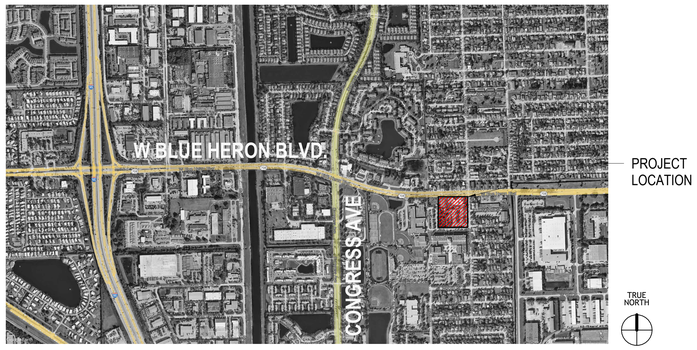
RIVIERA BEACH POLICE DEPARTMENT

2125 AVENUE S.
RIVIERA BEACH, FL 33404



10/14/2025

90% CONSTRUCTION DOCUMENTS/PERMIT SET

VOL II - EVIDENCE AND FIRING RANGE

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PGAL

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ENGINEERING
INTERIORS
PLANNING

ALEXANDRIA
ATLANTA
AUSTIN
BOCA RATON
DFW
DENVER
HOBOKEN
HOUSTON
LAS VEGAS
LOS ANGELES
SALT LAKE CITY
SAN DIEGO

REGISTRATION

STATE OF FLORIDA
SYMONNE LOHRUM
AR 96599
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

PROJECT NUMBER
1007657.00

SHEET TITLE
COVER SHEET

SHEET NUMBER
G0.00E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657.00_RBPD_A_R24.rvt
DATE STAMP: 10/16/2025 3:07:56 PM

VOL II SHEET INDEX - EVIDENCE & FIRING RANGE

Discipline	Sheet №	Sheet Name	Current Issue	Current Issue Date	Current Issue Description
GENERAL					
GENERAL	G0.00E	COVER SHEET	E	10/14/2025	90% Construction Documents/Permit Set
GENERAL	G0.01E	SHEET INDEX	E	10/14/2025	90% Construction Documents/Permit Set
GENERAL	G0.02E	GENERAL SYMBOLS, ABBREVIATIONS & INFORMATION	E	10/14/2025	90% Construction Documents/Permit Set
GENERAL	LS2.10E	LIFE SAFETY	E	10/14/2025	90% Construction Documents/Permit Set
GENERAL	LS2.15E	LIFE SAFETY - MEZZANINE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE					
ARCHITECTURE	A0.10E	PARTITION TYPES & DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.11E	PARTITION DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.12E	UL ASSEMBLIES	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.13E	UL ASSEMBLIES	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.30E	DOOR SCHEDULES, TYPES, AND FRAMES	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.35E	HOLLOW METAL FRAME & TYP. DOOR DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.36E	STOREFRONT DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.37E	STOREFRONT DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.50E	SIGNAGE SCHEDULE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A0.55E	SIGNAGE DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A2.10E	FLOOR PLAN, GROUND - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A2.15E	FLOOR PLAN, MEZZANINE - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A2.30E	FLOOR PLAN, ROOF - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A3.10E	OVERALL REFLECTED CEILING PLAN - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A4.01E	ENLARGED EQUIPMENT PLAN - LEVEL 1	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A4.02E	ENLARGED EQUIPMENT PLAN - LEVEL 1	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A4.03E	INTERIOR ELEVATIONS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A4.50E	STAIR PLANS AND SECTIONS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A4.51E	VERTICAL CIRCULATION DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A5.10E	PLAN DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A5.20E	CEILING DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A6.00E	EXTERIOR ELEVATIONS - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A6.10E	STOREFRONT ELEVATIONS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A7.00E	BUILDING SECTIONS - EVIDENCE/ FIRING RANGE	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A7.20E	WALL SECTIONS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A7.21E	FIRING RANGE DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A7.50E	ROOF DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A7.51E	EXTERIOR DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	A8.65E	MILLWORK DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
ARCHITECTURE	AF2.10E	FINISH PLAN - LEVEL 1	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT					
EQUIPMENT	Q1.01E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.02E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.03E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.04E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.05E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.06E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.07E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.08E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.09E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.10E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.11E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.12E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.13E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.14E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.15E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.16E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.17E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.18E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.19E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.20E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.21E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.22E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.23E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.24E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.25E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.26E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.27E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.28E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.29E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.30E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.31E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.32E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.33E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.34E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.35E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.36E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.37E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.38E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.39E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.40E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.41E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.42E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
EQUIPMENT	Q1.43E	FIRING RANGE EQUIPMENT DRAWINGS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL					
STRUCTURAL	S1.0E	STRUCTURAL NOTES & SCHEDULES	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S1.1E	SCHEDULES	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S1.2E	BUILDING ISOMETRICS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S1.3E	BUILDING ISOMETRICS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S2.0E	FOUNDATION PLAN	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S2.1E	MEZZANINE PLAN AND FIRING RANGE ROOF FRAMING PLAN	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S2.2E	EVIDENCE STORAGE HIGH ROOF FRAMING PLAN	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S2.3E	PANEL LAYOUT PLAN	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S3.0E	BUILDING SECTIONS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S3.1E	BUILDING SECTIONS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S3.2E	BUILDING SECTIONS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S4.0E	STRUCTURAL DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S4.1E	FLOOR FRAMING DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S4.2E	ROOF FRAMING DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S5.0E	PANEL DETAILS	E	10/14/2025	90% Construction Documents/Permit Set
STRUCTURAL	S5.1E	PANEL DETAILS	E	10/14/2025	90% Construction Documents/Permit Set

VOL II SHEET INDEX - EVIDENCE & FIRING RANGE

Discipline	Sheet №	Sheet Name	Current Issue	Current Issue Date	Current Issue Description
FIRE PROTECTION					
FIRE PROTECTION	F0.01E	GENERAL NOTES - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F0.10E	SITE PLAN - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F1.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F1.02E	FLOOR PLAN - MEZZANINE - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F5.01E	DETAILS - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F5.02E	DETAILS - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
FIRE PROTECTION	F6.01E	SCHEDULES - FIRE PROTECTION	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING					
PLUMBING	P0.01E	GENERAL NOTES, ABBREVIATIONS & LEGEND - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P1.00E	FOUNDATION PLAN - EVIDENCE/FIRING RANGE - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P1.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - WASTE - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P1.10E	ROOF PLAN - EVIDENCE/FIRING RANGE - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P2.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - DOMESTIC - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P4.01E	WASTE AND VENT RISER - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P4.02E	DOMESTIC WATER & COMPRESSED AIR RISER - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P5.01E	DETAILS - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P5.02E	DETAILS - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
PLUMBING	P6.01E	SCHEDULES - PLUMBING	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL					
MECHANICAL	M0.01E	GENERAL NOTES - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL	M1.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL	M1.02E	ROOF PLAN - EVIDENCE/FIRING RANGE - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL	M5.01E	DETAILS - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL	M6.01E	SCHEDULES - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
MECHANICAL	M7.01E	CONTROLS - HVAC	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL					
ELECTRICAL	E0.01E	GENERAL NOTES - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E0.02E	FIXTURES SCHEDULE - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E1.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - LIGHTING	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E1.02E	PHOTOMETRICS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E2.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - POWER	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E3.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - FIRE ALARM	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E4.01E	ENLARGED PLANS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E4.02E	ROOF PLAN - EVIDENCE/FIRING RANGE - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E4.03E	MEZZANINE PLAN - EVIDENCE/FIRING RANGE - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E5.01E	RISER DIAGRAM - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E5.02E	FIRE ALARM RISER DIAGRAM - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E6.01E	DETAILS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E6.02E	DETAILS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E6.03E	DETAILS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E7.01E	SCHEDULES - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E7.02E	SCHEDULES - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E8.01E	EMERGENCY PHOTOMETRICS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
ELECTRICAL	E8.02E	CONTROLS - ELECTRICAL	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY					
TECHNOLOGY	T0.01E	GENERAL NOTES - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T1.01E	FLOOR PLAN - EVIDENCE/FIRING RANGE - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T2.01E	ENLARGED PLANS - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T3.01E	CONDUIT RISER DIAGRAM - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T3.02E	BDA RISER DIAGRAM - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T4.01E	DETAILS - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set
TECHNOLOGY	T4.02E	DETAILS - TECHNOLOGY	E	10/14/2025	90% Construction Documents/Permit Set

CLIENT

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REGISTRATION

STATE OF FLORIDA
JEANNIE LOHRUM
AR 96099
REGISTERED ARCHITECT

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT

PROJECT LOCATION
2121 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
SHEET INDEX

SHEET NUMBER
G0.01E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657.00_RBPD_A_R24.rvt
DATE STAMP: 10/23/2025 11:52:38 AM

PROJECT GRAPHIC STANDARDS

PROJECT SYMBOLS

PLAN NORTH — PLAN NORTH NORTH ARROW

PLAN NORTH — TRUE NORTH NORTH ARROW

78.0 — EXISTING POINT ELEVATION

79.0 — NEW OR FINISH POINT ELEVATION

LEVEL POINT DATUM POINT

A220 — PARTITION TYPE

LEVEL
01100 — DOOR NUMBER

101
RM NAME — ROOM NAME NUMBER

1i
1'-0" A.F.F. — CEILING TYPE CEILING HEIGHT

EXIT SIGN W/ DIRECTION SYMBOL

MATCHLINE
SEE 1 / A101 — MATCHLINE VIEW REFERENCE

1i — CURTAIN PANEL TAG

W12 — WINDOW TAG

M33.3 — WALL TAG

L1 — LOUVER TAG

ABC-111 — SPECIALTY EQUIPMENT TAG

AB-1 — FURNITURE TAG

1 — REVISION TAG

? — KEYNOTE TAG

FINISH KEYNOTES:

F1 — FLOOR MATERIALS/FINISHES

G1 — GLAZING MATERIAL/FINISH

PT-1 — WALL MATERIALS/FINISHES

012233.A1 — MasterSpec KEYNOTE

012233.A1
DESCRIPTION — MasterSpec KEYNOTE w DESCRIPTION

1 / A — COLUMN LINE REFERENCE

A / A — EXISTING COLUMN LINE REFERENCE

DETAIL NUMBER
REFERENCE
SHEET NUMBER
DETAIL NUMBER
REFERENCE
SHEET NUMBER
10 / A5.101 SIM

1 / A101 SIM

1 / A101 / 1

EXTERIOR
ELEVATION NUMBER
01 / A11.01 / Ref — SHEET NUMBER REFERENCE

INTERIOR
ELEVATION NUMBER
01 / A11.01 / Ref — SHEET NUMBER REFERENCE

1 / A101 SIM — BUILDING SECTION REFERENCE

1 / A101 SIM

℄ ℄ — CENTER LINE, & SYMBOL

ABOVE LINE

BEYOND LINE

BREAK LINE

1t / 888888 — CASEWORK TYPE MARK

WIDTH, HEIGHT, DEPTH — WIDTH HEIGHT COMMENTS

SCALE

1 / A101

10 / A5.101 SIM

Name
Elevation

CONSTRUCTION TYPE SYMBOLS

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE DEMOLISHED
- NEW NON-RATED CONSTRUCTION
- NEW SMOKE RATED CONSTRUCTION (30 MIN)
- NEW 1 HR. RATED CONSTRUCTION
- NEW 2 HR. RATED CONSTRUCTION
- NEW 3 HR. RATED CONSTRUCTION

MATERIAL SYMBOLS - PLAN

- BRICK
- CONCRETE MASONRY UNIT
- CONCRETE
- CAST-IN-PLACE CONCRETE
- PRECAST CONCRETE
- STONE
- GRAVEL
- COMPACTED EARTH FILL
- SAND

MATERIAL SYMBOLS - DETAIL

- STEEL
- OTHER METALS
- BATT INSULATION
- RIGID INSULATION
- GYPSUM BOARD
- PLASTER ON LATHE
- PLYWOOD
- MDF BOARD
- FINISHED WOOD
- GLASS
- TILE
- CARPET
- ACOUSTICAL TILE
- CONTINUOUS WOOD BLOCKING
- WOOD SHIM
- GRAVEL
- CONCRETE
- SAND

RCP REFERENCE SYMBOLS

- RECESSED DOWNLIGHT
- WATERPROOF RECESSED DOWNLIGHT
- PENDANT LIGHT
- SURFACE MOUNTED CEILING LIGHT FIXTURE
- JUNCTION BOX
- WALL SCONCE
- WALL MOUNTED LIGHT
- SURFACE MOUNTED FLUORESCENT LIGHT
- UNDER CABINET LIGHT
- TRACK LIGHT
- CABLE TRACK LIGHT
- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- WALL EXHAUST GRILLE
- WALL SUPPLY GRILLE
- ELECTRICAL PANEL
- CONTINUOUS AIR SUPPLY & RETURN SLOT
- SPRINKLER HEAD
- SD — SMOKE DETECTOR
- S — ALARM SPEAKER
- EXIT LIGHT
- WALL WASHERS
- ACCESS PANEL
- EXIT SIGNAGE WITH DIRECTION ARROW TO EXIT DOOR

RCP REFERENCE SYMBOLS - MECH

- BLDG. STND. SPRINKLER HEAD
- BLDG. STND. SLOT DIFFUSER
- BLDG. STND. LAY-IN SUPPLY AIR GRILLE
- BLDG. STND. LAY-IN RETURN AIR GRILLE
- EF — EXHAUST FAN

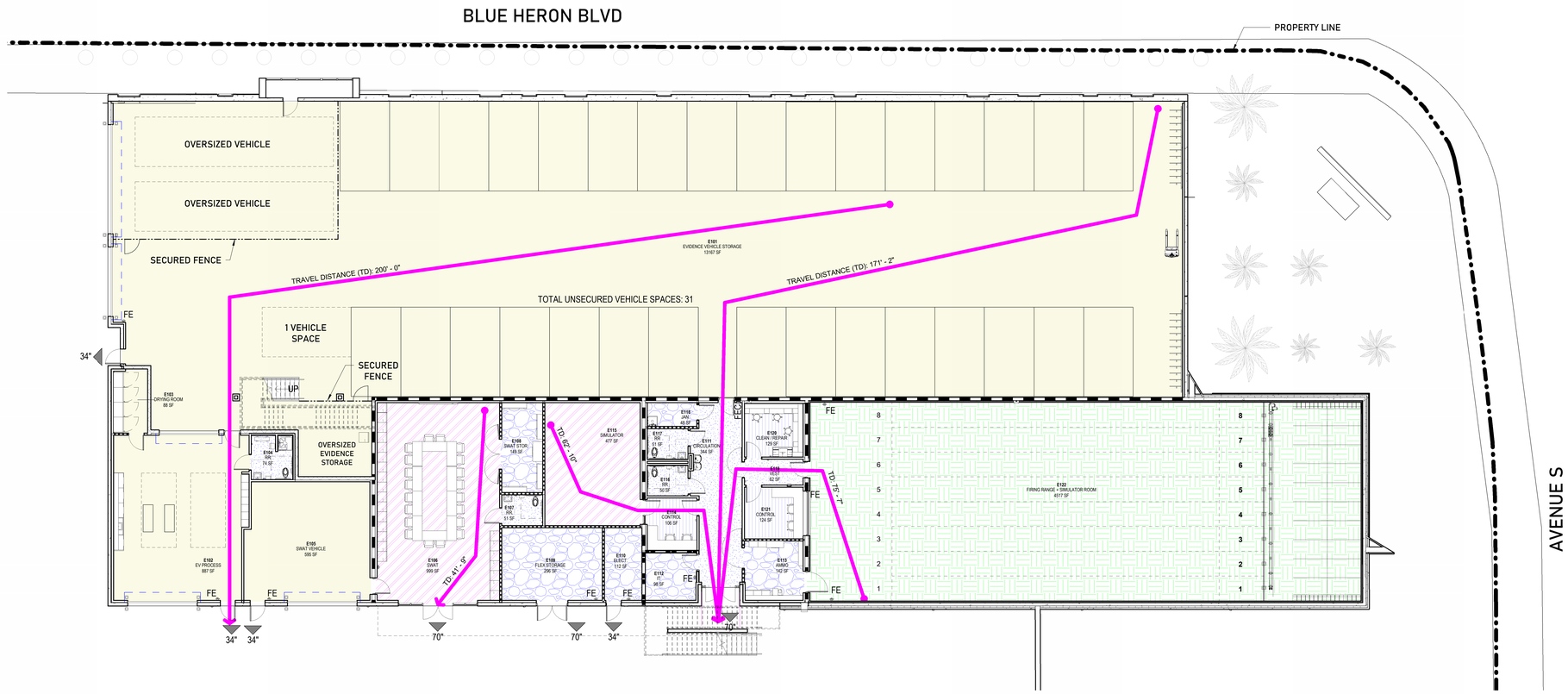
*REFER TO MEP DRAWINGS FOR ADDITIONAL INFO.

RCP REFERENCE SYMBOLS - LIGHTING

- EXISTING LIGHT FIXTURE TO REMAIN
- 2' x 4' FLUORESCENT LIGHT FIXTURE BUILDING STANDARD, UNO.
- 2' x 2' FLUORESCENT LIGHT FIXTURE BUILDING STANDARD, UNO
- RECESSED DOWNLIGHT
- RECESSED WALL WASHER
- WALL MOUNTED SCONCE RE: ELEVATIONS FOR MOUNTING HEIGHT
- EXIT SIGN FIXTURE BUILDING STANDARD, UNO
- FLUORESCENT STRIP LIGHT
- TRACK WITH LIGHT FIXTURE
- 1' x 4' OR 1' x 8' PENDANT FIXTURE
- CEILING MOUNTED PROJECTOR
- T-BAR SUSPENDED CEILING GRID SYSTEM RE: SHEET A2.1.2 FOR ADDITIONAL INFORMATION.

MATERIAL SYMBOLS - OTHER

- CROSSHATCH [DRAFTING]
- DIAGONAL CROSSHATCH_D [DRAFTING]
- DIAG CROSSHATCH_D [DRAFTING]
- DIAG DOWN SMALL_D [DRAFTING]
- DIAG DOWN SMALL_D [DRAFTING]
- CROSSHATCH
- CROSSHATCH
- CROSSHATCH



OVERALL FIRST FLOOR PLAN 3/32" = 1'-0" (1)

ROOM FUNCTION LEGEND

- BUSINESS AREA, (B, CONCENTRATED)
- BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)
- BUSINESS AREAS, (B. BUSINESS)
- LOW HAZARD STORAGE, (S-2)
- LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)
- SMALL ASSEMBLY, (B, BUSINESS)

SPECIAL FUNCTION*
FUNCTION OF THE FIRE RANGE IS CONTROLLED. A DEDICATED PERSONNEL, RANGE MASTER, ALSO AN INSTRUCTOR, CONTROLS AND MONITORS THE USE AND ENTRY OF THE SPACE. ALL ACCESS ARE PRE-SCHEDULED AND DETERMINED BEFORE ENTRY. EACH FIRING RANGE AISLE IS LIMITED TO 1 PERSON. THERE IS A TOTAL OF 8 LANES. THEREFORE, A TOTAL OF 8 PERSONS CAN TRAIN AT FULL CAPACITY. AN ADDITIONAL 1 INSTRUCTOR PER 2 TRAINEES IS REQUIRED. THEREFORE, 4 ADDITIONAL PERSONS FOR INSTRUCTORS ARE REQUIRED. THE TOTAL NUMBER OF ALLOWABLE PERSONS AT ONE TIME FOR FULL **OCCUPANCY IS 12 TOTAL PERSONS.**

LIFE SAFETY INFORMATION

PROJECT SUMMARY

THE PROJECT CONSISTS OF A SINGLE STORY EVIDENCE HOLDING FACILITY WITH A FIRING RANGE TRAINING FACILITY WITH CONFERENCE ROOMS AND SUPPORT SPACES. TOTAL BUILDING FOOTPRINT IS **22,568 GSF.**

EHPA / STORM SHELTER

THIS PROJECT **WILL NOT** BE CONSTRUCTED AS AN ENHANCED HURRICANE PROTECTION AREA (EHPA) OR A STORM SHELTER. IT IS CATEGORIZED AS A CRITICAL EMERGENCY OPERATION PER THE FLORIDA BUILDING CODE, 8TH EDITION UNDER CHAPTER 4, SECTION 423.3 CRITICAL EMERGENCY OPERATIONS, WHICH REQUIRES THE BUILDING TO BE RISK CATEGORY IV.

APPLICABLE CODES

THE APPLICABLE CODES AS REQUIRED BY THE CODE OF ORDINANCE OF THE CITY OF RIVIERA BEACH, FLORIDA (SEPTEMBER 6, 2024) WITHIN PALM BEACH COUNTY. PERTINENT SECTION ARE, BUT NOT LIMITED TO,
CHAPTER 6 - FIRE PROTECTION AND PROTECTION
CHAPTER 17 - SECURITY AND FIRE WARNING SYSTEMS
CHAPTER 19 - TRAFFIC AND MOTOR VEHICLES
CHAPTER 20 - UTILITIES
SUBPART B - LAND DEVELOPMENT CODE
CHAPTER 22 - BUILDINGS AND BUILDING REGULATIONS
CHAPTER 25 - FLOOD PLAIN MANAGEMENT
CHAPTER 27 - PLANNING
CHAPTER 28 - SIGNS
CHAPTER 28.5 - STORMWATER CONTROL
CHAPTER 31 - ZONING

APPLICABLE CODES

BUILDING:	FLORIDA BUILDING CODE, BUILDING - 8TH EDITION
FIRE / LIFE SAFETY:	FLORIDA FIRE PREVENTION CODE, 8TH EDITION
PLUMBING:	FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION
MECHANICAL:	FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION
ELECTRICAL:	FLORIDA BUILDING CODE, CHAPTER 27, 8TH EDITION NFPA 70, NATIONAL ELECTRICAL CODE, 2018 EDITION NFPA 72, NATIONAL FIRE ALARM CODE, 2017 EDITION
ACCESSIBILITY:	FLORIDA BUILDING CODE, ACCESSIBILITY, 8TH EDITION

AGENCIES HAVING JURISDICTION

BUILDING:	CITY OF RIVIERA BEACH, FL CODE OF ORDINANCE
FIRE / LIFE SAFETY:	CITY OF RIVIERA BEACH, FL , FIRE DEPARTMENT

CONSTRUCTION TYPE	TYPE II B CONSTRUCTION, FULLY SPRINKLERED
BUILDING HEIGHT (ACTUAL)	32 FT (1 STORY)
ALLOWABLE STORIES	4 (4 STORIES ALLOWABLE (SPRINKLERED) PER FBC TABLE 504.4)
ALLOWABLE HEIGHT	75 FT (75 FT ALLOWABLE (SPRINKLERED) PER FBC TABLE 504.3)
ALLOWABLE BUILDING AREA	92,000 SF PER STORY PER TABLE 506.2, SPRINKLERED SINGLE-STORY
ACTUAL BUILDING AREA	**22,568 GSF (1 STORY /32 FT MAX HEIGHT)**
ACTUAL BUILDING HEIGHT	**32 FT (1 STORIES)**

OCCUPANCY INFORMATION

OCCUPANCY USE / ROOM FUNCTION	FBC (SF)	NFPA (SF)	ALLOWABLE OCCUPANCY
BUSINESS (B)	150 GSF	150 GSF	6
BUSINESS (B), CONCENTRATED	50 GSF	50 GSF	7
BUSINESS (B), SMALL ASSEMBLY	15 GSF	15 GSF	99
BUSINESS (B), STORAGE / MECH.	300 GSF	300 GSF	6
LOW HAZARD STORAGE (S2)	200 GSF	200 GSF	74*
LOW HAZARD STORAGE (S2), SPECIAL FUNCTION*	200 GSF	200 GSF	12
		TOTAL ALLOWABLE BUILDING OCCUPANCY	**204 PERSONS**

OCCUPANCY CLASSIFICATION

FBC, BUILDING, 8TH EDITION, CHAPTER 3 - USE & OCCUPANCY CLASSIFICATION IS A MIXED USE W/ PRIMARY FUNCTION: GROUP B - BUSINESS OCCUPANCY; OTHER OCCUPANCY USE ARE ASSEMBLY (A-3) AND LOW HAZARD USE (S-2) WITH SPECIAL FUNCTION.

OCCUPANCY LOAD FACTORS

FBC, BUILDING, 8TH EDITION, TABLE 1004.5, MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT / NFPA 101 TABLE 7.3.1.2 OCCUPANT LOAD FACTOR.

DOOR EXIT WIDTHS (AS DESIGNED) (NOTE: FACTOR OF 0.2 INCHES ALLOWABLE WHEN BUILDING IS FULLY SPRINKLERED)	**EXIT WIDTH REQUIRED** 204 PERSON x 0.2" = 40.8"	**EXIT WIDTH AS DESIGNED** 206 INCHES
ALLOWABLE MAXIMUM EXIT ACCESS TRAVEL DISTANCE (FBC, TABLE 1017.2 & NFPA 101, 12.2.6.2(1))	BUSINESS, 300 FT W/ SPRINKLER ASSEMBLY, 250 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 250 FT SPRINKLERED	
ALLOWABLE EXIT COMMON PATH OF TRAVEL DISTANCE (FBC, TABLE 1006.2.1)	BUSINESS, 100 FT W/ SPRINKLER ASSEMBLY, 75 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 100 FT SPRINKLERED	
DEAD END CORRIDOR (FBC, 1020.4, EXCEPTION 2 & NFPA 101, 38.2.5.2.1)	BUSINESS, 50 FT W/ SPRINKLER ASSEMBLY, 20 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 50 FT SPRINKLERED	
NUMBER OF EXITS REQUIRED, (OCCUPANCY TYPE B)	PER FBC TABLE 1006.2.1 - 2 OR MORE FROM SPACE EXCEEDING 49 OCCUPANTS OR WHEN COMMON PATH OF TRAVEL EXCEEDS 100 FT PER FBC TABLE 1006.3.2 - 2 EXITS REQUIRED PER STORY FOR 1-500 OCCUPANTS	
MINIMUM DOOR WIDTH	32 INCHES	
MINIMUM CORRIDOR WIDTH	44 INCHES	

MINIMUM REQUIRED PLUMBING FIXTURES (FBC, TABLE 403.1, BUSINES OCCUPANCY)

BASED ON 194 OCCUPANTS

	PROVIDED	REQUIRED	RATIO
UNISEX, W.C.	4	4	1:25 FIRST 50 + 1:50 AFTERWARDS
UNISEX, LAVATORIES	4	3	1:40 FIRST 80 + 1:80 AFTERWARDS
DRINKING FOUNTAINS	2	1	1:100 (FBC, 410.3)

DISTANCE TO PUBLIC RESTROOMS (FBC 403.3.3)

1. SHALL BE ON AN ACCESSIBLE ROUTE, NOT BE MORE THAN 1 STORY ABOVE OR BELOW AND SHALL NOT EXCEED 500 FT TRAVEL DISTANCE. EXISTING AND PROPOSED CONDITIONS COMPLY.

DRINKING FOUNTAINS (FBC 410.3 SUBSTITUTION)

1. WHERE DRINKING FOUNTAINS ARE REQUIRED, WATER COOLERS OR BOTTLED WATER DISPENSERS SHALL BE PERMITTED TO BE SUBSTITUTED FOR NOT MORE THAN 50 PERCENT OF THE REQUIRED NUMBER OF DRINKING FOUNTAINS.

FIRE RESISTANCE BY CONSTRUCTION TYPE (FBC, TABLE 601)

PRIMARY STRUCTURAL FRAME	0 HOURS
BEARING WALLS, EXTERIOR	0 HOURS
BEARING WALLS, INTERIOR	0 HOURS
NONBEARING WALLS, EXTERIOR	0 HOURS
NONBEARING WALLS, EXTERIOR	0 HOURS (PER TABLE 705.5, $10 \leq X \leq 30$)
FLOOR CONSTRUCTION	0 HOURS (NOT APPLICABLE)
ROOF CONSTRUCTION	0 HOURS
CORRIDORS	0 HOURS
EXIT STAIRS	0 HOURS (NOT APPLICABLE)
FLOOR OPENINGS / SHAFTS	0 HOURS (NOT APPLICABLE)

OPENING PROTECTIVES IN FIRE RESISTANT CONSTRUCTION

CONSTRUCTION TYPE	FIRE RESISTANCE RATING
1-HOUR FIRE BARRIER	3/4 HOUR
2-HOUR FIRE BARRIER	1-1/2 HOUR
1-HOUR EXIT ENCLOSURE	1 HOUR
SMOKE PARTITION	1/3 HOUR

SEPARATION FROM HAZARDS

ROOM / AREA	FBC	NFPA
BUSINESS (B) / ASSEMBLY (A-3)	1 HR	1 HR
--	--	--

PER FBC, TABEL 508.4, REQUIRED SEPARATION OF OCCUPANCIES (HOURS)
PER NFPA 1, FIRE CODE, FLORIDA EDITION, TABLE 6.1.14.4.1(b)

(FS) = FULL SPRINKLERED, AUTOMATIC

SEPARATION FROM HAZARDS

ROOM / AREA	FIRE RESISTANCE RATING	STANDARD
BOILER / FURNACE ROOM	SMOKE PARTITION W/ SPRINKLER	NFPA 101
JANITOR CLOSETS	SMOKE PARTITION W/ SPRINKLER	NFPA 101
STORAGE ROOMS	SMOKE PARTITION W/ SPRINKLER	NFPA 101

INTERIOR FINISHES (FBC, TABLE 803.11)

ROOM & FINISH TYPE	FIRE RESISTANCE RATING
EXITS	CLASS B
EXIT ACCESS CORRIDORS	CLASS B
OTHER THAN EXITS	CLASS C
LOW HEIGHT PARTITIONS	CLASS C1
INTERIOR FLOOR FINISHES	PER FBC, SECTION 804
GENERAL ASSEMBLY AREAS (>300)	N/A
GENERAL ASSEMBLY AREAS (<300)	N/A

NOTES:
1. PARTITIONS NOT EXCEEDING 60 INCHES AND IN LOCATIONS OTHER THAN EXITS

LIFE SAFETY SYMBOLS

- NON-RATED PARTITION
- SMOKE PARTITION
- 1 HOUR FIRE BARRIER
- TRAVEL DISTANCE TO EXIT
- 36" WIDTH OF EGRESS UNITS (IN)
- FEC FIRE EXTINGUISHER, CABINET
- FE FIRE EXTINGUISHER, WALL MOUNTED
- WALL SPEAKER / STROBE
- SPEAKER
- CEILING SPEAKER STROBE
- FIRE STROBE ONLY
- WALL MOUNTED EXIT LIGHT
- CEILING MOUNTED EXIT LIGHT
- CEILING MOUNTED SMOKE DETECTOR
- MANUAL PULL STATION

NOTE: NOT ALL ITEMS IN THIS LEGEND MAY BE USED.

LIFE SAFETY

ROOM NO.	ROOM NAME	NSF	OCCUPANCY USE / FUNCTION	OCCUPANCY FACTOR	ALLOWABLE OCCUPANCY
BUSINESS AREA, (B, CONCENTRATED)					
E114	CONTROL	106 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	2
E121	CONTROL	124 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	2
E120	CLEAN / REPAIR	129 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	3
		358 SF			7
BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)					
E109	FLEX STORAGE	296 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E110	ELECT.	112 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E108	SWAT STOR.	149 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E118	JAN.	48 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E112	IT	98 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E113	AMMO	142 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
		845 SF			6
BUSINESS AREAS, (B. BUSINESS)					
E107	RR	51 SF	BUSINESS AREAS, (B. BUSINESS)	15 SF	3
E104	RR	74 SF	BUSINESS AREAS, (B. BUSINESS)	200 SF	1
E116	RR	50 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	1
E117	RR	51 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	1
E111	CIRCULATION	344 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	0
E119	VEST	62 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	0
		633 SF			6
LOW HAZARD STORAGE, (S-2)					
E105	SWAT VEHICLE	595 SF	LOW HAZARD STORAGE, (S-2)	200 SF	3
E102	EV PROCESS	887 SF	LOW HAZARD STORAGE, (S-2)	200 SF	4
E101	EVIDENCE VEHICLE STORAGE	13167 SF	LOW HAZARD STORAGE, (S-2)	200 SF	66
E103	DRYING ROOM	88 SF	LOW HAZARD STORAGE, (S-2)	200 SF	1
		14737 SF			74
LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)					
E122	FIRING RANGE + SIMULATOR ROOM	4517 SF	LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)	200 SF	12
		4517 SF			12
SMALL ASSEMBLY, (B, BUSINESS)					
E106	SWAT	999 SF	SMALL ASSEMBLY, (B, BUSINESS)	15 SF	67
E115	SIMULATOR	477 SF	SMALL ASSEMBLY, (B, BUSINESS)	15 SF	32
		1476 SF			99
		22566 SF			204

PLAN NORTH

0 5' 10' 20' 30' 40'
3/32" = 1'-0" GRAPHIC SCALE

CLIENT
CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD
PGAL, Inc.
791 Park of Commerce Blvd.
Suite 400
Boca Raton, FL 33487
T 561 988 4002
www.pgal.com

CONSTRUCTION MANAGER/BUILDER
CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT
JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA — CONNIE LOHRUM — AR 95898 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

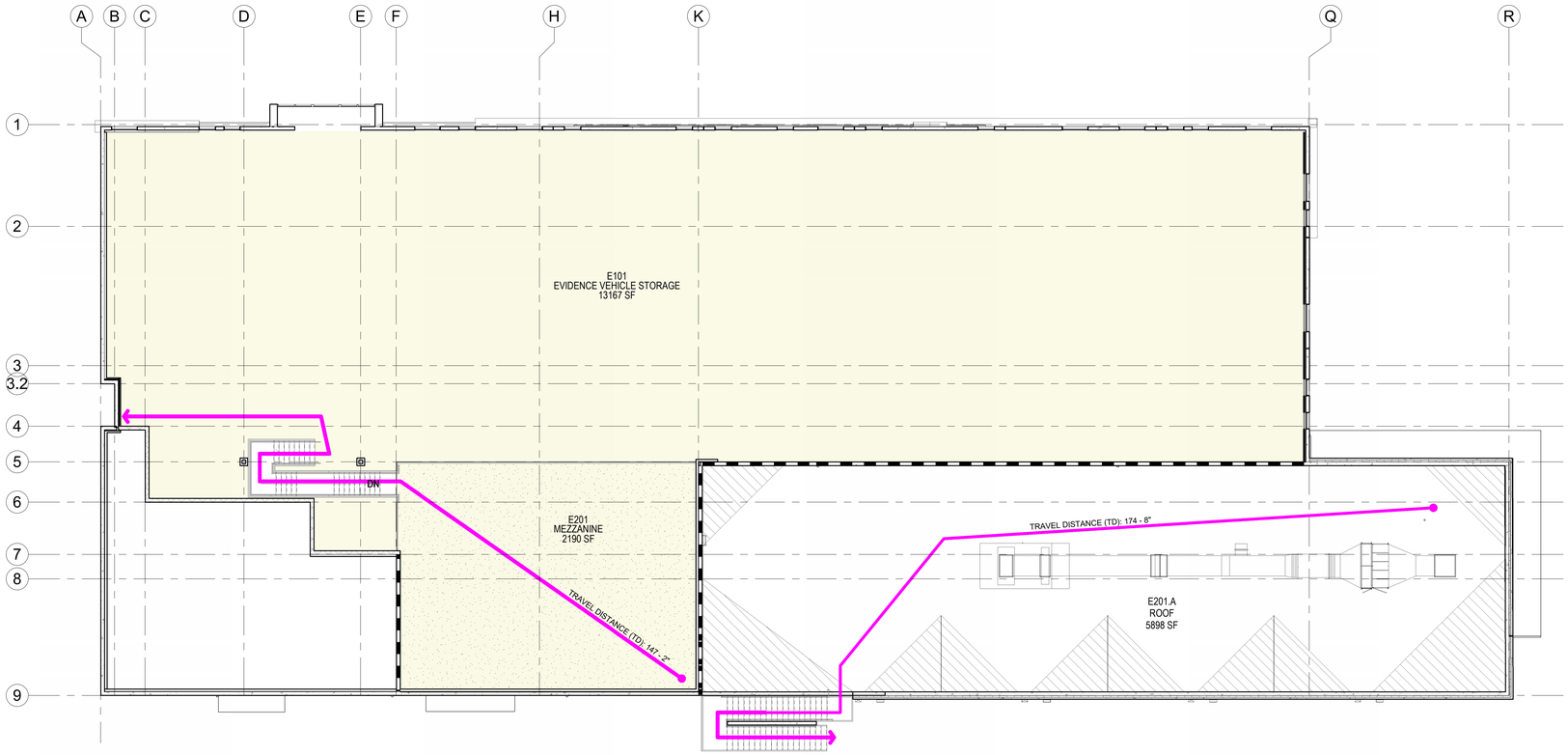
PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

SHEET TITLE
LIFE SAFETY

SHEET NUMBER
LS2.10E

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:30 PM



ROOM FUNCTION LEGEND

- LOW HAZARD STORAGE, (S-2)
- LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)
- SMALL ASSEMBLY, (B, BUSINESS)

MEZZANINE CALCULATION

OVERALL SQUARE FOOTAGE BEING SERVED:	13169 SF
1/3 OF OVERALL SQUARE FOOTAGE:	4340 SF
TOTAL OCCUPIABLE MEZZANINE SQUARE FOOTAGE:	2190 SF

*MEZZANINE DOES NOT EXCEED 1/3 SQUARE FOOTAGE OF SPACE BEING SERVED.

OVERALL FLOOR PLAN, MEZZANINE LIFE SAFETY 3/32" = 1'-0" (1)

LIFE SAFETY INFORMATION

PROJECT SUMMARY

THE PROJECT CONSISTS OF A SINGLE STORY EVIDENCE HOLDING FACILITY WITH A FIRING RANGE TRAINING FACILITY WITH CONFERENCE ROOMS AND SUPPORT SPACES. TOTAL BUILDING FOOTPRINT IS **22,568 GSF.**

EHPA / STORM SHELTER

THIS PROJECT **WILL NOT** BE CONSTRUCTED AS AN ENHANCED HURRICANE PROTECTION AREA (EHPA) OR A STORM SHELTER. IT IS CATEGORIZED AS A CRITICAL EMERGENCY OPERATION PER THE FLORIDA BUILDING CODE, 8TH EDITION UNDER CHAPTER 4, SECTION 423.3 CRITICAL EMERGENCY OPERATIONS, WHICH REQUIRES THE BUILDING TO BE RISK CATEGORY IV.

APPLICABLE CODES

THE APPLICABLE CODES AS REQUIRED BY THE CODE OF ORDINANCE OF THE CITY OF RIVIERA BEACH, FLORIDA (SEPTEMBER 6, 2024) WITHIN PALM BEACH COUNTY. PERTINENT SECTION ARE, BUT NOT LIMITED TO,
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CHAPTER 17 - SECURITY AND FIRE WARNING SYSTEMS
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CHAPTER 20 - UTILITIES
SUBPART B - LAND DEVELOPMENT CODE
CHAPTER 22 - BUILDINGS AND BUILDING REGULATIONS
CHAPTER 25 - FLOOD PLAIN MANAGEMENT
CHAPTER 27 - PLANNING
CHAPTER 28 - SIGNS
CHAPTER 28.5 - STORMWATER CONTROL
CHAPTER 31 - ZONING

APPLICABLE CODES

BUILDING:	FLORIDA BUILDING CODE, BUILDING - 8TH EDITION
FIRE / LIFE SAFETY:	FLORIDA FIRE PREVENTION CODE, 8TH EDITION
PLUMBING:	FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION
MECHANICAL:	FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION
ELECTRICAL:	FLORIDA BUILDING CODE, CHAPTER 27, 8TH EDITION NFPA 70, NATIONAL ELECTRICAL CODE, 2018 EDITION NFPA 72, NATIONAL FIRE ALARM CODE, 2017 EDITION
ACCESSIBILITY:	FLORIDA BUILDING CODE, ACCESSIBILITY, 8TH EDITION

AGENCIES HAVING JURISDICTION

BUILDING:	CITY OF RIVIERA BEACH, FL CODE OF ORDINANCE
FIRE / LIFE SAFETY:	CITY OF RIVIERA BEACH, FL , FIRE DEPARTMENT

CONSTRUCTION TYPE	TYPE II B CONSTRUCTION, FULLY SPRINKLERED
BUILDING HEIGHT (ACTUAL)	32 FT (1 STORY)
ALLOWABLE STORIES	4 (4 STORIES ALLOWABLE (SPRINKLERED) PER FBC TABLE 504.4)
ALLOWABLE HEIGHT	75 FT (75 FT ALLOWABLE (SPRINKLERED) PER FBC TABLE 504.3)
ALLOWABLE BUILDING AREA	92,000 SF PER STORY PER TABLE 506.2, SPRINKLERED SINGLE-STORY
ACTUAL BUILDING AREA	**22,568 GSF (1 STORY /32 FT MAX HEIGHT)**
ACTUAL BUILDING HEIGHT	**32 FT (1 STORIES)**

OCCUPANCY INFORMATION

OCCUPANCY USE / ROOM FUNCTION	FBC (SF)	NFPA (SF)	ALLOWABLE OCCUPANCY
BUSINESS (B)	150 GSF	150 GSF	6
BUSINESS (B), CONCENTRATED	50 GSF	50 GSF	7
BUSINESS (B), SMALL ASSEMBLY	15 GSF	15 GSF	99
BUSINESS (B), STORAGE / MECH.	300 GSF	300 GSF	6
LOW HAZARD STORAGE (S2)	200 GSF	200 GSF	74*
LOW HAZARD STORAGE (S2), SPECIAL FUNCTION*	200 GSF	200 GSF	12
		TOTAL ALLOWABLE BUILDING OCCUPANCY	**204 PERSONS**

OCCUPANCY CLASSIFICATION

FBC, BUILDING, 8TH EDITION, CHAPTER 3 - USE & OCCUPANCY CLASSIFICATION IS A MIXED USE W/ PRIMARY FUNCTION: GROUP B - BUSINESS OCCUPANCY; OTHER OCCUPANCY USE ARE ASSEMBLY (A-3) AND LOW HAZARD USE (S-2) WITH SPECIAL FUNCTION.

OCCUPANCY LOAD FACTORS

FBC, BUILDING, 8TH EDITION, TABLE 1004.5, MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT / NFPA 101 TABLE 7.3.1.2 OCCUPANT LOAD FACTOR.

DOOR EXIT WIDTHS (AS DESIGNED) (NOTE: FACTOR OF 0.2 INCHES ALLOWABLE WHEN BUILDING IS FULLY SPRINKLERED)	EXIT WIDTH REQUIRED	EXIT WIDTH AS DESIGNED
	204 PERSON x 0.2" = 40.8"	206 INCHES

ALLOWABLE MAXIMUM EXIT ACCESS TRAVEL DISTANCE (FBC, TABLE 1017.2 & NFPA 101, 12.2.6.2(1))	BUSINESS, 300 FT W/ SPRINKLER ASSEMBLY, 250 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 250 FT SPRINKLERED
ALLOWABLE EXIT COMMON PATH OF TRAVEL DISTANCE (FBC, TABLE 1006.2.1)	BUSINESS, 100 FT W/ SPRINKLER ASSEMBLY, 75 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 100 FT SPRINKLERED
DEAD END CORRIDOR (FBC, 1020.4, EXCEPTION 2 & NFPA 101, 38.2.5.2.1)	BUSINESS, 50 FT W/ SPRINKLER ASSEMBLY, 20 FT W/ SPRINKLER LOW HAZARD STORAGE (S-2), 50 FT SPRINKLERED
NUMBER OF EXITS REQUIRED, (OCCUPANCY TYPE B)	PER FBC TABLE 1006.2.1 - 2 OR MORE FROM SPACE EXCEEDING 49 OCCUPANTS OR WHEN COMMON PATH OF TRAVEL EXCEEDS 100 FT PER FBC TABLE 1006.3.2 - 2 EXITS REQUIRED PER STORY FOR 1-500 OCCUPANTS
MINIMUM DOOR WIDTH	32 INCHES
MINIMUM CORRIDOR WIDTH	44 INCHES

MINIMUM REQUIRED PLUMBING FIXTURES (FBC, TABLE 403.1, BUSINES OCCUPANCY)

BASED ON 194 OCCUPANTS

	PROVIDED	REQUIRED	RATIO
UNISEX, W.C.	4	4	1:25 FIRST 50 + 1:50 AFTERWARDS
UNISEX, LAVATORIES	4	3	1:40 FIRST 80 + 1:80 AFTERWARDS
DRINKING FOUNTAINS	2	1	1:100 (FBC, 410.3)

DISTANCE TO PUBLIC RESTROOMS (FBC 403.3.3)

1. SHALL BE ON AN ACCESSIBLE ROUTE, NOT BE MORE THAN 1 STORY ABOVE OR BELOW AND SHALL NOT EXCEED 500 FT TRAVEL DISTANCE. EXISTING AND PROPOSED CONDITIONS COMPLY.

DRINKING FOUNTAINS (FBC 410.3 SUBSTITUTION)

1. WHERE DRINKING FOUNTAINS ARE REQUIRED, WATER COOLERS OR BOTTLED WATER DISPENSERS SHALL BE PERMITTED TO BE SUBSTITUTED FOR NOT MORE THAN 50 PERCENT OF THE REQUIRED NUMBER OF DRINKING FOUNTAINS.

FIRE RESISTANCE BY CONSTRUCTION TYPE (FBC, TABLE 601)

PRIMARY STRUCTURAL FRAME	0 HOURS
BEARING WALLS, EXTERIOR	0 HOURS
BEARING WALLS, INTERIOR	0 HOURS
NONBEARING WALLS, EXTERIOR	0 HOURS
NONBEARING WALLS, EXTERIOR	0 HOURS (PER TABLE 705.5, $10 \leq X \leq 30$)
FLOOR CONSTRUCTION	0 HOURS (NOT APPLICABLE)
ROOF CONSTRUCTION	0 HOURS
CORRIDORS	0 HOURS
EXIT STAIRS	0 HOURS (NOT APPLICABLE)
FLOOR OPENINGS / SHAFTS	0 HOURS (NOT APPLICABLE)

OPENING PROTECTIVES IN FIRE RESISTANT CONSTRUCTION

CONSTRUCTION TYPE	FIRE RESISTANCE RATING
1-HOUR FIRE BARRIER	3/4 HOUR
2-HOUR FIRE BARRIER	1-1/2 HOUR
1-HOUR EXIT ENCLOSURE	1 HOUR
SMOKE PARTITION	1/3 HOUR

SEPARATION FROM HAZARDS

ROOM / AREA	FBC	NFPA
BUSINESS (B) / ASSEMBLY (A-3)	1 HR	1 HR
--	--	--

PER FBC, TABEL 508.4, REQUIRED SEPARATION OF OCCUPANCIES (HOURS)
PER NFPA 1, FIRE CODE, FLORIDA EDITION, TABLE 6.1.14.4.1(b)

(FS) = FULL SPRINKLERED, AUTOMATIC

SEPARATION FROM HAZARDS

ROOM / AREA	FIRE RESISTANCE RATING	STANDARD
BOILER / FURNACE ROOM	SMOKE PARTITION W/ SPRINKLER	NFPA 101
JANITOR CLOSETS	SMOKE PARTITION W/ SPRINKLER	NFPA 101
STORAGE ROOMS	SMOKE PARTITION W/ SPRINKLER	NFPA 101

INTERIOR FINISHES (FBC, TABLE 803.11)

ROOM & FINISH TYPE	FIRE RESISTANCE RATING
EXITS	CLASS B
EXIT ACCESS CORRIDORS	CLASS B
OTHER THAN EXITS	CLASS C
LOW HEIGHT PARTITIONS	CLASS C[1]
INTERIOR FLOOR FINISHES	PER FBC, SECTION 804
GENERAL ASSEMBLY AREAS (>300)	N/A
GENERAL ASSEMBLY AREAS (<300)	N/A

NOTES:
1. PARTITIONS NOT EXCEEDING 60 INCHES AND IN LOCATIONS OTHER THAN EXITS

LIFE SAFETY SYMBOLS

- NON-RATED PARTITION
- SMOKE PARTITION
- 1 HOUR FIRE BARRIER
- TRAVEL DISTANCE TO EXIT
- 36" WIDTH OF EGRESS UNITS (IN)
- FEC FIRE EXTINGUISHER, CABINET
- FE FIRE EXTINGUISHER, WALL MOUNTED
- WALL SPEAKER / STROBE
- SPEAKER
- CEILING SPEAKER STROBE
- FIRE STROBE ONLY
- WALL MOUNTED EXIT LIGHT
- CEILING MOUNTED EXIT LIGHT
- CEILING MOUNTED SMOKE DETECTOR
- P MANUAL PULL STATION

NOTE: NOT ALL ITEMS IN THIS LEGEND MAY BE USED.

LIFE SAFETY

ROOM NO.	ROOM NAME	NSF	OCCUPANCY USE / FUNCTION	OCCUPANCY FACTOR	ALLOWABLE OCCUPANCY
BUSINESS AREA, (B, CONCENTRATED)					
E114	CONTROL	106 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	2
E121	CONTROL	124 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	2
E120	CLEAN / REPAIR	129 SF	BUSINESS AREA, (B, CONCENTRATED)	50 SF	3
		358 SF			7
BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)					
E109	FLEX STORAGE	296 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E110	ELECT.	112 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E108	SWAT STOR.	149 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E118	JAN.	48 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E112	IT	98 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
E113	AMMO	142 SF	BUSINESS AREAS, (B, ACCESSORY STORAGE / MECHANICAL USE ROOMS)	300 SF	1
		845 SF			6
BUSINESS AREAS, (B. BUSINESS)					
E107	RR	51 SF	BUSINESS AREAS, (B. BUSINESS)	15 SF	3
E104	RR	74 SF	BUSINESS AREAS, (B. BUSINESS)	200 SF	1
E116	RR	50 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	1
E117	RR	51 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	1
E111	CIRCULATION	344 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	0
E119	VEST	62 SF	BUSINESS AREAS, (B. BUSINESS)	150 SF	0
		633 SF			6
LOW HAZARD STORAGE, (S-2)					
E105	SWAT VEHICLE	595 SF	LOW HAZARD STORAGE, (S-2)	200 SF	3
E102	EV PROCESS	887 SF	LOW HAZARD STORAGE, (S-2)	200 SF	4
E101	EVIDENCE VEHICLE STORAGE	13167 SF	LOW HAZARD STORAGE, (S-2)	200 SF	66
E103	DRYING ROOM	88 SF	LOW HAZARD STORAGE, (S-2)	200 SF	1
		14737 SF			74
LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)					
E122	FIRING RANGE + SIMULATOR ROOM	4517 SF	LOW HAZARD STORAGE, (S-2, SPECIAL FUNCTION)	200 SF	12
		4517 SF			12
SMALL ASSEMBLY, (B, BUSINESS)					
E106	SWAT	999 SF	SMALL ASSEMBLY, (B, BUSINESS)	15 SF	67
E115	SIMULATOR	477 SF	SMALL ASSEMBLY, (B, BUSINESS)	15 SF	32
		1476 SF			99
		22566 SF			204

PLAN NORTH

0 5' 10' 20' 30' 40'
3/32" = 1'-0" GRAPHIC SCALE

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REGISTRATION

STATE OF FLORIDA — JENNIFER LOHRUM — AR 96288 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
LIFE SAFETY - MEZZANINE

SHEET NUMBER
LS2.15E

FILE NAME: Autodesk Docs// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:33 PM

THROUGH-PENETRATION FIRESTOP SYSTEM SCHEDULE

FIRESTOP SYSTEMS ARE LISTED USING THE ALPHA-ALPHA-NUMERIC IDENTIFICATION SYSTEM
PUBLISHED IN UL'S FIRE RESISTANT DIRECTORY, VOL. 2

	CONSTRUCTION							
	FLOOR PENETRATION SYSTEM (FIRST ALPHA COMPONENT = C or F)		WALL PENETRATION SYSTEM (FIRST ALPHA COMPONENT = C or W)					
	CONCRETE FLOORS WITH A MIN. THICKNESS LESS THAN OR EQUAL TO 5"	CONCRETE FLOORS WITH A MIN. THICKNESS GREATER THAN 5"	CONCRETE OR MASONRY WALLS		FRAMED GYPSUM WALLS		FRAMED GYPSUM SHAFT WALLS	
TYPE OF PENETRANT	1 HOUR MIN.	2 HOUR MIN.	1 HOUR	2 HOUR	1 HOUR	2 HOUR	1 HOUR	2 HOUR
NO PENETRATING ITEMS	F-A-0000 -0999 or C-AJ-0000 -0999	C-BJ-0000 -0999 or C-AJ-0000 -0999	W-J-0000 -0999 or C-AJ-0000 -0999	W-J-0000 -0999 or C-AJ-0000 -0999	W-L-0030	W-L-0030	N/A	N/A
METALLIC PIPE, CONDUIT OR TUBING	F-A-1000 -1999 or C-AJ-1000 -1999	F-B-1000 -1999 or C-BJ-1000 -1999	W-J-1000 -1999 or C-AJ-1000 -1999	W-J-1000 -1999 or C-AJ-1000 -1999	W-L-1000 -1999	W-L-1000 -1999	W-L-1000 -1999	W-L-1000 -1999
NONMETALLIC PIPE OR TUBING	F-A-2000 -2999 or C-AJ-2000 -2999	F-B-2000 -2999 or C-BJ-2000 -2999	W-J-2000 -2999 or C-AJ-2000 -2999	W-J-2000 -2999 or C-AJ-2000 -2999	W-L-2000 -2999	W-L-2000 -2999	W-L-2000 -2999	W-L-2000 -2999
COMMUNICATIONS CABLES	F-A3000 -3999 or C-BJ-3000 -3999	F-A3000 -3999 or C-BJ-3000 -3999	W-J-3000 -3999 or C-AJ-3000 -3999	W-J-3000 -3999 or C-AJ-3000 -3999	W-L-3000 -3999	W-L-3000 -3999	W-L-3000 -3999	W-L-3000 -3999
CABLE TRAYS WITH COMMUNICATIONS CABLES	F-A4000 -4999 or C-BJ-4000 -4999	F-A4000 -4999 or C-BJ-4000 -4999	W-J-4000 -4999 or C-AJ-4000 -4999	W-J-4000 -4999 or C-AJ-4000 -4999	W-L-4000 -4999	W-L-4000 -4999	N/A	N/A
INSULATED PIPES	F-A-5000 -5999 or C-AJ-5000 -5999	F-A-5000 -5999 or C-AJ-5000 -5999	W-J-5000 -5999 or C-AJ-5000 -5999	W-J-5000 -5999 or C-AJ-5000 -5999	W-L-5000 -5999	W-L-5000 -5999	W-L-5000 -5999	W-L-5000 -5999
MISCELLANEOUS MECHANICAL PENETRANTS	F-A-7000 -7999 or C-AJ-7000 -7999	F-A-7000 -7999 or C-AJ-7000 -7999	W-J-7000 -7999 or C-AJ-7000 -7999	W-J-7000 -7999 or C-AJ-7000 -7999	W-L-7000 -7999	W-L-7000 -7999	W-L-7000 -7999	W-L-7000 -7999
GROUPING OF PENETRATIONS	F-A-8000 -8999 or C-AJ-8000 -8999	F-A-8000 -8999 or C-AJ-8000 -8999	W-J-8000 -8999 or C-AJ-8000 -8999	W-J-8000 -8999 or C-AJ-8000 -8999	W-L-8000 -8999	W-L-8000 -8999	N/A	N/A

FOR EACH LOCATION WHERE A FIRE-RESISTANCE-RATED FLOOR OR WALL ASSEMBLY IS PENETRATED, PROVIDE A UL-LISTED THROUGH-PENETRATION FIRESTOP SYSTEM SELECTED FROM THE APPLICABLE UL NUMBER RANGE LISTED ABOVE THAT COMPLIES WITH SECTION --078400 -FIRESTOPPING-- AND IS SUITABLE FOR THE PENETRATION CONDITIONS INDICATED FOR THE PROJECT.

SYSTEM DESIGNATIONS

THE FIRST ALPHA COMPONENT IS ONE OF THREE LETTERS REPRESENTING THE TYPE OF PENETRATION:

LETTER CONSTRUCTION PENETRATED

F FLOOR PENETRATIONS

W WALL PENETRATIONS

C EITHER FLOOR OR WALL PENETRATIONS

THE SECOND ALPHA COMPONENT DESCRIBES THE TYPE OF CONSTRUCTION BEING PENETRATED AND CAN INCLUDE A SINGLE LETTER OR DUAL LETTERS:

LETTER DESCRIPTION

A CONCRETE FLOORS WITH A MINIMUM THICKNESS LESS THAN OR EQUAL TO 5 INCHES.

B CONCRETE FLOORS WITH A MINIMUM THICKNESS OF MORE THAN 5 INCHES.

C FRAMED FLOORS

D STEEL DECKS IN MARINE VESSELS

E FLOOR/CEILING ASSEMBLIES CONSISTING OFCONCRETE WITH MEMBRANE PROTECTION

F THRU INOT USED NOW

J CONCRETE OR MASONRY WALLS WITH A MINIMUM THICKNESS LESS THAN OR EQUAL TO 8 INCHES

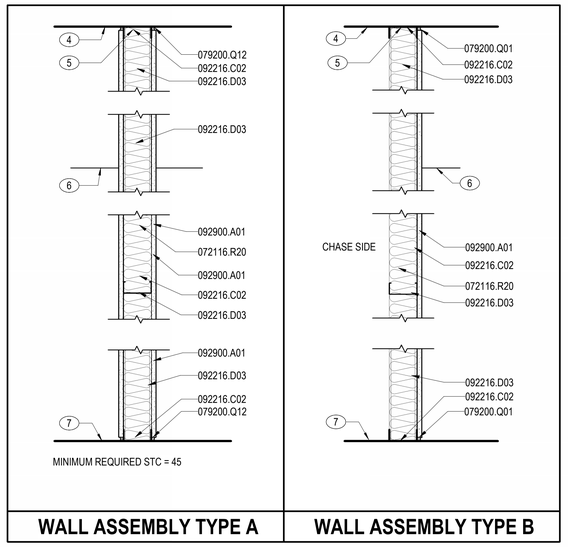
K CONCRETE OR MASONRY WALLS WITH A MINIMUM THICKNESS OF MORE THAN 8 INCHES

L FRAMED WALLS

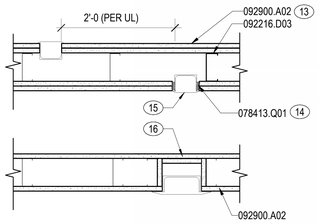
MBULKHEADS IN MARINE VESSELS

KEYNOTES:

1. FIRE RESISTANT OR SMOKE RATED FLOOR CONSTRUCTION.
2. FIRE RESISTANT OR SMOKE RATED WALL CONSTRUCTION.
3. PENETRANT - REFER TO SCHEDULE FOR TYPE.
4. THROUGH PENETRATION FIRE STOP SYSTEM - PROVIDE SYSTEM IN ACCORDANCE WITH FIRESTOP SCHEDULE.



WALL ASSEMBLY TYPE A | WALL ASSEMBLY TYPE B



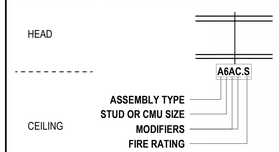
PENETRATION DETAIL

NOT TO SCALE

ELECTRICAL JUNCTION BOXES IN RATED WALLS
TOP: ADJACENT ELECTRICAL BOXES
BOTTOM: SHALLOW FIVE SIDED BOX.

4 1 1/2" = 1'-0" **FIRE PENETRATION AT ELECTRICAL BOXES**

PARTITION TYPE NAMING CONVENTION



METAL STUD AND CMU SIZES
1 = 1 1/2" FURRING OR 1 5/8" STUD
2 = 2 1/2" STUD
3 = 3 5/8" STUD
4 = 4" STUD OR 4" CMU
6 = 6" STUD OR 6" CMU
7 = 7/8" FURRING
8 = 8" STUD OR 8" CMU

PARTITION MODIFIERS
A = SOUND ATTENUATION BATTS NOT REQUIRED

B = GLASS MAT FACED GYPSUM BOARD (092900.B01) ONE SIDE IN LIEU OF REGULAR GYPSUM BOARD

C = GLASS MAT TILE BACKER BOARD (092900.B04) ONE SIDE WHERE TILE IS SCHEDULED IN LIEU OF REGULAR GYPSUM BOARD

D = GLASS MAT FACED GYPSUM BOARD (092900.B01) ONE SIDE IN LIEU OF REGULAR GYPSUM BOARD, GLASS MAT TILE BACKER BOARD (092900.B04) OTHER SIDE WHERE TILE IS SCHEDULED IN LIEU OF REGULAR GYPSUM BOARD

E = GLASS MAT TILE BACKER BOARD (092900.B04) BOTH SIDES WHERE TILE IS SCHEDULED IN LIEU OF REGULAR GYPSUM BOARD

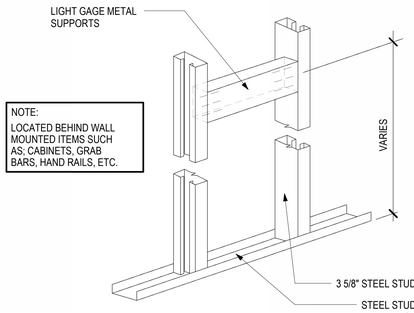
F= GLASS MAT FACED GYPSUM BOARD (092900.B01) BOTH SIDES IN LIEU OF REGULAR GYPSUM BOARD

G = ACOUSTICALLY ENHANCED GLASS MAT FACED GYPSUM BOARD (092900.C08) ONE SIDE IN LIEU OF ACOUSTICALLY ENHANCED GYPSUM BOARD

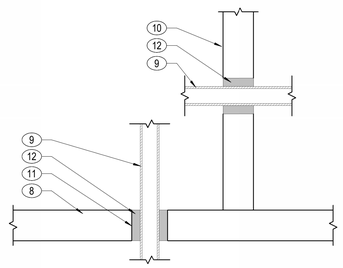
H= GYPSUM BD TO STOP 6" ABOVE CEILING.

J= WALL ASSEMBLY TO STOP 6" ABOVE CEILING. PROVIDE BRACING AS REQUIRED.

FIRE RATING
S = SMOKE RESISTIVE PARTITION
B = SMOKE BARRIER
1 = 1 HR FIRE BARRIER
2 = 2 HR FIRE BARRIER

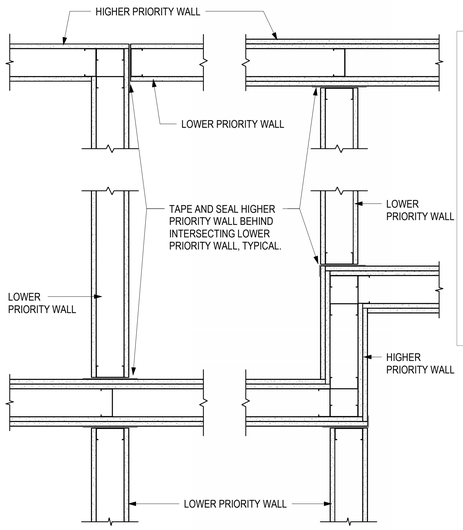


7 1/2" = 1'-0" **WALL BLOCKING DETAIL_TYP**



NOTE: SEE THROUGH-PENETRATION FIRESTOP SYSTEM SCHEDULE FOR SPECIFIC UL DESIGNATION AND DETAIL

6 1 1/2" = 1'-0" **THROUGH-PENETRATION FIRESTOP SYSTEM KEY**



WALL PRIORITY LEGEND

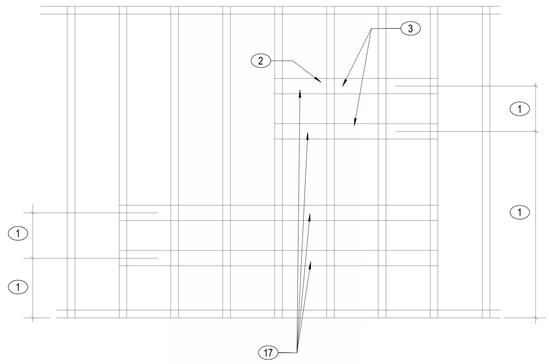
HIGHEST PRIORITY

1. FOUR HOUR RATED SMOKE WALL
2. FOUR HOUR RATED WALL
3. TWO HOUR RATED SMOKE WALL
4. TWO HOUR RATED SHAFT WALL
5. TWO HOUR RATED WALL
6. ONE HOUR RATED SMOKE WALL
7. ONE HOUR RATED HAZARDOUS WALL
8. ONE HOUR RATED WALL OR SHAFT
9. NON-RATED SMOKE TIGHT WALL AT HAZARDOUS AREAS
10. NON-RATED SMOKE TIGHT CORRIDOR WALL
11. NON-RATED WALL TO DECK
12. NON-RATED WALL TO 6" MIN. ABOVE CEILING
13. NON-RATED WALL CLOSING TO CEILING

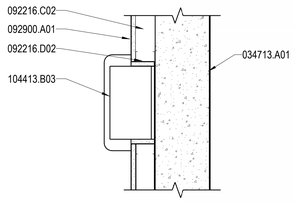
LOWEST PRIORITY

NOTE: SEE PARTITION TYPES FOR COMPONENTS OF WALLS, NUMBER OF LAYERS OF GYPSUM BOARD, TYPE OF GYPSUM BOARD, INSULATION, ETC.

5 1 1/2" = 1'-0" **WALL PRIORITIES**

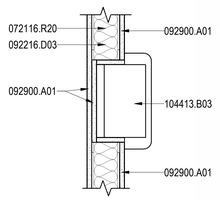


3 3/4" = 1'-0" **CASEWORK BACKING DETAIL**



NOTE: VERIFY CABINET OPENING SIZE AND DEPTH WITH APPLICABLE PRODUCT.

2 1 1/2" = 1'-0" **FIRE EXTINGUISHER CABINET**



NOTE: VERIFY CABINET OPENING SIZE AND DEPTH WITH APPLICABLE PRODUCT.

1 1 1/2" = 1'-0" **FIRE EXTINGUISHER CABINET**

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B EXTEND FIRE RATED WALL CONSTRUCTION BEHIND RECESSED OR BUILT-IN EQUIPMENT SUCH AS FIRE EXTINGUISHER CABINETS (FEC), ELECTRICAL WATER COOLERS (EWC), ELECTRIC PANELS, ETC.

C PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK AND OF ALL FLOOR MOUNTED OR SUSPENDED MECHANICAL OR ELECTRICAL EQUIPMENT. REFER TO DETAIL 14/A0.11E.

D WHERE HVAC OR OTHER MECHANICAL, ELECTRICAL OR PLUMBING ITEMS PENETRATE PARTITIONS, STUDS SHALL BE BRACED AND FRAMED TO STRUCTURE AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. ALL PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED TO PROVIDE FIRE, SMOKE, AND /OR ACOUSTICAL ISOLATION OF SPACES WITH APPROPRIATE FIRESTOP MATERIAL. REFER TO FIRE RATED PENETRATION DETAILS, SHEETS A0.10E AND A0.11E.

E THERE SHALL BE NO BACK-TO-BACK ELECTRICAL, TELEPHONE, OR OTHER OUTLETS, EXCEPT WHERE SPECIFICALLY INDICATED. AT ACOUSTICALLY SENSITIVE AREAS, SUCH AS CONFERENCE ROOMS, OFFSET OUTLETS IN OPPOSITE SIDES OF THE WALL BY AT LEAST TWO STUD CAVITIES.

F WHERE "SEALANT" IS INDICATED ON WALL TYPES, PROVIDE ACOUSTICAL (SOUND) SEALANT AT NON-RATED WALLS AND FIRE-RATED SEALANT AT RATED WALLS AS REQUIRED BY FIRE RATING TEST NUMBER.

G FOR RATED AND NON-RATED WALL PARTITION SLIP CONNECTION TO FLOOR OR ROOF DECK ABOVE SEE DETAILS ON SHEET A0.11E

H REFER TO STRUCTURAL NOTES FOR TYPICAL CMU WALL REINFORCEMENT AND LINTEL SIZES.

I REFER TO FINISH SCHEDULE SHEETS AF2.10E FOR WALL BASE TYPE, TILE TYPE, TILE HEIGHT AND OTHER MATERIALS APPLIED TO WALLS.

J PROVIDE GLASS MAT FACED GYPSUM BOARD TILE BACKER UNIT AT ALL WALLS THAT RECEIVE TILE.

K REFER TO UL ASSEMBLY LISTED FOR REQUIREMENTS NECESSARY TO ACHIEVE FIRE RATING.

L PROVIDE DRYWALL CONTROL JOINTS AT 30' MAX. JOINTS TO BE LOCATED AT NEAREST DOOR JAMB WHERE POSSIBLE.

M REFER TO SHEET A0.10E FOR TYPICAL RATED WALL PENETRATION DETAILS.

N PROVIDE GLASS MAT FACED GYPSUM BOARD AT THE FOLLOWING LOCATIONS UNO: WALLS AND CEILINGS OF TOILET ROOMS, JANITORS' CLOSETS, WITHIN 48 INCHES OF SINKS AND DRINKING FOUNTAINS, MECHANICAL ROOMS AND INTERIOR CLADDING OF EXTERIOR WALLS.

O FOR RATED AND NON-RATED WALL PARTITION CONNECTION TO FLOOR OR ROOF DECK ABOVE SEE DETAILS ON SHEET A0.11E

SHEET NOTES

1 LOCATE HORIZONTAL SUPPORT MEMBERS WHERE RECOMMENDED BY MANUFACTURER.
2 NOTCH BACK THE FLANGE LEGS AROUND EACH STUD SO THAT THE CHANNEL WEB CAN SIT FLUSH AGAINST THE METAL STUD FACE.
3 UPPER WALL CABINET SUPPORTS.
4 BOTTOM OF DECK.
5 SLIP TRACK, SEE STRUCTURAL FOR ADDITIONAL REQUIREMENTS.
6 CEILING WHERE SCHEDULED ON FINISH SCHEDULE.
7 TOP OF SLAB.
8 FIRE RESISTANT OR SMOKE RATED FLOOR CONSTRUCTION.
9 PENETRANT. REFER TO THROUGHT-PENETRATION FIRESTOP SYSTEM SCHEDULE FOR TYPE.
10 FIRE RESISTANT RATED WALL CONSTRUCTION.
11 PROVIDE PIPE SLEEVE AT ALL FLOOR PENETRATIONS, WHERE AVAILABLE AS AN OPTION IN THE TESTED ASSEMBLY.
12 THROUGH PENETRATION FIRE STOP SYSTEM. PROVIDE SYSTEM IN ACCORDANCE WITH FIRE STOPPING SCHEDULE.
13 1HR OR 2HR FIRE RATED PARTITION IN ACCORDANCE WITH UL.
14 MAXIMUM 16 SQ. IN. MAXIMUM OPENINGS 100 SQ. IN/ 100SF.
15 TELEPHONE OR ELECTRICAL BOX.
16 LAMINATED BACK PIECE TO WALLBOARD.
17 PROVIDE HORIZONTAL CONTINUOUS METAL SUPPORT BRACING ACROSS METAL WALL STUDS BETWEEN AND FLUSH WITH FACE OF STUDS AT LOCATIONS OF ALL WALL HUNG CASEWORK.

MATERIAL LEGEND

034713.A01	TILT-UP CONCRETE WALL PANEL
072116.R20	SOUND ATTENUATION BATTS
078413.Q01	FIRESTOPPING SEALANT
079200.Q01	JOINT SEALANT
079200.Q12	ACOUSTICAL SEALANT
092216.C02	METAL STUD RUNNER TRACK
092216.D02	METAL STUD 2 1/2"
092216.D03	METAL STUD 3 5/8"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.A02	GYPSUM BOARD, FIRE RESISTANT 5/8"
104413.B03	FIRE EXTINGUISHER CABINET, SEMI-RECESSED

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

0 4" 1' 2' 3' 4' 5'
3/4" = 1'-0" GRAPHIC SCALE

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STATE OF FLORIDA · LONNIE LORIUM · AR 96289 · REGISTERED ARCHITECT

DRAWING HISTORY

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CONSULTANT

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90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

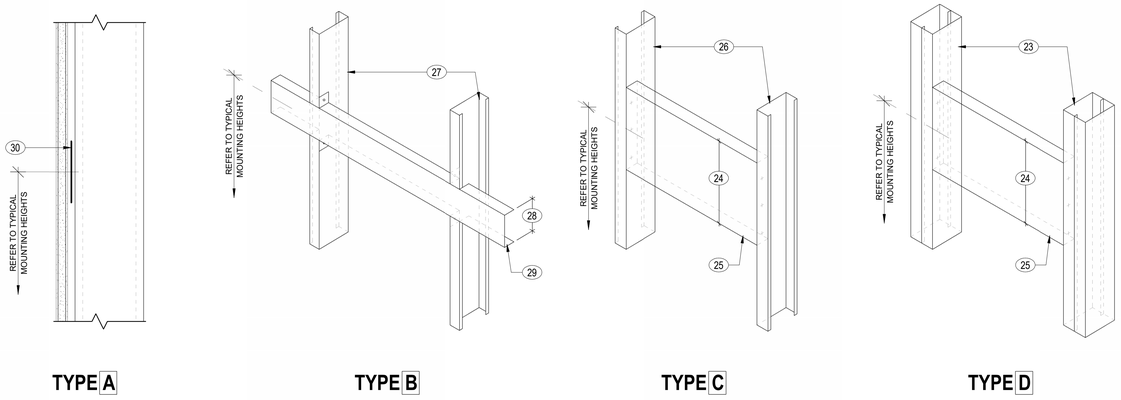
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
PARTITION TYPES & DETAILS

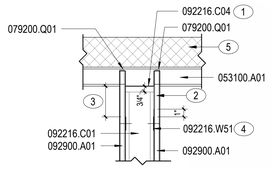
SHEET NUMBER
A0.10E

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:36 PM

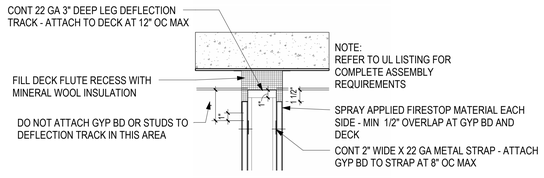


TYPE A TYPE B TYPE C TYPE D

14 3" = 1'-0" ACCESSORY/EQUIPMENT MOUNTING DETAILS

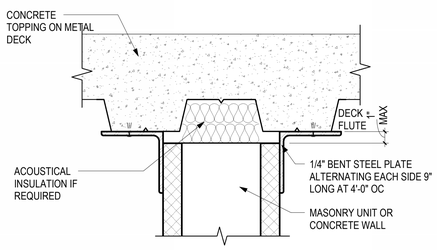


FLUTED STEEL DECK/CONCRETE FLOOR OR ROOF PREPENDICULAR OF DIAGONAL TO FLUTES



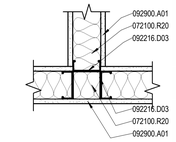
FLUTED STEEL DECK/CONCRETE FLOOR OR ROOF PERPENDICULAR OR DIAGONAL TO FLUTES - UL-HW-D-0107

8 3" = 1'-0" RATED PARTITION INTERSECTION

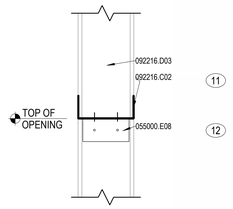


MASONRY PARTITION WALL - NON RATED

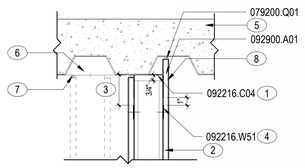
5 1 1/2" = 1'-0" INT. PLAN DETAIL



4 3" = 1'-0" SECTION DETAIL

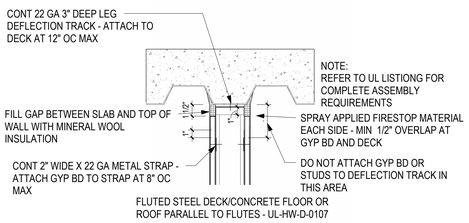


13 1 1/2" = 1'-0" NON-RATED OR SMOKE RESISTANT



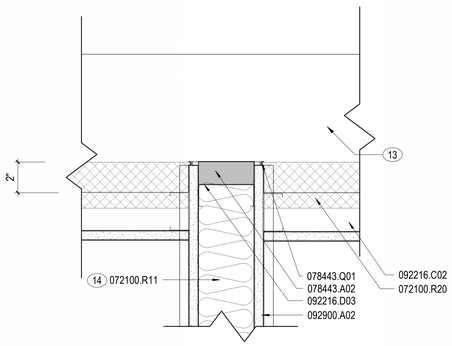
FLUTED STEEL DECK/CONCRETE FLOOR OR ROOF PARALLEL TO FLUTES

10 1 1/2" = 1'-0" 1 HR PARTITION HEAD

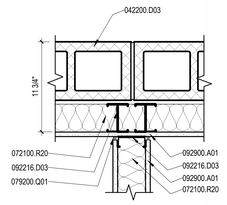


FLUTED STEEL DECK/CONCRETE FLOOR OR ROOF PARALLEL TO FLUTES - UL-HW-D-0107

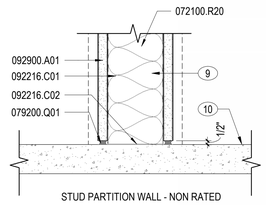
7 3" = 1'-0" HEAD OF WALL DETAIL



3 3" = 1'-0" TYP. SEALANT JOINT

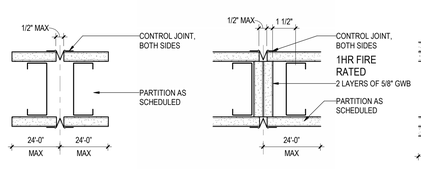


12 1 1/2" = 1'-0" NON-RATED OR SMOKE RESISTANT



STUD PARTITION WALL - NON RATED

9 1 1/2" = 1'-0" 1 HR PARTITION HEAD

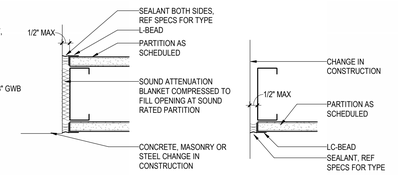


CONTROL JOINT IN GWB PARTITION

CONTROL JOINT IN 1 HR FIRE RATED PARTITION

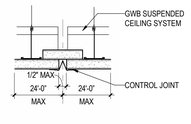
CONTROL JOINT IN 2 HR FIRE RATED PARTITION

6 3" = 1'-0" RATED PARTITION AT EXT. WALL



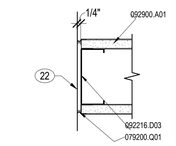
CONTROL JOINT AT PARTITION INTERSECTION OR CHANGE IN CONSTRUCTION

CONTROL JOINT IN PARTITION AT NON-EXPOSED EDGE



CONTROL JOINT IN GYPSUM BOARD CEILING

2 1 1/2" = 1'-0" INT. PLAN DETAIL



ADDITIONAL NOTES:

1. BUILDING CODE REQUIRES THAT "SMOKE PARTITIONS" BE SEALED TO STRUCTURE AS INDICATED TO SUCCESSFULLY "LIMIT THE PASSAGE OF SMOKE".
2. CONDITIONS INDICATED TO SHOW DESIGN INTENT, AND NOT INTENDED TO BE PROPRIETARY. CONTRACTOR MAY EMPLOY SIMILAR UL-APPROVED CONTROL JOINTS DESIGNS THAT ARE APPROPRIATE FOR THE SPECIFIC CONDITION. JOINTS TO BE SIZED TO ACCOMMODATE MOVEMENT CAPABILITIES OF FIRESTOP ASSEMBLY.

11 3" = 1'-0" PARTITION SILL DETAIL

1 3" = 1'-0" GYPSUM WALLBOARD CONTROL JOINT DETAILS

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B EXTEND FIRE RATED WALL CONSTRUCTION BEHIND RECESSED OR BUILT-IN EQUIPMENT SUCH AS FIRE EXTINGUISHER CABINETS (FEC), ELECTRICAL WATER COOLERS (EWC), ELECTRIC PANELS, ETC.

C PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK AND OF ALL FLOOR MOUNTED OR SUSPENDED MECHANICAL OR ELECTRICAL EQUIPMENT. REFER TO DETAIL 14/A0.11E.

D WHERE HVAC OR OTHER MECHANICAL, ELECTRICAL OR PLUMBING ITEMS PENETRATE PARTITIONS, STUDS SHALL BE BRACED AND FRAMED TO STRUCTURE AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. ALL PENETRATIONS THROUGH RATED WALLS SHALL BE SEALED TO PROVIDE FIRE, SMOKE, AND /OR ACOUSTICAL ISOLATION OF SPACES WITH APPROPRIATE FIRESTOP MATERIAL. REFER TO FIRE RATED PENETRATION DETAILS, SHEETS A0.10E AND A0.11E.

E THERE SHALL BE NO BACK-TO-BACK ELECTRICAL, TELEPHONE, OR OTHER OUTLETS, EXCEPT WHERE SPECIFICALLY INDICATED. AT ACOUSTICALLY SENSITIVE AREAS, SUCH AS CONFERENCE ROOMS, OFFSET OUTLETS IN OPPOSITE SIDES OF THE WALL BY AT LEAST TWO STUD CAVITIES.

F WHERE "SEALANT" IS INDICATED ON WALL TYPES, PROVIDE ACOUSTICAL (SOUND) SEALANT AT NON-RATED WALLS AND FIRE-RATED SEALANT AT RATED WALLS AS REQUIRED BY FIRE RATING TEST NUMBER.

G FOR RATED AND NON-RATED WALL PARTITION SLIP CONNECTION TO FLOOR OR ROOF DECK ABOVE SEE DETAILS ON SHEET A0.11E

H REFER TO STRUCTURAL NOTES FOR TYPICAL CMU WALL REINFORCEMENT AND LINTEL SIZES.

I REFER TO FINISH SCHEDULE SHEETS AF2.10E FOR WALL BASE TYPE, TILE TYPE, TILE HEIGHT AND OTHER MATERIALS APPLIED TO WALLS.

J PROVIDE GLASS MAT FACED GYPSUM BOARD TILE BACKER UNIT AT ALL WALLS THAT RECEIVE TILE.

K REFER TO UL ASSEMBLY LISTED FOR REQUIREMENTS NECESSARY TO ACHIEVE FIRE RATING.

L PROVIDE DRYWALL CONTROL JOINTS AT 30' MAX. JOINTS TO BE LOCATED AT NEAREST DOOR JAMB WHERE POSSIBLE.

M REFER TO SHEET A0.10E FOR TYPICAL RATED WALL PENETRATION DETAILS.

N PROVIDE GLASS MAT FACED GYPSUM BOARD AT THE FOLLOWING LOCATIONS UNO: WALLS AND CEILINGS OF TOILET ROOMS, JANITORS' CLOSETS, WITHIN 48 INCHES OF SINKS AND DRINKING FOUNTAINS, MECHANICAL ROOMS AND INTERIOR CLADDING OF EXTERIOR WALLS.

O FOR RATED AND NON-RATED WALL PARTITION CONNECTION TO FLOOR OR ROOF DECK ABOVE SEE DETAILS ON SHEET A0.11E

SHEET NOTES

1 CONT 22 GA 3" DEEP LEG DEFLECTION TRACK ATTACH TO DECK AT 12" OC MAX
2 EXTEND AT MINIMUM ONE LAYER UP INTO FLUTE RECESS AND SEAL.
3 DO NOT ATTACH GYP BD OR STUDS TO DEFLECTION TRACK IN THIS AREA
4 CONT 2" WIDE X 22 GA MTL STRAP FOR TOP ATTACHMENT OF GYPSUM BOARD
5 CONCRETE LAYER OR ROOF SYSTEM.
6 WHEN PARTITION IS ALIGNED AT DECK FLUTE RECESS - PROVIDE A 6" X 10" X 22 GA MTL PLATE AT DECK FLUTE RECESS THAT IS CONTIGUOUS WITH PARTITION - ATTACH MTL PLATE TO DECK WITH POWDER DRIVEN FASTENERS AT SAME SPACING REQUIRED FOR PARTITION TOP TRACK.
7 SEAL ONE SIDE OF PARTITION AGAINST PASSAGE OF SMOKE
8 WHERE GYP BD IS CONCURRENT WITH DECK FLUTE RECESS EXTEND UP INTO RECESS AS SHOWN
9 PARTITION AS INDICATED.
10 FINISH FLOOR.
11 20 GA MTL TRACK
12 CLIP ANGLE - 20 GA X 1 1/2" X 1 1/2" X 3" FOR 3 5/8" STUDS AND 5" FOR 6" STUDS EACH SIDE
13 EXTERIOR WALL SYSTEM.
14 2 LAYERS ON BOTH SIDES AT 2HR RATED PARTITIONS.
15 DOOR LOCATION.
16 HOLLOW METAL FRAME.
17 JAMB STUDS.
18 LOWER PRIORITY PARTITION.
19 TAPE AND JOINT COMPOUND.
20 HIGHER PRIORITY PARTITION.
21 PARTITION TYPE AS SCHEDULED
22 LINE OF PARTITION.
23 MIN 20 GA MTL DOUBLE STUDS AT 16" OC TO ALLOW MOUNTING PLATE ATTACHMENT.
24 8" MIN DEEPER IF REQUIRED.
25 14 GA STL RUNNER TRACK-CLIP FLANGES AND FOLD WEB TO FORM ATTACHMENT FLANGE.
26 MIN 20 GA MTL STUDS FACING OPPOSITE DIRECTIONS TO ALLOW MOUNTING PLATE ATTACHMENT.
27 WALL STUDS.
28 3 5/8" MIN, DEEPER IF REQUIRED.
29 20 GA MTL RUNNER TRACK-CLIP FLANGES TO FIT OVER STUDS.
30 CONT 20 GA 4" WIDE MTL BACKING PLATE.

MATERIAL NOTES

042200.D03	CMU 8"
053100.A01	STEEL DECK
055000.E08	ALUMINUM CLIP ANGLE
072100.R11	BLANKET INSULATION, FACED
072100.R20	SOUND ATTENUATION BATTS
078443.A02	FIRESAFING SYSTEM
078443.Q01	FIRE STOPPING SEALANT
079200.Q01	JOINT SEALANT
092216.C01	METAL STUD
092216.C02	METAL STUD RUNNER TRACK
092216.C04	DEFLECTION/FIRESTOP TRACK
092216.D03	METAL STUD 3 5/8"
092216.W51	FLAT HANGER STRAP
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.A02	GYPSUM BOARD, FIRE RESISTANT 5/8"

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL, Inc.
791 Park of Commerce Blvd.
Suite 400
Boca Raton, FL 33487
T 561 988 4002
www.pgal.com

CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — LYNNE LONDRUM — AR 99289 — REGISTERED ARCHITECT

DRAWING HISTORY

No	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

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FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:41 PM

UL DESIGN NO. U419

Design No. U419
BXUV.U419
Fire Resistance Ratings - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

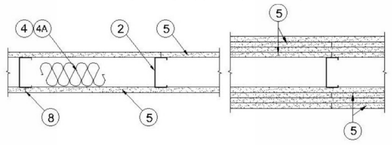
Fire Resistance Ratings - ANSI/UL 263

General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. U419

August 06, 2012

Nonbearing Wall Ratings — 1, 2, 3 or 4 Hr (See Items 4 & 5)



1. **Floor and Ceiling Runners —** (Not shown) — For use with Item 2 - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

1A. **Framing Members* - Floor and Ceiling Runners —** Not shown - In lieu of Item 1 — For use with Item 2A, proprietary channel shaped, min. 3-5/8 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC max. Effective thickness is 0.034 in.

CLARKDIETRICH BUILDING SYSTEMS — UltraSTEEL®.

1B. **Framing Members* - Floor and Ceiling Runners —** (Not shown - In lieu of Item 1) — For use with Item 2A, proprietary channel shaped, min. 2-1/2 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling fasteners 24 in. OC. max. Effective thickness is 0.034 in.

CLARKDIETRICH BUILDING SYSTEMS — UltraSTEEL®.

1C. **Framing Members* - Floor and Ceiling Runner —** Not shown - In lieu of Item 1 — For use with Item 2C, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™ Track

CRACO MFG INC — SmartTrack™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™ Track

PHILLIPS MFG CO L L C — Viper25™ Track

TELLING INDUSTRIES L L C — Viper25™ Track

1D. **Framing Members* - Floor and Ceiling Runner —** Not shown - In lieu of Item 1 — For use with Item 2D, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

PHILLIPS MFG CO L L C — Viper20™ Track

TELLING INDUSTRIES L L C — Viper20™ Track

1E. **Framing Members*— Floor and Ceiling Runners —** (Not shown) — In lieu of Item 1 - Channel shaped, attached t floor and ceiling with fasteners 24 in. OC. max.

ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME Framing System

UNITED METAL PRODUCTS INC — Type SUPREME Framing System

1F. **Floor and Ceiling Runners —** (Not shown)—For use with Item 2B- Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC.

1G. **Framing Members*— Floor and Ceiling Runners —** (Not shown, As an alternate to Item 1) — For use with Items 2F, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.

CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

DMFCWBS L L C — ProTRAK

MBA BUILDING SUPPLIES — ProTRAK

SOUTHEASTERN STUD & COMPONENTS INC — ProTRAK

STEEL STRUCTURAL SYSTEMS L L C — Tri-S ProTRAK

1H. **Framing Members* - Floor and Ceiling Runner —** Not shown - In lieu of Item 1 — For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud size, with 1- 1/8 in. long legs fabricated from min 0.015 in. (min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

SUPER STUD BUILDING PRODUCTS — The Edge

1I. **Framing Members* - Floor and Ceiling Runner —** For use with Item 2H, proprietary channel shaped runners, minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in. OC max.

STUDCO BUILDING SYSTEMS — CROCSTUD Track

1J. **Floor and Ceiling Runners —** (Not shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.02 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100.

1K. **Framing Members*— Floor and Ceiling Runners —** (Not shown, As an alternate to Item 1) — For use with Items 2I, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.

TELLING INDUSTRIES L L C — TRUE-TRACK™

2. **Steel Studs —** Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

2A. **Framing Members* - Steel Studs —** In lieu of Item 2 - Proprietary channel shaped studs, min. depth as indicated under Item 5, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Stud to be cut 3/4 in. less than assembly height. Allowable use of studs is shown in the table below. For direct attachment of gypsum board only. Effective thickness is 0.034 in.

CLARKDIETRICH BUILDING SYSTEMS — UltraSTEEL®.

2B. **Steel Studs —** (As an alternate to Item 2, For use with Items 5B & 5E) Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

2C. **Framing Members* - Steel Studs —** (As an alternate to Item 2, For use with Items 5C or 5I) - Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in less than the assembly height and installes with a ½ in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of gypsum board only.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™

CRACO MFG INC — SmartStud™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™

PHILLIPS MFG CO L L C — Viper25™

TELLING INDUSTRIES L L C — Viper25™

2D. **Framing Members* - Metal Studs —** Not shown - In lieu of Item 2 — For use with Item 1D, proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.020 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

PHILLIPS MFG CO L L C — Viper20™

TELLING INDUSTRIES L L C — Viper20™

2E. **Framing Members*— Steel Studs —** In lieu of Item 2 - For Use with Item 1E- Channel shaped studs, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME Framing System

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME Framing System

2F. **Framing Members*— Steel Studs —** (Not shown, As an alternate to Item 2) —For use with Items 1G, 5F or 5G or 5I only, channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD

DMFCWBS L L C — ProSTUD

MBA BUILDING SUPPLIES — ProSTUD

SOUTHEASTERN STUD & COMPONENTS INC — ProSTUD

STEEL STRUCTURAL SYSTEMS L L C — Tri-S ProSTUD

2G. **Framing Members* - Metal Studs —** Not shown - In lieu of Item 2 — For use with Item 1H, proprietary channel shaped steel studs, minimum width indicated under Item 5, 1-1/4 in. deep fabricated from min 0.015 in. (min bare metal thickness) galvanized steel. Studs 3/8 in. to 3/4 in. less in lengths than assembly heights.

SUPER STUD BUILDING PRODUCTS — The Edge

2H. **Framing Members* - Steel Studs —** Not shown - In lieu of Item 2 - For use with Item 1I. Proprietary channel shaped studs, minimum width indicated under Item 5, Studs to be cut 3/8 to 3/4 in less than the assembly height.

STUDCO BUILDING SYSTEMS — CROCSTUD

2I. **Framing Members*— Steel Studs —** (Not shown, As an alternate to Item 2) —For use with Items 1K, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

TELLING INDUSTRIES L L C — TRUE-STUD™

3. **Wood Structural Panel Sheathing —** (Optional, For use with Item 5 Only.)- (Not Shown) - 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min. head diam. of 0.292 in. at maximum 6 in. OC. in the perimeter and 12 in. OC. in the field. When used, fastener lengths for gypsum panels increased by min. 1/2 in.

4. **Batts and Blankets* —** (Required as indicated under Item 5) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 5. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

4A. **Batts and Blankets* —** (Optional) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

5. **Gypsum Board* —** Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall

Rating, Hr	Min Stud Depth, In. Items 2, 2D, 2E, 2G and 2H	Min Stud Depth, In. Item 2A	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 4)
1	3-1/2	3-5/8	1 layer, 5/8 in. thick	Optional
1	2-1/2	3-5/8	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	3-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 1/2 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 5/8 in. thick	Optional
2	3-1/2	3-5/8	1 layer, 3/4 in. thick	3 in.
3	1-5/8	2-1/2	3 layers, 1/2 in. thick	Optional
3	1-5/8	2-1/2	2 layers, 3/4 in. thick	Optional
3	1-5/8	2-1/2	3 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 1/2 in. thick	Optional
4	2-1/2	2-1/2	2 layers, 3/4 in. thick	2 in.

CGC INC — 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC; 3/4 in. thick Types IP-X3 or ULTRACODE

UNITED STATES GYPSUM CO — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR ; 3/4 in. thick Types IP-X3 or ULTRACODE

USG MEXICO S A DE C V — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE

When Item 7B, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6.

5A. **Gypsum Board* —** (As an alternate to Item 5) — 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 6.

CGC INC — Type SHX.

UNITED STATES GYPSUM CO — Type FRX-G, SHX.

USG MEXICO S A DE C V — Type SHX.

5B. **Gypsum Board* —** (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or ¾ in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12).

RAY-BAR ENGINEERING CORP — Type RB-LBG

5C. **Gypsum Board* —** (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory.

CGC INC — Type SCX.

UNITED STATES GYPSUM CO — Type SCX, SGX.

USG MEXICO S A DE C V — Type SCX.

5D. **Gypsum Board* —** (As an alternate to Item 5) — 5/8 in. thick, 48 in. wide, applied vertically or horizontally. Secured as described in Item 6. For use with Items 1 and 2 only.

UNITED STATES GYPSUM CO — Type USGX.

5E. **Gypsum Board* —** (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2B, not to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.

NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Nelco

5F. **Gypsum Board* —** (As an alternate to Item 5) — For use with Items 1G and 2F and limited to 1 Hour Rating only, Gypsum panels with beveled, square or tapered edges, applied vertically, and fastened to the steel studs with 1 in. long Type S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud depth shall be a minimum 3-5/8 in.

UNITED STATES GYPSUM CO — 5/8 in. thick Type SCX, SGX.

5G. **Gypsum Board* —** (As an alternate to Item 5) — For use with Items 1G and 2F only, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge

joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall

Rating, Hr	Min Stud Depth, in. Item 2F	No. of Layers & Thickness of Panel	Min Thkns of Insulation (Item 4)
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional

CGC INC — 1/2 in. thick Type C, IP-X2 or IPC-AR;, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or ULTRACODE

UNITED STATES GYPSUM CO — 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type SCX, SGX, SHX, IP-X1, AR, C, , FRX-G, IP-AR, IP-X2, IPC-AR ; 3/4 in. thick Types IP-X3 or ULTRACODE

USG MEXICO S A DE C V — 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or ULTRACODE

5H. **Gypsum Board* —** (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 or 3/4 in thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or 3/4 in. may be used as alternate to all 5/8 or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 11A) or Lead Discs (see Item 12A).

MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

5I. **Gypsum Board* —** (As an alternate to Item 5) - Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 5. Steel stud minimum depth shall be as indicated in Item 5.

CGC INC — Type ULX

UNITED STATES GYPSUM CO — Type ULX

USG MEXICO S A DE C V — Type ULX

5J. **Gypsum Board* —** (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2B, not to be used with Item 3). Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

6. **Fasteners —** (Not shown) — For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 7). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long

for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. **Two layer systems:** First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer.**Three-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. **Four-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

6A. **Fasteners —** (Not shown) —For use with Item 2A - Type S or S-12 steel screws used to attach panels to studs (Item 2A). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8-1/2 in. OC with additional screws 1 in. and 2-1/2 in. from edges of the board when panels are horizontally, or 8 in. OC. along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. **Two layer systems applied vertically:** First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. **Two layer systems applied horizontally:** First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board with screws offset 8 in. from first layer. **Three-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board. **Four-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board.

7. **Furring Channels —** (Optional, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E.

7A. **Framing Members* —** (Not Shown) — (Optional on one or both sides, not shown, for single or double layer systems) — As an alternate to Item 7, furring channels and Steel Framing Members as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.

b. **Steel Framing Members* —** Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw through the center hole. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Types RSIC-1, RSIC-V.

7B. **Framing Members* —** (Optional, Not Shown) — As an alternate to Item 7, for single or double layer systems, furring channels and Steel Framing Members on only one side of studs as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 5. Not for use with Item 5A and 5E.

b. **Steel Framing Members* —** Used to attach furring channels (Item 7Ba) to one side of studs (Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC — Type Isomax

7C. **Framing Members* —** Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7). Clips attached at each intersection of the resilient channel and the steel studs (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the steel stud with min. 1 in. long Type S-12 steel screws through the center hole of the clip and the resilient channel flange.

KEENE BUILDING PRODUCTS CO INC — Type RC Assurance.

UL DESIGN NO. U905

Design No. U905
BXUV.U905
Fire Resistance Ratings - ANSI/UL 263

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of U Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Fire Resistance Ratings - ANSI/UL 263

General Information for Fire Resistance Ratings - ANSI/UL 263

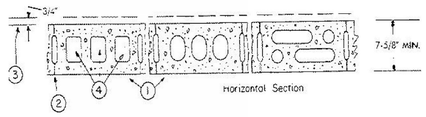
Design No. U905

September 30, 2010

Bearing Wall Rating — 2 HR.

Nonbearing Wall Rating — 2 HR

Load Restricted for Canadian Applications — See Guide BXUV7



1. **Concrete Blocks* —** Various designs. Classification D-2 (2 hr).

See **Concrete Blocks** category for list of eligible manufacturers.

2. **Mortar —** Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster —** Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).

4. **Loose Masonry Fill —** If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to

classification.

5. **Foamed Plastic* —** (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

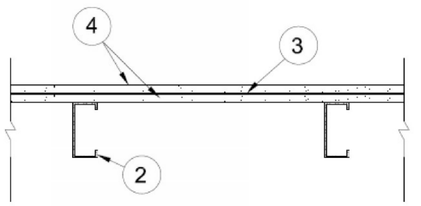
THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

*Bearing the UL Classification Mark

UL DESIGN NO. V497

Design No. V497

Nonbearing Wall Rating - 1 Hr



1. **Floor and Ceiling Runners —** (Not Shown) — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

2. **Steel Studs —** Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-5/8 in. wide, min 1-1/4 in. flanges, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

3. **Laminating Compound —** For use with Item 4 - Used to bond outer layer wallboard to inner layer wallboard. Powder type mixed with water in accordance with instructions shown on bags. Applied to entire surface of base layer wallboard. Applied with notched trowel producing continuous beads about 1/4 in. wide and 1/4 in. high.

4. **Gypsum Board* —** Applied to one side of steel studs (Item 2). Two layers of 5/8 in. gypsum panels with beveled, square or tapered edges. Gypsum panels applied vertically with joints centered over studs. Base layer applied with 1 in. Type S screws spaced 24 in. oc. Face layer applied vertically with joints centered over studs and offset from base layer joints by 24 in. Face layer applied with 1-5/8 in. Type S screws spaced 12 in. oc starting with a 6 in. offset from the bottom of the gypsum panel.

NATIONAL GYPSUM CO — 5/8 in. thick Type FSW, FSK, FSW-3, FSW-5, FSW-G, FSK-G, FSW-6, FSW-C, FSMR-C or FSK-C.

4A. **Gypsum Board* —** (As an alternate to Items 3 and 4) - Applied to one side of steel studs (Item 2). Three layers of 5/8 in. gypsum panels with beveled, square or tapered edges. Gypsum panels applied vertically with joints centered over studs. First layer applied with 1 in. Type S screws spaced 24 in. oc. Second layer applied vertically with joints centered over studs and offset from base layer joints by 24 in. Second layer applied with 1-5/8 in. Type S screws spaced 24 in. oc. Face layer applied vertically with joints centered over studs and offset from second layer joints by 24 in. Face layer applied with 2-1/4 in. Type S screws spaced 12 in. oc starting with a 6 in. offset from the bottom of the gypsum panel.

NATIONAL GYPSUM CO — 5/8 in. thick Type FSW, FSK, FSW-3, FSW-5, FSW-G, FSK-G, FSW-6, FSW-C, FSMR-C or FSK-C.

5. **Joint Tape and Compound —** (Not Shown) - Joints covered with joint compound and paper tape. Paper tape, nom 2 in. wide, embedded in first layer

UL DESIGN NO. D916

Design No. D916

May 16, 2013

Restrained Assembly Ratings — 3/4, 1, 1-1/2, 2 or 3 Hr.

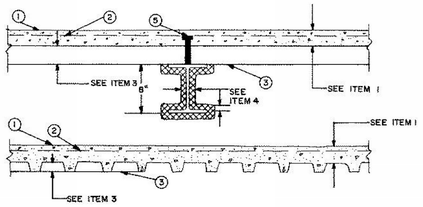
(See Items 1, 6, 7, 8 and 11)

Unrestrained Assembly Rating — 0 Hr. (See Items 3, 4 and 4A)

Unrestrained Beam Ratings — 1, 1-1/2, 2 and 3 Hr.

(See Items 4, 4A, 7 and 11)

Load Restricted for Canadian Applications — See Guide BXUV7



Supports — 8x28 min size steel beams. Or steel joists or joist girders (not shown), composite or noncomposite. Welded or bolted to end supports. Designed per S.J.I. specifications for a max tensile stress of 30 ksi. May be either uncoated or provided with a shop coat of paint. For the 2 h or less Restrained or Unrestrained Beam Ratings, top and bottom chords shall each consist of two angles with a min total area of 0.96 and 0.77 sq in., respectively. Web members shall be either round bars or angles. Min area of the end diagonal web shall be 0.444 sq in. Min area of each of the first six interior diagonal webs shall be 0.406 sq in. All other interior webs shall have a min area of 0.196 sq in. For the 3 h Restrained or Unrestrained Beam Ratings, each of the top and bottom chords shall each consist of two angles with a min total area of 1.74 sq in. Web members shall be either round bars or angles. Min area of each of the first five end diagonal webs shall be 0.886 sq in. All other interior webs shall have a min area of 0.441 sq in. Bridging per S.J.I. specifications is required when noncomposite joists are used. For noncomposite joists, steel filler pieces of proper size, 1 to 2 in. long shall be welded to and between the top chord angles at midway between all top chord panel points.

1. **Normal Weight or Lightweight Concrete —** Normal weight concrete carbonate or siliceous aggregate, 3500 psi compressive strength, vibrated. Lightweight concrete, expanded shale, or slate aggregate by rotary-kiln method, or expanded clay aggregate by rotary-kiln or sintered-grate method, 3000 psi compressive strength, vibrated, 4 to 7 percent entrained air.

Restrained Assembly Rating Hr	Concrete (Type)	Concrete Unit Weight pcf	Concrete Thkns In.
1	Normal Weight	147-153	3-1/2
1-1/2	Normal Weight	147-153	4
2	Normal Weight	147-153	4-1/2
3	Normal Weight	147-153	5-1/4
3/4 or 1 (See Item 6)	Lightweight	107-113	2-1/2
1	Lightweight	107-120	2-5/8
1-1/2	Lightweight	107-113	3
2	Lightweight	107-113	3-1/4
2	Lightweight	107-116	3-1/4*
2	Lightweight	114-120	3-1/2
3	Lightweight	107-113	4-3/16
3	Lightweight	114-120	4-7/16

*For use with 2 or 3 in. steel floor and form units only.

2. **Welded Wire Fabric —** 6 x 6, 10 x 10 SWG.

3. **Steel Floor and Form Units* —** Composite 1-1/2, 1-5/8, 2 or 3 in. deep galv units or 4-1/2 in. deep noncomposite galvanized units. Fluted units may be uncoated or phosphatized/painted. Min gauges are 22 MSG for fluted and 20/20 MSG for cellular units. The following combinations of units may be used:

(1) all 18, 24, 26, 28 or 36 in. wide cellular.

(2) all fluted.

(3) one or two 3 in. deep, 12 in. wide, 18/18 MSG min cellular units, alternating with 3 in. deep fluted or other cellular.

(4) any blend of fluted and 18, 24, 26, 28, or 36 in. wide cellular.

(5) 3 in. deep, 30 in. wide cellular with 8-1/8 in. wide valley along side joints may be used when 3/8 in. diam reinforcing bars are placed 1-1/2 in. to each side of side joints and 1 in. above bottom of unit.

(6) Corrugated, 1-5/16 in. deep, 30 in. wide, 24 MSG min galv units with shear wires factory welded to deck corrugations. Welded to supports 12 in. OC. through welding washers. For shear wire spacing of 8 in. or less the steel deck stress shall not exceed 20 KSI. For shear wire spacing greater than 8 in. OC. but less than or equal to 12 in. OC., steel deck stress shall not exceed 12 KSI.

ASC STEEL DECK, DIV OF ASC PROFILES INC — 24, 30, or 36 in. wide, Types B Hi-Form, BF Hi-Form, N Hi-Form, NF Hi-Form, 2W Hi-Form, 2WF Hi-Form, 3W Hi-Form, 3WF Hi-Form BR Hi-Form, BMOD Hi-Form, BRMOD Hi-Form, DGB Hi-Form, DGBF Hi-Form, DGN Hi-Form, DGN32 Hi-Form, DGNF Hi-Form, DGNF32 Hi-Form, DG2W Hi-Form, DG2WF Hi-Form, DG3W Hi-Form, and DG3WF Hi-Form; 32 in. wide Type N-32, NF32, DGN-32, DGNF32; 24 or 30 in. wide Types ASC2 or ASC3. All units may be galvanized or Prime Shield.

CANAM STEEL CORP — 36 in. wide Type P-3623, P-3606, P-3615 and 24 in wide Type P-2432 composite.

CENTRIA — QL Types, 24 in. wide 3 or 3 inverted, UKX, UKX-3, 2 in. 99, AKX, 21 or 21 inverted, 121, NKX, TKX; 24 or 30 in. wide GKX, GKXH, GKX-A; 36 in. wice 99, AKX, WKX; 24, 26, or 36 in. wide NKX; 1.5NKC, NKC, AKX, 2 or 3 in. TKC; 12 in. wide noncomposite Sec. 12; 17 in. wide 21; 26 or 28 in. wide UKX, 87.5 cm wide. Side Joints of QL, 99, 121, WKX, TKX, TKC, and Metric units - QL-77-900; QLC-78-900 may be welded together 60 in. OC. Side joints of 99, AKX, WKX, GKX, GKX-A, TKX and Metric units - QL-77-900 and QLC-78-900 may be fastened together with min 1 in. long No. 12x14 self-drilling, self-tapping steel screws 36 in. OC.

CHIA TEH CONSTRUCTION MATERIAL CO LTD — 24 or 36 in. wide Mac-Lok 3; 24 in. wide CFD-3.

CANAM STEEL CORP — 24 in. wide, Types 1-1/2 , 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 24 in. wide, Types N-LOK and N-LOK Cell; 24, 30 or 36 in. wide, Type 1-1/2 in. B-LOK and B-LOK Cell.

CONSOLIDATED SYSTEMS INC — 24 in. wide Types CFD-2, CFD-3; 24, 30 or 36 in. wide Type CFD-1.5; 24 or 36 in. wide Types Mac-Lok 2, Mac-Lok 3; 24 in. wide, Types B2C, B2FC, NC, NFC; 30 in. wide Type B3C; 12 in. wide Mac-Way cellular 45 MOW, 2-633 MTWA, 3-633 MTWA, 2-633MTWV, 3-633MTWV+, 24 in. wide Type Versa-Dek.

DECK WEST INC — 36 in. wide Type B-DW, Inverted B-DW, BA-DW, Inverted BA-DW, 2-DW or 3-DW. Side Joints of Type 2-DW and 3-DW may be fastened together with min 1 in. long No. 12 x 14 self-drilling, self-tapping steel screws 36 in. OC.

DESIGN ASSISTANCE CONSTRUCTION SYSTEMS INC — 36 in. wide Type DACS1.5CD, or 24 in. wide Type DACS2.0CD, or DACS3.0CD.

EPIC METALS CORP — 24 in. wide Types EC150, ECP150, EC300, ECP300, EC366, ECP366, EC150, EC300 inverted, ECA, 30 in. wide Types ECB150, ECBR150; 36 in. wide Type EC266.

GENS METALS INC — 24 or 36 in. wide Types LF2, LF3.

MARLYN STEEL DECKS INC — Type 1.5 CF, 2.0 CF or 3.0 CF.

HAMBRO STRUCTURAL SYSTEMS, DIV OF CANAM STEEL CORP — 36 in. wide, 1-1/2 in. Type P3615HB. The max superimposed loadings for Type P3615HB units shall not exceed 250 PSF. For single spans, the use of the units shall be limited to 5 ft 6 in., 6 ft 0 in. and 6 ft 6 in. max spans for the 22, 20 and 18 gauge units, respectively. For multiple spans, 18 gauge units may be used on a max 7 ft 6 in. spans with a max total superimposed loading of 240 PSF.

KAM INDUSTRIES LTD, DBA CORDECK — 24 in. wide, Types 2 or 3 in. WDR.

MORIN CORP — 24, 30 or 36 in. wide Types LXR-B, LXR-B inverted; 24 or 36 in. wide Type LXR-3W; 36 in. wide Type LXR-2W.

NEW MILLENNIUM BUILDING SYSTEMS L L C — Type 1.5CD, 1.5CDI, 1.5CDR, 2.0CD, or 3.0CD. Units may be phos/painted or galvanized.

ROOF DECK INC — 36 in. wide Types LOK 1 1/2, LOK 1 1/2 R; 24 in. wide Types LOK-2, LOK-3.

VALLEY JOIST — 24 or 36 in. wide Types WVC 1-1/2 or WVC 2.

VERCO DECKING INC - A NUCOR CO — 24, 30 or 36 in. wide Types PLB, B, BR; 24 or 36 in. wide Types PLW2, W2, PLW3, W3; 24 in. wide Types PLN, N. 12 in. wide PLW2, W2, PLW3 or W3 units may be blended with 24 or in. wide PLW2, W2, PLW3 or W3 units, respectively. Units may be phos/ptd.

VICWEST INC — 24 in. wide Type HB306; 32 in. wide Types HB308-INV and HB30V; 36 in. wide Types H8938, HB938CL and HB938-INV.

VULCRAFT, DIV OF NUCOR CORP — 24, 30 or 36 in. wide, Types 1.5VL, 1.5VLI, 1.5VLP, 1.5VLR; 24 or 36 in. wide, Types 1.5VLPA, 2VLI, 3VLI, 3VLP, 3VLPA, 3VLPA. Side joints of Type 1.5VL may be fastened together with min 1 in. long No. 12x14 self-drilling, self-tapping steel screws 36 in. OC max.

Spacing of welds attaching units to supports shall be 12 in. OC for 12, 24, and 36 in. wide units, four welds per sheet for 30 in. wide units, 6 in. OC for 18 in. wide and Sec. 12 units. Unless noted otherwise, adjacent units button-punched or welded together 36 in. OC along side joints. Adjacent 18 in. wide units welded together 30 in. OC along side joints. For **3 Hr. Rating,** units with overlapping type side joints welded together 24 in. OC max.

When a superimposed load of 250 PSF is desired the spacing of welds or button-punches shall not exceed 24 in. OC along side joints.

+12 in. wide, 1-1/2 in. deep Mac-Way units may be blended with 24 in. wide B2C or 30 in. wide B3C units with a der one cell to one or more fluted units. 12 in. wide, 2 in. deep Mac-Way units may be blended with 36 in. wide Mac-Lock 2 units in a blend of one cell to one or more fluted units. 12 in. wide, 3 in. deep Mac-Way units may be blended with 36 in. wide Mac-Lock3 units in a blend of one cell to one or more fluted units. The side edge of the fluted unit is placed on the top of the side edge of the Mac-Way unit and the two are welded together with welding washers spaced a max. of 32 in. OC for Mac-Lock 2 or 3 units and a max. of 24 in. OC for the B2C or B3C units.

The Unrestrained Assembly Rating is equal to the Unrestrained Beam Rating for a max of 3 Hr. and is limited to the following units and limitations:

(a) 1-1/2 in. deep, 24 in. wide, 22 MSG or thicker fluted with clear spans not more than 7 ft 8 in.

(b) 1-1/2 in. deep, 24 in. wide, 20 MSG or thicker fluted with clear spans not more than 8 ft 8 in.

(c) 1-1/2 in. deep, 24 in. wide, 16 MSG or thicker fluted and 18/18 MSG or thicker cellular with clear spans not more than 9 ft 11 in.

(d) 3 in. deep, 36 in. wide, 18 MSG or thicker fluted and 24 in. wide, 20/18 MSG or thicker cellular with clear spans not more than 13 ft 2 in.

4. **Spray-Applied Fire Resistive Materials* —** Applied by mixing with water and spraying in one or more coats to a final thickness as shown in the tables below, in the tables below to steel beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf respectively. Min avg and min ind density of 19/18 pcf respectively for Type 7GP and 7HD. For method of density determination, refer to Design Information Section.

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray Applied Fire Resistive Mtl Thkns on Beam In.
1	1	1	1/2
1-1/2	1	1	1/2
1-1/2	1-1/2	1-1/2	13/16
2	1	1	1/2
2	2	2	1-1/16
3	1-1/2	1-1/2	13/16
3	3	3	1-9/16

The thicknesses of Spray-Applied Fire Resistive Materials shown in the table below are applicable when the thickness applied to the beams' lower flange edges is reduced by 1/2 that shown in the table:

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray Applied Fire Resistive Mtl Thkns on Beam In.
1	1	1	9/16
1-1/2	1	1	9/16
1-1/2	1-1/2	1-1/2	7/8
2	1	1	9/16
2	2	2	1-3/16
3	1-1/2	1-1/2	7/8
3	3	3	1-3/4

The thicknesses of Spray-Applied Fire Resistive Materials shown in the table below are applicable when the thickness applied to the beams' lower flange edges is reduced by 1/2 that shown in the table and the beams are supporting all fluted floor or form units w/lightweight concrete only:

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray Applied Fire Resistive Mtl Thkns on Beam In.
1	1	1	7/16+
1-1/2	1	1	7/16+
1-1/2	1-1/2	1-1/2	3/4
2	1	1	7/16+
2	2	2	1
3	1-1/2	1-1/2	3/4
3	3	3	1-9/16

+Thickness applied to beams' lower flange edge to be 1/4 in. min.

The thickness of material required on the steel joist for the various ratings are shown in the following table:

Restrained or Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray Applied Fire Resistive Mtl Thkns on Joist & Bridging In.
1	1	1-1/8
1-1/2	1-1/2	1-3/4
2	2	2-1/4
3	3	2-7/8

W R GRACE & CO - CONN — Types Z- 105, Z-106, Z-106/G, Z-106/HY, Monokote Acoustic 5.

GRACE KOREA INC — Types Z-106, Z-106/G, Z-106/HY, Monokote Acoustic 5.

SOUTHWEST FIREPROOFING PRODUCTS CO — Types 7GP, 7HD.

4B. **Alternate Spray-Applied Fire Resistive Materials —** Applied by mixing with water and spraying in one or more coats to a final thickness as shown in the tables below to steel beam surfaces which must be clean and free of dirt, loose scale and oil. The thicknesses shown in the table below are applicable to beams supporting all fluted floor or form units. Min avg and min ind density of 40/36 pcf, respectively. Min avg and min ind density of 40/36 pcf respectively for Types Z-146, Z-146PC and Z-146T cementitious mixture. Min avg and min ind density of 50/45 pcf respectively for Types Z-156, Z-156T and Z-156PC.

For density determination refer to Design Information Section.

Unrestrained Beam Rating Hr	Restrained Assembly Rating Hr	Concrete Type	Spray Applied Fire Resistive Mtl Thkns on Beam In.
1	1, 1-1/2, 2	LW	9/16
1-1/2	1, 1-1/2, 2, 3	LW	7/8
1	1, 1-1/2, 2	LW	3/4
1-1/2	1, 1-1/2, 2, 3	LW	1

GRACE KOREA INC — Type Z-146 investigated for exterior use

W R GRACE & CO - CONN — Types Z-146, Z-146T, Z146PC, Z-156, Z-156T and Z-156PC investigated for exterior use

5. **Shear-Connector Studs — Optional —** Studs 3/4 in. diam by 3 in. long, for 1-1/2 in. deep form units to 5-1/4 in. long for 3 in. deep form units, headed type or equivalent per AISC specifications. Welded to the top flange of the beam through the steel form units.

6. **Electrical Inserts —** (Not shown) Classified as **"Outlet Boxes and Fittings Classified for Fire Resistance."**

CENTRIA — Preset Inserts

For use with 2-1/2 in. lightweight concrete topping over QL-WKX steel floor units. Installed over factory-punched holes in floor units per accompanying installation instructions.

Spacing shall not be more than one insert in each 14 sq ft. of floor area with spacing along floor units not less than 48 in. OC. The holes cut in insert cover for passage of wires shall be no more than 1/8 in. larger diam. than wire. Restrained Assembly Rating is 3/4 hr with Tapmate II-FS-1 and 1 hr with Tapmate II-FS-2 inserts.

CENTRIA — Tapmate II-FS-1, II-FS-2; Series KEB.

(2) **Wiremold Co.** — After set Inserts.

Single-service after set inserts installed per accompanying installation instructions in 2-1/2 in. diam hole core-drilled through min 3-1/4 in. thick concrete topping to top of cell of any min 3 in. deep cellular steel floor unit specified under Item 3. Spacing shall be no more than one insert in each 10 sq ft of floor area in each span with a min center to center spacing of 16 in. If the high potential and low potential raceways of the cellular steel floor unit are separated by a valley filled with

concrete, the center to center spacing of the high potential and low potential single-service after set inserts may be reduced to a min of 7-1/2 in. Restrained Assembly Rating is 2 hr or less with internally protected type 436 after set insert with Type M4-, M6- or M8- Series single-service activation fitting.

WIREMOLD CO — Internally protected Type 436 after set Insert with Type M4-, M6- or M8- Series single-service activation fitting.

7. **Mineral and Fiber Boards* —** (Optional, not shown). Applied over concrete floor with no restriction on board thickness. When mineral and fiber boards are used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr.

See Mineral and Fiber Board (CERZ) category for names of manufacturers.

8. **Roof Covering Materials* —** (Optional, not shown)Consisting of materials compatible with insulations described herein which provide Class A, B or C coverings. See Built-Up Roof Covering Materials in Building Materials Directory.

9. **Insulating Concrete —** (not shown) Optional. Various types of insulating concrete prepared and applied in the thickness indicated:

A. **Vermiculite Concrete —** (not shown) Optional.

1. Blend 6 to 8 cu. ft. of Vermiculite Aggregate* to 94 lb. Portland Cement and air entraining agent. Min thickness of 2 in. as measured to the top surface of the structural concrete or foamed plastic (Item 10) when it is used.

ELASTIZELL CORP OF AMERICA

SIPLAST INC

VERMICULITE PRODUCTS INC

2. Blend 3.5 cu. ft. of Type NVC Concrete Aggregate* or Type NVS Vermiculite Aggregate* coat, 1/8 in. thickness beneath foamed plastic (Item 10) when used, 1 in. min topping thickness.

SIPLAST INC

VERMICULITE PRODUCTS INC

Vermiculite concrete may be covered with Roof Covering Materials (Item 8).

B. **Cellular Concrete — Roof Topping Mixture* —** concentrate mixed with water and Portland cement per manufacturers specifications. Min. thickness of 2-in. as measured to the top surface of the structural concrete or foamed plastic (Item 10) when used. Cast dry density and 28— day min. compressive strength of 190 psi as determined with ASTM C495— 66.

CELCORE INC — Type Celcore with cast dry density of 31 (+ or - 3.0) pcf or Type Celcore MF with cast dry density of 29 (+ or - 3.0) pcf.

CELLULAR CONCRETE L L C — Cast dry density of 37 (+ or -) 3.0 pcf.

ELASTIZELL CORP OF AMERICA — Type II. Mix #1 of cast dry density 39 (+ or -) 3.0 pcf, Mix #2 of cast dry density 40 (+ or -) 3.0 pcf, Mix #3 of cast dry density 47 (+ or -) 3.0 pcf.

C. **Cellular Concrete-Roof Topping Mixture* —** Concentrate mixed with water and Portland cement per manufacturers specifications. 28-day min. compressive strength of 190 psi as determined with ASTM C495-66.

LTE-CRETE INC — Cast dry density of 29 (+ or -) 3.0 pcf.

SIPLAST INC — Mix No. 1 or 2. Cast dry density of 32+3 (Mix No. 1) or 36+3 (Mix No. 2) pcf.

D. **Perlite Concrete —** 6 cu ft. of Perlite Aggregate* to 94 lb of Portland Cement and 1-1/2 pt air entraining agent. Min. thickness 2 in. as measured to the top surface of structural concrete or foamed plastic (Item 10A) when it is used.

See Perlite Aggregate (CFFX) in Fire Resistance Directory for names of manufacturers.

E. **Cellular Concrete — Roof Topping Mixture* —** Foam Concentrate mixed with water, Portland Cement and UL Classified Vermiculite Aggregate per manufacturer's application instructions. Cast dry density of 33 (+ or -) 3.0 pcf and 28-day compressive strength of min 250 psi as determined in accordance with ASTM C495-86.

CELLULAR CONCRETE L L C — Mix No. 3.

SIPLAST INC — Mix No. 3.

F. **Floor Topping Mixture* —** (Optional, not shown) — Approx 4.5 gal of water to 41 lbs of NVS Premix floor topping mixture. Slurry coat 1/8 in. thickness beneath foamed plastic (Item 10) when used , 1 in. min topping thickness.

SIPLAST INC

Floor Topping Mixture may be covered with Built-Up or Single Membrane Roof Covering.

10. **Foamed Plastic* —** (optional — Not Shown) For use only with vermiculite ((Item 9A) or cellular ((Item 9C) concretes — Rigid polystyrene foamed plastic insulation having slots and/or holes sandwiched between vermiculite concrete slurry which is applied to the normal or lightweight concrete surface and vermiculite concrete topping ((Item 9A).

SIPLAST INC

VERMICULITE PRODUCTS INC

10A. **Foamed Plastic* —** For use only with cellular concrete. Nominal 24 by 48 in. polystyrene foamed plastic insulation boards having a density of □.0 + 0.1 pcf encapsulated within cellular concrete topping (Item 9B). Each insulation board shall contain six nominal 3 in. diameter holes oriented in two rows of three holes each with the holes spaced 12 in. OC, transversely and 16 in. OC longitudinally.

See Foamed Plastic* (BRYX) category in Building Materials Directory or Foamed Plastic* (CCVW) category in Fire Resistance Directory for list of manufacturers.

11. **Foamed Plastic* —** (Optional, not shown). Polyisocyanurate roof insulation, applied over concrete floor with no restriction on insulation thickness. When polyisocyanurate insulation is used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr.

12. **Metal Lath —** (Not Shown) — (Required with Z-146, Z-146T, Z146PC, Z-156, Z-156T and Z-156PC, otherwise optional) - Metal lath may be used to facilitate the spray application of Spray-Applied Fire Resistive Materials on steel bar joist and trusses. The diamond mesh, 3/8 in. expanded steel lath, 1.7 to 3.4 lb per sq yd is secured to both sides of each steel joist with No. 18 SWG galv steel wire at joist web and bottom chord members spaced 15 in. OC max. When used, the metal lath is to be fully covered with Spray-Applied Fire Resistive.

See **Foamed Plastic** (CCVW) category for list of manufacturers.

*Bearing the UL Classification Mark

FILE NAME: Autodesk Docs:// 1007657.00 - CORE_ City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:45 PM

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL, Inc.
791 Park of Commerce Blvd.
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Boca Raton, FL 33487
T 561 988 4002
www.pgal.com

CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
LYNNE LONDRUM
AR 90289
REGISTERED ARCHITECT

DRAWING HISTORY

№	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

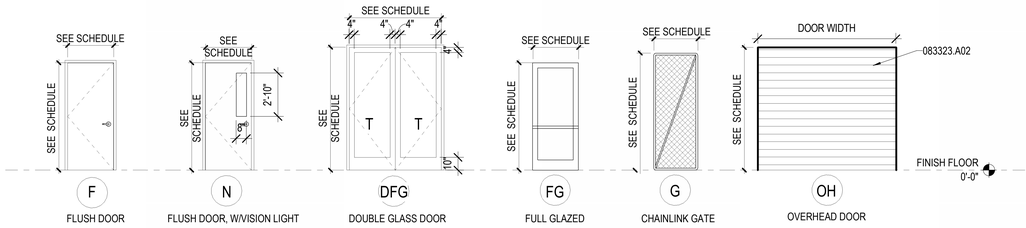
PROJECT NUMBER
1007657.00

SHEET TITLE
UL ASSEMBLIES

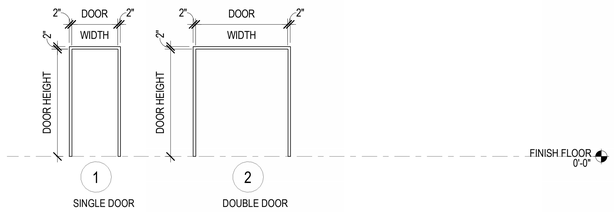
SHEET NUMBER
A0.13E

DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	FRAME MATERIAL	FIRE RATING	DOOR HARDWARE	DETAIL - HEAD	DETAIL - JAMB	DETAIL - SILL	REMARKS
E101.A	22' - 0"	14' - 0"	OH	STL	MFR	STL	--	MFR	8/A0.30E	6/A0.30E	2/A0.30E	
E101.B	14' - 0"	14' - 0"	OH	STL	MFR	STL	--	MFR	8/A0.30E	6/A0.30E	2/A0.30E	
E101.C	3' - 0"	8' - 0"	N	HM	1	HM	--	E3.0	7/A0.30E	5/A0.30E	4/A0.30E	
E101.D	3' - 0"	10' - 0"	G	STL	MFR	STL	--	MFR		7/A0.35E		
E101.E	3' - 0"	10' - 0"	G	STL	MFR	STL	--	MFR		7/A0.35E		--
E101.F	3' - 0"	8' - 0"	F	HM	1	HM	--	E3.0	2/A0.35E	6/A0.35E		
E102.A	3' - 0"	8' - 0"	N	HM	1	HM	--	E3.0	7/A0.30E	5/A0.35E	4/A0.30E	
E102.B	14' - 0"	14' - 0"	OH	STL	MFR	STL	--	MFR	8/A0.30E	6/A0.30E	2/A0.30E	
E102.C	3' - 0"	7' - 0"	N	HM	1	HM	45-MIN	E20.0	3/A0.30E	1/A0.30E		
E102.D	12' - 0"	14' - 0"	OH	STL	MFR	STL	--	MFR	8/A0.30E	6/A0.30E		
E103	3' - 0"	7' - 0"	F	HM	1	HM	20-MIN	E14.0	13/A0.35E	9/A0.35E		
E104	3' - 0"	7' - 0"	F	HM	1	HM	--	E15.0	13/A0.35E	9/A0.35E		
E105.A	3' - 0"	8' - 0"	N	HM	1	HM	--	E3.0	7/A0.30E	5/A0.30E	4/A0.30E	
E105.B	14' - 0"	14' - 0"	OH	STL	MFR	STL	--	MFR	8/A0.30E	6/A0.30E	2/A0.30E	
E105.C	3' - 0"	7' - 0"	F	HM	1	HM	45-MIN	E7.0	1/A0.35E	5/A0.35E		
E106	6' - 0"	7' - 0"	FG	AL	S1	AL		E1.0	14/A0.35E	3/A0.35E		
E107	3' - 0"	7' - 0"	F	HM	1	HM	--	E15.0	13/A0.35E	9/A0.35E		
E108	6' - 0"	7' - 0"	FF	HM	2	HM	--	E11.0	13/A0.35E	9/A0.35E		
E109	6' - 0"	8' - 0"	F	HM	2	HM	--	E4.0	7/A0.30E	5/A0.30E	4/A0.30E	
E110	3' - 0"	8' - 0"	F	HM	1	HM	--	E5.0	7/A0.30E	5/A0.30E	4/A0.30E	
E111	6' - 0"	7' - 0"	DFG	AL	S2	AL	--	E1.0	14/A0.35E	3/A0.35E	10/A0.35E	
E111.B	3' - 0"	7' - 0"	N	HM	1	HM	45-MIN	E20.0	7/A0.30E	5/A0.30E		
E112	3' - 0"	7' - 0"	F	HM	1	HM	20-MIN	E14.0	13/A0.35E	9/A0.35E		
E113.A	4' - 0"	7' - 0"	N	HM	1	HM	45-MIN	E22.0	13/A0.35E	9/A0.35E		BULLET RESISTANT, 180 DOOR
E113.B	4' - 0"	7' - 0"	N	HM	1	HM	20-MIN	E22.0	7/A0.30E	5/A0.30E		BULLET RESISTANT
E114	3' - 0"	7' - 0"	N	HM	1	HM	--	E17.0	13/A0.35E	9/A0.35E		
E115	3' - 0"	7' - 0"	N	HM	HM1	HM	45-MIN	E17.0	1/A0.35E	5/A0.35E		
E116	3' - 0"	7' - 0"	F	HM	1	HM	--	E15.0	13/A0.35E	9/A0.35E		
E117	3' - 0"	7' - 0"	F	HM	1	HM	--	E15.0	13/A0.35E	9/A0.35E		
E118	3' - 0"	7' - 0"	F	HM	1	HM	--	E16.0	13/A0.35E	9/A0.35E		
E119.A	3' - 0"	7' - 0"	N	HM	1	HM	--	E20.0	13/A0.35E	9/A0.35E		
E119.B	3' - 0"	7' - 0"	N	HM	1	HM	45-MIN	E6.0	7/A0.30E	5/A0.30E		BULLET RESISTANT
E120	3' - 0"	7' - 0"	N	HM	1	HM	--	E17.0	13/A0.35E	9/A0.35E		
E121	3' - 0"	7' - 0"	N	HM	1	HM	--	E17.0	13/A0.35E	9/A0.35E		

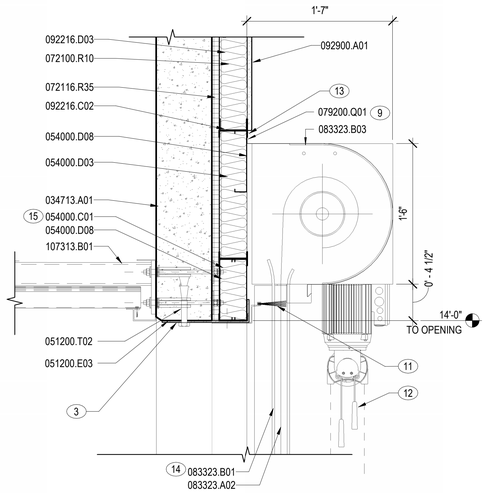


NOTE: SEE DOOR SCHEDULE FOR DIMENSIONS OF DOOR OPENINGS

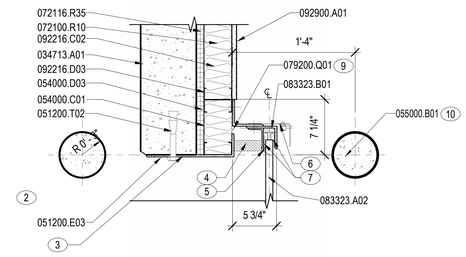


NOTE: SEE DOOR SCHEDULE FOR DIMENSIONS OF DOOR OPENINGS

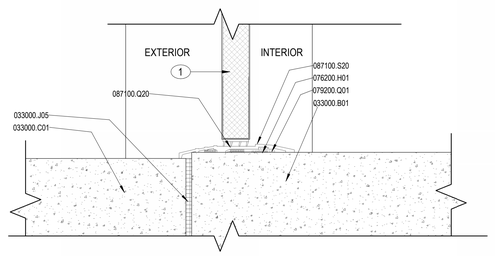
9 1/4" = 1'-0" DOOR AND DOOR FRAME LEGEND



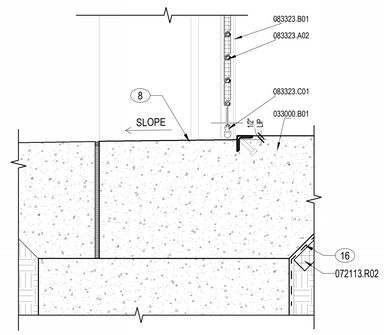
8 1 1/2" = 1'-0" HEAD DETAIL



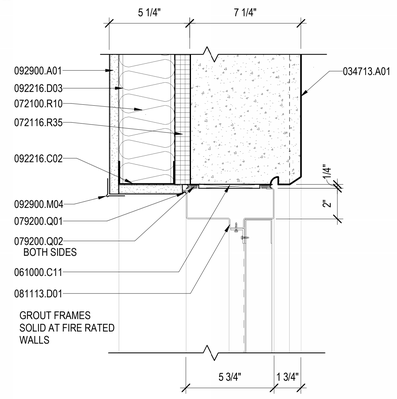
6 1 1/2" = 1'-0" OVERHEAD DOOR JAMB DETAIL



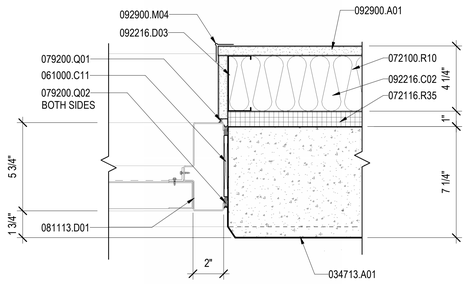
4 3" = 1'-0" DOOR THRESHOLD



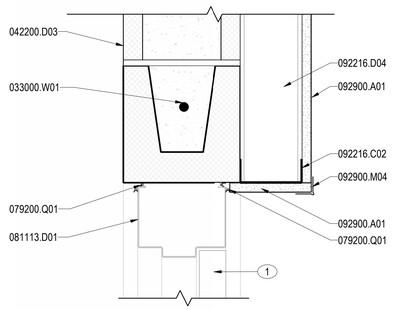
2 1 1/2" = 1'-0" TYPICAL COILING DOOR SILL DETAIL



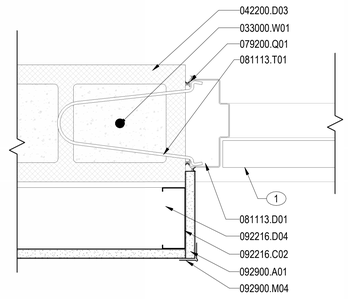
7 3" = 1'-0" HOLLOW METAL DOOR HEAD1



5 3" = 1'-0" HOLLOW METAL DOOR JAMB



3 3" = 1'-0" DOOR - TYPICAL CMU HEAD



1 3" = 1'-0" DOOR - TYPICAL CMU JAMB

GENERAL NOTES

1. ROOM AND DOOR REFERENCE NUMBERS ARE FOR CONSTRUCTION COORDINATION ONLY. CONTRACTOR SHALL COORDINATE WITH OWNER FOR FINAL ROOM & DOOR IDENTIFICATION.
2. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
3. ALL DIMENSIONS ARE TO FACE OF STUD, GRID LINES AND FACE OF MASONRY INFILL WALL U.N.O. ALL DIMENSIONS TO EXISTING WALLS ARE TO FACE OF WALL ASSEMBLY U.N.O.
4. ALL 36" WIDE INTERIOR SWING DOORS SHALL BE LOCATED 2'-0" FROM CENTER OF DOOR TO PERPENDICULAR SURFACE OF ADJACENT WALL AT DOOR JAMB U.N.O.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
6. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
7. REFER TO WALL TYPE SCHEDULE FOR ADDITIONAL INFORMATION.
8. ALL SHAFTS PENETRATING SLAB SHALL BE RATED 2HR.
9. CONTRACTOR SHALL FIELD COORDINATE LOCATION, SIZE AND TYPE OF BLOCKING FOR INSTALLATION OF SIGNAGE, PLUMBING FIXTURES, MILLWORK, ETC. ALL CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (F.R.T).
10. PROVIDE IN-WALL REINFORCEMENT FOR ALL WALL MOUNTED FURNITURE AND EQUIPMENT AS REQUIRED.

SHEET NOTES

1. REFER TO DOOR SCHEDULE FOR SPECIFIC DOOR TYPE.
2. CONCRETE-FILLED STEEL BOLLARD, IMPACT-RATED. REFER TO STRUCTURAL DRAWINGS.
3. 1/8" MIN. SILICONE BEAD.
4. COMPLETELY SEAL GUIDE AREA WITH A 1-1/2" FOAM STRIP. RUN FOAM STRIP FROM FLOOR TO UNDERSIDE OF LINTEL SEAL.
5. VINYL WEATHER SEAL. RUN WEATHER SEAL FROM TOP TO BOTTOM OF GUIDE.
6. 1/4" STEEL BRACKET PLATE ABOVE.
7. WEAR STRIPS, TYP.
8. LEVEL CONCRETE AT THE SLOPED OPENING TO MAINTAIN A PROPER SEAL AT THE DOOR BOTTOM WEATHERSEAL.
9. PROVIDE CONTINUOUS AIRTIGHT SEALANT AT JOINTS BETWEEN WALL AND DOOR JAMB GUIDES, WALL AND HOOD PERIMETER
10. CONCRETE-FILLED STEEL BOLLARD, IMPACT-RATED. REFER TO DETAIL D6/AE541.
11. "Z"-TYPE LINTEL SEAL WITH 3/4" BRUSH.
12. AUXILIARY HAND CHAIN.
13. 1-1/2" TOP HOOD BEAD.
14. 22/24 GA INSULATED, FLAT SLATS. PROVIDE 15/16" THICK SLATS WITH 7/8" INSULATION WITHIN.
15. BOX HEADER.
16. UNDERSLAB VAPOR BARRIER

MATERIAL NOTES

033000.B01	CONCRETE SLAB
033000.C01	CONCRETE WALK
033000.J05	PREFORMED JOINT FILLER
033000.W01	REINFORCING STEEL
034713.A01	TILT-UP CONCRETE WALL PANEL
042200.D03	CMU 8"
051200.E03	STEEL PLATE, BENT
051200.T02	ANCHOR BOLT
054000.C01	METAL STUD RUNNER TRACK
054000.D03	METAL STUD 3 5/8"
054000.D08	METAL STUD 8"
055000.B01	STEEL BOLLARD
061000.C11	PRESSURE TREATED WOOD BLOCKING
072100.R10	BLANKET INSULATION, UNFACED
072113.R02	PERIMETER INSULATION
072116.R35	GLASS-FIBERBOARD INSULATION
076200.H01	METAL FLASHING
079200.Q01	JOINT SEALANT
079200.Q02	BACKSTOP AND SEALANT
081113.D01	HOLLOW METAL FRAME
081113.T01	MASONRY ANCHOR
083323.A02	INSULATED OVERHEAD COILING DOOR
083323.B01	COILING DOOR GUIDES
083323.B03	COILING DOOR HOOD
083323.C01	BOTTOM BAR/WEATHER SEAL
087100.Q20	WEATHERSTRIPPING
087100.S20	THRESHOLD
092216.C02	METAL STUD RUNNER TRACK
092216.D03	METAL STUD 3 5/8"
092216.D04	METAL STUD 4"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.M04	CORNERBEAD
107313.B01	DOOR CANOPY SYSTEM

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

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PUBLIC SAFETY CONSULTANT/ARCHITECT

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1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
TIMMIE LORIUM JR.
AR 96098
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

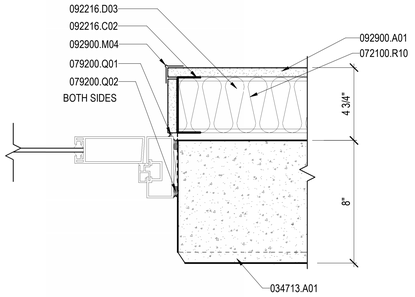
PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

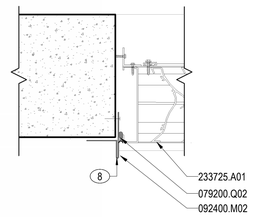
SHEET TITLE
DOOR SCHEDULES, TYPES, & FRAMES

SHEET NUMBER
A0.30E

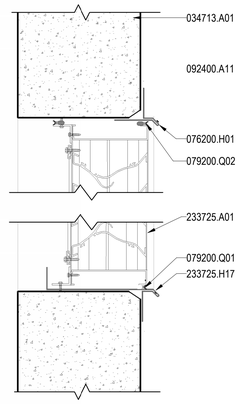
FILE NAME: Autodesk Docs:// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:50 PM



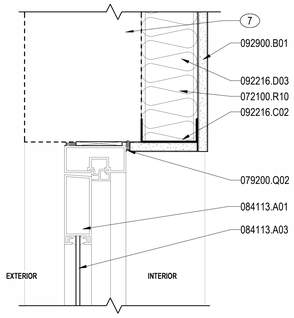
12 3" = 1'-0" **DOOR JAMB - STOREFRONT, EXT**



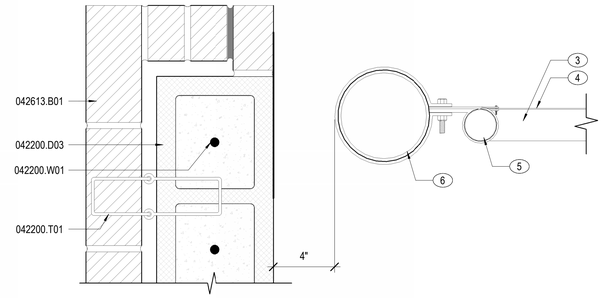
8 3" = 1'-0" **LOUVER JAMB DETAIL**



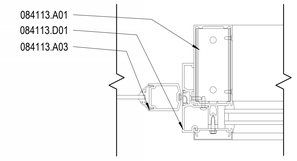
4 3" = 1'-0" **LOUVER HEAD AND SILL DETAIL**



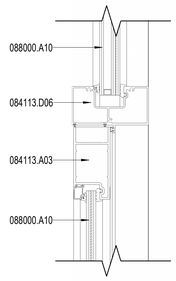
11 3" = 1'-0" **DOOR HEAD - STOREFRONT, EXT**



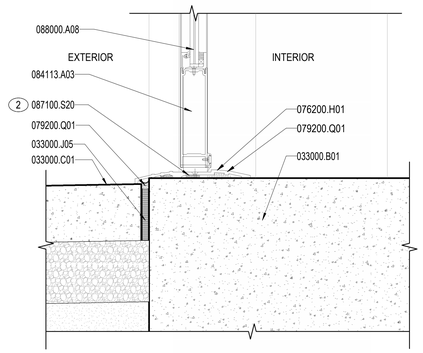
7 3" = 1'-0" **DUMPSTER GATE, JAMB**



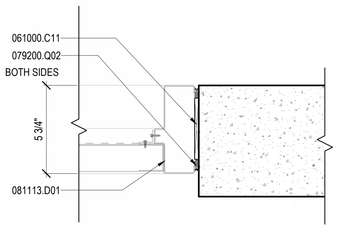
3 3" = 1'-0" **STOREFRONT MULLION / DOOR**



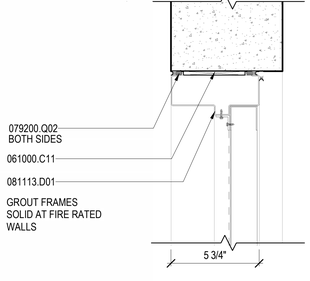
14 3" = 1'-0" **STOREFRONT DOOR HEADER**



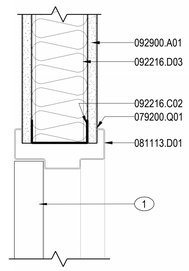
10 3" = 1'-0" **SILL DETAIL**



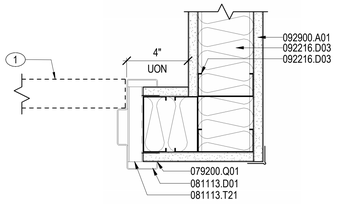
6 3" = 1'-0" **DOOR JAMB - HOLLOW METAL, INT**



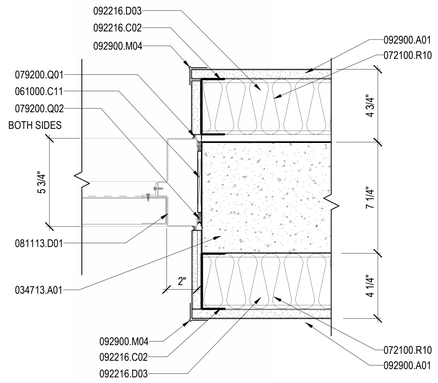
2 3" = 1'-0" **DOOR HEAD - HOLLOW METAL, INT**



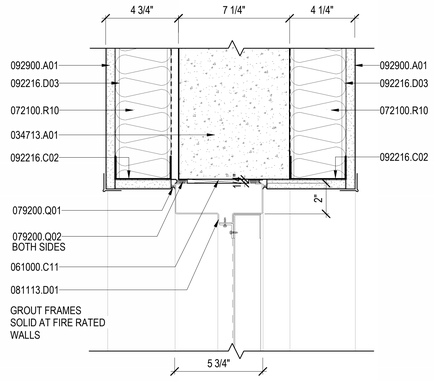
13 3" = 1'-0" **DOOR TYPICAL DOOR HEAD**



9 3" = 1'-0" **TYPICAL DOOR OFFSET ROOM CORNER**



5 3" = 1'-0" **DOOR JAMB - HOLLOW METAL, INT**



1 3" = 1'-0" **DOOR HEAD - HOLLOW METAL, INT 2 SIDED GYP**

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B REFER TO SHEET A0.30E FOR DOOR SCHEDULES & TYPICAL DOOR DETAILS.
C ALL WINDOW PROFILES ARE GENERIC. REFER TO SPECIFICATIONS SECTIONS FOR PERFORMANCE REQUIREMENTS. SEE SECTION 084113 FOR STOREFRONT WINDOW, 084229 FOR AUTOMATIC ENTRANCE, 084413 FOR CURTAIN WALL, 085113 FOR ALUMINUM WINDOW.
D ALL INTERIOR GLAZING SHALL BE CLEAR, TEMPERED GLASS 088000.A04 UNO.
E ALL EXTERIOR GLAZING SHALL BE TINTED INSULATING GLASS, CLASS 'E' IMPACT RATED FOR RISK CATEGORY IV ESSENTIAL BUILDINGS. 088000.A09 UNO.

SHEET NOTES

1 REFER TO DOOR SCHEDULE FOR SPECIFIC DOOR TYPE.
2 SET ON A CONTINUOUS BED OF SEALANT. CAULK ENDS OF THRESHOLD. SECURE THRESHOLD TO CONCRETE FLOOR WITH CONCRETE ANCHORS.
3 CHAIN LINK FENCE GATE SYSTEM. REFER TO CIVIL FOR CHAIN LINK SPECIFICATION INFORMAITON.
4 CHAINLINK FABRIC INFILL.
5 TENSION ROD.
6 END POST.
7 EXTERIOR WALL, SEE PLANS
8 METAL FLASHING SET ON SEALANT

MATERIAL NOTES

033000.B01	CONCRETE SLAB
033000.C01	CONCRETE WALK
033000.J05	PREFORMED JOINT FILLER
034713.A01	TILT-UP CONCRETE WALL PANEL
042200.D03	CMU 8"
042200.T01	MASONRY ANCHOR
042200.W01	REINFORCING STEEL
042613.B01	BRICK VENEER MASONRY
061000.C11	PRESSURE TREATED WOOD BLOCKING
072100.R10	BLANKET INSULATION, UNFACED
076200.H01	METAL FLASHING
079200.Q01	JOINT SEALANT
079200.Q02	BACKSTOP AND SEALANT
081113.D01	HOLLOW METAL FRAME
081113.T21	METAL STUD ANCHOR
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.A03	FULL GLAZED STILE AND RAIL DOOR
084113.D01	ALUMINUM DOOR FRAME
084113.D06	ALUMINUM FRAME
087100.S20	THRESHOLD
088000.A08	CLEAR LAMINATED GLASS
088000.A10	CLEAR INSULATING GLASS UNIT
092216.C02	METAL STUD RUNNER TRACK
092216.D03	METAL STUD 3 5/8"
092400.A11	SELF FURRING DIAMOND MESH LATH
092400.M02	DRIP EDGE TRIM
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.B01	GYPSUM BOARD, GLASS MAT FACED 5/8"
092900.M04	CORNERBEAD
233725.A01	EXTRUDED ALUMINUM WALL LOUVER
233725.H17	SILL FLASHING WITH END DAMS

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PUBLIC SAFETY CONSULTANT/ARCHITECT
JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA
LYNNIE LOHRUM
AR 96599
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

SHEET TITLE
HOLLOW METAL FRAME & TYPICAL DOOR DETAILS

SHEET NUMBER
A0.35E

FILE NAME: Autodesk Docs:// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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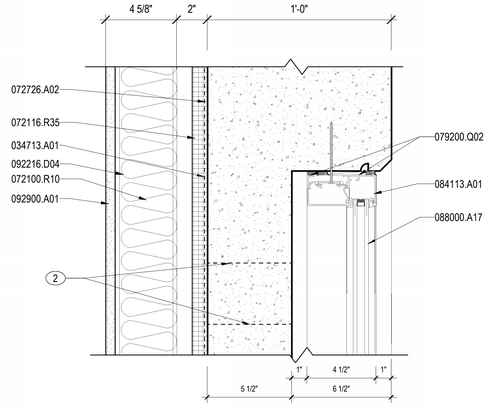
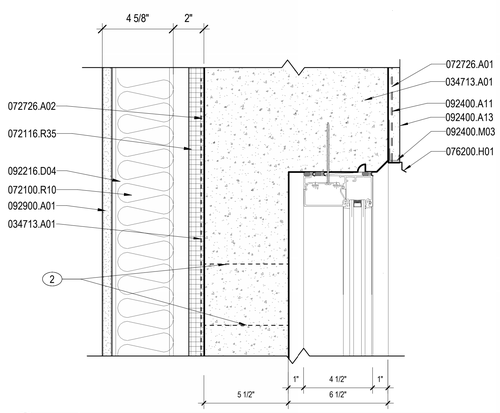


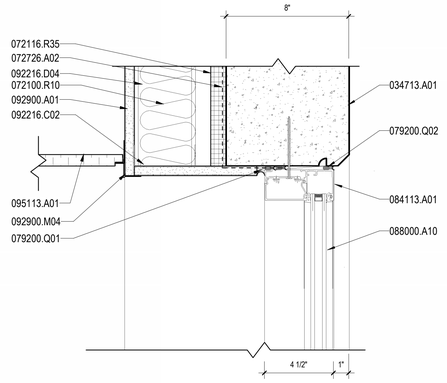
10 3" = 1'-0" **STOREFRONT SECTION DETAIL - HEAD**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



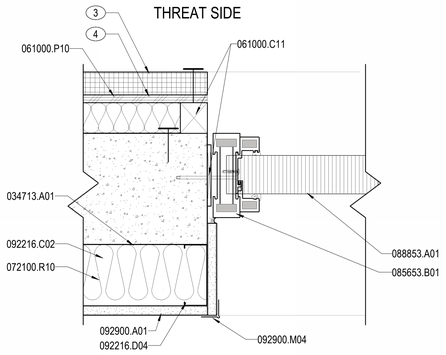
7 3" = 1'-0" **STOREFRONT SECTION DETAIL - HEAD**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



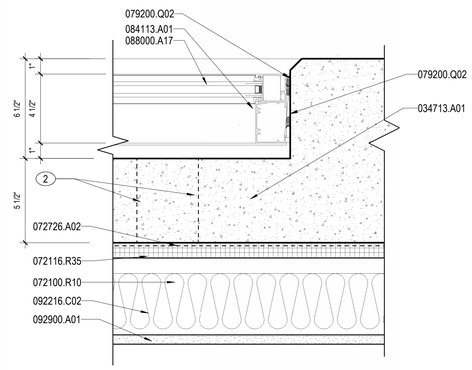
4 3" = 1'-0" **STOREFRONT SECTION DETAIL - HEAD**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



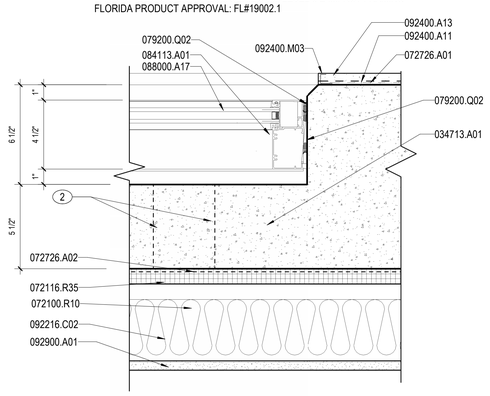
BASIS OF DESIGN: TSS BL 5.5 FRAMING SYSTEM WITH McGRORT GLASS BALLISTIC DEFEND 4-GCP GLAZING
(LEVEL 8 BULLET RESISTANT & SMOKE RATED)

12 3" = 1'-0" **BALLISTIC WINDOW JAMB**



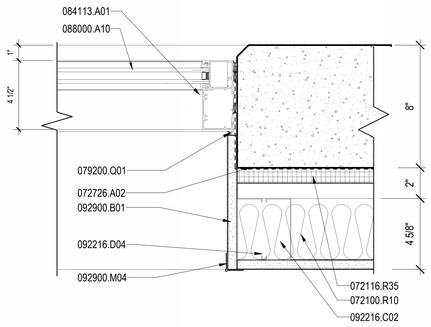
9 3" = 1'-0" **STOREFRONT SECTION DETAIL - JAMB**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



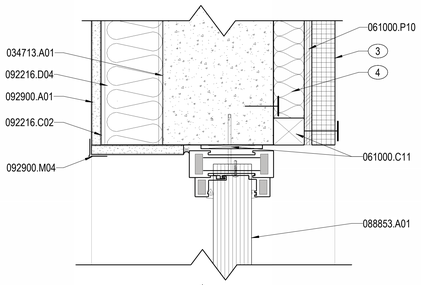
6 3" = 1'-0" **STOREFRONT SECTION DETAIL - JAMB**

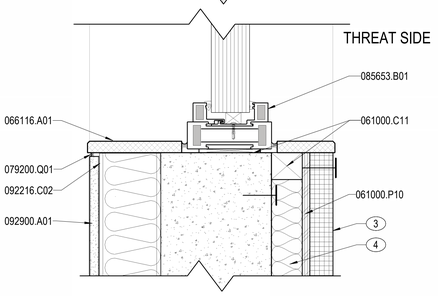
BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



3 3" = 1'-0" **STOREFRONT SECTION DETAIL - JAMB**

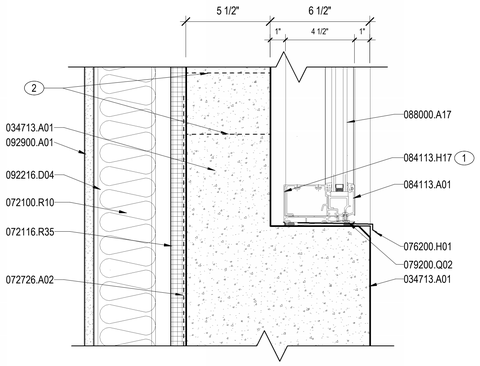
BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1





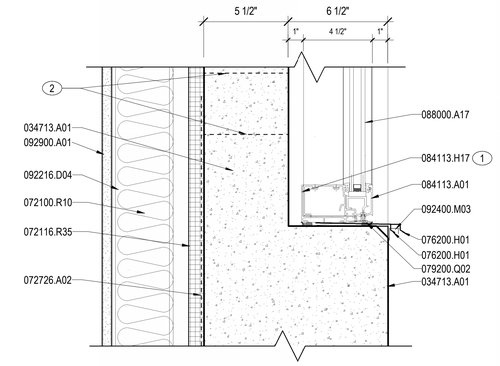
BASIS OF DESIGN: TSS BL 5.5 FRAMING SYSTEM WITH McGRORT GLASS BALLISTIC DEFEND 4-GCP GLAZING
(LEVEL 8 BULLET RESISTANT & SMOKE RATED)

11 3" = 1'-0" **BALLISTIC WINDOW HEAD/SILL**



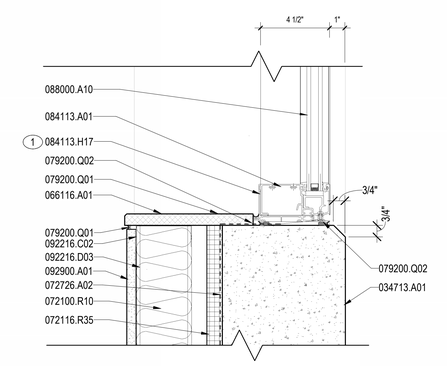
8 3" = 1'-0" **STOREFRONT SECTION DETAIL - SILL**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



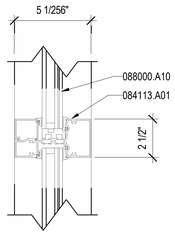
5 3" = 1'-0" **STOREFRONT SECTION DETAIL - SILL**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



2 3" = 1'-0" **STOREFRONT SECTION DETAIL - SILL**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING
FLORIDA PRODUCT APPROVAL: FL#19002.1



1 3" = 1'-0" **STOREFRONT MULLION**

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B REFER TO SHEET A0.30E FOR DOOR SCHEDULES & TYPICAL DOOR DETAILS.
C ALL WINDOW PROFILES ARE GENERIC. REFER TO SPECIFICATIONS SECTIONS FOR PERFORMANCE REQUIREMENTS. SEE SECTION 084113 FOR STOREFRONT WINDOW, 084229 FOR AUTOMATIC ENTRANCE, 084413 FOR CURTAIN WALL, 085113 FOR ALUMINUM WINDOW.
D ALL INTERIOR GLAZING SHALL BE CLEAR, TEMPERED GLASS 088000.A04 UNO.
E ALL EXTERIOR GLAZING SHALL BE TINTED INSULATING GLASS, CLASS 'E' IMPACT RATED FOR RISK CATEGORY IV ESSENTIAL BUILDINGS. 088000.A09 UNO.

SHEET NOTES

1 METAL FLASHING SET ON SEALANT
2 4" PVC SLEEVE VENT, 5 PER OPENING.
3 1 1/2" BALLISTIC RUBBER TILE PANELS FASTENED TO WOOD SLATS.
4 MINERAL WOOL INSULATION.

MATERIAL LEGEND

034713.A01	TILT-UP CONCRETE WALL PANEL
061000.C11	PRESSURE TREATED WOOD BLOCKING
061000.P10	FIRE-RETARDANT PLYWOOD PANEL
066116.A01	SOLID SURFACE WINDOW SILL
072100.R10	BLANKET INSULATION, UNFACED
072116.R35	GLASS-FIBERBOARD INSULATION
072726.A01	FLUID-APPLIED AIR BARRIER, VAPOR-RETARDING
072726.A02	FLUID-APPLIED AIR BARRIER, VAPOR-PERMEABLE
076200.H01	METAL FLASHING
079200.Q01	JOINT SEALANT
079200.Q02	BACKSTOP AND SEALANT
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.H17	SILL FLASHING WITH END DAMS
085653.B01	BULLET RESISTANT ALUMINUM FRAME
088000.A10	CLEAR INSULATING GLASS UNIT
088000.A17	SPANDREL INSULATING GLASS UNIT
088853.A01	LAMINATED-GLASS SECURITY GLAZING
092216.C02	METAL STUD RUNNER TRACK
092216.D03	METAL STUD 3 5/8"
092216.D04	METAL STUD 4"
092400.A11	SELF FURRING DIAMOND MESH LATH
092400.A13	3-COAT STUCCO SYSTEM
092400.M03	EDGE TRIM METAL
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.B01	GYPSUM BOARD, GLASS MAT FACED 5/8"
092900.M04	CORNERBEAD
095113.A01	ACOUSTICAL CEILING UNITS

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL

PGAL, Inc.
791 Park of Commerce Blvd.
Suite 400
Boca Raton, FL 33487
T 561 988 4002
www.pgal.com

CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
LYNNE LORIUM
AR 96289
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

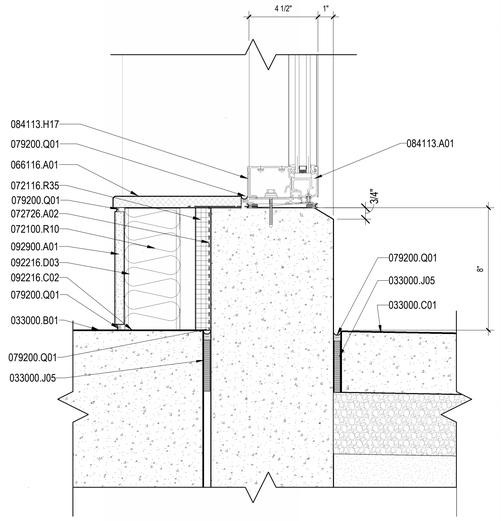
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

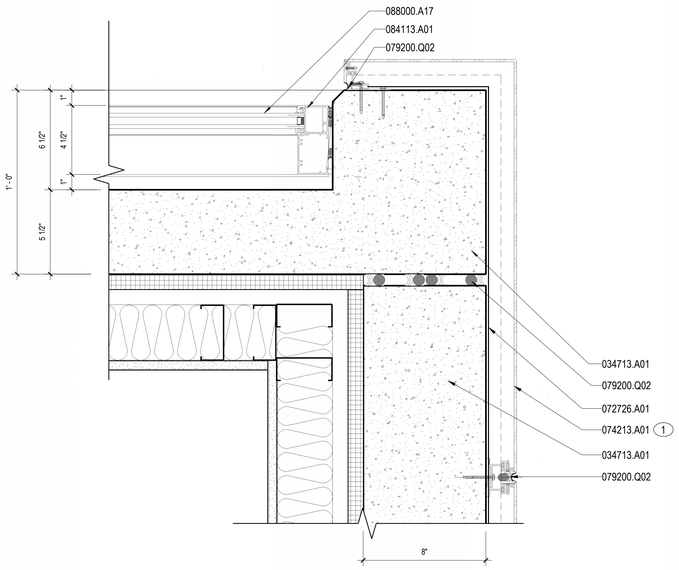
SHEET TITLE
STOREFRONT DETAILS

SHEET NUMBER
A0.36E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:40:58 PM



2 3" = 1'-0" **STOREFRONT SECTION DETAIL - SILL**



1 3" = 1'-0" **STOREFRONT PLAN DETAIL - JAMB**

GENERAL NOTES

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SHEET NOTES

1 BASIS OF DESIGN: ALPOLIC DBR DARK BRONZE TO MATCH ADMIN BUILDING

MATERIAL LEGEND

033000.B01	CONCRETE SLAB
033000.C01	CONCRETE WALK
033000.J05	PREFORMED JOINT FILLER
034713.A01	TILT-UP CONCRETE WALL PANEL
066116.A01	SOLID SURFACE WINDOW SILL
072100.R10	BLANKET INSULATION, UNFACED
072116.R35	GLASS-FIBERBOARD INSULATION
072726.A01	FLUID-APPLIED AIR BARRIER, VAPOR-RETARDING
072726.A02	FLUID-APPLIED AIR BARRIER, VAPOR-PERMEABLE
074213.A01	WALL PANEL SYSTEM
079200.Q01	JOINT SEALANT
079200.Q02	BACKSTOP AND SEALANT
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.H17	SILL FLASHING WITH END DAMS
088000.A17	SPANDREL INSULATING GLASS UNIT
092216.C02	METAL STUD RUNNER TRACK
092216.D03	METAL STUD 3 5/8"
092900.A01	GYPSUM BOARD, REGULAR 5/8"

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REGISTRATION

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DRAWING HISTORY

No	DATE	DESCRIPTION

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90% CONSTRUCTION DOCUMENTS / PERMIT SET

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PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

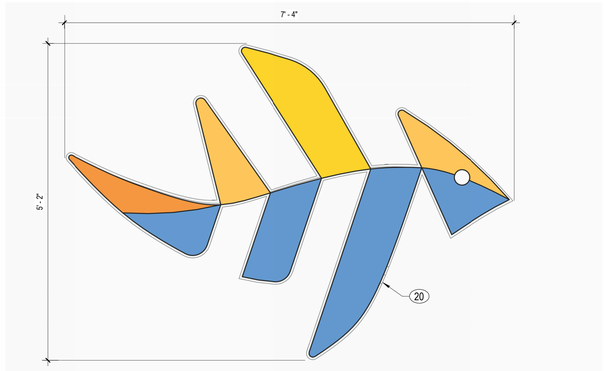
SHEET TITLE
STOREFRONT DETAILS

SHEET NUMBER
A0.37E

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:01 PM

ROOM SIGNAGE SCHEDULE

ROOM NUMBER	ROOM NAME	SIGN TYPE	SIGN ROOM NUMBER	SIGN MESSAGE	ADDITIONAL NOTES
FIRST FLOOR					
E101	EVIDENCE VEHICLE STORAGE	XA2/A2	E101	EVIDENCE VEHICLE STORAGE	
E102	EV PROCESS	XA2/A2	E102	EVIDENCE VEHICLE PROCESS	
E103	DRYING ROOM	A2	E103	DRYING ROOM	
E104	RR	A3	E104	RESTROOM	
E105	SWAT VEHICLE	XA2/A2	E105	SWAT VEHICLE ROOM	
E106	SWAT	XA2	E106	SWAT ROOM	
E107	RR	A3	E107	RESTROOM	
E108	SWAT STOR.	A2	E108	SWAT STORAGE	
E109	FLEX STORAGE	XA2	E109	MECHANICAL ROOM	
E110	ELECT.	XA2	E110	ELECTRICAL ROOM	
E111	CIRCULATION	A2	E111	CORRIDOR	
E112	IT	A2	E112	IT ROOM	
E113	AMMO	A2	E113	AMMUNITION ROOM	
E114	CONTROL	A2	E114	CONTROL ROOM	
E115	SIMULATOR	A2	E115	SIMULATOR ROOM	
E116	RR	A3	E116	RESTROOM	
E117	RR	A3	E117	RESTROOM	
E118	JAN.	A2	E118	JANITOR	
E119	VEST	A2	E119	VESTIBULE	
E120	CLEAN / REPAIR	A2	E120	CLEAN / REPAIR	
E121	CONTROL	A2	E121	CONTROL ROOM	
E122	FIRING RANGE + SIMULATOR ROOM	A2	E122	FIRING RANGE	
MEZZANINE					
E201	MEZZANINE	A2	E201	MEZZANINE	

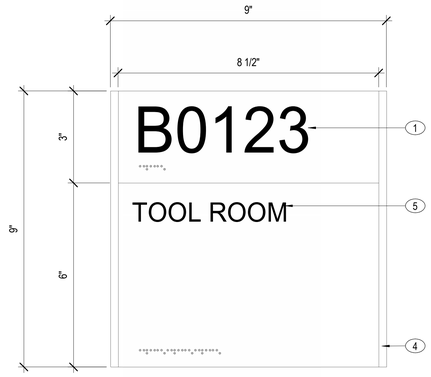


12 1" = 1'-0" **RBPD LOGO DETAIL, STAINLESS STEEL - ILLUMINATED**

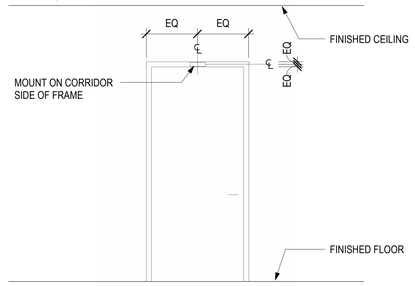
11 1" = 1'-0" **XBA - EXTERIOR SCREEN WALL NUMBER, STAINLESS STEEL - NON-ILLUMINATED**

10 1" = 1'-0" **XBA - EXTERIOR SCREEN WALL NUMBER, STAINLESS STEEL - NON-ILLUMINATED**

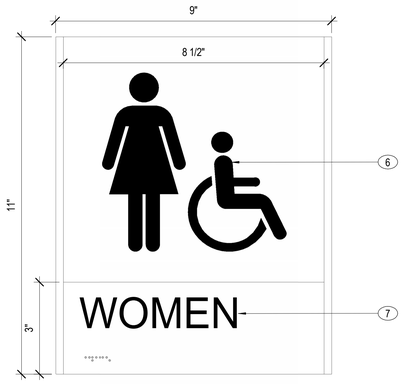
9 1" = 1'-0" **XBA - EXTERIOR BUILDING NUMBER, STAINLESS STEEL - NON-ILLUMINATED**



8 6" = 1'-0" **XA2 / A2, PERMANENT ROOM SIGNAGE**

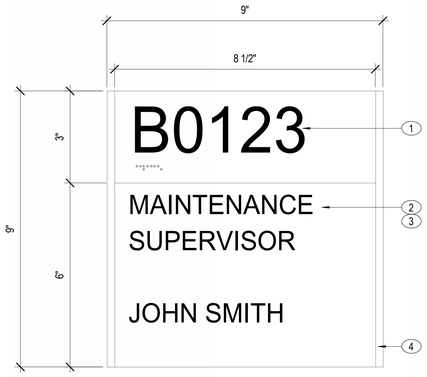


7 1/2" = 1'-0" **DOOR TAG SIGNAGE MOUNTING HEIGHTS**

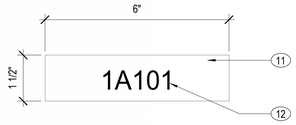


6 6" = 1'-0" **A3, ADA RESTROOM SIGNAGE**

5 6" = 1'-0" **XBD, NO SMOKING BUILDING SIGNAGE**



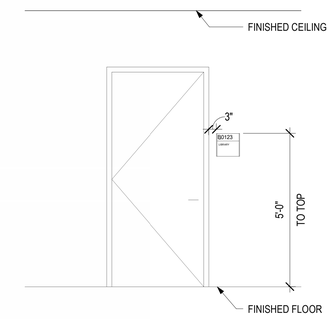
4 6" = 1'-0" **A1, ROOM SIGNAGE W/ INSERTS**



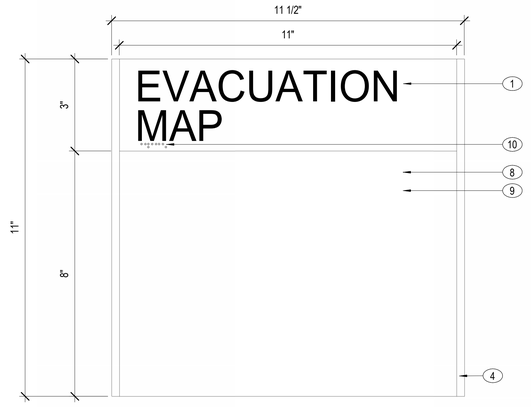
DOOR TAG IS REQUIRED ON ALL DOORS EVEN IF SIGN IS NOT SCHEDULED FOR ROOM

LOCATE A DOOR TAG ON ALL DOOR FRAMES (CORRIDOR SIDE). SIGN NUMBERS TO MATCH ARCHITECTURAL FLOOR PLAN NUMBERS.

3 6" = 1'-0" **DOOR TAG SIGNAGE**



2 1/2" = 1'-0" **ROOM SIGNAGE MOUNTING HEIGHTS**



1 6" = 1'-0" **E1, EVACUATION MAP**

GENERAL NOTES

A REFER TO AE815 FOR SIGNAGE LOCATION PLANS

B REFER TO AE815 & AE816 FOR SIGN ELEVATIONS AND MOUNTING HEIGHTS

C REFER TO AE816 FOR SIGN MESSAGE SCHEDULES

D LOCAL FIRE MARSHALL TO VERIFY SIGN TYPE E1 FIRE EVACUATION MAP SIGN LOCATIONS.

E PRIOR TO FABRICATION, SIGN FABRICATOR TO COORDINATE WITH OWNER TO FINALIZE SIGN MESSAGE SCHEDULE, ROOM NUMBERING, AND GENERAL NOMENCLATURE.

F REFER TO SPECIFICATION SECTION 10 14 23.16 ROOM-IDENFICATION PANEL SIGNAGE FOR ADDITIONAL INFORMATION AND COORDINATION.

G DOOR TAG NUMBERS TO MATCH ARCHITECTURAL FLOOR PLAN NUMBERS PER DOOR SCHEDULE. REFER TO DOOR NUMBERS AS PROVIDED ON SHEET AE601.

H CHARACTERS, LETTERS, AND NUMBERS TO BE TACITLE RAISED, 1/32 INCH OF CONTRASTING COLOR AND ACCOMPANIED BY GRADE 2 BRAILLE, UNLESS OTHERWISE NOTED.

I ALL FASTERNERS TO BE CONCEALED AND VANDAL RESISTANT.

J ALL EDGES TO BE FINISHED AND PAINTED.

K SIGN FABRICATOR TO PROVIDE OWNER WITH COMPLETE TEMPLATE LAYOUT FOR EACH SIGN TYPE, TO BE USED FOR FUTURE INSERT UPDATES.

L TEXT ON SIGN ELEVATIONS IS FOR EXAMPLE ONLY.

SHEET NOTES

1 1-1/2" TACTILE ROOM NUMBER WITH BRAILLE HELVETICA NEUE 55 ROMAN

2 PRINTED PAPER INSERT WITH ROOM DESCRIPTION

3 5/8" HIGH PRINTED MESSAGE HELVETICA NEUE 55 ROMAN

4 REMOVABLE END CAPS

5 5/8" TACTILE ROOM NUMBER WITH BRAILLE

6 GRAPHIC SHOULD FIT IN 6" FIELD

7 1" TACTILE ROOM DESCRIPTION WITH BRAILLE HELVETICA NEUE 55 ROMAN

8 CLEAR POLYCARBONATE INSERT COVER, MOUNT TO BACKER 1/32" THICK DOUBLE SIDED TAPE ALLOWING OPENING TO HOLD PAPER INSERT.

9 FABRICATE SIGN TO INCLUDE INSERT AREAS AS PER OWNER REQUIREMENTS.

10 GRADE 2 RAISED BRAILLE; COLOR TO MATCH BACKGROUND.

11 SOLID ACRYLIC PANEL TO MATCH DOOR FRAME

12 7/8" CAP HIGH MACHINE ENGRAVED TEXT COLOR: BLACK

13 1" CAP HEIGHT TEXT; COLOR: WHITE

14 NON SMOKING GRAPHIC, COLOR: REFLECTIVE WHITE VINYL

15 DOES NOT APPEAR IN SCHEDULE SEE SHEETS AG101 THROUGH AG111F FOR LOCATIONS

16 NO MESSAGE SCHEDULE. TEXT AND GRAPHIC SPECIFIC TO THIS SIGN

17 MOUNT TOP OF SIGN AT 60" AFF

18 BAKED ENAMEL INDIVIDUAL ALUMINUM PANEL, COLOR: BLUE PANTONE 19-4052 PTX (653C)

19 ROUNDED CORNERS

20 ALUMINUM LASER CUT SIGNAGE TO BE BACKLIT. COLORS AND DESIGN TO MATCH CITY OF RIVIERA BEACH LOGO.

0 1' 2' 4' 6' 8'
1/2" = 1'-0" GRAPHIC SCALE

0 6" 1' 2' 3' 4'
1" = 1'-0" GRAPHIC SCALE

0 1" 2" 3" 6"
6" = 1'-0" GRAPHIC SCALE

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

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791 Park of Commerce Blvd.
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CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — LYNNIE LORIUM — AR 96289 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

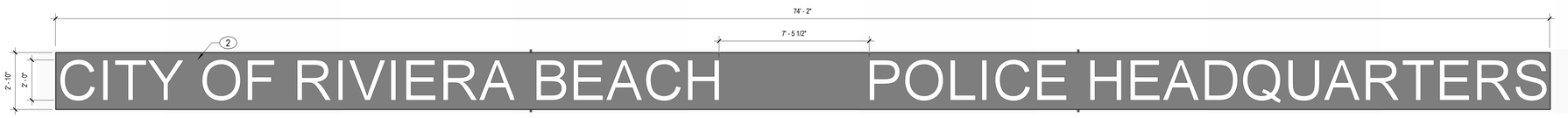
PROJECT NUMBER
1007657.00

SHEET TITLE
SIGNAGE SCHEDULE & TYPES

SHEET NUMBER
A0.50E

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-City of Riviera Beach D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:05 PM

2 1" = 1'-0" **RBPD LOGO SIGNAGE DETAIL**



1 3/8" = 1'-0" **CITY OF RIVIERA BEACH POLICE DEPARTMENT SIGNAGE DETAIL**

GENERAL NOTES

A REFER TO AE815 FOR SIGNAGE LOCATION PLANS
B REFER TO AE815 & AE816 FOR SIGN ELEVATIONS AND MOUNTING HEIGHTS
C REFER TO AE816 FOR SIGN MESSAGE SCHEDULES
D LOCAL FIRE MARSHALL TO VERIFY SIGN TYPE E1 FIRE EVACUATION MAP SIGN LOCATIONS.
E PRIOR TO FABRICATION, SIGN FABRICATOR TO COORDINATE WITH OWNER TO FINALIZE SIGN MESSAGE SCHEDULE, ROOM NUMBERING, AND GENERAL NOMENCLATURE.
F REFER TO SPECIFICATION SECTION 10 14 23.16 ROOM-IDENFICATION PANEL SIGNAGE FOR ADDITIONAL INFORMATION AND COORDINATION.
G DOOR TAG NUMBERS TO MATCH ARCHITECTURAL FLOOR PLAN NUMBERS PER DOOR SCHEDULE. REFER TO DOOR NUMBERS AS PROVIDED ON SHEET AE601.
H CHARACTERS, LETTERS, AND NUMBERS TO BE TACITLE RAISED, 1/32 INCH OF CONTRASTING COLOR AND ACCOMPANIED BY GRADE 2 BRAILLE, UNLESS OTHERWISE NOTED.
I ALL FASTERNERS TO BE CONCEALED AND VANDAL RESISTANT.
J ALL EDGES TO BE FINISHED AND PAINTED.
K SIGN FABRICATOR TO PROVIDE OWNER WITH COMPLETE TEMPLATE LAYOUT FOR EACH SIGN TYPE, TO BE USED FOR FUTURE INSERT UPDATES.
L TEXT ON SIGN ELEVATIONS IS FOR EXAMPLE ONLY.

SHEET NOTES

1 COLORS AND LOGO DESIGN TO MATCH CITY OF RIVIERA BEACH POLICE DEPARTMENT LOGO.
2 BACKLIT LASER CUT ALUMINUM SIGNAGE

0 6" 1' 2' 3' 4'
1" = 1'-0" GRAPHIC SCALE

0 1' 2' 4' 6' 8' 10'
3/8" = 1'-0" GRAPHIC SCALE

CLIENT

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REGISTRATION

STATE OF FLORIDA
JENNIE LOHRUM
AR 99289
REGISTERED ARCHITECT

DRAWING HISTORY

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CONSULTANT

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10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
SIGNAGE DETAILS

SHEET NUMBER
A0.55E

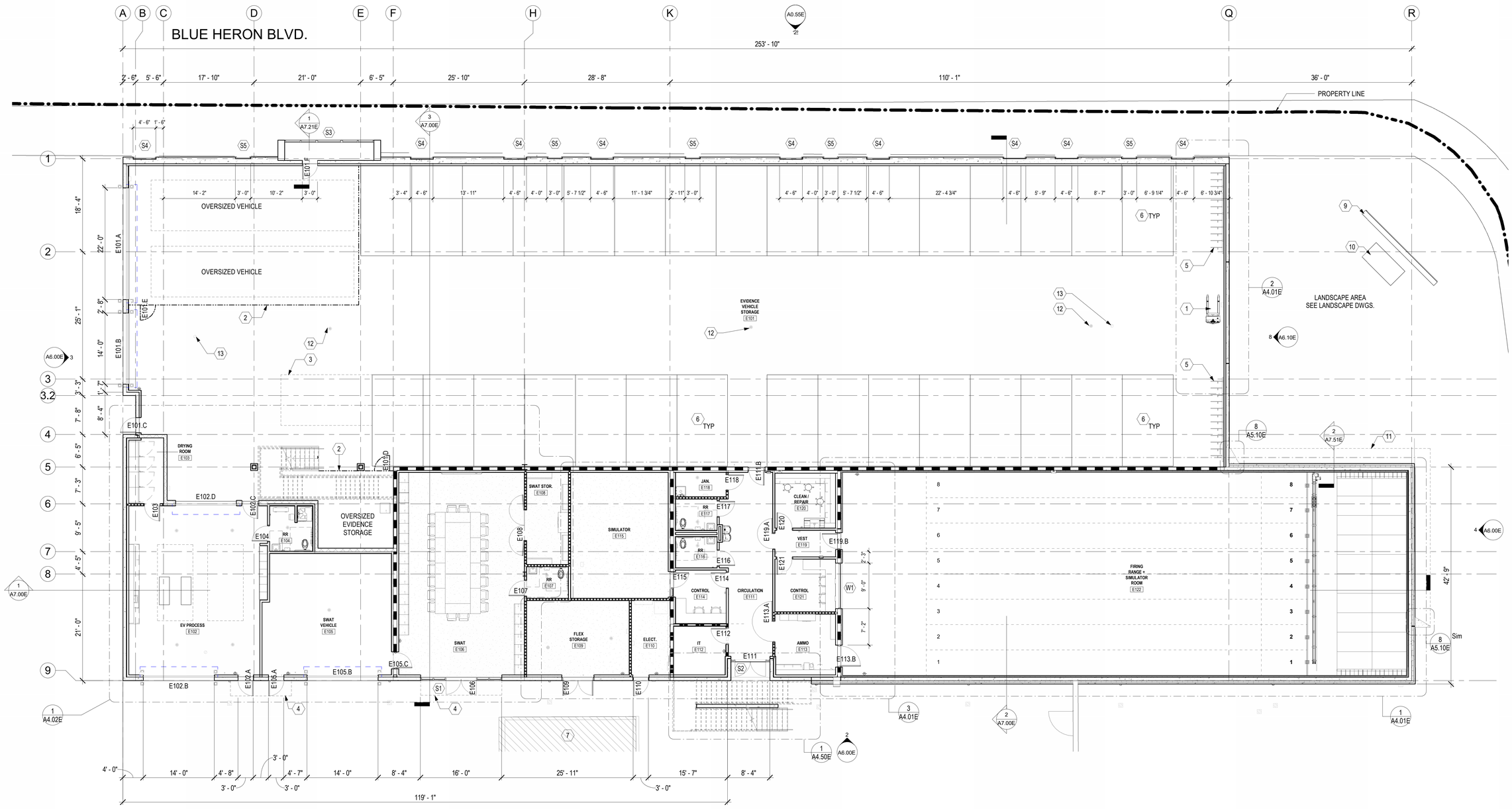
FILE NAME: Autodesk Docs// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:08 PM

GENERAL NOTES

A REFER TO SHEETS G1.00E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B DASHED LINES REPRESENT ITEMS ABOVE.
C REFER TO SHEET I0.10 FOR PARTITION TYPES AND DETAILS. PARTITIONS NOT IDENTIFIED SHALL BE TYPE A3 UNO.
D REFER TO SHEET I0.30E FOR DOOR, WINDOW, LOUVER, AND STOREFRONT ELEVATIONS.
E REFER TO SHEETS I0.30E FOR DOOR SCHEDULE & FOR TYPICAL DOOR DETAILS.
F FOR LOCKERS AND TOILET ROOM DIMENSIONS, REFER TO ENLARGED FLOOR PLANS.
G DIMENSIONS ARE TO COLUMN GRID, FACE OF MASONRY/CONCRETE/PRECAST, FACE OF METAL STUD, UNO.
H PROVIDE ALL NECESSARY FIREPROOFING MATERIALS TO MAINTAIN REQUIRED RATINGS.
I REFER TO SHEET G1.00E FOR LIFE SAFETY PLANS.
J REFER TO PLUMBING SHEETS FOR FLOOR DRAIN LOCATION COORDINATION.
K REFER TO SHEET A8.00 FOR TYPICAL EQUIPMENT MOUNTING HEIGHTS.
L REFER TO STRUCTURAL SHEET FOR TILT UP PANEL ELEVATIONS, OPENING DIMENSIONS AND DETAILS.
M REFER TO SHEET SERIES I2.21 FOR FINISH SCHEDULE AND KEY TO FINISHES.
N REFER TO SHEET I0.10 FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND WALL PRIORITIES.

SHEET NOTES

1 FORKLIFT STORAGE AREA
2 SECURED FENCE
3 TEMPORARY VEHICLE STORAGE
4 DASHED LINE REPRESENTS CANOPY ABOVE. REFER TO ADMIN BUILDING DRAWINGS FOR MORE INFORMATION.
5 WALL MOUNTED HIGH DENSITY BIKE RACK
6 DESIGNATED VEHICLE SPACE. TOTAL UNSECURED VEHICLE SPACES: 31
7 GENERATOR BUILDING. REFER TO ADMIN DRAWINGS FOR FURTHER INFORMATION.
9 EXTERIOR SIGNAGE. REFER TO ADMIN BUILDING DRAWINGS FOR MORE INFORMATION.
10 PEDESTAL. REFER TO ADMIN BUILDING DRAWINGS FOR FURTHER INFORMATION.
11 CAST IN PLACE CONCRETE SOFFIT ABOVE.
12 FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
13 FLOOR CLEANOUT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION



OVERALL FIRST FLOOR PLAN 1/8" = 1'-0" (1)

PLAN NORTH

0 4' 8' 16' 24' 32'
1/8" = 1'-0" GRAPHIC SCALE

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CLIENT

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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — LORRAINE LOHRUM — AR 96099 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/9/2025	Site Plan Resubmission

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN, GROUND - EVIDENCE/ FIRING RANGE

SHEET NUMBER
A2.10E

GENERAL NOTES

A REFER TO SHEETS G1.00E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B DASHED LINES REPRESENT ITEMS ABOVE.

C REFER TO SHEET I0.10 FOR PARTITION TYPES AND DETAILS. PARTITIONS NOT IDENTIFIED SHALL BE TYPE A3 UNO.

D REFER TO SHEET I0.30E FOR DOOR, WINDOW, LOUVER, AND STOREFRONT ELEVATIONS.

E REFER TO SHEETS I0.30E FOR DOOR SCHEDULE & FOR TYPICAL DOOR DETAILS.

F FOR LOCKERS AND TOILET ROOM DIMENSIONS, REFER TO ENLARGED FLOOR PLANS.

G DIMENSIONS ARE TO COLUMN GRID, FACE OF MASONRY/CONCRETE/PRECAST, FACE OF METAL STUD, UNO.

H PROVIDE ALL NECESSARY FIREPROOFING MATERIALS TO MAINTAIN REQUIRED RATINGS.

I REFER TO SHEET G1.00E FOR LIFE SAFETY PLANS.

J REFER TO PLUMBING SHEETS FOR FLOOR DRAIN LOCATION COORDINATION.

K REFER TO SHEET A8.00 FOR TYPICAL EQUIPMENT MOUNTING HEIGHTS.

L REFER TO STRUCTURAL SHEET FOR TILT UP PANEL ELEVATIONS, OPENING DIMENSIONS AND DETAILS.

M REFER TO SHEET SERIES I2.21 FOR FINISH SCHEDULE AND KEY TO FINISHES.

N REFER TO SHEET I0.10 FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND WALL PRIORITIES.

SHEET NOTES

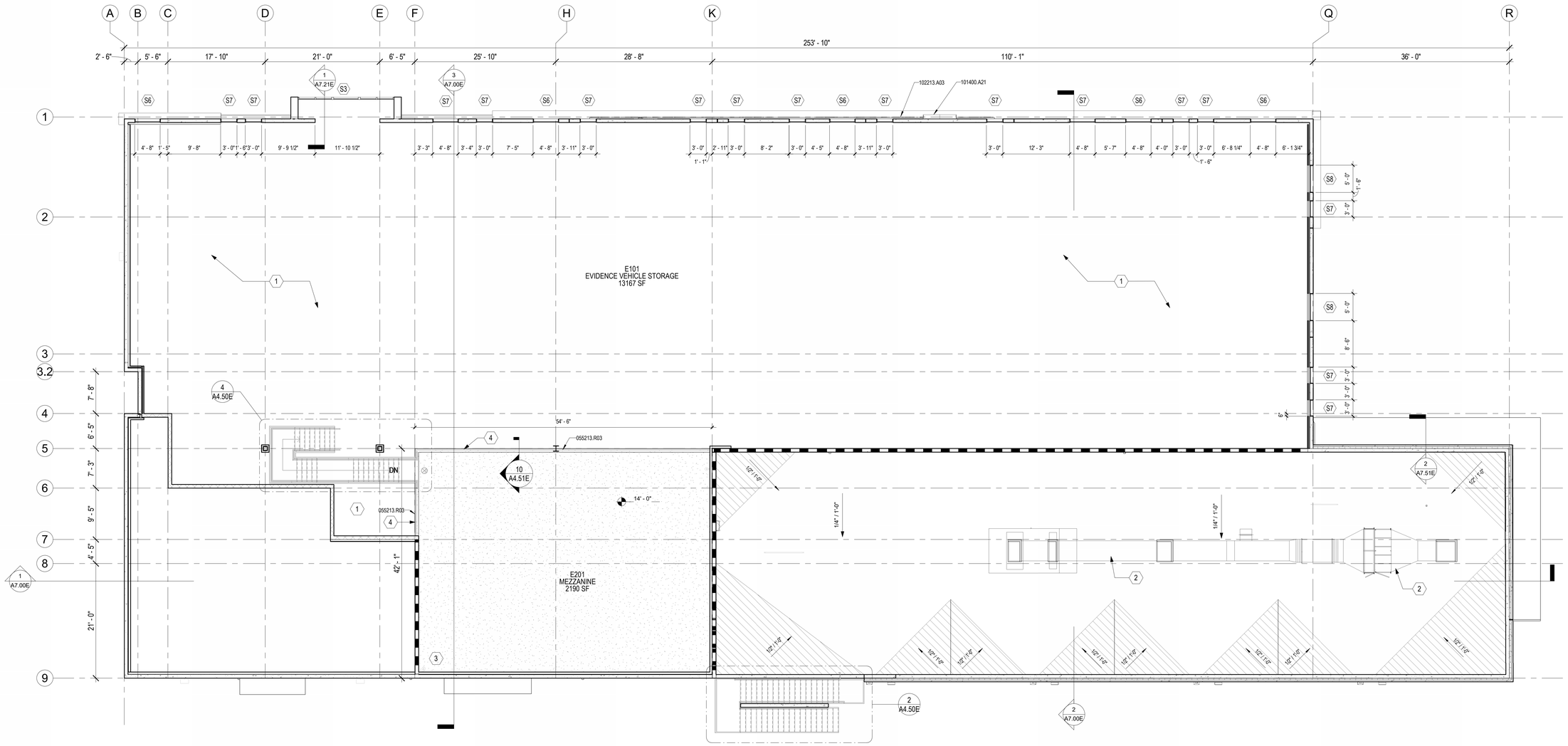
KEYNOTES: 0

1 OPEN TO BELOW

2 FIRING RANGE MECHANICAL EQUIPMENT BY VENDOR

3 REFER TO FINISH SCHEDULE FOR MORE INFORMATION

4 STAINLESS STEEL GUARDRAIL. REFER TO SPECS FOR MORE INFORMATION.



OVERALL FLOOR PLAN, MEZZANINE 1/8" = 1'-0" (1)

PLAN NORTH

0 4' 8' 16' 24' 32'

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

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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CLIENT

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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
SYNNIE LOHRUM
AR 99299
REGISTERED ARCHITECT

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/9/2025	Site Plan Resubmission

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN, MEZZANINE - EVIDENCE/ FIRING RANGE

SHEET NUMBER
A2.15E

GENERAL NOTES

1. DO NOT SCALE DRAWINGS, CONTACT ARCHITECT IN WRITING FOR CLARIFICATIONS OR MISSING DIMENSIONS.
2. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION IN WRITING BEFORE EXECUTION OF WORK.
3. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND ROOFTOP MECHANICAL EQUIPMENT.
4. PROVIDE WALKWAY PADS AROUND ALL ROOFTOP MECHANICAL EQUIPMENT.
5. PROVIDE WALKWAY PADS FROM ROOFTOP ACCESS MECHANICAL EQUIPMENT FOR PROTECTION.
6. REFER TO STRUCTURAL DRAWINGS FOR "ALLOWABLE" DESIGN WIND PRESSURE REQUIREMENTS RELATED TO THE ROOFING SYSTEM.
7. ROOFING SYSTEM TO HAVE CURRENT MIAMI DADE NOA AND/OR FLORIDA PRODUCT APPROVALS THAT MEET OR EXCEED THE DESIGN WIND PRESSURES.
8. REFER TO SHEET G0.02 FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
9. R-VALUE FOR ALL ROOF INSULATION IS TO BE EQUAL TO FLORIDA BUILDING CODE REQUIREMENT FOR THE CLIMATE ZONE REGION (1A).
10. PARAPET HEIGHTS ARE TO TOP OF TILT-WALL OR METAL STUD. PRESSURE TREATED WOOD NAILERS AND METAL COPING/ FLASHING OCCUR ABOVE THIS HEIGHT.

SHEET NOTES

- INDICATES 1/4" PER FOOT SLOPE TO DRAIN AT ROOF
- INDICATES ROOF PITCH
- WALK PADS
- .00.0 — NEW OR FINISH POINT ELEVATION
- A10 — SHEET KEYNOTE
- REFERENCE
- 10 / A7.101 — BUILDING SECTION REFERENCE

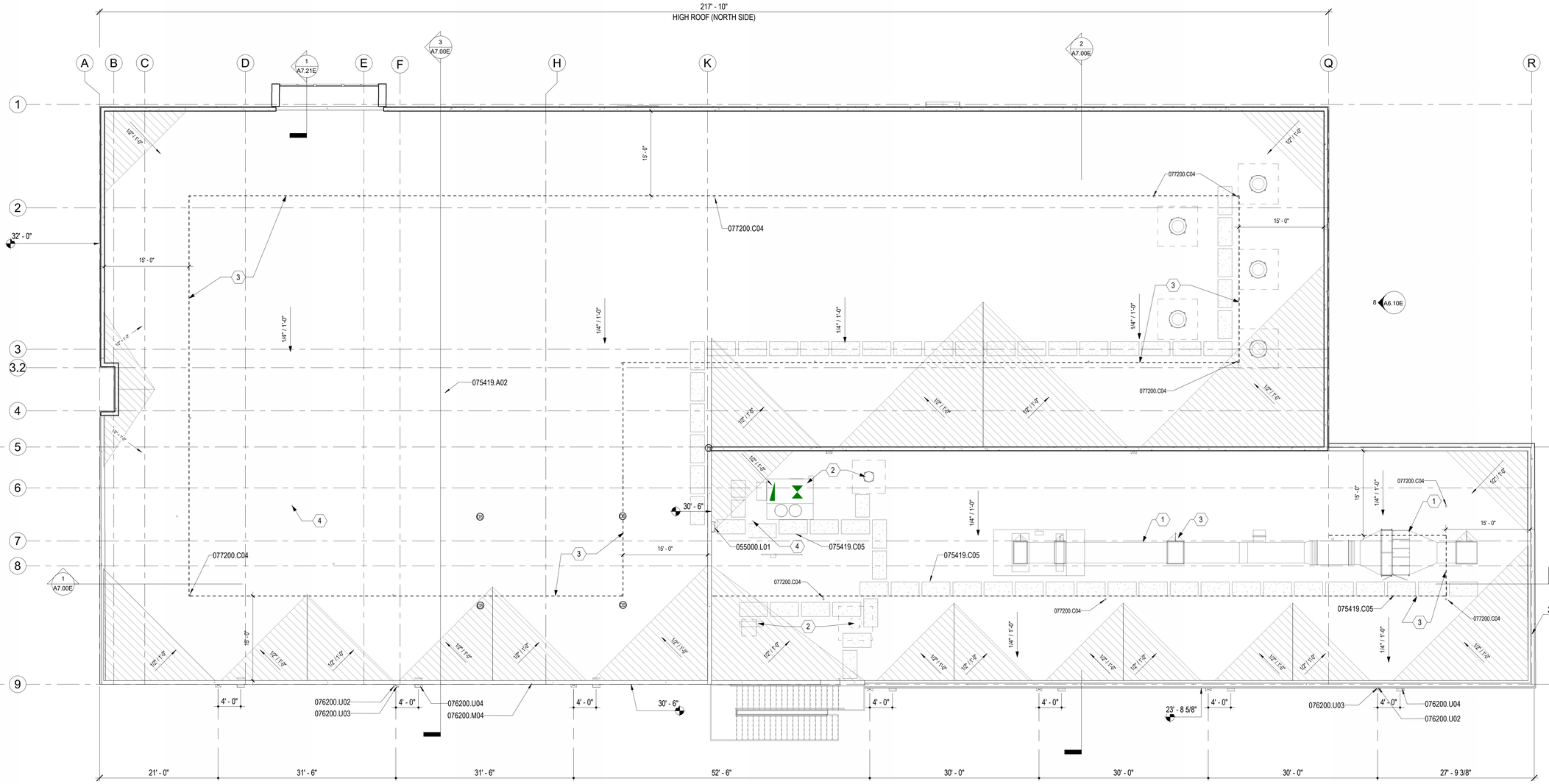
KEYNOTES: 0

1 FIRING RANGE MECHANICAL EQUIPMENT BY VENDOR
2 ROOF TOP MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
3 <varies>
4 VENT THRU ROOF (VTR). REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

MATERIAL LEGEND

055000.L01	STEEL LADDER
075419.A02	SINGLE-PLY PVC ROOFING MEMBRANE, FULLY ADHERED
075419.C05	ROOF WALKWAY PAD
076200.M04	PARAPET COPING
076200.U02	DOWNSPOUT
076200.U03	CONDUCTOR HEAD
076200.U04	SCUPPER
077200.C04	TIEBACK ANCHOR FOR FALL PROTECTION

HIGH ROOF (NORTH SIDE) ROOF AREA = 12,913 SF



HIGH ROOF (SOUTH) ROOF AREA = 4,435 SF

LOW ROOF (SHOOTING RANGE) ROOF AREA = 5,898 SF

OVERALL ROOF PLAN 1/8" = 1'-0" (1)

PLAN NORTH

0 4' 8' 16' 24' 32'
1/8" = 1'-0" GRAPHIC SCALE

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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CLIENT

CITY OF RIVIERA BEACH
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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — LYNNIE LORDUM — AR 96289 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/9/2025	Site Plan Resubmission

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN, ROOF - EVIDENCE/ FIRING RANGE

SHEET NUMBER
A2.30E

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B REFER TO SHEET SERIES G1.00E FOR LIFE SAFETY PLANS.
C ALL CEILING HEIGHTS ARE ABOVE FINISHED FLOOR.
E ALL SOFFITS ARE 7'-2" AFF UNO.
F WHERE LOCKERS ARE INSTALLED, COORDINATE SOFFIT HEIGHT WITH LOCKERS PROVIDED.
G REFER TO SHEET I2.21 FOR FINISH SCHEDULES AND FINIFH IDENTIFICATION SCHEDULES.
H REFER TO ELECTRICAL DRAWINGS FX, EL AND ET FOR COORDINATION OF ALL ELECTRICAL ITEMS SHOWN IN CEILING PLAN.
I REFER TO MECHANICAL DRAWINGS ME FOR COORDINATION OF ALL MECHANICAL ITEMS SHOWN IN CEILING PLAN.
J REFER TO ENGINEERING DRAWINGS FOR CEILING MOUNTED EQUIPMENT.
K COMMUNICATION DEVICES AND CEILING MOUNTED EQUIPMENT TO BE CENTERED IN CEILING TILE UNO.
L ALL CEILING GRIDS TO BE CENTERED IN ROOMS UNO.
M IN CASE OF DISCREPANCIES IN LOCATION OF COMPONENTS WITH ELECTRICAL DRAWINGS, THE REFLECTED CEILING PLAN SHALL GOVERN.
N SINGLE LIGHT FIXTURES IN GYPSUM BOARD CEILINGS TO BE CENTERED IN BOTH DIRECTIONS UNO.
O ACCESS PANELS TO BE PAINTED TO MATCH ADJACENT CEILING FINISH UNO.

SHEET NOTES

3 OPEN TO ABOVE
4 BULLET TRAP
5 BALLISTIC RATED BAFFLES
6 SAFETY CEILING
7 MECHANICAL EQUIPMENT
8 CONCRETE SOFFIT
9 FORENSICS VEHICLE PROCESSING CURTAIN TRACK. SEE SPECS FOR ADDITIONAL INFO

LIFE SAFETY SYMBOLS

UNRATED PARTITION
SMOKE PARTITION
1 HOUR FIRE BARRIER

INSULATION VALUES

CLIMATE ZONE 1A, CITY OF RIVIERA BEACH, FL (WARM-HUMID COUNTY) PALM BEACH COUNTY
HEATING LOAD - MAX 72 DEG. F
COOLING LOAD - MIN. 75 DEG. F

SPEC NO.	DESCRIPTION	DEPTH	R-VALUE
072200.R01	ROOF RIGID BOARD INSULATION (ENTIRELY ABOVE DECK)	3.5 INCHES	R-21ci
072113.R01	MASS (RIGID BOARD, EPS)	1 INCHES	R-5.7 ci
--	UNDERSLAB RIGID INSULATION	NR	NR
--	OPAQUE DOORS, NON-SWINGING*	--	R-4.75
SPEC NO.	DESCRIPTION	DEPTH	U-VALUE
--	FENESTRATION, FIXED	NR	0.50

SPEC NO.	DESCRIPTION	ORIENTATION	SHGC
--	FENESTRATION, FIXED	NORTH	0.37
SPEC NO.	DESCRIPTION	ORIENTATION	SHGC
--	FENESTRATION, FIXED	S,W,E	0.30

PER FBC, ENERGY CONSERVATION, TABLE C402.1.3
R-VALUES BASED ON STANDARD R-6 PER 1-INCH DEPTH OF INSULATION.
*REQUIRED FOR TEMPERATURE CONTROLLED INTERIOR SPACES.

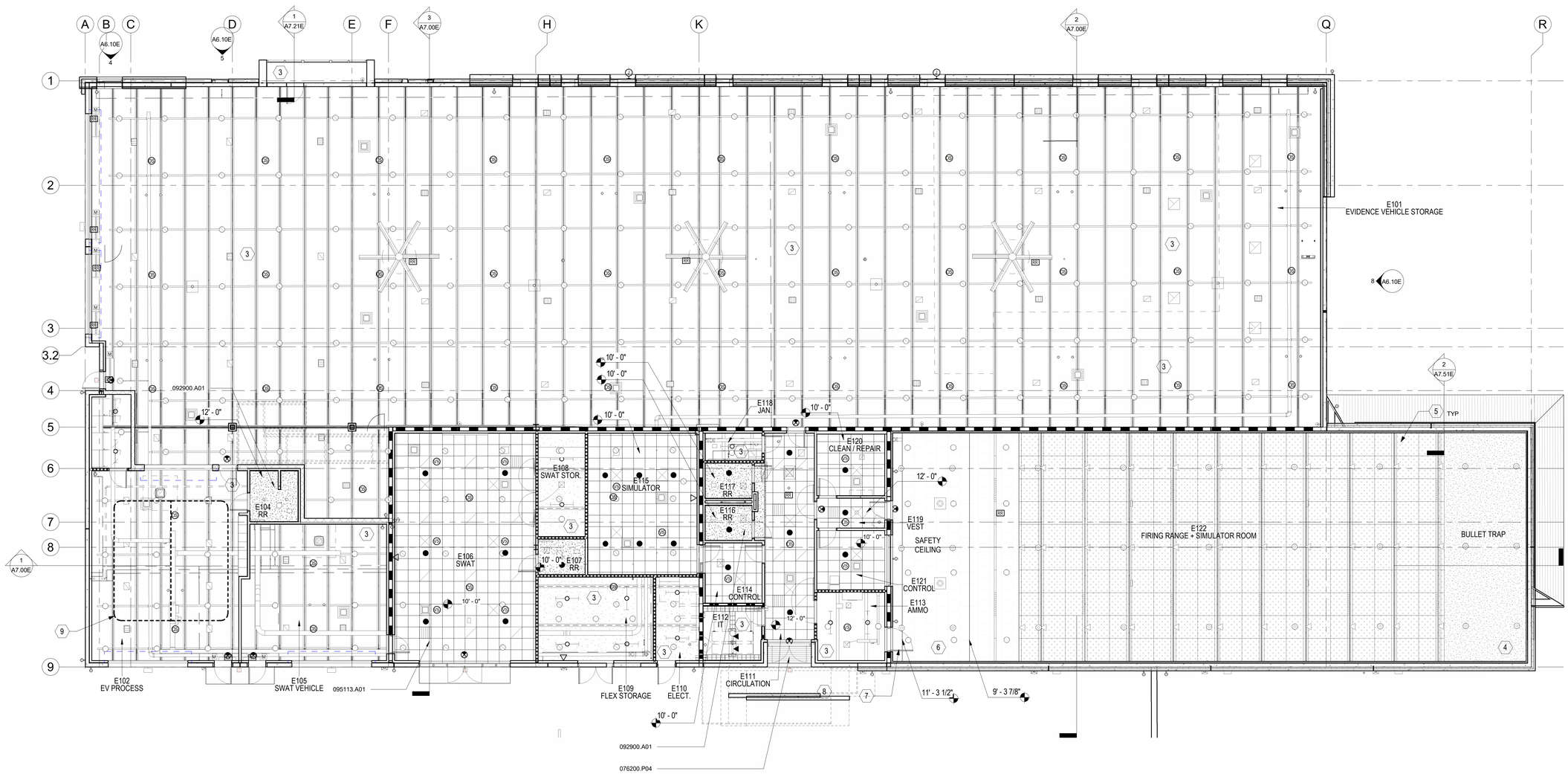
CEILING LEGEND

CEILING TYPES

ACOUSTICAL CEILING TILES 095113.A01
GYPSUM BOARD CEILING SYSTEM, UON 092900.A01
CONCRETE SOFFIT
OPEN TO STRUCTURE ABOVE

MATERIAL LEGEND

076200.P04	METAL SOFFIT PANEL SYSTEM
092900.A01	GYPSUM BOARD, REGULAR 5/8"
095113.A01	ACOUSTICAL CEILING UNITS



REFLECTED CEILING PLAN 1/8" = 1'-0" (1)

PLAN NORTH

0 4' 8' 16' 24' 32'
1/8" = 1'-0" GRAPHIC SCALE

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City_of_Riviera_Beach_D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
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REGISTRATION
STATE OF FLORIDA
CORINNE LOHRUM
AR 99099
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
OVERALL REFLECTED CEILING PLAN - EVIDENCE/ FIRING RANGE

SHEET NUMBER
A3.10E

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B REFER TO SHEET SERIES G1.00E FOR LIFE SAFETY PLANS.
C ALL CEILING HEIGHTS ARE ABOVE FINISHED FLOOR.
E ALL SOFFITS ARE 7'-2" AFF UNO.
F WHERE LOCKERS ARE INSTALLED, COORDINATE SOFFIT HEIGHT WITH LOCKERS PROVIDED.
G REFER TO SHEET I2.21 FOR FINISH SCHEDULES AND FINIFH IDENTIFICATION SCHEDULES.
H REFER TO ELECTRICAL DRAWINGS FX, EL AND ET FOR COORDINATION OF ALL ELECTRICAL ITEMS SHOWN IN CEILING PLAN.
I REFER TO MECHANICAL DRAWINGS ME FOR COORDINATION OF ALL MECHANICAL ITEMS SHOWN IN CEILING PLAN.
J REFER TO ENGINEERING DRAWINGS FOR CEILING MOUNTED EQUIPMENT.
K COMMUNICATION DEVICES AND CEILING MOUNTED EQUIPMENT TO BE CENTERED IN CEILING TILE UNO.
L ALL CEILING GRIDS TO BE CENTERED IN ROOMS UNO.
M IN CASE OF DISCREPANCIES IN LOCATION OF COMPONENTS WITH ELECTRICAL DRAWINGS, THE REFLECTED CEILING PLAN SHALL GOVERN.
N SINGLE LIGHT FIXTURES IN GYPSUM BOARD CEILINGS TO BE CENTERED IN BOTH DIRECTIONS UNO.
O ACCESS PANELS TO BE PAINTED TO MATCH ADJACENT CEILING FINISH UNO.

SHEET NOTES

1 OPEN TO ABOVE

LIFE SAFETY SYMBOLS

UNRATED PARTITION
SMOKE PARTITION
1 HOUR FIRE BARRIER

INSULATION VALUES

CLIMATE ZONE 1A, CITY OF RIVIERA BEACH, FL (WARM-HUMID COUNTY) PALM BEACH COUNTY
HEATING LOAD - MAX 72 DEG. F
COOLING LOAD - MIN. 75 DEG. F

SPEC NO.	DESCRIPTION	DEPTH	R-VALUE
072200.R01	ROOF RIGID BOARD INSULATION (ENTIRELY ABOVE DECK)	3.5 INCHES	R-21ci
072113.R01	MASS (RIGID BOARD, EPS)	1 INCHES	R-5.7 ci
--	UNDERSLAB RIGID INSULATION	NR	NR
--	OPAQUE DOORS, NON-SWINGING*	--	R-4.75
SPEC NO.	DESCRIPTION	DEPTH	U-VALUE
--	FENESTRATION, FIXED	NR	0.50

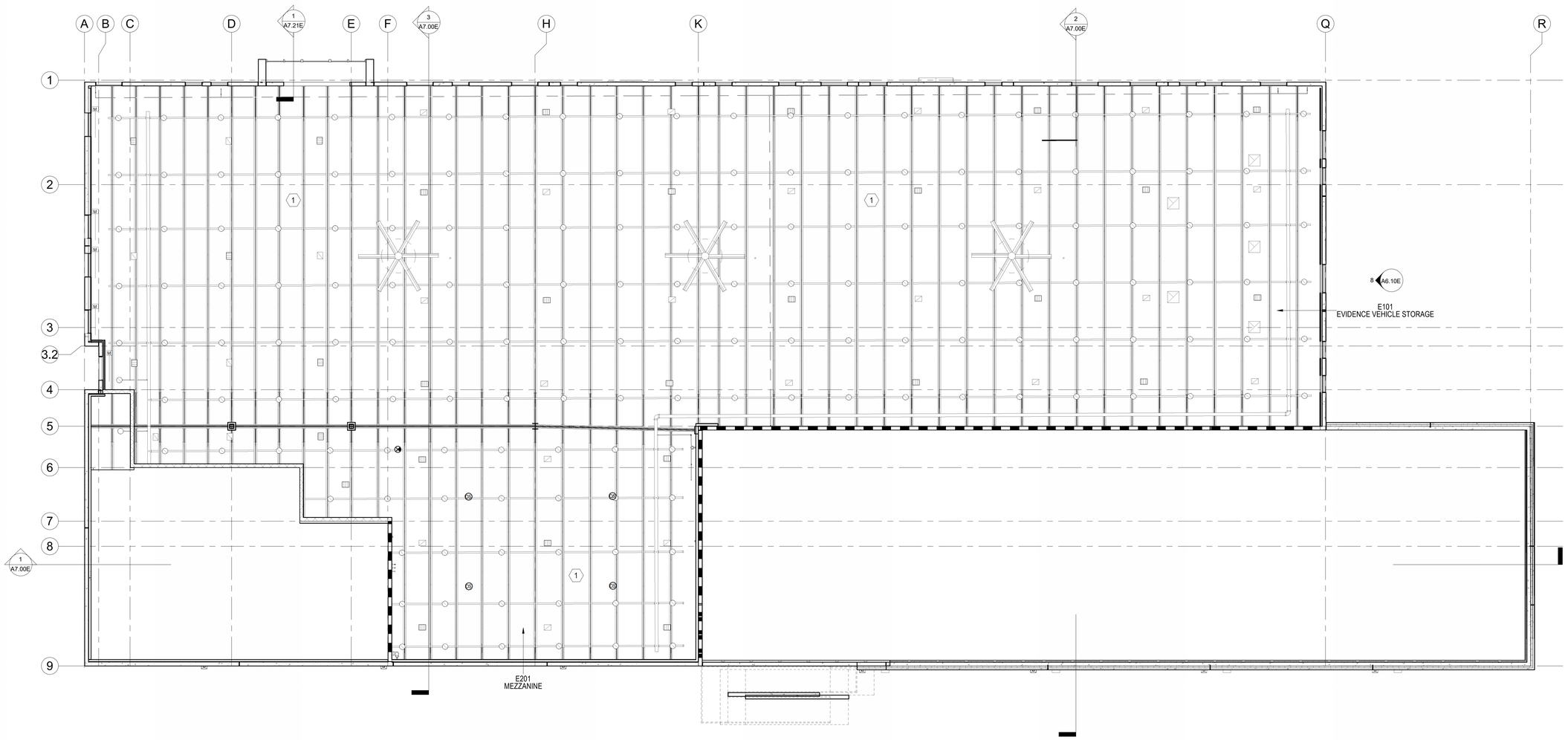
SPEC NO.	DESCRIPTION	ORIENTATION	SHGC
--	FENESTRATION, FIXED	NORTH	0.37
SPEC NO.	DESCRIPTION	ORIENTATION	SHGC
--	FENESTRATION, FIXED	S,W,E	0.30

PER FBC, ENERGY CONSERVATION, TABLE C402.1.3
R-VALUES BASED ON STANDARD R-6 PER 1-INCH DEPTH OF INSULATION.
*REQUIRED FOR TEMPERATURE CONTROLLED INTERIOR SPACES.

CEILING LEGEND

CEILING TYPES

ACOUSTICAL CEILING TILES 095113.A01
GYPSUM BOARD CEILING SYSTEM, UON 092900.A01
CONCRETE SOFFIT
OPEN TO STRUCTURE ABOVE



REFLECTED CEILING PLAN, MEZZANINE 1/8" = 1'-0" (1)

PLAN NORTH

0 4' 8' 16' 24' 32'
1/8" = 1'-0" GRAPHIC SCALE

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City_of_Riviera_Beach_D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:21 PM

CLIENT
CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD
PGAL, Inc.
791 Park of Commerce Blvd.
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CONSTRUCTION MANAGER/BUILDER
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1641 Worthington Rd
West Palm Beach
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PUBLIC SAFETY CONSULTANT/ARCHITECT
JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA
LORRAINE LORIUM
AR 96098
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

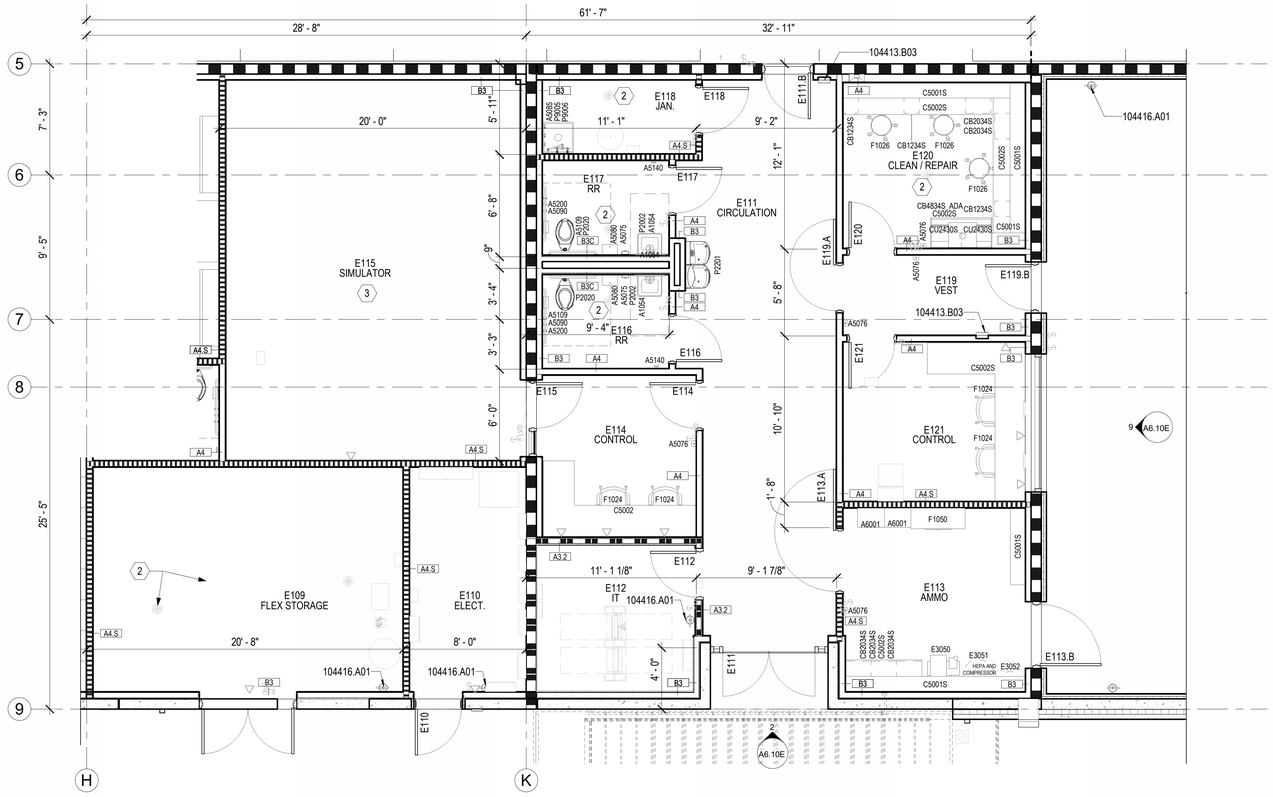
PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

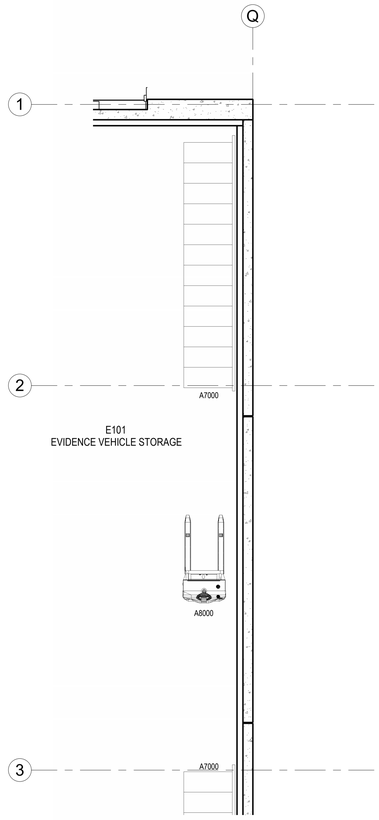
PROJECT NUMBER
1007657.00

SHEET TITLE
OVERALL REFLECTED CEILING PLAN, MEZZANINE - EVIDENCE/ FIRING RANGE

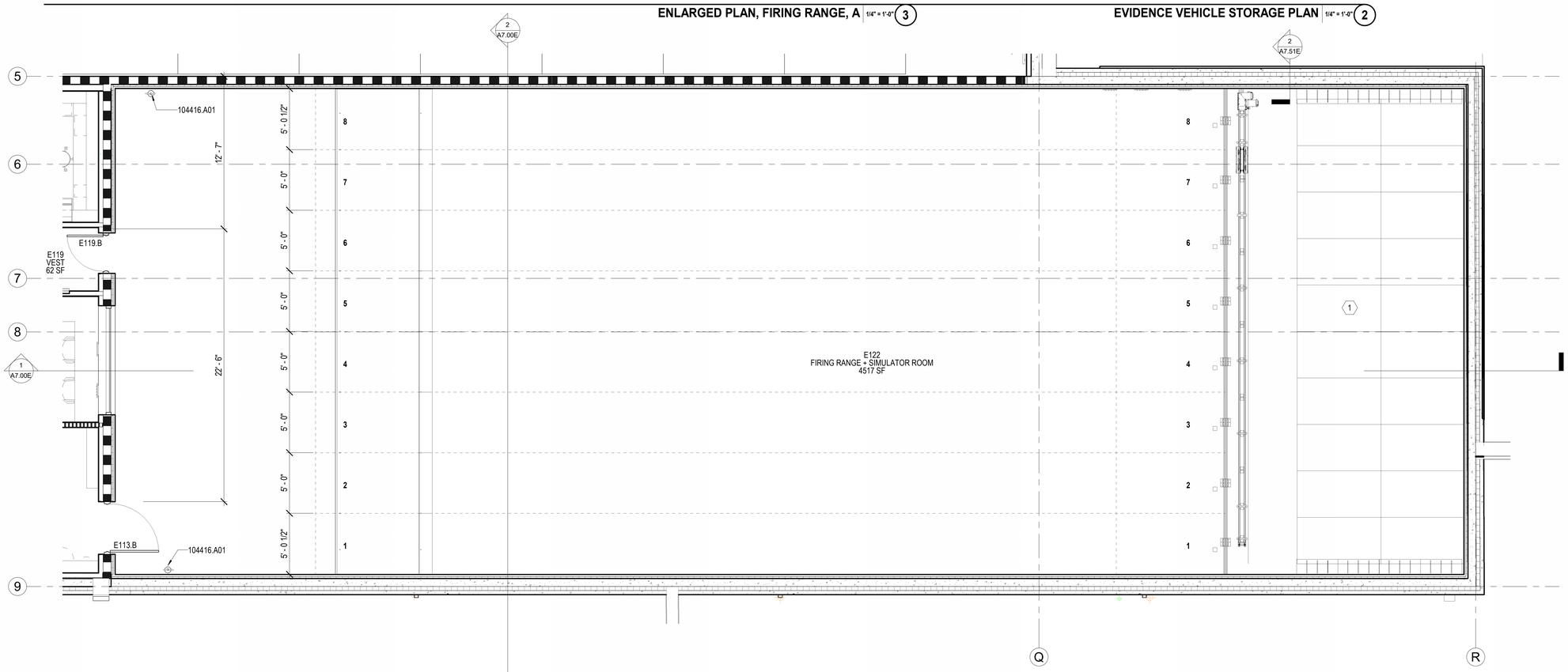
SHEET NUMBER
A3.15E



ENLARGED PLAN, FIRING RANGE, A 1/4" = 1'-0" (3)



EVIDENCE VEHICLE STORAGE PLAN 1/4" = 1'-0" (2)



ENLARGED PLAN, FIRING RANGE, B 1/4" = 1'-0" (1)

PLAN NORTH

0 2' 4' 8' 12' 16'
1/4" = 1'-0" GRAPHIC SCALE

GENERAL NOTES

A REFER TO SHEETS G1.00E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B DASHED LINES REPRESENT ITEMS ABOVE.
C REFER TO SHEET I0.10 FOR PARTITION TYPES AND DETAILS. PARTITIONS NOT IDENTIFIED SHALL BE TYPE A3 UNO.
D REFER TO SHEET I0.30E FOR DOOR, WINDOW, LOUVER, AND STOREFRONT ELEVATIONS.
E REFER TO SHEETS I0.30E FOR DOOR SCHEDULE & FOR TYPICAL DOOR DETAILS.
F FOR LOCKERS AND TOILET ROOM DIMENSIONS, REFER TO ENLARGED FLOOR PLANS.
G DIMENSIONS ARE TO COLUMN GRID, FACE OF MASONRY/CONCRETE/PRECAST, FACE OF METAL STUD, UNO.
H PROVIDE ALL NECESSARY FIREPROOFING MATERIALS TO MAINTAIN REQUIRED RATINGS.
I REFER TO SHEET G1.00E FOR LIFE SAFETY PLANS.
J REFER TO PLUMBING SHEETS FOR FLOOR DRAIN LOCATION COORDINATION.
K REFER TO SHEET A8.00 FOR TYPICAL EQUIPMENT MOUNTING HEIGHTS.
L REFER TO STRUCTURAL SHEET FOR TILT UP PANEL ELEVATIONS, OPENING DIMENSIONS AND DETAILS.
M REFER TO SHEET SERIES I2.21 FOR FINISH SCHEDULE AND KEY TO FINISHES.
N REFER TO SHEET I0.10 FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND WALL PRIORITIES.

SHEET NOTES

1 BULLET TRAP
2 FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
3 SIMULATOR ROOM TO BE FURNISHED WITH BOD: TAVOR 5-O SPEAKERS AND BENQ TH671ST PROJECTOR. FLAT PAINT TO BE PROVIDED ON WALL TO RECIEVE PROJECTED IMAGE. CONTRATOR TO COORDINATE FINAL INSTALLATION LOCATIONS WITH OWNER. OWNER PROVIDED EQUIPMENT.

MATERIAL LEGEND

104413.B03 FIRE EXTINGUISHER CABINET, SEMI-RECESSED
104416.A01 FIRE EXTINGUISHER

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REGISTRATION
STATE OF FLORIDA — CONNIE LORIUM — AR 0019399 — REGISTERED ARCHITECT

DRAWING HISTORY

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CONSULTANT

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10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
ENLARGED EQUIPMENT PLAN - LEVEL 1

SHEET NUMBER
A4.01E

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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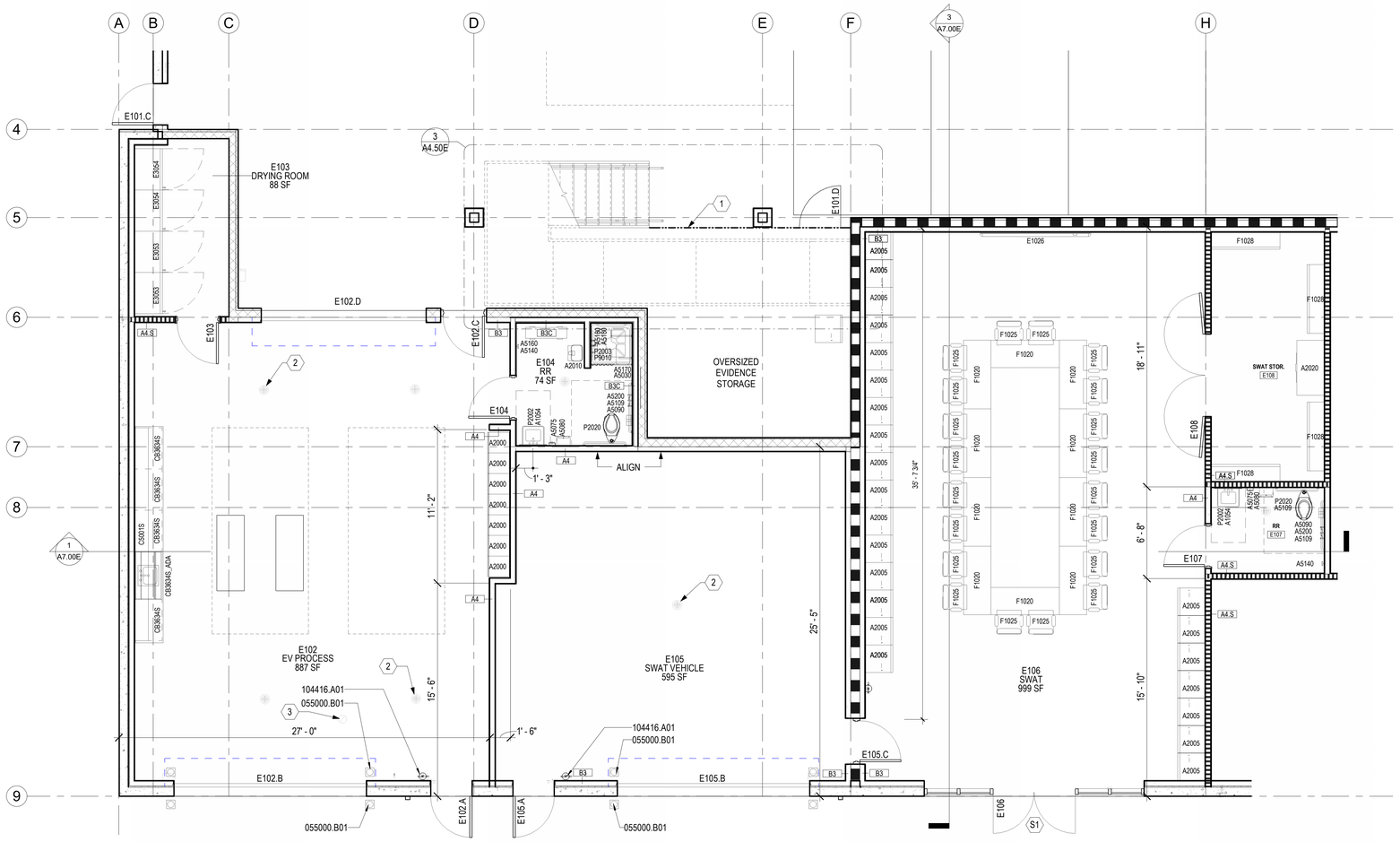

ENLARGED_FLOOR PLAN_01 LEVEL 1/4" = 1'-0" (1)

FFE SCHEDULE

EQUIPMENT CODE	DESCRIPTION	MANUFACTURER	MODEL NO.	PROVIDED BY	REMARKS
A1054	MIRROR, WALL MOUNTED 36X18 STAINLESS STEEL FRAME	BOBRICK	B-2908	CFCI	
A2000	24" WIDE 24" DEEP 71" HIGH FOREMAN® PREMIUM PHENOLIC Z-TIER US-STYLE LOCKER WITH ALUMINUM EXTRUDED PROFILE W/BENCH	FOREMAN LOCKERS SYSTEMS	EU Z-STYLE LOCKER WITH BENCH | SIGNATURE	CFCI	
A2005	LOCKER 24" WIDE 24" DEEP 76" TALL	TBD	TBD	CFCI	
A2010	WASTEPAPER BASKET, STEP-ON	BOBRICK	B-9279	CFCI	
A2020	CABINET STYLE INDOOR MAGAZINE BY ARMAG				
A5030	ACCESSIBLE SHOWER SEAT, WALL MOUNTED, FOLD DOWN	BOBRICK	B-517/B-518	CFCI	
A5075	SOAP DISPENSER, WALL MOUNTED	BOBRICK	B-2012	CFCI	
A5076	HAND SANITIZER DISPENSER, MANUAL, WALL MOUNTED, ADA	BOBRICK	B-2012	CFCI	
A5080	PAPER TOWEL DISPENSER, WALL MOUNTED.	BOBRICK	B-9262	CFCI	
A5085	MOP HOLDER, WALL MOUNTED	BOBRICK	B-239X34	CFCI	
A5090	SANITARY NAPKIN DISPENSER, WALL MOUNTED, STAINLESS STEEL.	BOBRICK	B-270	CFCI	
A5109	ADA GRAB BARS, WALL MOUNTED 36" AND 48", STAINLESS STEEL.	BOBRICK	B-9806	CFCI	
A5140	GARMENT HOOK, WALL MOUNTED, STAINLESS STEEL	BOBRICK	B-9541	CFCI	
A5160	WOOD (MAPLE) LOCKER BENCH W/ STAINLESS STEEL PEDESTALS, 9 1/2" W X 36" L X 17 1/2" H	SCHOOL LOCKERS	BST-09XX	CFCI	
A5170	SHOWER ROD AND CURTAIN, CONCEALED MOUNTED, 1" DIAMETER, STAINLESS STEEL, VINYL CURTAIN (72"), STAINLESS STEEL CURTAIN RINGS.	BOBRICK	204-1 / 204-3	CFCI	
A5180	ACCESSIBLE GRAB BAR, WALL MOUNTED, STAINLESS STEEL, 24"	BOBRICK	B-9806	CFCI	
A5200	TOILET TISSUE DISPENSER WITH SHELF, WALL MOUNTED, STAINLESS STEEL.	BOBRICK	B-6867	CFCI	
A6001	HEAVY DUTY AMMO STORAGE CABINET, 21" W X 15" D X 72" H	AMMO STORAGE CABINET	SMS-20-AMMO-72	CFCI	
A7000	HIGH DENSITY BIKE RACK	URBAN RACKS	4SSS	CFCI	
A8000	WALKIE STRADDLE STACKER ELECTRIC FORKLIFT	CROWN	M 3200-20	CFCI	
ALS2	ALS - COMMON PATH				
E1026	SMART BOARD,	SMART BOARD	7000R SERIES WITH iQ, SBID-7286R	CFCI	
E3050	SINGE-STAGE PORTABLE ELECTRIC AIR COMPRESSOR, 2HP, 20 GL, 5.5 CFM.	INGERSOLL RAND	GARAGE MATE MODEL P1.5IU-A9	CFCI	
E3051	HEPA VACUUM, DRY, 55 GL, 2HP, HEPA FILTER 99.99% AT 0.3 MICRON	NIKKRO INDUSTRIES, INC	HD55110	CFCI	
E3052	AIR CARTRIDGE FILTER, FLOOR MOUNTED	HANKISSON	SPX HF SERIES, HF5-24-6DG	CFCI	
E3053	DRYING CABINET WITH UV LIGHT	LABCONCO	TBD	CFCI	
E3054	DRYING CABINET WITH WASHDOWN	LABCONCO	TBD	CFCI	
F1020	FLIP-TOP RECT TABLE SQUARED EDGE LAM T-LEG 24D 48W	TBD	TBD	OFOI	
F1024	CHAIR, STACKABLE WITH CHAIR	TBD	TBD	OFOI	
F1026	WORK STOOL	TBD	TBD	CFCI	
F1028	HEAVY DUTY SHELVES				
P2003	PREFABRICATED SHOWER PAN, 36" x 36", SOLID SURFACE, ADA	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	
P2020	TOILET, FLOOR MOUNTED	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	
P2201	ADA REFRIGERATOR FOUNTAIN WITH BOTTLE FILLER	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	
P9005	MOP SINK BASIN, SURFACE MOUNTED	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	
P9006	SERVICE SINK FAUCET	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	
P9010	ACCESSIBLE, HAND-HELD SHOWER FIXTURE	REFER TO PLUMBING SCHEDULE	REFER TO PLUMBING SCHEDULE	CFCI	

CASEWORK SCHEDULE

CASEWORK NO.	DESCRIPTION	DEPTH	WIDTH	HEIGHT	QUANTITY	PROVIDED BY	REMARKS
C5001S	WALL MOUNTED SHELF	1' - 0"	<varies>	0' - 1"	6	CFCI	PL05
C5002	COUNTERTOP, PLAM	2' - 1"		2' - 10"	1	CFCI	PL03
C5002S	COUNTERTOP, STAINLESS STEEL	2' - 1"		2' - 10"	6	CFCI	PL05
CB1234S	BASE CABINET, STAINLESS STEEL	2' - 0"	1' - 0"	2' - 8 1/2"	3	CFCI	PL05
CB2034S	BASE CABINET, STAINLESS STEEL	2' - 0"	1' - 8"	2' - 8 1/2"	5	CFCI	PL05
CB3634S	BASE CABINET, STAINLESS STEEL	2' - 0"	3' - 0"	2' - 8 1/2"	4	CFCI	PL05
CB3634S_ADA	SINK COUNTER, ACCESSIBLE, WALL MOUNTED	2' - 0"	3' - 6"	2' - 8 1/2"	1	CFCI	PL03
CB4834S_ADA	SINK COUNTER, ACCESSIBLE, WALL MOUNTED	2' - 0"	4' - 0"	2' - 8 1/2"	1	CFCI	PL03
CU2430S	UPPER CABINETS, STAINLESS STEEL	1' - 0"	2' - 0"	2' - 6"	2	CFCI	PL05

GENERAL NOTES

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F FOR LOCKERS AND TOILET ROOM DIMENSIONS, REFER TO ENLARGED FLOOR PLANS.
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N REFER TO SHEET I0.10 FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND WALL PRIORITIES.

SHEET NOTES

1 SECURED FENCE
2 FLOOR DRAIN. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
3 FLOOR CLEANOUT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION

MATERIAL LEGEND

055000.B01 STEEL BOLLARD
104416.A01 FIRE EXTINGUISHER

PROCUREMENT LEGEND

OFCI: OWNER FURNISHED CONTRACTOR INSTALLED
OFOI: OWNER FURNISHED OWNER INSTALLED
CFCI: CONTRACTOR FURNISHED CONTRACTOR INSTALLED

NOTE: CONTRACTOR TO COORDINATE ALL FF&E ITEMS

PLAN NORTH

0 2' 4' 8' 12' 16'
1/4" = 1'-0" GRAPHIC SCALE

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

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32750

REGISTRATION

STATE OF FLORIDA
LYNNIE LONDRUM
AR 96299
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
ENLARGED EQUIPMENT PLAN - LEVEL 1

SHEET NUMBER
A4.02E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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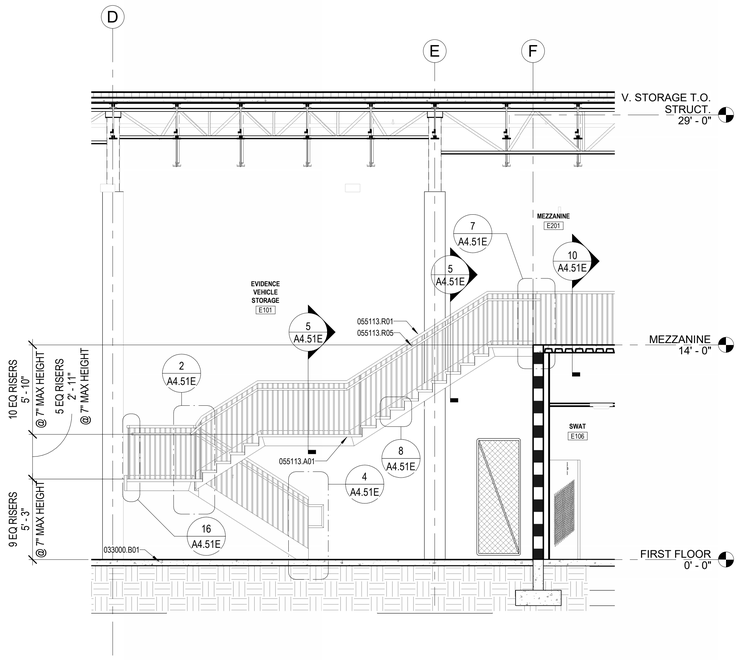
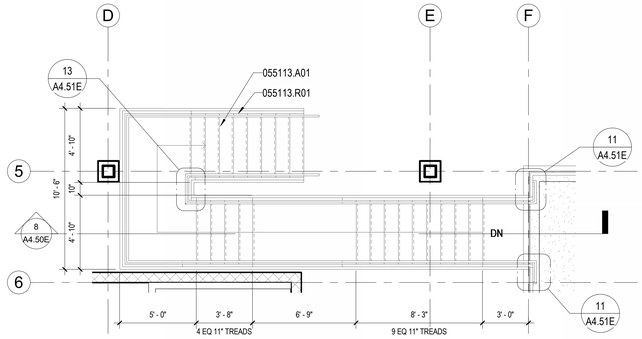
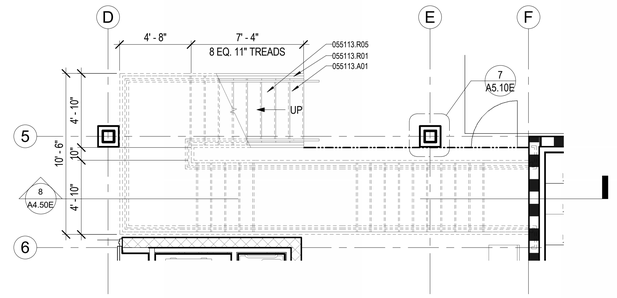


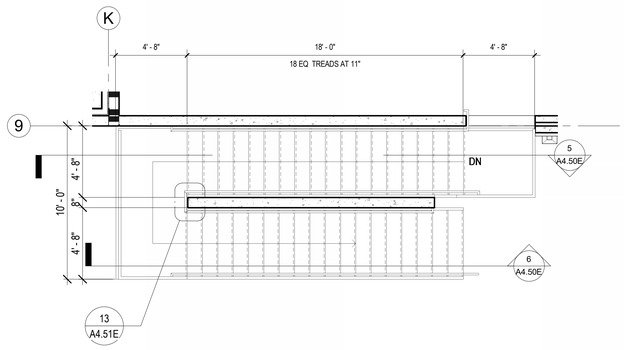
8 1/4" = 1'-0" **SECTION THRU EVIDENCE VEHICLE STORAGE STAIR**



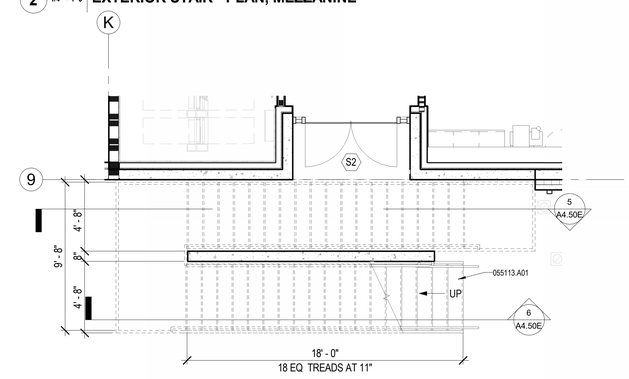
4 1/4" = 1'-0" **EVIDENCE VEHICLE STORAGE STAIR - PLAN, MEZZANINE**



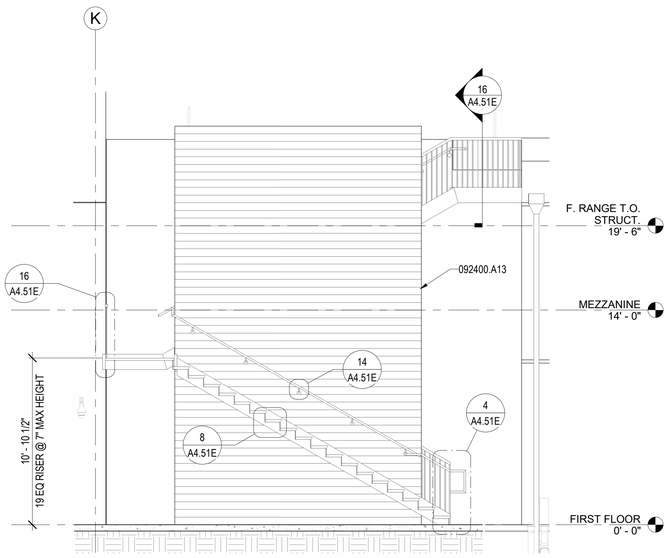
3 1/4" = 1'-0" **EVIDENCE VEHICLE STORAGE STAIR - PLAN**



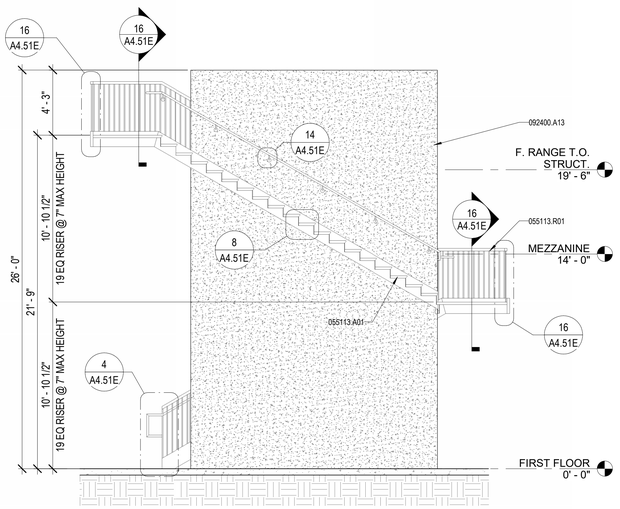
2 1/4" = 1'-0" **EXTERIOR STAIR - PLAN, MEZZANINE**



1 1/4" = 1'-0" **EXTERIOR STAIR - PLAN**



6 1/4" = 1'-0" **SECTION THRU EXTERIOR STAIR**



5 1/4" = 1'-0" **SECTION THRU EXTERIOR STAIR**

GENERAL NOTES

SHEET NOTES

MATERIAL LEGEND

033000.B01	CONCRETE SLAB
055113.A01	STEEL STAIR
055113.R01	STEEL GUARDRAIL
055113.R05	STEEL HANDRAIL
092400.A13	3-COAT STUCCO SYSTEM

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REGISTRATION

STATE OF FLORIDA
JENNIE LOHRUM
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PROJECT LOCATION
2125 AVENUE S,
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33404

PROJECT NUMBER
1007657.00

SHEET TITLE
STAIR PLANS AND SECTIONS

SHEET NUMBER
A4.50E

FILE NAME: Autodesk Docs:// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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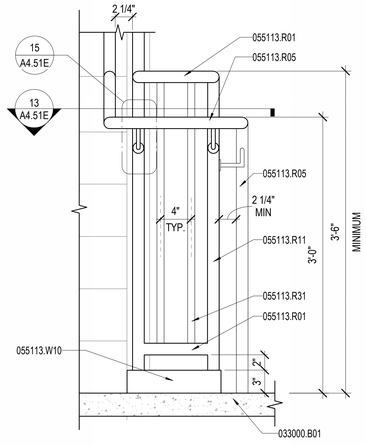
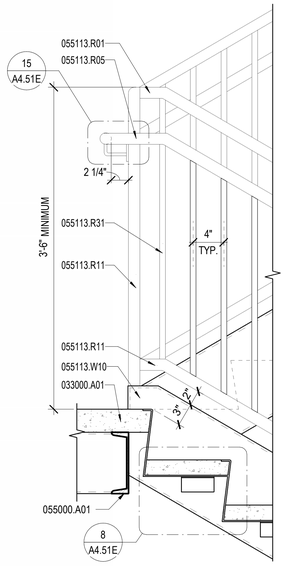
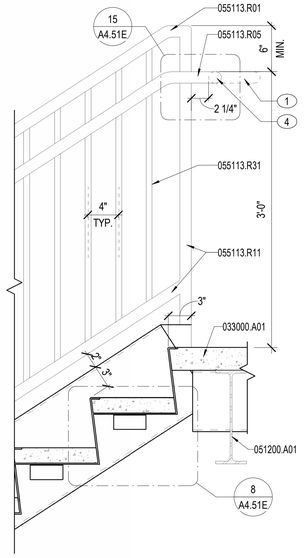


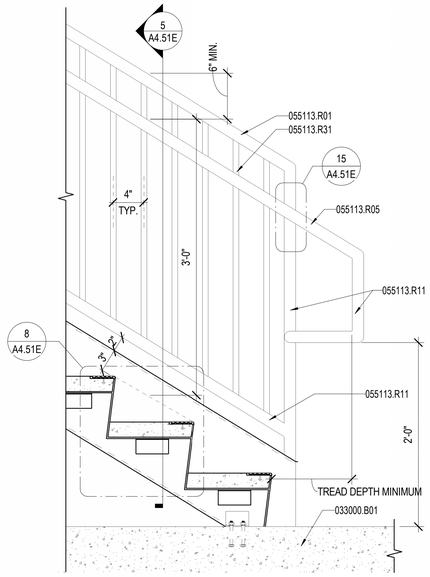
1 1 1/2" = 1'-0" **INTERMEDIATE LANDING**



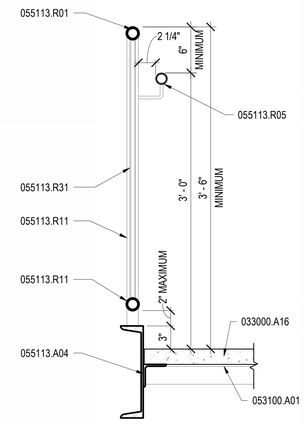
2 1 1/2" = 1'-0" **INTERMEDIATE LANDING**



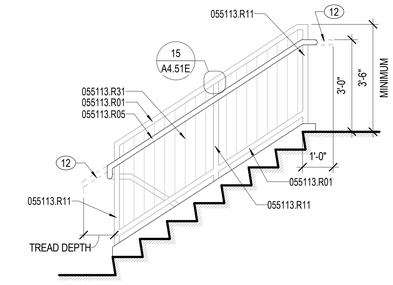
3 1 1/2" = 1'-0" **TOP LANDING, TYPICAL**



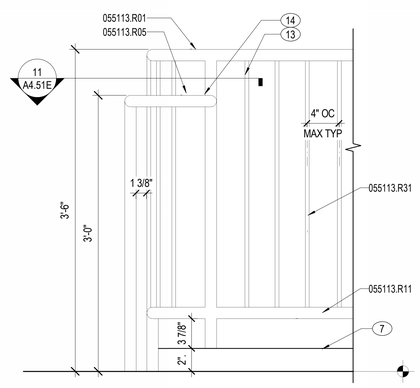
4 1 1/2" = 1'-0" **BOTTOM LANDING, TYPICAL**



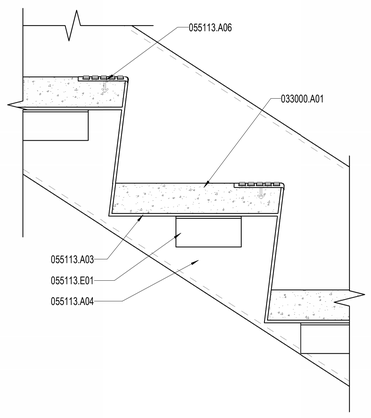
5 1 1/2" = 1'-0" **GUARDRAIL WITH HANDRAIL**



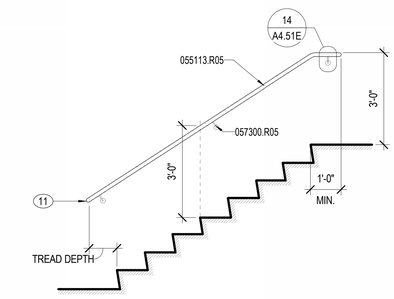
6 1/2" = 1'-0" **STAIR RAILING AT GUARDRAIL**



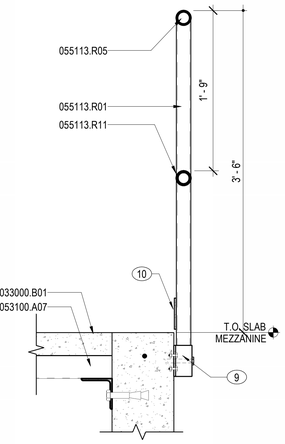
7 1 1/2" = 1'-0" **RAILING AND GUARDRAIL AT TOP LANDING**



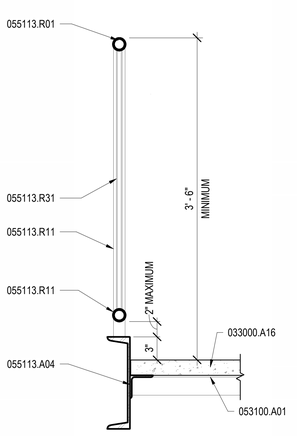
8 3" = 1'-0" **TYPICAL TREAD WITH SAFETY NOSING**



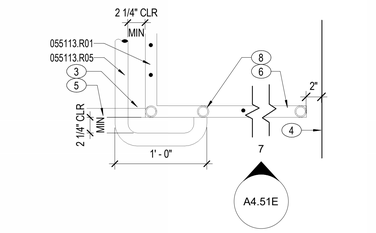
9 1/2" = 1'-0" **TYPICAL STAIR RAILING AT WALL**



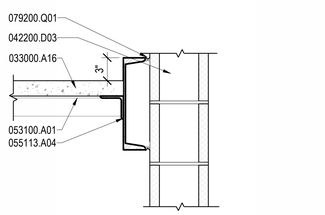
10 1 1/2" = 1'-0" **MEZZANINE GUARDRAIL DETAIL**



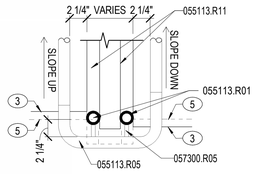
16 1 1/2" = 1'-0" **GUARDRAIL**



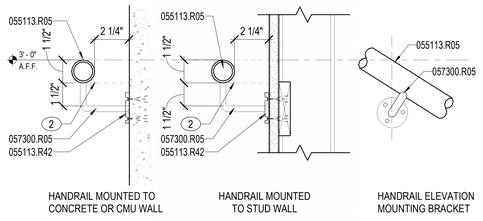
11 1 1/2" = 1'-0" **HANDRAIL AND GUARDRAIL AT TOP LANDING**



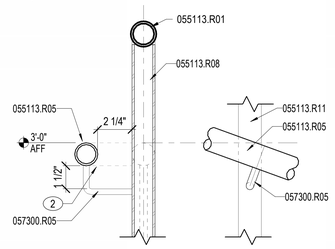
12 1 1/2" = 1'-0" **STAIR MID LANDING**



13 1 1/2" = 1'-0" **HANDRAIL/GUARDRAIL AT LANDING**



14 3" = 1'-0" **WALL MOUNTED HANDRAIL**



15 3" = 1'-0" **GUARDRAIL MOUNTED HANDRAIL**

GENERAL NOTES

1	CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
2	CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
3	DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
4	CONTRACTOR SHALL FIELD COORDINATE LOCATION, SIZE AND TYPE OF BLOCKING FOR INSTALLATION OF SIGNAGE, PLUMBING FIXTURES, MILLWORK, ETC. ALL CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (F.R.T).
5	ALL SHAFTS PENETRATING SLABS SHALL BE RATED 2HR.
6	ALL ROOF SLOPES SHALL BE 1/4" PER FOOT U.N.O.
7	REFER TO SHEETS A5.01T AND A5.02T FOR TYPICAL ROOF DETAILS.

SHEET NOTES

1 WHERE GUARDRAIL DOES NOT OCCUR, EXTEND HANDRAIL 12" FROM FACE OF STAIR.
2 CLOSE ENDS OF HANDRAILS AND RETURN HANDRAIL TO WALL AT ENDS.
3 FRONT EDGE OF TREAD BELOW.
4 EXTEND WRAP AROUND HANDRAIL A MINIMUM OF 12" PAST FACE OF GUARDRAIL.
5 LINE OF RISER.
6 ANGLE AT EDGE OF SLAB
7 BENT CLOSURE PLATE AT EDGE OF SLAB.
8 VERTICAL GUARDRAIL POST
9 PIPE RAIL SLEEVE WITH SOLID BOTTOM AND SET SCREW
10 STEEL FILLER PLATE AT EDGE OF LANDING
11 SECURE FLASHING COLLAR FLANGE TO ROOF PANEL AND NOT TO METAL BEAD OF DECK.
12 WHERE HANDRAIL DOES NOT WRAP, EXTEND 12" BEYOND TOP (OR BOTTOM) RISER
13 1/2" DIAMETER STEEL ROD BALUSTERS SPACES 4" OC MAX.
14 WHERE HANDRAILS ARE SUPPORTED BY GUARDRAILS - ALL HANDRAIL TERMINATIONS WILL BE TO A VERTICAL GUARDRAIL POST.

MATERIALS LIST

033000.A01	CAST-IN-PLACE CONCRETE
033000.A16	CONCRETE TIE BEAM
033000.B01	CONCRETE SLAB
042200.D03	CMU 8"
051200.A01	STEEL BEAM
053100.A01	STEEL DECK
053100.A07	STEEL ROOF DECK
055000.A01	STEEL CHANNEL
055113.A03	STEEL PAN STAIR TREAD
055113.A04	STEEL CHANNEL STRINGER
055113.A06	SAFETY NOSING
055113.E01	STEEL PLATE
055113.R01	STEEL GUARDRAIL
055113.R05	STEEL HANDRAIL
055113.R08	STEEL GUARDRAIL POST
055113.R11	STEEL PIPE 1 1/2" OD NOM
055113.R31	ROD 1/2" DIA
055113.R42	WALL BRACKET FILLER PLATE
055113.W10	STEEL TOE PLATE
057300.R05	FLANGE
079200.Q01	JOINT SEALANT

0 1' 2' 4' 6' 8'
1/2" = 1'-0" GRAPHIC SCALE
0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE
0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

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REGISTRATION

STATE OF FLORIDA
LORINNE LOHRUM
AR 96799
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET
DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
VERTICAL CIRCULATION DETAILS

SHEET NUMBER
A4.51E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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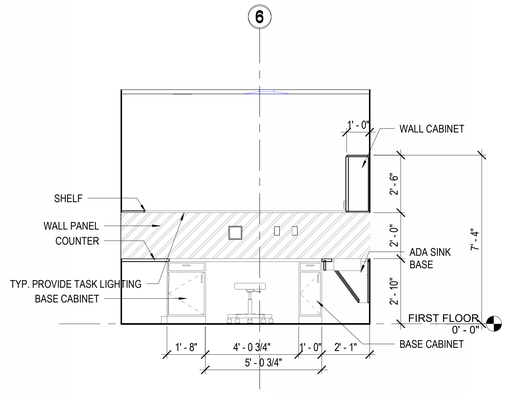
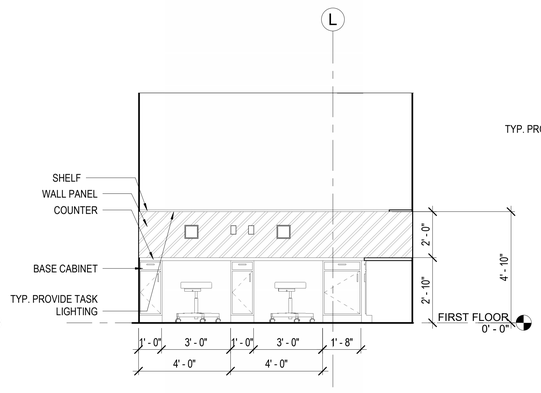
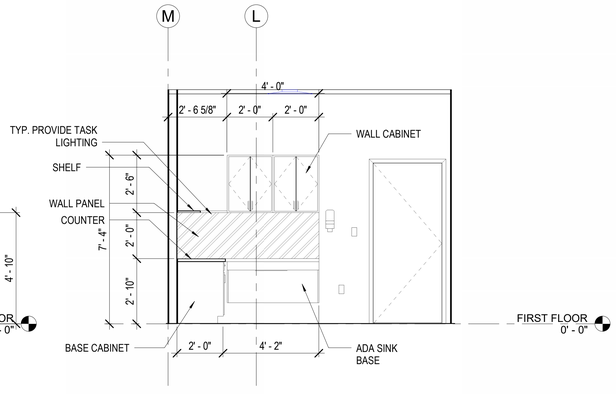


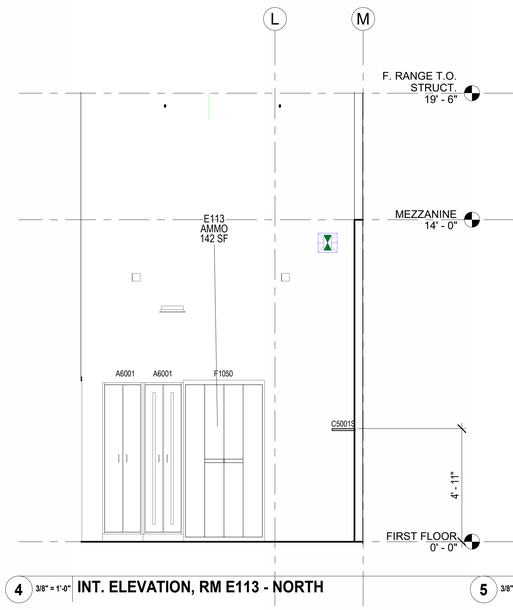
1 3/8" = 1'-0" **INT. ELEVATION, RM E120 - EAST**



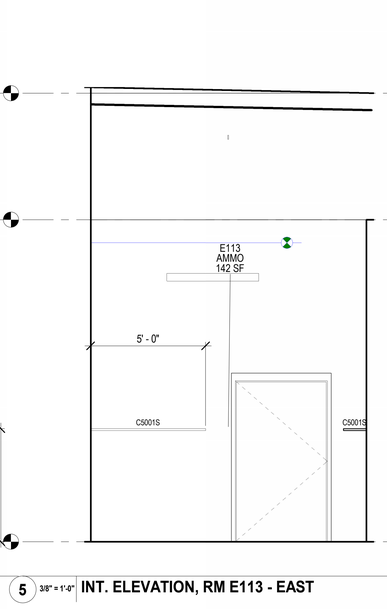
2 3/8" = 1'-0" **INT. ELEVATION, RM E120 - NORTH**



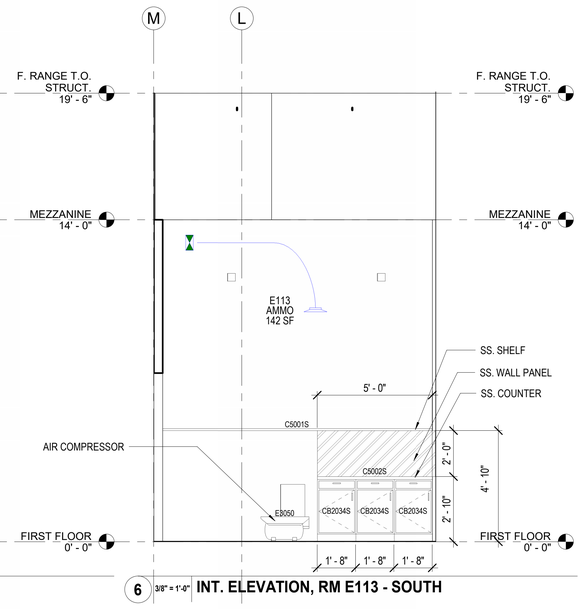
3 3/8" = 1'-0" **INT. ELEVATION, RM E120 - SOUTH**



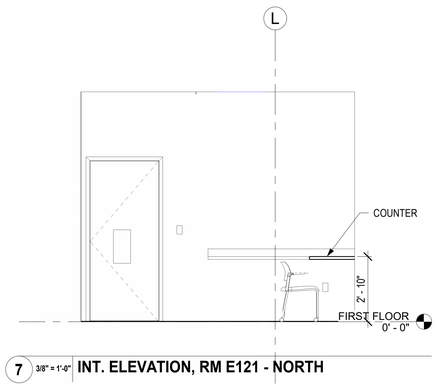
4 3/8" = 1'-0" **INT. ELEVATION, RM E113 - NORTH**



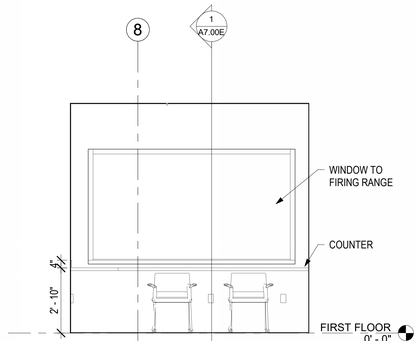
5 3/8" = 1'-0" **INT. ELEVATION, RM E113 - EAST**



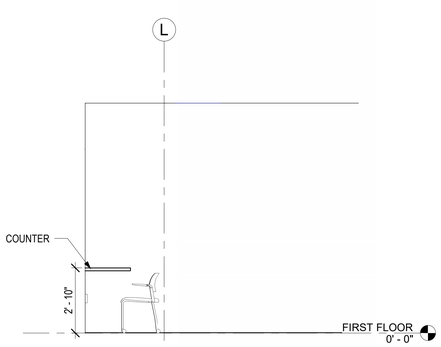
6 3/8" = 1'-0" **INT. ELEVATION, RM E113 - SOUTH**



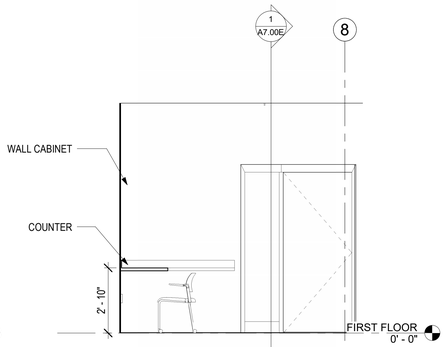
7 3/8" = 1'-0" **INT. ELEVATION, RM E121 - NORTH**



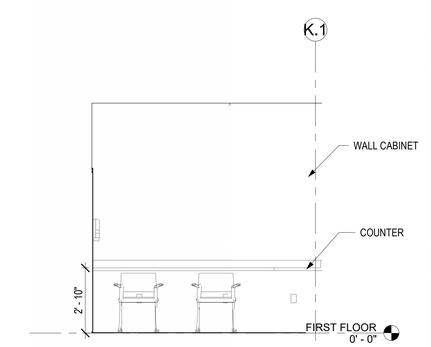
8 3/8" = 1'-0" **INT. ELEVATION, RM E121 - EAST**



9 3/8" = 1'-0" **INT. ELEVATION, RM E121 - SOUTH**



10 3/8" = 1'-0" **INT. ELEVATION, RM E114 - WEST**



11 3/8" = 1'-0" **INT. ELEVATION, RM E114 - SOUTH**

PLAN NORTH

0 1' 2' 4' 6' 8' 10'
3/8" = 1'-0" GRAPHIC SCALE

GENERAL NOTES

A FINISH SCHEDULE FOLLOW SHEET NORTH.

B REFER TO REFLECTED CEILING PLAN SHEETS A3.01E FOR CEILING HEIGHTS AND DESIGN COORDINATION.

C INTERIOR DOOR FRAMES AND INTERIOR WINDOW FRAMES PAINTED TO MATCH ADJACENT WALL, UNLESS OTHERWISE NOTED.

D FLOOR TRANSITIONS BETWEEN ROOMS TO BE AT CENTER LINE OF DOOR, UNLESS OTHERWISE NOTED.

E CHANGES IN LEVEL OF 1/4" HIGH MAX ARE TO BE PERMITTED VERTICAL. CHANGES IN LEVEL BETWEEN 1/4" HIGH MINIMUM AND 1/2" HIGH MAXIMUM ARE TO BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2.

F PAINT WALL BEHIND CORNER GUARDS AS SCHEDULED FINISH SCHEDULE.

G REFER TO SHEET A4.01E AND A4.02E FOR CASEWORK MATERIAL LEGEND, MISCELLANEOUS LEGEND.

H FINISHES INDICATED ARE THE APPROVED BASIS OF DESIGN TO CONVEY COLOR, PATTERN, TEXTURE AND SALIENT CHARACTERISTICS ONLY. THE LIST OF MANUFACTURER INFORMATION IS NOT INTENDED TO LIMIT THE SELECTION OF PRODUCTS PROVIDED BY OTHER MANUFACTURER. PRODUCT SUBSTITUTIONS MEETING THESE CRITERIA WILL BE CONSIDERED AND ARE TO BE REVIEWED BY THE ARCHITECT OF RECORD AND APPROVED BY THE USER GROUP.

SHEET NOTES

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REGISTRATION

STATE OF FLORIDA
LORRAINE LORIUM
AR 96099
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

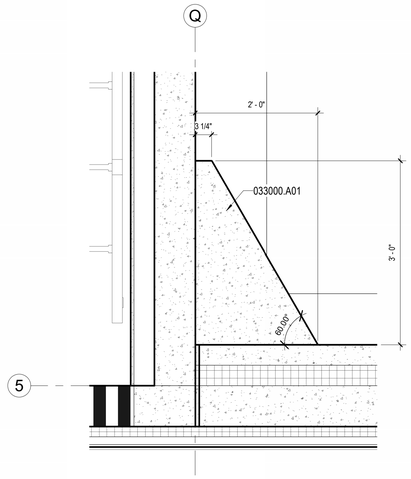
PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

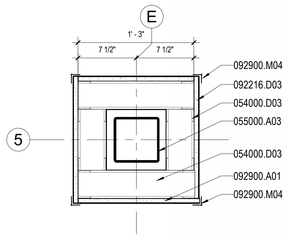
SHEET TITLE
INTERIOR ELEVATIONS

SHEET NUMBER
A4.03E

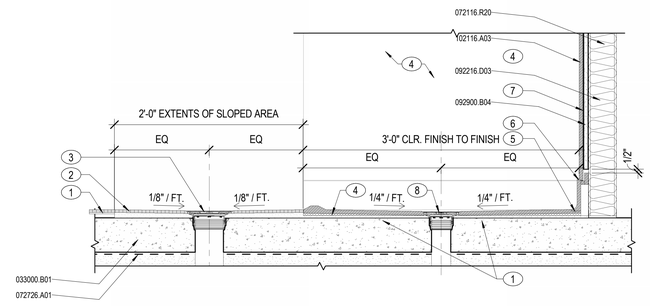
FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:45 PM



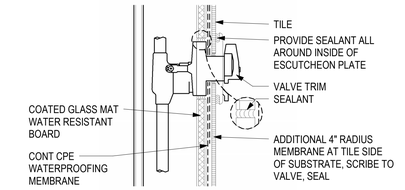
8 1" = 1'-0" **EXTERIOR CONCRETE PLAN DETAIL**



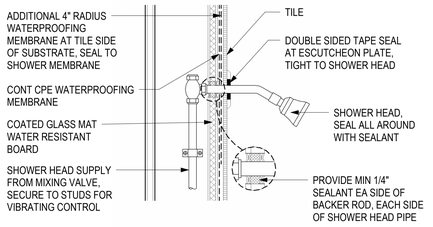
7 1 1/2" = 1'-0" **COLUMN DETAIL**



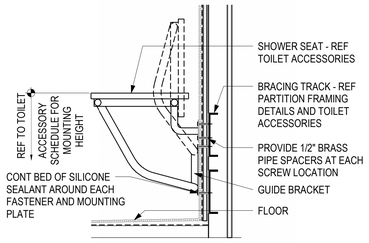
6 1 1/2" = 1'-0" **ADA COMPLIANT TRANSFER SHOWER**



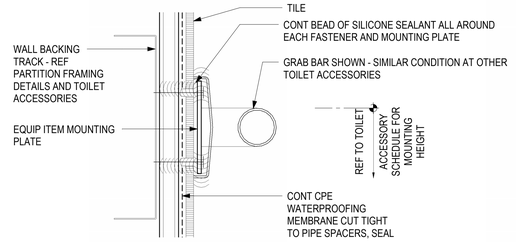
5 3" = 1'-0" **SHOWER CONTROL VALVE PENETRATION DETAIL**



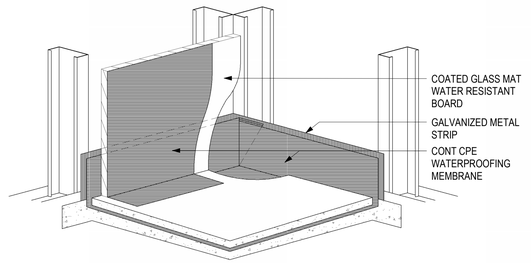
4 3" = 1'-0" **SHOWER HEAD PENETRATION DETAIL**



3 1 1/2" = 1'-0" **ACCESSIBLE SHOWER SEAT PENETRATION DETAIL**



2 6" = 1'-0" **TOILET ACCESSORIES PENETRATION DETAIL AT TILED WALL**



1 NOT TO SCALE **FOLDED CORNER AT RECESSED SHOWER**

GENERAL NOTES

A REFER TO SHEETS G-001 FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.
B DASHED LINES REPRESENT ITEMS ABOVE.
C DASHED LINES AND ARROWS AT DOORS INDICATE MINIMUM ADA CLEARANCES AND APPROACHES.
D MILLWORK & SPECIALTY EQUIPMENT SHOWN FOR REFERENCE ONLY.
E PLUMBING FIXTURES SHOWN FOR REFERENCE ONLY. REFER TO PLUMBING SHEETS FOR MORE INFORMATION.
F REFER TO FINISH SCHEDULE ON AE802 FOR TILE COORDINATION.
G ALL FLOOR SLOPE LINES INDICATE SLOPE TO FLOOR DRAIN (2% SLOPE MAX) TYP WHERE SHOWN
H EVERY SOAP DISPENSER (COUNTER-MOUNTED OR WALL-MOUNTED) WILL BE OWNER PROVIDED. EVERY SHOWER WILL HAVE TWO SOAP DISPENSERS THAT WILL BE INSTALLED BY THE CONTRACTOR, TYP.
J CONTRACTOR TO SUPPLY AND INSTALL SURFACED MOUNTED TOILET SEAT COVER DISPENSERS (102800.A50) FOR ALL TOILETS
K ALL APPLICABLE ITEMS IN LOCKER ROOMS, FAMILY CHANGING ROOMS AND TOILET ROOMS TO BE INSTALLED WITH STAINLESS STEEL HARDWARE, TYP

SHEET NOTES

1 LATEX MODIFIED 3/16" THICK THIN-SET, TYP.
2 REFER TO FINISH SCHEDULE FOR FINISH.
3 FLOOR DRAIN, REFER TO PLUMBING DRAWINGS.
4 POLYURETHANE EXPANDING FOAM. (PART OF BASE)
5 COVED PERIMETER.
6 1/8" SILICONE SEAL AT BASE OF WALL PANEL.
7 1/16" SILICONE ADHESIVE BEHIND WALL PANEL.
8 SHOWER DRAIN, REFER TO PLUMBING DRAWINGS.

MATERIALS LIST

033000.A01	CAST-IN-PLACE CONCRETE
033000.B01	CONCRETE SLAB
054000.D03	METAL STUD 3 5/8"
055000.A03	STEEL TUBE
072116.R20	SOUND ATTENUATION BATTS
072726.A01	FLUID-APPLIED AIR BARRIER, VAPOR-RETARDING
092216.D03	METAL STUD 3 5/8"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.B04	GYPSUM BOARD TILE BACKER UNIT, GLASS MAT FACED, 5/8"
092900.M04	CORNERBEAD
102116.A03	PHENOLIC-CORE SHOWER/DRESSING COMPARTMENT

0 6" 1' 2' 3' 4'
1" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

0 1" 2" 3" 6"
6" = 1'-0" GRAPHIC SCALE

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32750

REGISTRATION

STATE OF FLORIDA · LYNNE LORIUM · AR 96289 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

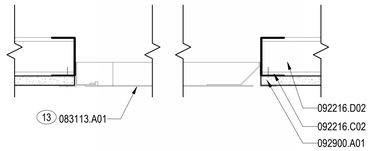
PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

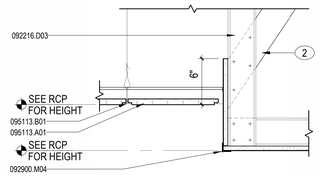
PROJECT NUMBER
1007657.00

SHEET TITLE
PLAN DETAILS

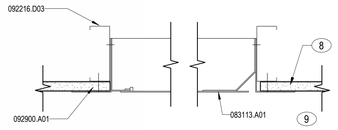
SHEET NUMBER
A5.10E

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:41:49 PM

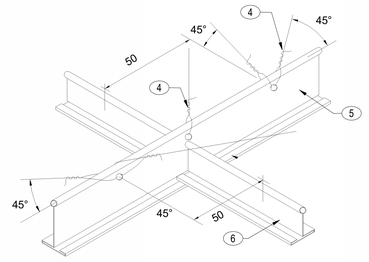




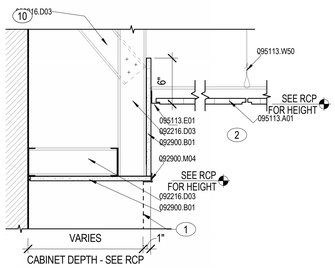
5 1 1/2" = 1'-0" BULKHEAD DETAIL



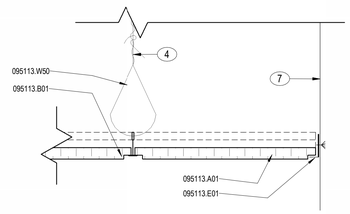
4 3" = 1'-0" ACCESS PANEL



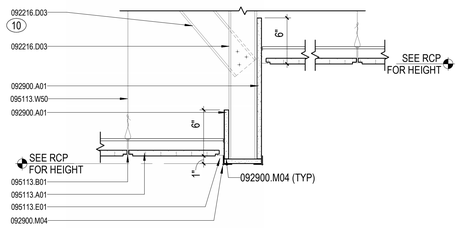
8 3" = 1'-0" CEILING ACCESS HATCH DETAIL



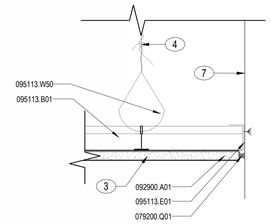
3 3" = 1'-0" SUSPENSION SYSTEM DETAIL



7 1 1/2" = 1'-0" BULKHEAD AT CABINET/CASEWORK



2 3" = 1'-0" ACT CEILING DETAIL



F4 1 1/2" = 1'-0" BULKHEAD DETAIL

1 3" = 1'-0" GYPSUM BOARD CEILING DETAIL

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B ATTACH ALL GRID SUPPORTED LIGHT FIXTURES TO CEILING AND ALSO TO BUILDING STRUCTURE.

C REFER TO SHEET AF2.10E FOR FINISH SCHEDULE.

SHEET NOTES

1 CASEWORK.
2 BRACING AS REQUIRED. SECURE TO STRUCTURE ABOVE.
3 SUBSTITUTE REGULAR GYPSUM BOARD WITH GYPSUM BOARD GLASS MAT FACED AT WET AREAS.
4 SECURE TO STRUCTURE ABOVE.
5 MAIN RUNNER.
6 CROSS RUNNER.
7 FINISHED FACE OF PARTITION.
8 SUBSTITUTE REGULAR GYPSUM BOARD WITH GYPSUM BOARD GLASS MAT FACED AT WET AREAS
9 REFER TO RCP FOR DIMENSIONS.
10 EXTEND FRAMING TO STRUCTURE. TYPICAL.
11 OPERABLE HUFCOR PARTITION HEAD. SEE MANUFACTURER.
12 DIAGONAL BRACING 48" OC ALTERNATE SIDES PER MANUFACTURER'S RECOMMENDATION.
13 SEE REFLECTED CEILING PLAN FOR SIZE.

MATERIAL LEGEND

079200.Q01	JOINT SEALANT
083113.A01	ACCESS DOOR
092216.C02	METAL STUD RUNNER TRACK
092216.D02	METAL STUD 2 1/2"
092216.D03	METAL STUD 3 5/8"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.B01	GYPSUM BOARD, GLASS MAT FACED 5/8"
092900.M04	CORNERBEAD
095113.A01	ACOUSTICAL CEILING UNITS
095113.B01	EXPOSED-GRID ACOUSTICAL CEILING SYSTEM
095113.E01	WALL ANGLE
095113.W50	HANGER WIRE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL, Inc.
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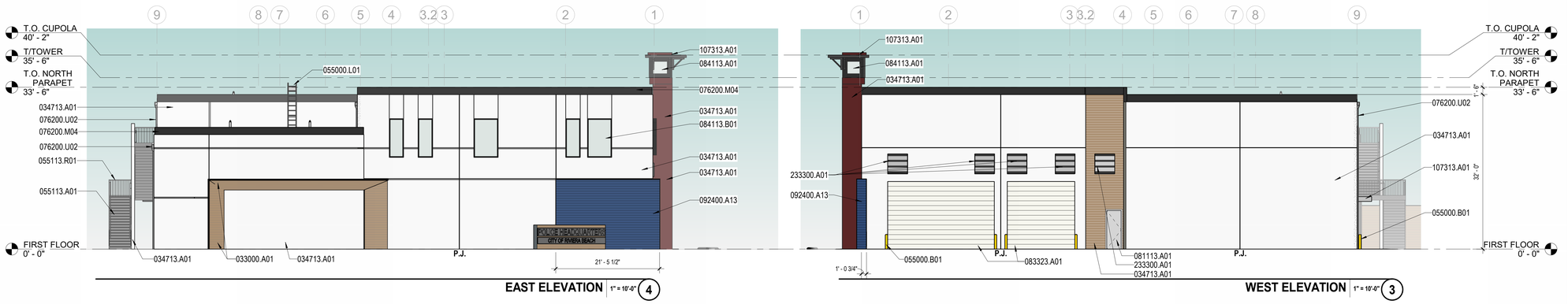
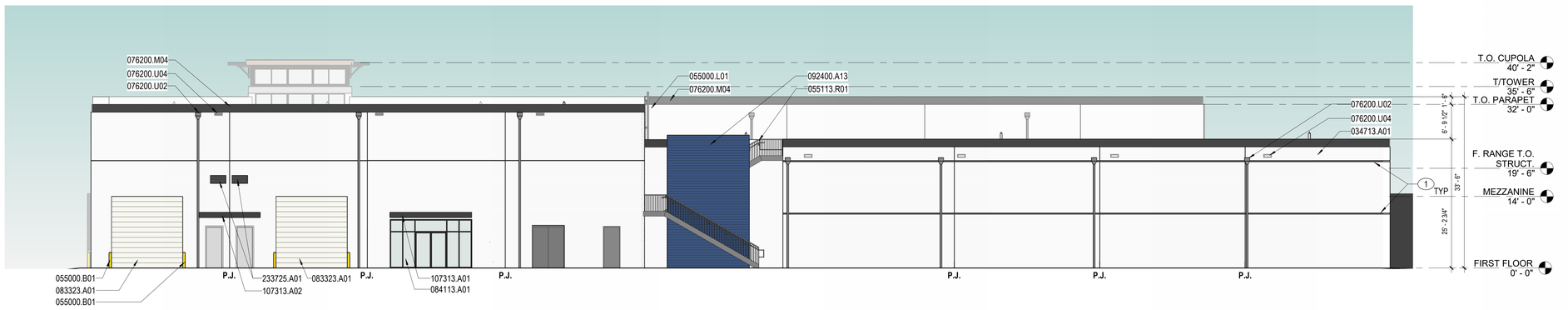
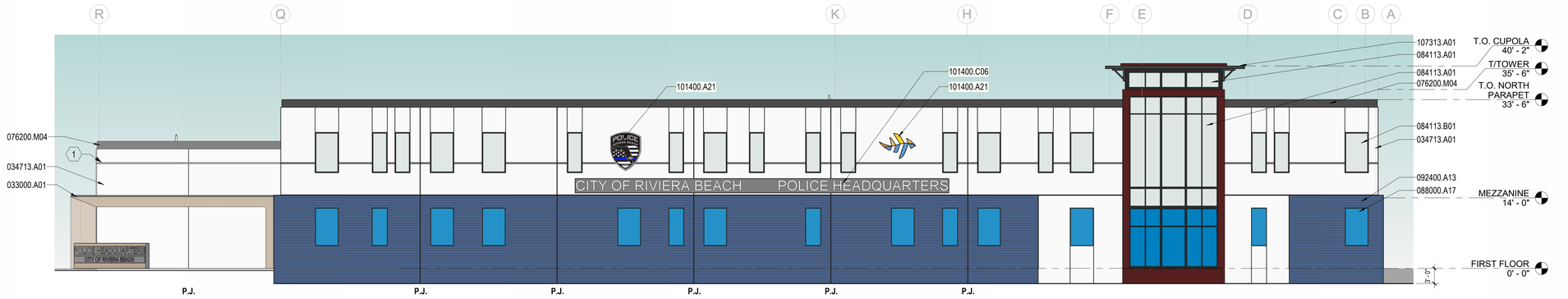


EAST ELEVATION 1" = 10'-0" 4

WEST ELEVATION 1" = 10'-0" 3



SOUTH ELEVATION 1" = 10'-0" 2



NORTH ELEVATION 1" = 10'-0" 1

GENERAL NOTES

1. DO NOT SCALE DRAWINGS. CONTACT THE ARCHITECT IN WRITING FOR CLARIFICATIONS OR MISSING DIMENSIONS.
2. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION IN WRITING BEFORE EXECUTION OF WORK.
3. BUILDING FINISH FLOOR ELEVATION IS 0'-0" FOR ARCHITECTURAL COORDINATION.
4. REFER TO CIVIL DRAWINGS FOR ACTUAL DATUM, FINISH FLOOR ELEVATION.
5. ALL EXTERIOR PENETRATIONS, JOINTS, DOORS AND WINDOWS TO BE SEALED WITH SILICONE SEALANT. COLOR TO MATCH ADJACENT.
6. FINISHES, TRIM, DECORATIVE ELEMENTS ETC. SHALL WRAP ALL ELEVATIONS OF WALLS, ALCOVES, ETC. NOT ALL EXTERIOR WALL RETURNS (ELEVATIONS) MAY NOT BE SHOWN.
7. REFER TO STRUCTURAL DRAWINGS FOR "ALLOWABLE" DESIGN WIND PRESSURES. ALL DOORS, LOUVERS AND WINDOWS TO HAVE CURRENT MIAMI DADE N.O.A. AND FLORIDA PRODUCT APPROVALS.
8. UNLESS OTHERWISE NOTED; PROVIDE STANDARD PVC STUCCO EXPANSION JOINT ACCESSORY BETWEEN DIFFERENT PAINT COLORS

SHEET NOTES

1 TYPICAL 1 1/2" REVEAL

MATERIAL LEGEND

033000.A01	CAST-IN-PLACE CONCRETE
034713.A01	TILT-UP CONCRETE WALL PANEL
055000.B01	STEEL BOLLARD
055000.L01	STEEL LADDER
055113.A01	STEEL STAIR
055113.R01	STEEL GUARDRAIL
076200.M04	PARAPET COPING
076200.U02	DOWNSPOUT
076200.U04	SCUPPER
081113.A01	HOLLOW METAL DOOR
083323.A01	OVERHEAD COILING DOOR
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.B01	ALUMINUM FIXED WINDOW
088000.A17	SPANDREL INSULATING GLASS UNIT
092400.A13	3-COAT STUCCO SYSTEM
101400.A21	ALUMINUM PANEL GRAPHIC SIGNAGE, CUTOUT
101400.C06	ILLUMINATED, FABRICATED CHANNEL DIMENSIONAL LETTERS
107313.A01	WALKWAY COVER SYSTEM
107313.A02	CANTILEVERED ALUMINUM SUNSHADE SYSTEM
233300.A01	EXTRUDED ALUMINUM WALL LOUVER
233725.A01	EXTRUDED ALUMINUM WALL LOUVER

EXTERIOR FINISH SCHEDULE

- COLOR A: MAIN EXTERIOR BUILDING SW 7008 ALABASTER
- COLOR B: ACCENT EXTERIOR BUILDING COLOR TEXTURED PAINT FINISH SW 6811 HONORABLE BLUE
- AREA TO RECEIVE FORMLINER PATTERN TO MATCH ADMIN BUILDING W/ TEXTURED PAINT FINISH; REFER TO SHEET KEYNOTES.
- ALUMINUM CANOPY SYSTEM; PAINTED REVEAL SW 7069 IRON ORE REFER TO SHEET KEYNOTES.
- MATERIAL: COMPOSITE ALUMINUM PANELING - ALPOLIC DBR DARK BRONZE ANODIZED
- ALUMINUM WINDOW OR STOREFRONT FRAMES
- TINTED INSULATING GLASS, REFER TO SPEC SECTION 88000 GLAZING
- INSULATED SPANDREL PANEL REFER TO SPEC SECTION 88000 GLAZING

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STATE OF FLORIDA
JENNIE LOHRUM
AR 96288
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/9/2025	Site Plan Resubmission

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

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RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
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SHEET TITLE
EXTERIOR ELEVATIONS - EVIDENCE/ FIRING RANGE

SHEET NUMBER
A6.00E

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City_of_Riviera_Beach_D/1007657_-_RBPD_Evidence_&_Fire_Range_Building.rvt
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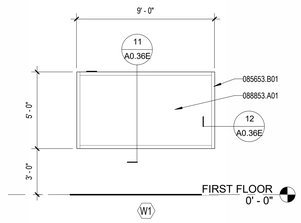
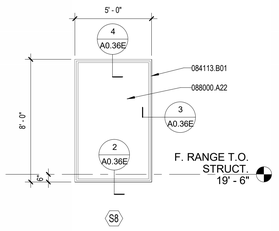


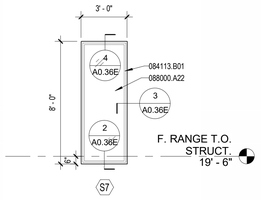
9 1/4" = 1'-0" **STOREFRONT ELEVATION W1**

BASIS OF DESIGN: TSS BL 5.5 FRAMING SYSTEM WITH McGRORT GLASS BALLISTIC DEFEND 4-GCP GLAZING (LEVEL 8 BULLET RESISTANT & SMOKE RATED)

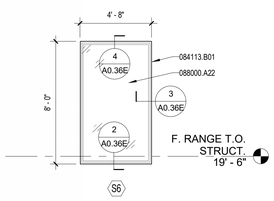


8 1/4" = 1'-0" **STOREFRONT ELEVATION S8**

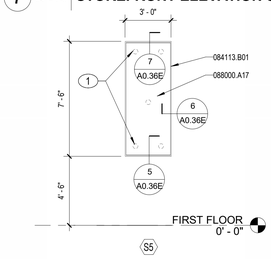
BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1



7 1/4" = 1'-0" **STOREFRONT ELEVATION S7**

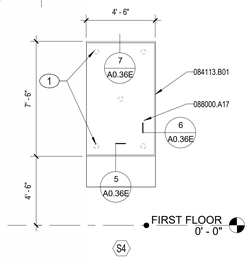


6 1/4" = 1'-0" **STOREFRONT ELEVATION S6**



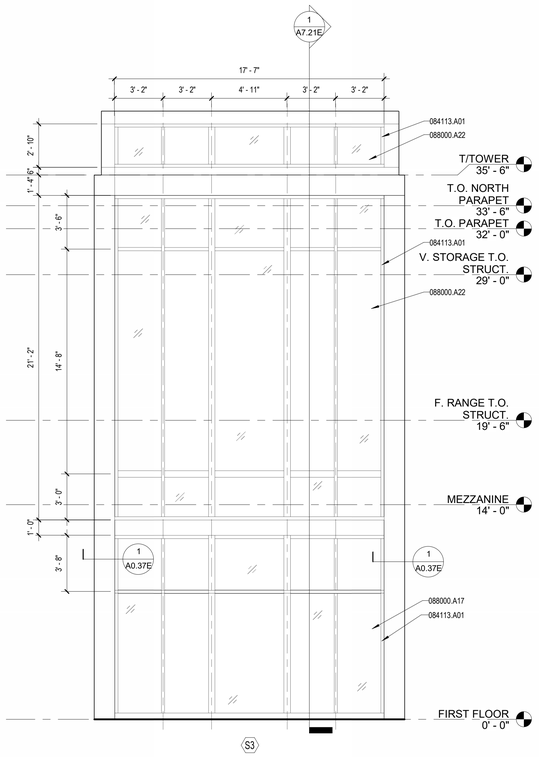
5 1/4" = 1'-0" **STOREFRONT ELEVATION S5**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1



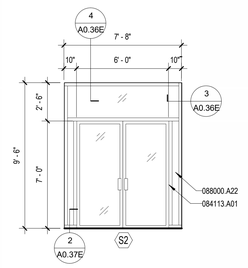
4 1/4" = 1'-0" **STOREFRONT ELEVATION S4**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1



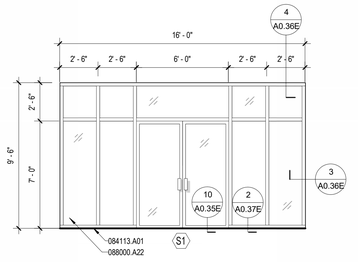
3 1/4" = 1'-0" **STOREFRONT ELEVATION S3**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1



2 1/4" = 1'-0" **STOREFRONT ELEVATION S2**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1
ENVIRALUM SERIES ENV-350 LEVEL E IMPACT - DOOR (L.M.I.) FLORIDA PRODUCT APPROVAL: FL#20701.5



1 1/4" = 1'-0" **STOREFRONT ELEVATION S1**

BASIS OF DESIGN: ENVIRALUM SERIES 450 LEVEL 3 E IMPACT FRAMING FLORIDA PRODUCT APPROVAL: FL#19002.1
ENVIRALUM SERIES ENV-350 LEVEL E IMPACT - DOOR (L.M.I.) FLORIDA PRODUCT APPROVAL: FL#20701.5

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET A0.30E FOR DOOR SCHEDULES & TYPICAL DOOR DETAILS.

C ALL WINDOW PROFILES ARE GENERIC. REFER TO SPECIFICATIONS SECTIONS FOR PERFORMANCE REQUIREMENTS. SEE SECTION 084113 FOR STOREFRONT WINDOW, 084229 FOR AUTOMATIC ENTRANCE, 084413 FOR CURTAIN WALL, 085113 FOR ALUMINUM WINDOW.

D ALL INTERIOR GLAZING SHALL BE CLEAR, TEMPERED GLASS 088000.A04 UNO.

E ALL EXTERIOR GLAZING SHALL BE TINTED INSULATING GLASS, CLASS 'E' IMPACT RATED FOR RISK CATEGORY IV ESSENTIAL BUILDINGS. 088000.A09 UNO.

SHEET NOTES

1 4" PVC SLEAVE VENT, 5 PER OPENING.

MATERIAL LEGEND

084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.B01	ALUMINUM FIXED WINDOW
085653.B01	BULLET RESISTANT ALUMINUM FRAME
088000.A17	SPANDREL INSULATING GLASS UNIT
088000.A22	INSULATING-LAMINATED GLASS UNIT
088853.A01	LAMINATED-GLASS SECURITY GLAZING

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GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET SERIES "C" FOR CIVIL INFORMATION.

C PARAPET HEIGHTS ARE TO TOP OF TILT-WALL OR METAL STUD. PRESSURE TREATED WOOD NAILERS AND METAL COPING/ FLASHING OCCUR ABOVE THIS HEIGHT.

D REFER TO SHEETS A3.01E FOR INTERIOR CEILING CONDITIONS.

E R-VALUE FOR ALL ROOF INSULATION IS TO BE EQUAL TO FLORIDA BUILDING CODE REQUIREMENT FOR THE CLIMATE ZONE REGION (1A).

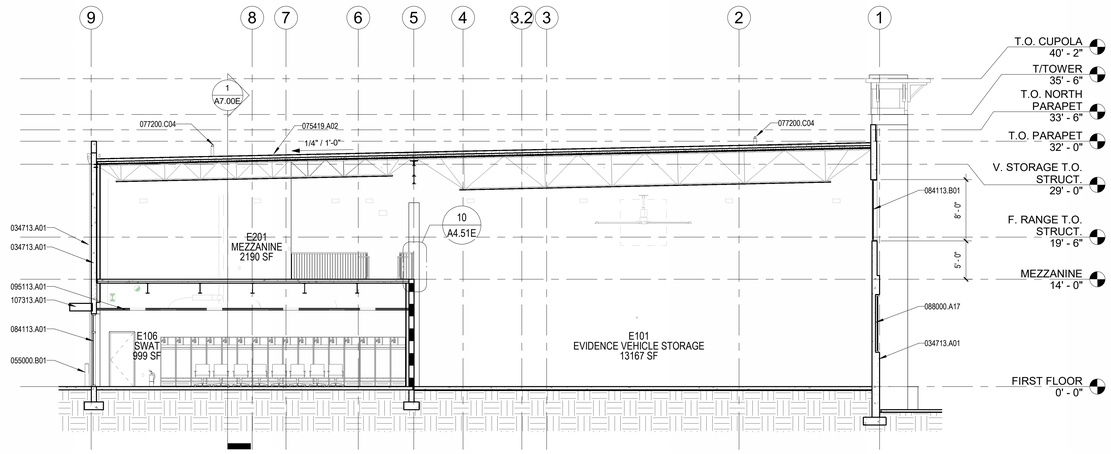
F REFER TO SHEET A2.51E FOR ROOF INFORMATION.

SHEET NOTES

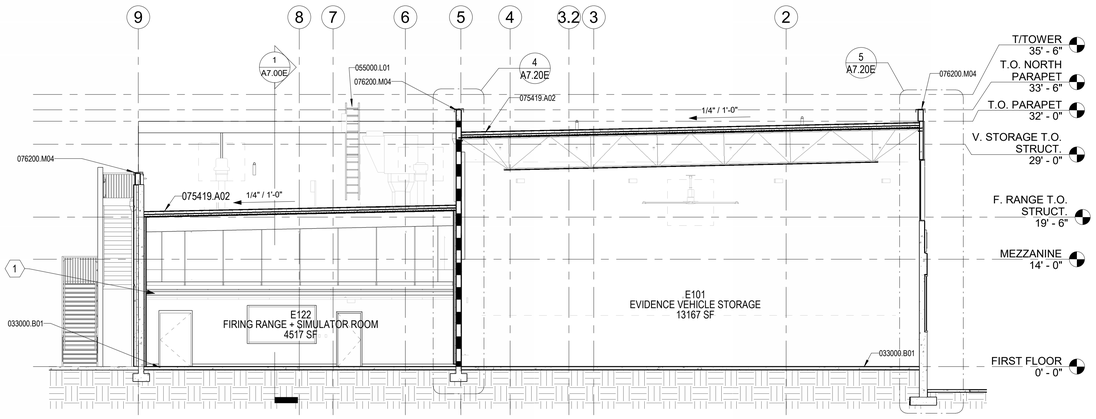
1 SAFETY CEILING
2 FIRING RANGE MECHANICAL EQUIPMENT BY VENDOR
3 BALLISTIC RATED BAFFLES
4 BULLET TRAP
5 ROOF TOP MECHANICAL EQUIPMENT. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION

MATERIAL LEGEND

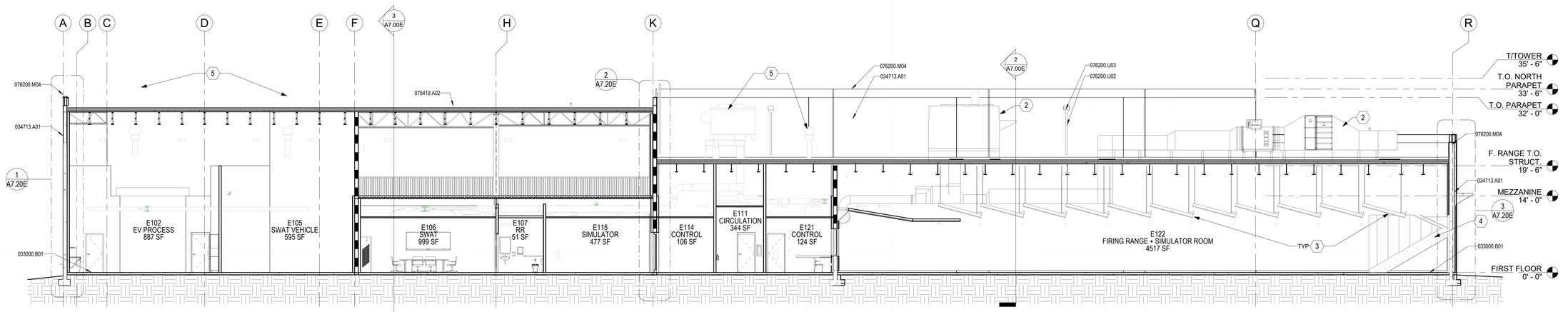
033000.B01	CONCRETE SLAB
034713.A01	TILT-UP CONCRETE WALL PANEL
055000.B01	STEEL BOLLARD
055000.L01	STEEL LADDER
075419.A02	SINGLE-PLY PVC ROOFING MEMBRANE, FULLY ADHERED
076200.M04	PARAPET COPING
076200.U02	DOWNSPOUT
076200.U03	CONDUCTOR HEAD
077200.C04	TIEBACK ANCHOR FOR FALL PROTECTION
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
084113.B01	ALUMINUM FIXED WINDOW
088000.A17	SPANDREL INSULATING GLASS UNIT
095113.A01	ACOUSTICAL CEILING UNITS
107313.A01	WALKWAY COVER SYSTEM



CROSS SECTION 1/8" = 1'-0" (3)



CROSS SECTION 1/8" = 1'-0" (2)



LONGITUDINAL SECTION 1/8" = 1'-0" (1)

0 4' 8' 16' 24' 32'
1/8" = 1'-0" GRAPHIC SCALE

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1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL, Inc.
791 Park of Commerce Blvd.
Suite 400
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T 561 988 4002
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CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
CORINNE LORHUM
AR 96099
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

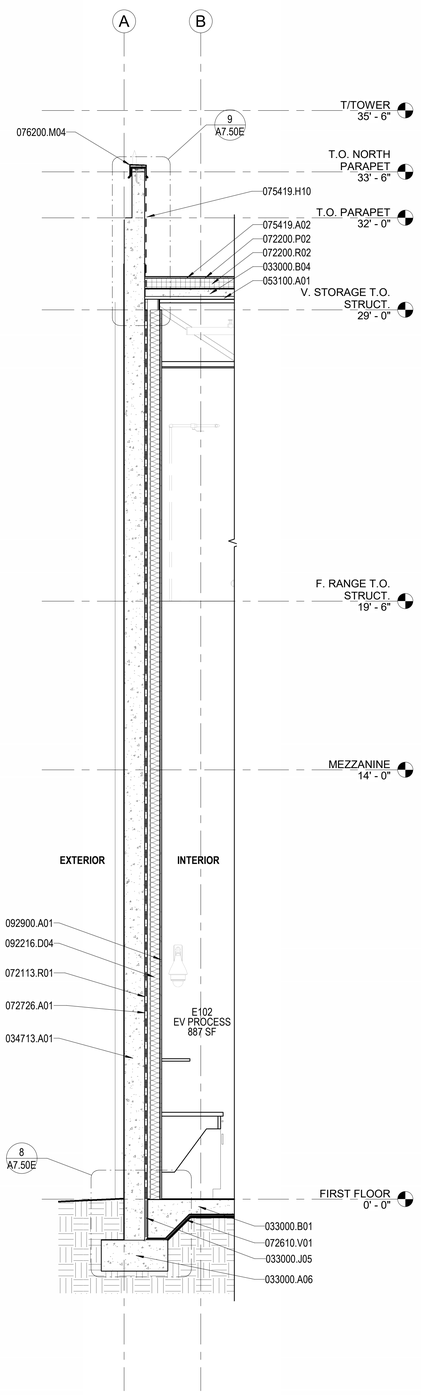
PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

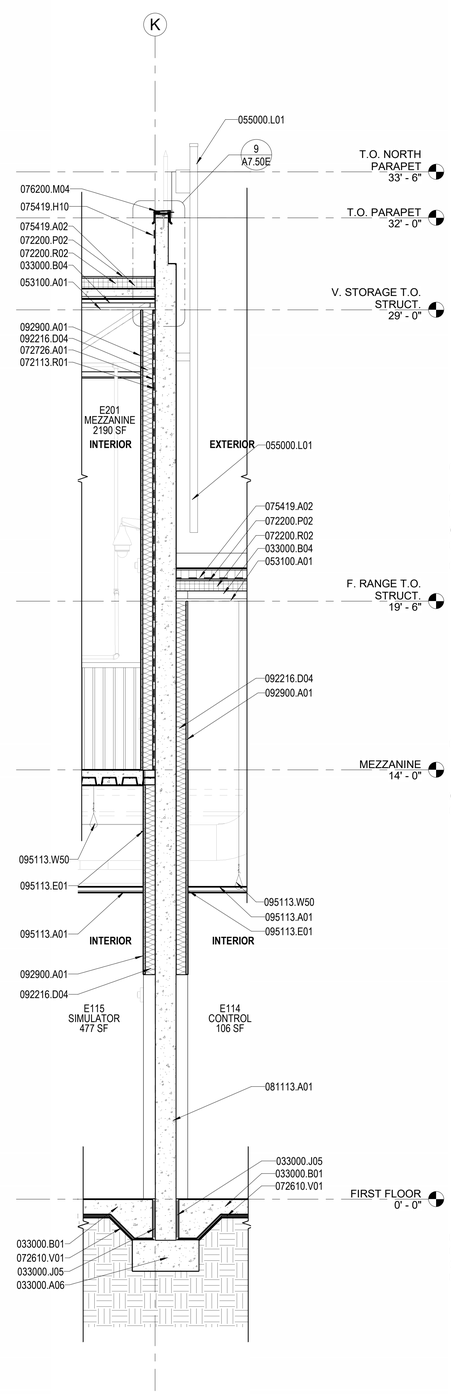
PROJECT NUMBER
1007657.00

SHEET TITLE
BUILDING SECTIONS - EVIDENCE/ FIRING RANGE

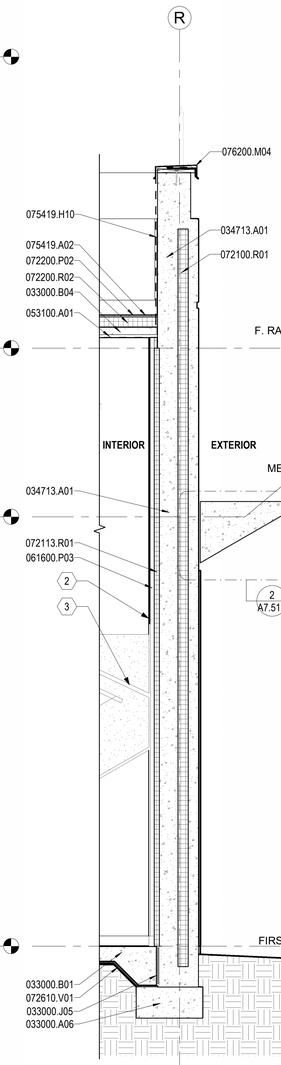
SHEET NUMBER
A7.00E



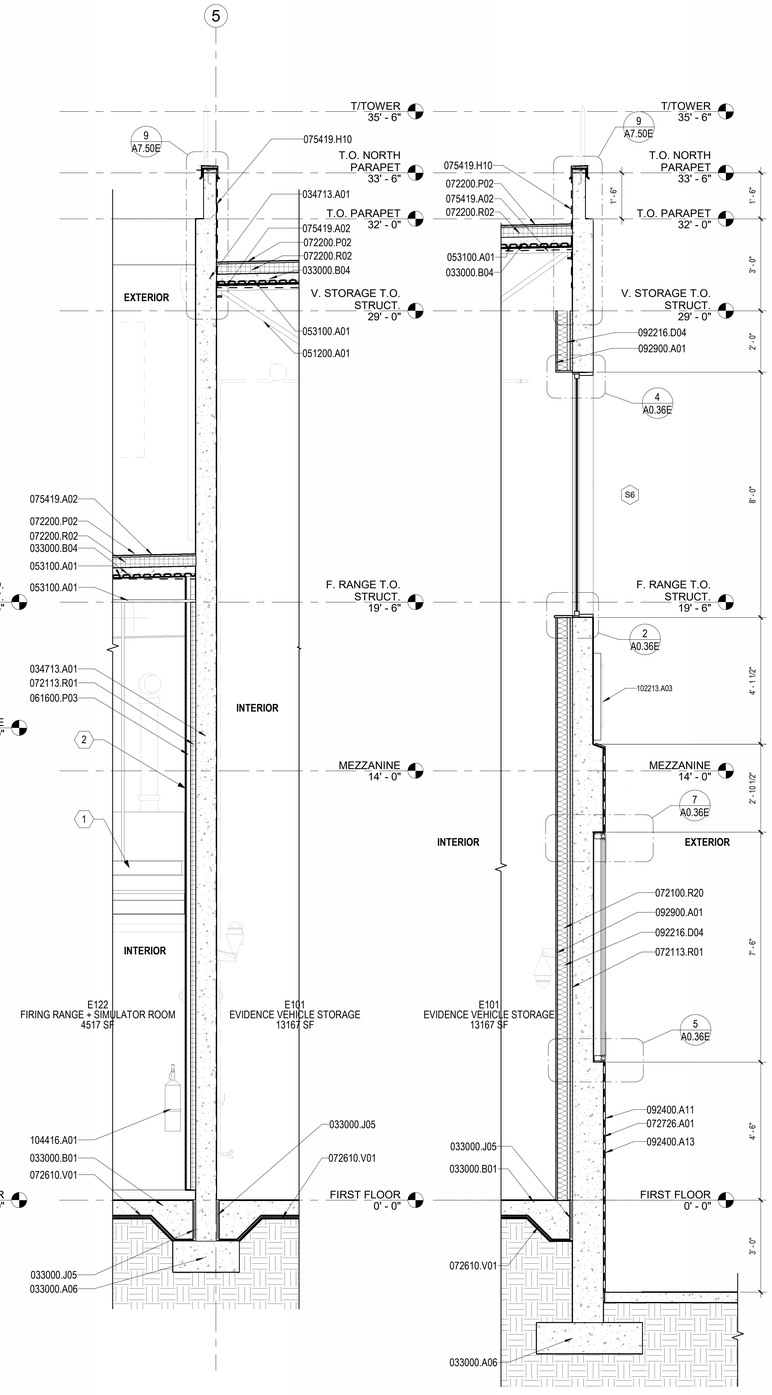
1 1/2" = 1'-0" **WALL SECTION**



2 1/2" = 1'-0" **WALL SECTION**



3 1/2" = 1'-0" **WALL SECTION**



4 1/2" = 1'-0" **WALL SECTION**

5 1/2" = 1'-0" **WALL SECTION**

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET SERIES "C" FOR CIVIL INFORMATION.

C PARAPET HEIGHTS ARE TO TOP OF TILT-WALL OR METAL STUD. PRESSURE TREATED WOOD NAILERS AND METAL COPING/ FLASHING OCCUR ABOVE THIS HEIGHT.

D REFER TO SHEETS A3.01E FOR INTERIOR CEILING CONDITIONS.

E R-VALUE FOR ALL ROOF INSULATION IS TO BE EQUAL TO FLORIDA BUILDING CODE REQUIREMENT FOR THE CLIMATE ZONE REGION (1A).

F REFER TO SHEET A2.51E FOR ROOF INFORMATION.

SHEET NOTES

KEYNOTES: 0

1 BALLISTIC RATED BAFFLES

2 RUBBER WALL TILE

3 BULLET TRAP

MATERIAL LEGEND

033000.A06	CONCRETE FOOTING
033000.B01	CONCRETE SLAB
033000.B04	LIGHTWEIGHT AGGREGATE STRUCTURAL CONCRETE
033000.J05	PREFORMED JOINT FILLER
034713.A01	TILT-UP CONCRETE WALL PANEL
051200.A01	STEEL BEAM
053100.A01	STEEL DECK
055000.L01	STEEL LADDER
061600.P03	PLYWOOD WALL SHEATHING
072100.R01	BOARD INSULATION
072100.R20	SOUND ATTENUATION BATTS
072113.R01	BOARD INSULATION
072200.P02	GLASS MAT GYPSUM PROTECTION BOARD
072200.R02	ROOF INSULATION BOARD
072610.V01	UNDERSLAB VAPOR BARRIER
072726.A01	FLUID-APPLIED AIR BARRIER, VAPOR-RETARDING
075419.A02	SINGLE-PLY PVC ROOFING MEMBRANE, FULLY ADHERED
075419.H10	POLYVINYL-CHLORIDE (PVC) WALL FLASHING
076200.M04	PARAPET COPING
081113.A01	HOLLOW METAL DOOR
092216.D04	METAL STUD 4"
092400.A11	SELF FURRING DIAMOND MESH LATH
092400.A13	3-COAT STUCCO SYSTEM
092900.A01	GYPSUM BOARD, REGULAR 5/8"
095113.A01	ACOUSTICAL CEILING UNITS
095113.E01	WALL ANGLE
095113.W50	HANGER WIRE
102213.A03	HEAVY DUTY PARTITION
104416.A01	FIRE EXTINGUISHER

LIFE SAFETY SYMBOLS

UNRATED PARTITION

SMOKE PARTITION

1 HOUR FIRE BARRIER

INSULATION VALUES

CLIMATE ZONE 1A, CITY OF RIVIERA BEACH, FL (WARM-HUMID COUNTY) PALM BEACH COUNTY
HEATING LOAD - MAX 72 DEG. F
COOLING LOAD - MIN. 75 DEG. F

SPEC NO.	DESCRIPTION	DEPTH	R-VALUE
072200.R01	ROOF RIGID BOARD INSULATION (ENTIRELY ABOVE DECK)	3.5 INCHES	R-21ci
072113.R01	MASS (RIGID BOARD, EPS)	1 INCHES	R-5.7 ci
--	UNDERSLAB RIGID INSULATION	NR	NR
--	OPAQUE DOORS, NON-SWINGING*	--	R-4.75
SPEC NO.	**DESCRIPTION**	**DEPTH**	**U-VALUE**
--	FENESTRATION, FIXED	NR	0.50
SPEC NO.	**DESCRIPTION**	**ORIENTATION**	**SHGC**
--	FENESTRATION, FIXED	NORTH	0.37
SPEC NO.	**DESCRIPTION**	**ORIENTATION**	**SHGC**
--	FENESTRATION, FIXED	S,W,E	0.30

PER FBC, ENERGY CONSERVATION, TABLE C402.1.3
R-VALUES BASED ON STANDARD R-6 PER 1-INCH DEPTH OF INSULATION.
*REQUIRED FOR TEMPERATURE CONTROLLED INTERIOR SPACES.

0 1' 2' 4' 6' 8'
1/2" = 1'-0" GRAPHIC SCALE

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REGISTRATION

STATE OF FLORIDA
JOANNE LOHRUM
AR 96089
REGISTERED ARCHITECT

DRAWING HISTORY

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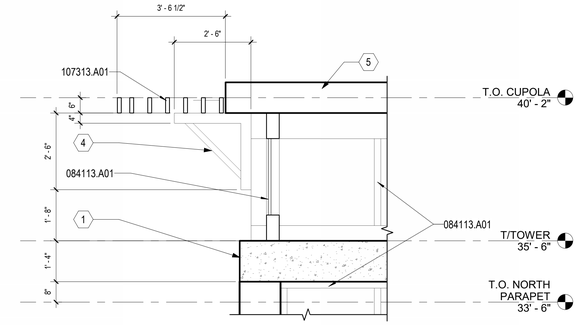
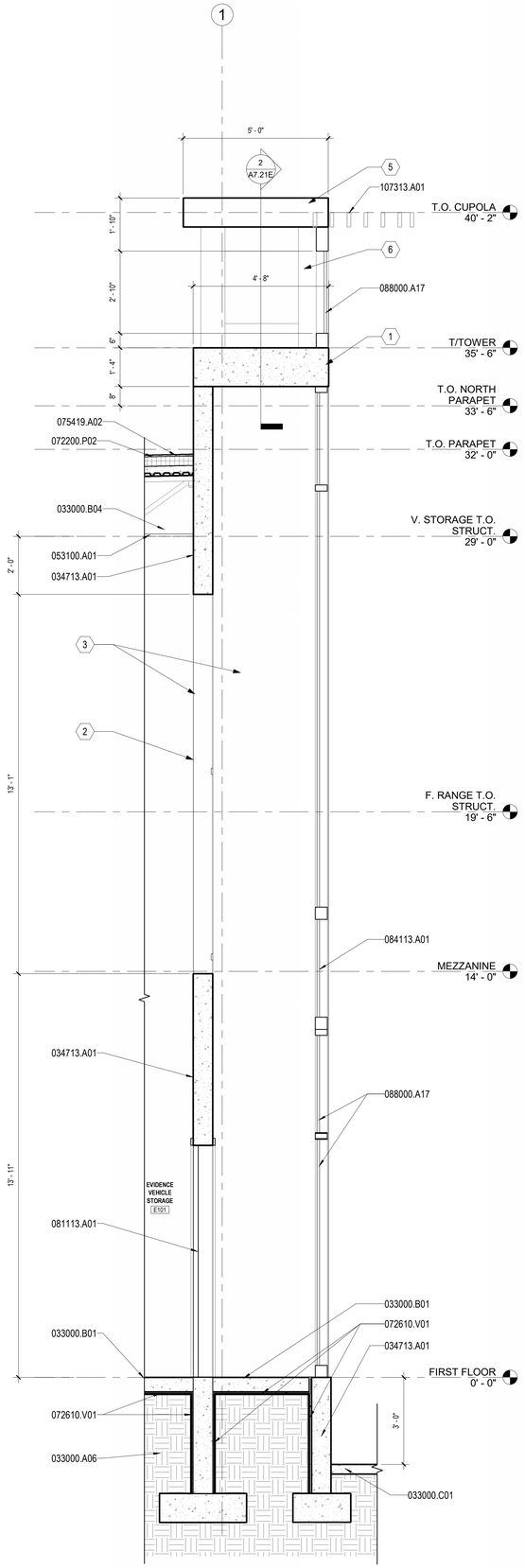
SHEET TITLE
WALL SECTIONS

SHEET NUMBER
A7.20E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:42:14 PM



2 1/2" = 1'-0" **TOWER SECTION**



1 1/2" = 1'-0" **WALL SECTION**

GENERAL NOTES

A REFER TO SHEETS G0.01E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET SERIES "C" FOR CIVIL INFORMATION.

C PARAPET HEIGHTS ARE TO TOP OF TILT-WALL OR METAL STUD. PRESSURE TREATED WOOD NAILERS AND METAL COPING/ FLASHING OCCUR ABOVE THIS HEIGHT.

D REFER TO SHEETS A3.01E FOR INTERIOR CEILING CONDITIONS.

E R-VALUE FOR ALL ROOF INSULATION IS TO BE EQUAL TO FLORIDA BUILDING CODE REQUIREMENT FOR THE CLIMATE ZONE REGION (1A).

F REFER TO SHEET A2.51E FOR ROOF INFORMATION.

SHEET NOTES

KEYNOTES: 0

1 16" TILT-UP LID WITH ALPOLIC METAL CLADDING DRY JOINT SYSTEM.
2 OPENING.
3 TILT-UP WALL BEYOND.
4 PAINTED ALUMINUM BRACKET.
5 12" TUBE FRAMING ZINC COATED
6 WINDOW SYSTEM BEYOND

MATERIAL LEGEND

033000.A06	CONCRETE FOOTING
033000.B01	CONCRETE SLAB
033000.B04	LIGHTWEIGHT AGGREGATE STRUCTURAL CONCRETE
033000.C01	CONCRETE WALK
034713.A01	TILT-UP CONCRETE WALL PANEL
053100.A01	STEEL DECK
072200.P02	GLASS MAT GYPSUM PROTECTION BOARD
072610.V01	UNDERSLAB VAPOR BARRIER
075419.A02	SINGLE-PLY PVC ROOFING MEMBRANE, FULLY ADHERED
081113.A01	HOLLOW METAL DOOR
084113.A01	GLAZED ALUMINUM STOREFRONT SYSTEM
088000.A17	SPANDREL INSULATING GLASS UNIT
107313.A01	WALKWAY COVER SYSTEM

0 1' 2' 4' 6' 8'
1/2" = 1'-0" GRAPHIC SCALE

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STATE OF FLORIDA
LYNNIE LORDUM
AR 96289
REGISTERED ARCHITECT

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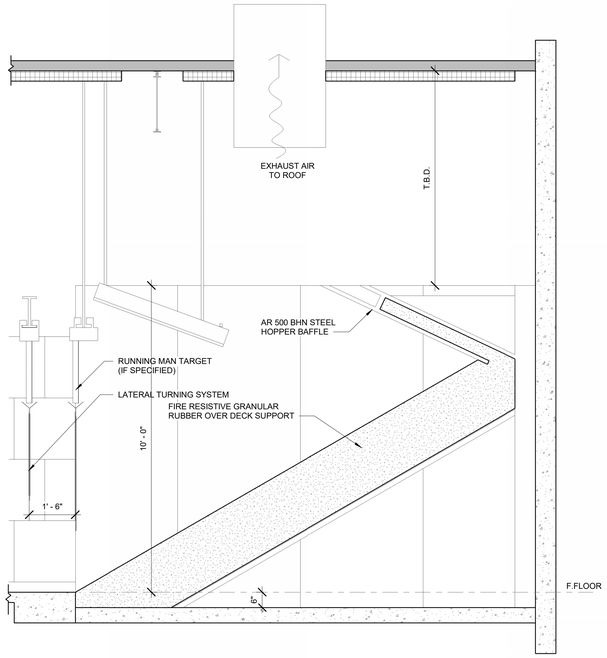
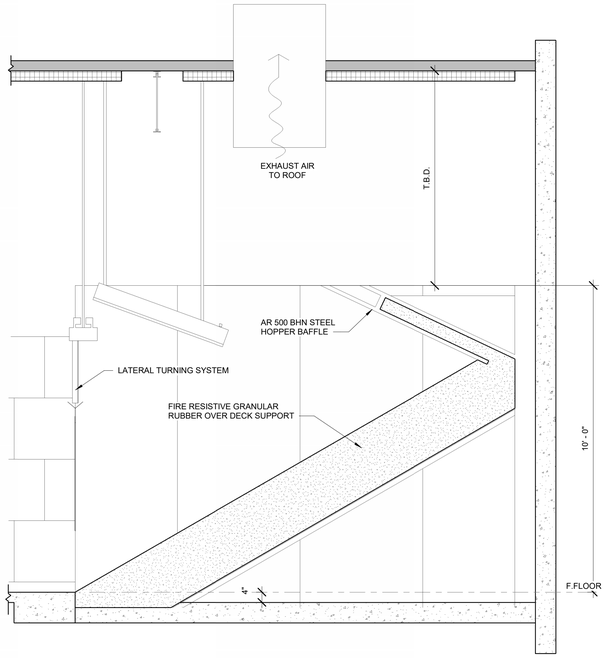
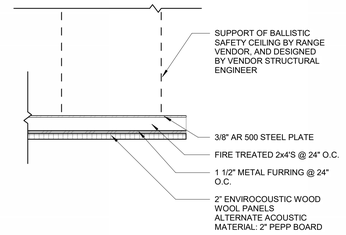


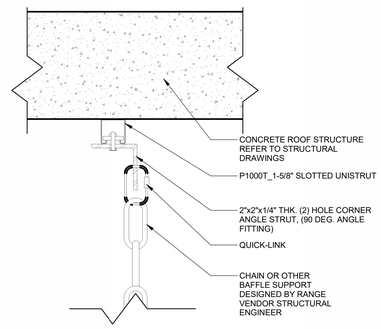
11 1/2" = 1'-0" **FIRE RESISTIVE GRANULAR RUBBER TRAP**



8 1/2" = 1'-0" **FIRE RESISTIVE GRANULAR RUBBER TRAP**

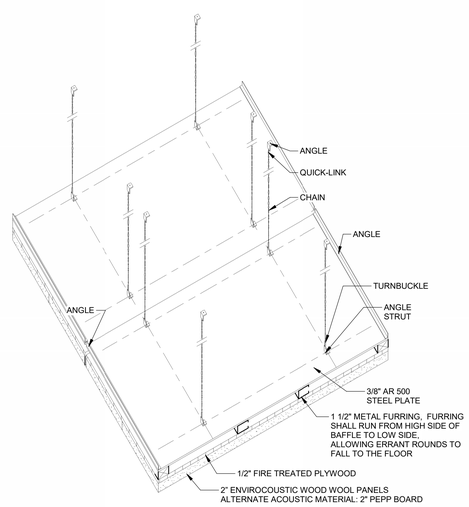


4 3/4" = 1'-0" **SAFETY CEILING DETAIL**

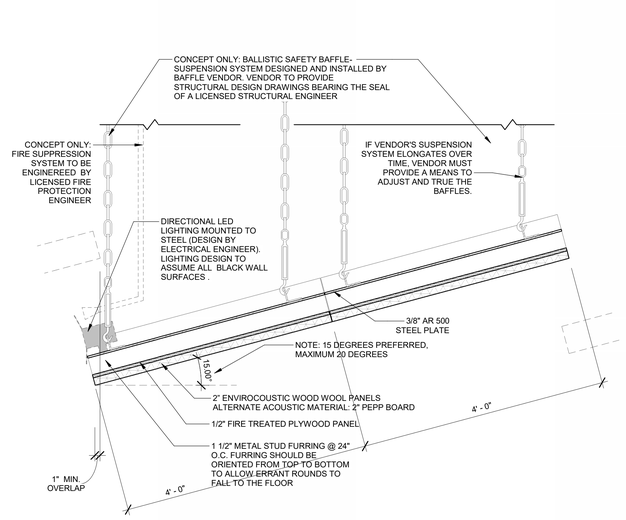


3 3" = 1'-0" **BAFFLE ANCHORAGE DETAIL**

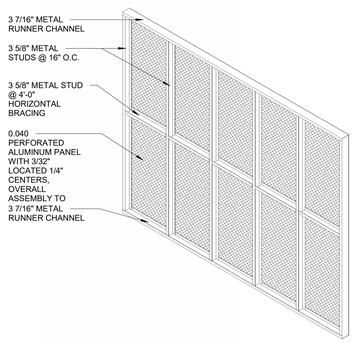
10 1 1/2" = 1'-0" **TYP. BAFFLE TO WALL DETAIL**



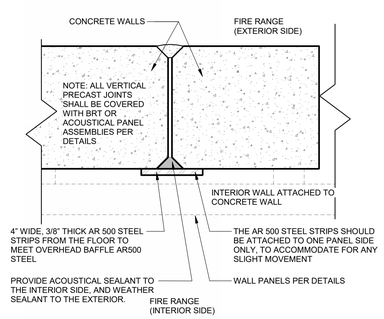
7 1" = 1'-0" **SAFETY BAFFLE ISOMETRIC**



2 1" = 1'-0" **SAFETY BAFFLE DETAIL.**

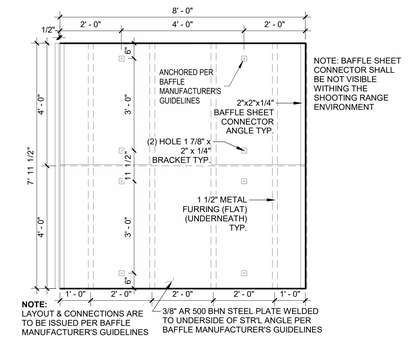


9 1/2" = 1'-0" **METAL SCREEN ISOMETRIC**

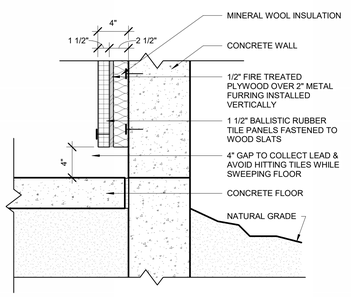


TILT-UP CONCRETE

6 3" = 1'-0" **SIDE WALL PANELS @ JOINTS**



5 1/2" = 1'-0" **BAFFLE PLAN - TOP VIEW**



1 1 1/2" = 1'-0" **BALLISTIC RUBBER DETAIL**

GENERAL NOTES

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F REFER TO SHEET A2.51E FOR ROOF INFORMATION.

SHEET NOTES

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

0 6" 1' 2' 3' 4'
1" = 1'-0" GRAPHIC SCALE

0 1' 2' 4' 6' 8'
1/2" = 1'-0" GRAPHIC SCALE

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PROJECT NUMBER
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SHEET TITLE
FIRING RANGE DETAILS

SHEET NUMBER
A7.22E

FILE NAME: Autodesk Docs// 1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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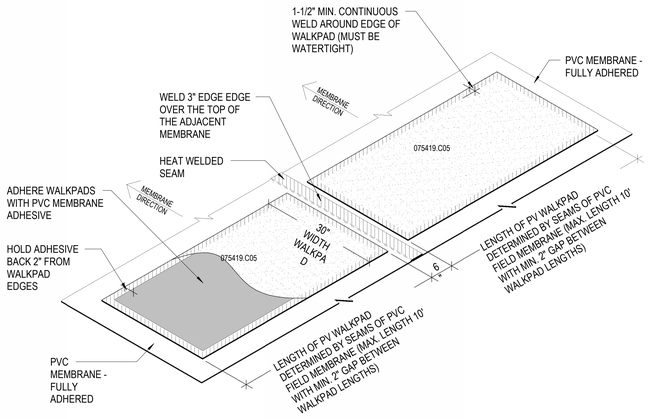
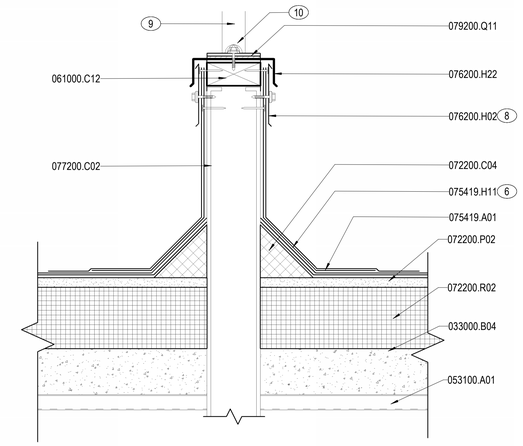
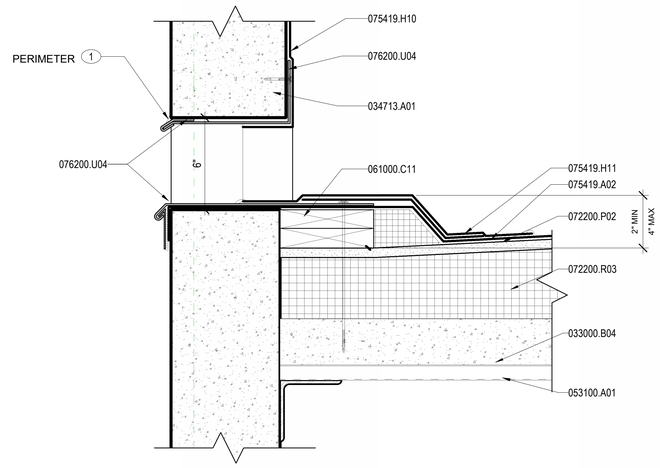


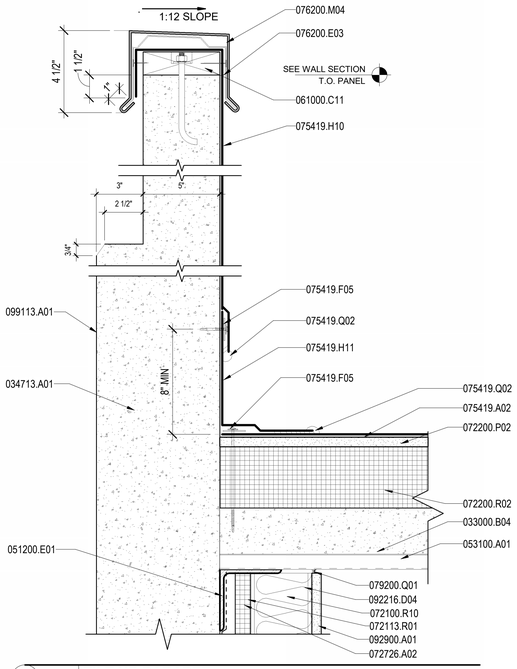
10 3/4" = 1'-0" **WALK PAD DETAIL**



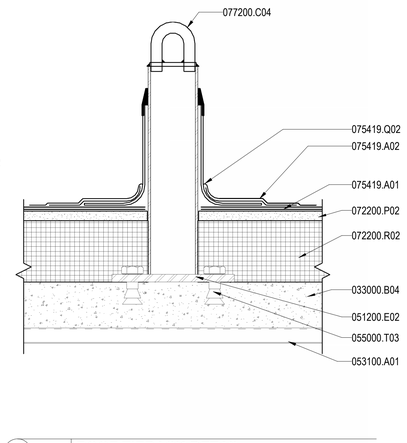
6 3" = 1'-0" **EQUIPMENT CURB SUPPORT DETAIL**



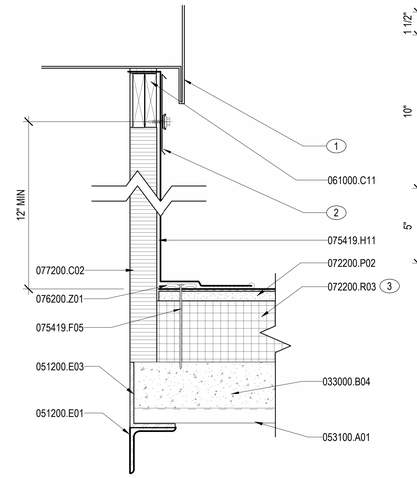
3 3" = 1'-0" **SECTION DETAIL - OVERFLOW SCUPPER**



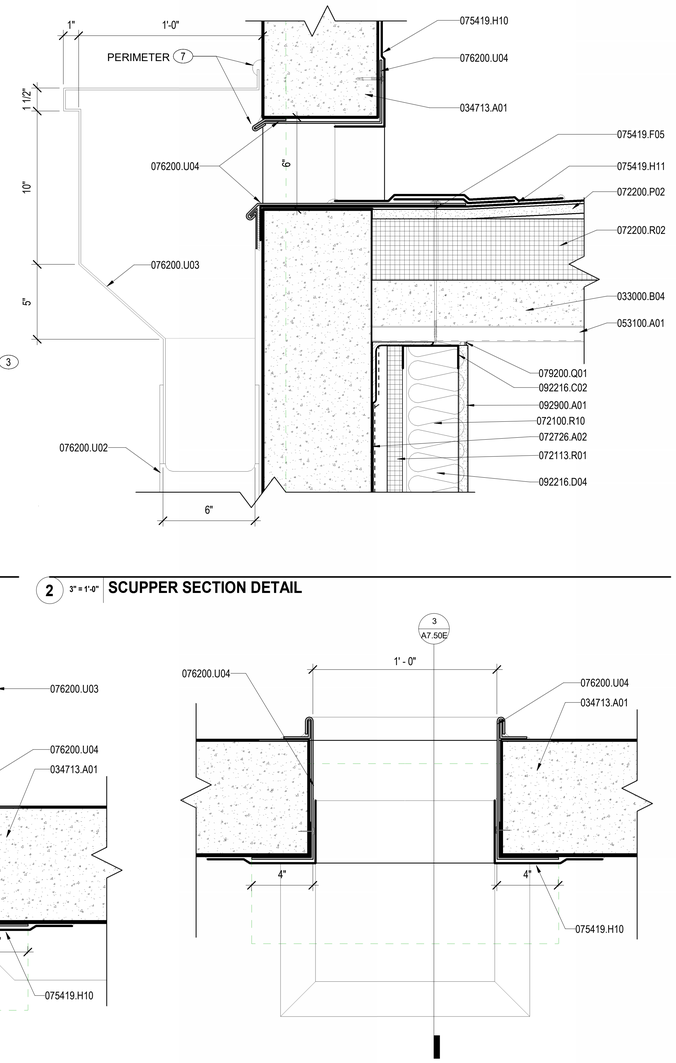
9 3" = 1'-0" **TILT UP PARAPET**



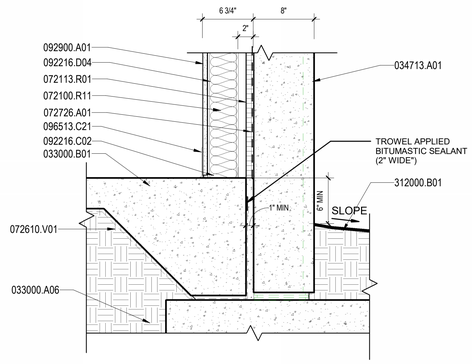
11 3" = 1'-0" **ROOF TIEBACK DETAIL**



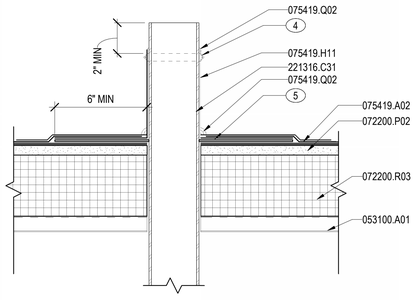
5 3" = 1'-0" **EQUIPMENT CURB DETAIL - TYPICAL**



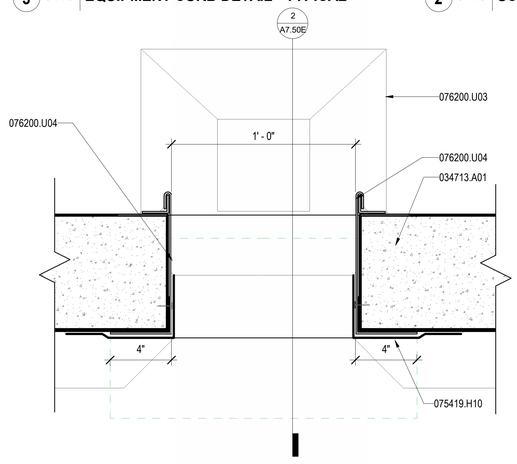
2 3" = 1'-0" **SCUPPER SECTION DETAIL**



8 1 1/2" = 1'-0" **TILT UP WALL BASE**



7 3" = 1'-0" **VENT STACK PENETRATION DETAIL**



4 3" = 1'-0" **SCUPPER PLAN DETAIL**

1 3" = 1'-0" **SCUPPER OVERFLOW PLAN DETAIL**

GENERAL NOTES

A REFER TO SHEETS G0.02E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET A0.10E FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND TYPICAL RATED PARTITION PENETRATION DETAILS

C TILT-WALL PANELS ARE BASED ON A 3/4" JOINT BETWEEN PANELS.

D PANEL ELEVATIONS ARE MEANT TO BE A DESIGN GUIDE. TILT-WALL CONTRACTOR TO VERIFY FINAL DIMENSIONS AND TILT-WALL PENETRATIONS PRIOR TO FABRICATION.

E COORDINATE DOOR, WINDOW AND OTHER OPENINGS WITH ARCHITECTURE AND ENGINEERING DRAWINGS.

F COORDINATE BOTTOM OF PANEL WITH STRUCTURAL GRADE BEAM LOCATIONS.

G COORDINATE ALL DEVICES & OPENINGS ON TILT-WALL PANELS.

SHEET NOTES

1 EXHAUST FAN/GRAVITY VENTILATOR CURB (REFER TO MECHANICAL DRAWINGS).
2 REMOVABLE LIPPED COUNTER FLASHING.
3 TAPERED INSULATION SYSTEM MAX. DEPTH 12.5".
4 PIPE STRAP AT ROUND PIPE ONLY.
5 SET IN CONTINUOUS SEALANT BED.
6 EXTEND MULTI-PLY BASE FLASHINGS UP CURB AND UNDER REMOVABLE COUNTER FLASHING
7 TOOL SEALANT TO FACILITATE WATER RUN-OFF.
8 REMOVABLE LIPPED COUNTER FLASHING AND CORROSION RESISTANT STEEL SCREWS W/NEOPRENE WASHERS
9 ROOF TOP EQUIPMENT, REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
10 SEALANT CAP BEAD OVER FASTENER HEAD, TYPICAL

MATERIAL LEGEND

033000.A06	CONCRETE FOOTING
033000.B01	CONCRETE SLAB
033000.B04	LIGHTWEIGHT AGGREGATE STRUCTURAL CONCRETE
034713.A01	TILT-UP CONCRETE WALL PANEL
051200.E01	STEEL ANGLE
051200.E02	STEEL PLATE
051200.E03	STEEL PLATE, BENT
053100.A01	STEEL DECK
055000.T03	EXPANSION BOLT
061000.C11	PRESSURE TREATED WOOD BLOCKING
061000.C12	CONTINUOUS PRESSURE TREATED WOOD BLOCKING
072100.R10	BLANKET INSULATION, UNFACED
072100.R11	BLANKET INSULATION, FACED
072113.R01	BOARD INSULATION
072200.C04	PREFORMED CANT
072200.P02	GLASS MAT GYPSUM PROTECTION BOARD
072200.R02	ROOF INSULATION BOARD
072200.R03	TAPERED ROOF INSULATION
072610.V01	UNDERSLAB VAPOR BARRIER
072726.A01	FLUID-APPLIED AIR BARRIER, VAPOR-RETARDING
072726.A02	FLUID-APPLIED AIR BARRIER, VAPOR-PERMEABLE
075419.A01	SINGLE-PLY POLYVINYL-CHLORIDE (PVC) ROOFING SYSTEM
075419.A02	SINGLE-PLY PVC ROOFING MEMBRANE, FULLY ADHERED
075419.C05	ROOF WALKWAY PAD
075419.F05	MECHANICAL FASTENER
075419.H10	POLYVINYL-CHLORIDE (PVC) WALL FLASHING
075419.H11	POLYVINYL-CHLORIDE (PVC) BASE FLASHING
075419.Q02	MASTIC SEALANT
076200.E03	CLEAT
076200.H02	COUNTERFLASHING
076200.H22	EQUIPMENT SUPPORT FLASHING
076200.M04	PARAPET COPING
076200.U02	DOWNSPOUT
076200.U03	CONDUCTOR HEAD
076200.U04	SCUPPER
076200.Z01	TERMINATION BAR
077200.C02	EQUIPMENT SUPPORT CURB
077200.C04	TIEBACK ANCHOR FOR FALL PROTECTION
079200.Q01	JOINT SEALANT
079200.Q11	SEALANT BED
092216.C02	METAL STUD RUNNER TRACK
092216.D04	METAL STUD 4"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
096513.C21	RUBBER WALL BASE
099113.A01	PAINT FINISH
221316.C31	VENT PIPING
312000.B01	FINISH GRADE

0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

0 4" 1' 2' 3' 4' 5'
3/4" = 1'-0" GRAPHIC SCALE

CLIENT

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REGISTRATION

STATE OF FLORIDA · SUZANNE LORIUM · AR 96289 · REGISTERED ARCHITECT

DRAWING HISTORY

№	DATE	DESCRIPTION

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

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RBPD EVIDENCE & FIRE RANGE BUILDING

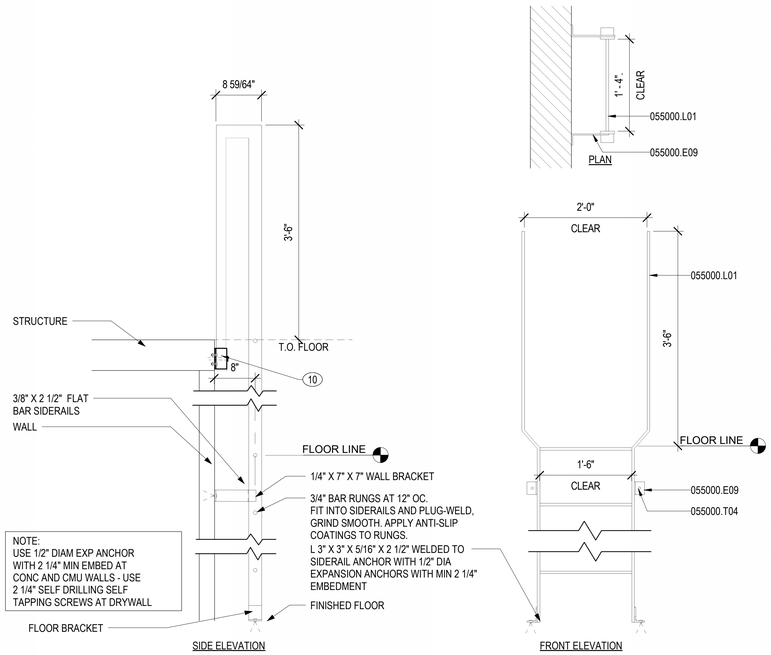
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

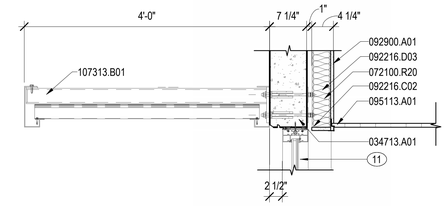
SHEET TITLE
ROOF DETAILS

SHEET NUMBER
A7.50E

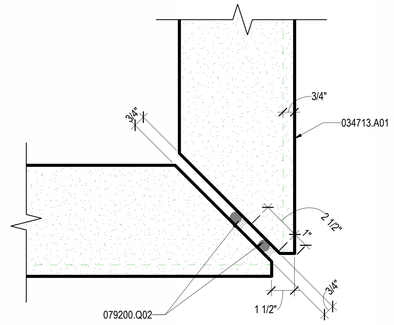
FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:42:23 PM



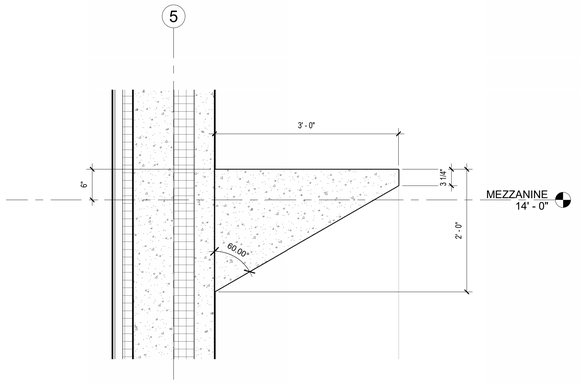
FINISH AFTER FABRICATION: SHOP PRIMER PAINT WITH HIGH PERFORMANCE COATING



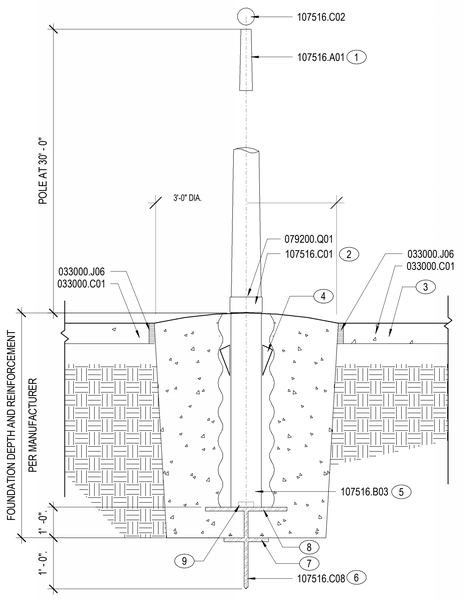
6 1" = 1'-0" **EXTERIOR CANOPY DETAIL**



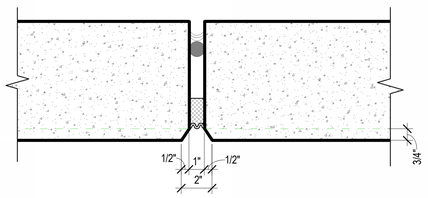
3 3" = 1'-0" **TYPICAL TILT-UP PLAN DETAIL @ 45 DEGREE CORNER**



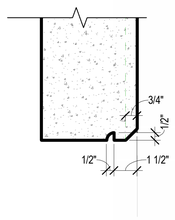
2 1" = 1'-0" **CONCRETE EXTERIOR DETAIL**



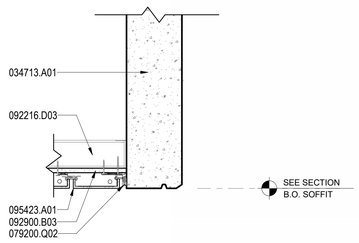
1 NTS **FLAG POLE DETAIL**



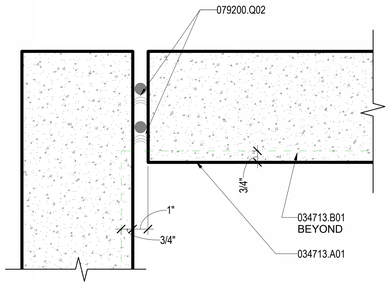
10 3" = 1'-0" **TYPICAL EXPANSION JOINT DETAIL**



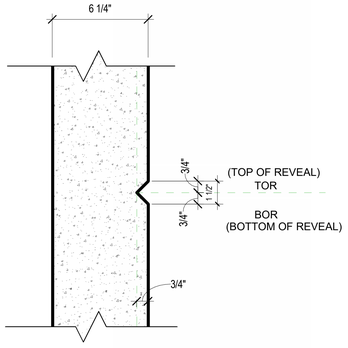
8 3" = 1'-0" **TYPICAL DRIP DETAIL**



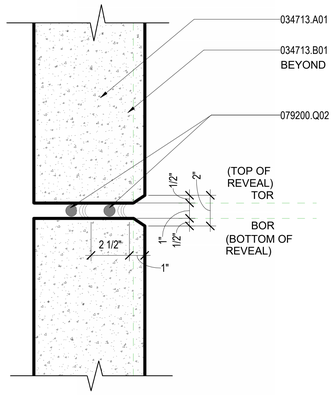
5 1 1/2" = 1'-0" **SOFFIT AT TILT-UP**



9 3" = 1'-0" **TYPICAL JOINT DETAIL**



7 3" = 1'-0" **TYPICAL REVEAL DETAIL**



4 3" = 1'-0" **TYPICAL JOINT DETAIL**

GENERAL NOTES

A REFER TO SHEETS G0.02E FOR GENERAL ABBREVIATIONS AND ARCHITECTURAL SYMBOLS.

B REFER TO SHEET A0.10E FOR THROUGH PENETRATION FIRESTOP SYSTEM SCHEDULE AND TYPICAL RATED PARTITION PENETRATION DETAILS

C TILT-WALL PANELS ARE BASED ON A 3/4" JOINT BETWEEN PANELS.

D PANEL ELEVATIONS ARE MEANT TO BE A DESIGN GUIDE. TILT-WALL CONTRACTOR TO VERIFY FINAL DIMENSIONS AND TILT-WALL PENETRATIONS PRIOR TO FABRICATION.

E COORDINATE DOOR, WINDOW AND OTHER OPENINGS WITH ARCHITECTURE AND ENGINEERING DRAWINGS.

F COORDINATE BOTTOM OF PANEL WITH STRUCTURAL GRADE BEAM LOCATIONS.

G COORDINATE ALL DEVICES & OPENINGS ON TILT-WALL PANELS.

SHEET NOTES

1 CONE TAPERED
2 CAST ALUMINUM WATERPROOF COLLAR. FINISH TO MATCH POLE.
3 REFER TO SITE PLAN FOR ADDITIONAL INFORMATION FOR COORDINATION ADJACENT MATERIAL.
4 HARDWOOD WEDGES BY CONTRACTOR.
5 10 INCH DIAMETER, GALVANIZED. FILL WITH DRY SAND.
6 2/4 INCH STEEL GROUND SPIKE. ALL WELDED CONSTRUCTION.
7 STEEL SUPPORT PLATE.
8 STEEL BOTTOM PLATE.
9 INTEGRAL STEEL CENTERING WEDGES.
10 PIPE RAIL SLEEVE WITH SOLID BOTTOM AND SET SCREW. COORDINATE WITH STRUCTURAL.
11 REFER TO DOOR SCHEDULE FOR SPECIFIC DOOR TYPE.

MATERIAL LEGEND

033000.C01	CONCRETE WALK
033000.J06	EXPANSION JOINT
034713.A01	TILT-UP CONCRETE WALL PANEL
034713.B01	CONCRETE INSERTS
055000.E09	STEEL BENT PLATE
055000.L01	STEEL LADDER
055000.T04	EXPANSION ANCHOR
072100.R20	SOUND ATTENUATION BATTS
079200.Q01	JOINT SEALANT
079200.Q02	BACKSTOP AND SEALANT
092216.C02	METAL STUD RUNNER TRACK
092216.D03	METAL STUD 3 5/8"
092900.A01	GYPSUM BOARD, REGULAR 5/8"
092900.B03	GLASS MAT FACED EXTERIOR GYPSUM SHEATHING 5/8"
095113.A01	ACOUSTICAL CEILING UNITS
095423.A01	METAL FACED COMPOSITION ACOUSTICAL CEILING SYSTEM
107313.B01	DOOR CANOPY SYSTEM
107516.A01	FLAGPOLE
107516.B03	FOUNDATION TUBE
107516.C01	FLASHING COLLAR
107516.C02	FINIAL BALL
107516.C08	STEEL GROUND SPIKE

0 4" 1' 2' 3' 4' 5'
3/4" = 1'-0" GRAPHIC SCALE

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE

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REGISTRATION

STATE OF FLORIDA
JENNIE LORUM
AR 96098
REGISTERED ARCHITECT

DRAWING HISTORY

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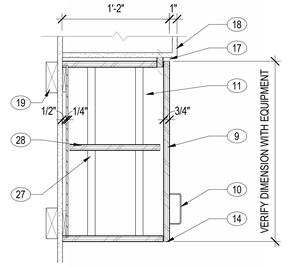
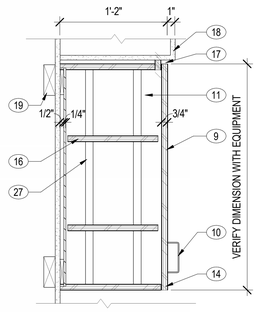
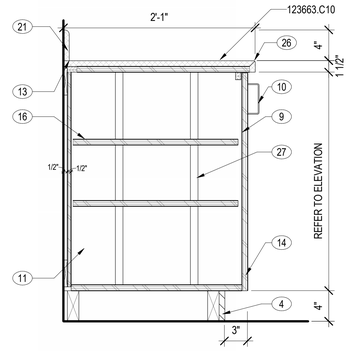


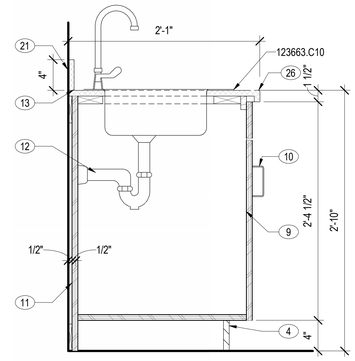
10 1 1/2" = 1'-0" **UPPER CABINET 24"**



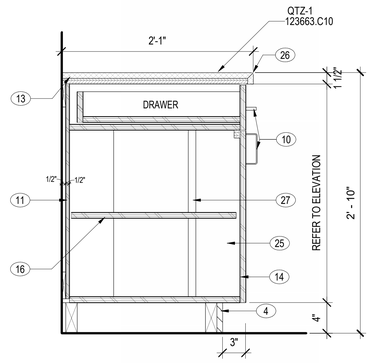
8 1 1/2" = 1'-0" **UPPER CABINET SECTION1**



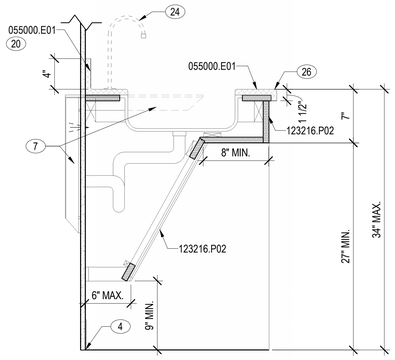
6 1 1/2" = 1'-0" **BASE CABINET SECTION1**



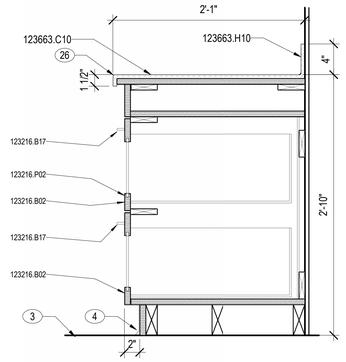
4 1 1/2" = 1'-0" **SINK CABINET SECTION1**



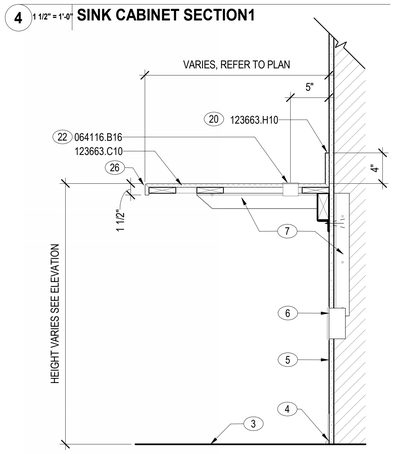
9 1 1/2" = 1'-0" **BASE CABINET W/ DRAWER TYP.**



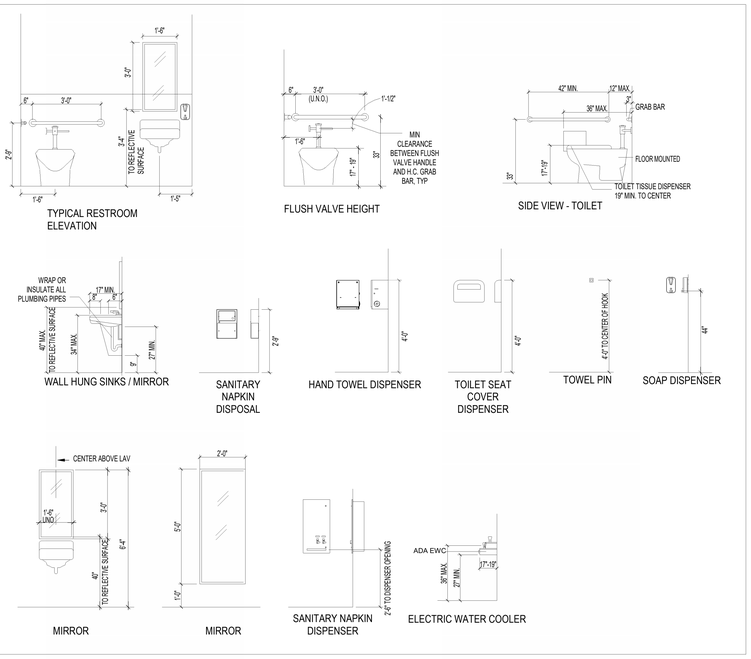
7 1 1/2" = 1'-0" **ACCESSIBLE SINK1**



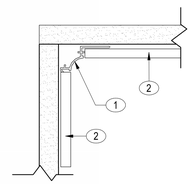
5 1 1/2" = 1'-0" **STORAGE DRAWERS**



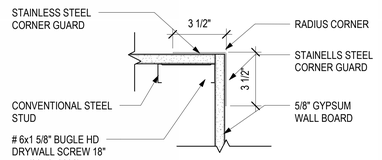
3 1 1/2" = 1'-0" **COUNTER WITH EXTENDED BACKSPLASH**



11 3/8" = 1'-0" **TYPICAL MOUNTING HEIGHTS**



2 6" = 1'-0" **PORCELAIN TILE INSIDE CORNER1**



1 3" = 1'-0" **SURFACE CORNERGUARD_SM-20A2**

GENERAL NOTES

A REFER TO SHEET I2.21 FOR FINISH SCHEDULE AND COLOR DESIGNATIONS LOCATED ON FINISH IDENTIFICATION. REFER TO SHEET B-AE810 FOR CEILING AND MISCELLANEOUS FINISH IDENTIFICATION SCHEDULE.

B REFER TO SHEET AE401 FOR MILLWORK ELEVATIONS.

C REFER TO SHEET AE801 FOR EQUIPMENT PLANS.

D PROVIDE BLOCKING EQUIPMENT AS NOTED AND AS NECESSARY BEHIND WALL MOUNTED CASEWORK AND EQUIPMENT. SEE SHEET B-AE801 FOR CASEWORK MOUNTING DETAIL AND EQUIPMENT MOUNTING DETAILS.

E PAINT ALL SUPPORT BRACKETS TO MATCH ADJACENT SURFACE.

SHEET NOTES

1 TR-2
2 PWT
3 FINISHED FLOOR
4 PL-1 BASE TO MATCH CABINET FINISH
5 FINISHED FACE OF PARTITION
6 POWER/PHONE/DATA RECEPTACLE. COORDINATE LOCATION WITH ELECTRICAL AND COMMUNICATION DRAWINGS.
7 CONCEALED METAL SUPPORT BRACKET; 48" ON CENTER MAX. ANCHOR BRACKET TO STUD OR BLOCKING AS SPECIFIED BY COUNTERTOP SUPPLIER. VERTICAL LEG TO BE CONCEALED. BRACKET SIZE MAY VARY BASED ON COUNTERTOP DEPTH; FABRICATOR TO VERIFY.
9 INTERIOR OF CABINET DOOR TO MATCH EXTERIOR
10 CABINET PULL
11 MELAMINE ON ALL INTERIOR CABINET SURFACES
12 COVER DRAIN AND HOT WATER SUPPLY LINES WITH INSULATION PER ADA REQUIREMENTS
13 CAULK AS REQ'D
14 ALL EXPOSED EXTERIOR CABINET EDGES TO BE CLAD WITH PLAM
16 ADJUSTABLE SHELVES
17 1/2" REVEAL
18 GYP. BD. SOFFIT
19 CONTINUOUS WOOD BLOCKING
20 INTEGRAL BACKSPLASH, PROVIDE BACKSPLASH WHEN SHOWN ON ELEVATION
21 QUARTZ BACKSPLASH
22 PROVIDE AS REQUIRED.
24 PLUMBING FIXTURE AS SCHEDULED. REFER TO EQUIPMENT SCHEDULE AND PLUMBING DRAWINGS FOR COORDINATION.
25 INTERIOR OF CABINET DOOR TO MATCH EXTERIOR PL-1
26 1/4" RADIUS EASED EDGE
27 RECESSED SHELF STANDARDS AND BRACKETS
28 ADJUSTABLE SHELVES

MATERIALS LIST

055000.E01	STEEL ANGLE
064116.B16	GROMMET
123216.B02	CABINET DRAWER
123216.B17	DRAWER PULL
123216.P02	WOOD FINISH
123663.C10	SOLID SURFACING COUNTERTOP
123663.H10	SOLID SURFACING BACKSPLASH

0 6" 1' 2'
1½" = 1'-0" GRAPHIC SCALE
0 2" 4" 8" 1'
3" = 1'-0" GRAPHIC SCALE
0 1" 2" 3" 6"
6" = 1'-0" GRAPHIC SCALE
0 1' 2' 4' 6' 8' 10'
3/8" = 1'-0" GRAPHIC SCALE

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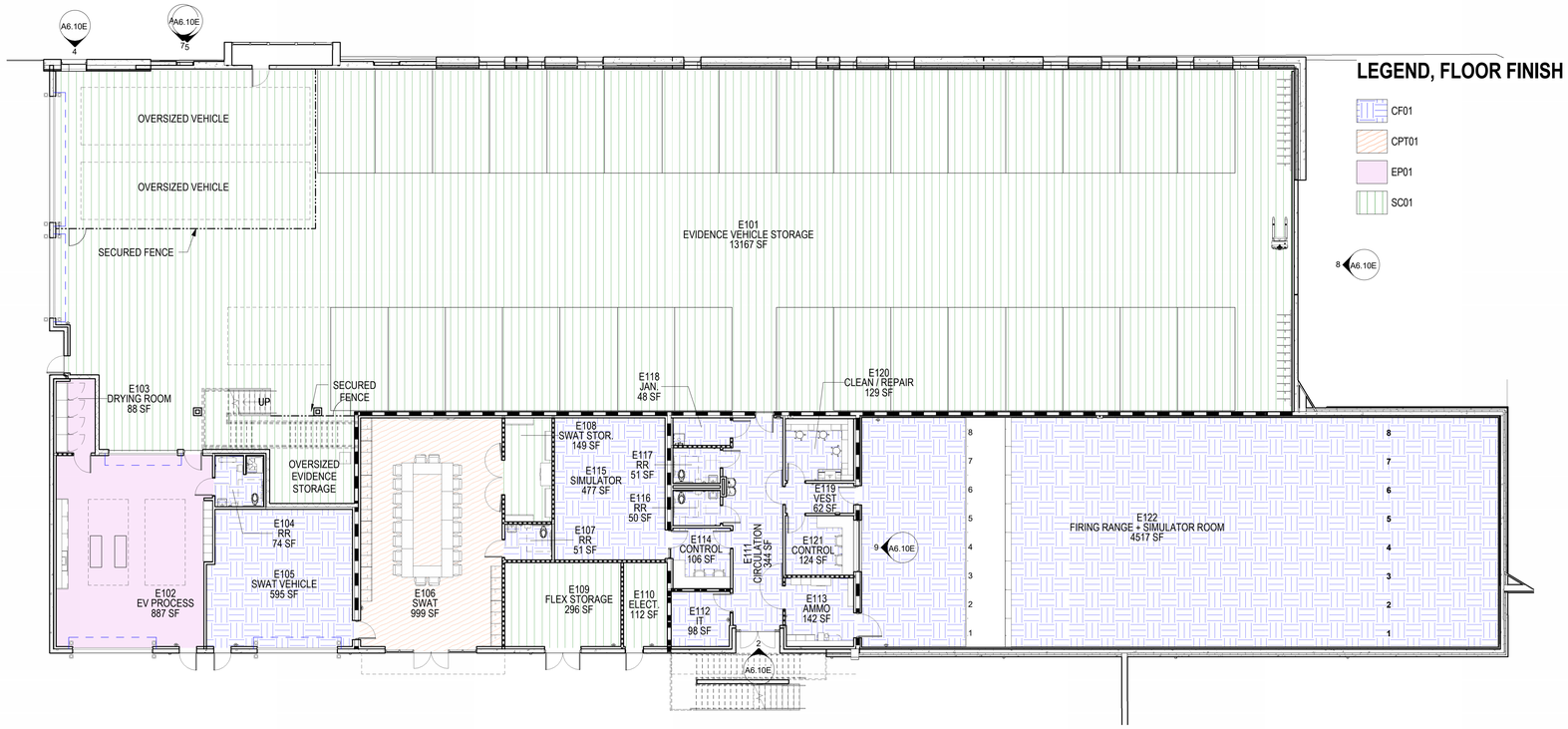


1 3/32" = 1'-0" **OVERALL FIRST FLOOR PLAN**

FINISH SCHEDULE

NUMBER	NAME	AREA	FLOOR	BASE	WALL, EAST	WALL, SOUTH	WALL, WEST	WALL, NORTH	CEILING FINISH	FINISH REMARKS
E101	EVIDENCE VEHICLE STORAGE	13167 SF	SC01	RB01	CONC	CONC	CONC	CONC	EXP	
E102	EV PROCESS	887 SF	EP01	RB01	PT01	PT01	PT01	PT01	EXP	FLOOR FINISH TO BE A CHEMICAL RESISTANT WHITE EPOXY WITH COVED BASE.
E103	DRYING ROOM	88 SF	EP01	EP01	PT01	PT01	PT01	PT01	EXP	FLOOR FINISH TO BE A CHEMICAL RESISTANT WHITE EPOXY WITH COVED BASE.
E104	RR	74 SF	CF01	EP01	PT01e	PT01e	PT01e	PT01e	PT01	
E105	SWAT VEHICLE	595 SF	CF01	RB01	PT01	PT01	PT01	PT01	EXP	
E106	SWAT	999 SF	CPT01	RB01	PT01	PT01	PT02	PT02	EXP	
E107	RR	51 SF	CF01	RB01	PT01e	PT01e	PT01e	PT01e	PT01	
E108	SWAT STOR.	149 SF	SC01	RB01	PT01	PT01	PT01	PT01	EXP	
E109	FLEX STORAGE	296 SF	SC01	RB01	PT01	PT01	PT01	PT01	EXP	
E110	ELECT.	112 SF	SC01	RB01	PT01	PT01	PT01	PT01	EXP	
E111	CIRCULATION	344 SF	CF01	RB01	PT01	PT01	PT02	PT01	ACP01	
E112	IT	98 SF	CF01	RB01	PT01	PT01	PT01	PT01	EXP	
E113	AMMO	142 SF	CF01	RB01	PT01	PT01	PT01	PT01	EXP	
E114	CONTROL	106 SF	CF01	RB01	PT01	PT01	PT01	PT01	ACP01	
E115	SIMULATOR	477 SF	CF01	RB01	PT01	PT01	PT01	PT01	EXP	
E116	RR	50 SF	CF01	RB01	PT01e	PT01e	PT01e	PT01e	PT01	
E117	RR	51 SF	CF01	RB01	PT01e	PT01e	PT01e	PT01e	PT01	
E118	JAN.	48 SF	CF01	RB01	PT01	PT01	PT01	PT01	EXP	
E119	VEST	62 SF	CF01	RB01	PT01	PT01	PT01	PT01	ACP01	
E120	CLEAN / REPAIR	129 SF	CF01	RB01	PT01e	PT01e	PT01e	PT01e	EXP	
E121	CONTROL	124 SF	CF01	RB01	PT01	PT01	PT01	PT01	ACP01	
E122	FIRING RANGE + SIMULATOR ROOM	4517 SF	CF01	RB01	CONC	CONC	CONC	CONC	BCP	
E201	MEZZANINE	2190 SF	SC01	RB01	PT01	PT01	--	--	EXP	

BASE FINISH IDENTIFICATION

WALL BASE FINISH	WALL BASE MATERIAL	WALL BASE MANUFACTURER	WALL BASE MANUFACTURER NO.	WALL BASE PATTERN	WALL BASE COLOR	WALL BASE SIZE	WALL BASE REMARKS	PROJECT REVISION
<varies>	RESILIENT WALL BASE	ROPPE	PINNACLE RUBBER BASE, STANDARD TOE	--	193 BLACK BROWN	6" H	PREFORMED INSIDE/OUTSIDE CORNERS	--

FLOOR FINISH IDENTIFICATION

what	FLOOR MATERIAL	FLOOR MANUFACTURER	FLOOR PRODUCT	FLOOR COLOR	FLOOR TEXTURE	SIZE	FLOOR REMARKS	PROJECT REVISION
CF01	CONCRETE (POLISHED)	SCOFIELD	FORMULA ONE GUARD-W	--	--	--	--	--
CPT01	CARPET TILE	MILLIKEN	OBEX ENTRANCE FLOOING	CUT/FIZZ, FZC174-133 TAUPE		50cm X 50cm	10% NOT TO EXCEED 10 YARDS OF ATTIC STOCK TO BE PROVIDED.	--
EP01	CONCRETE (SEALED)	TBD	CHEMICAL RESISTANT EPOXY	WHITE	--	--	--	--
SC01	CONCRETE (SEALED)	AMERIPOLISH	SR2 CONCRETE SEALER SOLVENT BASE	CLEAR	--	--	--	--

WALL FINISH IDENTIFICATION

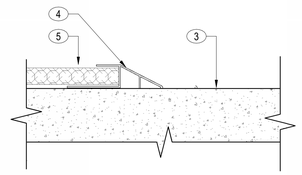
WALL FINISH CODE	WALL MATERIAL	WALL MANUFACTURER	WALL PRODUCT	WALL COLOR	WALL TEXTURE/FINISH	WALL SIZE	WALL FINISH REMARKS	PROJECT REVISION
CONC	EXPOSED TILT-UP	--	--	--	--	--		--
PT01	PAINT	SHERWIN WILLIAMS	--	SW7008 ALABASTER	LIGHT TEXTURE COAT ON ALL INTERIOR GYPSUM WALLBOARD	--	LEVEL 4 FINISH TYPICAL, LEVEL 5 FINISH AT ACCENT WALLS, CORRIDORS, 2 GALLONS OF EACH FINISH COAT OF EACH PRODUCT TO BE PROVIDED AS ATTIC STOCK	--
PT01e	PAINT, EPOXY	SHERWIN WILLIAMS	--	SW7008 ALABASTER	--	--	LEVEL 4 FINISH TYPICAL, LEVEL 5 FINISH AT ACCENT WALLS, CORRIDORS, 2 GALLONS OF EACH FINISH COAT OF EACH PRODUCT TO BE PROVIDED AS ATTIC STOCK	--
PT02	PAINT	SHERWIN WILLIAMS	--	SW9178 IN THE NAVY	--	--	LEVEL 4 FINISH TYPICAL, LEVEL 5 FINISH AT ACCENT WALLS, CORRIDORS, 2 GALLONS OF EACH FINISH COAT OF EACH PRODUCT TO BE PROVIDED AS ATTIC STOCK	--

CEILING FINISH IDENTIFICATION

FINISH CODE	CEILING TYPE	CEILING MANUFACTURER	CEILING PRODUCT	CEILING COLOR	CEILING TEXTURE / FINISH	CEILING SIZE	CEILING REMARKS	PROJECT REVISION
								<varies>
ACP01	ACOUSTIC CEILING	ROCKFON	ALASKA SQUARE LAY-IN	WHITE	NON-DIRECTIONAL	2'X2', 3/4"	400 TEMPRA SQ 9/16 SUSPENSION SYSTEM, NRC.90	--
BCP	BALLISTIC CEILING PANELS	ACTION TARGET	--	--	--	--	--	--
EXP	EXPOSED TO STRUCTURE	--	--		--	--	--	--
PT01	PAINTED GYPSUM BOARD	SHERWIN WILLIAMS	--	SW7008 ALABASTER	--	--	LEVEL 4 FINISH TYPICAL, 2 GALLONS OF EACH FINISH COAT OF EACH PRODUCT TO BE PROVIDED AS ATTIC STOCK	--

MISCELLANEOUS IDENTIFICATION

FINISH CODE KEY	FINISH MATERIAL	FINISH MANUFACTURER	FINISH PRODUCT	FINISH COLOR	FINISH TEXTURE	FINISH SIZE	FINISH LOCATION	FINISH REMARKS	PROJECT REVISION
CG01	CORNER GUARD	IN-PRO CORPORATION	150 HIGH IMPACT CORNER GUARD	GALA 380	--	3"X3"X72"	--	INSTALL DIRECTLY ABOVE WALL BASE.	--
PL03	HIGH PRESSURE LAMINATE	WILSONART	--	7946 ASIA	18 LINEARITY	--	RM E106 CASEWORK	INTERIOR WOODWORK.	--
PL05	STAINLESS STEEL	--	--	--	--	--	--	--	--
SS02	SOLID SURFACE MATERIAL COUNTERTOP	CORIAN	SOLID SURFACE	LINEN	--	1/2" D	E106 COUNTERTOP	SQUARE EASTED EDGE	--
SS03	STAINLESS STEEL COUNTERTOPSL	--	STAINLESS STEEL	--	--	--	RM E113 & RM 120 COUNTERTOPS	SQUARE EASTED EDGE	--
SS04	STAINLESS STEEL WALL PANEL		STAINLESS STEEL	--	--	--	RM E113 & RM 120 WALL PANEL ALONG WORK AREAS	SQUARE EASTED EDGE	--
TS01	METAL EDGE TRIM	SCHLUTER	VINPRO-U	BRUSHED CHROME ANNODIZED	--	--	USE AT CPT TRANSITION TO CONCRETE	--	--



3 FLOOR TRANSITION CARPET TO CONCRETE
6" = 1'-0"

PLAN NORTH

0 5' 10' 20' 30' 40'
3/32" = 1'-0" GRAPHIC SCALE

GENERAL NOTES

A FINISH SCHEDULE FOLLOW SHEET NORTH.
B REFER TO REFLECTED CEILING PLAN SHEETS A3.01E FOR CEILING HEIGHTS AND DESIGN COORDINATION.
C INTERIOR DOOR FRAMES AND INTERIOR WINDOW FRAMES PAINTED TO MATCH ADJACENT WALL, UNLESS OTHERWISE NOTED.
D FLOOR TRANSITIONS BETWEEN ROOMS TO BE AT CENTER LINE OF DOOR, UNLESS OTHERWISE NOTED.
E CHANGES IN LEVEL OF 1/4" HIGH MAX ARE TO BE PERMITTED VERTICAL. CHANGES IN LEVEL BETWEEN 1/4" HIGH MINIMUM AND 1/2" HIGH MAXIMUM ARE TO BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2.
F PAINT WALL BEHIND CORNER GUARDS AS SCHEDULED FINISH SCHEDULE.
G REFER TO SHEET A4.01E AND A4.02E FOR CASEWORK MATERIAL LEGEND, MISCELLANEOUS LEGEND.
H FINISHES INDICATED ARE THE APPROVED BASIS OF DESIGN TO CONVEY COLOR, PATTERN, TEXTURE AND SALIENT CHARACTERISTICS ONLY. THE LIST OF MANUFACTURER INFORMATION IS NOT INTENDED TO LIMIT THE SELECTION OF PRODUCTS PROVIDED BY OTHER MANUFACTURER. PRODUCT SUBSTITUTIONS MEETING THESE CRITERIA WILL BE CONSIDERED AND ARE TO BE REVIEWED BY THE ARCHITECT OF RECORD AND APPROVED BY THE USER GROUP.

SHEET NOTES

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REGISTRATION

STATE OF FLORIDA
CORINNE LOVRUM
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REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FINISH PLAN - LEVEL 1

SHEET NUMBER
AF2.10E

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:42:36 PM

RIVIERA BEACH PD

CUSTOMER APPROVAL:

Signature:

Printed Name:

Date:

NOTWITHSTANDING THE CONTRACT DOCUMENTS, APPROVAL OF THESE DRAWINGS SHALL ACT AS AN AMENDMENT TO THE PARTIES' AGREEMENT AND SUPERSEDE ALL PREVIOUS DRAWINGS.

DESIGN CRITERIA:

1. FIXED POSITION FIRING RANGE:
   - TRAJECTORIES START AT 1' ABOVE FINISHED FLOOR AT FIRING LINE. PAST 25 YARDS, SECONDARY TRAJECTORIES DESIGNED TO CONTAIN 6° PROJECTILE DEFLECTION.
   - BAFFLE LAYOUT PROVIDES STEEL COVERAGE OF TRAJECTORY + 2" ON BAFFLE/TRAP.
   - COVERAGE EXTENDS 36" BEHIND FIRING LINE, PROVIDING A 90° CONTAINMENT AREA AT FIRING LINE.
   - BAFFLE ANGLE DESIGNED TO NOT EXCEED 30°.
   - TARGETRY HEIGHT DESIGNED TO PLACE THE TOP OF HEAD AT 5'-10" AFF.
2. TACTICAL FIRING RANGE:
   - TRAJECTORIES START AT 1' ABOVE FINISHED FLOOR AT FURTHEST FIRING POSITION TO 10 YARDS. TRAJECTORIES AT 3 YARD TO 10 YARD LOCATIONS START AT 4' ABOVE FINISHED FLOOR. SECONDARY TRAJECTORIES DESIGNED TO CONTAIN 6° PROJECTILE DEFLECTION.
   - BAFFLE LAYOUT PROVIDES STEEL COVERAGE OF 1" HORIZONTAL OVERLAP ON BAFFLES AND 2" TRAJECTORY OVERLAP ON TRAP.
   - COVERAGE EXTENDS 36" BEHIND FIRING LINE
   - LAYOUT PROVIDES A 90° CONTAINMENT AREA FROM THE 3 METER LINE TO THE FURTHEST FIRING POSITION.
   - BAFFLE ANGLE DESIGNED TO NOT EXCEED 18°. TARGETRY HEIGHT DESIGNED TO PLACE THE TOP OF HEAD AT 5'-10" AFF.
3. M.A.T.C.H. (MODULAR ARMORED TACTICAL COMBAT HOUSE):
   - DESIGNED TO CONTAIN ROUNDS FIRED BETWEEN 0"AFF AND 84" AFF. WALLS DESIGNED TO BE A NOMINAL 8' TALL, WITH 84" AFF AND ABOVE DESIGNATED NO SHOOT ZONE.
   - WALL SYSTEM AND GRID REFERENCES DESIGNED ON A 4'-0" x 4'-0" GRID.
   - PAINT SCHEME:
     - RED PAINT - NO SHOOT ZONE
     - WHITE PAINT - SHOOT ZONE
       - WHEN CONFIGURING TRAINING SCENARIO'S BE AWARE OF THE TRAJECTORY OF THE ROUND AFTER IT PENETRATES THE INTENDED TARGET.
     - TAN PAINT - CAUTION ZONE
       - ROUNDS HAVE POTENTIAL TO PENETRATE THIS ZONE.
4. BUILDING / EQUIPMENT ACCESS:
   - SCREW CONVEYOR SYSTEM / DUST COLLECTION SYSTEM:
     - SUGGESTED ACCESS AREA AROUND EQUIPMENT FOR THE DISPOSE OF COLLECTED MATERIALS IS:
       - 4'-6" - FOR A FORKLIFT
       - 3'-0" - FOR A PALLET JACK
   - SPACE NEEDED FOR MATERIALS INSTALLATION AND INSTALLATION EQUIPMENT:
     - SUGGESTED ACCESS AREA TO RANGE AREA: (FOR ENTIRE DURATION OF INSTALLATION)
       - MIN (1) 4'-6" WIDE BY 7'-6" TALL ACCESS PER RANGE/BAY
5. CONCRETE SPECS:
   - ALL CONCRETE MUST HAVE A FLATNESS TOLERANCE OF 1/8" OVER 20' (3MM OVER 6M) FOR ANY CONCRETE WORK WHERE ACTION TARGET EQUIPMENT WILL BE INSTALLED AND/OR ATTACHED (WALLS AND FLOOR). CONCRETE SURFACES MUST NOT BE CROWNED OR SLOPED UNLESS SPECIFICALLY NOTED ON ACTION TARGET DRAWINGS.
   - RANGE FLOOR CONCRETE SHOULD BE 3,000 PSI MINIMUM, IDEALLY 5,000 PSI. IF CMU BLOCKS ARE USED FOR RANGE SIDE WALLS, THEY SHOULD BE HIGH DENSITY BLOCKS OF AT LEAST 4,000 PSI, CAVITIES MUST BE FILLED WITH 4,000 PSI CONCRETE. MORTAR LINES SHOULD BE "FLUSH" WITH THE BLOCK INSIDE RANGE AND NOT "INDENTED".

DISCLAIMERS:

NOTICE TO BUILDER & ALL SUBCONTRACTORS

THESE DOCUMENTS PROVIDE INFORMATION ONLY ABOUT ACTION TARGET'S PRODUCTS AND NOTHING MORE. IT IS THE INTENT OF ACTION TARGET THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE CUSTOMER, OWNER, BUILDER, AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. ACTION TARGET IS NOT RESPONSIBLE FOR ANY ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO ACTION TARGET PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH THE INFORMATION FOUND IN THESE DOCUMENTS. ANY QUESTIONS REGARDING THE INFORMATION FOUND IN THESE DOCUMENTS SHOULD BE DIRECTED TO OUR OFFICE AT (801) 377-8033 IMMEDIATELY. NO BACKCHARGES WILL BE CONSIDERED FOR REIMBURSEMENT BY ACTION TARGET WITHOUT ADVANCED NOTIFICATION AND APPROVAL BY ACTION TARGET. PAYMENTS WILL BE MADE IN ACCORDANCE WITH THE TERMS OF THE AGREEMENT

- ELECTRICAL:
  WHERE ELECTRICAL CONTRACTOR IS REQUIRED ALL ACTION TARGET INC. ELECTRICAL DRAWINGS WILL BE USED ONLY AS REFERENCE MATERIAL FOR THE ELECTRICAL CONTRACTOR TO UTILIZE IN THEIR DESIGN OF THE COMPLETE BUILDING / RANGE SYSTEM (UNLESS NOTED OTHERWISE.) FINAL LOCATION OF ELECTRICAL EQUIPMENT CONTAINED IN THE ACTION TARGET INC. ELECTRICAL LAYOUTS TO BE VERIFIED WITH ACTION TARGET INC., ELECTRICAL CONTRACTOR, AND CUSTOMER BEFORE INSTALLATION.
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- STRUCTURAL:
  WHERE ENGINEER IS REQUIRED ALL ITEMS PERTAINING TO ACTION TARGET INC. MATERIALS AND EQUIPMENT, AND IT'S CONNECTION TO / SUPPORT FROM THE STRUCTURE IS TO BE VERIFY AND APPROVED BY THE ENGINEER OF RECORD. ALL ACTION TARGET INC. PLANS INDICATING ANCHOR SIZES AND CONNECTION METHOD, CONCRETE DEPTH, REBAR LAYOUTS, AND ANY OTHER ITEMS PERTAINING TO THE CONNECTION AND SUPPORT OF ACTION TARGET INC. EQUIPMENT TO BE UTILIZED BY ENGINEER AS ACTION TARGET INC.'S PREFERRED METHOD.
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- SHEETS Z5XX.X
  STANDARD DETAIL SHOWN FOR REFERENCE ONLY ACTUAL INSTALLATION MAY VARY.

GENERAL ELECTRICAL NEEDS:

1. RANGE WILL HAVE 120/240 VAC AND MULTIPLE 20 AMP CIRCUITS PROVIDED BY OTHERS IF ANY OF THE FOLLOWING CONDITIONS ARE PRESENT IN ATTACHED RANGE DESIGN:
   - TARGETRY IS PRESENT.
   - TARGETRY CONTROL EQUIPMENT IS PRESENT.
   - STALL (AND/OR) RANGE LIGHTING IS PRESENT.
   - COMMUNICATION SYSTEMS ARE PRESENT.
   - A DUST COLLECTION UNIT IS PRESENT.
   - AN AIR COMPRESSOR IS PRESENT
2. RANGE WILL HAVE MULTIPLE 3 PHASE 208/240/480 VAC DISCONNECTS PROVIDED BY OTHERS IF ANY OF THE FOLLOWING CONDITIONS ARE PRESENT IN ATTACHED RANGE DESIGN:
   - A SCREW CONVEYOR SYSTEM IS PRESENT. (TYPICALLY UTILIZES 2 OR MORE 3HP 3 PHASE MOTORS)
   - A DUST COLLECTION UNIT IS PRESENT.
3. CUSTOMER TO PROVIDE ACCESS TO INTERNET FOR ACTION TARGET EQUIPMENT.
4. △ XX - THE △ DENOTES HOME RUN OF CAT5e OR GREATER FROM DATA JACK LOCATION TO GENESIS RANGE SERVER PATCH PANEL.
5. △ XX - THE (XX) DENOTES PORT ID# AND CORRESPONDING PATCH PANEL WIRING LOCATION.

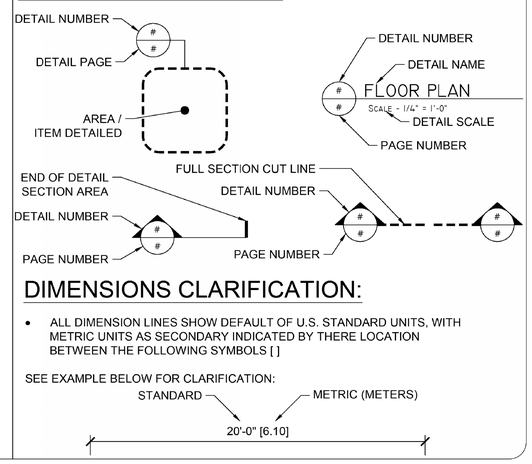
ABBREVIATIONS:

ABBREVIATED	UN-ABBREVIATED
~	APPROXIMATE / APPROXIMATELY
AFF	ABOVE FINISHED FLOOR
APROX	APPROXIMATE / APPROXIMATELY
ATI	ACTION TARGET INC.
AWG	AMERICAN WIRE GAUGE
BOS	BOTTOM OF STEEL
BOT	BOTTOM
CL	CENTER LINE
CFM	CUBIC FEET PER MINUTE
DCU	DUST COLLECTION UNIT
EMT	ELECTRICAL METALLIC TUBING
EQ	EQUAL / EQUALS
EQ APROX	EQUAL APPROXIMATE
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
LBS	POUNDS
MDU	MOTOR DRIVE UNIT
NTS	NOT TO SCALE
PSI	POUNDS PER SQUARE INCH
RBT	RUBBER BERM TRAP
SCS	SCREW CONVEYOR SYSTEM
SPKR	SPEAKER
TCT	TOTAL CONTAINMENT TRAP
TCT 2	TOTAL CONTAINMENT TRAP VERSION 2
TCT 4	TOTAL CONTAINMENT TRAP VERSION 4
TCT 4D	TOTAL CONTAINMENT TRAP VERSION 4D
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
GSR	GENESIS SERVER RACK
SRAS	SMART RANGE AXIS SCREEN

SHEET INDEX:

Z001	INDEX PAGE
Z101	RANGE PLAN
Z102	BAFFLE HANGING POINTS
Z103	REFLECTED CEILING PLAN
Z104	TRAP FOOTPRINT & LAYOUT
Z301	RANGE SECTION
Z302	INSTALL DIMENSIONS
Z511.0	INTEGRATED BAFFLE CLOSURE PANEL DETAILS
Z511.3	FIXED INTEGRATED BAFFLE (Z PURLIN) DETAILS
Z511.7	TACTICAL INTEGRATED BAFFLE (Z PURLIN) DETAILS
Z519.3	FURRED WALL BAFFLE DETAILS
Z519.5	WALL DEFLECTOR DETAILS
Z525.3	RUBBER BERM TRAP DETAILS
Z532.9	FIXED LATERAL DETAILS
Z533.9	INVERTED DRM PRO DETAILS
Z587.7	8' WOOD WOOL DETAILS
Z700	GENERAL ELECTRICAL NOTES
Z701	ELECTRICAL PLAN
Z702	ELECTRICAL SECTION
Z703.1	SERVER RACK DETAILS
Z732.9	FIXED LATERAL w/DRM PRO ELECTRICAL SCHEMATIC

SYMBOLS & CALLOUTS



DIMENSIONS CLARIFICATION:

- ALL DIMENSION LINES SHOW DEFAULT OF U.S. STANDARD UNITS, WITH METRIC UNITS AS SECONDARY INDICATED BY THERE LOCATION BETWEEN THE FOLLOWING SYMBOLS [ ]

SEE EXAMPLE BELOW FOR CLARIFICATION:

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PROJECT STATUS

90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME

RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

INDEX PAGE

DRAWING NUMBER

6342

SHEET NUMBER

Z001

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — JOANNIE LORIUM — REGISTERED ARCHITECT — AR 96289

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.01E

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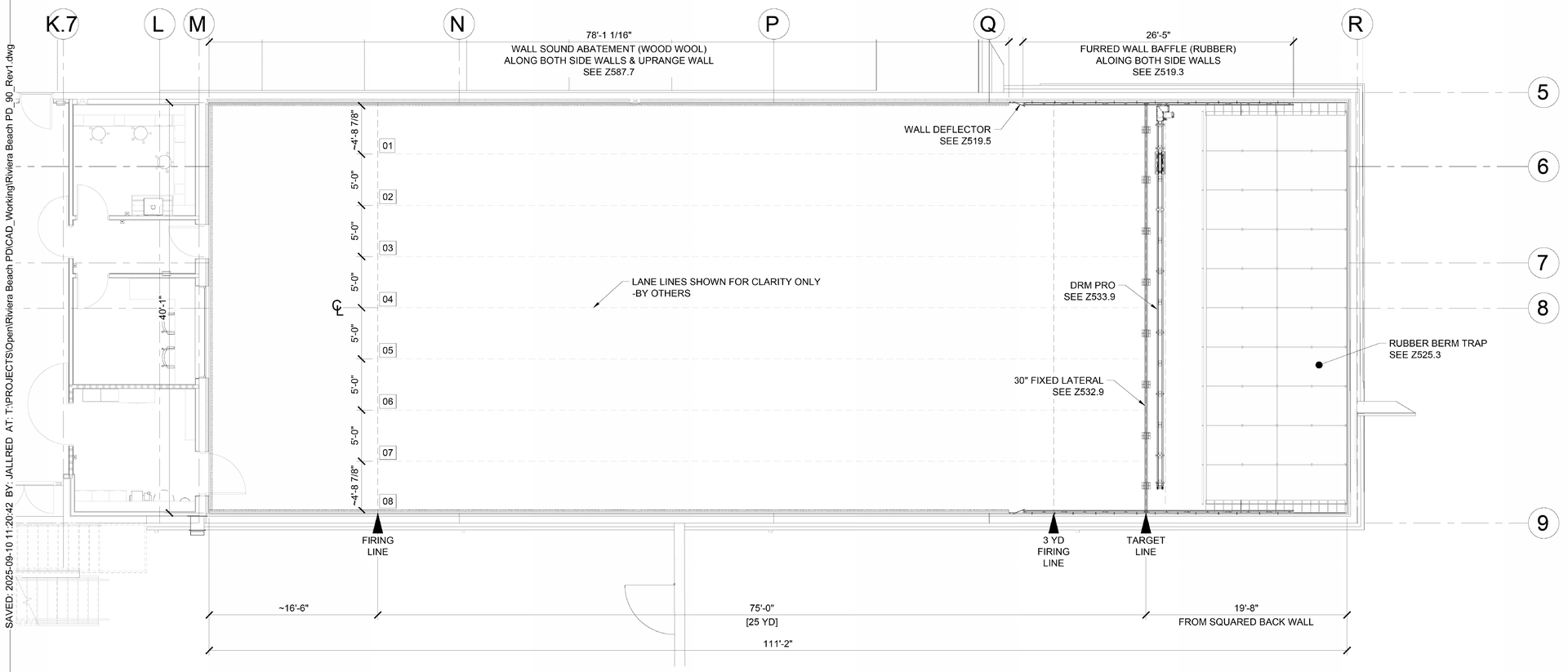

1 RANGE PLAN
Z101 SCALE 3/16" = 1'-0"

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Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

RANGE PLAN

DRAWING NUMBER

6342

SHEET NUMBER

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SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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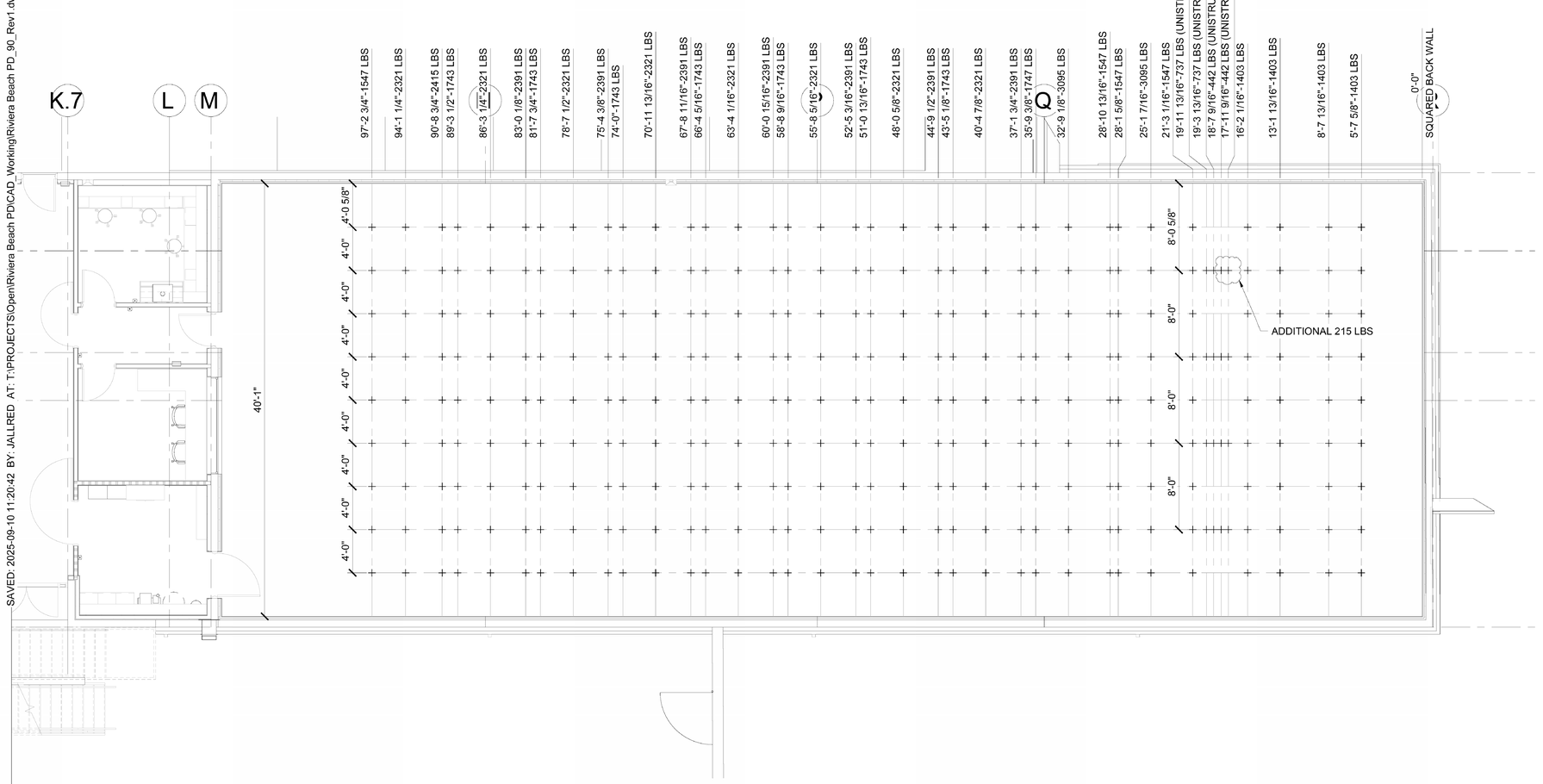
SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.02E

NOT FOR CONSTRUCTION

NOTE:
WEIGHTS REFLECT ENTIRE ROW FROM INSIDE OF WALL TO INSIDE OF WALL.



1 Z102 BAFFLE HANGING POINTS
SCALE - 3/16" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
BAFFLE HANGING POINTS

DRAWING NUMBER
6342

SHEET NUMBER
Z102

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

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FL 33409

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1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA · LYNNIE LORIUM · AR 96289 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

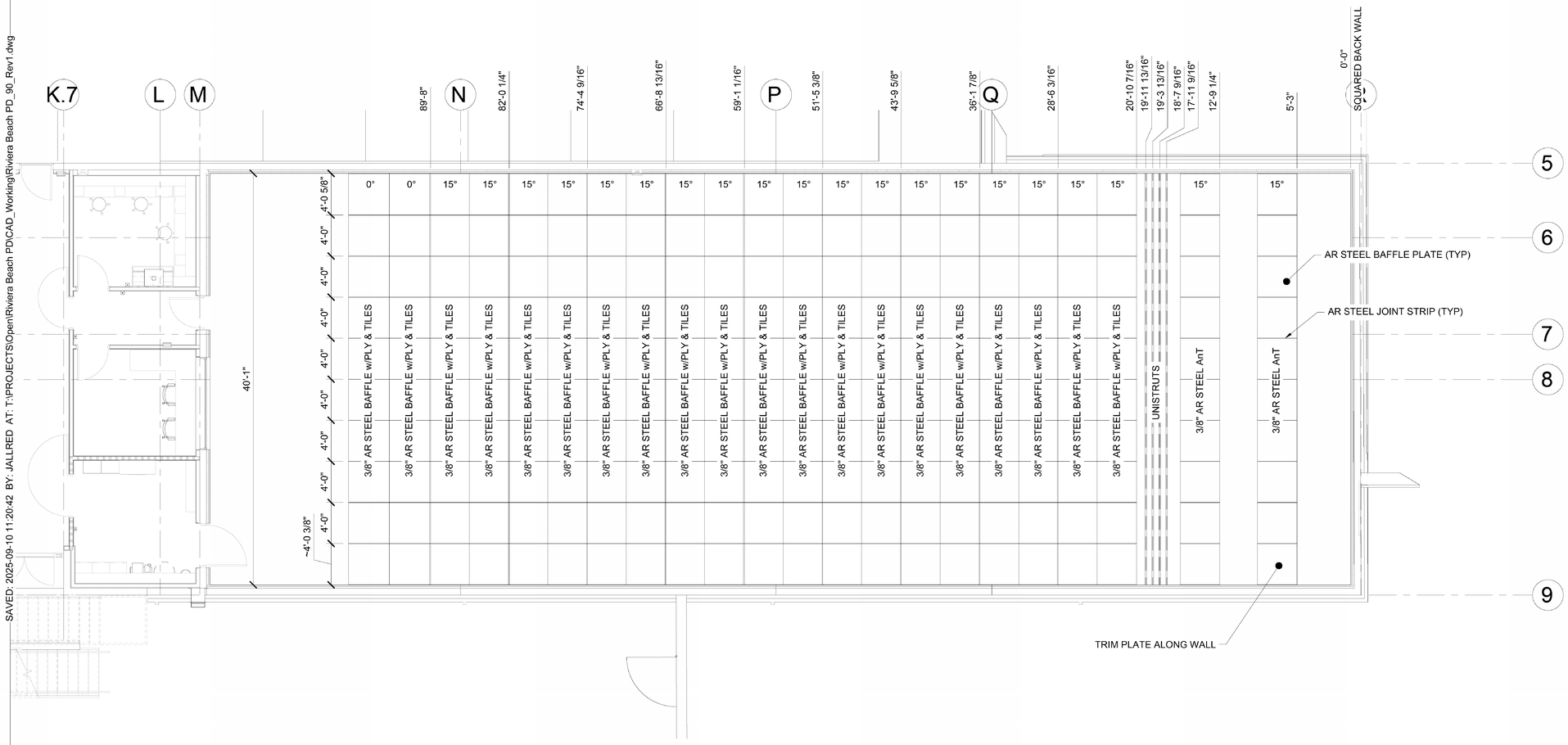
SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.03E

NOT FOR CONSTRUCTION

NOTE:
ALL APPROXIMATE DIMENSIONS ARE NOT VERIFIED FOR INSTALL.

DIMENSIONS SHOWN ARE TO BOTTOM OF STEEL AT BOTTOM OF BAFFLE.



1 / Z103 REFLECTED CEILING PLAN
SCALE - 3/16" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
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PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
REFLECTED CEILING PLAN

DRAWING NUMBER
6342

SHEET NUMBER
Z103

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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FL 33409

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Longwood, FL
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REGISTRATION
STATE OF FLORIDA — TIMMIE LONDRIM — AR 96098 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.04E

NOT FOR CONSTRUCTION

NOTE:
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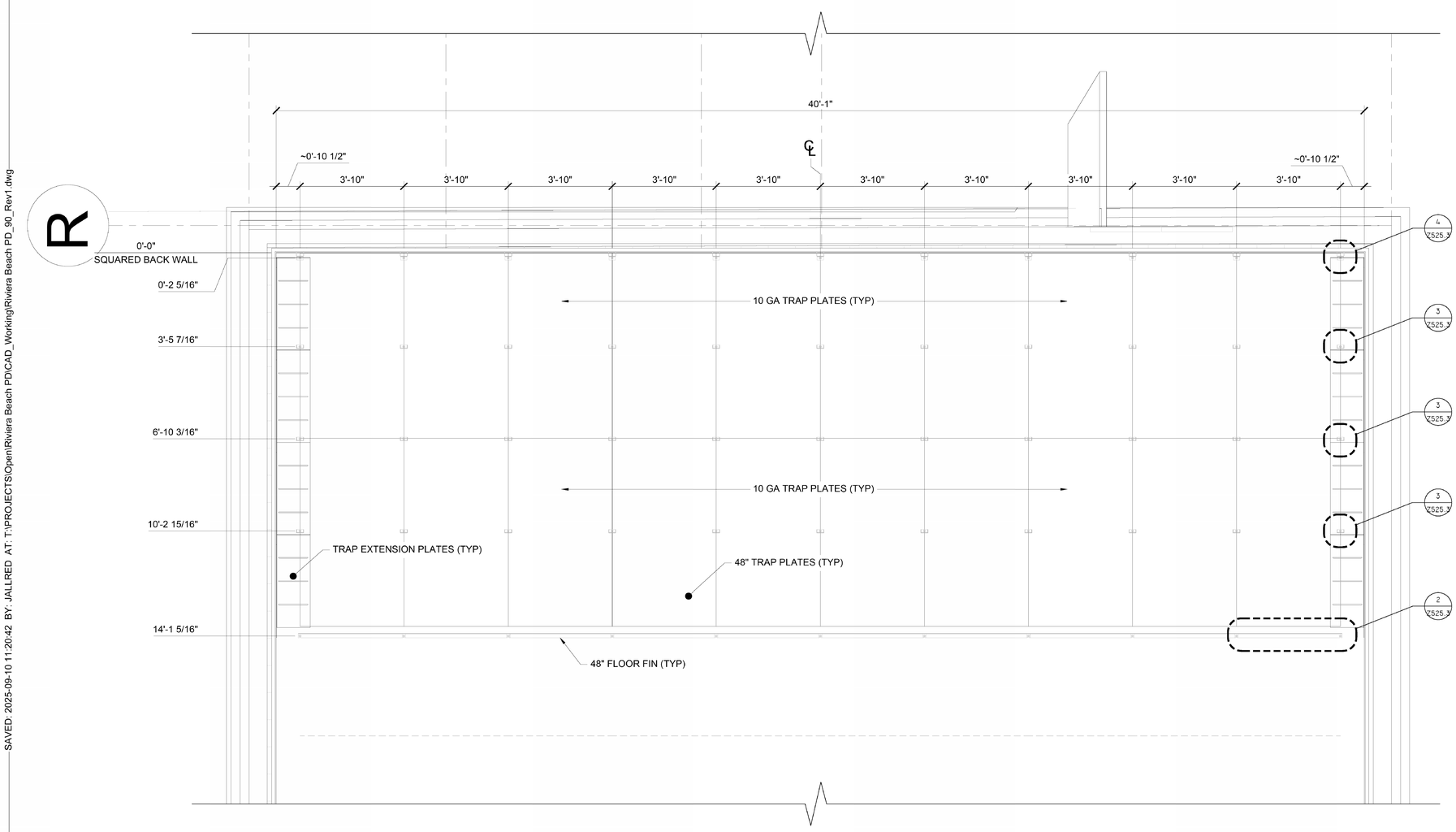

1 Z104 TRAP FOOTPRINT & LAYOUT
SCALE - 1/2" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
TRAP FOOTPRINT & LAYOUT

DRAWING NUMBER
6342

SHEET NUMBER
Z104

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT
CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD
PGAL, Inc.
791 Park of Commerce Blvd.
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1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA · JENNIE LOHRUM · AR 96799 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

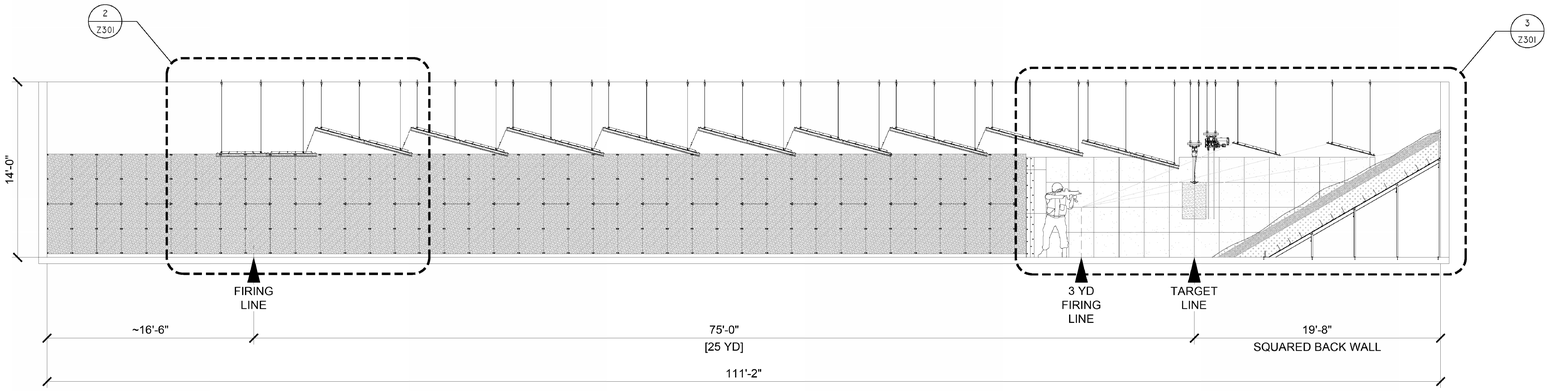
PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

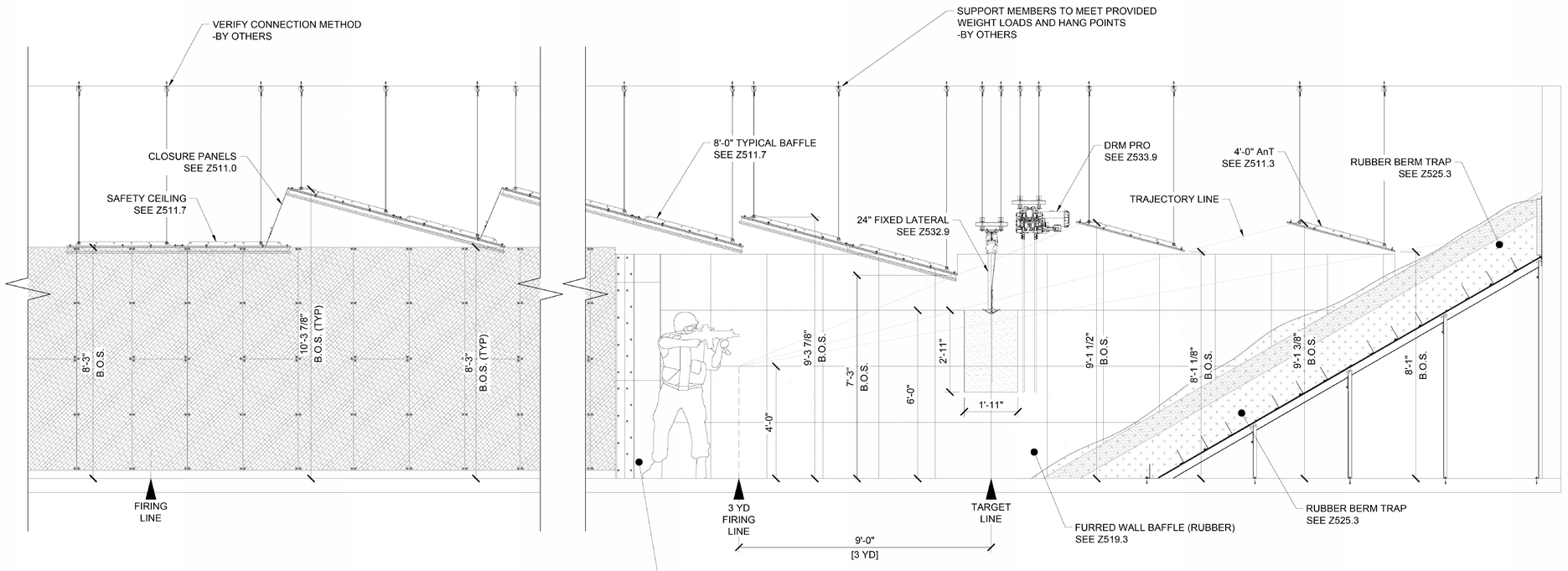
SHEET NUMBER
Q1.05E

NOT FOR CONSTRUCTION

NOTE:
SPACE BELOW STRUCTURAL MEMBER SHALL BE FREE OF OBSTRUCTIONS UNLESS COORDINATED WITH ACTION TARGET.



1 Z301 RANGE SECTION
SCALE - 3/16" = 1'-0"



2 Z301 FIRING LINE SECTION
SCALE - 1/2" = 1'-0"

3 Z301 TARGET LINE SECTION
SCALE - 1/2" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
RANGE SECTION

DRAWING NUMBER
6342

SHEET NUMBER
Z301

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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DRAWING HISTORY

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PROJECT STATUS
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DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.06E

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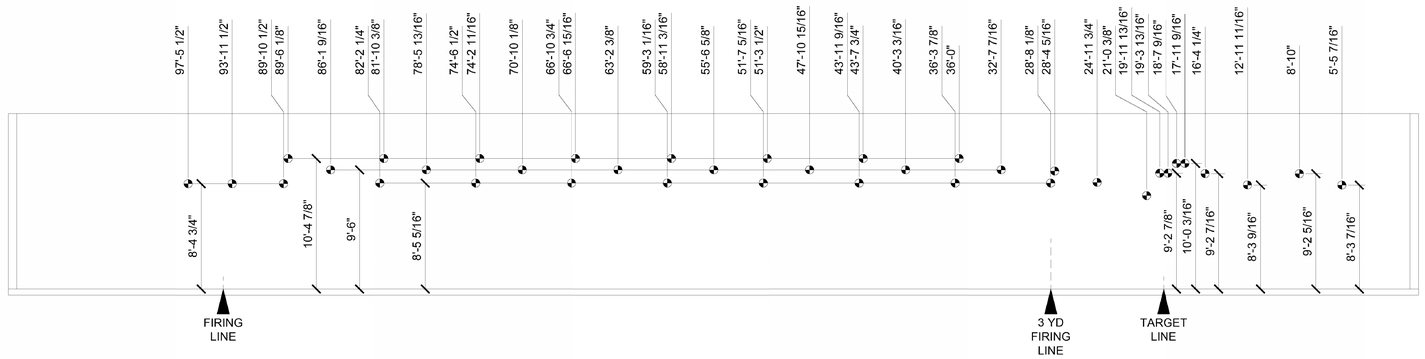

1 / Z302 INSTALL DIMENSIONS
SCALE - 3/16" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
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PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
INSTALL DIMENSIONS

DRAWING NUMBER
6342

SHEET NUMBER
Z302

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

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Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — JOHNNIE LONDRIE JR. — AR 96289 — REGISTERED ARCHITECT

DRAWING HISTORY

No	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

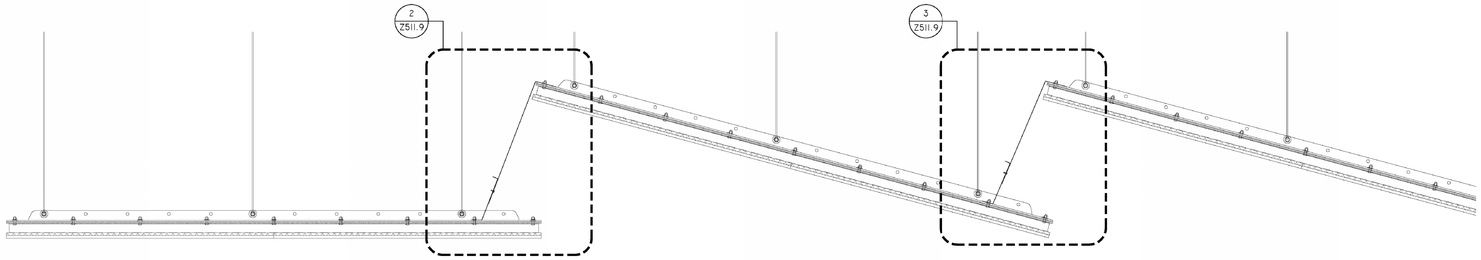
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

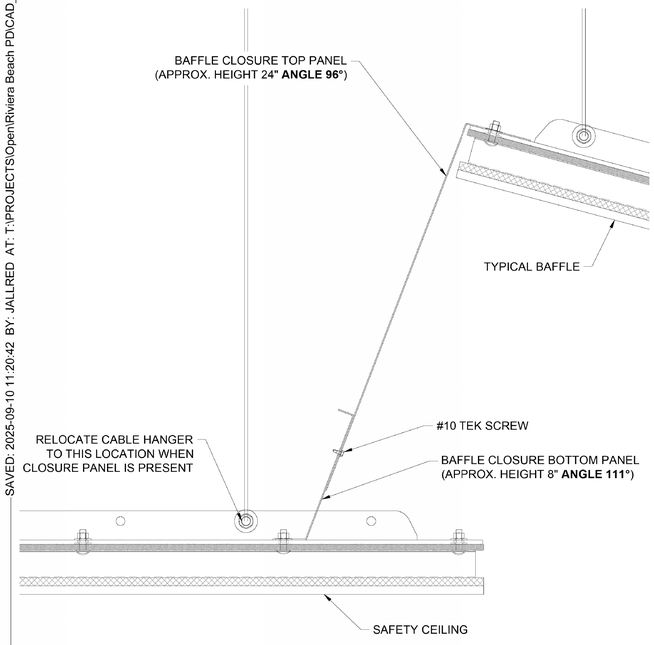
SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.07E

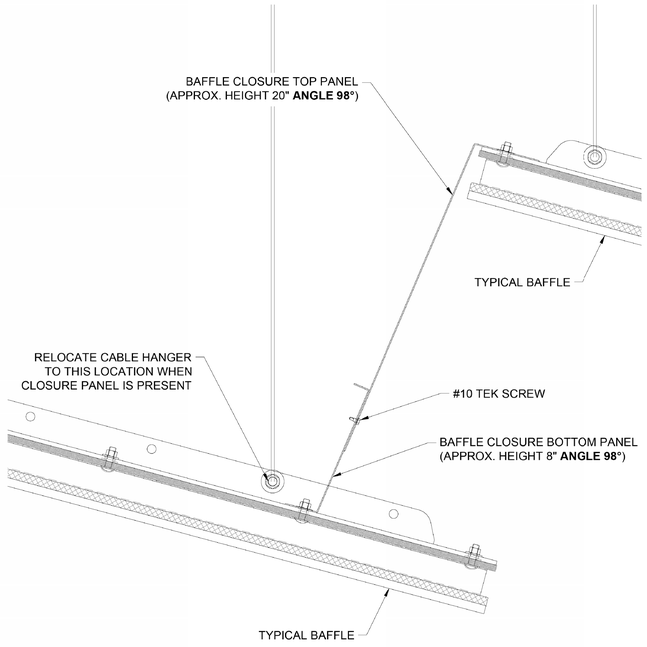
NOT FOR CONSTRUCTION



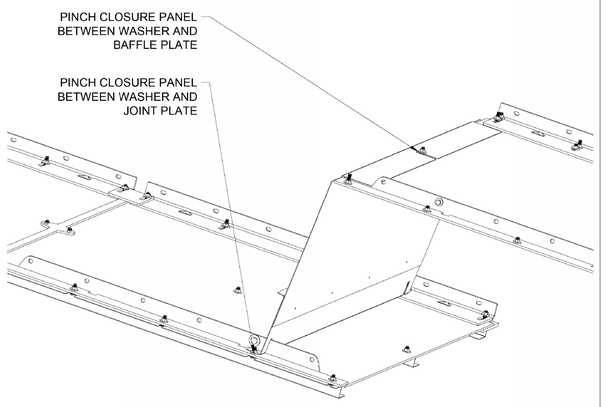
1 Z511.0 TACTICAL BAFFLE CLOSURE PANELS
SCALE - 1" = 1'-0"



2 Z511.0 SAFETY CEILING CLOSURE PANEL
SCALE - 3" = 1'-0"



3 Z511.0 TYPICAL CLOSURE PANEL
SCALE - 3" = 1'-0"



4 Z511.0 CLOSURE PANEL CONNECTION DETAIL
SCALE - 1 1/2" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
INTEGRATED BAFFLE CLOSURE PANEL DETAILS

DRAWING NUMBER
6342

SHEET NUMBER
Z511.0

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA · JENNIE LORUM · AR 98398 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

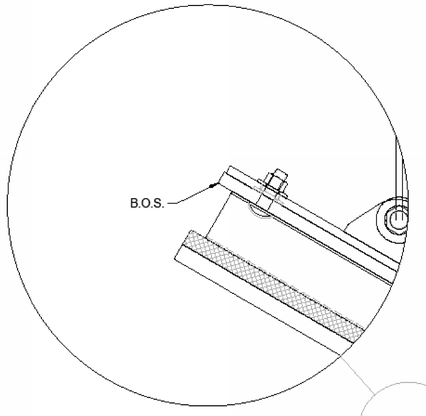
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

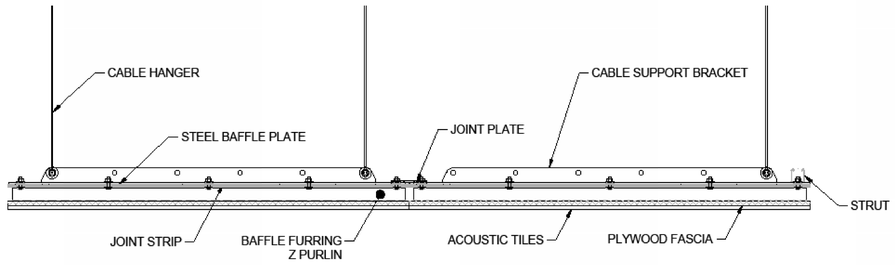
PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

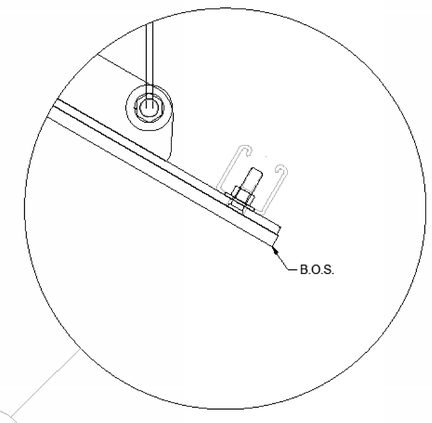
SHEET NUMBER
Q1.08E

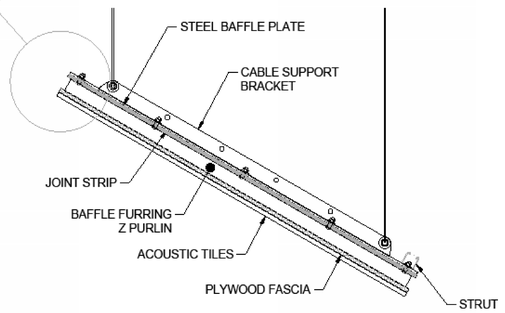
NOT FOR CONSTRUCTION



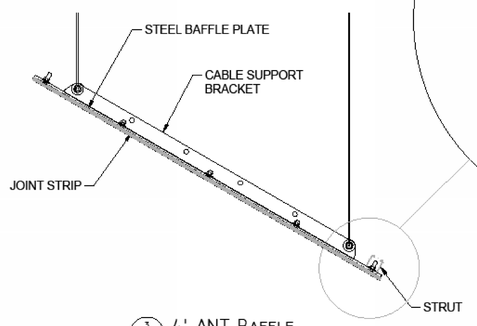


1 / Z511.3 8' SAFETY CEILING
SCALE - 1-1/2" = 1'-0"

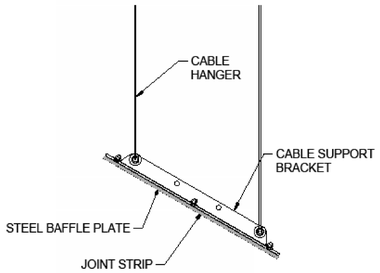




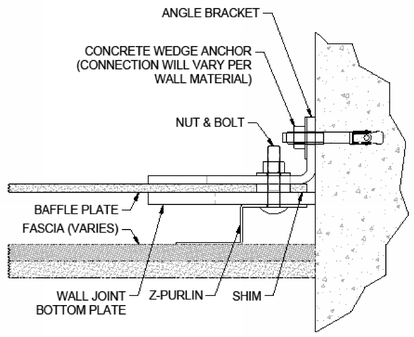
2 / Z511.3 4' TYPICAL BAFFLE
SCALE - 1-1/2" = 1'-0"



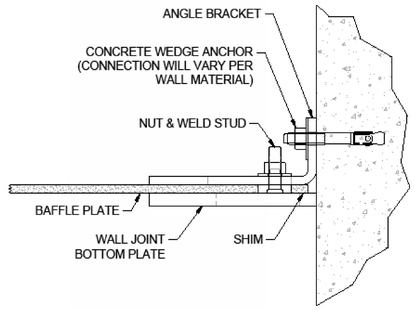
3 / Z511.3 4' ANT BAFFLE
SCALE - 1-1/2" = 1'-0"



4 / Z511.3 2' ANT BAFFLE
SCALE - 1-1/2" = 1'-0"



5 / Z511.3 BAFFLE TO WALL CONNECTION - FASCIA
SCALE - 6" = 1'-0"



6 / Z511.3 BAFFLE TO WALL CONNECTION - ANT
SCALE - 6" = 1'-0"

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PROJECT STATUS

90% SUBMITTAL NOT FOR CONSTRUCTION

PROJECT NAME

RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

INTEGRATED BAFFLE DETAILS FIXED

DRAWING NUMBER

6342

SHEET NUMBER

Z511.3

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

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1678 Kingston Road
Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA — CONNIE LOHRUM — AR 96098 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.09E

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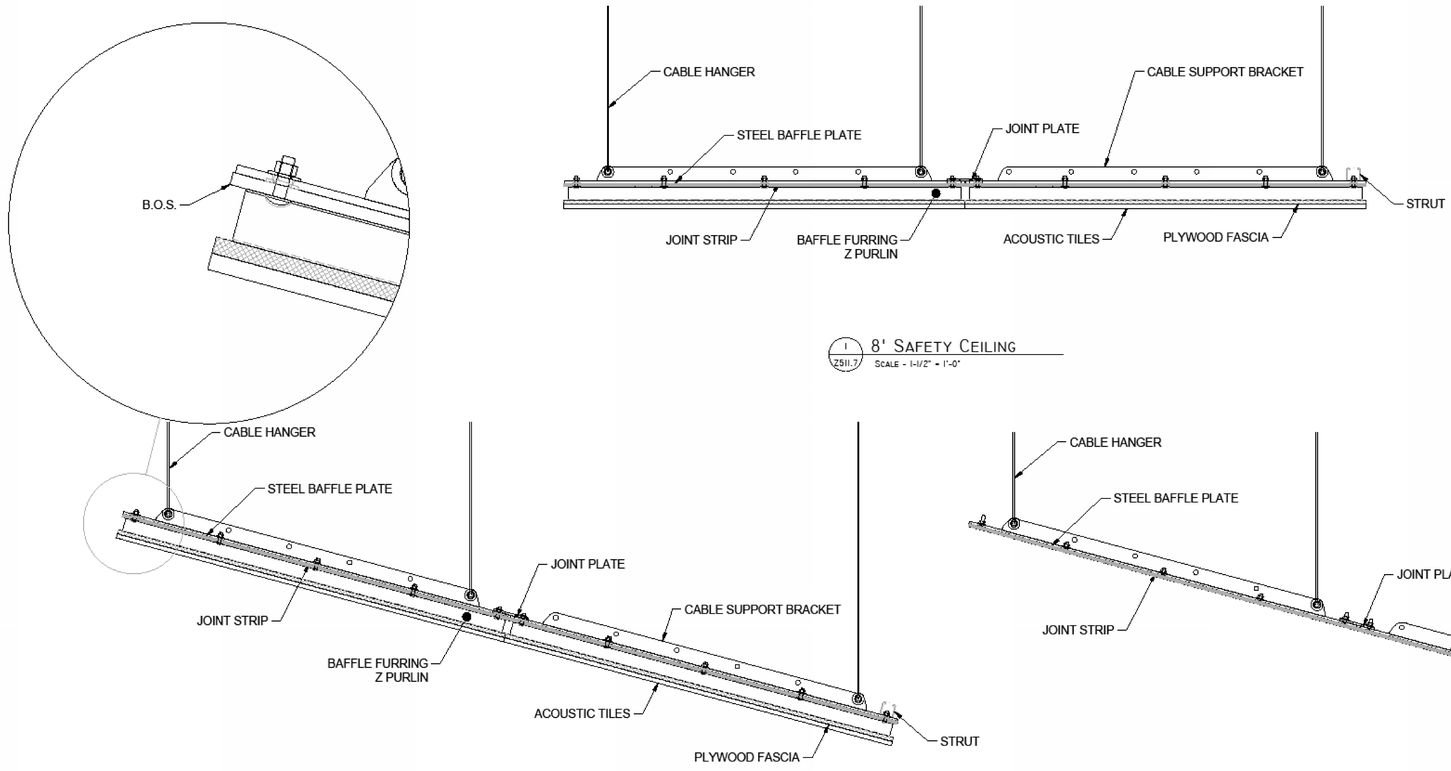
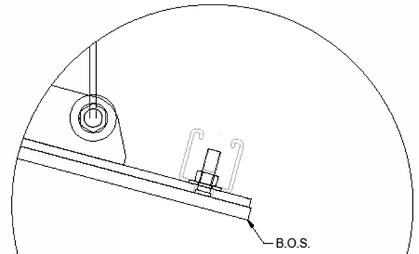
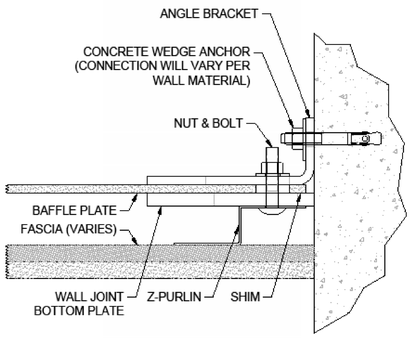


2 Z511.7 8' TYPICAL BAFFLE
SCALE - 1-1/2" = 1'-0"

1 Z511.7 8' SAFETY CEILING
SCALE - 1-1/2" = 1'-0"



3 Z511.7 8' ANT BAFFLE
SCALE - 1-1/2" = 1'-0"



4 Z511.7 BAFFLE TO WALL CONNECTION - FASCIA
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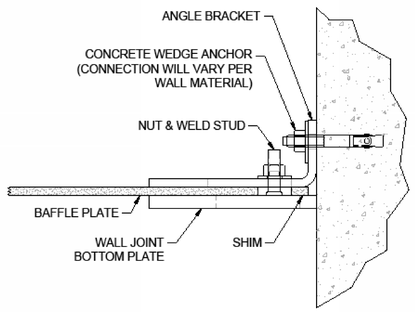

5 Z511.7 BAFFLE TO WALL CONNECTION - ANT
SCALE - 6" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
INTEGRATED BAFFLE DETAILS TACTICAL

DRAWING NUMBER
6342

SHEET NUMBER
Z511.7

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA · JOHNNIE LORIUM · AR 96299 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
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DATE OF ISSUE
10/14/2025

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RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.10E

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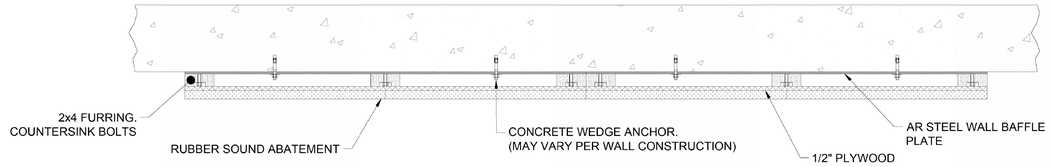
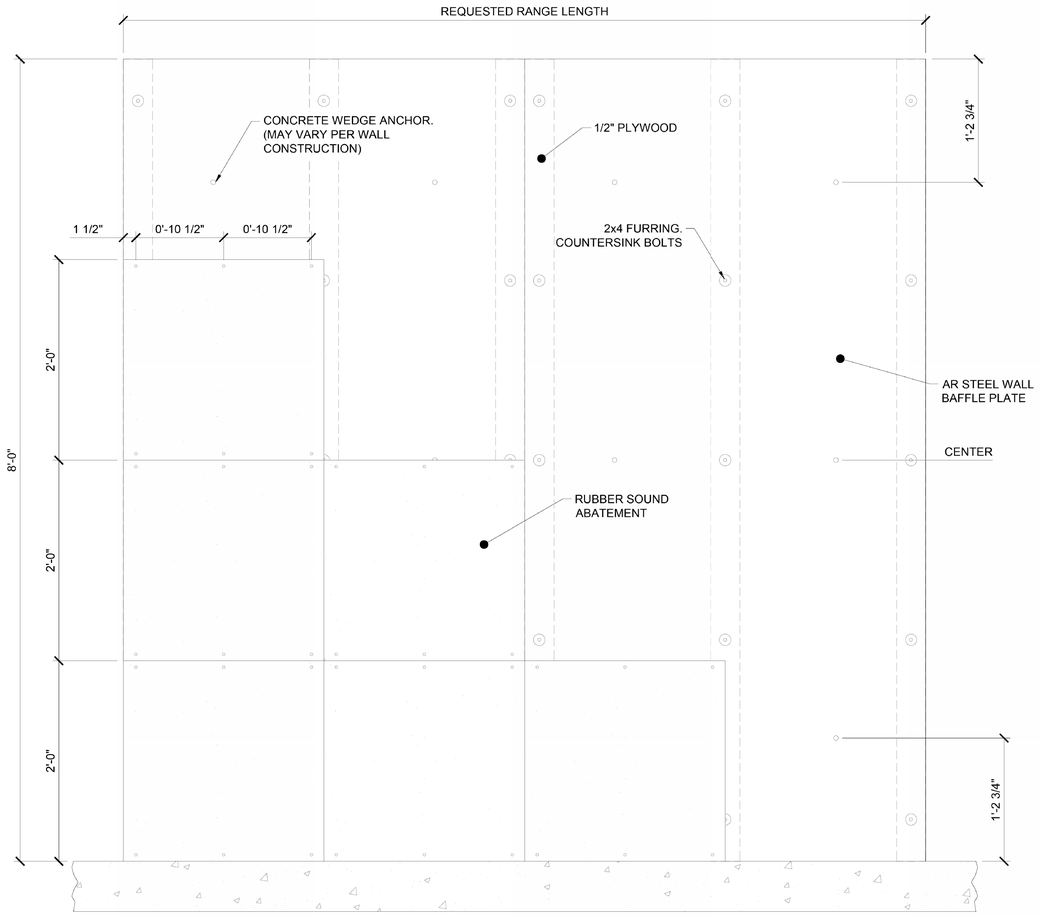
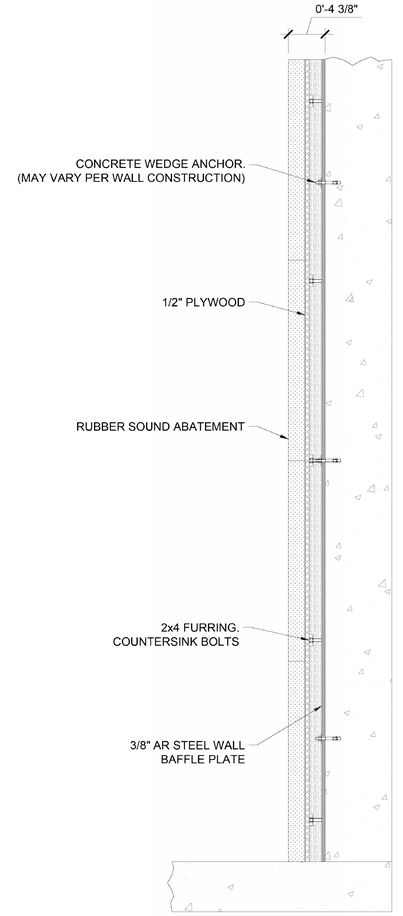


1 Z519.3 WALL BAFFLE (TOP)
SCALE - 1-1/2" = 1'-0"



2 Z519.3 WALL BAFFLE (FRONT)
SCALE - 1-1/2" = 1'-0"



3 Z519.3 WALL BAFFLE (SIDE)
SCALE - 1-1/2" = 1'-0"

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PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
FURRED WALL BAFFLE DETAILS

DRAWING NUMBER
6342

SHEET NUMBER
Z519.3

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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REGISTRATION

STATE OF FLORIDA
JENNIE LORUM
AR 96288
REGISTERED ARCHITECT

DRAWING HISTORY

No	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

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10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.11E

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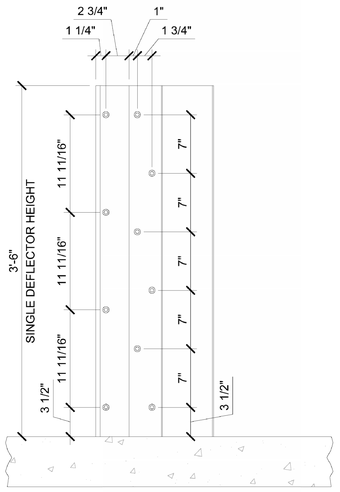
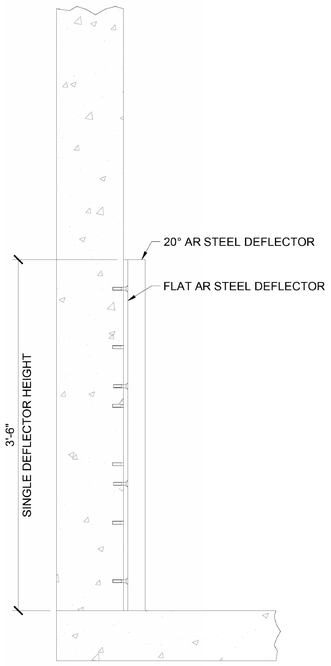
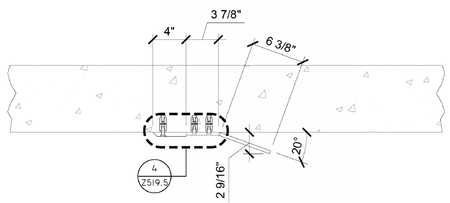


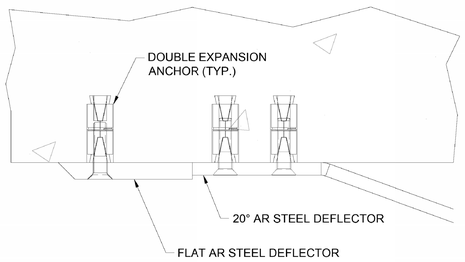
1 Z519.5 WALL DEFLECTOR (20°) (FRONT)
SCALE - 1-1/2" = 1'-0"



2 Z519.5 WALL DEFLECTOR (20°) (SIDE)
SCALE - 1-1/2" = 1'-0"



3 Z519.5 WALL DEFLECTOR (20°) (TOP)
SCALE - 1-1/2" = 1'-0"



4 Z519.5 DEFLECTOR JOINT DETAIL
SCALE - 6" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
WALL DEFLECTOR DETAILS

DRAWING NUMBER
6342

SHEET NUMBER
Z519.5

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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REGISTRATION

STATE OF FLORIDA — LONNIE LONDRUM — AR 96289 — REGISTERED ARCHITECT

DRAWING HISTORY

No	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

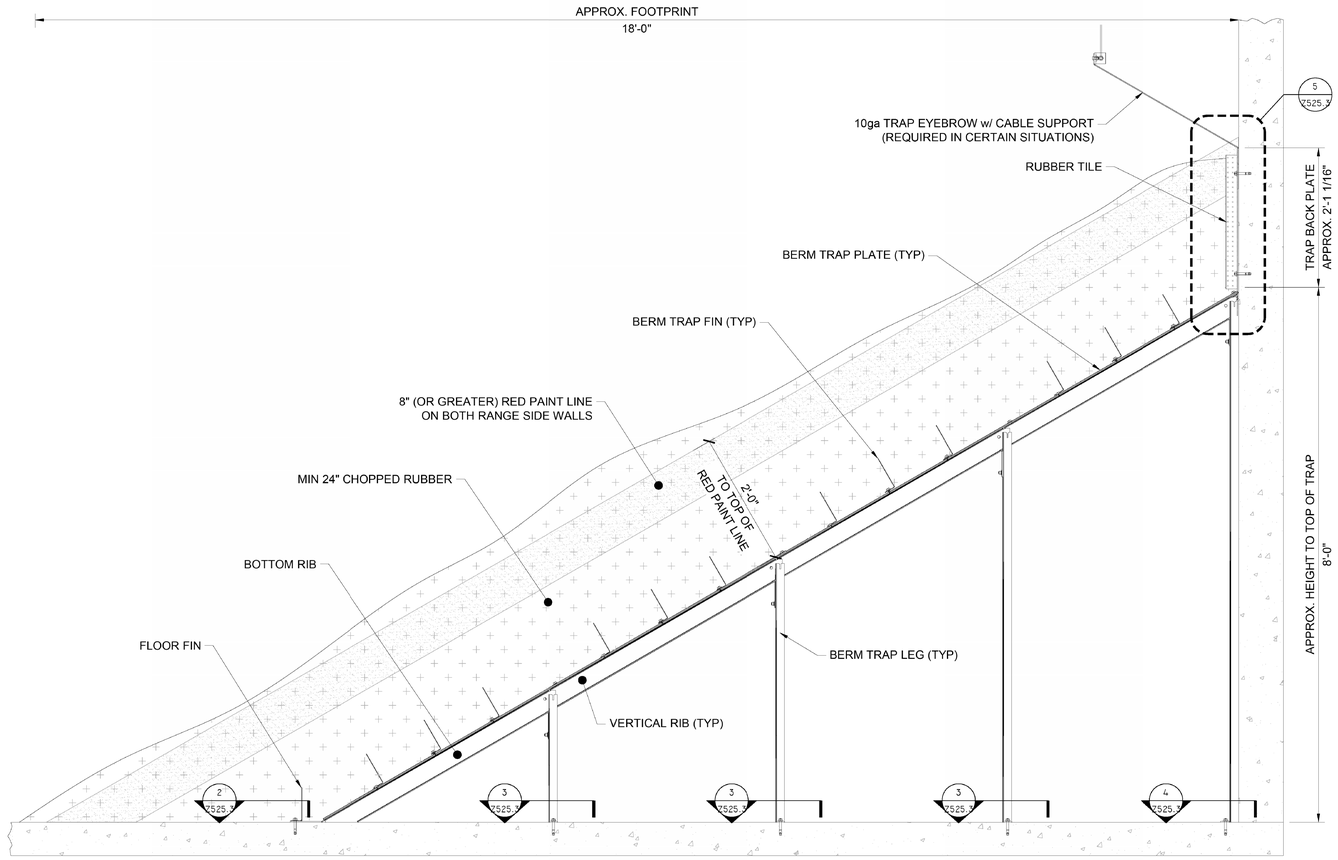
PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.12E

NOT FOR CONSTRUCTION

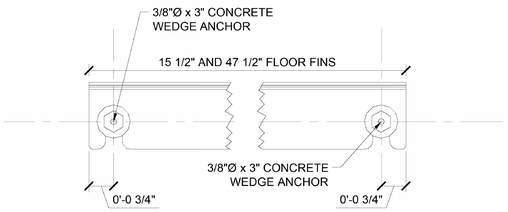


1 Z525.3 RUBBER BERM TRAP (8' TALL OPTION)
SCALE - 1" = 1'-0"

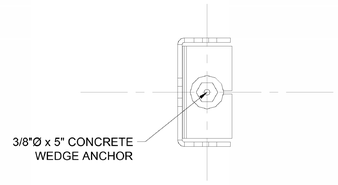
NOTE:
ATI RECOMMENDS A FLOOR-TO-CEILING CONCRETE WALL BEHIND TRAP.

IF CEILING STRUCTURE IS NOT CONCRETE, CUSTOMER SHALL CONFIRM THAT PLANNED RANGE FACILITY CEILING STRUCTURE IS CAPABLE OF PREVENTING ERRANT OR SECONDARY BULLET IMPACTS FROM ESCAPING THE PREMISES.

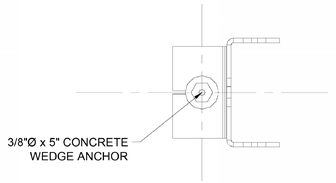
5 Z525.3 TRAP BACK PLATE DETAIL
SCALE - 3" = 1'-0"



2 Z525.3 FLOOR FIN ANCHOR DETAIL
SCALE - 6" = 1'-0"



3 Z525.3 LEG ANCHOR DETAIL
SCALE - 6" = 1'-0"



4 Z525.3 BACK LEG ANCHOR DETAIL
SCALE - 6" = 1'-0"

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PROJECT STATUS

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NOT FOR CONSTRUCTION

PROJECT NAME

RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

RUBBER BERM TRAP DETAILS

DRAWING NUMBER

6342

SHEET NUMBER

Z525.3

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Longwood, FL
32750

REGISTRATION

STATE OF FLORIDA
JOHNNIE LONDRIE JR
AR 0009859
REGISTERED ARCHITECT

DRAWING HISTORY

№	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

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10/14/2025

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RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
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SHEET NUMBER
Q1.13E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
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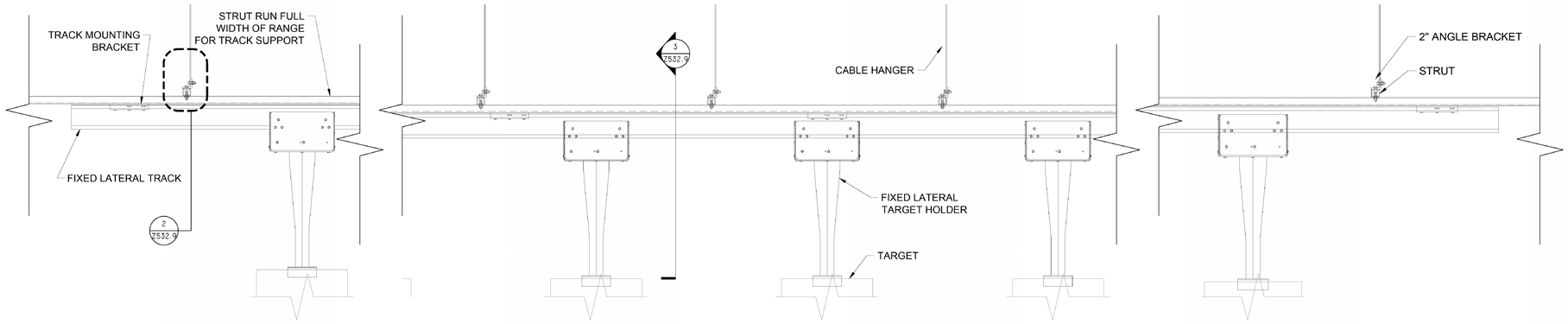
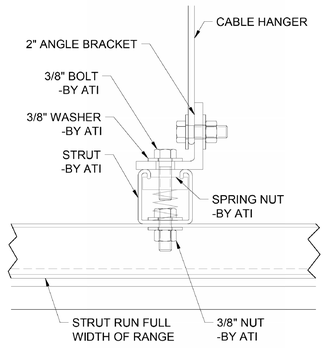
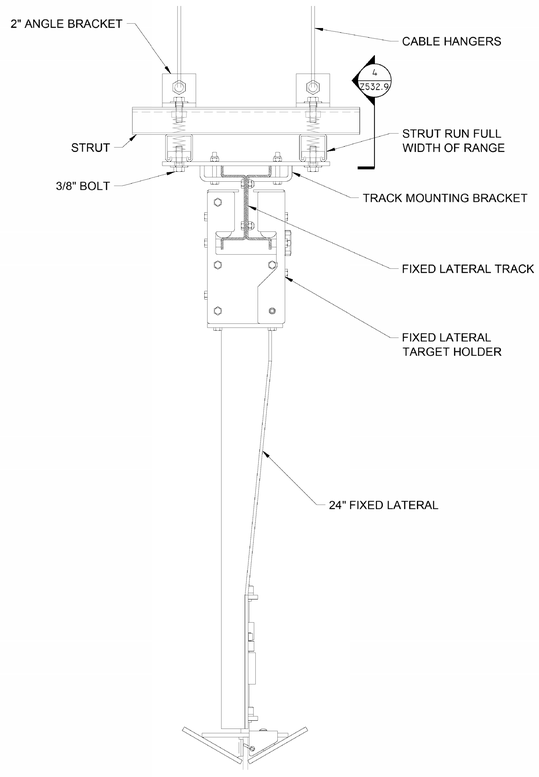


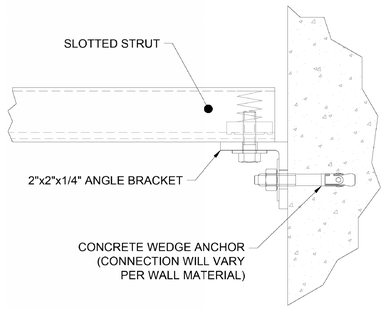
1 Z532.9 FIXED LATERAL FRONT VIEW
SCALE - 1-1/2" = 1'-0"



2 Z532.9 WIRE HANGER CONNECTION
SCALE - 6" = 1'-0"



3 Z532.9 RIGID BRACE DETAIL
SCALE - 3" = 1'-0"



4 Z532.9 STRUT TO WALL CONNECTION
SCALE - 6" = 1'-0"

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Origination Date:	06/23/25

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SHEET NAME

FIXED LATERAL DETAILS

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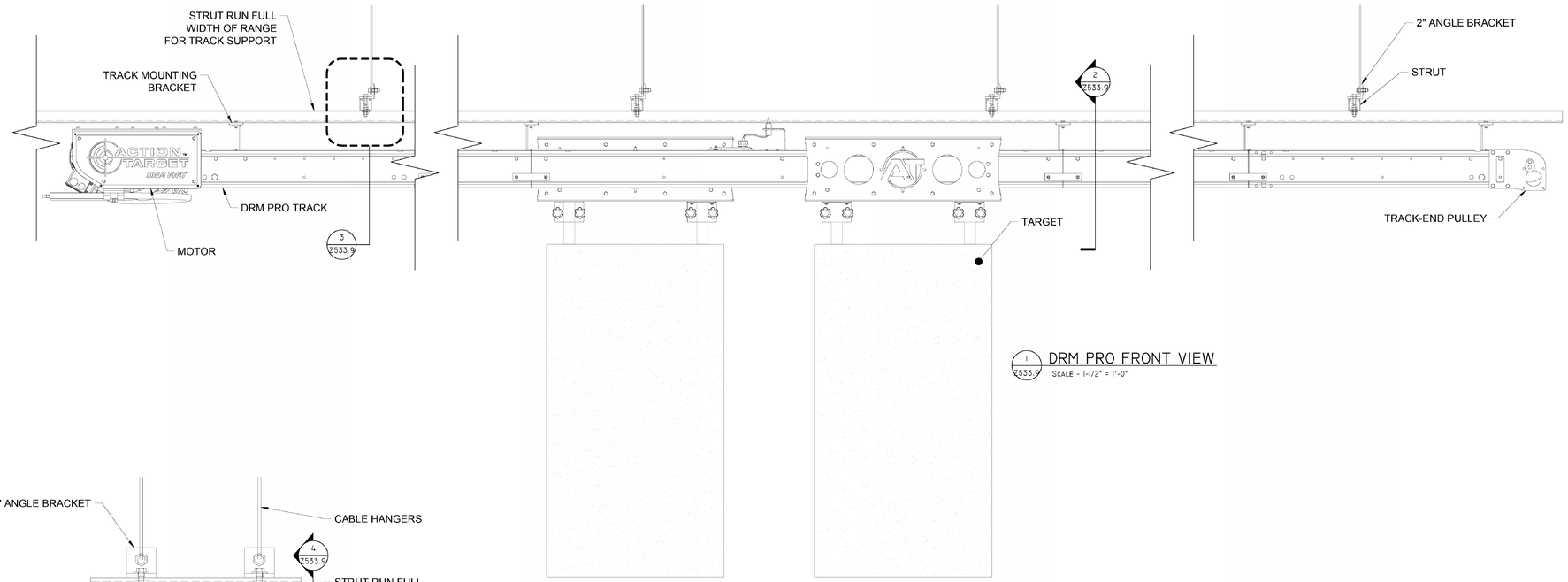
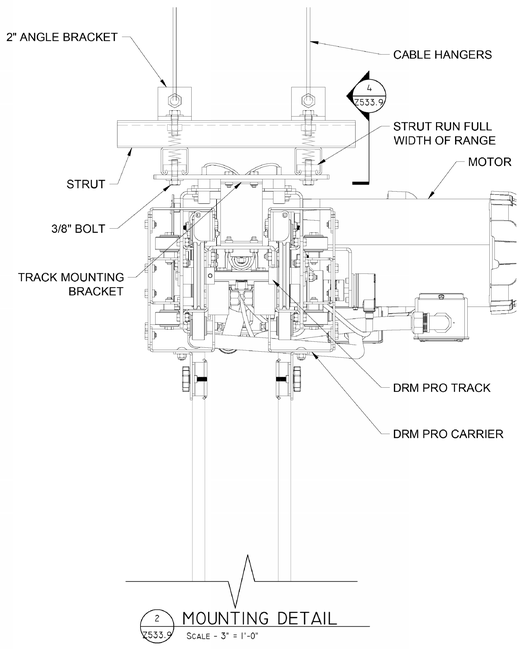
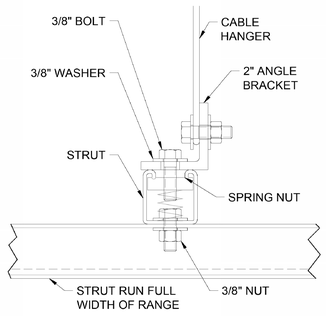


1 Z533.9 DRM PRO FRONT VIEW
SCALE - 1-1/2" = 1'-0"



2 Z533.9 MOUNTING DETAIL
SCALE - 3" = 1'-0"



3 Z533.9 WIRE HANGER CONNECTION
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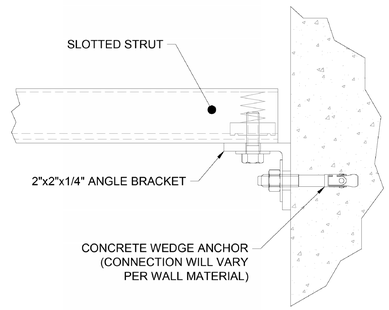

4 Z533.9 STRUT TO WALL CONNECTION
SCALE - 6" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
INVERTED DRM PRO DETAILS

DRAWING NUMBER
6342

SHEET NUMBER
Z533.9

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT
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Riviera Beach, FL 33404

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PUBLIC SAFETY CONSULTANT/ARCHITECT
JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA
CONNIE LORIUM
AR 98099
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.15E

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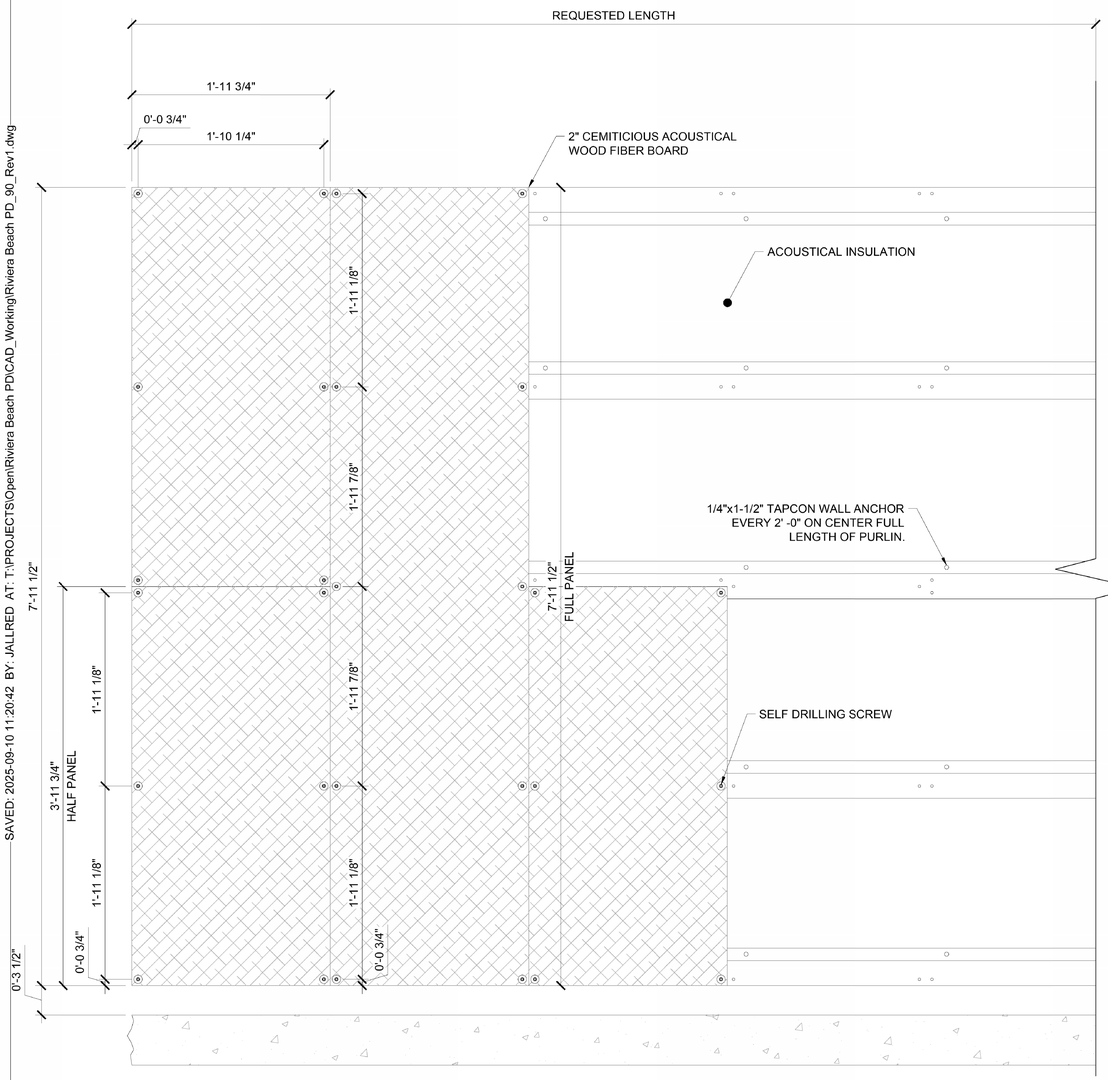
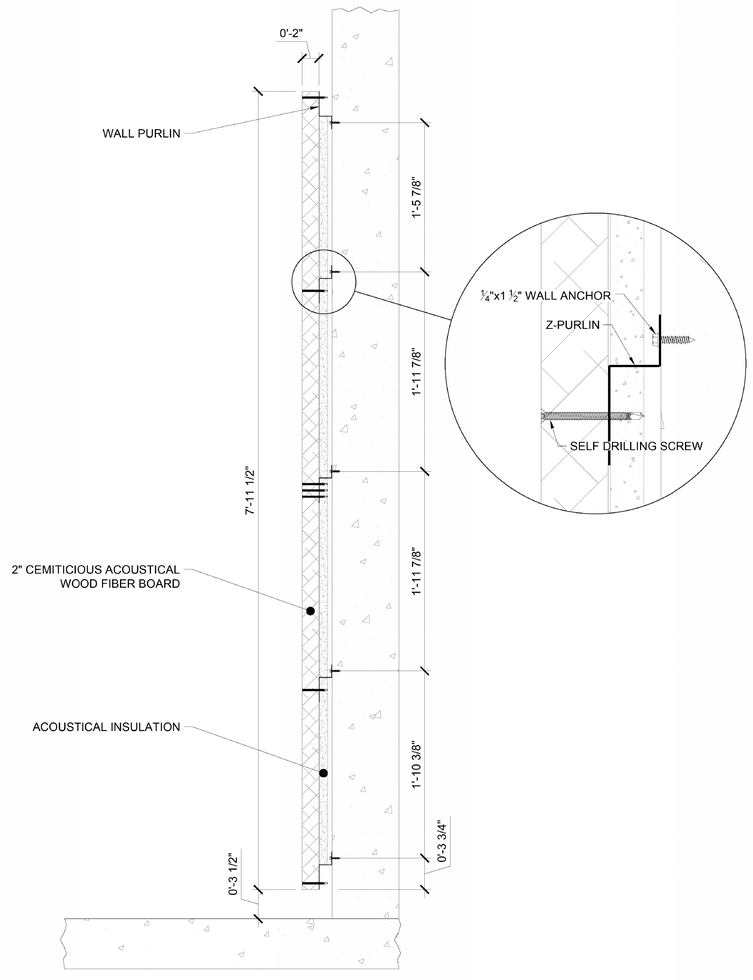


1 Z587.7 WOOD WOOL (FRONT)
SCALE - 1-1/2" = 1'-0"



2 Z587.7 WOOD WOOL (SIDE)
SCALE - 1-1/2" = 1'-0"

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Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

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1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

8' WOOD WOOL DETAILS

DRAWING NUMBER

6342

SHEET NUMBER

Z587.7

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ELECTRICAL GENERAL NOTES

-GENERAL ELECTRICAL NOTES FOR INDOOR AND OUTDOOR RANGES:

1. INSTALLATION OF ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING REGULATIONS, CODES, ETC.
A. LOCAL CODES AND ORDINANCES
B. THE EDITION OF THE NATIONAL ELECTRICAL CODE NFPA 70 (NEC) IN EFFECT.
2. PRIOR TO BEGINNING ANY WORK, SECURE NECESSARY PERMITS OR CLEARANCES FROM THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WORK SHALL BE EXECUTED BY EXPERIENCED ELECTRICIANS WHO ARE LICENSED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED.
3. THE CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN SHALL BE MAINTAINED.
4. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. COORDINATE ELECTRICAL EQUIPMENT LOCATION AND INSTALLATION WITH EQUIPMENT BEING SERVED. PROVIDE ALL POWER AND TELECOMMUNICATION FINAL CONNECTIONS TO THE SYSTEM FURNITURE AS REQUIRED.
5. ALL EQUIPMENT SUCH AS RELAYS, SWITCHES, PANELS, AND OTHER APPURTENANCES SHALL HAVE IDENTIFICATION PLATES OF BLACK LAMINATED PLASTIC WITH 1/2" WHITE LETTERS. ALL JUNCTION BOXES IN CEILING CAN BE MARKED WITH BLACK PERMANENT MARKER ON COVER PLATES AS PANEL DESIGNATION AND CIRCUIT NUMBER FROM WHICH THEY ARE FED.
6. ALL CONDUCTORS SHALL BE IDENTIFIED. ALL WIRING DEVICES SHALL BE USED WITH TYPED LABEL ON THE COVER PLATE IDENTIFYING THE PANEL DESIGNATION AND CIRCUIT NUMBER FROM WHICH THEY ARE FED.
7. ALL EQUIPMENT SHALL BE "UL" LISTED.
8. ELECTRICAL SYSTEMS SHALL BE GROUNDED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
9. ALL CONNECTIONS TO DEVICES SHALL BE TAPED WITH SCOTCH 33 ELECTRICAL TAPE.
10. ALL CONDUITS AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED AREAS. PRIOR TO CONCEALMENT OF NEW CONSTRUCTION, ALL WORK BEHIND FINISHED SURFACES SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE.
11. CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO COMPLETION OF CONSTRUCTION TO ALLOW SUFFICIENT TIME FOR COORDINATION OF EXISTING BUILDING ACTIVITIES WITH THE CONSTRUCTION WORK.
12. CONTROL WIRING SHALL BE TAGGED AT EACH END AND TERMINATED WHERE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH EQUIPMENT MANUFACTURES SPECIFICATIONS.
13. IF MATERIAL OR EQUIPMENT IS INSTALLED BEFORE IT IS APPROVED, THE CONTRACTOR SHALL BE LIABLE FOR ITS REMOVAL AND REPLACEMENT AT NO ADDITIONAL CHARGE OR IF IN THE OPINION OF ACTION TARGET, THE MATERIAL OR EQUIPMENT DOES NOT MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL INCLUDE IN THE WORK, WITHOUT EXTRA COST, ANY LABOR, MATERIALS, SERVICES, APPARATUS, AND DRAWINGS IN ADDITION TO CONTRACT DOCUMENTS, IN ORDER TO COMPLY WITH ALL APPLICABLE LAWS, INDICATED AND/OR SPECIFIED. PROVIDE ALL ELECTRICAL EQUIPMENT WITH ALL NECESSARY ASSOCIATED ACCESSORIES AND CONDUIT INFRASTRUCTURE AS REQUIRED TO ENSURE A COMPLETE AND OPERATIONAL SYSTEM AT NO ADDITIONAL COST TO OWNER.
15. BEFORE SUBMITTING BIDS, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL ADJOINING EXISTING BUILDINGS, EQUIPMENT, AND SPACE CONDITIONS ON WHICH HIS WORK IS IN ANY WAY DEPENDANT FOR THE BEST WORKMANSHIP AND OPERATION ACCORDING TO THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. HE SHALL REPORT TO ACTION TARGET ANY CONDITION WHICH MIGHT PREVENT HIM FROM INSTALLING HIS COMPONENTS IN THE MANNER SPECIFIED OR AS SHOWN IN CONTRACT DOCUMENTS TEN BUSINESS DAYS PRIOR TO SUBMISSION OF BIDS. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT THE SITE, NOR FOR ANY ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED OR WORK TO BE PERFORMED. THE CONTRACTOR SHALL INCLUDE IN HIS BID PRICE ALL LABOR AND MATERIAL THAT MAY EFFECT HIS WORK.
16. THE CONTRACTOR SHALL NOTIFY ACTION TARGET IN WRITING OF ANY DISCOVERED CONFLICTS BETWEEN EXISTING INSTALLATIONS WHICH ARE NOT SCHEDULED FOR DEMOLITION AND THE NEW WORK INDICATED WITHIN THE CONTRACT DOCUMENTS. SUCH NOTIFICATION SHALL BE ACCOMPANIED BY A DRAWING DELINEATING THE PROPOSED SOLUTION PRIOR TO STARTING ANY WORK IN THE AFFECTED AREA.
17. ALL MATERIALS AND WORK SHALL BE ACCORDING TO BASE BUILDING SPECIFICATIONS UNLESS OTHERWISE NOTED.
18. REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION, ELEVATION, MOUNTING HEIGHTS AND DETAILS OF ALL LIGHT FIXTURES AND DEVICES. REPORT ANY DISCREPANCIES TO ACTION TARGET IMMEDIATELY.
19. VERIFY DOOR SWINGS BEFORE INSTALLING SENSORS AND LIGHT SWITCHES.
20. PROVIDE PLASTER RING WITH PULL STRING TO SPACE ABOVE SUSPENDED CEILING FOR ALL TELEPHONE, DATA, FAX, MODEM, CATV, CARD READER, ETC. OUTLETS INSTALLED IN HOLLOW PARTITIONS. PROVIDE 3/4" EMPTY CONDUIT AND PULL STRING TO SPACE ABOVE SUSPENDED CEILING FOR THESE OUTLETS INSTALLED IN AN INSULATED PARTITION. PROVIDE 1" E.C. WITH 2 STRINGS FOR COMBINATION DATA/TEL OUTLET.
21. MAINTAIN INTEGRITY OF THE FIRE RATED CONSTRUCTION WHERE CONDUITS PASS THROUGH WALLS AND FLOORS.
22. ALL BACK BOXES INSTALLED ON OPPOSITE SIDES OF THE SAME PARTITION SHALL BE STAGGERED. DO NOT MOUNT THE BACK BOXES BACK TO BACK.
23. TYPE MC CABLE MAY BE USED IN LIEU OF EMT FOR BRANCH CIRCUITS, IN DRYWALL PARTITION AND IN CEILING PLENUM WHERE IS ALLOWED BY NEC AND THE BUILDING OWNER. (MC CABLE FOR ISOLATED CIRCUIT SHALL HAVE TWO (2) SEPARATE GROUNDING CONDUCTORS).
24. CONTRACTOR'S SCOPE OF WORK INCLUDES TRACING ALL EXISTING CIRCUITS IN THE CONSTRUCTION AREA BACK TO SOURCE. IF REMOVAL OF EXISTING ELECTRICAL EQUIPMENT AFFECTS ANY EXISTING CIRCUITS, CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS, WIRING, CONDUIT, ETC. REQUIRED TO RECONNECT EXISTING-TO-REMAIN
25.ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL, PLUMBING, AND OTHER TRADES TO PROVIDE ALL EQUIPMENT ASSOCIATED WITH THEIR RESPECTIVE TRADES WITH NECESSARY WIRING AND CONDUIT INFRASTRUCTURE FOR ALL SENSORS, AND CONTROL SYSTEMS AS REQUIRED.

ELECTRICAL SYMBOL LIST:

-GENERAL ELECTRICAL SYMBOLS

- DUPLEX REC.
- L15-30 RECEPTACLE
- WP WEATHER PROOF REC.
- GROUND FAULT REC.
- \ SWITCHED REC.
- S SWITCH
- S3 3 WAY SWITCH
- J JUNCTION BOX (AS SIZED IN SCHEDULE)
- P PULL BOX (AS SIZED IN SCHEDULE)
- START AND STOP SWITCH
- 5E CAT5E JACK & WALL PLATE
- AP ACCESS PORT

-ELECTRICAL SCHEMATIC SYMBOLS

- 5E CAT5E JACK & WALL PLATE PROVIDED - BY OTHERS
- EQUIPMENT PROVIDED - BY ACTION TARGET
- EQUIPMENT PROVIDED - BY OTHERS
- AP ACCESS PORT PROVIDED - BY ACTION TARGET
- CONDUIT/CONTROLS PROVIDED - BY OTHERS
- SPKR SPEAKER PROVIDED -BY ACTION TARGET
- C0 CONDUIT PROVIDED - BY OTHERS
- MICROPHONE PROVIDED -BY ACTION TARGET

ELECTRICAL ABBREVIATIONS

(ALL ABBREVIATIONS MAY NOT APPEAR ON THE DRAWINGS)

AMP	AMPERE
AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BRK	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CP	CONDENSATE PUMP
D	EXISTING TO BE DEMOLISHED
DISCSW	DISCONNECT SWITCH
DP	DISTRIBUTION PANEL
DWG	DRAWING
E, EX	EXISTING TO REMAIN
EG	EQUIPMENT GROUND
EM	DEVICE ON EMERGENCY CIRCUIT
EMT	ELECTRICAL METALLIC TUBING
EW	EMERGENCY WHITE (NIGHT) LIGHT
EWH	ELECTRIC WATER HEATER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FLA	FULL LOAD AMPS
G, GND	GROUND
GFI	GROUND FAULT INTERRUPTER
HP	HORSE POWER
IG	INTERRUPTER ISOLATED GROUND
KVA	KILOVOLT-AMPS
KW	KILOWATT
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DAMPER
MLO	MAIN LUGS ONLY
MDP	MAIN DISTRIBUTION PANEL
N	NEW
NEC	NATIONAL ELECTRICAL CODE
NF	NON FUSED
N/L	NIGHT LIGHT FIXTURE ON A TIMER
NTS	NOT TO SCALE
P	POLE
PH, Ø	PHASE
PNL	PANEL
PSRH	PROJECT STANDARD RECEPTACLE HEIGHT
PSSH	PROJECT STANDARD SWITCH HEIGHT
R	RELOCATED AT NEW LOCATION
RR	REMOVE AND RELOCATE
S.N.	SOLID NEUTRAL
SM	MOTOR THERMAL SWITCH CONTROL
SWBD	SWITCHBOARD
TEL	TELEPHONE
T, XFMR	TRANSFORMER
TYP	TYPICAL
U.H.	UNIT HEATER
U.O.A.	UNLESS OTHERWISE NOTED
V	VOLTS
W	WATTS
WP	WEATHERPROOF

ELECTRICAL COORDINATION NOTES:

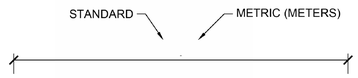
-GENERAL
1. ALL ELECTRICAL EQUIPMENT INSTALLATIONS, INCLUDING DEVICES, MATERIALS, AND WORKMANSHIP:
- SHALL BE PERFORMED BY A QUALIFIED PERSON.
- SHALL FULLY COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC).
- SHALL FULLY COMPLY WITH ALL REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ)."
2. ALL CONDUIT, J BOXES, SITE PREPARATIONS, AND HIGH VOLTAGE COMPONENTS SHALL BE PROVIDED BY THE CUSTOMER OR ELECTRICAL CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS.
3. ALL COMPONENTS ASSOCIATED WITH SYSTEMS AND EQUIPMENT TO BE REMOVED OR RELOCATED MAY NOT BE SPECIFICALLY INDICATED. REMOVE ALL ASSOCIATED ELECTRICAL COMPONENTS, HANGERS, WIRING, CABLING, CONDUIT, BOXES, DEVICES AND ALL OTHER ITEMS RELATED TO EQUIPMENT AND MATERIALS WHICH ARE INDICATED TO BE REMOVED OR RELOCATED. REMOVE ALL WIRING/CONDUIT BACK TO THE SOURCE IN EXISTING CIRCUITS WHICH ARE BEING DEMOLISHED. UNLESS SPECIFICALLY INDICATED, NO EQUIPMENT, MATERIALS OR ASSOCIATED COMPONENTS SHALL BE ABANDONED IN PLACE.

-DISPOSAL OF DEMOLITION
1. CONTRACTOR SHALL CLEAN THE PROJECT SITE AT THE END OF EACH WORKING DAY. CONTRACTOR SHALL NOTIFY BUILDING OWNER PRIOR TO DISPOSAL OF ALL DEMOLISHED MATERIALS TO ALLOW THE OWNER TO SALVAGE ANY USABLE MATERIALS. AFTER INSPECTING FROM THE OWNER'S REPRESENTATIVE ALL UNUSED MATERIALS SHALL BE REMOVED FROM THE JOB SITE WITH DISPOSAL IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND REGULATIONS.

-PROTECTION
1. PROTECT FROM DAMAGE ALL EXISTING WORK TO REMAIN. ANY EXISTING TO REMAIN OR EXISTING TO BE RELOCATED MATERIALS AND EQUIPMENT DAMAGED DURING THE COURSE OF THE WORK SHALL BE REPLACED WITH MATERIALS AND EQUIPMENT CONFORMING TO THESE SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER. CARE MUST TAKEN IN REMOVING ALL EXISTING MATERIALS.

DIMENSION CLARIFICATION

ALL DIMENSION LINES SHOW DEFAULT OF U.S. STANDARD UNITS, WITH METRIC UNITS AS SECONDARY INDICATED BY THERE LOCATION BETWEEN THE FOLLOWING SYMBOLS [ ]
SEE EXAMPLE BELOW FOR CLARIFICATION:



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Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

GENERAL ELECTRICAL NOTES

DRAWING NUMBER

6342

SHEET NUMBER

Z700

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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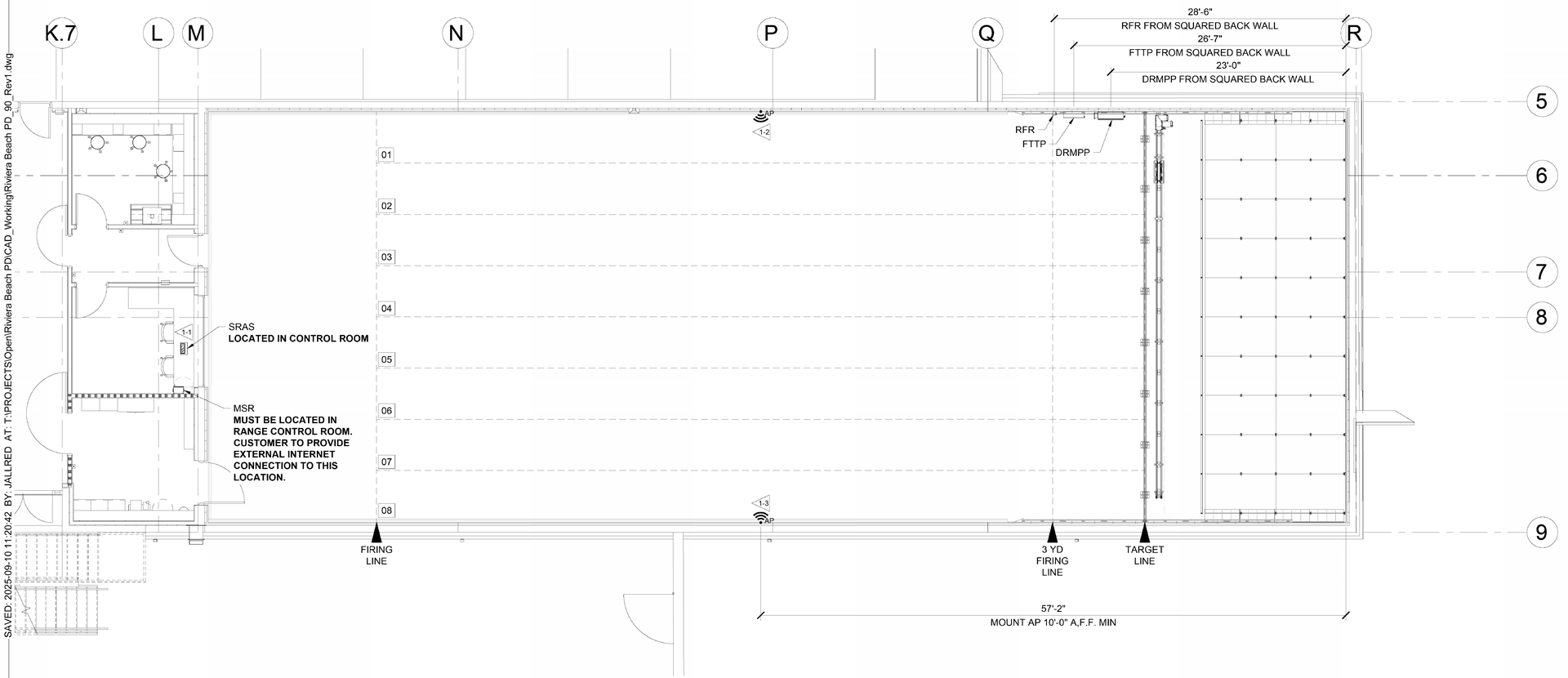

ELECTRICAL PLAN
SCALE 3/16" = 1'-0"

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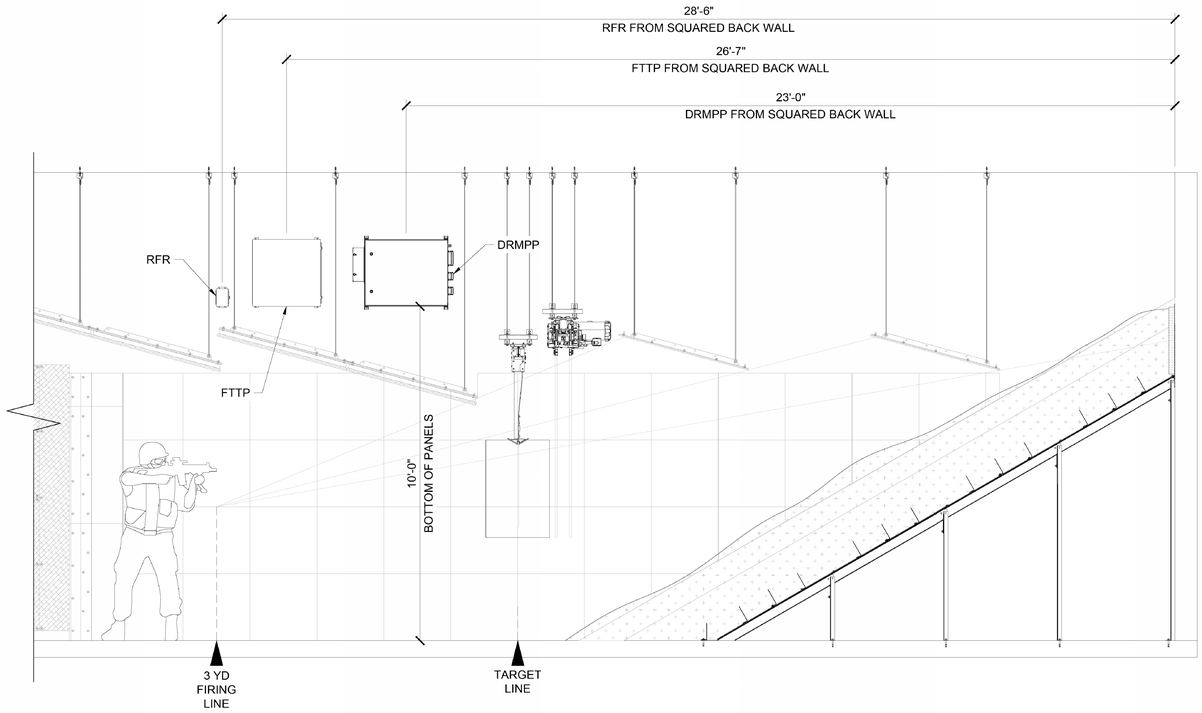
NOTE:
SPACE BELOW STRUCTURAL MEMBER SHALL BE FREE OF OBSTRUCTIONS UNLESS COORDINATED WITH ACTION TARGET.



3 / Z702 ELECTRICAL SECTION
SCALE - 1/2" = 1'-0"

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Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
ELECTRICAL SECTION

DRAWING NUMBER
6342

SHEET NUMBER
Z702

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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1481 West 15 Street
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REGISTRATION
STATE OF FLORIDA
JENNIE LORUM
AR 96098
REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.19E

NOT FOR CONSTRUCTION

NOTE:
SEE ELECTRICAL SCHEMATIC FOR ELECTRICAL SCHEDULES & TABLES

ALL CAT5e CABLE RUNS ARE LIMITED TO 300'-0"

SERVER RACK TO BE LOCATED IN A CONDITIONED LOCATION

CUSTOMER TO PROVIDE WIRED INTERNET ACCESS TO SERVER RACK LOCATION

ANY WIRE/CABLE RUNS DOWNRANGE OF FIRING LINE SHALL BE RUN IN A CONDUIT

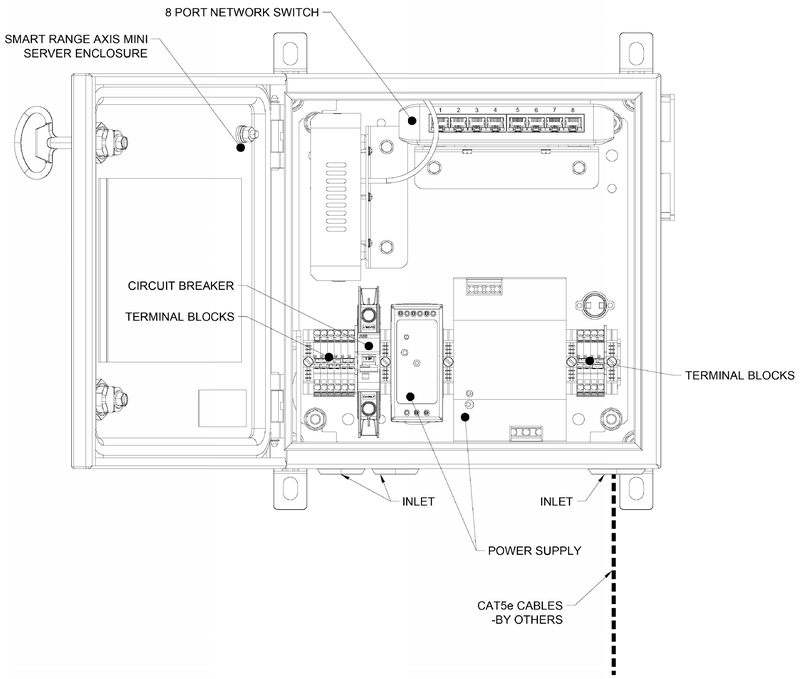
ALL DATA JACKS AND ASSOCIATED WIRING TO BE INSTALLED BY SITE ELECTRICIAN

ALL PATCH PANEL TERMINATIONS TO MATCH PATCH PANEL TERMINATION SCHEDULE.

PORT NUMBER TO MATCH PANEL ID NUMBER.

SWITCH 1
DATA JACK SCHEDULE

PRODUCT	LOCATION	PORT ID #
SRAS	CONTROL AREA	1
AP	RANGE RIGHT WALL	2
AP	RANGE LEFT WALL	3
DRMPP	TARGET LINE AREA	4
FTTP	TARGET LINE AREA	5
		6
		7
RESERVED FOR SWITCH		8



2 / Z703.1 SERVER RACK
SCALE - 6" = 1'-0"

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PROJECT STATUS
90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME
SERVER RACK DETAILS

DRAWING NUMBER
6342

SHEET NUMBER
Z703.1

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DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
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DATE OF ISSUE
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PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.20E

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FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/1007657 - RBPD_Evidence_&_Fire_Range_Building.rvt
DATE STAMP: 10/23/2025 5:43:27 PM

EQUIPMENT SCHEDULE - BY ACTION TARGET

ITEM	QTY	ABBREV
ACCESS POINT	2	AP
SMART RANGE ACCESS SCREEN	1	SRAS
DRM PRO DOWNRANGE PANEL	1	DRMPP
FIXED TURNING TARGET DOWNRANGE PANEL	1	FTTP
RADIO FREQUENCY RECEIVER	1	RFR
MINI SERVER RACK	1	MSR
ROAMING TABLET	1	
DRM PRO	1	
FIXED LATERAL	8	

EQUIPMENT POWER SCHEDULE - BY OTHERS

PRODUCT LINE	ITEM	QTY	PHASE	VOLTS	FLA
CONTROL PANEL	DRMPP	1	1	200-240	20
	FTTP	1	1	100-240	16
SERVER RACK	MSR	1	1	100-240	16

DATA COMMUNICATION OUTLET - BY OTHERS

ITEM	QTY	DESCRIPTION
5E	3	CAT5E JACK & WALL PLATE

JUNCTION BOX SCHEDULE - BY OTHERS

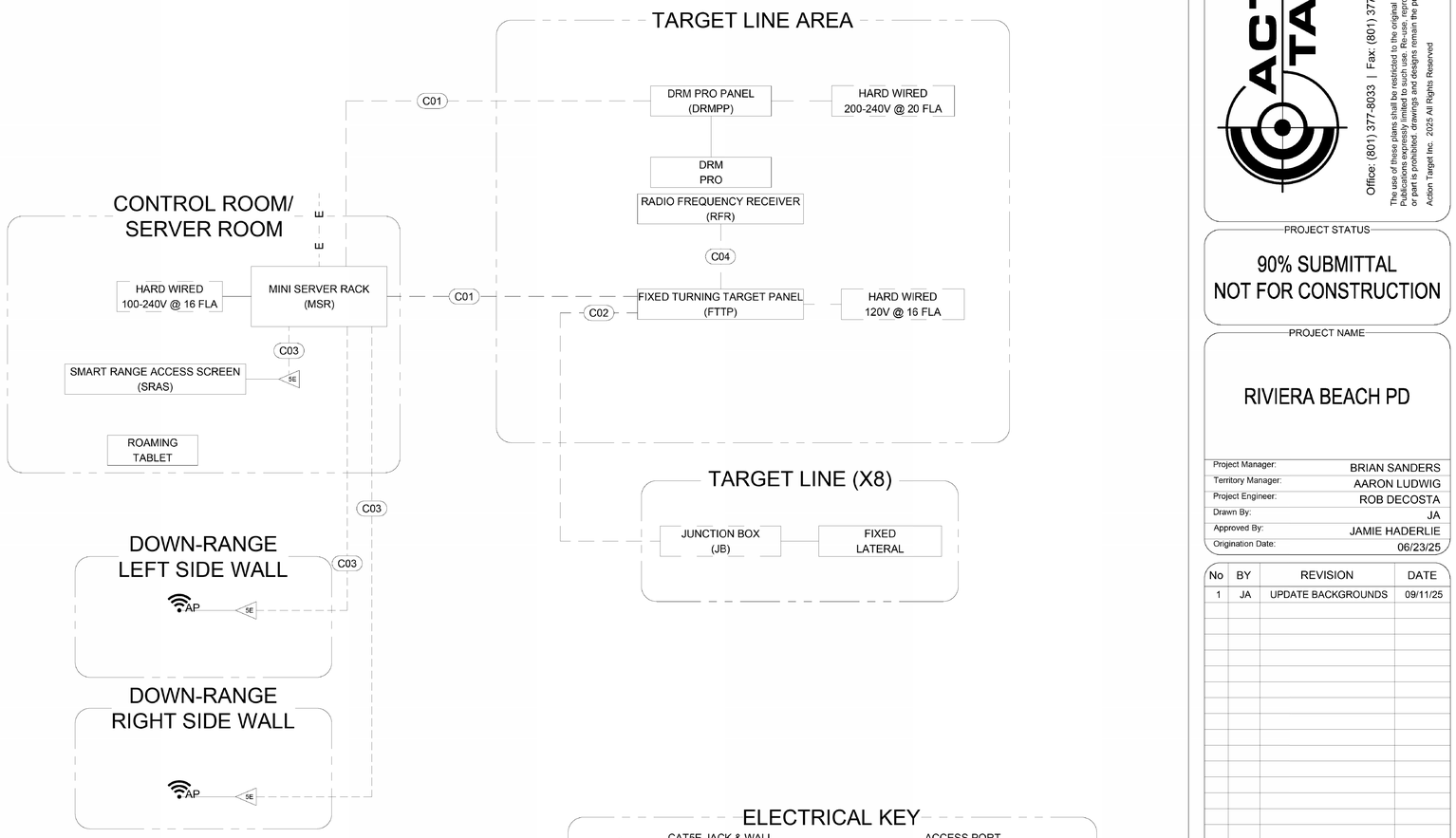
ITEM	QTY	DESCRIPTION
JB	8	JUNCTION BOX 4X4X4

CONDUIT SCHEDULE - BY OTHERS

ITEM	QTY	DESCRIPTION
C01	2	3/4" CONDUIT
C02	8	3/4" CONDUIT
C03	3	3/4" CONDUIT
C04	1	3/4" CONDUIT

CONDUIT FILL SCHEDULE - BY ACTION TARGET

ITEM	QTY	DESCRIPTION
C01		
	1	CAT5E OR GREATER < 300'
C02		
	1	18/2 GA CABLE
C03		
	1	CAT5E OR GREATER
C04		
	1	22/7 GA CABLE



ELECTRICAL KEY

- 5E — CAT5E JACK & WALL PLATE PROVIDED -BY OTHERS
- C# — CONDUIT PROVIDED -BY OTHERS
- CONDUIT/WIRES PROVIDED -BY OTHERS
- AC POWER PROVIDED -BY OTHERS
- AP — ACCESS PORT PROVIDED -BY ACTION TARGET
- RETRIEVERS/WIRES PROVIDED -BY ACTION TARGET
- E E — EXTERNAL INTERNET CONNECTION -BY OTHERS

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PROJECT STATUS

90% SUBMITTAL
NOT FOR CONSTRUCTION

PROJECT NAME

RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	06/23/25

No	BY	REVISION	DATE
1	JA	UPDATE BACKGROUNDS	09/11/25

SHEET NAME

FIXED LATERAL ELECTRICAL SCHEMATIC

DRAWING NUMBER

6342

SHEET NUMBER

Z732.9

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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CONSULTANT

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No	DATE	DESCRIPTION

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10/14/2025

PROJECT NAME

RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.21E

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RIVIERA BEACH PD

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SHEET INDEX:

ZM001	INDEX PAGE
ZM002	VENTILATION GENERAL NOTES
ZM003	VENTILATION SPECIFICATIONS
ZM004	VENTILATION SPECIFICATIONS
ZM101	HVAC PLAN
ZM102	PENETRATION ROOF PLAN
ZM103	VENTILATION ROOF PLAN
ZM104	CURB AND RAIL PLAN
ZM301	VENTILATION SECTION
ZM501	AIRFLOW SCHEMATIC RECIRC SYSTEM
ZM601	MECHANICAL HVAC SCHEDULES
ZM602	MECHANICAL DETAILS
ZM603	MECHANICAL DETAILS CONTINUED
ZM701	HVAC CONTROLS CONDUIT AND SENSOR ABOVE CEILING PLAN
ZM702	HVAC CONTROLS CONDUIT AND SENSOR ROOF PLAN
ZM703	HVAC CONTROLS CONDUIT SCHEMATIC
ZM704	HVAC CONTROL CONDUIT AND SENSOR SCHEDULE
ZM705	HVAC CONTROL PANEL WIRING
ZM706	SOO AND CONTROL SYSTEM OPTIONS
ZM707.1	HVAC RECIRC NETWORK DIAGRAM ETHERNET
ZM707.2	HVAC RECIRC NETWORK DIAGRAM BACNET
ZM707.3	HVAC RECIRC NETWORK DIAGRAM AAON COMM LINK

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Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME

INDEX PAGE

DRAWING NUMBER

6342

SHEET NUMBER

ZM001

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1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.22E

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DATE STAMP: 10/23/2025 5:43:35 PM

GENERAL NOTES:

1. EACH DRAWING HAS SPECIFIC KEYED AND GENERAL NOTES. THE NOTES ON THIS DRAWING ARE GENERAL IN NATURE AND APPLY TO WORK DESCRIBED IN ALL THE RANGE VENTILATION DRAWINGS AND SPECIFICATIONS.
2. THE RANGE VENTILATION DUCT ROUTING SHOWN IS APPROXIMATE AND DIAGRAMMATIC AND IS NOT TO BE SCALED. MINOR ALTERATIONS ARE ALLOWED TO AVOID LOCAL INTERFERENCES. WHERE FIELD CONDITIONS REQUIRE SUBSTANTIAL CHANGES TO THE DUCT LAYOUT, CHANGES MUST BE APPROVED BY ACTION TARGET.
3. THIS PROJECT AND ALL WORK SHALL CONFORM TO ALL LOCAL AND NATIONAL CODES AND STANDARDS WHICH ARE APPLICABLE TO THIS TYPE OF WORK, SOME OF WHICH ARE AS FOLLOWS: LOCAL AND NATIONAL BUILDING AND MECHANICAL CODES, NFPA, ASHRAE, SMACNA AND OTHER REGULATORY BODIES HAVING JURISDICTION OVER THIS TYPE OF WORK. ALL SYSTEMS INCLUDING MATERIALS, EQUIPMENT AND WORKMANSHIP SHALL CONFORM TO THE ASSOCIATED CODES AND REGULATIONS OF GOVERNING BODIES, CODES AND REGULATIONS OF THE ASSOCIATED MUNICIPAL, STATE AND FEDERAL AUTHORITIES.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, LICENSES, AND UTILITY SERVICE AGREEMENTS RELATED TO THE INSTALLATION, COMMISSIONING, TESTING AND BALANCING FOR THE COMPLETION OF THIS WORK. THE CONTRACTOR SHALL ASSIST AND WORK WITH THE OWNER TO OBTAIN OWNER SPECIFIC PERMITS, LICENSES AND AGREEMENTS.
5. THE CONTRACTOR SHALL COORDINATE THE RANGE VENTILATION WORK WILL ALL BUILDING PLUMBING, ELECTRICAL, AND STRUCTURAL TRADES TO PROVIDE ALL THE NECESSARY UTILITY CONNECTIONS FOR THE RANGE VENTILATION EQUIPMENT. COORDINATE THIS WORK WITH ALL OTHER TRADES IN ORDER TO RESOLVE ANY CONFLICTS THAT MIGHT ARISE DUE TO THE INSTALLATION AND LOCATION OF DUCTWORK, PIPING, CONTROLS OR EQUIPMENT THAT IS TO BE INSTALLED AS PART OF THIS PROJECT.
6. THE GENERAL CONTRACTOR OR OTHER DIVISIONS WILL INSURE THAT THE RANGE ENVELOPE IS SEALED TIGHT TO MAINTAIN THE REQUIRED NEGATIVE SPACE PRESSURE AS SPECIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
7. ALL WALL AND ROOF PENETRATIONS FOR DUCTWORK AND OTHER RELATED OPENINGS SHALL BE COMPLETED BY THE GENERAL CONTRACTOR OR BY THE OWNER. PROVIDE ROOF CURBS FOR ALL ROOF DUCT PENETRATIONS AND FLASH WATER TIGHT.
8. THE EQUIPMENT PADS AND STRUCTURAL SUPPORTS WILL BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR OR BY THE OWNER.
9. DUCTWORK, PIPING, CONTROLS AND EQUIPMENT INCLUDING FILTER HOUSING SHALL BE INSTALLED SUCH THAT THEY CAN BE SERVICED AND REPAIRED OR REPLACED BY ANY PERSON ASSOCIATED WITH THIS PROJECT, INCLUDING THE OWNER AND THE OWNERS REPRESENTATIVE.
10. ALL DUCTWORK, SUPPLY, EXHAUST AND RETURN SHALL BE SEALED AS DESCRIBED IN THE DRAWINGS AND IN THE SPECIFICATIONS AND PER SMACNA STANDARDS.
11. ALL DUCTWORK NEEDS TO BE RATED AT A MINIMUM OF 2" WC STATIC PRESSURE. THE DUCTWORK CONNECTING TO THE RANGE EXHAUST FANS AND THE FILTER HOUSING IS RATED AT A MINIMUM OF 10" WC STATIC PRESSURE. SEE DRAWINGS AND SPECIFICATIONS AND SMACNA STANDARDS FOR THE CONSTRUCTION AND INSTALLATION OF ALL DUCTWORK.
12. ALL DUCTWORK SIZES ARE INSIDE CLEAR DIMENSIONS. IF INSULATION LINING IS NOTED THE DUCTWORK SHALL BE INCREASED IN SIZE TO ALLOW FOR THE INSULATION.
13. ALL DUCTWORK ELBOWS SHALL BE RADIUS ELBOWS UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN THEY SHALL HAVE SINGLE BLADE TURNING VANES. ROUTE ALL DUCTWORK AS HIGH AS POSSIBLE ABOVE BALLISTIC BAFFLES. COORDINATE DUCT INSTALL WITH CEILING SUPPORT SYSTEM. DUCTWORK SIZE CHANGES ARE ALLOWED AS LONG AS THE FREE AREA IS NOT REDUCED. SUBMIT COORDINATED SHEET METAL SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION OF DUCTWORK SYSTEMS. SHOP DRAWINGS SHALL BE APPROVED BY ACTION TARGET INC (ATI). ALL OFF- SETS, RISERS OR DROPS ARE TO BE INDICATED ON THE SHOP DRAWINGS.
14. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING FROM THE POWER SOURCES TO THE EQUIPMENT DISCONNECT AND FROM THE DISCONNECT SWITCHES TO STARTERS AND FROM STARTERS TO THE EQUIPMENT.
15. ALL HIGH VOLTAGE CONDUITS AND WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
16. ALL LOW VOLTAGE CONDUITS AND WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
17. AUTOMATIC CONTROL DEVICES, SUCH AS TEMPERATURE SENSORS, RELAYS AND PRESSURE SWITCHES WHICH ARE ASSOCIATED WITH THIS WORK AND THESE SYSTEMS AND SHALL BE FURNISHED AND INSTALLED BY THIS DIVISION.
18. ALL CONTROL WIRING SHALL BE RUN CONCEALED WHEN POSSIBLE. WIRING IN WALLS SHALL BE IN CONDUIT. ALL CONTROL WIRING SHALL BE PLENUM RATED. CONTROL WIRING IN EXPOSED AREAS SHALL BE RUN IN CONDUIT. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODES AND ANY OTHER LOCAL OR STATE CODES.
19. FIELD VERIFY LOCATIONS OF ALL RANGE MECHANICAL EQUIPMENT, ROOF PENETRATIONS, AND DEVICES PRIOR TO FABRICATION OR STARTING NEW WORK. MECHANICAL CONTRACTOR SHALL COORDINATE WITH OWNERS GENERAL CONTRACTOR AND STRUCTURAL ENGINEER ALL SUPPORTING STEEL FOR MECHANICAL EQUIPMENT. GENERAL CONTRACTOR TO FURNISH AND INSTALL SUPPORT ANGLES AND SUPPORT BEAMS FOR MECHANICAL EQUIPMENT.
20. THE CONTRACTOR SHALL INSTALL THE RANGE MECHANICAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES AND STANDARDS. MAINTAIN THE MANUFACTURER'S OPERATIONAL AND SERVICE CLEARANCES AROUND EQUIPMENT.
21. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN, SELECTION, PROVISION, AND INSTALLATION OF ALL SUPPORTS, ANCHORAGE, AND RELATED HARDWARE FOR HVAC EQUIPMENT AND DUCTWORK. ALL SUPPORTS SHALL BE DESIGNED AND INSTALLED TO SAFELY RESIST THE SEISMIC AND WIND LOADS REQUIRED BY APPLICABLE NATIONAL AND LOCAL BUILDING CODES, STANDARDS, AND REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT ALL METHODS AND MATERIALS USED ARE ADEQUATE FOR THE INTENDED APPLICATION AND IN FULL COMPLIANCE WITH GOVERNING REQUIREMENTS.
22. ALL RANGE MECHANICAL SYSTEMS SHALL BE TESTED, COMMISSIONED AND SHALL BE COMPLETE AND FUNCTIONAL AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL WARRANTY HIS WORK FOR A PERIOD OF TWELVE (12) MONTHS FROM DATE OF FINAL ACCEPTANCE.
23. THIS WORK SHALL INCLUDE ALL THE PRODUCTS AND EQUIPMENT FOR COMPLETE AND FUNCTIONAL SYSTEMS FOR THE AREAS INDICTED IN THESE DOCUMENTS.

ATTENTION:

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO SHOW GENERAL INTENT OF THE VENTILATION EQUIPMENT AND DUCT LAYOUT.
- ACTUAL EQUIPMENT AND DUCT SIZE WILL BE DETERMINED DURING DETAILED DESIGN AND MAY VARY FROM THE SIZES SHOWN ON THESE DRAWINGS.
- ACTION TARGET'S DESIGNERS/ENGINEERS WILL NEED TO COORDINATE WITH THE CUSTOMER'S STRUCTURAL ENGINEER, ARCHITECT, AND CONTRACTOR THE LAYOUT OF THE VENTILATION SYSTEM AND SCOPE OF WORK.
- PROVIDE ACTION TARGET WITH BUILDING DRAWINGS OF THE RANGE SPACE. PLANS AND SECTION VIEWS IN AUTOCAD FORMAT. *(PDF FILES OR HAND SKETCHES ARE REQUIRED WHEN AUTOCAD FILES ARE NOT AVAILABLE.)*
- ACTION TARGET ROUTES VENTILATION DUCTING BETWEEN THE STEEL BAFFLES AND THE BOTTOM OF THE RANGE CEILING STRUCTURE.
- THE MINIMUM CLEAR DISTANCE FROM THE FLOOR TO THE BOTTOM OF THE RANGE ROOF STRUCTURAL MEMBERS (TRUSSES, ETC.) IS 14'-0".

REQUIRED INFORMATION:

OWNER/CONTRACTOR TO PROVIDE
- COMPLETE ACTION TARGET HVAC SURVEY WITH SALES ASSOCIATE AND/OR PROJECT MANAGER.
- ALL PERMITS AND LICENSES PERTAINING TO PROJECT.

STRUCTURAL
- STRUCTURAL SUPPORT OF MECHANICAL VENTILATION EQUIPMENT.
- CONCRETE EQUIPMENT PADS FOR MECHANICAL VENTILATION EQUIPMENT, IF APPLICABLE.
- WALL PENETRATIONS FOR VENTILATION DUCTING
- ROOF PENETRATIONS, PATCHING, AND ROOFING AROUND DUCT ROOF CURBING AND EQUIPMENT SUPPORTS OF MECHANICAL EQUIPMENT. FLASH AND WATER TIGHT SEAL.

ELECTRICAL
- MATERIAL AND INSTALL OF HIGH AND LOW VOLTAGE WIRE AND CONDUIT FOR VENTILATION EQUIPMENT.
- ELECTRICAL DISCONNECTS FOR MECHANICAL EQUIPMENT.
- DEDICATED 120V CIRCUIT TO VENTILATION CONTROL PANEL.
- INSTALLATION OF ATI PROVIDED VFD'S AND CONTROL/RANGE DISPLAY PANELS.
- INTERNET STATIC IP ADDRESS FOR REMOTE CONTROL ACCESS. CAT5 CABLE TO RANGE CONTROL PANEL.

MECHANICAL
- ALL GAS PIPE (SIZED FOR MECHANICAL EQUIPMENT), REGULATORS & FINAL CONNECTIONS AND HOOKUPS FOR RANGE MECHANICAL EQUIPMENT.

MISCELLANEOUS
- PROVIDE AN AIR TIGHT RANGE ENVELOPE. SEAL ALL HOLES, PENETRATIONS, DOORWAYS, DOOR JAMS, AND OPENINGS IN RANGE WALLS, WALL TO ROOF CONNECTIONS, AND ALL ROOF OPENINGS.
- T-BAR CEILING BETWEEN SAFETY CEILING AND RANGE DIFFUSERS.
- ANY FIRE/SMOKE DEVICES REQUIRED BY LOCAL JURISDICTION.

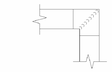
NOTE: THIS LIST IS PROVIDED TO IDENTIFY AND COORDINATE THE SCOPE OF WORK FOR THE RANGE VENTILATION SYSTEM. A COMPLETE AND DETAILED LIST WILL BE PROVIDED UPON CONTRACT.

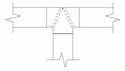
SYMBOLS:

NOT ALL SYMBOLS ARE SHOWN ON THESE DRAWINGS

DUCT-(SIZE VARIES)
FIRST FIGURE = SIDE SHOWN
SECOND FIGURE = SIDE NOT SHOWN

DIRECTION OF FLOW IN DUCT


ELBOW WITH TURNING VANES


TEE WITH TURNING VANES

DAMPER

RECTANGULAR RETURN DUCT
TURNING DOWN

RECTANGULAR RETURN DUCT
TURNING UP

RECTANGULAR SUPPLY DUCT
TURNING DOWN

RECTANGULAR SUPPLY DUCT
TURNING UP

RECTANGULAR EXHAUST DUCT
TURNING UP

RECTANGULAR EXHAUST DUCT
TURNING DOWN

RETURN OR EXHAUST DUCT TAP
FROM BOTTOM OF DUCT

ROUND DUCT TURNING DOWN

ROUND DUCT TURNING UP

RETURN, SUPPLY, OR EXHAUST
BRANCH DUCT IN SIDE OF DUCT
W/VOLUME DAMPER

SMOKE DAMPER

DUCT SMOKE DETECTOR

DIFFERENTIAL PRESSURE SENSOR

DIFFERENTIAL PRESSURE
TRANSMITTER

SUPPLY OR VENTILATING DIFFUSER
W/CFM AND FIXTURE TYPE SHOWN
CD-1
350 CFM

RETURN OR EXHAUST DUCT
W/CFM AND FIXTURE TYPE SHOWN
RG-1
350 CFM

RETURN/EXHAUST AIR
(AIR FLOW)

RETURN
(Block sz = 12" sq.; Scale up for 24" sq.)
(RTN-EXH)

EXHAUST FAN
(Block sz = 12" sq.; Scale up for 24" sq.)

EXHAUST GRILLE
(Block sz = 12" sq.; Scale up for 24" sq.)

ABBREVIATIONS:

ABBREVIATED	UN-ABBREVIATED
AFF	ABOVE FINISHED FLOOR
AD	ACCESS DOOR
ALT	ALTERNATE
BOD	BOTTOM OF DUCT
BTU/H	BRITISH THERMAL UNITS PER HOUR
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
FPM	FEET PER MINUTE
FT	FEET
FV	FACE VELOCITY
GA	GUAGE
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
IN	INCH
INWC	INCHES OF WATER COLUMN
INWG	INCHES OF WATER GUAGE
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BTU/H
MECH	MECHANICAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PH	PHASE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RAD	RADIUS
RH	RELATIVE HUMIDITY
SA	SUPPLY AIR
SEN	SENSIBLE
SP	STATIC PRESSURE
SQ FT	SQUARE FEET
TOD	TOP OF DUCT
TSP	TOTAL STATIC PRESSURE
TYP.	TYPICAL
VFD	VARIABLE FREQUENCY DRIVE
V	VELOCITY
WB	WET BULB

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PROJECT STATUS
100% SUBMITTAL

PROJECT NAME
RIVIERA BEACH PD

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Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

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FIRING RANGE EQUIPMENT DRAWINGS

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SPECIFICATIONS:

SECTION 23000 GENERAL REQUIREMENTS.

1. THIS WORK SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FIXTURES, AND DEVICES FOR THE ENTIRE MECHANICAL WORK AND A COMPLETE OPERATING AND TESTED INSTALLATION AS REQUIRED FOR THIS PROJECT.
2. ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL AND STATE RULES AND REGULATIONS APPLICABLE TO THE TRADE AFFECTED. AFTER ENTERING INTO THIS CONTRACT, THE CONTRACTOR WILL COMPLETE ALL WORK NECESSARY TO MEET THESE REQUIREMENTS WITHOUT EXTRA EXPENSES TO THE OWNER.
3. APPLICABLE CODES SHALL BE THE LATEST EDITION OF IBC, IMC, IPC, AND IFC. INDUSTRY STANDARDS SHALL BE AS FOLLOWS: ARI, ADC, AMCA, AGA, ANSI, ASHRAE, ASME, ASTM, AWWA, ETL, IEEE, NFPA, NEC, NEMA, NESC OSHA, SMACNA, AND UL.
4. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS TO PERFORM THIS WORK.
5. SHOP DRAWINGS AND COORDINATION DRAWING SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER AND ATI FOR REVIEW AND MUST BE COORDINATE WITH ALL OTHER TRADES. SHOP DRAWINGS SHALL INCLUDED PLANS, ELEVATIONS, SECTIONS AND INDICATE PRESSURE CLASS. DRAWINGS SHALL ALSO INCLUDE FITTINGS, REINFORCING AND SPACING, SEAM AND JOINT CONSTRUCTION DETAILS. PENETRATIONS THROUGH PARTITIONS AND FIRE-RATE WALLS SHALL BE INDICATED. HANGERS AND SUPPORTS WITH BUILDING ATTACHMENT AS WELL AS VIBRATION ISOLATION SHALL ALSO BE INCLUDED. SHEETMETAL SHOP DRAWINGS WILL BE REQUIRED FOR ALL DUCTWORK IN THE ENTIRE BUILDING. THESE DRAWINGS SHALL BE COORDINATED WITH ALL PIPING, CONDUIT, VALVES, EQUIPMENT AND DUCTWORK.
6. THE CONTRACT DRAWINGS SHOW THE GENERAL DESIGN ARRANGEMENTS AND THE EXTENT OF THE SYSTEMS. THE DRAWINGS MAY INCLUDE DETAILS THAT SHOW MORE NEARLY EXACT LOCATIONS AND ARRANGEMENTS; HOWEVER, THE LOCATIONS ARE SHOWN DIAGRAMMATICALLY, AND ARE TO BE REGARDED AS GENERAL. IT SHALL BE THE WORK OF THIS CONTRACTOR TO MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE COMPONENTS AND SYSTEMS FIT. THE DRAWINGS SHALL NOT BE SCALED FOR ROUGHING IN MEASUREMENTS NOR SHALL THEY BE USED AS SHOP DRAWINGS.
7. EXISTING CONDITIONS SHALL BE CAREFULLY EXAMINED BY THIS CONTRACTOR. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING SERVICES AND UNDERSTAND THE STRUCTURAL AND ELECTRICAL DRAWINGS AND REQUIREMENTS NEEDED TO COMPLETE THIS WORK.
8. THE EQUIPMENT CAPACITIES SHOWN FOR THE EQUIPMENT IS THE MINIMUM ACCEPTABLE. ALL EQUIPMENT SUBMITTALS SHALL GIVE THE SPECIFIED CAPACITY AND PERFORMANCE AT THE GIVEN JOB-SITE ELEVATION.
9. ALL EQUIPMENT SHALL BE FURNISHED AND INSTALLED STRUCTURALLY ADEQUATE TO WITHSTAND THE SEISMIC FORCES AS OUTLINED IN THE INTERNATIONAL BUILDING CODE AND THE SMACNA GUIDELINES FOR THE AREA WHICH THIS PROJECT IS BEING CONSTRUCTED.
10. THE CONTRACTOR SHALL REFER TO OTHER DRAWINGS AND PARTS OF THIS SPECIFICATION THAT COVER WORK OF OTHER TRADES THAT IS CARRIED ON IN CONJUNCTION WITH THE MECHANICAL WORK SUCH THAT ALL WORK CAN PROCEED WITHOUT INTERFERENCE RESULTING FROM LACK OF COORDINATION. THE CEILING CAVITY MUST BE CAREFULLY REVIEWED AND COORDINATED WITH ALL TRADES. THIS CONTRACTOR SHALL INSURE THAT THE INSTALLATION OF ALL DUCTWORK, PIPING AND EQUIPMENT IS IN COMPLIANCE WITH ARTICLES 110-16 AND 384-4 OF THE NATIONAL ELECTRICAL CODE RELATIVE TO PROPER CLEARANCES IN FRONT OF AND OVER ALL ELECTRICAL PANELS AND EQUIPMENT. NO PIPING OR DUCTWORK SHALL BE ALLOWED TO RUN OVER ELECTRICAL PANELS.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF A SATISFACTORY PIECE OF WORK IN ACCORDANCE WITH THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS. HE SHALL PROVIDE AS A PART OF HIS WORK AND WITHOUT EXPENSE, ALL INCIDENTAL ITEMS REQUIRED EVEN THOUGH THESE ITEMS ARE NOT PARTICULARLY SPECIFIED OR INDICATED. THE INSTALLATION SHALL BE MADE SO THAT SEVERAL COMPONENT PARTS WILL FUNCTION TOGETHER AS A WORKABLE SYSTEM AND SHALL BE LEFT WITH ALL EQUIPMENT PROPERLY ADJUSTED AND IN WORKING ORDER. THE CONTRACTOR SHALL FAMILIARIZE THE OWNER'S REPRESENTATIVE WITH MAINTENANCE AND LUBRICATION INSTRUCTIONS AS PREPARED BY THE CONTRACTOR AND SHALL EXPLAIN AND FULLY INSTRUCT HIM RELATIVE TO OPERATING, SERVICING, AND MAINTENANCE OF EACH ITEM.
12. WORKMANSHIP SHALL BE THE BEST QUALITY OF ITS KIND FOR THE RESPECTIVE INDUSTRIES, TRADE, CRAFTS, AND PRACTICES, AND SHALL BE ACCEPTABLE IN EVERY RESPECT TO THE OWNERS REPRESENTATIVE. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, AND OSHA SAFETY REQUIREMENTS IN PERFORMANCE WITH THIS WORK.
13. THE ACCESS TO EQUIPMENT SHOWN ON THE DRAWINGS IS THE MINIMUM ACCEPTABLE SPACE REQUIREMENTS. ALL OPEN DUCT AND PIPE OPENINGS SHALL BE ADEQUATELY COVERED AT ALL TIME TO PREVENT ITEMS FROM ENTERING.
14. NO CUTTING OR DRILLING IN STRUCTURAL MEMBERS SHALL BE DONE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
15. ALL FLOOR MOUNTED MECHANICAL EQUIPMENT SHALL BE SET ON 6-INCH HIGH CONCRETE BASE, UNLESS OTHERWISE NOTED OR SHOWN ON DRAWINGS. THE UNISTRUT INSERT OF DUCTWORK AND PIPING SYSTEMS SHALL INCLUDE ALL INSERTS, VERTICAL SUPPORTS, HORIZONTAL SUPPORT MEMBERS, CLAMPS, HANGERS, ROLLERS, BOLTS, NUTS AND ANY OTHER ACCESSORY ITEMS FOR A COMPLETE SUPPORTING SYSTEM.
16. UPON COMPLETION OF THIS WORK REMOVE ALL SURPLUS MATERIAL AND RUBBISH RESULTING FROM THIS WORK AND LEAVE THE PREMISES IN A CLEAN AND ORDERLY CONDITION.
17. THE ENTIRE MECHANICAL SYSTEM INCLUDING PLUMBING AND HVAC SYSTEMS SHALL BE QUIET IN OPERATION. THE CONTRACTOR SHALL MAKE PROMPTLY AND FREE OF CHARGE, UPON NOTICE FROM THE OWNER, ANY NECESSARY REPAIRS DUE TO DEFECTIVE WORKMANSHIP OR MATERIALS THAT MAY OCCUR DURING A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
18. PRE FILTERS USED DURING CONSTRUCTION AND TESTING SHALL BE REPLACED PRIOR TO TURNING THE SYSTEM OVER TO THE OWNER.

SECTION 230100 OPERATION AND MAINTENANCE MANUALS

19. THE CONTRACTOR SHALL TURN OVER TO THE OWNER THE OPERATION AND MAINTENANCE MANUALS WITH THE BALANCING REPORTS. THE MANUALS SHALL INCLUDE AIR-BALANCING REPORTS, SYSTEM COMMISSIONING PROCEDURES, START-UP TESTS AND REPORTS. ALSO INCLUDED SHALL BE THE EQUIPMENT AND SYSTEM PERFORMANCE TEST REPORTS AND WARRANTIES.

SECTION 233001 METAL DUCTS

20. THIS SECTION INCLUDES RECTANGULAR AND ROUND METAL DUCTWORK FOR VENTILATING, AIR CONDITIONING SYSTEMS IN PRESSURE CLASSES FROM MINUS 2 INCHES TO PLUS 10 INCHES WATER GAGE.
21. THE DUCT SYSTEM DESIGNS, AS INDICATED, HAVE BEEN USED TO SELECT AND SIZE AIR MOVING AND DISTRIBUTION EQUIPMENT AND OTHER COMPONENTS OF THE HVAC AIR SYSTEM. CHANGES OR ALTERATIONS TO THE LAYOUT OR CONFIGURATION OF THE DUCT SYSTEM MUST BE SPECIFICALLY APPROVED IN WRITING. APPROVED LAYOUT MODIFICATIONS PROPOSED MUST BE WITHOUT INCREASING THE SYSTEM TOTAL STATIC PRESSURE.
22. THE GENERAL FABRICATION REQUIREMENTS SHALL ALSO COMPLY WITH ALL SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS. CONSTRUCTION SHALL BE BASED ON STATIC PRESSURES INDICATED ON THE SCHEDULES, DRAWINGS AND SPECIFICATIONS. TYPICAL TOTAL STATIC PRESSURE OF THE SUPPLY FAN SYSTEMS ARE IN THE 2.5" RANGE AND THE EXHAUST SYSTEMS ARE TYPICALLY IN THE 8" RANGE, SEE SCHEDULES FOR EXACT PRESSURES. COMPLIANCE OF THIS WORK SHALL ALSO CONFORM TO NFPA STANDARD 90A.
23. TRANSVERSE JOINTS: SELECT JOINT TYPES AND FABRICATE ACCORDING TO "SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-1, RECTANGULAR DUCT/TRANSVERSE JOINTS FOR STATIC-PRESSURE CLASS AS REQUIRED FOR THIS PROJECT, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT SUPPORT INTERVALS, AND OTHER PROVISIONS ARE TO BE PER THE SMACNA STANDARDS.
24. LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-2, "RECTANGULAR DUCT/LONGITUDINAL SEAMS," FOR STATIC-PRESSURE CLASS FOR THIS PROJECT, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS ARE TO BE PER THE SMACNA STANDARDS.
25. ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS, AND OTHER DUCT CONSTRUCTION: SELECT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 4, "FITTINGS AND OTHER CONSTRUCTION" FOR STATIC-PRESSURE CLASS FOR THIS PROJECT, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS ARE TO BE PER SMACNA STANDARDS.
26. ROUND DUCTS AND FITTINGS, GENERAL FABRICATION REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 3, "ROUND, OVAL, AND FLEXIBLE DUCT" BASED ON INDICATED STATIC-PRESSURE CLASS FOR THIS PROJECT.
27. TRANSVERSE JOINTS: SELECT JOINT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-1, "ROUND DUCT TRANSVERSE JOINTS," FOR STATIC PRESSURE CLASS FOR THIS PROJECT, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS PER SMACNA STANDARDS.
28. LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE", FIGURE 3-2, "ROUND DUCT LONGITUDINAL SEAMS," FOR STATIC-PRESSURE CLASS FOR THIS PROJECT APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS AS PER SMACNA STANDARDS.
29. TEES AND LATERALS: SELECT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-5, "90 DEGREE TEES AND LATERALS," AND FIGURE 3-6 "CONICAL TEES," FOR STATIC-PRESSURE CLASS PER THIS PROJECT, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS PER SMACNA STANDARDS.
30. SHEET METAL MATERIALS, GENERAL MATERIAL REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR ACCEPTABLE MATERIALS, MATERIAL THICKNESS, AND DUCT CONSTRUCTION METHODS UNLESS OTHERWISE INDICATED. SHEET METAL MATERIALS SHALL BE NEW PRODUCT WITHOUT IMPERFECTIONS. GALVANIZED SHEET STEEL: COMPLY WITH ASTM A 653. GALVANIZED COATING DESIGNATION: G60. REINFORCEMENT SHAPES AND PLATES: COMPLY WITH ASTM A 36, STEEL PLATES, SHAPES, AND BARS: BLACK AND GALVANIZED. TIE RODS: GALVANIZED STEEL, ¼-INCH MINIMUM DIAMETER FOR LENGTHS 36 INCHES OR LESS; ⅜-INCH MINIMUM DIAMETER FOR LENGTHS LONGER THAN 36 INCHES.
31. SEALANT AND GASKETS, GENERAL SEALANT AND GASKET REQUIREMENTS: SURFACE-BURNING CHARACTERISTICS FOR SEALANTS AND GASKETS SHALL HAVE A MINIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE DEVELOPED INDEX OF 50 WHEN TESTED ACCORDING TO UL723; CERTIFIED BY AN NRTL. USE A TWO PART TAPE SEALING SYSTEM OR A WATER BASED JOINT AND SEAM SEALANT, FLANGED JOINT SEALANT SHALL COMPLY WITH ASTM C 920.
32. HANGERS AND SUPPORTS, HANGER RODS: CADMIUM-PLATED STEEL RODS AND NUTS. STRAP AND ROD SIZES: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," TABLE 5-1, "RECTANGULAR DUCT HANGERS MINIMUM SIZE," AND TABLE 5-2, "MINIMUM HANGER SIZES FOR ROUND DUCT."
33. STEEL CABLES FOR GALVANIZED-STEEL DUCTS: GALVANIZED STEEL COMPLYING WITH ASTM A 603.STEEL CABLE END CONNECTIONS: CADMIUM-PLATED STEEL ASSEMBLIES WITH BRACKETS, SWIVEL, AND BOLTS DESIGNED FOR DUCT HANGER SERVICE: WITH AN AUTOMATIC-LOCKING AND CLAMPING DEVICE. DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-TAPPING METAL SCREWS: COMPATIBLE WITH DUCT MATERIALS.
34. TRAPEZE AND RISER SUPPORTS FOR GALVANIZED-STEEL DUCTS SHALL BE USED AS NEED AND ARE TO BE GALVANIZED - STEEL SHAPES AND PLATES. WIRE HANGERS ARE NOT ALLOWED. USE THREADED ROD TO STEEL JOIST WITH ANVIL STEEL WASHERS AND DOUBLE NUT CONNECTION. ONE INCH 18 GA GALVANIZED STEEL STRAPS ARE ALLOWED FOR SMALLER SINGLE RUN DUCTWORK.
35. INSTALL DUCTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" UNLESS OTHERWISE INDICATED. DUCTWORK IS TO BE INSTALLED WITH FEWEST JOINTS AS POSSIBLE. SHOP AND PREFABRICATE THE FITTINGS WHENEVER POSSIBLE. PREFABRICATED FITTINGS ARE TO BE USED FOR CHANGES IN DIRECTIONS AND BRANCH CONNECTIONS. UNLESS OTHERWISE INDICATED, INSTALL DUCTS VERTICALLY AND HORIZONTALLY, AND PARALLEL AND PERPENDICULAR TO BUILDING LINES AND WALLS. INSTALL DUCTS WITH A CLEARANCE OF AT LEAST 1 INCH, PLUS ALLOW FOR INSULATION THICKNESS WHEN NOTED IN THE SPECIFICATIONS OR DRAWINGS. WHERE DUCTS PASS THROUGH EXTERIOR WALLS AND ARE EXPOSED TO THE OUTSIDE OR VIEW, COVER THE OPENING BETWEEN THE WALL AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME METAL THICKNESS AS THE DUCT. OVERLAP OPENINGS ON FOUR SIDES BY AT LEAST 1-½ INCHES. DURING CONSTRUCTION PROTECT DUCT INTERIORS FROM MOISTURE, CONSTRUCTION DEBRIS AND DUST, AND OTHER FOREIGN MATERIALS AT ALL TIMES.
36. DUCT SEALING SHALL BE FOR THE DUCT STATIC PRESSURES, SEAL CLASSES, AND LEAKAGE CLASSES SPECIFIED IN "DUCT CONSTRUCTION SCHEDULE" ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE." THE CONTRACTOR SHALL COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 5, "HANGERS AND SUPPORTS."
37. THIS CONTRACTOR NEEDS TO GET APPROVAL FROM THE STRUCTURAL ENGINEER ON ATTACHMENT SELECTION AND SPACING OF THE SYSTEMS HE WANTS TO INSTALL AND THE SUPPORTING OF THE DUCTWORK FROM THE STRUCTURE. BUILDING ATTACHMENTS SHALL BE CONCRETE INSERTS, POWDER-ACTUATED FASTENERS, OR STRUCTURAL-STEEL FASTENERS APPROPRIATE FOR CONSTRUCTION MATERIALS TO WHICH HANGERS ARE BEING ATTACHED. IF CONSTRUCTION PHASING ALLOWS, INSTALL CONCRETE INSERTS BEFORE PLACING CONCRETE IS PREFERRED. POWDER-ACTUATED CONCRETE FASTENERS ARE TO BE INSTALLED AFTER CONCRETE IS PLACED AND COMPLETELY CURED. ONLY USE POWDER-ACTUATED CONCRETE FASTENERS FOR STANDARD-WEIGHT AGGREGATE CONCRETE OR FOR SLABS MORE WHICH HAVE A THICKNESS GREATER THAN 4 INCHES. POWDER-ACTUATED CONCRETE FASTENERS ARE NOT TO BE USED FOR LIGHTWEIGHT-AGGREGATE CONCRETES OR FOR SLABS LESS THAN 4 INCHES THICK.
38. HANGER SPACING: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," TABLE 5-1, "RECTANGULAR DUCT HANGERS MINIMUM SIZE," AND TABLE 5-2, "MINIMUM HANGER SIZES FOR ROUND DUCT," FOR MAXIMUM HANGER SPACING; INSTALL HANGERS AND SUPPORTS WITHIN 24 INCHES OF EACH ELBOW AND WITHIN 48 INCHES OF EACH BRANCH INTERSECTION. IF THE HANGERS ARE EXPOSED TO VIEW THEY SHALL BE THREADED ROD AND ANGLE OR CHANNEL SUPPORTS. INSTALL UPPER ATTACHMENTS TO STRUCTURES. SELECT AND SIZE UPPER ATTACHMENTS WITH PULL-OUT, TENSION, AND SHEAR CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS WHERE USED.
39. COORDINATE DUCT INSTALLATIONS AND SPECIALTY ARRANGEMENTS WITH DRAWINGS. MAKE DUCTWORK CONNECTIONS TO EQUIPMENT WITH FLEXIBLE CONNECTORS FOR THE RATED PRESSURE AND USE INDOOR OR OUTDOOR. COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR BRANCH, OUTLET AND INLET, AND FAN OR UNIT CONNECTIONS.
40. FABRICATE DUCTS WITH GALVANIZED SHEET STEEL EXCEPT AS OTHERWISE INDICATED AND AS FOLLOWS: ELBOW CONFIGURATION - RECTANGULAR DUCT: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 4-2 "RECTANGULAR ELBOWS." BRANCH CONFIGURATION - RECTANGULAR DUCT: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 4-6, "BRANCH CONNECTIONS." RECTANGULAR MAIN TO RECTANGULAR BRANCH: 45-DEGREE ENTRY.RECTANGULAR MAIN TO ROUND BRANCH PROVIDE A 45 DEGREE TYPE TAKE-OFF.

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PROJECT STATUS
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PROJECT NAME
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SPECIFICATIONS:

SECTION 233300 AIR DUCT ACCESSORIES

41. GENERAL, COMPLY WITH NFPA 90A, "INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS," AND WITH NFPA 90B, "INSTALLATION OF WARM AIR HEATING AND AIR CONDITIONING SYSTEMS." COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE"FOR ACCEPTABLE MATERIALS, MATERIAL THICKNESSES, AND DUCT CONSTRUCTION METHODS UNLESS OTHERWISE INDICATED. SHEET METAL MATERIALS SHALL BE FREE OF PITTING, SEAM MARKS, STAINS, DISCOLORATIONS, AND OTHER IMPERFECTIONS. MATERIALS, GALVANIZED SHEET STEEL: COMPLY WITH ASTM A 653, GALVANIZED COATING DESIGNATION G60. REINFORCEMENT SHAPES AND PLATES: GALVANIZED - STEEL REINFORCEMENT WHERE INSTALLED ON GALVANIZED SHEET METAL DUCTS: TIE RODS SHALL BE GALVANIZED STEEL, ¼-INCH MINIMUM DIAMETER FOR LENGTHS 36 INCHES OR LESS; ⅜-INCH MINIMUM DIAMETER FOR LENGTHS LONGER THAN 36 INCHES.
42. MANUAL VOLUME DAMPERS, STANDARD, STEEL, MANUAL VOLUME DAMPERS: STANDARD LEAKAGE RATING WITH LINKAGE OUTSIDE AIRSTREAM, SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS. FRAMES SHALL BE A HAT-SHAPED TYPE, GALVANIZED SHEET STEEL, MITERED AND WELDED CORNERS WITH FLANGES FOR ATTACHING TO WALLS. PROVIDE FRAMES FOR INSTALLING IN DUCTS. THE BLADES ARE TO BE MULTIPLE OR SINGLE BLADE OR PARALLEL THE BLADE AXLES SHALL BE GALVANIZED STEEL, DAMPERS IN DUCTS WITH PRESSURE CLASSES OF 3-INCH WG OR LESS SHALL HAVE AXLES FULL LENGTH OF DAMPER BLADES AND BEARINGS AT BOTH ENDS OF OPERATING SHAFT. 2.10.4 MANUAL BALANCING DAMPERS.
43. CONTROL DAMPERS, GENERAL REQUIREMENTS: USE PARALLEL BLADE CONFIGURATION FOR TWO-POSITION CONTROL. SEE DRAWINGS FOR SIZES.
44. CONSTRUCTION SHALL BE STANDARD STEEL. PROVIDE STANDARD LEAKAGE RATING WITH LINKAGE OUTSIDE AIRSTREAM, SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS. THE FRAMES SHALL BE HAT-SHAPED CHANNEL WITH INTEGRAL FLANGES. THE BLADES SHALL BE AIRFOIL, GALVANIZED STEEL WITH A PARALLEL BLADE CONFIGURATION. MATERIAL SHALL BE ASTM A 653 GALVANIZED STEEL. THE BLADE SEALS SHALL BE REPLACEABLE AND ARE TO BE MECHANICALLY ATTACHED EXTRUDED SILICONE, VINYL, OR PLASTIC COMPOSITE. THE JAMB SEALS ARE TO BE STAINLESS STEEL, OR COMPRESSION TYPE. THE AXLES SHALL BE MECHANICALLY ATTACHED TO BLADES. BEARINGS ARE TO BE STAINLESS STEEL MOUNTED IN THE FRAME. WHERE BLADE AXLES ARE INSTALLED IN VERTICAL POSITION, PROVIDE THRUST BEARINGS. THE LINKAGE SHALL BE CONCEALED IN FRAME AND CONSTRUCTED OF ALUMINUM AND PLATED OR STAINLESS STEEL WITH STAINLESS STEEL HARDWARE. THE DAMPERS AND ACTUATORS SHALL BE ACCESSIBLE FOR VISUAL INSPECTION AND SERVICE. DAMPER ACTUATORS SHALL OPERATE WITH DAMPERS WITH SUFFICIENT RESERVE POWER TO PROVIDE SMOOTH MODULATING ACTION OR TWO-POSITION ACTION AND PROPER SPEED OF RESPONSE AT VELOCITY AND PRESSURE CONDITIONS TO WHICH THE DAMPER IS SUBJECT TO. ACTUATORS SHALL PRODUCE SUFFICIENT POWER AND TORQUE TO CLOSE OFF AGAINST THE MAXIMUM SYSTEM PRESSURES ENCOUNTERED. ACTUATORS SHALL BE SIZED TO CLOSE OFF AGAINST THE FAN SHUTOFF PRESSURE AS A MINIMUM REQUIREMENT. PROVIDE ONE ACTUATOR FOR EACH DAMPER ASSEMBLY. MULTIPLE ACTUATORS REQUIRED TO DRIVE A SINGLE DAMPER ASSEMBLY SHALL OPERATE IN UNISON IF NEEDED.
45. FLANGE CONNECTIONS SHALL BE ADD-ON OR ROLL-FORMED, FACTORY-FABRICATED, SLIDE-ON TRANSVERSE FLANGE CONNECTORS, GASKETS, AND COMPONENTS, GALVANIZED STEEL, GAGE AND SHAPE TO MATCH CONNECTING DUCTWORK.
46. TURNING VANES SHALL COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE"; FIGURES 4-3, "VANES AND VANE RUNNERS," AND 4-4, "VANE SUPPORT IN ELBOWS." VANE CONSTRUCTION SHALL BE SINGLE OR DOUBLE WALL.
47. DUCT-MOUNTED ACCESS DOORS PROVIDE IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE"; FIGURES 7-2, "DUCT ACCESS DOORS AND PANELS." AND LATCHES: 1-BY-1-INCH BUTT OR PIANO HINGE AND CAM LATCHES. FABRICATE DOORS AIRTIGHT AND SUITABLE FOR DUCT PRESSURE CLASS. FRAME SHALL BE GALVANIZED SHEET STEEL WITH BEND-OVER TABS AND FOAM GASKETS.
48. FLEXIBLE CONNECTORS SHALL BE FLAME-RETARDANT OR NONCOMBUSTIBLE FABRICS COMPLY WITH UL 181, CLASS 1. THE OUTDOOR SYSTEM, FLEXIBLE CONNECTORS SHALL BE FABRIC GLASS FABRIC DOUBLE COATED WITH WEATHERPROOF, SYNTHETIC RUBBER RESISTANT TO UV RAYS AND OZONE.
49. DUCT ACCESSORY INSTALLATION SHALL BE ACCORDING TO APPLICABLE DETAILS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR METAL DUCTS. USE GALVANIZED-STEEL ACCESSORIES IN GALVANIZED STEEL. INSTALL VOLUME DAMPERS AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES EXTEND FROM LARGER DUCTS. WHERE DAMPERS ARE INSTALLED IN DUCTS HAVING DUCT LINER, INSTALL DAMPERS WITH HAT CHANNELS OF SAME DEPTH AS LINER, AND TERMINATE LINER WITH NOSING AT HAT CHANNEL. SEE DRAWINGS FOR SOME OF THE DAMPER LOCATIONS. HOWEVER DAMPERS WILL NEED TO BE PROVIDED AS REQUIRED IN THE SYSTEM TO BALANCE THE SYSTEM ADEQUATELY. DAMPERS ARE TO BE SET AT A FULLY OPEN POSITION BEFORE TESTING, ADJUSTING, AND BALANCING. INSTALL TEST HOLES AT FAN INLETS AND OUTLETS AND ELSEWHERE AS NEEDED FOR BALANCING. INSTALL DUCT ACCESS DOORS ON SIDES OF DUCTS TO ALLOW FOR INSPECTING, ADJUSTING, AND MAINTAINING ACCESSORIES AND EQUIPMENT AT THE FOLLOWING LOCATIONS: FIRE AND SMOKE DAMPERS LOCATIONS IF JOB REQUIRED! AS WELL AS CONTROL DAMPERS AREAS. DOORS ARE TO BE INSTALLED WITH SWING AGAINST DUCT STATIC PRESSURES.
50. INSTALL FLEXIBLE CONNECTORS TO CONNECT DUCTS TO EQUIPMENT. INSTALL DUCT TEST HOLES WHERE REQUIRED FOR TESTING AND BALANCING PURPOSES.

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PROJECT STATUS

100% SUBMITTAL

PROJECT NAME

RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME

VENTILATION SPECIFICATIONS

DRAWING NUMBER

6342

SHEET NUMBER

ZM004

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

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DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

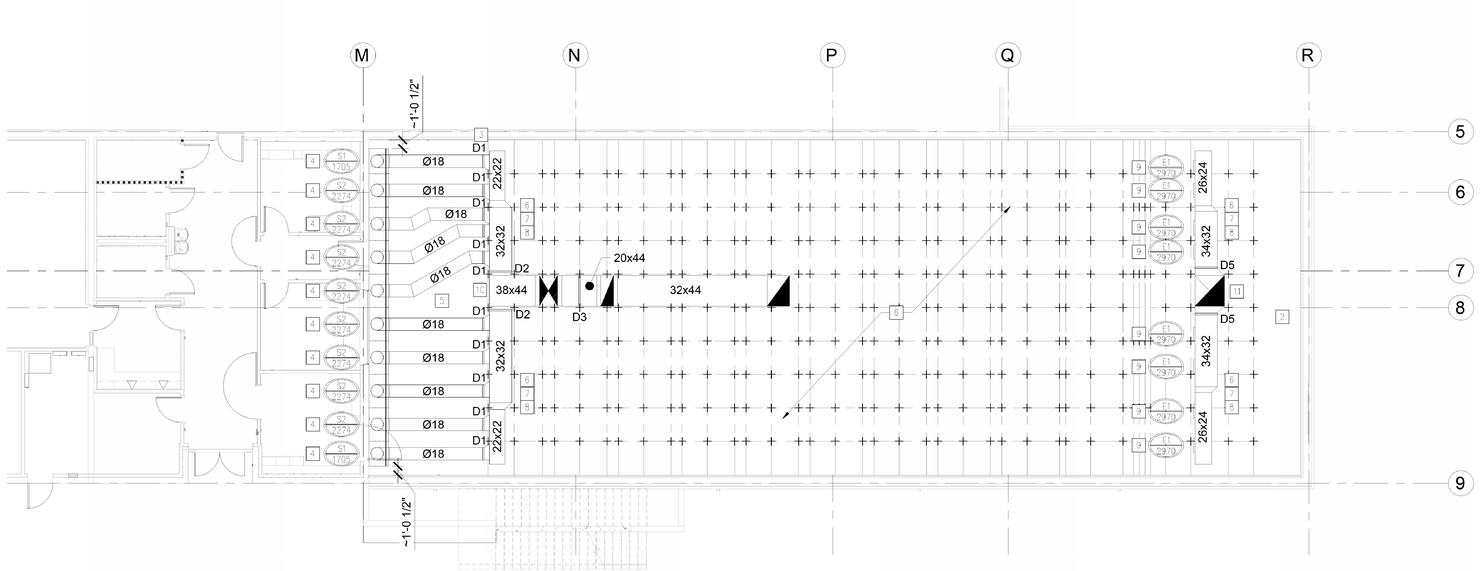
Q1.25E

KEYED NOTES (SHEET ZM101)

1. BALLISTIC CEILING (TYP.). SEE ATI RANGE DRAWINGS FOR DETAILS.
2. BULLET TRAP (TYP.). SEE ATI RANGE DRAWINGS FOR DETAILS.
3. HIGH EFFICIENCY TAKEOFF (HET) SUPPLIED BY MECHANICAL CONTRACTOR (M.C.). (TYP). MANUAL VOLUME DAMPER SUPPLIED BY ACTION TARGET. (TYP)
4. RADIAL SUPPLY AIR (SA) DIFFUSER SUPPLIED BY ATI AND INSTALLED BY M.C. INSTALL RADIAL DIFFUSER UNIFORMLY, PLUMB AND LEVEL, AND SYMMETRICAL ACROSS WIDTH OF RANGE. RADIAL DIFFUSER FACE SHALL BE A MINIMUM OF 7'-0" A.F.F. SEE DETAILS AT.07.01 AND AT.08.04 WITHIN ZM60X SERIES SHEETS. DIFFUSER SHALL BE FIELD BALANCED TO SUPPLY CFM STATED ON PLANS.
5. T-BAR LAY-IN CEILING SHALL BE PROVIDED BY OWNER OR GENERAL CONTRACTOR. T-BAR CEILING SHALL BE INSTALLED BETWEEN TOP OF RADIAL DIFFUSER AND THE STEEL SAFETY CEILING. SEE DETAIL AT.08.04 WITHIN ZM60X SERIES SHEETS.
6. ALL SUPPLY/RETURN/EXHAUST AIR DUCTWORK INSTALLED ABOVE CEILINGS, OR HUNG HIGH WITHIN SPACE SHALL BE SUPPORTED FROM OVERHEAD STRUCTURE (TYP). OWNER SHALL BE RESPONSIBLE FOR STRUCTURAL INTEGRITY REQUIRED TO SUPPORT ALL DUCTWORK IN ACCORDANCE WITH CODE AND INDUSTRY STANDARDS.
7. DUCTWORK HANGERS/SUPPORTS BY M.C. ALL SUPPORTS SHALL BE ABLE TO CARRY THE WEIGHT OF THE SECTION OF DUCT PLUS 15% SAFETY FACTOR. M.C. SHALL BE RESPONSIBLE FOR SUPPORTS FINAL DESIGN AND LOCATION IN COORDINATION WITH FINAL DUCTWORK LAYOUT. ALL SUPPORTS SHALL BE FABRICATED OF RUST RESISTANT MATERIALS.
8. ALL DUCTWORK (SA, RA, & EA) SHALL BE CROSS BRACED AND REINFORCED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE" LATEST EDITION FOR THE FOLLOWING STATED STATIC PRESSURE RATINGS:
   - •SUPPLY AIR (SA) DUCTWORK = 2.5"W.C.
   - •RETURN AIR (RA) DUCTWORK = 2.5"W.C.
   - •EXHAUST AIR (EA) DUCTWORK = 2.5"W.C. (SEE KEYNOTE 13 EXCEPTION)
9. PROVIDE LOUVER GRILLE WITH INTEGRAL OPPOSED BLADE BALANCE DAMPER. SEE AIR DEVICE SCHEDULE WITHIN ZM60X SERIES SHEETS. LOUVER SHALL BE FIELD BALANCED TO EXHAUST CFM STATED ON PLANS.
10. 38"x44" SUPPLY AIR (SA) DUCT UP THROUGH DECK TO ROOF TO CURB. CURB CONNECTION SHALL MATCH SA DUCT SIZE (26"x44") FROM RANGE. SEE ASSOCIATED ELEVATION SECTION WITHIN ZM301 SERIES SHEETS FOR CLARIFICATION.
11. 42"x44" EXHAUST AIR (EA) DUCT UP THROUGH DECK TO ROOF. EA DUCT SHALL CONNECT TO FB-1 (CORRESPONDING EF SUCTION). SEE ASSOCIATED ELEVATION SECTION WITHIN ZM301 SERIES SHEETS FOR CLARIFICATION.

GENERAL NOTES (SHEET ZM101)

1. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE AND BASED UPON MEASUREMENTS FROM THE BUILDINGS WALLS OR FINISHED FLOOR GENERATED IN A DIGITAL DRAWING. M.C. SHALL FIELD VERIFY ALL MEASUREMENTS AND EQUIPMENT/DUCTWORK LOCATIONS PRIOR TO INSTALLATION (TYP.).
2. FRAMED WALL BETWEEN RANGE AND ADJACENT SPACES SHALL BE AIRTIGHT TO ENSURE PROPER AIR MOVEMENT OF RANGE VENTILATION SYSTEM.
3. PROVIDE ANGLE IRON DUCT TRAPEZE WHERE INDICATED ON PLANS. TRAPEZE PROVIDED BY ACTION TARGET.
4. REFER TO DETAILS WITH ZM60X SERIES SHEETS FOR DUCTWORK INSTALLATION REQUIREMENTS.
5. TURNING VANES SHALL BE USED ON ALL 90, 45, AND 22.5 DEGREE CHANGE IN DIRECTION FITTINGS FOR ALL SUPPLY, RETURN, AND EXHAUST AIR SQUARE/RECTANGULAR DUCTS.
6. MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCTWORK FLOOR PENETRATIONS WITH STRUCTURAL ENGINEER TO ENSURE THE PROPER STRUCTURAL MODIFICATIONS HAVE BEEN MADE TO ACCOMMODATE PASSAGE.
7. M.C. SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL SEEN AND UNSEEN ARCHITECTURAL AND STRUCTURAL BUILDING FEATURES. FINAL DUCTWORK ROUTING SHALL BE THE RESPONSIBILITY OF THE M.C.
8. M.C. SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS, INCLUDING DUCTWORK ROUTING, TO ATI FOR REVIEW PRIOR TO SYSTEM INSTALLATION.
9. M.C. SHALL DESIGN, PROVIDE, AND INSTALL HVAC SUPPORTS/ANCHORAGE TO RESIST SEISMIC AND WIND LOADS PER APPLICABLE CODES.



HVAC PLAN (1 / ZM101)
SCALE - 1/8" = 1'-0"

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PROJECT STATUS
100% SUBMITTAL

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME
HVAC PLAN

DRAWING NUMBER
6342

SHEET NUMBER
ZM101

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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PROJECT STATUS
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PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.26E

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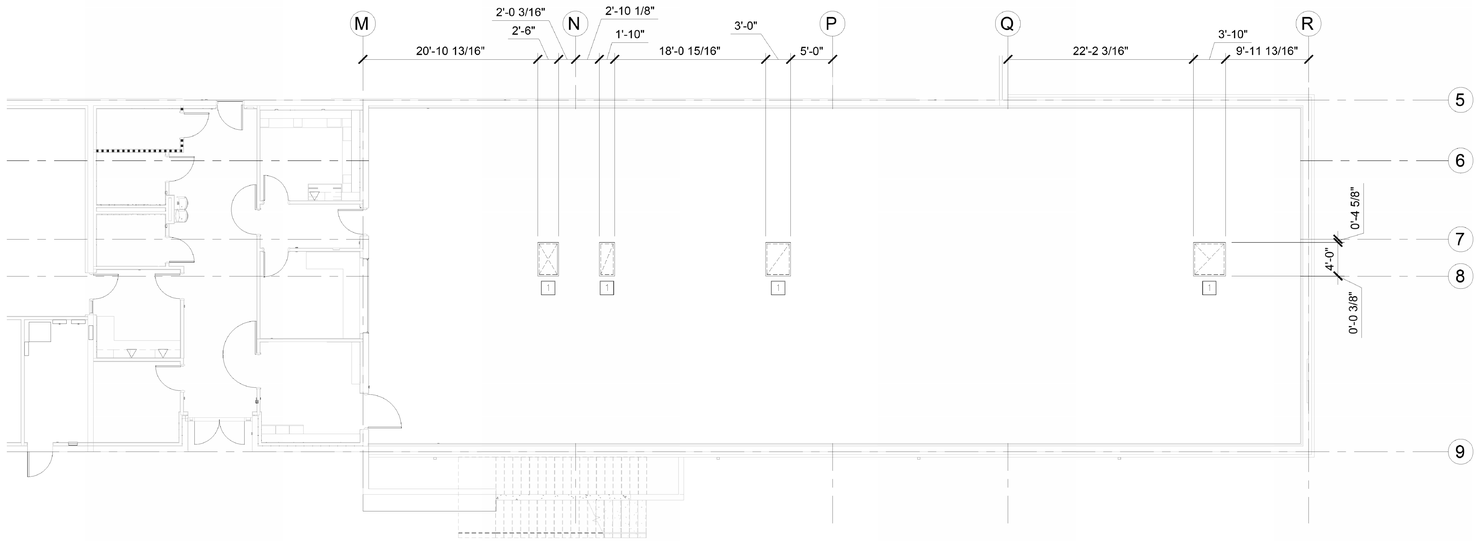
KEYED NOTES (SHEET ZM102)

1 CONTRACTOR SHALL PROVIDE A MINIMUM OF 2" OF CLEARANCE ON ALL SIDES FROM THE DUCT TO THE PENETRATION OPENING.

GENERAL NOTES (SHEET ZM102)

1. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE AND BASED UPON MEASUREMENTS FROM THE BUILDINGS WALLS OR FINISHED FLOOR GENERATED IN A DIGITAL DRAWING. M.C. SHALL FIELD VERIFY ALL MEASUREMENTS AND EQUIPMENT/DUCTWORK LOCATIONS PRIOR TO INSTALLATION (TYP.).
2. CURBS SHALL BE PROVIDED BY OTHERS AT ALL DUCT PENETRATIONS. FLASH CURB AND DUCT PENETRATIONS WATERTIGHT.



1 / ZM102 PENETRATION ROOF PLAN
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Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

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SHEET NAME

PENETRATION ROOF PLAN

DRAWING NUMBER

6342

SHEET NUMBER

ZM102

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PROJECT NAME

RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.27E

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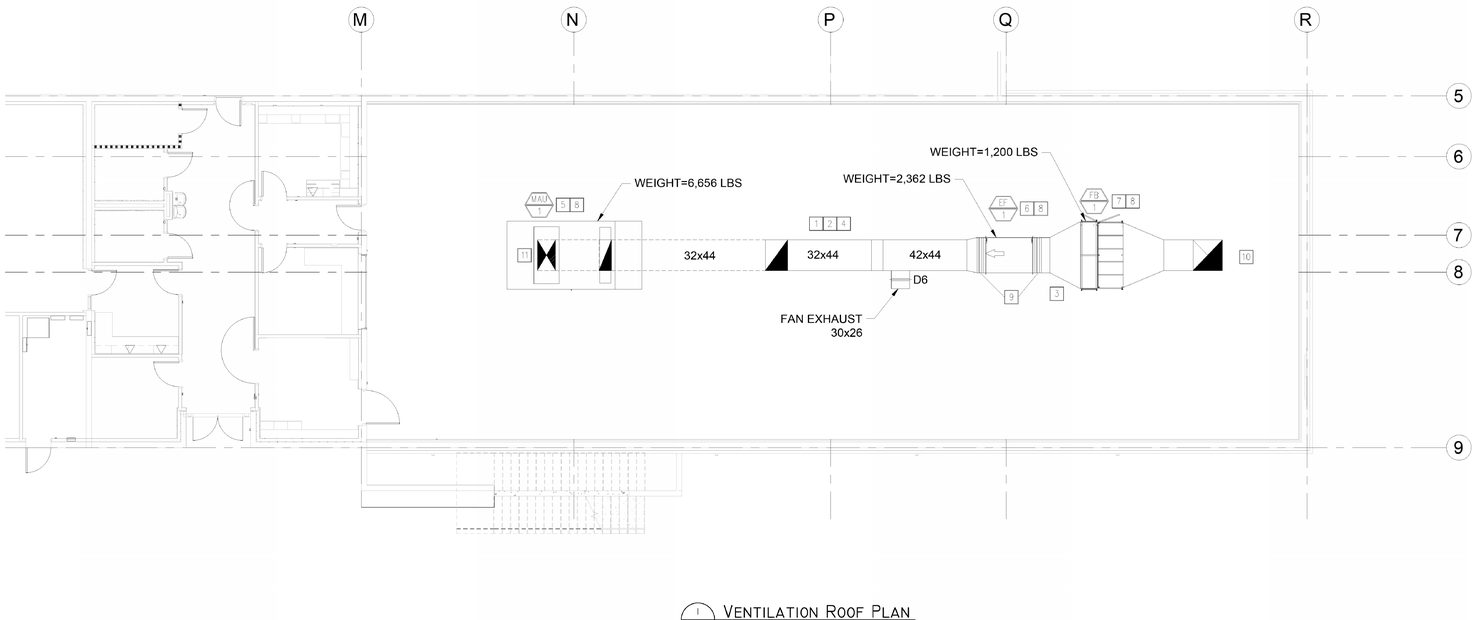
KEYED NOTES (SHEET ZM103)

1. ROOF APPLIED DUCTWORK SUPPORTS BY MECHANICAL CONTRACTOR (M.C.) ALL SUPPORTS SHALL BE ABLE TO CARRY THE WEIGHT OF THE SECTION OF DUCT PLUS 15% SAFETY FACTOR. M.C. SHALL BE RESPONSIBLE FOR SUPPORTS FINAL DESIGN AND LOCATION IN COORDINATION WITH FINAL DUCTWORK LAYOUT AND CODE. ALL SUPPORTS SHALL BE FABRICATED OF RUST RESISTANT MATERIALS.
2. ALL DUCTWORK (SA, RA, & EA) SHALL BE CROSS BRACED AND REINFORCED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE" LATEST EDITION FOR THE FOLLOWING STATED STATIC PRESSURE RATINGS:
   - SUPPLY AIR (SA) DUCTWORK = 2.5"W.C.
   - RETURN AIR (RA) DUCTWORK = 2.5"W.C.
   - EXHAUST AIR (EA) DUCTWORK = 2.5"W.C. (SEE EXCEPTION BELOW)
3. EXHAUST AIR EXCEPTION*** THE SEGMENT OF EXHAUST DUCT, INCLUDING THE TRANSITION, BETWEEN THE FILTER BANK (FB) AND THE EXHAUST FAN (EF) SHALL BE DESIGNED TO HANDLE A STATIC PRESSURE OF -8"W.C.
4. ALL EXTERIOR DUCTWORK SHALL BE CONSTRUCTED TO PEAK ON TOP TO PREVENT STANDING WATER. DUCTWORK MAY BE SEALED WATER-TIGHT, INSULATED WITH A CODE MINIMUM R-8 INSULATION, AND JACKETED OR WRAPPED WITH A UV PROTECTIVE COATING.
5. INSTALL MAKE UP AIR UNIT (MAU) ON ROOF IN THIS LOCATION. SEE SCHEDULES WITHIN ZM60X SERIES SHEETS FOR EQUIPMENT SPECIFICATIONS.THE CURB TO BE PROVIDED BY ATI, TO BE INSTALLED BY M.C., ROOF CURB SHALL BE SECURELY ANCHORED AND BRACED TO ROOF DECK IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SHALL MEET ALL SEISMIC REQUIREMENTS WHERE APPLICABLE.
6. INSTALL EXHAUST FAN (EF) ON EQUIPMENT RAILS ON ROOF IN THIS LOCATION. SEE SCHEDULES WITHIN ZM60X SERIES SHEETS FOR EQUIPMENT SPECIFICATIONS. M.C. SHALL PROVIDE A MINIMUM OF TWO (2) RAILS BELOW EXHAUST FAN (EF). ROOF APPLIED EQUIPMENT RAILS SHALL BE INSTALLED IN COORDINATION WITH THE EXHAUST FAN APPLIED EQUIPMENT SUPPORTS FROM MANUFACTURER.
7. INSTALL 2-STAGE FILTER BANK (FB) ON EQUIPMENT RAILS ON ROOF IN THIS LOCATION. SEE SCHEDULES WITHIN ZM60X SERIES SHEETS FOR EQUIPMENT SPECIFICATIONS. M.C. SHALL PROVIDE A MINIMUM OF THREE (3) RAILS BELOW FILTER BANK (FB). SUPPORTS SHALL BE INSTALLED IN PARALLEL TO SHORT SIDE DIMENSION (I.E. SAME DIRECTION AS AIRFLOW). RAILS SHALL BE PLACED ON THE EDGES AND IN THE MIDDLE OF THE FILTER BANK.
8. EQUIPMENT RAILS/SUPPORTS BY M.C. ALL RAILS/SUPPORTS SHALL BE ABLE TO CARRY THE WEIGHT OF THE EQUIPMENT PLUS 15% SAFETY FACTOR. M.C. SHALL BE RESPONSIBLE FOR RAILS/SUPPORTS FINAL DESIGN AND LOCATION IN COORDINATION WITH FINAL EQUIPMENT LOCATION AND CODE. ALL RAILS/SUPPORTS SHALL BE FABRICATED OF RUST RESISTANT MATERIALS.
9. M.C. SHALL PROVIDE FLEXIBLE FABRIC DUCT CONNECTOR INSTALLED BETWEEN DUCT AND MECHANICAL EQUIPMENT. (TYP).
10. 42"x44" EXHAUST AIR (EA) DUCT UP THROUGH DECK FROM BELOW. EA DUCT SHALL CONNECT TO FB-1 (CORRESPONDING EF SUCTION). SEE CONTINUATION ON SHEET ZM101.
11. 38"x44" SUPPLY AIR (SA) DUCT DOWN TO RANGE FROM CURB. OPENING IN CURB SHALL MATCH DUCT SIZE AND LOCATION. SEE CONTINUATION ON SHEET ZM101.

GENERAL NOTES (SHEET ZM103)

1. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE AND BASED UPON MEASUREMENTS FROM THE BUILDINGS WALLS OR FINISHED FLOOR GENERATED IN A DIGITAL DRAWING. M.C. SHALL FIELD VERIFY ALL MEASUREMENTS AND EQUIPMENT/DUCTWORK LOCATIONS PRIOR TO INSTALLATION (TYP.).
2. REFER TO DETAILS WITH ZM60X SERIES SHEETS FOR DUCTWORK INSTALLATION REQUIREMENTS.
3. TURNING VANES SHALL BE USED ON ALL 90, 45, AND 22.5 DEGREE CHANGE IN DIRECTION FITTINGS FOR ALL SUPPLY, RETURN, AND EXHAUST AIR SQUARE/RECTANGULAR DUCTS.
4. MECHANICAL CONTRACTOR (M.C.) SHALL COORDINATE ALL DUCTWORK FLOOR PENETRATIONS WITH STRUCTURAL ENGINEER TO ENSURE THE PROPER STRUCTURAL MODIFICATIONS HAVE BEEN MADE TO ACCOMMODATE PASSAGE.
5. ROOF CURBS SHALL BE PROVIDED BY ATI. FLASH CURB AND DUCT PENETRATIONS WATERTIGHT.
6. M.C. SHALL REFER TO ZM102 SERIES SHEETS FOR DIMENSIONS OF ROOF PENETRATION SIZES AND EQUIPMENT LOCATIONS.
7. M.C. SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL SEE AND UNSEEN ARCHITECTURAL AND STRUCTURAL BUILDING FEATURES. FINAL DUCTWORK ROUTING SHALL BE THE RESPONSIBILITY OF THE M.C.
8. M.C. SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS, INCLUDING DUCTWORK ROUTING, TO ATI FOR REVIEW PRIOR TO SYSTEM INSTALLATION.
9. M.C. SHALL DESIGN, PROVIDE, AND INSTALL HVAC SUPPORTS/ANCHORAGE TO RESIST SEISMIC AND WIND LOADS PER APPLICABLE CODES.



1 ZM103 VENTILATION ROOF PLAN
SCALE - 1/8" = 1'-0"

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JL2 ARCHITECTURE INC.
1678 Kingston Road
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32750

REGISTRATION
STATE OF FLORIDA — JOHNNIE LOWRUM JR. — AR 96098 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.28E

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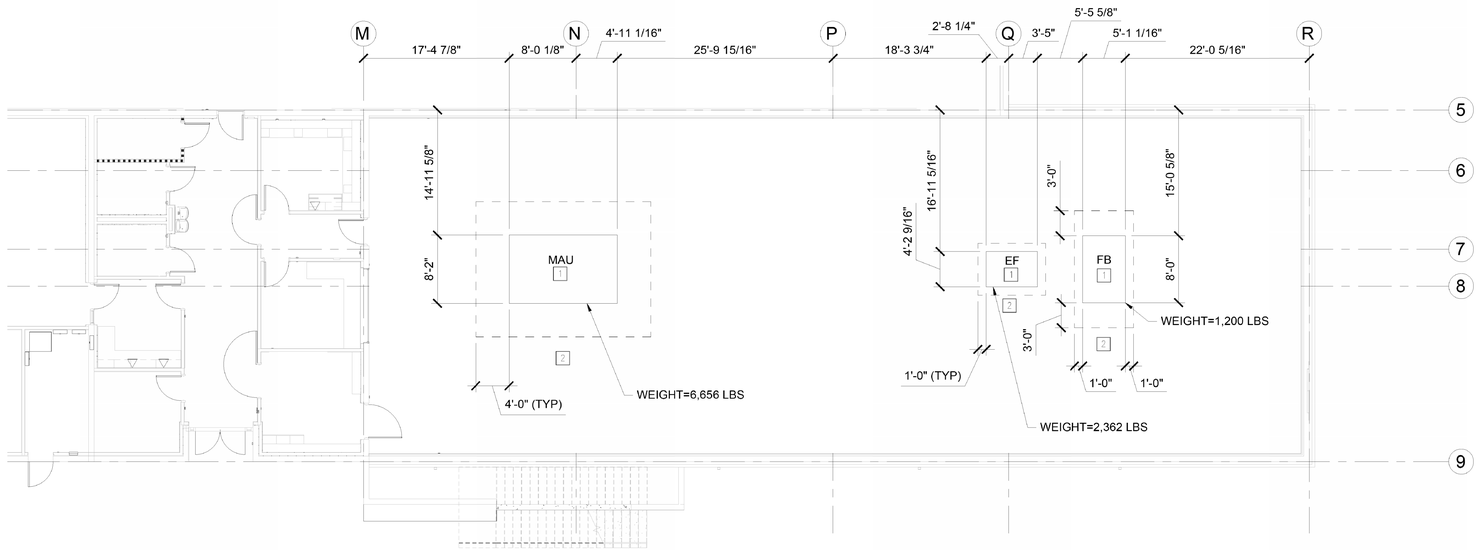
KEYED NOTES (SHEET ZM104)

1 CONTRACTOR SHALL PROVIDE SUPPORT FOR CURB & RAIL LOCATIONS

2 CONTRACTOR SHALL KEEP A MINIMUM CLEARANCE FROM THE UNITS

GENERAL NOTES (SHEET ZM104)

1. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE AND BASED UPON MEASUREMENTS FROM THE BUILDINGS WALLS OR FINISHED FLOOR GENERATED IN A DIGITAL DRAWING. M.C. SHALL FIELD VERIFY ALL MEASUREMENTS AND EQUIPMENT/DUCTWORK LOCATIONS PRIOR TO INSTALLATION (TYP.).
2. CURBS SHALL BE PROVIDED BY OTHERS AT ALL DUCT PENETRATIONS. FLASH CURB AND DUCT PENETRATIONS WATERTIGHT.
3. M.C. SHALL DESIGN, PROVIDE, AND INSTALL HVAC SUPPORTS/ANCHORAGE TO RESIST SEISMIC AND WIND LOADS PER APPLICABLE CODES.



1 ZM106 CURB AND RAIL PLAN
SCALE - 1/8" = 1'-0"

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RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME
CURB AND RAIL PLAN

DRAWING NUMBER
6342

SHEET NUMBER
ZM104

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

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FIRING RANGE EQUIPMENT DRAWINGS

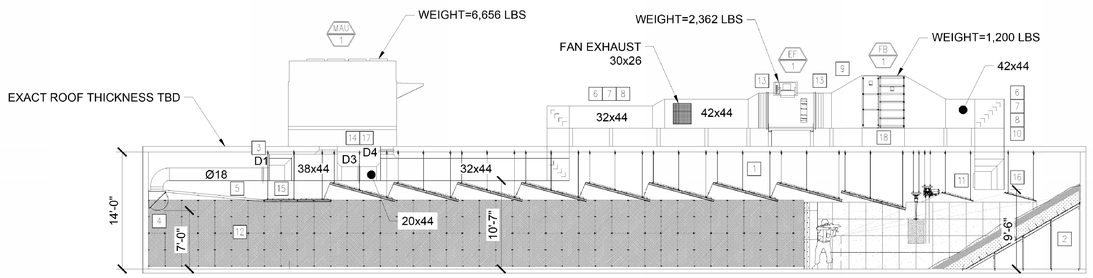
SHEET NUMBER
Q1.29E

KEYED NOTES (SHEET ZM301)

1. BALLISTIC CEILING (TYP.). SEE ATI RANGE DRAWINGS FOR DETAILS.
2. BULLET TRAP (TYP.). SEE ATI RANGE DRAWINGS FOR DETAILS.
3. HIGH EFFICIENCY TAKEOFF (HET) SUPPLIED BY MECHANICAL CONTRACTOR (M.C.). (TYP). MANUAL VOLUME DAMPER SUPPLIED BY ACTION TARGET. (TYP)
4. RADIAL SUPPLY AIR (SA) DIFFUSER SUPPLIED BY ATI AND INSTALLED BY M.C. INSTALL RADIAL DIFFUSER UNIFORMLY, PLUMB AND LEVEL, AND SYMMETRICAL ACROSS WIDTH OF RANGE. RADIAL DIFFUSER FACE SHALL BE A MINIMUM OF 7'-0" A.F.F. SEE DETAILS AT.07.01 AND AT.08.04 WITHIN ZM60X SERIES SHEETS. DIFFUSER SHALL BE FIELD BALANCED TO SUPPLY CFM STATED ON PLANS.
5. T-BAR LAY-IN CEILING SHALL BE PROVIDED BY OWNER OR GENERAL CONTRACTOR. T-BAR CEILING SHALL BE INSTALLED BETWEEN TOP OF RADIAL DIFFUSER AND THE STEEL SAFETY CEILING. SEE DETAIL AT.08.04 WITHIN ZM60X SERIES SHEETS.
6. ALL SUPPLY/RETURN/EXHAUST AIR DUCTWORK INSTALLED ABOVE CEILINGS, OR HUNG HIGH WITHIN SPACE SHALL BE SUPPORTED FROM OVERHEAD STRUCTURE (TYP). OWNER SHALL BE RESPONSIBLE FOR STRUCTURAL INTEGRITY REQUIRED TO SUPPORT ALL DUCTWORK IN ACCORDANCE WITH CODE AND INDUSTRY STANDARDS.
7. DUCTWORK HANGERS/SUPPORTS BY M.C. ALL SUPPORTS SHALL BE ABLE TO CARRY THE WEIGHT OF THE SECTION OF DUCT PLUS 15% SAFETY FACTOR. M.C. SHALL BE RESPONSIBLE FOR SUPPORTS FINAL DESIGN AND LOCATION IN COORDINATION WITH FINAL DUCTWORK LAYOUT. ALL SUPPORTS SHALL BE FABRICATED OF RUST RESISTANT MATERIALS.
8. ALL DUCTWORK (SA, RA, & EA) SHALL BE CROSS BRACED AND REINFORCED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE' LATEST EDITION FOR THE FOLLOWING STATED STATIC PRESSURE RATINGS:
   - •SUPPLY AIR (SA) DUCTWORK = 2.5"W.C.
   - •RETURN AIR (RA) DUCTWORK = 2.5"W.C.
   - •EXHAUST AIR (EA) DUCTWORK = 2.5"W.C. (SEE EXCEPTION BELOW)
9. EXHAUST AIR EXCEPTION*** THE SEGMENT OF EXHAUST DUCT, INCLUDING THE TRANSITION, BETWEEN THE FILTER BANK (FB) AND THE EXHAUST FAN (EF) SHALL BE DESIGNED TO HANDLE A STATIC PRESSURE OF -8"W.C. T-GRID CEILING SHALL REMAIN FREE OF ALL OBSTRUCTIONS BETWEEN DIFFUSER AND SHOOTING LINE INCLUDING BUT NOT LIMITED TO LIGHTS, SIGNAGE ETC.
10. ALL EXTERIOR DUCTWORK SHALL BE CONSTRUCTED TO PEAK ON TOP TO PREVENT STANDING WATER. DUCTWORK MAY BE SEALED WATER-TIGHT, INSULATED WITH A CODE MINIMUM R-8 INSULATION, AND JACKETED OR WRAPPED WITH A UV PROTECTIVE COATING.
11. PROVIDE LOUVER GRILLE WITH INTEGRAL OPPOSED BLADE BALANCE DAMPER. SEE AIR DEVICE SCHEDULE WITHIN ZM60X SERIES SHEETS. LOUVERS ARE TO BE INSTALLED AND LOCKED IN FULL OPEN POSITION UNTIL FIELD BALANCED. EXHAUST LOUVERS BALANCED TO CFM STATED ON PLANS.
12. CO SENSOR PROVIDED BY ATI. SENSOR INSTALLED A MAX OF 48-72" A.F.F. ON RANGE SIDEWALL, AND WITHIN 18" OF BACK EDGE OF SHOOTING STALL.
13. M.C. SHALL PROVIDE FLEXIBLE DUCTWORK FITTING AT CONNECTION OF DUCT TO EQUIPMENT (TYP.)
14. CURB PROVIDED AND INSTALLED BY GC. CURB SHALL BE BUILT IN COORDINATION WITH SCHEDULED MAU DIMENSIONS. ROOF CURB SHALL BE SECURELY ANCHORED AND BRACED TO ROOF DECK IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SHALL MEET ALL SEISMIC REQUIREMENTS WHERE APPLICABLE. FINAL DESIGN TO BE APPROVED BY ATI BEFORE MANUFACTURING.
15. 38"x44" SUPPLY AIR (SA) DUCT DOWN THROUGH DECK TO RANGE. M.C. SHALL TRANSITION SA DUCT FROM 26"x44" TO MATCH SA DUCT CONNECTION AT MAU-1.
16. 42"x44" EXHAUST AIR (EA) DUCT DOWN THROUGH DECK TO RANGE. EA DUCT SHALL CONNECT TO FB-1 (EF-1 SUCTION). SEE ASSOCIATED ELEVATION SECTION WITHIN ZM30X SERIES SHEETS FOR CLARIFICATION.
17. GC TO PROVIDE SLOPED CURB AT MAU-1 TO MATCH ROOF PITCH. CONTRACTOR SHALL FIELD VERIFY FINAL ROOF PITCH BEFORE INSTALLATION.
18. MC WILL PROVIDE A MINIMUM 3 RAILS RUNNING IN THE DIRECTION OF AIRFLOW

GENERAL NOTES (SHEET ZM301)

1. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE AND BASED UPON MEASUREMENTS FROM THE BUILDINGS WALLS OR FINISHED FLOOR GENERATED IN A DIGITAL DRAWING. M.C. SHALL FIELD VERIFY ALL MEASUREMENTS AND EQUIPMENT/DUCTWORK LOCATIONS PRIOR TO INSTALLATION (TYP.).
2. REFER TO DETAILS WITH ZM60X SERIES SHEETS FOR DUCTWORK INSTALLATION REQUIREMENTS.
3. TURNING VANES SHALL BE USED ON ALL 90, 45, AND 22.5 DEGREE CHANGE IN DIRECTION FITTINGS FOR ALL SUPPLY, RETURN, AND EXHAUST AIR SQUARE/RECTANGULAR DUCTS.
4. MECHANICAL CONTRACTOR (M.C.) SHALL COORDINATE ALL DUCTWORK FLOOR PENETRATIONS WITH STRUCTURAL ENGINEER TO ENSURE THE PROPER STRUCTURAL MODIFICATIONS HAVE BEEN MADE TO ACCOMMODATE PASSAGE.
5. ROOF CURB SHALL BE PROVIDED BY GC. FLASH CURB AND DUCT PENETRATIONS WATERTIGHT.
6. M.C. SHALL REFER TO ZM102 SERIES SHEETS FOR DIMENSIONS OF ROOF PENETRATION SIZES AND EQUIPMENT LOCATIONS.
7. M.C. SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL SEEN AND UNSEEN ARCHITECTURAL AND STRUCTURAL BUILDING FEATURES. FINAL DUCTWORK ROUTING SHALL BE THE RESPONSIBILITY OF THE M.C.
8. M.C. SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS, INCLUDING DUCTWORK ROUTING, TO ATI FOR REVIEW PRIOR TO SYSTEM INSTALLATION.
9. M.C. SHALL DESIGN, PROVIDE, AND INSTALL HVAC SUPPORTS/ANCHORAGE TO RESIST SEISMIC AND WIND LOADS PER APPLICABLE CODES.



1 ZM301 VENTILATION SECTION
SCALE - 1/8" = 1'-0"

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Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

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SHEET NAME

VENTILATION SECTION

DRAWING NUMBER

6342

SHEET NUMBER

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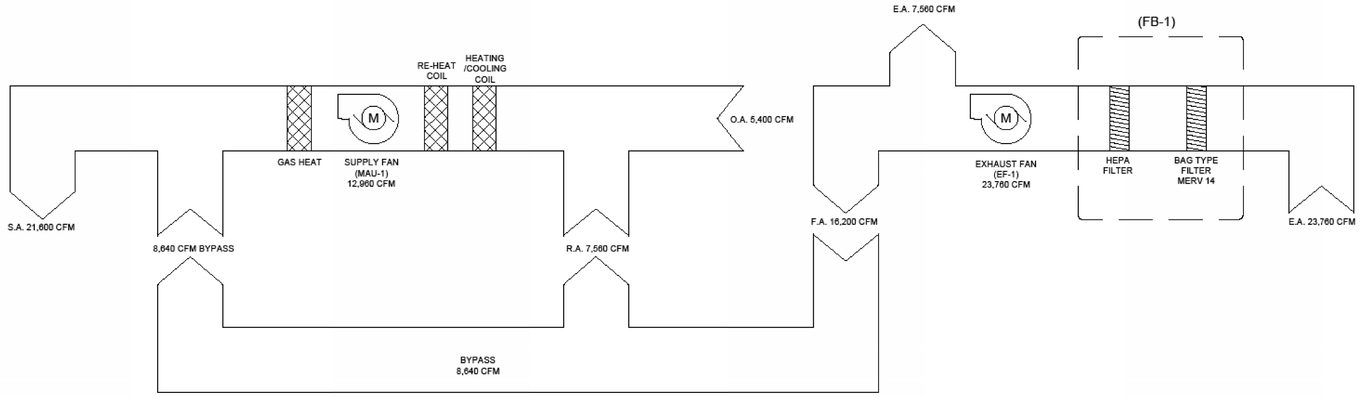
Q1.30E



AIR FLOW SCHEMATIC-1 (1 / ZM501)

NOT TO SCALE

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SHEET NAME

AIRFLOW SCHEMATIC RECIRC SYSTEM

DRAWING NUMBER

6342

SHEET NUMBER

ZM501

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PACKAGED MAKE-UP AIR UNIT

UNIT													COOLING							HOT GAS REHEAT			HEATING					NOTES:
ID	LOCATION	SERVICE	MANUFACTURER AND MODEL NUMBER	WEIGHT (LB)	ELECTRICAL			EFFICIENCY	SUPPLY FAN			FILTERS	EAT DB/WB (°F)	LAT DB/WB (°F)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	COMPRESSOR			TOTAL CAPACITY (MBH)	EAT DB/WB (°F)	LAT DB/WB (°F)	TYPE	MODULATION	TOTAL CAPACITY (MBH)	EDB (°F)	LDB (°F)	
					VOLTAGE (V/HZ/PH)	MCA (A)	MROPD (A)	EER	AIRFLOW (CFM)	TSP ("W.C.)	MOTOR SIZE	EFFICIENCY					MODULATION	QTY	REFRIGERANT									
MAU-1	ROOF	RANGE	GREENHECK RV-75-60I-O-G2	6,656	460/60/3	133.2	150	9.8	12,960	5.025	7.5	MERV 8	81.8/68.5	51.3/51.2	665.9	414	VARIABLE SPEED	4	R-454B	459.4	51.3	84.5	NAT. GAS	HIGH TURNDOWN	486	56.9	91.6	1,2,3,4,5,6,7,8

GENERAL NOTES:
1. APPROVED RTU MANUFACTURERS ARE: GREENHECK, OR ATI-APPROVED EQUIVALENT.
2. COOLING COIL CAPACITIES LISTED ARE AT SITE ALTITUDE.
3. SEE EQUIPMENT TECHNICAL DATA SHEET FOR ALL UNIT DIMENSIONS.
4. UNIT TO BE SUPPLIED WITH 24" CURB MATCHED TO THE MAU FOOTPRINT.

ACCESSORIES:
1. FACTORY-INSTALLED NON-FUSED ELECTRICAL DISCONNECT
2. GFCI CONVENIENCE OUTLET (NON-POWERED), SEPARATE CIRCUIT, WIRED BY E.C.
3. CURB SUPPLIED BY ATI. REFER TO GENERAL NOTES FOR MORE INFORMATION.
4. VARIABLE SPEED SUPPLY FAN MOTOR CONTROLLED BY VFD.
5. MOTORIZED OA DAMPER, DDC CONTROL
6. HIGH-STATIC PRESSURE SUPPLY FAN.
7. BACNET-IP INTERFACE
8. PHASE AND BROWN OUT PROTECTION

DESIGN CONDITIONS

SPACE TYPE	WINTER INDOOR		WINTER OUTDOOR		SUMMER INDOOR		SUMMER OUTDOOR	
	DB (°F)	%RH	DB (°F)	WB (°F)	DB (°F)	%RH	DB (°F)	WB (°F)
FIRING RANGE	70	-	44.2	-	70	50	91.4	80.1

NOTES:
1. OUTDOOR DESIGN TEMPERATURES ARE FROM ASHRAE WEATHER DATA FOR WEST PALM BEACH, FL (99.6% HEATING, 0.4% COOLING DESIGN VALUES).
2. INDOOR DESIGN CONDITIONS ARE ASSUMED FOR EQUIPMENT SIZING PURPOSES.

EXHAUST FAN SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	AIR		FAN		ELECTRICAL		PHYSICAL		NOTES
					MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN H20)	FAN SPEED (RPM)	OPERATING POWER (HP)	MOTOR SPEED (RPM)	MOTOR SIZE (HP)	POWER V/Hz/PH	LENGTH/ WIDTH/ HEIGHT (IN.)	ESTIMATED WEIGHT (LBS)	
EF-1	GREENHECK QEI-36	ROOF	INLINE MIXED FLOW	EXHAUST	23,760	7.5	1316	42.28	1725	50	460/60/3	73/55/82	2,362	1,2,3,4,5,6

NOTES:
1. PUNCHED INLET AND OUTLET FLANGES WITH COMPANION FLANGES.
2. DIRECT MOUNT, RESTRAINED-SPRING ISOLATORS, 1 INCH.
3. FAN HOUSING SEALED FOR OUTDOOR USE.
4. ENERGY EFFICIENT MOTOR WITH CLASS-B INSULATION.
5. WEATHER-PROOF MOTOR ENCLOSURE.
6. VFD-RATED MOTOR.

VARIABLE FREQUENCY DRIVE SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	UNIT SERVED	MOTOR/ELECTRICAL DATA			PHYSCIAL					NOTES
			HP	AMPERE RATING	V/Hz/PH	LENGTH (IN.)	WIDTH (IN.)	HEIGHT (IN.)	ENCLOSURE TYPE	WEIGHT (LBS.)	
VFD-1	ABB ACH580-01-065A-4	EF-1	50	65	460/60/3	10.1	8.0	23.7	IP21 / UL TYPE 1	44.1	1,2

NOTES:
1. EXTERNAL VFD'S ARE NOT REQUIRED WHERE HVAC EQUIPMENT PROVIDED BY THE MANUFACTURER IS FURNISHED WITH INTEGRAL VFD'S.
2. PROVIDE BACNET IP INTERFACE - ABB# FBIP-21

AIR DEVICE SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	SERVICE	TYPE	QTY.	CONNECTION SIZE (IN.) OR (W X H)	FACE SIZE (IN.) OR (H X W)	FINISH	NOTES
S1	ACTION TARGET	RANGE SUPPLY	PERFORATED RADIAL	10	Ø18"	48 X 18	ALUMINUM	1,2
E1	GREENHECK VCD-20	RANGE EXHAUST	3V OPPOSED-BLADE CONTROL DAMPER	8	-	20 X 20	GALVANIZED	3,5
D1	GREENHECK MBDR-50	RANGE SUPPLY	SINGLE-BLADE BALANCE DAMPER	10	Ø18"	-	GALVANIZED	6, 7
D2	GREENHECK VCD-20	RANGE SUPPLY BRANCHES	3V OPPOSED-BLADE CONTROL DAMPER	2	-	32 X 32	GALVANIZED	5, 7
D3	GREENHECK VCD-20	BYPASS	3V OPPOSED-BLADE CONTROL DAMPER	1	-	20 X 44	GALVANIZED	5, 8
D4	GREENHECK VCD-20	MAU RETURN	3V OPPOSED-BLADE CONTROL DAMPER	1	-	18 X 44	GALVANIZED	5, 8
D5	GREENHECK VCD-20	RANGE EXHAUST BRANCHES	3V OPPOSED-BLADE CONTROL DAMPER	1	-	34 X 32	GALVANIZED	5, 7
D6	GREENHECK VCD-20	FAN EXHAUST	3V OPPOSED-BLADE CONTROL DAMPER	1	-	30 X 26	GALVANIZED	5, 9

NOTES:
1. RADIAL DIFFUSER SHALL BE SUPPLIED BY ACTION TARGET.
2. PROVIDE OPPOSED BLADE DAMPER WITH LOUVER. DAMPER SHALL BE ADJUSTABLE THROUGH LOUVER FACE.
3. DIFFUSER SHALL BE INSTALLED IN ACCORDANCE WITH ACTION TARGET SPECIFICATIONS.
4. APPROVED MANUFACTURERS: TITUS, CARNES, NAILOR, PRICE, KRUEGER, METALAIRE, HART & COOLEY.
5. DAMPER CONSTRUCTION: 16 GA GALVANIZED STEEL, CHANNEL FRAME W/ SINGLE FLANGE, 3V BLADE TYPE, OPPOSED BLADE OPERATION,
6. DAMPER CONSTRUCTION: 20 GA GALVANIZED STEEL, SLIP FIT, SYNTHETIC AXLE BEARING.
7. ACTUATOR: MANUAL LOCKING QUADRANT.
8. ACTUATOR: BELIMO AFB24-SR, 24 VDC, MODULATING, 2-10 VDC CONTROL, 2-10 VDC FEEDBACK, SPRING RETURN OPEN, 180 IN-LB.
9. ACTUATOR: BELIMO AFX24-SR, 24 VDC, MODULATING, 2-10 VDC CONTROL, 2-10 VDC FEEDBACK, SPRING RETURN CLOSED, 180 IN-LB, NEMA 4/4X
10. ACTUATOR: BELIMO AFB24-SR, 24 VDC, MODULATING, 2-10 VDC CONTROL, 2-10 VDC FEEDBACK, SPRING RETURN CLOSED, 180 IN-LB.

FILTER BANK SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	FILTRATION	TYPE	ARRANG.	AIR		PHYSICAL		NOTES
						CLEAN STATIC PRESSURE (IN H20)	DIRTY STATIC PRESSURE (IN H20)	NUMBER 24" X 24" MODULES	NUMBER 12" X 24" MODULES	
FB-1	CAMFIL GP36H / SAD3 SPCL 3HX4W	ROOF	MERV 14	BAG	FLAT	0.48	2.5	12	0	1
			MERV 17	HEPA	FLAT	1.0	3.5	12	0	1,2

NOTES:
1. PROVIDE WEATHER-PROOF FILTER HOUSING WITH HINGED, LOCKABLE ACCESS DOORS.
2. IEST CERTIFIED HEPA FILTER, MIN 99.97% CAPTURE @ 0.3 MICRONS.

SPACE AIRFLOW VENTILATION SCHEDULE

ID	LOCATION	AIRFLOW REQUIREMENTS							SETPOINTS
		SUPPLY AIRFLOW RATE TO RANGE (CFM)	EXHAUST AIRFLOW RATE FROM RANGE (CFM)	BYPASS AIRFLOW RATE (CFM)	OUTSIDE AIRFLOW RATE (CFM)	EXHAUST AIRFLOW RATE (CFM)	RETURN AIRFLOW RATE (CFM)	VENTILATION AIRFLOW RATE (CFM)	INDOOR AIR CONDITIONS DB/RH (°F/%)
BAY 1	SHOOTING RANGE	21,600	23,760	8,640	5,400	7,560	7,560	12,960	70/50

NOTES:
1. SUPPLY AIRFLOW SIZED FOR 75 FPM AIR VELOCITY ACROSS RANGE WIDTH AT FIRING LINE PER NIOSH RECOMMENDATIONS.

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PROJECT STATUS
100% SUBMITTAL

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME
MECHANICAL HVAC SCHEDULES

DRAWING NUMBER
6342

SHEET NUMBER
ZM601

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT
CITY OF RIVIERA BEACH
1481 West 15 Street
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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA — JOANNE LORIUM — AR 96289 — REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.32E

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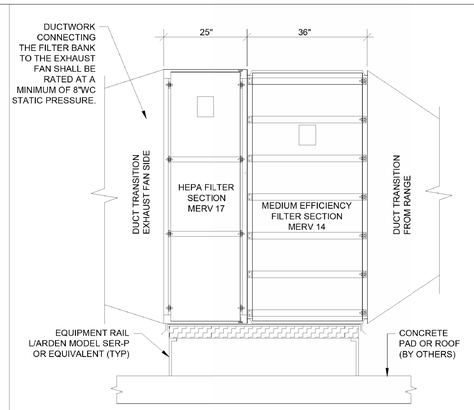
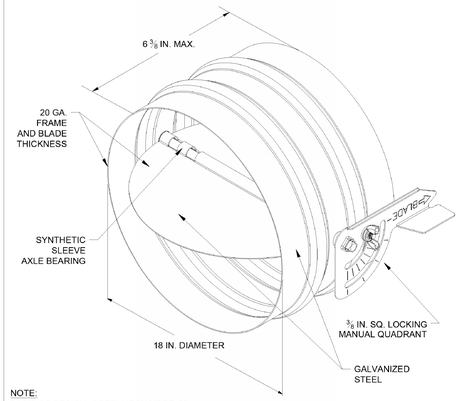


FILE NAME: AT.01.02
SCALE: NONE

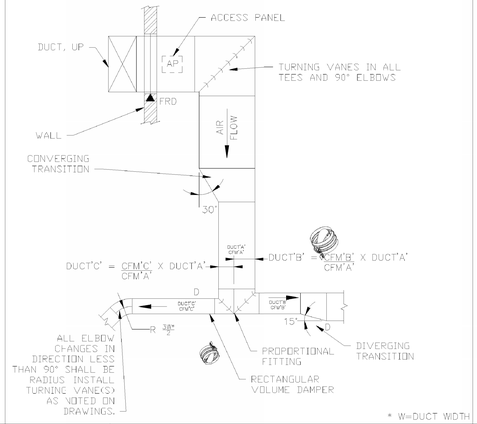
FILTER BANK INSTALLATION DETAIL (TYP.)



NOTE:
BASIS OF DESIGN: GREENHECK MBDR-50
PRESSURE: UP TO 4 IN W.G.

FILE NAME: AT.01.03
SCALE: NONE

MANUAL BALANCING DAMPER ROUND



* W=DUCT WIDTH

FILE NAME: M.04.01
SCALE: NONE

TYPICAL DUCTWORK

DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAUGE (ALL FOUR SIDES)	MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	TRANSVERSE REINFORCING (1) AT JOINTS				
			MIN. H. IN.	DRIVE SLIP / PLAIN S SLIP	HEMMED S SLIP	ALTERNATE BAR SLIP	REINFORCED BAR SLIP
				RECOMMENDED GAUGE	RECOMMENDED GAUGE	RECOMMENDED GAUGE	RECOMMENDED GAUGE
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24
13 - 18	24	NONE REQUIRED	1	24	24	24	24
19 - 30	24	1"X1"X1/8" @ 60 IN	1	24	24	24	24
31 - 36	22	1"X1"X1/8" @ 60 IN	1	-	-	22	22

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

(2) LONGITUDINAL JOINTS TO BE PITTSBURG OR SNAP LOCK TYPE.

(3) ALL DUCTING TO BE CONSTRUCTED TO SMACNA INSTALLATION STANDARDS AND SPECIFICATIONS.

FILE NAME: M.04.14
SCALE: NONE

DUCT CONSTRUCTION

FILE NAME: AT.07.01
SCALE: NONE

RADIAL DIFFUSER DETAIL (TYP.)

FILE NAME: M.04.02
SCALE: NONE

45 DEGREE TAKE-OFF

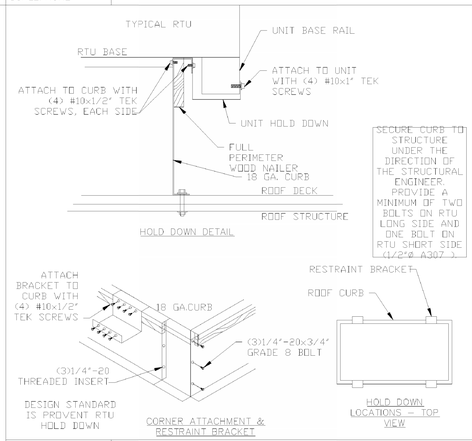
NOTE:
1. INSTALL AND FOLLOW ALL MANUFACTURERS INSTRUCTIONS. (MOUNTING, FASTENERS, SUPPORTS ETC.).

FILE NAME: M.04.09
SCALE: NONE

TYPICAL ROOF DUCT SUPPORT WITH RIDGE PEAK FOR WATER SHED

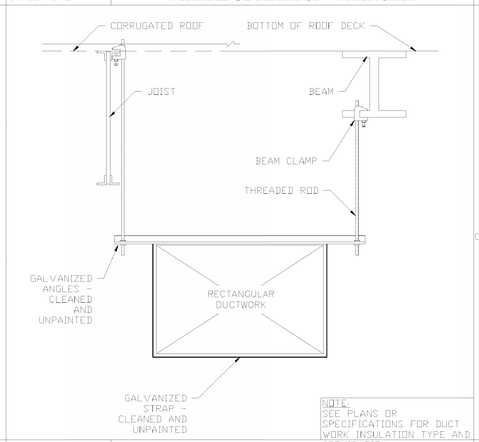
FILE NAME: M.04.10
SCALE: NONE

TYPICAL DUCT STRAP HANGER



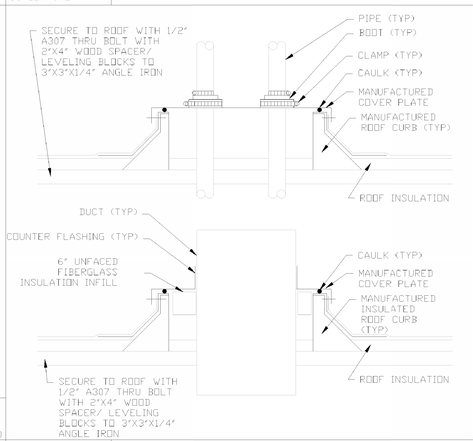
FILE NAME: M.06.03
SCALE: NONE

TYPICAL ROOF CURB



FILE NAME: M.04.21
SCALE: NONE

TRAPEZE HANGER DETAIL



FILE NAME: MP.01.07
SCALE: NONE

DUCT/PIPE ROOF CURB DETAIL

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SHEET NAME

MECHANICAL DETAILS

DRAWING NUMBER

6342

SHEET NUMBER

ZM602

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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PROJECT NUMBER

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SHEET TITLE

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SHEET NUMBER

Q1.33E

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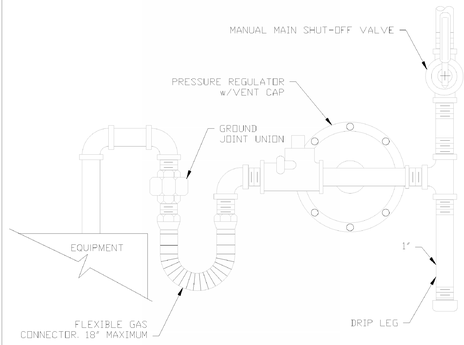
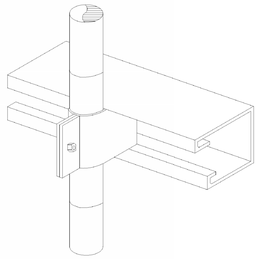


NOTES:

1. REGULATORS INSTALLED INDOORS ON MEDIUM PRESSURE NATURAL GAS PIPING (M.P. = 5 PSI OR LESS), REGULATORS SHALL BE INSTALLED WITH A "VENT LIMITING DEVICE" TO ELIMINATE CODE REQUIREMENT OF VENTING REGULATOR TO THE OUTSIDE.

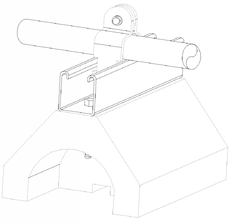
FILE NAME: MP.04.05 | SCALE: NONE

TYPICAL GAS PIPING LB. TO OZ. CONNECTION



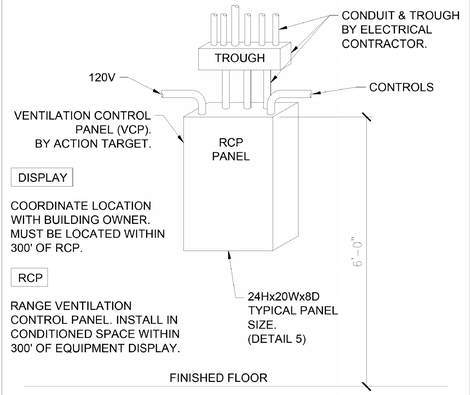
FILE NAME: P.02.12 | SCALE: NONE

PIPE HANGERS



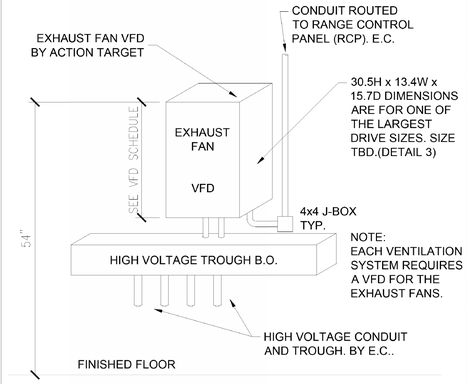
FILE NAME: P.02.13 | SCALE: NONE

ROOF PIPE SUPPORT - POLYMER BASE



FILE NAME: AT.08.01 | SCALE: NONE

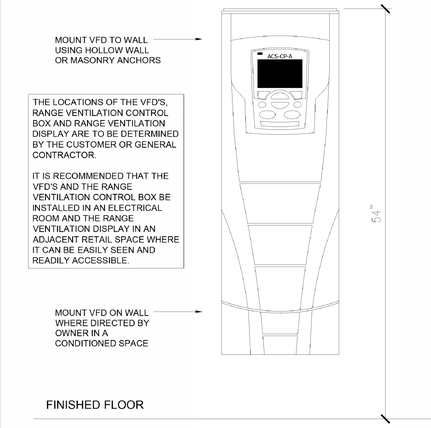
RCP PANEL DETAIL



VFD = VARIABLE FREQUENCY DRIVE
E.C. = ELECTRICAL CONTRACTOR

FILE NAME: AT.08.04 | SCALE: NONE

HVAC RECIRC SYSTEM VARIABLE FREQUENCY DRIVE (VFD) DETAIL

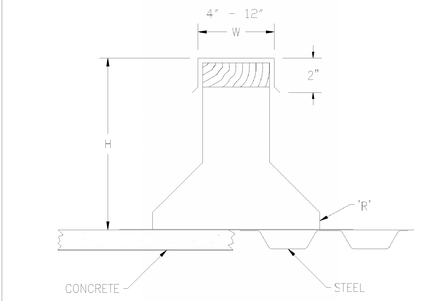


FILE NAME: AT.08.03 | SCALE: NONE

VARIABLE FREQUENCY DRIVE DETAIL

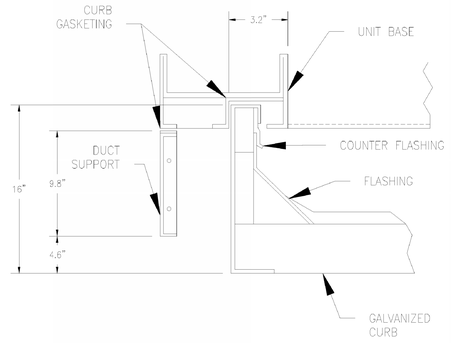
NOTES:

1. FINAL RAIL CONSTRUSTION SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. CONTRACTOR SHALL COORDINATE RAIL DIMENSION REQUIREMENT WITH EQUIPMENT SLPPORTED PRIOR TO FABRICATION.
2. RAIL SHALL BE FLASHED BY ROOFER TO ENSURE WATER TIGHT SEAL.



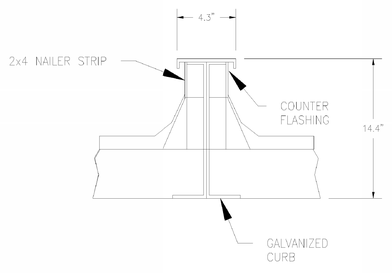
FILE NAME: AT.08.06 | SCALE: NONE

EQUIPMENT STAND DETAIL R-CER TYPE



FILE NAME: AT.08.07 | SCALE: NONE

MAKE-UP AIR UNIT CURB DIAGRAM



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Origination Date:	07/17/25

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SHEET NAME

MECHANICAL DETAILS CONTINUED

DRAWING NUMBER

6342

SHEET NUMBER

ZM603

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT

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REGISTRATION

STATE OF FLORIDA · JENNIE LOHRUM · AR 96598 · REGISTERED ARCHITECT

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2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.34E

KEYED NOTES (SHEET ZM701)

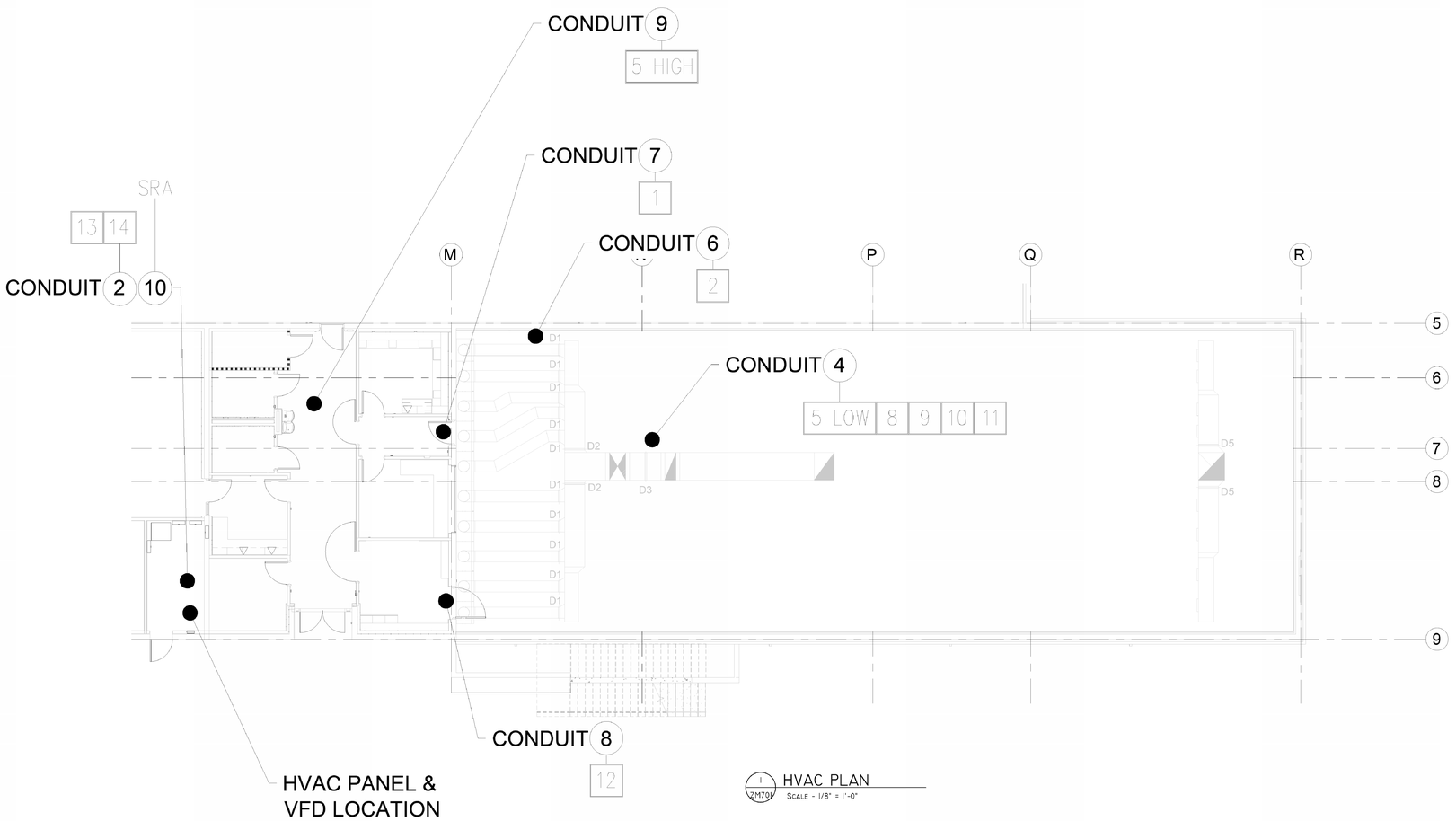
1. SEE ZM704.1–ZM704.3 FOR CONDUIT AND SENSOR DETAILS
2. PLACE CONDUITS IN THE LOCATIONS INDICATED FOR ACCURATE WIRING

GENERAL NOTES (SHEET ZM701)

(#) CONDUIT NUMBER

[#] SENSOR ID

A. SEE SCHEDULES SHEET FOR FILL, QTY, AND TERMINATION STYLE



ZM701 HVAC PLAN
SCALE - 1/8" = 1'-0"

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Origination Date:	07/17/25

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SHEET NAME

HVAC CONTROLS CONDUIT AND SENSOR ABOVE CEILING PLAN

DRAWING NUMBER

6342

SHEET NUMBER

ZM701

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER

Q1.35E

KEYED NOTES (SHEET ZM702)

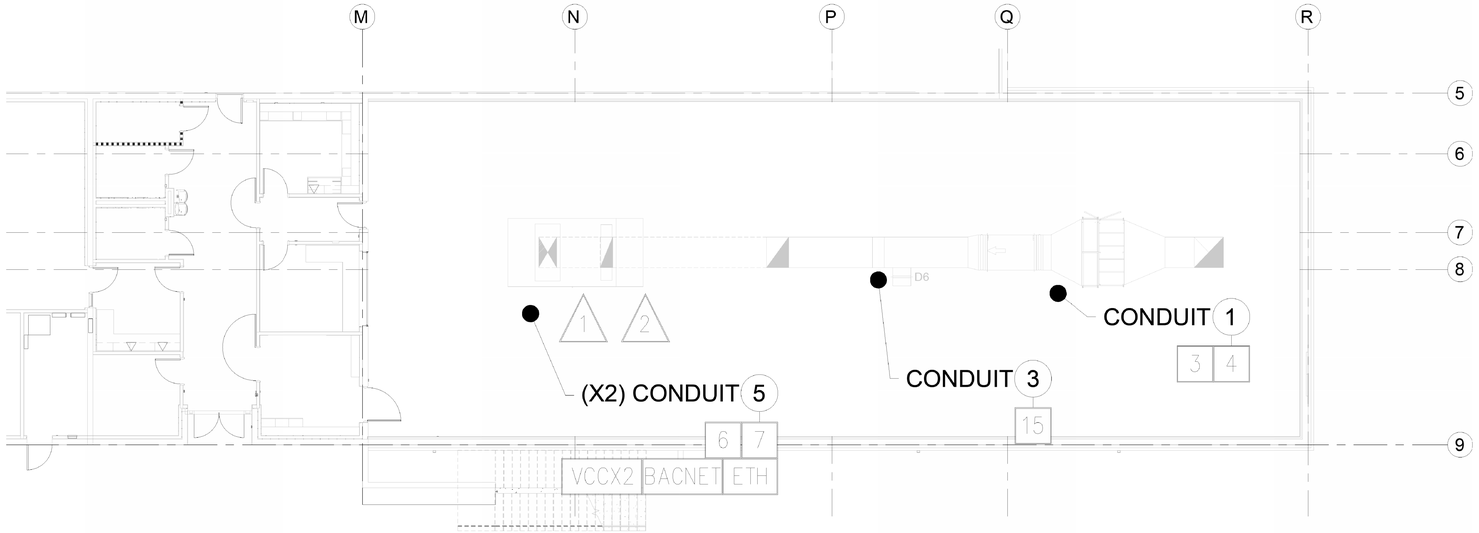
1. SITE CONTRACTOR IS RESPONSIBLE FOR RUNNING BUILT IN GREENHECK SUPPLY DUCT PRESSURE SENSOR, GREENHECK SUPPLY DUCT TEMPERATURE SENSOR, GREENHECK SPACE TEMPERATURE SENSOR, AND ANY OTHER INCLUDED OR NECESSARY GREENHECK UNIT SENSORS AS REQUIRED FOR GREENHECK STARTUP. THESE SENSORS SHALL BE INSTALLED PRIOR TO GREENHECK SERVICE PERFORMING STARTUP ON THE GREENHECK UNIT. ATI WILL INSTALL SUPERVISORY CONTROLS AFTER GREENHECK CERTIFIED STARTUP.
2. FOR GREENHECK STARTUP ALL SUPPLY, RETURN, OUTSIDE AIR, AND BYPASS DAMPERS SHALL BE IN THEIR FULLY OPEN POSITIONS
3. SEE ZM704.1–ZM704.3 FOR CONDUIT AND SENSOR DETAILS
4. PLACE CONDUITS IN THE LOCATIONS INDICATED FOR ACCURATE WIRING

GENERAL NOTES (SHEET ZM702)

(#) CONDUIT NUMBER

[#] SENSOR ID

1. SEE SCHEDULES SHEET FOR FILL, QTY, AND TERMINATION STYLE



1 / ZM702 VENTILATION ROOF PLAN
SCALE - 1/8" = 1'-0"

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SHEET NAME

HVAC CONTROLS CONDUIT AND SENSOR ROOF PLAN

DRAWING NUMBER

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SHEET NUMBER

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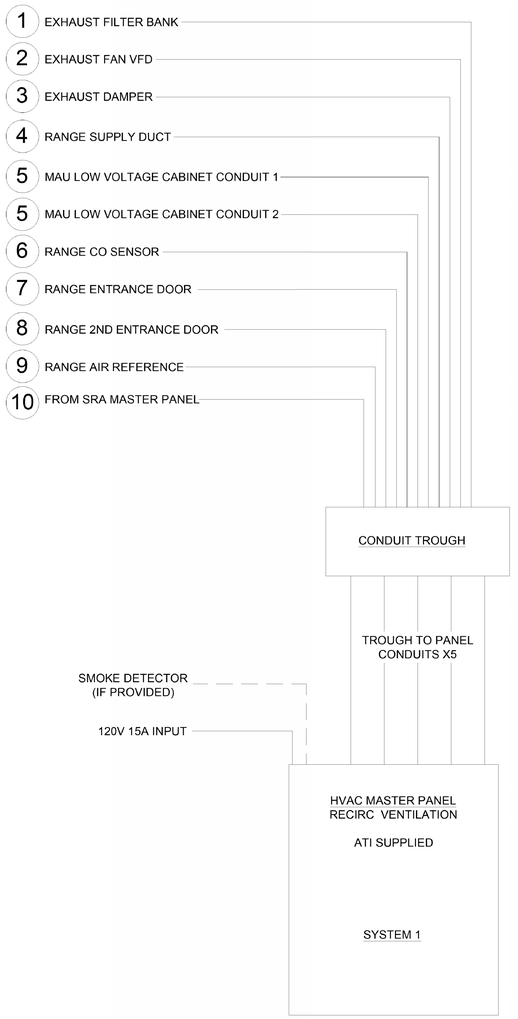

HVAC CONTROLS CONDUIT SCHEMATIC

NOTE:
-ALL CONDUITS 3/4 INCH UNLESS SPECIFIED OTHERWISE
-PROVIDE A MINIMUM OF 5 CONDUITS BETWEEN TROUGH AND EACH CONTROL PANEL
-PROVIDE A MINIMUM OF 2 CONDUITS BETWEEN CONTROL PANELS, IF MULTIPLE CONTROL PANELS ARE PRESENT
-PROVIDE EACH CONTROL PANEL WITH 120V 15AMP 1ϕ SERVICE, ON LEFT HAND SIDE
-IF INTEGRATION WITH SITE SMOKE DETECTORS IS REQUIRED, RUN ADDITIONAL CONDUIT FROM FIRE SYSTEM TO HVAC SYSTEM, AS DIRECTED BY FIRE SYSTEM INSTALLERS
-SEE CONDUIT AND SENSOR PLANS FOR CONDUIT PLACEMENT
-SEE CONDUIT SCHEDULE AND RANGE DETAILS FOR CONDUIT TERMINATIONS AND CONDUIT FILL

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PROJECT STATUS
100% SUBMITTAL

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME
HVAC CONTROLS CONDUIT SCHEMATIC

DRAWING NUMBER
6342

SHEET NUMBER
ZM703

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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REGISTRATION
STATE OF FLORIDA · JOHNNIE LORDUM · AR 90289 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.37E

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DATE STAMP: 10/23/2025 5:44:31 PM

NOTE:
-ALL 4 CONDUCTOR CABLE IS GENESIS 22151009, 18AWG, STRANDED, SHIELDED, CMR RATED, AND SUNLIGHT RESISTANT, OR EQUIVALENT
-ALL 6 CONDUCTOR CABLE IS GENESIS 22161009, 18AWG, STRANDED, SHIELDED, CMR RATED, AND SUNLIGHT RESISTANT, OR EQUIVALENT
-ALL COMMUNICATION CABLE IS CAT5E OR GREATER, 4 PAIR UTP, 24 AWG, CMR OR PLENUM RATED AND SUNLIGHT RESISTANT, OR EQUIVALENT
-ALL 2 CONDUCTOR CABLE IS BELDEN 82760, 18 AWG, TWISTED PAIR, PLENUM RATED
-LEAVE ENOUGH WIRE TO EXTEND 24" BEYOND WHERE THE SENSOR IS LOCATED ON THE PLANS
-FOR WIRE PULLS TO AAON UNIT, LEAVE ENOUGH WIRE TO PULL THROUGH THE ENTIRE LENGTH OF UNIT +24"

CONDUIT SCHEDULE RANGE 1

CONDUIT	QTY	DECRIPTION	FROM	TO	FILL	SENSOR(S)
1	1	TO EXHAUST FILTER BANK. TERMINATE WITH A 36" STUB UP, WITHIN 12" NEAR FILER BANK AS INDICATED ON PLANS.	TROUGH	EXHAUST FILTER BANK	(1) 18/6	3 4
2	1	TO EXHAUST FAN VFD, TERMINATE TO 4 SQUARE BOX WITH BLANK, 6-12" FROM VFD	TROUGH	EXHAUST FAN VFD	(1) 18/4, (1) CAT5E	13 14
3	1	TO EXHAUST DAMPER, TERMINATE WITH A 36" STUB UP WITHIN 12" OF EXHUAST DAMPER, AS INDICATED ON THE PLANS	TROUGH	EXHAUST DAMPER	(1) 18/6	15
4	1	TO RANGE SUPPLY DUCT, MOUNT ON DUCT, AT CLOSEST POINT IN THE RANGE FROM MAU, TERMINATE TO A 4 SQUARE BOX WITH A BLANK.	TROUGH	RANGE SUPPLY DUCT	(2) 18/4, (2) 18/6 (1) 1/4" PNEUMATIC TUBE	5 LOW 8 9 10 11
5	2	TO MAU, TERMINATE IN LOW VOLTAGE CABINET	TROUGH	MAU	(1) 18/6, (1) 18/4 (2) 18/2, (2) CAT5E	6 7 AAON VCCX2 & BACNET & SRA LINK
6	1	TO RANGE CO SENSOR BOX, TERMINATE TO 4 SQUARE BOX WITH SINGLE GANG MUD RING, 48" AFF, BEHIND FIRING LINE, SHOOTERS LEFT	TROUGH	RANGE CO SENSOR	(1) 18/4	2
7	1	TO RANGE ENTRANCE DOOR, TERMINATE TO 4 SQUARE BOX WITH BLANK, 6" ABOVE DOOR FRAME, ON THE RANGE SIDE, ON HANDLE SIDE OF ENTRANCE EXTERIOR DOOR	TROUGH	RANGE ENTRANCE DOOR	(1) 18/4	1
8	1	TO RANGE ENTRANCE DOOR, TERMINATE TO 4 SQUARE BOX WITH BLANK, 6" ABOVE DOOR FRAME, ON THE RANGE SIDE, ON HANDLE SIDE OF ENTRANCE EXTERIOR DOOR	TROUGH	RANGE DOUBLE DOOR	(1) 18/4	12
9	1	TO RANGE AIR REFERENCE AREA, TERMINATE IN A 4 SQUARE BOX WITH SINGLE GANG MUD RING, LOCATE AWAY FROM DOORS AND HVAC DIFFUSERS ON THE CEILING	TROUGH	RANGE AIR REFERENCE AREA	(1) 1/4" PNEUMATIC TUBE	5 HIGH
10	1	TO SMART RANGE AXIS MASTER PANEL, TERMINATE ON OR IN SRA MASTER PANEL	TROUGH	SMART RANGE AXIS MASTER PANEL	(1) CAT5E	N/A

SENSOR SCHEDULE RANGE 1

QTY	DECRIPTION	MFR	MFR PN	FED FROM CONDUIT	WIRE TYPE	SENSOR ID
1	RANGE ENTRANCE DOOR MAGNETIC SENSOR	RESIDEO	7939WG-WH	7	(1) 18/4	1
1	RANGE CO SENSOR	KELE	KCOC-W-V-LCD	6	(1) 18/4	2
1	BAG FILTER SENSOR	SETRA	2651005WDACT1C	1	(1) 18/6	3
1	HEPA FILTER SENSOR	SETRA	2651005WDACT1C	1		4
1	RANGE PRESSURE SENSOR LOW/HIGH	SETRA	2651005WDACT1C	4 9	1/4" PNEUMATIC TUBE	5 LOW 5 HIGH
1	SUPPLY FAN STATUS SENSOR	AUTOMATION DIRECT	ACSN250-AE-S	5	(1) 18/4	6
1	OUTSIDE AIR FILTER SENSOR	SETRA	2651005WDACT1C	5	(1) 18/4	7
1	BYPASS DAMPER ACTUATOR	BELIMO	AFB24-SR	4	(1) 18/6	8
1	RETURN DAMPER ACTUATOR	BELIMO	AFB24-SR	4	(1) 18/6	9
1	SUPPLY DUCT PRESSURE SENSOR	SETRA	2651005WDACT1C	4	(1) 18/4	10
1	SUPPLY AIR TEMP/HUMIDITY	SIEMENS	QFM2160U	4	(1) 18/4	11
1	2ND RANGE ENTRANCE DOOR MAGNETIC SENSOR	RESIDEO	7939WG-WH	8	(1) 18/4	12
1	EXHAUST FAN VFD STATUS/RUN ENABLE	RIB	RIBXLCJF	2	(1) 18/4	13
1	EXHAUST FAN VFD COMM MODULE	ABB	FBIP-21	2	(1) CAT5E	14
1	EXHAUST DAMPER ACTUATOR	BELIMO	AFB24-SR	3	(1) 18/6	15

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Approved By:	JAMIE HADERLIE
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SHEET NAME
HVAC CONTROLS CONDUIT AND SENSOR SCHEDULE

DRAWING NUMBER
6342

SHEET NUMBER
ZM704

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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DRAWING HISTORY

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RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.38E

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HVAC PANEL WIRING

SENSOR NAME	TERMINAL#	TERMINAL COLOR	SIGNAL	WIRE	WIRE COLOR	CONDUIT FEED	SENSOR(S)
ENTRANCE DOOR	1	RED	+24	18/4	RED	(7)	1
	2	WHITE	SIGNAL		WHITE		
2ND ENTRANCE DOOR	3	RED	+24	18/4	RED	(8)	12
	4	WHITE	SIGNAL		WHITE		
TEMP/HUMIDITY SENSOR	5	GREEN	TEMP SIGNAL 0-10V	18/4	GREEN	(4)	11
	6	WHITE	HUMIDITY SIGNAL 0-10V		WHITE		
	7	RED	+24		RED		
	8	BLACK	DC GRND		BLACK		
CARBON MONOXIDE SENSOR	9	GREEN	CO SIGNAL 0-10V	18/4	GREEN	(6)	2
	10	WHITE	DC GRND		WHITE		
	11	RED	+24		RED		
	12	BLACK	DC GRND		BLACK		
OUTSIDE AIR FILTER	13	RED	+24	18/4	RED	(5)	7
	14	BLACK	DC GRND		BLACK		
	15	WHITE	OUTSIDE AIR FILTER SIGNAL 0-10V		WHITE		
SUPPLY FAN STATUS	16	BROWN	+24	18/4	BROWN	(5)	6
	17	GREEN	SIGNAL		GREEN		
BYPASS DAMPER	18	BLUE	FEEDBACK SIGNAL 0-10V	18/6	BLUE	(4)	8
	19	GREEN	DRIVE SIGNAL 0-10V		GREEN		
	20	WHITE	DC GRND		WHITE		
	21	ORANGE	+24		BROWN		
	22	RED	+24		RED		
	23	BLACK	DC GRND		BLACK		
RETURN DAMPER	24	BLUE	FEEDBACK SIGNAL 0-10V	18/6	BLUE	(4)	9
	25	GREEN	DRIVE SIGNAL 0-10V		GREEN		
	26	WHITE	DC GRND		WHITE		
	27	ORANGE	+24		BROWN		
	28	RED	+24		RED		
	29	BLACK	DC GRND		BLACK		
EXHAUST DAMPER	30	BLUE	FEEDBACK SIGNAL 0-10V	18/6	BLUE	(3)	15
	31	GREEN	DRIVE SIGNAL 0-10V		GREEN		
	32	WHITE	DC GRND		WHITE		
	33	ORANGE	+24		BROWN		
	34	RED	+24		RED		
	35	BLACK	DC GRND		BLACK		

HVAC PANEL WIRING

SENSOR NAME	TERMINAL#	TERMINAL COLOR	SIGNAL	WIRE	WIRE COLOR	CONDUIT FEED	SENSOR(S)
EXHAUST/RETURN FILTERS	36	BLUE	HEPA FILTER SIGNAL 0-10V	18/6	BLUE	(1)	3 4
	37	GREEN	BAG FILTER SIGNAL 0-10V		GREEN		
	38	WHITE	DC GRND		WHITE		
	39	ORANGE	+24		BROWN		
	40	RED	+24		RED		
	41	BLACK	DC GRND		BLACK		
N/A	42	RED	+24	18/4	RED	N/A	N/A
	43	WHITE	SIGNAL		WHITE		
EXHAUST FAN VFD	44	GREEN	+24	18/4	GREEN	(2)	13 14
	45	WHITE	DC GRND		WHITE		
	46	RED	VFD ENABLE SIGNAL		RED		
	47	BLACK	CURRENT SENSOR FB SIGNAL		BLACK		
N/A	48	RED	+24	18/6	RED	N/A	N/A
	49	WHITE	SIGNAL		WHITE		
SMOKE DETECTOR/FIRE	80	GREEN	SIGNAL	BY OTHERS			
	81	WHITE	+24				
	82	RED	+24				
	83	BLACK	DC GRND				
SUPPLY DUCT PRESSURE	84	GREEN	SUPPLY DP SIGNAL 0-10V	18/4	GREEN	(4)	10
	85	WHITE	+24		WHITE		
	86	RED	+24		RED		
	87	BLACK	DC GRND		BLACK		

NOTE:
*MAU OUTSIDE AIR DAMPER WIRING FOR EXTERNAL CONTROL DIRECT WIRE TO PLC ANALOG OUTPUT 1 TERMINAL 2.3. SEE FIELD WIRING PACKET FOR ADDITIONAL DETAILS.

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Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	TAKE TO 100	08/25/25

SHEET NAME
HVAC CONTROLS PANEL WIRING

DRAWING NUMBER
6342

SHEET NUMBER
ZM705

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

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DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.39E

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SEQUENCE OF OPERATIONS

Startup Sequence:

- Dampers for the system open to their preset running positions as defined on commissioning
- Start command sent to each Packaged unit
- Package unit reports start sequence activated
- Packaged unit actuates internal dampers to running positions as defined on commissioning
- Package unit starts its Supply Fan
- Once Supply Fan current exceeds minimum running current, corresponding return fan will start
- Supply and Return fans will ramp up and begin controlling supply duct and range pressures.

Normal operation:

Supply fan

- Will regulate its speed to achieve the desired supply duct pressure and air flow across the firing line.

Return fan

- Will regulate its speed in to achieve the desired range pressure required to create proper air flow across the firing line.

Package unit

- Will operate in mode of operation selected on the control screen.
- Heat mode:
  - Temperature will be increased if the discharge air temperature goes below the desired setpoint.
- Cooling Mode:
  - Temperature will decrease if the discharge air temperature goes above the desired setpoint.
  - Humidity is controlled by drawing moisture out of the air using the cooling coils to drop the air temperature below the dew point, then using the package unit re-heat function to achieve desired setpoint.
- Fan Only:
  - The supply and return fan will regulate as normal.
  - Humidity and temperature are not controlled in this mode.

Events, Alarms and Shutdowns:

Door Opened

- The fan will stop modulating for a period of time to eliminate potential for incorrect control due to excess air entering through the door
- If the door is left open for longer than the system allows, the system will either display a warning or shutdown depending upon how the door is configured

CO levels

- If CO levels exceed the warning or alarm threshold, a warning will appear on the control screen, and do not shoot will be illuminated on the control screen

Supply Fan failure

- If a supply fan fails to provide sufficient current feedback, the system will shutdown

Return Fan failure

- If a return fan fails to provide sufficient current feedback, the system will shutdown

Safe to Shoot

- If the range can achieve at least 50% of the desired pressure for a preset amount of time, the Safe To Shoot indication will turn on. If the pressure falls below the lower threshold, the system will shutdown

Filter Levels

- If the filter pressure differential exceeds the alarm setpoint, meaning the filter is starting to reach the end-of-life, an alarm indication will appear on the control screen indicating this condition.
- If the filter pressure differential exceeds the fault setpoint, meaning the filter has reached end-of-life, a alarm will appear on the control screen indicating this condition

Smoke detect

- If configured a smoke detection event occurs, the system will shutdown

CONTROL SYSTEM OPTIONS

1	# OF SYSTEMS
I	PARALLEL OR INDEPENDENT
	CUSTOM MASTER HVAC PANEL
	CUSTOM HVAC SLAVE PANEL
	EXTRA OR CUSTOM SENSORS
	PURGE
X	RECIRC
X	GAS HEAT
	ELECTRIC HEAT
	HEAT PUMP
	RECOVERY WHEEL
X	VARIABLE CAPACITY SCROLL COMPRESSOR
X	GREENHECK PANEL REQUIRED
X	COMPRESSOR OFFLAND LOGIC
	FREEZE PROTECTION
	OTHER CUSTOM NOTES AS REQUIRED
	CUSTOM CODE REQUIRED

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SOO AND CONTROL SYSTEM OPTIONS

DRAWING NUMBER

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SHEET NUMBER

ZM706

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RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

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PROJECT NUMBER

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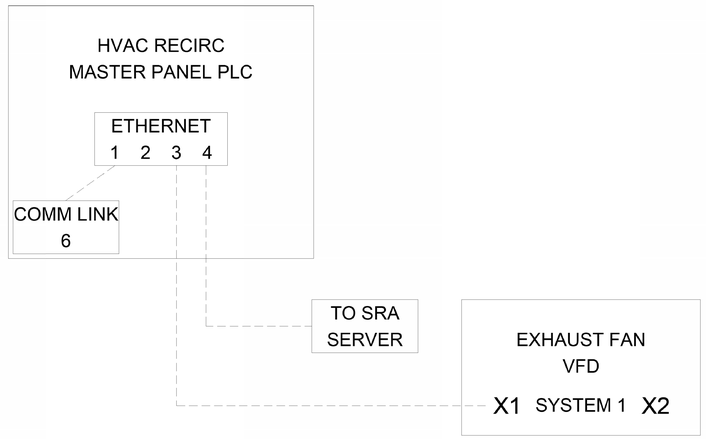
DATE STAMP: 10/23/2025 5:44:42 PM

NOTE:
-ALL WIRING CAT5E OR GREATER. TERMINATE w/RJ45 PLUGS. TEST FOR CONTINUITY AND BAND WIDTH.
-ALL COMMUNICATION CABLE IS CAT5E OR GREATER, 4 PAIR UTP, 24 AWG, CMR OR PLENUM RATED, SUNLIGHT RESISTANT, OR EQUIVALENT



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1	JA	ADD ELECTRICAL	04/24/24

SHEET NAME
HVAC RECIRC NETWORK DIAGRAM ETHERNET

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SHEET NUMBER
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NOTE:
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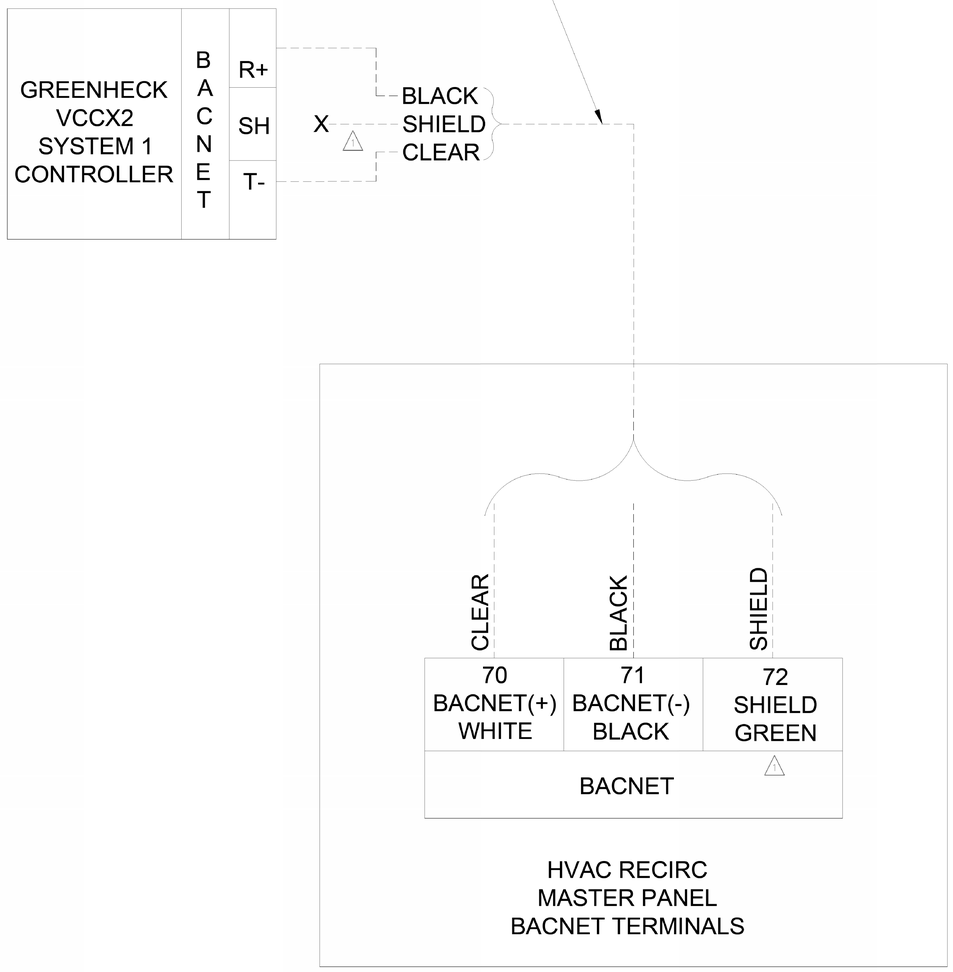
-BACNET CONNECTIONS ARE DAISY CHAINED
-TERMINATE LOOP START/END WITH 120 Ω RESISTORS

1 SHIELD WIRES ONLY CONNECTED ON ONE SIDE

1 DAISY CHAIN BACNET CONNECTION THROUGH MASTER PANEL

PULL BACNET CABLES TO UNIT
1 FOR DAISY CHAIN CONNECTION



HVAC RECIRC
MASTER PANEL
BACNET TERMINALS

ACTION TARGET™
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PROJECT STATUS
100% SUBMITTAL

PROJECT NAME
RIVIERA BEACH PD

Project Manager:	BRIAN SANDERS
Territory Manager:	AARON LUDWIG
Project Engineer:	ROB DECOSTA
Drawn By:	JA
Approved By:	JAMIE HADERLIE
Origination Date:	07/17/25

No	BY	REVISION	DATE
1	JA	ADD ELECTRICAL	04/24/24

SHEET NAME
HVAC RECIRC NETWORK DIAGRAM BACNET

DRAWING NUMBER
6342

SHEET NUMBER
ZM707.2

SCALED FOR ORIGINAL DRAWING AT 22" X 34"

CLIENT
CITY OF RIVIERA BEACH
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Riviera Beach, FL 33404

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PUBLIC SAFETY CONSULTANT/ARCHITECT
JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION
STATE OF FLORIDA · LYNNIE LORDUM · AR 96289 · REGISTERED ARCHITECT

DRAWING HISTORY

No.	DATE	DESCRIPTION

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S,
RIVIERA BEACH, FL
33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRING RANGE EQUIPMENT DRAWINGS

SHEET NUMBER
Q1.42E

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DATE STAMP: 10/23/2025 5:44:49 PM

NOTE:
-ALL 2 CONDUCTOR CABLE IS BELDEN 82760, 18 AWG, TWISTED PAIR, PLENUM RATED
-COMM LINK CONNECTIONS ARE DAISY CHAINED
-TERMINATE LOOP START/END WITH 120 Ω RESISTORS

1 SHIELD WIRES ONLY CONNECTED ON ONE SIDE

2 DAISY CHAIN COMM LINK CONNECTION THROUGH MASTER PANEL

PULL COMM LINK CABLES TO UNIT
1 FOR DAISY CHAIN CONNECTION

GREENHECK VCCX2 SYSTEM 1 CONTROLLER	COMM LINK LOOP	
		T-
	X 1	SH
		R+

BLACK
SHIELD
CLEAR

CLEAR	BLACK	SHIELD
R+	SH	T-
AAON COMM LINK 6 2		

HVAC RECIRC
MASTER PANEL
AAON COMM LINK
TERMINALS

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1	JA	ADD ELECTRICAL	04/24/24

SHEET NAME
HVAC RECIRC NETWORK DIAGRAM AAON COMM LINK

DRAWING NUMBER
6342

SHEET NUMBER
ZM707.3

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DRAWING HISTORY

No.	DATE	DESCRIPTION

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PROJECT STATUS
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DATE OF ISSUE
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PROJECT NAME
RBPD EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
2125 AVENUE S, RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
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SHEET NUMBER
Q1.43E

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GENERAL STRUCTURAL NOTES

DESIGN CRITERIA

D1 ALL WORK SHALL CONFORM TO AT LEAST THE MINIMUM STANDARDS OF THE FLORIDA BUILDING CODE, EIGHTH EDITION (2023)

D2 DESIGN LOADS PER FLORIDA BLDG. CODE,
SEE PLAN SHEETS FOR FLOOR AND ROOF DESIGN LOADS
WIND DESIGN PER ASCE 7-22
V=200 MPH (3 SECOND ULTIMATE GUST); Vservice = 155 MPH
RISK CATEGORY IV, EXPOSURE C, ENCLOSED BUILDING
h = 29'-0"; H = 32'-0"
qh (ult) = 99.6 PSF; qh (asd) = 59.9 PSF
a = 10'-3"
SEE THIS SHEET FOR WALL CLADDING PRESSURES
AND FOR ROOF UPLIFT PRESSURES

D3 FOUNDATION DESIGN RECOMMENDATIONS:
FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 3000 PSF PER THE FINAL REPORT AND RECOMMENDATIONS PREPARED BY UES DATED OCTOBER 3, 2025.
GC TO FAMILIARIZE THEMSELVES WITH THE REPORT AND RECOMMENDATIONS FOR PREPARING THE BUILDING PAD.

D4 TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE STRUCTURAL PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE LATEST EDITION.

GENERAL

G1 THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.

G2 THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION.

G3 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.

G4 THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANCHORED, EMBEDDED, SUPPORTED ITEMS WHICH AFFECT THE STRUCTURAL DRAWINGS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.

G5 ALL WINDOWS, DOORS, AND LOUVERS SHALL BE INSTALLED PER THEIR DADE COUNTY PRODUCT APPROVAL REQUIREMENTS.

G6 SUBMIT SHOP DRAWINGS IN ELECTRONC FORM FOR APPROVAL. PAPER COPIES WILL NOT BE REVIEWED. FINAL SEALED SHOP DRAWINGS AND CALCULATIONS TO BE SUBMITTED IN PRINTED FORM FOR SUBMISSION TO THE BUILDING DEPARTMENT AFTER INCORPORATING ALL COMMENTS FROM THE A/E DESIGN TEAM.

SLAB ON GRADE

S1 REFER TO THE GEOTECHNICAL REPORTS NOTED ABOVE FOR PROPER PREPARATION OF THE SUBGRADE FOR THE PROJECT.

S2 CONTROL JOINTS / SAW JOINTS FOR THE SLAB ON GRADE SHALL BE SPACED NO FARTHER THAN 16' ON CENTER IN BOTH DIRECTIONS. THE PANELS SHALL BE CLOSE TO SQUARE. SUBMIT A PROPOSED JOINT PLAN FOR A/E APPROVAL.

CONCRETE AND REINFORCING

C1 CONCRETE WORK SHALL CONFORM TO ACI CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-19)

C2 ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH & PROPERTIES AS FOLLOWS:

		SLUMP	MAX. W/C
TILT-UP PANELS	4000 PSI	5±1"	0.55
FOUNDATIONS	3000 PSI	5±1"	0.58
FLOORS	4000 PSI	5±1"	0.54

C3 CONCRETE MIX DESIGN SUBMITTALS MUST INCLUDE THE AREA IN WHICH THE CONCRETE IS TO BE PLACED (e.g. FOUNDATIONS, SLAB-ON-GRADE, FILLED CELLS, COLUMNS, etc.). FAILURE TO DO SO WILL CAUSE DELAY AND/OR REJECTION OF SUBMITTALS.

C4 REBARS SHALL CONFORM TO ASTM-615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

C5 MIMIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED. REFER TO A.S5.0 FOR TILT-UP PANELS.

FOOTINGS	3"
SLABS ON GRADE	1 1/2" FROM TOP
BEAMS	1 1/2" (ON TIES)
COLUMNS	1 1/2" (ON TIES)

C6 SPLICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

WELDED WIRE FABRIC	6"
ALL OTHER	SEE LAP TABLE

C7 REINFORCEMENT IN WALLS, FOOTINGS AND BEAMS SHALL BE CONTINUOUS AND LAPPED AS SHOWN ON NOTE M11. HOOK AND LAP ALL CORNER AND INTERSECTING BARS. (SEE TYPICAL DETAILS)

C8 TERMINATE ALL DISCONTINUED ELEVATED SLAB TOP BARS WITH A 180 DEGREE STANDARD HOOK UNLESS OTHERWISE NOTED.

C9 CONTINUOUS TOP BARS SHALL BE SPLICED AT MIDSPAN. CONTINUOUS BOTTOM BARS SHALL BE SPLICED AT CENTER-LINE OF SUPPORTS (OR AS SHOWN ON TYPICAL DETAILS).

C10 AT CHANGES IN DIRECTION OF CONCRETE WALLS, STRIP FOOTINGS AND GRADE BEAMS PROVIDE CORNER BARS AT SAME SIZE AND SPACING AS HORTIZONTAL BARS. (REFER TO B/S4.0)

C11 SUBMIT CONCRETE MIX DESIGN FOR APPROVAL.

STRUCTURAL STEEL

SS1 GENERAL CONTRACTOR SHALL ENGAGE A CERTIFIED TESTING AGENCY TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

SS2 STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATIONS" FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS", LATEST EDITION.

SS3 STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE C.

SS4 STRUCTURAL W, C AND MC SHAPES SHALL BE TO ASTM A992, Fy=50KSI. OTHER SHAPES, Ls, PLATES SHALL BE TO ASTM A572, GR. 50 ALL STRUCTURAL STEEL SHALL BE DOMESTICALLY PRODUCED.

SS5 BRACE AND MAINTAIN ALL STEEL IN ALIGNMENT UNTIL OTHER PARTS OF CONSTRUCTION NECESSARY FOR PERMANENT SUPPORT ARE COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TEMPORARY SHORING AS REQUIRED FOR THE STABILITY OF THE STEEL FRAME UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN COMPLETED AND BUILDING IS ENCLOSED.

SS6 ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY. WELDING ELECTRODES SHALL BE E70XX-LOW HYDROGEN FOR SHIELD AND METAL ARC WELDING. ALL WELDING TO BE PERFORMED BY CERTIFIED WELDERS.

SS7 GROUT FOR COLUMN BASE PLATES AND PRESET BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT. (5000 PSI MIN)

SS8 SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOADS AND TOLERANCES.

SS9 ALL WELDED CONN. SHALL BE 1/4" FILLET ALL AROUND, UNO. ALL BOLTED CONN. SHALL BE 3/4"DIA. A325 BOLTS, UNO.

SS10 ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. GALVANIZE MEMBERS TO ASTM A123/A123M; PROVIDE SPECIAL HIGH GRADE GALVANIZED COATING PER ASTM B6. MINIMUM COATING THICKNESS IS 1.25 OZ / SQUARE FT FOR ALL SURFACES

EXPANSION ANCHORS

EA1. CARBON STEEL EXPANSION ANCHORS SHALL HAVE A ONE PIECE ANCHOR BODY WITH A LENGTH IDENTIFICATION CODE. THE ANCHORS SHALL HAVE AN EXPANSION MECHANISM WHICH CONSISTS OF A PAIR OF INTERLOCKING INDEPENDENT WEDGES. CARBON STEEL COMPONENTS SHALL BE PLATED ACCORDING TO ASTM SPECIFICATION B 633. EXPANSION ANCHORS MUST MEET THE DESCRIPTION IN FEDERAL SPECIFICATION FF-S-325 FOR CONCRETE EXPANSION ANCHORS.

EA2. EXPANSION ANCHORS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

EA3. EXPANSION ANCHORS SHALL HAVE A MINIMUM ULTIMATE TENSILE AND SHEAR LOADS (LBS) AS SHOWN IN SCHEDULE BELOW:

DIA.	EMBEDMENT (IN)	MIN. EDGE DIST. MIN. SPACING	f'c=3,000 psi TENSILE	f'c=3,000 psi SHEAR	f'c=4,000 psi TENSILE	f'c=4,000 psi SHEAR	INSTALLATION TORQUE (ft/lbs)
1/2"	2 1/4"	6 3/4"	4925	7360	5450	7360	65
	3 1/2"		8000	9200	9000	9200	
	6"		8650	9200	9500	9200	
5/8"	2 3/4"	8"	7000	11500	8000	11500	110
	4"		10670	14200	12350	14200	
	7"		13000	14200	14000	14200	
3/4"	3 1/4"	11 1/4"	8700	15500	10000	15500	235
	4 3/4"		15500	19200	18000	19200	
	8"		18500	19200	22000	19200	
1"	4 1/2"	13 1/2"	15200	28500	17500	30500	450
	6"		22500	34500	26500	34500	
	9"		28750	34500	32500	34500	

EXTERIOR LIGHT GAGE METAL FRAMING

MS1 DESIGN OF LIGHT GAGE METAL FRAMING AND THEIR CONNECTIONS TO THE SUPPORTING STRUCTURE IS A DELEGATED ITEM FOR THIS PROJECT. ALL STUD SIZES SHOWN SHALL BE USED FOR BID PURPOSES BUT THE FINAL DESIGN OF THE METAL FRAMING ELEMENTS SHALL BE BY THE SPECIALTY ENGINEER OF RECORD.

MS2 MINIMUM GAGE OF MATERIAL SHALL BE 18 GAGE WHERE SHEATHING IS ATTACHED. (I.E. SOFFIT STUDS, ROOF STUDS, ETC.). ALL MATERIAL TO BE GALVANIZED G90.

MS3 SPECIALTY ENGINEER SHALL HAVE A MINIMUM OF 5 YEARS EXPERIENCE IN SIMILAR STRUCTURAL DESIGNS.

MS4 PLANS SHALL SHOW ALL PERMINENT BRACING AND BLOCKING REQUIREMENTS.

MS5 SEE NOTE G6 ON THIS SHEET REGARDING SUBMISSION REQUIREMENTS.

TILT-UP PANELS

TU1 ALL PANELS ARE VIEWED FROM THE INSIDE

PANEL THICKNESS SHALL BE AS INDICATED IN THE SCHEDULE. SPECIAL ATTENTION MUST BE GIVEN THE LOCATION AND PLACEMENT OF THE REINFORCING

TU2 REFER TO THE ARCHITECTURAL DRAWINGS FOR FINISH REQUIREMENTS, CHAMFERS, REVEALS, ETC.

TU3 PANELS SHALL NOT BE LIFTED UNTIL THE CONCRETE HAS ATTAINED THE MINIMUM MODULUS OF RUPTURE AND COMPRESSIVE STRENGTH AS REQUIRED BY THE LIFTING ENGINEER.

TU4 THE CONTRACTOR SHALL PROVIDE DESIGN FOR THE LIFT INSERTS AND ANY ADDITIONAL REINFORCING STEEL REQUIRED FOR THE LIFTING OPERATION. HOWEVER NO ADDITIONAL REINFORCING SHALL BE ADDED WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER. THE DESIGNERS OF THE LIFTING INSERTS MUST CONSIDER THE REINFORCING ALREADY PRESENT IN THE PANELS AS INDICATED IN THIS SET OF CONSTRUCTION DRAWINGS.

TU5 THE CONTRACTOR SHALL CHECK ALL PANEL DIMENSIONS, PLATE LOCATIONS, AND DETERMINE THE LOCATIONS OF ALL OPENINGS REQUIRED. NO PANEL WORK SHALL BE PERFORMED WITHOUT THE CONTRACTOR'S APPROVAL OF ALL THE ABOVE. THE CONTRACTOR IS INDICATING THAT HE HAS REVIEWED THE ABOVE AND APPROVES OF THE PANEL DRAWINGS FOR ACCURACY BY THE COMMENCEMENT OF PANEL CONSTRUCTION EVEN IF FORMAL STAMPED APPROVAL HAS NOT BEEN INDICATED ON THOSE DRAWINGS.

TU6 MISCELLANEOUS OPENINGS MAY BE REQUIRED FOR FIRE LINES, PLUMBING, SANITARY LINES, ELECTRICAL CONDUITS, ETC. CORE DRILLING AFTER ERECTION OF THE PANELS MUST HAVE THE APPROVAL OF THE ARCHITECT AND ENGINEER PRIOR TO PERFORMING THE WORK.

TU7 THE REINFORCING STEEL SUPPLIER SHALL PROVIDE SHOP DRAWINGS INDICATING ALL THE NECESSARY INFORMATION REQUIRED TO ACCURATELY POSITION THE REBAR AS INDICATED. ENSURE CHAIRS, BOLSTERS OR OTHER MEANS OF SUPPORTING THE BARS ARE PROVIDED AND ACCURATELY DETAILED.

STEEL JOISTS

SJ1 GENERAL CONTRACTOR SHALL ENGAGE A CERTIFIED TESTING AGENCY TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

SJ2 ALL DESIGN, FABRICATION AND ERECTION OF STEEL JOISTS AND BRIDGING SHALL BE IN STRICT ACCORDANCE WITH THE CURRENT SPECIFICATIONS OF STEEL JOIST INSTITUTE AND RECOMMENDED CODE OF STANDARD PRACTICE.

SJ3 THE ENDS OF ALL BRIDGING LINES TERMINATING AT WALLS OR BEAMS SHALL BE ANCHORED TO THE WALL OR BEAM.

SJ4 ALL STEEL JOISTS ARE TO BE CAMBERED AS SPECIFIED BY SJI.

SJ5 PROVIDE BOTTOM AND/OR TOP CHORD EXTENSIONS AS SHOWN ON DRAWINGS.

SJ6 UNLESS NOTED OTHERWISE, MINIMUM JOIST BEARING SHALL BE 2 1/2" ON A STEEL MEMBER OR EMBED PLATE.

SJ7 BRIDGING SHALL BE FURNISHED AND INSTALLED TO MEET THE SIZE AND SPACING REQUIREMENTS OF THE SJI STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. THE LAST TWO JOIST SPACES IN A LINE OF BRIDGING SHALL BE "X" TYPE. ALL JOISTS 40'-0" OR LONGER REQUIRE A ROW OF BOLTED BRIDGING TO BE IN PLACE BEFORE SLACKENING OF HOISTING LINES. OTHER JOISTS REQUIRE SIMILAR BRIDGING CONSULT LATEST SJI SPECIFICATIONS.

SJ8 ALL HANGERS TO SUPPORT MECHANICAL EQUIPMENT, ETC. TO BE SUPPORTED BY THE BOTTOM CHORD OF JOISTS SHALL BE LOCATED AT THE PANEL POINT OF THE JOIST. IF HANGERS MUST BE LOCATED BETWEEN PANEL POINTS, PROVIDE JOIST STIFFENERS. L1 1/2 x 1 1/2 x 3/16 JOIST STIFFENERS MUST BE INSTALLED FROM HANGER TO OPPOSITE CHORD PANEL POINT BEFORE LOAD IS APPLIED.

SJ9 CONTRACTOR TO FURNISH BAR JOIST CERTIFICATIONS SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE SAME STATE AS THE PROJECT LOCATION.

SJ10 FOR NET UPLIFT SEE NET UPLIFT PLAN ON SHEET S1.02 PROVIDE UPLIFT BRIDGING.

SJ11 ALL SPRINKLER AND ROOF DRAIN PIPES MUST BE SUPPORTED NO FURTHER THAN 3" FROM THE JOIST TOP CHORD PANEL POINTS. THIS WILL BE STRICTLY ENFORCED. WHEN PIPES ARE PERPENDICULAR TO JOISTS, HANGERS SHALL BE PROVIDED EVERY OTHER JOIST (APPROX 10'-0" OC). WHEN PIPES ARE PARALLEL TO JOISTS, TWO CASES EXIST. FIRST, PIPES THAT ARE 4" AND LESS MAY BE SUPPORTED BY A SINGLE JOIST WITH HANGERS NOT TO EXCEED 10'-0" OC. SECOND, PIPES THAT ARE LARGER THAN 4" MUST BE CENTERED BETWEEN TWO JOISTS AND SUPPORTED FROM L4x4x5/16 ANGLE BEARING ON JOIST TOP CHORD PANEL POINTS WITH SPACING NOT TO EXCEED 10'-0" OC. GENERAL CONTRACTOR SHALL COORDINATE THESE REQUIREMENTS WITH THE APPROPRIATE TRADES.

SJ12 ALL ITEMS SUSPENDED FROM JOISTS (i.e. CATWALKS, BALCONIES, OPERABLE PARTITIONS, etc...) SHALL BE INSTALLED AFTER DEAD LOAD HAS BEEN APPLIED.

JOIST BRIDGING NOTES:

JB1 BRIDGING STANDARD WITH THE MANUFACTURER AND COMPLYING WITH THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS LOAD TABLES AND WEIGHT TABLES OF THE LATEST ADOPTION SHALL BE USED FOR BRIDGING ALL JOISTS FURNISHED BY THE MANUFACTURER. POSITIVE ANCHORAGE SHALL BE PROVIDED AT THE ENDS OF EACH BRIDGING ROW AT BOTH TOP AND BOTTOM CHORDS. SEE SHEET S1.01 FOR SAMPLE OF BRIDGING REQUIREMENTS AS PUBLISHED IN THE VULCRAFT 2017 MANUAL.

JB2 FOR "K" AND "LH" SERIES JOISTS HORIZONTAL BRIDGING IS RECOMMENDED FOR SPANS UP TO AND INCLUDING 60 FEET EXCEPT WHERE THE STEEL JOIST INSTITUTE STANDARD SPEC LOAD TABLES & WEIGHT TABLES REQUIRE BOLTED DIAGONAL BRIDGING FOR ERECTION STABILITY.

JB3 "LH" AND "DLH" SERIES JOISTS EXCEEDING 60 FEET IN LENGTH SHALL HAVE BOLTED DIAGONAL BRIDGING FOR ALL ROWS.

JB4 REFER TO SJI SECTION 6 IN THE "K" SERIES SPECIFICATIONS AND SECITON 105 IN THE "LH" AND "DLH" SERIES SPECIFICATIONS FOR ERECTION STABILITY REQUIREMENTS.

JB5 REFER TO APPENDIX E FOR OSHA STEEL JOIST ERECITON STABILITY REQUIREMENTS.

JB6 HORIZONTAL BRIDGING SHALL CONSISTS OF CONTINUOUS HORIZONTAL STEEL MEMBERS. THE l/r RATIO FOR HORIZONTAL BRIDGING SHALL NOT EXCEED 300.

JB7 DIAGONAL CROSS BRIDGING CONSISTING OF ANGLES OR OTHER SHAPES CONNECTED TO THE TOP AND BOTTOM CHORDS, OF "K", "LH" AND "DLH" SERIES JOISTS SHALL BE USED WHEN REQUIRED BY THE APPLICABLE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS LOAD TABLES AND WEIGHT TABLES OF LATEST ADOPTION.

JB8 DIAGONAL BRIDGING, WHEN USED, SHALL HAVE AN l/r RATIO < 200.

JB9 WHEN BOLTED DIAGONAL ERECTION BRIDGING IS REQUIRED, THE FOLLOWING SHALL APPLY:
A. THE BRIDGING SHALL BE INDICATED ON THE JOIST LAYOUT PLAN
B. THE JOIST LAYOUT PLAN SHALL BE THE EXCLUSIVE INDICATOR FOR THE PROPER PLACEMENT OF THIS BRIDING.
C. SHOP INSTALLED BRIDGING CLIPS, OR FUNCTIONAL EQUIVALENT SHALL BE PROVIDED WHERE THE BRIDGING BOLTS TO THE STEEL JOISTS.
D. WHEN TWO PIECES OF BRIDGING ARE ATTACHED TO THE STEEL JOIST BY A COMMON BOLT, THE NUT THAT SECURES THE FIRST PIECE OF BRIDGING SHALL NOT BE REMOVED FROM THE BOLT FOR THE ATTACHMENT OF THE SECOND PIECE.
E. BRIDING ATTACHMENTS SHALL NOT PROTRUDE ABOVE THE TOP CHORD OF THE STEEL JOISTS.

JB10 PROVIDE UPLIFT BRIDGING AT FIRST BOTTOM CHORD PANEL POINT EACH END OF JOIST. REFER TO SECTION A/S1.00 FOR UPLIFT BRIDGING CONNECITON DETAILS.

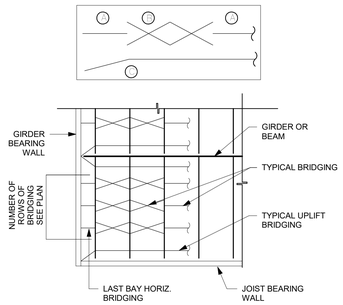
JB11 DO NOT WELD BRIDGING TO JOIST WEB MEMBERS. DO NOT HANG ANY MECHANICAL, ELECTRICAL, PLUMBING, ETC. FROM BRIDGING.

JB12 BRIDGING LEGEND FOR PLAN BELOW:

Ⓐ HORIZONTAL BRIDGING ATTACHED TO TOP & BOTTOM CHORD

Ⓑ BOLTED OR WELDED CROSS BRIDGING AS SHOWN

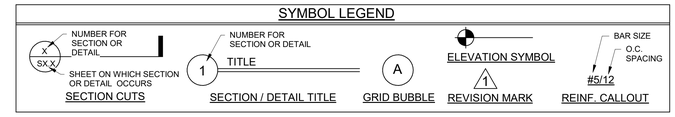
Ⓒ SINGLE LINE HORIZONTAL UPLIFT BRIDGING



STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
A.C.I.	AMERICAN CONCRETE INSTITUTE
ADD'L	ADDITIONAL
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
A.I.S.C.	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
A.I.S.I.	AMERICAN IRON AND STEEL INSTITUTE
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
A.S.T.M.	AMERICAN SOCIETY OF TESTING MATERIALS
A.W.S.	AMERICAN WELDING SOCIETY
B/	BOTTOM OF
BB	BOND BEAM
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BP	BASE PLATE
BRDG	BRIDGING
BRG	BEARING
BRK	BRICK
BS	BOTH SIDES
BTJ	BOLTED TIE JOIST
BTWN	BETWEEN
C/C	CENTER TO CENTER
CANT	CANTILEVER
CB	CONCRETE BEAM
CC	CONCRETE COL
CIP	CAST IN PLACE
CJ	CONSTRUCTION JOINT OR CONTROL JOINT
CL	CENTERLINE
CLR	CLEAR(ANCE)
CM	CONCRETE MASONRY
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CSK	COUNTER SINK
CTR	CENTER
CTRD	CENTERED
DIA	DIAMETER
DL	DEAD LOAD
DN	DOWN
DTL	DETAIL
DWG	DRAWING
DWL	DOWEL
EA	EACH
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
ENG	ENGINEER
EL	ELEVATION
EQ	EQUAL
EQ SP	EQUAL SPACE(S) (ING)
ES	EACH SIDE
EW	EACH WAY
EXT	EXTERIOR
F/	FACE OF
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FS	FAR SIDE
FT	FOOT
FTG	FOOTING
GA	GAGE, GAUGE
GALV	GALVANIZE
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GLB	GLU-LAM BEAM
GR	GRADE
HC	HOLLOW CORE
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HEADED STUD
ID	INSIDE DIAMETER
IF	INSIDE FACE
INT	INTERIOR
JST	JOIST
K	KIP
KO	KNOCK OUT
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LNTL	LINTEL
LSL	LONG SLOTTED HOLES
LONG	LONGITUDINAL
LP	LOW POINT
MAS	MASONRY
MAX	MAXIMUM
MBM	METAL BUILDING MFR
MC	MOMENT CONNECTION
MCJ	MASONRY CONTROL JT
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURE(ER)
MIN	MINIMUM
MO	MASONRY OPENING
MS	METAL STUD
MTL	METAL
NS	NEAR SIDE
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIA
OF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
PAF	POWDER ACTUATED FASTENERS
PERP	PERPENDICULAR
PC	PRECAST
PL	PLATE
PLYWD	PLYWOOD
PNL	PANEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTN	PARTITION
R	RADIUS
REF	REFERENCE
REINF	REINFORCE(D) (ING)
REQ	REQUIRE
REQ'D	REQUIRED
RF	ROOF
RTN	RETURN
RW	RETAINING WALL
SCH	SCHEDULE
SE	SLAB EDGE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SJ	SAWCUT JOINT
SJI	STEEL JOIST INSTITUTE
SL	SLOPE
SP	SPACE(S)
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STR	STRENGTH
STRL	STRUCTURAL
SW	SHEAR WALL
SYMM	SYMMETRICAL
SYP	SOUTHERN YELLOW PINE
TB	TIE BEAM
T&B	TOP & BOTTOM
TC	TIE COLUMN
TDS	TURN DOWN SLAB
TEMP	TEMPERATURE
THK	THICK
THNS	THICKEN SLAB
TOP'G	TOPPING
TYP	TYPICAL
T/	TOP OF
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
WF	WALL FOOTING
WO	WINDOW OPENING (MASONRY)
WP	WORKING POINT
WS	WATERSTOP
WWF	WELDED WIRE FABRIC
W/	WITH

SYMBOL LEGEND



WALL WIND PRESSURES - SERVICE

OPENING AREA	POSITIVE WIND PRESSURE	NEGATIVE ZONE 4 PRESSURE	NEGATIVE ZONE 5 PRESSURE
10 SF	54.9 PSF	-59.5 PSF	-73.3 PSF
20 SF	52.5 PSF	-57.1 PSF	-68.4 PSF
35 SF	50.5 PSF	-55.1 PSF	-64.5 PSF
50 SF	49.3 PSF	-53.9 PSF	-62.0 PSF
75 SF	47.9 PSF	-52.4 PSF	-59.1 PSF
100 SF	46.9 PSF	-51.4 PSF	-57.1 PSF
150 SF	45.4 PSF	-50.0 PSF	-54.2 PSF
200 SF	44.4 PSF	-49.0 PSF	-52.2 PSF
350 SF	42.5 PSF	-47.0 PSF	-48.3 PSF
500 SF	41.2 PSF	-45.8 PSF	-45.8 PSF

LOADS PER ASCE 7-16 DESIGN PARAMETERS - SEE NOTE D2 FOR "a" DIMENSION
PRESSURES SHOWN ARE SERVICE LOAD PRESSURES = 0.6 * ULTIMATE

CLASS B TENSION LAP SPLICES

BAR SIZE	F'c 3000 PSI	F'c 4000 PSI	F'c 5000 PSI
#3	32"	28"	25"
#4	43"	37"	33"
#5	53"	46"	41"
#6	64"	55"	50"
#7	93"	81"	72"
#8	107"	92"	83"
#9	120"	104"	93"
#10	136"	117"	105"
#11	151"	130"	117"

LAP LENGTHS SHOWN ARE FOR WORST CASE CLASS B TENSION LAPS

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REGISTRATION

MARK JOHNSON LICENSE NO. 51983 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWING HISTORY

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
STRUCTURAL NOTES & SCHEDULES

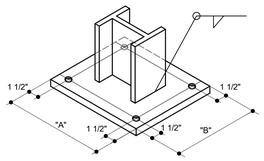
SHEET NUMBER
S1.0E

FILE NAME: C:\JSG\JSG C Drive\24115- Riviera Beach PoliceRevit 2024\24115 RBPD_EFR_S_R24_Clear Span.rvt
DATE STAMP: 10/23/2025 11:51:05 AM

STEEL COLUMN / BASE PLATE SCHEDULE							
COLUMN SIZE	Base Plate			Anchor Bolt		Cap Plate	Remarks
	A	B	T	E	D		
HSS10X10X1/4	16"	16"	1"	8"	3/4"	1"	HSS-Hollow Structural Section-Column
2							
W10X33	16"	16"	1"				W-Wide Flange-Column
1							
W12X65							W-Wide Flange-Column
1							
Grand total: 4							

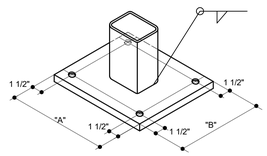
FOUNDATION SCHEDULE - PAD FOOTINGS					
	SIZE			REINFORCING	
MARK	LENGTH	WIDTH	DEPTH	LONGITUDINAL	TRANSVERSE
F1	7' - 0"	5' - 0"	1' - 0"	(6) #5 BOTT.	(8) #5 BOTT.
F2	7' - 0"	6' - 0"	1' - 6"	(8) #5 T&B	(7) #5T&B
F3	8' - 0"	4' - 0"	1' - 3"	(5) #5 BOTT.	(8) #5 BOTT.
F50	5' - 0"	5' - 0"	1' - 0"	(6) #5 BOTT.	(6) #5 BOTT.
F60	6' - 0"	6' - 0"	1' - 6"	(8) #5 BOTT.	(8) #5 BOTT.
F60A	6' - 0"	6' - 0"	1' - 6"	(8) #5 T&B	(8) #5 T&B
F70	7' - 0"	7' - 0"	1' - 6"	(9) #5 BOTT.	(9) #5 BOTT.
F76	7' - 6"	7' - 6"	1' - 6"	(10) #5 BOTT.	(10) #5 BOTT.
F80	8' - 0"	8' - 0"	2' - 0"	(10) #6 BOTT.	(10) #6 BOTT.
F80A	8' - 0"	8' - 0"	2' - 0"	(10) #6 T&B	(10) #6 T&B
Grand total: 13					

FOUNDATION SCHEDULE - WALL FOOTINGS				
	SIZE		REINFORCING	
MARK	WIDTH	FND THICKNESS	LONGITUDINAL	TRANSVERSE
WF20	2' - 0"	1' - 0"	(3) #5 BOTTOM	#5 AT 16" O.C. BOTT.
WF26	2' - 6"	1' - 0"	(3) #5 BOTTOM	#5 AT 16" O.C. BOTT.
WF30	3' - 0"	1' - 0"	(4) #5 BOTT.	#5 AT 14" O.C. BOTT.
WF36	3' - 6"	1' - 0"	(4) #5 BOTT.	#5 AT 14" O.C. BOTT.
WF40	4' - 0"	1' - 6"	(5) #5 T & B	#5 AT 12" O.C. T&B
WF66	6' - 6"	1' - 6"	(8) #5 T & B	#5 AT 9" O.C. T&B
Grand total: 21				



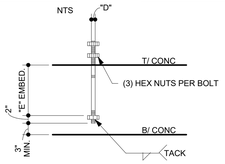
BASE PLATE DETAIL

NTS



BASE PLATE DETAIL

NTS

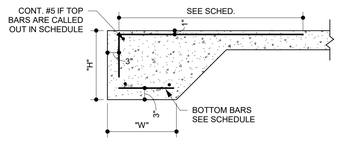


BOLTS TO BE F1554 GRADE 36 UNLESS NOTED OTHERWISE

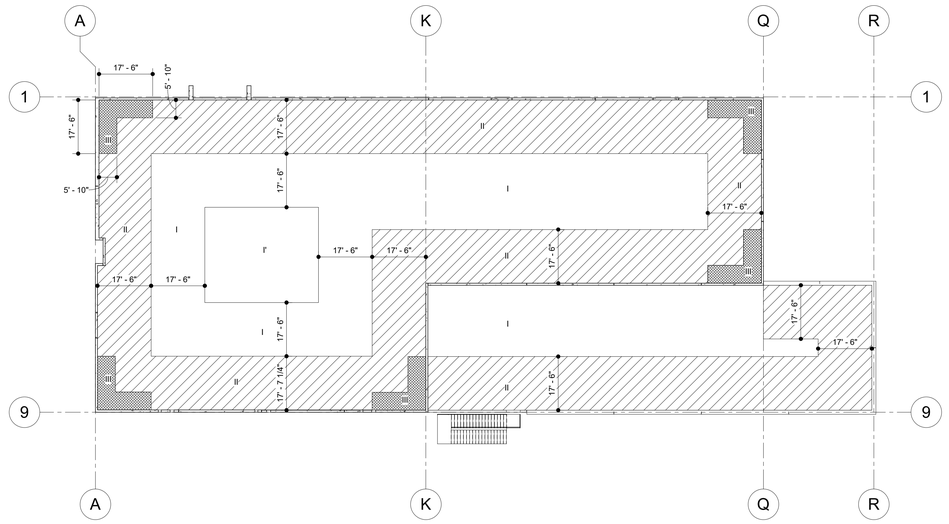
ANCHOR BOLT DETAIL

NTS

TURN DOWN SLAB SCHEDULE			
MARK	SIZE OF TDS	BOTTOM REINFORCEMENT	TOP REINFORCEMENT
TDS10	CONT. x 12"W x 16"H	(2) #5 CONT. & #5 AT 18" TRANS	
TDS16	CONT. x 18"W x 24"H	(2) #5 CONT. & #5 AT 18" TRANS	#4 x 4'-0" + HOOK AT 18" O.C.



TURN DOWN SLAB DETAIL



1 ROOF UPLIFT PLAN

1" = 20'-0"

EVIDENCE UPLIFT PLAN SERVICE

ZONE	*ROOF JOISTS	*JOIST GIRDERS	ROOFING
I'	-29.5 PSF	-21.2 PSF	-54.9 PSF
I	-60.0 PSF	-38.8 PSF	-95.6 PSF
II	-80.4 PSF	-47.3 PSF	-126 PSF
III	-80.4 PSF	-47.3 PSF	-172 PSF
IV			

* GROSS UPLIFT PRESSURE SHOWN
LOADS PER ASCE 7-22 DESIGN PARAMETERS: 0.6h = 17'-6", 0.2h = 5'-10"
PRESSURES SHOWN ARE SERVICE LOAD PRESSURES = 0.6 * ULTIMATE

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PROJECT STATUS

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DATE OF ISSUE

10/14/2025

PROJECT NAME

RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION

2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

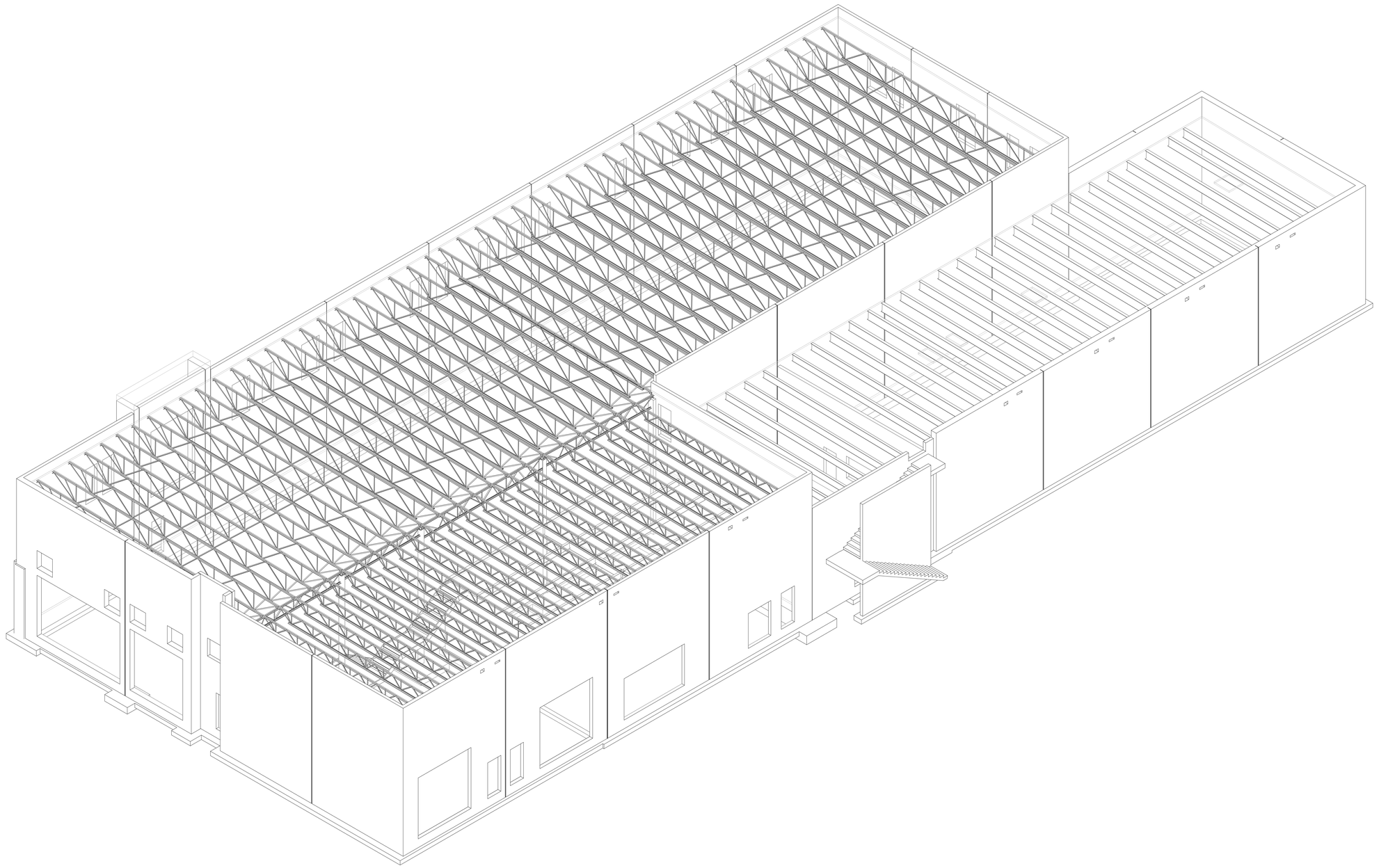
JSG #24115

SHEET TITLE

SCHEDULES

SHEET NUMBER

S1.1E



1 BUILDING ISOMETRIC 1

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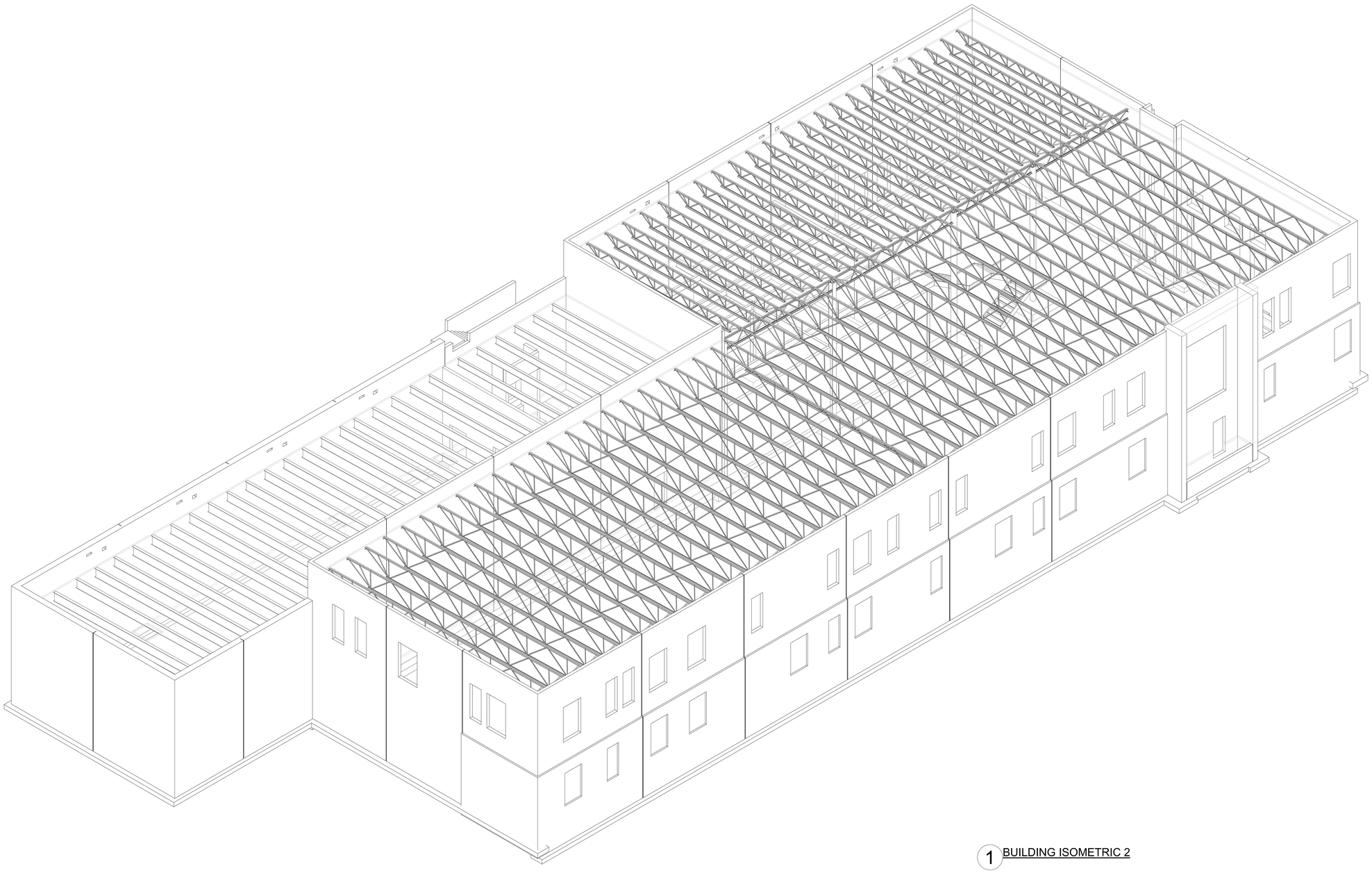
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
BUILDING ISOMETRICS

SHEET NUMBER
S1.2E



1 BUILDING ISOMETRIC 2

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PROJECT STATUS
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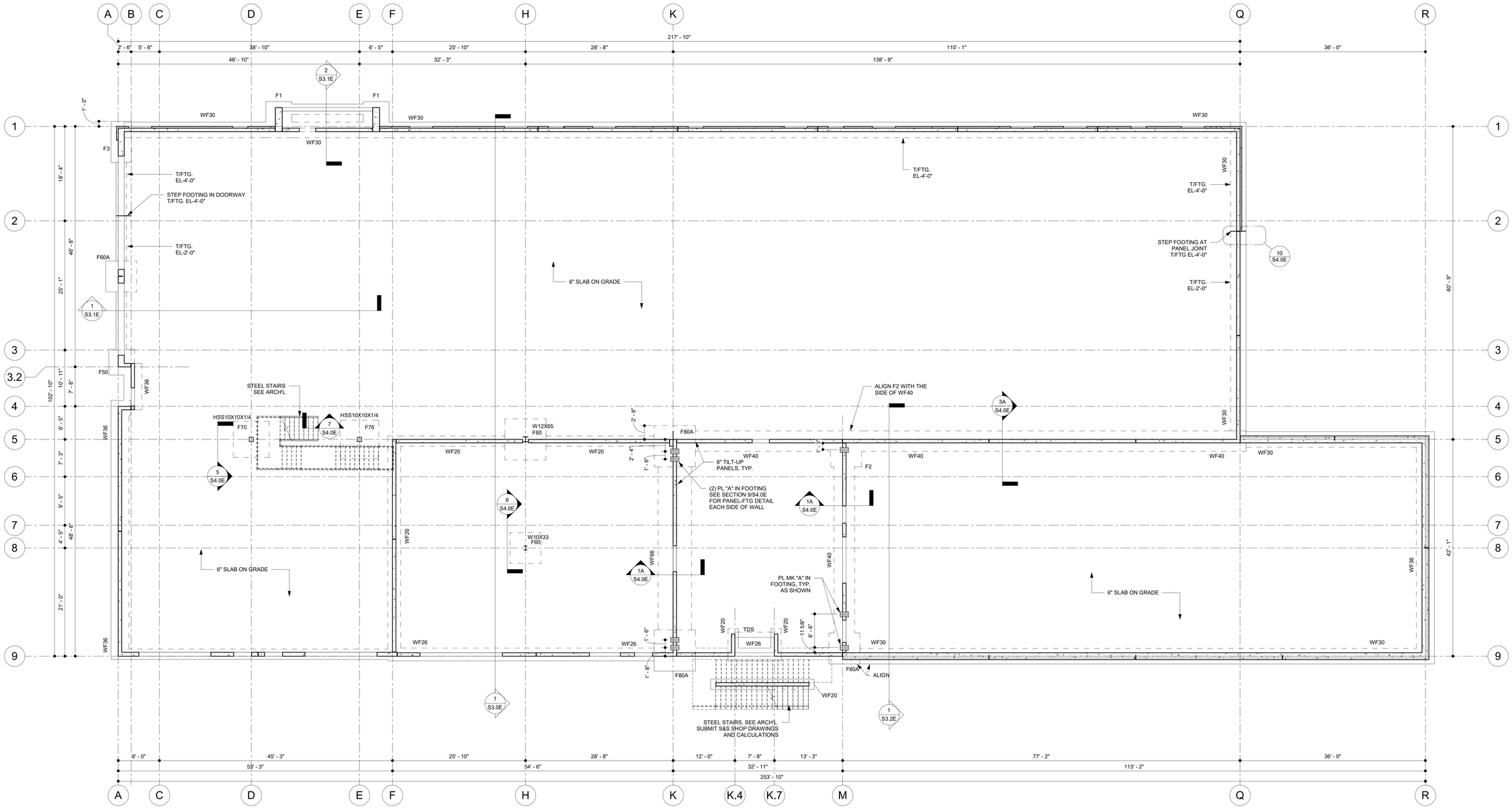
PROJECT NUMBER
JSG #24115

SHEET TITLE
BUILDING ISOMETRICS

SHEET NUMBER
S1.3E



1 FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. FLOOR SLAB TO BE 6" THICK CONCRETE REINFORCED WITH 6x6 W2.1xW2.1 WWF OVER 15 MIL VAPOR BARRIER ON COMPACTED TERMITE TREATED SUBGRADE. TYPICAAL THROUGHOUT
2. SEE SLAB ON GRADE DETAILS FOR PLACEMENT OF REINFORCEMENT AND JOINT DETAILS.
3. T/SLAB EL +0'-0" U.N.O. (REFERENCE ONLY). SEE CIVIL FOR ACTUAL ELEVATION.
4. T/WALL FOOTINGS TYPICAL EL -2'-0"
5. ALL EXTERIOR PANELS ALLOW FOR A 3/4" DEEP RECESS (i.e. THICKNESS = STRUCTURAL THICKNESS + 3/4" INCH) U.N.O. SEE PANEL REINFORCEMENT SHEETS FOR INDIVIDUAL PANEL THICKNESSES.
6. ALL TILT-UP PANELS ARE VIEWED FROM THE INSIDE OF THE BUILDING OR FROM THE NON-FINISHED FACE.
7. ALL FOOTINGS ARE CENTERED BENEATH BEARING WALLS AND COLUMNS.
8. SEE SHEET SS.0E FOR PANEL REINFORCING EMBEDDED ITEMS AND JOINT DETAILS.
9. SEE SHEET S1.1E FOR FOUNDATION AND STEEL COLUMN SCHEDULES
10. PROVIDE 6" HOUSEKEEPING PAD AT MECHANICAL EQUIPMENT REINFORCED WITH 6x6 W1.4xW1.4 WWF. HOUSEKEEPING PAD TO BE 6" WIDER THAN EQUIPMENT SUPPORTED. COORDINATE WITH MEP.

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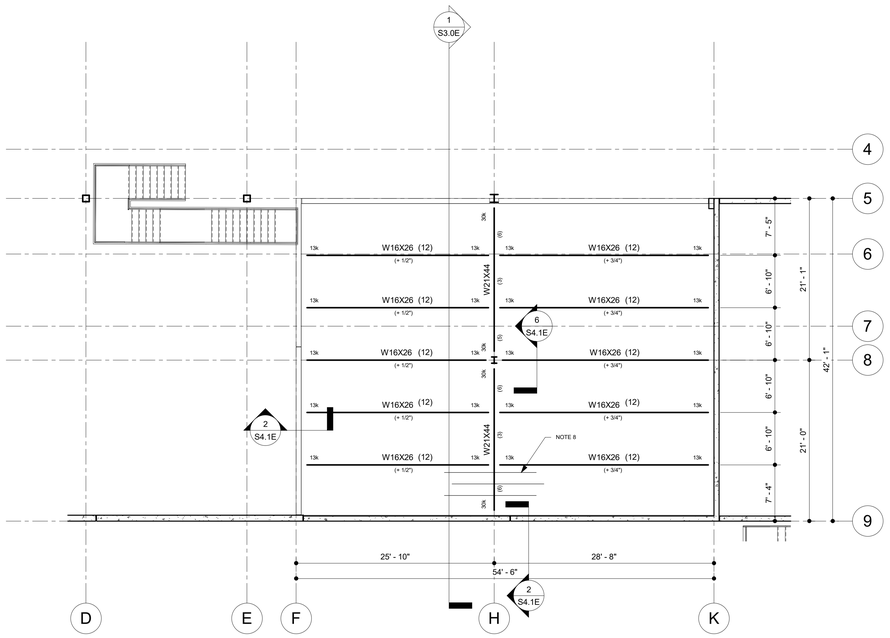
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER
S2.0E



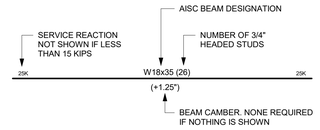
1 MEZZANINE PLAN
1/8" = 1'-0"

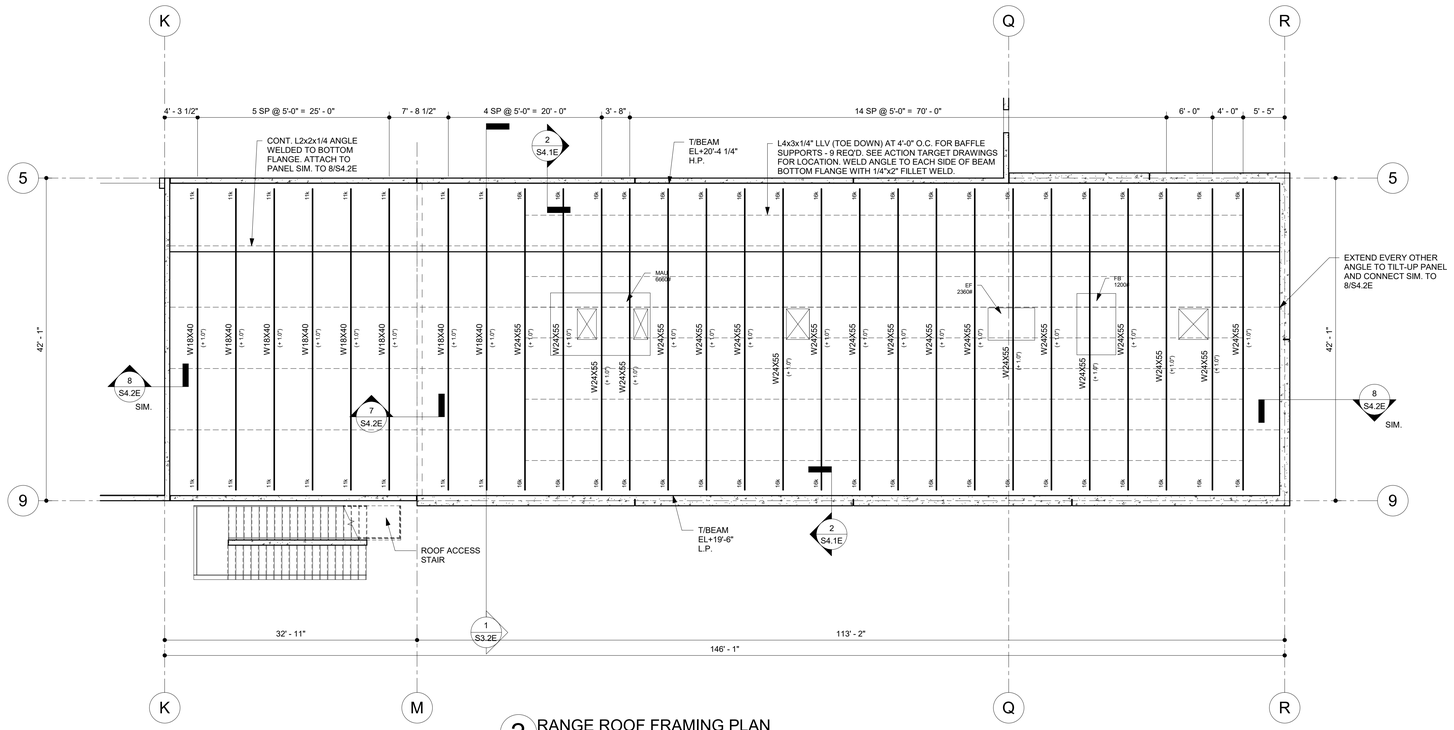
MEZZANINE DESIGN LOADS

LIVE LOAD OFFICE:	80 PSF
LIVE LOAD AT STAIRS: OR CONCENTRATED LOAD ON TREADS:	100 PSF 300 #
MISC. DEAD LOAD THROUGHOUT:	10 PSF
SYSTEM WEIGHT (3" CONCRETE & 3" DECK):	57 PSF
FLOOR LIVE LOAD REDUCTION PER FLORIDA BUILDING CODE SECTION 1607.10 WITH MAXIMUM 20% FOR GIRDERS AND 30% FOR COLUMNS AND FOOTINGS.	

MEZZANINE FLOOR FRAMING NOTES:

1. FLOOR SYSTEM SHALL BE 3" NORMAL WEIGHT CONCRETE ON 3", 20GA GALVANIZED G60 VULCRAFT VLI COMPOSITE METAL DECK. (6" TOTAL THICKNESS).
2. T/FINISHED FLOOR EL. + 14'-0"
3. T/BEAM = EL +13-6"
4. REINFORCE DECK WITH 6x6 W1.4xW1.4 WELDED WIRE FABRIC CHAIRED 1.5" BELOW TOP OF SLAB.
5. FLOOR IS DESIGNED AS AN UNSHORED COMPOSITE BEAM SYSTEM. ATTACH METAL DECK TO TOP FLANGE OF BEAMS USING HEADED STUDS IN ACCORDANCE WITH SDI 36/4 PATTERN WITH (4) #12 TEK SIDELAP SCREWS. PROVIDE 5/8" DIA PUDDLE WELDS AT 12" O.C. ALONG PERIMETER ANGLE.
6. ALL STEEL BEAMS TO BE A992, Fy = 50 KSI
7. ALL REACTIONS ARE SHOWN AS SERVICE REACTIONS. IF BEAM REACTION IS NOT SHOWN ON PLAN, ASSUME A MINIMUM 12 KIP SERVICE REACTION
8. PROVIDE #4 BARS AT 18" O.C. TOP AT GIRDERS. ALTERNATELY STAGGER BARS 12" FROM THE GIRDER CENTERLINE. SEE PLAN FOR BAR LENGTHS.
9. PROVIDE 6" HOUSEKEEPING PAD AT MECHANICAL EQUIPMENT REINFORCED WITH 6x6 W1.4xW1.4 WWF. HOUSEKEEPING PAD TO BE 6" WIDER THAN EQUIPMENT SUPPORTED. COORDINATE WITH MEP.





2 RANGE ROOF FRAMING PLAN
1/8" = 1'-0"

ROOF DESIGN LOADS

DESIGN LIVE LOAD	DESIGN DEAD LOAD	1" DECK + 3" CONCRETE	SHOOTING RANGE BAFFLES
30 PSF	25 PSF	45 PSF	WEIGHT INCL.

ROOF FRAMING NOTES:

1. ROOF SYSTEM TO BE 3" CONCRETE ON 1.0C-32 22 GAGE, GRADE 80 NON-COMPOSITE METAL DECK, 4" TOTAL THICKNESS, ON STEEL BEAMS SPACED AS SHOWN. ATTACH METAL DECK TO BEAMS WITH 5/8" PUDDLE WELDS 1 PER RIB. PROVIDE 5/8" PUDDLE WELDS AT 4" ON CENTER PARALLEL TO THE DECK SPAN AT EDGE SUPPORTS. USE #10 TEK SIDELAP SCREWS AT 24" O.C. MAX SPACING.
2. REINFORCE DECK WITH 6x6 10x10 WWF CHAIRED MID HEIGHT OF SLAB.
3. W24x55 BEAMS HAVE TAKEN INTO ACCOUNT THE WEIGHT OF THE HANGING BAFFLE SYSTEM BELOW FOR THE RANGE. DESIGN BASED ON ACTION TARGET DESIGN DRAWINGS SHEET Z102.
4. T/STEEL BEAMS EL+ 19'-6", THROUGHOUT
5. SEE PLAN FOR TOP OF PARAPET ELEVATIONS
6. SEE STRUCTURAL NOTE SHEET S1.0E FOR STRUCTURAL STEEL NOTES. SEE SHEET S1.1E FOR SCHEDULES.
7. SEE SECTIONS FOR FRAMING DETAILS
8. SEE PLAN FOR TOP OF BEAM ELEVATIONS
9. SEE SHEET S1.1E FOR ROOF UPLIFT PLAN.

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REGISTRATION

MARK JOHNSON LICENSE NO. 51983 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	04/04/2025	100% Design Development
B	07/22/2025	50% Construction Documents
C	09/18/2025	90% Construction Documents
D	10/14/2025	90% Construction Documents / Permit Set

J2 ARCHITECTURE

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

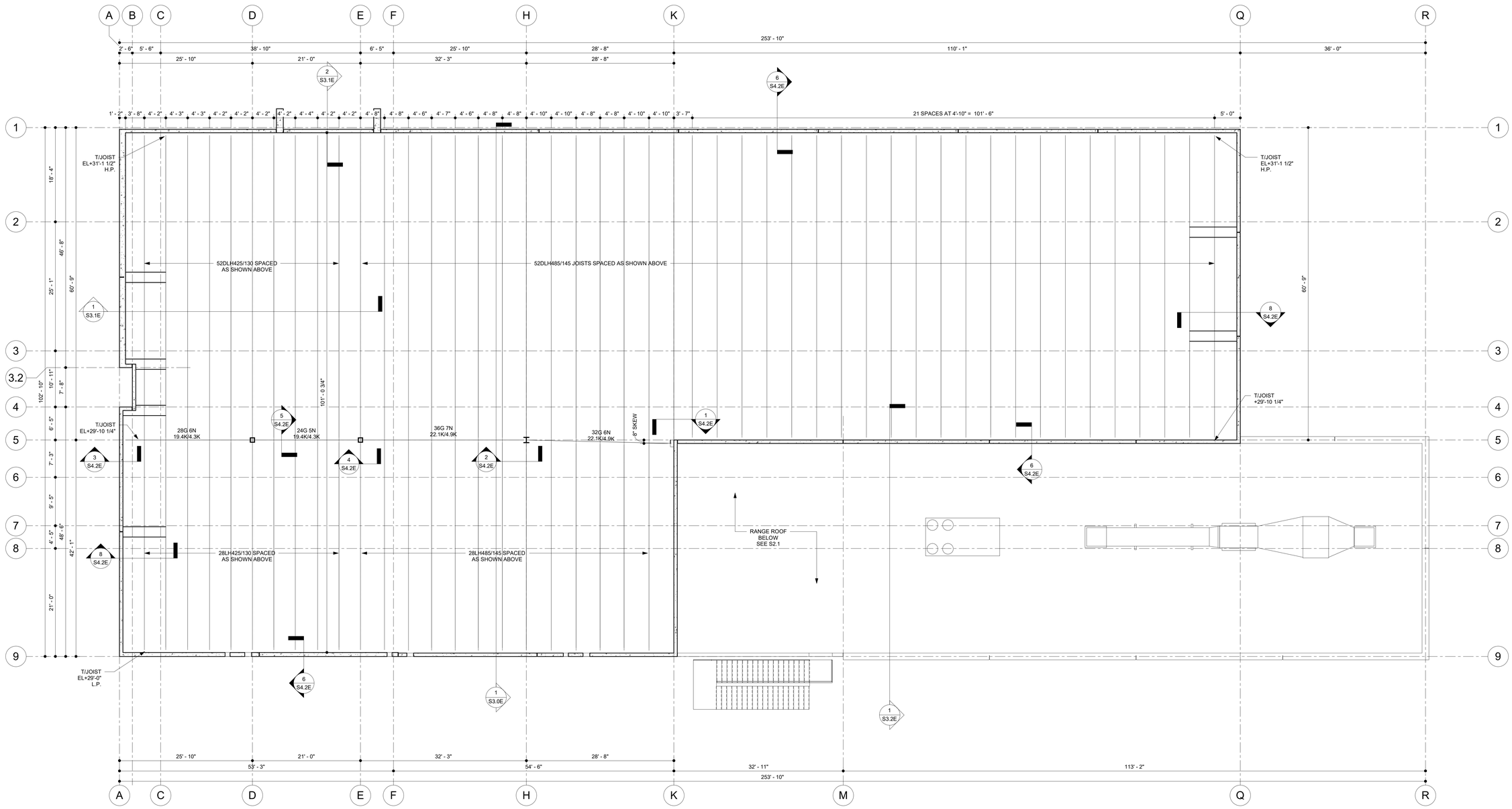
PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
MEZZANINE PLAN AND FIRING RANGE ROOF FRAMING PLAN

SHEET NUMBER
S2.1E

FILE NAME: C:\JSG\JSG C Drive\24115- Riviera Beach Police\Revit 2024\24115 RBPD_EFR_S_R24_Clear Span.rvt
DATE STAMP: 10/23/2025 2:09:20 PM



1 EVIDENCE ROOF FRAMING PLAN
1/8" = 1'-0"

ROOF DESIGN LOADS			
JOIST DESIGN LIVE LOAD	JOIST GIRDER LIVE LOAD	DESIGN DEAD LOAD	1" DECK + 3" CONCRETE
30 PSF	20 PSF	25 PSF	45 PSF

ROOF FRAMING NOTES:

1. ROOF SYSTEM TO BE 3" CONCRETE ON 1.0C-32 22 GAGE, GRADE 80 NON-COMPOSITE METAL DECK, 4" TOTAL THICKNESS, ON BAR JOISTS SPACED AS SHOWN. ATTACH METAL DECK TO JOISTS WITH 5/8" PUDDLE WELDS, 1 PER RIB + 1 EVERY OTHER RIB. PROVIDE 5/8" PUDDLE WELDS AT 2.5" ON CENTER PARALLEL TO THE DECK SPAN AT EDGE SUPPORTS. USE #10 TEK SIDELAP SCREWS AT 24" O.C. MAX SPACING.
2. REINFORCE DECK WITH 6X6 10X10 WWF CHAIRED MID HEIGHT OF SLAB.
3. T/JOIST EL + 29'-0" THROUGHOUT
4. SEE PLAN FOR TOP OF PARAPET ELEVATIONS
5. SEE STRUCTURAL NOTE SHEET S1.0E FOR STRUCTURAL STEEL NOTES. SEE SHEET S1.1E FOR SCHEDULES.
6. SEE SECTIONS FOR FRAMING DETAILS
7. SEE PLAN FOR TOP OF BEAM ELEVATIONS
8. SEE SHEET S1.1E FOR ROOF UPLIFT PLAN.

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J2 ARCHITECTURE

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

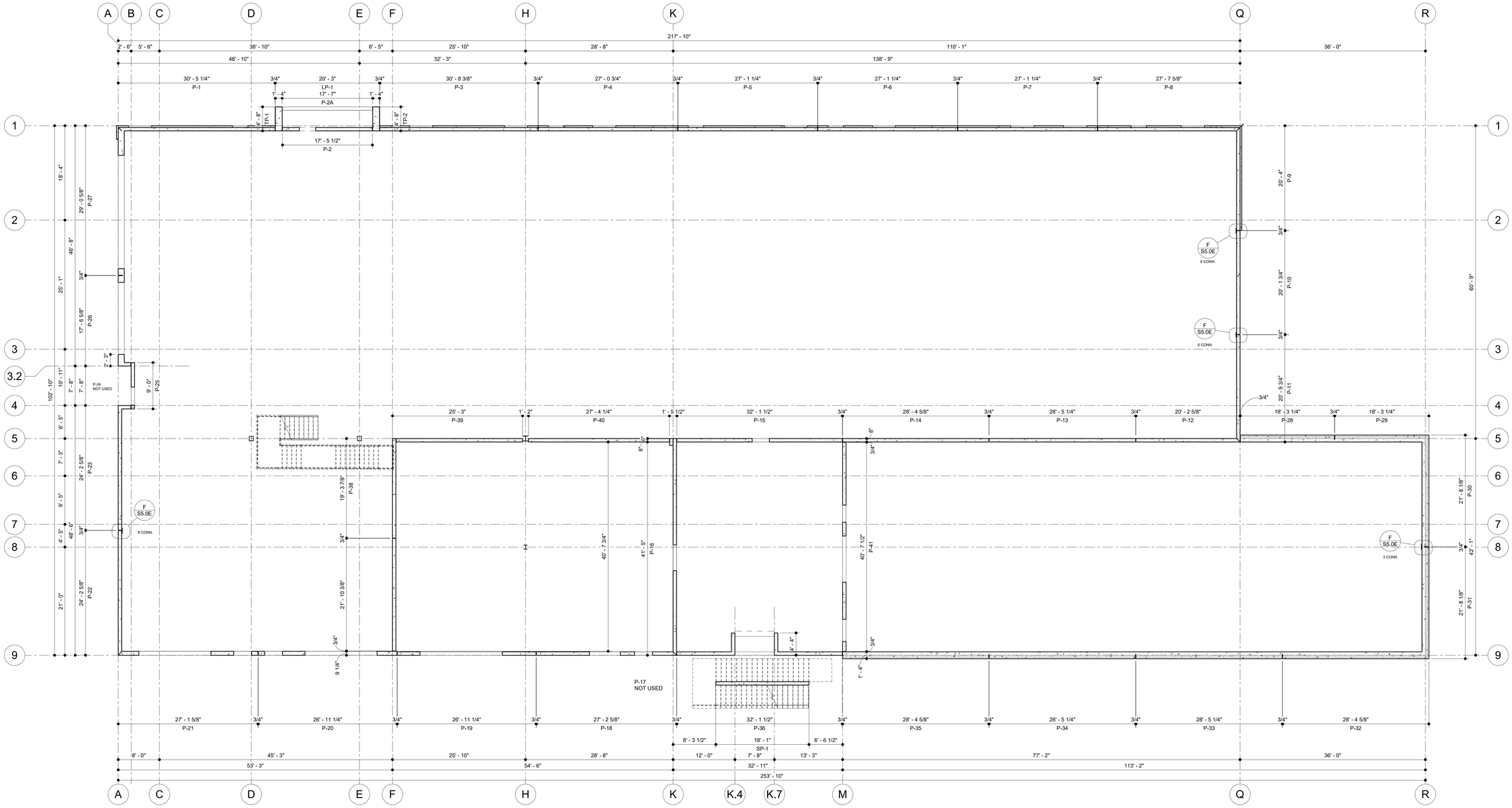
PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
EVIDENCE STORAGE HIGH ROOF FRAMING PLAN

SHEET NUMBER
S2.2E



1 PANEL LAYOUT PLAN
1/8" = 1'-0"

FILE NAME: C:\JSG\JSG C Drive\24115- Riviera Beach Police\Revit 2024\24115 RBPD_EFR_S_R24_Clear Span.rvt
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J2 ARCHITECTURE

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

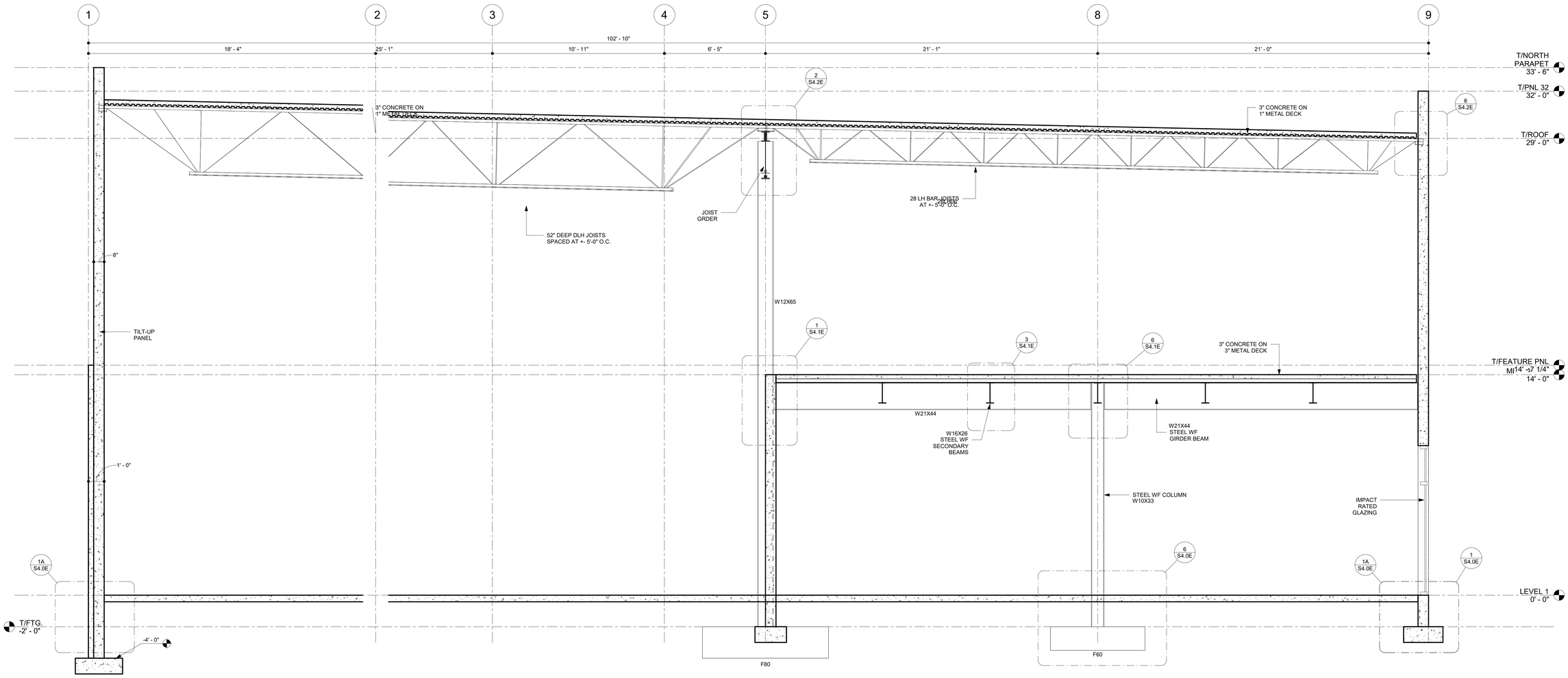
PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
PANEL LAYOUT PLAN

SHEET NUMBER
S2.3E



1 BUILDING TRANSVERSE SECTION THROUGH MEZZANINE
3/8" = 1'-0"

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CLIENT

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J2 ARCHITECTURE

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PROJECT STATUS

90% CDs / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION

2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

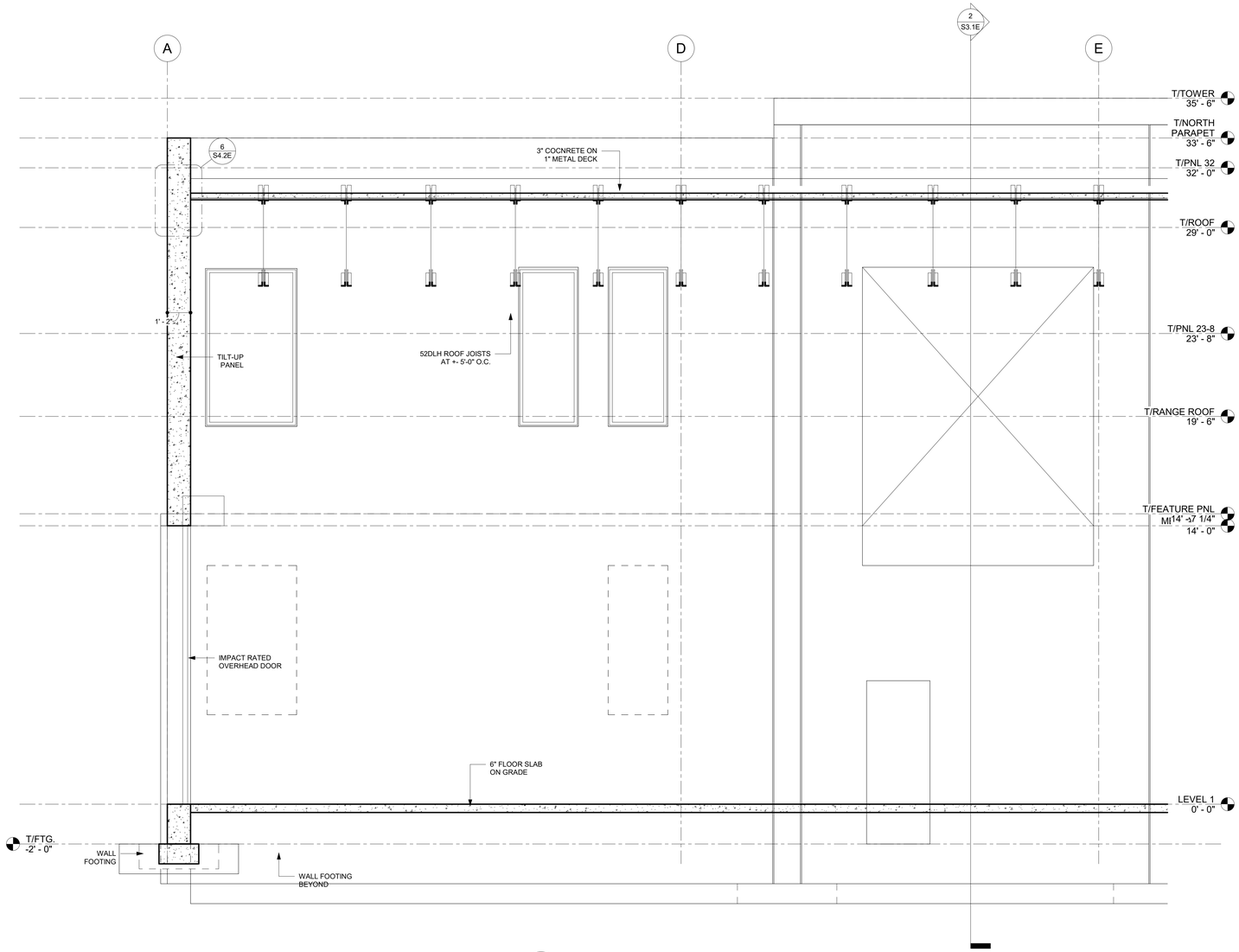
JSG #24115

SHEET TITLE

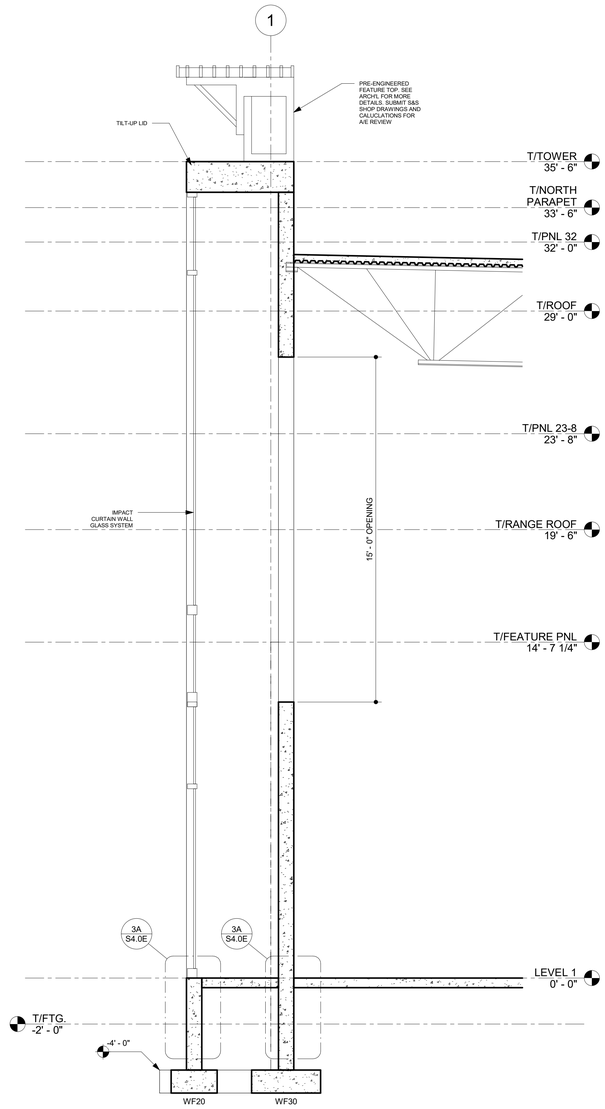
BUILDING SECTIONS

SHEET NUMBER

S3.0E



1 BUILDING PARTIAL SECTION
3/8" = 1'-0"



2 SECTION THROUGH TOWER FEATURE
3/8" = 1'-0"

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CLIENT

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PROJECT STATUS

90% CDs / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION

2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

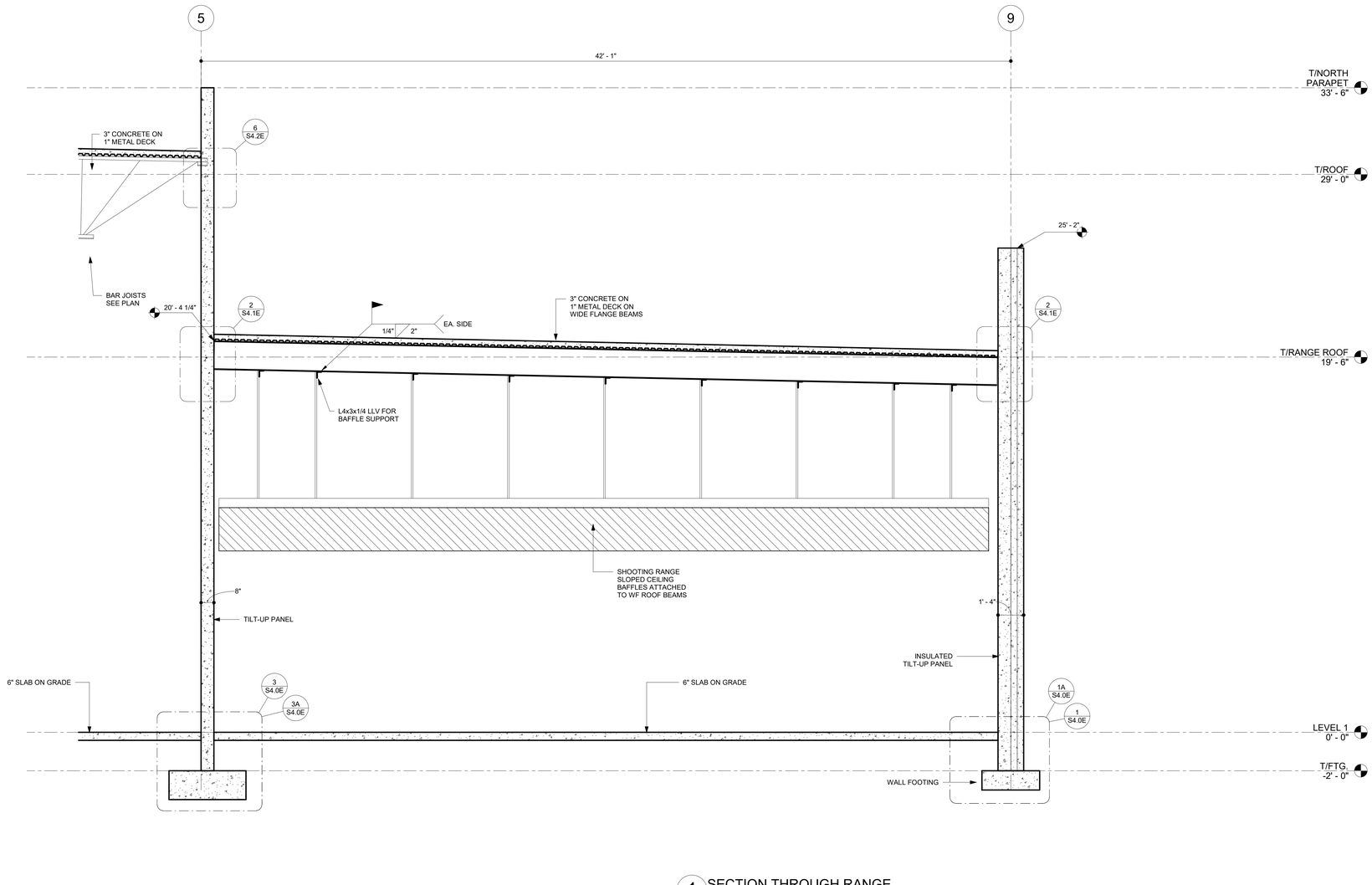
JSG #24115

SHEET TITLE

BUILDING SECTIONS

SHEET NUMBER

S3.1E



1 SECTION THROUGH RANGE
3/8" = 1'-0"

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CLIENT

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REGISTRATION

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JL2 ARCHITECTURE

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PROJECT STATUS

90% CDs / PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION

2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

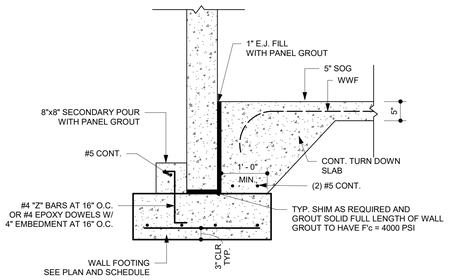
JSG #24115

SHEET TITLE

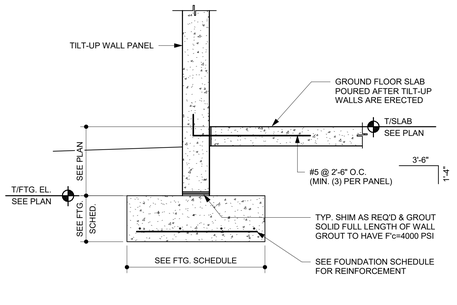
BUILDING SECTIONS

SHEET NUMBER

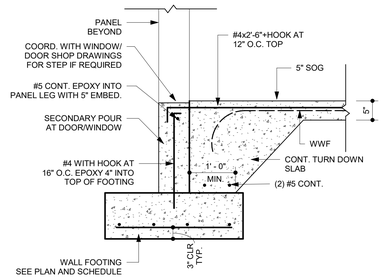
S3.2E



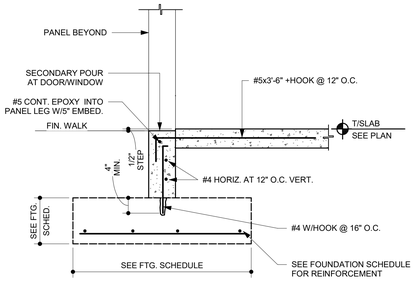
1 SECTION AT WALL FOOTING - TDS
3/4" = 1'-0"



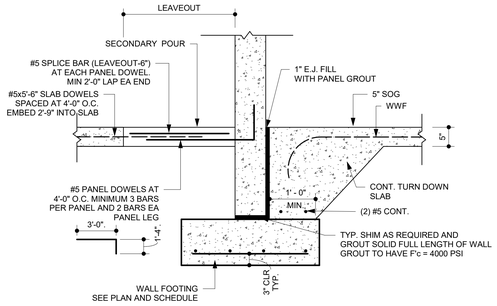
1A SECTION AT WALL FOOTING - LEAVEOUT
3/4" = 1'-0"



2 SECTION AT EXT. DOOR - TDS
3/4" = 1'-0"



2A SECTION AT EXT. DOOR - LEAVEOUT
3/4" = 1'-0"

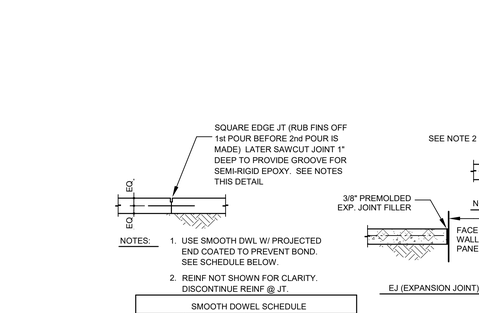


3 SECTION AT INTERIOR TILT WALL - TDS
3/4" = 1'-0"

3A SECTION AT INTERIOR TILT WALL - LEAVEOUT
3/4" = 1'-0"

4 SECTION AT INTERIOR DOOR
3/4" = 1'-0"

5 SECTION AT STEEL TS COLUMN
3/4" = 1'-0"

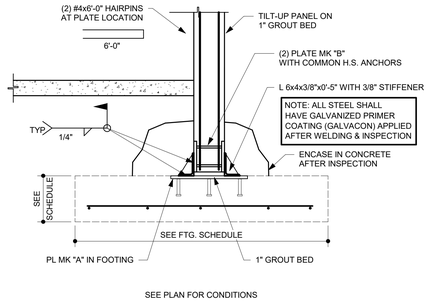


NOTE: SIMILAR FOR TS COLUMN

6 SECTION AT STEEL WF COLUMN
3/4" = 1'-0"

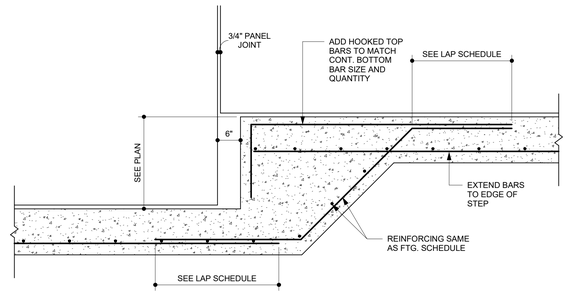
7 SECTION AT STEEL STAIR LANDING
3/4" = 1'-0"

8 SECTION AT OVERHEAD DOOR
3/4" = 1'-0"

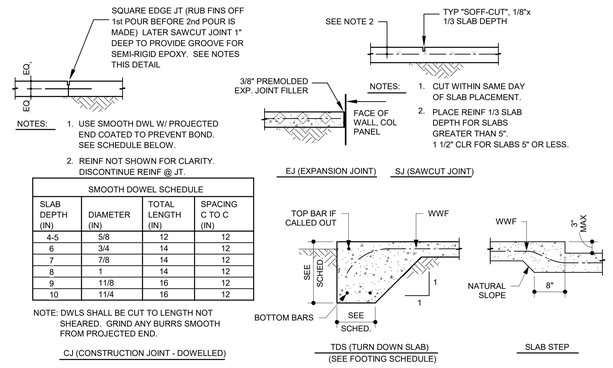


SEE PLAN FOR CONDITIONS

9 PANEL TO FOOTING CONN 2
3/4" = 1'-0"



10 SECTION AT FOOTING STEP
3/4" = 1'-0"



A SLAB ON GRADE DETAILS
3/4" = 1'-0"

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DATE STAMP: 10/23/2025 11:51:21 AM

CLIENT

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REGISTRATION

MARK JOHNSON LICENSE NO. 51983 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	04/04/2025	100% Design Development
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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

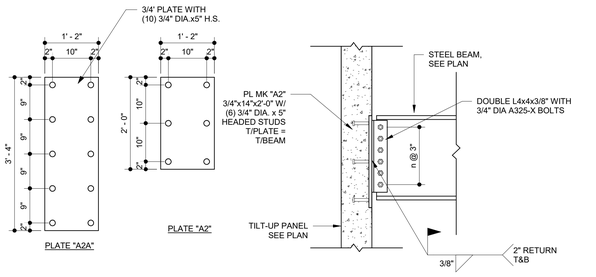
PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

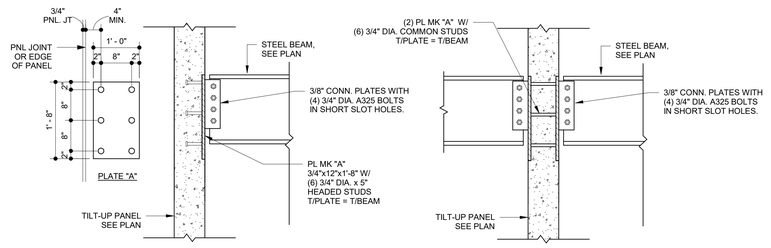
SHEET TITLE
STRUCTURAL DETAILS

SHEET NUMBER
S4.0E



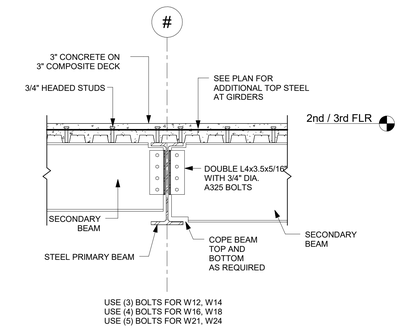
NOTES: USE THIS CONNECTION FOR PRIMARY GIRDER BEAMS FOR REACTIONS >=41 KIPS AND <60 KIPS
USE PLATE "A2A" FOR REACTIONS > 60 KIPS AND <= 90 KIPS
USE 5 BOLTS FOR W18 BEAM
USE 6 BOLTS FOR W21 AND W24 BEAMS

1 SECTION AT PRIMARY BEAM TO WALL
3/4" = 1'-0"



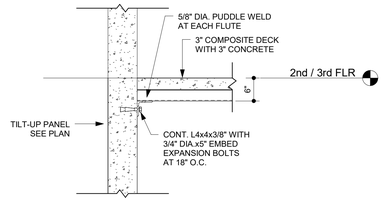
NOTE: USE THIS CONNECTION FOR REACTIONS EQUAL TO OR LESS THAN 40 KIPS FIELD AND
30 KIPS AT THE EDGE. THIS CONNECTION ALSO APPLIES FOR BEAMS AT A SKEW TO WALL

2 SECTION AT SECONDARY BEAM TO WALL
3/4" = 1'-0"

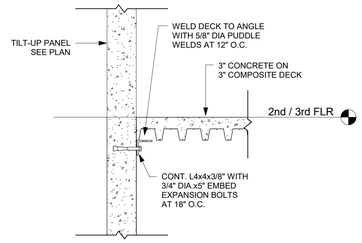


USE (3) BOLTS FOR W12, W14
USE (4) BOLTS FOR W16, W18
USE (5) BOLTS FOR W21, W24

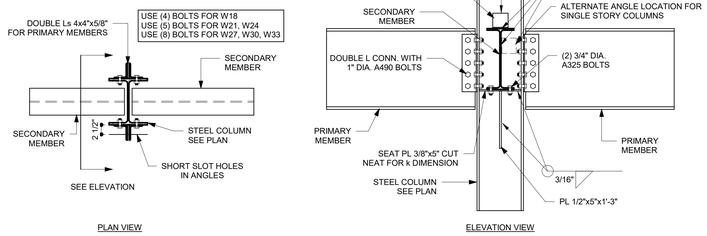
3 SECTION AT BEAM TO BEAM
3/4" = 1'-0"



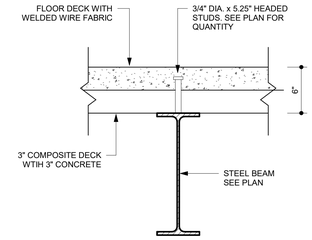
4 SECTION AT FLOOR DECK BEARING
3/4" = 1'-0"



5 SECTION AT FLOOR PARALLEL TO WALL
3/4" = 1'-0"



6 SECTION AT WF COLUMN TO BEAM CONNECTION
3/4" = 1'-0"



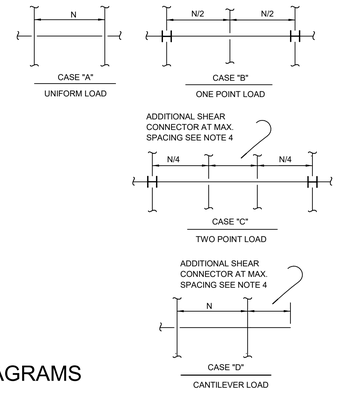
7 SECTION AT TYPICAL DECK BEARING
1 1/2" = 1'-0"

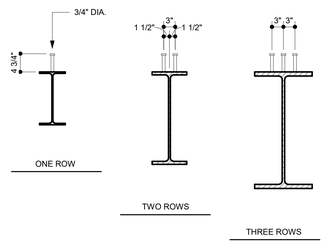
NOTES:
1. CONDUITS NEED TO BE LIMITED TO A MAXIMUM 1" OUTSIDE DIAMETER
2. CONDUIT SHALL BE WIRE TIED TO 3/4" CHAIRS SET ON THE TOP FLUTES
3. CONDUIT SHALL NOT BE RUN IN THE "VALLEY" OF THE FLUTES
4. GANGIN OF 2 CONDUITS IS PERMITTED. NO MORE THAN 2 ARE PERMITTED TO BE GANGED TOGETHER
5. SPAACE CONDUIT RUNS MINIMUM 18 INCHES APART THROUGHOUT THE RUN
6. DO NOT CROSS CONDUIT RUNS. NO OVERLAPPING PERMITTED
7. DO "HOME RUNS" TO MEP ROOMS

CONDUITS IN DECK

NOTES:
1. N=SPECIFIED NUMBER OF SHEAR CONNECTORS. REFER TO PLAN
2. UNLESS NOTED OTHERWISE ON PLAN OR IN THE COMPOSITE BEAM SCHEDULE, SHEAR CONNECTORS SHALL BE DISTRIBUTED ALONG THE ENTIRE LENGTH OF THE BEAM AS SHOWN ON DETAILS ABOVE.
3. FOR GIRDERS, PROVIDE NUMBER OF SHEAR CONNECTORS (NSC) WITHIN THAT BAY AS SPECIFIED ON PLANS.
4. REFER TO GENERAL NOTED FOR SHEAR CONNECTOR DIAMETER AND LENGTH
5. MAXIMUM SPACING OF SHEAR CONNECTORS SHALL BE AS FOLLOWS:
   A. BEAMS PERPENDICULAR TO DECK SPAN = 18 INCHES
   B. BEAMS PARALLEL TO DECK SPAN = 24 INCHES
   C. CHANNELS OR TUBES = 18 INCHES
6. WHERE STEEL DECK CORRUGATIONS DO NOT ALLOW FOR AN EVEN SPACING OF SHEAR CONNECTORS WITH ONE STUD IN EACH FLUTE, ADDITIONAL STUDS IN A SECOND ROW (AND THIRD ROW WHERE REQUIRED) SHALL BE PLACED SUCH THAT THE HIGHEST DENSITY OF SHEAR CONNECTORS OCCURS NEAR THE BEAM SUPPORT.
7. WHERE THE SPECIFIED NUMBER OF SHEAR CONNECTORS IS LESS THEN THE BEAM SPAN LENGTH DIVIDED BY THE MAXIMUM SPACING (SEE NOTE 4), ADDITIONAL SHEAR CONNECTORS SHALL BE PROVIDED SUCH THAT THE MAXIMUM SPACING IS NOT EXCEEDED AT ANY LOCATION IN THE SPAN.
8. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR ENGINEER'S APPROVAL
9. PUDDLE WELDS MUST BE USED SUCH THAT WELDING (INCLUDING SHEAR STUDS) OF DECK TO ALL BEAMS DOES NOT EXCEED 12 INCHES ON CENTER ANYWHERE.

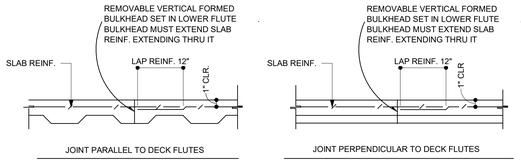
SHEAR CONNECTOR PLACEMENT DIAGRAMS COMPOSITE METAL DECK





NOTES:
1. SHEAR CONNECTORS IN ONE ROW SHALL BE PLACED DIRECTLY OVER THE BEAM WEB
2. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR THE ENGINEER'S APPROVAL
3. PLACE STUD IN A SINGLE ROW WHERE SPACING REQUIREMENTS PERMIT.
4. STUDS SHALL BE PLACED IN TWO ROWS OR THREE ROWS ONLY WHERE REQUIRED IN ORDER TO PLACE THE TOTAL NUMBER OF STUDS. SEE TYPICAL DETAILS AND SHEAR CONNECTOR PLACEMENT DIAGRAMS
5. PROVIDE MINIMUM 1" SPACING FROM EDGE OF FLANGE TO CENTERLINE OF STUD

TYPICAL DETAIL SHEAR CONNECTOR SPACING CRITERIA



NOTES:
1. CONSTRUCTION JOINTS SHALL BE LOCATED NO CLOSER THAN 5'-0" FROM THE CENTER LINE OF THE NEAREST GIRDER
2. AT CONTRACTOR'S OPTION, PRE-FORMED PERMANENT METAL SHEAR KEY MAY BE USED WITH SLAB REINFORCEMENT STOPPING EACH SIDE AND #3 DOWELSx2'-0" CENTERED AT 18" O.C.

TYPICAL DETAIL CONCRETE SLAB ON METAL DECK CONSTRUCTION JOINT

A COMPOSITE BEAM DETAILS
3/4" = 1'-0"

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REGISTRATION

MARK JOHNSON LICENSE NO. 51983 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWING HISTORY

№	DATE	DESCRIPTION
A	04/04/2025	100% Design Development
B	07/22/2025	50% Construction Documents
C	09/18/2025	90% Construction Documents
D	10/14/2025	90% Construction Documents / Permit Set

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

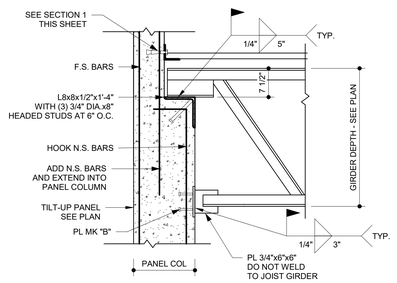
PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

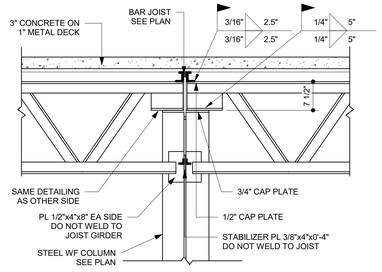
PROJECT NUMBER
JSG #24115

SHEET TITLE
FLOOR FRAMING DETAILS

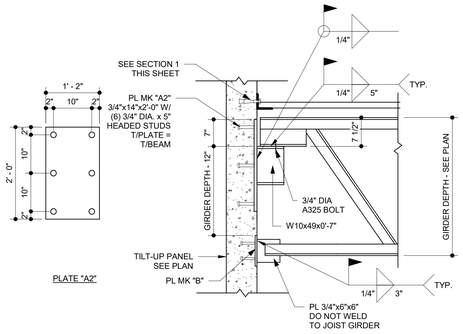
SHEET NUMBER
S4.1E



1 SECTION AT JOIST GIRDER TO PANEL COLUMN
3/4" = 1'-0"

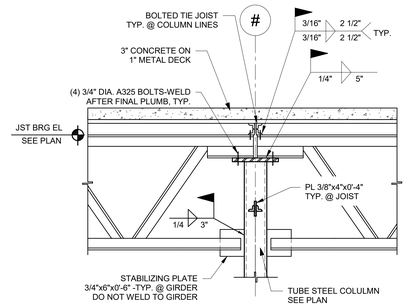


2 SECTION AT WF COL TO ROOF GIRDERS 2
3/4" = 1'-0"



NOTE: SEE PANEL REINFORCEMENT DETAILS FOR ADDITIONAL STEEL AT GIRDER LOCATIONS. USE A2 PLATE WITH COMMON STUDS FOR JOIST GIRDERS EA SIDE OF WALL

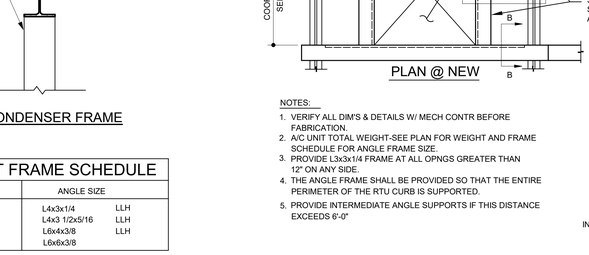
3 SECTION AT JOIST GIRDER TO WALL
3/4" = 1'-0"



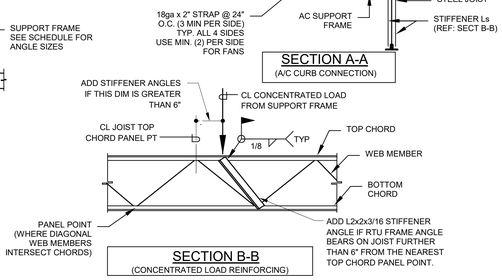
4 SECTION AT JOIST GIRDER TO TS COL 3+1
3/4" = 1'-0"

5 SECTION AT JOIST TO GIRDER 3+1
3/4" = 1'-0"

6 SECTION AT LH JOIST BEARING 3+1
3/4" = 1'-0"



7 SECTION AT DECK OVER PANEL
3/4" = 1'-0"



8 SECTION AT BRIDGING 3+1
3/4" = 1'-0"

9 SECTION AT PANEL JOINT 3+1
3/4" = 1'-0"

NOTE: PROVIDE 4 BOLTS FOR REACTIONS <= 40 KIPS
PROVIDE 5 BOLTS FOR REACTIONS <= 50 KIPS

10 SECTION AT BEAM TO TS COLUMN
3/4" = 1'-0"

AT CONDENSER FRAME

ROOF TOP UNIT FRAME SCHEDULE		
UNIT WEIGHT	ANGLE SIZE	
0 - 675 lbs	L4x3x1/4	LLH
676 - 1500 lbs	L4x3 1/2x5/16	LLH
1501 - 3000 lbs	L6x4x3/8	LLH
3001 - 6000 lbs	L6x6x3/8	

PLAN @ NEW

NOTES:
1. VERIFY ALL DIM'S & DETAILS W/ MECH CONTR BEFORE FABRICATION.
2. A/C UNIT TOTAL WEIGHT-SEE PLAN FOR WEIGHT AND FRAME SCHEDULE FOR ANGLE FRAME SIZE.
3. PROVIDE L3x3x1/4 FRAME AT ALL OPNGS GREATER THAN 12" ON ANY SIDE.
4. THE ANGLE FRAME SHALL BE PROVIDED SO THAT THE ENTIRE PERIMETER OF THE RTU CURB IS SUPPORTED.
5. PROVIDE INTERMEDIATE ANGLE SUPPORTS IF THIS DISTANCE EXCEEDS 6'-0"

A MECH ROOF SUPPORT DETAILS
3/4" = 1'-0"

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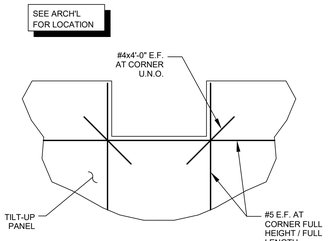
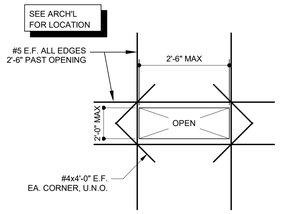


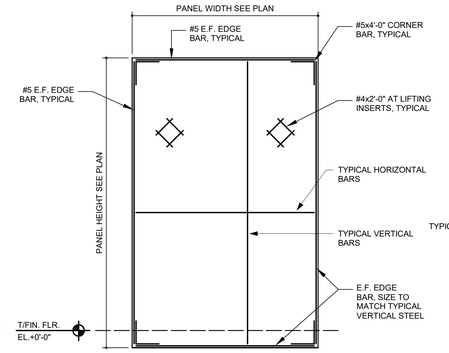
1 NOTCH REINFORCEMENT

SCALE:N.T.S.

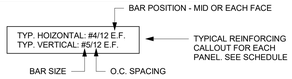


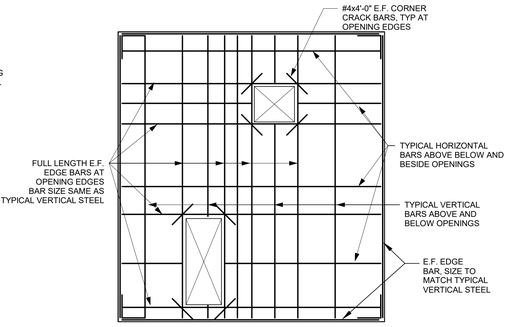
2 TYP. SCUPPER/SMALL MECH

SCALE:N.T.S.



TYPICAL PANEL DETAILS



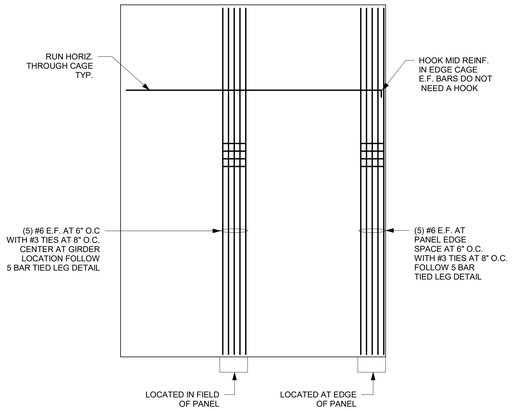


TYPICAL PANEL DETAILS

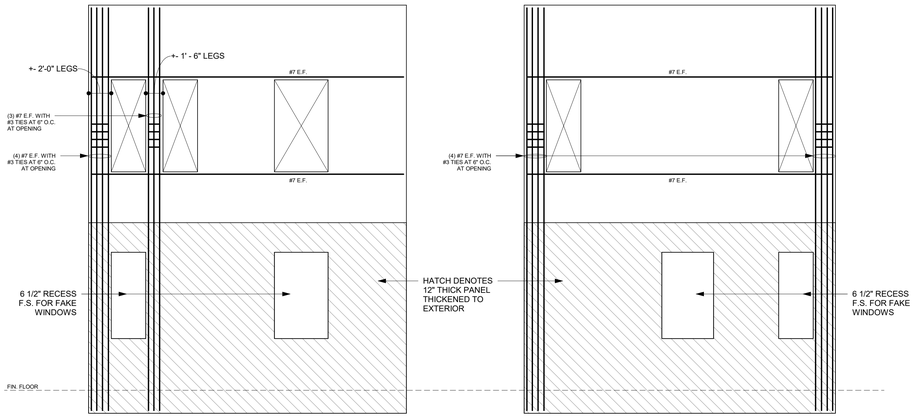
PANEL REINFORCING SCHEDULE

PANEL NUMBERS	THICKNESS	TYPICAL REINFORCEMENT VERTICAL	TYPICAL REINFORCEMENT HORIZONTAL	NOTES
P-1, P-3 THRU P-8	8.00" / 12.00"	#7/12 E.F.	#4/12 E.F.	SEE S5.0E FOR ADD. BARS
P-2	8.00"	#6/12 E.F.	#4/12 E.F.	
LP-1	16.00"	#5/10 E.F.	#5/10 E.F.	HOOK LONG BOTTOM BARS
TP-1, TP-2	16.00"	(5) #7 E.F.	#3 TIES @ 10" O.C.	TIED COLUMN CAGE
P-9 (8"/12"), P-10, P-11	8.00"	#6/10 E.F.	#4/12 E.F.	SEE S5.1E FOR ADD. BARS
P-22, P-23, P-25	8.00"	#6/10 E.F.	#4/12 E.F.	(2) #6 E.F. VERT W/ #3 TIES AT 6" O.C. AT OPN'G AT MAN DOOR LEG FOR PANEL P-25. ADD GIRDER CAGE FOR PANEL P-23
P-16, P-41	8.00"	#5/10 MID	#4/12 MID	SEE S5.1E FOR ADD. BARS
P-2A, P-12 THRU P-15, P-18, P-19 P-37 THRU P-40, SP-1	8.00"	#5/12 MID	#4/12 MID	ADD GIRDER CAGE FOR PANEL P-19
P-28, P-29, P-32 THRU P-35	8.00"+4.00"	#5/12 MID	#4/12 MID	
P-30, P-31	8.00"+4.00"	#6/10 MID	#4/12 MID	
P-36	8.00"	#6/10 MID	#4/12 MID	
P-20, P-21	9.25"			SEE S5.1E FOR REINF.
P-26, P-27	14.00"			SEE S5.1E FOR REINF.

8.00" + 4.00" ARE INSULATED PANELS WITH AN 8" MAIN STRUCTURAL WYTHE, 4" OF THERMOMASS INSULATION, AND A 4.00" THICK FACING LAYER. THE FACING LAYER TO BE REINFORCED WITH 6x6 W2.9xW2.9 WWF CHAIRED MID-HEIGHT OF WYTHE. REFER TO THE THERMOMASS WEB SITE FOR ADDITIONAL INFORMATION.

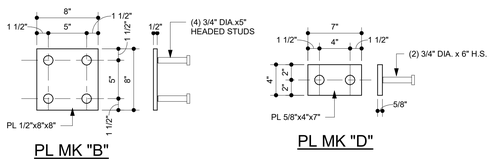


TYPICAL GIRDER REINFORCEMENT DETAILS



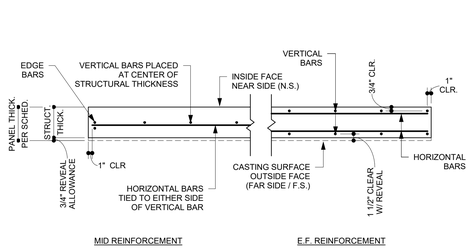
P-1, P-3, P-5, P-7, P-8

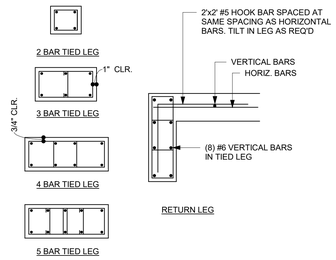
P-4,P-6



PL MK "B"

PL MK "D"

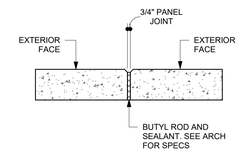




A REINFORCEMENT PLACEMENT DIAGRAM

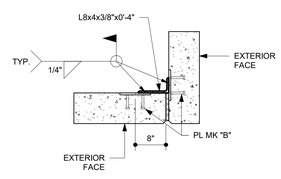
3/4" = 1'-0"

PROVIDE MINIMUM TWO (4) CONNECTIONS PER LEVEL BETWEEN PANELS AT INSIDE BUTT, OUTSIDE BUTT, AND MITER CORNERS ONLY, U.N.O. ON PLAN (DETAILS C, D, AND E BELOW). PROVIDE DETAIL F ONLY WHERE INDICATED ON PLAN. LOCATE CONNECTIONS AT 2'-0" A.F.F. (GROUND) AND AT 2'-0" BELOW SECOND FLOOR OR ROOF TRUSS BEARING TYPICAL U.N.O. RECESS ALL PLATES 3/4" AT ALL LOCATIONS EXCEPT FOR THE GUN RANGE AREA. IF CALLOUT DOES NOT SPECIFY SPACING, SPACE CONNECTIONS EQUALLY BETWEEN FLOORS. RECESS ALL EMBED CONNECTIONS EXPOSED TO WEATHER 3/4" AND PATCH AFTER INSPECTION



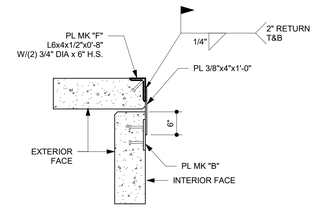
B TYPICAL PANEL JOINT

3/4" = 1'-0"



C OUTSIDE BUTT JOINT

3/4" = 1'-0"



D INSIDE BUTT JOINT

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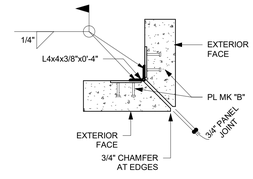
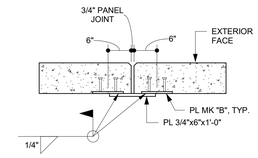


E MITER CORNER

3/4" = 1'-0"



F PANEL-PANEL CONNECTION

3/4" = 1'-0"

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B	07/22/2025	50% Construction Documents
C	09/18/2025	90% Construction Documents
D	10/14/2025	90% Construction Documents / Permit Set

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PROJECT STATUS
90% CDs / PERMIT SET

DATE OF ISSUE
10/14/2025

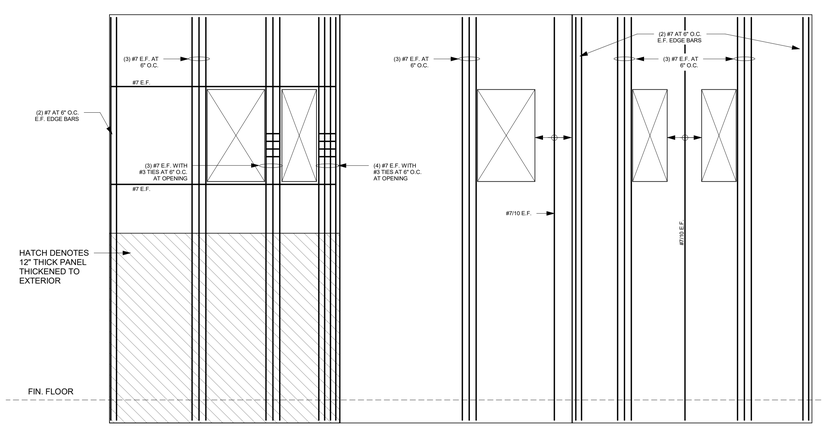
PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

PROJECT LOCATION
2125 AVENUE S.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
JSG #24115

SHEET TITLE
PANEL DETAILS

SHEET NUMBER
S5.0E



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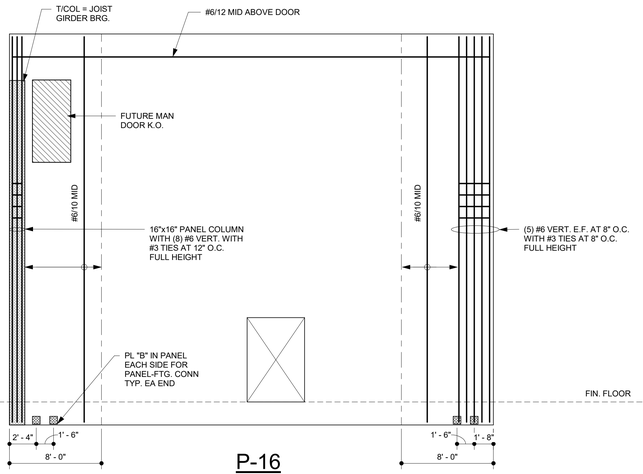

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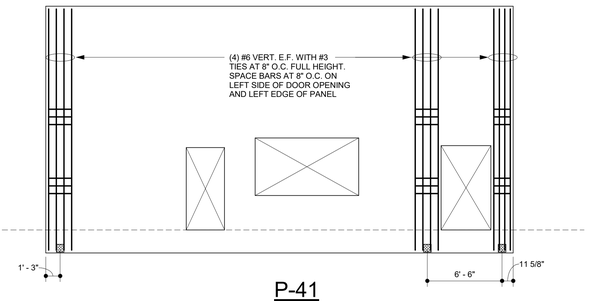

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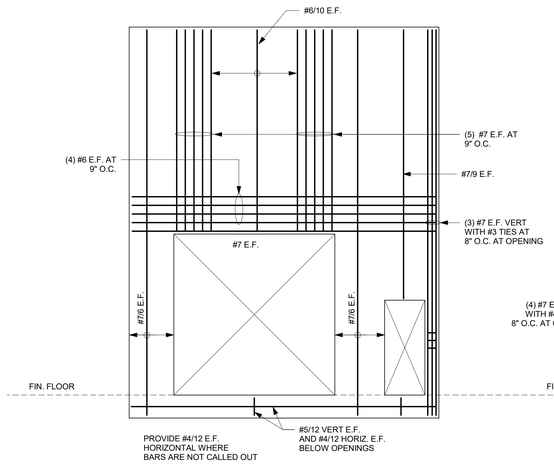

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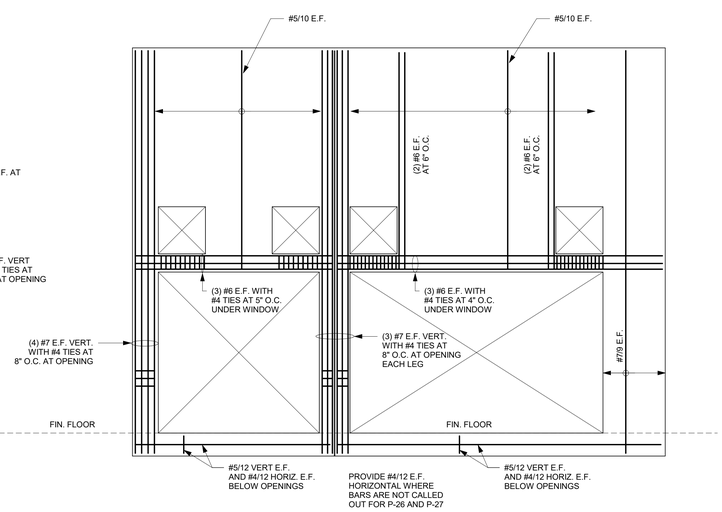

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DATE STAMP: 10/23/2025 11:51:29 AM

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	04/04/2025	100% Design Development
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PROJECT NAME
RIVIERA BEACH POLICE DEPARTMENT EVIDENCE AND FIRE RANGE

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PROJECT NUMBER
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SHEET TITLE
PANEL DETAILS

SHEET NUMBER
S5.1E

FIRE PROTECTION DESIGN CRITERIA:

61G15-32.003 (1) (2) (5)

(1) SCOPE OF WORK:
NEW CONSTRUCTION BUILDING:
FIRE PROTECTION SYSTEM FOR NEW CONSTRUCTION 1 STORY WITH A MEZZANINE EVIDENCE AND FIRING RANGE BLDG.

BUILDING SHALL BE PROTECTED WITH A WET AUTOMATIC FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13, 2019 EDITION.

THE EXISTING CITY SUPPLY PRESSURE SHALL BE BOOSTED BY A ELECTRICAL FIRE PUMP SYSTEM IN ACCORDANCE WITH NFPA 20, 2019 EDITION

(2) ACCEPTANCE TEST CRITERIA:
TESTING OF FIRE PROTECTION SYSTEM AND ITS COMPONENTS SHALL COMPLY WITH ALL APPLICABLE ITEMS PER NFPA 13, 2019 EDITION, FIGURES 6.10.1 AND 28.1, CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVE AND UNDERGROUND PIPING.

SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE FOR 2 HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHEN THE MAXIMUM PRESSURE TO BE MAINTAINED IN THE SYSTEM IS IN EXCESS OF 150 PSI.

THE TESTING PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED.

THE CONTRACTOR SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS IN ACCORDANCE WITH NFPA-13. COMPLETE THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S), AND FORWARD THE APPROVED CERTIFICATE(S) TO THE ARCHITECT/ENGINEER FOR APPROVAL OF THE INSTALLATION.

ALL TEST CERTIFICATE(S) SHALL BE DATED, SIGNED AND WITNESSED BY AHJ. SUBMIT ONE COPY OF EACH TEST CERTIFICATE TO ARCHITECT/ENGINEER.

(5) STRUCTURAL SUPPORT AND STRUCTURAL OPENINGS:
THE SUPPORT SYSTEMS FOR THIS BUILDING SHALL BE DESIGNED BY A STATE LICENSED STRUCTURAL ENGINEER IN ACCORDANCE WITH F.A.C., PLEASE REFER TO STRUCTURAL DRAWINGS FOR LIVE AND DEAD LOADING INFORMATION. THERE ARE NO SIGNIFICANT STRUCTURAL OPENINGS THAT WILL BE REQUIRED FOR THIS FIRE SPRINKLER SYSTEM.

61G15-32.004 (2) (A-M)

A. POINT OF SERVICE:
POINT OF CONNECTION SHALL BE TO AN EXISTING WATER SUPPLY MAIN ON SITE. POINT OF SERVICE OCCURS WHEN THE UNDERGROUND PIPING FOR THE FIRE SPRINKLER SYSTEM BECOMES EXCLUSIVELY FOR THE FIRE PROTECTION SYSTEM. ONE FIRE DEPARTMENT CONNECTION SHALL LOCATED ON SITE. REFER TO CIVIL UTILITY SITE DRAWINGS FOR LOCATION OF POS AND FDC.

B. APPLICABLE NFPA STANDARD TO BE APPLIED:
· FLORIDA FIRE PREVENTION CODE 8TH EDITION
· NFPA 13, 2019 EDITION
· *NFPA 20, 2019 EDITION*
· NFPA 24, 2019 EDITION
· NFPA 25, 2020 EDITION

C. CLASSIFICATION OF HAZARD OCCUPANCY OF EACH AREA OR ROOM:
LIGHT HAZARD OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: OFFICE SPACES, BATHROOMS AND CORRIDORS.

ORDINARY HAZARD GROUP I OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: STORAGE ROOMS, ELECTRICAL ROOMS, MECHANICAL ROOMS, IDF ROOMS AND IT ROOMS.

ORDINARY HAZARD GROUP II OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: FIRE RANGE.

EXTRA HAZARD GROUP II OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: EVIDENCE VEHICLE STORAGE.

REFER TO FIRE PROTECTION DRAWINGS FOR ALL ROOM HAZARD OCCUPANCY CLASSIFICATIONS.

D. DESIGN APPROACH:

DENSITY/AREA:
ORDINARY HAZARD GROUP II:
0.20 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. AREA OF SPRINKLER OPERATION. AN ADDITIONAL 250 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.

EXTRA HAZARD GROUP II:
0.40 GPM/SQ.FT. OVER THE MOST DEMANDING 2500 SQ. FT. AREA OF SPRINKLER OPERATION. AREA OF OPERATION WAS REDUCED BY 25% PER NFPA 13, SECTION 19.3.3.2.6 FOR USE OF HIGH TEMPERATURE SPRINKLER HEADS. AN ADDITIONAL 250 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.

SPRINKLER HEADS:
QUICK RESPONSE, 155°F UNLESS OTHERWISE NOTED.

SPACING:
STANDARD COVERAGE HEADS:
PENDENT AND UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 225 SQ. FT. FOR ALL LIGHT HAZARD AREAS, AND 130 SQ. FT. FOR ALL ORDINARY HAZARD GROUP I AND II AREAS. (MAXIMUM SPACING SHALL BE 15'-0" AND MINIMUM SPACING SHALL BE 6'-0")

EXTENDED COVERAGE SIDEWALL SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 288 SQ. FT. (MAXIMUM SPACING SHALL BE 18'-0" AND MINIMUM SPACING SHALL BE 8'-0")

EXTENDED COVERAGE SPRINKLER HEADS:
PENDENT/ UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 324 SQ. FT. (MAXIMUM SPACING SHALL BE 18'-0" AND MINIMUM SPACING SHALL BE 9'-0" FOR PENDENT'S AND 8'-0" FOR UPRIGHTS)

E. CHARACTERISTICS OF THE WATER SUPPLY TO BE USED:
THE EX. WATER MAIN IS AN 10" CIRCULATING MAIN LOCATED ON THE AVENUE S. BASED ON THE FLOW TEST DATA RECEIVED, THE DURATION WILL SUPPORT THE DESIGN CRITERIA. A NEW 8" UNDERGROUND WATER MAIN CONNECTS TO AN EX. 10" UNDERGROUND WATER SUPPLY ADJACENT THE BUILDINGS. THE NEW 8" UNDERGROUND MAIN CONNECTS TO THE SITE BACKFLOW DEVICE BEFORE EXTENDING TO THE SITE FIRE PUMP SYSTEM. A NEW 8" BOOSTED SUPPLY MAIN IS ROUTED FROM THE SITE FIRE PUMP SYSTEM TO ALL BUILDING ON SITE.

F. FLOW TEST DATA:
FLOW TEST RESULTS PERFORMED ON, 04-22-2025,: REFER TO FIRE HYDRANT FLOW TEST DATA THIS SHEET FOR CLARIFICATION.

G. VALVE AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER:
ALL PADDLE TYPE WATER FLOW INDICATORS SHALL HAVE A FLOW SWITCH. ALL VALVES CONTROLLING THE FIRE SPRINKLER SYSTEMS, INCLUDING BACKFLOW DEVICE, SHALL HAVE TAMPER SWITCHES. ALL ELECTRICAL DEVICES SHALL BE MONITORED BY CENTRAL STATION OR SIMILAR AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE IN COMPLIANCE WITH NFPA 72.

H. MICROBIAL INDUCED CORROSION (MIC):
CONTRACTOR SHALL ORDER AND OBTAIN A TEST LAB REPORT INDICATING THAT NO MIC IS PRESENT IN THE SYSTEM.

PROVIDE WITH TYCO TAV-W AUTOMATIC AIR VENT. LOCATE AT HIGHEST REMOTE PART OF SPRINKLER SYSTEM.

I. BACKFLOW PREVENTION AND METERING SPECIFICATIONS:
THE BACKFLOW PREVENTION AND METERING EQUIPMENT SHALL BE INSTALLED BY A MINIMUM OF A CLASS V CONTRACTOR AS LICENSED BY THE STATE FIRE MARSHAL. THE MAXIMUM ALLOWABLE PRESSURE LOSS ACROSS THE DEVICE SHALL BE 5 PSI AT SYSTEM DEMAND.

J. QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS:
ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS SHALL BE FM APPROVED AND UL LISTED.

K. FIRE PUMP REQUIREMENTS:
AURORA INLINE ELECTRICAL FIRE PUMP MODEL 8-383-15 1,000 GPM @ 60 PSI -75 HP, 3 PHASE, 460V, 60HZ

L. WATER STORAGE TANK:
WATER STORAGE TANK WILL NOT BE REQUIRED.

M. STORAGE OCCUPANCY REQUIREMENTS:
MISCELLANEOUS STORAGE OCCUPANCY IN ACCORDANCE WITH NFPA 13, 2019 EDITION CHAPTER 4.

OWNER'S INFORMATION CERTIFICATE AS DEPICTED IN NFPA 13 FIGURE A.27.1(b) SHALL BE PROVIDE BY OWNER FOR AHJ REVIEW AND VERIFICATION OF ANY POSSIBLE STORAGE.

FIRE PROTECTION GENERAL NOTES:

1. THE FIRE PROTECTION SYSTEM SHOWN REPRESENT THE DESIGN INTENT OF THE ENGINEER OF THE RECORD IN ACCORDANCE WITH STATE REGULATION 61G15-32. CONTRACTOR SHALL PROVIDE LAYOUT DRAWINGS AND ASSOCIATED HYDRAULIC CALCULATIONS PER DESIGN CRITERIA PROVIDED BY THE ENGINEER OF THE RECORD.
2. DESIGN AND INSTALLATION OF FIRE PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
   - FLORIDA FIRE PREVENTION CODE 8TH EDITION
   - NFPA 13, 2019 EDITION
   - NFPA 20, 2019 EDITION
   - NFPA 24, 2019 EDITION
   - NFPA 25, 2020 EDITION
3. ALL HANGERS & MATERIALS SHALL BE IN ACCORDANCE WITH NFPA 13 STANDARDS.
4. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE APPROVED BY NFPA-13. ALL HANGERS ON 4" PIPE AND LARGER IS TO BE CLEVIS TYPE HANGERS. POWDER DRIVEN STUDS SHALL NOT BE PERMITTED. ALL HANGERS SHALL BE U.L./F.M. APPROVED.
5. FIRE PROTECTION CONTRACTOR SHALL UTILIZE ONLY U.L. LISTED AND FM APPROVED MATERIALS AND EQUIPMENT THROUGHOUT THE FIRE SPRINKLER SYSTEM.
6. ALL YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND FM APPROVED. THE YARD UNDERGROUND SERVICE LINE SHALL BE TYPE DR-14, C900, CPVC PIPE. INTERIOR MAIN PIPING, 2-1/2" AND LARGER, SHALL BE SCHEDULE 10 BLACK STEEL, WITH GROOVED END FITTINGS AND WELDED BRANCH LINE OUTLETS. BRANCH LINE PIPING, 2" AND SMALLER, SHALL BE SCHEDULE 10 BLACK STEEL WITH GROOVED END FITTINGS AND WELDED OUTLETS AND/ OR SCHEDULE 40 WITH THREADED ENDS. SPRIGS, ARM-OVERS AND DROPS SHALL BE SCHEDULE 40 STEEL WITH THREADED ENDS. ALL PIPING AND FITTINGS EXPOSED TO THE OUTSIDE ELEMENTS OR CORROSIVE ENVIRONMENTS SHALL BE GALVANIZED MATCHING THE CRITERIA ABOVE.
7. ALL METAL HANGERS, SUPPORTS, THREADED ROD, ETC. EXPOSED TO THE OUTSIDE ELEMENTS OR CORROSIVE ENVIRONMENTS SHALL BE HOT DIPPED GALVANIZED.
8. ALL UNDERGROUND PIPING SHALL BE ADEQUATELY SUPPORTED. ALL UNDERGROUND PIPING SHALL BE BURIED AT LEAST 12 INCHES BELOW THE FROST LINE FOR THE LOCALITY OR A MINIMUM OF 36 INCHES BELOW FINISH GRADE IF FROST IS NOT APPLICABLE.
9. SPRINKLER SYSTEMS SHALL HAVE AN UNDERGROUND FLUSH COMPLETED AT THE TIME OF HYDROSTATIC TEST. FLUSHING SHALL BE COMPLETED PRIOR TO CONNECTING THE UNDERGROUND PIPING TO THE OVERHEAD PIPING.
10. SPRINKLER SYSTEMS SHALL BE HYDROSTATICALLY TESTED FOR 2 HOURS AT 200 PSI OR 50 PSI IN EXCESS OF NORMAL WORKING PRESSURE WHEN NORMAL WORKING PRESSURE EXCEEDS 150 PSI.
11. SUITABLY PROTECT ALL EQUIPMENT FURNISHED DURING CONSTRUCTION ALL RUBBISH OCCASIONED BY THIS INSTALLATION SHALL BE PERIODICALLY REMOVED FROM THE PREMISES AND ALL EXPOSED WORK SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL ACCEPTANCE. RESTORE ANY DAMAGED SURFACES AND ITEMS TO "LIKE NEW" CONDITION BEFORE A REQUEST FOR FINAL ACCEPTANCE.
12. UNTIL SYSTEM IS COMPLETED, TESTED AND ACCEPTED, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF LEAKS, AND ACCIDENTAL BREAKS.
13. CONTRACTOR SHALL GUARANTEE IN WRITING, HIS RESPONSIBILITY FOR DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FORM THE DATE OF FINAL ACCEPTANCE ISSUED BY THE ARCHITECT AND CORRECT ANY DEFICIENCIES, LABOR AND MATERIALS, WITHOUT ADDITIONAL COST TO OWNER.
14. ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED. COORDINATE ALL PAINTING REQUIREMENTS/ COLORS WITH ARCHITECTURAL DRAWINGS.
15. FIRE SPRINKLER CONTRACTOR SHALL NOT ROUTE ANY FIRE PROTECTION PIPING ABOVE ELECTRICAL PANELS, OFFSET OR REROUTE AS REQUIRED.
16. ALL SPRINKLER HEADS EXPOSED TO THE OUTSIDE ELEMENTS SHALL BE UL LISTED CORROSION RESISTANT.
17. PROVIDE ADDITIONAL SPRINKLER HEADS UNDER HVAC DUCT WORK OR OBSTRUCTION EQUAL TO AND EXCEEDING 4' IN WIDTH.
18. ALL SPRINKLER HEADS SHALL BE CENTERED TO THE CEILING TILES.
19. ALIGN ALL SPRINKLER HEADS WITH CEILING LIGHT FIXTURES AND MECHANICAL DIFFUSERS.
20. PROVIDE SPRINKLER HEAD GUARDS THAT ATTACH ONLY TO THE PIPE AND NOT THE FIRE SPRINKLER HEAD (SPRINKGUARD OR APPROVED EQUAL) FOR ALL HEADS LOCATED WITHIN MECHANICAL ROOMS, ELECTRICAL ROOMS, ELEVATOR PITS, BENEATH STAIRS, STORAGE ROOMS OR LOCATED BELOW 7'-6"
21. FIRE SPRINKLER HEADS IN EXPOSED OBSTRUCTED CONSTRUCTION AREAS (AREAS CONTAINING STRUCTURAL BEAMS) SHALL BE INSTALLED BELOW THE STRUCTURAL MEMBERS UP TO A MAXIMUM OF 22" BELOW THE CEILING AVOIDING OBSTRUCTION TO DISCHARGE IN CONFORMANCE WITH NFPA 13, 2019 EDITION SECTION 10.2.6.1.2 (1), (2), AND (4).
22. FIRE PROTECTION CONTRACTOR SHALL COMPLY WITH NFPA 13, 2019 EDITION TABLES 10.2.7.1.2 (A), (B), & (C) TO AVOID OBSTRUCTION TO SPRINKLER HEAD DISCHARGE. FIRE PROTECTION CONTRACTOR SHALL THOROUGHLY COORDINATE FIRE SPRINKLER HEAD PLACEMENTS WITH ALL STRUCTURAL/ ARCHITECTURAL OBSTRUCTIONS.
23. ONLY NEW SPRINKLERS SHALL BE EMPLOYED IN THE INSTALLATION OF SPRINKLER SYSTEMS. AT LEAST TWELVE SPARE SPRINKLER HEADS OF EACH TYPE, TEMPERATURE RATING, AND ORIFICE SIZE USED IN THE SYSTEMS SHALL BE KEPT IN THE PREMISES. REPLACEMENT SPRINKLERS SHALL HAVE THE SAME OPERATING CHARACTERISTICS AS THE SPRINKLER HEADS BEING REPLACED.
24. PROVIDE ADEQUATE DRAIN PER NFPA - 13.
25. EACH SPRINKLER SYSTEM SHALL HAVE A DRAIN AND TEST CONNECTION WITH A VALVE ON THE SYSTEM SIDE OF THE CONTROL VALVE.
26. WATER FLOW TEST CONNECTIONS SHALL BE PROVIDED AT LOCATIONS THAT ALLOW FLOW TESTING OF WATER SUPPLIES, CONNECTIONS, AND ALARM MECHANISMS.
27. PROVIDE FLUSHING CONNECTIONS AT REMOTE END OF ALL CROSS MAINS AND AT ALL LOW ENDS. ROUTE ALL DRAIN PIPING TO THE GROUND LEVEL AND DISCHARGE TO THE EXTERIOR OF THE BUILDING OR STORM DRAINAGE SYSTEM.
28. SPRINKLER ZONES WITH DEAD END MAINS OR MORE THAN ONE REMOTE END, PROVIDE WITH INSPECTORS TEST AND DRAINS TO EACH END MAIN AND REMOTE END. ROUTE ALL DRAIN PIPING TO THE GROUND LEVEL AND DISCHARGE TO THE EXTERIOR OF THE BUILDING OR STORM DRAINAGE SYSTEM.
29. FIRE PROTECTION CONTRACTOR SHALL THOROUGHLY COORDINATE ALL HEADS, HANGERS, PIPING AND ALL OTHER ASSOCIATED MATERIAL LOCATIONS WITH MECHANICAL, PLUMBING, ELECTRICAL AND ALL STRUCTURAL OBSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS.
30. REFER TO ARCHITECTURAL REFLECTED CEILING AND ELECTRICAL LIGHTING DRAWINGS FOR CEILING DESCRIPTIONS AND HEIGHTS.
31. ALL VALVES SHALL HAVE A PERMANENTLY AFFIXED SIGN INDICATION ITS FUNCTION.
32. ALARMS SHALL BE OF SUFFICIENT INTENSITY TO BE CLEARLY AUDIBLE IN OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
33. (4) 2-1/2" FIRE DEPARTMENT CONNECTIONS SHALL BE PROVIDED.
34. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY.
35. NOT ALL PIPING, VALVES AND APPURTENANCES ARE SHOWN ON PLANS. REFER TO PIPING RISER DIAGRAMS, DETAILS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
36. THE SYSTEM SHALL BE DESIGNED AND HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13 AND SPRINKLERS MANUFACTURER REQUIREMENTS.
37. ALL WIRING OF FLOW SWITCHES AND ANY FIRE PROTECTION DEVICES IS DONE BY ELECTRICAL SUBCONTRACTOR.
38. SEPARATE FIRE SPRINKLER PERMIT DRAWINGS SHALL BE SUBMITTED BY INSTALLING CONTRACTOR FOR REVIEW.

UNDERGROUND GENERAL NOTES

1. ALL UNDERGROUND SHALL BE INSTALLED BY A STATE OF FLORIDA MINIMUM CLASS 5 LICENSED UNDERGROUND CONTRACTOR.
2. ALL UNDERGROUND PIPING TO BE C-900 PVC CLASS 200 DR-14
3. ALL PVC PIPE TO BE MARKED W/DETECTABLE UNDERGROUND MARKING TAPE.
4. ALL ABOVE GROUND STEEL PIPING TO BE PAINTED FOR CORROSION PROTECTION.
5. ALL MATERIALS, TESTING, METHOD OF RESTRAINT & INSPECTION SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13 & 24.
6. FITTING RESTRAINTS, THRUST BLOCKS AND RODDING SHALL CONFORM TO NFPA 24.
7. MINIMUM BURY DEPTH SHALL NOT BE LESS THAN 3'-0"
8. ALL WATER LINES FOR FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 PSI FOR TWO (2) HOURS MINIMUM.
9. ALL EXTERIOR MATERIALS SHALL BE PROPERLY PROTECTED AGAINST EXPOSURE.
10. ALL WIRING BY OTHERS.
11. UNDERGROUND PIPING SHALL BE FLUSHED AS PER NFPA 24 BEFORE CONNECTING TO THE OVERHEADS FIRE SPRINKLER SYSTEM PIPING.
12. COMPLY WITH ALL LOCAL CODE REQUIREMENTS PRIOR CONNECTION TO THE FIRE SERVICE WATER SYSTEM.

ABBREVIATIONS

ABV	ABOVE
APPROX	APPROXIMATELY
ASP	AUTOMATIC STANDPIPE
ASSY	ASSEMBLY
BFF	BELOW FINISHED FLOOR
BFV	BUTTERFLY VALVE
CONT	CONTINUATION
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DN	DOWN
EL	ELEVATION
FCA	FLOOR CONTROL ASSEMBLY
PRFCA	PRESSURE REDUCING FLOOR CONTROL ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
FHV	2-1/2" FIRE HOSE VALVE
FHVC	2-1/2" FIRE HOSE VALVE IN CABINET
FS	FLOW SWITCH
GPM	GALLONS PER MINUTE
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
POC	POINT OF CONNECTION
PRFHV	PRESSURE REDUCING HOSE VALVE
PRFHVC	PRESSURE REDUCING HOSE VALVE IN CABINET
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RM	ROOM
SPCA	STANDPIPE CONTROL ASSEMBLY
SPR	SPRINKLER
TYP	TYPICAL
UG	UNDERGROUND
RN	RISER NIPPLE

FIRE PROTECTION DATA

LIGHT HAZARD OCCUPANCY CLASSIFICATION (L.H.)	
OCCUPANCY CLASSIFICATION:	LIGHT HAZARD
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.10 GPM/SQ.FT.
HYDRAULIC REMOTE AREA:	1500 SQ.FT. UNLESS OTHERWISE NOTED
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	30 MIN.
MAX. COVERAGE /SPRINKLER HEAD:	STANDARD COVERAGE HEADS: PENDENT AND UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 225 SQ. FT. (MAXIMUM SPACING SHALL BE 15'-0" AND MINIMUM SPACING SHALL BE 6'-0")
HOSE STREAM ALLOWANCE:	100 GPM
ORDINARY HAZARD GROUP I OCCUPANCY CLASSIFICATION (O.H.1)	
OCCUPANCY CLASSIFICATION:	ORDINARY HAZARD GROUP I
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.15 GPM/SQ.FT.
HYDRAULIC REMOTE AREA:	1500 SQ.FT. UNLESS OTHERWISE NOTED
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	60 MIN.
MAX. COVERAGE /SPRINKLER HEAD:	STANDARD COVERAGE HEADS: PENDENT AND UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 130 SQ. FT. (MAXIMUM SPACING SHALL BE 15'-0" AND MINIMUM SPACING SHALL BE 6'-0")
HOSE STREAM ALLOWANCE:	250 GPM
ORDINARY HAZARD GROUP II OCCUPANCY CLASSIFICATION (O.H.2)	
OCCUPANCY CLASSIFICATION:	ORDINARY HAZARD GROUP II
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.20 GPM/SQ.FT.
HYDRAULIC REMOTE AREA:	1500 SQ.FT. UNLESS OTHERWISE NOTED
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	60 MIN.
MAX. COVERAGE /SPRINKLER HEAD:	STANDARD COVERAGE HEADS: PENDENT AND UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 130 SQ. FT. (MAXIMUM SPACING SHALL BE 15'-0" AND MINIMUM SPACING SHALL BE 6'-0") EXTENDED COVERAGE SIDEWALL SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 288 SQ. FT. (MAXIMUM SPACING SHALL BE 18'-0" AND MINIMUM SPACING SHALL BE 8'-0") EXTENDED COVERAGE SPRINKLER HEADS: PENDENT/ UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 324 SQ. FT. (MAXIMUM SPACING SHALL BE 18'-0" AND MINIMUM SPACING SHALL BE 9'-0" FOR PENDENT'S AND 8'-0" FOR UPRIGHTS)
HOSE STREAM ALLOWANCE:	250 GPM
EXTRA HAZARD GROUP I OCCUPANCY (EH2)	
OCCUPANCY CLASSIFICATION:	EXTRA HAZARD GROUP 2
SYSTEM TYPE:	WET PIPE
DESIGN DENSITY:	.40 GPM/SQ.FT.
HYDRAULIC REMOTE AREA:	2500 SQ.FT. UNLESS OTHERWISE NOTED
SPRINKLER ORIFICE SIZE:	1/2" UNLESS OTHERWISE NOTED
DURATION OF SUPPLY:	90 MIN.
MAX. COVERAGE /SPRINKLER HEAD:	MAXIMUM PROTECTION SHALL BE 100 SQ.FT. (MAXIMUM SPACING SHALL BE 12'-0" AND MINIMUM SPACING SHALL BE 6'-0")
HOSE STREAM ALLOWANCE:	500 GPM

Riviera Beach
see what's beneath the surface

Hydrant Details

Hydrant ID: 5-0048

Address: 2024 Avenue S, West Palm Beach, FL 33404, US

Location Description:2075 AVE S

Manufacture	Model	Model Year	Size
Mueller	A-326	1997	5 1/4"
Barrel Type	Cap Color	Open Direction	Isolation Valve
Dry	Red	Right	Yes

Fire Flow Test Details

Date of Fire Flow	Operational Status	Port Diameter
04/22/2025 02:37:47 PM	OK	2.5
Static Pressure	Residual Pressure	Pitot Pressure
50	40	30.00

Flow Time	Flow GPM	Flow Base	Gallons Used
5.00	924.00	4620.00	4620.00
Lubricated	Chains Needed	Replaced Cap	Gasket Needed
Yes	No	No	No

Comment:Flow tested and re-painted Clow fire hydrant

City of Riviera Beach, Utility Special District

600 West Blue Heron Blvd, Riviera Beach, Florida 33404

Office: 561-845-4185, Web: www.rivierabeach.org

FIRE HYDRANT FLOW TEST DATA

1 GENERAL NOTES
1/8" = 1'-0"

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
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CLIENT

CITY OF RIVIERA BEACH
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Riviera Beach, FL 33404

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REGISTRATION

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FL. REG. NO.: PE57743

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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561.688.6575 | cmta.com

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD. RIVIERA BEACH, FL 33404

PROJECT NUMBER

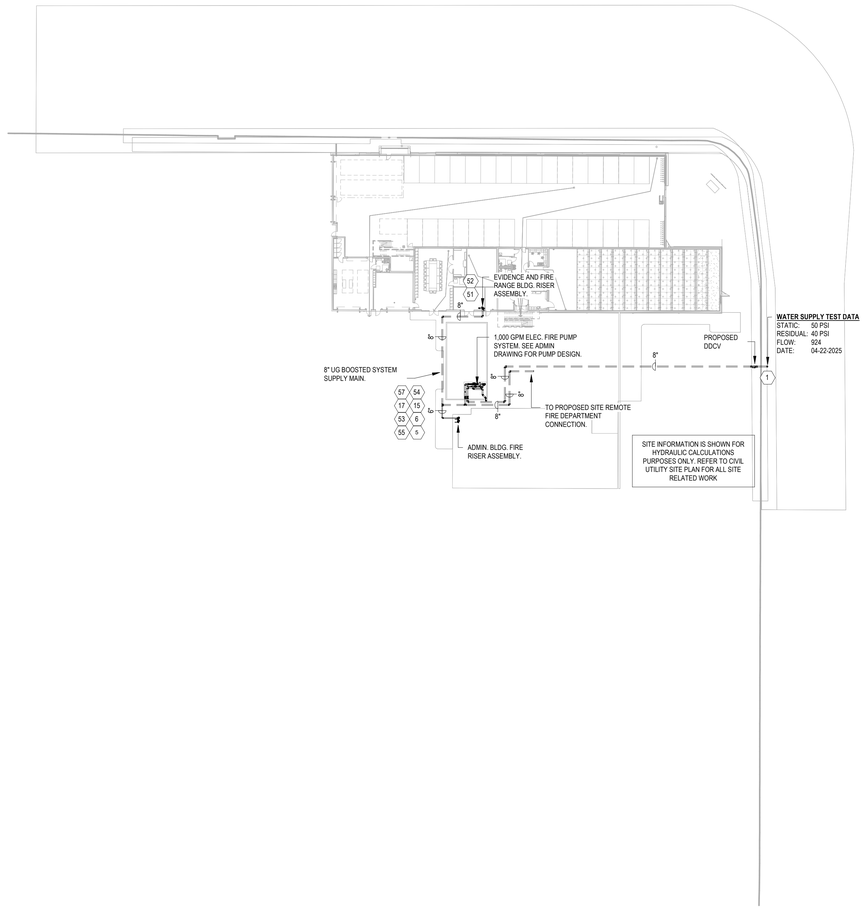
1007657.00

SHEET TITLE

GENERAL NOTES - FIRE PROTECTION

SHEET NUMBER

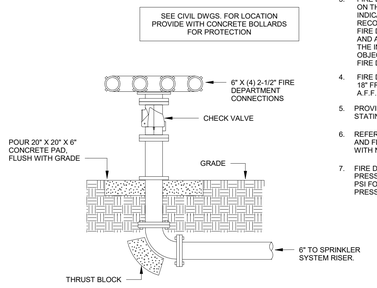
F0.01E



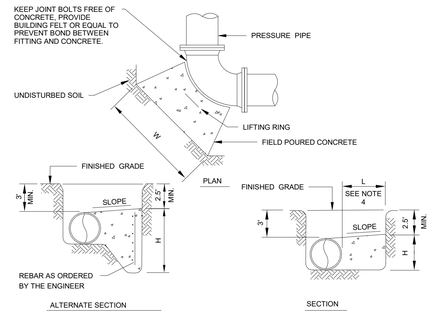
1 SITE PLAN - FIRE PROTECTION
1" = 40'-0"

FDC GENERAL NOTES

1. FIRE DEPARTMENT CONNECTION SHALL HAVE RAISED OR ENGRAVED 1" LETTERS STATING "AUTOSPRK" ON FITTING. SEE CIVIL FOR FDC REGULATORY TRAFFIC SIGN.
2. PROVIDE FIRE DEPARTMENT CONNECTION WITH A MINIMUM CLEARANCE OF 7-1/2" TO THE FRONT AND TO THE SIDES.
3. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE LOCATED ON THE STREET SIDE OF BUILDINGS, FULLY VISIBLE, A SIGN INDICATING WHAT BUILDING(S) THEY PROTECT AND RECOGNIZABLE FROM THE STREET OR NEAREST POINT OF FIRE DEPARTMENT ACCESSIBILITY, AND SHALL BE LOCATED AND ARRANGED SO THAT HOSE LINES CANBE ATTACHED TO THE INLETS WITHOUT INTERFERENCE FROMNEARBY OBJECTS, INCLUDING BUILDINGS, FENCES, POST, OR OTHER FIRE DEPARTMENT CONNECTIONS.
4. FIRE DEPARTMENT CONNECTION SHALL NOT BE LESS THAN 18" FROM A.F.F. AND NOT EXCEED MORE THAN 36" FROM A.F.F.
5. PROVIDE SIGN 12" WIDE X 18" HIGH MOUNTED 7'-0" A.F.F. STATING NO PARKING - FIRE DEPARTMENT CONNECTION.
6. REFER TO CIVIL SITE DRAWINGS FOR REQUIRED BUILDING # AND FDOT REGULATORY SIGNAGE. SIGNAGE SHALL COMPLY WITH NFPA 24, 2019 EDITION.
7. FIRE DEPARTMENT CONNECTION MUST BE PRESSURE TESTED AT NOT LESS THAN 200 PSI FOR 2 HOURS WITH A ZERO DROP IN PRESSURE.



2 FIRE DEPARTMENT CONECTION DETAIL
N.T.S.



PIPE SIZE INCH	DEFLECTION ANGLE									
	11-1/4"		22-1/2"		45°		TEE/PLUG		90°	
	THRUST BLOCK DIMINSIONS - FEET									
	H	W	H	W	H	W	H	W	H	W
6	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"	2'-6"	1'-6"	3'-0"	2'-0"	3'-6"
8	1'-0"	1'-6"	1'-6"	2'-6"	2'-0"	3'-6"	2.5	3'-6"	3'-0"	4'-0"
10	1'-0"	2'-0"	1'-6"	3'-0"	2'-6"	4'-0"	3'-0"	4'-6"	3'-6"	5'-0"
12	1'-6"	2'-6"	2'-6"	3'-6"	3'-0"	5'-0"	3'-6"	5'-6"	4'-0"	6'-6"
16	2'-6"	4'-0"	3'-6"	5'-6"	5'-0"	7'-0"	5'-6"	8'-0"	6'-6"	9'-0"
20	3'-0"	5'-6"	4.5	6'-6"	6'-0"	8'-6"	6'-6"	9'-6"	7.5	11'-0"
24	3'-6"	6'-0"	5'-0"	8'-0"	7'-0"	9'-6"	7'-6"	11'-6"	9'-0"	12'-6"

NOTES:

1. TEST PRESSURE FOR 6" THROUGH 12" IS 100 psi.
2. TEST PRESSURE FOR 16" THROUGH 24" IS 150 psi.
3. THRUST BLOCKS ARE DESIGNED FOR A MINIMUM 3' OF COVER OVER THE PIPE. IF LESS COVER EXISTS, BLOCKS SHALL BE ENLARGED AS DIRECTED BY THE ENGINEER.
4. L = 3' MAXIMUM FOR ROADWAYS - POUR TO UNDISTURBED SOIL.

3 THRUST BLOCK DETAIL
N.T.S.

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CLIENT

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DRAWING HISTORY

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CONSULTANT

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

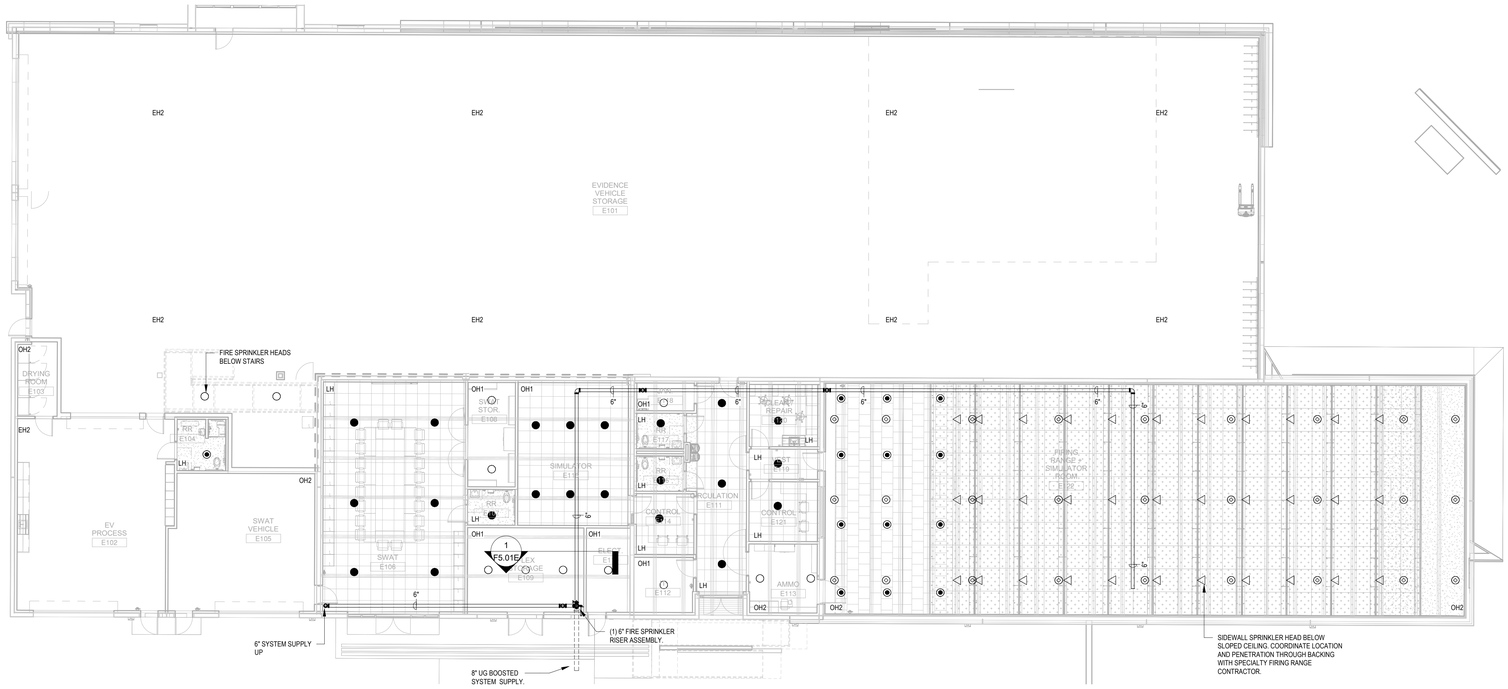
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
SITE PLAN - FIRE PROTECTION

SHEET NUMBER
F0.10E



FLOOR PLAN - EVIDENCE/FIRING RANGE - FIRE PROTECTION 3/32" = 1'-0" (1)

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CLIENT

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DRAWING HISTORY

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A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
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PROJECT STATUS

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DATE OF ISSUE

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PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

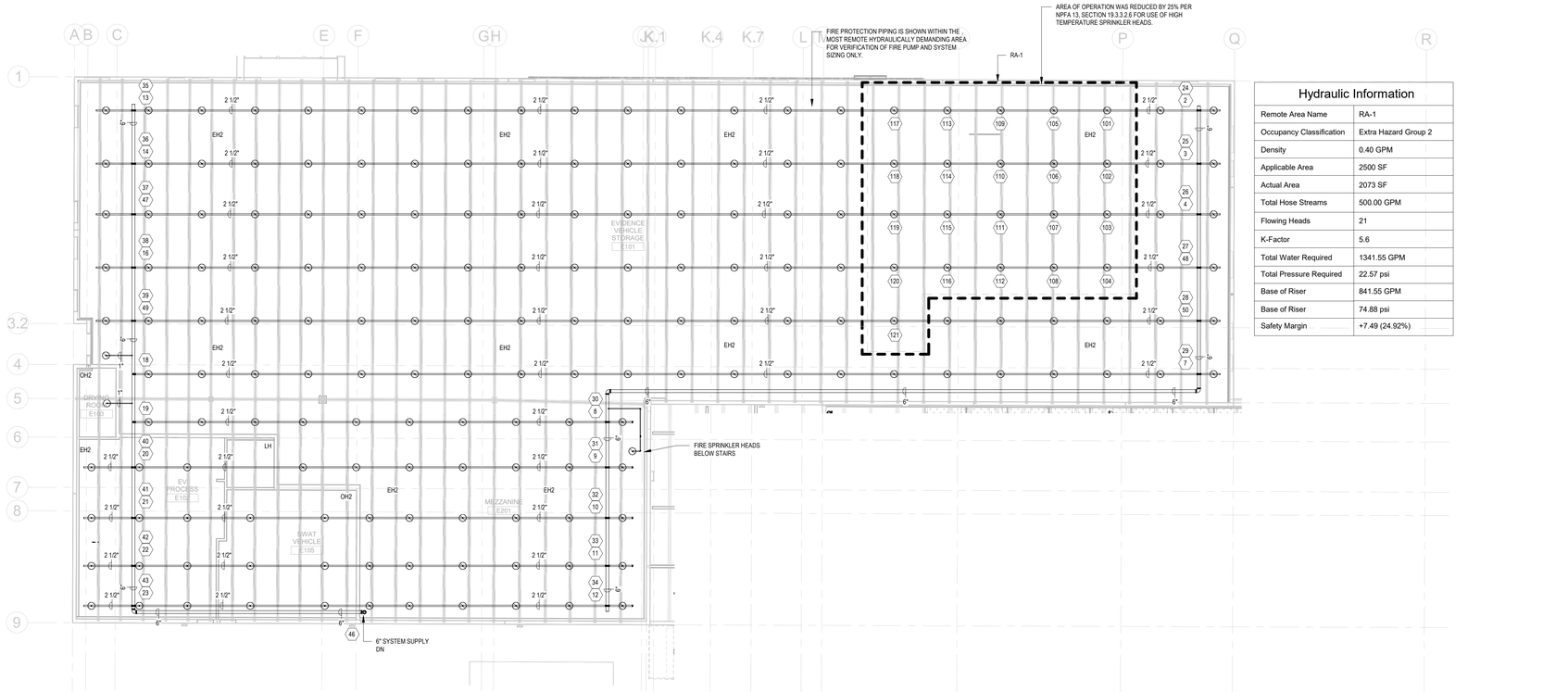
1007657.00

SHEET TITLE

FLOOR PLAN - EVIDENCE/FIRING RANGE - FIRE PROTECTION

SHEET NUMBER

F1.01E



Hydraulic Information	
Remote Area Name	RA-1
Occupancy Classification	Extra Hazard Group 2
Density	0.40 GPM
Applicable Area	2500 SF
Actual Area	2073 SF
Total Hose Streams	500.00 GPM
Flowing Heads	21
K-Factor	5.6
Total Water Required	1341.55 GPM
Total Pressure Required	22.57 psi
Base of Riser	841.55 GPM
Base of Riser	74.88 psi
Safety Margin	+7.49 (24.92%)

FLOOR PLAN - MEZZANINE - FIRE PROTECTION

3/32" = 1'-0" (1)

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FL REG. NO. 76572

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

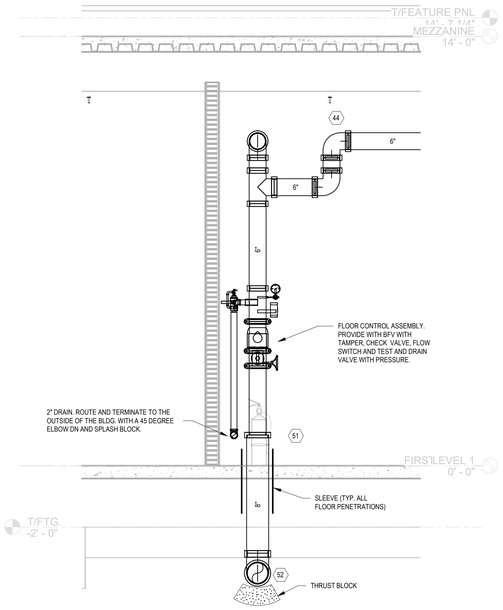
1007657.00

SHEET TITLE

FLOOR PLAN - MEZZANINE - FIRE PROTECTION

SHEET NUMBER

F1.02E



1 FIRE SPRINKLER RISER ASSEMBLY DETAIL
1/2" = 1'-0"

NFPA 13 TABLE 17.4.2.1(a) AND SECTIONS 17.4.3.3 AND 17.4.3.4.1

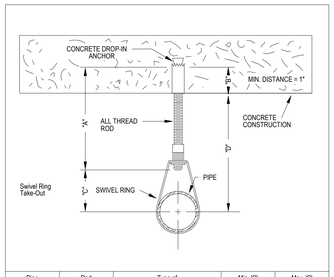
NFPA SPACING REQUIREMENTS HANGER LOCATION DETAIL

PIPE SIZE	A	B*	C
1"	3'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/4"	4'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/2"-8"	5'-0" MAX.	15'-0" MAX.	3" MIN.

* MAXIMUM HANGER SPACING FOR STEEL PIPE

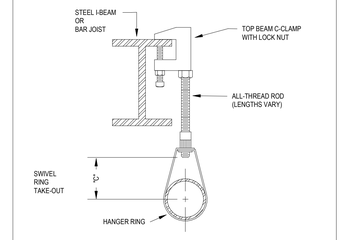
NOTES:

THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOVER TO A SPRINKLER OR SPRINKLER DROP SHALL NOT EXCEED 24".



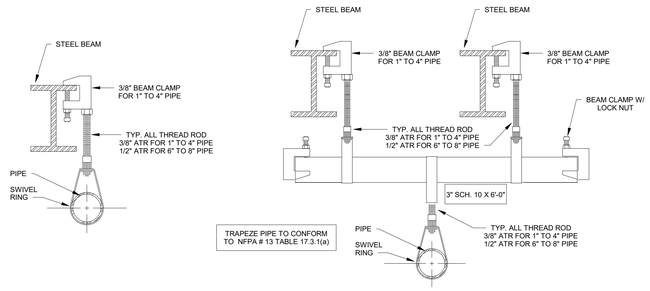
Pipe Size	Rod Size	Type of Fastener	Min. 'C' Dim.	Max. 'C' Dim.
3/4"	3/8"	1 - 3/8 x 1 17/32" DROP-IN	1/2"	1 5/8"
1"			5/8"	1 3/4"
1 1/4"			13/16"	1 7/8"
1 1/2"			15/16"	2"
2"			1 3/16"	2 3/8"
2 1/2"			1 7/16"	2 3/4"
3"			1 3/4"	3 1/4"
3 1/2"			2"	3 5/8"
4"			2 1/4"	3 7/8"
5"	1/2"	1 - 1/2 x 2 1/32" DROP-IN	2 3/4"	4 3/4"
6"			3 5/16"	5 1/2"
8"			N/A	N/A

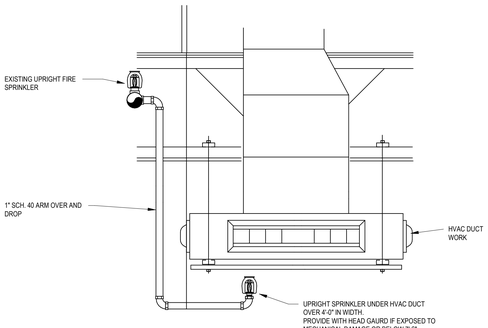
2 HANGER LOCATION DETAIL
N.T.S.



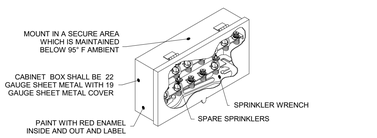
Pipe Size	Rod Size		Min. 'C' Dim.	Max. 'C' Dim.
3/4"	3/8"		1/2"	1 5/8"
1"			5/8"	1 3/4"
1 1/4"			13/16"	1 7/8"
1 1/2"			15/16"	2"
2"			1 3/16"	2 3/8"
2 1/2"			1 7/16"	2 3/4"
3"			1 3/4"	3 1/4"
3 1/2"			2"	3 5/8"
4"			2 1/4"	3 7/8"
5"			2 3/4"	4 3/4"
6"	1/2"		3 5/16"	5 1/2"
8"			4 5/16"	6 3/4"

3 HANGER PIPE SUPPORT DETAIL
N.T.S.



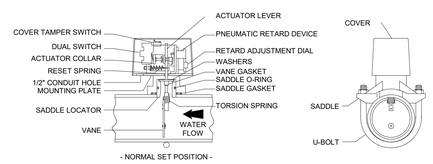


4 SPRINKLER UNDER DUCT DETAIL
N.T.S.

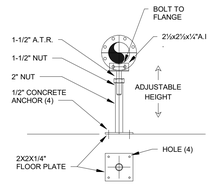


FACILITIES HAVING UNDER 300 SPRINKLERS - NO FEWER THAN 6 SPARE SPRINKLERS IN STOCK
FACILITIES HAVING 300 - 1000 SPRINKLERS - NO FEWER THAN 12 SPARE SPRINKLERS IN STOCK
FACILITIES HAVING OVER 1000 SPRINKLERS - NO FEWER THAN 24 SPARE SPRINKLERS IN STOCK

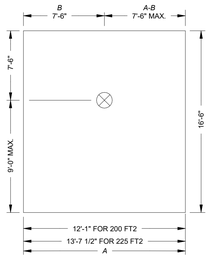
5 SPARE HEAD CABINET DETAIL
N.T.S.



6 FLOW SWITCH DETAIL
N.T.S.

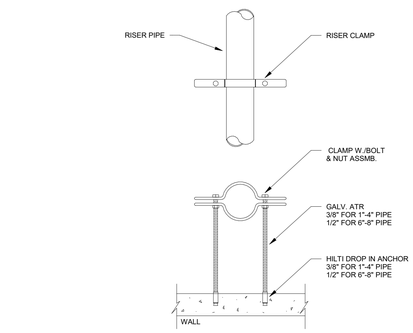


7 PIPE SUPPORT DETAIL
N.T.S.



NFPA 13 2019 EDITION FIGURE A.10.2.5.2.3(a)

8 SMALL ROOM RULE DETAIL
N.T.S.



9 VERTICAL PIPE SUPPORT DETAIL
N.T.S.

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

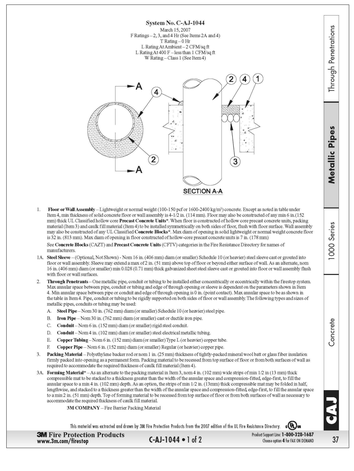
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - FIRE PROTECTION

SHEET NUMBER
F5.01E



System No. C-AJ-1044
March 15, 2007
F Ratings – 2, 3, and 4 Hr (See Items 2A and 4)
T Rating – 0 Hr
L Rating At Ambient – 2 CFM/sq ft
L Rating At 400 F – less than 1 CFM/sq ft
W Rating – Class 1 (See Item 4)

SECTION A-A

1. **Floor or Wall Assembly** – Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Except as noted in table under Item 4, min thickness of solid concrete floor or wall assembly is 4-1/2 in. (114 mm). Floor may also be constructed of any min 6 in (152 mm) thick UL Classified **Concrete Blocks** (CAZT) or **Precast Concrete Units** (CFTV) in the Fire Resistance Directory. Wall may be constructed of any min 4 in (102 mm) thick UL Classified **Concrete Blocks**. Min diam of opening in solid lightweight or normal weight concrete floor is 52 in. (915 mm). Min diam of opening in floor constructed of hollow-core precast concrete units is 7 in. (178 mm).

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

1A. **Steel Sleeve** – (Optional, Not Shown) - Nom 16 in. (406 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly. Sleeve may extend a max of 2 in. (51 mm) above top of floor or beyond either surface of wall. As an alternate, nom 16 in. (406 mm) diam (or smaller) min 0.028 (0.71 mm) thick galvanized sheet steel sleeve cast or grouted into floor or wall assembly flush with both surfaces of wall.

2. **Through Penetrants** – One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Max annular space between pipe, conduit or tubing and edge of through-opening or sleeve is dependent on the parameters shown in Item 4. Min annular space between pipe or conduit and edge of through-opening is 0 in. (point contact). Min annular space to be as shown in the table in Item 4. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

   A. **Steel Pipe** – Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** – Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
   D. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) steel electrical metallic tubing.
   E. **Copper Tubing** – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
   F. **Copper Pipe** – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Packing Material** – Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed mineral wool batt or glass fiber insulation to be installed at any point between the firestop system and the through-opening or sleeve to a depth equal to the thickness of floor top surface of floor or from both surfaces of wall as required to accommodate the required thickness of caulk fill material (Item 4).

3A. **Forming Material*** – As an alternate to the packing material in Item 3, nom 4 in. (102 mm) wide strips of min 1/2 in (13 mm) thick compressible rod to be stacked to a thickness greater than the width of the annular space and compression-filled, edge-first, to fill the annular space to a min 4 in. (102 mm) depth. As an option, the strips of min 1/2 in. (13mm) thick compressible mat may be folded in half, lengthwise, and stacked to a thickness greater than the width of the annular space and compression-filled, edge-first, to fill the annular space to a min 2 in. (51 mm) depth. Top of forming material to be recessed from top surface of floor or from both surfaces of wall as necessary to accommodate the required thickness of caulk fill material.
   3M COMPANY – Fire Barrier Packing Material

Through Penetrations | Metallic Pipes | 1000 Series | Concrete | CAJ

This material was extracted and drawn by 3M Fire Protection Products from the 2025 edition of the UL Fire Resistance Directory

System No. C-AJ-1044 *continued*

4. **Fill,Void or Cavity Material*** – **Caulk, Sealant** – Applied to fill the annular space flush with top surface of floor. In wall assemblies, caulk fill material may be applied flush with both surfaces of wall. Min thickness of caulk fill material is 1/4 in. (6 mm). Annular space between pipe, conduit or tubing and concrete, a min 1/4 in. (6 mm) diam bead of caulk shall be applied at top surface of floor and at both surfaces of wall. The hourly F Ratings and the min required caulk thicknesses are dependent upon a number of parameters, as shown in the following table:

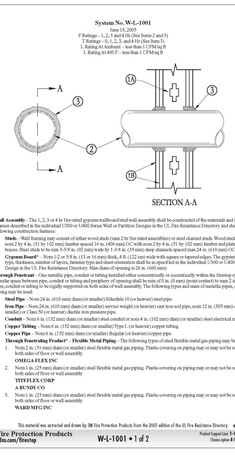
Min Floor or Wall Thkns In. (mm)	Nom Pipe Tube or Conduit Diam In. (mm)	Max Annular Space In. (mm)	Min Caulk Thkns In. (mm)	F Rating Hr
4-1/2 (114)	1/2-12 (13-305)	1-3/8 (35)	1/2 (13)	2
5-1/2 (140)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	2
4-1/2 (114)	1/2-6 (13-152)	1-3/8 (35)	1-9/16 (40)	2
4-1/2 (114)	1/2-12 (13-305)	1-1/4 (32)	1-2 (13)	3
4-1/2 (114)	1/2-2 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-2 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	3
4-1/2 (114)	2/2-30 (356-762)	2 (51)	2 (51)	3
5-1/2 (140)	1/2-6 (13-152)	1-3/8 (35)	1-(25)(3)	4

(a) Min 2 in. (51 mm) thickness of mineral wool batt insulation or forming material (Item 3A) required in annular space.
(b) Min 1 in. (25 mm) thickness of caulk to be installed flush with both surfaces of floor or wall assembly.
Min 1 in. (25 mm) thickness of caulk to be installed flush with each surface of floor or wall assembly.
3M COMPANY – CP 25WB+ or FB-3000 WT.
(Note: W Rating applies only when FB-3000 WT is used.)

*Bearing the UL Classification Marking

Through Penetrations | Metallic Pipes | 1000 Series | Concrete | CAJ

This material was extracted and drawn by 3M Fire Protection Products from the 2025 edition of the UL Fire Resistance Directory



System No. W-L-1001
June 15, 2005
F Ratings – 1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings – 0, 1, 2, 3, and 4 Hr (See Item 3)
L Rating At Ambient – less than 1 CFM/sq ft
L Rating At 400 F – less than 1 CFM/sq ft

SECTION A-A

1. **Wall Assembly** – The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/metal stud wall assembly shall be constructed of the materials and in the manner described in the individual U360 or U465 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** – Wall framing (any variation of either wood studs (nom 2 hr fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-5/8 in. (35 mm) deep shaped-web spaced nom 24 in. (610 mm) OC.
   B. **Gypsum Board*** – Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft (1222 mm) wide with square or tapered edges. The gypsum wallboard shall be installed parallel or perpendicular to studs and shall be secured to the studs as described in the individual U360 or U465 Series Design in the UL Fire Resistance Directory. Max diam of opening is 24 in. (610 mm).
2. **Through-Penetrant** – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe** – Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** – Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
   C. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing
   D. **Copper Tubing** – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing
   E. **Copper Pipe** – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe
   F. **Through Penetrating Product*** – **Flexible Metal Piping** - The following types of steel flexible metal gas piping may be used:
      1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Flutes covering on piping may or may not be removed on both sides of floor or wall assembly.
         OMEGA FLEX INC
      2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Flutes covering on piping may or may not be removed on both sides of floor or wall assembly.
         TITEFLEX CORP
         A PENDY CO
      3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         WARD MFG INC

Through Penetrations | Metallic Pipes | 1000 Series | Gypsum | WL

This material was extracted and drawn by 3M Fire Protection Products from the 2025 edition of the UL Fire Resistance Directory

System No. W-L-1001 *continued*

3. **Fill,Void or Cavity Material*** – **Caulk or Sealant** – Min 5/8, 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr fire rated assemblies, respectively, applied within annular space between pipe, conduit or tubing and periphery of opening. Caulk shall be applied to gypsum board/penetrant interface at point contact locations on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam In. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0-, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
4 (102)	3 or 4	0
12 (305)	1 or 2	0

-When copper pipe is used,T Rating is 0 hr.
3M COMPANY – CP 25WB+ caulk or FB-3000 WT sealant.
*Bearing the UL Classification Marking

This material was extracted and drawn by 3M Fire Protection Products from the 2025 edition of the UL Fire Resistance Directory

1 UL PENETRATION DETAIL
N.T.S.

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

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FL. REG. NO. PE57743

REGISTRATION

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DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEGENCE Company
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561.688.8275 | cmta.com

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

DETAILS - FIRE PROTECTION

SHEET NUMBER

F5.02E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 9:32:22 AM

FIRE SPRINKLER HEAD SCHEDULE

SYMBOL	TEMP	RESPONSE	HAZARD	K-FACTOR	FINISH	MODEL/ SIN	STYLE	PLATE	SIZE	MANUFACTURER
●	155°	QUICK	LH/ OH	5.6	WHITE POLYESTER COATED	TY-FRB/ TY323	STANDARD COVERAGE PENDENT	2 PIECE	1/2"	TYCO
◉	155°	QUICK	LH/ OH	5.6	BRASS	RFII/ TY3531	STANDARD COVERAGE CONCEALED PENDENT	WHITE CONCEALED PLATE	1/2"	TYCO
○	155°	QUICK	LH/ OH	5.6	BRASS	TY-FRB/ TY313	STANDARD COVERAGE UPRIGHT	NONE	1/2"	TYCO
⊘	286°	STANDARD	ALL	5.6	BRASS	TYB/ TY315	STANDARD COVERAGE UPRIGHT	NONE	1/2"	TYCO
△	155°	STANDARD	OH	11.2	WHITE POLYESTER COATED	SW-25/ TY5332	EXTENDED COVERAGE HORIZONTAL SIDEWALL	2 PIECE	3/4"	TYCO
◎	155°	QUICK	LH/ OH	11.2	BRASS	EC-11/ TY5137	EXTENDED COVERAGE UPRIGHT	NONE	3/4"	TYCO

NOTES:

1. FIRE PROTECTION CONTRACTOR SHALL COORDINATE ALL CONCEALED PLATE COLORS WITH ARCHITECT/ ARCHITECTURAL DRAWINGS. FINAL PLATE COLORS AND CUSTOM COLORS FOR EACH AREA AND INDIVIDUAL ROOMS SHALL BE APPROVED BY ARCHITECT PRIOR TO ORDERING.
2. ALL SPRINKLERS IN THE IN ALL STORAGE ROOM, MECHANCIAL ROOMS, ELECTRICAL ROOMS AND UNDERNEATH STAIRS SHALL BE PROVIDED WITH IN LINE SPRINKLER HEAD GUARD - SPRINKGUARD ITEM # 201040. PROVIDE SIDEWALL SPRINKLER HEAD GUARD - SPRINKGUARD ITEM # 20125Z FOR ALL SIDEWALL SPRINKLER HEADS.
3. ALL SPRINKLER HEADS SHALL BE CENTERED TO THE CEILING TILES UNLESS OTHERWISE NOTED.
4. ALIGN ALL SPRINKLER HEADS WITH LIGHTING AND DIFFUSERS.
5. PROVIDE ADDITIONAL SPRINKLER HEADS UNDER HVAC DUCT WORK EQUAL TO AND EXCEEDING 4' IN WIDTH. COORDINATE FINAL DUCT LOCATIONS WITH INSTALLING MECHANICAL CONTRACTOR.
6. PROVIDE INTERMEDIATE TEMPERATURE SPRINKLER HEADS ADJACENT TO ANY DIFFUSER WHERE THE DISTANCE REQUIREMENTS LISTED IN NFPA 13 TABLE 8.3.2.5 (A) ARE NOT FOLLOWED.

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 9:32:26 AM

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REGISTRATION

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FL. REG. NO.: PE57743

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PROJECT NUMBER

1007657.00

SHEET TITLE

SCHEDULES - FIRE PROTECTION

SHEET NUMBER

F6.01E

CODE REFERENCE

- FLORIDA BUILDING CODE - PLUMBING - 8TH EDITION (2023)
- FLORIDA BUILDING CODE - ACCESSIBILITY - 8TH EDITION (2023)
- FLORIDA BUILDING CODE - ENERGY CONSERVATION - 8TH EDITION (2023)

GENERAL NOTES

1. EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO INSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICTS WITH ANY OTHER BUILDINGS SYSTEMS. VERIFY SAME WITH SHOP DRAWINGS.
2. INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING AND THE COLLECTION OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ARCHITECT.
3. ADVISE ARCHITECT OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC.. AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATIONS BY WRITTEN ADDENDUM.
4. DEVIATIONS FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND MUST BE SUBMITTED IN WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE.
5. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY,COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC..)
6. INSTALL EQUIPMENT, MATERIALS, ETC.. IN STRICT ACCORD WITH MANUFACTURERS' RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INTENT IN CONTRACT DOCUMENTS, ADVISE THE ARCHITECT PRIOR TO INSTALLATION FOR CLARIFICATIONS.
7. ALL SYSTEMS, EQUIPMENT, AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT MEETING THIS CRITERION SHALL BE REMOVED AND REINSTALLED SATISFACTORILY. FINAL DETERMINATION OF THE ACCEPTABILITY OF THE QUALITY OF WORK RESIDES WITH THE ARCHITECT.
8. ALL WORK, MATERIALS, EQUIPMENT, ETC. SHALL BE FULLY GUARANTEED FOR ONE FULL CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AS DOCUMENTED BY THE ARCHITECT, UNLESS LONGER WARRANTY PERIODS FOR EQUIPMENT ARE SPECIFIED.
9. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE NOTED. COORDINATE WORK WITH ARCHITECT.
10. ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LABELED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED LISTING AGENCY. APPROVED AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY THE ARCHITECT IN WRITING.
11. ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE OR SUB-SERVICE FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRIC LINES. VERIFY THE LOCATION, SIZE TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
12. ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, SUPPORT FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES, EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT AND CONSENT OF THE OTHER TRADE, IN WRITING.
13. WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED.
14. WHERE PENETRATING NEW ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATION IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING INSTALLER/ARCHITECT.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES, CASH CONTRIBUTIONS OR OTHER COSTS THAT THE UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (ELECTRIC, TELEPHONE, TELEVISION, ETC..)
16. DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ARCHITECT OR NOT SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
17. INTERRUPTION OF ANY EXISTING SERVICES SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR, UTILITY COMPANY, ARCHITECT, AND OWNER AS NECESSARY, WITH AT LEAST ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN PARTIES MENTIONED, TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED TWO WEEKS IN ADVANCE, IN WRITING. IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE.
18. ALL WORK SHALL BE CONCEALED UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, OR REQUIRED TO BE EXPOSED. IF IN DOUBT, CONTACT THE ARCHITECT FOR CLARIFICATION PRIOR TO INSTALLING ANY SUCH WORK.
19. DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONED SUPPLIED TO THE CONTRACTOR.
20. IT IS NOT INTENDED THAT THE PLANS SHOW ALL OFFSETS IN PIPES, CONDUITS, AND DUCTS REQUIRED FOR INSTALLATION OF THE WORK DETAILS AND SECTIONS ARE INCLUDED FOR SOME AREAS TO SHOW INTENDED RELATIONSHIP OF THE WORK OF VARIOUS TRADES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO COORDINATE INSTALLATION OF THE WORK AND TO PROVIDE THE NECESSARY OFFSETS, TRANSFORMATIONS, AND FITTINGS REQUIRED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CORRECTING CONFLICTS BETWEEN THE WORK OF VARIOUS TRADES. DETAILS AND SECTIONS ARE SHOWN FOR THE CONTRACTORS' CONVENIENCE AND SHALL NOT BE CONSIDERED COMPLETE IN EVERY DETAIL.
21. ALL WORK SHOWN ON DRAWINGS (EQUIPMENT, DUCTWORK, PIPING FIXTURES, RACEWAYS, WIRING, ETC.) ARE NEW, TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
22. ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE. COORDINATION WITH ALL TRADES WILL BE REQUIRED.
23. REFER TO DOMESTIC WATER RISER DIAGRAM FOR LOCATIONS OF ALL VALVES AND ACCESSORIES TO BE INSTALLED.
24. WATER HAMMER ARRESTORS, TRAP PRIMERS, VALVES, ETC. SHALL BE ACCESSIBLE. PROVIDE ACCESS PANELS WHERE ANY ITEM IS INSTALLED IN AN INACCESSIBLE SPACE.
25. INSULATE HOT WATER PIPING IN ACCORDANCE WITH FLORIDA ENERGY EFFICIENCY CODE.
26. METALLIC PIPING SHALL BE INSTALLED IN FIRE RATED WALL. (TYPICAL)
27. SEAL ALL PIPING PENETRATIONS WITH NON-SHRINK MASTIC.
28. DOMESTIC WATER PIPING WITHIN 5 FEET OF THE BUILDING SEWER/DRAIN PIPING IS TO BE A MINIMUM OF 12 INCHES ABOVE THE HIGHEST POINT OF THE BUILDING SEWER/DRAIN PIPING AND THE PIPE MATERIALS MUST CONFORM TO THE FLORIDA BUILDING CODE 2023 - PLUMBING.
29. PLUMBING CONTRACTOR SHALL COORDINATE UNDERGROUND PIPING WITH BUILDING FOUNDATION.
30. WHERE PIPING PENETRATES FOOTING, REFER TO STRUCTURAL DRAWINGS FOR SLEEVING METHODS.
31. WHERE INVERT ELEVATIONS ARE HIGHER ON PLUMBING DRAWINGS, PLUMBING CONTRACTOR SHALL INSTALL PIPING AS PER THE PLUMBING CONTRACT DRAWINGS AND PROVIDE A 45° DROP TO MEET THE CIVIL ENGINEERS POINT OF CONNECTION. IF ANY CONFLICTS ARISE WHERE CIVIL ENGINEERS' POINT OF CONNECTIONS ARE SHALLOWER THAN ON THE PLUMBING CONTRACT DOCUMENTS, PLUMBING CONTRACTOR SHALL CONTACT THE ARCHITECT/ENGINEER.
32. SUPPLY AND TRAP WRAPS SHALL BE PROVIDED AT ADA LAVATORIES AND SINKS WHERE PIPING IS EXPOSED.
33. WHERE PIPING IS NEAR ROOF ACCESS HATCH CONTRACTOR SHALL ROUTE ALL PIPING TO CLEAR ALL LADDERS AND OPENINGS.
34. COORDINATE VENT THRU ROOF WITH ALL EQUIPMENT . WHERE PIPING IS WITHIN 10'-0" OF EQUIPMENT, LOUVERS ETC. VENT THRU ROOF SHALL BE MOVED TO MAINTAIN A 10'-0" CLEARANCE OF OUTSIDE AIR OPENING.
35. P-TRAPS INSTALLED ON ALL FLOOR DRAINS SHALL BE DEEP SEAL TRAPS.
36. PROVIDE ROUGH-IN AND FINAL CONNECTIONS FOR ALL PLUMBING UTILITIES AND SERVICES FOR EQUIPMENT PROVIDED BY OTHERS.
37. WATER HAMMER TO BE INSTALLED IN ALL QUICK CLOSING FIXTURES.
38. WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPING INTERNALLY COATED WITH CORROSION INHIBITORS AND NONMETALLIC PIPING, THE STEEL PIPE COATING SHALL BE INVESTIGATED FOR COMPATIBILITY WITH THE NONMETALLIC PIPING BY A TESTING LABORATORY.
39. WHEN FABRICATING STEEL PIPE FOR A COMBINATION (CPVC-STEEL) SYSTEM, THE CUTTING OIL AND LUBRICANTS CAN CAUSE PERFORMANCE DEGRADATION OF THE CPVC PIPING. CUTTING OILS AND LUBRICANTS FOUND TO BE COMPATIBLE ARE AVAILABLE AND SHALL BE USED.
40. WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE THAT IS NOT INTERNALLY COATED WITH CHEMICAL CORROSION INHIBITORS, NO ADDITIONAL EVALUATIONS SHALL BE REQUIRED.
41. WHEN NONMETALLIC PIPE IS USED IN COMBINATION SYSTEMS UTILIZING STEEL PIPE, CUTTING OILS AND LUBRICANTS USED FOR FABRICATION OF THE STEEL PIPING SHALL BE COMPATIBLE WITH THE NONMETALLIC PIPE MATERIALS.
42. FIRE-STOPPING MATERIALS INTENDED FOR USE ON NONMETALLIC PIPING PENETRATIONS SHALL BE INVESTIGATED FOR COMPATIBILITY WITH THE NONMETALLIC PIPE MATERIALS.
43. ALL CPVC PIPING, FITTINGS AND SOLVENTS SHALL BE FROM A SINGLE MANUFACTURERS. MIXING OF MANUFACTURERS IS NOT ALLOWED OR PERMITTED.
44. CPVC PIPING INSTALLATION SHALL BE IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS AND GUIDELINES.
45. PROVIDE IDENTIFICATION (LABELING) FOR DOMESTIC ACCESSORIES HIDDEN ABOVE / BEHIND CEILING TILES AND ACCESS PANELS.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATELY
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
AUX	AUXILIARY
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
BWV	BACK WATER VALVE
CD	CONDENSATE DRAIN
CO	CLEAN-OUT
COMPR	COMPRESSOR
COND	CONDENSATE OR CONDENSER
CONT	CONTINUATION
CW	DOMESTIC COLD WATER
DN	DOWN
DWG	DRAWING
ECO	EXTERIOR CLEANOUT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EL	ELEVATION
ELEC	ELECTRIC
EXP	EXPANSION
EEW	EYE WASH/SHOWER
°F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FG	FINISHED GRADE
FS	FLOOR SINK
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
HZ	FREQUENCY
IN	INCH OR INCHES
INSUL	INSULATION
KW	KILOWATT
L	LAVATORY
LT	LENGTH
MECH	MECHANICAL
MIN	MINIMUM
MS	MOP SINK
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OD	OUTSIDE DIAMETER
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RCP	RECIRCULATING PUMP (HWR)
RPM	REVOLUTIONS PER MINUTE
S	KITCHEN SINK (DOMESTIC)
SAN	SANITARY
SH	SHOWER
SPEC	SPECIFICATION
ST	STORM
TD	TRENCH DRAIN
TMV	THERMOSTATIC MIXING VALVE
TYP	TYPICAL
V	VENT LINE
VTR	VENT THRU ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WB	SUPPLY BOX (CLOTHES WASHER)
RD	ROOF DRAIN

SYMBOL LEGEND

- PIPE SECTION - SUPPLY
- PIPE SECTION - RETURN
- DIRECTION OF FLOW IN PIPE
- PIPE UP
- PIPE DOWN
- BALL VALVE
- CHECK VALVE
- GATE VALVE
- GLOBE VALVE
- BALANCING VALVE
- PLUG VALVE
- STRAINER, Y-TYPE AND BLOWOFF VALVE
- PRESSURE RELIEF VALVE (WATER)
- PRESSURE REDUCING VALVE
- VALVE IN SERVICE BOX WITH CAST IRON COVER
- SOLENOID VALVE
- FCO — FLOOR CLEANOUT
- ECO — EXTERIOR CLEANOUT
- 2-WAY ECO — EXTERIOR 2-WAY CLEANOUT
- WCO — WALL CLEANOUT
- CO — HORIZONTAL CLEANOUT
- CAPPED PIPE
- POINT OF CONNECTION OF NEW TO EXISTING
- POINT OF DISCONNECT FROM EXISTING
- T — DELTA T (TEMPERATURE DIFFERENCE
- HOT WATER RECIRCULATOR PUMP
- HOSE BIBB
- FLOOR DRAIN
- HUB DRAIN
- FLOOR SINK
- TRENCH DRAIN
- DOMESTIC COLD WATER PIPING
- DOMESTIC HOT WATER PIPING (120°F)
- 140 — DOMESTIC HOT WATER PIPING (140°F)
- DOMESTIC HOT WATER RETURN PIPING
- VENT PIPING
- SAN — SANITARY/SEWER PIPING
- ST — STORM PIPING
- TP — TRAP PRIMER PIPING
- CA — COMPRESSED AIR PIPING

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DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD. RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

GENERAL NOTES, ABBREVIATIONS & LEGEND - PLUMBING

SHEET NUMBER

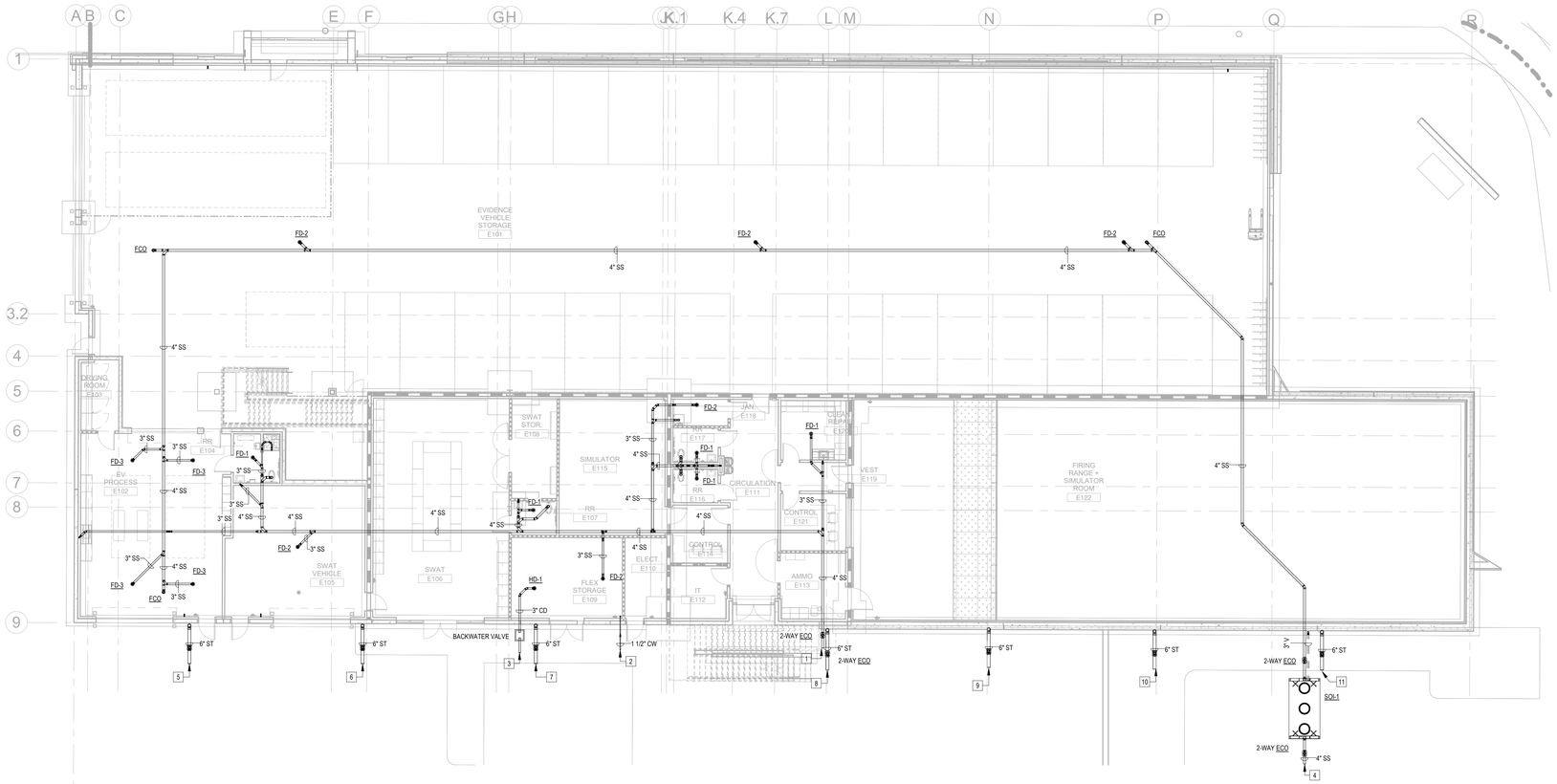
P0.01E

PLUMBING KEYNOTES [X]:

1. 4" SANITARY WASTE PIPING BELOW GRADE WITH 2-WAY EXTERIOR CLEANOUT. REFER TO CIVIL SITE UTILITY PLAN FOR CONTINUATION. (42 DFU & PRELIMINARY APPROX IN. EL. 40" BELOW FINISHED FLOOR).
2. 1-1/2" DOMESTIC WATER SERVICE PIPING BELOW GRADE WITH SHUT-OFF VALVE IN VALVE BOX WITH CAST IRON COVER. REFER TO CIVIL SITE UTILITY PLAN FOR CONTINUATION. (37 SFU = 25 GPM WITH AND ADDITIONAL GPM LOAD OF 10 GPM FOR WALL HYDRANTS TOTALING 35 GPM).
3. 3" CONDENSATE PIPING BELOW GRADE WITH BACKWATER VALVE IN VALVE BOX WITH CAST IRON COVER. (APPROX. IN. EL. 24" BELOW FINISHED FLOOR.
4. 4" SANITARY WASTE PIPING BELOW GRADE WITH 2-WAY EXTERIOR CLEANOUT. REFER TO CIVIL SITE UTILITY PLAN FOR CONTINUATION. (18 DFU & PRELIMINARY APPROX. IN. EL. 60" BELOW FINISHED FLOOR).
5. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (3,793 SQ. FT. @ 197 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
6. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (3,500 SQ. FT. @ 182 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
7. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (3,934 SQ. FT. @ 205 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
8. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (5,211 SQ. FT. @ 271 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
9. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (1,499 SQ. FT. @ 78 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
10. TRANSITION FROM ARCH. DOWNSPOUT TO 6" ST (5,142 SQ. FT. @ 268 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.
11. TRANSITION FROM ARCH. DOWNSPOUT TO 4" ST (2,014 SQ. FT. @ 105 GPM). OFF SET BELOW GRADE WITH FOOTER AS REQUIRED. REFER TO CIVIL UTILITY PLAN FOR CONTINUATION.

PLUMBING GENERAL NOTES:

1. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH STRUCTURE AND SYSTEMS (PIPING, DUCTWORK, CONDUIT, ETC.) PROVIDING OFFESTS AS REQUIRED.
2. REFER TO RISERS FOR COMPLETE PIPE SIZING.
3. COORDINATE UNDERGROUND PLUMBING PIPING WITH STRUCTURAL FOUNDATION PLANS PRIOR TO INSTALLATION OF FOUNDATION OR PIPING. COORDINATE DROP/STEP DOWN OF FOOTINGS AND FOUNDATION STRUCTURES AS REQUIRED WITH PLUMBING SERVICES. AVOID PENETRATION OF FOUNDATION STRUCTURES (FOOTINGS, ETC.) UNLESS PRE APPROVED, SLEEVED AND INSTALLED PER STRUCTURAL ENGINEER DIRECTION. PIPING ROUTED BELOW GRADE BEAMS SHALL BE SLEEVED (2 PIPE SIZES LARGER FOR ENTIRE WIDTH OF GRADE BEAM ZONE OF INFLUENCE + 1'-0" MIN. ON EACH SIZE. REFER TO STRUCTURAL DRAWING DETAILS FOR ADDITIONAL INFORMATION.
4. COORDINATE ENTERING AND LEAVING LOCATIONS AND INVERTS OF PLUMBING SERVICES WITH SITE UTILITIES PRIOR TO ANY SITE OR BLDG SYSTEM INSTALLATIONS.
5. ALL HORIZONTAL SANITARY PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT; 2-1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT.
6. ALL STORM PIPING SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.



OVERALL FOUNDATION PLAN - PLUMBING 3/32" = 1'-0" (1)

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FOUNDATION PLAN - EVIDENCE/FIRING RANGE - PLUMBING

SHEET NUMBER

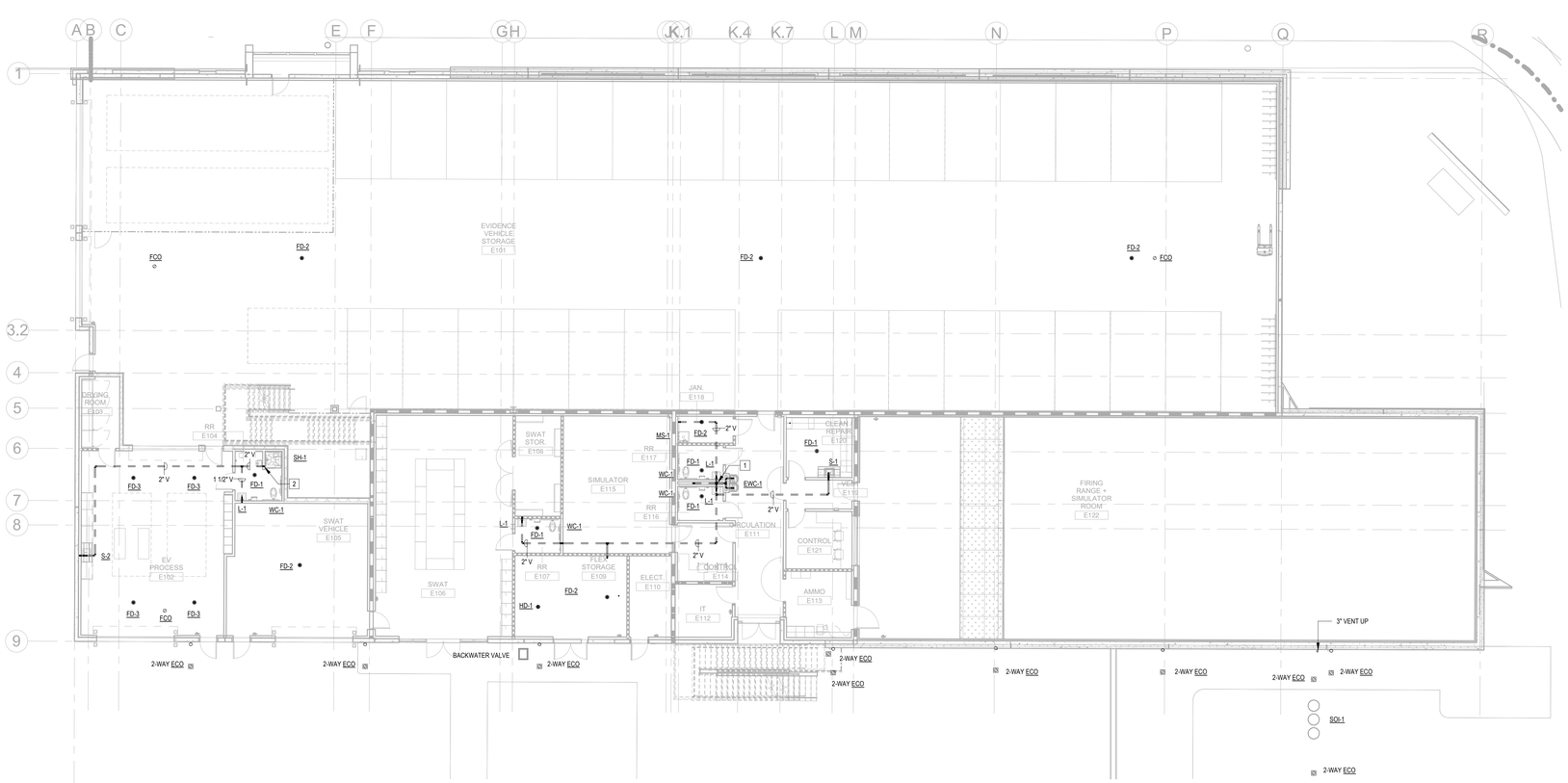
P1.00E

PLUMBING KEYNOTES [X]:

1. 3" VENT UP, 3" V.T.R.
2. 2" VENT UP, 2" V.T.R.

PLUMBING GENERAL NOTES:

1. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH STRUCTURE AND SYSTEMS (PIPING, DUCTWORK, CONDUIT, ETC.) PROVIDING OFFESTS AS REQUIRED.
2. REFER TO RISERS FOR COMPLETE PIPE SIZING.
3. WHERE PIPING IS ROUTED DOWN WITHIN CMU WALLS, CONTRACTOR SHALL COORDINATE INSTALLATION TO MINIMIZE CHIPPING AND CUTTING OF BLOCK. ROUTE WITHIN CMU CORE OPENINGS WHICH ARE NOT GROUTED SOLID. INSTALL PIPING PRIOR TO CMU INSTALLATION WHEN FEASIBLE. COORDINATE ROUTING WITH STRUCTURAL.
4. PROVIDE WALL AND CEILING ACCESS PANELS FOR VALVES AND ACCESSORIES REQUIRING ACCESS LOCATED WITHIN WALLS OR ABOVE INACCESSIBLE CEILINGS. LOCATE ACCESS PANELS AND SIZE (MINIMUM 12"X12") TO PROVIDE ADEQUATE ACCESS.
5. ALL HORIZONTAL SANITARY PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT; 2-1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT.
6. ALL STORM PIPING SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.



OVERALL FIRST FLOOR PLAN - WASTE - PLUMBING 3/32" = 1'-0" (1)

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

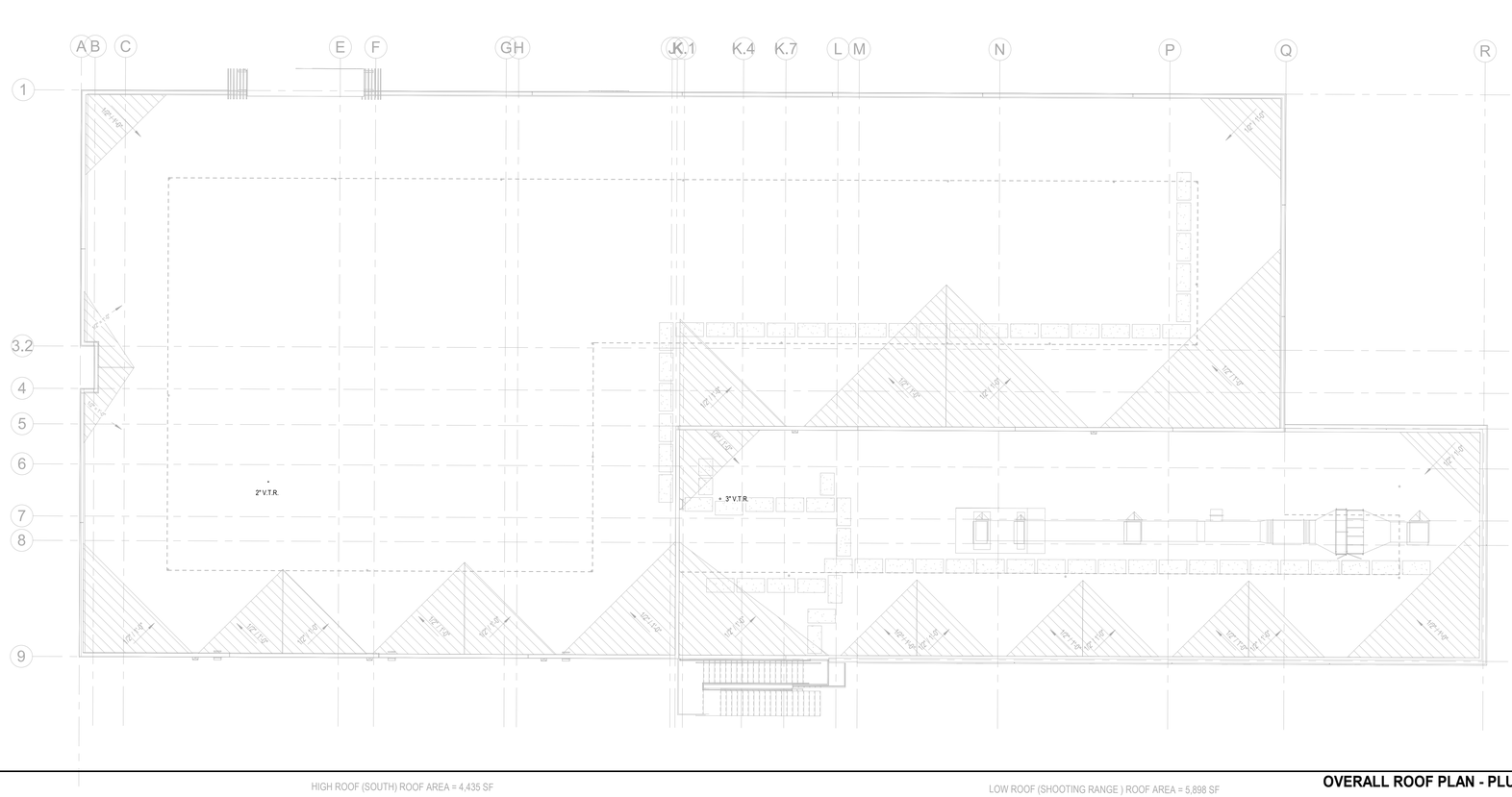
PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN - EVIDENCE/FIRING RANGE - WASTE - PLUMBING

SHEET NUMBER
P1.01E

PLUMBING GENERAL NOTES:

1. MAINTAIN 10 FEET MINIMUM HORIZONTAL DISTANCE FROM VTR'S TO ANY OUTSIDE AIR INTAKE OR BUILDING OPENING.



HIGH ROOF (NORTH SIDE) ROOF AREA = 12,913 SF

HIGH ROOF (SOUTH) ROOF AREA = 4,435 SF

LOW ROOF (SHOOTING RANGE) ROOF AREA = 5,898 SF

OVERALL ROOF PLAN - PLUMBING 3/32" = 1'-0" (1)

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A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS

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DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

ROOF PLAN - EVIDENCE/FIRING RANGE - PLUMBING

SHEET NUMBER

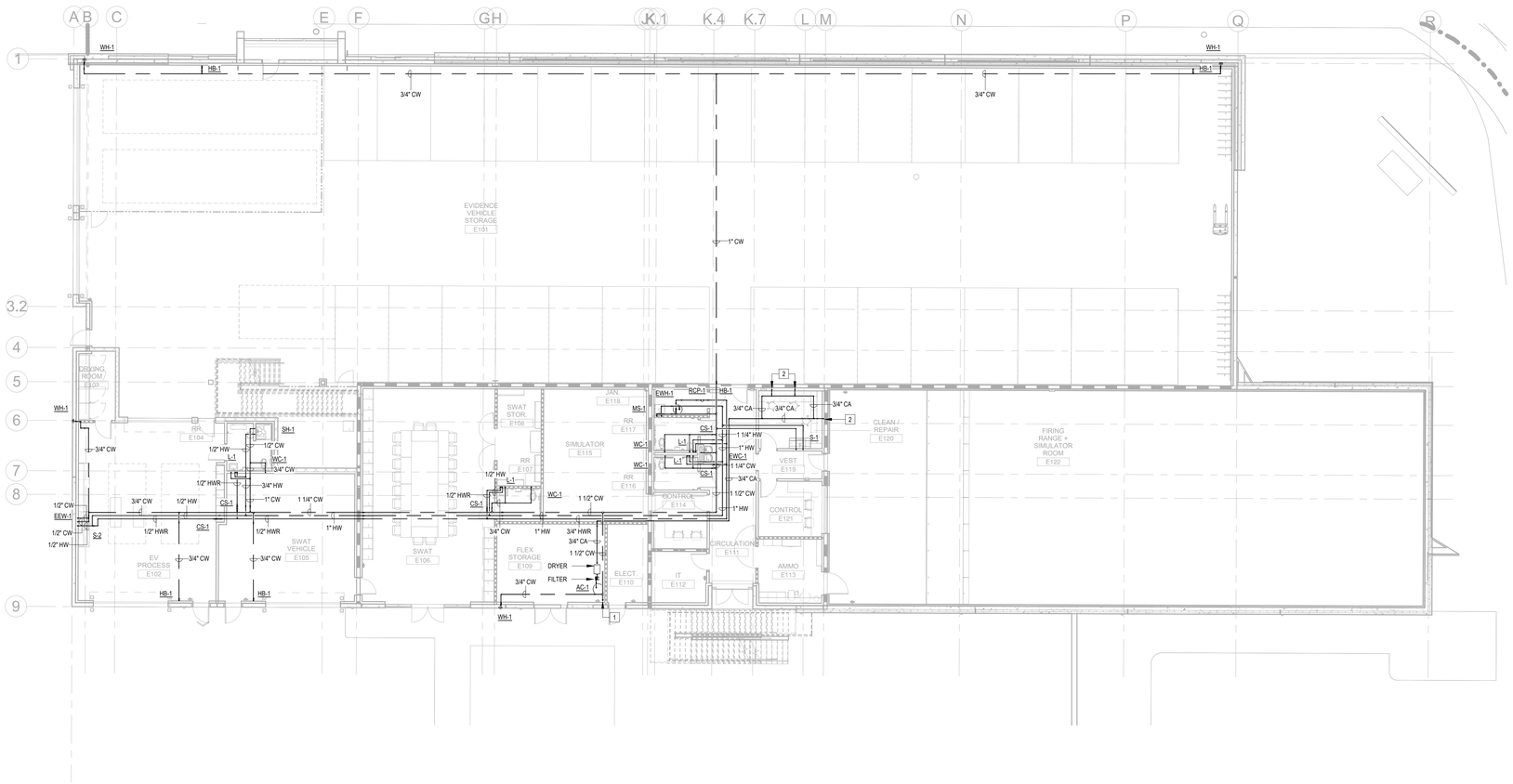
P1.10E

PLUMBING KEYNOTES [X]:

1. 1-1/2" DOMESTIC WATER PIPING DN. SEE SHEET 1/P1.00E FOR CONTINUATION.
2. 1/2" COMPRESSED AIR PIPING DN. TERMINATE WITH QUICK DISCONNECT.

PLUMBING GENERAL NOTES:

1. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH STRUCTURE AND SYSTEMS (PIPING, DUCTWORK, CONDUIT, ETC.) PROVIDING OFFESTS AS REQUIRED.
2. REFER TO RISERS FOR COMPLETE PIPE SIZING.
3. WHERE PIPING IS ROUTED DOWN WITHIN CMU WALLS, CONTRACTOR SHALL COORDINATE INSTALLATION TO MINIMIZE CHIPPING AND CUTTING OF BLOCK. ROUTE WITHIN CMU CORE OPENINGS WHICH ARE NOT GROUTED SOLID. INSTALL PIPING PRIOR TO CMU INSTALLATION WHEN FEASIBLE. COORDINATE ROUTING WITH STRUCTURAL.
4. PROVIDE WALL AND CEILING ACCESS PANELS FOR VALVES AND ACCESSORIES REQUIRING ACCESS LOCATED WITHIN WALLS OR ABOVE INACCESSIBLE CEILINGS. LOCATE ACCESS PANELS AND SIZE (MINIMUM 12"X12") TO PROVIDE ADEQUATE ACCESS.


A B C E F GH J K.1 K.4 K.7 L M N P Q R
1 3.2 4 5 6 7 8 9
WH-1
HB-1
3/4" CW
1" CW
EVIDENCE VEHICLE STORAGE E101
DISPATCH ROOM E103
RR E104
EV PROCESS E102
SWAT VEHICLE E105
SWAT E106
SWAT STOR. E108
JAN. E118
RR E107
RR E117
RR E116
SIMULATOR E115
CONTROL E114
FLEX STORAGE E109
ELECT. E110
IT E112
CIRCULATION E111
VEST. E119
CONTROL E121
AMMO E113
CLEAN / REPAIR E120
FIRING RANGE + SIMULATOR ROOM E122
EWH-1
RCP-1
MS-1
WC-1
SH-1
L-1
S-1
CS-1
EWC-1
EW-1
S-2
DRYER
FILTER
AC-1
3/4" CA
1" HW
1 1/4" HW
1/2" HW
1/2" HWR
1/2" CW
1 1/4" CW
1 1/2" CW
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1 1/2" CW
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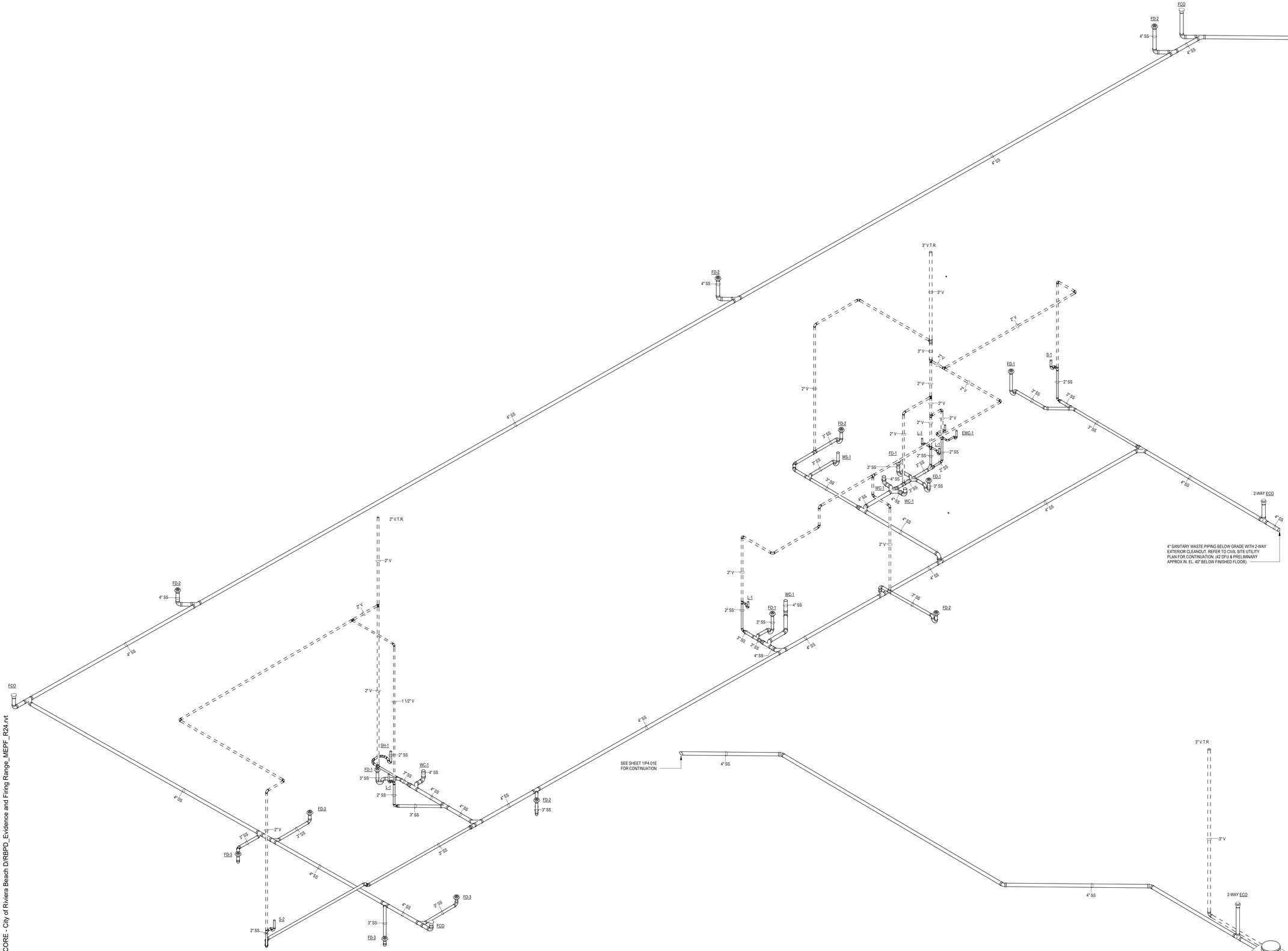

1 WASTE & VENT RISER (PART 1) - PLUMBING

2 WASTE & VENT RISER (PART 2) - PLUMBING

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DRAWING HISTORY

No.	DATE	DESCRIPTION
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
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DATE OF ISSUE
10/14/2025

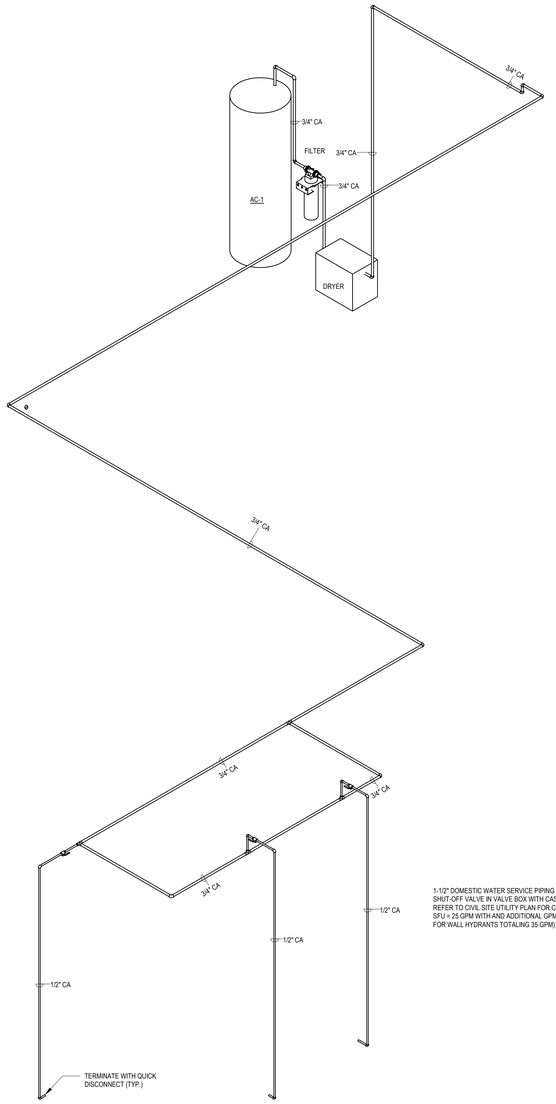
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

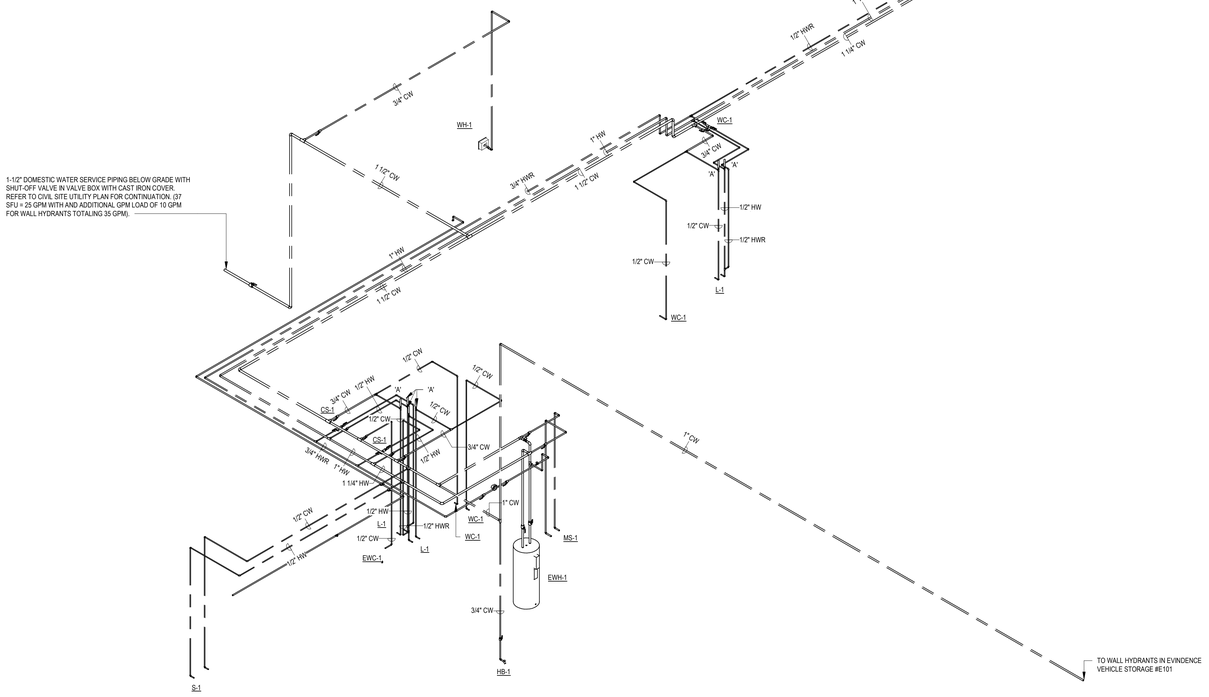
PROJECT NUMBER
1007657.00

SHEET TITLE
WASTE & VENT RISER - PLUMBING

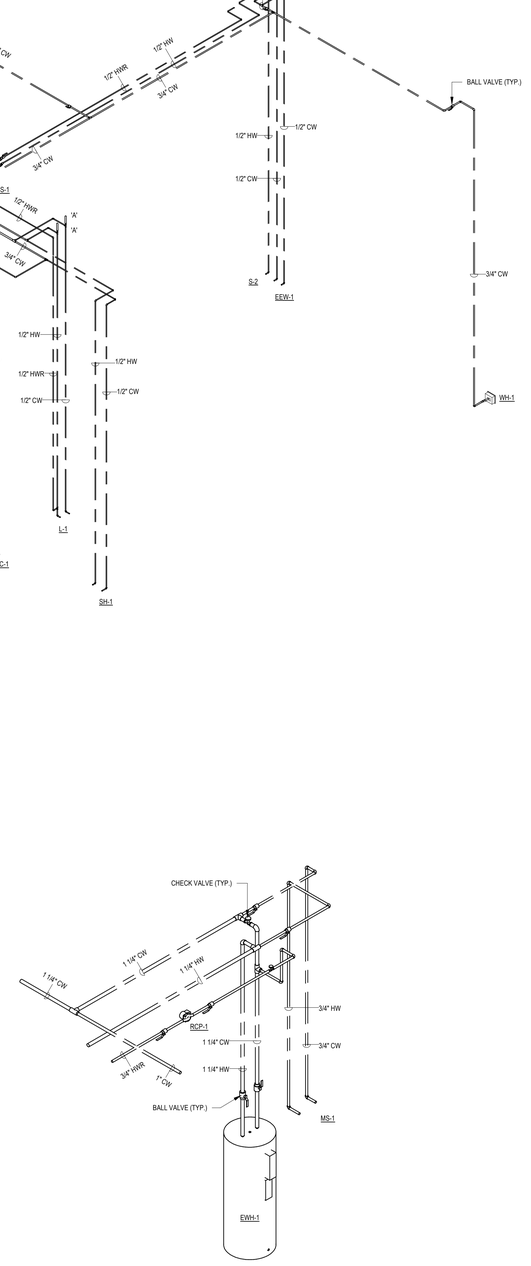
SHEET NUMBER
P4.01E



3 COMPRESSED AIR RISER - PLUMBING



1 DOMESTIC WATER RISER - PLUMBING



2 WATER HEATER PIPING DIAGRAM - PLUMBING

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D	9/18/2025	90% Construction Documents
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PROJECT STATUS
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DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DOMESTIC WATER & COMPRESSED AIR RISER - PLUMBING

SHEET NUMBER
P4.02E

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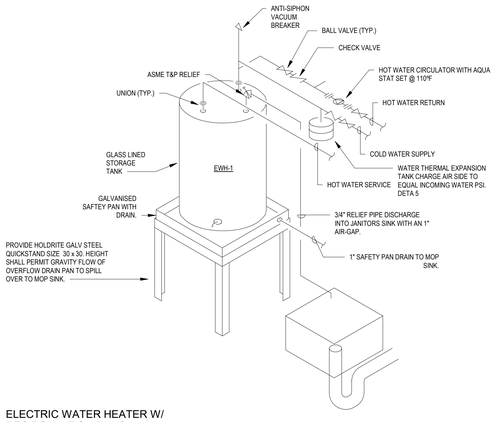
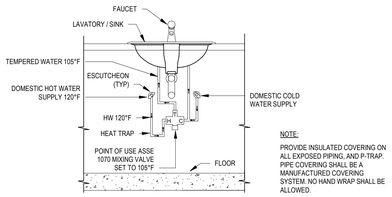


10 ELECTRIC WATER HEATER W/ RECIRCULATION PUMP
N.T.S.



11 ASSE 1070 POINT OF USE MIXING VALVE DETAIL - PLUMBING
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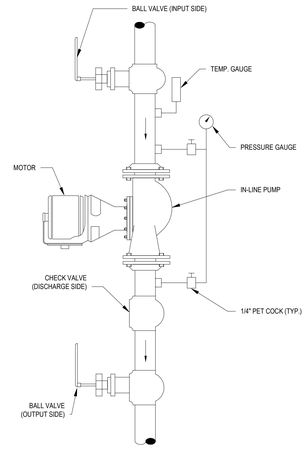

12 TYPICAL IN-LINE PUMP DETAIL
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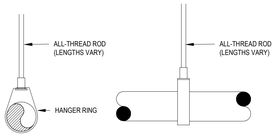

4 NON-INSULATED HANGER DETAIL
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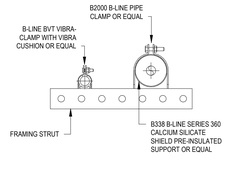

5 INSULATED & NON-INSULATED STRUT MOUNT DETAIL
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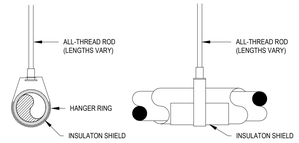

6 INSULATED HANGER DETAIL
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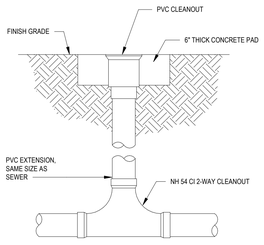

7 LISTED TWO WAY CLEANOUT FITTING DETAIL
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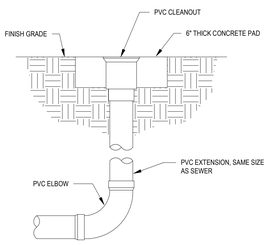

8 (ELBOW) EXTERIOR 1-WAY CLEANOUT DETAIL
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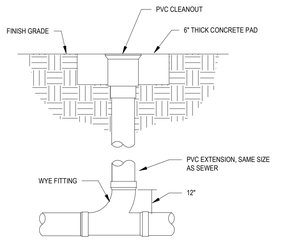

9 (WYE) EXTERIOR 1-WAY CLEANOUT DETAIL
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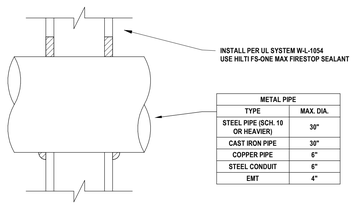
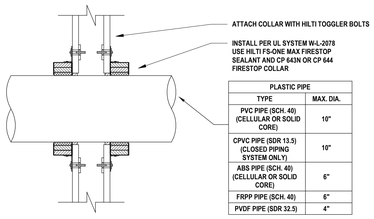


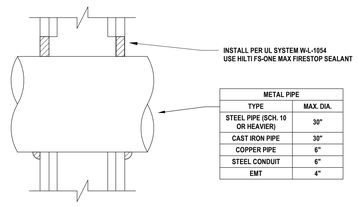
METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH GYPSUM WALL ASSEMBLY (1-HR.)
NTS



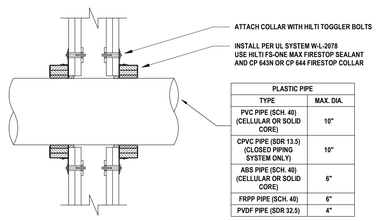
PLASTIC PIPE	
TYPE	MAX. DIA.
PVC PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	10"
CPVC PIPE (SDR 13.5) (CLOSED PIPING SYSTEM ONLY)	10"
ABS PIPE (SCH. 40) (CELLULAR OR SOLID CORE)	6"
FRPP PIPE (SCH. 40)	6"
PVDF PIPE (SDR 32.5)	4"

PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY (1-HR.)
NTS



METAL PIPE	
TYPE	MAX. DIA.
STEEL PIPE (SCH. 10 OR HEAVIER)	30"
CAST IRON PIPE	30"
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH GYPSUM WALL ASSEMBLY (2-HR.)
NTS



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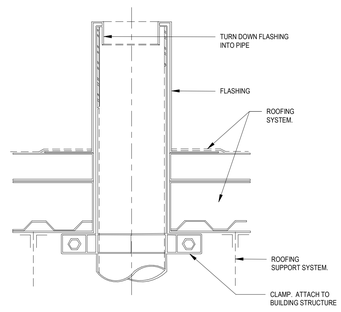
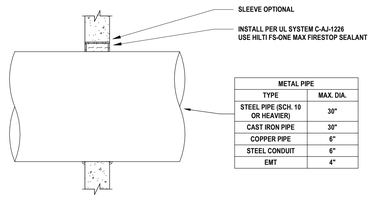
PLASTIC PIPE THROUGH GYPSUM WALL ASSEMBLY (2-HR.)
NTS



3 VENT THRU ROOF DETAIL
N.T.S.



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STEEL PIPE (SCH. 10 OR HEAVIER)	30"
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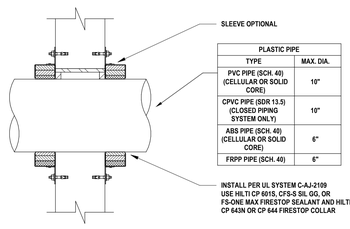
COPPER PIPE	6"
STEEL CONDUIT	6"
EMT	4"

METAL PIPE THROUGH CONCRETE WALL (2-HR.)
NTS



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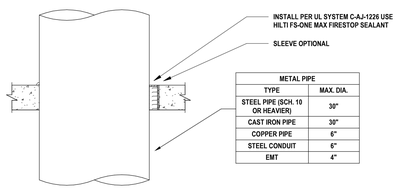
FRPP PIPE (SCH. 40)	6"

PLASTIC PIPE THROUGH CONCRETE WALL (2-HR.)
NTS



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STEEL CONDUIT	6"
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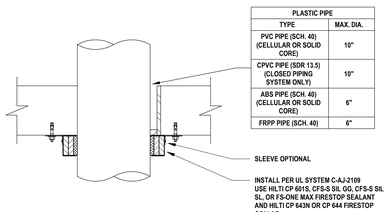
METAL PIPE THROUGH CONCRETE FLOOR (2-HR.)
NTS



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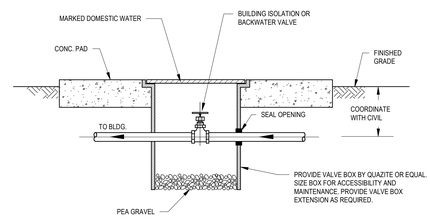
PLASTIC PIPE THROUGH CONCRETE FLOOR (2-HR.)
NTS



2 VALVEBOX DETAIL
N.T.S.

1 UL FIRE PENETRATIONS
N.T.S.

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 8:43:05 AM

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL, Inc.
791 Park of Commerce Blvd.
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T 561 988 4002
www.pgal.com

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FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

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JASON L. SMITH, P.E.
600 S. ORLANDO AVE.
WINTER PARK, FL
FL. REG. NO. : 0037141

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEIDOS Company
4 Harvard Cir, Suite 600 | West Palm Beach, FL 33409
561.688.6575 | cmta.com

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - PLUMBING

SHEET NUMBER
P5.01E

SPECIFICATIONS

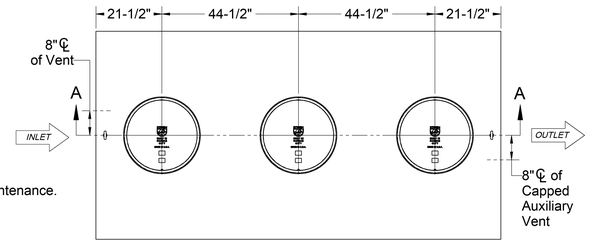
1. 6" Plain End inlet/outlet shown, 3" Plain End vents standard.
2. Max flow rate: 314 GPM.
3. Liquid capacity: 1500 gallons (201 cu. ft.).
4. Oil capacity: 488 gallons.
5. Solids capacity: 825 gallons.
6. Unit weight: 1676 lbs.
7. Maximum operating temperature 140˚F continuous.

NOTES

1. For gravity drainage applications only.
2. Do not use for pressure applications.
3. Capped auxiliary vent provided to allow flexibility with vent piping and design. Provided cap can be moved to unused vent location, or discarded if two chamber vents are required per local code.
4. Cover placement allows full access to tank for proper maintenance.
5. Lifting lug set for easy install.
6. Maximum burial depth: 106" from standard cover height.

ENGINEER SPECIFICATION GUIDE

Striem oil separator model OT-1500 shall be lifetime guaranteed and made in the USA. Separator shall be constructed of polyethylene with 7/8" nominal wall thickness. Separator shall be manufactured for below-grade installation. Field-adjustable riser system is available as an option to bring manhole covers to grade. Separator flow rate shall be 314 GPM. Separator liquid holding capacity shall be 1500 gallons and oil capacity shall be 488 gallons. Solids capacity shall be 825 gallons. Covers shall be H20 rated pickable cast iron. Separator shall be certified to IAPMO IGC 183-2016 and carry a UPC listing.



TOP VIEW

OPTIONS

Connection Options (Plain End Only)

Inlet / Outlet

- ☐ 4"
- ☐ 6"
- ☐ 8"

SELECTION REQUIRED

Riser Options

From Factory: Up to 5"

- ☐ Up to 24": **SR24** (3)
- ☐ Up to 39": **LR24** (3)
- ☐ Up to 43": **SR24** (6)
- ☐ Up to 58": **SR24** (3) + **LR24** (3)
- ☐ Up to 72": **LR24** (6)
- ☐ Up to 90": **SR24** (3) + **LR24** (6)
- ☐ Up to 106": **LR24** (9)

- OR -

☐ **CPRK** (3): 11" - 106"
(See specification for more detail.)

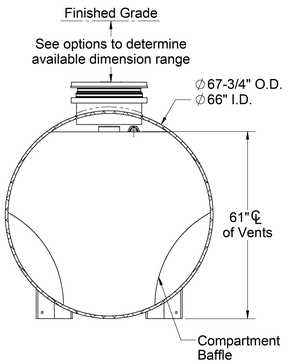
Additional Options

- ☐ **HDK-6**: High Water Table Hold Down Kit
- ☐ **SS**: Slick Stick™ Oil Level Monitoring System*

*Monitoring system will raise covers by 3".

OIL SEPARATOR CALCULATIONS	
SERVICE AREA	12900 SQ. FT.
OIL SEPARATOR SIZING	
6.0 CU. FT. FOR FIRST 100 SQ. FT. OF DRAINAGE AREA	6 CU. FT.
1.0 CU. FT. FOR EACH ADDITIONAL 100 SQ. FT. OF DRAINAGE AREA	128 CU. FT.
CU. FT. REQUIREMENT	134 CU. FT.
GAL. REQUIREMENT	1003 GAL

Sizing methodology complies with UPC section 1017.2 and IPC section 1003.4.2.2.



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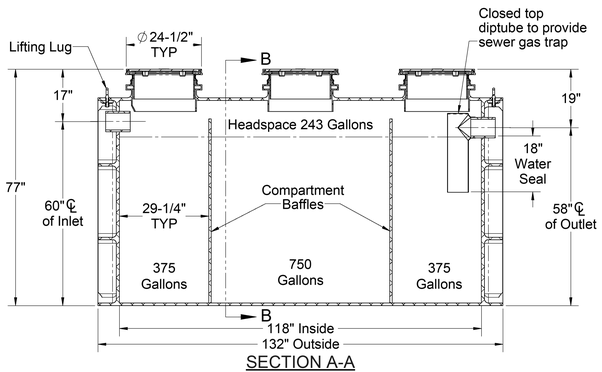
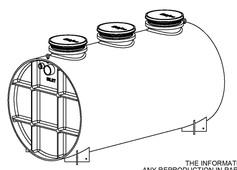


SECTION A-A



UPC ®

PO IS NON-CANCELABLE ORDER IS NON-RETURNABLE

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ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF **STRIEM, LLC.** IS PROHIBITED.

MODEL NUMBER:	OT-1500	**SPECIFICATION SHEET**	
DESCRIPTION:	OIL TANKER™ POLYETHYLENE OIL SEPARATOR 1500 GALLON CAPACITY	**Striem** **Kansas City, KS** **Tel: 913-222-1500** **orders@striemco.com** **www.striemco.com** **Made in the U.S.A**	STRIEM
DWG BY: ENG	**DATE:** 1/24/2025	**REV:** 1	

1 SAND/OIL INTERCEPTOR DETAIL - PLUMBING
N.T.S.

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 8:43:12 AM

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

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791 Park of Commerce Blvd.
Suite 400
Boca Raton, FL 33487
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CONSTRUCTION MANAGER/BUILDER

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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

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600 S. ORLANDO AVE.
MAITLAND, FL 32751
FL. REG. NO.: PE57143

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEGENCE Company
4 Harvard Cir, Suite 600 | West Palm Beach, FL 33409
561.688.0575 | cmta.com

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAIL - PLUMBING

SHEET NUMBER
P5.02E

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURES MODEL	FAUCET/ FLUSH VALVE MODEL	FIXTURE CONNECTION SIZES					ACCESSORIES
				C.W.	H.W.	MIXED	WASTE	VENT	
WC-1	WATER CLOSET FLOOR SET ADA FLUSH TANK	AMERICAN STANDARD #215AA.104	-	1/2"	-	-	4"	2"	PROVIDE AMERICAN STANDARD #5901.100SS ELOGATED SEAT.
L-1	LAVATORY WALL HUNG	AMERICAN STANDARD #0355.012	T & S BRASS #ECW3158	1/2"	-	1/2"	1-1/2"	1-1/2"	PROVIDE POINT OF USE THERMOSTATIC MIXING VALVE LAWLER #TMM1070. SET TEMP. 105°. PROVIDE WITH MCGUIRE 2165 ANGLE STOPS, MCGUIRE 8912 P-TRAP AND CLEANOUT PLUG WITH MCGUIRE #100WC OFFSET STRAINER. PROVIDE CHROME PLATED WALL NIPPLES & ESCHUTCHEONS. PROVIDE TRUEBRO P-TRAP & ANGLE VALVE COVER.
S-1	SINK DROP IN	ELKAY #DLRQ191910	CHICAGO FAUCET #786-245ABCP	1/2"	1/2"	-	2"	1-1/2"	STAINLESS STEEL SINK WITH STRAINER AND MCGUIRE 2165 LOOSE KEY SUPPLIES, MCGGUIRE 8902 P-TRAP.
S-2	SINK DROP IN	ELKAY #DLRQ221910	CHICAGO FAUCET #786-245ABCP	1/2"	1/2"	-	2"	1-1/2"	STAINLESS STEEL SINK WITH STRAINER AND MCGUIRE 2165 LOOSE KEY SUPPLIES, MCGGUIRE 8902 P-TRAP.
SH-1	SHOWER	FREEDOM SHOWERS #APF3838LDPANSS (SHOWER PAN)	AMERICAN STANDARD #TU662SG.213	1/2"	1/2"	-	2"	1-1/2"	-
MS-1	MOP SINK 24" X 24"	FIAT #MSB2424	FIAT #830-AA	3/4"	3/4"	-	3"	1-1/2"	FIAT #889-CC MOP HANGER, FIAT #832-AA HOSE BRACKET, FIAT #E-99-AA BUMPER GUARD AND FIAT #MSG2424 WALL GUARD.
EWC-1	ELECTRIC WATER COOLER	ELKAY #LZSTL8WSSK	-	1/2"	-	-	2"	1-1/2"	-
EEW-1	EMERGENCY EYE/FACEWASH	HAWS #7610	-	1/2"	-	-	-	-	-

NOTES:

- FIXTURE TO BE WHITE IN COLOR UNLESS OTHERWISE NOTED
- ADA WATER CLOSETS SHALL HAVE FLUSH HANDLE ON WIDE SIDE OF TOILET STALL. COORDINATE FLUSH VALVE WITH GRAB BARS.
- ADA LAVATORIES AND SINKS SHALL HAVE TRAP INSULATION KIT TO COVER P-TRAP AND SUPPLIES.
- ADA FIXTURES MOUNTING HEIGHT PER LOCAL, STATE HANDICAP CODES.
- CONTRACTOR TO PROVIDE TRAP, CARRIER, SUPPLIES LINES AND DRAINS REQUIRED BY FIXTURES.

ELECTRIC WATER HEATER SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURES MODEL	GALLON CAPACITY	SET TEMPERATURE	ELECTRICAL DATA			ACCESSORIES
					VOLT	PHASE	kW	
EWH-1	ELECTRIC WATER HEATER	A.O.SMITH DEN-52	55	125°	480	1	9	INSULATION BLANKET, PLASTIC/ ALUMINUM WATER HEATER PAN

NOTES:

- PROVIDE ALL GAUGES, HEAT TRAPS, THERMOSTATS, TEMPERATURE AND PRESSURE RELIEF VALVE AND SHUT-OFF VALVES AS REQUIRED BY LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.
- FLOOR MOUNTED HEATERS SHALL BE INSTALLED ON 4" CONCRETE HOUSE KEEPING PAD

RECIRCULATION PUMP SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURES MODEL	HP	RPM	GPM/ TDH	ELECTRICAL DATA			ACCESSORIES
						VOLT	PHASE	HZ	
RCP-1	RECIRCULATION PUMP	TACO #006-B4	1/40	3250	2/4	115	1	60	PROVIDE TACO INDUSTRIAL FLOW SWITCH & AQUASTAT.

NOTES:

- PROVIDE ALL GAUGES, UNIONS, THERMOSTATS, VALVE AND SHUT-OFF VALVES AS REQUIRED BY LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.
- COORDINATE WITH DIVISION 26 CONTRACTOR.
- PUMP SHALL BE ALL BRONZE WITH FLANGE CONNECTION.

AIR COMPRESSOR SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURES MODEL	TYPE	CFH	MOTOR/HP	NOISE LEVEL	ELECTRICAL DATA			ACCESSORIES
							VOLT	PHASE	HZ	
AC-1	AIR COMPRESSOR 80 GALLON VERTICAL TANK	QUINCY #QT-5	SINGLE STAGE	17 @ 175 PSI	5	70 DBA	480	3	60	PROVIDE QUINCY #QRHT-50 AIR DRYER AND #QMF 25 AIR FILTER. INSTALL PER MANFACTURERS INSTRUCTIONS.

PLUMBING EQUIPMENT SCHEDULE

MARK	FIXTURE DESCRIPTION	MANUFACTURES MODEL	ACCESSORIES / NOTES
FCO	FLOOR CLEANOUT	WATTS CO-200-R	-
WCO	WALL CLEANOUT	WATTS CO-590-RD	-
ECO	EXTERIOR FLOOR CLEANOUT	WATTS CO-200-RX-4	-
HB-1	HOSE BIB MILD CLIMATE	WOODFORD #24	MOUNT @ 18" AFF.
WH-1	WALL HYDRANT MILD CLIMATE	WOODFORD #B74	PROVIDE TWO (2) SETS OF LOOSE KEYS. MOUNT @ 18" AFG.
FD-1	FLOOR DRAIN	ZURN #Z415B-VP	PROVIDE BARRIER TRAP SEAL PROTECTION DEVICE (ASSE 1072). JAY R. SMITH QUAD CLOSE TRAP SEAL OR APPROVED EQUAL
FD-2	FLOOR DRAIN HEAVY DUTY	ZURN #Z520-Y	PROVIDE BARRIER TRAP SEAL PROTECTION DEVICE (ASSE 1072). JAY R. SMITH QUAD CLOSE TRAP SEAL OR APPROVED EQUAL
FD-3	FLOOR DRAIN HEAVY DUTY	ZURN #Z520-SS-Y	PROVIDE BARRIER TRAP SEAL PROTECTION DEVICE (ASSE 1072). JAY R. SMITH QUAD CLOSE TRAP SEAL OR APPROVED EQUAL
HD-1	HUB DRAIN	WATTS FD-100-ER-15	-
CS-1	BALANCING VALVE	CIRCUIT SOLVER CSUAS-1/2-110-CV1	-
SOI-1	SAND/OIL INTERCEPTOR	STRIEM #OT-1500	PROVIDE H20 TRAFFIC RATED PICKABLE CAST IRON COVER AND HDK-6 HIGH WATER ANCHOR KIT.

SHOCK ARRESTOR SCHEDULE

DESIGNATION	MANUFACTURER	SERIES	FIXTURE UNITS
A	WATTS	LF15M2-A	1-11
B	WATTS	LF15M2-B	12-32
C	WATTS	LF15M2-C	33-60
D	WATTS	LF15M2-D	61-113
E	WATTS	LF15M2-E	114-154
F	WATTS	LF15M2-F	155-330

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DRAWING HISTORY

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
SCHEDULES - PLUMBING

SHEET NUMBER
P6.01E

GENERAL LEGEND AND SYMBOLS

- PIPE UP THROUGH PLAN
- PIPE DOWN THROUGH PLAN
- DIRECTION OF FLOW IN PIPE
- PIPE UP
- PIPE DOWN
- G — PIPE GUIDE
- FLEXIBLE PIPE CONNECTOR
- SUPPLY DIFFUSER
- SUPPLY PLAQUE DIFFUSER
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- XIX — RIGID DUCTWORK (WIDTH/DEPTH)
- ELBOW WITH TURNING VANES
- MANUAL SPLITTER DAMPER
- FLEXIBLE DUCT WITH SPIN-IN FITTING AND MANUAL VOLUME DAMPER
- MANUAL VOLUME DAMPER
- X — KEYNOTE DESIGNATION
- ΔT — DELTA T (TEMPERATURE DIFFERENCE)
- CD — CONDENSATE DRAIN LINE
- R — REFRIGERANT LINES
- FD — FIRE DAMPER
- BDD — BACKDRAFT DAMPER
- MVD — MOTORIZED VOLUME DAMPER
- SD — SMOKE DAMPER
- T — THERMOSTAT
- H — HUMIDISTAT
- SD — DUCT MOUNTED SMOKE DETECTOR
- S CO — CARBON MONOXIDE SENSOR (MOUNT @36" A.F.F.)
- S CO_2 — CARBON DIOXIDE SENSOR (MOUNT @60" A.F.F.)
- BP — BIPOLAR IONIZATION UNIT
- 1 / M-0 — DETAIL OR RISER DESIGNATION / SHEET WHERE DETAIL OR RISER APPEAR

NOTE:
ALL STANDARD SYMBOLS AND ABBREVIATIONS MAY NOT APPEAR ON THE PROJECT DRAWINGS.

ABBREVIATIONS

SYMBOL	DESCRIPTION
AC	AIR CONDITIONING
ACS	AUTOMATIC CONTROL SYSTEM
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMP	AMPERES
AP	ACCESS PANEL
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
AUTO	AUTOMATIC
AUX	AUXILIARY
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BP	BIPOLAR IONIZATION UNIT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT PER HOUR
BWV	BACK WATER VALVE
CAM	COMMON AREA MAINTENANCE
CC	COOLING COIL
CCP	CENTRAL CONTROL PANEL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COMB	COMBINATION
COMPR	COMPRESSOR
COND	CONDENSATE OR CONDENSER
CONT	CONTINUATION
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CU IN	CUBIC INCHES
CW	DOMESTIC COLD WATER
D	DRAIN LINE
DB	DRY BULB
DEG	DEGREES
DG	DOOR GRILLE
DHC	DUCT HEATING COIL
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRIC CONNECTOR
ECO	EXTERIOR CLEANOUT
EDB	ENTERING DRY BULB TEMPERATURE
EEW	EMERGENCY EYE WAS/SHOWER
EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC
EQ	EQUAL
EVAP	EVAPORATOR
EWB	ENTERING WET BULB TEMPERATURE
EWH	ELECTRIC WATER HEATER
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST AIR
EXIST	EXISTING
EXP	EXPANSION
°F	DEGREES FAHRENHEIT
F	FIRE SPRINKLER PIPING
FA	FREE AREA
FC	FLEXIBLE CONNECTION
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDPR	FIRE DAMPER
FG	FINISHED GRADE
FHC	FIRE HOSE CABINET
FIN FL	FINISHED FLOOR
FLA	FULL LOAD AMPERES
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FTB	FAN POWERED TERMINAL BOX
FV	FACE VELOCITY
HB	HOSE BIBB
HC	HEATING COIL
HD	HEAD

SYMBOL	DESCRIPTION
HGT	HEIGHT
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HRR	HEAT RECOVERY RETURN
HRS	HEAT RECOVERY SUPPLY
HW	DOMESTIC HOT WATER
HZ	HERTZ (FREQUENCY)
IN	INCH OR INCHES
INSUL	INSULATION
IPS	IRON PIPE SIZE
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LBS/HR	POUNDS PER HOUR
LCP	LOCAL CONTROL PANEL
LDB	LEAVING DRY BULB TEMPERATURE
LIN FT	LINEAR FEET
LWB	LEAVING WET BULB
MAX	MAXIMUM
MB	MIXING BOX
MBH	THOUSANDS OF BTUH
MC	MECHANICAL CONTRACTOR
MIN	MINIMUM
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO.	NUMBER
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
OV	OUTLET VELOCITY
P	PRESSURE
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAUGE
PRESS	PRESSURE
PVC	POLYVINYL CHLORIDE
R	RISE
RA	RETURN AIR
RAF	RETURN AIR FAN
RD	ROOF DRAIN
REQ'D	REQUIRED
RHC	REHEAT COIL
R_{HG}	REFRIGERANT HOT GAS DISCHARGE
R_L	REFRIGERANT LIQUID
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
R_S	REFRIGERANT SUCTION
RV	RELIEF VALVE
S/FDPR	COMBINATION SMOKE AND FIRE DAMPER
SAN	SANITARY
SAU	SOUND ATTENUATION UNIT
SCW	SOFT COLD WATER
SMH	STORM MANHOLE
SP	STATIC PRESSURE
SDPR	SMOKE DAMPER
SPEC	SPECIFICATION
ST	STORM
TB	TERMINAL BOX
TD	TRENCH DRAIN
TEMP	TEMPERATURE
TS	TIP SPEED
TYP	TYPICAL
TX	TOILET EXHAUST
UH	UNIT HEATER
V	VENT LINE
VAV	VARIABLE AIR VOLUME UNIT
VLV	VALVE
VTR	VENT THRU ROOF
W/	WITH
W/O	WITHOUT
W	WIDTH
WB	WET BULB
WC	WATER COLUMN
WCO	WALL CLEANOUT
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WP	WORKING PRESSURE

MECHANICAL GENERAL NOTES

1. ALL MECHANICAL WORK SHALL BE GOVERNED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION AND APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
   A. FLORIDA BUILDING CODE - 2023
   B. FLORIDA MECHANICAL CODE - 2023
   C. FLORIDA PLUMBING CODE - 2023
   D. FLORIDA ENERGY EFFICIENCY CODE - 2023
   E. FLORIDA FIRE PREVENTION CODE - 2023
   F. FLORIDA EXISTING BUILDING CODE - 2023
   G. NATIONAL ELECTRICAL CODE (NEC) - 2020
   H. NFPA 90A - INSTALLATION OF AIR CONDITIONING & VENTILATING SYSTEMS
   I. NFPA 101 - LIFE SAFETY CODE
   J. ASHRAE STANDARDS (INCLUDING 15, 55, 62.1, 90.1 & 129)
   K. ANSI
   L. SMACNA DUCTWORK STANDARDS - CURRENT EDITION
   M. AMERICANS WITH DISABILITIES ACT (ADA)
   N. ALL OTHER APPLICABLE FEDERAL, COUNTY AND CITY CODES REQUIRED BY LOCAL JURISDICTIONS
2. THE CONTRACTOR SHALL READ THE SPECIFICATIONS. THE SPECIFICATIONS AND DRAWINGS TOGETHER DEFINE THE FULL CONTRACT REQUIREMENTS. IN THE EVENT OF A DISCREPANCY BETWEEN THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT APPLIES UNLESS DIRECTION HAS BEEN PROVIDED THROUGH A FORMAL REQUEST FOR INFORMATION OR CLARIFICATION PRIOR TO THE CLOSE OF THE BIDDING.
3. ANY PROPOSED EQUIPMENT OR MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER AND ENGINEER OF RECORD PRIOR TO THE CLOSE OF BIDDING. NO EQUIPMENT OR MATERIAL SUBSTITUTIONS WILL BE CONSIDERED ONCE THE BIDDING HAS ENDED AND THE GMP HAS BEEN ESTABLISHED.
4. AIR HANDLING SYSTEMS SHALL NOT BE ENERGIZED UNTIL ALL OF THE DRYWALL FINISHING AND PAINTING SCOPES HAVE BEEN COMPLETED. CONFIRMATION THAT THOSE SCOPES ARE REQUIRED WITH WRITTEN APPROVAL FROM THE OWNER AND ENGINEER BEFORE AIR HANDLING UNIT AND FANS CAN BE ENERGIZED. FAILURE TO OBTAIN WRITTEN APPROVAL TO ENERGIZE THE FANS WILL RESULT IN THE CLEANING OF THE ENTIRE INTERIOR OF ANY AFFECTED AIR DISTRIBUTION SYSTEM BY A LICENSED THIRD-PARTY CONTRACTOR AT NO ADDITIONAL COST.
5. ALL TEMPORARY FILTRATION AT AIR HANDLING EQUIPMENT AND ANY RETURN AIR INTAKE GRILLE SHALL BE REPLACED A MINIMUM OF ONCE A MONTH DURING PERIODS OF OPERATION DURING CONSTRUCTION. A LOG MUST BE MAINTAINED AT EACH AIR HANDLING UNIT INDICATING DATES OF FILTER REPLACEMENTS FOR INSPECTION. FAILURE TO MAINTAIN THE REQUIRED LOGS WILL RESULT IN THE CLEANING OF THE ENTIRE INTERIOR OF ANY AFFECTED AIR DISTRIBUTION SYSTEM BY A LICENSED THIRD PARTY CONTRACTOR AT NO ADDITIONAL COST.
6. ALL EQUIPMENT, DUCTWORK AND MATERIALS STORED ON THE JOBSITE SHALL BE PROPERLY PROTECTED FROM THE ELEMENTS AND CONSTRUCTION DIRT AND DEBRIS. ANY MATERIAL EXPOSED TO THE ELEMENTS WITH EXPOSED INSULATION WILL BE REQUIRED TO BE REPLACED AT NO ADDITIONAL COST. ANY EQUIPMENT OR MATERIAL THAT IS EXPOSED TO THE ELEMENTS, DIRT AND DEBRIS THAT ARE DEEMED ACCEPTABLE TO REMAIN SHALL BE THOROUGHLY CLEANED AND DISINFECTED AND SIGNED OFF ON BY THE OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
7. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ALL REQUIREMENTS WITH EQUIPMENT SUPPLIED.
8. ALL EQUIPMENT HOUSINGS AND COMPONENTS INSTALLED OUTDOORS OR WITHIN UNCONDITIONED VENTILATED SPACES THAT ARE EXPOSED TO THE ELEMENTS SHALL BE SUITABLE FOR SEACOAST APPLICATION. ANY APPLIED CORROSION RESISTANT MATERIALS SHALL BE FACTORY APPLIED.
9. EVERY PIECE OF MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH AN ENGRAVED NAMEPLATE WITH MINIMUM 1" HIGH LETTERS INDICATING EQUIPMENT DESIGNATION. ANY EQUIPMENT INSTALLED WHERE CONCEALED ABOVE CEILINGS SHALL BE NOTED WITH CLEAR ADHESIVE LABEL AT NEAREST T-GRID OR ON ACCESS PANEL IN ADDITION TO THE ENGRAVED NAMEPLATE.
10. ALL VARIABLE FREQUENCY DRIVES AND MOTOR STARTERS SHALL BE PROVIDED WITH ENGRAVED LABELS INDICATING ASSOCIATED EQUIPMENT THEY SERVE AS WELL AS THE ELECTRICAL PANEL AND CIRCUIT THAT FEEDS THE DEVICE.
11. ALL EXTERIOR MECHANICAL EQUIPMENT AND THEIR FRAMES, APPURTENANCES, COMPONENTS, SUPPORTS AND ANCHORING DEVICES SHALL BE ANCHORED TO RESIST THE FORCES DUE TO WIND PRESSURE AS REQUIRED BY THE FLORIDA BUILDING CODE.
12. ALL EQUIPMENT AND MATERIALS INSTALLED THAT INTERFACE WITH THE ROOFING SYSTEM SHALL BE COORDINATED WITH THE ROOFING SYSTEM BEING PROVIDED. ALL MECHANICAL EQUIPMENT INSTALLATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROOFING MANUFACTURER TO MAINTAIN CONTINUITY AND WARRANTIES.
13. COORDINATE LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES WITH ARCHITECTURAL REFLECTED CEILING PLANS AND WORK OF ALL OTHER TRADES.
14. ALL LOW-PRESSURE SUPPLY, RETURN AND EXHAUST DUCTWORK ARE DESIGNED FROM A MINIMUM OF 0.05" TO A MAXIMUM OF 0.1" OF FRICTION PER 100 FT. OF DUCT.
15. UNLESS NOTED OTHERWISE, FLEXIBLE DUCT CONNECTORS AND RIGID DUCT RUNOUTS SERVING SINGLE DIFFUSER SHALL BE THE SAME SIZE AS DIFFUSER NECK.
16. UNLESS NOTED OTHERWISE, FLEXIBLE DUCT CONNECTORS FOR VAV BOXES AND FAN TERMINAL UNIT SHALL BE THE SAME SIZE AS UNIT INLET. VERIFY ACTUAL DIMENSIONS WITH EQUIPMENT SUPPLIED.
17. PAINT INTERNAL DUCTWORK VISIBLE THROUGH DIFFUSERS, GRILLE OR LOUVER FACE FLAT BLACK.
18. DUCTWORK LAYOUTS INDICATED ON PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO BE USED AS DUCT FABRICATION DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION EFFORTS BETWEEN TRADES AS OUTLINED IN THE SPECIFICATIONS.
19. ALL LOW-PRESSURE BRANCH DUCTS SHALL BE PROVIDED WITH A MANUAL VOLUME DAMPER FOR BALANCING. ALL MANUAL VOLUME DAMPERS SHALL BE PROVIDED WITH A MINIMUM 12" LENGTH OF FLUORESCENT ORANGE RIBBON TO AIDE IN VISIBILITY WHERE ABOVE CEILINGS.
20. ALL INSULATION DUCT SEAMS SHALL BE SEALED WITH GLASS FAB, STAPLES AND MASTIC. PRESSURE SENSITIVE TAPE IS NOT AN APPROVED DUCT / INSULATION CLOSURE SYSTEM. ANY PRESSURE SENSITIVE TAPE USED WILL BE REQUIRED TO BE REMOVED AND REPLACED WITH A PROPER CLOSURE SYSTEM.
21. DUCT ACCESS DOORS SHALL BE PROVIDED WHERE ANY EQUIPMENT REQUIRING ACCESS IS INSTALLED ABOVE AN INACCESSIBLE CEILING. MINIMUM SIZE SHALL BE 12X12 OR AS LARGE AS NECESSARY TO ACCOMMODATE EQUIPMENT REPLACEMENT AND SERVICE.
22. ALL DUCT AND PIPING PENETRATIONS THROUGH TILT WALL PANELS SHALL BE COORDINATED BETWEEN THE TILT WALL AND MECHANICAL SUBCONTRACTORS PRIOR TO WALL PANEL FORMING OR DUCT FABRICATION.
23. THE FINISH OF ANY INTERIOR OR EXTERIOR EXPOSED MECHANICAL EQUIPMENT, DUCTWORK, FABRIC DUCT SYSTEMS, LOUVERS, ETC. SHALL BE CONFIRMED WITH THE ARCHITECT.
24. ALL DOORS TO INDIVIDUAL TOILETS, JANITORS CLOSETS AND OTHER SMALL SPACES WITHOUT RETURN GRILLS ARE TO BE UNDERCUT MINIMUM 1/2".
25. MOUNT SPACE MOUNTED SENSORS AT 48" TO THE CENTER UNLESS NOTED OTHERWISE.
26. ALL WALL SENSORS SHALL BE PROVIDED WITH ENGRAVED NAMEPLATE WITH 1/4" HIGH LETTERS INDICATING THE ASSOCIATED MECHANICAL EQUIPMENT IT SERVES.
27. ALL THREE PHASE MOTORS SHALL HAVE PHASE LOSS / ROTATION MONITORS.
28. PROVIDE MOTOR STARTERS FOR ALL MOTORS THAT ARE REQUIRED TO BE CONTROLLED THAT ARE NOT BEING PROVIDED WITH A VARIABLE FREQUENCY DRIVE.
29. ALL REFRIGERANT LINE RUNS SHALL BE SIZED AND INSULATED PER THE MANUFACTURER'S RECOMMENDATIONS. UNLESS NOTED OTHERWISE, PROVIDE PVC CHASES UNDERGROUND WITH DIRECT PATH TO CONDENSING UNIT TO MINIMIZE LINE SET LENGTHS AS MUCH AS POSSIBLE. ALL REFRIGERANT LINES INSTALLED EXPOSED OUTDOORS SHALL BE NEATLY RACK MOUNTED AND PROVIDED WITH ALUMINUM JACKETING.
30. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL OF THE ROOF MOUNTED PLUMBING VENTS WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. THE CODE MINIMUM SEPARATION BETWEEN OUTDOOR AIR.
31. ALL PIECES OF MECHANICAL EQUIPMENT REQUIRING ACCESS LOCATED ABOVE HARD CEILINGS SHALL BE PROVIDED WITH ACCESS PANELS SIZED PER DRAWINGS AND/OR MANUFACTURER'S RECOMMENDATION, WHICHEVER IS LARGER. COORDINATE STYLE/COLOR/LOCATIONS OF PANEL WITH A/E/O.

COMMISSIONING SCOPE

1. INDEPENDENT COMMISSIONING SERVICES WILL BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR AND ASSOCIATED SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION AND SUPPORT REQUIRED FOR ALL COMMISSIONING PROCEDURES AND ACTIVITIES.
2. ALL DEFICIENCIES OR ADJUSTMENTS NOTED AS REQUIRING CORRECTION BY THE COMMISSIONING AUTHORITY (CXA) SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST WITHIN FIVE CALENDAR DAYS OF NOTIFICATION.
3. PRIOR TO PASSING THE FINAL MECHANICAL INSPECTION, EVIDENCE OF THE MECHANICAL SYSTEM'S COMMISSIONING AND COMPLETION SHALL BE PROVIDED.
4. COMMISSIONING SERVICES REQUIREMENTS: COMMISSIONING SERVICES SHALL BE PROVIDED THROUGH A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY IN ACCORDANCE WITH THE PROVISIONS OF THE FLORIDA BUILDING CODE, ENERGY CONSERVATION CODE SECTION C408. PRIOR TO PASSING THE FINAL MECHANICAL INSPECTION, EVIDENCE OF THE MECHANICAL SYSTEM'S COMMISSIONING AND COMPLETION SHALL BE PROVIDED. COPIES OF THE REQUIRED COMMISSIONING DOCUMENTATION SHALL BE PROVIDED TO THE OWNER AND MADE AVAILABLE TO THE CODE OFFICIAL UPON REQUEST.

TEST AND BALANCE SCOPE

1. THE GENERAL CONTRACTOR SHALL PROVIDE INDEPENDENT THIRD PARTY TEST AND BALANCE SERVICES.
2. THE ASSOCIATED SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION AND SUPPORT REQUIRED FOR ALL TEST AND BALANCE PROCEDURES AND ACTIVITIES.
3. ALL DEFICIENCIES OR ADJUSTMENTS NOTED AS REQUIRING CORRECTION BY THE THIRD PARTY TEST AND BALANCE CONTRACTOR SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST WITHIN FIVE CALENDAR DAYS OF NOTIFICATION.
4. REFER TO SPECIFICATIONS FOR PRELIMINARY AND FINAL PERFORMANCE VERIFICATION REQUIREMENTS.

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DRAWING HISTORY

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A	4/4/2025	100% Design Development
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E	10/14/2025	90% Construction Documents/Permit Set

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10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

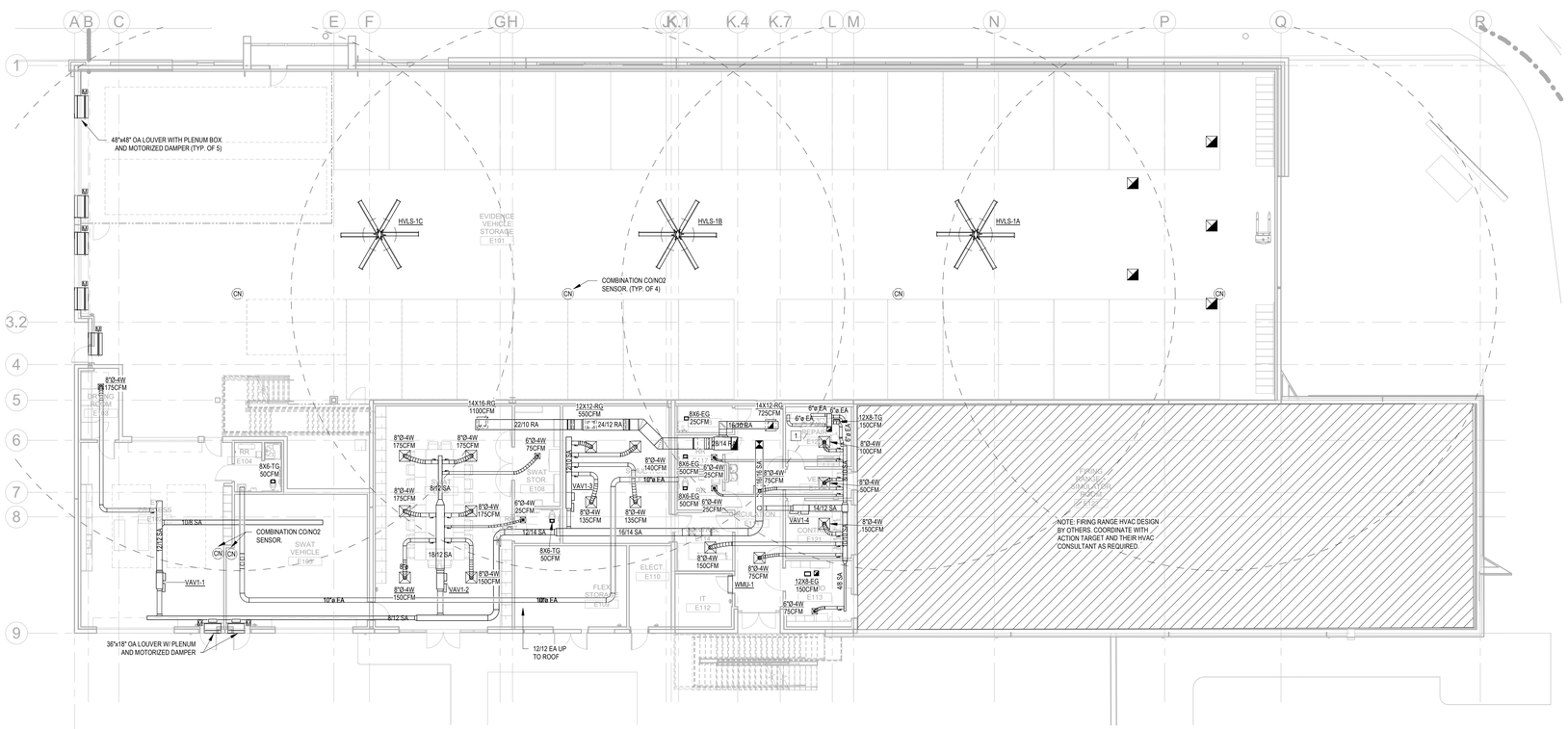
PROJECT NUMBER
1007657.00

SHEET TITLE
GENERAL NOTES - HVAC

SHEET NUMBER
M0.01E

HVAC KEYNOTES [X] :

1. ROUTE DUCTWORK EXHAUST WITHIN MILLWORK ENCLOSURE. PROVIDE EXHAUST GRILLE TO BOTTOM OF MILLWORK. COORDINATE WITH ARCHITECTURAL DRAWINGS.



OVERALL FIRST FLOOR PLAN - HVAC 3/32" = 1'-0" (1)

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PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
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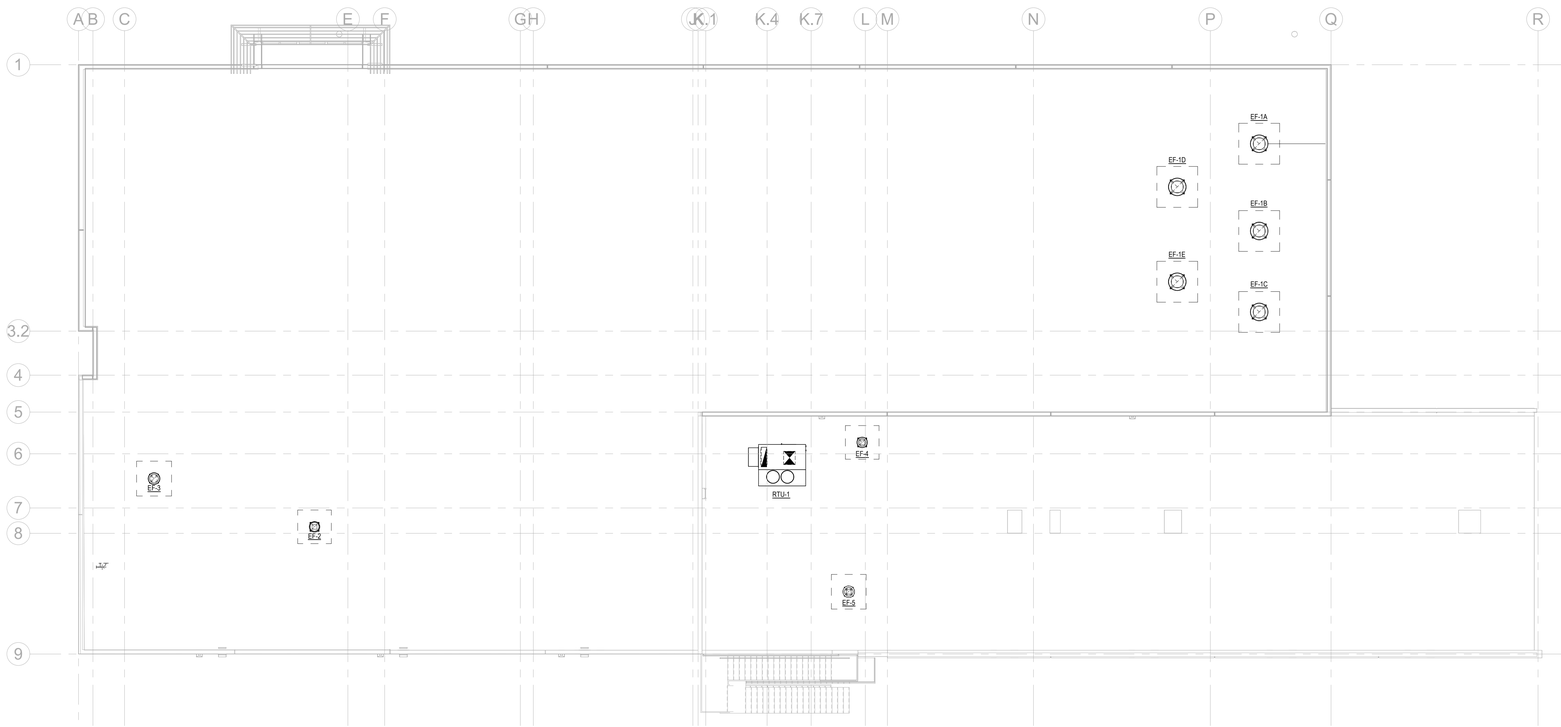
PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN - EVIDENCE/FIRING RANGE - HVAC

SHEET NUMBER
M1.01E



OVERALL ROOF PLAN - HVAC 3/32" = 1'-0" (1)

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E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

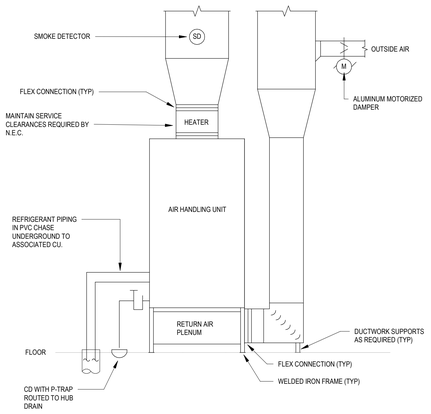
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

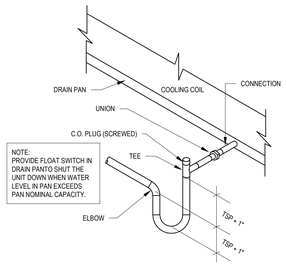
PROJECT NUMBER
1007657.00

SHEET TITLE
ROOF PLAN - EVIDENCE/FIRING RANGE - HVAC

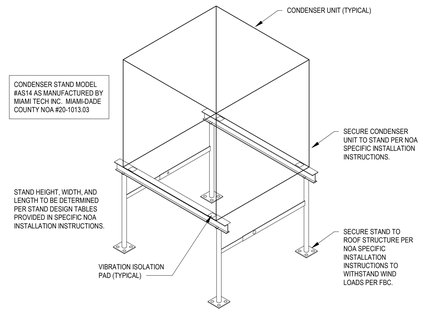
SHEET NUMBER
M1.02E



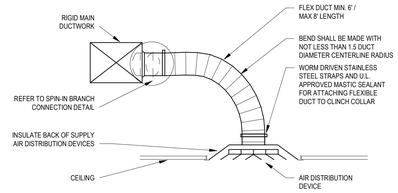
1 AHU DX CV SPLIT SINGLE ZONE
NTS



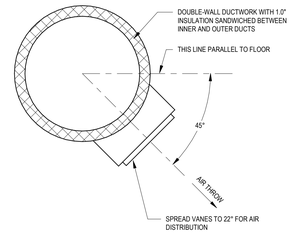
2 CONDENSATE DRAIN - ISO
NTS



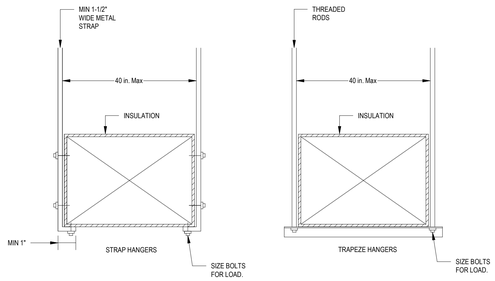
3 CONDENSER UNIT STAND ON ROOF DETAIL - HVHZ
NTS



4 DIFFUSER AND FLEX DUCT DETAIL
NTS



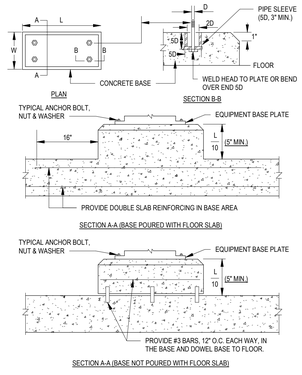
5 DRUM LOUVER DETAIL
NTS



NOTE:

1. DUCTWORK TRAPEZE HANGERS SUPPORT SHALL NOT BE COVERED BY DUCTWORK INSULATION.

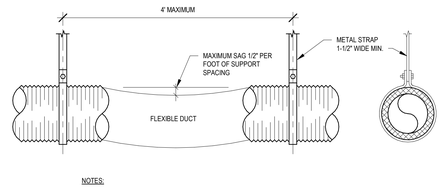
6 DUCTWORK SUPPORT
NTS



NOTES:

1. THIS DETAIL APPLIES TO EQUIPMENT NOT SPECIFIED TO BE MOUNTED ON SPPING ISOLATED BASES.
2. BASE AND W DIMENSIONS SHALL BE 6 INCHES GREATER THAN THE EQUIPMENT PLATE.

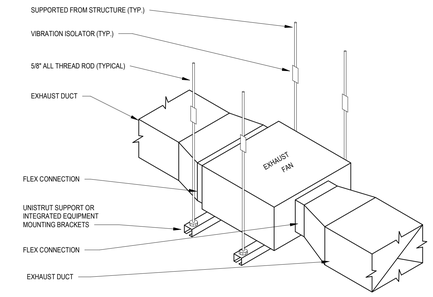
7 EQUIPMENT PAD DETAIL
NTS



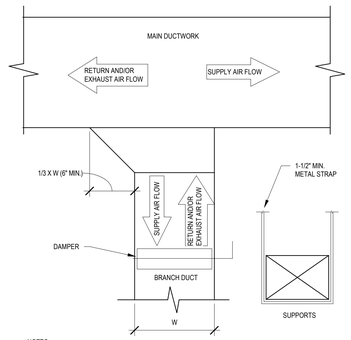
NOTES:

1. DUCT SHOULD EXTEND STRAIGHT FOR SEVERAL INCHES FROM A CONNECTION BEFORE BENDING.
2. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.

8 FLEX DUCT SUPPORT
NTS



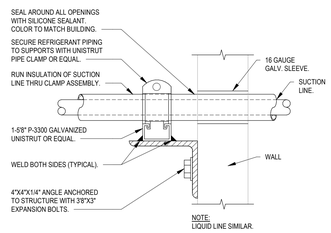
9 IN-LINE EXHAUST FAN - ISO
NTS



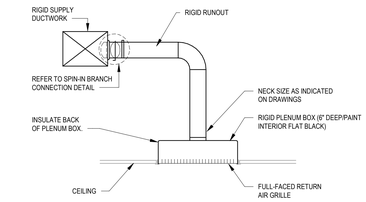
NOTES:

1. ALL SUPPLY, EXHAUST AND RETURN AIR BRANCH DUCTS SHALL BE SUPPLIED WITH A MANUAL VOLUME DAMPER FOR BALANCING. DAMPERS NOT SHOWN ON PLAN FOR CLARITY.
2. AIR FLOW ARROWS ABOVE INDICATE NEGATIVE (RETURN OR EXHAUST) OR POSITIVE AIR FLOW (SUPPLY) TO DELINEATE THE DUCT CONNECTION BOOT ORIENTATION FOR EACH DUCT SYSTEM.

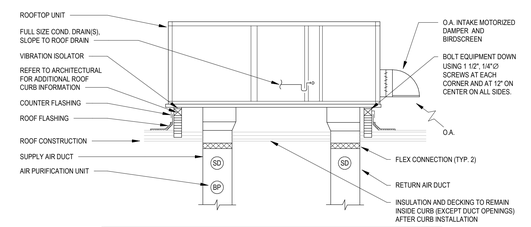
10 RECTANGULAR DUCT BRANCH
NTS



11 REFRIGERANT PIPE SUPPORT AT WALL DETAIL
NTS



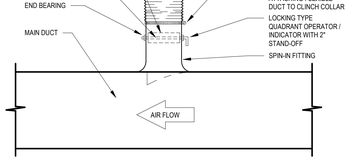
12 PLENUM BACKED RETURN GRILLE DETAIL
NTS



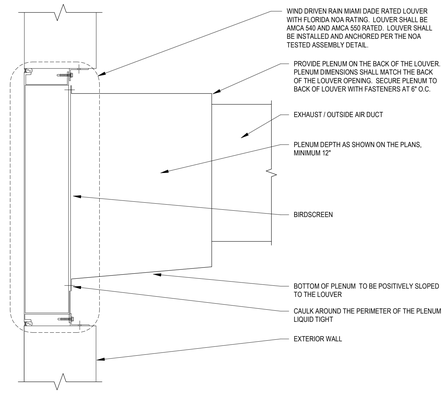
NOTES:

1. COORDINATE ALL PITCH PAN FLASHING REQUIREMENTS (IF ANY) WITH ROOFING CONTRACTOR.
2. PROVIDE 4 TO 6 INCHES BETWEEN ALL PIPE PENETRATIONS TO ENSURE PROPER FLASHING.
3. LOCATE ALL ROOF CURBS AND PENETRATIONS A MINIMUM OF 12 TO 18 INCHES AWAY FROM ALL VERTICAL WALL BASE FLASHING, OTHER CURBS, METAL ROOF JACKS AND ANY OTHER UNIT PENETRATIONS.
4. COORDINATE ALL UNIT LOCATIONS, CONDENSATE DRAIN PIPING, PRIMARY/SECONDARY ROOF DRAINAGE SYSTEMS, TRAFFIC PADS AND CROSSOVER LADDERS AS REQUIRED.
5. ALL ROOF MOUNTED EQUIPMENT SHALL BE ANCHORED TO WITHSTAND THE FORCES OF WIND AS OUTLINED IN THE CURRENT FLORIDA BUILDING CODE.

13 ROOFTOP UNIT MOUNTING DETAIL
NTS



14 TYPICAL SPIN-IN BRANCH CONNECTION
NTS



15 TYPICAL LOUVER DETAIL
NTS

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
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DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - HVAC

SHEET NUMBER
M5.01E

PACKAGED ROOFTOP UNIT SCHEDULE

MARK	SERVICE	MANUFACTURER	MODEL	TYPE	CONFIGURATION	NOMINAL SIZE LxWxH (IN.)	WEIGHT (LBS)	UNIT ELECTRICAL					OUTSIDE AIR (CFM)	SUPPLY FAN								COOLING COIL				CMTA M EER	CMTA G REMARKS
								VOLTAGE	PHASE	FREQ.	MCA	MOCP		AIRFLOW (CFM)	T.S.P / E.S.P (IN WG)	FAN TYPE	FAN QTY	DRIVE TYPE	FAN RPM	MOTOR HP	ACOUSTICS (63/125/250/500/1K/2K/4K/8K/dBA/ SONES)	CMTA AD COOLING COIL EAT/LAT DB	CMTA AD COOLING COIL EAT/LAT WB	CMTA H COOLING CAPACITY	CMTA H COOLING SENSIBLE CAPACITY		
RTU-1	EVIDENCE VEHICLE STORAGE	VALENT	VX-112-12.5K-0-J2	ROOFTOP DX COOLING ONLY	DOWNFLOW	121X87X66	2500	460 V	3	60 Hz	30 A	45	725	3075	1"	PLENUM	1	DIRECT	1668	2	75.0 / 80.7 / 83.6 / 75.6 / 68.7 / 64.5 / 72.3 / 60.4	77.0 / 69.8	54.8 / 54.7	146.1	71.6	11.7	

REMARKS:

1. PROVIDE ALL UNITS WITH 14" TALL VIBRATION ISOLATION ROOF CURBS.COORDINATE WITH ROOF CONSTRUCTION TYPE.
2. PROVIDE FACTORY MOUNTED HIGH-EFFICIENCY, VFD/INVERTER DUTY MOTORS ON EXHAUST AND SUPPLY FANS.
3. PROVIDE VFDS AND DISCONNECTS FOR ALL FAN MOTORS.
4. PROVIDE WITH FACTORY START-UP UTILIZING MANUFACTURER'S STANDARD FORMS. 2 YEARS PARTS AND LABOR WARRANTY ON ENTIRE UNIT FROM DATE OF SUBSTANTIAL COMPLETION.
5. PROVIDE WITH FOUR COMPLETE SETS OF MERV 8 FILTERS.
6. ENTIRE UNIT SHALL BE DOUBLE WALL CONSTRUCTION.
7. PROVIDE WITH STAINLESS STEEL IAQ CONDENSATE DRAIN PAN. ENTIRE PAN SHALL BE PITCHED TO OUTLET.
8. PROVIDE (1) INVERTER-DRIVEN/DIGITAL SCROLL AND (1) FIXED SCROLL COMPRESSOR, FOR MODULATING COOLING CAPABILITY.
9. PROVIDE UNIT WITH SINGLE POINT POWER.
10. PROVIDE UNIT WITH FULLY MODULATING HOT GAS REHEAT TO MAINTAIN A CONSTANT LEAVING AIR TEMPERATURE. CAPACITY OF THE HGR COIL SHALL BE CAPABLE OF REHEATING THE FULL AIRFLOW TO 72F DISCHARGE AIR TEMPERATURE.

SPLIT SYSTEM SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	FAN CFM	ESP ("WC)	VOLTS	PHASE	HZ	MCA	MOCP	COOLING				SYMBOL (OUTDOOR UNIT)	MANUFACTURER	MODEL	EFFICIENCY	NOMINAL TONS	REFRIGERANT	VOLTS	PHASE	HZ	MCA	MOCP	REMARKS
											TOTAL CAPACITY (MBTUH)	SENSIBLE CAPACITY (MBTUH)	EAT DB/WB	LAT DB/WB											
WMU-1	MITSUBISHI	MSY-GS12NA	WALL MOUNTED UNIT	350	N/A	208	1	60	1.0	15	12,000	N/A	N/A	N/A	CU-5	TRANE	MSY-GS12NA	23 SEER	1	R-410A	208	1	60	10	15	1,2,3,4,5,6,11,12

REMARKS:

1. PROVIDE WITH FACTORY START-UP UTILIZING MANUFACTURERS STANDARD FORMS
2. ENTIRE UNIT SHALL BE DOUBLE WALL CONSTRUCTION WITH 6" BASE RAIL.
3. SUPPLY STAINLESS STEEL IAQ CONDENSATE PAN. ENTIRE DRAIN SHALL BE PITCHED TO OUTLET.
4. REFER TO DRAWINGS FOR FULL UNIT CONFIGURATION.
5. THE TOTAL STATIC PRESSURE FOR THE FANS SHALL INCLUDE THE FOLLOWING. (A) LISTED ESP, (B) DESIGN FILTER ALLOWANCE, (C) PRESSURE DROPS THROUGH UNIT CONFIGURATION INCLUDING (COILS, DAMPERS, FILTERS, ETC.
6. PROVIDE HIGH EFFICIENCY ECM FAN MOTORS.
7. PROVICE WITH 2" MERV 13 PLEATED FILTERS.
8. PROVIDE UNIT WITH FULLY MODULATING HOT GAS REHEAT TO MAINTAIN A CONSTANT LEAVING AIR TEMPERATURE. CAPACITY OF THE HGR COIL SHALL BE CAPABLE OF REHEATING THE FULL AIRFLOW TO 72F DISCHARGE AIR TEMPERATURE.
9. PROVIDE WITH REVERSE CYCLE HEATING CAPABILITY
10. PROVIDE INDOOR UNIT WITH DOUBLE WALL INSULATED CASING.
11. ROUTE AND SIZE REFRIGERANTE PIPING PER MANUFACTURER REQUIREMENTS.
12. ACCEPTABLE MANUFACTURERS: DAIKIN, JCI/YORK, TRANE, CARRIER, AAON

VAV UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	INLET SIZE	PRIMARY AIR CFM		HEATING CFM	ΔP (IN. W.G.)	AUXILIARY ELECTRIC HEAT			NOTES
				MAX.	MIN.			KW	VOLTS/PH.	STEPS	
VAV1-1	Trane	VCEF	10	700	245	350	0.30	3.5	277/1	SCR	
VAV1-2	Trane	VCEF	12	1100	385	550	0.30	5.5	277/1	SCR	
VAV1-3	Trane	VCEF	8	550	195	275	0.30	3	277/1	SCR	
VAV1-4	Trane	VCEF	10	725	255	365	0.30	3.5	277/1	SCR	

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	TYPE	CFM / ESP	DRIVE / FAN RPM	FAN HP	ELECTRICAL			REMARKS
								VOLTS	PH	HZ	
EF-1A	GREENHECK	CUE-200-VG	EVIDENCE VEHICLE STORAGE	ROOF-MOUNTED UPBLAST	4000 / 0.2	DIRECT ECM / 787	1	120 V	1	60	
EF-1B	GREENHECK	CUE-200-VG	EVIDENCE VEHICLE STORAGE	ROOF-MOUNTED UPBLAST	4000 / 0.2	DIRECT ECM / 787	1	120 V	1	60	
EF-1C	GREENHECK	CUE-200-VG	EVIDENCE VEHICLE STORAGE	ROOF-MOUNTED UPBLAST	4000 / 0.2	DIRECT ECM / 787	1	120 V	1	60	
EF-1D	GREENHECK	CUE-200-VG	EVIDENCE VEHICLE STORAGE	ROOF-MOUNTED UPBLAST	4000 / 0.2	DIRECT ECM / 787	1	120 V	1	60	
EF-1E	GREENHECK	CUE-200-VG	EVIDENCE VEHICLE STORAGE	ROOF-MOUNTED UPBLAST	4000 / 0.2	DIRECT ECM / 787	1	120 V	1	60	
EF-2	GREENHECK	CUE-095-VG	SWAT VEHICLE	ROOF-MOUNTED UPBLAST	475 / 0.25	DIRECT ECM / 1131	1/6	120 V	1	60	
EF-3	GREENHECK	CUE-120-VG	EVIDENCE VEHICLE PROCESSING	ROOF-MOUNTED UPBLAST	750 / 0.25	DIRECT ECM / 841	1/4	120 V	1	60	
EF-4	GREENHECK	CUE-080-VG	CLEAN/REPAIR	ROOF-MOUNTED UPBLAST	150 / 0.5	DIRECT ECM / 1439	1/6	120 V	1	60	
EF-5	GREENHECK	GB-097	AMMO SUPPLY	ROOF-MOUNTED DOWNBLAST	150 / 0.5	BELT / 1236	1/6	120 V	1	60	1

REMARKS:

1. FAN SHALL HAVE SPARK RESISTANCE CLASS B.

CEILING FAN SCHEDULE

Mark	MANUF.	MODEL	TYPE	PHYSICAL SIZE (IN) / FAN DIAMETER (FT)	WEIGHT (LBS)	SERVICE	DRIVE / HP	FAN RPM (MAX)	ELECTRICAL DATA				REMARKS
									VOLT.	PH.	HZ	FLA	
HVLS-1A	GREENHECK	DS-6-14	HIGH VOLUME LOW SPEED	14' - 0"	177.00 lbf	VEHICLE STORAGE	DIRECT / 3/4	97	208 V	1	60	7.0 A	ALL
HVLS-1B	GREENHECK	DS-6-14	HIGH VOLUME LOW SPEED	14' - 0"	177.00 lbf	VEHICLE STORAGE	DIRECT / 3/4	97	208 V	1	60	7.0 A	ALL
HVLS-1C	GREENHECK	DS-6-14	HIGH VOLUME LOW SPEED	14' - 0"	177.00 lbf	VEHICLE STORAGE	DIRECT / 3/4	97	208 V	1	60	7.0 A	ALL

REMARKS:

1. MOUNT FAN TO STRUCURE. COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION.
2. COORDINATE LENGTH OF DOWNROD PRIOR TO PURCHASE TO AVOID STROBING.
3. PROVIDE WITH MANUFACTURER CONTROLLER WITH BACNET INTERFACE. PROVIDE WITH HIGH AND LOW MOUNTED TEMPERATURE SENSORS.
4. FAN DIAMETER LISTED MUST NOT CHANGE.
5. FAN SHALL BE PROVIDED WITH GEARLESS DIRECT DRIVE MOTOR.
6. MAINTAIN REQUIRED CLEARANCE FROM OBSTRUCTIONS PER MANUFACTURERER RECOMMENDATIONS.
7. COLOR TO BE SELECTED BY ARCHITECT.
8. PROVIDE FAN WITH SOLID STATE WALL MOUNTED SPEED CONTROLLER.

ENERGY RECOVERY VENTILATOR

SYMBOL	MANUFACTURER	MODEL	TYPE	NOMINAL SIZE LxWxH (IN.)	WEIGHT (LBS)	SUPPLY FAN			EXHAUST FAN		ELECTRICAL	
						CFM	DRIVE	MOTOR HP	CFM	MOTOR HP	V / PH / HZ	MCA / MOP

ENERGY RECOVERY VENTILATOR (CONT...)

SYMBOL	ENERGY RECOVERY									
	OUTSIDE AIR SIDE					EXHAUST AIR SIDE			EFFECTIVENESS	
		SUMMER (DB / WB) (F)		WINTER (DB / WB) (F)			EAT (DB / WB) (F)			
	CFM / APD	EAT	LAT	EAT	LAT	CFM / APD	SUMMER	WINTER	SUMMER	WINTER

REMARKS:

1. PROVIDE WITH DOUBLE WALL CONSTRUCTION.
2. PROVIDE WITH MERV 8 FILTERS IN BOTH AIRSTREAMS.
3. PROVIDE WITH FACTORY START-UP UTILIZING MANUFACTURER'S STANDARD FORMS.
4. PROVIDE WITH ECM MOTORS.
5. PROVIDE WITH INTEGRAL DISCONNECT.
6. PROVIDE MOTORIZED DAMPERS IN BOTH OUTSIDE AND EXHAUST AIRSTREAMS

ELECTRIC DUCT HEATER SCHEDULE

Mark	SERVES	AIR FLOW (CFM)	ELECTRICAL			DUCT SIZE	BASIS OF DESIGN		NOTES
			Kw	STAGES	VOLTS/PH.		MANUFACTURER	MODEL	

NOTES:
1. FINNED TUBULAR SLIP IN STYLE DUCT HEATER.
2. COORDINATE DUCT SIZES WITH DUCT FABRICATION SHOP DRAWINGS PRIOR TO ORDERING.
3. PROVIDE WITH VERNIER STYLE SCR HEATING CONTROLLER.
4. HEATER SIZES BASED ON 25 DEGREE ENTERING / 55 DEGREE LEAVING AIR TEMPS.

FILE NAME: Autodesk Docs://_1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 12:24:42 PM

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DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
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RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

SCHEDULES - HVAC

SHEET NUMBER

M6.01E

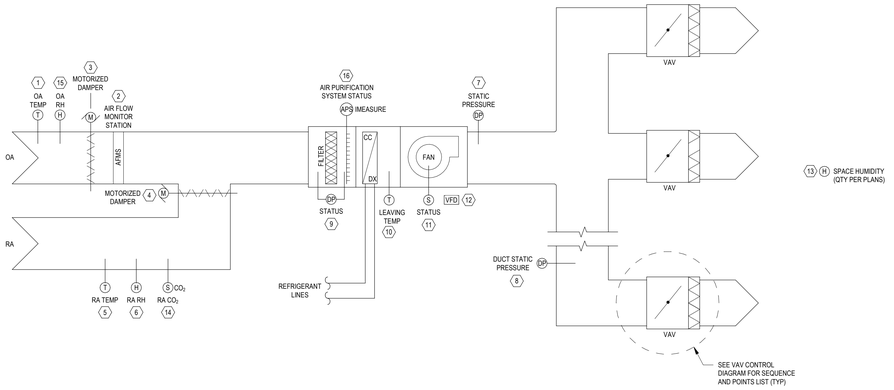
CONTROL POINTS (X)

CONTROL POINTS

1. OA TEMP
2. OA FLOW RATE
3. OA DAMPER POSITION
4. RA DAMPER POSITION
5. RA TEMP
6. RA RELATIVE HUMIDITY
7. HIGH STATIC LIMIT
8. DUCT SYSTEM STATIC PRESSURE
9. FILTER STATUS / DP
10. COIL LEAVING AIR TEMP
11. FAN STATUS
12. VFD INTERFACE
13. SPACE RELATIVE HUMIDITY
14. RETURN CO2
15. OA RELATIVE HUMIDITY
16. AIR PURIFICATION SYSTEM STATUS (IMEASURE).

ALARMS

1. SA HIGH STATIC
2. SA FAN FAILED TO START
3. SPACE RH ABOVE SETPOINT.
4. CO2 LEVEL ABOVE SETPOINT
5. OA DAMPER FAILED



SUPPLY FAN CONTROL:

THE FAN CAN BE STARTED BASED ON ANY OF THE FOLLOWING CONDITIONS:

1. WHEN THE SYSTEM IS PUT INTO WARM UP / COOL DOWN MODE (THRU THE EMS SYSTEM).
2. WHEN THE SYSTEM IS PUT IN THE OCCUPIED MODE (THRU THE EMS SYSTEM).
3. WHEN THE SYSTEM IS IN THE UNOCCUPIED MODE WITH A CALL FOR TEMPERATURE OR DEHUMIDIFICATION OVERRIDE (THRU THE EMS SYSTEM).
4. WHEN THE SYSTEM IS MANUALLY PUT IN AN OVERRIDE MODE (THRU THE EMS SYSTEM).
5. IF THE HAND-OFF-AUTO SWITCH LOCATED ON THE VFD IS PUT IN THE HAND POSITION ONLY THE FAN STARTS.

WHEN THE FAN IS INDEXED TO START VIA THE OPERATIONAL MODE SELECTION, THE VARIABLE FREQUENCY DRIVE SHALL INCREASE THE SUPPLY FAN(S) SPEED SLOWLY OVER A PERIOD OF 1 MINUTE (ADJ.) TO ACHIEVE THE DUCT STATIC PRESSURE SETPOINT. THE VARIABLE FREQUENCY DRIVE SHALL CONTINUE TO MODULATE THE FAN SPEED AS REQUIRED TO MAINTAIN THE CURRENT STATIC PRESSURE SETPOINT. THE ASSOCIATED EXHAUST FANS ARE STARTED, OUTDOOR AIR DAMPERS WILL MODULATE OPEN (SEE BELOW) AND THE UNIT CONTROL LOOPS ARE ENABLED.

STATIC PRESSURE CONTROL:

WHEN THE SUPPLY FAN PROOF OF FLOW HAS BEEN DETERMINED THE SUPPLY FAN STATIC LOOP IS ALLOWED TO CONTROL. THE SUPPLY FAN SPEED IS RAMPED UP ON FAN START-UP AND THEN MODULATED TO MAINTAIN DISCHARGE STATIC PRESSURE SETPOINT DEPENDING IF IN THE OCCUPIED MODE OR NOT.

FAN STATIC PRESSURE SETPOINT RESET:

THE BCS SYSTEM SHALL CONTINUOUSLY MONITOR THE DAMPER POSITION AND AIRFLOWS OF ALL VAV TERMINALS SERVED BY THE ROOFTOP UNIT. THE SYSTEM SHALL EVALUATE THE DUCT STATIC PRESSURE CONDITIONS EVERY 10 MINUTES (ADJ.)

THE SYSTEM SHALL HAVE A MINIMUM AND MAXIMUM SETTING FOR THE SUPPLY AIR STATIC SETPOINT TO BE ADJUSTABLE AND DETERMINED DURING TEST AND BALANCE. UPON FAN INITIAL STARTUP THE MINIMUM SETPOINT SHALL BE THE STARTING POINT FOR FAN CONTROL.

IN THE EVENT THAT ALL VAV TERMINALS ARE SATISFIED (I.E. ALL VAV TERMINALS ARE AT LESS THAN 100% MAXIMUM OPEN POSITION AND ANY THAT ARE AT 100% MAXIMUM POSITION ARE DELIVERING AT LEAST 95% (ADJ.) OF THE SUPPLY AIR FLOW MAXIMUM SETPOINT) THE DUCT STATIC PRESSURE SETPOINT SHALL DECREASE BY 0.1" W.C.

IN THE EVENT THAT ANY VAV TERMINAL IS NOT SATISFIED WITH VALVE AT THE 100% MAXIMUM OPEN POSITION AND IS DELIVERING LESS THAN 95% (ADJ.) OF THE SUPPLY AIR FLOW MAXIMUM SETPOINT, THE DUCT STATIC PRESSURE SETPOINT SHALL INCREASE BY 0.1" W.C.

THE ABILITY SHALL BE PROVIDED TO BLACKLIST ANY PROBLEM ZONE THAT WILL NOT BE CONSIDERED IN THE STATIC PRESSURE SETPOINT ADJUSTMENT.

THE RTU GRAPHICS SCREEN SHALL INCLUDE THE CURRENT STATIC PRESSURE SETPOINT AND CURRENT STATIC PRESSURE READING AS WELL AS IDENTIFY ANY ZONES THAT ARE NOT SATISFIED IN TERMS OF AIRFLOW.

EACH SYSTEM SHALL HAVE A MINIMUM TOTAL SYSTEM SUPPLY AIRFLOW SETPOINT TO AVOID SURGE AS RECOMMENDED BY THE MANUFACTURER. IN THE EVENT THAT THE SYSTEM TOTAL FLOW DROPS TO WITHIN 10% (ADJ.) OF THE MINIMUM AIRFLOW SETPOINT, THE SYSTEM SHALL RESET THE STATIC PRESSURE SETPOINT TO THE MINIMUM SETTING. UPON A CONTINUED DROP IN TOTAL SYSTEM FLOW BELOW THE MINIMUM SETPOINT, THE VAV TERMINAL MINIMUM FLOW OVERRIDE SAFETY SHALL ENABLE.

RTU MAIN COOLING COIL CONTROL:

WHEN COOLING IS ENABLED, THE COMPRESSOR(S) ARE STAGED TO MAINTAIN THE UNITS DISCHARGE AIR TEMPERATURE SETPOINT (ADJ.) THE DDC SHALL CONTINUOUSLY MONITOR THE ZONE SPACE TEMPERATURE, RETURN AIR HUMIDITY AND ZONE SPACE HUMIDITY (WHERE APPLICABLE). THE SYSTEM SHALL EVALUATE THE SUPPLY AIR LEAVING CONDITIONS EVERY 5 MINUTES (ADJ.).

IF THERE ARE NO RELATIVE HUMIDITY ALARMS IN EXCESS OF THE HUMIDITY ALARM SETPOINT (ADJ.) AND ALL ZONES SPACE TEMPERATURES ARE WITHIN 1(2F (ADJ.) ABOVE THE SPACE TEMPERATURE SETPOINT, THE SUPPLY AIR LEAVING TEMPERATURE SETPOINT SHALL BE DECREASED BY 1F. LEAVING AIR TEMPERATURE SHALL NOT EXCEED 60 DEGF.

IF THERE ARE ANY RELATIVE HUMIDITY ALARMS IN EXCESS OF THE HUMIDITY ALARM SETPOINT (ADJ.) OR ANY ZONE SPACE TEMPERATURES THAT ARE MORE THAN 1(2F (ADJ.) ABOVE THE SPACE TEMPERATURE SETPOINT, THE SUPPLY AIR LEAVING TEMPERATURE SETPOINT SHALL BE DECREASED BY 1F.

THE ABILITY SHALL BE PROVIDED TO BLACKLIST ANY PROBLEM ZONE THAT WILL NOT BE CONSIDERED IN THE STATIC PRESSURE SETPOINT ADJUSTMENT.

AIR PURIFICATION CONTROL:

THE AIR PURIFICATION SYSTEM SHALL BE ENABLED WHENEVER THE SUPPLY FAN IS ENABLED.

OUTSIDE AIR OCCUPIED - UNOCCUPIED CONTROL:

WHEN ENABLED, THE OUTSIDE AIR AND RETURN AIR DAMPERS SHALL MODULATE TO MAINTAIN THE OUTDOOR AIR FLOW SETPOINT PER THE FOLLOWING: THE RETURN DAMPER SHALL REMAIN FULLY OPEN WHILE THE OUTSIDE AIR DAMPER IS MODULATED TO MAINTAIN THE SETPOINT. IN THE EVENT THAT THE OUTSIDE AIR DAMPER IS FULLY OPEN AND THE OUTSIDE AIR IS BELOW THE SETPOINT, THEN THE RETURN AIR DAMPER SHALL MODULATE CLOSED AS REQUIRED TO MAINTAIN THE OUTSIDE AIR FLOW SETPOINT. THE SEQUENCE WILL OCCUR IN REVERSE ORDER AS THE RETURN AIR MODULATES OPEN. AT NO TIME ARE THE OUTSIDE AIR DAMPER AND RETURN DAMPER TO MODULATE AT THE SAME TIME. A RETURN AIR MINIMUM DAMPER POSITION OF 30% (ADJ.) SHALL BE MAINTAINED AND THE RETURN AIR DAMPER SHALL NEVER BE ABLE TO GO FULLY CLOSED.

RELATIVE HUMIDITY OVERRIDE CONTROL:

IF THE SPACE RELATIVE HUMIDITY RISES TO ABOVE 65% (ADJ.) THE LEAVING AIR DISCHARGE SETPOINT IS RESET DOWN TO THE DESIGNED DISCHARGE TEMPERATURE. IF THE SYSTEM IS IN UNOCCUPIED MODE, THE FAN AND COOLING COIL LEAVING AIR TEMPERATURE CONTROL SEQUENCES SHALL BE INITIATED UNTIL THE RELATIVE HUMIDITY LEVELS DROP BELOW THE SETPOINT. OUTDOOR AIR TO REMAIN DISABLED.

UNOCCUPIED MODE LOCAL TEMPERATURE OVERRIDE:

EACH SPACE TEMPERATURE SENSOR SHALL BE PROVIDED WITH A LOCAL OVERRIDE BUTTON. UPON ACTIVATION OF THE LOCAL OVERRIDE, THE UNIT SERVING THAT ZONE SHALL BE ENERGIZED AND THE STANDARD COOLING COIL, FAN OPERATION SHALL BE INITIATED. THE VAVS SERVING THE NON-OVERRIDE ZONES SHALL OPERATE AT THEIR SCHEDULED MINIMUM AIRFLOWS TO MAINTAIN THEIR UNOCCUPIED SETPOINTS. THE VAV SERVING THE OVERRIDE ZONE SHALL OPERATE IN OCCUPIED MODE WITH OCCUPIED SETPOINTS FOR HEATING AND COOLING. OVERRIDE DURATION SHALL BE FOR A PERIOD OF 1 HOUR (ADJ.) AT WHICH TIME ALL COMPONENTS WILL RESUME NORMAL UNOCCUPIED STATE. OUTSIDE AIR AND EXHAUST/RELIEF SYSTEMS SHALL REMAIN IN UNOCCUPIED MODE UNLESS CO2 LEVELS FROM ANY SENSOR ASSOCIATED WITH THE OVERRIDDEN SYSTEM RISES ABOVE THE SETPOINT. UPON A RISE IN CO2 ABOVE THE SETPOINT, THE OCCUPIED OUTSIDE AIR, RELIEF DAMPER AND EXHAUST FAN SEQUENCES FOR EQUIPMENT SERVING THE SAME AREA/SYSTEMS SHALL BE INITIATED UNTIL THE CO2 LEVELS DROP 10% (ADJ.) BELOW THE CO2 LEVEL SETPOINT.

FIRE PROTECTION:

DUCT SMOKE DETECTORS SHALL BE LOCATED IN THE SUPPLY AND RETURN DUCTS IN ACCORDANCE WITH NFPA 72. UPON SENSING OF SMOKE A DETECTOR SHALL SHUT "OFF" THE UNIT FAN(S) AND THE ASSOCIATED EXHAUST FAN(S). THE SMOKE DETECTORS SHALL BE MANUALLY RESET FROM THE FIRE ALARM PANEL.

HIGH STATIC ALARM:

AN ALARM SHALL BE GENERATED IN THE EVENT THE HIGH DUCT STATIC PRESSURE SWITCH IS TRIPPED (WITH MANUAL RESET).

SAFETIES:

THE FOLLOWING SAFETIES SHALL SHUT DOWN THE UNIT UPON ALARM CONDITION:

1. A FIRE ALARM CONDITION.
2. THE HIGH DISCHARGE STATIC PRESSURE SWITCH TRIPS (W/ MANUAL RESET) AND AN ALARM IS GENERATED.

AIR PURIFICATION FAILURE:

UPON AN AIR PURIFICATION FAILURE, AN ALARM SHALL BE GENERATED AT THE DDC FRONT END SYSTEM.

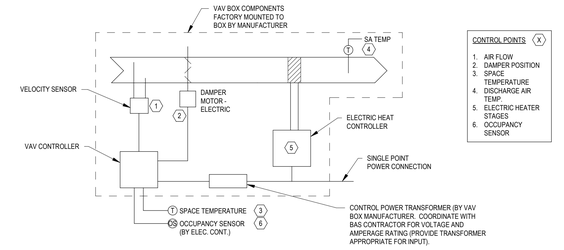
SHUTDOWN:

THE FOLLOWING OCCURS WHEN THE RTU FAN(S) IS STOPPED EITHER BY SAFETIES AS NOTED ABOVE OR IF IN ITS UNOCCUPIED MODE:

1. THE OA DAMPER CLOSES AND THE RETURN AIR DAMPER OPENS.
2. THE COMPRESSOR(S) ARE DE-ENERGIZED.
3. THE INTERLOCKED EXHAUST FANS PER ITS SCHEDULE ARE STOPPED.

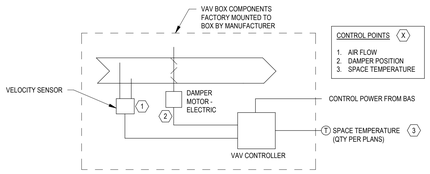
IF THE SUPPLY STATIC PRESSURE FAILS TO INCREASE ABOVE A MINIMUM SETPOINT, THE DDC SYSTEM USES THIS TO CONFIRM THE FAN IS IN THE DESIRED STATE AND GENERATES AN ALARM IF THE STATUS DEVIATES FROM THE DDC START/STOP CONTROL.

1 AIR HANDLING UNIT SERVING VAVS
CONTROL SCHEMATIC
NTS



CONTROL POINTS (X)

1. AIR FLOW
2. DAMPER POSITION
3. SPACE TEMPERATURE
4. DISCHARGE AIR TEMP
5. ELECTRIC HEATER STAGES
6. OCCUPANCY SENSOR



CONTROL POINTS (X)

1. AIR FLOW
2. DAMPER POSITION
3. SPACE TEMPERATURE

VAV SEQUENCE:

THE BAS SHALL CONTINUOUSLY MONITOR THE SPACE TEMPERATURES OF SPACES SERVED WITH TEMPERATURE SENSORS.

THE VAV TERMINAL SHALL MODULATE AIRFLOW AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE COOLING SETPOINT(S). THE SPACE SETPOINTS (ADJ.) ARE AS FOLLOWS IN PRIORITY OF THE ORDER LISTED:

1. SYSTEMS - 75°F
2. ELECTRICAL - 85°F
3. MECHANICAL - 78°F

IN THE EVENT ANY ONE SPACE TEMPERATURE DROPS BELOW 68°F (ADJ.) THE VAV CONTROL SHALL BE OVERRIDDEN TO MAINTAIN THE WORST CASE MINIMUM TEMPERATURE.

2 VARIABLE AIR VOLUME SYSTEM W/
ELECTRIC HEAT
NTS

VAV SEQUENCE:

EACH VAV SHALL BE PROVIDED WITH INDEPENDENT SETPOINTS FOR THE FOLLOWING CONDITIONS:

SYSTEM MODE	ZONE MODE	COOLING TEMP	HEATING TEMP	MINIMUM AIRFLOW
UNOCCUPIED	UNOCCUPIED	80	64	TERMINAL RECOMMENDED MINIMUM FLOW
	OCCUPIED	75	69	TERMINAL RECOMMENDED MINIMUM FLOW
OCCUPIED & COOL DOWN/WARMUP	UNOCCUPIED	77	68	TERMINAL RECOMMENDED MINIMUM FLOW
	OCCUPIED	75	69	AS SCHEDULED

WHEN THE ASSOCIATED AIR HANDLING UNIT IS ENABLED THE VAV TERMINAL SHALL OPERATE PER THE FOLLOWING:

UPON RISE IN SPACE TEMPERATURE ABOVE THE SPACE COOLING SETPOINT, AIR VALVE SHALL OPEN TO INCREASE SUPPLY AIR FLOW. UPON FALL IN SPACE TEMPERATURE THE REVERSE SHALL OCCUR UNTIL THE AIR VALVE REACHES THE MINIMUM AIRFLOW SETPOINT. IF SPACE TEMPERATURE CONTINUES TO FALL BELOW THE SPACE HEATING SETPOINT THE ELECTRIC HEAT SHALL STAGE ON TO RAISE SUPPLY AIR TEMPERATURE AS REQUIRED TO MAINTAIN THE SPACE HEATING SETPOINT.

THE SYSTEM OCCUPIED / UNOCCUPIED MODE SHALL BE DETERMINED BY THE MODE IN WHICH THE ASSOCIATED AHU IS OPERATING IN.

FOR VAV'S SERVING LARGE ZONES WITH OCCUPANCY SENSORS SUCH AS CLASSROOMS AND CONFERENCE ROOMS, THE ZONE OCCUPIED / UNOCCUPIED MODE SHALL BE DETERMINED BY THE SPACE MOUNTED OCCUPANCY SENSOR. FOR ALL OTHER SPACES THE ZONE SETTINGS WOULD MATCH THE SYSTEM SETTINGS.

THE ZONE OCCUPIED / UNOCCUPIED MINIMUM AIRFLOW SETPOINTS SHALL BE DETERMINED BY SIGNAL FROM OCCUPANCY SENSOR (BY ELECTRICAL CONTRACTOR). COORDINATE AND PROVIDE ALL REQUIRED CONTROL INTERFACE, RELAYS, WIRING FOR INTERCONNECTION OF OCCUPANCY SENSOR WITH LIGHTING CONTROL / OCCUPANCY SENSOR MANUFACTURER.

SYSTEM MINIMUM FLOW VAV OVERRIDE: WHEN COMMANDED FROM THE AHU CONTROLLER, THE VAV MINIMUM SETPOINTS SHALL BE OVERRIDDEN AS OUTLINED IN THE VAV AIR HANDLING UNIT CONTROL SEQUENCE.

3 VARIABLE AIR VOLUME SYSTEM -
COOLING ONLY
NTS

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 12:24:47 PM

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REGISTRATION

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DRAWING HISTORY

No	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

CONTROLS - HVAC

SHEET NUMBER

M7.01E

COMMISSIONING NOTES:

C408.3.1 LIGHTING SYSTEM FUNCTIONAL TESTING:
PRIOR TO PASSING FINAL INSPECTION, THE REGISTERED DESIGN PROFESSIONAL SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS. FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 THROUGH C408.3.1.3 FOR THE APPLICABLE CONTROL TYPE. A SUMMARY OF THE TEST PROCEDURES INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

C408.3.1.1 OCCUPANT SENSOR CONTROLS:
CONFIRM THAT THE PLACEMENT, SENSITIVITY, AND TIME-OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE.

C408.3.1.2 TIME SWITCH CONTROLS:
CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.

C408.3.1.3 DAYLIGHT RESPONSIVE CONTROLS:
CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

C408.3.2 DOCUMENTATION REQUIREMENTS:
THE CONSTRUCTION DOCUMENTS SHALL SPECIFY THAT THE DOCUMENTS DESCRIBED IN THIS SECTION BE PROVIDED TO THE BUILDING OWNER OR THE OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

C408.3.2.1 DRAWINGS:
CONSTRUCTION DOCUMENTS SHALL INCLUDE THE LOCATION AND CATALOGUE NUMBER OF EACH PIECE OF EQUIPMENT.

C408.3.2.2 MANUALS:
AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED AND INCLUDE THE FOLLOWING:
1. NAME AND ADDRESS OF NOT LESS THAN ONE SERVICE AGENCY FOR INSTALLED EQUIPMENT.
2. A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.
3. SUBMITTAL DATA INDICATING ALL SELECTED OPTIONS FOR EACH PIECE OF LIGHTING EQUIPMENT AND LIGHTING CONTROLS.
4. OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF LIGHTING EQUIPMENT. REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY IDENTIFIED.
5. A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.

C408.3.2.3 REPORT:
A REPORT OF TEST RESULTS SHALL BE PROVIDED AND INCLUDE THE FOLLOWING:
1. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
2. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING,INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.

COMPLETION REQUIREMENTS:

RECORD DRAWINGS:
PER C405.5.4.1 - CONTRACTOR SHALL PROVIDE WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION TO THE BUILDING OWNER INCLUDING:
1. A SINGLE LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND
2. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.

MANUALS:
PER C405.5.4.2, OPERATION MANUALS & MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER. THE MANUALS SHALL INCLUDE AT A MINIMUM THE FOLLOWING:
1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
2. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
3. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.

ELECTRICAL SYMBOLS LEGEND

NOTE: THESE ARE STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS.

LIGHTING

NOTE:
UPPER CASE LETTER INDICATES FIXTURE TYPE, SEE LIGHTING FIXTURE SCHEDULE AND DRAWINGS. LOWER CASE LETTER INDICATES SWITCH CIRCUIT.

- 2X4 LUMINAIRE - CEILING MOUNTED
- 2X4 LUMINAIRE - CEILING MOUNTED, LIFE SAFETY BRANCH
- 2X2 LUMINAIRE - CEILING MOUNTED
- INDUSTRIAL STRIP FIXTURE
- INDUSTRIAL STRIP FIXTURE - EMERGENCY POWER (VERIFY BRANCH OF ESSENTIAL ELECTRICAL SYSTEM WITH DRAWINGS)
- LINEAR FIXTURE - WALL MOUNTED
- LINEAR FIXTURE - WALL MOUNTED, LIFE SAFETY BRANCH
- DOWNLIGHT LUMINAIRE - RECESSED
- DOWNLIGHT FIXTURE - RECESSED, EMERGENCY POWER (VERIFY BRANCH OF ESSENTIAL ELECTRICAL SYSTEM WITH DRAWINGS)
- DOWNLIGHT LUMINAIRE - SURFACE MOUNTED
- DOWNLIGHT LUMINAIRE - SURFACE MOUNTED, EMERGENCY POWER (VERIFY BRANCH OF ESSENTIAL ELECTRICAL SYSTEM WITH DRAWINGS)
- WALL WASH LUMINAIRE - RECESSED
- WALL MOUNTED LUMINAIRE
- WALL MOUNTED LUMINAIRE, EMERGENCY POWER (VERIFY BRANCH OF ESSENTIAL ELECTRICAL SYSTEM WITH DRAWINGS)
- FIXTURE - PENDANT MOUNTED
- UNIVERSAL MOUNTING EXIT LIGHTS, SINGLE AND DOUBLE FACED, ARROWS AS SHOWN ON FLOOR PLANS
- WALL MOUNTED EXIT LIGHTS, SINGLE FACED
- END MOUNTED EXIT LIGHTS, SINGLE AND DOUBLE FACED, ARROWS AS SHOWN ON FLOOR PLANS
- EMERGENCY BATTERY PACK, HEADS AS INDICATED
- REMOTE EMERGENCY LIGHT

SWITCHES

- LOWER CASE SUBSCRIPTS INDICATE OUTLET CONTROLLED
- SINGLE POLE SWITCH (UNLESS NOTED BY SUBSCRIPT)
  (OS) OCCUPANCY SENSOR TYPE SWITCH
  (OR) LOW VOLTAGE LIGHTING CONTROL OVERRIDE SWITCH
  (TS) DIGITAL TIMMING SWITCH - 4 HOURS MAX OVERRIDE.
  (LVD) LOW VOLTAGE DIMMER SWITCH WITH ON/OFF/RAISE/LOWER BUTTONS
  (OSD) DIMMABLE OCCUPANCY SENSOR TYPE SWITCH WITH ON/OFF/RAISE/LOWER BUTTONS
  (T) SINGLE PHASE MOTOR STARTING SWITCH
- OCCUPANCY/VACANCY SENSOR, DUAL TECHNOLOGY, LOW VOLTAGE WITH POWER PACKS. SENSOR SHALL CONTAIN AN AUXILIARY RELAY FOR HVAC CONTROLS EMS INTERFACE.
- PHOTOCELL

CONDUIT AND WIRE

- CONDUIT CONCEALED IN WALLS OR ABOVE CEILINGS
- CONDUIT CONCEALED UNDERGROUND OR IN SLAB
- CONDUIT HOMERUN - EC SHALL CONSIDER CIRCUIT DISTANCES AND AMOUNT OF CONDUCTORS IN A CONDUIT.

RECEPTACLES

NOTES:
1. ALL RECEPTACLES SHALL BE RATED 120V, 20A, U.N.O.
2. ALL 120V, 20A, RECEPTACLES LOCATED IN DAMP AND/OR WET LOCATIONS SHALL BE LISTED "WEATHER-RESISTANT" (TYPE WR).

- DUPLEX RECEPTACLE: MOUNTED 18" AFF UNLESS NOTED OTHERWISE.
  * (G) DUPLEX GFCI RECEPTACLE
  (IG) DUPLEX ISOLATED GROUND RECEPTACLE.
  (USB) RECEPTACLE; 2-POWER, 2-USB
  (WPG) DUPLEX GFCI WEATHER RESISTANT RECEPTACLE, WITH WHILE-IN-USE WEATHERPROOF COVER
  (EWC) ELECTRIC WATER COOLER, COORDINATE LOCATION WITH PLUMBING INSTALLER. LOCATE GFCI RECEPTACLE CENTERED UP UNDER COOLER.
- DUPLEX RECEPTACLE, MOUNT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 48" TO CENTER.
- QUADRUPLEX RECEPTACLE IN TWO GANG BOX COVER.
- DUPLEX RECEPTACLE IN FLOOR BOX.
- QUADRUPLEX RECEPTACLE, MOUNT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 48" TO CENTER.
- DUPLEX RECEPTACLE FLUSH MOUNTED IN CEILING
- SIMPLEX RECEPTACLE
- COMBINATION DATA/TELEPHONE AND DUPLEX RECEPTACLE, MOUNTED IN CAST IRON OR STAINLESS STEEL FLOOR BOX, REFER TO POWER/SYSTEMS FLOOR PLAN FOR EXACT TYPE FLOOR BOX
- 5-20R SPECIAL OUTLET, SUBSCRIPT INDICATES NEMA CONFIGURATION NUMBER

SITE

- POWER COMPANY TRANSFORMER - UNLESS NOTED
- PARKING LOT OR ROADWAY FIXTURE
- WALKWAY BOLLARD
- FLOODLIGHT
- UTILITY POLE
- GENERATOR - SEE RISER DIAGRAM

POWER CONNECTIONS

- J — JUNCTION BOX SIZED PER N.E.C. UNLESS NOTED CEILING MOUNTED
- J — JUNCTION BOX
- C — ELECTRICAL CONNECTOR
- PB — WALL MOUNTED PUSH BUTTON STATION MOUNT AT 7'-0" AFG FOR OUTDOOR INSTALLATIONS AND 4'-0" AFF FOR INDOOR INSTALLATIONS.
- SH — WALL MOUNTED SHUNT TRIP STATION MOUNT AT 7'-0" AFG FOR OUTDOOR INSTALLATIONS AND 4'-0" AFF FOR INDOOR INSTALLATIONS
- TC — TIME CLOCK
- EPO — WALL MOUNTED EMERGENCY POWER OFF STATION MOUNT AT 7'-0" AFG INSTALLATIONS
- EWH — ELECTRIC WATER HEATER
- IWH — INSTANTANEOUS WATER HEATER
- EF / MV — MOTOR CONNECTION, MARK NUMBER WILL IDENTIFY EQUIPMENT, EF, AHU, CU, ETC. SEE MOTOR CONNECTION SCHEDULE.
- 30/2 — NON FUSIBLE HEAVY DUTY SAFETY SWITCH, SIZE AND NUMBER OF POLES ARE INDICATED.
- 30/2 / 25 3R — FUSIBLE HEAVY DUTY SAFETY SWITCH, SIZE AND NUMBER OF POLES ARE INDICATED.
  - ENCLOSURE NEMA RATING
  - DISCONNECT SIZE #POLES / FUSE SIZE
- MANUAL MOTOR STARTER
- MAGNETIC STARTER.
  * (VFD) PROVIDE WITH VARIABLE FREQUENCY DRIVE CONTROLLER COMPATIBLE WITH VARIABLE FREQUENCY DRIVE.
- COMBINATION MAGNETIC STARTER WITH A CIRCUIT BREAKER.
  * (VFD) PROVIDE WITH VARIABLE FREQUENCY DRIVE CONTROLLER COMPATIBLE WITH VARIABLE FREQUENCY DRIVE.
- COMBINATION MAGNETIC STARTER WITH FUSIBLE HEAVY DUTY SAFETY SWITCH.
  * (VFD) PROVIDE WITH VARIABLE FREQUENCY DRIVE CONTROLLER COMPATIBLE WITH VARIABLE FREQUENCY DRIVE.
- ENCLOSED CIRCUIT BREAKER.
- ATS — AUTOMATIC TRANSFER SWITCH - SEE RISER DIAGRAM
- PANELBOARD, LOW VOLTAGE (120/208V) - SEE PANELBOARD SCHEDULES AND RISER DIAGRAM
- PANELBOARD, HIGH VOLTAGE (277/480V) - SEE PANELBOARD SCHEDULES AND RISER DIAGRAM
- DISTRIBUTION PANEL, SEE RISER DIAGRAM
- M — POWER COMPANY METERING.
- T — DRY-TYPE TRANSFORMER, SEE RISER. FOR CHARACTERISTICS
- SPD — SURGE PROTECTION DEVICE

FIRE ALARM SYSTEM

NOTE:
(D) DENOTES DUCT MOUNTED
(C) DENOTES CEILING MOUNTED
(F) DENOTES FLUSH WALL MOUNTED
(UF) DENOTES UNDER FLOOR ACCESS
(WP) DENOTES WEATHERPROTECTED

- BR — BEAM DETECTOR, RECEIVER
- BT — BEAM DETECTOR, TRANSMITTER
- FD — THERMAL DETECTOR, FIXED + RATE-OF-RISE
- FX — THERMAL DETECTOR, FIXED TEMP.
- ID — SMOKE DETECTOR - IONIZATION
- IR — FLAME DETECTOR - INFRARED
- SA — SMOKE ALARM - NON-SYSTEM, 120V (PROVIDE WITH BATTERY BACK-UP)
- SD — SMOKE DETECTOR - PHOTO
- UV — FLAME DETECTOR - UV
- CO — CARBON MONOXIDE DETECTOR
- F — MANUAL PULL STATION
- H — MAGNETIC DOOR RELEASE
- CE — CONTROL ELEMENT
- FS — FLOW SWITCH (FIRE SPRINKLER)
- KB — KNOX BOX, MOUNTED AT 7'-0" AFG OR @ HEIGHT INDICATED ON FLOOR PLAN.
- TS — TAMPER SWITCH (VALVE SUPERVISION)
- RR — CONTROL RELAY
- RT — REMOTE TEST INDICATOR
- FSD — FIRE SMOKE DAMPER
- SDH — DOOR HOLDER/CLOSER WITH INTEGRAL SMOKE DETECTOR
- S — FIRE SPRINKLER SOLENOID VALVE
- G — GAS SOLENOID VALVE
- * F — SIGNALING APPLIANCE - HORN
  * (V) WITH VISUAL SIGNAL (STROBE, 75CD UNLESS NOTED) - MOUNTED 80" A.F.F. TO BOTTOM OF STROBE
- * SP — SIGNALING APPLIANCE - SPEAKER
  * (V) WITH VISUAL SIGNAL (STROBE, 75CD UNLESS NOTED) - MOUNTED 80" A.F.F. TO BOTTOM OF STROBE
- * — SIGNALING APPLIANCE - STROBE (75CD UNLESS NOTED) - MOUNTED 80" A.F.F. TO BOTTOM OF STROBE
- SIGNALING APPLIANCE - CEILING MOUNTED HORN
  * (V) WITH VISUAL SIGNAL (STROBE, 75CD UNLESS NOTED)
- SIGNALING APPLIANCE - CEILING MOUNTED SPEAKER
  * (V) WITH VISUAL SIGNAL (STROBE, 75CD UNLESS NOTED)
- SIGNALING APPLIANCE - CEILING MOUNTED STROBE ONLY (STROBE, 75CD UNLESS NOTED)
- F — FIRE ALARM SYSTEM RACEWAY
- ZIM — ZONE INTERFACE DEVICE
- FAAP — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL
- FZCP — FIRE ALARM ZONE PANEL
- FATC — FIRE ALARM TERMINAL CABINET
- FATP — FIREMAN'S TELEPHONE PANEL

ABBREVIATIONS:

A	AMPERES
AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
ANNUN	ANNUNCIATOR
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
C	CONDUIT
CAT	CATALOG
CKT	CIRCUIT
CU	COPPER
CB	CIRCUIT BREAKER
C/T	CURRENT TRANSFORMERS
DWG	DELTA DRAWING
FT	FEET
G	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPT
IG	ISOLATED GROUND
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
NC	NORMALLY CLOSED
NL	NIGHT LIGHT CIRCUIT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NIC	NOT IN CONTACT
Ø	PHASE
POS	POINT OF SCALE
PVC	POLYVINYL CHLORIDE
P/T	POTENTIAL TRANSFORMER
R	RECESSED
SCR	SHORT CIRCUIT RATING
SURF	SURFACE
TEL	TELEPHONE
TYP	TYPICAL
UG	UNDERGROUND
UNIV	UNIVERSAL
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
W	WATTS
WP	WEATHERPROOF
WPG	WEATHERPROOF WITH GROUND FAULT INTERRUPT
XFMR	TRANSFORMER
Y	WYE

GENERAL NOTES:

1. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM WHETHER INDICATED OR NOT.
2. CODES AND STANDARDS: ALL ELECTRICAL WORK SHALL BE IN STRICT COMPLIANCE WITH OSHA REQUIREMENTS, THE NATIONAL ELECTRICAL CODE, THE FLORIDA BUILDING CODE, AND POWER COMPANY REQUIREMENTS AND STANDARDS. ALL MATERIALS SHALL BE NEW UNLESS SPECIFIED OTHERWISE AND FREE FROM DEFECTS, AND SHALL BEAR THE UNDERWRITER'S LABEL FOR ITS INTENDED USE AND PURPOSE.
3. CONTRACTOR SHALL THOROUGHLY INVESTIGATE SITE BEFORE BIDDING. NO CHANGES WILL BE ALLOWED IN CONTRACT PRICE FOR WORK REQUIRED TO COMPLY WITH EXISTING CONDITIONS.
4. WORKMANSHIP SHALL MEET N.E.C.A. GUIDELINES AND NEC 110.12.
5. IF, THROUGH ERRORS OR OMISSIONS, THE INTENT OF THE ARCHITECT OR ENGINEER, WITH REGARD TO ANY DETAIL, IS NOT CLEAR, OR IS CAPABLE OF MORE THAN ONE INTERPRETATION, SUCH MATTERS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE THE SUBMISSION OF BIDS. AND THE ARCHITECT OR ENGINEER SHALL MAKE THE NECESSARY CORRECTION OR EXPLANATION IN A WRITTEN FORMAL RESPONSE. OTHERWISE, NO EXTRA CHARGE WILL BE ALLOWED FOR THE WORK OR MATERIAL WHICH THE ARCHITECT OR ENGINEER MAY REQUIRE. PROVIDED THAT IT COMES WITHIN A REASONABLE INTERPRETATION OF THE DRAWINGS, SPECIFICATIONS, AND OVERALL INTENT OF THE CONTRACT DOCUMENTS.
6. THE PLANS AND SPECIFICATIONS ARE INTENDED AS A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED. ALL ITEMS NOT SPECIFICALLY MENTIONED OR SHOWN, BUT NECESSARY FOR THE COMPLETION OF THE INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS CONTRACT, BY THE SUB-CONTRACTOR. THIS SUB-CONTRACTOR SHALL THOROUGHLY ACQUAINT THEMSELF WITH THE MECHANICAL, ARCHITECTURAL, PLUMBING, STRUCTURAL, AND ELECTRICAL PLANS PRIOR TO SUBMITTING THEIR FINAL BID. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO FAMILIARIZE THEMSELF WITH THE PLANS AND HAVE ALL ITEMS OF WORK CLEARLY UNDERSTOOD AND ITEMIZED IN THEIR BID PROPOSAL.
7. PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SERVICES FOR ELECTRICAL WORK INDICATED ON DRAWINGS.
8. WHERE CONDUIT IS REQUIRED BELOW GRADE, IT SHALL BE SCHEDULE 40 PVC. PROVIDE NYLON PULL CORDS IN ALL EMPTY CONDUITS. SIZE CONDUIT PER N.E.C. FOR ENCLOSED WIRING.
9. WHERE CONDUIT IS REQUIRED WITHIN, IT SHALL BE:
   1. 9.1. WHERE EXPOSED TO PHYSICAL DAMAGE, RIGID OR INTERMEDIATE METAL
   2. 9.2. WHERE CONCEALED IN STRUCTURE OR CONCEALED BY FINISHES, EMT SHALL BE UTILIZED EXCEPT WHERE RIGID NONMETALLIC CONDUIT IS PERMITTED BY LOCAL AUTHORITY.
   3. 9.3. MC CABLE WITH RESTRICTIONS. MC CABLE MAY NOT BE USED FOR ANY HOMERUN.FITTINGS SHALL BE APPROVED AND U.L. LISTED FOR THE RACEWAY UTILIZED.
10. ALL CONDUCTORS SHALL BE #12 MIN., THHN/THWN/XHHW INSULATION UNO. COMPLY WITH ALL N.E.C. ARTICLES. ALL CONDUCTORS SHALL BE NEW, FREE FROM KINKS AND OTHER DEFECTS AFTER INSTALLATION HAS BEEN MADE.
11. WHERE NEW CONDUCTORS AND/OR CONDUIT SYSTEM ARE INSTALLED, LENGTH AND ROUTING OF CONDUCTORS AND/OR CONDUIT SYSTEMS SHALL BE DETERMINED IN THE FIELD BY THE ELECTRICAL CONTRACTOR.
12. PROVIDE ALL ADDITIONAL AUXILIARY EQUIPMENT SUCH AS CONDUIT SUPPORT DEVICES, BOXES, CLAMPS, ETC., NOT SPECIFICALLY SHOWN ON THESE DRAWINGS, BUT NECESSARY FOR A COMPLETE INSTALLATION.
13. ALL PLATE FINISHES SHALL BE AS DESIGNATED BY THE ARCHITECT.
14. PROVIDE COMMERCIAL GRADE 20 AMP, 2 POLE, 3 WIRE, GROUNDING TYPE DEVICES WITH BACK AND SIDE WIRING CAPABILITY, SUITABLE FOR SPLIT CIRCUIT OPERATION.
15. GROUND FAULT INTERRUPTER: PROVIDE "SPECIFICATION GRADE" DUPLEX RECEPTACLES, GROUND FAULT CIRCUIT INTERRUPTERS (GFI), FEED-THRU TYPE, CAPABLE OF PROTECTING CONNECTED DOWNSTREAM RECEPTACLES ON SINGLE CIRCUIT, GROUNDING TYPE UL RATED CLASS A, 20 AMPERES RATING, 120 VOLTS, WITH SOLID STATE GROUND FAULT SENSING AND SIGNALING, 5 MILLIAMPERES GROUND FAULT TRIP LEVEL; AND EQUIP WITH LOCAL TEST/RESET BUTTONS.
16. PROVIDE SILENT TYPE STANDARD GRADE 20 AMP, 120V FOR ALL SINGLE POLE, DOUBLE POLE, THREE-WAY AND FOUR-WAY SWITCHES.
17. LUMINAIRE SCHEDULE SHOWS FIXTURE TYPES. DETERMINE MODIFICATIONS REQUIRED TO MAKE FIXTURES SUITABLE FOR CEILINGS AS INSTALLED AND FURNISH FIXTURES ADAPTED TO THE TYPE OF CEILING USED. FIXTURES SHALL BE U.L. APPROVED. THIS CONTRACTOR SHALL PROTECT THE FIXTURES AND LAMPS AND SHALL REPLACE ANY BROKEN PARTS. ALL LENSES AND LOUVERS IN ANY AREA SHALL BE CLEANED AFTER ALL TRADES HAVE COMPLETED THEIR WORK IN THAT AREA. PROTECT EACH FIXTURE WITH CLEAN, CLEAR PLASTIC UNTIL FINAL INSPECTION. PROVIDE NEW LAMPS FOR ALL LIGHTING FIXTURES.
18. DRIVERS FOR LED FIXTURES SHALL BE U.L. CLASS P, HIGH POWER FACTOR, RAPID START TYPE WITH CBM APPROVAL WHERE APPLICABLE. DRIVERS SHALL BE "A" SOUND RATING EXCEPT WHERE THIS RATING IS NOT AVAILABLE IN WHICH CASE THE RATING SHALL BE THE BEST AVAILABLE. ALL LED DRIVERS SHALL BE ELECTRONIC, ENERGY SAVING TYPE.
19. DISCONNECTS SHALL BE HEAVY DUTY SAFETY SWITCHES WITH 100,000A SHORT CIRCUIT RATING, AND SHALL BE LISTED IN ACCORDANCE WITH U.L. 98. THE COVER SHALL BE INTERLOCKED SO THAT THE DOOR CANNOT BE OPENED WITH THE HANDLE IN THE "ON" POSITION, EXCEPT BY THE INTENTIONAL OPERATION OF A CONCEALED RELEASE (DEFEATER) MECHANISM. PROVIDE FUSIBLE SWITCH FOR AC UNITS AS PER U.L. LISTING AND LOCAL CODE REQUIREMENTS. PROVIDE DUAL ELEMENT, TIME DELAY FUSES IN ALL FUSIBLE SWITCHES. A SEPARATE GROUNDING CONDUCTOR, SIZED IN ACCORDANCE WITH N.E.C. ARTICLE 250-122 SHALL BE PROVIDED IN THE CONDUIT WITH THE CIRCUIT CONDUCTORS FOR ALL LIGHTING, POWER AND FEEDER CIRCUITS.
20. ALL ELECTRICAL EQUIPMENT ENCLOSURES AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED.
21. PROVIDE PROTECTIVE COVERING OVER PANELS AND EQUIPMENT DURING CONSTRUCTION.
22. THE CONTRACTOR SHALL INSTALL THEIR WORK TO JOB CONDITIONS AND MAKE SUCH CHANGES AS REQUIRED AND PERMITTED BY THE ARCHITECT, SUCH AS MOVING THEIR WORK TO CLEAR BEAMS, JOISTS, AND ADJUSTING OTHER APPARATUS TO AVOID INTERFERENCES WITH WINDOWS AND OPENINGS; OR RAISING OR LOWERING THEIR WORK TO PERMIT THE PASSING OF DUCTWORK OR THE WORK OF OTHER TRADES; ALL AS REQUIRED OR AS JOB CONDITIONS DICTATE, WITHOUT ANY ADDITIONAL COSTS TO THE OWNER OR THE CONTRACT PRICE.
23. EXAMINE AREAS AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND PRODUCTS ARE TO BE INSTALLED AND NOTIFY ARCHITECT IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF THE WORK. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE INSTALLER.
24. DO NOT ALLOW OR CAUSE ANY OF THE WORK OF THIS DIVISION, OR CAUSE OTHER DIVISIONS OF WORK TO BE COVERED UP, OR ENCLOSED, UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED BY THE ARCHITECT AND BY ALL OTHER AUTHORITIES HAVING JURISDICTION.
25. PROVIDE GROUND AND CONTINUITY TESTING ON ALL ELECTRICAL CIRCUIT WIRING PRIOR TO RECONNECTION/REINSTALLATION.
26. ALL SWITCHES, OUTLETS, COVER PLATES, SIGNS, LIGHTING FIXTURES, AND ANY AND ALL OTHER ELECTRICAL EQUIPMENT PROVIDED SHALL BE THOROUGHLY CLEANED OF ALL DIRT, OIL, CONCRETE, ETC. ANY DENTS, SCRATCHES OR OTHER VISIBLE BLEMISHES SHALL BE CORRECTED AND THE APPEARANCE AND CORROSION RESISTANCE OF THE EQUIPMENT MADE "LIKE NEW", TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
27. PERFORM ALL ADJUSTMENTS NECESSARY TO ENSURE PROPER SYSTEM OPERATION IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

APPLICABLE CODES:

1. FLORIDA BUILDING CODE 2023 8TH EDITION.
2. FLORIDA BUILDING CODE 2023 - ENERGY CONSERVATION 8TH EDITION.
3. FLORIDA FIRE PREVENTION CODE 2023 8TH EDITION.
4. NFPA 37 STANDARD FOR THE INSTALLATION AND USE OF STATIONARY COMBUSTION ENGINES - 2021 EDITION.
5. NFPA 70 NATIONAL ELECTRICAL CODE - 2020 EDITION.
6. NFPA 72 NATIONAL FIRE ALARM & SIGNALING CODE - 2019 EDITION.
7. NFPA 101 LIFE SAFETY CODE - 2021 EDITION.
8. NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS - 2019 EDITION.
9. NFPA 780 STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS - 2020 EDITION.
10. NFPA 1221 STANDARD FOR THE INSTALLATION OF EMERGENCY SERVICES COMUUNICATION SYSTEMS - 2019 EDITION.

VOLTAGE DROP:

THIS PROJECT IS DESIGNED FOR A MAXIMUM TOTAL VOLTAGE DROP OF 5% AS PER 2023 FBC ENERGY CONSERVATION C405.5.3: THE FEEDERS AND BRANCH CIRCUIT CONDUCTORS HAVE BEEN SIZED FOR A MAXIMUM VOLTAGE DROP OF 5% AT DESIGN LOAD.

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DRAWING HISTORY

No	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD. RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
GENERAL NOTES AND SYMBOL LEGEND - ELECTRICAL

SHEET NUMBER
E0.01E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 11:38:03 AM

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	WATTS	TYPE	VOLTAGE	MOUNTING	NOTES
A1	HIGH BAY FIXTURE CONSTRUCTED FROM EXTRUDED ALUMINUM WITH WITH GLARE CONTROL ACRYLIC LENS AND 0-10V DIMMING DRIVER. 4000K CCT. 80CRI. MH: 24'-0" AFF - AIRCRAFT CABLE. BASIS OF DESIGN: LITHONIA CPHB 12000LM SEF GCL MD 40K 80CRI OR APPROVED EQUAL.	88	LED	UNV	SUSPENDED	-
A1E	SAME FIXTURE AS TYPE 'A1' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA CPHB 12000LM SEF GCL MD 40K 80CRI E10W OR APPROVED EQUAL.	88	LED	UNV	SUSPENDED	-
A2	HIGH BAY FIXTURE CONSTRUCTED FROM EXTRUDED ALUMINUM WITH WITH GLARE CONTROL ACRYLIC LENS AND 0-10V DIMMING DRIVER. 4000K CCT. 80CRI MH: 24'-0" AFF - AIRCRAFT CABLE. BASIS OF DESIGN: LITHONIA CPHB 24000LM SEF GCL MD 40K 80CRI OR APPROVED EQUAL.	175	LED	UNV	SUSPENDED	-
A2E	SAME FIXTURE AS TYPE 'A2' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA CPHB 24000LM SEF GCL MD 40K 80CRI E10W OR APPROVED EQUAL.	175	LED	UNV	SUSPENDED	-
B	2'X4' CENTER ELEMENT TROFFER CONSTRUCTED FROM ALUMINUM FRAME WITH GLARE RESISTANT MATTE WHITE REFLECTOR, IMPACT RESISTANT ACRYLIC LENS, AND 0-10V DIMMING DRIVER. 4000K CCT. 80CRI. BASIS OF DESIGN: LITHONIA STAK 2X2 5000LM 80CRI 40K COL MVOLT OR APPROVED EQUAL.	43	LED	UNV	RECESSED	-
BE	SAME FIXTURE AS TYPE 'B' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA STAK 2X2 5000LM 80CRI 40K COL MVOLT E10W OR APPROVED EQUAL.	43	LED	UNV	RECESSED	-
C	6" DOWNLIGHT CONSTRUCTED FROM GALVANIZED STEEL WITH HINGED ACCESS COVER, SPRING LATCHES, ADJUSTABLE MOUTING BRACKETS, INTEGRAL HEAT SINKS AND 0-10V DIMMING DRIVER. 4000K CCT. 80CRI. BASIS OF DESIGN: LITHONIA LDN6 40/15 L06 AR LD OR APPROVED EQUAL.	18	LED	UNV	RECESSED	(1)
CE	SAME FIXTURE AS TYPE 'C' BUT WITH 90MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA LDN6 40/15 L06 AR LD EL OR APPROVED EQUAL.	18	LED	UNV	RECESSED	(1)
D	4' STRIP FIXTURE CONSTRUCTED FROM COLD ROLLED STEEL WITH HIGH GLOSS BAKED WHITE POLYESTER FINISH, FLAT DIFFUSED LENS, 0-10V DIMMING DRIVER AND AIRCRAFT CABLE WITH Y HANGERS. 4000K CCT, MH: 12'-0" AFF. 80CRI. BASIS OF DESIGN: LITHONIA CLX L48 4000LM SEF FDL MVOLT GZ10 40K 80CRI WHZACVHM100 OR APPROVED EQUAL.	26	LED	UNV	SUSPENDED	-
DE	SAME FIXTURE AS TYPE 'D' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA CLX L48 4000LM SEF FDL MVOLT GZ10 40K 80CRI E10W WHZACVHM100 OR APPROVED EQUAL.	26	LED	UNV	SUSPENDED	-
F	24" LINEAR BATHROOM VANITY LIGHT WITH SATIN NICKEL FINISH. DAMP LOCATION LISTED BASIS OF DESIGN: OXYGEN 3-571-24 OR APPROVED EQUAL.	15	LED	UNV	SURFACE	-
G	4' STRIP FIXTURE CONSTRUCTED FROM COLD ROLLED STEEL WITH HIGH GLOSS BAKED WHITE POLYESTER FINISH, FLAT DIFFUSED LENS, 0-10V DIMMING DRIVER 4000K CCT. 80CRI. BASIS OF DESIGN: LITHONIA ZL1D L48 3000LM FST MVOLT 40K 80CRI OR APPROVED EQUAL.	30	LED	UNV	SURFACE	-
GE	SAME FIXTURE AS TYPE 'G' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA ZL1D L48 3000LM FST MVOLT 40K 80CRI E10W OR APPROVED EQUAL.	30	LED	UNV	SURFACE	-
H	2X2 FLAT PANNEL CONSTRUCTED FROM METAL WITH SWITCHABLE LUMEN OUTPUT, SWITCHABLE CCT, SATIN WHITE LENS, AND WITH 0-10V DIMMING DRIVER. IP65 RATED, WET LOCATION LISTED, IK10 RATED. 4000K CCT. 80CRI. BASIS OF DESIGN: LITHONIA CPX 2X2 ALOT (HIGH) SWW7(40K) SWL MVOLT OR APPROVED EQUAL.	30	LED	UNV	RECESSED	-
HE	SAME FIXTURE AS TYPE 'H' BUT WITH 90 MINUTE INTEGRAL EMERGENCY BATTERY BACK UP. BASIS OF DESIGN: LITHONIA CPX 2X2 ALOT (HIGH) SWW7(40K) SWL MVOLT E10W OR APPROVED EQUAL.	30	LED	UNV	RECESSED	-
WPA	TRAPEZOIDAL WALL SCONCE/WALLPACK CONSTRUCTED FROM SINGLE PIECE DIE CAST ALUMINUM WITH WITH INTEGRAL HEAT SINKS, GASKETED DOOR FRAME, ZINC THERMOSET POWDER COAT FINISH, ACRYLIC LENS, 0-10V DIMMING DRIVER, WIDE OPTICS AND INTEGRAL EM BATTERY. 4000K CCT. 9'-0" AFF. BASIS OF DESIGN: LITHONIA WDGE1 LED P2 40K 80CRI VW MVOLT E4WH DDBXD OR APPROVED EQUAL.	15	LED	UNV	SURFACE	-
WPB	TRAPEZOIDAL WALL SCONCE/WALLPACK CONSTRUCTED FROM SINGLE PIECE DIE CAST ALUMINUM WITH WITH INTEGRAL HEAT SINKS, GASKETED DOOR FRAME, ZINC THERMOSET POWDER COAT FINISH, ACRYLIC LENS, 0-10V DIMMING DRIVER, WIDE OPTICS. 4000K CCT. 16'-0" AFF. BASIS OF DESIGN: LITHONIA WDGE3 LED P3 40K R3 MVOLT SRM DDBXD OR APPROVED EQUAL.	71	LED	UNV	SURFACE	-
X	THERMOPLASTIC RED LETTERED LED SIGN WITH FIELD AJUSTABLE CHEVRONS AND 90 MINUTE EMERGENCY BATTERY BACK UP. UL-924 LISTED BASIS OF DESIGN: EVENLITE TLX-EM-RU-W OR APPROVED EQUAL.	2	LED	UNV	SURFACE	-

NOTES: 1. FLANGE AND FINISH BY ARCHITECT/ID.

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

LUMINAIRE SCHEDULE - ELECTRICAL

SHEET NUMBER

E0.02E

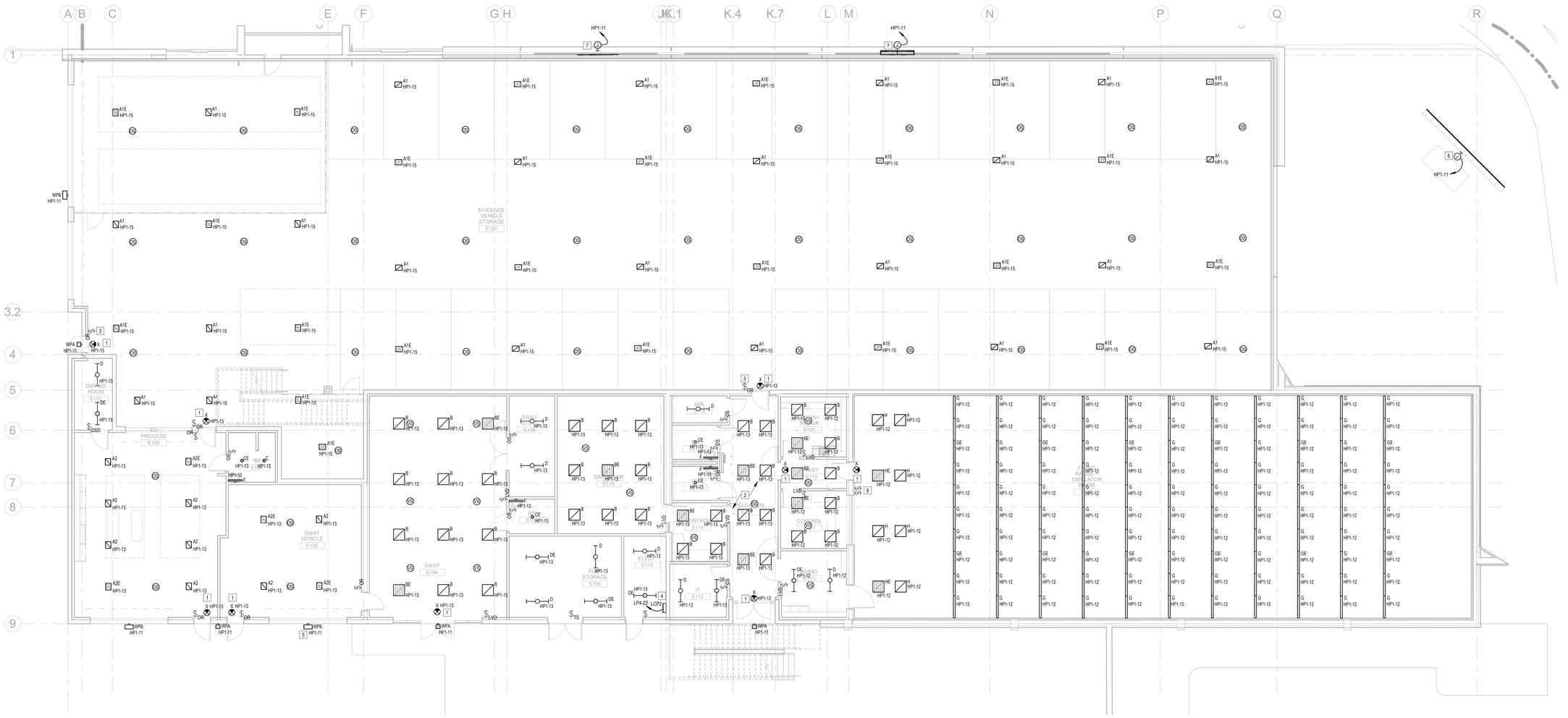
FILE NAME: Autodesk Docs// 1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 11:38:07 AM

KEYNOTES:

1. WIRE ALL EXIT LUMINAIRES AHEAD OF ALL SWITCHING. (TYPICAL)
2. CORRIDOR AND COMMON AREA LIGHTING CONTROLLED VIA OCCUPANCY SENSOR. (TYPICAL)
3. VEHICLE STORAGE BAY HIGHBAY LUMINAIRES CONTROLLED VIA OCCUPANCY SENSOR WITH OVERRIDE SWITCHES.
4. PROPOSED LOCATION FOR LIGHTING CONTROL PANEL. COORDINATE FINAL LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN.
5. EXTERIOR WALL MOUNTED LIGHTING CONTROLLED VIA LIGHTING CONTROL PANEL TIMECLOCK/PHOTOCELL COMBINATION. REFER TO LCP SCHEDULE ON SHEET E7.02 FOR ADDITIONAL INFORMATION. (TYPICAL)
6. EXTERIOR MONUMENT SIGN CONTROLLED VIA LIGHTING CONTROL PANEL TIMECLOCK/PHOTOCELL COMBINATION. REFER TO LCP2 SCHEDULE ON SHEET E7.02 FOR ADDITIONAL INFORMATION.
7. EXTERIOR SIGNAGE LIGHTING CONTROLLED VIA LIGHTING CONTROL PANEL TIMECLOCK/PHOTOCELL COMBINATION. REFER TO LCP2 SCHEDULE ON SHEET E7.02 FOR ADDITIONAL INFORMATION.
8. FIRING RANGE FIXTURES CONTROLLED VIA SINGLE POLE TOGGLE SWITCHES FOR SAFETY PURPOSES.

GENERAL LIGHTING NOTES:

1. ALL LIGHT SWITCHES SHALL BE 277V RATED UNLESS OTHERWISE NOTED.
2. COORDINATE EXACT LOCATION OF EACH LIGHT FIXTURE WITH MECHANICAL, PIPING, CONDUIT, HVAC TERMINALS, ETC. FIELD ADJUST ANY LIGHT TO AVOID CONFLICT.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT TYPE AND HEIGHT OF CEILING IN EACH ROOM. COORDINATE WITH ARCHITECT/ENGINEER PRIOR TO ROUGH-IN OF ANY FIXTURES. COORDINATE ALL CONTROL JOINT LOCATIONS WITH LIGHT FIXTURES PRIOR TO ANY ROUGH-IN OF FIXTURES.
4. EXIT LIGHTS SHALL BE MOUNTED WITH BOTTOM OF FIXTURE AT 6" ABOVE DOOR HEADER IN ALL AREAS THAT PERMIT THIS PLACEMENT. ALL OTHERS MAY BE CEILING MOUNTED.
5. MULTIPLE LIGHT SWITCHES, AT THE SAME LOCATION, SHALL BE GANGED TOGETHER UNDER ONE COVER PLATE. DIMMER SWITCHES SHALL BE INSTALLED IMMEDIATELY BELOW SWITCH LOCATIONS.
6. COORDINATE LOCATION OF ALL LIGHT FIXTURES WITH ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
7. POWER PACK FOR OCCUPANCY SENSORS ARE NOT INDICATED ON PLANS. ELECTRICAL CONTRACTOR SHALL PROVIDE POWER PACKS PER OCCUPANCY SENSOR MANUFACTURER'S RECOMMENDATIONS.
8. PROVIDE A LIGHTING CONTROL SYSTEM TO CONTROL ALL LIGHTS, UNLESS NOTED OTHERWISE. BASIS OF DESIGN FOR LOW VOLTAGE LIGHTING CONTROL SYSTEM IS ACUITY. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETELY OPERATIONAL LIGHTING CONTROL SYSTEM. REFER TO SHEET E8.02E FOR LIGHTING CONTROL PLANS.
9. LIGHTING FIXTURE CONTROL WITH OCCUPANCY SENSORS/PHOTOCELLS, ETC, SHOWN ON DRAWINGS ARE DIAGRAMMATIC. LIGHTING CONTROL SYSTEM PHOTOCELLS, OCCUPANCY SENSORS, WALL SWITCHES, POWER SUPPLIES/REMOTE DRIVERS (NOT SHOWN), ETC., SHALL BE COORDINATED WITH LIGHTING CONTROLS MANUFACTURER'S SHOP DRAWINGS. INDICATED QUANTITIES, TYPE, AND LOCATION OF DEVICES SHOWN ON LIGHTING CONTROLS MANUFACTURER'S SHOP DRAWINGS SHALL SUPERCEDE DEVICES INDICATED ON THIS DRAWING.



OVERALL FIRST FLOOR PLAN - LIGHTING 1/8" = 1'-0" (1)

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DRAWING HISTORY

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A	4/4/2025	100% Design Development
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PROJECT STATUS

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10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FLOOR PLAN - EVIDENCE/FIRING RANGE - LIGHTING

SHEET NUMBER

E1.01E

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City_of_Riviera_Beach_D/RBPD_Evidence_and_Firing_Range_MEPF_R24.rvt
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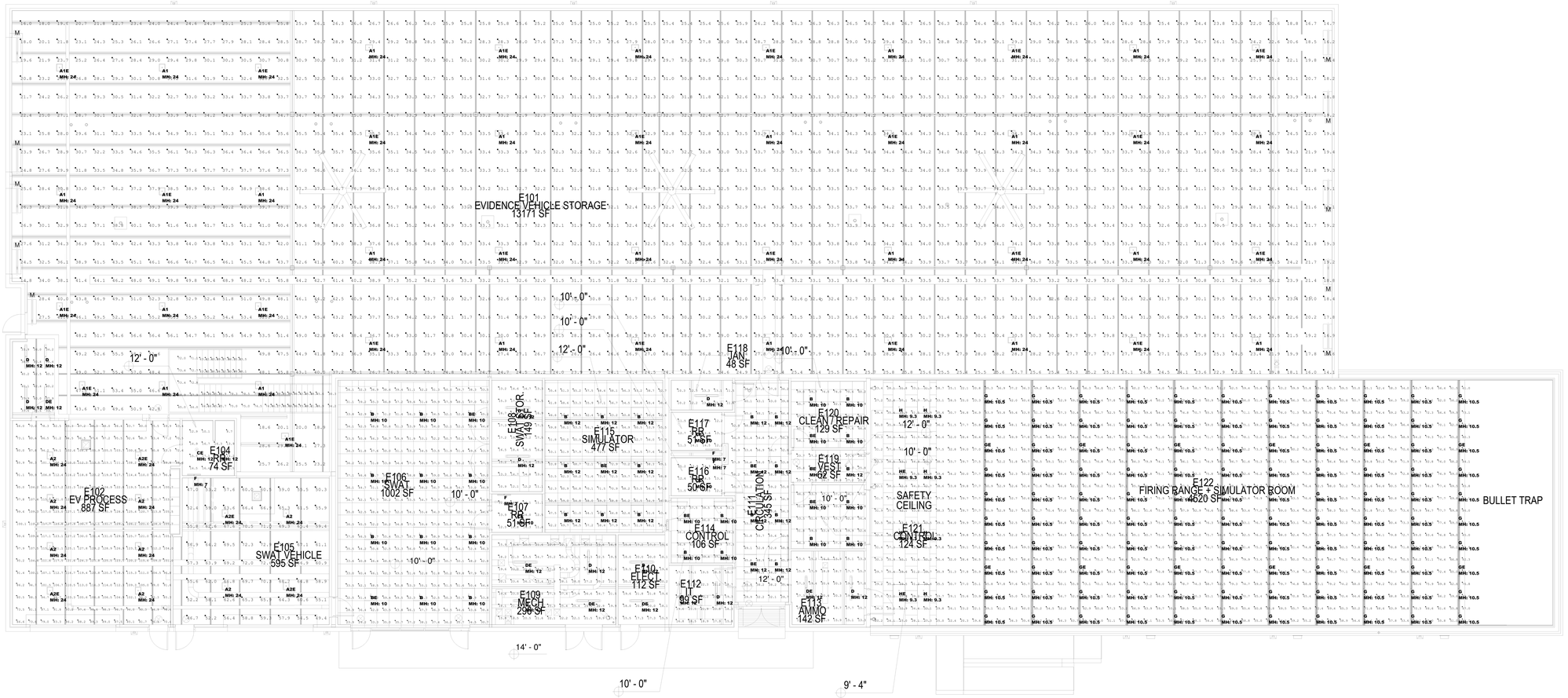

LUMINAIRE SCHEDULE

Scenario: NORMAL

SYMBOL	QTY	LABEL	ARRANGEMENT	MANUFACTURER	CATALOG NUMBER	MOUNTING	EMERGENCY	LLF	LUMINAIRE LUMENS	LUMINAIRE WATTS
	25	A1	Single	Lithonia Lighting	CPHB 12000LM SEF GCL MD 40K 80CRI	SUSPENDED	N/A	0.860	12277	87.95
	23	A1E	Single	Lithonia Lighting	CPHB 12000LM SEF GCL MD 40K 80CRI	SUSPENDED	GENERATOR	0.860	12277	87.95
	8	A2	Single	Lithonia Lighting	CPHB 24000LM SEF GCL MD 40K 80CRI	SUSPENDED	N/A	0.860	24882	174.41
	4	A2E	Single	Lithonia Lighting	CPHB 24000LM SEF GCL MD 40K 80CRI	SUSPENDED	GENERATOR	0.860	24882	174.41
	34	B	Single	Lithonia Lighting	STAK 2X2 5000LM 80CRI 40K COL MVOLT	RECESSED	N/A	0.860	5290	42.6156
	9	BE	Single	Lithonia Lighting	STAK 2X2 5000LM 80CRI 40K COL MVOLT	RECESSED	GENERATOR	0.860	5290	42.6156
	1	C	Single	Lithonia Lighting	LDN6 40/15 L06AR LD	RECESSED	N/A	0.670	1358	17.52
	4	CE	Single	Lithonia Lighting	LDN6 40/15 L06AR LD	RECESSED	GENERATOR	0.670	1358	17.52
	12	D	Single	Lithonia Lighting	CLX L48 4000LM SEF FDL MVOLT 40K 80CRI	SUSPENDED	N/A	0.860	3956	25.5429
	5	DE	Single	Lithonia Lighting	CLX L48 4000LM SEF FDL MVOLT 40K 80CRI	SUSPENDED	GENERATOR	0.860	3956	25.5429
	4	F	Single	Oxygen Lighting	3-571-24	WALL SURFACE	N/A	0.860	1180	14.9
	98	G	Single	Lithonia Lighting	ZL1D L48 3000LM FST MVOLT 40K 80CRI	CEILING SURFACE	N/A	0.860	4029	29.85
	12	GE	Single	Lithonia Lighting	ZL1D L48 3000LM FST MVOLT 40K 80CRI	CEILING SURFACE	GENERATOR	0.860	4029	29.85
	6	H	Single	Lithonia Lighting	CPX 2X2 ALO7 (High) SWW7 (40K) SWL MVOLT	CEILING RECESSED	N/A	0.760	4559	32.76
	2	HE	Single	Lithonia Lighting	CPX 2X2 ALO7 (High) SWW7 (40K) SWL MVOLT	CEILING RECESSED	GENERATOR	0.760	4559	32.76

CALCULATION SUMMARY

Scenario: NORMAL

LABEL	CALC TYPE	UNITS	SPACING L-R (FT)	SPACING T-B (FT)	HEIGHT (FT)	AVG	MAX	MIN	AVG/MIN	MAX/MIN
103 - DRYING ROOM_Floor	Illuminance	Fc	2	2	0	38.08	42.5	33.6	1.13	1.26
E101 - EVIDENCE VEHICLE STORAGE_Floor	Illuminance	Fc	3	3	0	32.19	58.2	14.1	2.28	4.13
E102 - EV PROCESS_Workplane	Illuminance	Fc	2	2	2.5	104.56	132.1	48.6	2.15	2.72
E104 - RR_Floor	Illuminance	Fc	2	2	0	14.49	17.1	8.7	1.67	1.97
E105 - SWAT VEHICLE_Floor	Illuminance	Fc	3	3	0	61.89	72.9	46.7	1.33	1.56
E106 - SWAT_Workplane	Illuminance	Fc	2	2	2.5	47.89	60.9	23.9	2.00	2.55
E107 - RR_Floor	Illuminance	Fc	2	2	0	13.36	14.8	11.1	1.20	1.33
E108 - SWAT STOR_Floor	Illuminance	Fc	2	2	0	15.98	19.3	10.9	1.47	1.77
E109 - MECH_Floor	Illuminance	Fc	2	2	0	23.09	28.1	15.8	1.46	1.78
E110 - ELECT_Floor	Illuminance	Fc	2	2	0	19.06	22.4	15.4	1.24	1.45
E111 - CIRCULATION_Floor	Illuminance	Fc	2	2	0	48.81	59.2	29.7	1.64	1.99
E112 - IT_Floor	Illuminance	Fc	2	2	0	19.70	23.2	15.8	1.25	1.47
E113 - AMMO_Floor	Illuminance	Fc	2	2	0	17.07	20.4	13.3	1.28	1.53
E114 - CONTROL_Floor	Illuminance	Fc	2	2	0	59.52	68.3	51.0	1.17	1.34
E115 - SIMULATOR_Workplane	Illuminance	Fc	2	2	2.5	58.00	73.4	32.7	1.77	2.24
E116 - RR_Floor	Illuminance	Fc	2	2	0	13.18	14.5	11.2	1.18	1.29
E117 - RR_Floor	Illuminance	Fc	2	2	0	13.28	14.6	11.3	1.18	1.29
E118 - JAN_Floor	Illuminance	Fc	2	2	0	12.08	13.3	10.2	1.18	1.30
E119 - VEST_Floor	Illuminance	Fc	2	2	0	27.28	31.0	23.5	1.16	1.32
E120 - CLEAN REPAIR_Workplane	Illuminance	Fc	2	2	2.5	72.41	83.9	58.1	1.25	1.44
E121 - CONTROL_Floor	Illuminance	Fc	2	2	0	56.50	65.7	46.3	1.22	1.42
E122 - FIRING RANGE SIMULATOR ROOM_Floor	Illuminance	Fc	2	2	0	63.05	92.7	19.6	3.22	4.73
STAIR	Illuminance	Fc				66.30	80.0	30.3	2.19	2.64

LIGHTING POWER DENSITY SUMMARY

Scenario: NORMAL

LABEL	AREA	TOTAL WATTS	LPD
103 - DRYING ROOM_LPD	87.75	102.1716	1.164
E101 - EVIDENCE VEHICLE STORAGE_LPD	13169	4221.599	0.321
E102 - EV PROCESS_LPD	888.67	1395.28	1.570
E104 - RR_LPD	73.79	49.94	0.677
E105 - SWAT VEHICLE_LPD	595.21	697.64	1.172
E106 - SWAT_LPD	998.08	511.3872	0.512
E107 - RR_LPD	51.26	32.42	0.632
E108 - SWAT STOR_LPD	149.32	51.0858	0.342
E109 - MECH_LPD	296.27	102.1716	0.345
E110 - ELECT_LPD	111.53	51.0858	0.458
E111 - CIRCULATION_LPD	337.43	340.9248	1.010
E112 - IT_LPD	99.37	51.0858	0.514
E113 - AMMO_LPD	141.89	51.0858	0.360
E114 - CONTROL_LPD	105.68	170.4624	1.613
E115 - SIMULATOR_LPD	477.13	383.5404	0.804
E116 - RR_LPD	50.32	32.42	0.644
E117 - RR_LPD	50.75	32.42	0.639
E118 - JAN_LPD	48.15	25.5429	0.530
E119 - VEST_LPD	62.20	85.2312	1.370
E120 - CLEAN REPAIR_LPD	128.62	170.4624	1.325
E121 - CONTROL_LPD	123.66	170.4624	1.378
E122 - FIRING RANGE SIMULATOR ROOM_LPD	4469	3545.583	0.793

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DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
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D	9/18/2025	90% Construction Documents
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CONSULTANT

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL
33404

PROJECT NUMBER

1007657.00

SHEET TITLE

PHOTOMETRICS - ELECTRICAL

SHEET NUMBER

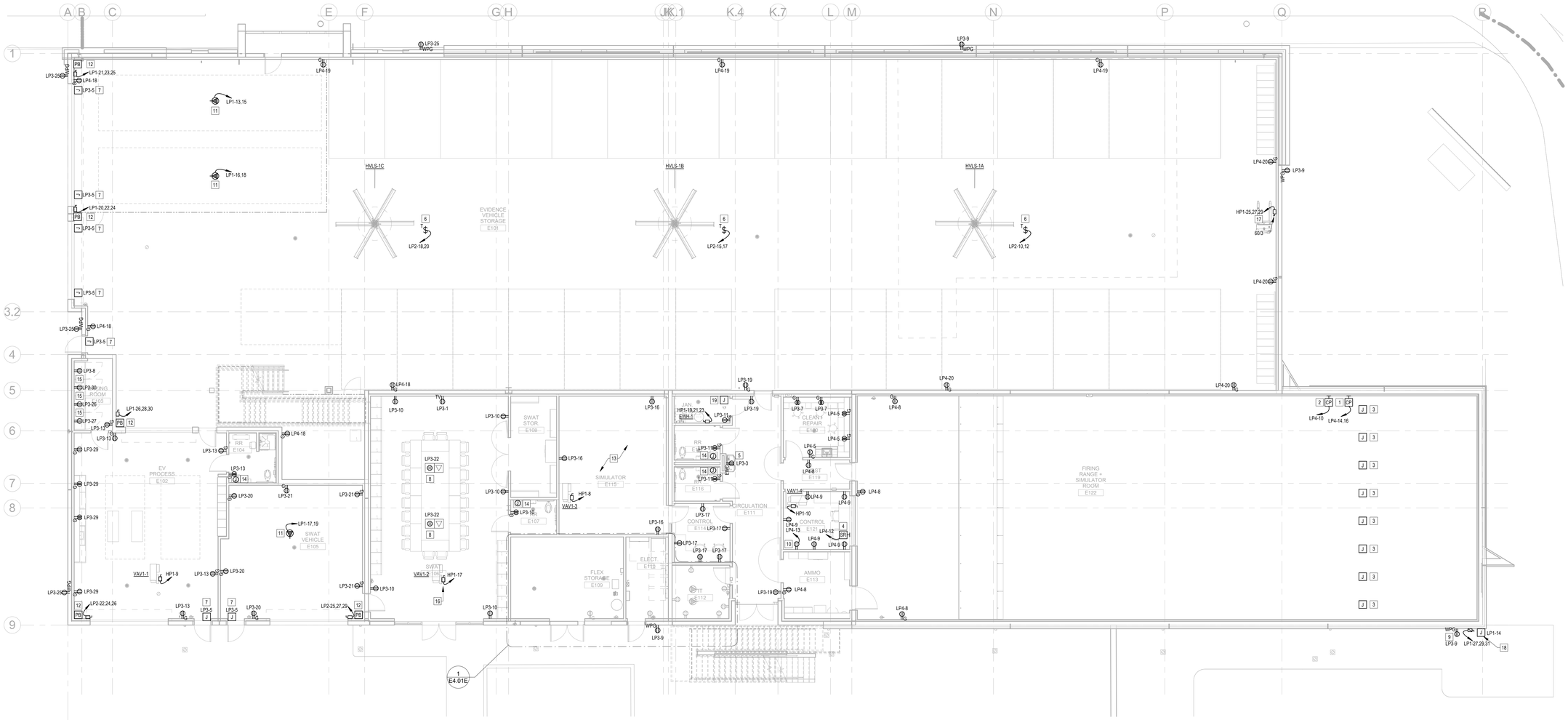
E1.02E

KEYNOTES:

1. PROVIDE HARDWIRED POWER CONNECTION TO FIRING RANGE DRM PRO PANEL (DRMPP). COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
2. PROVIDE HARDWIRED POWER CONNECTION TO FIRING RANGE FIXED TURNING TARGET PANEL (FTTP). COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
3. PROVIDE 4X4X4 JUNCTION BOX FOR TARGET LINE. REFER TO SHEET T1.01E FOR CONDUIT REQUIREMENTS. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
4. PROVIDE HARDWIRED CONNECTION TO FIRING RANGE MINI SERVER RACK. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
5. PROVIDE POWER CONNECTION TO EWC. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. EWC SHALL BE FED BY GFCI BREAKER.
6. PROVIDE CONNECTION TO HVLS CEILING FAN. PROVIDE ADDITIONAL CONDUITS AND BOXES TO CONTROL STATION LOCATION PER MECHANICAL DRAWINGS. COORDINATE FINAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
7. PROVIDE CONNECTION TO MOTORIZED VOLUME DAMPER. COORDINATE FINAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROPOSED LOCATION FOR FLOOR BOX. EC SHALL OBTAIN DIMENSION FROM ARCHITECT PRIOR TO ROUGH-IN.
   BOD: WIREMOLD RFBA6R300G
9. PROVIDE LOCKABLE DIE-CAST IN-USE ALUMINUM COVER. (TYPICAL FOR ALL EXTERIOR WPG RECEPTACLES)
   BOD: INTERMATIC WP1250MVXD
10. PROVIDE DEDICATED QUAD RECEPTACLE FOR WALL MOUNTED IT CABINET. MOUNT 5'-0" AFF.
11. PROVIDE 14-50R RECEPTACLE HUNG FROM CEILING TO SERVICE MCC VEHICLES. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH END USER PRIOR TO ROUGH-IN. REFER TO DETAIL #8 ON SHEET E6.02E FOR ADDITIONAL INFORMATION.
12. PROVIDE POWER CONNECTION TO OVERHEAD COILING DOORS. REFER TO EQUIPMENT SCHEDULE ON SHEET E7.05 FOR SIZES. COORDINATE FINAL PUSH BUTTON ACTIVATION LOCATION AND ADDITIONAL CONNECTION REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
13. PROVIDE ADDITIONAL RACEWAY, CONDUITS AND BOXES BACK TO ELECTRICAL ROOM. FINAL SIMULATOR DESIGN TO BE DETERMINED AT A LATER DATE.
14. PROVIDE POWER CONNECTION TO AUTOMATIC FLUSH VALVE AND/OR AUTOMATIC FAUCET. WIRE TO NEAREST GENERAL RECEPTACLE CIRCUIT AHEAD OF ANY GFI RECEPTACLE IF CIRCUIT NUMBER IS NOT DESIGNATED. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
15. PROVIDE POWER CONNECTION TO EVIDENCE DRYING CABINET. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH EQUIPMENT MANUFACTURER AND END USER PRIOR TO ROUGH-IN.
16. PROVIDE EXTERNAL DISCONNECT SWITCH OF VAV. REFER TO EQUIPMENT SCHEDULE ON SHEET E7.05 FOR SIZES. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. (TYPICAL FOR ALL HEATING VAV'S)
17. PROVIDE POWER CONNECTION TO FORK LIFT CHARGER. COORDINATE FINAL POWER CONNECTION REQUIREMENTS WITH FORK LIFT MANUFACTURER AND END USER PRIOR TO ROUGH-IN.
18. PROVIDE POWER CONNECTIONS FOR IRRIGATION PUMP AND CONTROLLER. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH IRRIGATION CONTRACTOR AND LANDSCAPE ARCHITECT PRIOR TO ROUGH-IN.
19. WIRE RECIRC PUMP TO NEAREST 120V GENERAL RECEPTACLE CIRCUIT AHEAD OF ANY GFI RECEPTACLE. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.

GENERAL POWER NOTES:

1. COORDINATE EXACT INSTALLATION REQUIREMENTS OF OUTLETS IN MILLWORK WITH ARCHITECTURAL DRAWINGS AND ACCEPTED MILLWORK SHOP DRAWINGS. RELOCATE RECEPTACLES AND ELECTRICAL EQUIPMENT TO AVOID CONFLICTS WITH ARCHITECTURAL CASEWORK.
2. LOCATIONS OF ALL DEVICES ON DRAWINGS ARE APPROXIMATE ONLY. VERIFY EXACTLY LOCATION WITH OWNERS REPRESENTATIVES, ARCHITECT AND/OR ENGINEER PRIOR TO ROUGH-IN.
3. COORDINATE THE LOCATION OF POWER RECEPTACLES WITH VOICE/DATA OUTLETS ESPECIALLY WHERE COMPUTERS ARE TO BE LOCATED. COORDINATE WITH TECHNOLOGY DRAWINGS.
4. ALL RACEWAYS AND CABLE SHALL BE CONCEALED UNLESS NOTED OR APPROVED IN WRITING BY OWNER AND/OR ENGINEER.
5. ALL 15 AND 20 AMPS, 125 VOLTS RECEPTACLES SHALL BE TAMPER-RESISTANT RECEPTACLES.
6. ALL CONTROL WIRING FOR MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
7. COORDINATE WITH PLUMBING CONTRACTOR FOR EXACT LOCATION AND CONNECTION REQUIREMENTS OF EQUIPMENT PRIOR TO ROUGH-IN.
8. ALL 20A, 120/208V HOMERUNS LONGER THAN 90' SHALL BE A MINIMUM SIZE OF #10 AWG AND ALL HOMERUNS LONGER THAN 230' SHALL BE A MINIMUM OF SIZE OF #6 AWG.
9. MOUNT ALL DISCONNECT SWITCHES FOR MECHANICAL EQUIPMENT WITHIN 6 FT. OF EQUIPMENT CONNECTION POINT. VERIFY LOCATION OF POINT OF CONNECTION WITH EQUIPMENT INSTALLER PRIOR TO ELECTRICAL ROUGH-IN. MAINTAIN CODE REQUIRED CLEARANCES. (DRAWINGS ONLY SHOW DIAGRAMMATIC LOCATION OF CONNECTION).
10. VFD/STARTERS ON MECHANICAL EQUIPMENT ARE SHOWN FOR WIRING PURPOSES ONLY. VFD/STARTERS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
11. DISCONNECT SWITCHES FOR ALL MECHANICAL, PLUMBING AND MISCELLANEOUS ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS. MAINTAIN CODE REQUIRED CLEARANCES.
12. FLOOR BOX LOCATIONS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT TO OBTAIN ROUGH-IN DIMENSIONS.
13. PROVIDE POWER CONNECTION ABOVE DOORS WITH ACCESS CONTROLS. DOORS SHALL BE WIRED TO NEAREST 120V GENERAL POWER CIRCUIT. REFER TO ARCHITECTURAL DOOR SCHEDULE AND TECHNOLOGY DRAWINGS FOR DETAILS AND ACCESS CONTROL LOCATIONS. COORDINATE ADDITIONAL REQUIREMENTS WITH DIVISION 27 AND 28 CONTRACTORS PRIOR TO ROUGH-IN.



OVERALL FIRST FLOOR PLAN - POWER 1/8" = 1'-0" (1)

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PROJECT STATUS

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DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

FLOOR PLAN - EVIDENCE/FIRING RANGE - POWER

SHEET NUMBER

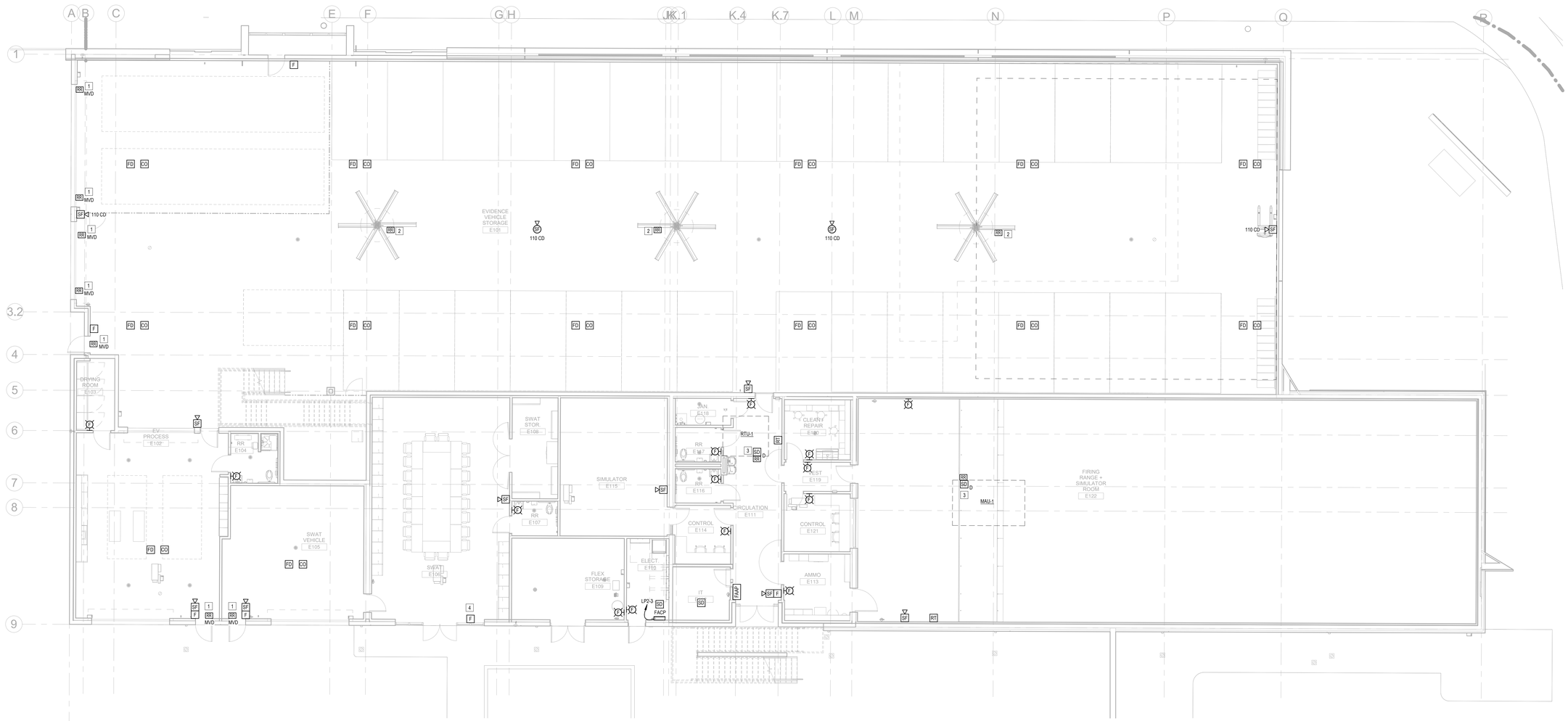
E2.01E

KEYNOTES:

1. PROVIDE SHUTDOWN RELAY FOR MOTORIZED VOLUME DAMPER. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. PROVIDE SHUTDOWN RELAY FOR HIGH VOLUME LOW SPEED CEILING FANS. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
3. COORDINATE FINAL DUCT SMOKE DETECTOR, SHUTDOWN RELAYS, AND REMOTE TEST SWITCH LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN.
4. PROVIDE MULLION COVER TO CONCEAL CONDUIT TO PULL STATION.

GENERAL FIRE ALRAM NOTES:

1. ALL WALL-MOUNTED AUDIBLE & VISUAL SIGNALING APPLIANCES SHALL HAVE THEIR HEIGHTS ABOVE THE FINISHED FLOOR AT 80" PER FBC CHAPTER 11, ART 11.4.28.3. AREAS HAVING MORE THAN 2 STROBES IN THE FIELD OF VIEW SHALL BE SYNCHRONIZED PER NFPA 72, CH4-4.1.1(4)
2. DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN-UP OF ALL TRADES IS COMPLETE AND FINAL. DETECTORS THAT HAVE BEEN INSTALLED PRIOR TO FINAL CLEAN-UP BY ALL TRADES SHALL BE CLEANED OR REPLACED. CLEANING OR REPLACEMENT OF DEVICES THAT WERE MOUNTED AT THE REQUEST OF THE CONTRACTOR WILL NOT BE PERFORMED WITHOUT WRITTEN AUTHORIZATION THAT ASSUMES FINANCIAL RESPONSIBILITY FOR COSTS INCURRED.
3. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
4. CENTER OF MANUAL PULL STATIONS SHALL BE MOUNTED AT 48" MAXIMUM ABOVE FLOOR LEVEL, PER FBC CHAPTER 11.
5. ALL EQUIPMENT SHALL BE U.L. LISTED.
6. ALL JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. AND SHALL HAVE THEIR COVERS PAINTED RED WHERE BOX IS INSTALLED BEHIND BUILDING FINISHES OR IN UNFINISHED SPACES..
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS AND DEVICES THAT REQUIRE SERVICING, TROUBLE SHOOTING, ETC.
8. DO NOT DEVIATE FROM CONDUIT RUNS AS SHOWN ON SHOP DRAWINGS WITHOUT PRIOR APPROVAL FROM SYSTEM SUPPLIER. FACTORS SUCH AS EXCESSIVE VOLTAGE DROP, ADDITIONAL PARTS, ENGINEERING, ETC., THAT ARE A RESULT OF CONDUIT RUN DEVIATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
9. AREA DETECTORS SHALL NOT BE LOCATED IN A DIRECT AIR-FLOW, NOR CLOSER THAN 5 FEET FROM AN AIR SUPPLY DIFFUSER.
10. ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM INTERFACE SHALL BE BY MECHANICAL CONTRACTOR. FIRE ALARM CONTRACTOR WILL PROVIDE OPEN CONTACT ON ALARM WITHIN THREE FEET OF THE STARTER.
11. ALL CONDUITS ARE 3/4" UNLESS OTHERWISE NOTED.
12. ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
13. ALL FIRE ALARM DEVICE BACKBOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
14. SMOKE DETECTOR TESTING SHALL BE IN ACCORDANCE WITH NFPA 72 SECTION 7.5.4.
15. ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
16. POINT AND COMMON ANNUNCIATION AND T-TAPPING ARE PROHIBITED. (T-TAPPING IS ALLOWABLE ON STYLE 4 SLC LOOPS WHERE TAPS ARE LOCATED IN METALLIC JUNCTION BOXES).
17. PROVIDE 3/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO TELEPHONE BACKBOARD AND WIRELESS DACT TRANSMITTER FOR OWNER PROVIDED CENTRAL STATION MONITORING VIA TELEPHONE LINES.
18. COORDINATE EXACT QUANTITY OF FLOW AND TAMPER SWITCHES WITH FIRE PROTECTION SHOP DRAWINGS PRIOR TO ROUGH-IN.
19. FA NOTIFICATION DEVICE SPACING IS SHOWN ONLY FOR DESIGN PURPOSES. FIRE ALARM CONTRACTOR SHALL LOCATE DEVICES BASED ON THE LISTED COVERAGE OF THE SELECTED DEVICE AND ADJUST FIRE ALARM SHOP DRAWINGS AS NEEDED..
20. PROVIDE BATTERY CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR AUTHORITY HAVING JURISDICTION (AHJ).
21. BUILDING IS FULLY SPRINKLERED, SO AREA DETECTION IS NOT PROVIDED IN STORAGE ROOMS. HOWEVER, THE DETECTORS HAVE BEEN PROVIDED IN LOCATIONS WHERE THERE WILL BE SPECIALTY EQUIPMENT/CHEMICALS STORED.



OVERALL FIRST FLOOR PLAN - FIRE ALARM 1/8" = 1'-0" (1)

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DRAWING HISTORY

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A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

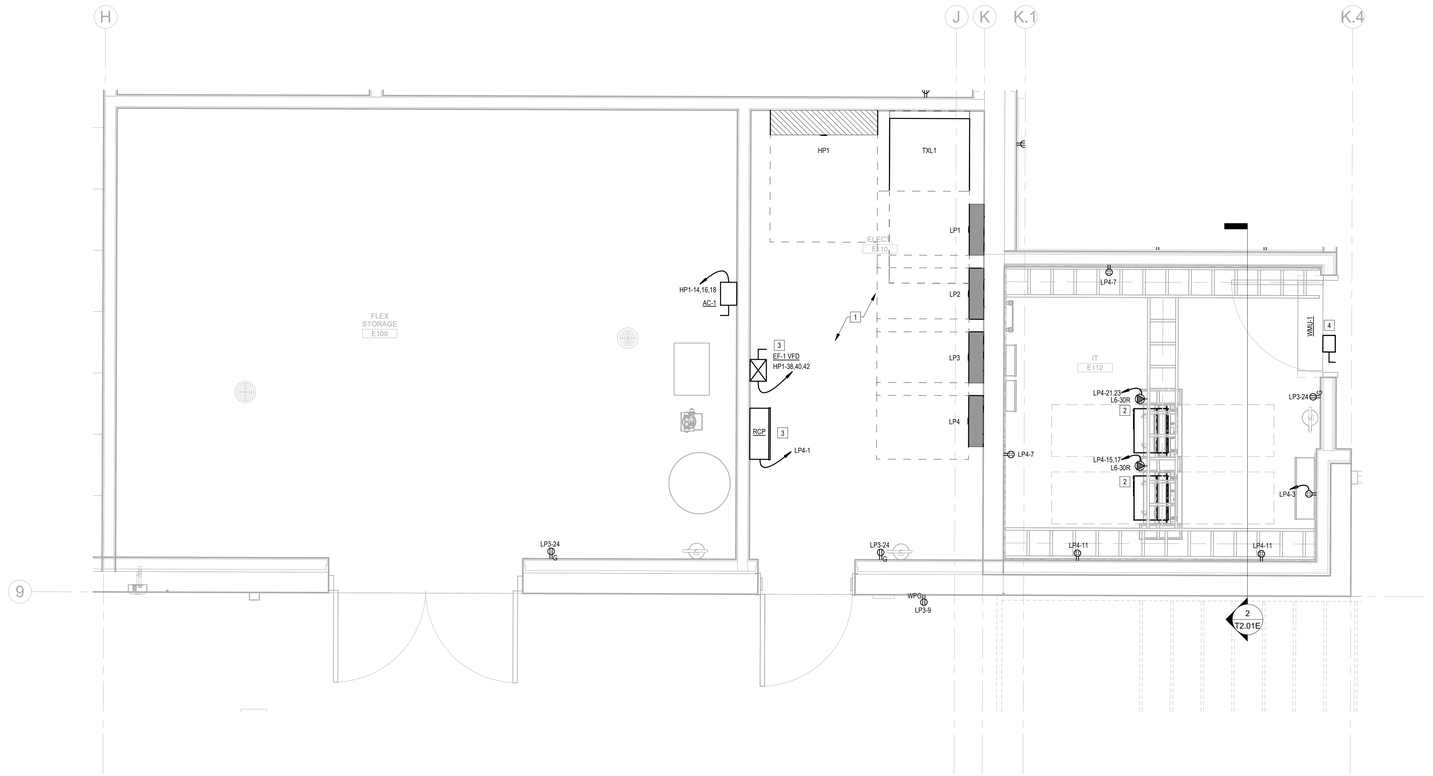
FLOOR PLAN - EVIDENCE/FIRING RANGE - FIRE ALARM

SHEET NUMBER

E3.01E

KEYNOTES:

1. THE ELECTRICAL CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF DEPICTING THE LOCATION OF ALL ELECTRICAL SWITCHGEAR/EQUIPMENT SHOWING THAT CODE REQUIRED CLEARANCES ARE MAINTAINED.
2. PROVIDE L6-30R RECEPTACLE ABOVE DATA CABINET. MOUNT RECEPTACLE TO LADDER RACK OR PROVIDE UNISTRUT FOR MOUNTING OF RECEPTACLE. COORDINATE FINAL CONNECTION REQUIREMENTS WITH CITY OF RIVIERA BEACH I.T. TEAM PRIOR TO ROUGH-IN.
3. FIRING RANGE MECHANICAL EQUIPMENT CONTROL PANELS BY OTHERS. COORDINATE FINAL LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN.
4. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. PROVIDED STRANDED WIRING BACK TO OUTDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.



1 ENLARGED MEP ROOMS
1/2" = 1'-0"

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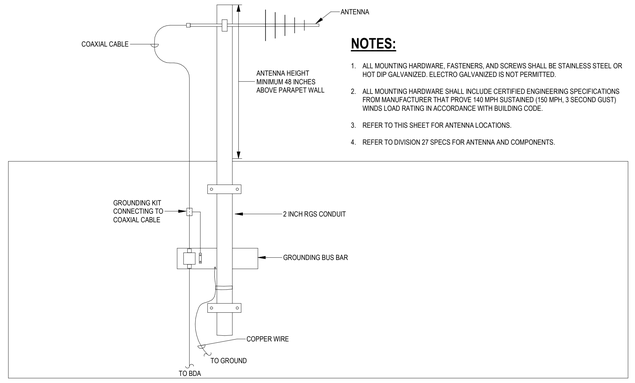
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
ENLARGED PLANS - ELECTRICAL

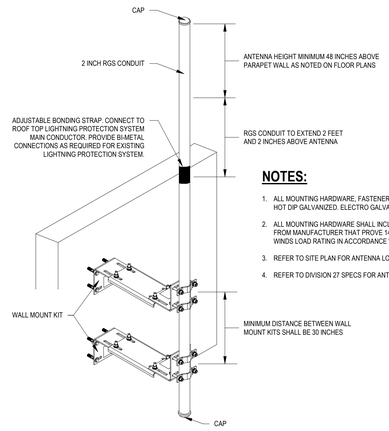
SHEET NUMBER
E4.01E



NOTES:

1. ALL MOUNTING HARDWARE, FASTENERS, AND SCREWS SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED. ELECTRO GALVANIZED IS NOT PERMITTED.
2. ALL MOUNTING HARDWARE SHALL INCLUDE CERTIFIED ENGINEERING SPECIFICATIONS FROM MANUFACTURER THAT PROVE 140 MPH SUSTAINED (150 MPH, 3 SECOND GUST) WINDS LOAD RATING IN ACCORDANCE WITH BUILDING CODE..
3. REFER TO THIS SHEET FOR ANTENNA LOCATIONS.
4. REFER TO DIVISION 27 SPECS FOR ANTENNA AND COMPONENTS.

2 TYPICAL 400/700-800 MHZ ANTENNA - EXTERIOR - WALL MOUNTED
NTS



NOTES:

1. ALL MOUNTING HARDWARE, FASTENERS, AND SCREWS SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED. ELECTRO GALVANIZED IS NOT PERMITTED.
2. ALL MOUNTING HARDWARE SHALL INCLUDE CERTIFIED ENGINEERING SPECIFICATIONS FROM MANUFACTURER THAT PROVE 140 MPH SUSTAINED (150 MPH, 3 SECOND GUST) WINDS LOAD RATING IN ACCORDANCE WITH BUILDING CODE.
3. REFER TO SITE PLAN FOR ANTENNA LOCATIONS.
4. REFER TO DIVISION 27 SPECS FOR ANTENNA AND COMPONENTS.

1 TYPICAL 400/700-800 MHZ ANTENNA - EXTERIOR - WALL MOUNTED
NTS

LIGHTNING PROTECTION SYSTEM

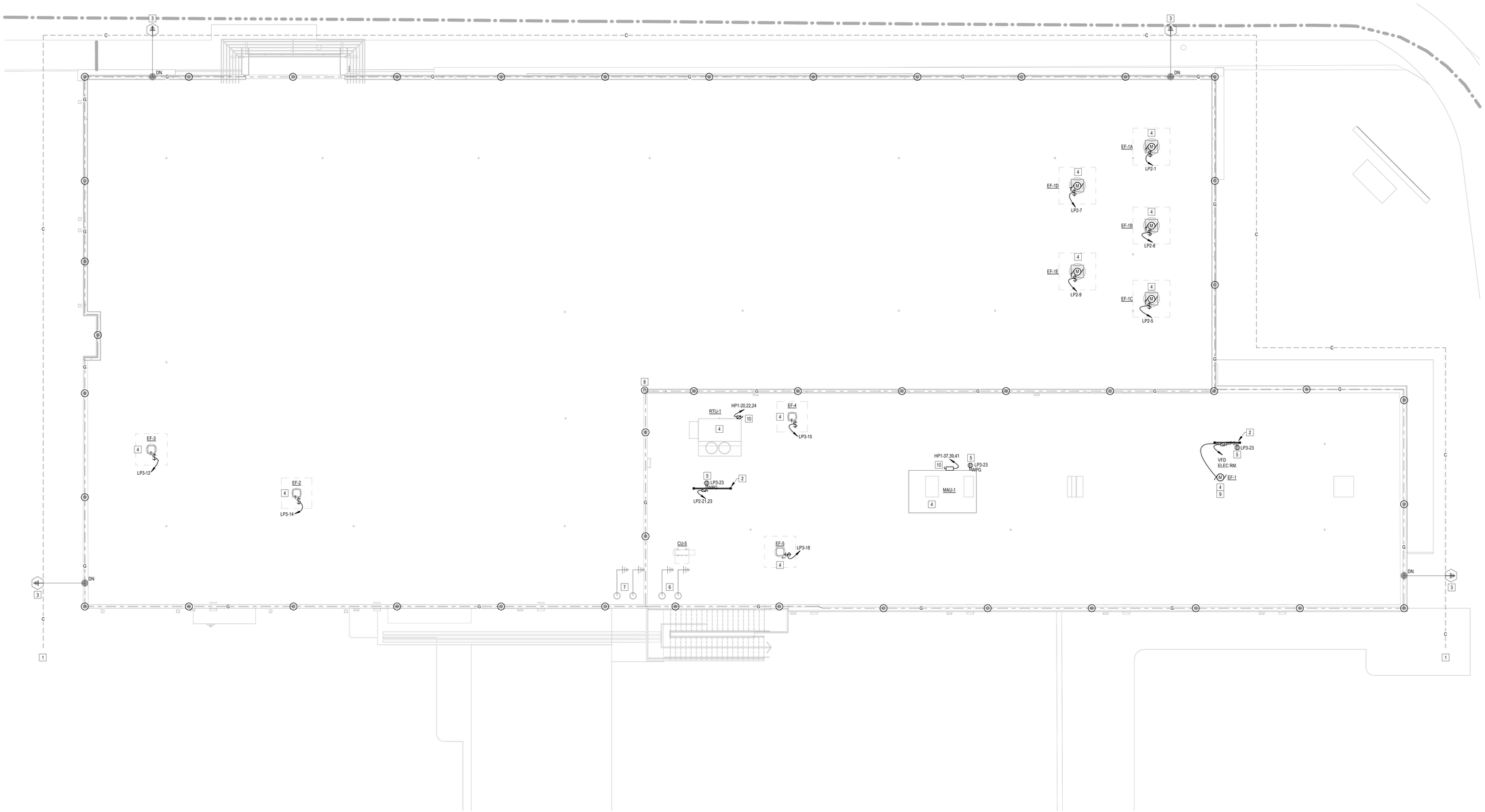
- C — COUNTERPOISE CONDUCTOR - CABLE SIZED PER NFPA 780
- G — MAIN L.P. CONDUCTOR - CABLE SIZED PER NFPA 780
- B — BONDING CONDUCTOR - CABLE SIZED PER NFPA 780
- AIR TERMINAL
  * (A) FLAT SURFACE BASE
  (B) FLAT WALL MOUNTED PARAPET
  (C) SWIVEL BASE
  (D) RIDGE SADDLE BASE (EXPOSED)
  (E) RIDGE SADDLE BASE (CONCEALED)
  (F) CONCEALED AIR TERMINAL BASE ASSEMBLY
- MECHANICAL OR EXOTHERMIC BOND
- EXOTHERMIC TEE CONNECTION
- DN — DOWN CONDUCTOR LOCATION

GENERAL NOTES:

1. EXTEND COUNTERPOISE SYSTEM TO ADMIN BUILDING.
2. PROVIDE UNISTRUT FRAME FOR MOUNTING OF ELECTRICAL EQUIPMENT TO SERVE ROOF MOUNTED EQUIPMENT. COORDINATE FINAL LOCATION WITH OTHER TRADES AND ROOFING CONTRACTOR PRIOR TO ROUGH-IN.
3. PROVIDE GROUND INSPECTION WELL.
4. BOND TO ALL MECHANICAL EQUIPMENT, DRAINS...ETC LOCATED ON ROOF.
5. PROVIDE LOCKABLE DIE-CAST IN-USE ALUMINUM COVER. (TYPICAL FOR ALL EXTERIOR WP/G RECEPTACLES)
   BOD: INTERMATIC WP1250MVXD
6. PROVIDE (2) 2" RGS CONDUITS WITH WEATHER HEADS FOR FUTURE USE. TERMINATE IN CONDUITS ABOVE IT ROOM.
7. PROVIDE (2) 2" RGS CONDUITS WITH WEATHER HEADS FOR FUTURE USE. TERMINATE IN CONDUITS ABOVE ELECTRICAL ROOM.
8. COORDINATE FINAL LOCATION OF LIGHTING PHOTOCELL ON ROOF WITH OTHER TRADES PRIOR TO ROUGH-IN.
9. PROVIDE POWER CONNECTION TO EXHAUST FAN. DISCONNECT SWITCH PROVIDED BY MECHANICAL CONTRACTOR. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
10. DISCONNECT SWITCH PROVIDED BY EQUIPMENT MANUFACTURER. SHOWN FOR DESIGN PURPOSES ONLY.

GENERAL NOTES:

1. PROVIDE A COMPLETE LIGHTNING PROTECTION SYSTEM PER CURRENT NFPA 780 AND UL96A STANDARDS.
2. THIS LIGHTNING PROTECTION DRAWING IS FOR DIAGRAMMATIC PURPOSES ONLY. SHOP DRAWINGS ISSUED BY A CERTIFIED LIGHTNING PROTECTION CONTRACTOR SHALL BE USED FOR BIDDING PURPOSES AND SHALL TAKE PRECEDENCE.
3. THE COMPLETED INSTALLATION SHALL MEET THE INSTALLATION REQUIREMENTS FOR LIGHTNING PROTECTION SYSTEMS, UL96A-OF UNDERWRITERS LABORATORIES - LATEST EDITION. THE UL MASTER LABEL SHALL BE FURNISHED TO THE OWNER UPON COMPLETION.
4. COPPER LIGHTNING PROTECTION SYSTEM COMPONENTS SHALL NOT BE MOUNTED ON ALUMINUM ROOF OR SIDING OR OTHER ALUMINUM SURFACES AND VICE VERSA.
5. METAL BODIES WITHIN 6'-0" OF THE LIGHTNING PROTECTION SYSTEM SHALL BE BONDED TO THE SYSTEM IN ACCORDANCE WITH UL96A - LATEST EDITION.
6. UNDERGROUND METALLIC PIPING ENTERING THE BUILDING SHALL BE BONDED TO THE NEAREST DOWN CONDUCTOR OR GROUND ELECTRODE.
7. ADHESIVE USED WITH ADHESIVE AIR TERMINAL BASES AND CONDUCTOR FASTENERS SHALL BE COMPATIBLE WITH ROOFING MEMBRANE - VERIFY WITH ROOFING CONTRACTOR.
8. ROOF TOP EQUIPMENT NOT SHOWN ON THIS DRAWING SHALL BE PROTECTED AS REQUIRED TO MEET THE REQUIREMENTS LISTED ABOVE INCLUDING THE INSTALLATION OF AIR TERMINALS AND OR BONDING. IF THE METAL THICKNESS OF AN OBJECT IS 3/16" OR GREATER, AIR TERMINALS MAY BE ELIMINATED IF THE OBJECT IS PROPERLY CONNECTED TO THE SYSTEM.
9. THE DESIGNS SHOWN FOR THESE SYSTEMS ARE SCHEMATIC AND ARE INTENDED TO SHOW BASIC SYSTEM DESIGN. CONTRACTOR SHALL VERIFY DIMENSIONS AND SITE CONDITIONS AND PROVIDE SYSTEMS THAT COMPLY WITH CODE REQUIREMENTS.
10. ALL LIGHTNING CONDUCTORS ARE TO MAINTAIN A HORIZONTAL OR DOWNWARD PATH. ALL BENDS IN THE CONDUCTOR SHALL HAVE A RADIUS BEND OF 8" OR GREATER, AND SHALL HAVE AN ANGLE BEND OF 90 DEGREES OR GREATER.
11. ALL LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED NOT MORE THAN 3' MAXIMUM SPACING.
12. COORDINATE ROOF PENETRATIONS WITH ROOFING CONTRACTOR TO MAINTAIN ROOFING SYSTEM INTEGRITY AND WARRANTY.



OVERALL ROOF PLAN - ELECTRICAL 1/8" = 1'-0" (32)

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PROJECT STATUS

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PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL
33404

PROJECT NUMBER

1007657.00

SHEET TITLE

ROOF PLAN - EVIDENCE/FIRING RANGE - ELECTRICAL

SHEET NUMBER

E4.02E

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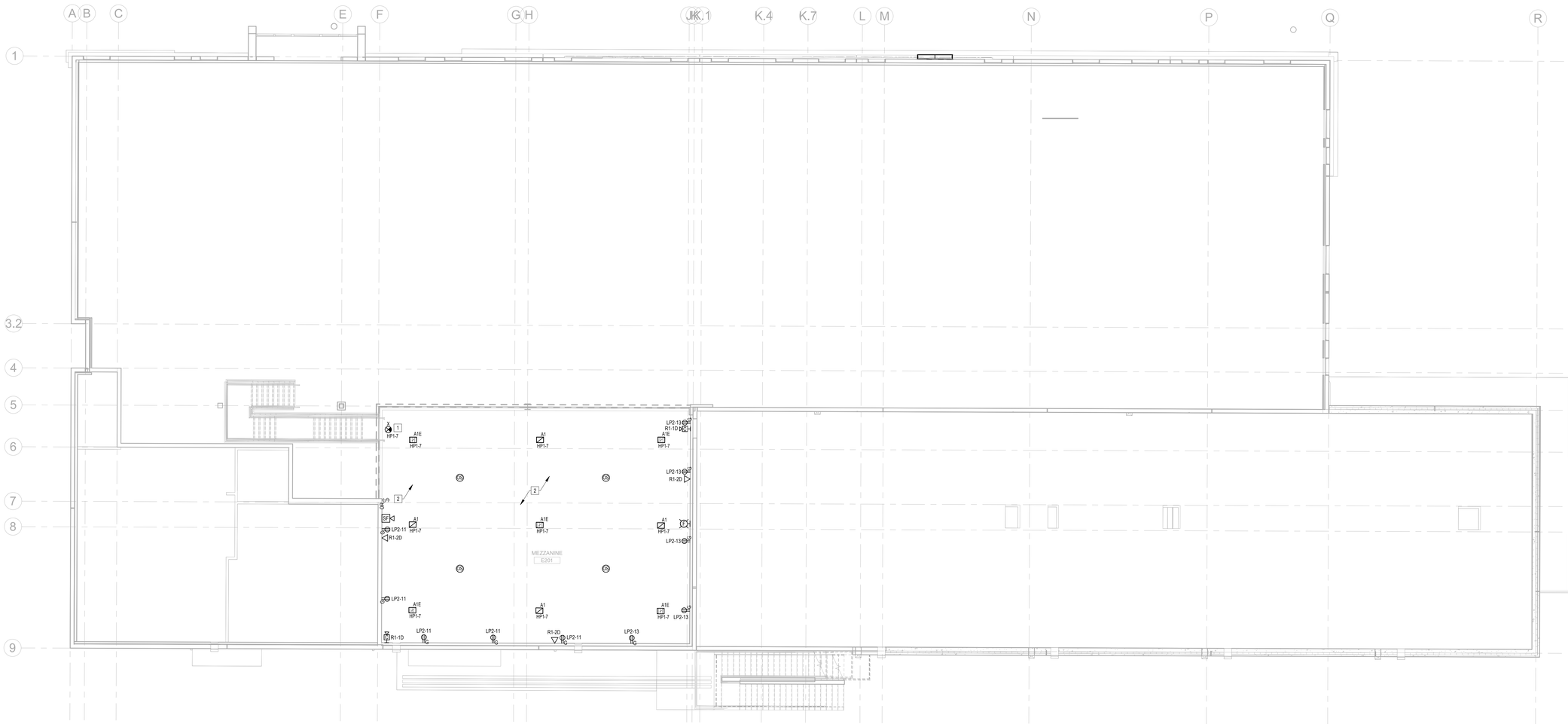
KEYNOTES:

1 WIRE ALL EXIT LUMINAIRES AHEAD OF ALL SWITCHING. (TYPICAL)

2 MEZZANINE HIGHBAY LUMINAIRES CONTROLLED VIA OCCUPANCY SENSOR WITH OVERRIDE SWITCHES.



MEZZANINE PLAN - ELECTRICAL 1/8" = 1'-0" (1)

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PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

MEZZANINE PLAN - EVIDENCE/FIRING RANGE - ELECTRICAL

SHEET NUMBER

E4.03E

DRY-TYPE TRANSFORMER SCHEDULE

480V/3-3φ-3W				208Y/120V-3φ-4W				
MK.	LOAD	OCPD	FEEDER	LOAD	OCPD	FEEDER		GND
A	112.5kVA/135A	175A	(3) #4/0 AWG AL, (1) #4 AL GND, 2"C.	112.5kVA/312A	400A	(2) SETS OF (4) #250 KCMIL AL, (1) #1/0 AL GND, 3"C.		#1/0 AL, 1" PVC

GENERAL NOTES:

1. ANY TRANSFORMER WIRE SIZES LISTED ON THE ONE-LINE DIAGRAM SHALL TAKE PRECEDENCE.
2. SECONDARY OVERCURRENT PROTECTION SHALL BE LOCATED WITHIN TEN FEET OF THE TRANSFORMER SECONDARY TERMINALS.
3. 500 KCMIL AND LARGER CONDUCTORS SHALL BE COORDINATED WITH PROPER TERMINATION LUGS OR PROVIDED WITH ADAPTERS AS REQUIRED TO COORDINATE WITH STANDARD BREAKER LUG SIZES.
4. THE TRANSFORMER GROUNDING ELECTRODE CONDUCTOR SHALL CONNECT FROM THE TRANSFORMER NEUTRAL AND TRANSFORMER EQUIPMENT GROUND TO THE COLD WATER LINE, BUILDING STEEL, REBAR AND GROUND ROD WHERE AVAILABLE PER NEC AND LOCAL AUTHORITY HAVING JURISDICTION.
5. TRANSFORMER SYSTEM BONDING JUMPER RUN FROM TRANSFORMER NEUTRAL TO PANEL GROUND BAR SHALL BE SIZED PER TABLE 250-66 BASED ON FEEDER CONDUCTOR SIZE PER NEC 250.30(A) (1) & 250.28 (D).
6. ALL FLOOR MOUNTED TRANSFORMERS SHALL BE PROVIDED WITH A 4" CONCERETE HOUSE KEEPING PAD.

FEEDER SCHEDULE

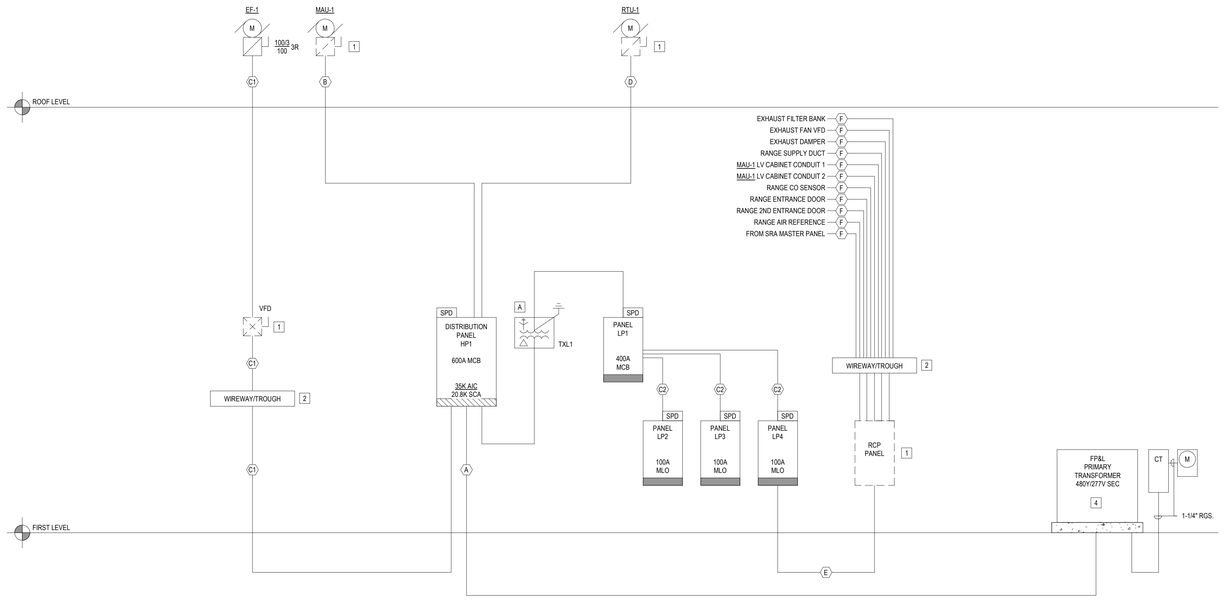
MARK	OCPD	CONDUCTOR SIZE	RACEWAY
(A)	600A	(2) SETS OF (4) #350 KCMIL AL.	3-1/2" EA. + (1) 3-1/2" SPARE
(B)	150A	(3) #3/0 AWG AL, (1) #4 AL GND.	2".
(C1)	100A	(3) #1 AWG AL, (1) #6 AL GND.	1-1/2".
(C2)	100A	(4) #1 AWG AL, (1) #6 AL GND.	1".
(D)	60A	(3) #6 AWG CU, (1) #10 CU GND.	1".
(E)	15A	(2) #12 AWG CU, (1) #12 CU GND.	3/4".
(F)		LV CONTROL CABLING BY OTHERS.	3/4".

GENERAL NOTES:

1. BASIS OF DESIGN FOR POWER DISTRIBUTION EQUIPMENT IS SQUARE-D. IF CONTRACTOR SUBMITS APPROVED ALTERNATES, CONTRACTOR SHALL VERIFY EQUIPMENT DIMENSIONS MEET CLEARANCE REQUIREMENTS.
2. BASIS OF DESIGN FOR GENERATOR IS GENERAC. IF CONTRACTOR SUBMITS APPROVED ALTERNATES, CONTRACTOR SHALL VERIFY EQUIPMENT DIMENSIONS MEET CLEARANCE REQUIREMENTS.
3. BASIS OF DESIGN FOR TRANSFER SWITCHES IS ASCO. IF CONTRACTOR SUBMITS APPROVED ALTERNATES, CONTRACTOR SHALL VERIFY EQUIPMENT DIMENSIONS MEET CLEARANCE REQUIREMENTS.
4. PROVIDE FIELD MARKING OF THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE EQUIPMENT PER NEC 110.24. FIELD MARKING SHALL BE LEGIBLE AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
5. SERVICE TRANSFORMER PROVIDED BY FLORIDA POWER AND LIGHT. CONCRETE PAD SHALL BE PROVIDED BY CONTRACTOR. COORDINATE PAD SIZE AND OTHER REQUIREMENTS WITH THE UTILITY. COORDINATE ELECTRICAL SERVICE WITH THE UTILITY PROVIDER PRIOR TO START OF ANY WORK.
6. ALL DISTRIBUTION PANELS & PANELBOARDS SHALL BE FULLY RATED.
7. PROVIDE ARC FLASH HAZARD LABELS ON ALL DISTRIBUTION PANELS & PANELBOARDS IN ACCORDANCE WITH NFPA 70E 130.5(D).
8. PERFORM SHORT-CIRCUIT AND COORDINATION STUDY. SET THE FIELD ADJUSTABLE CIRCUIT BREAKERS TRIP RANGES. ELECTRICAL CONTRACTOR SHALL HIRE THE MANUFACTURER OF THE POWER DISTRIBUTION SYSTEM TO SET TIME CURRENT CURVES ON THE MAIN CIRCUIT BREAKER AND ASSOCIATED BRANCH CIRCUIT BREAKERS FOR THE MAIN DISTRIBUTION PANELS & PANELBOARDS SO THAT THEY ARE SELECTIVELY COORDINATED WITH EACH OTHER. THE INTERRUPTING RATING OF ALL ELECTRICAL EQUIPMENTS SHALL BE BASED ON THE DATA RESULTS FROM THE SHORT-CIRCUIT & COORDINATION STUDY
9. GENERATOR SHALL BE IN ACCORDANCE WITH NFPA 37, 70, 110 AND CAPABLE OF TRANSFERRING POWER WITHIN 10 SECONDS.
10. 500 KCMIL AND LARGER CONDUCTORS SHALL BE COORDINATED WITH PROPER TERMINATION LUGS OR PROVIDED WITH ADAPTERS AS REQUIRED BY SWITCHGEAR MAUFACTURER TO COORDINATE WITH STANDARD BREAKER LUG SIZES.
11. ALL FLOOR MOUNTED GENERATORS, SWITCHBOARDS, PANELBOARDS AND TRANSFORMERS SHALL BE PROVIDED WITH 4" CONCRETE HOUSE KEEPING PAD.

KEYNOTES:

1. BY EQUIPMENT MANUFACTURER. SHOWN FOR COORDINATION PURPOSES ONLY.
2. EC TO PROVIDE WIREWAY/TROUGH. COORDINATE FINAL SIZE AND CONNECTION REQUIREMENTS WITH FIRING RANGE MANUFACTUER AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
3. EC TO PROVIDE A DEDICATED RACEWAY FROM RECIRCULATION VENTILATION CONTROL PANEL (RCP) TO EQUIPMENT LISTED. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE MANUFACTURER AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
4. UTILITY TRANSFORMER SECONDARY SERVICES ARE DIAGRAMMATIC ONLY. EC SHALL COORDINATE INCOMING SERVICES FROM UTILITY TRANSFORMER(S) WITH FPL PRIOR TO THE START OF ANY UNDERGROUND WORK.



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RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

RISER DIAGRAM - ELECTRICAL

SHEET NUMBER

E5.01E

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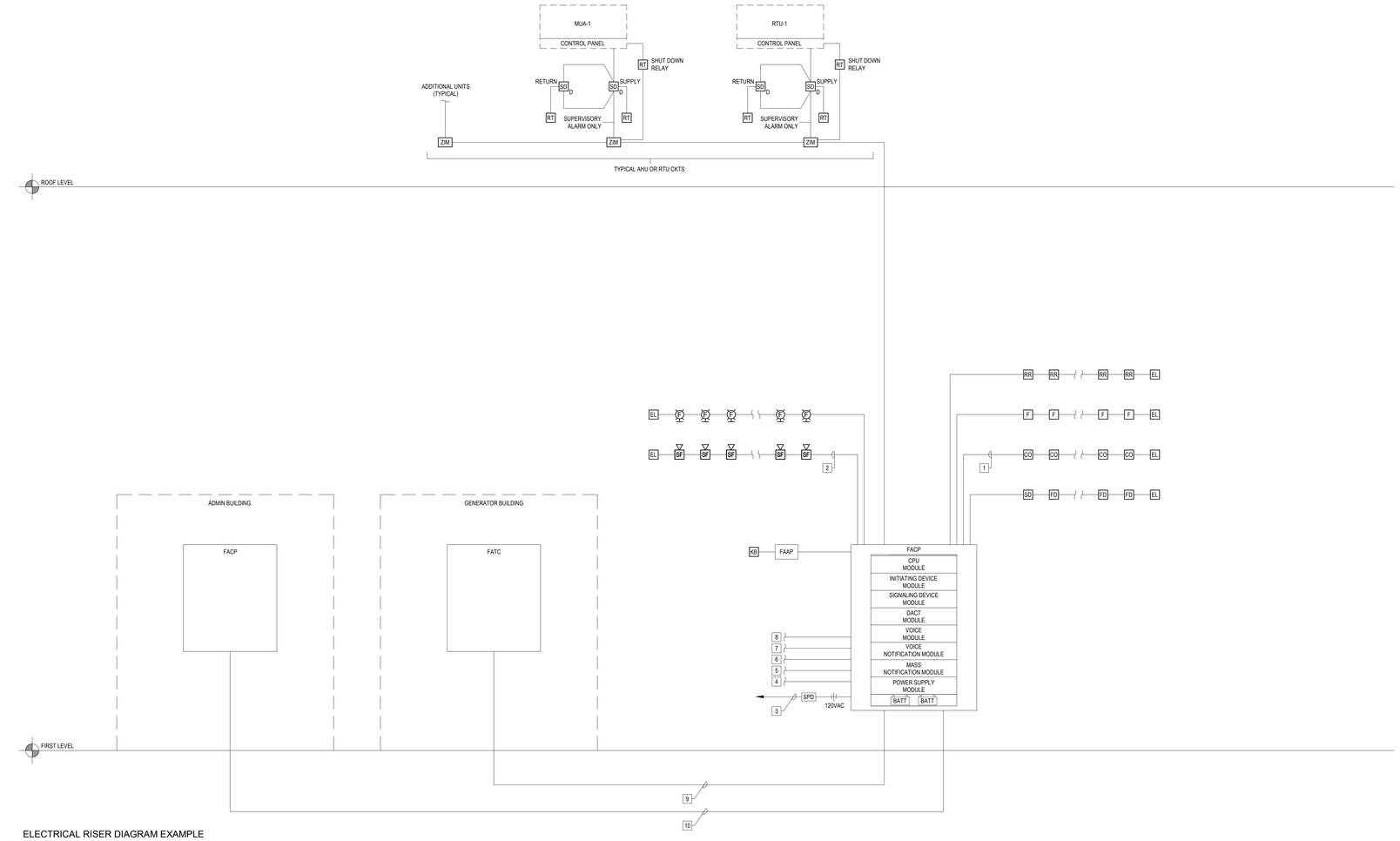

ELECTRICAL RISER DIAGRAM EXAMPLE
1
NTS

KEYNOTES:

1. 3/4" C., WITH INITIATING DEVICE CIRCUIT WIRING AS REQUIRED BY THE SYSTEM MANUFACTURER. (TYP).
2. 3/4" C., WITH NOTIFICATION APPLIANCE CIRCUIT WIRING AS REQUIRED BY THE SYSTEM MANUFACTURER. (TYP)
3. 3/4"C., 2 #12 & 1 #12 GND HOMERUN TO PANELBOARD. CIRCUIT BREAKER SHALL BE PROVIDED WITH "RED" OPERATING HANDLE AND A "LOCK-ON" DEVICE.
4. PROVIDE 1" CONDUIT FOR DACT CIRCUIT CABLING.
5. PROVIDE 1" CONDUIT FOR INTEGRATION WITH OWNER'S ACCESS CONTROL SYSTEM. COORDINATE WITH OWNER & ARCHITECT.
6. PROVIDE 1" CONDUIT FOR INTEGRATION WITH OWNER BDA/ERCES SYSTEM. COORDINATE ADDITIONAL REQUIREMENTS WITH OWNER AND LOW VOLTAGE CONTRACTOR PRIOR TO ROUGH-IN.
7. 3/4" C. FOR CONNECTION TO WIRELESS DACT TRANSMITTER. COORDINATE ADDITIONAL REQUIREMENTS WITH OWNER AND AHJ PRIOR TO ROUGH-IN.
8. PROVIDE 1" CONDUIT TO LIGHTING CONTROL PANEL. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH EC PRIOR TO ROUGH-IN.
9. PROVIDE 1-1/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO GENERATOR BUILDING FIRE ALARM TERMINAL CABINET.
10. PROVIDE 1-1/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO ADMIN BUILDING.

FIRE ALARM GENERAL NOTES

NOTE: UNLESS OTHERWISE NOTED ON PLANS

1. ALL WIRING SHALL BE POWER LIMITED
2. SEPARATE ZONES & FUNCTIONS MAY BE RUN IN THE SAME CONDUIT.
3. INSTALLATION SHALL COMPLY WITH NFPA CODE'S EDITIONS AS PUBLISHED IN FAC 69A-60.
4. INSTALLATION SHALL COMPLY WITH FLORIDA FIRE PREVENTION CODE 2023 EDITION.
5. CONDUIT, AS APPLICABLE SHALL BE 3/4" MINIMUM, UNLESS NOTED OTHERWISE, WITH A MAXIMUM FILL OF 40%. COMPLY WITH NEC. CONDUIT, AS APPLICABLE SHALL BE 1" MINIMUM WITH A MAXIMUM FILL OF 40%. COMPLY WITH NEC FOR CONDUIT THAT IS RUN UNDERGROUND.
6. PROVIDE ACTUAL CONDUIT SIZE REQUIRED ON SHOP DRAWINGS.
7. WIRING SHALL BE MINIMUM SIZE #16 THHN CU.
8. ALL CONDUIT SHALL BE FURNISHED WITH NYLON PULL STRING.
9. ALL AHU SHUTDOWN DEVICES MUST BE LOCATED WITHIN THREE FEET OF THE AHU STARTER.
10. ALL CABLE SHALL HAVE ZONE NUMBER AT BOTH ENDS, AND ALL RETURN CABLE SHALL BE TAPED.
11. SYSTEM SHALL BE GROUNDED PER MANUFACTURERS SPECIFICATIONS.
12. SYSTEM COMPONENTS SHALL BE UL LISTED AND COMPATIBLE.
13. SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN 3' OF A/C DIFFUSERS.
14. CIRCUITS LEAVING THE BUILDING MUST HAVE SURGE PROTECTION INSTALLED. SURGE PROTECTION TO BE PROVIDED FOR 120VAC POWER, AND TELEPHONE CONNECTIONS TO FIRE ALARM.
15. FIRE ALARM PANEL & ANY ASSOCIATED FIRE ALARM EQUIPMENT MUST BE FED WITH A 120VAC, SINGLE PHASE, 20 AMP, DEDICATED BREAKER LOCKED AND MARKED.
16. SPEAKERS TO SOUND AN AUTOMATIC PRE-RECORDED MESSAGE.
17. STROBES TO BE SYNCHRONIZED.

IT SHALL BE UNDERSTOOD THAT THE CONDUIT SHOWN ON THESE DRAWINGS ARE DRAWN DIAGRAMMATICALLY. DUE TO UNKNOWN FIELD CONDITIONS CONDUIT ROUTING MAY BE INSTALLED DIFFERENTLY THAN SHOWN. WORST CASE SCENARIOS WERE CONSIDERED WHEN CALCULATING THE VOLTAGE DROPS AND CURRENT LIMITATIONS DURING THE DESIGN PROCESS. LUMP SUM METHOD WAS USED TO CALCULATE ALLOWABLE VOLTAGE DROP. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS.

SEQUENCE OF OPERATIONS

UPON ACTIVATION OF ANY MANUAL STATION THE FOLLOWING SHALL OCCUR:

1. ALL SPEAKERS WILL SOUND AN AUTOMATIC PRE-RECORDED MESSAGE UNTIL SYSTEM IS SILENCED.
2. ALL STROBES WILL FLASH UNTIL SYSTEM IS SILENCED.
3. AN ALARM SIGNAL SHALL BE SENT TO THE FACP. DISPLAY SYSTEM POINT NUMBER, AND POINT DESCRIPTION.
4. A SIGNAL SHALL BE SENT TO THE REMOTE SUPERVISING STATION VIA DACT.

UPON ACTIVATION OF ANY AUTOMATIC DEVICE THE FOLLOWING SHALL OCCUR:

1. ALL SPEAKERS WILL SOUND AN AUTOMATIC PRE-RECORDED MESSAGE UNTIL SYSTEM IS SILENCED.
2. ALL STROBES WILL FLASH UNTIL SYSTEM IS SILENCED.
3. AN ALARM SIGNAL SHALL BE SENT TO THE FACP. DISPLAY SYSTEM POINT NUMBER, AND POINT DESCRIPTION.
4. A SIGNAL SHALL BE SENT TO THE REMOTE SUPERVISING STATION VIA DACT.

UPON ACTIVATION OF A DUCT SMOKE DETECTOR, THE FOLLOWING SHALL OCCUR:

1. ALL SPEAKERS WILL SOUND AN AUTOMATIC PRE-RECORDED MESSAGE UNTIL SYSTEM IS SILENCED
2. ALL STROBES WILL FLASH UNTIL SYSTEM IS SILENCED.
3. A SUPERVISORY SIGNAL SHALL BE SENT TO THE FACP. DISPLAY SYSTEM POINT NUMBER, AND POINT DESCRIPTION.
4. SHUT DOWN ASSOCIATED AIR-HANDLING EQUIPMENT.
5. A SUPERVISORY SIGNAL SHALL BE SENT TO THE REMOTE SUPERVISING STATION VIA DACT.

UPON ACTIVATION OF A SPRINKLER SUPERVISORY DEVICE, THE FOLLOWING SHALL OCCUR:

1. A SUPERVISORY SIGNAL SHALL BE SENT TO THE FACP. DISPLAY SYSTEM PONT NUMBER AND POINT DESCRIPTION.
2. A SUPERVISORY SIGNAL SHALL BE SENT TO THE REMOTE SUPERVISING STATION VIA DACT.

UPON A TROUBLE CONDITION THE FOLLOWING SHALL OCCUR:

1. TROUBLE TONE SHALL SOUND AT FACP. DISPLAY DESCRIPTION OF TROUBLE CONDITION.
2. A TROUBLE SIGNAL SHALL BE SENT TO THE REMOTE SUPERVISING STATION VIA DACT.

CLIENT

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DRAWING HISTORY

No	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
FIRE ALARM RISER DIAGRAM - ELECTRICAL

SHEET NUMBER
E5.02E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
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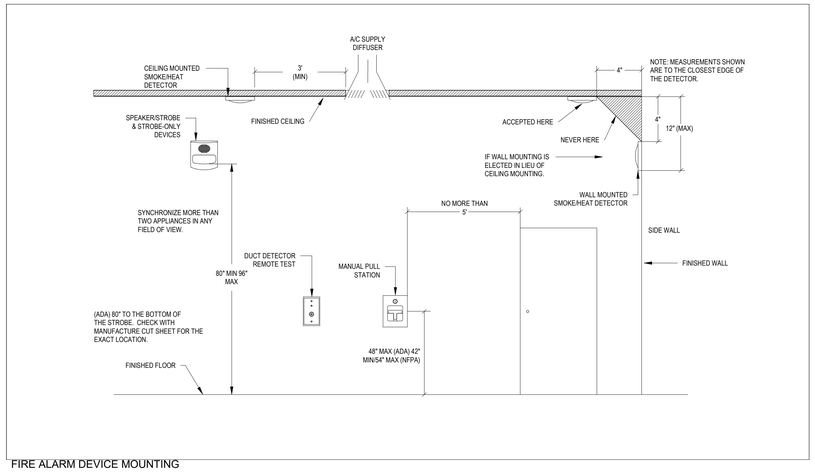
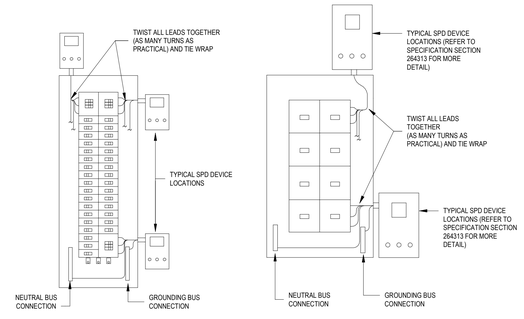


9 FIRE ALARM DEVICE MOUNTING HEIGHTS DETAIL
NTS

10 FIRE ALARM WALL DEVICE MOUNTING DETAIL
NTS



11 SPD INSTALLATION DETAIL
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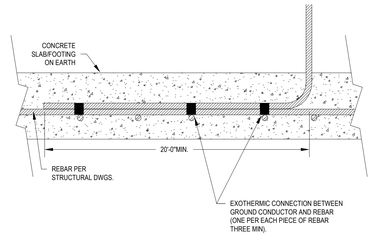
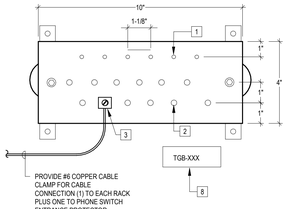
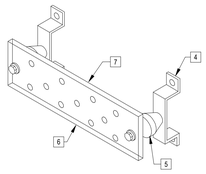


5 TYPICAL "UFER" GROUND
NTS





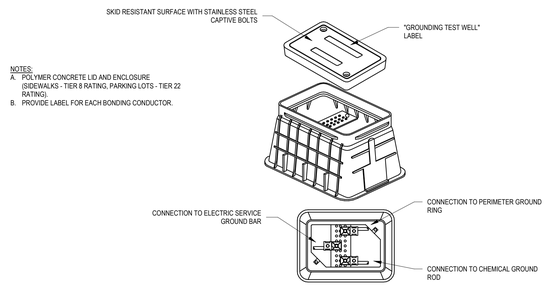
6 TYPICAL GROUND BUS BAR DETAIL
NTS

GENERAL:

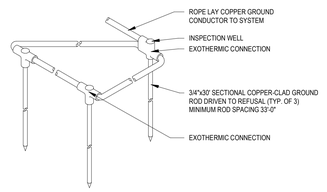
1. ALL HARDWARE (BOLTS, NUTS WASHERS, ETC.) SHALL BE SOLID COPPER OR BRONZE. COPPER PLATING SHALL NOT BE ACCEPTABLE.
2. BUSBAR SHALL BE 1/4" THICK(MINIMUM).
3. INCREASE LENGTH OF BUSBAR, FOR NUMBER OF CONNECTIONS, AS REQUIRED TO MAINTAIN CORRECT SPACING BETWEEN LUGS.

NOTE XX:

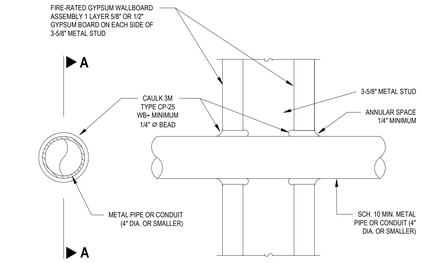
1. #6/32 (TYPICAL)
2. #9/32 (TYPICAL)
3. PROVIDE COPPER CABLE CLAMPS FOR CABLE CONNECTIONS (BY DIV.26).
4. STANDOFF BRACKET
5. INSULATOR
6. CADWELDS44A018 OR EQUAL
7. COPPER BUSBAR
8. PROVIDE WHITE CORE BAKELITE NAMEPLATE FASTENED TO A WALL/SURFACE BELOW BUSBAR AT EACH FLOOR, WITH DESIGNATION ENGRAVED THEREON IN 1/2" HIGH LETTERS.



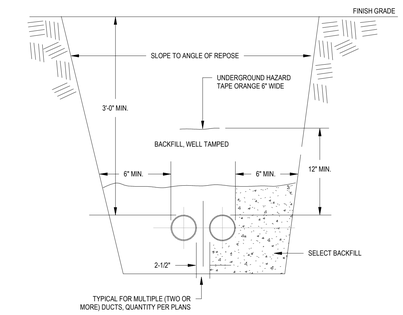
7 GROUND INSPECTION WELL
NTS



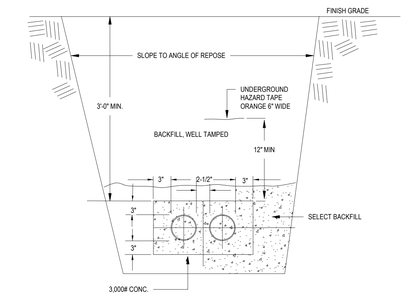
8 TYPICAL GROUND ARRAY DETAIL
NTS



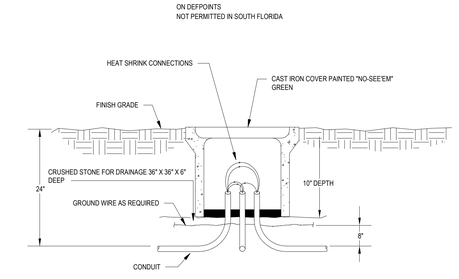
1 ONE HOUR FIREWALL PENETRATION DETAIL
NTS



2 TYPICAL TRENCH DETAIL
NTS



3 TYPICAL ENCASED DUCT DETAIL
NTS



4 SPLICE BOX SECTION
NTS

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DETAILS - ELECTRICAL

SHEET NUMBER

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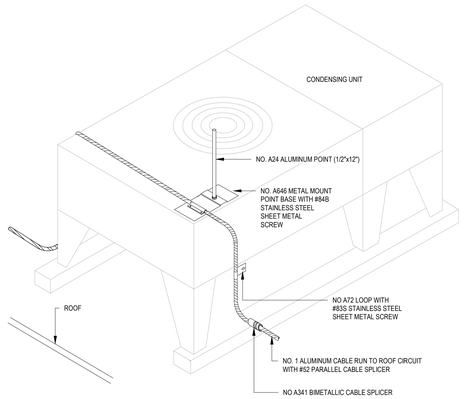
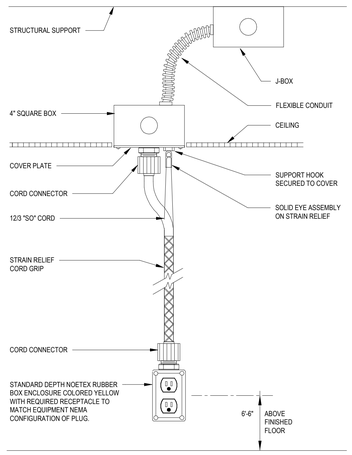
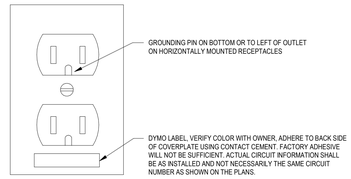


13 TYPICAL AIR TERMINAL ON MECHANICAL EQUIPMENT DETAIL
NTS



9 DROP CORD DETAIL
NTS

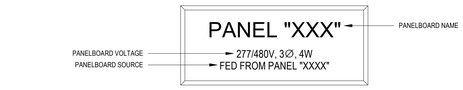


NOTES:

1. PROVIDE GREEN GROUND WIRE IN ALL RECEPTACLE CIRCUITS. CONNECT TO GROUND BUS IN PANEL
2. DO NOT INSTALL RECEPTACLES,COMPUTER OR TELEPHONE OUTLETS BACK TO BACK. INSTALL IN ADJACENT STUD CAVITIES, TO REDUCE SOUND TRANSMISSION.

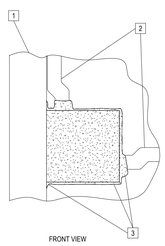
5 TYPICAL RECEPTACLE IDENTIFICATION
NTS

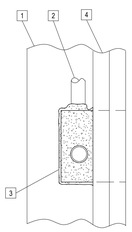
TYPICAL 120/208V PANELBOARD



TYPICAL 277/480V PANELBOARD

1 PANELBOARD NAMEPLATE
NTS

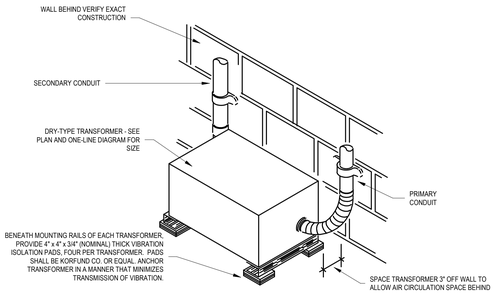




NOTES:
A. ELECTRICAL BOX MUST BE WIPED CLEAN OF JOBSITE DIRT/DUST INCLUDING ALL SIDES (TOP AND BOTTOM).
B. BEGIN INSTALLATION BY INSTALLING THE PUTTY PAD FROM THE BOTTOM OF THE BOX TO THE TOP OF THE BOX.
C. DESIGN BASED ON 3M FIRE PROTECTION PRODUCTS OR APPROVED EQUAL (HILTISTI).

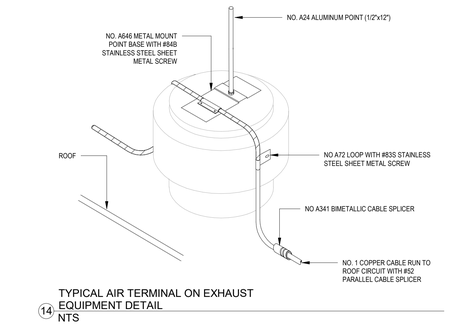
MATERIALS:
1. STEEL OR WOOD STUDS.
2. CONDUIT (EMT).
3. 3M FIRE BARRIER MOLDABLE PUTTY.
4. 1 OR 2 HOUR FIRE RATED GYPSUM WALLBOARD ASSEMBLY.

6 WALL OPENING PROTECTIVE MATERIALS ON DEVICE BOXES
NTS

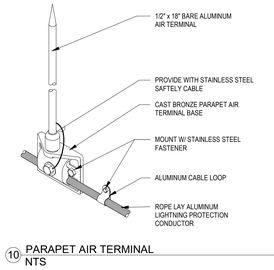


NOTES:
A. THE FINAL 12" TO 18" OF RACEWAY CONNECTION TO BOTH PRIMARY AND SECONDARY SIDES SHALL BE "SEALTITE" TYPE UA FLEXIBLE CONDUIT OR EQUAL, FOR VIBRATION ISOLATION.
B. ALL FLOOR - MOUNTED TRANSFORMERS 75KVA AND HIGHER TO HAVE A 4" HIGH REINFORCED CONCRETE PAD.

2 PANELBOARD NAMEPLATE
NTS



14 TYPICAL AIR TERMINAL ON EXHAUST EQUIPMENT DETAIL
NTS



10 PARAPET AIR TERMINAL
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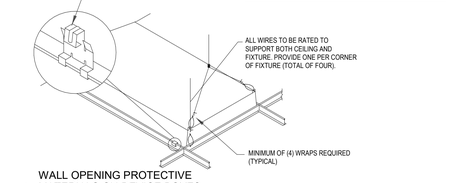
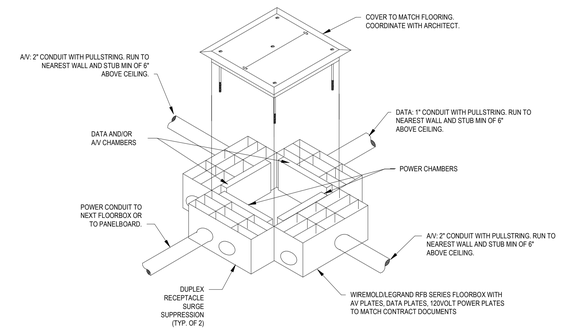


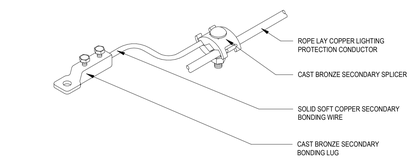
NOTE:
TYPICAL FOR ALL LED FIXTURES. PROVIDE 200 # TEST WIRE AT EACH CORNER OF FIXTURE WITH A CADDY # 515 CLIP (TOTAL OF 4) PER NEC ART 300.11(A) & 410.36(B).

PROVIDE INDIVIDUAL SUPPORTS AT ALL FOUR CORNERS WHEN TRAPEZE CONNECTION CONFLICTS WITH MECHANICAL WORK.

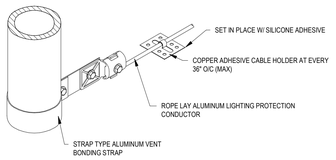
7 WALL OPENING PROTECTIVE MATERIALS ON DEVICE BOXES
NTS



3 TYPICAL FLOOR BOX DETAIL
NTS



15 SECONDARY BONDING DETAIL
NTS



11 VENT BONDING DETAIL
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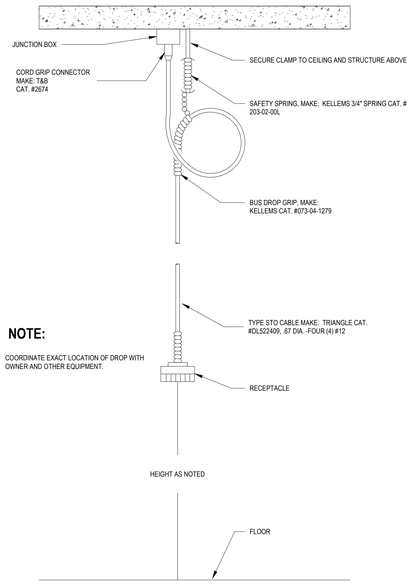
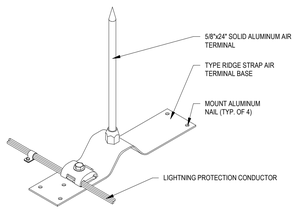
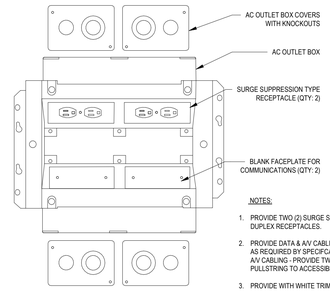


NOTE:
COORDINATE EXACT LOCATION OF DROP WITH OWNER AND OTHER EQUIPMENT.

8 PENDANT RECEPTACLE DETAIL
NTS



12 TYPICAL RIDGE DETAIL
NTS



NOTES:
1. PROVIDE TWO (2) SURGE SUPPRESSION TYPE DUPLEX RECEPTACLES.
2. PROVIDE DATA & A/V CABLING AND COVER PLATES AS REQUIRED BY SPECIFICATION. FOR DATA AND A/V CABLING - PROVIDE TWO (2) 2" CONDUITS WITH PULLSTRING TO ACCESSIBLE CEILING SPACE.
3. PROVIDE WITH WHITE TRIM FLANGE AND COVER.
4. PROVIDE DIVIDER PLATE FOR SEPARATION OF 120V WIRING AND FUTURE COMMUNICATION WIRING.
5. PROVIDE ALL REQUIRED HARDWARE, MODULES, ETC. AS REQUIRED BY MANUFACTURER FOR COMPLETE SYSTEM.

4 TYPICAL WALL BOX DETAIL
NTS

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E	10/14/2025	90% Construction Documents/Permit Set

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - ELECTRICAL

SHEET NUMBER
E6.02E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 11:40:24 AM

UX-116.1.3 — CONCRETE FOUNDATION CONSTRUCTION DETAILS FOR 750 TO 2,500 KVA 3 PHASE RADIAL AND LOOP TYPE PAD MOUNTED TRANSFORMER — UX-116.1.3

INSTALLATION GUIDELINES AND RESPONSIBILITIES

THE CUSTOMER SHALL:

1. MAINTAIN ACCESSIBILITY OF CONCRETE FOUNDATION FOR FPL VEHICLES AND EQUIPMENT.
2. INSTALL ALL PVC CONDUITS, AS SHOWN IN UX-116.1.1 FIGURE 1 AND FIGURE 2, BEFORE THE CONCRETE PAD IS POURED.
3. PROVIDE AND INSTALL REINFORCING MATERIAL PER UX-116.1.2 AND HAVE PAD INSPECTED BY FPL BEFORE THE CONCRETE IS POURED.
4. PROVIDE AND INSTALL DAYTON SUPERIOR THREADED INSERT 1/2" PART NO. F42-1/2" WITH PLUG ELECTRO-GALVANIZED, TWO(2) REQUIRED, SEE UX-116.1.1 FIGURE 1 AND DETAIL "A".
   DAYTON SUPERIOR NORTH OF WEST PALM IS 1-800-745-3710
   DAYTON SUPERIOR FOR EVERYWHERE ELSE IS 1-800-745-3702
5. INSTALL A 1-1/2" METERING CONDUIT TO A LOCATION SPECIFIED BY FPL, IF APPLICABLE.
   NOTE: THIS CONDUIT MUST BE IN ACCORDANCE WITH K-27.0.1 OF THE DISTRIBUTION CONSTRUCTION STANDARDS.
6. INSTALL SECONDARY CABLES NOT TO EXCEED THAT SPECIFIED IN TABLE ON UX-116.1.1 AND OF SUFFICIENT LENGTH TO TERMINATE IN SECONDARY BUS.
7. PROVIDE AND INSTALL C.T. METERING ENCLOSURES AT LOCATION SPECIFIED BY FPL, IF APPLICABLE.
8. PROVIDE AND MAINTAIN GALVANIZED TRAFFIC BARRIERS WHEN SPECIFIED BY FPL.

FPL SHALL:

1. PROVIDE FPL CONDUIT AND END PLUGS TO CUSTOMER.
2. INSPECT CUSTOMER'S REINFORCING MATERIALS BEFORE CONCRETE IS POURED INTO FORMED PAD.
3. INSTALL AND MAINTAIN THE PADMOUNTED TRANSFORMER AND THE SECONDARY BUS ENCLOSURE.
4. TERMINATE THE CUSTOMER'S SECONDARY CABLES TO THE TRANSFORMER BUS.
5. INSTALL C.T. WIRING AND METERING EQUIPMENT, IF APPLICATION.
6. CABLES REQUIRING CT METERING INSIDE THE TRANSFORMER MUST BE PLACED TOWARDS THE FRONT OPENING OF THE TX PAD AND IN FRONT OF ANY OTHER CABLES WHICH ARE NOT CT METERED INSIDE THE TRANSFORMER. THIS IS TO AVOID CABLE TRAINING ISSUES.

FPL
OH & UG DISTRIBUTION SYSTEM STANDARDS

ORIGINATOR: SMS — DRAWN BY: E. SCHILLING

NO.	DATE	REVISION	ORG.	DRAWN	APPR.
2	1/28/16	UPDATE NOTES	ARR	ELS	RDH
1	8/20/08	UPDATE NOTE 5	JFD	ELS	JJM

DATE: — APPROVED: J.J. McEVOY — NO SCALE
SUPERVISOR, OH/UG PRODUCT SUPPORT SERVICES

UX-116.1.2 — CONCRETE FOUNDATION CONSTRUCTION DETAILS FOR 750 TO 2,500 KVA 3 PHASE RADIAL AND LOOP TYPE PAD MOUNTED TRANSFORMERS — UX-116.1.2

REINFORCING MATERIALS

NOTES:

1. THE CONCRETE PAD SHALL BE 5.5 TO 6.0 INCHES THICK, IT SHOULD BE FORMED USING 1" X 6" FRAMING BOARDS.
2. THE #4 REINFORCING BARS AND THE WELDED WIRE MESH (6" X 6") MUST HAVE A 2" CONCRETE COVER FROM THE TOP AND SIDES OF THE PAD INCLUDING THE CABLE OPENING AREA. EXPOSED WIRE MESH SHALL NOT BE ACCEPTABLE.

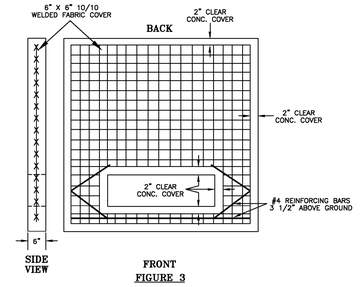


FIGURE 3

CONCRETE MIX SPECIFICATIONS

1. CONCRETE MIX PLACED IN PAD SHALL MEET THE FOLLOWING DESIGN REQUIREMENTS:
   A. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 psi.
   B. MAXIMUM WATER/CEMENT RATIO OF 0.50.
   C. MAXIMUM SLUMP OF 4 INCHES.
   D. AIR-ENTRAINMENT CONTENT BETWEEN 4 AND 8 PERCENT.
2. CONCRETE SHALL BE AFFORDED ADEQUATE CURE FOR A MINIMUM OF 7 DAYS AT AN AVERAGE AMBIENT TEMPERATURE OF 70 DEGREES F. OR MORE.
3. PAD SHALL BE SUPPORTED ON NATURAL LEVELED GROUND WITH THE SUB-GRADE COMPACTED UNTIL IT IS UNIFORM. A MAXIMUM ALLOWABLE VARIATION BETWEEN ANT TWO POINTS ON THIS SURFACE IS 0.250 INCHES.

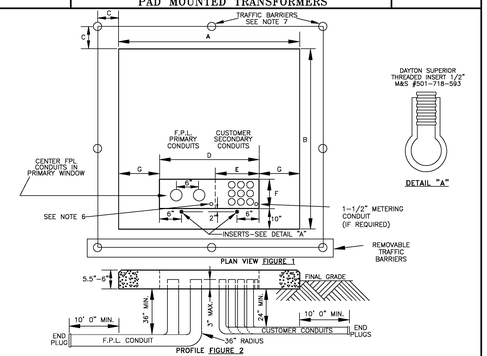
FPL
OH & UG DISTRIBUTION SYSTEM STANDARDS

ORIGINATOR: SMS — DRAWN BY: RAS

NO.	DATE	REVISION	ORG.	DRAWN	APPR.

DATE: — APPROVED: J.J. MCEVOY — NO SCALE
SUPERVISOR, OH/UG PRODUCT SUPPORT SERVICES

UX-116.1.1 — CONCRETE FOUNDATION CONSTRUCTION DETAILS FOR 750 TO 2,500KVA 3Ø RADIAL & LOOP TYPE PAD MOUNTED TRANSFORMERS — UX-116.1.1



PAD M&S NUMBER	WEIGHT	TRANSFORMER KVA	SECONDARY VOLTAGE	MAX. NUMBER OF CONDUCTORS & SIZE		A	B	C	D	E	F	G
162-750-120	2,700LBS	750	277/480 V	8 SETS SMALLER THAN 750 KCMIL 8 SETS 750KCMIL AL 6 SETS 750KCMIL CU*	12 – 5" MAX 8 – 5" MAX 6 – 5" MAX	78	78	18	60	25	21	9
162-750-120	2,700LBS	750	120/208 V	12 SETS SMALLER THAN 750 KCMIL 8 SETS 750KCMIL AL 6 SETS 750KCMIL CU*	12 – 5" MAX 8 – 5" MAX 6 – 5" MAX	78	78	18	60	25	21	9
162-100-000	3,600LBS	1000	120/208 V OR 277/480 V	12 SETS SMALLER THAN 750 KCMIL 8 SETS 750KCMIL AL 6 SETS 750KCMIL CU*	12 – 5" MAX 8 – 5" MAX 6 – 5" MAX	88	88	18	60	25	21	14
162-150-200	4,050LBS	1500-2000	277/480 V	12 SETS SMALLER THAN 750 KCMIL 8 SETS 750KCMIL AL 6 SETS 750KCMIL CU*	12 – 5" MAX 8 – 5" MAX 6 – 5" MAX	94	94	18	64	26	21	15
162-250-025	5,050LBS	2500	277/480 V	12 SETS 750 KCMIL OR SMALLER*	12 – 5" MAX	106	106	18	66	28	26	20

NOTES:
1. FOR CONSTRUCTION DETAILS AND INSTALLATION GUIDELINES.
2. (*) CABLES LARGER THAN 500 CU WILL REQUIRE MULTITAP CONNECTORS 103-806-300 AND 103-806-400.
3. FOR ANY NEW INSTALLATION WHICH HAS MORE THAN 8 SETS OF 750 KCMIL CU OR MORE THAN 12 SETS OF A SMALLER SIZE CONDUCTOR, IT IS RECOMMENDED TO USE THE LARGE THREE -PHASE SECONDARY CABINET, M&S #161-401-003, AS SHOWN IN DCS 1-75.0.0.
4. #4 TYPE OF STEEL RE-BAR (1/2") ON ALL 4 CORNERS.
5. 6" X 6" WIRE MESH SURROUNDING ALL OPENINGS.
6. INSTALL 2" SLEEVE FOR GROUND ROD, 48" LONG.
7. FOR TRAFFIC BARRIERS INFORMATION REFER TO UN-21.0.0.
8. REFER TO 1-63.0.1 FOR ADDITIONAL DETAILS.
9. USE APPROVED TOOL M&S #594-106-003 FOR LIFTING AND HANDLING THESE PADS.
10. IF CT'S ARE REQUIRED, CABLES/CONDUITS REQUIRING CT METERING MUST BE PLACED TOWARDS THE FRONT OF THE PAD.
11. A SECONDARY CABINET IS REQUIRED FOR ALL NON-LISTED NEW INSTALLATIONS.

FPL
OH & UG DISTRIBUTION SYSTEM STANDARDS

ORIGINATOR: MV — DRAWN BY: E. SCHILLING

NO.	DATE	REVISION	ORG.	DRAWN	APPR.
13	8/27/20	ADD NOTE 11 & UPDATE TABLE	ARR	GKS	RDH
12	8/26/19	UPDATE NOTE 8	ARR	ELS	RDH
11	12/14/15	UPDATE TABLE	ARR	ELS	RDH
10	11/9/15	UPDATE TABLE	ARR	ELS	RDH
9	9/9/15	ADD NOTE 8	ARR	ELS	RDH

DATE: 10/9/96 — APPROVED: J.J. MCEVOY — NO SCALE
SUPERVISOR, OH/UG PRODUCT SUPPORT SERVICES

FPL

09/05/25

Colin Cassidy
4 Harvard Circle Suite 600
West Palm Beach 33409

Re: Available Fault Current for 1621 W Blue Heron Blvd

Dear Colin Cassidy

Thank you for contacting FPL about the available fault current at 1621 W Blue Heron Blvd . Based on the plans you have provided dated 09/05/25 , the maximum available fault current at the transformer secondary terminals is estimated to be 20821 symmetrical amperes at 277/480 volts. The protective device on the line side of the transformer currently in place or to be installed and serving your property located at the subject location is a 65 amp type Bayonet fuse. The primary service voltage is 13 kv L-G.This calculated symmetrical fault current is not intended for use as the basis for motor starting calculations and does not include:

- Consideration for any motor contribution or
- Fault current asymmetry.

The FPL equipment currently serving or planned to serve your facility may change over time as a result of any number of factors, including but not limited to transformer replacements due to load growth, electrical grid changes or emergencies. As a result, although we are providing you with this information for the sole purpose of assisting you in the completion of your study, you and your client should not design, install or operate your system in reliance upon any expectation that the specific size and type of equipment currently in place will remain so. If and when the size and type of the equipment changes, our employees are not always in a position to immediately notify customers.

As the construction project progresses, any questions or information you may need can be communicated through me. I have enclosed my business card for easy reference and look forward to hearing from you in the near future.

Sincerely,

Andrew Boutte

Andrew Boutte
Distribution Engineer

CLIENT

CITY OF RIVIERA BEACH
1481 West 15 Street
Riviera Beach, FL 33404

ARCHITECT OF RECORD

PGAL

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T 561 988 4002
www.pgal.com

CONSTRUCTION MANAGER/BUILDER

CORE CONSTRUCTION
1641 Worthington Rd
West Palm Beach
FL 33409

PUBLIC SAFETY CONSULTANT/ARCHITECT

JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

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SUDHARMA WIJEGUNAWARDANA, P.E.
4 HARVARD CIRCLE, SUITE 600
WEST PALM BEACH, FL 33409
FL REG. NO. 79515

DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEGENCE Company
4 Harvard Cir. Suite 600 | West Palm Beach, FL 33409
561.688.8275 | cmta.com

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - ELECTRICAL

SHEET NUMBER
E6.03E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 11:40:31 AM

Branch Panel: LP3

LOCATION: ELECT. E110
SUPPLY FROM: LP1
MOUNTING: Surface
ENCLOSURE: TYPE 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 22kA
MAINS TYPE: MLO
MAINS RATING: 225 A

C...	NOT...	CIRCUIT DESCRIPTION	TRIP	P	Ø	N	G	C.	A	B	C	C.	G	N	Ø	P	TRIP	CIRCUIT DESCRIPTION	NOT...	C...
1		REC. E106	20 A	1					0.18	0		--	--	--	--	3	30 A	SPD	--	2
3	(G)	EWC	20 A	1						0.58	0	--	--	--	--	--	--	--	--	4
5	--	MOTORIZED DAMPERS	20 A	1							0.35	0	--	--	--	--	--	--	--	6
7		REC. E120	20 A	1					0.36	0.8						1	20 A	DRYING CABINET.		8
9		EXTERIOR REC.	20 A	1						0.72	1.08					1	20 A	REC. E106		10
11		REC. 116/117/118	20 A	1							0.54	0.7				1	15 A	EF-3		12
13		REC. E102	20 A	1					1.08	0.53						1	15 A	EF-2		14
15		EF-4	15 A	1						0.53	0.54					1	20 A	REC. E115		16
17		REC. E114	20 A	1								0.9	0.53			1	15 A	EF-5		18
19		REC. E111	20 A	1					0.54	0.54						1	20 A	REC. E105		20
21		REC. E105	20 A	1						0.54	0.72					1	20 A	FLR BOX E106		22
23		ROOF RECEPTACLES	20 A	1								0.54	0.54			1	20 A	REC. E109/110/112		24
25		EXTERIOR REC.	20 A	1					0.72	0.8						1	20 A	DRYING CABINET.		26
27		DRYING CABINET.	20 A	1						0.8										28
29		REC. E102	20 A	1								0.72	0.8			1	20 A	DRYING CABINET.		30
31	--	SPARE	20 A	1	--	--	--	--	0	0				--	--	--	--	1	20 A	SPARE	--	32
33	--	SPARE	20 A	1	--	--	--	--			0	0		--	--	--	--	1	20 A	SPARE	--	34
35	--	SPARE	20 A	1	--	--	--	--					0	0		--	--	1	20 A	SPARE	--	36
37	--	SPARE	20 A	1	--	--	--	--	0	0						--	--	1	20 A	SPARE	--	38
39	--	SPARE	20 A	1	--	--	--	--			0	0				--	--	1	20 A	SPARE	--	40
41	--	SPARE	20 A	1	--	--	--	--					0	0		--	--	1	20 A	SPARE	--	42
								Total Load:	5.55 kVA		5.51 kVA			5.62 kVA							
								Total Amps:	46 A		46 A			47 A							

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	2.64 kVA	106.63%	2.82 kVA	
Receptacle	14.04 kVA	85.61%	12.02 kVA	**Total Conn. Load:** 16.68 kVA
				Total Est. Demand: 14.84 kVA
				Total Conn.: 46 A
				Total Est. Demand: 41 A

NOTE LEGEND:

*** REFER TO POWER RISER FOR FEEDER WIRE AND CONDUIT SIZES.**

G = GFCI TYPE BREAKER
A = AFCI TYPE BREAKER
ST = SHUNT TRIP BREAKER
RL = RED, LOCKABLE BREAKER
E = EXISTING BREAKER
LSI = LSI ADJUSTABLE TRIP BREAKER

- ALL SINGLE POLE 15 & 20 AMP CIRCUITS SHALL BE PROVIDED WITH (2) #12 AWG CU, #12 CU GND IN 3/4" C. UNLESS NOTED OTHERWISE.
- PROVIDE GROUND BUS & NEUTRAL BUS.
- PROVIDE TYPE WRITTEN DIRECTORY.
- PANEL SHALL BE FULLY RATED
- FOR MULTIPHASE CIRCUITS, CONTRACTOR SHALL PROVIDE A PHASE CONDUCTOR FOR EACH POLE....

Branch Panel: HP1

LOCATION: ELECT. E110
SUPPLY FROM:
MOUNTING: Surface
ENCLOSURE: TYPE 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35kA
MAINS TYPE: MCB
MAINS RATING: 600 A
MCB RATING: 600 A

C...	NOT...	CIRCUIT DESCRIPTION	TRIP	P	Ø	N	G	C.	A	B	C	C.	G	N	Ø	P	TRIP	CIRCUIT DESCRIPTION	NOT...	C...
1		TXL1	125 A	3					38.41	0		--	--	--	--	3	30 A	SPD	--	2
3	--	--	--	--	--	--	--	--			35.06	0	--	--	--	--	--	--	--	4
5	--	--	--	--	--	--	--	--					--	--	--	--	--	--	--	6
7		MEZZANINE LTG	20 A	1					0.81	3										8
9		VAV1-1	20 A	1							3.5	3.5								10
11		EXTERIOR LIGHTING	20 A	1									0.89	4						12
13		SWAT LIGHTING	20 A	1					3.99	2.11										14
15		VEHICLE STRG.E101 LTG	20 A	1							4.11	2.11								16
17		VAV1-2	25 A	1									5.5	2.11	--	--	--	--	--	18
19		EWH-1	15 A	3					3	7.03										20
21	--	--	--	--	--	--	--	--			3	7.03								22
23	--	--	--	--	--	--	--	--					3	7.03	--	--	--	--	--	24
25		FORK LIFT CHARGER	60 A	3					11.08											26
27	--	--	--	--	--	--	--	--			11.08									28
29	--	--	--	--	--	--	--	--					11.08							30
31																				32
33																				34
35																				36
37		MAU-1	150 A	3					29.52	18										38
39	--	--	--	--	--	--	--	--			29.52	18			--	--	--	--	--	40
41	--	--	--	--	--	--	--	--					29.52	18	--	--	--	--	--	42
								Total Load:	116.95 kVA		116.91 kVA			116.95 kVA					
								Total Amps:	422 A		422 A			422 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	53.75 kVA	100.00%	53.75 kVA	
Heating	15.5 kVA	100.00%	15.5 kVA	**Total Conn. Load:** 350.8 kVA
Motor	226.17 kVA	109.79%	248.31 kVA	**Total Est. Demand:** 360.6 kVA
Receptacle	41.58 kVA	62.03%	25.79 kVA	**Total Conn.:** 422 A
Lighting	13.8 kVA	125.00%	17.25 kVA	**Total Est. Demand:** 434 A

NOTE LEGEND:

*** REFER TO POWER RISER FOR FEEDER WIRE AND CONDUIT SIZES.**

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A = AFCI TYPE BREAKER
ST = SHUNT TRIP BREAKER
RL = RED, LOCKABLE BREAKER
E = EXISTING BREAKER
LSI = LSI ADJUSTABLE TRIP BREAKER

- ALL SINGLE POLE 15 & 20 AMP CIRCUITS SHALL BE PROVIDED WITH (2) #12 AWG CU, #12 CU GND IN 3/4" C. UNLESS NOTED OTHERWISE.
- PROVIDE GROUND BUS & NEUTRAL BUS.
- PROVIDE TYPE WRITTEN DIRECTORY.
- PANEL SHALL BE FULLY RATED
- FOR MULTIPHASE CIRCUITS, CONTRACTOR SHALL PROVIDE A PHASE CONDUCTOR FOR EACH POLE....

Branch Panel: LP4

LOCATION: ELECT. E110
SUPPLY FROM: LP1
MOUNTING: Surface
ENCLOSURE: TYPE 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 22kA
MAINS TYPE: MLO
MAINS RATING: 225 A

C...	NOT...	CIRCUIT DESCRIPTION	TRIP	P	Ø	N	G	C.	A	B	C	C.	G	N	Ø	P	TRIP	CIRCUIT DESCRIPTION	NOT...	C...
1		RANGE HVAC CNTRL PNL	15 A	1					0.13	0		--	--	--	--	3	30 A	SPD	--	2
3		BDA QUAD E112	20 A	1						0.36	0	--	--	--	--	--	--	--	--	4
5		REC. E120	20 A	1							0.54	0	--	--	--	--	--	--	--	6
7		REC. E112	20 A	1					0.72	0.9						1	20 A	REC E113/119/122		8
9		REC. E121	20 A	1						0.9	1.92					1	20 A	FR - FTT PANEL		10
11		REC. E112	20 A	1								0.72	1.92			1	20 A	FR - MINI SERVER RACK		12
13		WALL RACK E121	20 A	1					1.5	4.16						2	30 A	FR - DRMP PANEL		14
15		L6-30R TWIST LOCK REC.	30 A	2						2.08	0					--	--	--	--	16
17	--	--	--	--	--	--	--	--				2.08	0.72			1	20 A	REC. E101		18
19		REC. E101	20 A	1					0.54	0.72						1	20 A	REC. E101		20
21		L6-30R TWIST LOCK REC.	30 A	2						2.08	0.2					1	20 A	LTG CNTRL PNL LCP2		22
23	--	--	--	--	--	--	--	--			2.08									24
25																				26
27																				28
29																				30
31	--	SPARE	20 A	1	--	--	--	--	0	0				--	--	--	--	1	20 A	SPARE	--	32
33	--	SPARE	20 A	1	--	--	--	--			0	0		--	--	--	--	1	20 A	SPARE	--	34
35	--	SPARE	20 A	1	--	--	--	--					0	0		--	--	1	20 A	SPARE	--	36
37	--	SPARE	20 A	1	--	--	--	--	0	0						--	--	1	20 A	SPARE	--	38
39	--	SPARE	20 A	1	--	--	--	--			0	0				--	--	1	20 A	SPARE	--	40
41	--	SPARE	20 A	1	--	--	--	--					0	0		--	--	1	20 A	SPARE	--	42
								Total Load:	8.67 kVA		7.54 kVA			8.06 kVA							
								Total Amps:	73 A		63 A			68 A							

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	14.35 kVA	100.00%	14.35 kVA	
Motor	4.16 kVA	125.00%	5.2 kVA	**Total Conn. Load:** 24.27 kVA
Receptacle	5.76 kVA	100.00%	5.76 kVA	**Total Est. Demand:** 25.31 kVA
				Total Conn.: 67 A
				Total Est. Demand: 70 A

NOTE LEGEND:

*** REFER TO POWER RISER FOR FEEDER WIRE AND CONDUIT SIZES.**

G = GFCI TYPE BREAKER
A = AFCI TYPE BREAKER
ST = SHUNT TRIP BREAKER
RL = RED, LOCKABLE BREAKER
E = EXISTING BREAKER
LSI = LSI ADJUSTABLE TRIP BREAKER

- ALL SINGLE POLE 15 & 20 AMP CIRCUITS SHALL BE PROVIDED WITH (2) #12 AWG CU, #12 CU GND IN 3/4" C. UNLESS NOTED OTHERWISE.
- PROVIDE GROUND BUS & NEUTRAL BUS.
- PROVIDE TYPE WRITTEN DIRECTORY.
- PANEL SHALL BE FULLY RATED
- FOR MULTIPHASE CIRCUITS, CONTRACTOR SHALL PROVIDE A PHASE CONDUCTOR FOR EACH POLE....

Branch Panel: LP1

LOCATION: ELECT. E110
SUPPLY FROM: TXL1
MOUNTING: Surface
ENCLOSURE: TYPE 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 22kA
MAINS TYPE: MCB
MAINS RATING: 400 A
MCB RATING: 400 A

C...	NOT...	CIRCUIT DESCRIPTION	TRIP	P	Ø	N	G	C.	A	B	C	C.	G	N	Ø	P	TRIP	CIRCUIT DESCRIPTION	NOT...	C...
1		LP2	100 A	3					10.03	0		--	--	--	--	3	30 A	SPD	--	2
3	--	--	--	--	--	--	--	--			8.35	0	--	--	--	--	--	--	--	4
5	--	--	--	--	--	--	--	--					--	--	--	--	--	--	--	6
7		LP3	100 A	3					5.55	8.67									3	100 A	LP4		8
9	--	--	--	--	--	--	--	--			5.51	7.54							--	--	--	10
11	--	--	--	--	--	--	--	--					5.62	8.06	--	--	--	--	--	12
13		MCC REC.	50 A	2					3.33	0.5									1	20 A	IRRIGATION CONTROL		14
15	--	--	--	--	--	--	--	--			3.33	3.33							2	50 A	MCC REC.		16
17		SWAT MCC REC.	50 A	2									3.33	3.33	--	--	--	--	--	18
19	--	--	--	--	--	--	--	--	3.33	1.32									3	20 A	ROLLUP DOOR E101		20
21		ROLLUP DOOR E101	20 A	3							1.32	1.32											22
23	--	--	--	--	--	--	--	--					1.32	1.32	--	--	--	--	--	24
25	--	--	--	--	--	--	--	--	1.32	1.32									3	20 A	ROLLUP DOOR E101		26
27		IRRIGATION PUMP (7.5HP)	50 A	3							3.04	1.32											28
29	--	--	--	--	--	--	--	--					3.04	1.32	--	--	--	--	--	30
31	--	--	--	--	--	--	--	--	3.04											32
33																				34
35																				36
37	--	SPARE	20 A	1	--	--	--	--	0	0					--	--	--	1	20 A	SPARE	--	38
39	--	SPARE	20 A	1	--	--	--	--			0	0			--	--	--	1	20 A	SPARE	--	40
41	--	SPARE	20 A	1	--	--	--	--					0	0	--	--	--	1	20 A	SPARE	--	42
								Total Load:	38.41 kVA		35.06 kVA			35.82 kVA							
								Total Amps:	321 A		292 A			299 A							

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	20.51 kVA	100.00%	20.51 kVA	
Motor	47.2 kVA	104.83%	49.48 kVA	**Total Conn. Load:** 109.29 kVA
Receptacle	41.58 kVA	62.03%	25.79 kVA	**Total Est. Demand:** 95.78 kVA
				Total Conn.: 303 A
				Total Est. Demand: 266 A

NOTE LEGEND:

*** REFER TO POWER RISER FOR FEEDER WIRE AND CONDUIT SIZES.**

G = GFCI TYPE BREAKER
A = AFCI TYPE BREAKER
ST = SHUNT TRIP BREAKER
RL = RED, LOCKABLE BREAKER
E = EXISTING BREAKER
LSI = LSI ADJUSTABLE TRIP BREAKER

- ALL SINGLE POLE 15 & 20 AMP CIRCUITS SHALL BE PROVIDED WITH (2) #12 AWG CU, #12 CU GND IN 3/4" C. UNLESS NOTED OTHERWISE.
- PROVIDE GROUND BUS & NEUTRAL BUS.
- PROVIDE TYPE WRITTEN DIRECTORY.
- PANEL SHALL BE FULLY RATED
- FOR MULTIPHASE CIRCUITS, CONTRACTOR SHALL PROVIDE A PHASE CONDUCTOR FOR EACH POLE....

Branch Panel: LP2

LOCATION: ELECT. E110
SUPPLY FROM: LP1
MOUNTING: Surface
ENCLOSURE: TYPE 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 22kA
MAINS TYPE: MLO
MAINS RATING: 225 A

C...	NOT...	CIRCUIT DESCRIPTION	TRIP	P	Ø	N	G	C.	A	B	C	C.	G	N	Ø	P	TRIP	CIRCUIT DESCRIPTION	NOT...	C...
1		EF-1A	30 A	1					1.92	0		--	--	--	--	3	30 A	SPD	--	2
3	(RL)	FACP	20 A	1						1.5	0	--	--	--	--	--	--	--	--	4
5		EF-1C	30 A	1							1.92	0	--	--	--	--	--	--	--	6
7		EF-1D	30 A	1					1.92	1.92						1	30 A	EF-1B		8
9		EF-1E	30 A	1							1.92	0.73				2	15 A	HVLS-1A		10
11		MEZZANINE REC.	20 A	1								0.9	0.73	--	--	--	--	--	--	12
13		MEZZANINE REC.	20 A	1					0.9											14
15		HVLS-1B	15 A	2						0.73										16
17	--	--	--	--	--	--	--	--			0.73	0.73				2	15 A	HVLS-1C		18
19									0.73				--	--	--	--	--	--	--	20
21		CU-5	15 A	2						0.83	1.32					3	20 A	ROLLUP DOOR E102		22
23	--	--	--	--	--	--	--	--				0.83	1.32	--	--	--	--	--	--	24
25		ROLLUP DOOR E105	20 A	3					1.32	1.32				--	--	--	--	--	--	26
27	--	--	--	--	--	--	--	--		1.32										28
29	--	--	--	--	--	--	--	--			1.32									30
31	--	SPARE	20 A	1	--	--	--	--	0	0				--	--	--	--	1	20 A	SPARE	--	32
33	--	SPARE	20 A	1	--	--	--	--			0	0		--	--	--	--	1	20 A	SPARE	--	34
35	--	SPARE	20 A	1	--	--	--	--					0	0	--	--	--	1	20 A	SPARE	--	36
37	--	SPARE	20 A	1	--	--	--	--	0	0					--	--	--	1	20 A	SPARE	--	38
39	--	SPARE	20 A	1	--	--	--	--			0	0			--	--	--	1	20 A	SPARE	--	40
41	--	SPARE	20 A	1	--	--	--	--					0	0	--	--	--	1	20 A	SPARE	--	42
								Total Load:	10.03 kVA		8.35 kVA			8.48 kVA							
								Total Amps:	84 A		70 A			71 A							

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	1.5 kVA	100.00%	1.5 kVA	
Motor	23.56 kVA	104.20%	24.55 kVA	**Total Conn. Load:** 26.86 kVA
Receptacle	1.8 kVA	100.00%	1.8 kVA	**Total Est. Demand:** 27.85 kVA
				Total Conn.: 75 A
				Total Est. Demand: 77 A

NOTE LEGEND:

*** REFER TO POWER RISER FOR FEEDER WIRE AND CONDUIT SIZES.**

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ST = SHUNT TRIP BREAKER
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- PANEL SHALL BE FULLY RATED
- FOR MULTIPHASE CIRCUITS, CONTRACTOR SHALL PROVIDE A PHASE CONDUCTOR FOR EACH POLE....

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CLIENT

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REGISTRATION

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FL REG. NO. : PE93143

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEIDOS Company
4 Harvard Cir, Suite 600 | West Palm Beach, FL 33409
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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL
33404

PROJECT NUMBER

1007657.00

SHEET TITLE

SCHEDULES - ELECTRICAL

SHEET NUMBER

E7.01E

LIGHTING CONTROL PANEL 'LCP2' SCHEDULE

PANEL-RELAY#	BRANCH CKT#	AREA	CONTROL	TYPE	DIMMING
LCP2#1	HP1-7	WALL PACK LIGHTING	TIMECLOCK/PHOTOCELL	WPA/WPB	0-10V
LCP2#2	HP1-7	MONUMENT SIGN	TIMECLOCK/PHOTOCELL	CUSTOM	0-10V
LCP2#3	HP1-7	LIT LOGO/SIGNAGE	TIMECLOCK/PHOTOCELL	CUSTOM	0-10V
LCP2#4					0-10V
LCP2#5					0-10V
LCP2#6					0-10V
LCP2#7					0-10V
LCP2#8					0-10V
LCP2#9					0-10V
LCP2#10					DALI
LCP2#11					0-10V
LCP2#12					0-10V
LCP2#13					0-10V
LCP2#14					0-10V
LCP2#15					0-10V
LCP2#16					0-10V

NOTES:
1. LIGHTING CONTROL PANEL SHALL BE CAPABLE OF CONTROLLING BOTH INTERIOR AND EXTERIOR LUMINARIES.

EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT NAME	LOCATION	VOLTAGE/ PHASE	BRANCH O.C.P.	DISCONNECT SWITCH			CONDUCTORS	RACEWAY	NOTES
				SIZE	FUSE	ENCL.			
MAU-1	ROOF	480/3	150A	-	-	-	(3) #3/0 AWG AL, (1) #4 AL GND.	2"	(1)
EF-1	ROOF	480/3	100A	100A	-	3R	(3) #1 AWG AL, (1) #6 AL GND.	1-1/2"	-
RTU-1	ROOF	480/3	45A	60A	45A	3R	(3) #6 AWG CU, (1) #10 CU GND.	1"	-
VAV1-1	EV PROCESS E102	277/1	20A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
VAV1-2	SWAT E106	277/1	25A	30A	-	1	(2) #10 AWG CU, (1) #10 CU GND.	3/4"	-
VAV1-3	SIMULATOR E115	277/1	15A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
VAV1-4	CONTROL E121	277/1	20A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
EF-1A	ROOF	120/1	30A	30A	-	3R	(2) #4 AWG CU, (1) #4 CU GND.	1"	-
EF-1B	ROOF	120/1	30A	30A	-	3R	(2) #4 AWG CU, (1) #4 CU GND.	1"	-
EF-1C	ROOF	120/1	30A	30A	-	3R	(2) #4 AWG CU, (1) #4 CU GND.	1"	-
EF-1D	ROOF	120/1	30A	30A	-	3R	(2) #4 AWG CU, (1) #4 CU GND.	1"	-
EF-1E	ROOF	120/1	30A	30A	-	3R	(2) #4 AWG CU, (1) #4 CU GND.	1"	-
EF-2	ROOF	120/1	15A	30A	-	3R	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
EF-3	ROOF	120/1	15A	30A	-	3R	(2) #10 AWG CU, (1) #10 CU GND.	3/4"	-
EF-4	ROOF	120/1	15A	30A	-	3R	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
EF-5	ROOF	120/1	15A	30A	-	3R	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
CU-5	ROOF	208/1	15A	30A	-	3R	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
HLVS-1A	EVIDENCE VEHICLE STRG 101	208/1	15A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
HLVS-1B	EVIDENCE VEHICLE STRG 101	208/1	15A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
HLVS-1C	EVIDENCE VEHICLE STRG 101	208/1	15A	30A	-	1	(2) #12 AWG CU, (1) #12 CU GND.	3/4"	-
IRRIGATION PUMP	EXTERIOR	208/3	50A	60A	-	3R	(3) #8 AWG CU, (1) #10 CU GND.	1"	-
EWH-1	JAN 1118	480/3	15A	30A	-	1	(3) #12 AWG CU, (1) #12 CU GND.	3/4"	-
AC-1	FLEX E109	480/3	15A	30A	-	1	(3) #12 AWG CU, (1) #12 CU GND.	3/4"	-

NOTES: 1. DISCONNECT BY OTHERS

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CLIENT

CITY OF RIVIERA BEACH
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Riviera Beach, FL 33404

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FL 33409

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JL2 ARCHITECTURE INC.
1678 Kingston Road
Longwood, FL
32750

REGISTRATION

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4 HARVARD CIRCLE, SUITE 600
WEST PALM BEACH, FL 33409
FL REG. NO. 79535143

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
A LEGENCE Company
4 Harvard Cir. Suite 600 | West Palm Beach, FL 33409
561.688.8275 | cmta.com

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

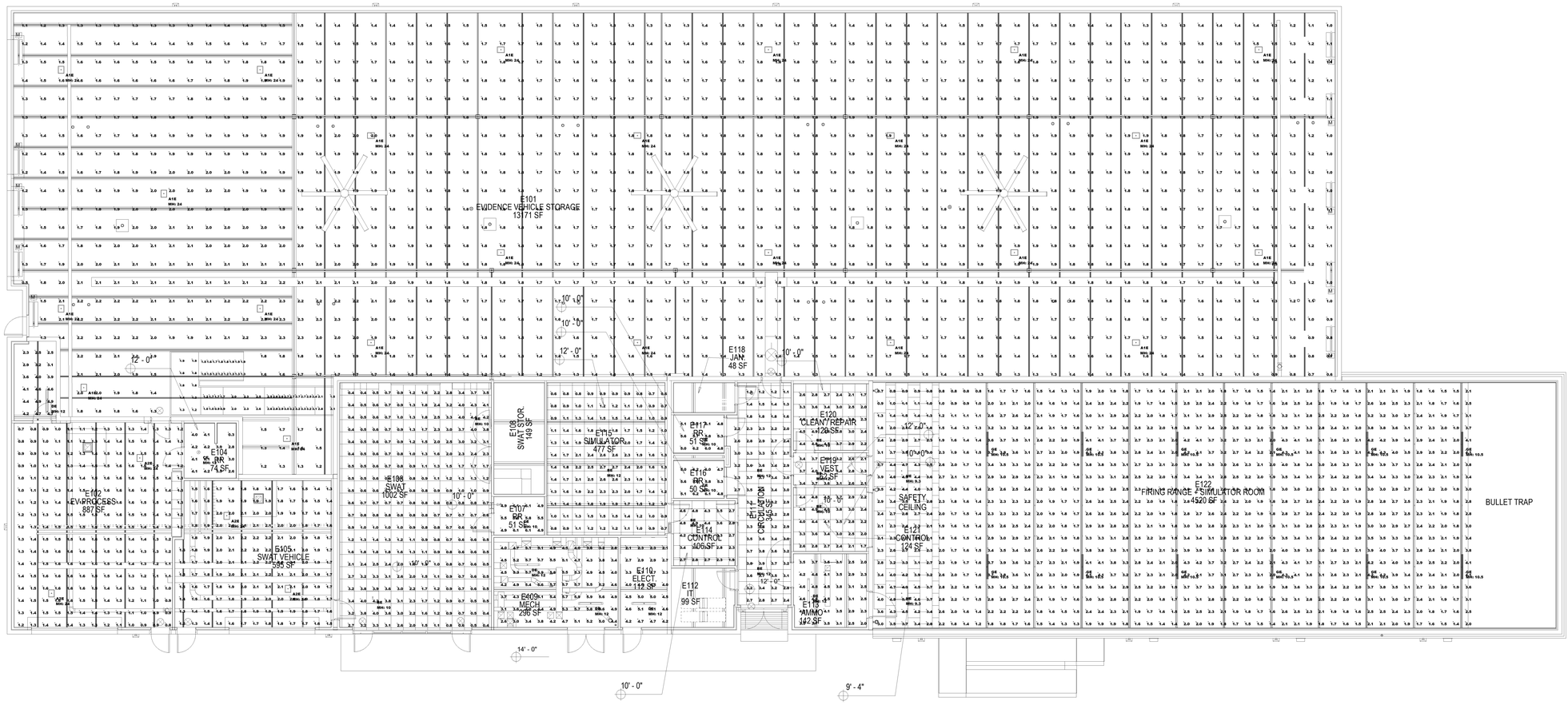
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
SCHEDULES - ELECTRICAL

SHEET NUMBER
E7.02E



Luminaire Schedule: RIVIERA BEACH POLICE DEPARTMENT - EVIDENCE & FIRING RANGE REV 2 RIVIERA BEACH, FL 08/21/2025

Scenario: EMERGENCY

Symbol	Qty	Label	Arrangement	Manufacturer	Catalog Number	Mounting	Emergency	LLF	Lum Lumens	Lum Watts
	23	A1E	Single	Lithonia Lighting	CPHB 12000LM SEF GCL MD 40K 80CRI E10W	SUSPENDED MOUNT A.F.F.	BATTERY	0.860	1400	87.95
	4	A2E	Single	Lithonia Lighting	CPHB 24000LM SEF GCL MD 40K 80CRI E10W	SUSPENDED MOUNT A.F.F.	BATTERY	0.860	1430	174.41
	9	BE	Single	Lithonia Lighting	STAK 2X2 5000LM 80CRI 40K CGL MVOLT E10W	RECESSED MOUNT A.F.F.	BATTERY	0.860	1240	42.6156
	4	CE	Single	Lithonia Lighting	LDN6 40/15 LO6AR LD EL	RECESSED MOUNT A.F.F.	BATTERY	0.670	780	17.52
	5	DE	Single	Lithonia Lighting	CLX L48 4000LM SEF FDL MVOLT 40K 80CRI E10W	SUSPENDED MOUNT A.F.F.	BATTERY	0.860	1550	25.5429
	12	GE	Single	Lithonia Lighting	ZL1D L48 3000LM FST MVOLT 40K 80CRI E10W	CEILING MOUNT A.F.F.	BATTERY	0.860	1350	29.85
	2	HE	Single	Lithonia Lighting	CPX 2X2 ALO7 (High) SWW7 (40K) SWL MVOLT E10W	RECESSED MOUNT A.F.F.	BATTERY	0.760	1390	32.76

Calculation Summary: RIVIERA BEACH POLICE DEPARTMENT - EVIDENCE & FIRING RANGE REV 2 RIVIERA BEACH, FL 08/21/2025

Scenario: EMERGENCY

Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
103 - DRYING ROOM_EM	Illuminance	Fc	3.84	4.9	2.3	1.67	2.13
E101 - EVIDENCE VEHICLE STORAGE_EM	Illuminance	Fc	1.71	2.3	0.5	3.42	4.60
E102 - EV PROCESS_EM	Illuminance	Fc	1.35	1.6	0.7	1.93	2.29
E104 - RR_EM	Illuminance	Fc	3.53	4.2	0.3	11.77	14.00
E105 - SWAT VEHICLE_EM	Illuminance	Fc	1.83	2.2	1.2	1.53	1.83
E106 - SWAT_EM	Illuminance	Fc	1.48	4.4	0.4	3.70	11.00
E107 - RR_EM	Illuminance	Fc	5.55	6.1	4.9	1.13	1.24
E109 - MECH_EM	Illuminance	Fc	4.77	5.9	2.6	1.83	2.27
E110 - ELECT_EM	Illuminance	Fc	3.83	5.1	2.1	1.82	2.43
E111 - CIRCULATION_EM	Illuminance	Fc	2.88	3.9	1.1	2.62	3.55
E113 - AMMO_EM	Illuminance	Fc	3.50	4.8	2.0	1.75	2.40
E114 - CONTROL_EM	Illuminance	Fc	3.47	4.9	1.9	1.83	2.58
E115 - SIMULATOR_EM	Illuminance	Fc	1.49	2.7	0.6	2.48	4.50
E116 - RR_EM	Illuminance	Fc	5.55	6.2	4.7	1.18	1.32
E117 - RR_EM	Illuminance	Fc	5.55	6.2	4.8	1.16	1.29
E119 - VEST_EM	Illuminance	Fc	3.17	4.0	2.1	1.51	1.90
E120 - CLEAN REPAIR_EM	Illuminance	Fc	3.30	4.9	1.7	1.94	2.88
E121 - CONTROL_EM	Illuminance	Fc	3.29	4.9	1.7	1.94	2.88
E122 - FIRING RANGE SIMULATOR ROOM_EM	Illuminance	Fc	2.52	5.1	0.7	3.60	7.29
STAIR	Illuminance	Fc	2.00	3.30	0.90	2.22	3.67

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FL REG. NO.: PE83143

DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

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PROJECT STATUS

90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE

10/14/2025

PROJECT NAME

RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

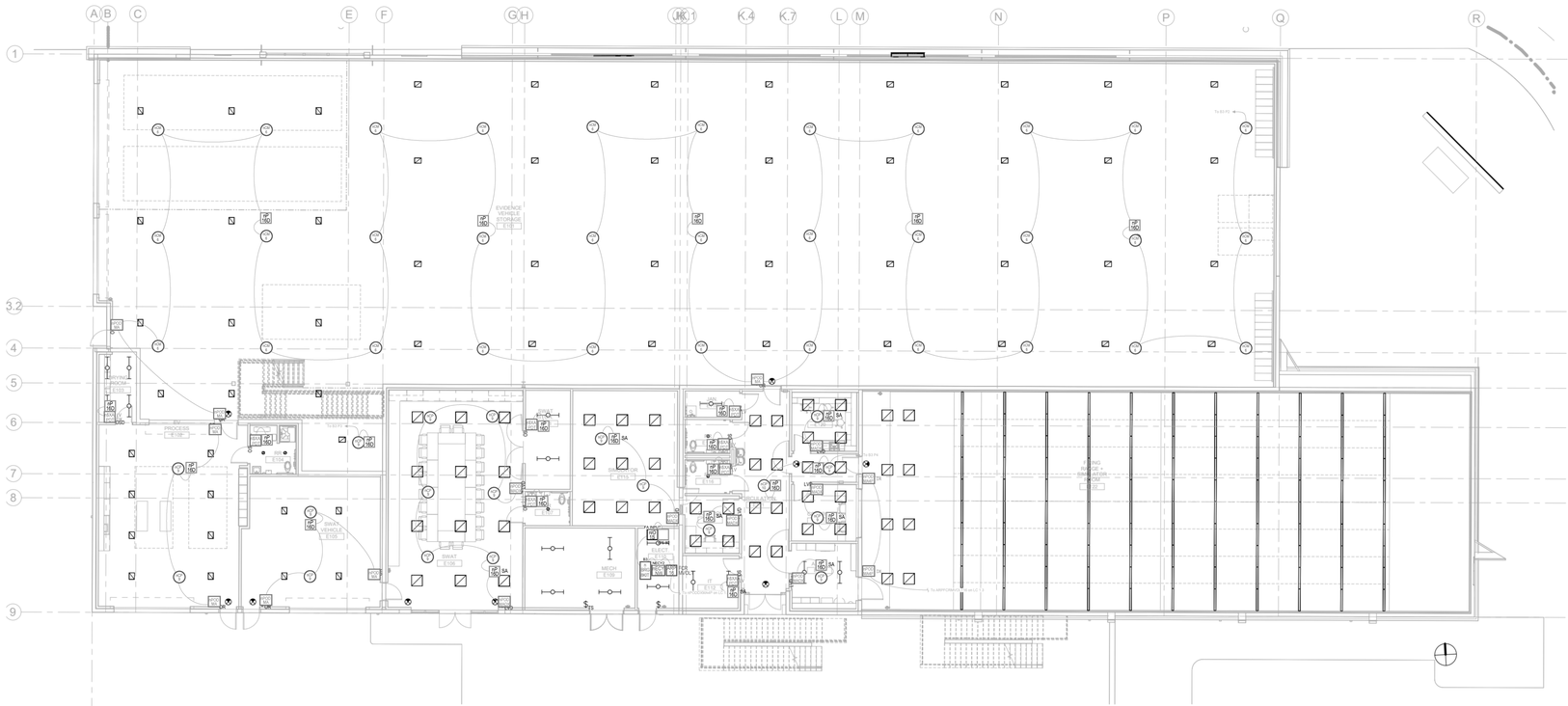
1007657.00

SHEET TITLE

EMERGENCY PHOTOMETRICS - ELECTRICAL

SHEET NUMBER

E8.01E


A
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EVIDENCE VEHICLE STORAGE E102
SWAT VEHICLE E105
SWAT E106
WEAPONS CLEANING E107
ARMORY E108
FIRING RANGE + SIMULATOR E110
MECH E109
ELEC E111
TRAINING ROOM E101
AV PROCESS E103
SHOOTER E112
TRAINING ROOM E113
LOCKER ROOM E114
LOCKER ROOM E115
TRAINING ROOM E116
LOCKER ROOM E117
LOCKER ROOM E118
TRAINING ROOM E119
LOCKER ROOM E120
LOCKER ROOM E121
TRAINING ROOM E122
LOCKER ROOM E123
LOCKER ROOM

TECHNOLOGY SYSTEMS SYMBOLS LEGEND

NOTE: THESE ARE STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS. ALL DETAILS FOR EACH SYMBOL ARE INDICATED BELOW UNLESS OTHERWISE NOTED ELSEWHERE ON THE DRAWINGS. SEE ABBREVIATIONS FOR ADDITIONAL LABELS THAT MAY BE USED.

DATA DISTRIBUTION

- DATA OUTLET, FLUSH MOUNTED IN WALL AT 18" OC AFF, FLUSH MOUNTED.
- DATA OUTLET, FLUSH MOUNTED IN CEILING.
- TELEPHONE OUTLET, FLUSH MOUNTED IN WALL AT 46" OC AFF.
- TELEPHONE OUTLET, FLUSH MOUNTED IN CEILING.
- DATA/TELEPHONE OUTLET, FLUSH MOUNTED IN WALL AT 46" OC AFF.
- DATA/TELEPHONE OUTLET, FLUSH MOUNTED IN CEILING.
- WAP — WIRELESS ACCESS POINT, FLUSH MOUNTED IN CEILING, TERMINATION ABOVE CEILING.
- WAP — WIRELESS ACCESS POINT, SURFACE MOUNTED TO POLE AT 96" OC AFF.
- WAP — WIRELESS ACCESS POINT, SURFACE MOUNTED TO WALL AT 96" OC AFF.
- DAS — DISTRIBUTED ANTENNA SYSTEM ANTENNA, FLUSH MOUNTED IN CEILING.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE DATA/TELEPHONE DISTRIBUTION SECTION AS NOTED IN THE DESIGN:

* (D#) PROVIDE FACEPLATE WITH NUMBER OF DATA PORTS AS SHOWN. ALL FACEPLATES SHALL HAVE 6 SPACES FOR TERMINATION MODULES.
(W) TELEPHONE WALL MOUNT PLATE WITH LUGS FOR MOUNTING PHONE TO WALL.
(C) MOUNTED WHERE BOTTOM IS AT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 46" OC AFF.
(TV) MOUNTED 66" OC AFF BEHIND FLAT PANEL DISPLAY.
(A) MOUNTED ABOVE CEILING.

AUDIOVISUAL SYSTEM

- AUDIOVISUAL OUTLET, FLUSH MOUNTED IN WALL AT 18" OC AFF.
- AUDIOVISUAL OUTLET, FLUSH MOUNTED IN CEILING.
- S — SPEAKER, CEILING MOUNTED.
- S — SPEAKER, WALL MOUNTED AT 24" OC BFC.
- M — MICROPHONE, CEILING MOUNTED.
- M — MICROPHONE, WALL MOUNTED AT 24" OC BFC.
- M — MICROPHONE, SURFACE MOUNTED TO TABLETOP. SEE ARCHITECTURAL DRAWINGS FOR FURNITURE LOCATION AND MOUNTING HEIGHT.
- V — VOLUME CONTROL, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- AMP — AMPLIFIER, SURFACE MOUNTED TO WALL AT 46" OC AFF OR MANUFACTURER RECOMMENDED MOUNTING HEIGHT.
- TSC — TOUCH SCREEN, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- TSC — TOUCH SCREEN, SURFACE MOUNTED TO TABLETOP. SEE ARCHITECTURAL DRAWINGS FOR FURNITURE LOCATION AND MOUNTING HEIGHT.
- CP — CONTROL PANEL, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- CAMERA, SURFACE MOUNTED TO CEILING.
- PROJECTOR, SUSPENDED FROM CEILING.
- FLAT PANEL DISPLAY, SURFACE MOUNTED TO WALL AT 66" OC AFF.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE AUDIOVISUAL SYSTEM SECTION AS NOTED IN THE DESIGN:

* (C) MOUNTED WHERE BOTTOM IS AT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 46" OC AFF.
(TV) MOUNTED 66" OC AFF BEHIND FLAT PANEL DISPLAY.
(A) MOUNTED ABOVE CEILING.
(L) LAY-IN, RECESSED MOUNTED.
(R) ROUND, FLUSH MOUNTED.
(S) SQUARE, FLUSH MOUNTED.

VIDEO SURVEILLANCE SYSTEM

- SURVEILLANCE CAMERA, SURFACE MOUNTED TO POLE AT 96" OC AFF.
- SURVEILLANCE CAMERA, SURFACE MOUNTED TO WALL AT 96" OC AFF.
- SURVEILLANCE CAMERA, SURFACE MOUNTED TO CEILING.
- VM — VIDEO MONITOR OUTLET, FLUSH MOUNTED BEHIND DISPLAYS FOR TIE-IN WITH CCTV CAMERAS.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE VIDEO SURVEILLANCE SYSTEM SECTION AS NOTED IN THE DESIGN:

* (P) PAN/TILT/ZOOM.
(W) WEATHERPROOF.
(D) DOME CAMERA.
(B) BULLET CAMERA.
(#) PROVIDE CAMERA WITH APPROXIMATE HORIZONTAL FIELD OF VIEW AS SHOWN ON THE FLOOR PLAN.

TELEVISION SYSTEM

- TV — TELEVISION OUTLET, ONE (1) RG-6 COAX, TV DISPLAY SHALL BE PROVIDED BY OTHERS, FLUSH MOUNTED IN WALL AT 18" OC AFF.
- TV — TELEVISION OUTLET, ONE (1) RG-6 COAX, TV DISPLAY SHALL BE PROVIDED BY OTHERS, FLUSH MOUNTED IN CEILING.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE TELEVISION SYSTEM SECTION AS NOTED IN THE DESIGN:

* (C) MOUNTED WHERE BOTTOM IS AT 4" ABOVE COUNTER OR BACKSPLASH. MAXIMUM 46" OC AFF.
(TV) MOUNTED 66" OC AFF BEHIND FLAT PANEL DISPLAY.
(A) MOUNTED ABOVE CEILING.

INTERCOM SYSTEM

- IS — INTERCOM SPEAKER, CEILING MOUNTED.
- IS — INTERCOM SPEAKER, WALL MOUNTED AT 24" OC BFC.
- IS — INTERCOM SPEAKER, HORN, WEATHER-RESISTANT, SURFACE MOUNTED TO WALL AT 24" OC BFC.
- IS — INTERCOM SPEAKER, FLEXHORN, VANDAL-RESISTANT, WEATHER-RESISTANT, SURFACE MOUNTED TO WALL AT 24" OC BFC.
- IC — INTERCOM CALL SWITCH, FLUSH MOUNTED IN RACEWAY NEAR TEACHERS STATION.
- IV — INTERCOM VOLUME CONTROL, FLUSH MOUNTED IN RACEWAY NEAR TEACHERS STATION.
- ID — INTERCOM DOOR BELL CAMERA, SURFACE MOUNTED AT 46" OC AFF, CONNECTED TO MASTER STATION NEAR COMPUTER IN LOBBY OFFICE, UNLESS OTHERWISE NOTED. COORDINATE WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE INTERCOM SYSTEM SECTION AS NOTED IN THE DESIGN:

* (O) ONE-WAY DEVICE.
(T) TALKBACK DEVICE.
(IO) IP SOUNDPOINT, ONE-WAY DEVICE.
(IT) IP SOUNDPOINT , TALKBACK DEVICE.
(L) LAY-IN, RECESSED MOUNTED.
(R) ROUND, FLUSH MOUNTED.
(S) SQUARE, FLUSH MOUNTED.
(V) VANDAL-RESISTANT ANGLED ENCLOSURE WITH SPEAKER, SURFACE MOUNTED.
(SD) SMALL TEXT DISPLAY SPEAKER, SURFACE MOUNTED TO TEACHING WALL.
(LD) LARGE TEXT DISPLAY SPEAKER, SURFACE MOUNTED TO TEACHING WALL.
(S) 5 WATT HORN.
(15) 15 WATT HORN.
(C) COMPACT FLEXHORN WITHOUT ENCLOSURE, SURFACE MOUNTED.
(E) EMERGENCY ONLY CALL SWITCH.
(NE) NORMAL/EMERGENCY CALL SWITCH.
(N) NOISE-SENSING DEVICE. SHALL BE ACCOMPANIED WITH REMOTE MICROPHONE FOR WORKING SYSTEM (EXACT LOCATIONS AND QUANTITIES TO BE CONFIRMED AND LOCATED BY PRINCIPAL AND PM).

INTRUSION DETECTION SYSTEM

- K — KEYPAD, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- DC — DOOR CONTACT, CONSISTS OF COMPONENT RECESSED MOUNTED IN TOP FRAME OF DOOR AND COMPONENT RECESSED MOUNTED IN TOP OF THE DOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS AND VENDORS FOR DOOR SPEC.
- WC — WINDOW CONTACT, CONSISTS OF COMPONENT RECESSED MOUNTED IN TOP OF FRAME OF DOOR AND COMPONENT RECESSED MOUNTED IN TOP OF THE DOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS AND VENDORS FOR WINDOW SPEC.
- DB — DURESS BUTTON, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- SL — SECURITY LOCKING DEVICE, SURFACE MOUNTED ON OR IN PLACE OF DOOR HANDLE.
- GB — GLASS BREAK DETECTOR, SURFACE MOUNTED TO WALL AT 84" OC AFF. COORDINATE WITH WINDOW/DOOR LOCATION AND OPTIMAL MOUNTING HEIGHT AND LOCATION FOR FINAL PLACEMENT BASED ON MANUFACTURER'S INSTRUCTIONS.
- GB — GLASS BREAK DETECTOR, CEILING MOUNTED. COORDINATE WITH WINDOW/DOOR LOCATION FOR FINAL PLACEMENT BASED ON MANUFACTURERS INSTRUCTIONS.
- MD — MOTION DETECTOR, SURFACE MOUNTED TO WALL AT 84" OC AFF. COORDINATE RECOMMENDED LOCATION AND MOUNTING HEIGHT WITH MANUFACTURER FOR FINAL PLACEMENT.
- MD — MOTION DETECTOR, CEILING MOUNTED. COORDINATE RECOMMENDED LOCATION WITH MANUFACTURER FOR FINAL PLACEMENT.
- S — SOUND DETECTOR, SURFACE MOUNTED TO WALL AT 84" OC AFF. COORDINATE RECOMMENDED LOCATION AND MOUNTING HEIGHT WITH MANUFACTURER FOR FINAL PLACEMENT.
- V — VIBRATION DETECTOR, SURFACE MOUNTED TO WALL AT 84" OC AFF. COORDINATE RECOMMENDED LOCATION AND MOUNTING HEIGHT WITH MANUFACTURER FOR FINAL PLACEMENT.
- A — ALARM STROBE, SURFACE MOUNTED TO WALL AT 84" OC AFF. COORDINATE RECOMMENDED LOCATION AND MOUNTING HEIGHT WITH MANUFACTURER FOR FINAL PLACEMENT.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE SECURITY SYSTEM SECTION AS NOTED IN THE DESIGN:

* (A) ACTIVE INFRARED.
(P) PASSIVE INFRARED.
(U) ULTRASONIC.

ACCESS CONTROL SYSTEM

- CR — CARD READER, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- BR — BIOMETRIC READER, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- PB — PUSH BUTTON, SURFACE MOUNTED TO WALL AT 46" OC AFF.
- DP — DOOR POSITION SWITCH, CONSISTS OF COMPONENT RECESSED MOUNTED IN TOP FRAME OF DOOR AND COMPONENT RECESSED MOUNTED IN TOP OF THE DOOR.
- EL — ELECTRONIC LOCK, MOUNTED ON OR IN PLACE OF DOOR HANDLE. COORDINATE WITH ARCHITECT FOR DOOR HARDWARE.
- ES — ELECTRONIC STRIKE, MOUNTED ONTO FRAME OF DOORWAY. COORDINATE WITH ARCHITECT FOR DOOR HARDWARE.

THE FOLLOWING ARE APPLICABLE TO THE ABOVE CARD ACCESS SYSTEM SECTION AS NOTED IN THE DESIGN:

* (K) CARD READER W/ KEYPAD. READER SHALL ALLOW KEYPAD ENTRY AS A SUBSTITUTE IN CASE CARD/BADGE/FOB/ETC. IS MISSING OR LOST.

TECHNOLOGY SYSTEMS GENERAL NOTES, CONDUIT ROUTING NOTES, AND ABBREVIATIONS

GENERAL NOTES

1. PRODUCTS SHALL BE OF MATERIALS THAT ARE SUITABLE FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.
2. WORKING CLEARANCES AROUND EQUIPMENT, RACKS, AND CABINETS SHALL BE MAINTAINED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 110 AND OSHA. COORDINATE INSTALLATION TO MAINTAIN REQUIRED CLEARANCES.
3. IF AN OUTLET BOX IS REQUIRED TO BE LOCATED IN AN ASSEMBLY OR PARTITION RATED AS "FIRE/SMOKE" OR "SMOKE" OR IDENTIFIED AS SUCH, THEN ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:
   A. THE OUTLET BOX SHALL BE METALLIC.
   B. THE OUTLET BOX OPENINGS SHALL OCCUR ONLY ON ONE SIDE OF THE FRAMING SPACE.
   C. THE OUTLET BOX OPENINGS SHALL NOT EXCEED 16 SQUARE INCHES.
   D. ALL CLEARANCES BETWEEN THE OUTLET BOX AND THE WALL BOARD MATERIAL SHALL BE COMPLETELY SEALED WITH APPROVED MATERIALS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS FOR THE PROJECT.
   E. PROVIDE A SUPPLEMENTAL BARRIER AROUND OUTLETS LARGER THAN 16 INCHES SO THAT THE ORIGINAL RATING OF THE PENETRATION IS MAINTAINED.
   F. THE TOTAL AGGREGATE SURFACE AREA OF THE OUTLET BOX SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET.
   G. THE OUTLET BOX SHALL BE SEPARATED FROM OPENINGS ON THE OPPOSITE SIDE OF THE RATED PARTITION BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.
   H. THE OUTLET BOX SHALL BE SECURELY FASTENED TO A PARTITION FRAMING MEMBER BY MEANS OF AN APPROVED ATTACHMENT METHOD.
   I. OPENINGS CUT INTO THE WALL BOARD MATERIAL SHALL NOT EXCEED 1/8 INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.
4. LOCATIONS OF EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE EXACT EQUIPMENT LOCATION AND CONNECTION REQUIREMENTS WITH THE OWNER, ARCHITECT, PROJECT GC, AND APPROPRIATE TRADE PRIOR TO INSTALLATION.
5. FOR EXACT LOCATION OF CEILING MOUNTED EQUIPMENT REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN. LOCATIONS OF EQUIPMENT NOT INCLUDED ON THE REFLECTED CEILING PLAN SHALL BE COORDINATED WITH THOSE ITEMS SHOWN. COORDINATION OF CEILING MOUNTED EQUIPMENT SHALL BE COMPLETED PRIOR TO ANY ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCY.
6. CONTRACTOR TO PROVIDE FINAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT WHERE INDICATED ON THE PLAN DRAWINGS.
7. PRIOR TO ROUGH-IN AND INSTALLATION OF ANY FLOOR MOUNTED DEVICE, VERIFY LOCATION WITH OWNER AND ARCHITECT.
8. VERIFY AND COORDINATE THE LOCATION OF REQUIRED DIVISION 27 AND 28 DEVICES WITH OTHER TRADE DRAWINGS AND OWNER PROVIDED EQUIPMENT.
9. ALL RACEWAY SYSTEMS INCLUDING CONDUITS, PULL STRINGS, AND BACK BOXES, TO SUPPORT THE INSTALLATION OF DIVISION 27 AND 28 EQUIPMENT SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTRACTOR TO PROVIDE COORDINATION FOR THE INSTALLATION OF THIS RACEWAY SYSTEM WITH THE ELECTRICAL CONTRACTOR.
10. ELECTRICAL CONTRACTOR TO PROVIDE ALL SLEEVES AS REQUIRED FOR ALL LOW VOLTAGE CABLE PATHWAYS. RESTORE THE FIRE RATING OF THE SURFACE.
11. EACH TECHNOLOGY SYSTEMS OUTLET LOCATION SHOWN SHALL HAVE A DOUBLE GANG OUTLET BOX 4-11/16 INCHES X 4-11/16 INCHES X 2-3/4 INCHES WITH A SINGLE GANG PLASTER RING AND (1) ONE INCH CONDUIT, UNLESS OTHERWISE NOTED, STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING. WORK BY ELECTRICAL CONTRACTOR PER PLANS AND SPECIFICATIONS.
12. EACH TECHNOLOGY SYSTEMS OUTLET LOCATION SHOWN SHALL HAVE A CONDUIT WITH PULL STRING, STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING OR TO AN ACCESSIBLE CABLE TRAY WHERE PROVIDED.
13. EACH TECHNOLOGY FLOOR BOX MOUNTED ON THE FIRST FLOOR WITH A VOICE/DATA OUTLET SHALL HAVE A DOUBLE GANG SPACE WITHIN THE FLOOR BOX AND 1 INCH CONDUIT CONCEALED IN SLAB FROM THE OUTLET TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING. WORK BY ELECTRICAL CONTRACTOR PER PLANS AND SPECIFICATIONS.
14. ALL BONDING AND GROUNDING ELEMENTS UTILIZED FOR THE STRUCTURE CABLING SYSTEM SHALL BE IN COMPLIANCE WITH PLANS AND SPECIFICATIONS.
15. CABLE WITHIN/UNDER SLAB ON GRADE USE OSP GEL-FILLED CABLES.
16. ALL MATERIALS AND EQUIPMENT PROVIDED UNDER THIS CONTRACT SHALL BE NEW AND CARRY A ONE YEAR MANUFACTURER'S WARRANTY. WARRANTY SHALL START ONE DAY AFTER OWNER'S ACCEPTANCE OF THE PROJECT.
17. CONTRACTOR TO PROVIDE AND INSTALL FIRE-STOPPING IN ALL CONDUITS PENETRATING RATED WALLS AFTER CABLING IS INSTALLED AND PROVIDE PHOTOGRAPHIC EVIDENCE OF COMPLIANCE WITH CODE, PLANS, AND SPECIFICATIONS.
18. ROUTE CABLING FOR EACH TECHNOLOGY SYSTEM BACK TO LOCAL HEAD-END TERMINATION BOARD OR CABINET AS SHOWN ON THE PLANS AND SPECIFICATIONS.
19. PROVIDE AND INSTALL TECHNOLOGY SYSTEMS CABLE/WIRING AS RECOMMENDED BY THE MANUFACTURER, APPLICABLE CODES AND STANDARDS, UNLESS OTHERWISE INDICATED ON DRAWINGS OR SPECIFICATIONS. WHERE CONFLICT EXISTS, THE LARGER SIZE SHALL BE USED.
20. TECHNOLOGY CABLES SHALL BE GROUPED IN BUNDLES OF 48 CABLES OR LESS.
21. TO AVOID EMI PROVIDE CLEARANCES OF THE FOLLOWING MINIMUM DISTANCES:
   A. 4' FROM MOTORS AND TRANSFORMERS
   B. 1' FROM ELECTRICAL CONDUITS USED FOR POWER DISTRIBUTION
   C. 1' FROM FLUORESCENT LIGHTING FIXTURES
22. TECHNOLOGY PATHWAYS SHALL CROSS FLUORESCENT FIXTURES AND POWER CONDUITS PERPENDICULARLY WITH PROPER SEPARATION.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COORDINATION OF ALL WORK AND EQUIPMENT IDENTIFIED IN THE DRAWINGS AND SPECIFICATIONS FOR A COMPLETE SOLUTION OF MULTIPLE, FULLY FUNCTIONAL TECHNOLOGY SYSTEMS AS DESCRIBED WITHIN THIS PACKAGE.
24. ALL DATA CABLING SHALL BE CAT-6A UNO.
25. BUILDING IS RETURN AIR PLENUM. PROVIDE PLENUM RATED CONDUITS, BOXES, RACEWAYS. AND MATERIALS...ETC
26. ALL DATA CABLING SHALL PLENUM RATED UNO.
27. ALL WIRELESS ACCESS POINT (WAP) LOCATIONS ARE DIAGRAMMATICAL. LOW VOLTAGE CONTRACTOR SHALL PERFORM SIGNAL STRENGTH ANALYSIS AND PRODUCE A HEAT MAP TO DETERMINE FINAL QUANTITY OF WIRELESS ACCESS POINTS.
28. WHERE EQUIPMENT, CABLE TERMINATIONS, PULL BOXES, OR OTHER EQUIPMENT OR MATERIALS ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR BEHIND WALLS THE CONTRACTOR SHALL PROVIDE AND INSTALL LOCKING ACCESS PANELS. ALL ACCESS PANELS SHALL BE KEYED ALIKE. REFER TO ARCHITECTURAL PLANS FOR ACCESS PANEL LOCATIONS WHEN REQUIRED.

CONDUIT ROUTING NOTES

1. ONLY EMT OR RIGID SHALL BE USED FOR ALL CONDUIT INSTALLATIONS ABOVE GRADE.
2. ALL BURIED CONDUITS SHALL BE A MINIMUM OF 36 INCHES BELOW GRADE. MAINTAIN A MINIMUM OF 1 FOOT (12 INCHES) OF SEPARATION BETWEEN POWER CONDUITS AND TECHNOLOGY SYSTEMS CONDUITS.
3. CONTRACTOR SHALL PROVIDE A MINIMUM 24 INCHES AGGREGATE BASE BELOW EACH MANHOLE, OR HANDHOLE.
4. ALL CONDUIT ENTRY PENETRATION POINTS MUST BE PROPERLY SEALED AND PACKED TO PREVENT GASES OR RODENT INTRUSION.
5. ALL MANHOLES, VAULTS, AND PULL BOXES MUST HAVE TRAFFIC RATED COVERS MINIMUM 20,000 LBS RATED.
6. ALL CONDUITS SHALL BE PROVIDED WITH PULL STRINGS AND PLASTIC BUSHINGS ON THE ENDS.
7. ALL CONDUITS BETWEEN BUILDINGS, MANHOLES, AND/OR VAULTS SHALL BE SLOPED DOWN AT 1% FROM THE BUILDING OR CENTER POINT BETWEEN VAULTS.
8. ALL UNDERGROUND CONDUITS SHALL BE CLEANED USING A MANDREL AFTER INSTALLATION AND PRIOR TO SYSTEM TURN-OVER.
9. TECHNOLOGY SYSTEM PATHWAYS IN ACCESSIBLE CEILING SPACES MAY BE PROVIDED UTILIZING DEDICATED CABLE SUPPORTS RATED FOR THE RESPECTIVE CEILING SPACE (PLENUM OR NON-PLENUM) AND INSTALLED PER APPLICABLE CODES AND STANDARDS. FOR NON-ACCESSIBLE CEILING SPACES A CONTINUOUS PATHWAY, CONDUITS SHALL BE PROVIDED.
10. ALL PATHWAYS SHALL BE SIZED AS RECOMMENDED BY THE MANUFACTURERS AND APPLICABLE CODES AND STANDARDS. NO PATHWAY CABLE FILL SHALL EXCEED 40% FILL.
11. FIRE ALARM, SECURITY, ACCESS CONTROL, CLOSED CIRCUIT VIDEO SURVEILLANCE, AND CABLING SHALL BE INSTALLED IN COLOR CODED AND LABELED CONDUITS AND JUNCTION BOXES, UNLESS OTHERWISE NOTED.
12. INTERIOR CONDUIT RUNS SHALL BE PROVIDED WITH PULL BOXES AT A MINIMUM OF EVERY 100 FEET OR AFTER TWO 90 DEGREE BENDS OR AFTER A TOTAL OF 180 DEGREES OF BENDS.
13. EXTERIOR CONDUIT RUNS SHALL BE PROVIDED WITH HANDHOLES AT A MINIMUM OF EVERY 300 FEET OR AFTER TWO 90 DEGREE BENDS OR AFTER A TOTAL OF 180 DEGREES OF BENDS.
14. BACKBONE RACEWAYS SHALL HAVE A MINIMUM SIZE OF 2 INCHES.
15. HORIZONTAL RACEWAYS SHALL HAVE A MINIMUM SIZE OF 3/4 INCHES.
16. SLEEVES SHALL BE INSTALLED ABOVE CEILINGS IN ALL WALLS, RATED OR NOT. SLEEVES SHALL BE SIZED AND IN THE QUANTITIES TO SUPPORT THE NUMBER OF CABLES AND FILL IS NOT TO EXCEED 40%.
17. THE USE OF SURFACE MOUNTED RACEWAYS IN NEW CONSTRUCTION IS NOT ACCEPTABLE. ALL SURFACE MOUNTED RACEWAY INSTALLATION MUST BE APPROVED BY OWNER PRIOR TO INSTALLATION.
18. WHEN INSTALLED IN ACCESSIBLE CEILING SPACES, APPROVED HOOKS SHALL BE INSTALLED TO CONFORM WITH BUILDING LINES AND BE SPACED NO MORE THEN 5 FEET APART. PROVIDE TWO HOOKS AT 90 DEGREE CORNERS.
19. CABLE BUNDLES SHALL BE SECURED WITH VELCRO EVERY 2 FEET AND SHALL ALSO BE SECURED TO HOOKS.
20. CABLE SAG BETWEEN HOOKS SHALL NOT EXCEED 2 INCHES.
21. EACH TECHNOLOGY SYSTEM CABLING SHALL BE BUNDLED SEPARATELY AND SHALL HAVE SEPARATE SUPPORT BRACKETS.
22. WHERE EQUIPMENT, CABLE TERMINATIONS, PULL BOXES, OR OTHER EQUIPMENT OR MATERIALS ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR BEHIND WALLS THE CONTRACTOR SHALL PROVIDE AND INSTALL LOCKING ACCESS PANELS. ALL ACCESS PANELS SHALL BE KEYED ALIKE.

ABBREVIATIONS

AC	ACCESS CONTROL (SECURITY)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANNUN	ANNUNCIATOR
ARCH	ARCHITECT
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATED SYSTEMS
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BICSI	BUILDING INDUSTRY CONSULTANT SERVICES INTERNATIONAL
BLDG	BUILDING
C	CONDUIT
CA	CARD ACCESS (SECURITY)
CAB	CABINET
CAT	CATEGORY
CATV	COMMUNITY ACCESS TELEVISION
CCTV	CLOSED CIRCUIT TV (SECURITY)
CKT	CIRCUIT
CU	COPPER
DEMARK	SERVICE PROVIDER TERMINATION
DN	DOWN
E	EXISTING
ER	EQUIPMENT ROOM
ERL	EXISTING TO BE RELOCATED
ETR	EXISTING TO REMAIN
EXT	INTERNAL OUTLET FOR EXTERNAL DEVICE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FOB	FURNISHED BY OTHERS
FT	FEET
GND	GROUND
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPT
HC	HORIZONTAL CROSS CONNECT
HDMI	HIGH DEFINITION MEDIA INTERFACE
IDF	INTERMEDIATE DISTRIBUTION FRAME
IG	ISOLATED GROUND
KVA	KILOVOLT - AMPERES
KW	KILOWATTS
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MDF	MAIN DISTRIBUTION FRAME
MISC	MISCELLANEOUS
NEC	NATIONAL ELECTRICAL CODE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NIC	NOT IN CONTRACT
OC	ON CENTER LINE
OF	OWNER FURNISHED
OFOI	OWNER FURNISHED OWNER INSTALLED
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOVI	OWNER FURNISHED OWNER'S VENDOR INSTALLED
PDS	PREMISE DISTRIBUTION SYSTEM
PM	PROJECT MANAGER
POS	POINT OF SALE
PTZ	PAN, TILT ZOOM CAMERA
PVC	POLYVINYL CHLORIDE
R	RECESSED
RCDD	REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
RGB	15 PIN AV CONNECTOR
RK	RACK
SATV	SATELLITE TV SOURCE
SURF	SURFACE
SVGA	15 PIN AV CONNECTOR
TGB	TELCOM GND BUS BAR
TMGB	TELCOM MAIN GND BUS BAR
TSER	TELECOMMUNICATIONS SERVICE
TV	TELEVISION
UNIV	UNIVERSAL
UON	UNLESS OTHERWISE NOTED
USB	UNIVERSAL SERIAL BUS
USC	UNDER SEPARATE CONTRACT
UTP	UNIFORM TWISTED PAIRS
VGA	15 PIN AV CONNECTORS
W	WALL MOUNTED
WAP	WIRELESS ACCESS POINT
WP	WEATHERPROOF

ADDITIONAL ABBREVIATIONS MAY BE USED AND IDENTIFIED IN THE SPECIFICATIONS OR DRAWINGS.

CABLE COLORING CONVETION	
DATA - (COMPUTERS, HVAC, IRRIGATION, METERS, SMART DEVICES...ETC)	BLUE
PHONE - (IP BASED TEAMS PHONES)	RED
ACCESS POINTS (APs, WAPS)	GREEN
CCTV (CAMERAS)	PURPLE
ACCESS CONTROL	YELLOW

CONDUIT - TRADE SIZE (INCHES) EMT	CABLE OUTSIDE DIAMETER *
	CAT-6A U/UTP ~ 0.230
	# OF CABLES (40% FILL)
3/4	5
1	8
1-1/4	14
1-1/2	19
2	32
2-1/2	56
3	85
3-1/2	111
4	142
*BOD: LANMARK LM-RDT CAT6A UTP CMP	

CONDUIT - TRADE SIZE (INCHES) SCH-40	CABLE OUTSIDE DIAMETER *
	CAT-6A U/UTP ~ 0.230
	# OF CABLES (40% FILL)
3/4	4
1	8
1-1/4	13
1-1/2	19
2	31
2-1/2	45
3	69
3-1/2	93
4	120
*BOD: LANMARK LM-RDT CAT6A UTP CMP	

CLIENT

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REGISTRATION

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DRAWING HISTORY

No.	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

CMTA
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PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
GENERAL NOTES - TECHNOLOGY

SHEET NUMBER
T0.01E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
DATE STAMP: 10/23/2025 11:41:22 AM

SPECIAL NOTE:

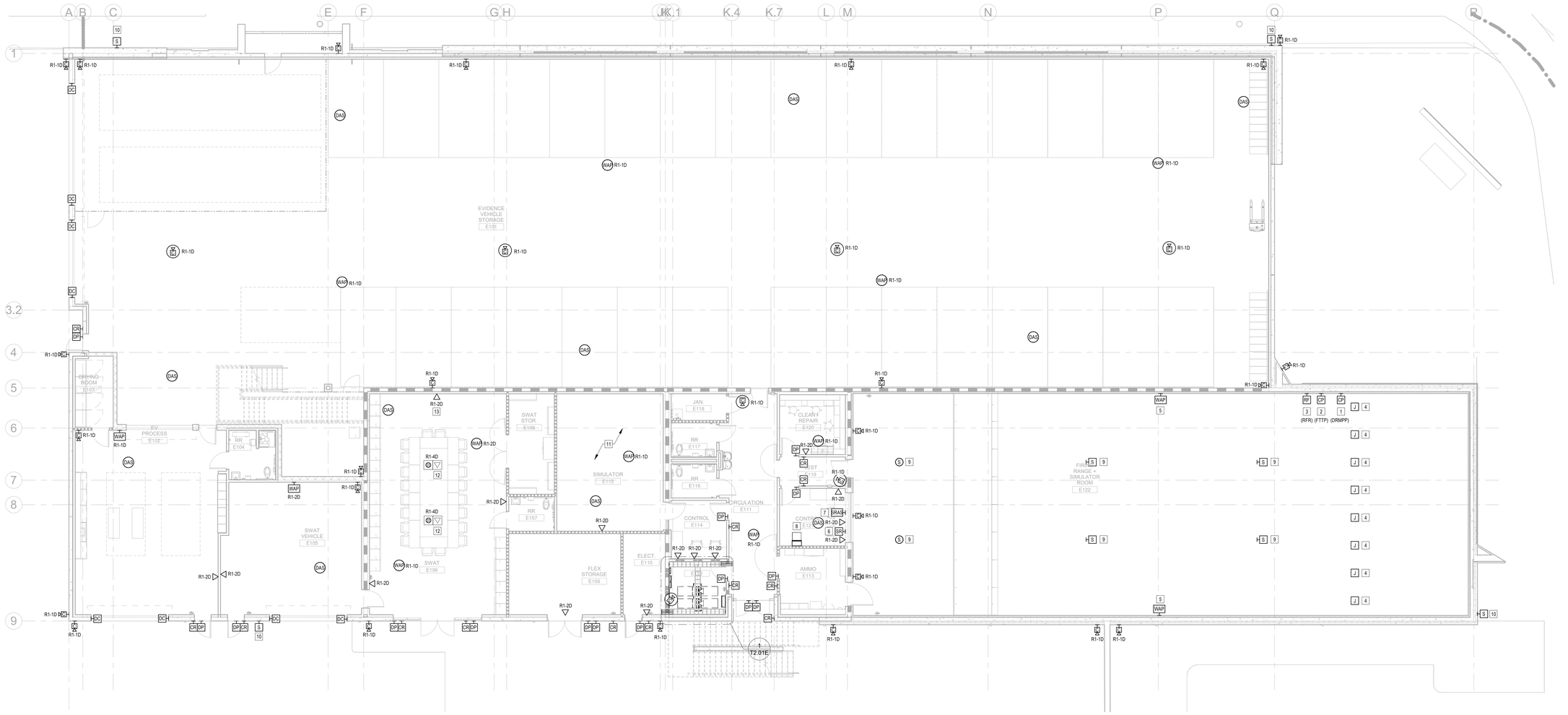
REFER TO SHEET E4.03 FOR DATA AND CCTV LOW VOLTAGE REQUIREMENTS.

KEYNOTES:

1. PROVIDE (2) 3/4" CONDUITS FROM DRM PRO PANEL (DRMPP) TO MINI SERVER RACK LOCATED IN FIRING RANGE CONTROL ROOM. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN. LOW VOLTAGE CABLING BY OTHERS.
2. PROVIDE (2) 3/4" CONDUITS FROM FIXED TURNING TARGET PANEL (FTTP) TO MINI SERVER RACK LOCATED IN FIRING RANGE CONTROL ROOM. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN. LOW VOLTAGE CABLING BY OTHERS.
3. PROVIDE (1) 3/4" CONDUIT FROM FIXED TURNING PANEL TO RADIO FREQUENCY RECEIVER. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN. LOW VOLTAGE CABLING BY OTHERS.
4. PROVIDE (1) 3/4" CONDUIT FROM FIXED TURNING PANEL TO TARGET LINE JUNCTION BOX. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN. J-BOX BY EC. LOW VOLTAGE CABLING BY OTHERS.
5. PROVIDE (1) 3/4" CONDUIT FROM FIRING RANGE WIRELESS ACCESS POINT TO MINI SERVER RACK LOCATED IN FIRING RANGE CONTROL ROOM. WAP PROVIDED BY FIRING RANGE MFR. COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN. LOW VOLTAGE CABLING BY OTHERS.
6. PROPOSED LOCATION FOR FIRING RANGE MINI SERVER RACK. COORDINATE FINAL LOCATION WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
7. PROVIDE (1) 3/4" CONDUIT FROM FIRING RANGE MINI SERVER RACK TO SMART RANGE ACCESS SCREEN (SRAS). COORDINATE FINAL CONNECTION REQUIREMENTS WITH FIRING RANGE DRAWINGS PRIOR TO ROUGH-IN.
8. PROVIDE WALL MOUNTED ENCLOSED AV CABINET. CABINET SHALL HOST AUDIO NETWORKING EQUIPMENT FOR RANGE SPEAKER SYSTEM AND EXTERIOR WHITE NOISE GENERATION SPEAKERS. MOUNT 5'-0" AFF.
   BOD: CHATSWORTH CUBE-IT 24"X24"X24"
9. PROPOSED SPEAKER LOCATION. PROVIDE SPEAKER AND SPEAKER WIRE WITH CONDUITS AND BOXES BACK TO FIRING RANGE AV RACK LOCATED IN FIRING RANGE CONTROL ROOM.
10. PROPOSED SPEAKER LOCATION. PROVIDE CONDUITS AND BOXES (INFRASTRUCTURE) FOR FUTURE WHITE NOISE GENERATOR SYSTEM. COORDINATE FINAL SPEAKER JUNCTION BOX LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
11. PROVIDE ADDITIONAL RACEWAY, CONDUITS AND BOXES BACK TO IT ROOM. FINAL SIMULATOR DESIGN TO BE DETERMINED AT A LATER DATE.
12. HOMERUN (1) 1" CONDUIT FROM FLOOR BOX TO IT ROOM. REFER TO SHEET E2.01E FOR FLOOR BOX SPECIFICATIONS. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH OTHER TRADES PRIOR TO ROUGH-IN
13. PROVIDE DATA CONNECTION FOR SMARTBOARD. COORDINATE ADDITIONAL CONNECTION REQUIREMENTS WITH SMARTBOARD MANUFACTURER AND END USER PRIOR TO ROUGH-IN.

GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO ALL INDUSTRY STANDARDS AND LOCAL BUILD REQUIREMENTS AS IDENTIFIED IN THE DRAWINGS AND SPECIFICATIONS.
2. CONTRACTORS SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS OF THE PLANS AND SPECIFICATIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. COORDINATE EXACT INSTALLATION REQUIREMENTS OF OUTLETS IN MILLWORK WITH ARCHITECTURAL DRAWINGS AND ACCEPTED MILLWORK SHOP DRAWINGS.
4. BACKBOXES FOR TECHNOLOGY EQUIPMENT SHALL BE OFFSET INTO SEPARATE STUD CAVITIES FROM BOXES SERVING ADJACENT SPACES WHEREVER POSSIBLE. CONTRACTOR SHALL COORDINATE FINAL ROUGH-IN LOCATION OF ALL DEVICES WITH APPROVED FURNITURE PLANS TO ASSURE THAT DATA/VOICE OUTLETS ARE ACCESSIBLE AND THAT CABLE OR PLUG CONNECTIONS DO NOT CONFLICT WITH INTENDED FURNITURE PLACEMENT.
5. COORDINATE THE LOCATION OF VOICE/DATA/AV OUTLETS WITH POWER RECEPTACLES WHERE EQUIPMENT SHALL BE SERVED BY MULTIPLE SYSTEMS. COORDINATE WITH POWER DRAWINGS.
6. RACEWAY, TECHNOLOGY, AND GROUNDING REQUIREMENTS SHALL COMPLY WITH SECTIONS OF DIVISION 26 AND 27. WHERE A CONFLICT ARISES THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
7. ALL RACEWAY TERMINATIONS SHALL HAVE BUSHINGS AND SHALL BE GROUNDED WHERE RACEWAY IS METALLIC.
8. ALL RACEWAYS AND CABLE INSTALLED IN FINISHED SPACES SHALL BE CONCEALED UNLESS NOTED OR APPROVED IN WRITING BY OWNER AND/OR ENGINEER.
9. REFER TO MANUFACTURER OF EACH EQUIPMENT ITEM FOR EXACT DATA REQUIREMENTS PRIOR TO ROUGH-IN.
10. ALL PATHWAYS SHOWN ARE CONDUITS WITH 12" RADIUS ELBOWS WHERE REQUIRED, UNLESS NOTED OTHERWISE. PLASTIC BUSHINGS AND PULL STRINGS ARE REQUIRED IN ALL CONDUITS.
11. STUB ALL CONDUITS 4" BEYOND WALLS OR FLOORS THEY ARE PENETRATING AT A MINIMUM. INSTALL PLASTIC BUSHINGS. SEAL CONDUITS AFTER INSTALLATION OF CABLES. SEAL ALL UNUSED CONDUITS WITH A REMOVABLE PLUG.
12. CABLE TRAY LAYOUT IS DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND ADD SECTIONS AND ACCESSORIES AS NEEDED TO AVOID CONFLICTS WITH OTHER TRADES WHILE MAINTAINING CABLE QUANTITIES.
13. DIVISIONS 26, 27, AND 28 CONTRACTORS SHALL COORDINATE TO PROVIDE PROPER INFRASTRUCTURE REQUIREMENTS (CONDUITS AND BOXES) FOR ALL ACCESS CONTROL AND SECURITY REQUIREMENTS WITH ARCHITECTURAL PLANS INCLUDING DOOR SCHEDULES.



OVERALL FIRST FLOOR PLAN - TECHNOLOGY 1/8" = 1'-0" (1)

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DRAWING HISTORY

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PROJECT STATUS
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10/14/2025

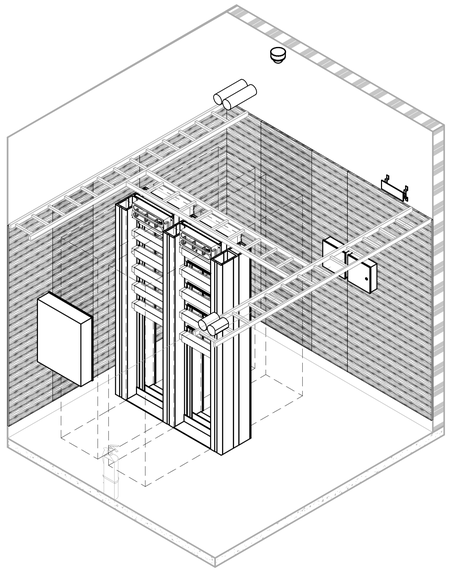
PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

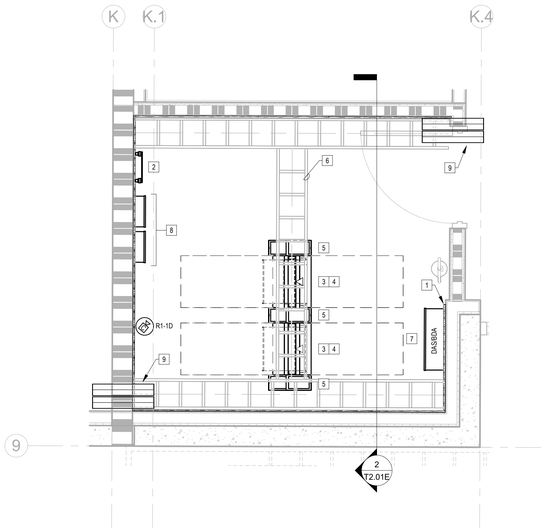
PROJECT NUMBER
1007657.00

SHEET TITLE
FLOOR PLAN - EVIDENCE/FIRING RANGE - TECHNOLOGY

SHEET NUMBER
T1.01E



3 3D VIEW - IT ROOM



1 ENLARGED IT ROOM PLAN
1/2" = 1'-0"

DATA CABLE QUANTITIES

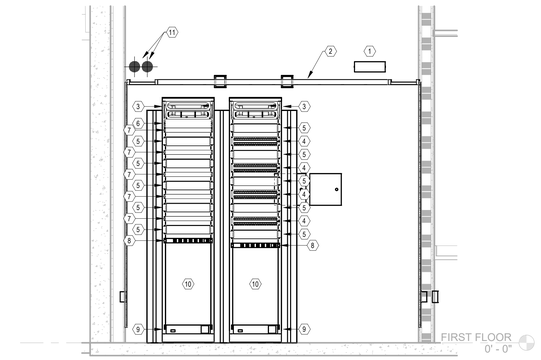
MARK	DAS COAX	CAT-6A	NOTES
TOTAL	11	86	-
NOTES:			

GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO ALL INDUSTRY STANDARDS AND LOCAL BUILDING REQUIREMENTS AS IDENTIFIED IN THE DRAWINGS AND SPECIFICATIONS AND DESIGN CRITERIA.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS OF THE PLANS AND SPECIFICATIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONTRACTOR TO PROVIDE AND INSTALL ALL EQUIPMENT, RACKS AND CABINETS IDENTIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
4. CONTRACTOR TO GROUND ALL CABLE TRAY, RACKS AND CABINETS AND BOLT ALL RACKS AND CABINETS TO THE FLOOR. SEE DETAIL SHEETS FOR ADDITIONAL REQUIREMENTS.
5. ALL ELECTRICAL POWER CONNECTION AND BUILDING GROUNDING SYSTEM BY DIVISION 26 CONTRACTOR.
6. COORDINATE LABELING WITH OWNER'S I.T. DEPARTMENT. PROVIDE ACCURATE LABELING AT TERMINATION RACKS, WORKSTATION FACEPLATES AND ON AS-BUILT DRAWINGS PER PLANS AND SPECS.
7. CONTRACTOR SHALL MAINTAIN CODE REQUIRED CLEARANCES AND INFORM ENGINEER OF ANY CLEARANCE CONFLICT.
8. EQUIPMENT SHOWN IN ENLARGED PLANS IS FOR DESIGN PURPOSES. THE OWNER IS RESPONSIBLE FOR CORRECT NUMBER OF NETWORK SWITCHES, EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE FOR INFRASTRUCTURE AND CABLE MANAGEMENT.
9. EQUIPMENT SHOWN IN THE ENLARGED PLANS IS FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL RELOCATE RACKS/PANELS/CABLES TRAY AS REQUIRED FOR CONTRACTIBILITY PURPOSES FOR A ORGANIZED AND CLEAN INSTALLATION.
10. COORDINATE CONDUIT PENETRATIONS WITH ELECTRICAL CONTRACTOR WHERE ELECTRICAL AND I.T. ROOMS ARE STACKED ABOVE ONE ANOTHER PRIOR TO ROUGH-IN REGARDLESS OF WHAT IS SHOWN ON THE PLANS.

KEYNOTES:

1. PROVIDE 48"X96"X3/4" MARINE GRADE PLYWOOD BACKBOARD WRAPPED AROUND ROOM. MOUNT BACKBOARDS ABOVE WALL OUTLET HEIGHT. BACKBOARDS SHALL RECEIVE TWO (2) COATS OF FIRE RETARDANT WHITE PAINT. (CFCI)
2. PROVIDE NEW 4"X12" TELECOMMUNICATIONS GROUND BUS BAR. CONNECT TO BUILDING GROUND, GROUND LADDER RACK AND 2-POST RACKS. (CFCI)
3. PROVIDE STANDARD 8'-0" HIGH x 19" WIDE ALUMINUM FLOOR MOUNTED 2-POST RACK, BLACK FINISH. PROVIDE A RACK RADIUS DROP AT EACH WIRE MANAGER FOR PROPER TRANSITION OF HORIZONTAL WIRING AND TO PROTECT CABLING. PROVIDE WITH GROUND TERMINAL BLOCK. BOD: CHATSWORTH UNIVERSAL OR APPROVED EQUAL. (CFCI)
4. PROVIDE RACKS WITH HORIZONTAL CABLE MANAGERS. COORDINATE WITH OWNER'S IT REPRESENTATIVE. BOD: CHATSWORTH VELOCITY OR APPROVED EQUAL. (CFCI)
5. PROVIDE VERTICAL DUAL SIDED MANAGER 8'-0" - COORDINATE WITH OWNER'S IT REPRESENTATIVE. BOD: CHATSWORTH VELOCITY OR APPROVED EQUAL. (CFCI)
6. PROVIDE NEW LADDER TRAY. MINIMUM WIDTH IS 12". PROVIDE WITH RADIUS DROPS WHEN OVER RACKS. COORDINATE LAYOUT WITH OWNER'S IT REPRESENTATIVE. BOD: CHATSWORTH UNIVERSAL CABLE RUNWAY OR APPROVED EQUAL (CFCI)
7. DAS/BDA CONTROL PANEL LOCATION. COORDINATE FINAL LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN.
8. SPACE PROVIDED FOR WALL MOUNTED EQUIPMENT PANELS AND 110 BLOCKS.
9. PROVIDE 4" SPEED SLEEVE FOR HORIZTONAL CABLING DISTRIBUTION. COORDINATE FLOOR AND WALL PENETRATIONS FOR HORIZONTAL CABLING WITH OTHER TRADES PRIOR TO ROUGH-IN. (TYPICAL)



2 Section 7
1/2" = 1'-0"

KEYNOTES:

1. TELECOMMUNICATION GROUND BUS BAR. (CFCI)
2. LADDER RACKING. (CFCI)
3. 4RU RACK MOUNTED FIBER ENCLOSURE. (CFCI)
4. 2RU CAT-6A PATCH PANEL. (TYPICAL) (CFCI)
5. 2RU HORIZONTAL WIRE MANAGER. (TYPICAL) (CFCI)
6. 2RU BLANKING PLATE. (TYPICAL) (CFCI)
7. PROVIDE 1RU BLANKING PLATE. SPACE IS RESERVED FOR OWNER PROVIDED NETWORK SWITCH. (TYPICAL) (CFCI)
8. 1RU RACK MOUNTED POWER DISTRIBUTION UNIT. (CFCI)
9. LITHIUM-ION RACK MOUNTED UPS. LOCATE AT BOTTOM OF RACK. (CFCI)
10. RACK SPACE PROVIDED FOR OWNER'S AND SERVICE PROVIDER'S NETWORKING EQUIPMENT.
11. HILTI SPEED SLEEVES. (CFCI)
12. L6-30R TWIST LOCK RECEPTACLES. (CFCF)

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DRAWING HISTORY

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A	4/4/2025	100% Design Development
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D	9/18/2025	90% Construction Documents
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PROJECT STATUS

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RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION

1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER

1007657.00

SHEET TITLE

ENLARGED PLANS - TECHNOLOGY

SHEET NUMBER

T2.01E

FILE NAME: Autodesk Docs://1007657.00 - CORE - City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
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CONDUIT SCHEDULE

MARK	RACEWAY	NOTES
A	(2) SETS OF 4" CONDUIT	(1)
B	(1) 1-1/4" CONDUIT	(2)

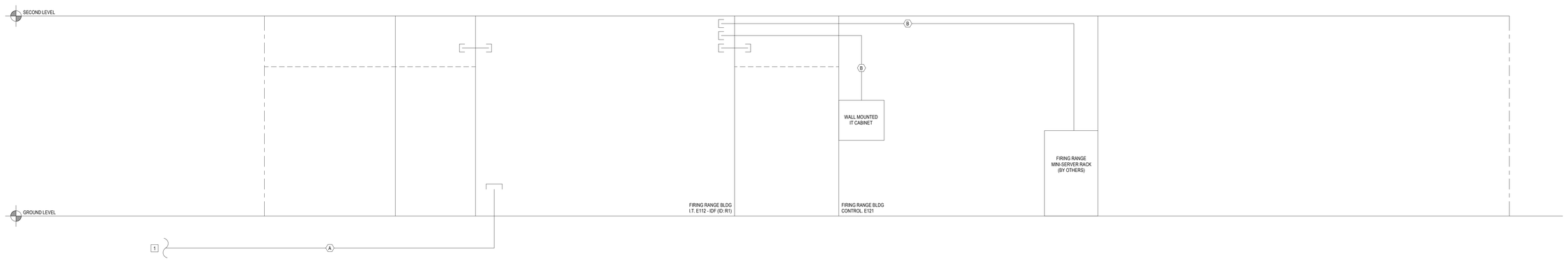
NOTES: 1. PROVIDE (2) 3-CELL 4" MAXCELL INNERDUCTS IN EACH CONDUIT.

GENERAL NOTES:

1. NO MORE THAN TWO (2) 90-DEGREE SWEEPS SHALL BE USED BETWEEN THE SERVICE ENTRANCE MANHANDHOLES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS OF THE PLANS AND SPECIFICATIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. ALL ELECTRICAL POWER CONNECTIONS AND BUILDING GROUNDING SYSTEM BY THE DIVISION 26 CONTRACTOR.
4. ALL SLEEVES SHALL BE TERMINATED WIT BUSHINGS TO PREVENT DAMAGE OF CABLES.
5. THE CONTRACTOR SHALL PROVIDE DATA CABLING APPROPRIATE FOR THE ENVIRONMENT (PLENUM/RISER/OSP) THEY ARE TO BE INSTALLED IN.
6. PERFORM WIRELESS SIGNAL STRENGTH TEST SURVEY. WIRELESS SIGNAL STRENGTH TEST SHALL DETERMINE THE FINAL LOCATION OF WIRELESS ACCESS POINTS AND QUANTITIES REGARDLESS OF WHAT IS ON THE PLANS.

KEYNOTES:

1 PROVIDE CONDUIT AND BOXES FROM EVIDENCE/GUN RANGE IDF TO MAIN BUILDING MDF. COORDINATE ROUTING WITH OTHER TRADES PRIOR TO START OF ANY UNDERGROUND WORK.



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RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
CONDUIT RISER DIAGRAM - TECHNOLOGY

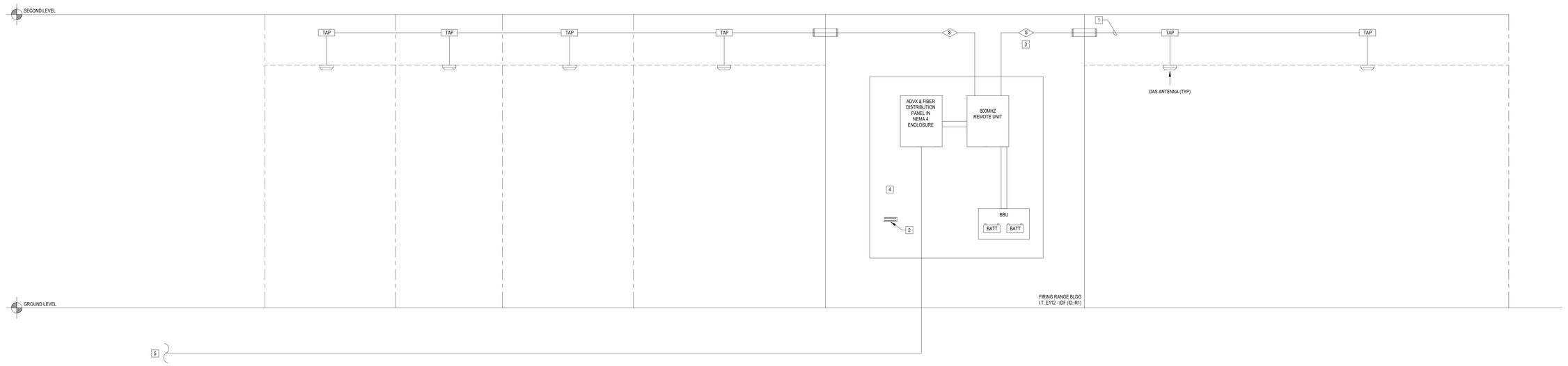
SHEET NUMBER
T3.01E

GENERAL NOTES:

1. CONTRACTOR SHALL PERFORM A RADIO SIGNAL COVERAGE ANALYSIS ONCE THE SHELL OF THE BUILDING IS CONSTRUCTED THROUGH A LICENSED BDA/DAS SIGNAL TESTER. IN THE EVENT THE RADIO SIGNAL COVERAGE DOES NOT MEET THE AHJ'S SIGNAL REQUIREMENTS OR THE MINIMUM REQUIREMENTS SET FORTH BY THE NFPA (2019 EDITION) THE CONTRACTOR SHALL WORK WITH A LICENSED BDA/DAS VENDOR FOR A COMPLETE DESIGN TO BE PROVIDED AND INCORPORATED AS PART OF THE CONTRACT.
2. CONTRACTOR TO PROVIDE THE INFRASTRUCTURE REQUIRED FOR THE DAS SYSTEM. CONSTRUCTION MANAGER AND ELECTRICAL CONTRACTOR TO COORDINATE WITH THE DAS DESIGN BUILD TEAM TO IDENTIFY THE SYSTEM REQUIREMENT PRIOR THE CONSTRUCTION PHASE.
3. DAS DESIGN BUILD TEAM AND CONTRACTOR SHALL ADHERE TO ALL INDUSTRY STANDARDS, LOCAL BUILD REQUIREMENTS, NFPA, AND IFC SET REGULATIONS AS WELL AS WORK WITH THE LOCAL GOVERNMENT TO ENSURE THAT REQUIREMENTS AND MEASURES ARE SET IN PLACE.
4. DAS DESIGN BUILD TEAM SHALL BE RESPONSIBLE FOR THE CORRECT LOCATIONS AND QUANTITIES OF THE OMNI COVERAGE ANTENNAS UPON COMPREHENSIVE RADIO FREQUENCY SURVEY AND FORMAL DESIGN REQUIRED FOR THE ENTIRE PUBLIC SAFETY DAS PROJECT TO FURNISH A COMPLETELY OPERATIONAL SYSTEM PER NFPA, IFC REGULATIONS AND THE LOCAL GOVERNMENT REQUIREMENTS.
5. DAS DESIGN BUILD CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS OF THE PLANS AND SPECIFICATIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.
6. DAS DESIGN BUILD CONTRACTOR TO PROVIDE AND INSTALL ALL EQUIPMENT, RACKS AND CABINETS IDENTIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
7. DAS DESIGN BUILD CONTRACTOR TO GROUND ALL CABLE TRAY, RACKS AND CABINETS AND BOLT ALL RACKS AND CABINETS TO THE FLOOR. SEE DETAIL SHEETS FOR ADDITIONAL REQUIREMENTS.
8. ALL ELECTRICAL POWER CONNECTION AND BUILDING GROUNDING SYSTEM BY DIVISION 26 CONTRACTOR.
9. CONTRACTOR TO PROVIDE A BID ALTERNATE FOR A COMBINED SYSTEM FOR PUBLIC SAFETY AND CELLULAR DAS SYSTEM.
10. ALL RISER CABLING TO BE PROTECTED BY ASSEMBLY OF A.) INTERNAL TWO-HOUR FIRE RATED CONDUIT (CHAMPION FLAME SHIELD PHENOLIC CONDUIT - FOR MANDATED FIRE PROTECTION AND B.) EXTERNAL EMT CONDUIT FOR MECHANICAL STRENGTH RIGIDITY.

KEYNOTES:

1. 1/2" COAX PLENUM CABLE SHALL BE ROUTED IN CONDUIT RACEWAY TO EACH LOCAL ANTENNA. CONTRACTOR TO PROVIDE 2" SLEEVE WHEN PENETRATING FLOOR/WALL AND SEAL BOTH ENDS SLEEVE AFTER CABLE INSTALLATION WITH FIRE STOPPING WHICH MEETS THE RESPECTIVE FLOOR/WALL RATING AND PATHWAY SURVIVABILITY.
2. CONTRACTOR TO PROVIDE GROUNDING FOR ALL NEW INSTALLED EQUIPMENTS.
3. ALL TAPS AND SPLITTERS SHALL BE INSTALLED INSIDE JUNCTION BOX 12" X 12" X 6" MOUNTED TO BUILDING STRUCTURE WITH HINGED COVER (TYPICAL).
4. PROVIDE PLYWOOD BACKBOARD, BACKBOARDS SHALL BE 3/4" THICK AC GRADE PLYWOOD. PRIME WITH TWO COATS FIRE RETARDANT PRIMER, SANDING SMOOTH AFTER EACH COAT. FINISH WITH TWO COATS FIRE RETARDANT PAINT, COLOR LIGHT GRAY.
5. PROVIDE (1) 2" CONDUIT FROM FROM BDA REMOTE UNIT TO BDA HEAD END SYSTEM IN MAIN BUILDING. REFER TO SHEET T3.02 FOR ADDITIONAL INFORMATION.



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PROJECT STATUS
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PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

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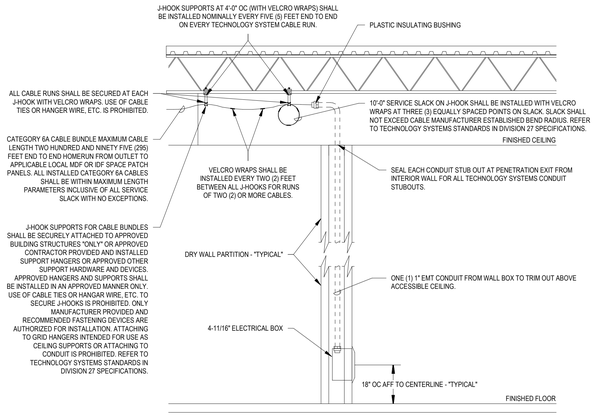
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
BDA RISER DIAGRAM - TECHNOLOGY

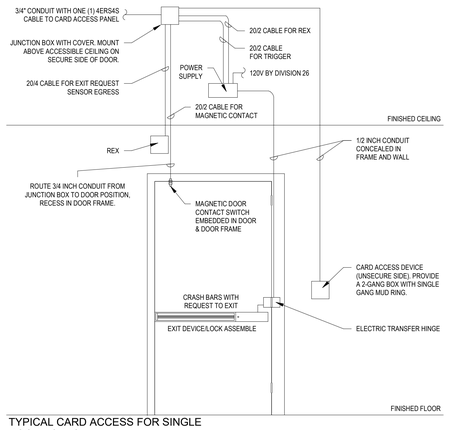
SHEET NUMBER
T3.02E



8 TYPICAL FLUSH MOUNTED OUTLET
NTS

NOTES:

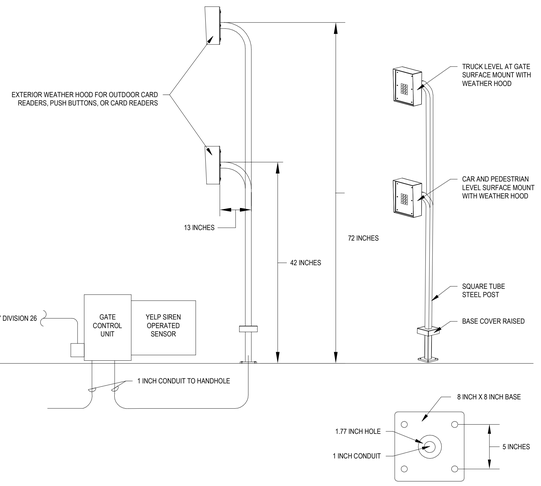
1. REFER TO DIVISION 26, DIVISION 27, AND DIVISION 28 SPECS FOR ANY COMPONENTS NEEDED FOR FULLY WORKING SYSTEM.



9 TYPICAL CARD ACCESS FOR SINGLE DOOR - CRASH BAR
NTS

NOTES:

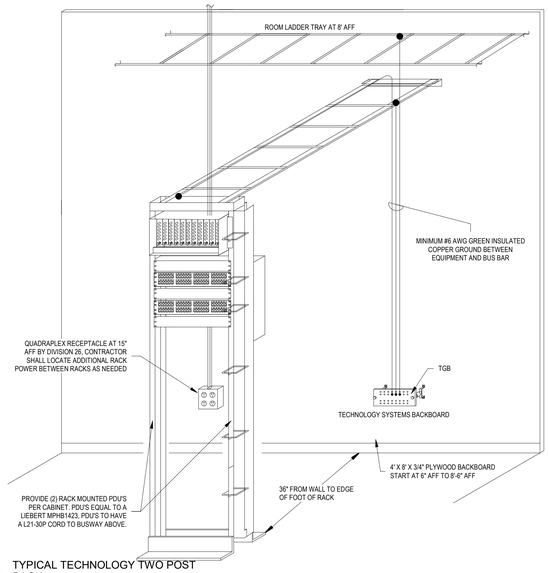
1. REFER TO SITE PLAN FOR ENTRY PEDESTAL LOCATIONS.
2. REFER TO POWER AND ARCHITECTURAL PLANS AND SPECS FOR COORDINATION AS NEEDED.
3. REFER TO DIVISION 26, DIVISION 27, AND DIVISION 28 SPECS FOR ANY COMPONENTS NEEDED FOR FULLY WORKING SYSTEM.



10 TYPICAL CARD ACCESS FOR ENTRY PEDESTAL
NTS

NOTES:

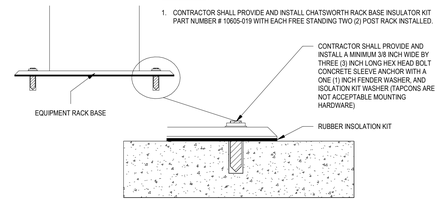
1. TIGHT METAL TO METAL CONTACT BETWEEN TRAY SEGMENTS, SUPPORTS AND RACK.
2. ANCHOR LADDER TRAY WALL BRACKETS WITH TAPCONS OR OTHER APPROVED FASTENERS.
3. DRILL A NEW HOLE IN RACKS FOR ATTACHING GROUND KIT. DO NOT USE EXISTING MOUNTING HOLES.
4. BOLT THROUGH FASTENER.



4 TYPICAL TECHNOLOGY TWO POST RACK
NTS

NOTES:

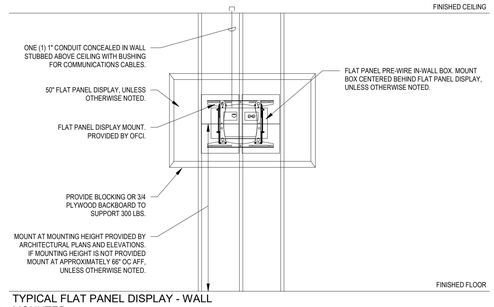
1. CONTRACTOR SHALL PROVIDE AND INSTALL CHATSWORTH RACK BASE INSULATOR KIT PART NUMBER # 10605-019 WITH EACH FREE STANDING TWO (2) POST RACK INSTALLED.



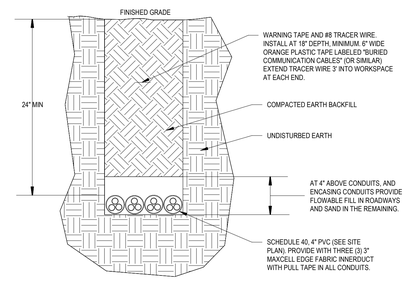
5 TYPICAL TWO POST RACK FLOOR MOUNTING
NTS

NOTES:

1. REFER TO POWER PLANS FOR CIRCUIT AND ROUTING REQUIREMENTS, ALONGSIDE ANY POWER RECEPTACLES AND THE TYPE OF RECEPTACLE BEING USED.



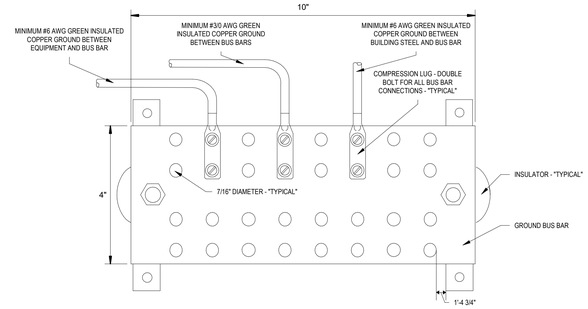
6 TYPICAL FLAT PANEL DISPLAY - WALL MOUNTED
NTS



7 TYPICAL CONDUIT TRENCHING/BORING
NTS

NOTES:

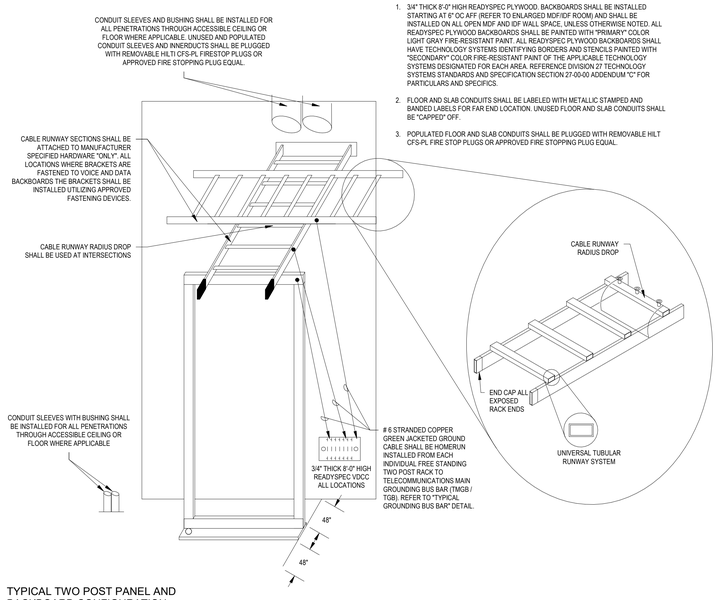
1. ALL CABLING TYPES SHALL HAVE WRITTEN LABELS DENOTING FAR END TERMINATION POINT.
2. REQUIRED SIZE FOR CABLING TO BE CALCULATED BY DESIGN.



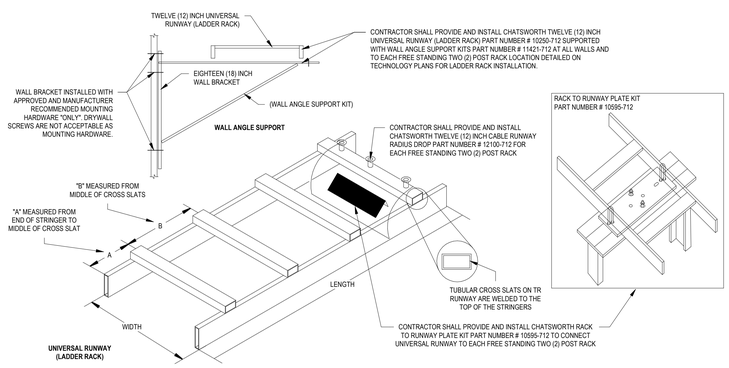
1 TYPICAL GROUNDING BUS BAR
NTS

NOTES:

1. 3/4" THICK 8'-0" HIGH READYSPEC PLYWOOD. BACKBOARDS SHALL BE INSTALLED STARTING AT 6" OC AFF (REFER TO ENLARGED MDF/IDF ROOM) AND SHALL BE INSTALLED ON ALL OPEN MDF AND IDF WALL SPACE, UNLESS OTHERWISE NOTED. ALL READYSPEC PLYWOOD BACKBOARDS SHALL BE PAINTED WITH "PRIMARY" COLOR LIGHT GRAY FIRE-RESISTANT PAINT. ALL READYSPEC PLYWOOD BACKBOARDS SHALL HAVE TECHNOLOGY SYSTEMS IDENTIFYING BORDERS AND STENCILS PAINTED WITH "SECONDARY" COLOR FIRE-RESISTANT PAINT OF THE APPLICABLE TECHNOLOGY SYSTEMS DESIGNATED FOR EACH AREA. REFERENCE DIVISION 27 TECHNOLOGY SYSTEMS STANDARDS AND SPECIFICATION SECTION 27-00-00 ADDENDUM "C" FOR PARTICULARS AND SPECIFICS.
2. FLOOR AND SLAB CONDUITS SHALL BE LABELED WITH METALLIC STAMPED AND BANDED LABELS FOR FAR END LOCATION. UNUSED FLOOR AND SLAB CONDUITS SHALL BE "CAPPED" OFF.
3. POPULATED FLOOR AND SLAB CONDUITS SHALL BE PLUGGED WITH REMOVABLE HILT CFS-PL FIRE STOP PLUGS OR APPROVED FIRE STOPPING PLUG EQUAL.



2 TYPICAL TWO POST PANEL AND BACKBOARD CONFIGURATION
NTS



3 TYPICAL LADDER RACK
NTS

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DRAWING HISTORY

№	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

PROJECT STATUS
90% CONSTRUCTION DOCUMENTS/PERMIT SET

DATE OF ISSUE
10/14/2025

PROJECT NAME
RBPS EVIDENCE & FIRE RANGE BUILDING

PROJECT LOCATION
1621 WEST BLUE HERON BLVD.
RIVIERA BEACH, FL 33404

PROJECT NUMBER
1007657.00

SHEET TITLE
DETAILS - TECHNOLOGY

SHEET NUMBER
T4.01E

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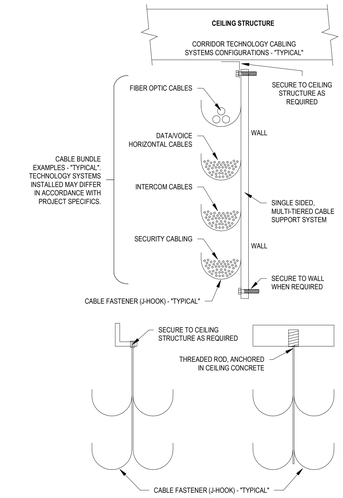
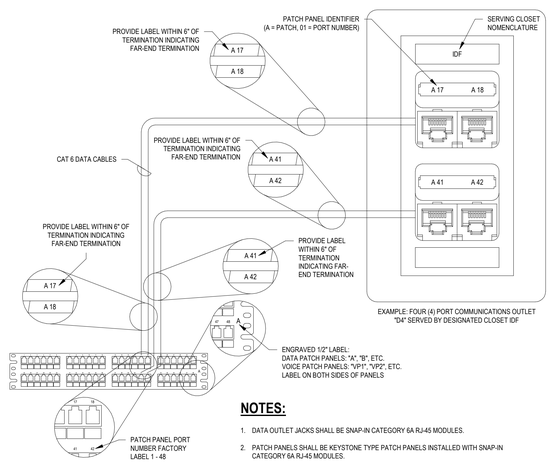


TYPICAL ABOVE CEILING SUPPORT SYSTEM
9 NTS

NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AND INSTALL THEIR OWN SEPARATE TRADE SPECIFIC CABLE SUPPORT SYSTEMS FOR ALL INSTALLATIONS. THIS REQUIREMENT IS APPLICABLE FOR MAIN CABLE BUNDLES AS WELL AS INDIVIDUAL STATION AND FIELD DEVICE CABLE RUNS.
2. THE CONTRACTOR SHALL PROVIDE CABLE FASTENERS AND HARDWARE AS SPECIFIED AND REQUIRED BY THE J-HOOK MANUFACTURER AS WELL AS ALL REQUIRED AND APPROVED COMPONENTS.
3. ALL NEWLY INSTALLED J-HOOK SUPPORT SYSTEMS SHALL BE APPROPRIATELY SIZED TO ACCOMMODATE A FORTY (40) PERCENT INCREASE IN GROWTH CAPACITY UPON COMPLETION OF EACH NEW INSTALLATION. DURING NEW CABLING INSTALLATIONS WHERE THE MANUFACTURER'S CABLE FILL RATIO REQUIREMENTS ARE EXCEEDED THE CONTRACTOR SHALL BE REQUIRED TO INSTALL ADDITIONAL J-HOOK FASTENERS TO ACCOMMODATE THE OVERFILL CABLES.
4. FOR NEW CONSTRUCTION CABLE SUPPORT SYSTEMS ALL SUPPORTS FOR BOTH THE MAIN RUNS AND THE STATION AND FIELD DEVICE FEEDS SHALL BE MOUNTED AT THE HIGHEST POINT AVAILABLE ABOVE CEILING. MOUNT AT LEVEL OF BUILDING STEEL, AND IF FEASIBLE, ABOVE ALL OTHER TRADE WIRING, DUCTING, PIPING, CONDUITS, AND ALL MECHANICAL AND ELECTRICAL EQUIPMENT. FOR EXISTING RENOVATION CONSTRUCTION CABLE SUPPORT SYSTEMS LOCATIONS SHALL AS MUCH AS POSSIBLE ROUTINELY COMPLY AS REQUIRED FOR NEW CONSTRUCTION INSTALLATIONS. ALL INSTALLED PATHWAYS SHALL BE INSPECTED AND ALL ISSUES ADDRESSED BY THE CONTRACTOR TO THE SATISFACTION OF THE CONSTRUCTION PROJECT MANAGERS AND OWNER REPRESENTATIVE.
5. IF J-HOOKS CAN NOT BE MOUNTED TO STRUCTURAL METALWOOD STUDS OR DRYWALL THEN J-HOOKS MAY ALSO BE INSTALLED USING CONTRACTOR PROVIDED AND INSTALLED CEILING GRID WIRE PAINTED WITH A TWELVE (12) INCH SWATCH OF BLUE PAINT INDICATING THE HANGERS ARE INTENDED ONLY FOR THE INSTALLATION OF CABLE RUNS. ALL GRID HANGERS SHALL BE FASTENED ON CEILING FAR END TO BUILDING STEEL OR TO APPROVED ANCHORS AND AT THE NEAR END OF THE CEILING GRID. IT IS NOT PERMISSIBLE IN ANY CIRCUMSTANCE FOR ANY CONTRACTOR TO USE ANY PRE-EXISTING GRID WIRE, BRACKETS, HANGERS, THREADED ROD OR OTHER MEANS INSTALLED BY OTHER CONTRACTORS.
6. J-HOOK SUPPORT SYSTEMS MAY BE INSTALLED AS DOUBLE SIDED MULTIPLE HOOK HANGER ASSEMBLIES WITH THE FOLLOWING PROVISIONS:
   A. ALL CONTRACTORS SHALL MAINTAIN MANUFACTURER APPROVED MINIMUM CABLE SEPARATION FOR ALL DIFFERING CABLES INSTALLED.
   B. ALL CONTRACTORS SHALL PROVIDE AND INSTALL ADEQUATE AND APPROVED AND SECURELY FASTENED ASSEMBLY BRACKETS.
   C. ALL J-HOOK AND OTHER APPROVED ASSEMBLIES SHALL BE SECURELY FASTENED TO BUILDING STRUCTURE UTILIZING ONLY APPROVED STRUCTURAL SURFACES.
7. ALL CABLE BUNDLES AND ALL CABLE RUNS SHALL BE SECURED AT EACH J-HOOK WITH VELCRO WRAPS AND SHALL BE SECURED BETWEEN EACH J-HOOK WITH VELCRO WRAPS EVERY TWO (2) FEET THE ENTIRE LENGTH OF EACH CABLE BUNDLE AND OR CABLE RUN.
8. ALL CABLE RUNS SHALL BE SECURED AT THE FIELD STATION OR FIELD DEVICE TERMINATING END WITH SPECIFIED LENGTHS OF SERVICE SLACK WHICH SHALL BE NEATLY DRESSED AND BUNDLED WITH VELCRO WRAPS AT THREE (3) EQUAL POINTS ON THE SERVICE SLACK COIL. THE SERVICE SLACK COIL SHALL BE SECURED ON A J-HOOK SUPPORT WITH VELCRO WRAPS.



EXAMPLE: FOUR (4) PORT COMMUNICATIONS OUTLET "D4" SERVED BY DESIGNATED CLOSET IDF

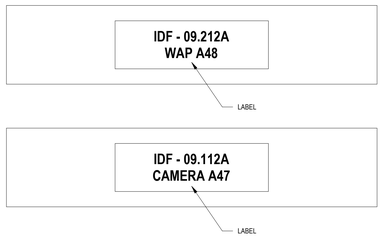
TYPICAL OUTLET AND PATCH PANEL WIRING/LABELING
10 NTS

NOTES:

1. DATA OUTLET JACKS SHALL BE SNAP-IN CATEGORY 6A RJ-45 MODULES.
2. PATCH PANELS SHALL BE KEYSTONE TYPE PATCH PANELS INSTALLED WITH SNAP-IN CATEGORY 6A RJ-45 MODULES.

NOTES:

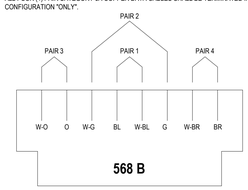
1. INTERIOR CEILING LABEL SPECIFICATIONS FOR WIRELESS ACCESS POINT AND VIDEO SURVEILLANCE CAMERA CATEGORY 6A DATA CABLE AND RJ-45 MODULAR JACK INSTALLATIONS INSTALLED ABOVE CEILING.
2. IDENTIFICATION LABELS TO BE PLACED BELOW FINISHED CEILING ON THE CEILING GRID AT THE EXACT ABOVE CEILING LOCATION OF THESE TERMINATED CATEGORY 6A DATA CABLE AND RJ-45 MODULAR JACK LOCATIONS



TYPICAL ABOVE CEILING LABELS
11 NTS

NOTES:

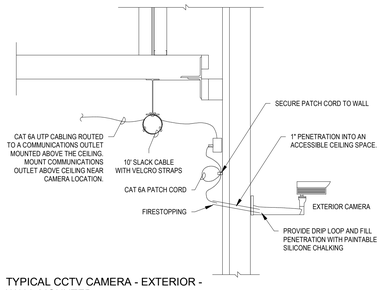
1. RJ45 MODULAR JACK AND PATCH PANEL PORT TERMINATION METHOD 568 "B" ONLY ALL CONFIGURATIONS UNLESS OTHERWISE NOTED.
2. EIGHT (8) - POSITION JACK PIN / PAIR ASSIGNMENTS EIA / TIA - 568B.
3. ALL FOUR (4) PAIR CATEGORY 6A COPPER DATA CABLES SHALL BE TERMINATED IN THIS CONFIGURATION "ONLY".



TYPICAL CATEGORY 6A WIRING CONFIGURATION
12 NTS

NOTES:

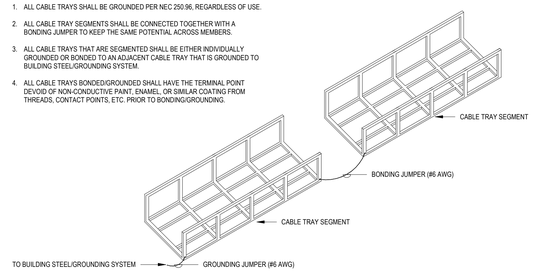
1. WALL ELEVATION SHOWN IS FOR REFERENCE ONLY.
2. REFER TO ARCHITECTURAL SHEET WALL ELEVATIONS AND STRUCTURAL DRAWING FOR SPECIFIC CONSTRUCTION REQUIREMENTS.



TYPICAL CCTV CAMERA - EXTERIOR - WALL MOUNTED
5 NTS

NOTES:

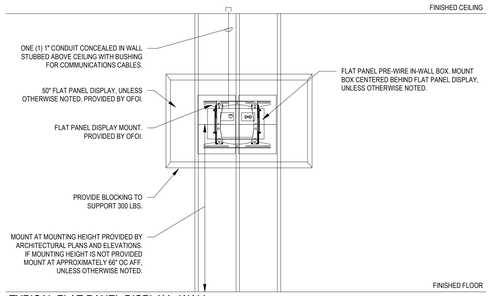
1. ALL CABLE TRAYS SHALL BE GROUNDED PER NEC 250.96, REGARDLESS OF USE.
2. ALL CABLE TRAY SEGMENTS SHALL BE CONNECTED TOGETHER WITH A BONDING JUMPER TO KEEP THE SAME POTENTIAL ACROSS MEMBERS.
3. ALL CABLE TRAYS THAT ARE SEGMENTED SHALL BE EITHER INDIVIDUALLY GROUNDED OR BONDED TO AN ADJACENT CABLE TRAY THAT IS GROUNDED TO BUILDING STEEL/GROUNDING SYSTEM.
4. ALL CABLE TRAYS BONDED/GROUNDED SHALL HAVE THE TERMINAL POINT DEVOID OF NON-CONDUCTIVE PAINT, ENAMEL, OR SIMILAR COATING FROM THREADS, CONTACT POINTS, ETC. PRIOR TO BONDING/GROUNDING.



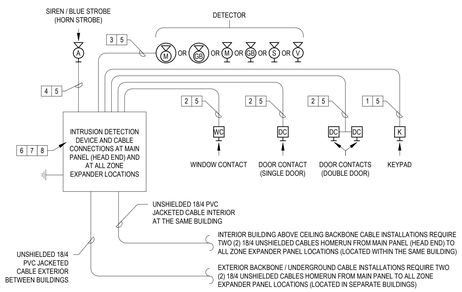
TYPICAL GROUNDING BUS BAR
6 NTS

NOTES:

1. REFER TO POWER PLANS FOR CIRCUIT AND ROUTING REQUIREMENTS, ALONGSIDE ANY POWER RECEPTACLES AND THE TYPE OF RECEPTACLE BEING USED.



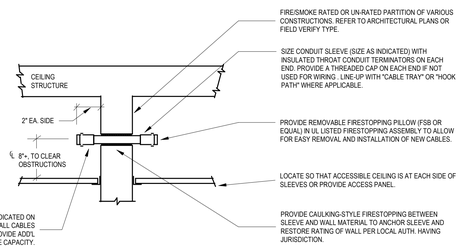
TYPICAL FLAT PANEL DISPLAY - WALL MOUNTED
7 NTS



KEYNOTES [XX]:

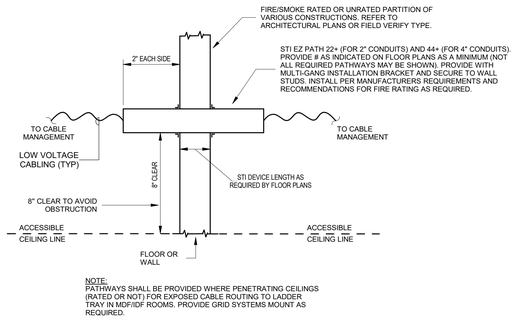
1. 22/4 UNSHIELDED CABLE FOR KEYPAD FIELD DEVICE LOCATIONS WITH A TEN (10) FOOT SERVICE SLACK AT EACH CABLE END.
2. 22/2 UNSHIELDED CABLE FOR DOOR CONTACT FIELD DEVICE LOCATIONS WITH A TEN (10) FOOT SERVICE SLACK AT EACH CABLE END.
3. 22/4 UNSHIELDED CABLE FOR MOTION SENSOR FIELD DEVICE LOCATIONS WITH A TEN (10) FOOT SERVICE SLACK AT EACH CABLE END.
4. 18/2 UNSHIELDED CABLE FOR STROBE AND SIREN FIELD DEVICE LOCATIONS WITH A TEN (10) FOOT SERVICE SLACK AT EACH CABLE END.
5. ALL FIELD DEVICE CABLE ENDS SHALL BE PROPERLY LABELED AND TERMINATED WITHIN SIX (6) INCHES OF POINT OF TERMINATION AT EACH DEVICE OR WHERE DEVICE CABLING IS INSTALLED IN A STUB OUT SHALL BE LABELLED WITHIN SIX (6) INCHES OF ENTRANCE INTO STUB OUT AT ALL LOCATIONS.
6. AT THE MAIN INTRUSION DETECTION PANEL (HEAD END) AND AT ALL ZONE EXPANDER PANELS ALL FIELD DEVICE CABLE ENDS SHALL BE PROPERLY LABELED AND TERMINATED AND DRESSED IN EACH PANEL. ALL CABLES SHALL BE INSTALLED AT EACH PANEL THROUGH AN APPROVED COUPLER DEVICE TO THE INTERIOR OF EACH PANEL.
7. THE MAIN INTRUSION DETECTION PANEL (HEAD END) AND ALL ZONE EXPANDER PANELS SHALL BE INSTALLED WITH A PROPERLY LABELED ZONE CARD INDICATING ALL DEVICES CONNECTED. ALL NEW PANEL INSTALLATIONS SHALL BE INSTALLED WITH TWO (2) SPARE PORTS FOR EXPANSION PURPOSES AT COMPLETION OF ALL NEW CONSTRUCTION AND RENOVATION PROJECTS.
8. THE MAIN INTRUSION DETECTION PANEL (HEAD END) AND EACH ZONE EXPANDER PANEL SHALL BE PROPERLY GROUNDED AT THE INTERIOR OF EACH PANEL. CONNECTION SHALL BE METAL TO METAL UTILIZING A PROPERLY SIZED GROUND LUG BOLTED (NOT SCREWED) TO THE PANEL CHASSIS WHICH SHALL BE ATTACHED TO A NUMBER SIX (6) STRANDED COPPER, GREEN JACKETED GROUND CABLE HOMERUN INSTALLED FROM THE SPECIFICATIONS FOR GROUND CABLE INSTALLATIONS. THIS SHALL BE ACCOMPLISHED AT COMPLETION OF ALL PROJECT PANEL INSTALLATIONS. EACH GROUND CABLE SHALL BE INSTALLED AT EACH PANEL THROUGH AN APPROVED COUPLER DEVICE TO THE INTERIOR OF EACH PANEL AND EACH CABLE SHALL BE SUPPORTED BY THE CONTRACTOR TO THE PANEL FROM THE GROUNDING BUS BAR BY DIVISION 27.
9. ALL LOW VOLTAGE CABLE SHOULD BE ROUTED TO THE MDF/IDF ROOMS IN A SECURED PATHWAY CABLE TRAY OR CONDUITS.

TYPICAL INTRUSION DETECTION SYSTEM CONFIG
8 NTS



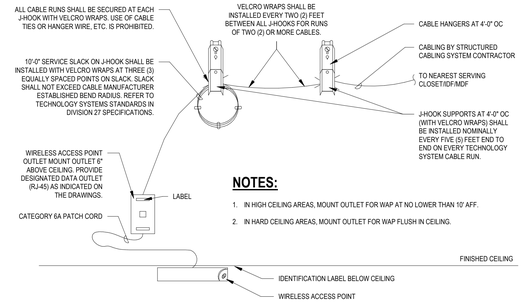
GENERAL NOTES:
A. PROVIDE ONE 2" SPARE CONDUIT SLEEVE THROUGH ALL FULL HEIGHT PARTITIONS FOR FUTURE USE. LABEL AS SPARE FOR OWNER'S USE ONLY. REFER TO ARCHITECTURAL PLANS FOR FULL HEIGHT PARTITION LOCATIONS.
B. USE AT ALL "OPEN" TYPE CABLING PENETRATIONS THROUGH WALLS, FLOORS, ETC.

SYSTEMS CABLING SLEEVE INSTALLATION (SPEED SLEEVE)
1 NTS



NOTE:
PATHWAYS SHALL BE PROVIDED WHERE PENETRATING CEILINGS (RATED OR NOT) FOR EXPOSED CABLE ROUTING TO LADDER TRAY IN MDF/IDF ROOMS. PROVIDE GRID SYSTEMS MOUNT AS REQUIRED.

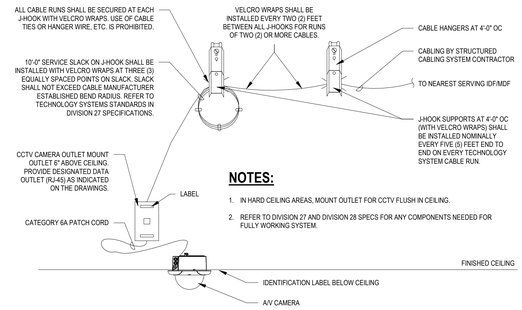
SYSTEMS SLEEVE PENETRATION DETAIL (EZ PATH)
2 NTS



NOTES:

1. IN HIGH CEILING AREAS, MOUNT OUTLET FOR WAP AT NO LOWER THAN 10' AFF.
2. IN HARD CEILING AREAS, MOUNT OUTLET FOR WAP FLUSH IN CEILING.

TYPICAL WIRELESS ACCESS POINT CEILING MOUNTED
3 NTS



NOTES:

1. IN HARD CEILING AREAS, MOUNT OUTLET FOR CCTV FLUSH IN CEILING.
2. REFER TO DIVISION 27 AND DIVISION 28 SPECS FOR ANY COMPONENTS NEEDED FOR FULLY WORKING SYSTEM.

TYPICAL CCTV CAMERA - INTERIOR - CEILING MOUNTED
4 NTS

CLIENT

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DRAWING HISTORY

No	DATE	DESCRIPTION
A	4/4/2025	100% Design Development
B	7/22/2025	50% Construction Documents
D	9/18/2025	90% Construction Documents
E	10/14/2025	90% Construction Documents/Permit Set

CONSULTANT

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SHEET NUMBER

T4.02E

FILE NAME: Autodesk Docs://_1007657.00_-_CORE_-_City of Riviera Beach D/RBPD_Evidence and Firing Range_MEPF_R24.rvt
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