · KYLE J. OBERDORF · 098269 · LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 09/30/2025

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

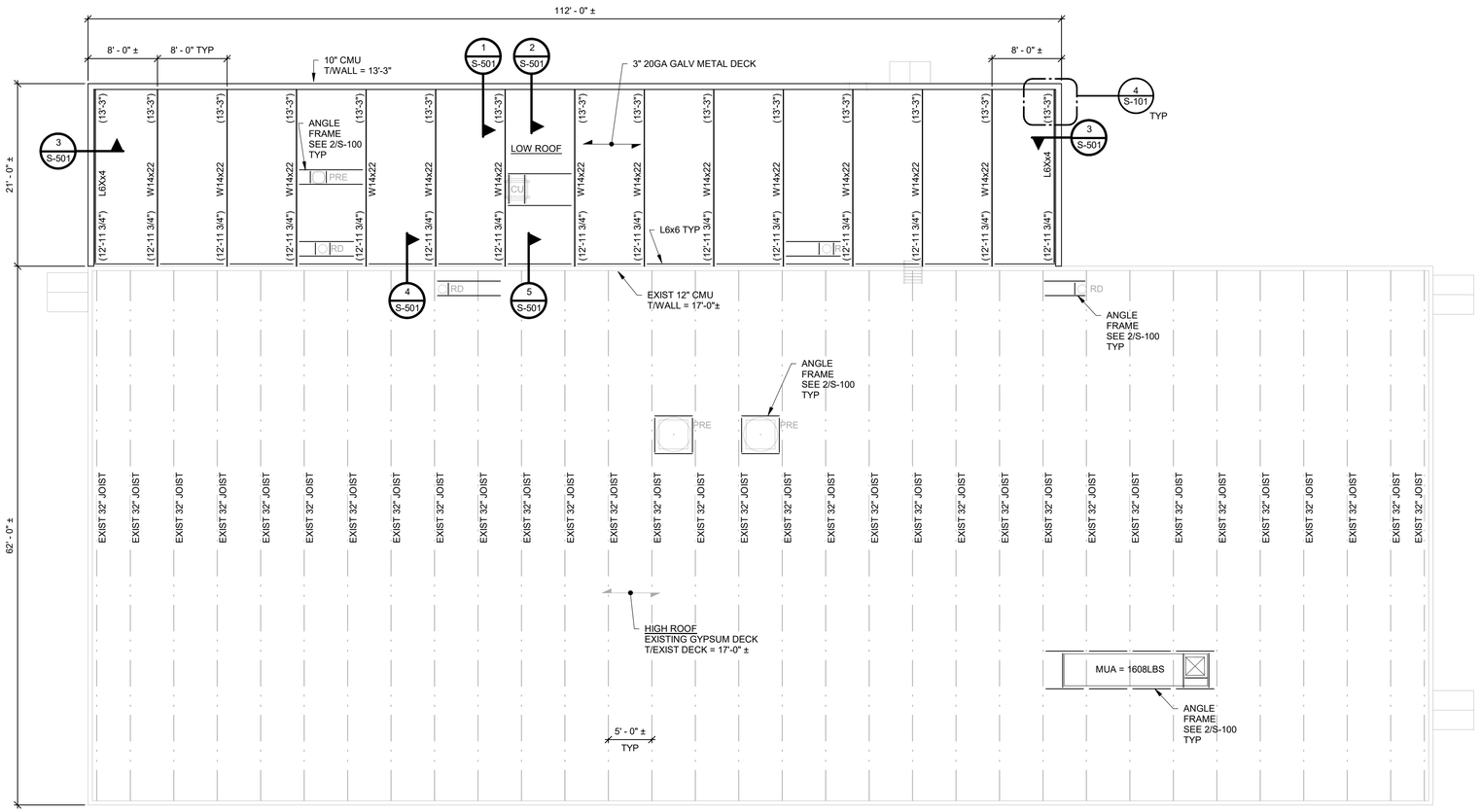
MARK	DATE	DESCRIPTION
MARK	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C
DESIGNED BY:	KJO
DRAWN BY:	KJO
FIELD CHECK:	---
APPROVED:	JLD

SHEET TITLE:
GENERAL NOTES

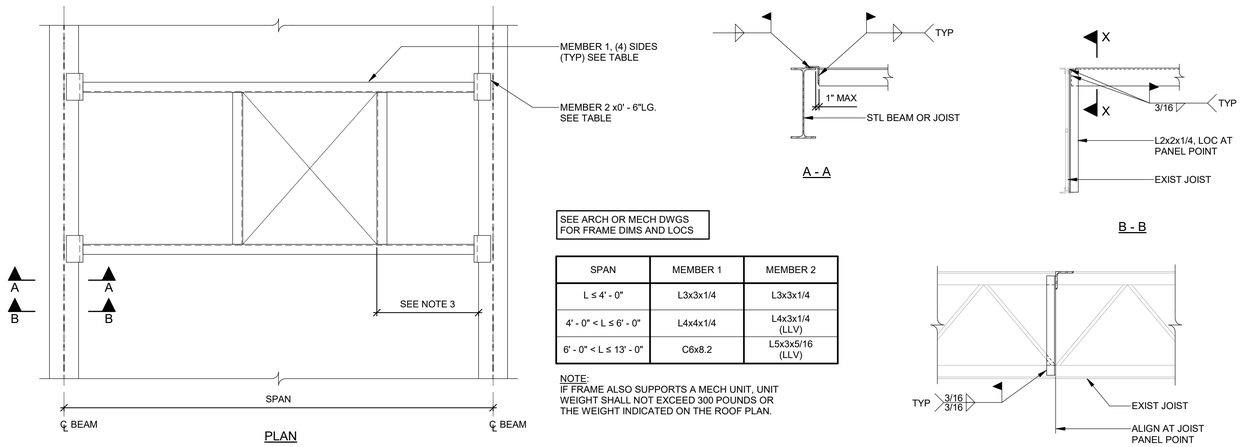
DRAWING NUMBER:
S-002

SHEET 5 OF 21



1 S-101 OVERALL ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"



PLAN

NOTES:
1. IF FRAME ALSO SUPPORTS A MECHANICAL UNIT, UNIT WEIGHT SHALL NOT EXCEED 300 POUNDS OR THE WEIGHT INDICATED ON THE ROOF PLAN.
2. DETAIL SHOWS DIFFERENT ATTACHMENT METHODS TO DIFFERENT EXISTING FRAME MEMBERS. IF NOT NOTED IN PLAN, USE ATTACHMENT THAT WILL POSITION SUPPORT FRAME TIGHT TO EXISTING ROOF MEMBER. NOTIFY ENGINEER IF EXISTING CONDITIONS ARE DIFFERENT THAN SHOWN IN SECTIONS A - A OR B - B.
3. WHERE DIMENSION IS LESS THAN 8", OMIT MEMBER 1 PARALLEL TO EXISTING BEAM OR JOIST. TYPICAL (4) SIDES OF PENETRATION.

A - A

B - B

SEE ARCH OR MECH DWGS
FOR FRAME DIMS AND LOCS

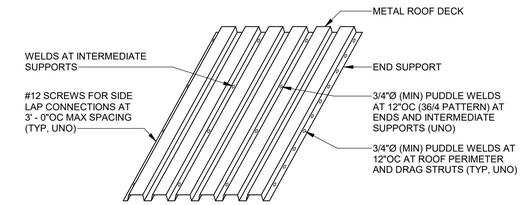
SPAN	MEMBER 1	MEMBER 2
L ≤ 4' - 0"	L3x3x1/4	L3x3x1/4
4' - 0" < L ≤ 6' - 0"	L4x4x1/4	L4x3x1/4 (LLV)
6' - 0" < L ≤ 13' - 0"	C6x8.2	L5x3x5/16 (LLV)

NOTE:
IF FRAME ALSO SUPPORTS A MECH UNIT, UNIT WEIGHT SHALL NOT EXCEED 300 POUNDS OR THE WEIGHT INDICATED ON THE ROOF PLAN.

X - X

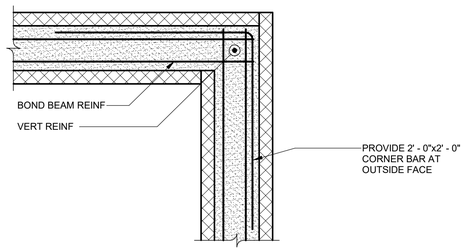
2 S-101 WELDED ANGLE FRAME DETAIL

NOT TO SCALE



3 S-101 ROOF DECK ATTACHMENT DETAIL

NOT TO SCALE



CORNER

4 S-101 BOND BEAM PLAN DETAILS

NOT TO SCALE

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Office of General Services

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STATE OF NEW YORK
KYLE J. OBERDORF
098269
LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES:
09/30/2025

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	20 DEC. 2024	BID DOCUMENTS
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PROJECT NUMBER:	47298-C	
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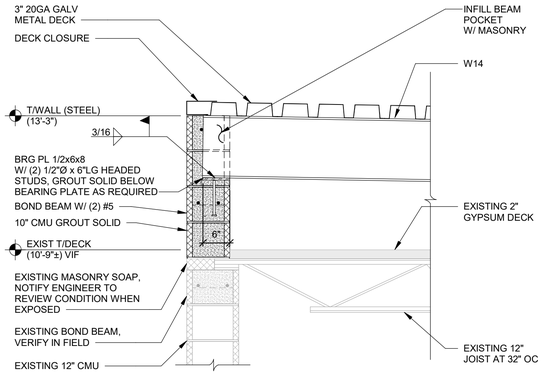
DRAWN BY:	KJO	
FIELD CHECK:	---	
APPROVED:	JLD	

SHEET TITLE:
ROOF PLAN

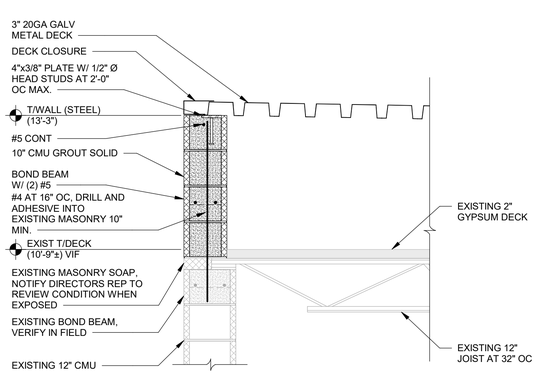
DRAWING NUMBER:
S-101



NOTE:
CONTRACTOR'S OPTION TO USE THREADED ROD WITH TACK WELDED NUT IN LIEU OF HEADED STUDS.

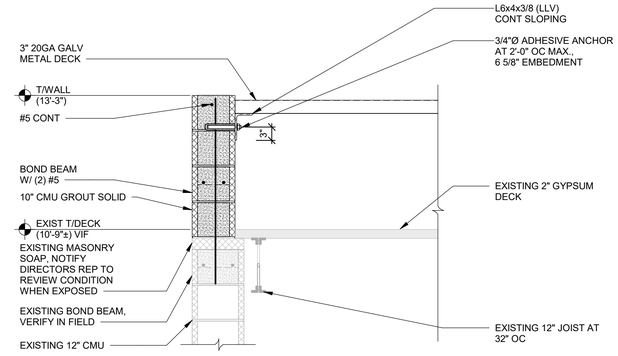
1 S-501 ROOF EDGE SECTION AT BEAM BEARING

SCALE: 3/4" = 1'-0"



2 S-501 ROOF EDGE SECTION

SCALE: 3/4" = 1'-0"



3 S-501 ROOF EDGE SECTION

SCALE: 3/4" = 1'-0"

NOTE:
CONTRACTOR'S OPTION TO USE THREADED ROD WITH TACK WELDED NUT IN LIEU OF HEADED STUDS.

4 S-501 ROOF EDGE SECTION AT BEAM BEARING IN EXISITNG WALL

SCALE: 3/4" = 1'-0"

5 S-501 ROOF EDGE SECTION AT EXISTING WALL

SCALE: 3/4" = 1'-0"

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT

bell & spina ARCHITECTS

RYAN BIGGS CLARK DAVIS ENGINEERING & SURVEYING
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STATE OF NEW YORK · KYLE J. OBERDORF · 098269 · LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 09/30/2025

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

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DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

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PROJECT NUMBER:	47298-C
DESIGNED BY:	KJO
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SHEET TITLE:
SECTIONS AND DETAILS

DRAWING NUMBER:
S-501

SHEET 7 OF 21

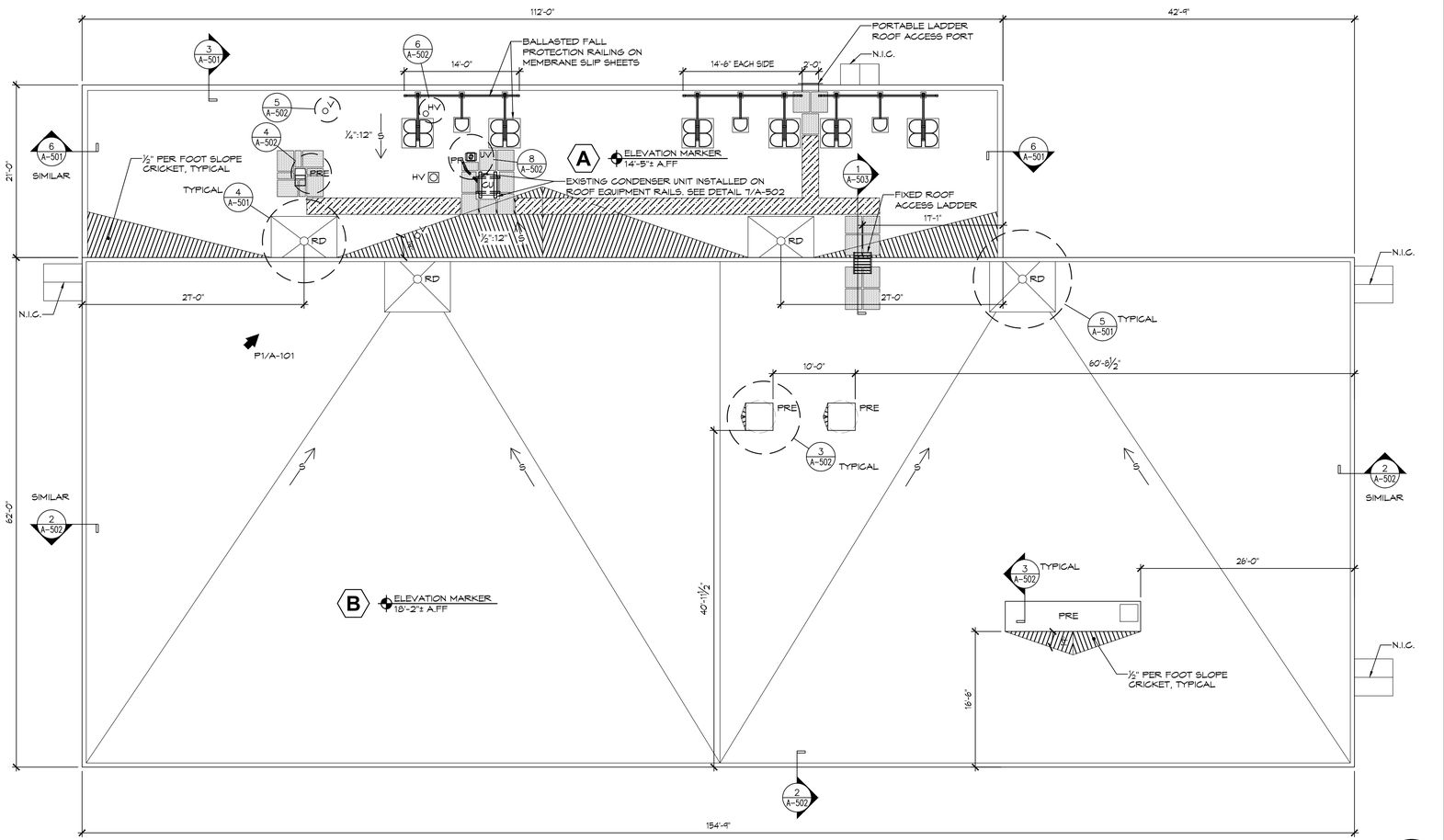
GENERAL ROOF NOTES:

1. MORE STRINGENT ARCHITECTURAL DETAILS SHALL GOVERN OVER MANUFACTURER'S DETAILS.
2. DIMENSIONS GIVEN ARE FOR REFERENCE ONLY. FIELD VERIFYING THE EXISTING BUILDING EXTENT AND MEASUREMENTS IS SOLELY THE CONTRACTOR'S RESPONSIBILITY.
3. ALL ROOF PENETRATIONS ARE TO BE FLASHED, WHETHER SHOWN OR NOT; ITEMS ARE SHOWN IN THEIR GENERAL LOCATIONS.
4. MINIMUM FINISHED FLASHING HEIGHTS, TOP OF MEMBRANE TO:
   -TOP OF NON-METALLIC FLASHINGS - 8"
   -TOP OF PLUMBING VENT - 18"
   -OR AS SHOWN ON DRAWINGS
5. FIELD VERIFY ALL EXISTING CONDITIONS AND CONFIRM THAT DETAILS AS SHOWN WILL INTERFACE WITH THOSE CONDITIONS.
6. WATER DAMAGE NOTE:
   KEEP THE BUILDING DRY DURING ROOFING OPERATIONS. ANY WATER OR DEBRIS ENTERING THE BUILDING CAUSED BY REROOFING WORK SHALL BE CLEANED UP BY THE CONTRACTOR. ANY DAMAGE TO THE BUILDING OR ITS CONTENTS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE STATE. IF WORK AFFECTS THE INTERIOR OF THE BUILDING, PRECAUTIONS SHALL BE TAKEN TO PROTECT THE BUILDING AND IT'S CONTENTS. FOR EXAMPLE:
   PROTECTION OF A GYM FLOOR..
7. PROVIDE TRAFFIC / WALKWAY PADS AT ALL ROOF ACCESS POINTS, TOP & BOTTOM OF ALL LADDERS, AROUND ALL PONERED ROOFTOP EQUIPMENT, AT ACCESS POINTS TO LARGE HVAC ROOFTOP UNITS, AT MECHANICAL ROOM DOORS AND WHERE SHOWN.
8. ABANDONED PENETRATIONS LESS THAN 12" IN EACH DIMENSION IN METAL ROOF DECKS TO BE COVERED w/ 20 GA. GALV. STEEL SHEET METAL MIN. 4" LARGER THAN OPENING IN ALL DIRECTIONS - FASTEN w/ #14 TEK SCREWS @ 6" O.C. MAX. AROUND PERIMETER OF SHEET METAL. SEE "TYPICAL DECK PATCH DETAIL" FOR LARGER ABANDONED PENETRATIONS.
9. AT ALL ROOFTOP EQUIPMENT PROVIDED & EXISTING (A/C UNITS, RTU'S, ETC.) THE WIRES, PIPES AND / OR CONDUIT SHALL BE INSTALLED IN A PRE-FABRICATED PIPE / CONDUIT CURB AS DETAILED / SPECIFIED, WHETHER SHOWN OR NOT. PITCH POCKETS ARE NOT ACCEPTABLE, UNLESS SHOWN OTHERWISE. REFER TO NOTE 10, C.
10. MECHANICAL
    A. REMOVE AND REINSTALL EXISTING MECHANICAL EQUIPMENT AS REQUIRED FOR INSTALLATION OF ROOF SYSTEM & TO ACHIEVE SPECIFIED CLEARANCES, Ie; RAISE AND / OR FLASH PER DETAILS, IF REQUIRED.
    B. PAINT NON-ALUMINUM/COPPER UNITS AND STEEL SUPPORT STRUCTURES WITH PRIME AND 2 FINISH COATS OF ENAMEL PAINT. IDENTIFY UNITS (STENCIL) PER DIRECTOR'S IDENTIFICATION SCHEDULE.
    C. REPLACE ANY EXTERIOR GAS, REFRIGERANT CONDUIT, CONTROL WIRING, ETC. AS REQUIRED TO ELIMINATE PITCH POCKETS. SERVICES TO BE INSTALLED IN PRE-FABRICATED PIPE/CONDUIT CURBS AS DETAILED / SPECIFIED.
11. INSULATION
    A. PROVIDE CRICKETS AT HIGH SIDE OF ALL ROOFTOP EQUIPMENT LARGER THAN 2'-0" WIDE OR AT ANY DOWNHILL WALL PROJECTION WHICH MAY POCKET WATER.
    B. FILL GAPS BETWEEN CUT INSULATION AND CURBS/WALLS/EDGE BLOCKING GREATER THAN ¼" WITH SPRAY FOAM INSULATION.
12. ROOF DRAINS
    A. FLOW TEST PRIOR TO ANY WORK ON ROOF AREA. ALL ROOF DRAINS TO BE REMOVED/REPLACED BY C-CONTRACT UNLESS NOTED OTHERWISE.
    B. USE OF DRAIN INSERTS WILL ONLY BE APPROVED ON A CASE BY CASE BASIS BASED ON FLOW CAPACITY AND CONDITION OF THE ROOF DRAIN BOWL.
    C. AT COMPLETION OF ROOFING OPERATIONS CLEAN ROOF DRAINS FROM ROOF TO LEADER.
    D. TEST ROOF DRAINS FOR LEAKS AND FLOW UPON COMPLETION OF CONSTRUCTION. LEAK TEST: PLUG EACH ROOF DRAIN BELOW CONNECTION TO THE ROOF DRAIN LEADER. OBSERVE THE FLOW OF EACH LINE. PROVIDE A WRITTEN REPORT OF THE RESULTS TO THE DIRECTOR'S REPRESENTATIVE.
13. WOOD
    A. WOOD OR PLYWOOD INSTALLED IN DIRECT CONTACT WITH MASONRY OR CONCRETE, IS TO BE OF PRESSURE TREATED MATERIALS. ALL OTHER LUMBER TO BE NON-TREATED UNLESS NOTED OTHERWISE.
    B. BLOCKING TO BE SOLID - NO VOIDS OR 'SKIP-FRAMING' ARE PERMITTED. IF WOOD DIMENSIONS ARE NOT GIVEN, STACKED WOOD HEIGHT (3 BOARDS OR LESS) SHALL BE 2x6 MINIMUM.
    C. WOOD TO BE ANCHORED AS SPECIFIED, OR SHOWN. GENERALLY, FASTENER SPACING, NAILS OR SCREWS, NOT MORE THAN 12" O.C. AND ANCHOR BOLTS -⅝" O.D. MIN., NOT MORE THAN 36" O.C. AND FROM ENDS OF BOARDS - 9" MAXIMUM. SEE "TYPICAL BLOCKING FASTENING DETAIL" FOR ADDITIONAL INFORMATION.
    D. BLOCKING CONSIDERED FOR REUSE SHALL BE CHECKED FOR ADEQUATE ANCHORAGE VIA PULL TEST. PROVIDE ADDITIONAL FASTENERS, IF REQUIRED TO ASSURE SOLID ANCHORING. INSTALL ADDITIONAL BLOCKING OVER THE EXISTING AS REQUIRED TO BRING HEIGHT INTO THE SAME PLANE WITH INSULATION HEIGHT. REFER TO NOTE 5 IN DESIGN WIND UPLIFT NOTES FOR PERFORMANCE REQUIREMENTS.
14. FASTENERS
    A. FASTENERS TO BE NON-RUSTING TYPE (HOT DIPPED GALVANIZED, STAINLESS STEEL, CADMIUM PLATED) UNLESS NOTED OTHERWISE.
    B. NAILS SHALL BE SPIRAL OR RING-SHANKED
    C. FASTENERS (NAILS, SCREWS, BOLTS, ETC.) FASTENING OR PENETRATING PRESSURE-TREATED WOOD ARE TO BE OF AUSTENITIC STAINLESS STEEL, TYPE A304 OR A316
    D. ALL FASTENERS IN METAL FLASHINGS TO BE COMPATIBLE WITH METAL USED; FASTENERS ALL OF STAINLESS STEEL UNLESS NOTED OTHERWISE. FASTENER SPACING, SCREWS, NOT MORE THAN 4" O.C., NAILS USED FOR CLEATING - 3" O.C. UNLESS NOTED OTHERWISE FROM ENDS OF UNITS - 3" MAXIMUM.
    E. POP-RIVETS IN METAL FLASHINGS/COPINGS ARE NOT PERMITTED.
15. MISCELLANEOUS:
    A. ANY METAL COPING OR FASCIA OVERLAPS, FOLDS, OR SEAMS ARE TO BE SOLIDLY BEDDED WITH SEALANT BETWEEN PIECES OF METAL.
    B. ALL FLASHINGS, COPINGS OR ROOF EDGES ETC. SHALL HAVE PREFABRICATED CORNERS. NO CAULKED CORNERS WILL BE ALLOWED. NO POP-RIVETS WILL BE ALLOWED.
    C. ALIGN METAL FLASHING HEIGHTS.
    D. PROVIDE MEMBRANE SLIP SHEETS UNDER ALL BALLASTED GUARDRAIL SYSTEM POINTS OF CONTACT AND WALKWAY PADS (NOT MANUFACTURED/PROVIDED BY THE MEMBRANE MANUFACTURER.)

PHOTO P1

TYPICAL ABBREVIATIONS:

A.F.F	ABOVE FINISHED FLOOR
EF	EXHAUST FAN
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
GV	GRAVITY VENT
HP	HIGH POINT
HV	HOT VENT
LP	LOW POINT
MPH	MILES PER HOUR
N.I.C.	NOT-IN-CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
PP	PIPE PENETRATION
PRE	PONER ROOF EXHAUST
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RD	ROOF DRAIN
RTU	ROOF TOP UNIT
SF	SQUARE FOOT
V	PLUMBING VENT (COLD)
V.I.F.	VERIFY IN FIELD



1 ROOF PLAN
SCALE: 1/8" = 1'-0"

ROOF GRAPHIC SYMBOLS LEGEND

- PHOTO LOCATION
- DETAIL TAG
- DETAIL TAG
- SLOPE TO DRAIN PROVIDED BY SLOPED STRUCTURAL DECK
- SLOPE TO DRAIN PROVIDED BY TAPERED INSULATION
- WALKWAY PAD (TYPE 1)
- WALKWAY PAD (TYPE 2)
- CRICKET

ROOF SYSTEM DESCRIPTIONS

ROOF AREA A DESCRIPTION

- EPDM MEMBRANE (FULLY ADHERED)
- ½" COVERBOARD (SET IN LOW RISE INSULATION ADHESIVE)
- 2 LAYERS OF 3" POLYISOCYANURATE INSULATION (SET IN LOW RISE INSULATION ADHESIVE)
- ASPHALT VAPOR RETARDER (TORCH APPLIED)
- ½" UNDERLAYMENT BOARD (MECHANICALLY ATTACHED AND PRIMED)
- METAL ROOF DECK (STRUCTURALLY SLOPED WITH TAPERED POLYISOCYANURATE INSULATION CRICKETS)

ROOF AREA B DESCRIPTION

- EPDM MEMBRANE (FULLY ADHERED)
- ½" COVERBOARD (SET IN LOW RISE INSULATION ADHESIVE)
- 2 LAYERS OF 3" POLYISOCYANURATE INSULATION (SET IN LOW RISE INSULATION ADHESIVE)
- ASPHALT VAPOR RETARDER (TORCH APPLIED)
- NAILED BASE SHEET
- EXISTING GYPSUM ROOF DECK (STRUCTURALLY SLOPED)

SYSTEM 'R' VALUES (ROOF AREA A)

- OUTSIDE AIR	0.17
- EPDM MEMBRANE	0.34
- ½" COVERBOARD	0.56
- 2 LAYERS OF 3" POLYISOCYANURATE INSULATION	30.0
- ASPHALT VAPOR RETARDER	0.12
- ½" UNDERLAYMENT BOARD	0.56
- SLOPED METAL DECK	0.00
- INSIDE AIR	0.92
TOTAL R VALUE	32.67

INSULATION MEETS OR EXCEEDS REQUIREMENTS IECC

SYSTEM 'R' VALUES (ROOF AREA B)

- OUTSIDE AIR	0.17
- EPDM MEMBRANE	0.34
- ½" COVERBOARD	0.56
- 2 LAYERS OF 3" POLYISOCYANURATE INSULATION	30.0
- ASPHALT VAPOR RETARDER	0.12
- NAILED BASE SHEET	0.12
- GYPSUM DECK	0.92
- INSIDE AIR	0.92
TOTAL R VALUE	33.15

INSULATION MEETS OR EXCEEDS REQUIREMENTS IECC

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT
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REGISTERED ARCHITECT DOUGLAS K. AREW 032669 STATE OF NEW YORK
REGISTRATION EXPIRES: 08/31/2025

CONTRACT: CONSTRUCTION

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C, H, E
DESIGNED BY:	DKA
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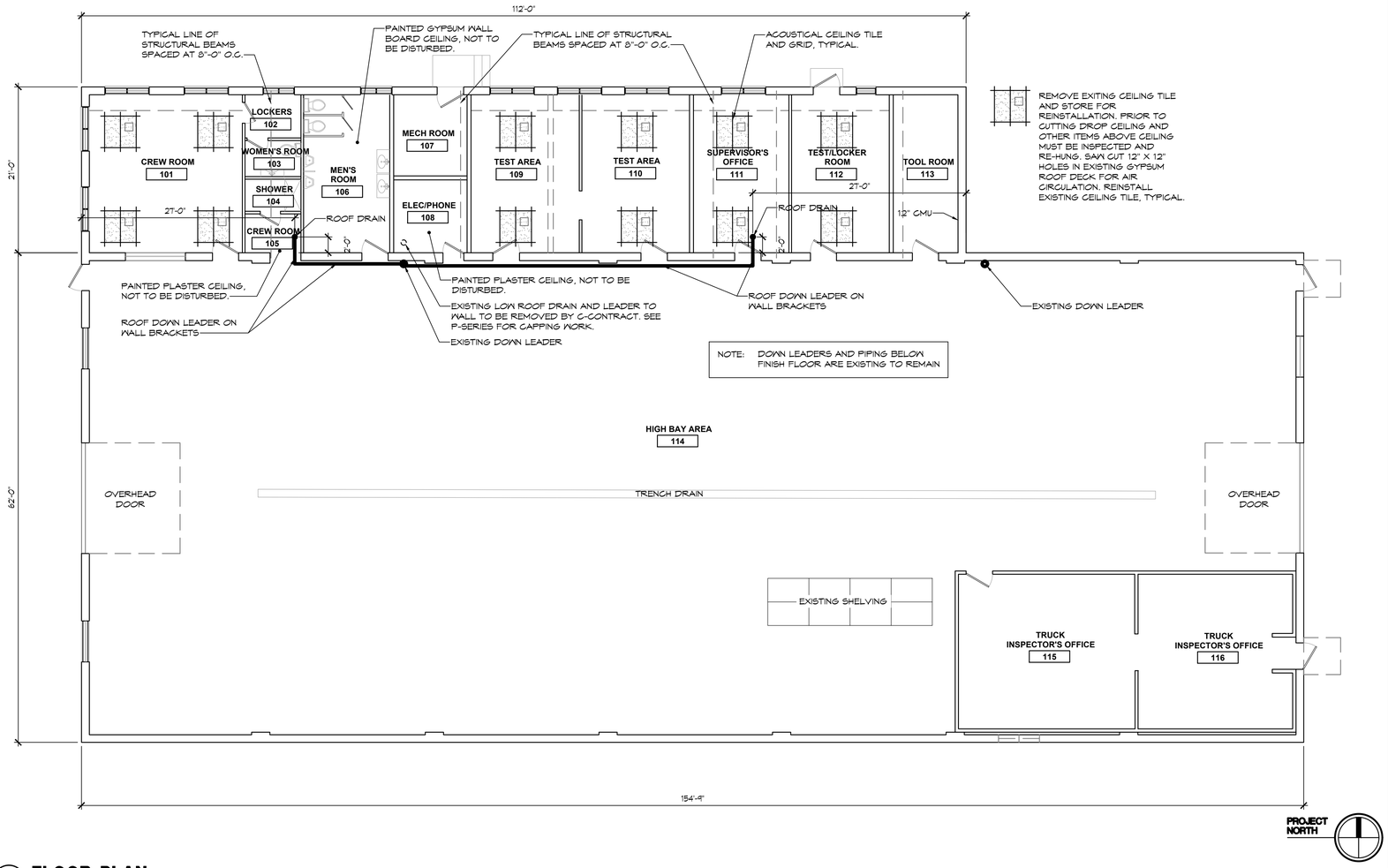
SHEET TITLE: ROOF PLAN, GENERAL NOTES AND ABBREVIATIONS

DRAWING NUMBER: A-101

SHEET 8 OF 21



1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

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DESIGN & CONSTRUCTION

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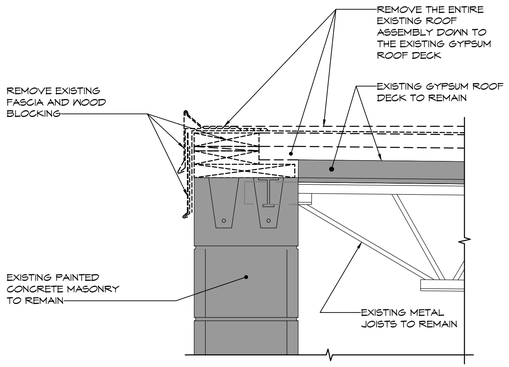
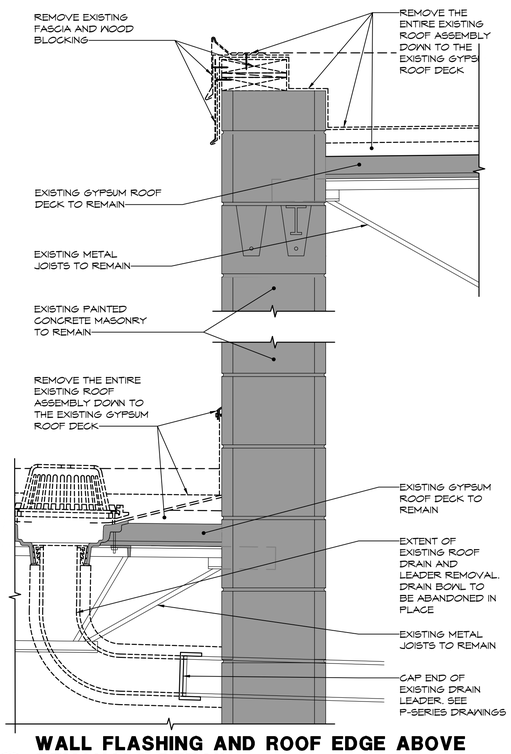
SHEET TITLE:
FLOOR PLAN

DRAWING NUMBER:
A-102

SHEET 9 OF 21

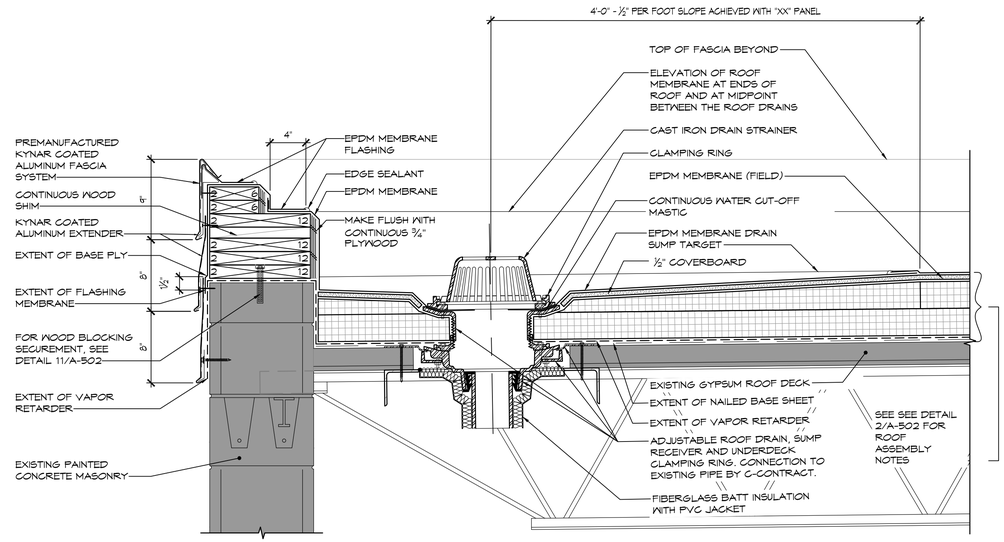


1 ROOF EDGE REMOVAL DETAIL
SCALE: 1 1/2" = 1'-0"

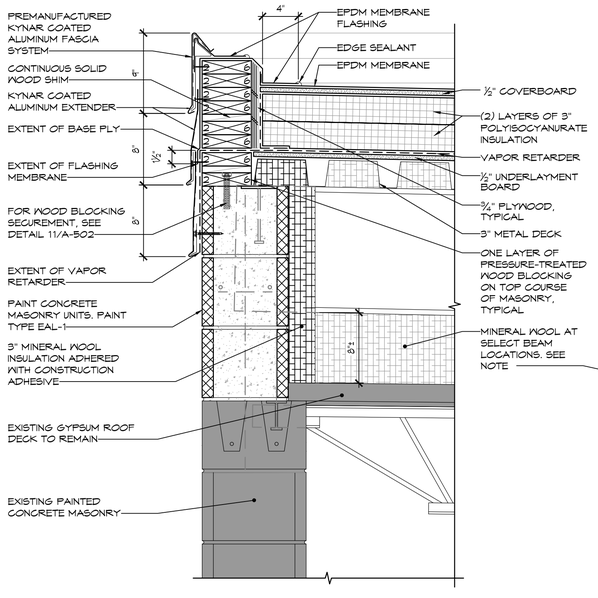


2 WALL FLASHING AND ROOF EDGE ABOVE REMOVALS DETAIL
SCALE: 1 1/2" = 1'-0"

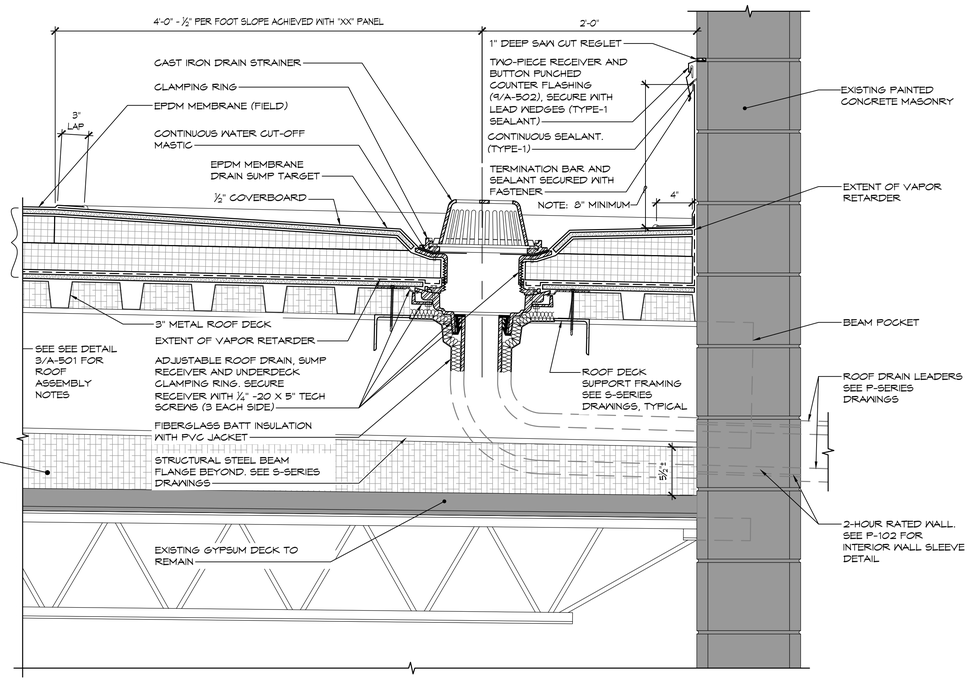
NOTE: COORDINATE SIZE OF HOLE IN EXISTING GYPSUM ROOF DECK WITH SUMP RECEIVER AND ROOF DECK SUPPORT FRAMING. SEE S-SERIES DRAWINGS, TYPICAL.



5 ROOF EDGE DETAIL AT DRAIN SUMP
SCALE: 1 1/2" = 1'-0"

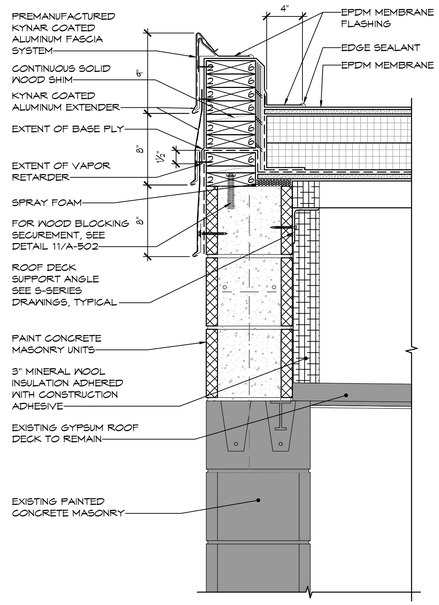


3 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



NOTE: IN PLAN, FROM WEST TO EAST, PROVIDE AND SECURE 3" RIGID MINERAL WOOL INSULATION VERTICALLY AT THE 3RD, 6TH, 10TH, 11TH & 13TH STRUCTURAL BEAMS, FILL THE DECK FLUES ABOVE THE BEAMS AND GAP BETWEEN THE BOTTOM OF THE BEAMS AND THE EXISTING GYPSUM DECK. SEE A-102 FOR LOCATIONS OF BEAMS TYPICAL.

4 ROOF TO WALL DETAIL AT DRAIN SUMP
SCALE: 1 1/2" = 1'-0"



6 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"

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REGISTERED ARCHITECT DOUGLAS K. AREEN 032689 STATE OF NEW YORK

REGISTRATION EXPIRES: 08/31/2025

CONTRACT: CONSTRUCTION

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

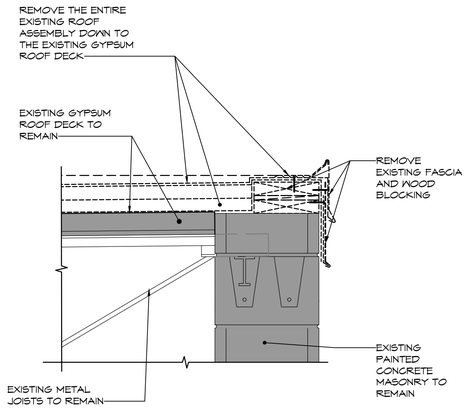
MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C, H, E
DESIGNED BY:	VALUE
DRAWN BY:	VALUE
FIELD CHECK:	---
APPROVED:	---

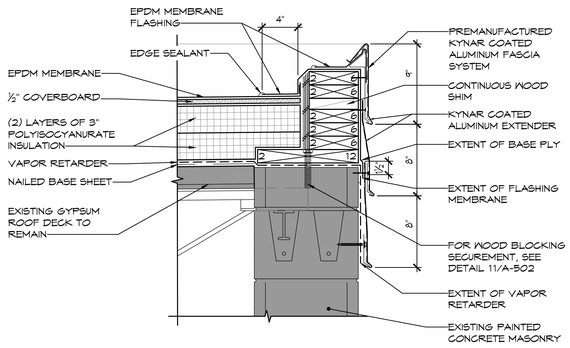
SHEET TITLE: DETAILS

DRAWING NUMBER: A-501

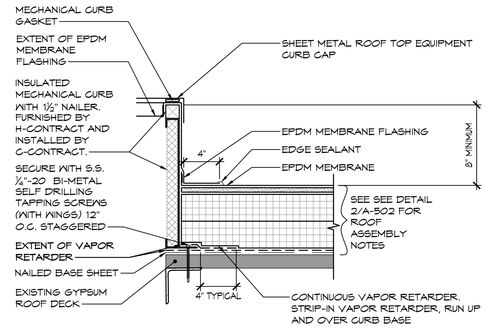
SHEET 10 OF 21



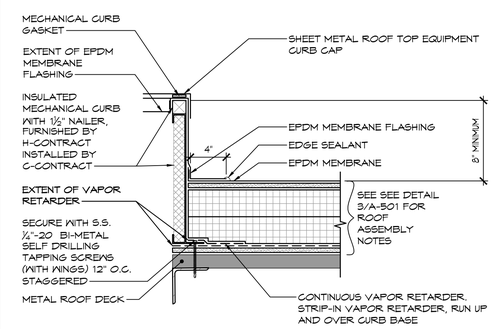
1 ROOF EDGE REMOVAL DETAIL
SCALE: 1 1/2" = 1'-0"



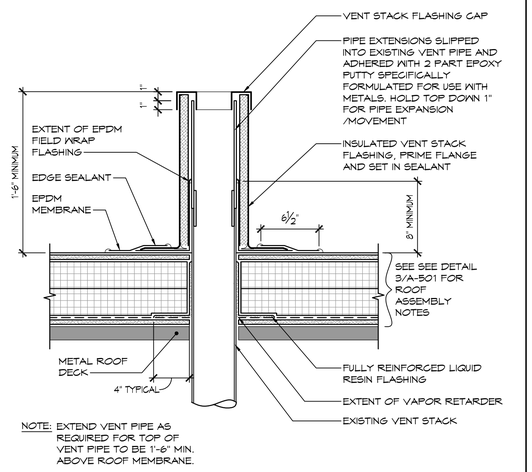
2 ROOF EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



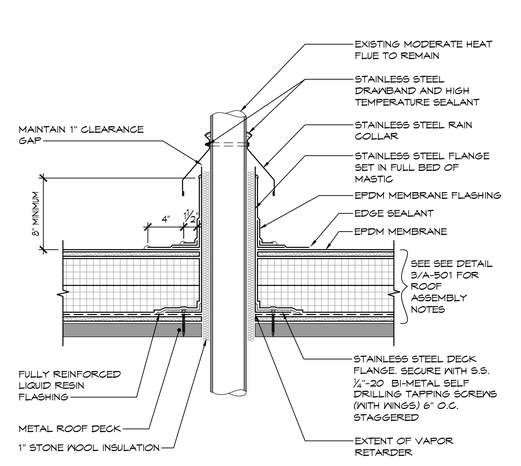
3 TYP.METAL CURB FLASHING DET. (GYPSUM)
SCALE: 1 1/2" = 1'-0"



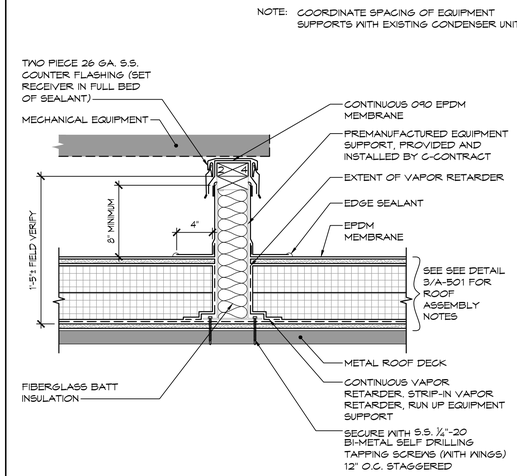
4 TYP. METAL CURB FLASHING DET. (METAL)
SCALE: 1 1/2" = 1'-0"



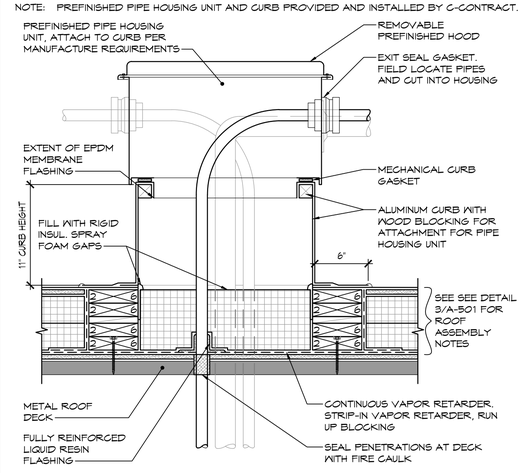
5 TYPICAL PLUMBING VENT DETAIL (COLD)
SCALE: 1 1/2" = 1'-0"



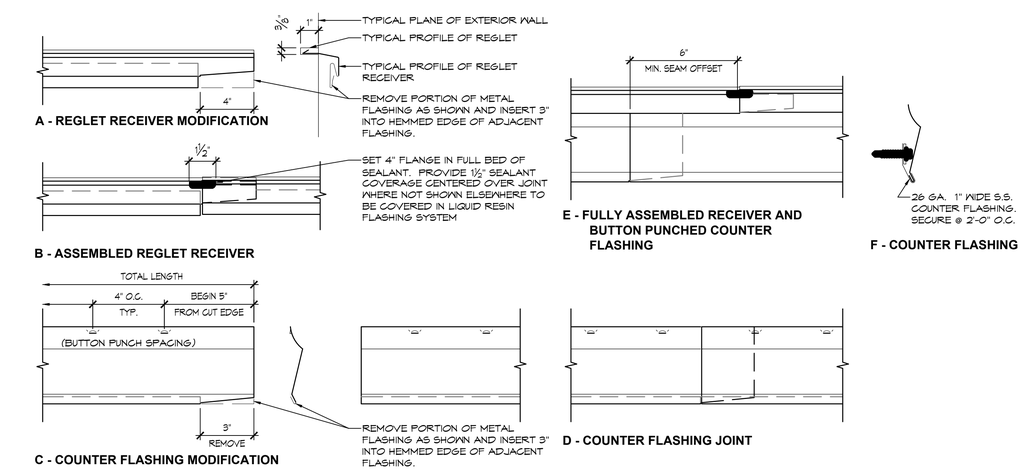
6 TYPICAL PLUMBING VENT DETAIL (HOT)
SCALE: 1 1/2" = 1'-0"



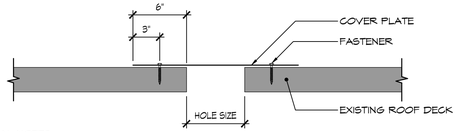
7 TYPICAL EQUIPMENT SUPPORT DETAIL
SCALE: 1 1/2" = 1'-0"



8 THRU-ROOF CONDUIT HOOD DETAIL (MANUF.)
SCALE: 1 1/2" = 1'-0"



9 TYPICAL RECEIVER AND COUNTER FLASHING DETAIL
SCALE: 3" = 1'-0"



TYPICAL NOTES:

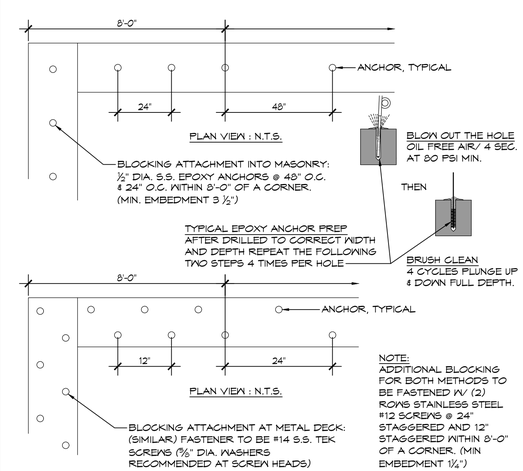
1. COVER HOLES IN DECK SMALLER THAN 12" X 12" WITH 18 GA. GALVANIZED STEEL PLATE.
2. COVER HOLES IN DECK BETWEEN 12" X 12" AND 24" X 24" WITH ⅛" GALVANIZED STEEL PLATE.
3. COVER HOLES IN DECK BETWEEN 24" X 24" AND 42" X 42" WITH ¼" GALVANIZED STEEL PLATE.
4. EXTEND PATCH MATERIAL A MINIMUM OF 6" PAST THE OPENING. FASTENERS 3" FROM EDGE OF PLATE AND SPACED EVENLY AROUND PERIMETER OF PATCH.
5. WHEN PATCHING HOLES LARGER THAN 42" X 42", CONSULT WITH ARCHITECT FOR PATCH METHOD.

FASTENER SCHEDULE

DECK TYPE	18 GA. GALV PLATE			⅛" GALV. STEEL PLATE			¼" GALV. STEEL PLATE		
	QTTY	SIZE	TYPE	QTTY	SIZE	TYPE	QTTY	SIZE	TYPE
METAL	4	#10	TEK	8	#12	TEK	16	#14	TEK
GYPSUM	4	¼" DIA.	TOGGLE	8	5/16" DIA.	TOGGLE	16	3/8" DIA.	TOGGLE

NOTE: FOR BIDDING PURPOSES INCLUDE (4) 12"X 12", (2) 24"X 24", (2) 42"X42" PLATES IN THE BID WITH THE SPECIFIED FASTENERS.

10 TYPICAL DECK COVER PLATE DETAIL
SCALE: 1 1/2" = 1'-0"



11 TYP. WOOD BLOCKING FASTENING DETAIL
SCALE: 1 1/2" = 1'-0"

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REGISTERED ARCHITECT DOUGLAS K. AREA 032669 STATE OF NEW YORK

REGISTRATION EXPIRES: 08/31/2025

CONTRACT: CONSTRUCTION

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

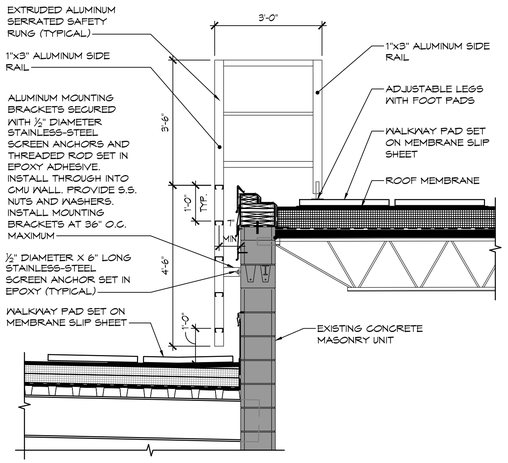
MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-C, H, E
DESIGNED BY:	DKA
DRAWN BY:	JDT
FIELD CHECK:	---
APPROVED:	---

SHEET TITLE: DETAILS

DRAWING NUMBER: A-502

SHEET 11 OF 21



1 ROOF ACCESS LADDER DETAIL
SCALE: 1/2" = 1'-0"

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REGISTRATION EXPIRES: 08/31/2025

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REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND RD
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CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DEC. 2024	BID DOCUMENTS

PROJECT NUMBER:	**47298-C, H, E**
DESIGNED BY:	DKA
DRAWN BY:	JDT
FIELD CHECK:	---
APPROVED:	---

SHEET TITLE:
DETAILS

DRAWING NUMBER:
A-503

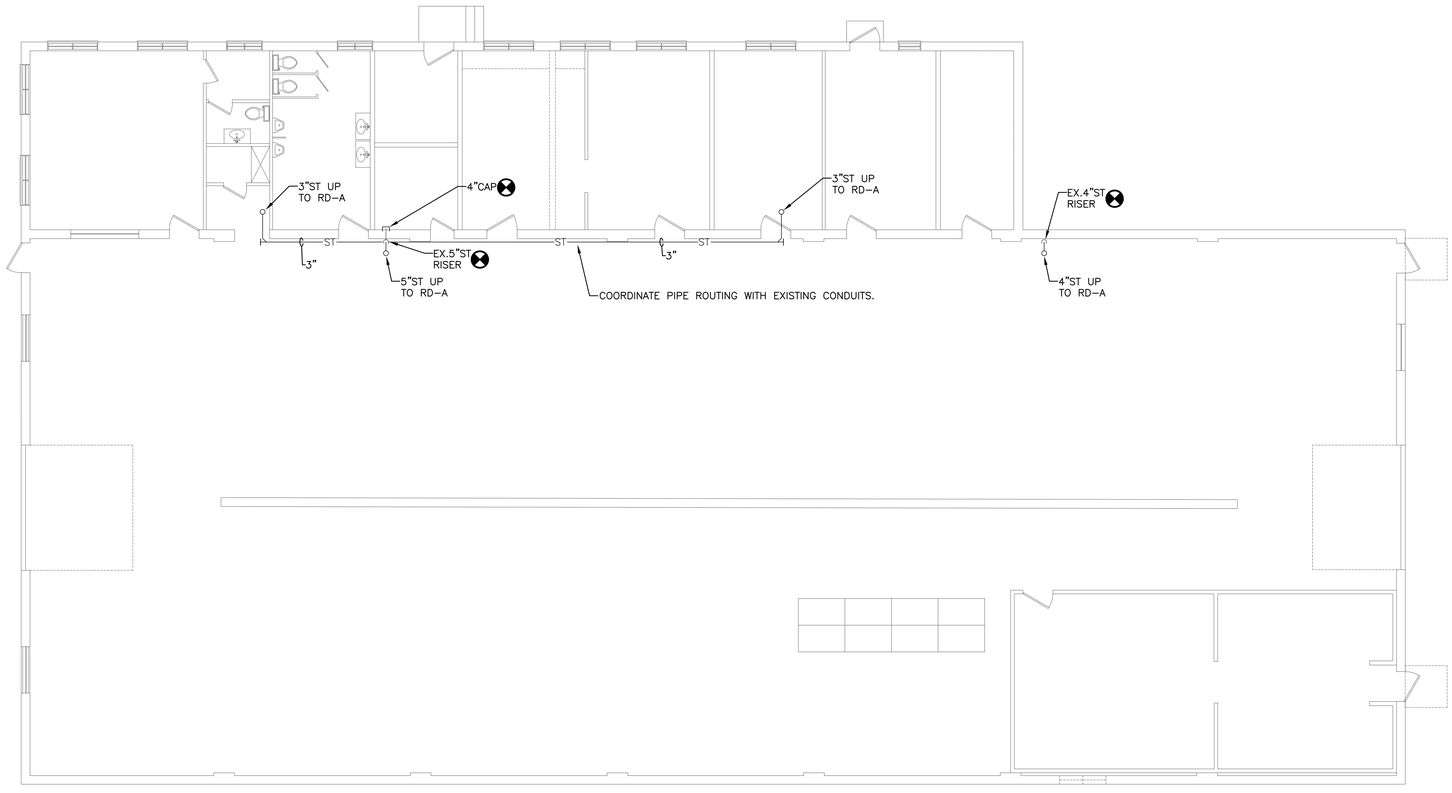
SHEET 12 OF 21

DRAWING NOTES:

A. VERIFY ALL INVERTS, PIPING ROUTES PRIOR TO INSTALLATION. PROVIDE ALL NECESSARY OFFSETS AND FITTINGS REQUIRED TO MAKE SYSTEMS OPERATIONAL.

B. PROVIDE ALL CUTTING, PATCHING, AND FIRESTOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH OPENINGS TO MATCH ADJACENT WALLS, FLOORS, AND CEILINGS.

C. COORDINATE THE INSTALLATION OF ALL PLUMBING PIPING SLEEVE LOCATIONS INSTALLED THRU OR WITHIN CONCRETE FLOORS OR BLOCK WALLS.



1 **FLOOR PLAN - PLUMBING**
SCALE: 1/8" = 1'-0"

P:\23012\PLUM\23012 - P101-FLOOR PLAN.dwg, 12/19/2024 12:21:50 PM

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

bell & spina ARCHITECTS

RAM-TECH ENGINEERS

Syracuse, NY • Buffalo, NY • Philadelphia, PA

RAM-TECH Engineers of Syracuse, P.C.

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STATE OF NEW YORK · RAVI RAMAN · No. 066343 · LICENSED PROFESSIONAL ENGINEER

RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RA8# 23012
Signed on: 12/20/2024

CONTRACT:
CONSTRUCTION

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

	20 DECEMBER 2024	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47298-C
DESIGNED BY:	JMT
DRAWN BY:	JMT
FIELD CHECK:	
APPROVED:	

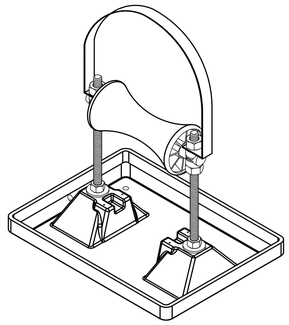
SHEET TITLE:

FLOOR PLAN – PLUMBING

DRAWING NUMBER:

P-101

SHEET 13 OF 21



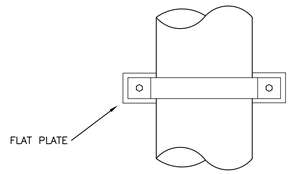
Not to Scale

Notes:

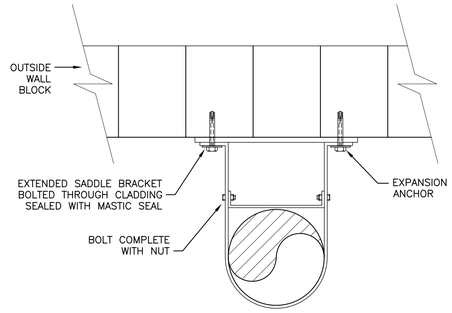
A. PREFABRICATED ADJUSTABLE PIPE SUPPORT WITH PIPE STRAP. PROVIDE SUPPORT TO INSTALL GAS PIPING 12" ABOVE ROOF. GAS–PIPING SUPPORTS. SPACE GAS PIPING SUPPORTS AT 8' FOR ALL HORIZONTAL ROOF PIPING OF 1 1/4" OR LARGER.

Not to Scale

GAS PIPING SUPPORT DETAIL



NOTE:
PROVIDE HANGERS EVERY 6' OF VERTICAL SPACING.



Not to Scale

VERTICAL GAS PIPING SUPPORT DETAIL

DRAIN SCHEDULE

DESIGNATION	REQUIRED	SERIES NO. (ZURN / WADE / SMITH / JOSAM)	BODY: CAST IRON	BODY: STAINLESS STEEL	BODY: ALL BRONZE	BODY: SECONDARY CLAMP	BODY: CLAMPING DEVICE	BODY: DECK CLAMP	BODY: BACK WATER VALVE	BODY: SUMP RECEIVER	BODY: FLASHING COLLAR	STRAINER: CAST IRON (LOW PROFILE)	STRAINER: ACID RESISTANT INTERIOR	STRAINER: ALL BRONZE	STRAINER: NICKEL BRONZE (ADJUSTABLE)	STRAINER: CHROME PLATED	STRAINER: SEDIMENT BUCKET	STRAINER: SECONDARY STRAINER	STRAINER: POLISHED FINISH	STRAINER: STAINLESS STEEL	STRAINER: TRACTOR GRATE	STRAINER: BRONZE MESH SCREEN	STRAINER: FUNNEL TOP	STRAINER: FLAT TOP	STRAINER: DOME STRAINER	STRAINER: ANTI FLOOD RIM	STRAINER: ADJUSTABLE EXTENSION	STRAINER: STAINLESS STEEL	STRAINER: NICKEL BRONZE TOP	STRAINER: IRON GRATE	STRAINER: PVC STANDPIPE	STRAINER: SOLID HINGED COVER	REMARKS: LOCATION
RD–A	•	1015	•				•	•		•	•	•					•								•		•							ROOF

PLUMBING SYMBOLS LIST

SYMBOL	DESCRIPTION	ABBREVIATION
○ RD	ROOF DRAIN (LETTER INDICATES TYPE)	RD
	PLUG VALVE	---
	PLUGGED OR CAPPED OPENING	---
	PIPE UP	UP
	PIPE DOWN	DN
	EXISTING PIPING	XTG
	EXISTING WORK TO BE REMOVED	---
ST	STORM PIPING	ST
G	GAS PIPING	G
ETR	EXISTING TO REMAIN	ETR
EX.	EXISTING	EX.
	POINT OF CONNECTION	---
	POINT OF DISCONNECTION	---
	MAKE UP AIR UNIT	MAU

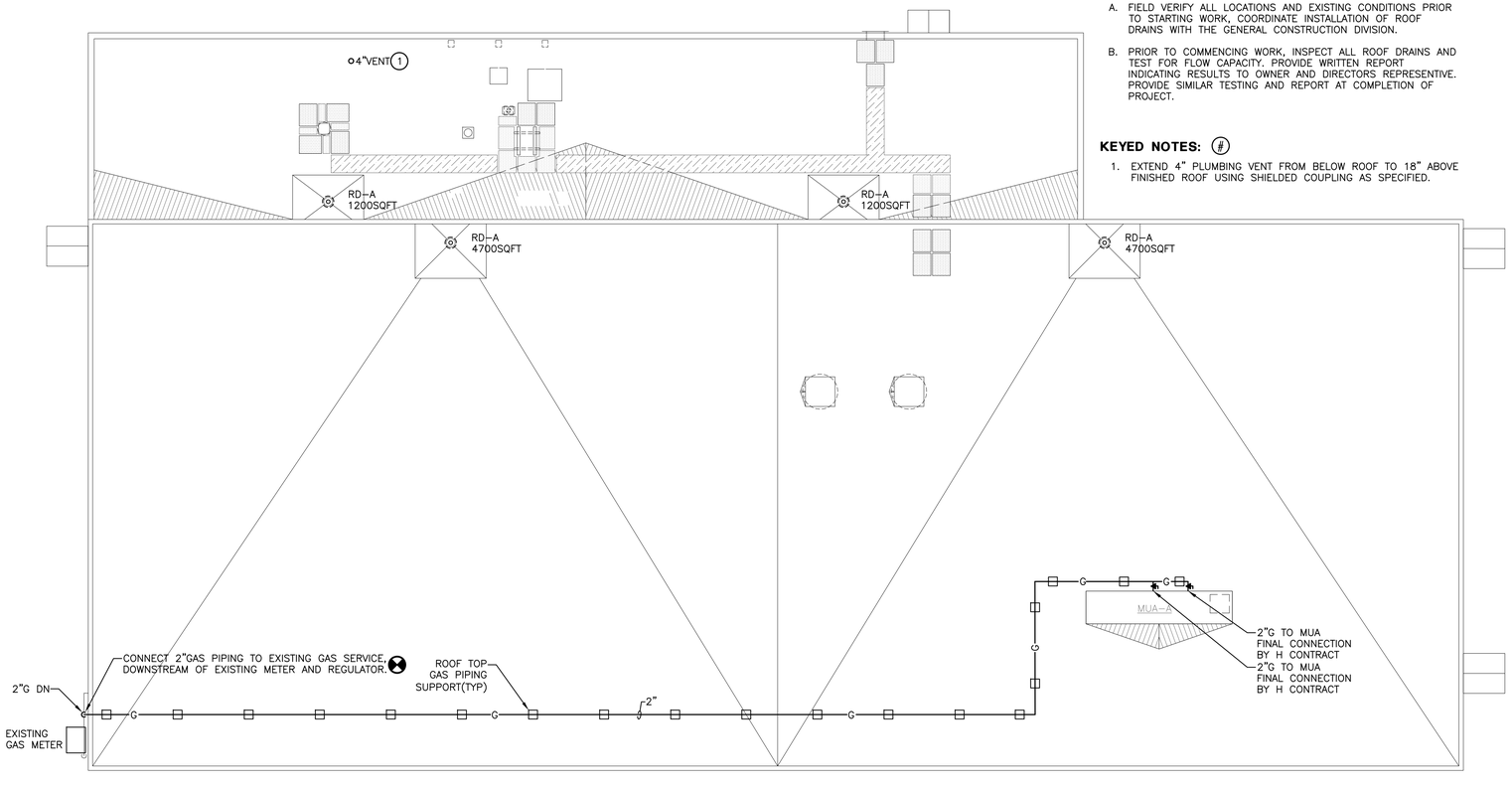
DRAWING NOTES

A. FIELD VERIFY ALL LOCATIONS AND EXISTING CONDITIONS PRIOR TO STARTING WORK, COORDINATE INSTALLATION OF ROOF DRAINS WITH THE GENERAL CONSTRUCTION DIVISION.

B. PRIOR TO COMMENCING WORK, INSPECT ALL ROOF DRAINS AND TEST FOR FLOW CAPACITY. PROVIDE WRITTEN REPORT INDICATING RESULTS TO OWNER AND DIRECTORS REPRESENTIVE. PROVIDE SIMILAR TESTING AND REPORT AT COMPLETION OF PROJECT.

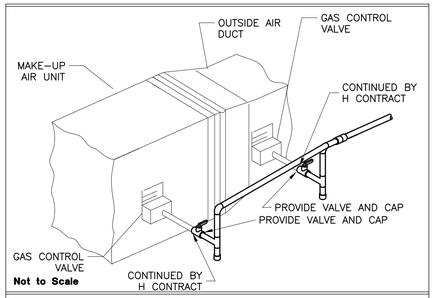
KEYED NOTES: (#)

1. EXTEND 4" PLUMBING VENT FROM BELOW ROOF TO 18" ABOVE FINISHED ROOF USING SHIELDED COUPLING AS SPECIFIED.



1 ROOF PLAN - PLUMBING

SCALE: 1/8" = 1'-0"

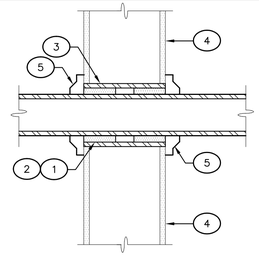


Not to Scale

Notes:

A. GAS PIPING ROUTE SHALL NOT INTERFERE WITH HVAC EQUIPMENT

GAS CONNECTION DETAIL



INTERIOR WALLS

3 HR RATING: UL #C–AJ–1080
2 HR RATING: UL #C–AJ–1240
1 HR RATING: UL #C–AJ–1240

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED WALLS. NOTES #1 AND #2 APPLY TO BOTH RATED AND NON–RATED CONSTRUCTION. FOR GYPSUM BOARD WALLS; PROVIDE UL #W–L–1033 FOR 2 HR AND 1HR RATINGS.

Not to Scale

MARK	DESCRIPTION
1.	MINIMUM 2¼" THICKNESS OF MINIMUM 4 PCF MATERIAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM RECESSED A MINIMUM OF ¼" FROM BOTH SURFACES OF WALL.
2.	FILL VOID WITH TYPE 1 SEALANT A MINIMUM OF ¼" THICKNESS APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY. AT POINT OF CONTACT BETWEEN THROUGH PENETRANT AND WALL, A MINIMUM ¼"" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/THROUGH PENETRANT INTERFACE ON BOTH SURFACES OF WALL.
3.	PIPE SLEEVE (NOT REQUIRED FOR CORE DRILLED WALLS).
4.	WALL.
5.	ESCUTCHEON PLATE FLUSH AGAINST WALL AND OF SIZE TO COMPLETELY COVER OPENING. PROVIDE FOR ALL EXPOSED PIPING IN FINISHED SPACES.

INTERIOR WALL SLEEVE DETAIL

NEW YORK STATE OF OPPORTUNITY. Office of General Services

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CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

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REPLACE ROOFS, SIGNAL SHOP

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DOT REGION 3, ONONDAGA COUNTY
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CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DECEMBER 2024	BID DOCUMENTS
PROJECT NUMBER:	47298-C	
DESIGNED BY:	JMT	
DRAWN BY:	JMT	
FIELD CHECK:		
APPROVED:		

SHEET TITLE:
ROOF PLAN, DETAILS AND SYMBOLS LIST – PLUMBING

DRAWING NUMBER:
P-102

SHEET 14 OF 21

P:\23012\PLUM\23012 - P102-ROOF PLAN.dwg, 12/19/2024 12:22:38 PM

EXHAUST FAN SCHEDULE

UNIT NO.	SERVICE	LOCATION	TYPE	DRIVE	PERFORMANCE DATA					FAN MOTOR DATA				CONTROL NOTES	MFR/MODEL	NOTES
					CFM	TOTAL SP (IN.)	FAN RPM	BHP	(%) SE	MHP (w)	ELECTRICAL DATA VOLTS	PHASE	HZ			
EF-A	VEHICLE STORAGE BAY	ROOF	PRE (UPBLAST)	BELT	6500	0.75	700	1.3	50	1.5	208	3	60	A	GREENHECK CUBE-300-15	1, 2, 3, 4
EF-B	VEHICLE STORAGE BAY	ROOF	PRE (UPBLAST)	BELT	450	0.125	1300	0.03	50	1/30	120	1	60	A	GREENHECK CUBE-085	1, 2, 3, 4, 5

KEYED NOTES:
1. PROVIDE INTEGRAL DISCONNECTING MEANS
2. PROVIDE 18" HIGH ROOF CURB FURNISHED BY H-TRADE, INSTALLED BY C-TRADE.
3. PROVIDE AAD INTERLOCKED WITH FAN (DELAY FAN START UNTIL AAD IS OPEN) .
4. FAN SHALL BE INTERLOCKED WITH MUA-A
5. EF-B SHALL BE INTERLOCKED EF-A AND SHALL OPERATE CONTINUOUSLY WHEN EF-A IS OFF AND SHALL BE OFF WHEN EF-A IS OPERATING.

CONTROL NOTES:
A. CONTROLLED BY CO/NO2 MONITORING SYSTEM TO ACTIVATE THE FAN EF-A WHEN CO OR NO2 ARE SENSED.

MAKE-UP AIR UNIT SCHEDULE

UNIT NO.	AREA SERVED	UNIT CFM				SUPPLY FAN								GAS BURNER				UNIT ELECTRICAL					MANUFACTURER/ MODEL	NOTES
		UNIT MAX SA	DESIGN MAX SA	DESIGN MIN SA	DESIGN MIN OA	NO.	TYPE	CFM	ESP (IN WG)	TSP (IN WG)	RPM	BHP	MHP	EAT (°F)	LAT (°F)	INPUT MBH	OUTPUT MBH	FLA	VOLTS	PHASE	MCA	MOCP		
MAU-A	STORAGE BAY VENTILATION	6,500	6,500	6,500	6,500	1	AF	6,500	1.0	1.5	1878.0	4	5	3	60	500	400	15	208	3	20	25	GREENHECK IGX-P122-H22-MF-O	A-G

GENERAL NOTES:
A. PROVIDE INLET WEATHER HOOD WITH BIRDSCREEN AND INLET AUTOMATIC DAMPER.
B. PROVIDE FILTERS 2", PLEATED, EFFICENCY MERV 8.
C. 24" HIGH ROOF CURB. FURNISHED BY H-TRADE, INSTALLED BY C-TRADE.
D. PROVIDE SINGLE POINT POWER CONNECTION WITH FACTORY WIRED DISCONNECT.
E. PROVIDE MODULATING GAS BURNER AND STAINLESS STEEL HEAT EXCHANGER.
F. BURNER GAS PRESSURE RANGE 7"WC TO 14" WC, TURNDOWN 4:1
G. EF-A INTERLOCKED WITH MAU-A. SEE EXHAUST FAN SCHEDULE

REGISTER AND DIFFUSER SCHEDULE

TYPE	DESCRIPTION	CONSTRUCTION	FEATURES	BASIS OF DESIGN	NOTES
1	12"x12" OR 24"x24" (AS SHOWN) MULTI-CORE FACE DIFFUSER SUPPLY AIR	STEEL FLUSH STAMPED MULTI-CORE	4-WAY ADJUSTABLE PATTERN DAMPER OPERABLE FROM FACE	TITUS TMSA	1
2	SUPPLY AIR REGISTER	STEEL DOUBLE DEFLECTED ADJUSTABLE BLADES, FRONT SPACED 3/4" ON CENTER.	BLADES SHALL HAVE STEEL FRICTION PIVOT ENDS. DAMPER OPERABLE FROM FACE, FRONT BLADES PARALLEL TO HORIZONTAL.	TITUS 300 RL	1, 2
3	SUPPLY AIR REGISTER	ROUND DUCT DIFFUSER	BLADES SHALL HAVE STEEL FRICTION PIVOT ENDS. DAMPER OPERABLE FROM FACE, FRONT BLADES PARALLEL TO HORIZONTAL.	TITUS S300 FL	1
					1
A	12"x12" OR 24"x24" (AS SHOWN) PERFORATED FACE RETURN	STEEL FLUSH PERFORATED FACE WITH 3/16" HOLES ON 1/4" STAGGERED CENTERS	UN-LATCHABLE FACE WITHOUT DAMPER OR PATTERN CONTROL FOR LAY-IN CEILING	TITUS PAR	1
B	35° DEFLECTION RETURN, EXHAUST OR MAKE-UP AIR GRILLE	STEEL FIXED BLADES PARALLEL TO LENGTH SPACED AT 1/2" ON CENTER	BLADES SHALL BE FIXED BY MULLIONS BEHIND THE GRILLE AND FIXED TO GRILLE BY WELDING, PROVIDE OPPOSED BLADE DAMPER ADJUSTABLE FROM FACE	TITUS 355 RL	1

NOTES:
1. PROVIDE BAKED ENAMEL FINISH WITH COLOR AS SELECTED BY DIRECTORS REPRESENTATIVE.
2. CFM TO BE BALLANCED THROUGH THE REGISTER FACE USING A SCREWDRIVER.
GENERAL NOTES:
A. PROVIDE FRAMES FOR GYPSUM BOARD CEILING AS NECESSARY. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPE.
B. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPE. SELECT DIFFUSER, REGISTER OR GRILLE ACCORDINGLY.
C. PROVIDE SIZE AND CONFIGURATION FOR 25 NC MAXIMUM.

HVAC SYMBOLS LIST

	DUCTWORK
	EXISTING DUCTWORK TO REMAIN
	EXISTING DUCTWORK TO BE REMOVED
	EQUIPMENT
	EXISTING EQUIPMENT TO REMAIN
	EXISTING EQUIPMENT TO BE REMOVED
20x12	DUCT SIZE, FIRST FIGURE IS SIDE SHOWN
PIPE DUCT	BREAKS
	POINT OF CONNECTION BETWEEN EXISTING WORK TO REMAIN & NEW WORK.
	POINT BETWEEN EXISTING WORK TO REMAIN & EXISTING WORK TO BE REMOVED

HVAC ABBREVIATIONS LIST

AAD	AUTOMATIC AIR DAMPER
BHP	BRAKE HORSE POWER
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EX	EXISTING
ESP	EXTERNAL STATIC PRESSURE
FLA	FULL LOAD AMPS
LAT	LEAVING AIR TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BRITISH THERMAL UNITS
MCA	MAXIMUM CIRCUIT AMPACITY
MOCP	MAXIMUM OVER CIRCUIT PROTECTION
OED	OPEN ENDED DUCT
PRE	POWERED ROOF EXHAUSTER
PV	PLUMBING VENT
RD	ROOF DRAIN
RH	ROOF HATCH
SA	SUPPLY AIR
SRV	STATIONARY ROOF VENT
TSP	TOTAL STATIC PRESSURE
TYP.	TYPICAL

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

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RAM-TECH ENGINEERS
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RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RA8# 23012
Signed on: 01/29/2025

CONTRACT: HVAC

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

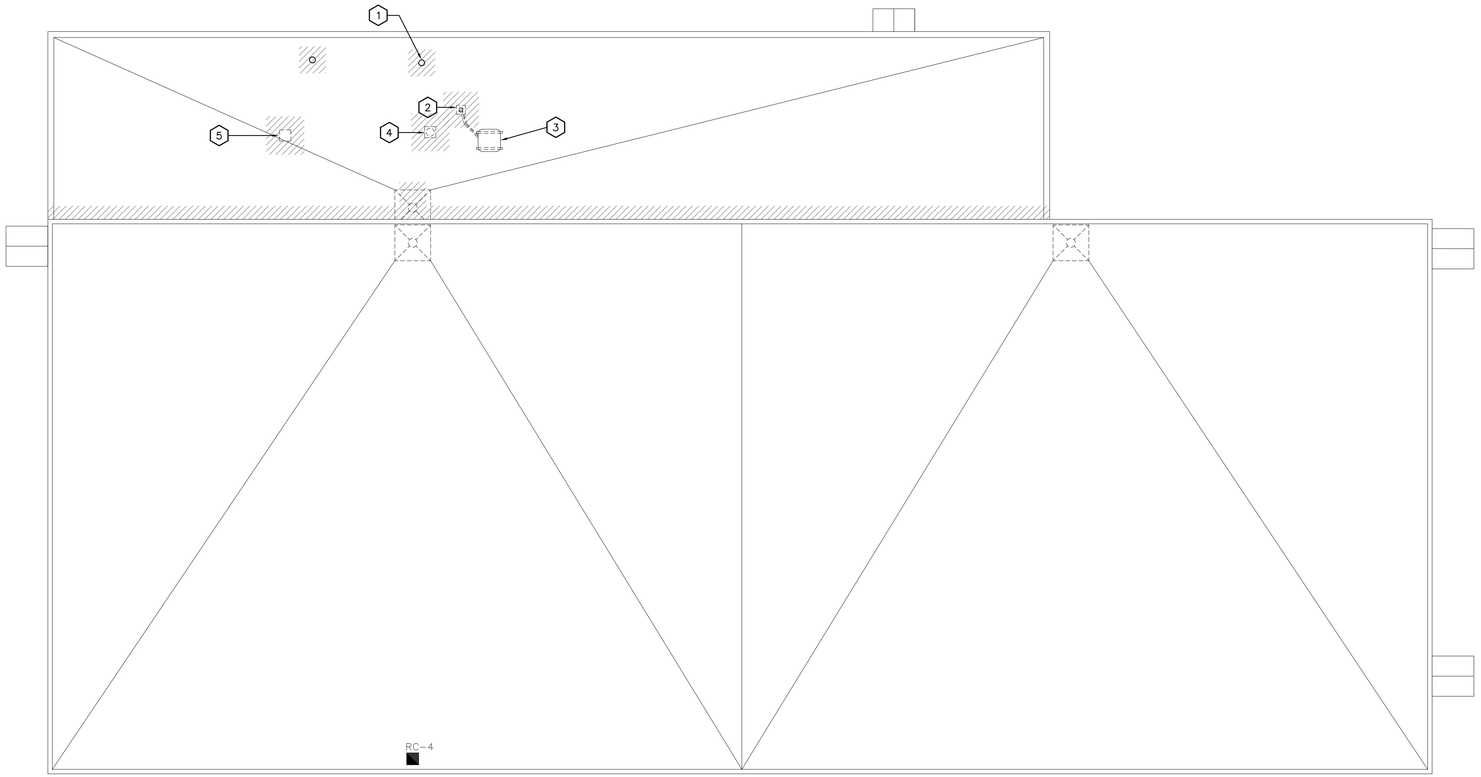
MARK	DATE	DESCRIPTION
	20 DECEMBER 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-H
DESIGNED BY:	TAM
DRAWN BY:	EGC
FIELD CHECK:	
APPROVED:	

SHEET TITLE: SCHEDULES AND SYMBOLS LIST – HVAC

DRAWING NUMBER: **M-001**

SHEET 15 OF 21



1 ROOF PLAN – HVAC REMOVALS
SCALE: 1/8"=1'-0"

DRAWING NOTES:

A PROVIDE ALL CUTTING, INCLUDING ROOF DECKING PENETRATIONS, PATCHING AND FIRE STOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH AND SEAL OPENINGS TO MATCH ADJACENT WALLS, FLOORS, CEILINGS, ETC. UNLESS OTHERWISE INDICATED.

B. FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND EXISTING CONDITIONS (PIPING, DUCTWORK, STRUCTURAL ELEMENTS, ETC.) PRIOR TO STARTING WORK. COORDINATE INSTALLATION OF EQUIPMENT, PIPING AND DUCTWORK WITH EXISTING CONDITIONS. PROVIDE FITTINGS, TRANSITIONS, OFFSETS, ELEVATION CHANGES, ETC. TO MINIMIZE CONFLICTS WITH EXISTING CONDITIONS.

C. MAINTAIN THE INTEGRITY OF ALL EXISTING EQUIPMENT AND SYSTEMS LOCATED OUTSIDE THE WORK AREA AND INTERRUPTED BY THE RENOVATION WORK. PROVIDE ALL ADDITIONAL PIPING, FITTINGS, DUCTWORK, ACCESSORIES, ETC. REQUIRED TO EXTEND AND RECONNECT REMAINING EQUIPMENT AND SYSTEMS.

D. SCHEDULE SYSTEMS SHUTDOWNS WITH DIRECTORS REP. PROVIDE A MINIMUM OF 72 HOUR NOTICE. SYSTEM SHUTDOWNS SHALL NOT INTERFERE WITH BUILDING OPERATIONS. PROVIDE TEMPORARY SYSTEMS DURING SHUTDOWNS AS REQUIRED BY DIRECTORS REP. MAINTAIN EXISTING SYSTEMS OPERATIONAL PER THE DIRECTORS REP. REQUIREMENTS.

E. EXISTING EQUIPMENT LOCATIONS, DUCT SIZES AND PIPE SIZES SHOWN ARE APPROXIMATE. FIELD VERIFY SAME PRIOR TO STARTING THE WORK. NOT ALL EXISTING HVAC EQUIPMENT, DUCTWORK AND PIPING IN THE WORK AREA HAVE BEEN SHOWN. FIELD VERIFY ACTUAL EXTENT OF WORK AT SITE.

F. SYSTEMS INDICATED ON DRAWINGS SHALL BE INSTALLED AS SHOWN. ADJUSTMENTS TO LOCATIONS OF VARIOUS ITEMS MAY BE REQUIRED BY FIELD CONDITIONS AND COORDINATION WITH THE WORK OF OTHER TRADES. VERIFY PRIOR TO INSTALLATION.

KEYED NOTES: (#)

1. REMOVE EXISTING HOT WATER HEATER VENT AND RAIN CAP TO ALLOW FOR ROOF REPLACEMENT. SAVE VENT FOR REINSTALLATION.
2. EX REFRIGERANT PIPING
3. EXISTING AIR COOLED CONDENSING UNIT (CARRIER (MODEL 24ACC W/ R-410A REFRIGERANT). DISCONNECT ASSOCIATED PIPING, AND CONTROLS. REMOVE CONDENSING UNIT FROM ROOF TO ALLOW ROOF REPLACEMENT AND SAVE FOR REINSTALLATION. RECLAIM REFRIGERANT PRIOR TO PIPING REMOVAL. REMOVE EXPOSED REFRIGERANT PIPING ASSOCIATED WITH THE CONDENSING UNIT ABOVE THE ROOF INCLUDING SPECIALTIES AND ACCESSORIES. INSTALL SCHRADER PORT TO FACILITATE REFRIGERANT CHARGING & EVACUATION, ALL JOINTS SHALL BE BRAZED. PROVIDE TEMPORARY CHARGE OF NITROGEN DURING ROOF REPLACEMENT.
4. REMOVE EXISTING OUTDOOR AIR INTAKE VENT WITH RAIN CAP TO ALLOW FOR ROOF REPLACEMENT. SAVE VENT FOR REINSTALLATION.
5. REMOVE EXISTING EXHAUST FAN TO ALLOW ROOF REPLACEMENT. DOCUMENT EXISTING FAN OPERATING CONDITIONS PRIOR TO REMOVAL (AIRFLOW, STATIC PRESSURE, VOLTAGE, OPERATING AMPS, ETC.) AND SUBMIT REPORT TO DIRECTOR'S REPRESENTATIVE. DISCONNECT EXISTING DUCTWORK AND CONTROL WIRING AND REMOVE EXHAUST FAN, SAVE EXHAUST FAN FOR REINSTALLATION.

N

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DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

bell & spina ARCHITECTS

RAM-TECH ENGINEERS
Syracuse, NY • Buffalo, NY • Philadelphia, PA
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STATE OF NEW YORK · RAVI RAMAN · LICENSED PROFESSIONAL ENGINEER · No. 066343

RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RA8# 23012
Signed on: 12/20/2024

CONTRACT: HVAC

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DECEMBER 2024	BID DOCUMENTS

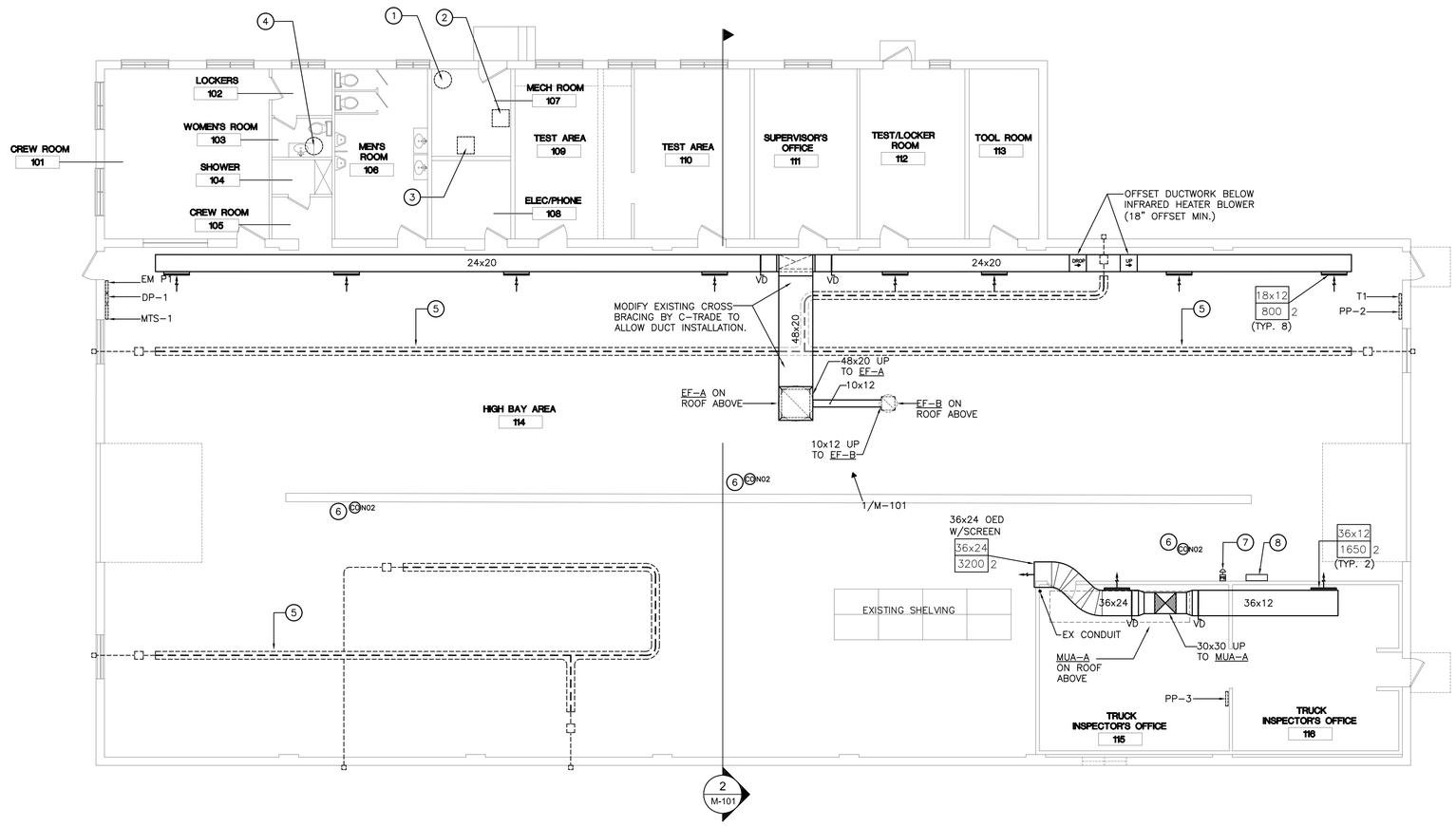
PROJECT NUMBER:	47298-H
DESIGNED BY:	TAM
DRAWN BY:	EGC
FIELD CHECK:	
APPROVED:	

SHEET TITLE: ROOF PLAN – HVAC REMOVALS

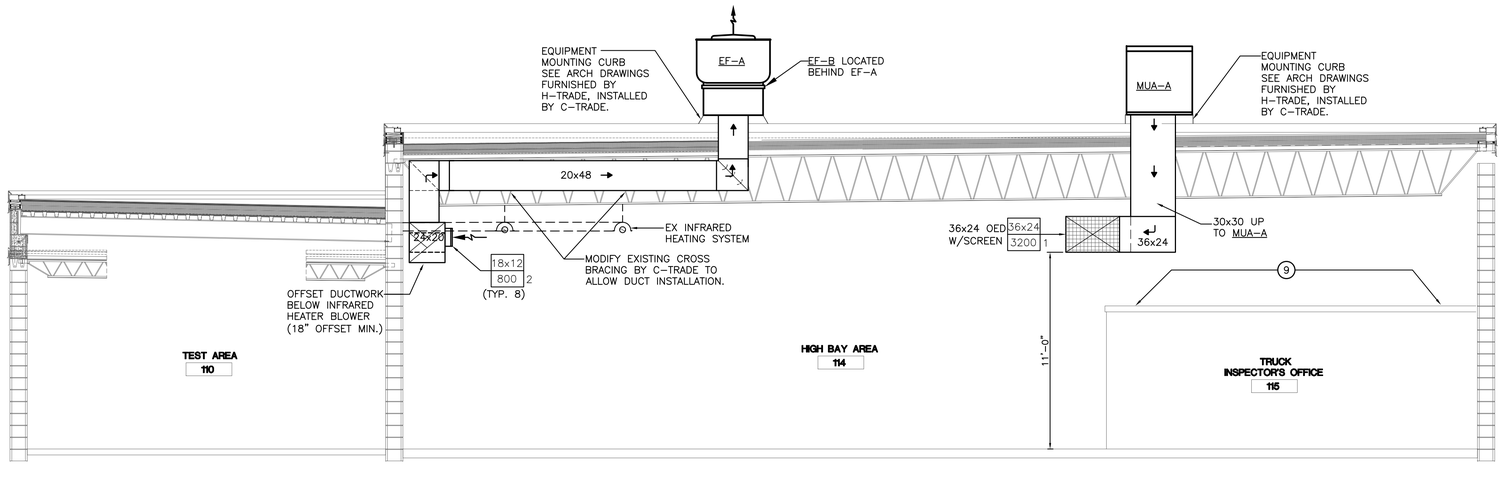
DRAWING NUMBER: **MD-101**

SHEET 16 OF 21

P:\23012\HVAC\23012 - MD101-ROOF PLAN - REMOVALS.dwg, 12/19/2024 12:28:30 PM



1 FLOOR PLAN – HVAC
SCALE: 1/8"=1'-0"



2 BUILDING SECTION – HVAC
SCALE: 1/4"=1'-0"

DRAWING NOTES:

A PROVIDE ALL CUTTING, INCLUDING ROOF DECKING PENETRATIONS, PATCHING AND FIRE STOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH AND SEAL OPENINGS TO MATCH ADJACENT WALLS, FLOORS, CEILINGS, ETC. UNLESS OTHERWISE INDICATED.

B. PROVIDE ALL CONTROL COMPONENTS, CONTROL WIRING, AND CONNECTIONS TO PROPERLY CONTROL AND OPERATE SYSTEMS AS INDICATED. ALL NEW CONTROL COMPONENTS, THERMOSTATS, SENSORS, ETC. SHALL BE ELECTRIC TYPE. PROVIDE ALL CONTROL WIRING IN APPROVED RACEWAY SYSTEMS; REFER TO DIVISION 26 SPECIFICATIONS.

C. FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND EXISTING CONDITIONS (PIPING, DUCTWORK, STRUCTURAL ELEMENTS, ETC.) PRIOR TO STARTING WORK. COORDINATE INSTALLATION OF EQUIPMENT, PIPING AND DUCTWORK WITH EXISTING CONDITIONS. PROVIDE FITTINGS, TRANSITIONS, OFFSETS, ELEVATION CHANGES, ETC. TO MINIMIZE CONFLICTS WITH EXISTING CONDITIONS.

D. MAINTAIN THE INTEGRITY OF ALL EXISTING EQUIPMENT AND SYSTEMS LOCATED OUTSIDE THE WORK AREA AND INTERRUPTED BY THE RENOVATION WORK. PROVIDE ALL ADDITIONAL PIPING, FITTINGS, DUCTWORK, ACCESSORIES, ETC. REQUIRED TO EXTEND AND RECONNECT REMAINING EQUIPMENT AND SYSTEMS.

E. SCHEDULE SYSTEMS SHUTDOWNS WITH DIRECTORS REP. PROVIDE A MINIMUM OF 72 HOUR NOTICE. SYSTEM SHUTDOWNS SHALL NOT INTERFERE WITH BUILDING OPERATIONS. PROVIDE TEMPORARY SYSTEMS DURING SHUTDOWNS AS REQUIRED BY DIRECTORS REP. MAINTAIN EXISTING SYSTEMS OPERATIONAL PER THE DIRECTORS REP. REQUIREMENTS.

F. EXISTING EQUIPMENT LOCATIONS, DUCT SIZES AND PIPE SIZES SHOWN ARE APPROXIMATE. FIELD VERIFY SAME PRIOR TO STARTING THE WORK. NOT ALL EXISTING HVAC EQUIPMENT, DUCTWORK AND PIPING IN THE WORK AREA HAVE BEEN SHOWN. FIELD VERIFY ACTUAL EXTENT OF WORK AT SITE.

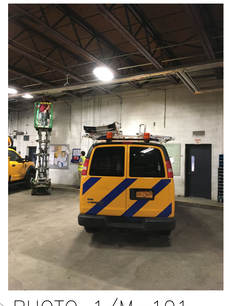
G. SYSTEMS INDICATED ON DRAWINGS SHALL BE INSTALLED AS SHOWN. ADJUSTMENTS TO LOCATIONS OF VARIOUS ITEMS MAY BE REQUIRED BY FIELD CONDITIONS AND COORDINATION WITH THE WORK OF OTHER TRADES. VERIFY PRIOR TO INSTALLATION.

H. PROVIDE MANUAL VOLUME DAMPERS IN MAIN BRANCH DUCTS, IN THE BRANCH DUCT TAKE-OFF TO EACH AIR OUTLET OR INLET (WHETHER SHOWN OR NOT) AND WHERE SHOWN. REFER TO SYMBOL LIST FOR IDENTIFICATION.

I. PROVIDE SERVICE CLEARANCE FOR ALL HVAC EQUIPMENT AS RECOMMENDED BY MANUFACTURER.

KEYED RENOVATION NOTES: (#)

1. EX HOT WATER HEATER. (36 MBH) WITH B-VENT UP THRU ROOF. REINSTALL AND EXTEND VENT AS REQUIRED.
2. EX HIGH EFFICIENCY FURNACE WITH SIDE WALL VENT. DX COIL WITH REFRIGERANT PIPING UP TO ACCU ON ROOF.
3. EX OUTDOOR AIR INTAKE DUCT UP THRU ROOF. REINSTALL AND EXTEND DUCT AS REQUIRED.
4. EX EXHAUST FAN ABOVE.
5. EX INFRARED HEATING SYSTEM.
6. PROVIDE GAS DETECTOR DIGITAL TRANSMITTER (TYPICAL) MOUNTED TO BOTTOM OF ROOF TRUSS.
7. PROVIDE PUSH BUTTON TIMER
8. PROVIDE GAS DETECTION SYSTEM CONTROLLER.
9. THE SURFACE ABOVE THE TRUCK INSPECTORS OFFICE #115 IS NOT WALKABLE. CONTRACTOR TO INSTALL WORK WITHOUT BEARING WEIGHT ON THIS SURFACE.



3 PHOTO 1/M-101
SCALE: NOT TO SCALE

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DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

bell & spina ARCHITECTS

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STATE OF NEW YORK · RAVI RAMAN · LICENSED PROFESSIONAL ENGINEER · No. 066343

RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RAB# 23012
Signed on: 01/29/2025

CONTRACT:
HVAC

TITLE:
REPLACE ROOFS, SIGNAL SHOP

LOCATION:
DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:
NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DECEMBER 2024	BID DOCUMENTS

PROJECT NUMBER: 47298-H
DESIGNED BY: TAM
DRAWN BY: EGC
FIELD CHECK:
APPROVED:

SHEET TITLE:
FLOOR PLAN – HVAC

DRAWING NUMBER:
M-101

SHEET 17 OF 21

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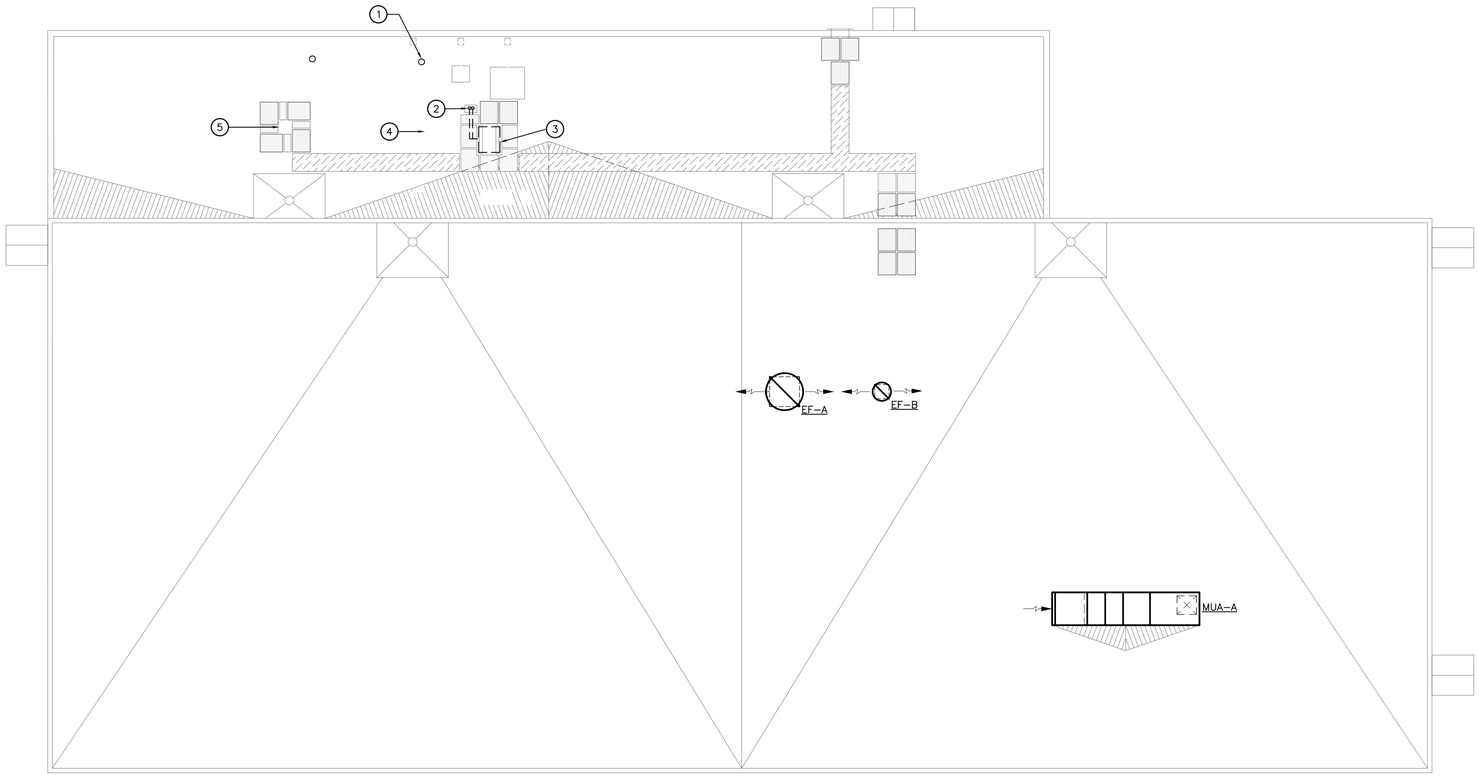

1 ROOF PLAN – HVAC
SCALE: 1/8"=1'-0"

DRAWING NOTES:

A. PROVIDE ALL CUTTING, INCLUDING ROOF DECKING PENETRATIONS, PATCHING AND FIRE STOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH AND SEAL OPENINGS TO MATCH ADJACENT WALLS, FLOORS, CEILINGS, ETC. UNLESS OTHERWISE INDICATED.

B. PROVIDE ALL CONTROL COMPONENTS, CONTROL WIRING, AND CONNECTIONS TO PROPERLY CONTROL AND OPERATE SYSTEMS AS INDICATED. ALL NEW CONTROL COMPONENTS, THERMOSTATS, SENSORS, ETC. SHALL BE ELECTRIC TYPE. PROVIDE ALL CONTROL WIRING IN APPROVED RACEWAY SYSTEMS; REFER TO DIVISION 26 SPECIFICATIONS.

C. FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND EXISTING CONDITIONS (PIPING, DUCTWORK, STRUCTURAL ELEMENTS, ETC.) PRIOR TO STARTING WORK. COORDINATE INSTALLATION OF EQUIPMENT, PIPING AND DUCTWORK WITH EXISTING CONDITIONS. PROVIDE FITTINGS, TRANSITIONS, OFFSETS, ELEVATION CHANGES, ETC. TO MINIMIZE CONFLICTS WITH EXISTING CONDITIONS.

D. MAINTAIN THE INTEGRITY OF ALL EXISTING EQUIPMENT AND SYSTEMS LOCATED OUTSIDE THE WORK AREA AND INTERRUPTED BY THE RENOVATION WORK. PROVIDE ALL ADDITIONAL PIPING, FITTINGS, DUCTWORK, ACCESSORIES, ETC. REQUIRED TO EXTEND AND RECONNECT REMAINING EQUIPMENT AND SYSTEMS.

E. SCHEDULE SYSTEMS SHUTDOWNS WITH DIRECTORS REP. PROVIDE A MINIMUM OF 72 HOUR NOTICE. SYSTEM SHUTDOWNS SHALL NOT INTERFERE WITH BUILDING OPERATIONS. PROVIDE TEMPORARY SYSTEMS DURING SHUTDOWNS AS REQUIRED BY DIRECTORS REP. MAINTAIN EXISTING SYSTEMS OPERATIONAL PER THE DIRECTORS REP. REQUIREMENTS.

F. EXISTING EQUIPMENT LOCATIONS, DUCT SIZES AND PIPE SIZES SHOWN ARE APPROXIMATE. FIELD VERIFY SAME PRIOR TO STARTING THE WORK. NOT ALL EXISTING HVAC EQUIPMENT, DUCTWORK AND PIPING IN THE WORK AREA HAVE BEEN SHOWN. FIELD VERIFY ACTUAL EXTENT OF WORK AT SITE.

G. SYSTEMS INDICATED ON DRAWINGS SHALL BE INSTALLED AS SHOWN. ADJUSTMENTS TO LOCATIONS OF VARIOUS ITEMS MAY BE REQUIRED BY FIELD CONDITIONS AND COORDINATION WITH THE WORK OF OTHER TRADES. VERIFY PRIOR TO INSTALLATION.

H. PROVIDE SERVICE CLEARANCE FOR ALL HVAC EQUIPMENT AS RECOMMENDED BY MANUFACTURER.

KEYED NOTES: (#)

1. REINSTALL EXISTING HOT WATER HEATER VENT AND RAIN CAP AFTER ROOF IS REPLACED IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURERS REQUIREMENTS AND AS INDICATED ON THE ARCHITECTURAL DRAWINGS. EXTEND WITH TYPE B VENT TO MATCH EXISTING. TERMINATE MINIMUM 5'–0" ABOVE NEW ROOF.
2. EX REFRIGERANT PIPING
3. REINSTALL EXISTING AIR COOLED CONDENSING UNITS (ACCU'S) AFTER ROOF IS REPLACED IN ACCORDANCE WITH ROOFING SYSTEMS MANUFACTURERS REQUIREMENTS AND AS INDICATED ON THE ARCHITECTURAL DRAWINGS. EXTEND REFIGERANT PIPING AND CONTROL WIRING TO EXISTING UNIT IN ACCORDANCE WITH ACCU'S MANUFACTURERS REQUIREMENTS. ALL JOINTS SHALL BE BRAZED.
4. REINSTALL EXISTING OUTDOOR AIR INTAKE VENT AND RAIN CAP AFTER ROOF IS REPLACED IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURERS REQUIREMENTS AND AS INDICATED ON THE ARCHITECTURAL DRAWINGS. EXTEND DUCTWORK AND CONNECT EXISTING ROOF HOOD TO EXISTING DUCT. OUTDOOR AIR INTAKE SHALL BE 3'–0" ABOVE NEW ROOF.
5. REINSTALL EXISTING EXHAUST FAN AFTER ROOF IS REPLACED IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED ON THE ARCHITECTURAL DRAWINGS. EXTEND EXISTING DUCTWORK AND CONTROL WIRING TO RECONNECT EXISTING FAN TO EXISTING DUCTWORK.

N

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DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

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RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RA8# 23012
Signed on: 01/29/2025

CONTRACT: HVAC

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

	20 DECEMBER 2024	BID DOCUMENTS
MARK	DATE	DESCRIPTION

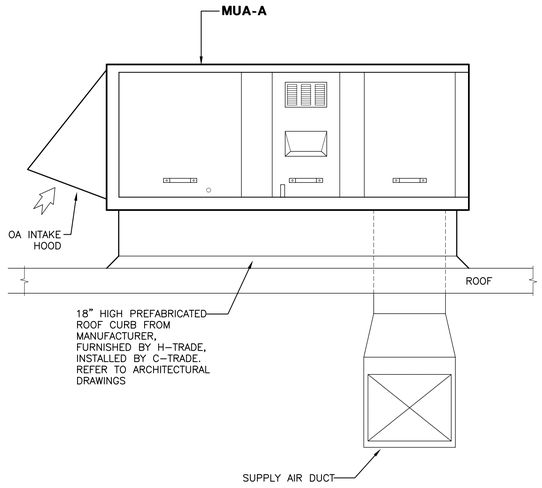
PROJECT NUMBER:	47298-H
DESIGNED BY:	TAM
DRAWN BY:	EGC
FIELD CHECK:	
APPROVED:	

SHEET TITLE: ROOF PLAN – HVAC

DRAWING NUMBER: **M-102**

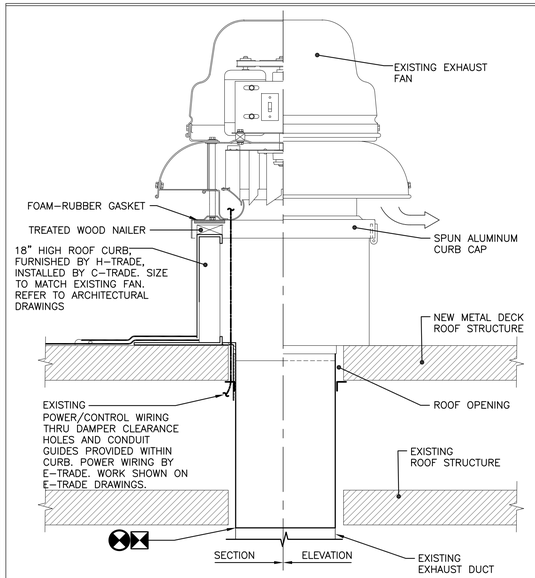
SHEET 18 OF 21

P:\23012\HVAC\23012 - M102-ROOF PLAN.dwg, 1/29/2025 11:56:22 AM



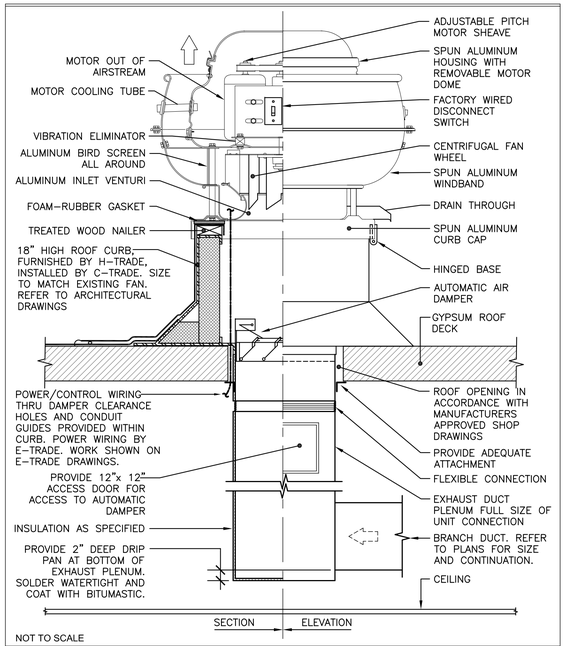
NOT TO SCALE

NEW ROOFTOP UNIT / MUA-A



NOT TO SCALE

EXISTING EXHAUST FAN DETAIL - DOWNBLAST TYPE

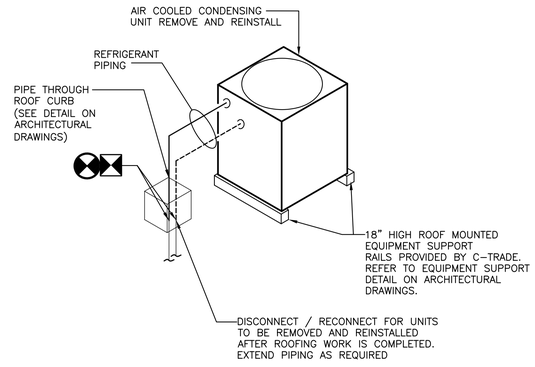


NOT TO SCALE

POWER ROOF VENTILATOR DETAIL - UPBLAST TYPE

GENERAL NOTES:

A. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS EXPLICITLY.



NOT TO SCALE

ACCU PIPING DETAIL

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

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RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RA## 23012
Signed on: 12/20/2024

CONTRACT: HVAC

TITLE: REPLACE ROOFS, SIGNAL SHOP

LOCATION: DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT: NYS DEPT. OF TRANSPORTATION

	20 DECEMBER 2024	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47298-H
DESIGNED BY:	TAM
DRAWN BY:	EGC
FIELD CHECK:	
APPROVED:	

SHEET TITLE: HVAC DETAILS

DRAWING NUMBER: **M-501**

SHEET 19 OF 21

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ELECTRICAL SYMBOLS LIST

4 4	KEYED NOTE.
M UH	MOTOR/ELECTRICAL EQUIPMENT. LETTERS INDICATE ITEM ON ELECTRICAL EQUIPMENT AND CONTROL SCHEDULE.

EXISTING PANELBOARD SCHEDULE

PANEL	LOCATION	MOUNTING	VOLTS	PH.	WIRE	MAIN BUS AMPS	MLO	MCB	BRANCH BREAKERS						MINIMUM INTERR. RATING	NOTES
									1-POLE	2-POLE	3-POLE	SPARE	SPACE	POLES		
DP-1	WEST EXTERIOR WALL	SURFACE	120/208	3	4	225A	--	225A/3P	(1)20A **(1)15A**	(3)100A (1)50A (1)40A	(1)100A **(1)25A** **(1)15A**	(8)20A/1P	(13)1P	42	22,000	1

PANELBOARD SCHEDULE NOTES:

1. UPDATE PANELBOARD DIRECTORY TO INCLUDE ADDITIONAL CIRCUIT BREAKERS.

ELECTRICAL EQUIPMENT WIRING SCHEDULE

EQUIP. ID	DESCRIPTION	LOCATION	HP (KW)	VOLTS	PH.	PANEL	CIRCUIT BREAKER	POWER & CONTROL WIRING/CONDUIT	MOTOR CONTROL (BY DIV. 26 UNLESS NOTED)	MOTOR CONTROL FURNISHED BY OTHERS (INSTALLED BY DIV. 26)	LOCATION OF CONTROLLERS	NOTES
MUA-A	MAKEUP AIR UNIT	ON ROOF	(5.4)	208	3	DP-1	25A/3P	3#10, 1#12G-3/4"C	---	---	---	1,2,3
EF-A	EXHAUST FAN	VEHICLE STORAGE BAY	1.5	208	3	DP-1	15A/3P	3#12, 1#12G-3/4"C	B-COM (SEE SPEC)	---	VEHICLE BAY (SEE PLAN)	2,4
EF-B	EXHAUST FAN	VEHICLE STORAGE BAY	1/30	120	1	DP-1	15A/1P	2#12, 1#12G-3/4"C	RELAY	---	VEHICLE BAY (SEE PLAN)	1,2,4,5

EQUIPMENT SCHEDULE NOTES:

1. PROVIDE DUPLEX GFCI RECEPTACLE (WITH WHILE-IN-USE WEATHER RESISTANT COVER) AT UNIT. EXTENT 120 VOLT POWER FROM CIRCUIT FEEDING EXISTING ACCU RECEPTACLE AS REQUIRED.
2. INTEGRAL DISCONNECT SWITCH.
3. PROVIDE CONNECTION TO FIRE ALARM SYSTEM FOR FAN SHUT DOWN.
4. WIRE TO TOGGLE SWITCH AT UNIT BY OTHERS.
5. PROVIDE RELAY FOR AUTOMATIC OPERATION BY VENTILATION SYSTEM CONTROLS (CONTROLS BY H-CONTRACT).

NEW YORK STATE OF OPPORTUNITY. Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT

CERTIFICATE OF AUTHORIZATION # 1395067

bell & spina ARCHITECTS

RAM-TECH ENGINEERS

Syracuse, NY • Buffalo, NY • Philadelphia, PA

RAM-TECH Engineers of Syracuse, P.C.

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RAM-TECH Engineers, P.C.
Expires: 02/28/2027
DOS ID# 1395067
RAB# 23012
Signed on: 01/29/2025

CONTRACT:

ELECTRICAL

TITLE:

REPLACE ROOFS, SIGNAL SHOP

LOCATION:

DOT REGION 3, ONONDAGA COUNTY
143 SAND ROAD
NORTH SYRACUSE, NY

CLIENT:

NYS DEPT. OF TRANSPORTATION

MARK	DATE	DESCRIPTION
	20 DECEMBER 2024	BID DOCUMENTS

PROJECT NUMBER:	47298-E
DESIGNED BY:	FAR
DRAWN BY:	FAR
FIELD CHECK:	TAM
APPROVED:	TAM

SHEET TITLE:

SCHEDULES AND SYMBOLS LIST – ELECTRICAL

DRAWING NUMBER:

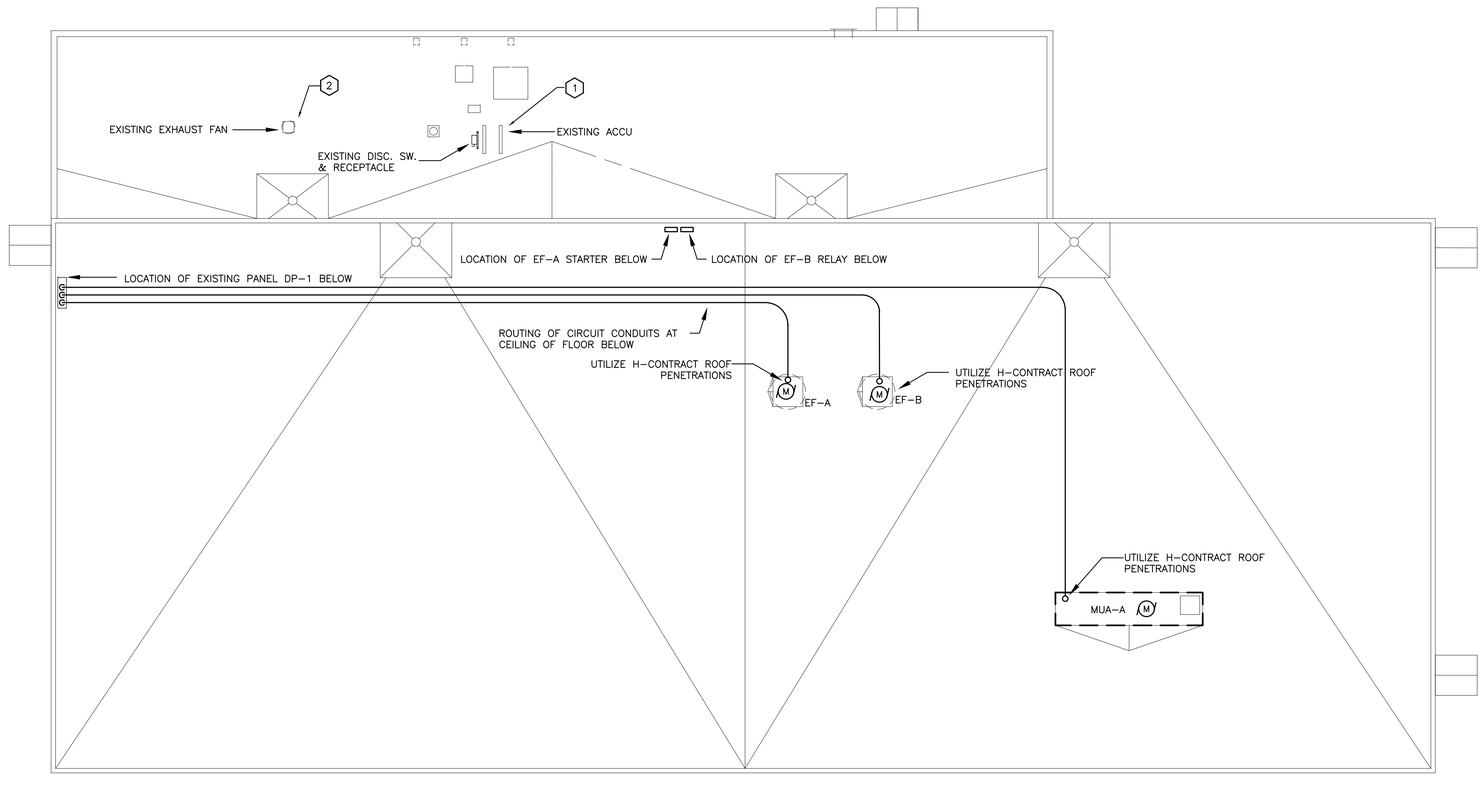
E-001

SHEET 20 OF 21

KEYED NOTES: (#)

1. DISCONNECT ELECTRICAL CIRCUIT FROM EXISTING ACCU. REMOVE EXISTING DISCONNECT SWITCH/RECEPTACLE AND ASSOCIATED CHANNEL SUPPORT STRUCTURE, RETAIN FOR REINSTALLATION. REINSTALL EXISTING DISCONNECT SWITCH/RECEPTACLE/CHANNEL SUPPORT STRUCTURE TO ACCU BASE SUPPORT (BY C-CONTRACT) AFTER ROOF WORK IS COMPLETED. RECONNECT ALL ASSOCIATED WIRING AFTER REINSTALLATION, EXTEND 2'-0" OF 3#8 & #10 GND. AS REQUIRED. UTILIZE H-CONTRACT ROOF PENETRATIONS.

2. DISCONNECT ELECTRICAL CIRCUIT FROM EXISTING EXHAUST FAN (BEING REMOVED BY H-CONTRACT). RECONNECT ALL ASSOCIATED WIRING AFTER ROOF WORK AND REINSTALLATION (BY H-CONTRACT) IS COMPLETED, EXTEND 2'-0" OF 2#12 & #12 GND. AS REQUIRED. UTILIZE H-CONTRACT ROOF PENETRATIONS.



1 ROOF PLAN - ELECTRICAL
SCALE: 1/8" = 1'-0"

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CONSULTANT

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CLIENT: NYS DEPT. OF TRANSPORTATION

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DRAWN BY:	FAR
FIELD CHECK:	TAM
APPROVED:	TAM

SHEET TITLE: ROOF PLAN – ELECTRICAL

DRAWING NUMBER: **E-101**

SHEET 21 OF 21