CONTRACT DRAWINGS
FOR CONSTRUCTION OF THE
SNOW REMOVAL EQUIPMENT STORAGE BUILDING

ORANGE COUNTY AIRPORT

500 DUNN ROAD
MONTGOMERY NY 12549

C&S PROJECT NO. 104.120.001
FAA PROJECT NO. 3-36-0059-043-2019
NYSDOT PIN NO. 8903.56

FEBRUARY 2021

RE-BID DOCUMENTS

ORANGE COUNTY AIRPORT (MGJ) PROPOSED SNOW REMOVAL EQUIPMENT (SRE) BUILDING.

LOCATION MAP

SCALE: NOT TO SCALE

DRAWING LIST

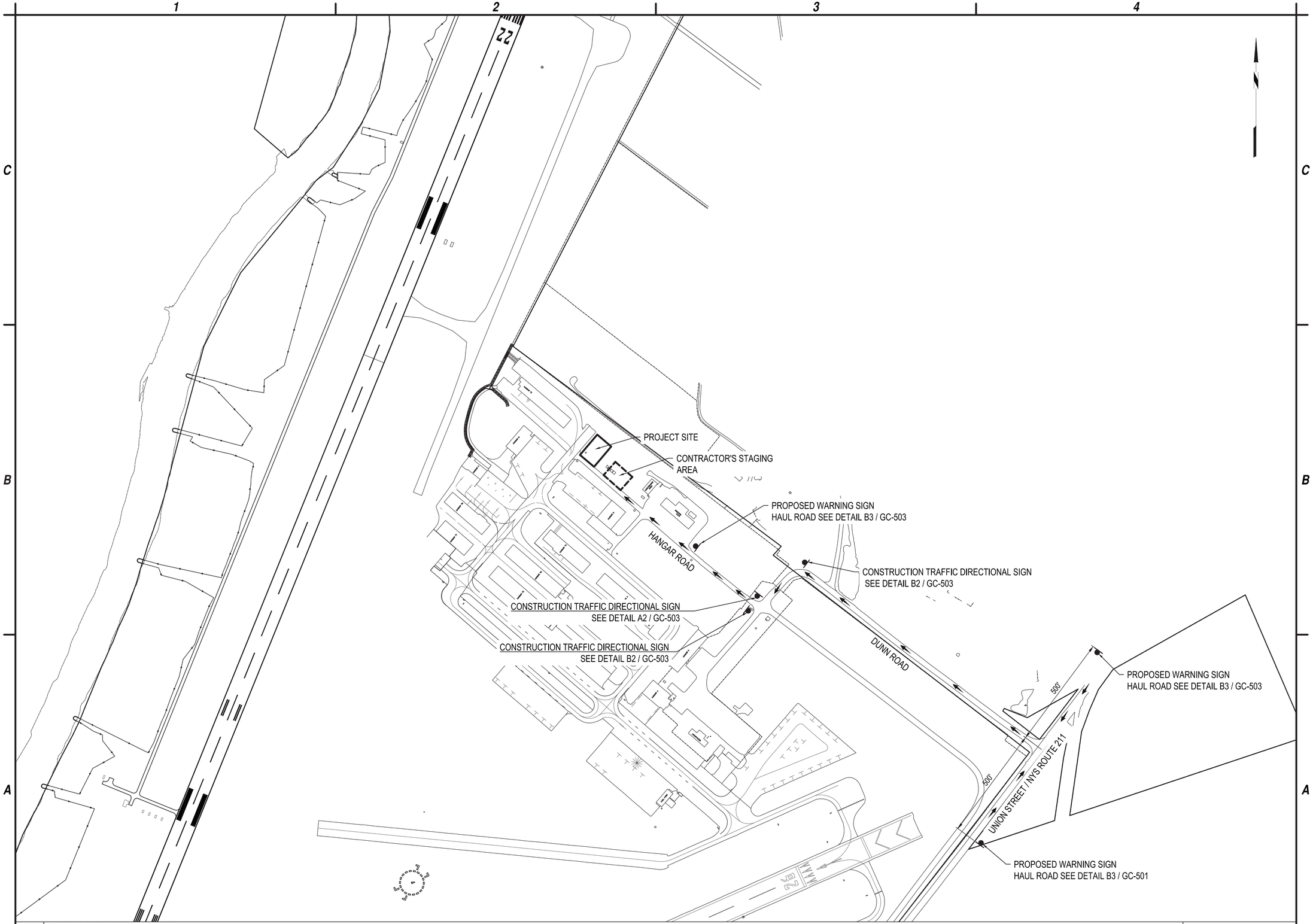
REGISTERED ARCHITECT — PATRICK D. MAY — 037030 — STATE OF NEW YORK

STATE OF NEW YORK — JEFFREY D. PETER — 072206 — LICENSED PROFESSIONAL ENGINEER

TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF THE PLANS AND SPECIFICATIONS FOR THIS PROJECT ARE IN COMPLIANCE WITH THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE AND THE BUILDING CODE OF NEW YORK STATE

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

G-001



A1 CONSTRUCTION SITE PLAN
SCALE: 1" = 200'

0 200' 400'

C&S COMPANIES
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499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
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Fax: 315-455-9667
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STATE OF NEW YORK
JEFFREY D. PALM
LICENSED PROFESSIONAL ENGINEER
072206

ORANGE COUNTY NEW YORK
1 NOVEMBER 1683

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY, NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104.120.001
DATE:	FEBRUARY 2021
DRAWN BY:	S.K. DAVIS
DESIGNED BY:	S.K. DAVIS
CHECKED BY:	J.B. DOLAN

GENERAL PLAN AND CONTRACTOR'S HAUL ROUTE

GC-101

Jan 12, 2021 — 1:55pm
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PROPOSED WORK AREA 1 BOUNDARIES

PROPOSED WORK AREA 2 BOUNDARIES

LOW-PROFILE AVIATION BARRICADE LOCATION

RETROREFLECTIVE CONSTRUCTION CONES

TAXIWAY SAFETY AREA BOUNDARY (TSA)

TAXIWAY OBJECT FREE AREA BOUNDARY (TOFA)

2" x 2" WOODEN STAKE FLUORESCENT ORANGE OR WITH FLAGGING

RETROREFLECTIVE TRAFFIC CONES

C1 LEGEND
SCALE: NOT TO SCALE

T– HANGAR 2

EXISTING APRON

EXISTING BUILDING

TOFA

TSA

33' +/-

SEE CONSTRUCTION SAFETY & PHASING NOTE 6

PROPOSED ASPHALT PAVEMENT

WORK AREA 2

10' +/-

SEE CONSTRUCTION SAFETY & PHASING NOTE 5

LOW PROFILE AVIATION BARRICADES. WORK AREA 2 ONLY. SEE DETAIL A3 / GC-501

RETROREFLECTIVE CONES, SEE DETAIL B4 / GC-501

TAXIWAY "E"

70.00'

130.5'

PROPOSED SRE BUILDING (2,085 SQ. FT.)

PROPOSED ASPHALT PAVEMENT

WORK AREA 1

PROPOSED CONCRETE SIDEWALK

10' +/-

HANGAR ROAD

34' +/-

50' MIN.

100' +/-

CONTRACTOR'S STAGING AREA

DPW STORAGE BUILDING

PLACE RETROREFLECTIVE CONES ACROSS HANGAR ROAD PRIOR TO THE START OF CONSTRUCTION

STABILIZED CONSTRUCTION ENTRANCE SEE DETAIL C3 / GC-501.

CONSTRUCTION SAFETY & PHASING NOTES:

1. THE TOTAL DURATION FOR CONSTRUCTION IS 120 CALENDAR DAYS FROM THE DATE ON THE NOTICE TO PROCEED.
2. WORK AREA 1 DURATION = 105 CALENDAR DAYS FROM THE DATE ON THE NOTICE TO PROCEED.
3. WORK AREA 2 DURATION = 15 CALENDAR DAYS FROM THE DATE ON THE NOTICE TO PROCEED.
4. LOW–PROFILE AVIATION BARRICADES ACROSS TAXIWAY "E" ARE ONLY REQUIRED DURING WORK AREA 2 CONSTRUCTION. BARRICADES SHALL BE PLACED PRIOR TO THE START OF WORK AREA 2 CONSTRUCTION.
5. ALL CONCRETE WORK NORTHWEST OF THE SRE STORAGE BUILDING SHALL BE COMPLETED DURING WORK AREA 2.
6. PLACE RETROREFLECTIVE CONES ACROSS THE T–HANGAR 2 APRON PRIOR TO THE START OF CONSTRUCTION ON WORK AREA 2.

A1 CONSTRUCTION WORK AREA PLAN
SCALE: 1" = 20'-0"

0 20' 40'

Jan 12, 2021 – 1:56pm
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STATE OF NEW YORK · JEFFREY D. RALEY · LICENSED PROFESSIONAL ENGINEER · 072208

ORANGE COUNTY NEW YORK · 1 NOVEMBER 1683

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CONSTRUCTION SAFETY AND PHASING PLAN

GC-102

1. AT THE COMPLETION OF WORK IN ANY CONSTRUCTION PERIOD AND THIRTY (30) MINUTES PRIOR TO THE SCHEDULED OPENING OF THE DESIGNATED AIRFIELD FACILITIES, AN INSPECTION TO DETERMINE WHETHER THE RESPECTIVE AIRPORT FACILITIES ARE IN THE APPROPRIATE CONDITION TO BE OPENED SHALL BE PERFORMED BY AIRPORT OPERATIONS. THE CONTRACTORS CONSTRUCTION SUPERVISOR MUST BE PRESENT DURING THIS INSPECTION. THE CONTRACTOR SHALL HAVE STAFF AND EQUIPMENT AVAILABLE TO QUICKLY CORRECT ANY DEFICIENCIES PRIOR TO THE DESIGNATED OPENING TIME.

2. TAXIWAY "E" WILL REMAIN ACTIVE FOR AIRCRAFT TAXIING FOR THE DURATION OF THE PROJECT. THE CONTRACTOR IS ADVISED TO USE EXTREME CAUTION AT ALL TIMES, BUT IN PARTICULAR DURING CONSTRUCTION ON AND ADJACENT TO TAXIWAY "E".

3. WORK AREAS WILL BE CLOSED TO AIRCRAFT AND SHALL BE BARRICADED OFF USING LOW-PROFILE AVIATION BARRICADES.

4. THE SEQUENCE OF CONSTRUCTION WORK AREAS AND THE CONTRACTOR'S ASSOCIATED CONSTRUCTION SHALL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING AND SHALL BE COMMUNICATED TO THE ENGINEER AND AIRPORT AT EACH WEEK'S PROGRESS MEETING.

5. THE CONTRACTOR SHALL DELINEATE THE TAXIWAY SAFETY AREA (TSA) OF ACTIVE PAVEMENTS ADJACENT TO ACTIVE CONSTRUCTION WORK AREAS. DELINEATION CAN BE FLAGS OR BARRICADES OR OTHER MEANS APPROVED BY AIRPORT OPERATIONS.

6. CONTRACTOR SHALL NOTIFY THE ENGINEER AND AIRPORT 72 HOURS PRIOR TO START OF WORK / CLOSURE IN ORDER TO ESTABLISH A NOTICE TO AIRMEN (NOTAM).

7. ALLOWABLE CONSTRUCTION DURATION:
   WORK AREA I:110 CALENDAR DAYS.
   WORK AREA II: 10 CALENDAR DAYS.
   TOTAL CONSTRUCTION TIME OF COMPLETION IS120 CALENDAR DAYS FROM THE DATE ON THE NOTICE TO PROCEED, EXCUSIVE OF MATERIALS ORDERING AND DELIVERY TIME.

8. REFER TO THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) FOR DETAILED REQUIREMENTS.

9. PRIOR TO RE-OPENING A CLOSED TAXIWAY, THE ASSOCIATED SAFETY AREA AND TAXIWAY PAVEMENT MUST BE FULLY RESTORED, CLEARED OF ALL DEBRIS AND MATERIAL AND APPROVED BY THE AIRPORT AND ENGINEER.

10. THE CONTRACTOR SHALL HAVE AT LEAST ONE FULLY OPERATIONAL VACUUM SWEEPER TRUCK, WITH A WORKING ROTATING OR FLASHING AMBER BEACON, MOUNTED AT THE HIGHEST POINT OF THE VACUUM SWEEPER TRUCK AVAILABLE ON SITE AT ALL TIMES TO CLEAN PAVEMENTS PRIOR TO REOPENING TO AIRCRAFT.

11. THE CONTRACTOR'S ON-SITE REPRESENTATIVE SHALL MEET WITH THE OWNER AND ENGINEER PRIOR TO THE START OF WORK EACH DAY, TO DISCUSS THE DAY'S CONSTRUCTION ACTIVITY. .

12. HANGAR ROAD WILL REMAIN OPEN AND ACTIVE FOR VEHICULAR TRAFFIC FOR THE DURATION OF CONSTRUCTION. AS SUCH, THE CONTRACTOR'S FORCES SHALL EXERCISE EXTREME CAUTION WHEN ENTERING HANGAR ROAD FROM THE STAGING AREA OR WORK AREAS.

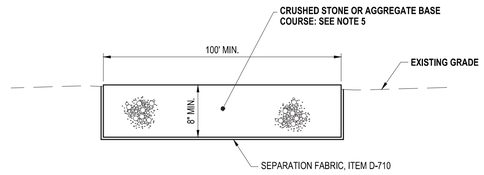
13. LOW PROFILE AVIATION BARRICADES SHALL BE PLACED ACROSS TAXIWAY "E", AS SHOWN ON THE CONSTRUCTION WORK AREA PLAN, PRIOR TO THE START OF CONSTRUCTION IN WORK AREA 2. THE BARRICADES SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THE BARRICADES SHALL BE TEMPORARILY REMOVED AND REPLACED BY THE CONTRACTOR, FOR ANY AIRCRAFT REQUIRING ACCESS TO THE AIRCRAFT RUN-UP AREA AT THE NORTHEAST END OF TAXIWAY "E".

14. RETROREFLECTIVE CONES SHALL BE PLACED ACROSS HANGAR ROAD, AS SHOWN ON THE CONSTRUCTION WORK AREA PLAN, FOR THE DURATION OF CONSTRUCTION. THE RETROREFLECTIVE CONES SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR, FOR ANY VEHICLE OPERATED BY AIRCRAFT OWNERS REQUIRING ACCESS TO THE AIRCRAFT RAMPS OR HANGARS, OR FOR AIRPORT VEHICLES.

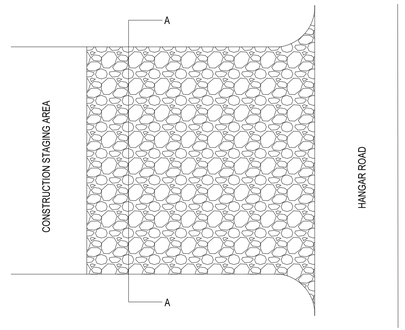
15. THE CONTRACTOR SHALL PLACE 2"x2" WOOD STAKES, EITHER PAINTED FLUORESCENT ORANGE OR WITH ORANGE FLAGGING, ALONG THE TAXIWAY SAFETY AREA (TSA) AT A MAXIMUM 50' SPACING, PRIOR TO THE START OF CONSTRUCTION. THE WOODEN STAKES SHALL HAVE 30" REVEAL ABOVE GROUND LEVEL.

16. CONSTRUCTION TRAFFIC WARNING SIGNS SHALL BE PLACED PRIOR TO THE START OF CONSTRUCTION, INSPECTED AND APPROVED BY THE ENGINEER.

A1 WORK PHASING NOTES
SCALE: NOT TO SCALE



SECTION A-A



PLAN

NOTES:

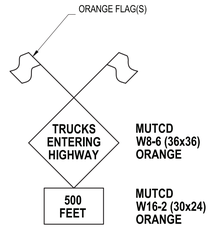
1. SURFACE WATER SHALL BE PIPED ACROSS STABILIZED CONSTRUCTION ENTRANCE AS DIRECTED BY THE ENGINEER.
2. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVEMENT. SHOULD SEDIMENT BECOME DISPLACED ONTO PAVEMENT, THE CONTRACTOR SHALL IMMEDIATELY REMOVE ALL SUCH SEDIMENT FROM THE PAVEMENT SURFACE.
3. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED UPON SITE STABILIZATION AND RESTORED TO EXISTING CONDITION UNLESS ORDERED TO REMAIN BY ENGINEER.
4. ALL MATERIALS REQUIRED FOR THIS ITEM SHALL BE PAID FOR UNDER ITEM P-156 BY THE UNIT COST PER EACH FOR STABILIZED CONSTRUCTION ENTRANCE.
5. ADDITIONAL CRUSHED STONE SHALL BE ADDED AS ORDERED BY THE ENGINEER TO MAINTAIN THE CONSTRUCTION STAGING AREA AND MITIGATE TRACKING OF SEDIMENT OR MUD ON TO PAVED AREAS. MO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL CRUSHED STONE.

C3 TEMPORARY HAUL ROAD DETAIL
SCALE: NOT TO SCALE

NOTES:

1. SIGN DIMENSIONS, LEGEND, BACKGROUND, AND MOUNTING SYSTEM SHALL BE PER MUTCD REQUIREMENTS.
2. CONSTRUCTION TRAFFIC SIGNS SHALL BE IN PLACE, INSPECTED AND APPROVED BY BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

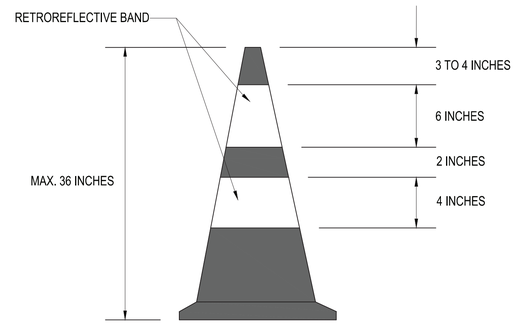
B2 CONSTRUCTION HAUL ROAD SIGN (LEFT) DETAIL
SCALE: NOT TO SCALE



NOTES:

1. LOCATE 500' FEET FROM TRUCK ENTRANCE OR EXIT TO PROJECT SITE.
2. SIGN SHALL BE MOUNTED PER MUTCD REQUIREMENTS.

B3 WARNING SIGN HAUL ROAD DETAIL
SCALE: NOT TO SCALE

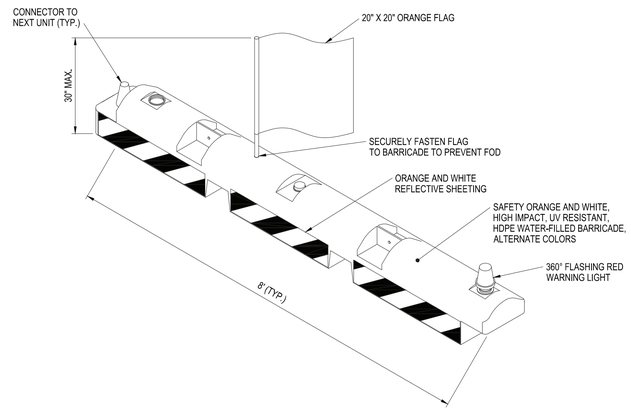


B4 RETROREFLECTIVE CONE
SCALE: NOT TO SCALE

NOTES:

1. SIGN DIMENSIONS, LEGEND, BACKGROUND, AND MOUNTING SYSTEM SHALL BE PER MUTCD REQUIREMENTS.
2. CONSTRUCTION TRAFFIC SIGNS SHALL BE IN PLACE, INSPECTED AND APPROVED BY BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

A2 CONSTRUCTION HAUL ROAD SIGN (RIGHT) DETAIL
SCALE: NOT TO SCALE



BARRICADE NOTES:

1. BARRICADES SHALL BE 6" X 8' AIRPORT LOW PROFILE BARRICADE AS MANUFACTURED BY NEUBERT AERO CORP., OR 10" X 8' RRM LOW PROFILE AIRPORT BARRIER AS MANUFACTURED BY SHERWIN INDUSTRIES, INC., OR APPROVED EQUAL.
2. BARRICADES SHALL EXTEND TO EDGES OF PAVEMENT UNLESS OTHERWISE SHOWN. EXACT LOCATIONS SHALL BE DETERMINED DURING CONSTRUCTION.
3. BARRICADES SHALL BE FILLED WITH WATER AND INTERLOCKED WITH EACH OTHER. BARRICADES WHICH HAVE TO BE MOVED DAILY MAY BE ANCHORED TO THE PAVEMENT BY AN ALTERNATE METHOD.
4. ONE FLAG AND ONE WARNING LIGHT SHALL BE ATTACHED TO EACH BARRICADE.
5. IN AREAS OF JET BLAST, USE METAL STRAPS AND EXPANSION ANCHORS TO SECURE BARRICADES TO THE PAVEMENT.

A3 INTERLOCKING BARRICADE DETAIL
SCALE: NOT TO SCALE

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JEFFREY D. RALW — STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — 072208

ORANGE COUNTY NEW YORK — 1 NOVEMBER 1683

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
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MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104.120.001
DATE:	FEBRUARY 2021
DRAWN BY:	S.K. DAVIS
DESIGNED BY:	S.K. DAVIS
CHECKED BY:	J.B. DOLAN

CONSTRUCTION SAFETY NOTES AND DETAILS

GC-501

Jan 12, 2021 — 1:56pm
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&	AND	DMH	DRAINAGE MANHOLE	LF	LINEAR FEET	PVC	POLYVINYL CHLORIDE
@	AT	DW	DRY WELL	MAX	MAXIMUM	S	SLOPE
BLDG.	BUILDING	EA	EACH	MC	MECHANICAL CONTRACT(OR)	SA, SAN	SANITARY SEWER
℄	CENTERLINE	EL, ELEV	ELEVATION	MH	MANHOLE	SH	SIGNAL HAND HOLE
CATV	CABLE TELEVISION	EC	ELECTRICAL CONTRACT(OR)	MIN	MINIMUM	SF	SILT FENCE
CB	CATCH BASIN	ELEC	ELECTRICAL	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	S.F., SQ. FT.	SQUARE FEET
CHH	COMMUNICATION HAND HOLE	ES	END SECTION	N	NORTH	ST	STORM SEWER
CMH	COMMUNICATION MANHOLE	EX, EXIST	EXISTING	NTS	NOT TO SCALE	STD	STANDARD
CLR	CLEAR	F.F.E.	FINISH FLOOR ELEVATION	O.F.	ON CENTER	T	TELEPHONE
C.O.	CLEAN OUT	FT	FOOT, FEET	OS	OUTLET STRUCTURE	TCF	TEMPORARY CONSTRUCTION FENCE
CONC	CONCRETE	GC	GENERAL CONTRACTOR	℗	PROPERTY LINE	TYP	TYPICAL
Ø, DIA	DIAMETER	HDPE	HIGH DENSITY POLYETHYLENE	PC	PLUMBING CONTRACT(OR)	UD	UNDERDRAIN
DH	DEEP HOLE	HH	HAND HOLE	PT	PERCOLATION TEST	V	VENT
		INV	INVERT			W	WATER

NOTE: NOT ALL ABBREVIATIONS ARE USED.

C3 ABBREVIATIONS

SCALE: NOT TO SCALE

1. A TOPOGRAPHIC SURVEY WAS PROVIDED BY CIVIL TEC ENGINEERING & SURVEYING P.C., NOVEMBER 2020. NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING UTILITIES AND THE LOCATION OF THOSE SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION BEFORE COMMENCING WORK. BEFORE ANY PIPE IS PLACED THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AT PIPE CROSSINGS TO ENABLE THE ENGINEER TO VERIFY THAT THE PROPOSED PIPE WITH GRADES SHOWN ON THE PLANS IS NOT OBSTRUCTED BY EXISTING UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THIS CONTRACT.
2. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT LEAST 72 HOURS PRIOR TO START OF WORK.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES.
4. IN THE EVENT THAT THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND THE AFFECTED UTILITIES REPRESENTATIVE OF SUCH DAMAGE. ANY DAMAGE SHALL PROMPTLY AND SATISFACTORILY BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
5. CONTRACTOR TO ABANDON, CUT AND CAP ALL EXISTING UTILITIES SERVICING THE STRUCTURES MARKED FOR DEMOLITION. CONTRACTOR TO COORDINATE UTILITY DISCONNECTIONS WITH THE UTILITIES REPRESENTATIVE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES ENCOUNTERED IN THIS WORK. WHERE NECESSARY, THE CONTRACTOR SHALL PROVIDE TIMBER , PLANK OR OTHER APPROVED MATERIALS AND SECURELY BRACE AND PROTECT THESE UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
7. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING AND OTHER DEVICES AS MAY BE REQUIRED OR AS DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF THE ADJACENT STRUCTURES, ROADWAY AND UTILITIES. ALL COSTS SHALL BE INCLUDED IN VARIOUS ITEMS IN THE CONTRACT.
8. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT PRIOR TO PAVEMENT REMOVAL.
9. ALL FOUNDATIONS, FOR STRUCTURES MARKED FOR DEMOLITION, SHALL BE REMOVED THE FULL DEPTH.
10. ALL FOUNDATION, CONCRETE SLAB AND PAVEMENT VOIDS, CREATED AFTER REMOVAL, SHALL BE FILLED TO MATCH EXISTING GRADE (GRADE TO DRAIN) WITH COMPACTED RUN A BANK OR APPROVED EQUAL.
11. ALL UNSUITABLE SPOIL MATERIAL, SUCH AS CONCRETE AND ASPHALT AND EXCAVATED MATERIAL, SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
12. CONTRACTOR WILL BE REQUIRED TO IMPORT MATERIAL TO THE SITE TO COMPLETE ALL GRADING WORK.
13. ALL DISTURBED AREAS SHALL BE GRADED TO PROVIDE A SMOOTH MAINTAINABLE SURFACE AND ALLOW FOR POSITIVE DRAINAGE.
14. CONTRACTOR SHALL TOPSOIL (4" MIN.), SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS.
15. IT WILL BE THE CONTRACTORS OBLIGATION AND RESPONSIBILITY TO USE METHODS AND EQUIPMENT WHICH WILL INSURE THE SATISFACTORY COMPLETION OF THE REQUIRED WORK WITHIN THE CONTRACT TIME ALLOWED.
16. THE CONTRACTOR MUST BE ACQUAINTED WITH THE DRAINAGE CHARACTERISTICS OF THE AREA SO THAT HE WILL PROGRESS HIS WORK EFFICIENTLY WITH FULLKNOWLEDGE OF THE POTENTIAL DRAINAGE PROBLEMS.
17. ALL EXISTING DRAINAGE SYSTEMS, INCLUDING DITCHES AND CULVERTS, WITHIN THE CONTRACT LIMITS SHALL BE CLEANED AND KEPT CLEAN AND FREE FLOWING FOR THE DURATION OF THE CONTRACT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THIS CONTRACT.
18. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
19. CONTRACTOR IS TO BE ADVISED THAT GROUNDWATER MAY BE ENCOUNTERED AT APPROXIMATELY ELEVATION FOUR (4) FEET BELOW EXISTING GRADE.
20. THE CONTRACTOR'S STAGING AREA SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE START OF WORK.
21. CONTRACTOR SHALL UTILIZE THE PROPOSED ACCESS ROUTE FOR ACCESS TO THE SITE (SEE GENERAL PLAN). CONTRACTOR SHALL CLEAN PAVEMENT AS REQUIRED BY THE ENGINEER.

B3 GENERAL NOTES

SCALE: NOT TO SCALE

BUILDING	EXISTING BUILDING		PROPOSED BUILDING
W	EXISTING WATER SERVICE LINE		PROPOSED ASPHALT PAVEMENT
ST CBFI	EXISTING STORM SEWER PIPE & INLET		
PHN	EXISTING OPTIC PHONE LINE		PROPOSED CONCRETE PAVEMENT / SIDEWALK
E	EXISTING UNDERGROUND ELECTRIC		EXISTING CONCRETE PAVEMENT TO BE REMOVED (FULL DEPTH)
GM	EXISTING NATURAL GAS LINE	ST	PROPOSED STORM SEWER PIPE
	EXISTING CHAIN LINK FENCE	RL	PROPOSED ROOF LEADER PIPE
ORANGE CO. AIRPORT PROPERTY LINE	EXISTING PROPERTY LINE	W	PROPOSED WATER SERVICE LINE (BY ADD ON #1)
360	EXISTING CONTOURS	G	PROPOSED NATURAL GAS LINE (BY CENTRAL HUDSON)
369.3	EXISTING SPOT ELEVATION	UE	PROPOSED UNDERGROUND ELECTRIC
	EXISTING SIGN		PROPOSED SILT FENCE
E EB	EXISTING ELECTRIC SERVICE BOX	470	PROPOSED CONTOUR LINE
©	EXISTING OPTIC PHONE SERVICE BOX		EXISTING OBJECT / UTILITY TO BE REMOVED OR DEMOLISHED
GM	EXISTING ELECTRIC METER	CB-#	PROPOSED CATCH BASIN
GM	EXISTING NATURAL GAS METER		PROPOSED CURB STOP AND SERVICE BOX
			PROPOSED PIPE BOLLARD
		368.50'	PROPOSED SPOT ELEVATION
			PROPOSED INLET PROTECTION

A2 LEGEND

SCALE: NOT TO SCALE

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ORANGE COUNTY · 1 NOVEMBER 1683 · NEW YORK

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DATE:	FEBRUARY 2021
DRAWN BY:	M. ZINGARO
DESIGNED BY:	M. CHAMBERS
CHECKED BY:	J.D. PALIN, P.E.

GENERAL NOTES, ABBREVIATIONS, AND LEGEND

C-001

Jan 13, 2021 – 3:19pm
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REPUTED OWNER:
F & J PROPERTIES INC
TAX MAP #28-1-14.22

ORANGE CO. AIRPORT PROPERTY LINE

2 STORY OFFICE / HANGER BUILDING

ELECTRIC METER

PAVEMENT

TELE/CABLE BOX

CHAINLINK FENCE

ROTATING BEACON MOUNT POLE

ELECTRIC PANEL

EXISTING CATCH BASIN TO REMAIN

EXISTING "DO NOT ENTER" SIGN AND CONCRETE BASE TO BE REMOVED AND RELOCATED

CBFI
RIM 365.79
INV. OUT 361.90

SIGN

CONC PAD

TAXIWAY "E"

EXISTING CONCRETE PAD TO BE REMOVED

REPUTED OWNER:
COUNTY OF ORANGE
TAX MAP #32-1-16.3 & 16.4

EXISTING 12" CULVERT PIPE TO BE REMOVED

EXISTING 12" CULVERT

INV. 368.65

HANGAR

ROAD

GRAVEL AREA

WOOD FRAME STRUCTURE
SALT BARN

LOADING RAMP

BL PNT #2
MAG NAIL

BRINE TANK

OIL WASTE TANK

SHED

1 STORY BLOCK BUILDING
MAINTENANCE GARAGE

ST

GM

E

PHN

EB

CONC PAD

SIGN

TELE/CABLE BOX

CHAINLINK FENCE

ELECTRIC PANEL

GM MANHOLE COVER ELEV. 380.04

CONC PAD

EB

SIGN

CONC PAD

TELE/CABLE BOX

PAVEMENT

GM

PHN

E

CHAINLINK FENCE

CONC PAD

EB

SIGN

2 STORY OFFICE / HANGER BUILDING

A1 EXISTING CONDITIONS PLAN AND DEMOLITION PLAN
SCALE: 1" = 20'-0"

0 20' 40'

Jan 13, 2021 - 3:19pm
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STATE OF NEW YORK
JEFFREY D. PALIN
LICENSED PROFESSIONAL ENGINEER
072206

ORANGE COUNTY NEW YORK
1 NOVEMBER 1683

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY, NY 12549

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	104.120.001
DATE:	FEBRUARY 2021
DRAWN BY:	M. ZINGARO
DESIGNED BY:	M. CHAMBERS
CHECKED BY:	J.D. PALIN, P.E.

EXISTING CONDITIONS PLAN AND DEMOLITION PLAN

C-002

REPUTED OWNER:
F & J PROPERTIES INC
TAX MAP #28-1-14.22

POINT TABLE		
POINT #	NORTHING	EASTING
P-1	976939.50	557851.28
P-2	976902.70	557819.69
P-3	976930.71	557787.07
P-4	976967.51	557818.66
P-5	976992.98	557786.69
P-6	977013.62	557785.60
P-7	976961.01	557741.55
P-8	976958.50	557756.99

POINT TABLE		
POINT #	NORTHING	EASTING
P-9	976897.32	557828.26
P-10	976879.87	557823.41
P-11	976882.03	557812.82
P-12	976838.51	557863.43
P-13	976859.45	557861.64
P-14	976884.10	557882.80
P-15	976912.30	557880.66

HORIZONTAL / VERTICAL DATUM NOTE:

HORIZONTAL DATUM IS BASED ON THE NYS PLANE COORDINATE SYSTEM NAD 83 ZONE 3101, EASTERN ZONE.

VERTICAL DATUM IS BASED ON NAVD88.

C4 LAYOUT PLAN POINT TABLE
SCALE: NOT TO SCALE

2 STORY OFFICE / HANGER BUILDING
ELEC. ELECTRIC METER
PAVEMENT
BL PNT #2 MAG NAIL
TELE/CABLE BOX
ORANGE CO. AIRPORT PROPERTY LINE
CHAINLINK FENCE
PROPOSED 2' X 2' CATCH BASIN (TYP. OF 2) (SEE DETAIL A1/C-501)
PROPOSED CONCRETE APRON (SEE DETAIL A3/C-501)
PROPOSED ASPHALT PAVEMENT (SEE DETAIL A4/C-501)
CB-1
R=15'
P-5
P-6
P-7
P-8
P-4
55'
30'
43'
CBFI
RIM 365.79
INV. OUT 361.90
SIGN
RELOCATED AIRFIELD TAXIWAY SIGNAGE (SEE SHEET E-100)
45'-6"
PROPOSED SRE BUILDING
(2,085 SQ. FT.)
P-1
P-3
P-2
P-9
P-15
R=20'
P-14
P-11
P-10
P-13
P-12
R=10'
CB-2
1'-6"
10'
20'
PROPOSED CONCRETE SIDEWALK (SEE DETAIL C2/C-501)
PROPOSED NATURAL GAS METER AND REGULATOR BY CENTRAL HUDSON (SEE SHEET P-101)
PROPOSED 5' X 5' CONCRETE PAD
PROPOSED UTILITY TRANSFORMER (SEE SHEET E-100)
PROPOSED PIPE BOLLARD (TYP.) (SEE DETAIL C1/C-501)
TAXIWAY "E"
HANGAR
ROAD
EB
SIGN
CONC. PAD
REPUTED OWNER:
COUNTY OF ORANGE
TAX MAP #32-1-16.3 & 16.4
ROTATING BEACON MOUNT POLE
ELECTRIC PANEL
GRAVEL AREA
WOOD FRAME STRUCTURE
SALT BARN
LOADING RAMP
BL PNT #3 MAG NAIL
BRINE TANK
OIL WASTE TANK
SHED
1 STORY BLOCK BUILDING
MAINTENANCE GARAGE
BM - X-CUT ON CORNER CONC PAD ELEV=358.04
PROPOSED 1 1/2" CURB STOP AND SERVICE BOX (SEE DETAIL B4/C-502) **(ADD ON #1)**

A1 SITE PLAN AND LAYOUT PLAN
SCALE: 1" = 20'-0"

0 20' 40'

C&S COMPANIES
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STATE OF NEW YORK JEFFREY D. PALIN 077208 LICENSED PROFESSIONAL ENGINEER

ORANGE COUNTY NEW YORK 1 NOVEMBER 1683

**SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY, NY 12549**

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DESIGNED BY: M. CHAMBERS
CHECKED BY: J.D. PALIN, P.E.

SITE PLAN AND LAYOUT PLAN

C-101

Jan 13, 2021 - 3:19pm
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REPUTED OWNER:
F & J PROPERTIES INC
TAX MAP #28-1-14.22

2 STORY OFFICE / HANGER BUILDING

ELECTRIC METER

PAVEMENT

52.6'

BL PNT #2 MAG NAIL

2.6'

TELE/CABLE BOX

PHN

ORANGE CO. AIRPORT PROPERTY LINE

CHAINLINK FENCE

PROPOSED 2' X 2' CATCH BASIN (SEE DETAIL A1/C-501)

CB-1
RIM = 366.30'
INV. = 363.30'

73 L.F. OF 12" HDPE @ 0.012 FT/FT (SEE DETAIL B1/C-501)

PROPOSED SRE BUILDING (2,085 SQ. FT.)

CORE DRILL EXISTING CATCH BASIN AND PROVIDE WATERTIGHT CONNECTION @ INV. 362.40'

CBTI
RIM 365.79
INV. OUT 361.90

PROPOSED DOWNSPOUT CONNECTION (TYP. OF 2) (SEE DETAIL C4/C-502)

FOR CONTINUATION SEE SHEET P-101

PROPOSED NATURAL GAS METER AND REGULATOR BY CENTRAL HUDSON (SEE SHEET P-101)

FOR CONTINUATION SEE SHEET P-101 **(ADD ON #1)**

RELOCATED AIRFIELD TAXIWAY SIGNAGE (SEE SHEET E-100)

PROPOSED CONDUIT (SEE SHEET E-100)

PROPOSED UTILITY TRANSFORMER (SEE SHEET E-100)

PROPOSED 6" HDPE ROOF LEADER (TYP. OF 2)

CONNECT TO EXISTING NATURAL GAS LINE (BY CENTRAL HUDSON)

PROPOSED 2" NATURAL GAS SERVICE (BY CENTRAL HUDSON)

160 L.F. OF 12" HDPE @ 0.013 FT/FT (SEE DETAIL B1/C-501)

CB-2
RIM = 367.50'
INV. = 364.50'

PROPOSED 2' X 2' CATCH BASIN (SEE DETAIL A1/C-501)

TAXIWAY "E"

HANGAR

ROAD

REPUTED OWNER:
COUNTY OF ORANGE
TAX MAP #32-1-16.3 & 16.4

463 L.F. OF 1 1/2" HEAVY DUTY POLYETHYLENE WATER SERVICE **(ADD ON #1)**

ROTATING BEACON MOUNTED ON POLE

ELECTRIC PANEL

GRAVEL AREA

WOOD FRAME STRUCTURE SALT BARN

LOADING RAMP

BL PNT #3 MAG NAIL

BRINE TANK

OIL WASTE TANK

SHED

CONC PAD

1 STORY BLOCK BUILDING MAINTENANCE GARAGE

BM - X-CUT ON CORNER OF CONC. PAD ELEV=351.04'

PROPOSED 1 1/2" CURB STOP AND SERVICE BOX (SEE DETAIL B4/C-502) **(ADD ON #1)**

CONNECT TO EXISTING WATER SERVICE LINE **(ADD ON #1)**

A1 UTILITY PLAN
SCALE: 1" = 20'-0"

0 20' 40'

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UTILITY PLAN

C-102

REPUTED OWNER:
F & J PROPERTIES INC
TAX MAP #28-1-14.22

REPUTED OWNER:
COUNTY OF ORANGE
TAX MAP #32-1-16.3 & 16.4

PROPOSED SILT FENCE (SEE DETAIL A3/C-501)

PROPOSED INLET PROTECTION (SEE DETAIL B3/C-501)

MEET EXISTING GRADE (SEE DETAIL B4/C-501)

CB-1
RIM = 366.30'
INV. = 363.30'

CB-2
RIM = 367.50'
INV. = 364.50'

CB#1
RIM 365.79
INV. OUT 361.90

PROPOSED SRE BUILDING
(F.F.E. = 369.20')

368.76'
369.3
H.P. 369.05'
367.70'
368.56'

BL PNT #2 MAG NAIL

BL PNT #3 MAG NAIL

2 STORY OFFICE / HANGER BUILDING

ELEC ELECTRIC METER

TAXIWAY "E"

HANGAR ROAD

PAVEMENT

CONC PAD

TELE/CABLE BOX

SIGN

EB

ORANGE CO. AIRPORT PROPERTY LINE

CHAINLINK FENCE

ROTATING BEACON MOUNTED ON POLE

ELECTRIC PANEL

GRAVEL AREA

WOOD FRAME STRUCTURE
SALT BARN

LOADING RAMP

BRINE TANK

OIL WASTE TANK

SHED

1 STORY BLOCK BUILDING
MAINTENANCE GARAGE

BM = X-CUT ON CONC. CONC PAD
ELEV. = 380.04

A1 GRADING PLAN AND EROSION CONTROL PLAN
SCALE: 1" = 20'-0"

0 20' 40'

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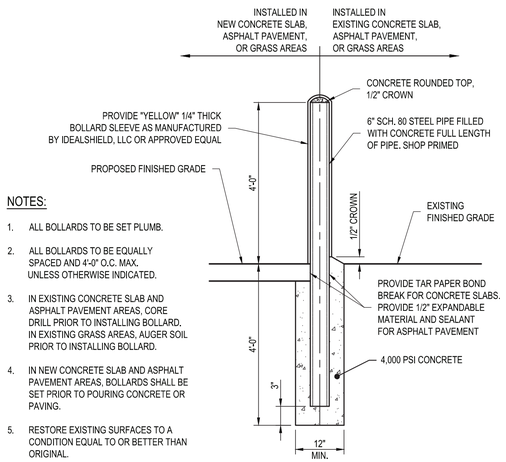
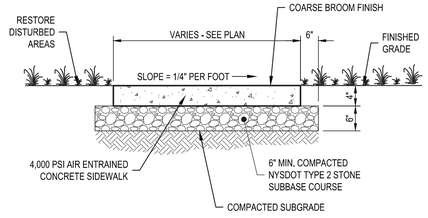
GRADING PLAN AND EROSION CONTROL PLAN

C-103

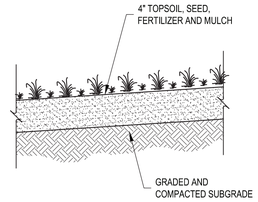


C1 TYPICAL STEEL PIPE BOLLARD DETAIL
SCALE: NOT TO SCALE

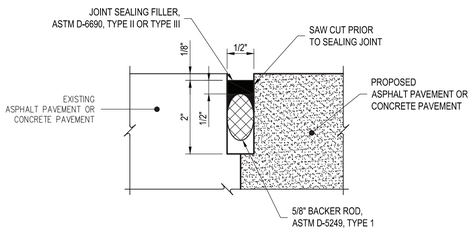


NOTES:
1. PROVIDE ISOLATION JOINT ALONG BUILDING FACE

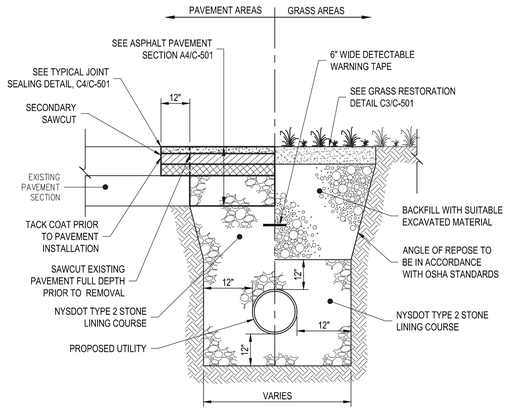
C2 CONCRETE SIDEWALK DETAIL
SCALE: NOT TO SCALE



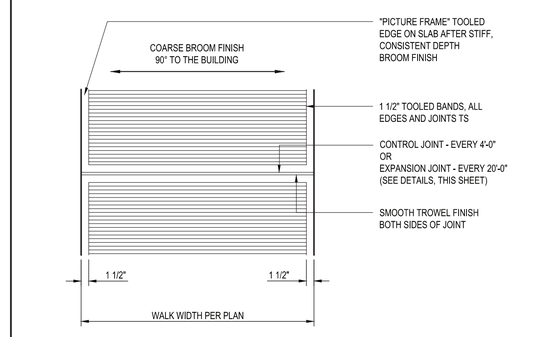
C3 LAWN RESTORATION DETAIL
SCALE: NOT TO SCALE



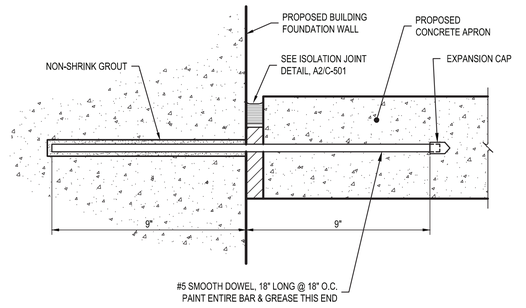
C4 TYPICAL JOINT SEALING DETAIL
SCALE: NOT TO SCALE



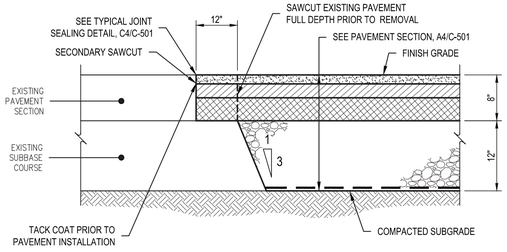
B1 UTILITY TRENCH AND RESTORATION DETAIL
SCALE: NOT TO SCALE



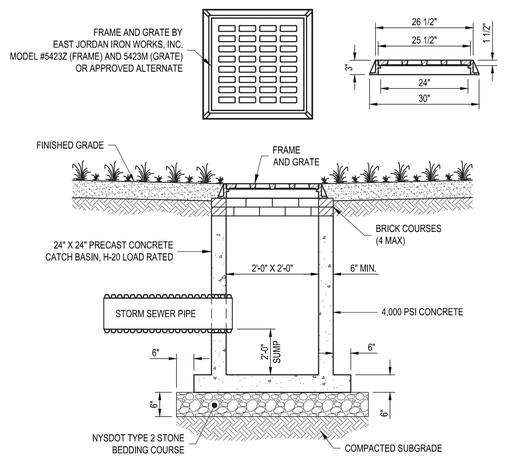
B2 CONCRETE SIDEWALK FINISH DETAIL
SCALE: NOT TO SCALE



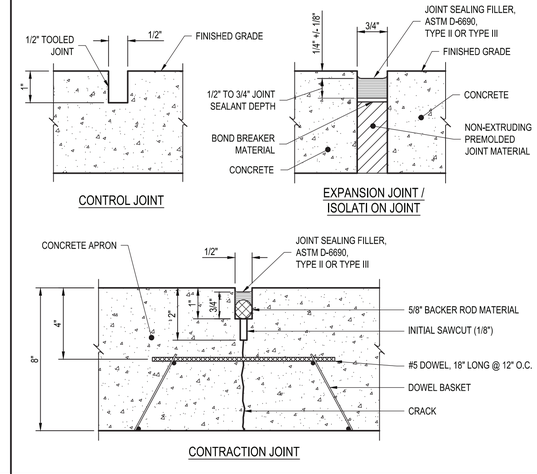
B3 DOWEL DETAIL @ BUILDING FACE
SCALE: NOT TO SCALE



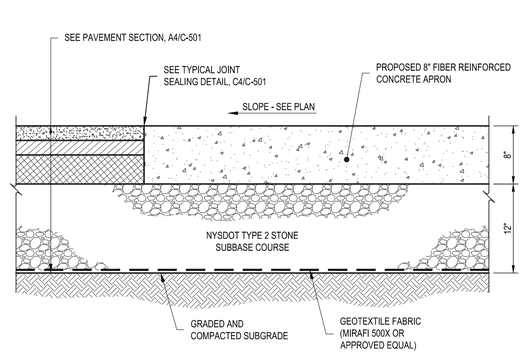
B4 HEAVY DUTY ASPHALT PAVEMENT KEYING DETAIL
SCALE: NOT TO SCALE



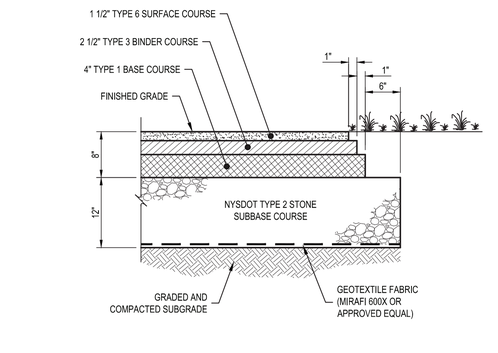
A1 2' X 2' CONCRETE CATCH BASIN DETAIL
SCALE: NOT TO SCALE



A2 TYPICAL CONCRETE JOINT DETAILS
SCALE: NOT TO SCALE



A3 CONCRETE APRON DETAIL
SCALE: NOT TO SCALE



A4 HEAVY DUTY ASPHALT PAVEMENT SECTION
SCALE: NOT TO SCALE

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DETAILS

C-501

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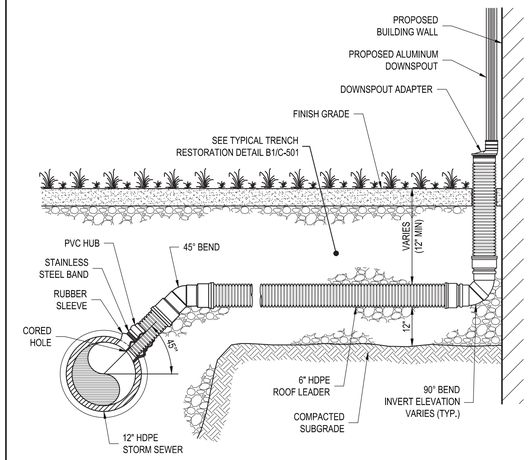
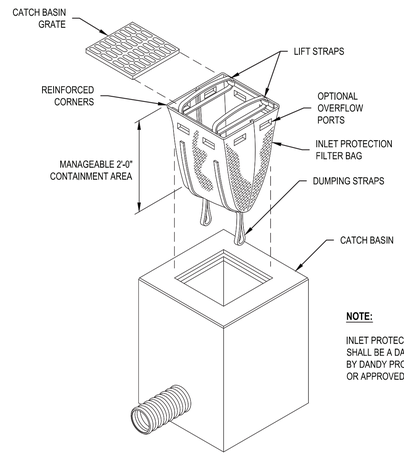


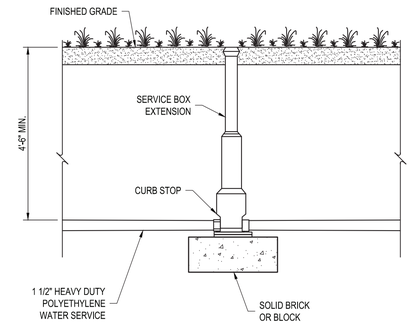
C4 DOWNSPOUT CONNECTION DETAIL
SCALE: NOT TO SCALE



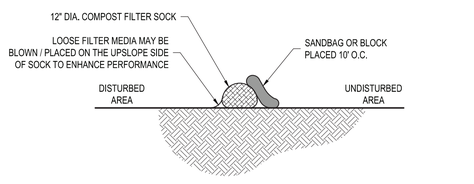
NOTE:

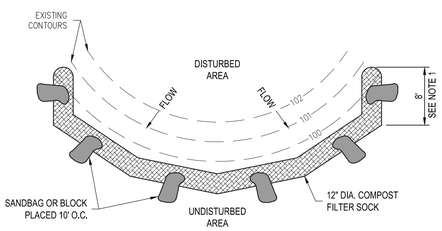
INLET PROTECTION FILTER BAG SHALL BE A DANDY SACK™ BY DANDY PRODUCTS, INC. OR APPROVED EQUAL.

B3 INLET PROTECTION FILTER BAG
SCALE: NOT TO SCALE

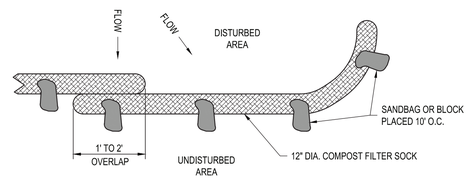


B4 CURB STOP AND SERVICE BOX DETAIL (BY ADD ON #1)
SCALE: NOT TO SCALE





PLAN VIEW

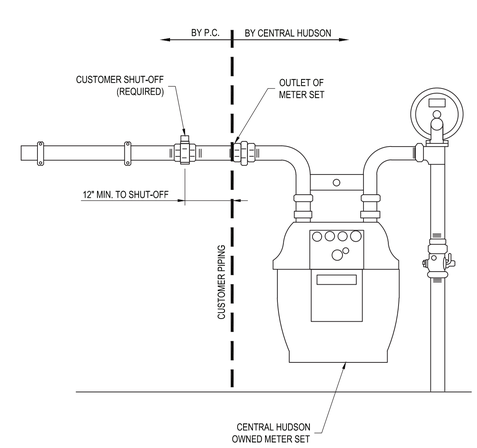


OVERLAPPING

NOTES:

1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURE
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCKS, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

A2 COMPOST FILTER SOCK DETAIL
SCALE: NOT TO SCALE



A4 GAS METER ASSEMBLY (BY CENTRAL HUDSON)
SCALE: NOT TO SCALE

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DETAILS

C-502

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@	AT
DIA	DIAMETER
A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADD'L	ADDITIONAL
ADJUST	ADJUSTMENT
AESS	ARCHITECTURALLY-EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALT	ALTERNATE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING OF MATERIALS
AWS	AMERICAN WELDING SOCIETY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
B/	BOTTOM OF
BAL	BALANCE
C	CHANNEL
C/C	CENTER-TO-CENTER
CFMF	COLD-FORMED METAL FRAMING
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
DWG	DRAWING
E-W	EAST-WEST
EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATION & FINISH SYSTEM
EL OR ELEV	ELEVATION
EMBED	EMBEDMENT
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EX OR EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F/S	FAR SIDE
FF	FINISH FLOOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FLR	FLOOR
FS	FOOTING STEP
FT OR '	FOOT
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
HP	HIGH POINT
HSS	HOLLOW STRUCTURAL SECTION
IN OR "	INCH
INFO	INFORMATION
INT	INTERIOR
K	KIP (1000 LBS)
KB	KNEE BRACE
KSI	KIPS PER SQUARE INCH
L	ANGLE
LLBB	LONG LEGS BACK-TO-BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LW	LIGHTWEIGHT
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
N/S	NEAR SIDE
N-S	NORTH-SOUTH
NTS	NOT TO SCALE
NW	NORMAL WEIGHT
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
PAF	POWDER-ACTUATED FASTENER
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PEMB	PRE-ENGINEERED METAL BUILDING
PREFAB	PREFABRICATED
PROJ	PROJECTION
PT	PRESSURE-TREATED
R	RADIUS
RD	ROOF DRAIN
REQD	REQUIRED
RET	RETURN
RTU	ROOFTOP UNIT
SCHED	SCHEDULE
SECT	SECTION
SF	SHALLOW FOOTING
SFRM	SPRAYED FIRE-RESISTIVE MATERIAL
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SLBB	SHORT LEGS BACK-TO-BACK
SQ	SQUARE
SSMA	STEEL STUD MANUFACTURER'S ASSOCIATION
SSPC	STEEL STRUCTURES PAINTING COUNCIL
STD	STANDARD
SOG	SLAB ON GRADE
T/	TOP OF
TYP	TYPICAL
U/S	UNDERSIDE
U.N.O.	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WIDE-FLANGE SECTION
W/	WITH
W/O	WITHOUT
WP	WORK POINT
WS	WALL STEP
WT	TEE SECTION
WWF	WELDED WIRE FABRIC
WWR	WELDED WIRE REINFORCEMENT

A1 ABBREVIATIONS
SCALE: 12" = 1'-0"

GENERAL

A. WORK STRUCTURAL DRAWINGS WITH CIVIL, ARCHITECTURAL, PLUMBING AND MECHANICAL DRAWINGS.
B. REFERENCED CODES AND DESIGN STANDARDS
   1. 2020 BUILDING CODE OF NEW YORK STATE - BCNYS.
   2. ASCE/SEI 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-16).
C. ALL ELEVATIONS ARE REFERENCED FROM FINISH FLOOR = 0' - 0"

PROJECT CONDITIONS

A. COORDINATE WORK WITH THE OWNER.
B. COMPLY WITH ALL APPLICABLE OWNER RULES, CODES AND REGULATIONS.
C. FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS BEFORE SUBMITTING SHOP DRAWINGS. NOTIFY ENGINEER OF ANY DIFFERENCES BETWEEN EXISTING CONDITIONS AND INTENT OF THESE DRAWINGS.
D. ALL WORK SHALL BE EXECUTED IN A TIMELY AND PROFESSIONAL MANNER.
E. REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM CONSTRUCTION.
F. KEEP ACCESS TO AND FROM THE WORK AREAS CLEAN AND FREE OF TOOLS, MATERIALS, DEBRIS, ETC.
G. AT COMPLETION OF JOB, LEAVE THE WORK AREA READY FOR USE BY OWNER AND WITHOUT NEED FOR FURTHER CLEAN UP OF ANY KIND.
H. JOB SITE SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

SUBMITTALS

A. ELECTRONICALLY SUBMIT SHOP DRAWINGS AND PRODUCT INFORMATION FOR MATERIALS DETAILED OR SPECIFIED.
B. REPRODUCTION OF CONTRACT DRAWINGS IS NOT PERMITTED.

STRUCTURAL DESIGN DATA

A. BUILDING OCCUPANCY CATEGORY - II
B. PEMB (PRE-ENGINEERED METAL BUILDING) DEAD LOADS:
   1. ROOF DEAD LOAD - 10 PSF
   2. COLLATERAL LOAD - 5 PSF (PRIMARY AND SECONDARY FRAMING)
   3. ADDITIONAL DEAD LOADS AS INDICATED ON ROOF FRAMING PLAN
C. ROOF SNOW LOAD:
   1. GROUND SNOW LOAD, Pg - 30 PSF
   2. EXPOSURE CATEGORY, C
   3. EXPOSURE FACTOR, Ce - 1.0
   4. THERMAL FACTOR, Ct - 1.2
   5. SNOW LOAD IMPORTANCE FACTOR, Is - 1.0
   6. PEMB DESIGNS SHALL CONSIDER SNOWDRIFT AND UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7-16.
D. WIND LOAD: PER 2015 IBC WITH 2016 NYS SUPPLEMENT
   1. BASIC WIND SPEED (3-SECOND GUST), V - 115 MPH
   2. EXPOSURE CATEGORY, C
   3. WIND DIRECTIONALITY FACTOR, Kd - .85
   4. TOPOGRAPHIC FACTOR, Kzt - 1.0
   5. GUST EFFECT FACTOR, G - .85
   6. ENCLOSURE CLASSIFICATION, ENCLOSED
   7. VELOCITY PRESSURE COEFFICIENT, Kz - .9642
   8. VELOCITY PRESSURE, qz - BY PEMB MANUFACTURER
   9. COMPONENT & CLADDING PRESSURES, BY PEMB MANUFACTURER
E. SEISMIC LOAD: ASCE 7-10
   1. SEISMIC IMPORTANCE FACTOR, Ie - 1.0
   2. SPECTRAL RESPONSE ACCELERATION, Ss - 0.202 g
   3. SPECTRAL RESPONSE ACCELERATION, S1 - 0.066 g
   4. SEISMIC SITE CLASS, D
   5. SITE COEFFICIENT FOR Ss, Fa - 1.6
   6. SITE COEFFICIENT FOR S1, Fv - 2.4
   7. DESIGN SPECTRAL RESPONSE ACCELERATION, Sds - 0.216 g
   8. DESIGN SPECTRAL RESPONSE ACCELERATION, Sd1 - 0.105 g
   9. SEISMIC DESIGN CATEGORY, B
   10. BASIC SEISMIC-FORCE-RESISTING SYSTEM - BY PEMB MANUFACTURER
   11. RESPONSE MODIFICATION FACTOR, R - BY PEMB MANUFACTURER
   12. ANALYSIS PROCEDURE - BY PEMB MANUFACTURER
   13. DESIGN BASE SHEAR, V - BY PEMB MANUFACTURER

SPECIAL INSPECTION & TESTING REQUIREMENTS

A. REFER TO SPECIFICATION SECTION 014100

EARTHWORK AND FOUNDATIONS

A. READ THE GEOTECHNICAL SERVICES REPORT PREPARED BY DANIEL G. LOUCKS, PE. THIS REPORT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
B. THE BOTTOM OF ALL CONCRETE FOUNDATIONS SHALL BEAR ON 12" MIN. OF COMPACTED SELECT STRUCTURAL FILL
C. THE CONTRACTOR SHALL NOT COMMENCE FOUNDATION CONSTRUCTION WORK PRIOR TO INSPECTION AND APPROVAL OF THE BEARING SOIL BY PROFESSIONAL GEOTECHNICAL ENGINEER.
D. ALL EXCAVATIONS SHALL BE DEWATERED TO MAINTAIN GROUNDWATER AT LEAST 24" BELOW FOOTING BEFORE PLACING OF CONCRETE.
E. FOOTINGS SHOWN HAVE BEEN SIZED BASED ON AN ALLOWABLE NET SOIL BEARING PRESSURES OF 3,000 PSF. PROFESSIONAL GEOTECHNICAL ENGINEER SHALL VERIFY THE PRESUMPTIVE BEARING PRESSURES CAN BE ACHIEVED, PRIOR TO CONSTRUCTION OF FOUNDATIONS.
F. BACKFILL ONE SIDE OF FOUNDATION WALLS NO MORE THAN 24" HIGHER THAN OPPOSITE SIDE. UNLESS THE SLABS AT THE TOP AND BOTTOM OF THE WALL ARE IN PLACE AND HAVE CURED 7 DAYS MINIMUM.
G. UNLESS NOTED OTHERWISE, CENTER COLUMN FOOTINGS ON COLUMNS.
H. UNLESS NOTED OTHERWISE, CENTER STRIP FOOTINGS ON FOUNDATION WALLS.
I. READ "RECOMMENDED SITE PREPARATION SEQUENCING NOTES" THIS SHEET.

CAST-IN-PLACE CONCRETE

A. A. STANDARDS
   1. ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   2. ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
   3. ACI 306.1 STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING
   4. CRSI MANUAL OF STANDARD PRACTICE
B. DESIGN COMPRESSIVE STRENGTHS
   1. FOUNDATIONS AND FOUNDATION WALLS: 4000 PSI @ 7 DAYS
   2. SLAB-ON-GRADE: 4000 PSI @ 28 DAYS
C. CONCRETE MIX REQUIREMENTS
   1. PORTLAND CEMENT - ASTM C150, TYPE I OR II
   2. NORMAL WEIGHT AGGREGATES - ASTM C33, CLASS 3S
      a. MAXIMUM AGGREGATE SIZE - 3/4"
   3. AIR-ENTRAINING ADMIXTURE - ASTM C260
      a. FOR ALL EXTERIOR CONCRETE AND OTHER CONCRETE THAT WILL BE EXPOSED TO FREEZING TEMPERATURES DURING THE CURING PERIOD, PROVIDE CONCRETE WITH A TOTAL AIR CONTENT OF 5.5% WITH TOLERANCE +/-1.5%
   4. FLY ASH - ASTM C618 CLASS 'C' OR 'F' FLY ASH WITH LOSS ON IGNITION LESS THAN 6 PERCENT. MAXIMUM FLY ASH CONTENT SHALL BE 25 PERCENT OF TOTAL CEMENTITIOUS MATERIALS, BY WEIGHT. CONTRACTOR MAY SUBSTITUTE GROUND-GRANULATED BLAST FURNACE SLAG (ASTM C989 GRADE 100 OR 120) FOR FLY ASH. ALTERNATIVELY, A BLENDED CEMENT MAY BE USED.

A2 GENERAL NOTES
SCALE: 12" = 1'-0"

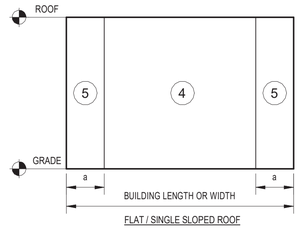
D. CLEAR CONCRETE COVER
   1. CONCRETE CAST AGAINST EARTH - 3"
   2. CONCRETE EXPOSED TO EARTH OR WEATHER - AS SHOWN ON DRAWINGS
   3. CONCRETE NOT EXPOSED TO EARTH OR WEATHER
      a. TOP OF SLABS ON METAL DECKING - 1" MIN
      b. TOP OF SLABS ON GRADE, WALLS, COLUMNS, BEAMS - 1-1/2"
E. REINFORCING
   1. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED
   2. WELDED-WIRE-REINFORCEMENT - ASTM A185 (FLAT SHEETS), DEFORMED WIRE
   3. LAP SPLICES SHALL BE PER ACI 318, LAP CLASS B. STAGGER SPLICES WHEREVER POSSIBLE SO AS NOT TO IMPAIR STRENGTH OF MEMBERS.
F. OTHER REQUIREMENTS
   1. ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A ¾" CHAMFER OR OTHERWISE AS SHOWN ON DRAWINGS.
   2. THE CONTRACTOR SHALL NOT PLACE ANY CONCRETE PRIOR TO SPECIAL INSPECTOR'S VERIFICATION OF USAGE OF APPROVED MIX DESIGN AND INSTALLATION OF REINFORCING STEEL.
   3. DEPOSIT CLOSE TO FINAL LOCATION TO AVOID SEGREGATION.
   4. USE VIBRATOR TO CONSOLIDATE CONCRETE BUT NOT TO TRANSPORT CONCRETE LATERALLY.
   5. PLACE WITHIN 90 MINUTES OF MIXING. NO TEMPERING.
   6. MOIST OR WET CURE ALL CONCRETE FOR SEVEN DAYS.
   7. COMPLY WITH ACI REQUIREMENTS FOR PLACEMENT AND CURING OF CONCRETE DURING HOT OR COLD WEATHER.
   8. SLAB TO HAVE A FINISH FLATNESS (FF) OF 38 (1/8" OVER 10'-0") AND A FINISH LEVEL (FL) OF 25 IN ACCORDANCE WITH ACI 117 AND ASTM E1155.

STRUCTURAL STEEL FRAMING

A. STANDARDS
   1. DESIGN - AISC 360 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ALLOWABLE STRESS DESIGN)
   2. CONSTRUCTION - AISC 303 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
   3. BOLTED CONNECTIONS - AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
   4. WELDED CONNECTIONS - AMERICAN WELDING SOCIETY (AWS) D1.1
B. MATERIALS
   1. WIDE-FLANGE SECTIONS, TEES - ASTM A992
   2. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500 GRADE B
   3. PIPE SECTIONS - ASTM A53 GRADE B
   4. ALL OTHER SECTIONS, PLATES AND RODS - ASTM A36
C. FABRICATION
   1. BEAM COPES - ALL RE-ENTRANT CORNERS SHALL BE SHAPED, NOTCH FREE, TO A MINIMUM RADIUS OF 1/2".
   2. PROPERLY MARK ALL MATERIALS FOR FIELD ASSEMBLY. FABRICATE FOR DELIVERY SEQUENCE WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING OF MATERIALS.
D. CONNECTIONS
   1. GENERAL
      a. USE WELDED OR BOLTED SHOP CONNECTIONS, AND BOLTED FIELD CONNECTIONS WHERE POSSIBLE.
      b. DETAIL CONNECTIONS FOR MEMBER END REACTIONS SHOWN ON DRAWINGS. IF NO END REACTION IS INDICATED AND CONNECTION IS NOT DETAILED, DETAIL CONNECTION FOR ONE-HALF THE MAXIMUM TOTAL UNIFORM LOAD FOR A LATERALLY-SUPPORTED BEAM, AS TABULATED IN CHAPTER 3 OF AISC 360.
      c. - DENOTES MOMENT CONNECTION
   2. BOLTED CONNECTIONS
      a. HIGH STRENGTH BOLTS: ASTM A325, MINIMUM 3/4" DIA. DIAMETER, WITH ASTM A563 HEAVY HEX NUTS AND ASTM F436 WASHERS, UNLESS NOTED OR DETAILED OTHERWISE.
      b. ALL BOLTED CONNECTIONS ARE BEARING CONNECTIONS, TIGHTENED TO THE SNUG-TIGHT CONDITION AS DEFINED BY AISC, UNLESS NOTED OR DETAILED OTHERWISE.
      c. MINIMUM CONNECTION DEPTH SHALL BE ONE-HALF THE BEAMS "T" DIMENSION.
      d. CONNECTIONS SHALL BE STANDARD DOUBLE-ANGLE CONNECTIONS, UNLESS NOTED OR DETAILED OTHERWISE.
      e. THE USE OF EXTENDED SHEAR PLATE CONNECTIONS FOR EITHER BEAM-TO-BEAM OR BEAM-TO-COLUMN CONNECTIONS IS NOT PERMITTED.
      f. HOLES FOR SHOP AND FIELD CONNECTIONS SHALL BE DRILLED OR PUNCHED. NO BURNT HOLES SHALL BE PERMITTED.
   3. WELDED CONNECTIONS
      a. USE E70XX ELECTRODES, UNLESS NOTED OTHERWISE.
      b. WELDERS SHALL BE AWS-CERTIFIED FOR WELD TYPES AND POSITIONS REQUIRED.
E. SURFACE PREPARATION AND COATINGS
F. ERECTION
   1. SET STEEL ACCURATELY AND TO ELEVATIONS INDICATED ACCORDING TO AISC 303 AND AISC 360.
   2. MAINTAIN ERECTION TOLERANCES WITH LIMITS OF AISC 303.
   3. SPLICE MEMBERS ONLY WHERE INDICATED.
   4. DO NOT USE THERMAL CUTTING DURING ERECTION.

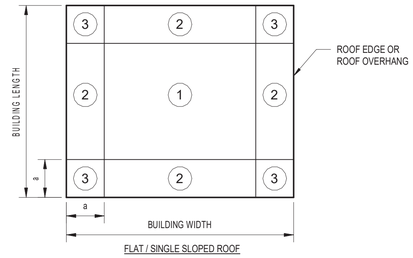
RECOMMENDED SITE PREPARATION SEQUENCING NOTES

A. RECOMMENDED SITE PREPARATION SEQUENCING NOTES
   1. REFER TO THE GEOTECHNICAL SERVICES REPORT PREPARED BY DANIEL G. LOUCKS, PE FOR PROJECT SITE REQUIREMENTS.
   2. PREPARE THE SITE BY STRIPPING AWAY ALL ASPHALT OR CONCRETE PAVEMENTS, TOPSOIL, ORGANIC MATTER AND EXISTING FILL MATERIALS FROM WITHIN THE BUILDING FOOTPRINT AND A MINIMUM OF 5'-0" BEYOND ON ALL SIDES. IF LARGE BOULDERS ARE ENCOUNTERED AND REQUIRE REMOVAL, REMOVE BOULDERS USING NON-EXPLOSIVE TECHNIQUES. PROVIDE TEMPORARY SHORING AS REQUIRED TO PROTECT EXISTING STRUCTURES OR PAVEMENTS NOT INTENDED TO BE DISTURBED. PROVIDE 12" MINIMUM OF COMPACTED STRUCTURAL FILL UNDER ALL FOOTINGS.
   3. UNDER OBSERVATION OF GEOTECHNICAL ENGINEERING SPECIAL INSPECTION AGENT, PREPARE SUBGRADE AS RECOMMENDED BY THE ON SITE REPRESENTATIVE WITH APPROVAL OF THE GEOTECHNICAL ENGINEER. DO NOT PROOFROLL OR PREPARE THE SUBGRADE DURING OR IMMEDIATELY FOLLOWING INCLEMENT WEATHER OR ON FROZEN GROUND.
   4. CONSTRUCT BUILDING PAD. CONTRACTOR SHALL USE APPROPRIATE MEASURES TO MAINTAIN INTEGRITY OF SUBGRADE AND FILL MATERIALS AND PREVENT WATER FROM PONDING IN EXCAVATIONS. STRUCTURAL FILL SHALL BE PLACED IN UNIFORM 8" MAX. LIFTS IN MASS FILL AREAS AND 4" MAX. LIFTS IN CONFINED AREAS, COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY ATTAINABLE THROUGH THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557). TOP OF BUILDING PAD IS BOTTOM OF SLAB SUBBASE ELEVATION.
   5. NATIVE SOILS ARE MOISTURE SENSITIVE AND WILL TEND TO BECOME MUDDY AND LOSE STRENGTH WHEN WET AND EXPOSED TO NORMAL CONSTRUCTION TRAFFIC. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO MAINTAIN INTEGRITY OF SUBGRADE. DIVERT WATER AWAY FROM BUILDING PAD AREA AS REQUIRED.
   6. EXCAVATE FOR FOOTINGS. GEOTECHNICAL ENGINEERING SPECIAL INSPECTION AGENT SHALL OBSERVE ALL EXPOSED SUBGRADE AND SHALL VERIFY THE PRESUMPTIVE NET ALLOWABLE BEARING PRESSURES OF 3,000 PSF CAN BE ACHIEVED. COMPACT FOOTING BEARING GRADES AS RECOMMENDED IN GEOTECHNICAL REPORT. ADDITIONAL PASSES MAY BE REQUIRED BASED ON FIELD CONDITIONS IF COMPACTION DOES NOT YIELD SATISFACTORY RESULTS. THEN UNDERCUTS WILL BE REQUIRED. IF UNDERCUTS ARE REQUIRED, THE UNDERCUT WIDTH SHALL BE AT LEAST SIX INCHES WIDER THAN THE FOOTING ON ALL SIDES FOR EVERY FOOT DEPTH OF UNDERCUT REQUIRED. UNDERCUTS SHALL BE BACKFILLED WITH STRUCTURAL FILL, COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY ATTAINABLE THROUGH THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557).
   7. CONSTRUCT FOOTINGS AND FOUNDATION WALLS.
   8. BACKFILL FOUNDATION EXCAVATIONS WITH STRUCTURAL FILL COMPACTED TO 98% MAXIMUM DRY DENSITY PER ASTM D1557 WITHIN BUILDING PERIMETER AND UNDER ALL SLABS AND PAVEMENTS, AND 98% ON EXTERIOR SIDE OF PERIMETER FOUNDATIONS IN LANDSCAPED AREAS.
   9. PLACE MIRAFI 550X WOVEN GEOTEXTILE FABRIC OR APPROVED EQUAL PRIOR TO PLACING COMPACTED SUBBASE / SELECT STRUCTURAL FILL MATERIAL FOR SLAB ON GRADE.
   10. PROVIDE 10MIL VAPOR BARRIER ON TOP OF SUBBASE IN SPECIFIED LOCATIONS. REFER TO SLAB PLAN.
   11. PLACE SLAB REINFORCING ON SUITABLE SUPPORTS. REFER TO TYPICAL SLAB ON GRADE DETAILS.
   12. PLACE CONCRETE SLAB ON GRADE. FINISH AND CURE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
   13. SELECT STRUCTURAL FILL MATERIALS AND ALL FILL MATERIAL USED WITHIN THE BUILDING FOOTPRINT TO BE REVIEWED AND APPROVED BY THE GEOTECHNICAL ENGINEER.



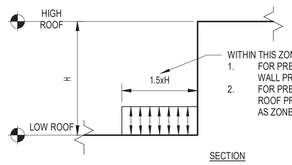
FLAT / SINGLE SLOPED ROOF

EXTERIOR WALL ELEVATION - COMPONENTS AND CLADDING
WALL WIND PRESSURE ZONE DESIGNATIONS



FLAT / SINGLE SLOPED ROOF

ROOF PLAN - COMPONENTS AND CLADDING
ROOF WIND PRESSURE ZONE DESIGNATIONS



SECTION

ROOF STEP - COMPONENTS AND CLADDING
ROOF WIND PRESSURE ZONE DESIGNATIONS

DESIGN WIND PRESSURE FOR EXTERIOR COMPONENTS AND CLADDING MATERIALS

ROOF SLOPE	SURFACE	EFFECTIVE WIND AREA (SF)	WIND PRESSURE TOWARD SURFACE (+ PSF)	WIND PRESSURE AWAY FROM SURFACE (- PSF)
<10°	ZONE 1 ROOF	10	NA	44.7
		20	NA	42.5
		50	NA	39.34
		100	NA	36.7
	ZONE 2 ROOF EDGES	10	NA	70.1
		20	NA	66.6
		50	NA	58.6
		100	NA	48.1
	ZONE 3 ROOF CORNERS	10	NA	95.5
		20	NA	90.73
		50	NA	79.84
		100	NA	65.5
NA	ZONE 4 WALL	10	30.5	30.5
		20	29	29.3
		50	25.5	27
		100	20.91	23.71
		500	14.64	19
	ZONE 5 WALL CORNERS	10	30.5	56
		20	29	52.1
		50	25.5	43.75
		100	20.91	33.25
		500	14.64	20

COMPONENTS AND CLADDING WIND PRESSURE NOTES:

1. THE COMPONENTS AND CLADDING WIND LOAD PRESSURES IN THE TABLES ABOVE ARE BASED ON ASCE 7-2016.
2. THE PRESSURES INDICATED ARE "ULTIMATE" LOAD CONDITIONS. REFER TO THE GENERAL NOTES FOR WIND LOAD INFORMATION AND PARAMETERS.
3. THE PRESSURES IN THE TABLES ABOVE ARE TO BE USED FOR WIND LOAD CONTRIBUTION TO THE TOTAL LOAD APPLIED TO ANY COMPONENTS AND CLADDING MEMBER OR MATERIAL WHICH IS PART OF A ROOF OR EXTERIOR WALL ASSEMBLY.
4. REFER TO CHAPTER 16 OF THE BUILDING CODE OF NEW YORK STATE AND ASCE 7-2016 FOR DEFINITION OF TERMS.
5. CONFIGURATION OF END ZONES, EDGE STRIPS AND CORNERS SHALL BE PER ASCE 7-2016.
6. INTERPOLATION FOR EFFECTIVE WIND AREA BETWEEN 10 SF AND 100 SF FOR ROOFS, AND 10 SF AND 500 SF FOR WALLS IS PERMITTED.
7. PRESSURES ARE APPLIED NORMAL TO THE SURFACE OF THE COMPONENT OR CLADDING ELEMENT.
8. POSITIVE AND NEGATIVE PRESSURES DO NOT SIMULTANEOUSLY.
9. THE WIDTH OF EDGE STRIP (a) SHALL BE 10 PERCENT OF THE LEAST HORIZONTAL, OR 40 PERCENT OF THE EAVE HEIGHT, WHICHEVER IS LESS, BUT NOT LESS THAN EITHER 4 PERCENT OF THE LEAST HORIZONTAL DIMENSION OR 3 FEET.

A4 WIND COMPONENT & CLADDING PRESSURES
SCALE: 12" = 1'-0"

C&S COMPANIES®
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STATE OF NEW YORK · JEFFREY G. PALN · 072206 · LICENSED PROFESSIONAL ENGINEER

ORANGE COUNTY · NEW YORK · 1 NOVEMBER 1683

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

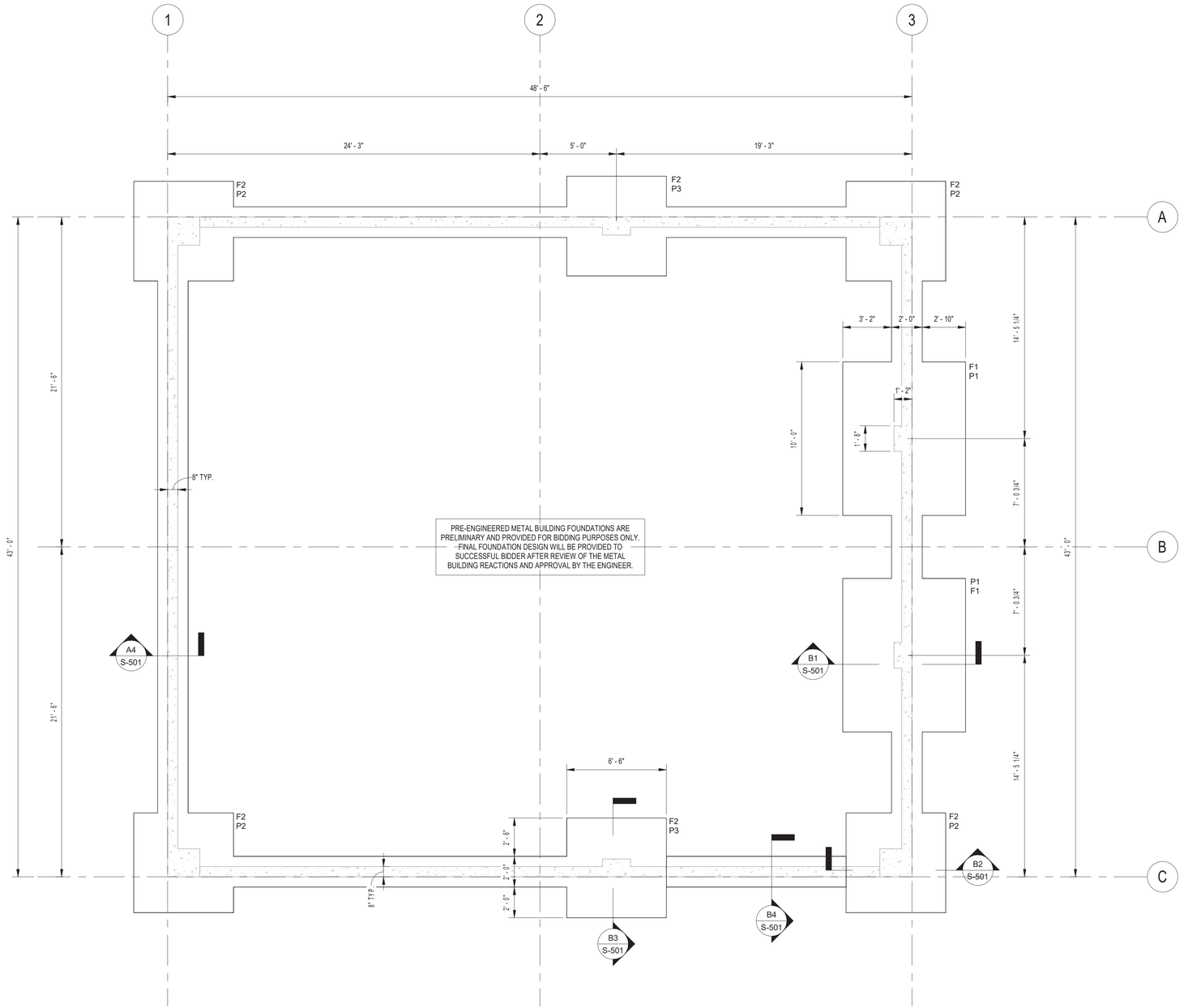
MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	104015003
DATE:	FEBRUARY 2021
DRAWN BY:	M.J. BARBER
DESIGNED BY:	M.J. BARBER
CHECKED BY:	J.D. NADZAN, P.E.

GENERAL NOTES AND ABBREVIATIONS

S-001



NOTES:

1. TOP OF CONCRETE ELEVATIONS NOTED ON PLAN ARE REFERENCED FROM FIRST FLOOR DATUM 0'-0".
2. TYPICAL FLOOR IS 8" THICK CONCRETE SLAB ON GRADE OVER 12" MIN. COMPACTED SUBBASE. REFER TO GEOTECHNICAL REPORT BY DANIEL G. LOUCKS, PE.
3. REINFORCE SLABS WITH #5 BARS AT 10" OC EACH WAY TOP AND BOTTOM.
4. UTILITIES NOT SHOWN ON STRUCTURAL DRAWINGS. REFER TO CIVIL, MECHANICAL AND PLUMBING DRAWINGS FOR ALL UNDERGROUND UTILITIES.

PLAN NORTH

A1 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

0 2' 4' 8'

C&S COMPANIES®
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ORANGE COUNTY · NEW YORK · 1 NOVEMBER 1683

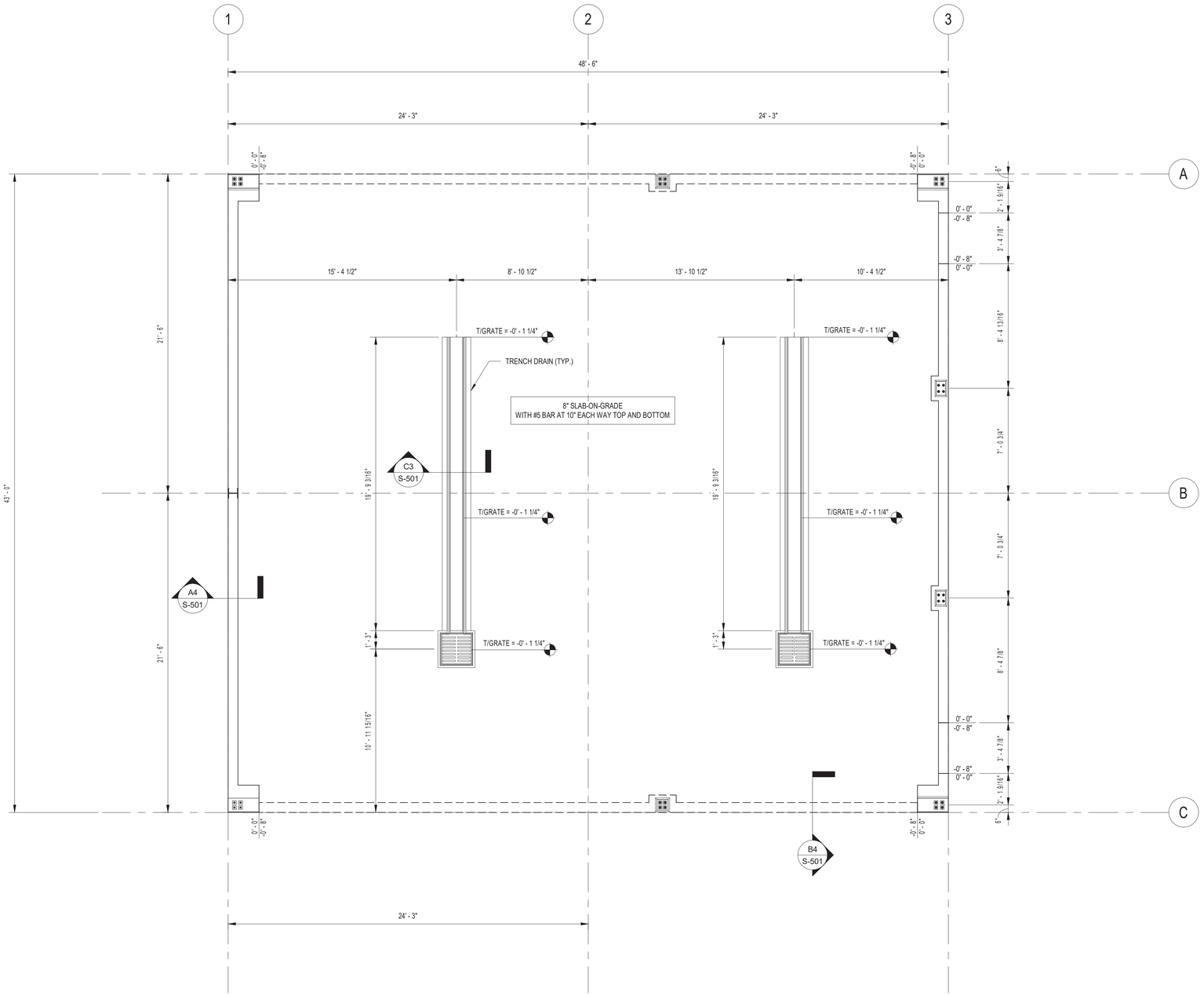
SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104015003
DATE:	FEBRUARY 2021
DRAWN BY:	M.J. BARBER
DESIGNED BY:	M.J. BARBER
CHECKED BY:	J.D. NADZAN, P.E.

FOUNDATION PLAN

S-101

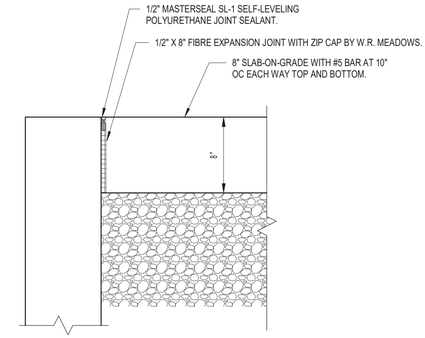


PLAN NORTH

0 2' 4' 8'

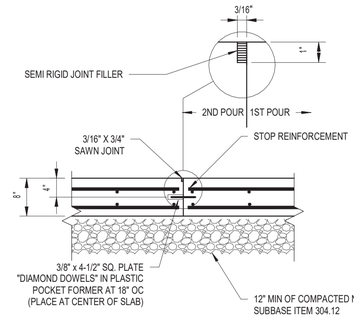
A1 SLAB PLAN

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



C4 TYPICAL SLAB-ON-GRADE ISOLATION JOINT DETAIL

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

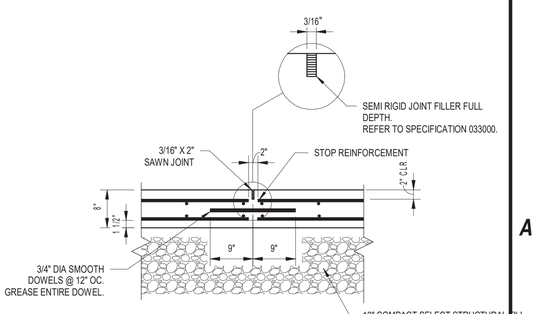


NOTES:

1. CONSTRUCTION JOINTS SHALL ALIGN WITH PLANNED SAWCUT CONTROL JOINTS. CONTRACTOR SHALL SUBMIT PROPOSED CONSTRUCTION JOINT LAYOUT WITH POUR SEQUENCE INDICATING CONSTRUCTION JOINT LOCATIONS FOR ENGINEER'S REVIEW AND APPROVAL PRIOR TO SLAB PLACEMENT.
2. JOINTS SHALL NOT BE FILLED UNTIL ADEQUATE TIME HAS PASSED AS RECOMMENDED BY THE MANUFACTURER.
3. FILL JOINTS FULL DEPTH IN ACCORDANCE WITH SPECIFICATION 033000 AND MANUFACTURERS INSTRUCTIONS.

B4 TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINT DETAIL

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



NOTES:

1. JOINT TO BE SAWCUT AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT DISLODGING OF AGGREGATE. COMPLETE CUTTING BEFORE SHRINKAGE INDUCES CRACKING.
2. SAWCUT JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 15 FT WITH AN ASPECT RATIO NOT TO EXCEED 1.5:1. CONTRACTOR SHALL SUBMIT PROPOSED CONSTRUCTION JOINT LAYOUT FOR ENGINEER'S REVIEW AND APPROVAL PRIOR TO SLAB PLACEMENT.
3. JOINTS SHALL NOT BE FILLED UNTIL ADEQUATE TIME HAS PASSED AS RECOMMENDED BY THE MANUFACTURER.
4. FILL JOINTS FULL DEPTH IN ACCORDANCE WITH SPECIFICATION 033000 AND MANUFACTURERS INSTRUCTIONS.

A4 TYPICAL SLAB-ON-GRADE CONTROL JOINT DETAIL

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

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STATE OF NEW YORK
JEFFREY D. FALN
LICENSED PROFESSIONAL ENGINEER
072206

ORANGE COUNTY
1 NOVEMBER 1683
NEW YORK

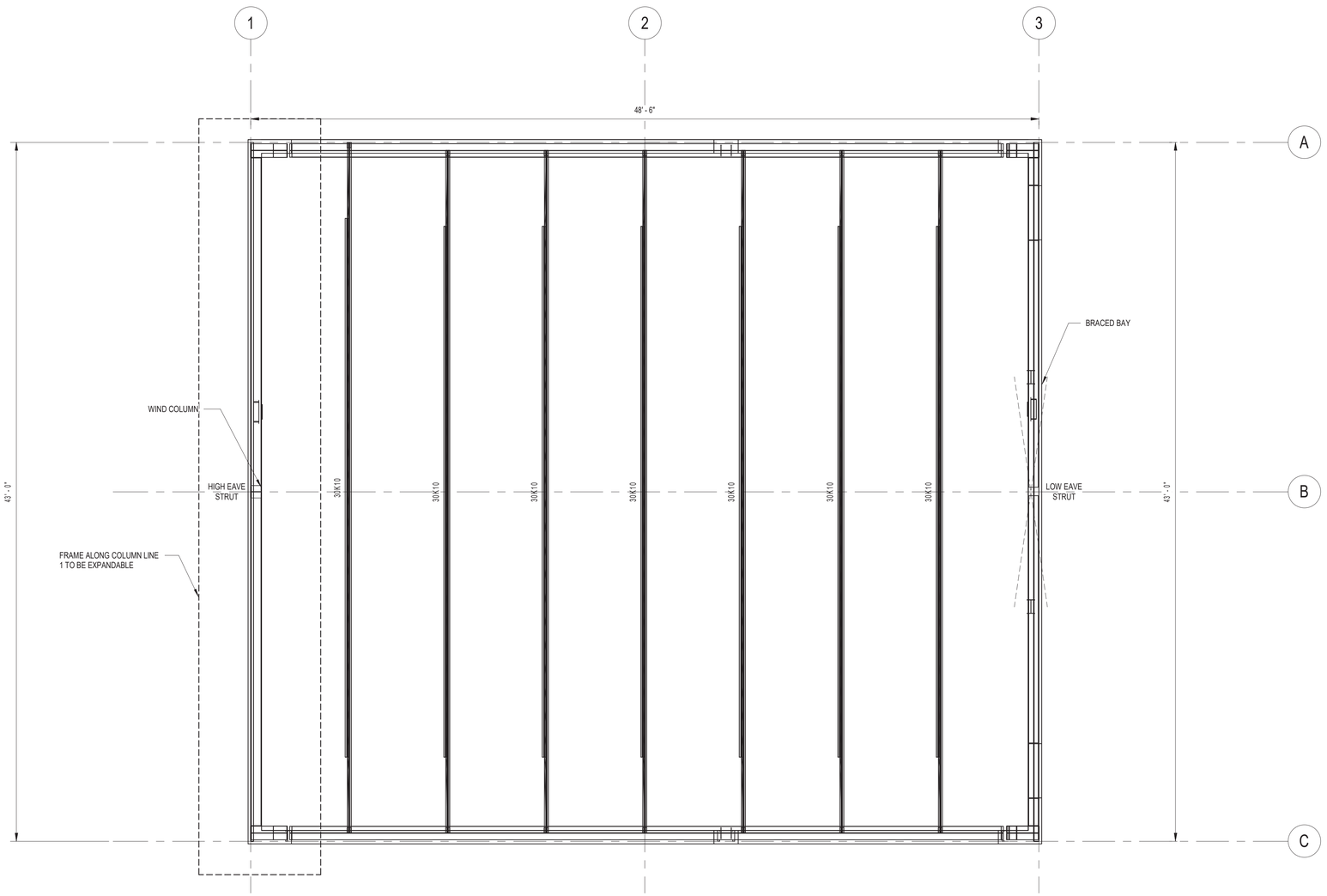
SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104015003
DATE:	FEBRUARY 2021
DRAWN BY:	M.J. BARBER
DESIGNED BY:	M.J. BARBER
CHECKED BY:	J.D. NADZAN, P.E.

SLAB PLAN

S-102



NOTES:

1. METAL BUILDING PACKAGE TO INCLUDE TYPE B STEEL ROOF DECK, STEEL JOIST PACKAGE, BUILDING SHELL (INCLUDING ALL FRAMED OPENINGS INDICATED ON THE ARCHITECTURAL DRAWINGS) AND ALL ARCHITECTURAL COMPONENTS. FOUNDATIONS, SLABS AND OTHER INTERIOR STRUCTURAL ITEMS ARE NOT INCLUDED IN METAL BUILDING BID PACKAGE.
2. STEEL JOISTS SHALL BE DESIGNED USING THE FOLLOWING UNIFORM LOADS:
   a. ROOF DEAD LOAD = 10 PSF
   b. COLLATERAL DEAD LOAD = 5 PSF
   c. ROOF LIVE LOAD = 2000 LBS CONCENTRATED LIVE LOAD APPLED TO SINGLE PANEL POINT ON BOTTOM CHORD. POSITION LOAD ALONG JOIST TO CREATE WORST CASE LOAD EFFECT FOR EACH LIMIT STATE UNDER CONSIDERATION.
   d. SNOW LOAD = 38 PSF
   e. WIND LOAD = 31 PSF UPLIFT (PER ASCE 7-16)
3. THE EXPANDABLE FRAME ALONG COLUMN LINE 1 SHALL NOT BE INCLUDED IN THE DESIGN OF THE LATERAL FORCE RESISTING SYSTEM.
4. THE STEEL ROOF DECK DIAPHRAGM, CHORDS, COLLECTORS, DRAG STRUTS AND FASTENERS SHALL BE DESIGNED FOR A MINIMUM APPLIED UNIT SHEAR OF 650 LBS/FT.
5. BOTTOM OF ROOF DECK = 25' - 6 1/8" AFF AT COLUMN LINE 3.
6. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ROOF OPENINGS AND ROOFTOP EQUIPMENT. PROVIDE A TYPICAL ROOF OPENING FRAME AROUND ALL OPENINGS GREATER THAN 8" IN ANY DIRECTION OR ANY EQUIPMENT WITH AN OPERATING WEIGHT GREATER THAN 75 LBS. FRAME SHALL CONSIST OF L6X6X3/8 MEMBERS WELDED TO 8" LONG L6X6X3/8 CLIPS AND POSITIONED AS REQUIRED BY EQUIPMENT MANUFACTURER. USE 1/4" FILLET WELDS ALL AROUND UNLESS NOTED OTHERWISE.

PLAN NORTH

A1 FRAMING PLAN
SCALE: 1/4" = 1'-0"

0 4' 8' 16'

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ORANGE COUNTY NEW YORK 1 NOVEMBER 1683

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

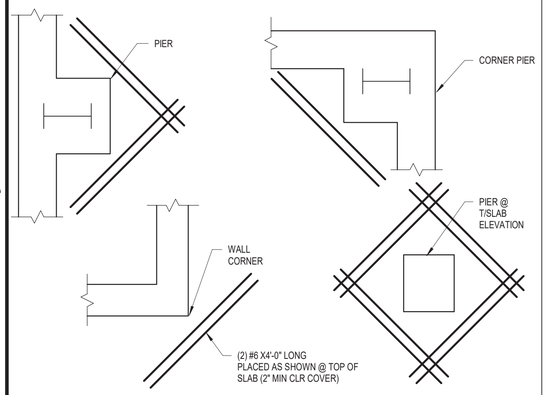
MARK	DATE	DESCRIPTION

REVISIONS

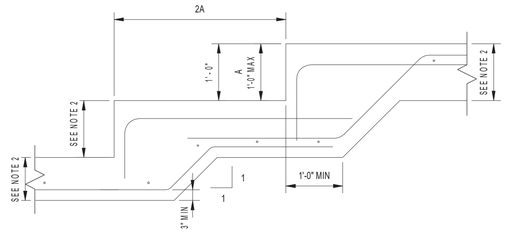
PROJECT NO:	104015003
DATE:	FEBRUARY 2021
DRAWN BY:	M.J. BARBER
DESIGNED BY:	M.J. BARBER
CHECKED BY:	J.D. NADZAN, P.E.

FRAMING PLAN

S-103



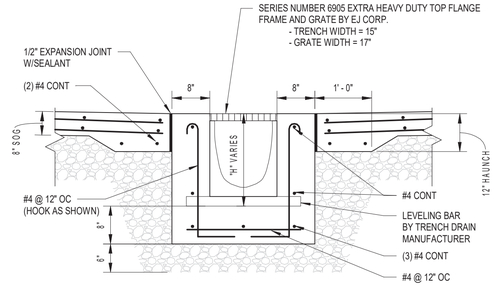
C1 TYPICAL RE-ENTRANT CORNER REINFORCEMENT DETAIL
SCALE: 1/2" = 1'-0"



NOTES:

1. REINFORCING SIZE AND SPACING TO MATCH FOOTING REINFORCEMENT.
2. THICKNESS TO MATCH CONTINUOUS FOUNDATION. SEE PLAN.
3. STEP FOOTINGS BELOW ANY PIPING OR UTILITIES WITH INVERTS LOWER THAN 3' - 6" BELOW FINISH FLOOR. COORDINATE WITH PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS TO DETERMINE LOCATIONS REQUIRING STEPPED FOOTINGS NOT OTHERWISE SHOWN ON FOUNDATION PLAN.

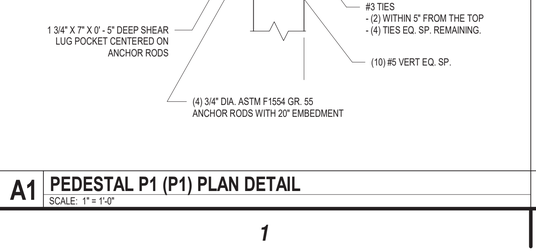
C2 FOUNDATION STEP DETAIL
SCALE: 3/4" = 1'-0"



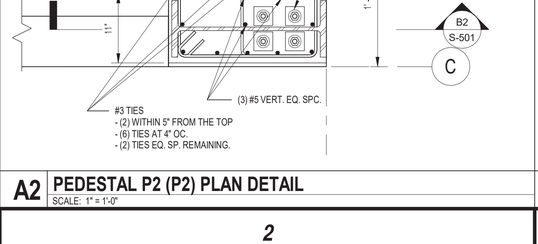
NOTES:

1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED FOR INSTALLATION OF TRENCH DRAINS INCLUDING PROCUREMENT AND INSTALLATION OF FRAME AND GRATE.
2. REFER TO PLUMBING DRAWINGS FOR INVERT ELEVATIONS.
3. WORK TO BE COORDINATED WITH PLUMBING CONTRACTOR.

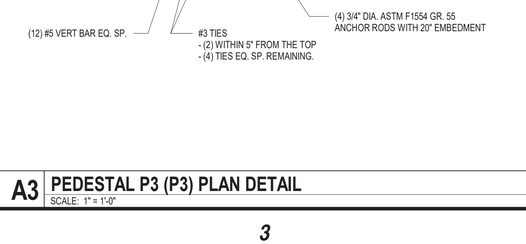
C3 TYPICAL TRENCH DRAIN DETAIL
SCALE: 3/4" = 1'-0"



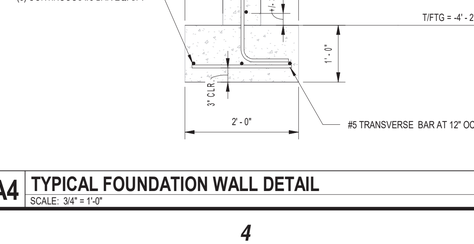
B1 PEDESTAL P1 (P1) SECTION
SCALE: 3/4" = 1'-0"



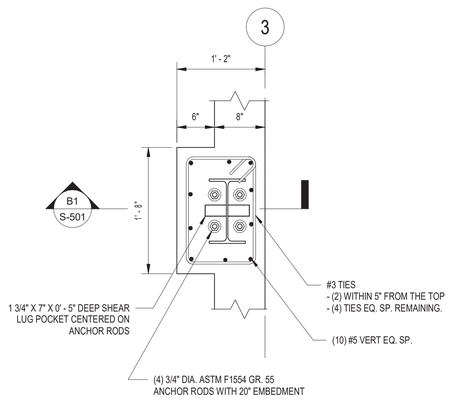
B2 PEDESTAL P2 (P2) SECTION
SCALE: 3/4" = 1'-0"



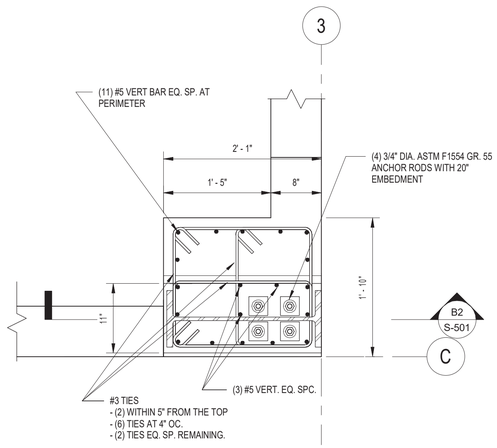
B3 PEDESTAL P3 (P3) SECTION
SCALE: 3/4" = 1'-0"



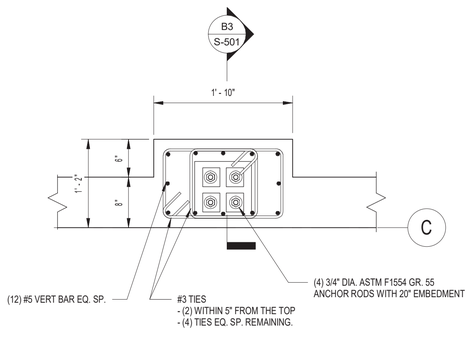
B4 TYPICAL FOUNDATION WALL DETAIL AT DOOR OPENINGS
SCALE: 3/4" = 1'-0"



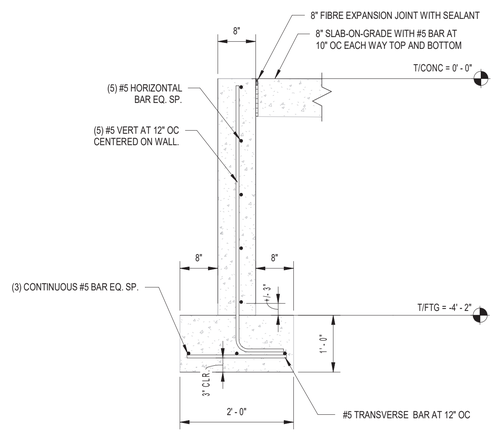
A1 PEDESTAL P1 (P1) PLAN DETAIL
SCALE: 1" = 1'-0"



A2 PEDESTAL P2 (P2) PLAN DETAIL
SCALE: 1" = 1'-0"



A3 PEDESTAL P3 (P3) PLAN DETAIL
SCALE: 1" = 1'-0"



A4 TYPICAL FOUNDATION WALL DETAIL
SCALE: 3/4" = 1'-0"

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ORANGE COUNTY 1 NOVEMBER 1683 NEW YORK

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	104015003
DATE:	FEBRUARY 2021
DRAWN BY:	M.J. BARBER
DESIGNED BY:	M.J. BARBER
CHECKED BY:	J.D. NADZAN, P.E.

DETAILS

S-501

ABBREVIATION LIST

A	
AFF	ABOVE FINISHED FLOOR
ACT	ACOUSTICAL CEILING TILE
AMP	ACOUSTICAL METAL PANEL
ALUM	ALUMINUM
B	
BLK	BLOCK
BD	BOARD
BOT	BOTTOM
BLDG	BUILDING
C	
CPT	CARPET
CLG	CEILING
CTR	CENTER
CL	CENTER LINE
CT	CERAMIC TILE
CLR	CLEAR / CLEARANCE
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
CNTJ	CONTROL JOINT
CJ	CONSTRUCTION JOINT
CG	CORNER GUARD
CORR	CORRIDOR
CTR	COUNTER
CRS	COURSE(S)
CRN	CROWN
D	
DEMO	DEMOLISH / DEMOLITION
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DWG	DRAWING
DF	DRINKING FOUNTAIN
E	
EA	EACH
EOS	EDGE OF SLAB
ELEC	ELECTRIC
EWC	ELECTRIC WATER COOLER
EL	ELEVATION
ELEV	ELEVATOR
ENCL	ENCLOSURE
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EJ	EXPANSION JOINT
EXP	EXPOSED
EXT	EXTERIOR
F	
FT	FEET/FOOT
FRP	FIBER REINFORCED POLYESTER
FGL	FIBERGLASS
FIN	FINISH(ED)
FFL	FINISHED FLOOR ELEVATION
FIN GR	FINISH GRADE
FA	FIRE ALARM
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FP	FIRE PROTECTION
FRT	FIRE RETARDANT TREATED
FP	FIREPROOF
FIXT	FIXTURE
FLASH	FLASHING
FL	FLOOR
FD	FLOOR DRAIN
FTG	FOOTING
FDTN	FOUNDATION
FURN	FURNISH
FBO	FURNISHED BY OTHERS
G	
GA	GAGE / GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS
GL BLK	GLASS BLOCK
GB	GRAB BAR
GRL	GRILLE
GYP	GYPSUM BOARD
H	
HCP	HANDICAPPED
HDWD	HARDWOOD
HT	HEIGHT
HP	HIGH POINT
HM	HOLLOW METAL
I	
IRWC	IMPACT RESISTANT WALL COVERING
ID	INSIDE DIAMETER
INSUL	INSULATION / INSULATED
INT	INTERIOR
J	
JAN CLO	JANITOR'S CLOSET
K	
KD	KNOCKDOWN
L	
LAM	LAMINATE
LAM GL	LAMINATED GLASS
LAV	LAVATORY
L	LENGTH / LONG
LF	LINEAL FEET
LPT	LOW POINT

M	
MFR	MANUFACTURER
MO	MASONRY OPENING
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MEZZ	MEZZANINE
MIN	MINIMUM
N	
NOM	NOMINAL
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
O	
OC	ON CENTER
OPP	OPPOSITE
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OHD	OVERHEAD INSULATED DOOR
OHSD	OVERHEAD INSULATED SECTIONAL DOOR
P	
PT	PAINT
PTD	PAPER TOWEL DISPENSER
PBD	PARTICLE BOARD
PTN	PARTITION
PLAS	PLASTER
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLY	PLYWOOD
POL	POLISHED
PVC	POLYVINYL CHLORIDE
Q	
QT	QUARRY TILE
R	
R	RADIUS
REINF	REINFORCE
REQD	REQUIRED
RF	RESILIENT FLOORING
REV	REVISION / REVISED
R	RISER
RD	ROOF DRAIN
RL	ROOF LEADER
RTU	ROOF TOP UNIT
RM	ROOM
RO	ROUGH OPENING
RBR	RUBBER
RB	RUBBER BASE
S	
SCH	SCHEDULE(D)
SLNT	SEALANT
SLR	SEALER
SEC	SECTION
SHTHG	SHEATHING
SIM	SIMILAR
SD	SOAP DISPENSER
SSLM	SOLID SURFACE (SOLID CORE LAMINATE)
SAFB	SOUND ATTENUATION FIBERGLASS BATT
SPEC	SPECIFICATION
SF	SQUARE FEET
STN	STAIN
SS	STAINLESS STEEL
STL	STEEL
ST	STONE (QUARRY OR MANUFACTURED)
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYS	SYSTEM
T	
TK BD	TACK BOARD
TMPD GL	TEMPERED GLASS
TER	TERRAZZO
THK	THICKNESS
THRES	THRESHOLD
TL	TILE
TPTN	TOILET PARTITION
TO	TOP OF
TOS	TOP OF STEEL
TOW	TOP OF WALL
T&G	TONGUE AND GROOVE
T	TREAD(S)
TYP	TYPICAL
U	
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
V	
VB	VAPOR BARRIER
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
VIF	VERIFY IN FIELD
VERT	VERTICAL
VEST	VESTIBULE
VCT	VINYL COMPOSITION TILE
VWB	VINYL WALL BASE
VWC	VINYL WALL COVERING
VP	VISION PANEL
W	
WSCT	WAINSCOT
W CAB	WALL CABINET
WC	WATER CLOSET
W	WIDE
WG	WIRE GLASS
W/	WITH
WM	WIRE MESH
WRB	WEATHER RESISTANT BARRIER
WD	WOOD
WBL	WOOD BLOCKING

BUILDING CODE INFORMATION

CODES TO WHICH THIS PROJECT WAS DESIGNED:	
2020 UNIFORM BUILDING CODE OF NEW YORK STATE - BCNYS	2018 INTERNATIONAL BUILDING CODE IBC 2018 INTERNATIONAL MECHANICAL CODE - IMC 2018 INTERNATIONAL PLUMBING CODE - IPC 2018 INTERNATIONAL ENERGY CONSERVATION CODE - IECC 2018 NFPA 70 NATIONAL ELECTRICAL CODE, of the NATIONAL FIRE PROTECTION ASSOC, INC. 2010 ICC/ANSI A117.1 ACCESSIBLE and USABLE BUILDINGS and FACILITIES ANSI 2020 AMMENDMENTS TO THE BUILDING CODE OF NEW YORK STATE
2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE - ECCCNYS	
2020 FIRE CODE OF NEW YORK STATE - FCNYS	2018 INTERNATIONAL FIRE CODE - IFC 2018 NATIONAL FIRE PROTECTION ASSOCIATION STANDARD (NFPA) 101 - LIFE SAFETY CODE 2020 AMMENDMENTS TO FIRE CODE OF NEW YORK STATE 2008 NEW YORK PUBLIC HEALTH CODE - PHC 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
OCCUPANCY CLASSIFICATION (BCNYS 302):	LOW-HAZARD STORAGE GROUP, S2 (SBCNY 311.3)
ENCLOSED GARAGE, VENTILATION (BCNYS 406.6.2):	MECHANICAL VENTILATION AND EXHAUST SYSTEM - PROVIDED
ALLOWABLE BUILDING HEIGHT / AREA (BCNYS 503.1.1, TABLE 504.3, TABLE 504.4, TABLE 506.2, BCNYS 507):	BUILDING HEIGHT ALLOWABLE (STORY/FEET): 2 STORIES / 55.0 FT BUILDING HEIGHT PROVIDED (STORY/FEET): 1 STORY / 25.0 FT BUILDING AREA ALLOWABLE: 26,000 SF BUILDING AREA PROVIDED: 2,000 SF
OCCUPANCY TYPE (BCNYS 508.3):	PRIMARY OCCUPANCY USE IS S2
INCIDENTAL USES (BCNYS TABLE 509)	MECHANICAL ROOMS NONSPRINKLERED, NO SEPERATION REQUIRED
CONSTRUCTION TYPE CLASSIFICATION (BCNYS TABLE 601):	TYPE IIB, NONCOMBUSTABLE - NEW CONSTRUCTION
FIRE RESISTANCE RATED CONSTRUCTION PROVIDED (BCNYS TABLE 601, TABLE 602):	STRUCTURAL FRAME: 0 HRS BEARING WALLS, EXTERIOR 0 HRS, SEPERATION DISTANCE <30FT BEARING WALLS, INTERIOR 0 HRS NON-BEARING WALLS 0 HRS FLOOR CONSTRUCTION 0 HRS ROOF CONSTRUCTION 0 HRS
INTERIOR FINISHES (BCNYS TABLE 803.13):	USE GROUP S2, NONSPRINKLED ALL EXITS HAVE MINIMUM CLASS B INTERIOR FINISH ALL CORRIDORS HAVE MINIMUM CLASS B INTERIOR FINISH. ALL ROOMS & ENCLOSED SPACES HAVE MINIMUM CLASS C INTERIOR FINISH

LIFE SAFETY LEGEND

5500 SF / 100 SF/P = 55P — ROOM OCCUPANT LOAD: AREA IN SQ. FT. / OCCUPANT LOAD FACTOR (BCNYS TABLE 1004.5)

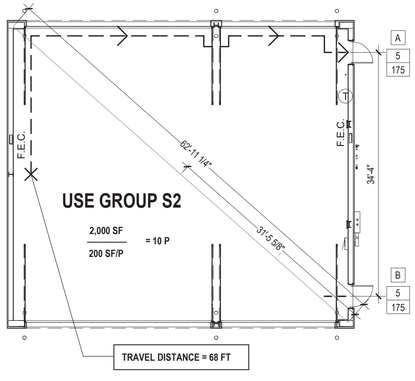
7 / 165 — EXIT CAPACITY: ACTURAL LOAD / EXIT CAPACITY

15 → DIRECTION OF TRAVEL WITH ACCUMULATED OCCUPANT LOAD

←146'— → MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT

OCCUPANCY DESIGNATION:

USE GROUP S2



1 **LIFE SAFETY PLAN**
SCALE: 3/32" = 1'-0"

BUILDING CODE INFORMATION CONTINUED:

FIRE SUPPRESSION (BCNYS 903.2.10):	UNSPRINKLERED - NOT REQUIRED - REFER TO LIFE SAFETY PLAN
PORTABLE FIRE EXTINGUISHERS (BCNYS 906.1):	PORTABLE FIRE EXTINGUISHERS - PROVIDED
OCCUPANT LOAD (BCNYS 1004.1.2):	PARKING GARAGE: 200 SF PER OCCUPANT
EGRESS WIDTHS (BCNYS 1005.3):	DOORS AND CORRIDORS: 0.2" PER OCCUPANT STAIRS: 0.3" PER OCCUPANT
EGRESS CAPACITY OF DOORS (BCNYS 1005.1):	DOORS WITH STANDARD HOLLOW METAL FRAMES AND BUTT HINGES

SIZE	CLEAR WIDTH	MAX. OCC. LOAD (CAP = .2"/OCC)
(1) 3'-0"	33.125"	165 OCCUPANTS
(1) 3'-2"	35.125"	175 OCCUPANTS
(1) 3'-4"	37.125"	185 OCCUPANTS
(1) 3'-6"	39.125"	195 OCCUPANTS
(1) 3'-8"	41.125"	205 OCCUPANTS
(1) 3'-10"	43.125"	215 OCCUPANTS
(1) 4'-0"	45.125"	225 OCCUPANTS

MEANS OF EGRESS ILLUMINATION (BCNYS 1008):	PROVIDED AT EXIT DOORS
EXIT ACCESS TRAVEL DISTANCE (BCNYS TABLE 1017.2):	USE GROUP S2, 300' ALLOWABLE, 68' PROVIDED - REFER TO LIFE SAFETY PLAN
RISK CATEGORY (BCNYS TABLE 1604.5):	CATEGORY II
PLUMBING FIXTURES (BCNYS 2902.3.1):	NOT REQUIRED
ENVELOPE REQUIREMENTS (ECCCNYS):	ORANGE COUNTY NY: CLIMATE ZONE 5 SEMI-HEATED METAL BUILDING METAL BUILDING ENVELOPE: TABLE C402.1.3, C402.1.4 REQUIRED: R-13 + 13CI OR U-0.052 PROVIDED: R-16 OR U-0.063 UNHEATED SLAB: TABLE C402.1.3 OR C402.1.4 REQUIRED: R-10 FOR 24" BELOW PROVIDED: R-15 ROOF ENVELOPE: TABLE C402.1.3 OR C402.1.4 REQUIRED: R-19 + 11 LS OR U-0.035 PROVIDED: R-19 + 11 LS GARAGE DOOR GLAZING <14%: TABLE C402.1.4 REQUIRED: U-0.31 PROVIDED: U-0.37 SWINGING DOOR: TABLE C402.1.3 OR C402.1.4 REQUIRED: R-4.75 OR U-0.37 PROVIDED: R-19 + 11 LS

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REGISTERED ARCHITECT PATRICK D. MALLOY 037530 STATE OF NEW YORK

ORANGE COUNTY NEW YORK 1 NOVEMBER 1683

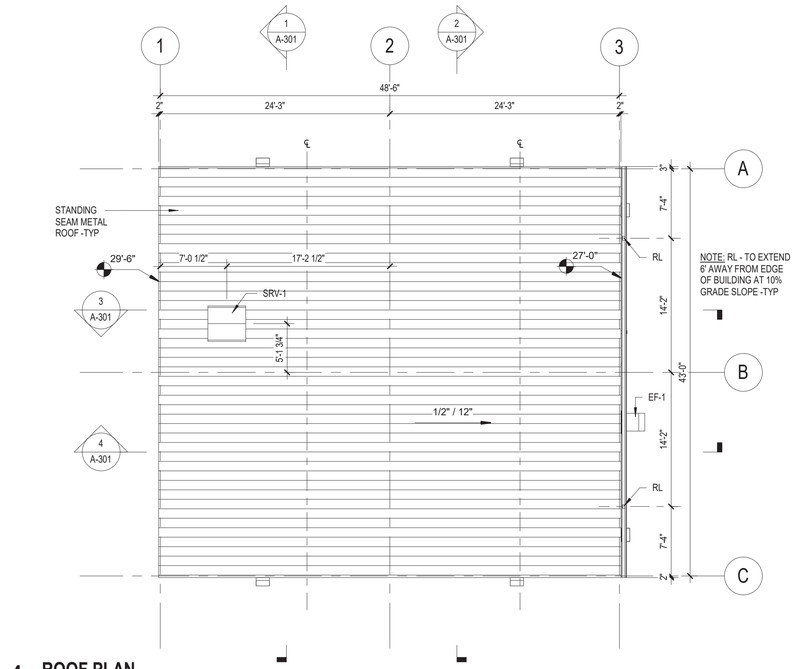
SNOW REMOVAL EQUIPMENT STORAGE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104.120.001
DATE:	FEBRUARY 2021
DRAWN BY:	P. MALLOY
DESIGNED BY:	P. MALLOY
CHECKED BY:	P. MALLOY

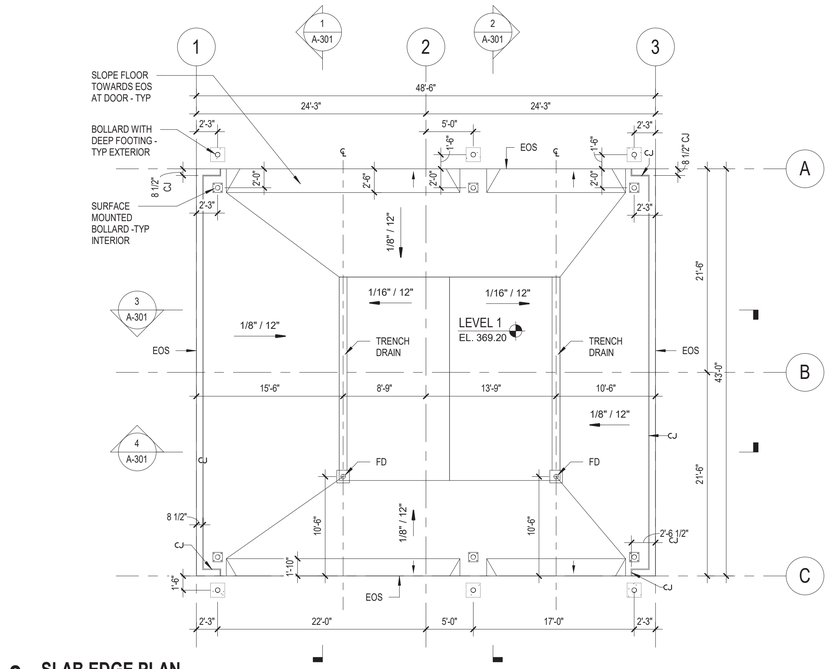
BUILDING CODE INFORMATION

A-001



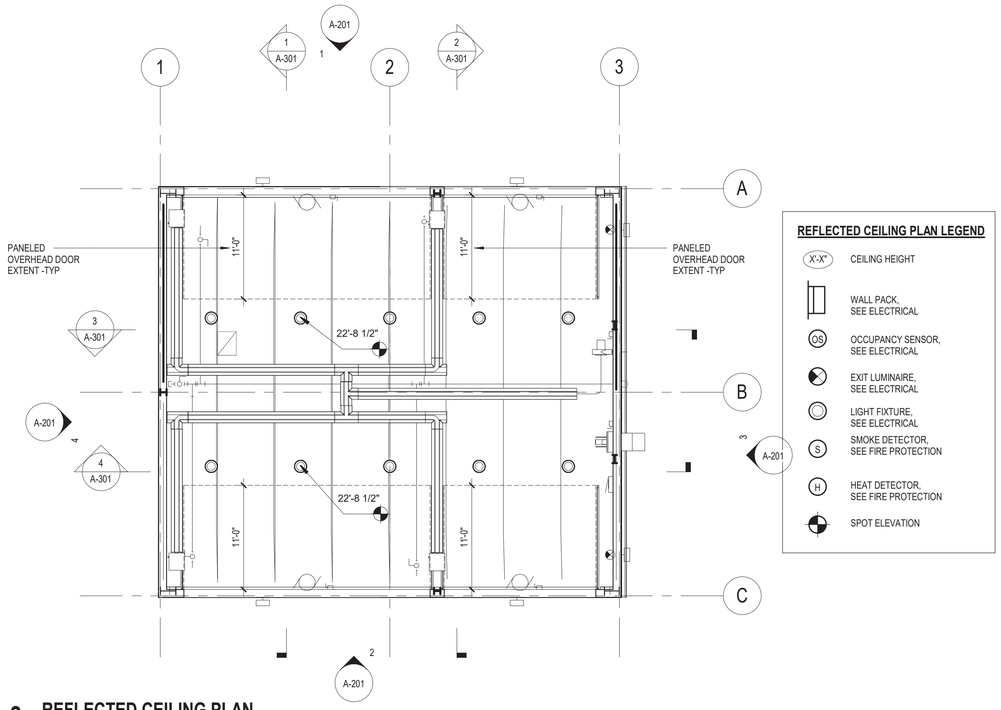
4 ROOF PLAN

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



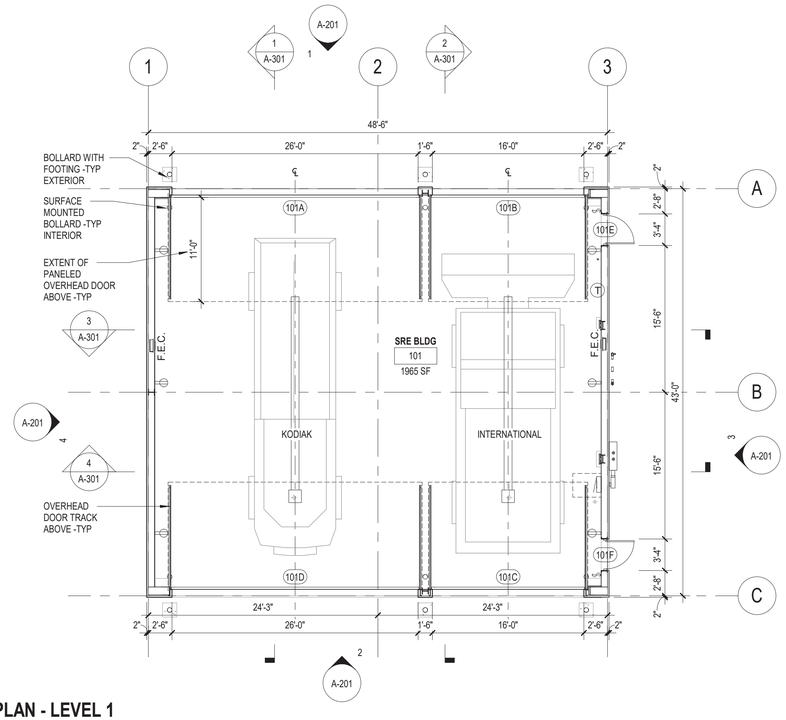
2 SLAB EDGE PLAN

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



3 REFLECTED CEILING PLAN

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



1 PLAN - LEVEL 1

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

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REGISTERED ARCHITECT PATRICK D. MALLOY 037030 STATE OF NEW YORK

ORANGE COUNTY 1 NOVEMBER 1683 NEW YORK

SNOW REMOVAL EQUIPMENT STORAGE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	104.120.001
DATE:	FEBRUARY 2021
DRAWN BY:	P. MALLOY
DESIGNED BY:	P. MALLOY
CHECKED BY:	P. MALLOY

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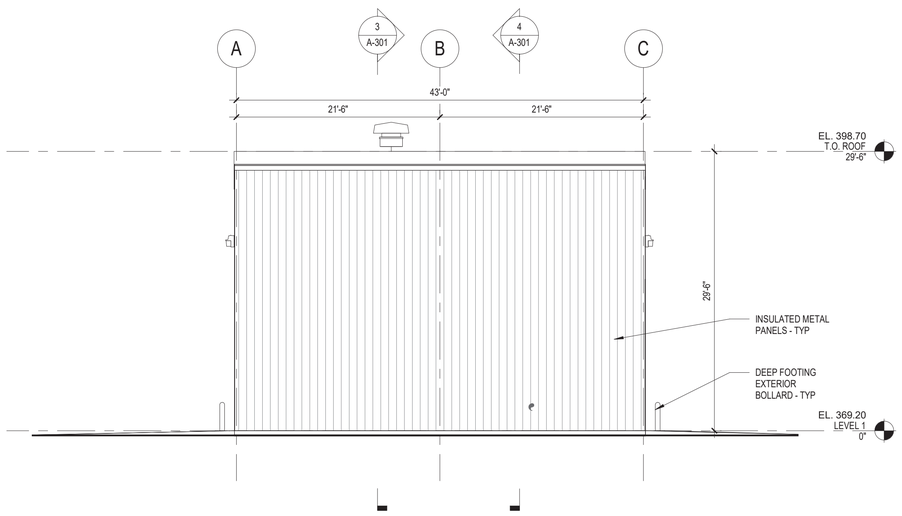
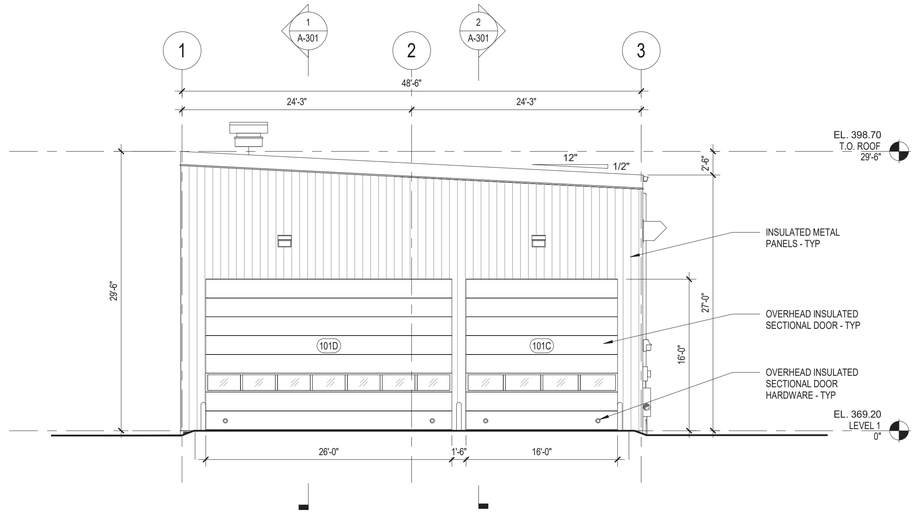
PLANS

A-101



4 NORTH ELEVATION

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



2 WEST ELEVATION

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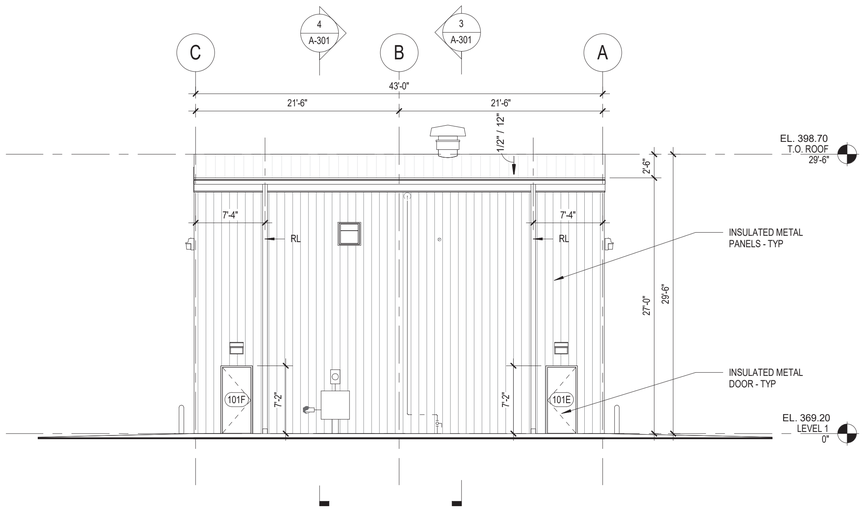

3 SOUTH ELEVATION

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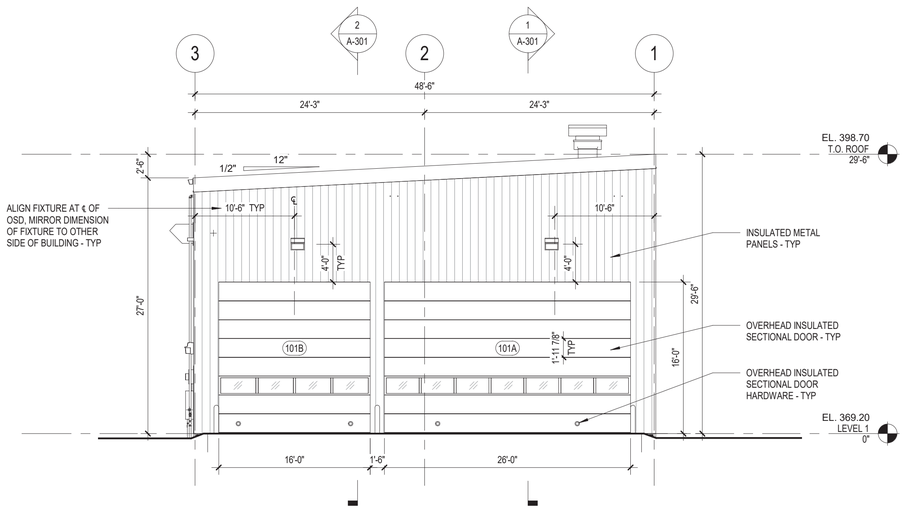

1 EAST ELEVATION

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

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1 NOVEMBER 1683
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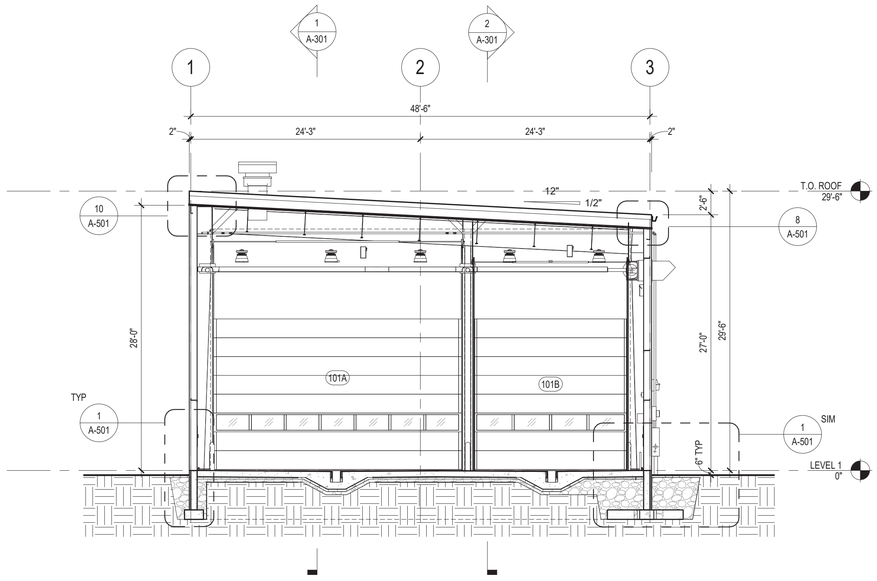
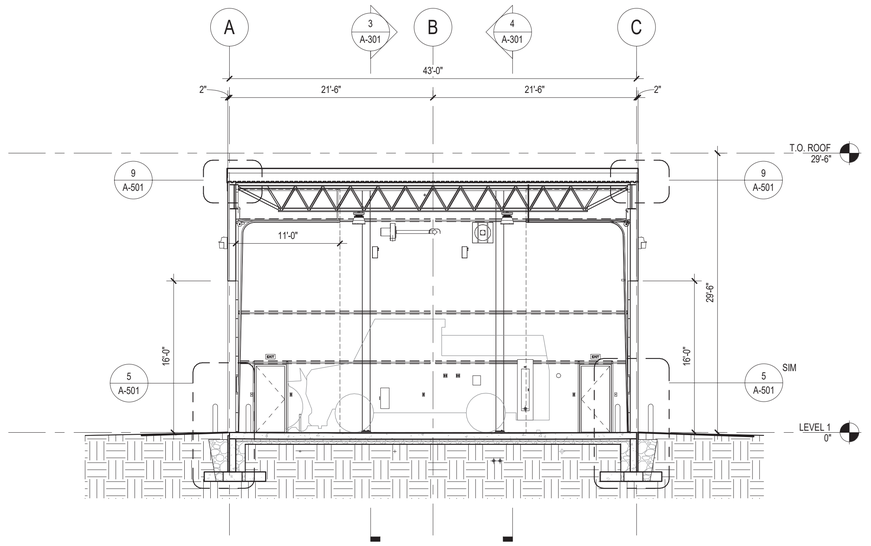
EXTERIOR ELEVATIONS

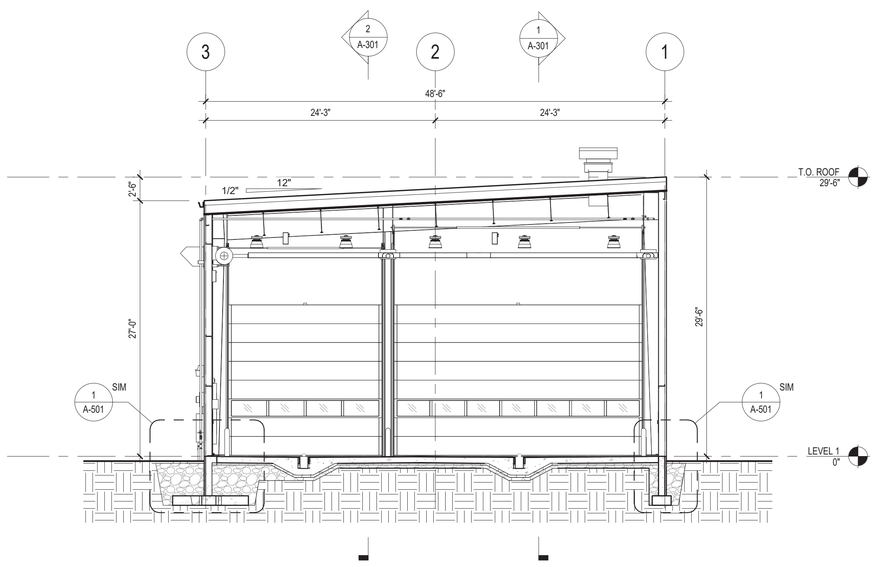
A-201



4 BUILDING SECTION - LOOKING EAST
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION - LOOKING SOUTH
SCALE: 1/8" = 1'-0"



3 BUILDING SECTION - LOOKING WEST
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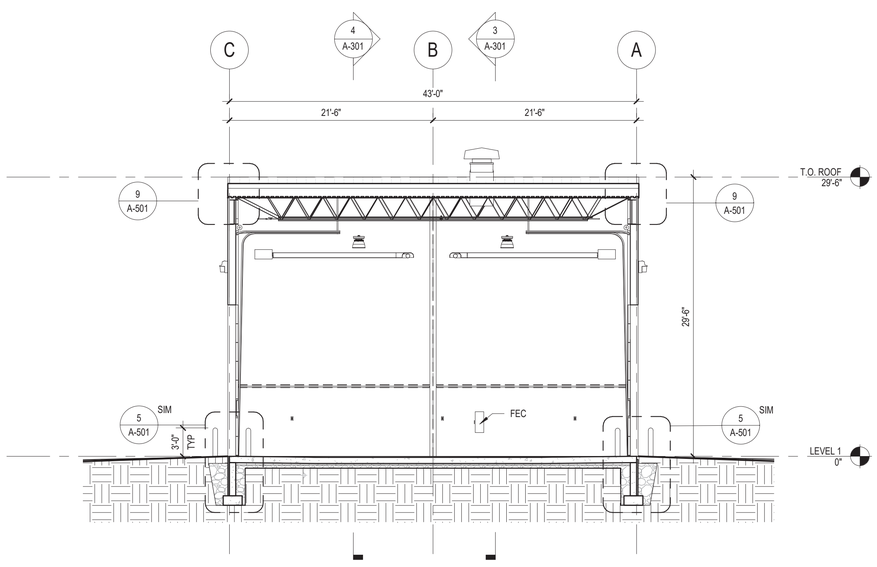

1 BUILDING SECTION - LOOKING NORTH
SCALE: 1/8" = 1'-0"

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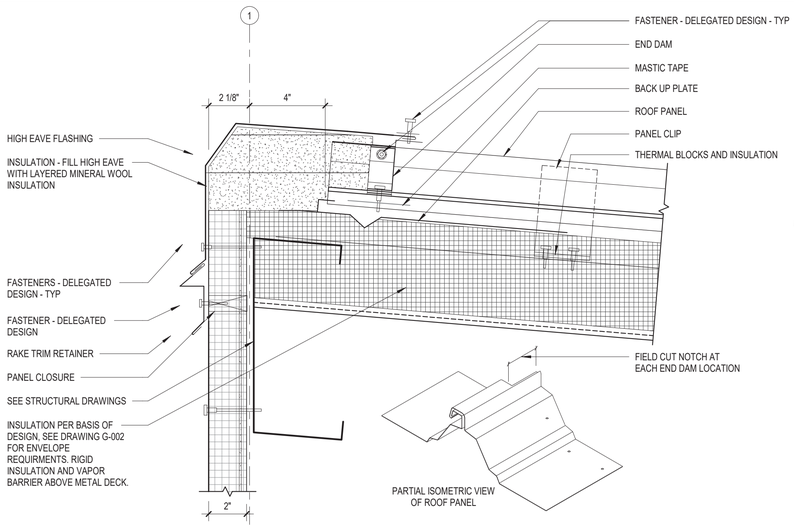
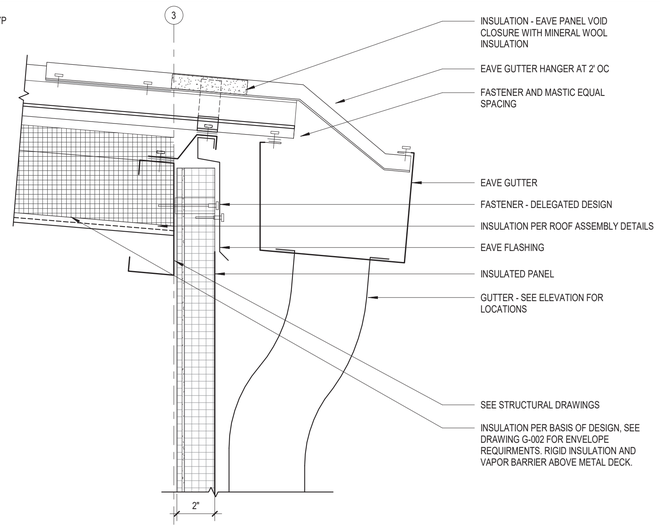
BUILDING SECTIONS

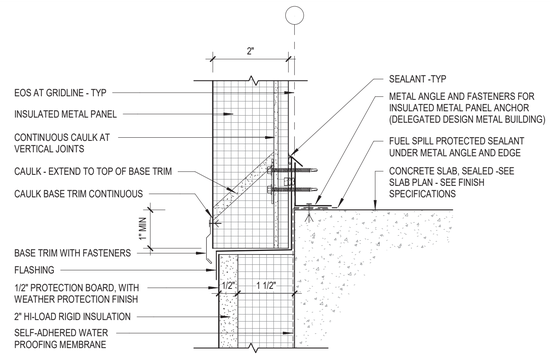
A-301



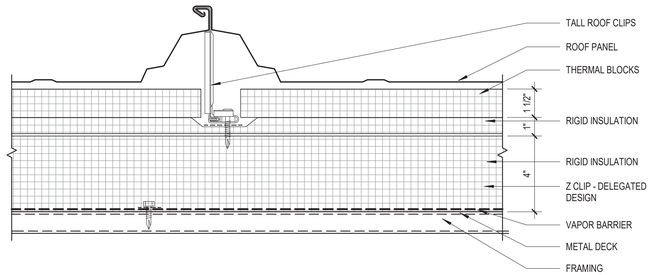
10 SECTION DETAIL - ROOF HIGH EAVE
SCALE: 3" = 1'-0"



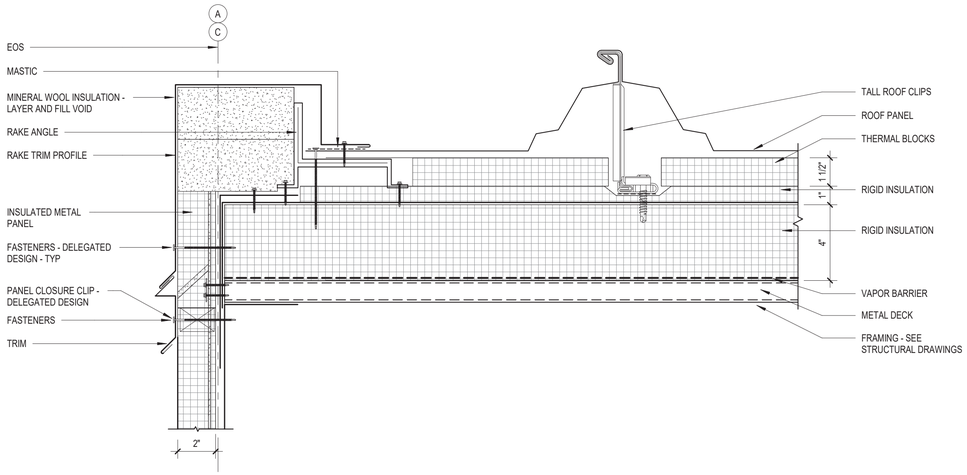
8 SECTION DETAIL - LOW ROOF EAVE
SCALE: 3" = 1'-0"



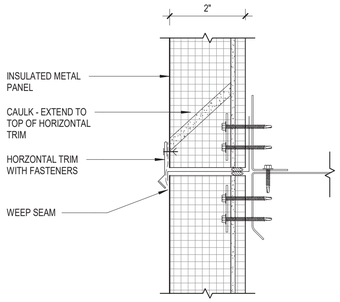
3 SECTION DETAIL - PANEL JOINT AT EDGE OF SLAB
SCALE: 6" = 1'-0"



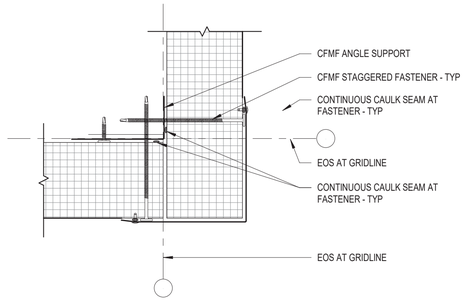
2 SECTION DETAIL - TYP ROOF ASSEMBLY
SCALE: 3" = 1'-0"



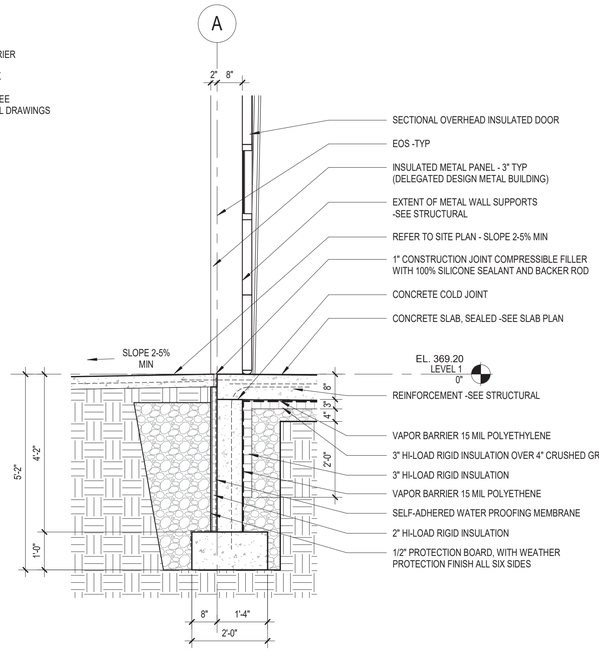
9 SECTION DETAIL - ROOF RAKE
SCALE: 3" = 1'-0"



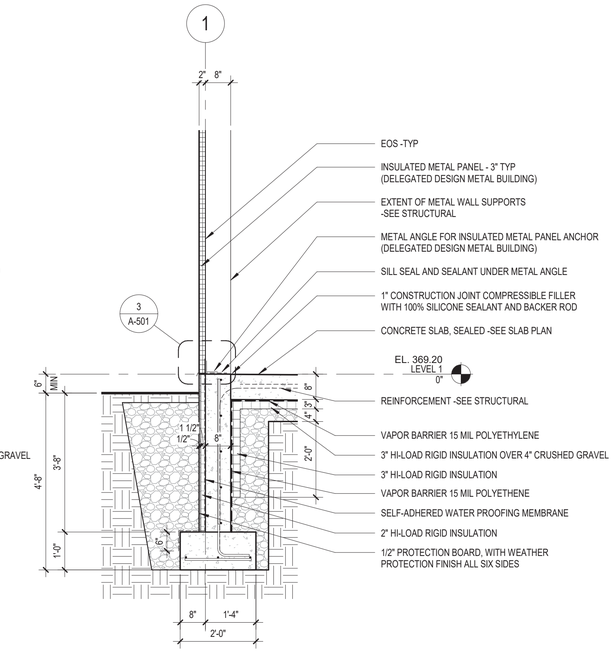
7 SECTION DETAIL - PANEL HORIZONTAL JOINT
SCALE: 6" = 1'-0"



6 PLAN DETAIL - PANEL JOINT AT OUTSIDE CORNER
SCALE: 6" = 1'-0"



5 SECTION AT OVERHEAD SECTION DOOR
SCALE: 1/2" = 1'-0"



1 SECTION AT EXTERIOR WALL BASE
SCALE: 1/2" = 1'-0"

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ORANGE COUNTY 1 NOVEMBER 1683 NEW YORK

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ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

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DRAWN BY:	P. MALLOY
DESIGNED BY:	P. MALLOY
CHECKED BY:	P. MALLOY

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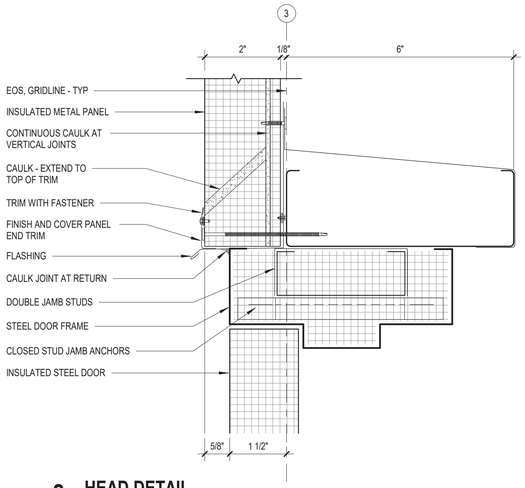
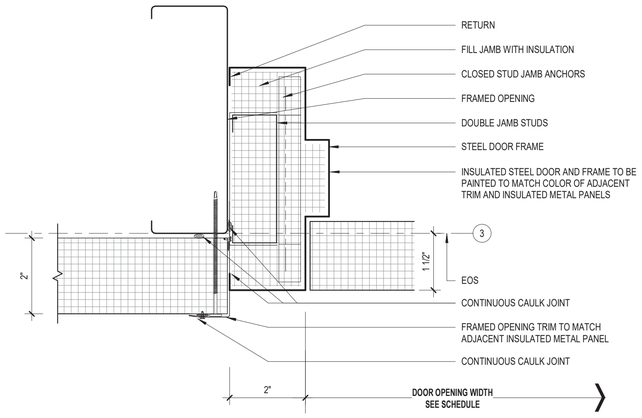
SECTION DETAILS

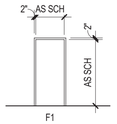
A-501



8 HEAD DETAIL
SCALE: 6" = 1'-0"

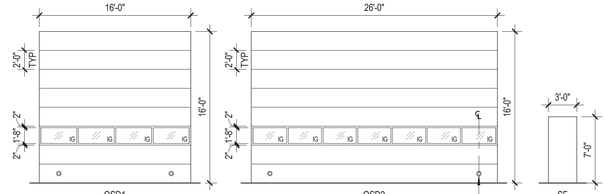


5 JAMB DETAIL
SCALE: 6" = 1'-0"



FRAME TYPES

F1 - INSULATED STEEL FRAME



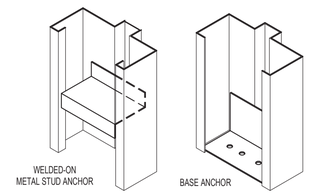
DOOR TYPES

SF - INSULATED SINGLE FLUSH DOOR
OSD - OVERHEAD INSULATED SECTIONAL DOOR

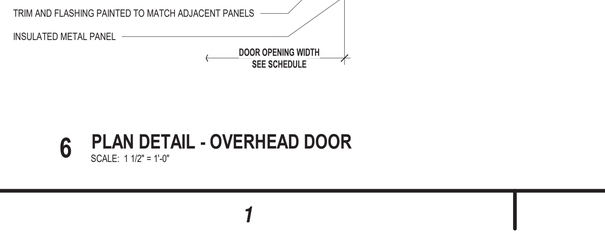
GLAZING TYPE

IG - INSULATED GLASS

2 DOOR AND FRAME TYPES
SCALE: 1/8" = 1'-0"



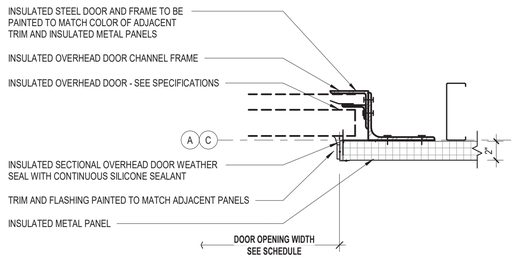
1 TYP JAMB ANCHORS
SCALE: 3" = 1'-0"



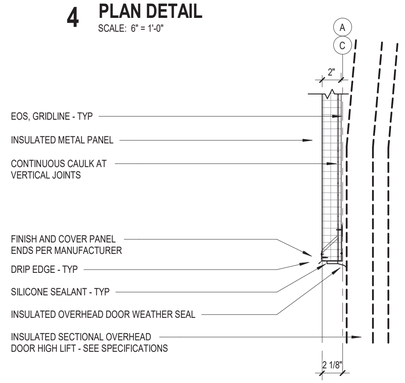
7 TYP SILL DETAIL
SCALE: 6" = 1'-0"

PLAN DETAIL AT LOUVER

4 PLAN DETAIL
SCALE: 6" = 1'-0"



6 PLAN DETAIL - OVERHEAD DOOR
SCALE: 1 1/2" = 1'-0"



3 SECTION DETAIL - OVERHEAD DOOR
SCALE: 1 1/2" = 1'-0"

DOOR SCHEDULE

DOOR NO.	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FRAME DEPTH	HEAD / JAMB / SILL DETAIL	HARDWARE SET	FIRE RATING	NOTES
101A	OSD	26'-0"	16'-0"	IM	PT-1	OHD	ST	PT-1		3/A601, 6/A601	H2	N/A	INSULATED SECTIONAL OVERHEAD DOOR
101B	OSD	16'-0"	16'-0"	IM	PT-1	OHD	ST	PT-1		3/A601, 6/A601	H2	N/A	INSULATED SECTIONAL OVERHEAD DOOR
101C	OSD	16'-0"	16'-0"	IM	PT-1	OHD	ST	PT-1		3/A601, 6/A601	H2	N/A	INSULATED SECTIONAL OVERHEAD DOOR
101D	OSD	26'-0"	16'-0"	IM	PT-1	OHD	ST	PT-1		3/A601, 6/A601	H2	N/A	INSULATED SECTIONAL OVERHEAD DOOR
101E	SF	3'-0"	7'-0"	IM	PT-1	F1	ST	PT-1	6"	8/A601, 5/A601, 7/A601	H1	N/A	
101F	SF	3'-0"	7'-0"	IM	PT-1	F1	ST	PT-1	6"	8/A601, 5/A601, 7/A601	H1	N/A	

ABBREVIATIONS:

ALUM - ALUMINUM
CAA - CLEAR ANODIZED
FFL - FINISH FLOOR
GALV - GALVANIZED
HM - HOLLOW METAL
PR - PAIR
PT - PAINT
STN - STAIN
STL - STEEL

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS (SUBSTRATE/FINISH) NORTH	WALLS SOUTH	WALLS EAST	WALLS WEST	CEILING SUBSTRATE/FINISH	CEILING HEIGHT	NOTES
101	SRE BLDG	SCONC	PT-1	PT-1	PT-1	PT-1	PT-1	PT-1	AS SHOWN	INTERIOR TO BE PAINTED WHITE

ABBREVIATIONS:

SCONC - SEALED CONCRETE
CMU - CONCRETE MASONRY UNIT
GYP - GYPSUM BOARD
PT - PAINT
UNFIN - UNFINISHED

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MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION

REVISIONS

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DATE:	FEBRUARY 2021
DRAWN BY:	P. MALLOY
DESIGNED BY:	P. MALLOY
CHECKED BY:	P. MALLOY

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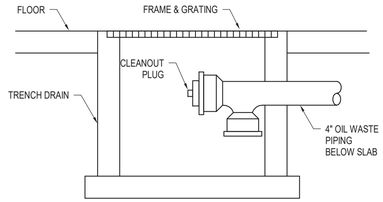
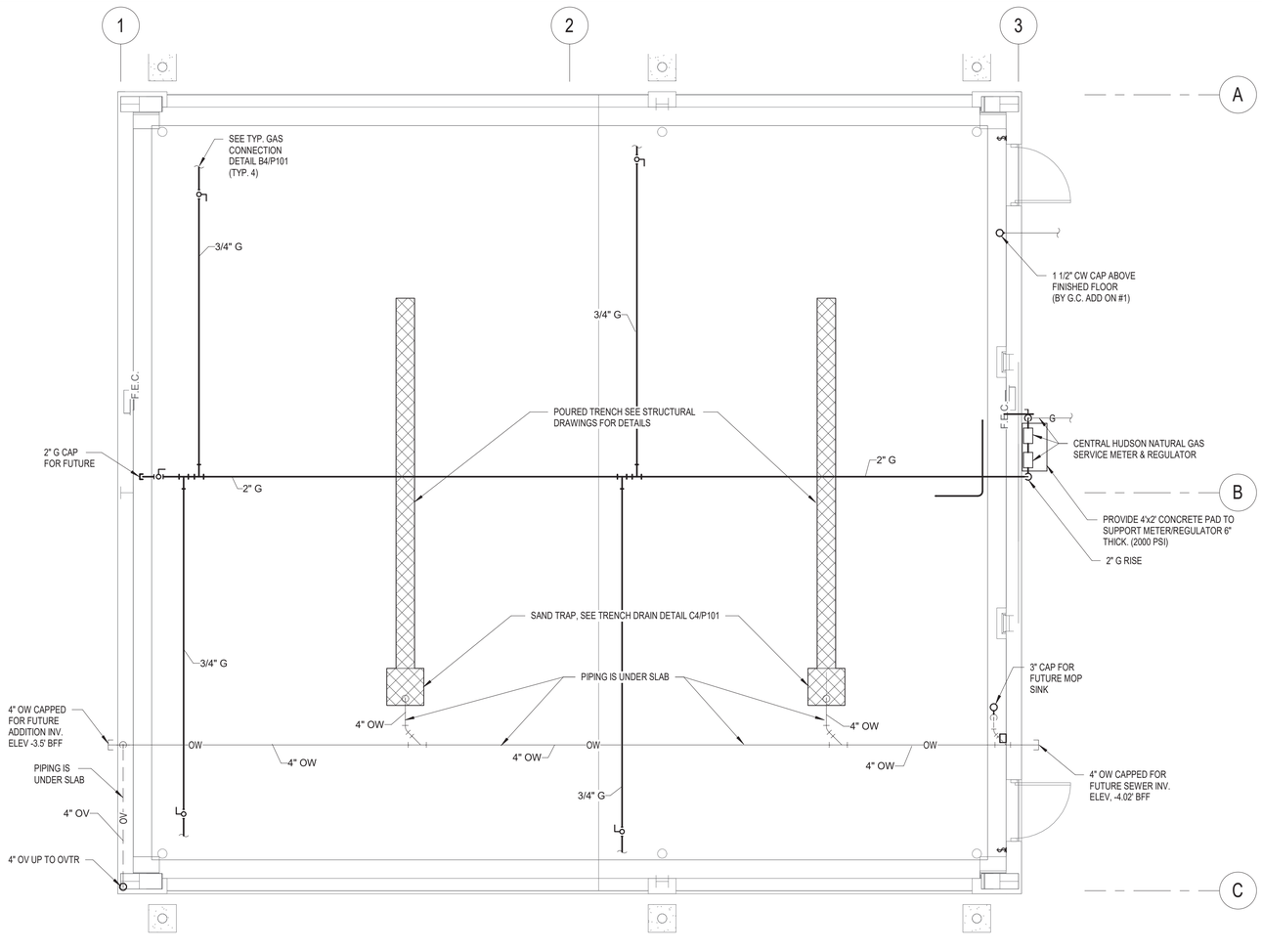
SCHEDULES AND DOOR DETAILS

A-601

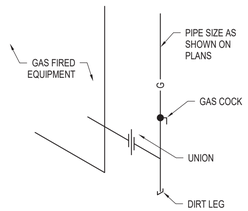


C4 TRENCH DRAIN PIPING DETAIL
SCALE: NOT TO SCALE



A1 PLUMBING FLOOR PLAN
SCALE: 1/4" = 1'-0"

0 2' 4' 8'



B4 TYPICAL GAS CONNECTION DETAIL
SCALE: NOT TO SCALE

OV	OIL VENT PIPING (OV)
G	NATURAL GAS PIPING (G)
OW	OIL WASTE PIPING (OW)
OVTR	OIL VENT THRU ROOF
INV	INVERT ELEVATION
DN	DOWN
TYP.	TYPICAL
AFF	ABOVE FINISHED FLOOR
FFE	FINISHED FLOOR ELEVATION
	CONNECT TO EXISTING
SF	SQUARE FEET
	GAS COCK

A4 LEGEND
SCALE: NOT TO SCALE

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ORANGE COUNTY · 1 NOVEMBER 1683 · NEW YORK

SRE BUILDING
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MONTGOMERY NY 12549

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104120001
DATE:	FEBRUARY 2021
DRAWN BY:	E. LUKOWSKI
DESIGNED BY:	D. CHAMBERS
CHECKED BY:	J. PALIN, P.E.

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PLUMBING FLOOR PLAN & DETAILS

P-101

1). ALL WORK SHALL CONFORM TO ALL APPLICABLE RULES, REGULATIONS AND CODES, INCLUDING, BUT NOT LIMITED TO NEW YORK ENERGY CODE, NEW YORK BUILDING CODE AND OSHA.

2). ALL EQUIPMENT SHALL COMPLY WITH THE PROVISIONS OF THE CURRENT INTERNATIONAL ENERGY CODE AND AS MODIFIED BY NEW YORK. ALL SUBMITTALS FOR EQUIPMENT COVERED BY THE CODE SHALL INCLUDE THE MANUFACTURER'S STATEMENT OF CONFORMANCE TO THE CODE.

3). FIELD VERIFY ALL DIMENSIONS PRIOR TO DUCTWORK FABRICATION OR ANY OTHER MECHANICAL WORK. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT, PIPING AND DUCTWORK WITH OTHER CONTRACTORS. PROVIDE FITTINGS, ELEVATION CHANGES, TRANSITIONS, AND OFFSETS REQUIRED, WHETHER SHOWN OR NOT, TO AVOID CONFLICTS WITH WORK OF OTHER CONTRACTS.

4). MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL HVAC PENETRATIONS (PIPING, DUCTWORK, ETC) IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND WHERE SHOWN OR SPECIFIED.

5). ITEMS OF SPECIFIC MANUFACTURER'S SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S REPRESENTATIVES DIRECTIONS.

6). MECHANICAL CONTRACTOR TO INSTALL ALL NECESSARY STIFFENERS, BRACES, STRUTS, ETC, WHETHER SHOWN OR NOT, TO PROVIDE A COMPLETE, SAFE, AND DURABLE SYSTEM.

7). DIMENSIONS SHOWN "AFF" INDICATE THE ACTUAL CLEAR DIMENSIONS FROM THE BOTTOM OF THE UNIT TO THE FINISHED FLOOR ELEVATION; UNLESS INDICATED OTHERWISE.

8). SUPPORT AND EQUIPMENT DETAILS MAY VARY TO SUIT EQUIPMENT AND PARTS SUPPLIED.

9). ALL DUCT DIMENSIONS SHOWN ARE "SIDE SEEN" BY "SIDE NOT SEEN" AND ARE THE CLEAR INSIDE DIMENSIONS UNLESS OTHERWISE NOTED.

10). BRANCH DUCTS TO REGISTER SHALL BE THE SAME SIZE AS REGISTER UNLESS INDICATED OTHERWISE.

13). PROVIDE ALL CONTROL AND INTERLOCK WIRING REQUIRED OR SPECIFIED THAT IS NOT PROVIDED BY THE ELECTRICAL CONTRACTOR.

14). COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING THE RESPONSIBILITIES FOR SUPPLYING, INSTALLING AND WIRING OF HVAC-RELATED DISCONNECT SWITCHES, STARTERS, SAFETY INTERLOCKS, EMERGENCY SHUTDOWN AND WIRING.

15). WORK ON M-SERIES DRAWINGS IS BY THE MECHANICAL CONTRACTOR (MC) UNLESS OTHERWISE NOTED.

16). VERIFY ALL LOCATIONS, DIMENSIONS, EQUIPMENT ARRANGEMENTS, CLEARANCES AND ELECTRICAL CHARACTERISTICS IN THE FIELD PRIOR TO BID. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.

17). PRIOR TO CUTTING THROUGH WALLS THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL STRUCTURAL MEMBERS, JOISTS, AND OR COLUMNS. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. DO NOT CUT ANY STRUCTURAL MEMBERS UNLESS SPECIFICALLY DIRECTED TO DO SO.

18).THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR IN THE LOCATIONS WHICH WILL REQUIRE MECHANICAL SUPPORT STEEL.

B1 GENERAL NOTES
SCALE: NOT TO SCALE

GENERAL

- (T) TEMPERATURE SENSOR WITH LOCKING GUARD
- (CO) CARBON MONOXIDE SENSOR
- (M) DAMPER MOTOR
- DIRECTION OF AIRFLOW

DUCTWORK

- RETURN DIFFUSER
- SUPPLY DIFFUSER
- SQUARE TO ROUND DUCT TRANSITION
- SQUARE MAIN TO ROUND BRANCH TAKE-OFF
- FC — FLEXIBLE DUCT CONNECTOR
- POSITIVELY PRESSURIZED DUCT OUT OF THE PLANE
- POSITIVELY PRESSURIZED DUCT INTO THE PLANE
- NEGATIVELY PRESSURIZED DUCT OUT OF THE PLANE
- NEGATIVELY PRESSURIZED DUCT INTO THE PLANE
- SQUARE ELBOW WITH TURNING VANES
- MANUAL VOLUME DAMPER
- AAD — AUTOMATIC AIR DAMPER
- UNIT — GENERAL EQUIPMENT DESIGNATION
- VIEW / SHEET — ENLARGED PLAN & DETAIL CALL OUT

NOTE: NOT ALL ABBREVIATIONS AND SYMBOLS USED

B3 SYMBOLS
SCALE: NOT TO SCALE

ABBREVIATIONS

AMP	AMPERES	EAT	ENTERING AIR TEMPERATURE	IRH	INFARED HEATER	PD	PRESSURE DROP
AAD	AUTOMATIC AIR DAMPER	EDB	ENTERING DRY BULB TEMPERATURE	KW	KILOWATT	RA	RETURN AIR
AFF	ABOVE FINISHED FLOOR	EFF	EFFICIENCY	LAT	LEAVING AIR TEMPERATURE	RPM	REVOLUTION PER MINUTE
APD	AIR PRESSURE DROP	ENC	ENCLOSURE	LB	POUND	SA	SUPPLY AIR
BDD	BACK DRAFT DAMPER	ESP	EXTERNAL STATIC PRESSURE	LDB	LEAVING DRY BULB TEMPERATURE	SD	SMOKE DAMPER
BHP	BRAKE HORSE POWER	EWB	ENTERING WET BULB TEMPERATURE	LV	LOUVER	SP	STATIC PRESSURE
BOD	BOTTOM OF DUCT	EXH	EXHAUST AIR	LWB	LEAVING WET BULB	SQ	SQUARE
BTU	BRITISH THERMAL UNIT	F	FAN	MAX	MAXIMUM	THC	TOTAL HEAT CAPACITY
BTUH	BRITISH THERMAL UNIT PER HOUR	°F	FAHRENHEIT	MAU	MAKEUP AIR UNIT	TSP	TOTAL STATIC PRESSURE
C	COMMON	FC	FLEXIBLE CONNECTION	MBH	1000 BTUH	TYP	TYPICAL
CO	CARBON MONOXIDE	FIL	FILTER	MCA	MINIMUM CIRCUIT AMPACITY	V	VOLT
CFM	CUBIC FEET PER MINUTE	FPM	FEET PER MINUTE	MIN	MINIMUM	VD	VOLUME DAMPER
dB	DECIBELS	FT	FEET	MOP	MAXIMUM OVERCURRENT PROTECTION	VIF	VERIFY IN FIELD
DB	DRY BULB TEMPERATURE	GC	GENERAL CONTRACTOR	MV	MANUAL VENT	VP	VACUUM PUMP
DIA	DIAMETER	HP	HORSEPOWER	NC	NORMALLY CLOSED	VSD	VARIABLE SPEED DRIVE
DN	DOWN	HZ	HERTZ	NIC	NOT IN CONTRACT	WH	UNIT HEATER
DP	DEWPOINT TEMPERATURE	IN	INCH	OA	OUTSIDE AIR	WB	WET BULB TEMPERATURE

A1 ABBREVIATIONS
SCALE: NOT TO SCALE

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ORANGE COUNTY · 1 NOVEMBER 1683 · NEW YORK

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

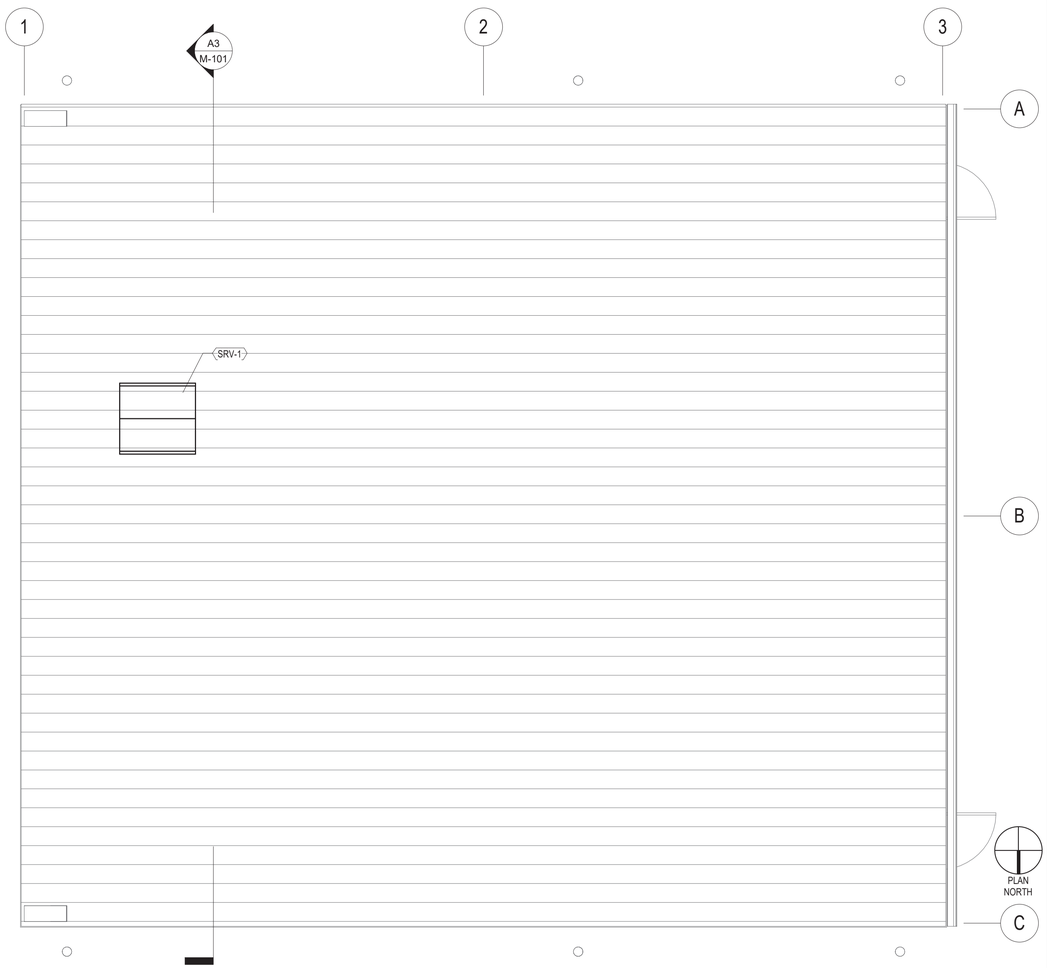
MARK	DATE	DESCRIPTION

REVISIONS

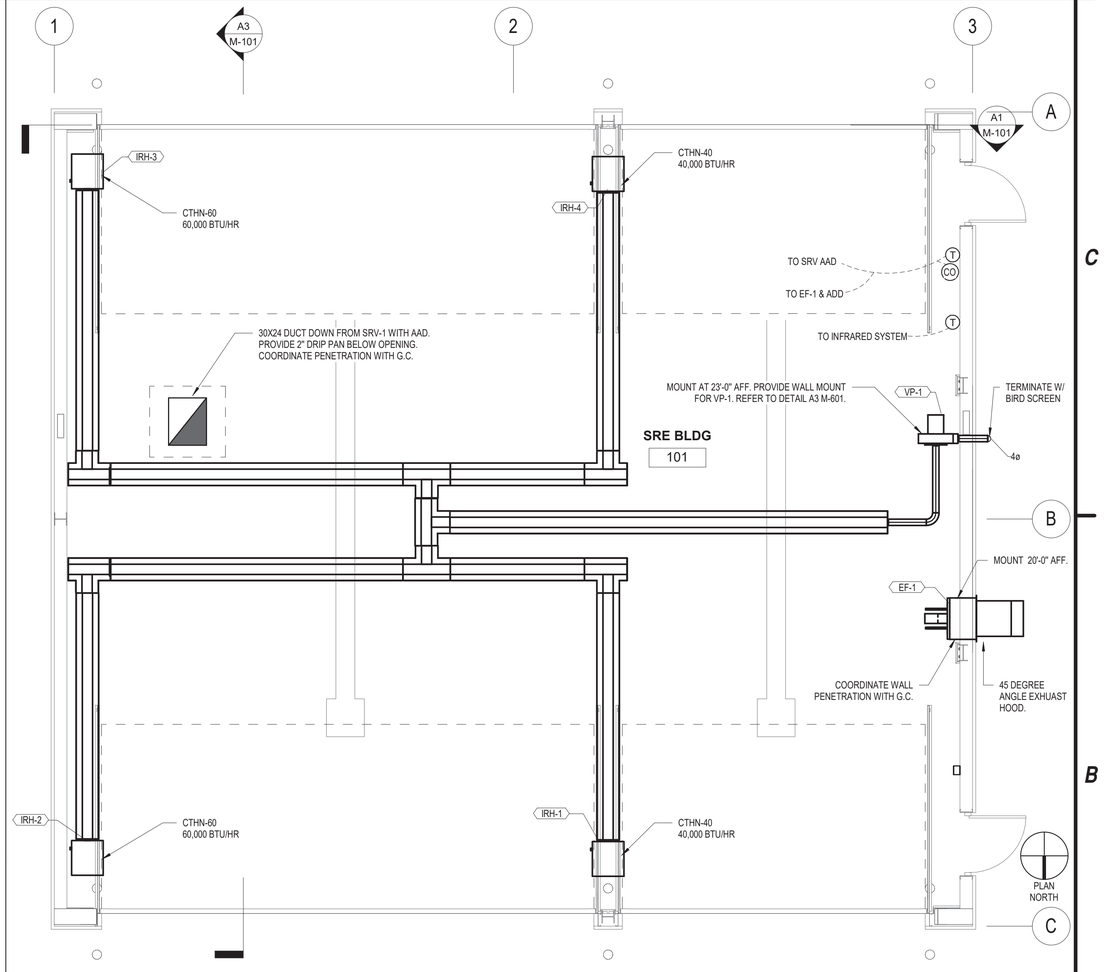
PROJECT NO:	104120001
DATE:	FEBRUARY 2021
DRAWN BY:	A.M. CALABRESE
DESIGNED BY:	A.M. CALABRESE
CHECKED BY:	L.J. MERRY

GENERAL NOTES, ABBREVIATIONS AND SYMBOLS

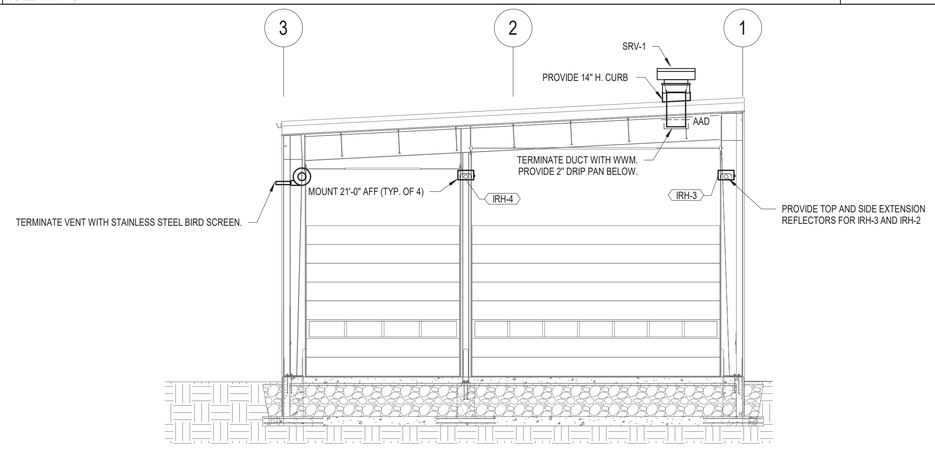
M-001



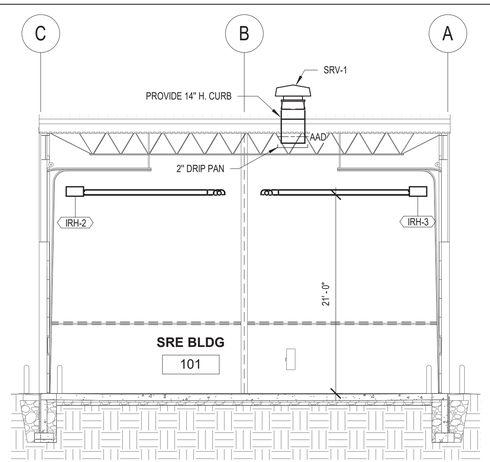
B1 **HVAC ROOF PLAN**
SCALE: 1/4" = 1'-0"



B3 **HVAC FLOOR PLAN**
SCALE: 1/4" = 1'-0"



A1 **NORTH HVAC ELEVATION**
SCALE: 1/8" = 1'-0"



A3 **EAST HVAC ELEVATION**
SCALE: 1/8" = 1'-0"

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HVAC FLOOR PLANS & ELEVATIONS

M-101

SEQUENCE OF OPERATION:

EXHAUST FAN:

1. WHEN THE SPACE TEMPERATURE SET-POINT (80 DEGREES ADJUSTABLE) IS EXCEEDED, LINE VOLTAGE MOTORIZED AIR DAMPERS AT THE EXHAUST FAN AND SRV SHALL OPEN. WHEN THE DAMPERS HAVE REACHED FULL OPEN, AS INDICATED BY THE DAMPER ACTUATORS END SWITCH, THE FAN WILL START.

2. WHEN SPACE CO LEVEL EXCEEDS 70PPM, THE LINE VOLTAGE EXHAUST FAN AND SRV DAMPER SHALL OPEN. WHEN THE DAMPERS HAVE REACHED FULL OPEN, AS INDICATED BY THE DAMPER ACTUATORS END SWITCH, THE FAN WILL START. THE SRV AND EXHAUST FAN AAD WILL REMAIN OPEN AND THE FAN SHALL RUN UNTIL CO LEVELS FALL BELOW SETPOINT.

3. FAN SHALL BE SHUTDOWN AND MOTORIZED AUTOMATIC AIR DAMPER SHALL CLOSE UPON ACTIVATION OF THE FIRE ALARM SYSTEM.

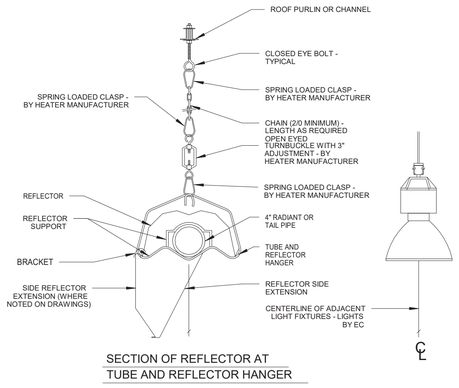
4. AUTOMACTIC AIR DAMPERS SHALL CLOSE WHEN FAN IS SHUT-DOWN.

INFRARED HEATERS:

1. THE INFRARED HEATING SYSTEM SHALL BE CONTROLLED VIA WALL-MOUNTED THERMOSTAT. THE USER'S SHALL BE ABLE TO ADJUST THE SETPOINT FOR THE SYSTEM. THE EQUIPMENT SAFETY FEATURES SHALL BE RUN THROUGH THE SYSTEM CONTROLLER TO ENABLE THE SYSTEM TO ENABLE THE VACUUM PUMP AND BURNER(S).

C1 SEQUENCE OF OPERATION

SCALE: NOT TO SCALE



SECTION OF REFLECTOR AT TUBE AND REFLECTOR HANGER

B1 REFLECTOR AND REFLECTOR HANGER DETAIL

SCALE: NOT TO SCALE

INFRARED RADIANT TUBE HEATER SCHEDULE (IRH)

UNIT NO.	LOCATION	STRAIGHT LENGTH (FT)	FUEL TYPE	INPUT MBH	GAS PRESSURE MIN. (IN WG)	GAS PRESSURE MAX. (IN WG)	# OF STAGES	ELECTRICAL			BASIS OF DESIGN		REMARKS
								VOLTS	PHASE	MCA	MANUFACTURER	MODEL	
IRH-1	SRE BLDG 101	10' - 0"	NATURAL GAS	40	4.6	14	1	120	1	1	ROBERTS GORDON	CTHN-40	1
IRH-2	SRE BLDG 101	20' - 0"	NATURAL GAS	60	4.6	14	1	120	1	1	ROBERTS GORDON	CTHN-60	2
IRH-3	SRE BLDG 101	20' - 0"	NATURAL GAS	60	4.6	14	1	120	1	1	ROBERTS GORDON	CTHN-60	2
IRH-4	SRE BLDG 101	10' - 0"	NATURAL GAS	40	4.6	14	1	120	1	1	ROBERTS GORDON	CTHN-40	1

1. PROVIDE TOP REFLECTORS.
2. PROVIDE TOP AND SIDE REFLECTORS.

FAN SCHEDULE (EF)

UNIT NO.	LOCATION	SERVICE	TYPE	ARRANGEMENT	CFM	E.S.P. (IN WG)	RPM	MAX. SONES	ELECTRICAL			HP	BASIS OF DESIGN		REMARKS
									VOLTS	PHASE	FLA		MANUFACTURER	MODEL	
EF-1	SRE BLDG 101	EXHAUST	DIRECT DRIVE	WALL MOUNTED	2000 CFM	0.5	1725	21	115 V	1	6.4	1/2	Greenheck	AER-E20C-310-VG	1,2,3

1. PROVIDE 45 DEGREE WEATHER HOOD.
2. PROVIDE UNIT WITH SHORT WALL HOUSING.
3. PROVIDE 22X22 AUTOMATIC AIR DAMPER.

STATIONARY ROOF VENT SCHEDULE (SRV)

UNIT NO.	LOCATION	SERVICE	CFM	APD (IN WG)	THROAT DIMENSIONS		FREE AREA (SQFT)	BASIS OF SDESIGN		REMARKS
					LENGTH	WIDTH		MANUFACTURER	MODEL	
SRV-1	ROOF	INTAKE	2000	0.05	2' - 0"	2' - 6"	5	Greenheck	FGI	1,2

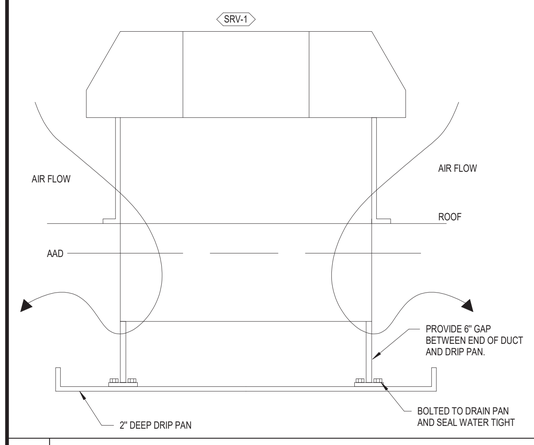
1. PROVIDE 2" DEEP DRIP PAN.
2. PROVIDE 14" H. CURB WITH MOTORIZED DAMPER.

VACUUM PUMP SCHEDULE (VP)

UNIT NO.	LOCATION	ARRANGEMENT	ELECTRICAL				BASIS OF DESIGN		REMARKS
			VOLTS	PHASE	RPM	HP	MANUFACTURER	MODEL	
VP-1	SRE BLDG 101	WALL MOUNTED	120 V	1	3450	3/4	ROBERTS GORDON	EP-201	

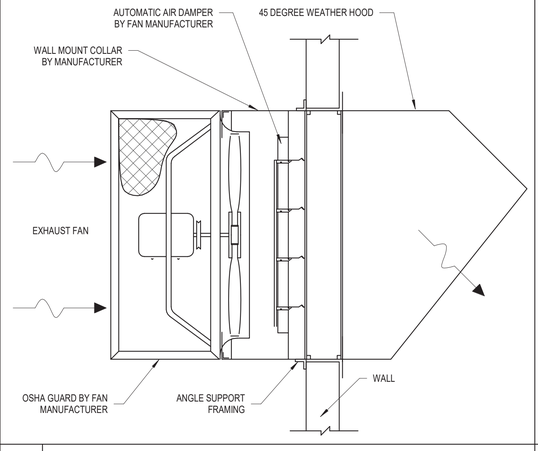
B2 SCHEDULES

SCALE: NOT TO SCALE



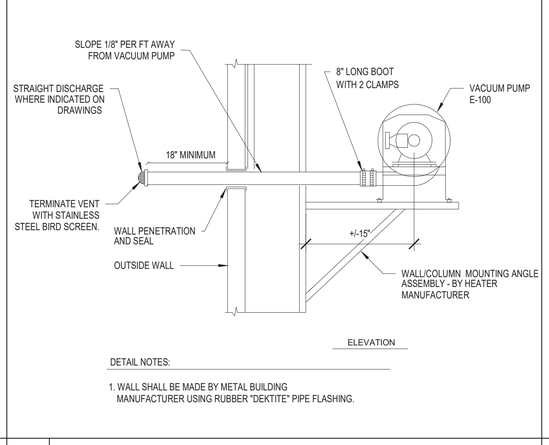
A1 STATIONARY ROOF VENT

SCALE: NOT TO SCALE



A2 PROPELLER WALL FAN DETAIL

SCALE: NOT TO SCALE

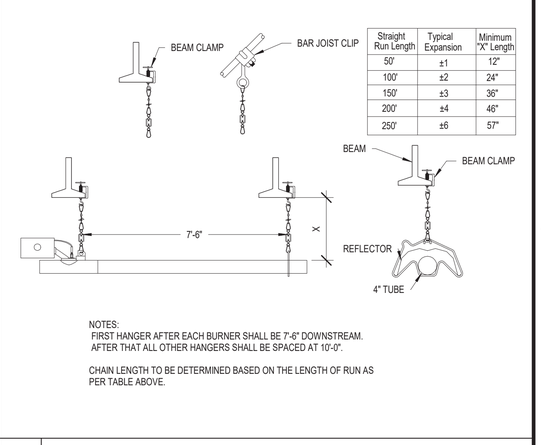


DETAIL NOTES:

1. WALL SHALL BE MADE BY METAL BUILDING MANUFACTURER USING RUBBER "DEKTITE" PIPE FLASHING.

A3 VACUUM PUMP VENT DETAIL

SCALE: NOT TO SCALE



Straight Run Length	Typical Expansion	Minimum "X" Length
50'	±1	12"
100'	±2	24"
150'	±3	36"
200'	±4	46"
250'	±6	57"

NOTES:
FIRST HANGER AFTER EACH BURNER SHALL BE 7'-6" DOWNSTREAM. AFTER THAT ALL OTHER HANGERS SHALL BE SPACED AT 10'-0".

CHAIN LENGTH TO BE DETERMINED BASED ON THE LENGTH OF RUN AS PER TABLE ABOVE.

A4 INFRARED HEATING SYSTEM HANGER DETAIL

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SCHEDULES AND DETAILS

M-601

ELECTRICAL SYMBOL LIST

	EXISTING WORK LINETYPE
or	DEMOLITION WORK LINETYPES
	NEW WORK LINETYPE
XX	DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNLESS NOTATION INDICATES OTHERWISE. GFI = GROUND FAULT CIRCUIT INTERRUPTER, MOUNT AT 48" AFF UNLESS OTHERWISE NOTED WP = GFI WITH WEATHERPROOF COVER, MOUNT AT 42" AFF UNLESS OTHERWISE NOTED
	QUAD RECEPTACLE, MOUNT 18" AFF UNLESS OTHERWISE NOTED GFI = GROUND FAULT CIRCUIT INTERRUPTER, MOUNT AT 48" AFF UNLESS OTHERWISE NOTED
	SPECIAL RECEPTACLE
XX	SINGLE POLE SWITCH, UNLESS NOTATION INDICATES OTHERWISE. 3 = THREE-WAY SWITCH
	DISCONNECT SWITCH (TICKS INDICATE NUMBER OF POLES)
	CIRCUIT BREAKER (TICKS INDICATE NUMBER OF POLES)
	CONTACTS (NORMALLY OPEN)
	CONTACTS (NORMALLY CLOSED)
	FUSE
	GROUND
PC	PHOTO CELL FOR EXTERIOR LIGHTING CONTROL
	NON FUSED DISCONNECT SWITCH
J	JUNCTION BOX
	ELECTRICAL MOTOR (SEE EQUIPMENT CONNECTION SCHEDULE)
	PANEL BOARD, REFER TO PANEL BOARD SCHEDULE
XXX	BRANCH CIRCUIT HOME RUN WITH CIRCUIT NUMBER SEE PANEL SCHEDULES FOR DETAILS

A	HIGHBAY LIGHT FIXTURE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE
A	INDICATES WALL MOUNTED LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE
A	INDICATES EMERGENCY HIGHBAY LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE
	EMERGENCY LIGHT WITH BATTERY PACK
UE	UNDERGROUND ELECTRIC
A	EXIT LUMINAIRE, SHADED AREA DENOTES FACE, LETTER DENOTES TYPE
M	METER

ELECTRICAL CONTROLS SYMBOL LIST

C	CONTACTOR ("M" DENOTES MOTOR CONTACTOR)
R	INDICATOR LIGHT
	CONNECTION POINT OR CABLE SPLICE
	TRANSFORMER
	FUSED DISCONNECT SWITCH
BPS	BOLTED PRESSURE SWITCH w/FUSE

A2 ELECTRICAL SYMBOLS
SCALE: NOT TO SCALE

1. ALL ELECTRICAL WORK SHALL CONFORM TO ALL STATE, LOCAL, AND NATIONAL ELECTRICAL CODES.
2. ELECTRICAL CHARACTERISTICS SHALL BE VERIFIED WITH EQUIPMENT MANUFACTURER.
3. ITEMS OF SPECIFIC MANUFACTURERS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S REPRESENTATIVE'S DIRECTIONS.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND DIMENSIONS SHOWN ON DRAWINGS
5. ALL CONDUIT AND WIRING SCHEDULES SHALL BE VERIFIED BEFORE INSTALLATION.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL EQUIPMENT WITH OTHER CONTRACTORS.
7. ALL AREAS DISTURBED BY WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ORIGINAL AS DETERMINED BY THE ENGINEER.
8. THE CONTRACTOR SHALL PROVIDE RACEWAYS, WIRING, AND CONNECTIONS FOR ALL CONTROL CIRCUITS AND INTERLOCK.
9. ALL ELECTRICAL CONDUIT AND CONDUCTORS DISCONNECTED AND NOT TO BE REUSED SHALL BE REMOVED.
10. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE STARTING WORK. IF ONLY A PORTION OF AN EXISTING CIRCUIT IS BEING REMOVED FOR DEMOLITION, CONTINUITY SHALL BE MAINTAINED TO THE REST OF THE REMAINING CIRCUIT.
11. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE #12AWG UNLESS OTHERWISE SHOWN.
12. ALL BRANCH CIRCUITS SHALL CONSIST OF 2 CONDUCTORS PLUS GROUND, UNLESS OTHERWISE SHOWN.

B4 ELECTRICAL GENERAL NOTES
SCALE: NOT TO SCALE

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
CT	CURRENT TRANSFORMER
DP	DISTRIBUTION PANEL
MDP	MAIN DISTRIBUTION PANEL
EF	EXHAUST FAN
EMT	ELECTRIC METALLIC TUBING
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
JB	JUNCTION BOX
KA	KILO AMP
KV	KILO VOLT
KVA	KILO VOLT AMP
NC	NORMALLY CLOSED
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
REM	REMARKS
RGS	RIGID GALVANIZED STEEL CONDUIT
WP	WEATHER PROOF

A4 ELECTRICAL ABBREVIATIONS
SCALE: NOT TO SCALE

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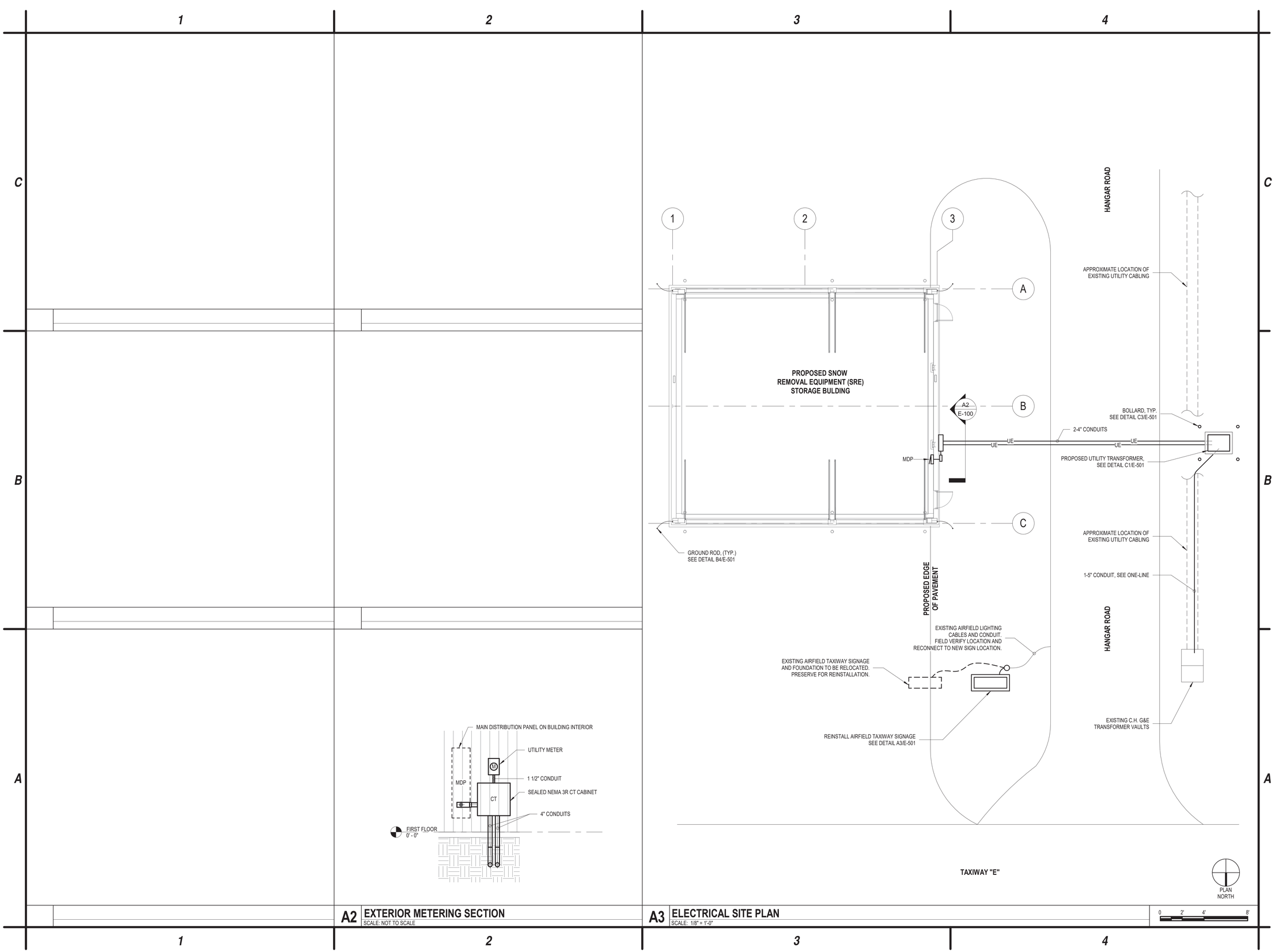
DESIGNED BY:	S.R. PINE
CHECKED BY:	S.H. SHOVA

ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS

E-001



A2 EXTERIOR METERING SECTION
SCALE: NOT TO SCALE

A3 ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'-0"

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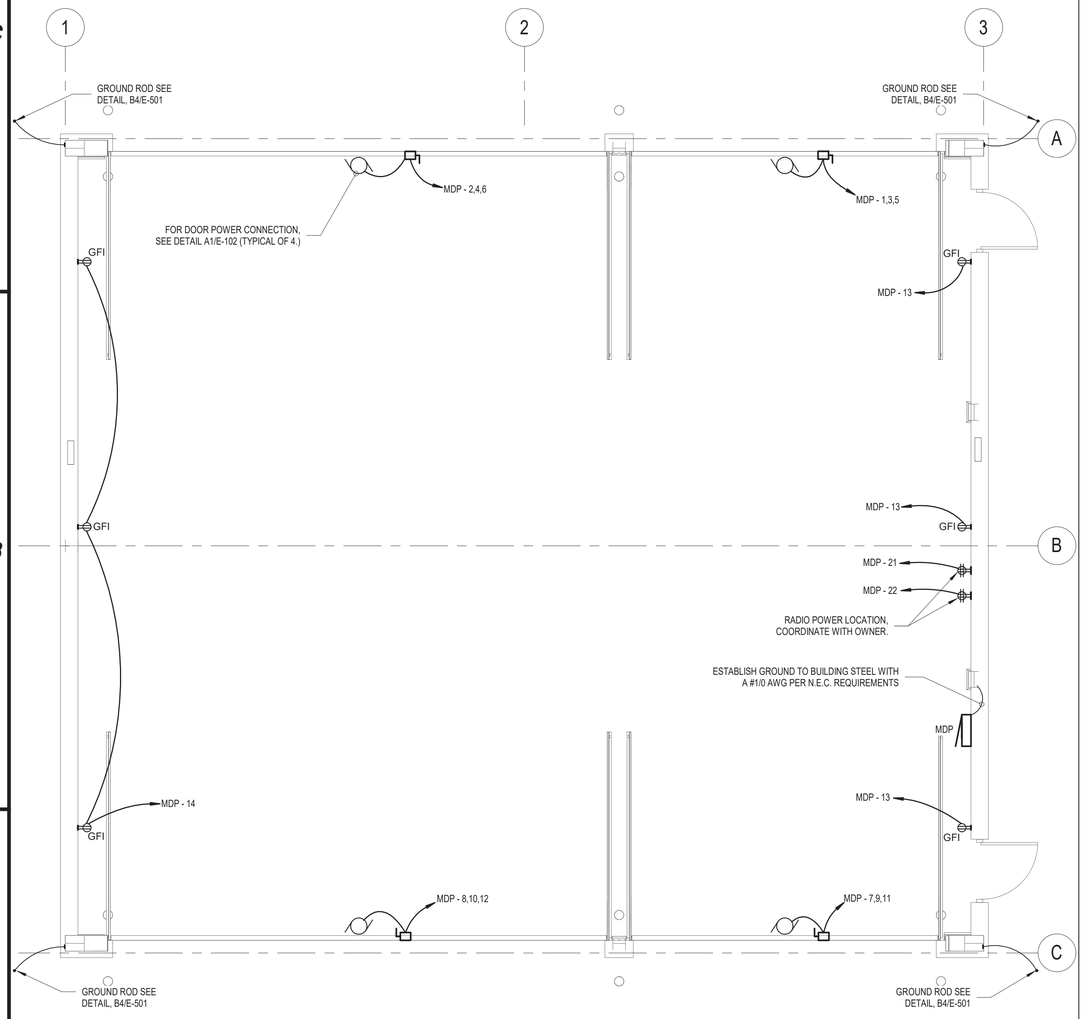
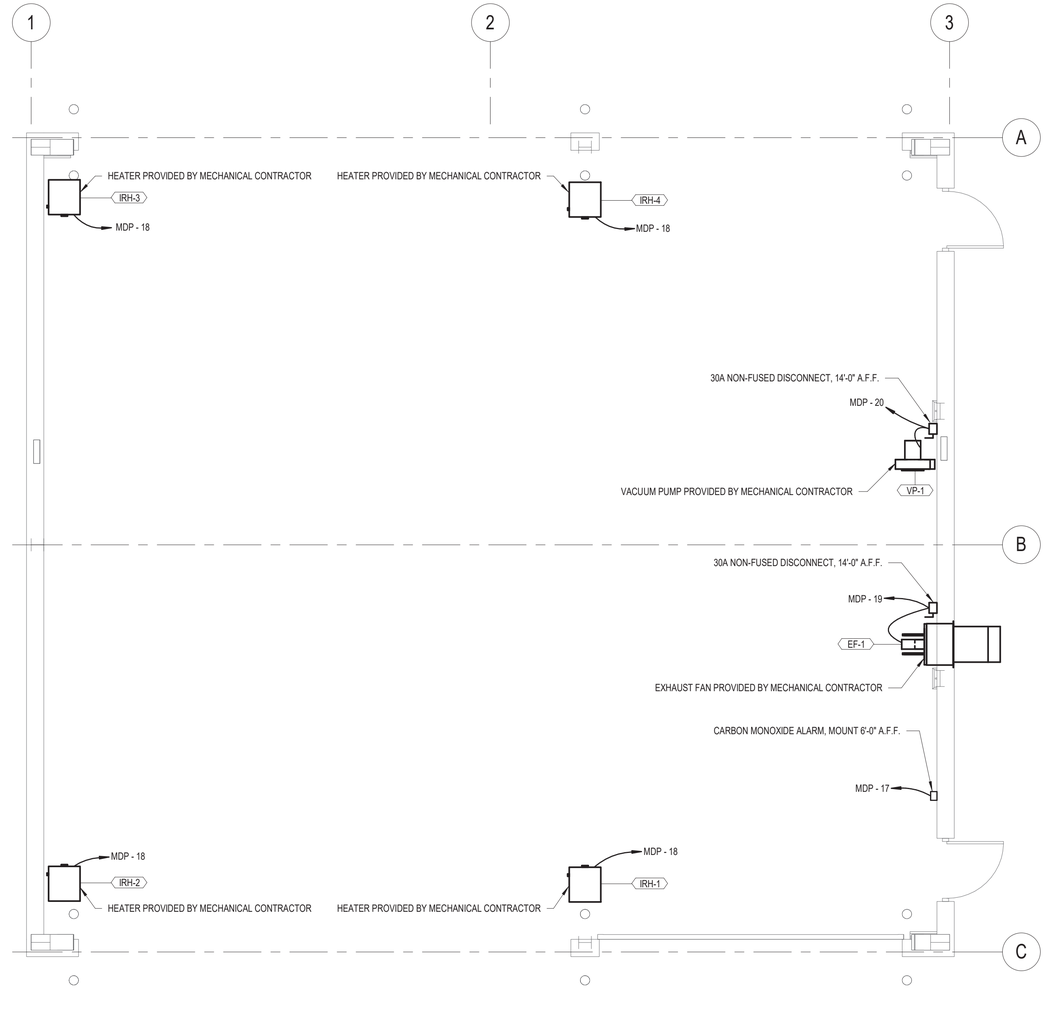
ELECTRICAL SITE PLAN

E-100



A1 FIRST FLOOR ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"

0 2' 4' 8'



A3 FIRST FLOOR ELECTRICAL HVAC POWER PLAN
SCALE: 1/4" = 1'-0"

0 2' 4' 8'

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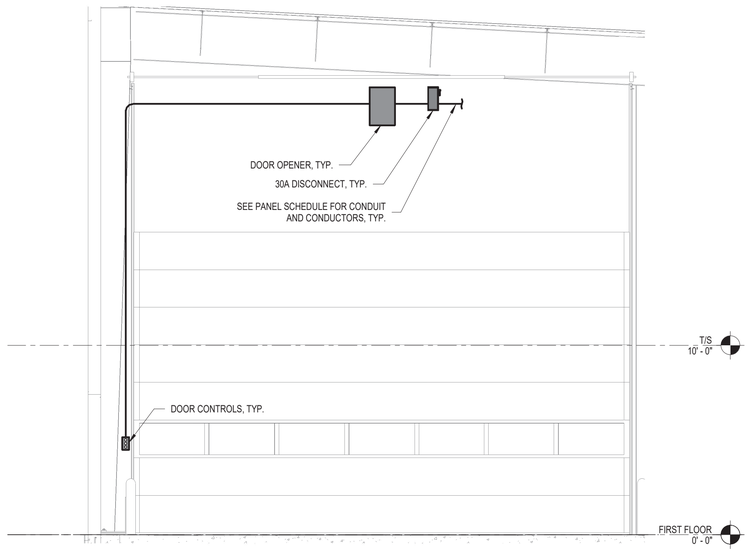
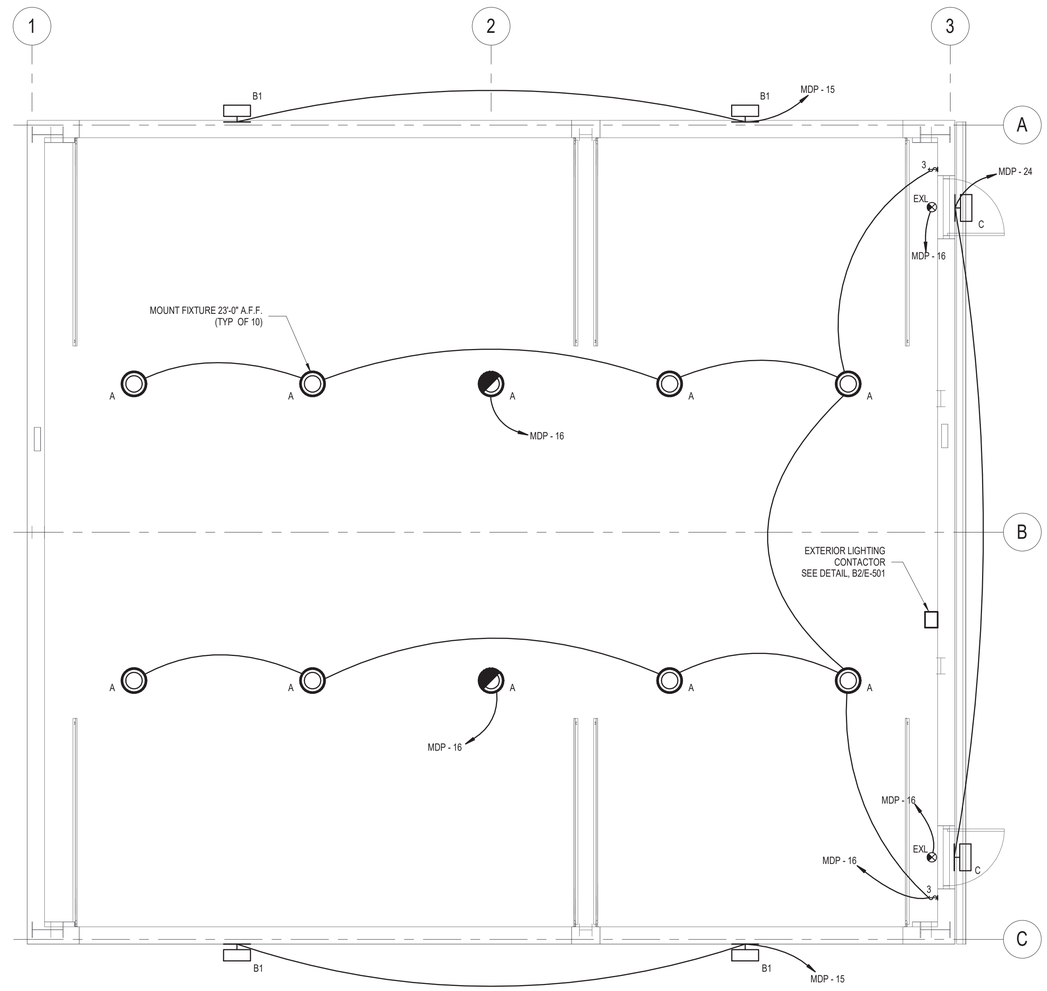
ELECTRICAL POWER PLANS

E-101



A1 TYPICAL OVERHEAD DOOR POWER CONNECTION DETAIL
SCALE: NOT TO SCALE



A3 FIRST FLOOR LIGHTING PLAN
SCALE: 1/4" = 1'-0"

0 2' 4' 8'

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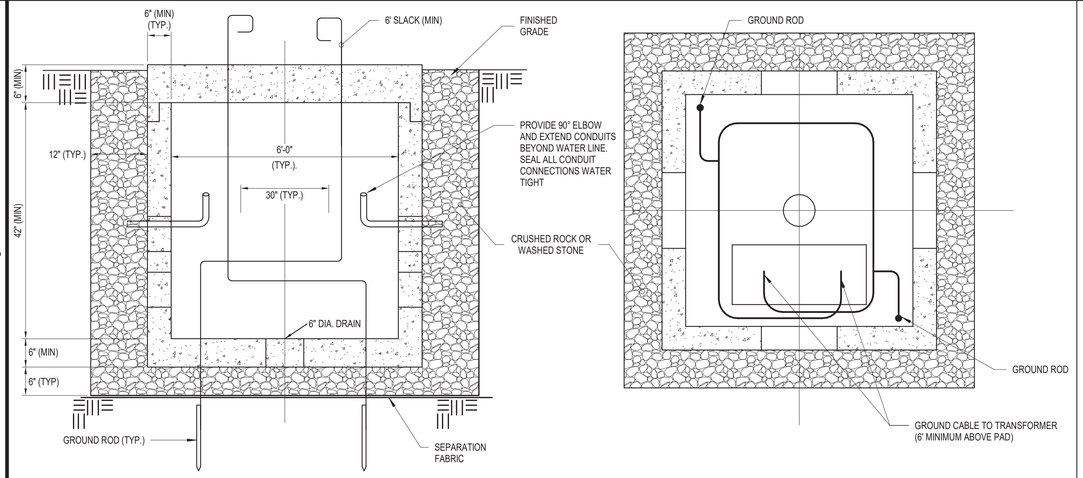
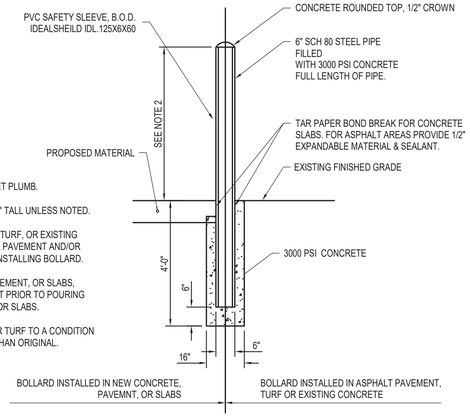
ELECTRICAL LIGHTING PLAN AND DETAILS

E-102



C1 TRANSFORMER BASE DETAIL

SCALE: NOT TO SCALE

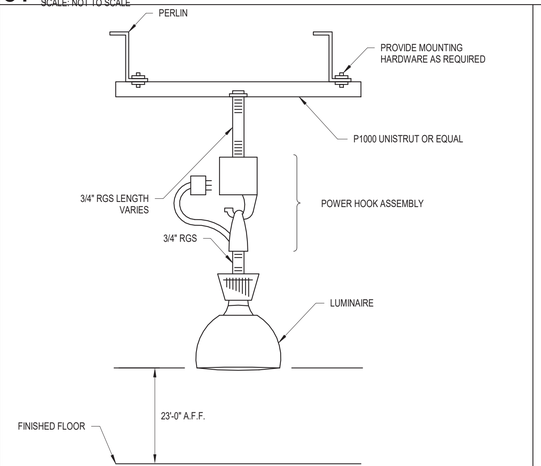


NOTES:

1. ALL BOLLARDS TO BE SET PLUMB.
2. BOLLARDS SHALL BE 5'-0" TALL UNLESS NOTED.
3. IN ASPHALT PAVEMENT, TURF, OR EXISTING CONCRETE, CORE DRILL PAVEMENT AND/OR AUGER SOIL PRIOR TO INSTALLING BOLLARD.
4. IN NEW CONCRETE, PAVEMENT, OR SLABS, BOLLARDS SHALL BE SET PRIOR TO POURING CONCRETE PAVEMENT OR SLABS.
5. RESTORE PAVEMENT OR TURF TO A CONDITION EQUAL TO OR BETTER THAN ORIGINAL.

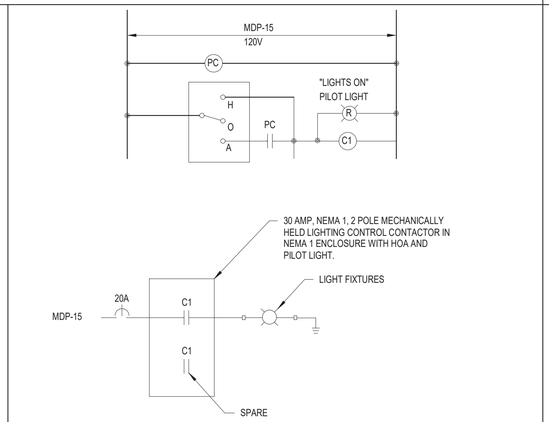
C3 BOLLARD DETAIL

SCALE: NOT TO SCALE



B1 PENDANT MOUNTING DETAIL

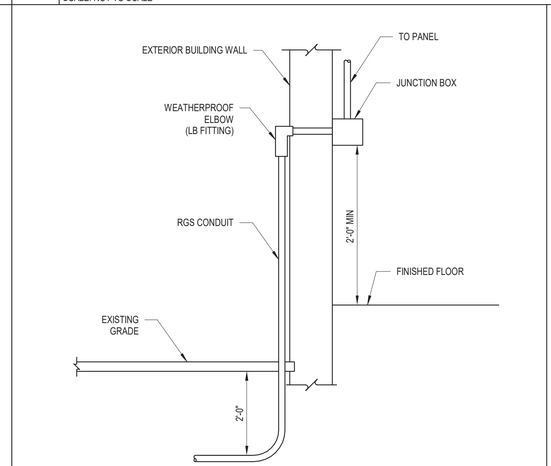
SCALE: NOT TO SCALE



NOTE: INSTALL CONTACTOR NEXT TO MDP PANEL. PROVIDE PLASTIC ENGRAVED LABEL. MOUNT PHOTO CELL ON EXTERIOR OF NORTH WALL. COIL CLEARING CONTACTS AND UNLATCH COIL NOT SHOWN.

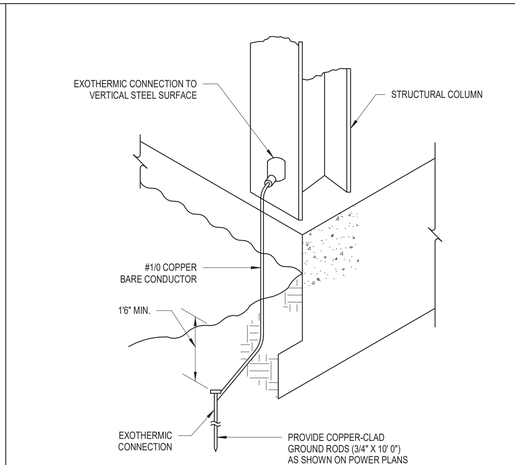
B2 EXTERIOR LIGHTING CONTROL DETAIL

SCALE: NOT TO SCALE



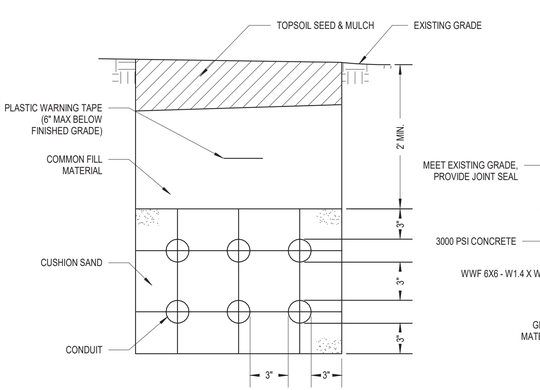
B3 CONDUIT PENTRATIONS DETAIL

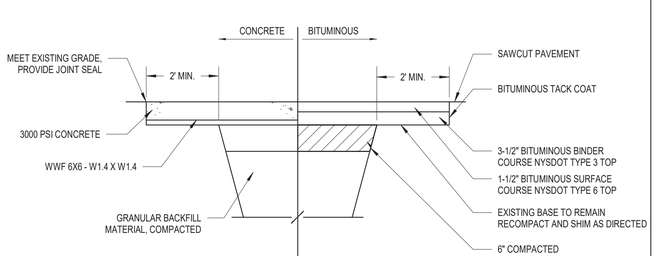
SCALE: NOT TO SCALE



B4 GROUNDING & BONDING DETAIL

SCALE: NOT TO SCALE



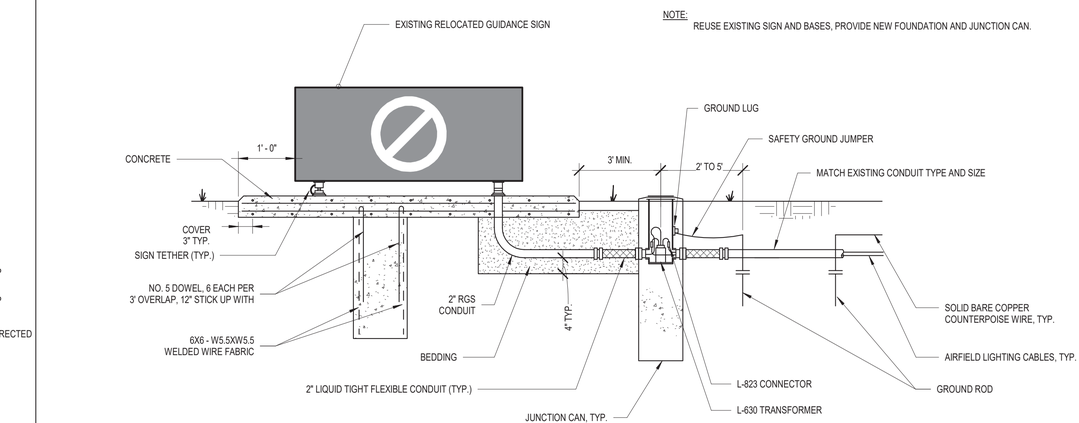


NOTES:

1. TO BE USED IN TURFED ARES AND UNDER SIDEWALKS UNLESS OTHERWISE SHOWN.
2. NUMBER OF CONDUITS AS PER PLANS.

A1 TRENCH SECTION AND RESTORATION DETAIL

SCALE: NOT TO SCALE



A3 TAXIWAY SIGNAGE DETAIL

SCALE: NOT TO SCALE

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STATE OF NEW YORK · JEFFREY D. RALYN · LICENSED PROFESSIONAL ENGINEER · 077206

ORANGE COUNTY · 1 NOVEMBER 1683 · NEW YORK

SRE BUILDING
ORANGE COUNTY AIRPORT
500 DUNN ROAD
MONTGOMERY NY 12549

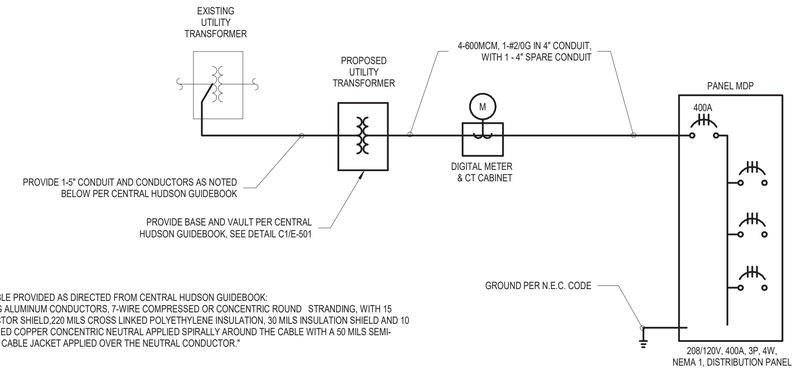
MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	104120001
DATE:	FEBRUARY 2021
DRAWN BY:	S.R. PINE
DESIGNED BY:	S.R. PINE
CHECKED BY:	S.H. SHOVA

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

DETAILS

E-501



PRIMARY UTILITY CABLE PROVIDED AS DIRECTED FROM CENTRAL HUDSON GUIDEBOOK:
"15KV, #2 AWG ALUMINUM CONDUCTORS, 7-WIRE COMPRESSED OR CONCENTRIC ROUND STRANDING, WITH 15 MILS CONDUCTOR SHIELD,220 MILS CROSS LINKED POLYETHYLENE INSULATION, 30 MILS INSULATION SHIELD AND 10 #14 AWG TINNED COPPER CONCENTRIC NEUTRAL APPLIED SPIRALLY AROUND THE CABLE WITH A 50 MILS SEMI-CONDUCTING CABLE JACKET APPLIED OVER THE NEUTRAL CONDUCTOR."

C3 ONE-LINE DIAGRAM
SCALE: NOT TO SCALE

PANEL SCHEDULE

400 AMPS
120/208 Wye VOLTS
3 PHASE
4 WIRE
42 POLE SPACES

MAIN BREAKER 400 A
LUGS
GND. BAR COPPER
SC RATING 30 KAIC
ENCLOSURE NEMA 1

INSTALLATION MDP
LOCATION SRE BLDG 101
PANEL FEEDER UTILITY
NOTES

CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AMPS	Poles	CKT	A	B	C	CKT	Poles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
					1				2					
OVERHEAD DOOR POWER (RIGHT, IN)	3-#12, 1-#12	3/4"	20 A	3	3				4	3	20 A	3/4"	3-#12, 1-#12	OVERHEAD DOOR POWER (LEFT, IN)
					5				6					
OVERHEAD DOOR POWER (RIGHT, OUT)	3-#12, 1-#12	3/4"	20 A	3	7				8					
					9				10	3	20 A	3/4"	3-#12, 1-#12	OVERHEAD DOOR POWER (LEFT, OUT)
					11				12					
CONVENIENCE RECEPTACLES (RIGHT)	1-#12, 1-#12, 1-#12	3/4"	20 A	1	13				14	1	20 A	3/4"	1-#12, 1-#12, 1-#12	CONVENIENCE RECEPTACLES (LEFT)
EXTERIOR LIGHTING	1-#12, 1-#12, 1-#12	3/4"	20 A	1	15				16	1	20 A	3/4"	1-#12, 1-#12, 1-#12	INTERIOR LIGHTING
CARBON MONOXIDE ALARM	1-#12, 1-#12, 1-#12	3/4"	20 A	1	17				18	1	20 A	3/4"	1-#12, 1-#12, 1-#12	INFRARED BURNER POWER
EF-1 POWER	1-#12, 1-#12, 1-#12	3/4"	20 A	1	19				20	1	20 A	3/4"	1-#12, 1-#12, 1-#12	INFRARED BLOWER POWER
AVIATION RADIO POWER	1-#12, 1-#12, 1-#12	3/4"	20 A	1	21				22	1	20 A	3/4"	1-#12, 1-#12, 1-#12	UHF MAINTENANCE RADIO POWER
SPARE	--	--	20 A	1	23				24	1	20 A		1-#12, 1-#12, 1-#12	MAN DOOR LIGHTING
SPARE	--	--	20 A	1	25				26	1	20 A	--	--	SPARE
SPARE	--	--	20 A	1	27				28	1	20 A	--	--	SPARE
SPARE	--	--	20 A	1	29				30	1	20 A	--	--	SPARE
SPARE	--	--	20 A	1	31				32	1	20 A	--	--	SPARE
SPARE	--	--	20 A	1	33				34	1	20 A	--	--	SPARE
SPARE	--	--	20 A	1	35				36	1	20 A	--	--	SPARE
					37				38					
FUTURE SUBFEED BREAKER	--	--	200 A	3	39				40	3	50 A	--	--	SPARE
					41				42					

MASTER LUMINAIRE SCHEDULE

FIXTURE DESCRIPTION	MANUFACTURER AND MODEL NUMBER	NUMBER AND TYPE OF LAMP	VOLTS	BALLAST	MOUNTING	REMARKS
A	LITHONIA LIGHTING LED HIGH-BAY FIXTURE, MODEL # JCBL-9000LM-ACCR-120-GZ10-40K-80CRI-PM OR ENGINEERS APPROVED EQUAL	63W LED	120	LED DRIVER	PENDANT MOUNT	PROVIDE EMERGENCY BATTERY FOR FIXTURE WHERE INDICATED ON PLAN, MODEL # E10WCP
B1	H.E. WILLIAMS VOLTAIRE AREA LIGHT FIXTURE, MODEL # VA1-L110/740-T4-F-S-DBZ-VAWM-DBZ OR ENGINEERS APPROVED EQUAL	110W LED	120	LED DRIVER	WALL MOUNTED	MOUNT FIXTURES ABOVE OVERHEAD DOORS AS SHOWN ON PLAN
C	H.E. WILLIAMS VOLTAIRE ARCHITECTURAL LIGHT FIXTURE, MODEL # VWPV-L30/740-T3-SBZ-GCL-EM/4W-PC-DIM-120 OR ENGINEERS APPROVED EQUAL	36W LED	120	LED DRIVER	WALL MOUNTED	MOUNT FIXTURES ABOVE MAN DOORS AS SHOWN ON PLAN, PROVIDE EM BATTERY AND PHOTOCELL
EXL	LED EXIT LIGHT, THERMOPLASTIC HOUSING UNIVERSAL FACE, WHITE FINISH, SOLID STATE CHARGER, NICAD BATTERY, SELF DIAGNOSTICS	6W LED	120	LED DRIVER	WALL MOUNTED	

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ONE-LINE DIAGRAM AND SCHEDULES

E-601